17th Annual Northwest Tribal Transportation Symposium

Portland, Oregon
April 19-22

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PMC Northwest
SITE PLANNING WORKSHOP

- PMC Northwest
  - Multi-disciplined design and planning
  - Community/urban design
  - Town Center/Downtown Revitalization
  - Master planning
  - Site planning
  - Land planning
  - Site development studies
  - TOD (Transit Oriented Design)
  - Entitlements
  - Illustrations – Digital and hand graphics
  - Housing studies
Site Planning is the art of arranging the external physical environment to support human behavior.

It lies along the boundaries of architecture, engineering, landscape architecture and city planning, and it is practiced by members of all these professions.

Site plans locate structures and activities in three-dimensional space and, when appropriate, in time.

Kevin Lynch
Site Planning – 1973
Site Planning begins with a project, a program and a site.

The program is your recipe for the project. Your task is to make sure the site can accommodate the program while avoiding adverse impacts.
Site Planning Process

- The process begins with learning everything you can about the physical, biological, legal and aesthetic aspects of the project, the program and the site.
Site Planning Process

1. Identify and Collect Data
   - Program/Macro/Micro Information

2. Document/Catalog
   - Base Information

3. Analyze
   - Compare/Contrast

4. Design
   - Program
   - Site
Identify and Collect Data

Site Characteristics
Document and Catalog

Base/Supporting Graphics

- Base Maps
  - Context – City–District–Neighborhood
  - Site – Various Layers
- Photographs
- Illustrative Maps – Annotated
  - Composite or Individual
- Sketches and Illustrations – Annotated
- Lists/Graphs/Charts/Matrices
Identify/Collect Data
Macro and Micro Information

Macro Information:
- State
- Regional
- Metropolitan Area
- City

Micro Information:
- District
- Neighborhood
- Block
- Site
Identify and Collect Data
Site Attributes

Site Features:
- Location/Human–Cultural
  - Context
  - Neighborhood/District
  - Local History/Demographics
  - Attitudes
  - Negative Activity
  - Man–made Features
  - Historic Resources
- Size/Land Use/Zoning
  - Buildable Area
  - Ownership/Jurisdiction
  - Boundaries
  - Easements
  - Covenants and Restrictions
- Utilities/Circulation
  - Location
  - Type
  - Condition
  - Streets/Rights of Way
  - Vehicular/Pedestrian/Other
- Sensory Qualities
  - Noise
  - Pollution
  - Light
  - Views into/out of Site
Identify and Collect
Site Attributes

Physical Features

- Topography
  - Contours
  - Major Land Features
  - Slopes

- Hydrology
  - Drainage Patterns
  - Location of H2O
  - Quality/Quantity

- Geology
  - Soils – Type/Conditions
  - Bearing Capacities

- Climate
  - Temperature
  - Precipitation/Relative Humidity
  - Wind
  - Sky Cover
Identify and Collect
Site Attributes

Biologic Features

- Vegetation
  - Trees
  - Shrubs
  - Ground Cover

- Wildlife
  - Mammals
  - Birds
  - Reptiles

- Endangered Species
  - Habitat

- Special Design Elements
  - Water Features
  - Significant Trees/Groupings
  - Land Forms
Identify and Collect
Regulatory Conditions

- Land Use Plans/Zoning Codes
- Environmental Regulations
- Sensitive Area Constraints
- Design Review Codes
Exercise #1
Shade/Shadow

Exercise #2
Land Contours

Design Analysis/Synthesis
Design Analysis/Synthesis

Site Sections

Shade/Shadow
Design Analysis/Synthesis

Compare and Contrast Opportunities and Constraints with the Program and with:

- Regulatory Conditions
- Physical Conditions
- Site Characteristics
Design Analysis/Synthesis

Opportunities and Constraints Diagrams

- Annotated maps and graphics outlining existing conditions, site limitations, features, buildable zones, sensory qualities and areas to avoid/enhance;
- Graphically depict Opportunities and Constraints
  - Composite or individual graphics.
  - Support with other graphical analysis
Design

Iterative Process of Design
- Interplay of program and site
- Identification land use/activity patterns
- Identification of optimal building areas
- Logical circulation patterns/parking
- Building footprints
- Preservation/natural areas
On the given site you will be asked to locate elements that will result in a development plan for the property. The property is a suburban site that will accommodate a 50,000 SF, 5 story office building; a 4225 SF single story drive through restaurant; a 5000 SF Plaza linking the two; various drive ways, parking areas and pedestrian connections.
In this program, you are required to:

1. Locate the office building near the pond on the site. The main entrance is to face Umpqua Drive.
2. Locate the restaurant in proximity to Umpqua drive, but and adjacent the office building; the main entrance is to open on walkway to the plaza. The Drive Thru is to be served from the parking lot and not be seen from the plaza. The main entrance should face Nez Perce Way.
3. Locate a 5000 SF plaza between the office building and the restaurant. The plaza is to be protected from prevailing winds and should receive adequate noon time sun.
4. Locate 35 standard parking spaces no closer than 5 feet to the office or the restaurant. Access to the plaza should be apparent by the location of parking.
5. Locate 2 pedestrian connections to the plaza, one from Umpqua Drive and one from Nez Perce Way.
Site Design Exercise

- Cannot build any structures on the utility easement;
- Must keep all construction within the building limit lines;
- Must keep all construction at least 30 feet from the edge of the pond;
- Are allowed to remove only 6 trees in your site plan;
- Locate driveways no closer than 120’ from the corner of Umpqua Drive and Nez Perce Way.
- May configure the plaza in any shape;
- Must configure parking, driveways and pedestrian paths in an efficient, logical way to maximize circulation on the site.
1. Locate the office building near the pond on the site. The main entrance is to face Umpqua Drive.
2. Locate the restaurant in proximity to the office building, facing Umpqua Way; the main entrance is to open on the plaza. The drive-through is to be served from the parking lot and not be seen from the plaza.
3. Locate a 5000 SF plaza between the office building and the restaurant. The plaza is to be protected from prevailing winds and should receive adequate noon time sun.
4. Locate 35 standard parking spaces no closer than 5 feet to the office or the restaurant. Access to the plaza should be apparent by the location of parking.
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For Example:
Site Design Exercise

Two possible solutions…..
Site Design Exercise

Warm Springs Drive

Umpqua Way

Site Planning Workshop

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