



WK1/DAY .05

ARCH 2330 BUILDING TECH III

Handout: Inventory & Analysis

Today's Class: *Working in teams develop your site inventory and analysis.*

Inventory: An inventory is a count – it identifies what things are and where they are. It does not qualify whether they are good (an asset) or bad (a liability)

Analysis: An analysis looks at your inventory and determines whether things are an asset or liability based on the goal of the project. For example a six lane highway is an asset if you are building a gas station but a liability if you are building a preschool.

Design Response: A design response would show how you intend to take advantage of an asset or how you look to minimize a liability. For example to minimize a liability like noise you might decide to design a facade that absorbs sound and has few windows. To maximize a liability like a great view you might decide to orient the building with a lot of windows facing the view.

Drawings: Develop a base map that will accommodate all of your drawings. Most categories will fit on the same size site plan but some including circulation or land use might require a second large map. We often refer to this map as the Neighborhood or Environs Map. For example you should indicate significant open-spaces including Metrotech Center and Cadman Plaza as well as the subway stations in both locations. You might consider combining open-space and circulation on one larger map. Our sheet size for our semester will be 22 x 34 full size or 11 x 17 for half size – in landscape mode. Look to format these maps to print well on an 11 x 17 printer.

Develop a system of graphics and labeling that is consistent for all of your maps. Labels should be large enough to read from a distance when pinned up on the wall. Some can logically be combined into maps that cover more than one category. Inventory and Analysis are typically on separate sheets but could also be combined onto one drawing if the information is clearly categorized and readable.

Categories: Start by drawing each of these categories as a separate overlay. After they are done consider if you can logically combine similar categories onto a single map to limit the number of sheets you will need. Remember to work on top of the same base plan for each category, It helps to have this with you when you visit the site.

Land Use / Open-Space/ Zoning: A basic overlay of the site and adjacent buildings identifying existing building uses, existing heights and zoning categories (C6-2, etc). It is useful to understand the adjacencies to your project site. Also note the existence of any parks or open-spaces.



Circulation: Identify circulation close to your site – how people will get to your project site? Clarify different categories of circulation, for example Public (bus/subway) vs Private (car/private bus) and types Pedestrian, Bicycle, Vehicular. Always look to identify the “node” or decision point- a place where people change from one mode of transit to another (exit the subway and start to walk). For example for subways and buses these are the stations or stops. For bikes these would be the bike racks or the Citibike stations. For cars these would include exits from highways or the bridges and the parking lots.

Noise: Are there any significant sources of noise? Typically these exist adjacent to roadways and so they might logically be added to the circulation map.

Views to and from your Site: Mark on your drawing views to your site – from where is the site visible and are there significant views from your site. For example some of the sites have a view of the Brooklyn Bridge – this is worth taking advantage of – it will be considered an asset. So to be clear the **inventory says there is a view** – the **analysis says the view is good** (an asset) and the **design response** is to locate a space in the building that **takes advantage of the view**.

Geology/Hydrology: Typically geology is important because it helps us understand the sites ability to support development. For example can it support a tall building due to bedrock or would it require piles? Hydrology tells us if the site has a high water table or a visible water feature? Typically things below grade are identified by core drilling in a grid. For most of our sites this will be difficult for us to determine so unless the features are obvious we will skip this for our sites.

Vegetation: Note the location of significant vegetation including trees, shrubs, location of parks etc. For trees it is important to note if the tree is deciduous (loses it leaves in winter) or coniferous (has needles like a pine tree that remain in winter). For larger trees note the location, the diameter of the trunk and if you can identify the species. Remember that vegetation effects micro-climate.

Climate: Climate includes a sun exposure diagram, slope aspect diagram (which way does a hill face), winds and other factors that can create significant effect or result in a Microclimate like proximity to a large body of water. For the sun you want to show a compass (NSEW) and indicate at which angle the sun rises and sets throughout the year. For winds our prevailing Winter Winds come from the North-West and our prevailing Summer Breezes come from the South-West.

Microclimate: Note any locations where climate conditions are localized (Microclimate conditions). Are winds near the site different than the prevailing conditions? Are portions of the site are highly shaded or not shaded during the day or during certain times of the year?

History: Are there any significant historical elements or buildings on or near the site or was the site in any way historically significant? (a historic event or use) If so we may wish to take advantage of this when we design.