Design and Drawing Steps

Lecture 2

Design steps which includes:

First: Site Study

A - Engineering drawing, and contains:

1 –Drawing Scale to easily enable the calculation of dimensions.

2 -The Four dimensions which is important to know the direction of the sun ray and then the north and south to see the direction of the wind.

3 - The main entrances to the garden or house and the general climate.

4 - The boundaries of the land and surrounding roads and neighbors.

B - Site inspection on the ground.

The designer must inspect the site according to the nature for the following purposes.

1 – Having a general idea of the site on the ground.

2 – Studying the benefits of the trees inside the garden or greenery.

3 – Studying the boundaries of the land like neighbors or wanted visual landscapes or unwanted views of these landscapes.

4 - Soil testing to see what kind of plants is appropriate.

5 – Studying the places, sources of water and sanitation.

6 – Studying the buildings style that in which the garden will be created for.

Second: The wishes of the owner:

It is necessary to know the desire of the owner of the garden that will live in it. After studying the social status and the traditions and customs of the house that can easily know from visiting the interior of the house and see how many family members and how to organize the furniture and study the prevailing colors at home.

The designer will have an idea which can satisfy the garden owner by choosing the appropriate model for the building model and the appropriate selection of flowering plants. The knowledge of the park and over the budget possibilities in the implementation of the park owner which is a very important factor before the design and implementation.

Third: Drawing

The drawing is the important principle in the design process, where it gives a true picture of what will the park could appear especially by having the consent of the owner of the garden for the drawings before starting the implementation process.

Whatever the designer has experience, and also no matter how large an area of the park the drawing must exist. Because without the drawings the errors may occur during the implementation which can cause unwarranted loss of money and time needed for the project.

And before starting the drawing we must get a survey map of the land including the floor plan of the house, rooms, facilities and water and sewage

network. It also helps in the study of the contour map of the place if the area is large or has different levels and other maps showing the location of the place for the neighboring buildings.

After that the sketch can be placed on papers to facilitate the work before starting the final drawing to ease the necessary adjustments.

Fourth: Drawing and scale:

The appropriate scale is usually 1/100, which can easily be scaled to other scales like 1/200 or 1/500 if a very large area.

Also the name of the place of the forest and the history will be write on the drawing.

The following things should be shown in the map:

1 - Drawing scale.

2 - The original directions.

3 – Land Dimensions.

4 – Wind directions.

5 – Water supply and sewerage network.

6 - Sunny or shady parts.

Simplicity and proportionality in the design of all parts of the garden and park must be the basis of the graphic design, whether it's agricultural or structural.

Fifth: Symbolic drawing legends of plants and the contents of the drawing:

On the final map of the design drawing legends must be drawn in the drawing indicating the various plants, and also structural or other facilities. For example, given a symbol trees and other shrubs and other surfaces and so on all paints must have a symbol indicating it.

Implementation of the drawing and cultivation of various plants:

The implementation is usually on the order form in accordance with:

1 – Planning the roads on the ground and drawing its boundaries.

2 - Planning fences place on the border of the garden and park.

3 - Planning the boundaries of the flowerbeds in the garden or parks, however, endemic, exotic plants and rare plant as well as endangered or threatened plants in botanical garden.

4 - Locating structural facilities like Pergolas, sitting places and stairs

5 - Installation of water supply and sanitation.

6 - Road construction and paving.

7 - Preparing land for cultivation (conduct of various agricultural operations)

8 - Growing plants (trees, shrubs, flowers or green surfaces) when tree planting digs the ground for planting, then drilling work needed to grow

trees and seedlings Shrubs basins and landscaping.

The working a pit with the following dimensions: length of 1 m and 1 m and a depth of 1 m for per tree, and shrub (0.5 × 0.5 × 0.5) m_3 and deal climbs treatment shrubs and tubs of flowers dig deep 0.3 m to be added mix suited them later, but lawns are removed soil to a depth of 0.2 m.

These cubic meters of soil removed called cubes drilling for all plants.

Cubes drilling (m_3) = cubes drilling of trees + cubes drilling of bushes and climbs + cubes drilling of fences + cubes drilling basin flowers + cubes drilling for lawns green.

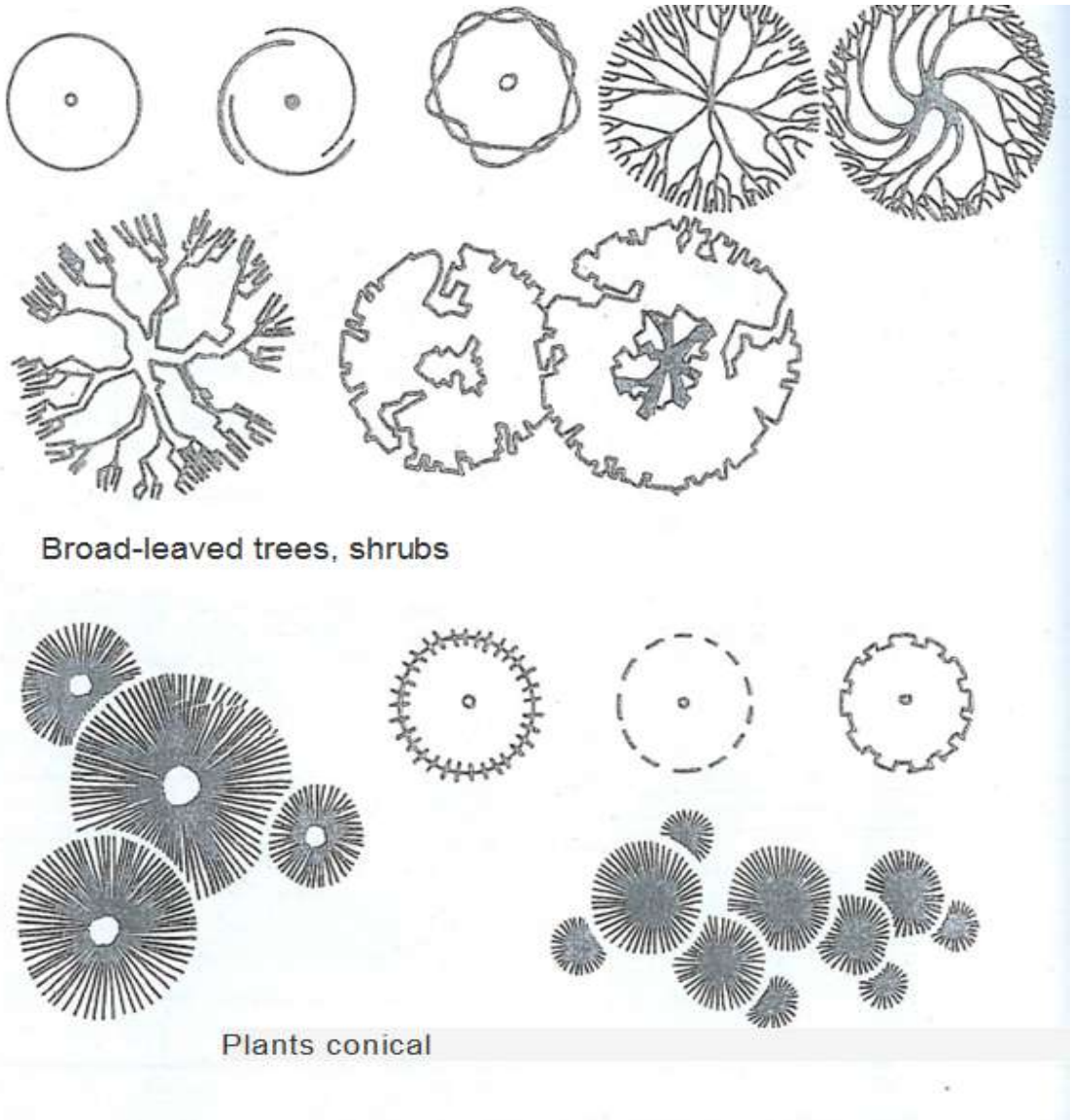
= Number of trees (1 × 1 × 1) + Number of shrubs, Climbs (0.5×0.5×0.5) + the total area of the trenches hedge ×(0.5) + collection ponds flowers ×(0.3) + total area of green spaces × (0.2).

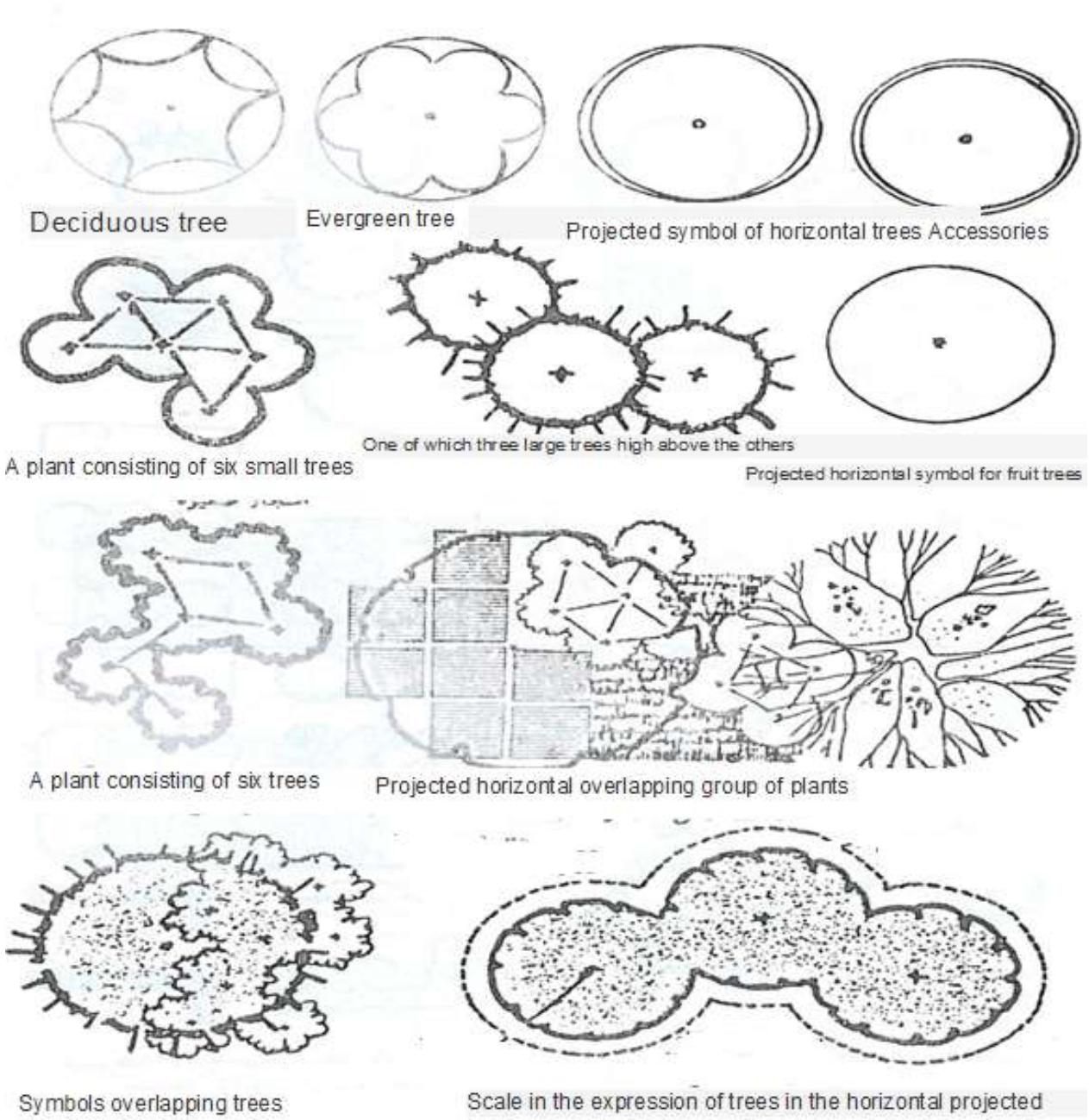
Symbols and elements Username:

The expression drawing for landscaping requires full knowledge of symbols of different plant components and other construction as well, and drawn on the chart scale drawing used in the design. To express park what on paper good scheme must be drawn in scale, and plant elements have to be drawn and fixed installations on this chart symbols known worldwide, where drawing all symbols of the elements of plant and fixed installations in different forms and roads.... etc. According to scale chosen, the symbols plants are horizontal projections of crowns of the plants, symbol trees icon for the horizontal projected area around the tree, and its site represents the garden, as it should be proportional symbol tree with the external view of the crown. The bushes are smaller than trees are planted in groups and rarely grown

individually, the Shrub symbol is circular, but inside multiple points express the number of the market. the sausage symbol used in the expression of climbs in projected horizontal, outside line to draw symbol serrated irregular shape, and expressed More fences with two geometric shape and with two Zigzag or symbols overlapping bushes natural that leave without cutting, shaping, and symbolizes the flowering plants perennial forms, and there is also symbol for different cover of soil by growth and direction of growth as well, the lawn is thus about points dense near the vicinity of lawn and points is dense in the center, while the fixed installations, and the roads and the terrace and pathway symbol to the floor so as to match forms tiling and paving, as well as no symbols of the walls and gates and stairs and some tables and seating.

A



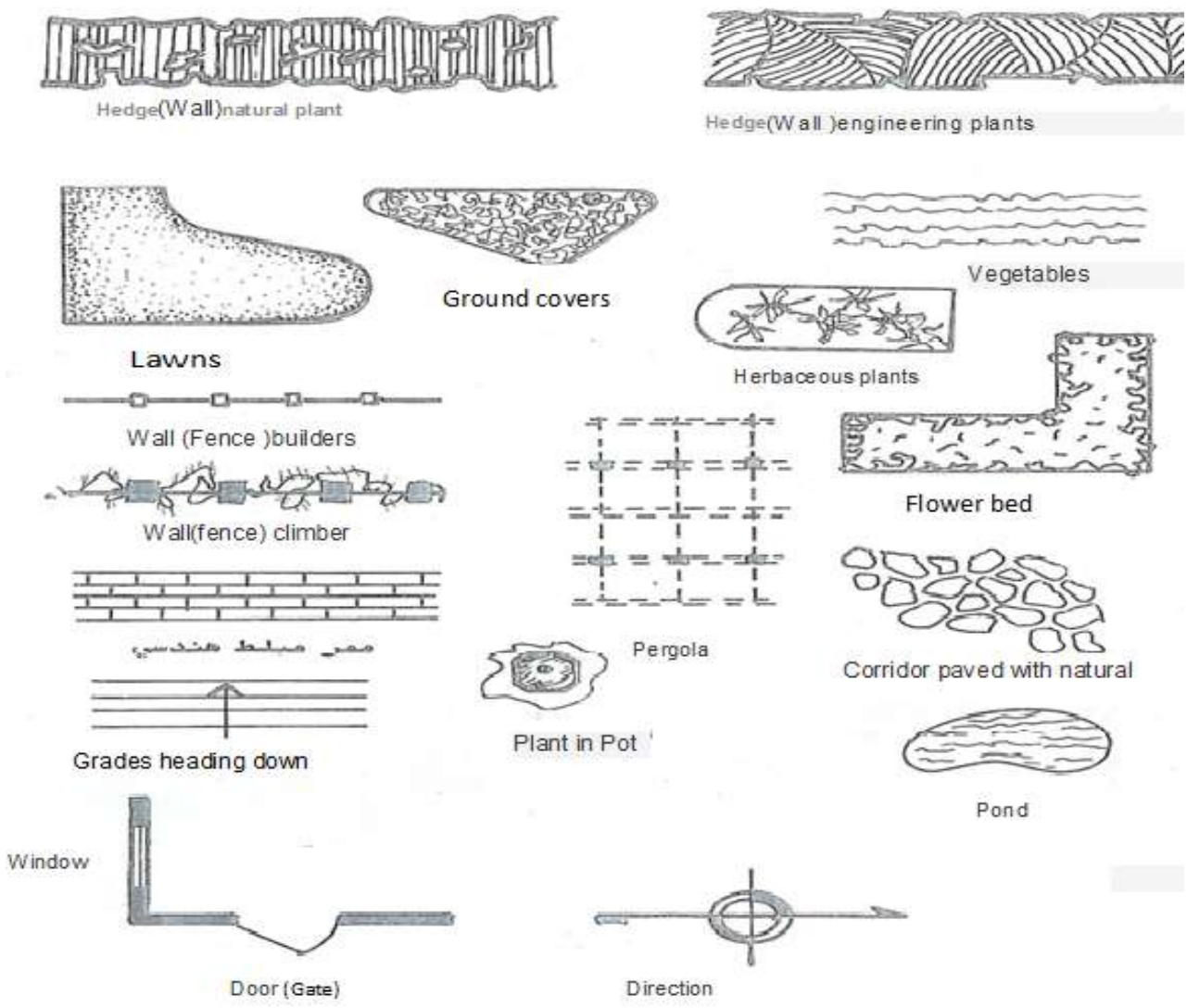


architects are following special symbols and forms, in mapping to denote landmarks construction of the walls and the doors and windows, so the gardens engineers follow also symbols and forms, especially in their maps to illustrate the features of the various flora and these conventions semi international should also be placed on the design the same scale used in drawing map can even see the space that will be filled each plant on the nature of

that can estimate the required number of each type of plant.

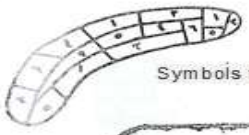
These expressions do not show the name of the plant, but shows its kind only if a tree or shrub or climber as also illustrate the characteristics example shows types of sustainable and deciduous plants and family coniferous and Family grassy and describes these icons constituent parts of the park, such as fences and plant landscaping and flowerbeds and other shows some terminology used in mapping the gardens.

If the number of plants are possibly few to put their names on the terms in the drawing but if the number was a significant number of each plant And on the side of the map shows the meaning of each number and do not deform the map to the large number of writing.



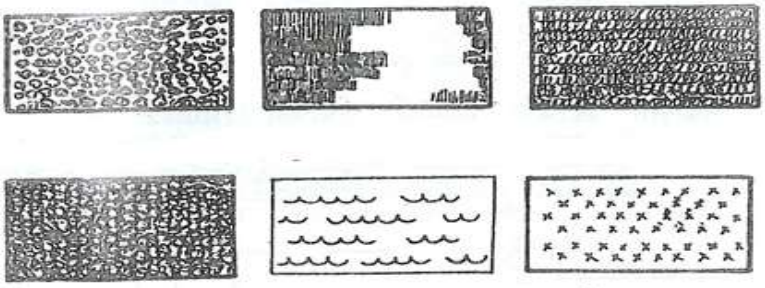
Symbols flower

Symbols flower

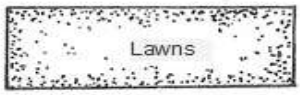


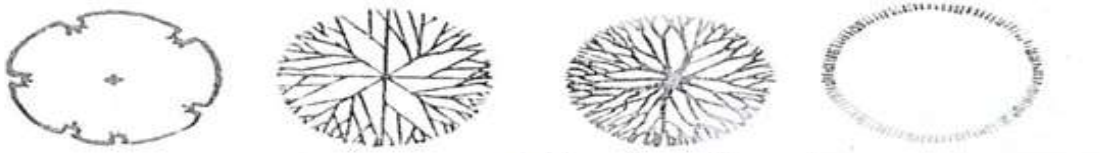
Symbols flower

One of the symbols used to express climbs



Symbols used to express different types of Covers ground



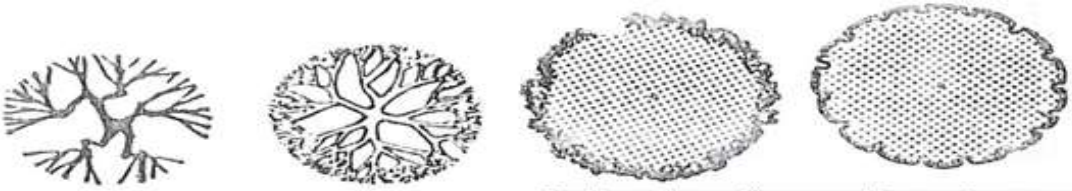


Deciduous tree

Deciduous tree

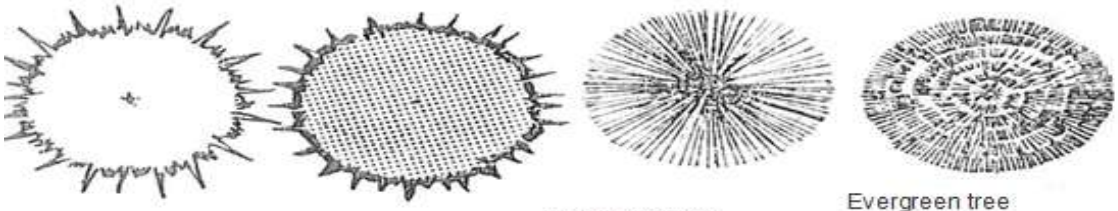
Deciduous trees widespread

Deciduous trees are cut and formation



Deciduous huge trees

Deciduous trees with green widespread mass



Trees with leaves pointed or sharp evergreen

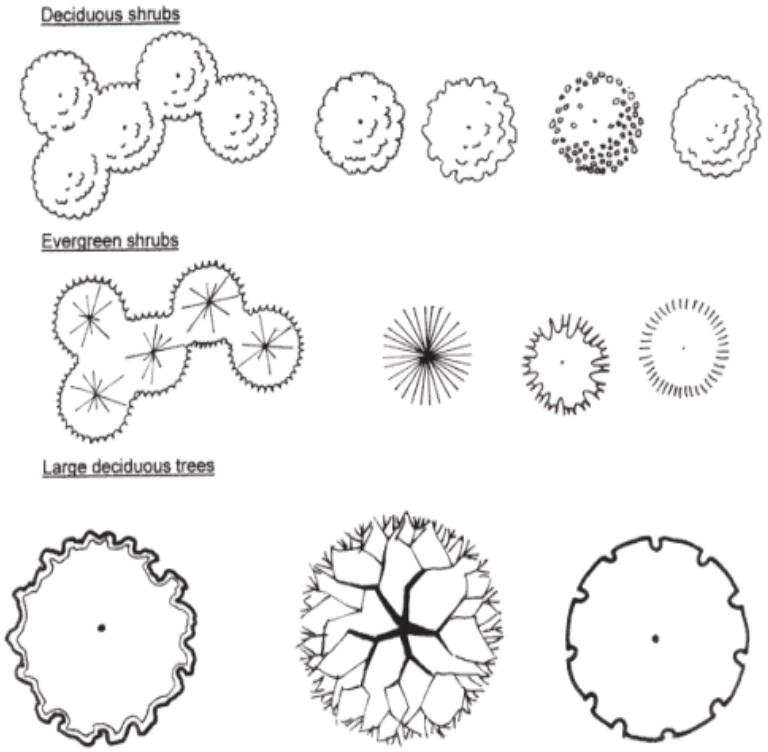
Evergreen tree

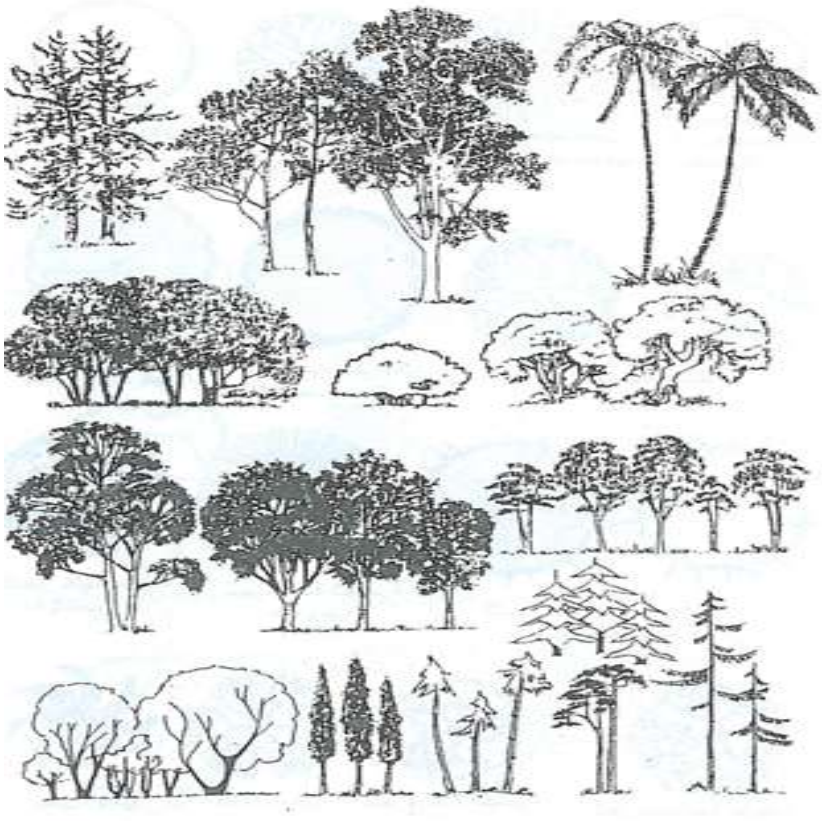
Evergreen tree

Palm trees

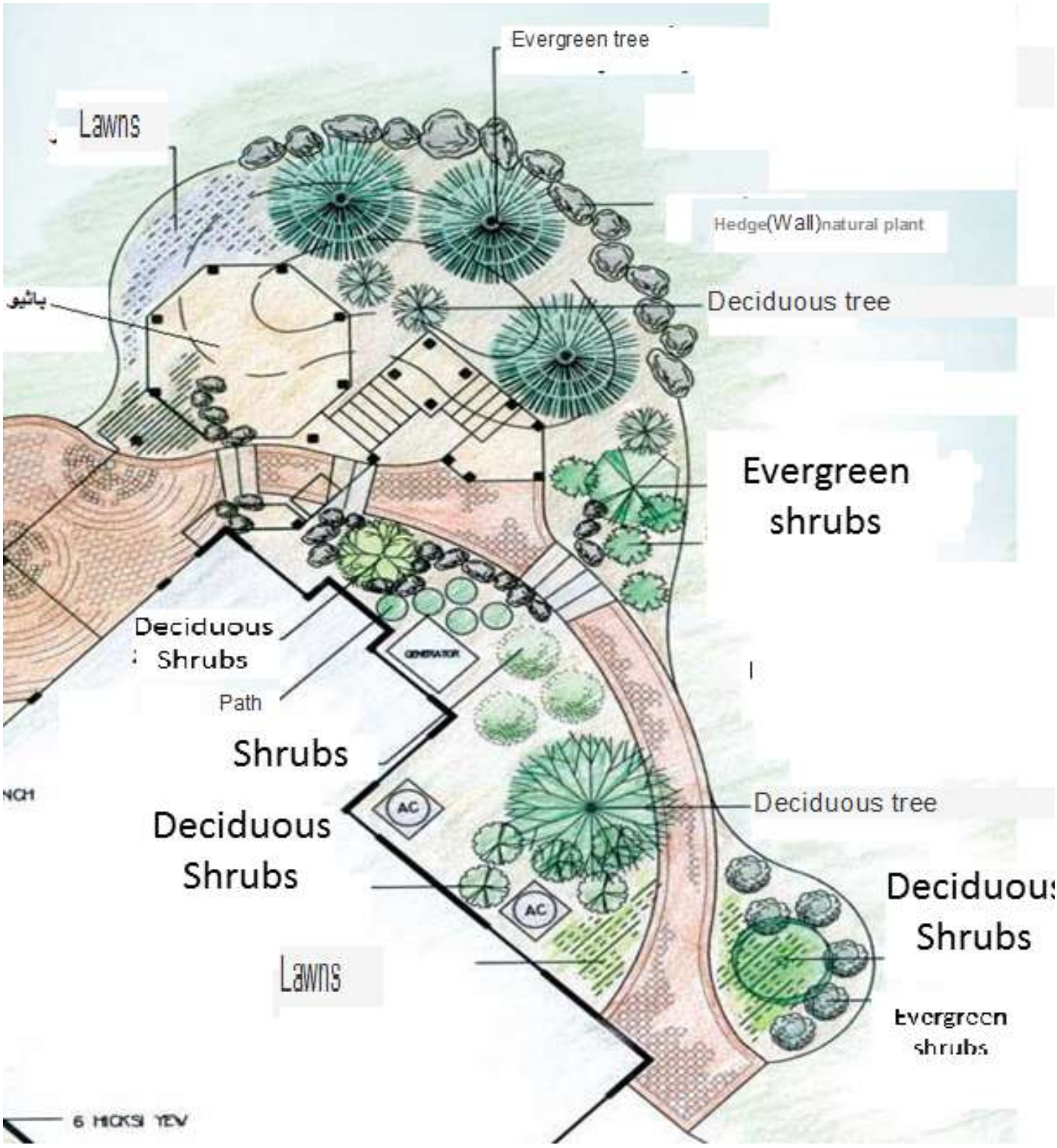
Evergreen tree

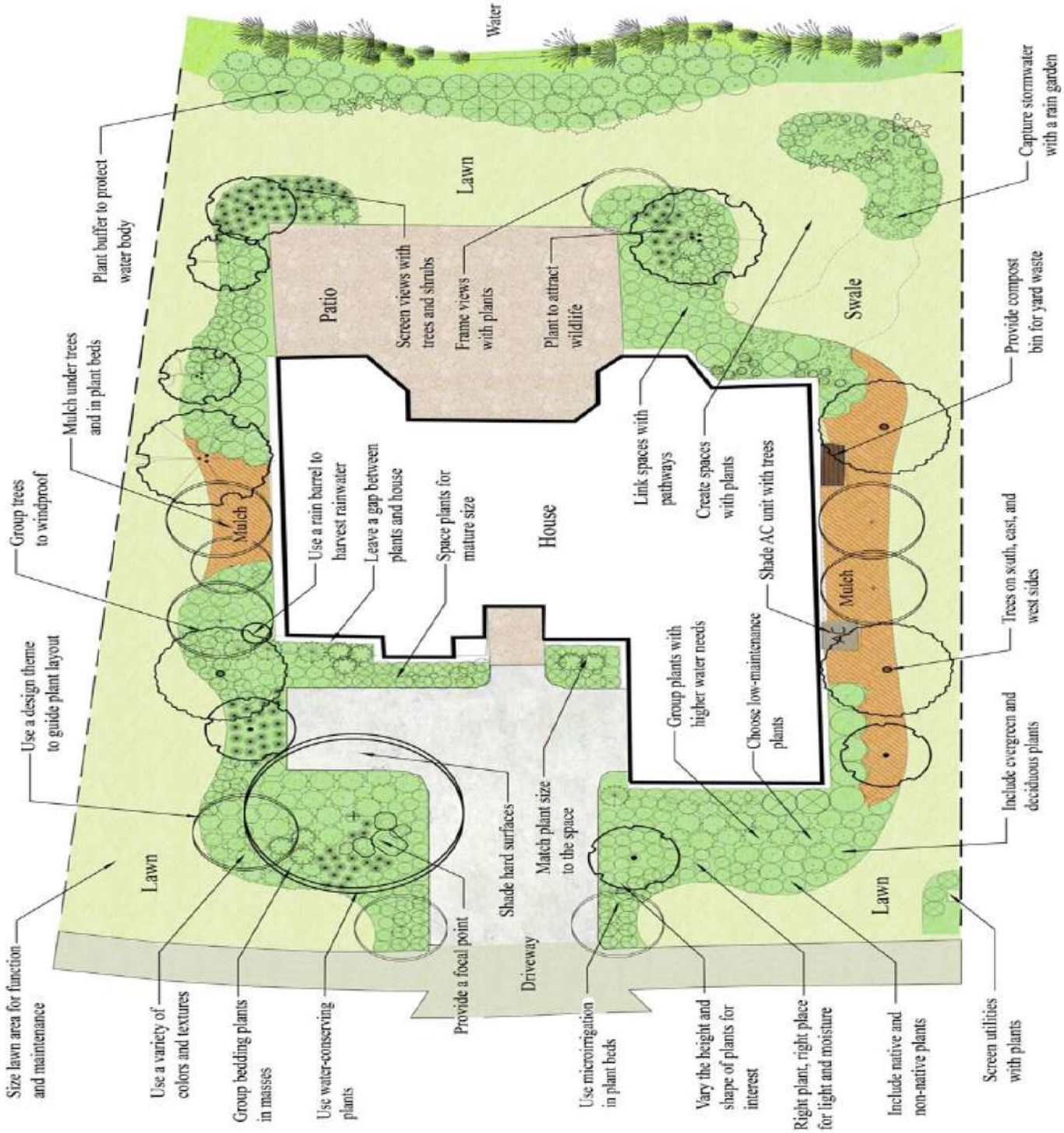
The plan view is a collection of symbols that represent the plants and construction materials to be used in the landscape design.





Some forms of codes and interfaces trees in nature configurations


Evergreen tree
Lawns
Hedge(Wall)natural plant
Deciduous tree
Evergreen shrubs
Deciduous Shrubs
Path
Shrubs
Deciduous tree
Deciduous Shrubs
AC
AC
Deciduous Shrubs
Lawns
Evergreen shrubs


Water
Plant buffer to protect water body
Lawn
Capture stormwater with a rain garden
Patio
Screen views with trees and shrubs
Frame views with plants
Plant to attract wildlife
Swale
Provide compost bin for yard waste
Mulch under trees and in plant beds
Link spaces with pathways
Create spaces with plants
Group trees to windproof
Mulch
Use a rain barrel to harvest rainwater
Leave a gap between plants and house
Space plants for mature size
House
Shade AC unit with trees
Mulch
Trees on south, east, and west sides
Use a design theme to guide plant layout
Group plants with higher water needs
Choose low-maintenance plants
Include evergreen and deciduous plants
Shade hard surfaces
Match plant size to the space
Lawn
Lawn
Size lawn area for function and maintenance
Use a variety of colors and textures
Group bedding plants in masses
Use water-conserving plants
Provide a focal point
Driveway
Use microirrigation in plant beds
Vary the height and shape of plants for interest
Right plant, right place for light and moisture
Include native and non-native plants
Screen utilities with plants