

Course Number and Title: ARCH 150 / Intro to CADD I / 4.0 Credits

Instructor: Lauren Karwoski Magee

Contact: LKM@DREXEL.EDU

Website: [www.thedraftedline.com/teaching](http://www.thedraftedline.com/teaching)

### PROJECT 3: Design and Development – Site Analysis and Design

Design often starts with analysis – analysis of a site, context, existing conditions, appropriate building materials, environmental conditions, use and function, etc. Analysis is the first, but very important step, in most design projects. The analysis completed this week will be used in design work.

#### Assignment 1:

1. Using Google Earth, Google Maps, or any other satellite mapping program, download images of the site as shown here. You will use these as underlays for drawings in AutoCAD.



2. Using the trace diagrams from class as a guide, develop (3) 8.5"x11" digital site analysis diagrams:
  - a. Import the site images into the software program and use this as an underlay to develop your 2D diagrams.
  - b. Use a combination of AutoCAD linework and Photoshop transparent color in the diagrams.
  - c. Use a combination of line weights, line types (dashed, dotted, etc) and transparent tone to diagram. Be sure to include North Arrow, titles, etc.
  - d. Be certain to show the context (surrounding buildings, line of existing sidewalk and street) in your drawings as single lines (not fill). Use a single bold line (bolder than primary) for exterior walls of buildings and secondary & tertiary lines for sidewalk and street.
  - e. Print 3 final 8.5"x11" diagrams on vellum (you will need to put your own paper into the plotter, this will be discussed in the lab session this week, be sure to attend).
  - f. Print 3 copies of the site plan out on regular white bond paper to pin up as underlays for each diagram. These may be printed in color or black and white on 8.5"x11" paper.
  - g. Be sure to include your *name* and the *diagram title* on each diagram page.
3. Develop a 4<sup>th</sup> drawing, using a site underlay that is a *proposed site plan* based upon your observations and investigation of contextual conditions.

- a. This diagram should include schematic ideas about areas for *sitting, bike parking, shade, ground cover (grass, gravel, permeable paving, etc), topography, plantings (trees, shrubs)*.
  - b. Be certain to show the context (surrounding buildings, line of existing sidewalk and street) in your drawings as single lines (not fill). Use a single bold line (bolder than primary) for exterior walls of buildings and secondary & tertiary lines for sidewalk and street.
  - c. Use a combination of AutoCAD linework and Photoshop transparent color in this drawing.
  - d. Print this proposal on an 8.5"x11" sheet of vellum and print out a copy of the site satellite photo on bond paper to use as an underlay.
4. Using information learned from the site analysis, design a new seating / shade / bike parking structure for the site in SketchUp.
    - a. Assume that no car parking will be permitted in the lot, and the existing structures (seating, shade, bike parking, dumpster, gate at driveway) will be removed.
    - b. Your design work should be in progress by next week's class, Week 7, with final designs due in Week 8. Your site plan can be adjusted to accommodate your design work.
      - i. Week 7: Export and print a minimum of 2 progress .JPG perspective views.
      - ii. Week 8: Export and print a minimum of 2 final .JPG perspective views.
    - c. Print views in color on 8.5"x11" paper. You may use the plotter by arranging several small sheets on the page, or you may use a better-quality ink jet printer.



Site plan for Palmer Park Children's Garden by LSU Student

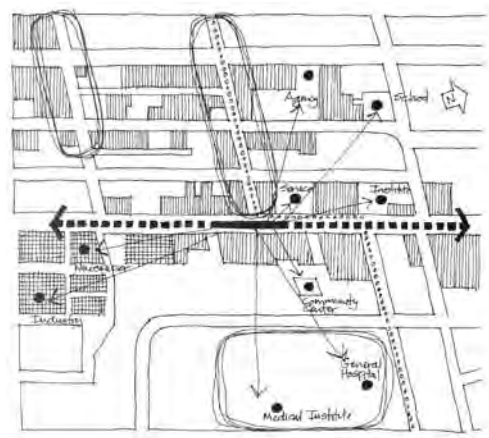


Diagram of Transportation, *Graphic Thinking*

### Assignment Objectives:

Explore hybrid drawing techniques in representation style; work between software to develop a fluid working methodology; use site analysis to aid in concept and design development.

### Submission of Work, Project 3, Assignment 1:

Due at 2pm, Tues 5/11/10 (Sect 1) or Thurs 5/13/10 (Sect 2)

- 3 site analysis diagrams plotted on vellum, pinned up as overlays on satellite map photo.
- 1 proposed site plan, plotted on vellum, pinned up as overlay on satellite map photo.
- Min. of 2 .JPG perspective progress views of SketchUp model on 8.5"x11" paper.
- Submit digital files of all images due for this week to AW Storage by 2pm:
  - (3) YourName\_P3A1\_SiteAnalysis\_DiagramTitle.jpg (300dpi)
  - (1) YourName\_P3A1\_SitePlan.jpg (300dpi)
  - (2) YourName\_P3A1\_ShadeStructureProgress.jpg (300dpi)