### **Creating Gardens**

Lecture 3

Creating gardens mean implementation phase and by talking about steps stage construction and implementation, to be mentioned some of the tools used in the signature line on earth as it is painted on say planned foliar bars measurement, ropes, small containers as well as transport vehicles soil and soft white sand or bag to identify on the ground, and shovels, spatial, hammers, wedges of wood and iron, however, devices space theodolite to renew right angles add for ranging rods.

By these devices can determine the difference different points above the area of the ground and low settlement process and know where the fixed point is taken (zero) and is taken on the basis of which other high points and low (Contour ground). Also has to be mentioned some agricultural machinery, which is used when implementation garden especially in land reclamation, levelling, tillage and transport soil.

#### **Gardening Tools:**

- 1. Trowel
- 2. Pruning Shears
- 3. Garden Rake
- 4. Angled Shovel
- 5. Wheelbarrow





## Include the construction and implementation phase on the following steps:

### 1 - Initially Preparing the Land: -

The first initial preparing the groundwork for large through knowledge of the land, boundaries, maps heights and lows as well as can deviation budget passed earlier by the knowledge differences Contour ground snapped a fixed point (zero) on the basis of which is taken other high points and low.

Moreover, dig being conducted and the settlement of the areas that require it according to charts and graphs designed previously, while sufficient to collect dirt and debris in the flatlands. As some plants can be cut from trees and shrubs that may already be present and to be removed or cut some and leave others as planned.

However, conducted full reclamation of the land before starting the implementation of the park, while conducting operations plowing some heavy pieces of land textures.









# 2 - The Implementation of all the Architectural, Artistic Constructions and Water Surfaces, If Existed:

The Buildings are being implemented under the supervision of structural engineers, and after the completion of the construction; construction waste and other dirt remain.

The necessary buildings to be existed like: bathrooms, which are distributed to hold various gardens. Also constructing water basins, fountains and building them according to the required technical specifications objectivity drawing all of them by specialized engineers and designers, as well as establishing a water irrigation network with full supervision by irrigation engineers with the collaboration with garden engineers. Then supplying electricity wires, cables by specialists and connecting them to the ground also provide the telephone network as planned.



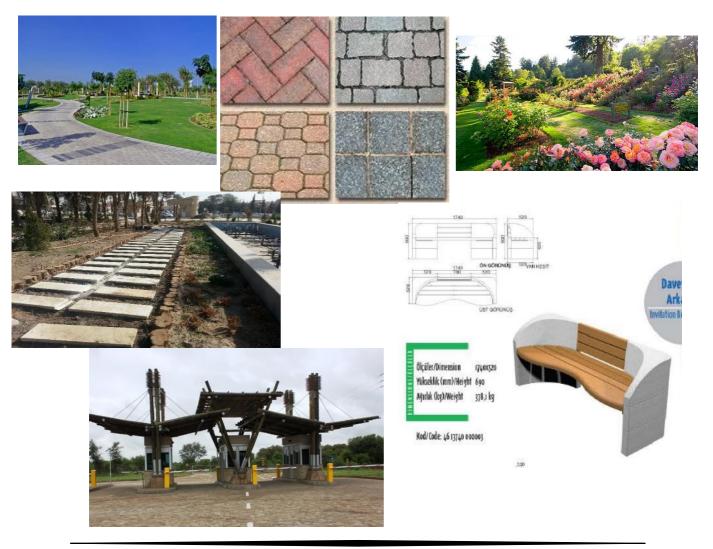






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Then create the main, branch roads and pedestrians, a multi-according to the required sizes and desired orientation, where different types of paving. After that, the implementation of all entrance gates will be done after implementing the external walls if existed, and implementation of umbrellas fixed stalls and distribution along the roads petition and roads Infantry where occupies seating space of these narrow streets but cut from the garden, and the distribution of seats to sit and tables for the visitors, also the statues will be plotted in their positions and after the establishment of roads distributed aspects pots stone and marble, which will show some types of beautiful flowering plants, also stairs will be located between levels with different elevations of the garden, and illumination will be distributed in their positions and loudspeakers have to be distributed on poles inside the park.



## 3- The Final Preparation of the Land and the Placement of all the Plants

Before preparing the land; all construction waste and dirt in the park have to be removed with adding fertile soil to some parts of the park with adding organic compost on it. So the first stage is to prepare the ground with various instruments and preferably adding some mixture of soil, sand and compost 1:1:1 equal proportions of basins flowers fixed and also the parts that will sow plants perennials and shrubs, so there are three types of pegs; green for trees, red for shrubs and white for flowers.

## After that necessary excavations must be done for trees and shrubs seedlings , flowering, climbs and fences.

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  $(0.5 \times 0.5 \times 0.5)$  m<sub>3</sub> 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  $(1 \times 1 \times 1)$  + Number of shrubs, Climbs  $(0.5 \times 0.5 \times 0.5)$  + the total area of the trenches hedge  $\times (0.5)$  + collection ponds flowers  $\times (0.3)$  + total area of green spaces  $\times (0.2)$ .

## 4- Transporting of all Plant Components to Their Locations and Planting Them:

After initializing necessary excavations for all the plants, various types of trees with both evergreen and deciduous types have to be placed beside excavations allocated for planting, both evergreen trees and cultivated types with container can be planted at any time of the year after removing the packaging and containing roots with soil but preferably after the end of flowering or their fruit either deciduous trees and seedlings that were transporting from the ground standing and planting winter months at time of dormancy plants after transplanting by containing roots without soil stuck.

The distance between trees differently, depending on the type, size, form and shape of trees up to (four, five, six or seven) meters of the small crown trees such as *Ligustrum japonicum* and increase the distance at that big crown trees such as *Melia azedarach Robin' Tige ,Photinia fraseri 'Red* others.

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Shrubs distributed according to the plan after the necessary excavations, including evergreen and Deciduous, are treated as trees in relation to the time of planting them. Perennial flowering plants or small plants have to be distributed within bed flower to distance between them, for example plant responded and another for less than 75 cm, and this is due to the size of class roses required cultivation example, there rose dwarf, which is used to determine also states cultivated flora expel 30 or 40 cm between to each plant.

However, annuals summer will be planted on pools allocated in spring months (February, March and April), while winter annuals seedlings grown in the autumn months (September, October and November) as early may be late.

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The plants are grown specifically on the edge of flower beds such as Euonymus pulchellus ,Buxus microphylla 'Rotundifolia large perennial plants or plants are grown short annuals and the distance between 15 to 30 cm such as Baby rosa, Canadian rosa.







Also, hedge or fence plants will be planted with a distance of 50 cm or 75 cm between the other implant. According to planned the grown evergreen can be cut and formed in their locations are planted such as Ligustrum ovalivolum, Ficus banjamina, Mrytus comminus these plants are often used in street by geometrical style.

Planting trees and shrubs will be placed add a mixture of sand soil and compost in equal proportions or fertile soil used by organic (4:1+4:3).

The lawns scrape soil depth required 20 cm and add the mixture, at rates equal or fertile soil organic fertilizer smooth and decomposition rates (3:4+1:4) in size and settled the soil and scatter the seeds mixture of permanent and carpeted soil with a thin layer of lines himself and sprayed the ground with water twice a day, morning and the evening and the best time to plant seeds of green spaces, the most famous spring and autumn months where proving seed after six or seven days, spraying water must be spray or grown volumes allocated for lawns green coil promoter ready and be in rolls and display 40 or 50 cm and a length of not over 2 meters and carpeted the ground and successively legs are provided chemical fertilizer for flowering plants and plants in general up to 0.75 to 1.25 kg per 4 m.

### 5 - Permanent and Ongoing Care for The Garden: (Managements)

After the completion of the garden there has to be constant care including the following operations:

- **Continuous irrigation**: Trees, shrubs, fences, and irrigation hoses mediated and timeliness, as needed, preferably in the morning and evening.
- **Replanting**: replanting the plants in the same season and compensated.
- Modifying the plants again after being planted and watered: Where the soil around the plant species and deviate plants will go down, so adjust modify plants and add part of the mix if necessary.
- Fertilization: Add compost and prefer to add it to the autumn plants and also added chemical fertilizers to the soil to improve the soil characteristics and plant nutrition and raise manually or through machines.

And its preferable to stop fertilizing when the emergence of floral buds and do not add liquid chemical fertilizer when plants are thirsty, it causes injury roots and leaves burns and damage. Also, it's preferred not too excessive chemical fertilization and be once every 15 days to separate growth and once a month or every two months cold (winter).

- Cut lawn mowing: This is done by electric shearing machines or gasoline-powered machines
- Replacement seasonal herbs: After the end of the flowering season.
- **Pruning and shaping plants:** This work needs to be with skilled hands and the process is done using manual shears or scissors mechanism mediated and must trim trees and shrubs with sharp winter and plant formation in the start of the growing season and until the autumn.
- **Disease Control and insects:** A precaution spraying is preferable before the appearance of diseases and insect injury to plants and conducts various pesticide spraying by diseases that appear appropriate where pesticides are used against diseases.
- Anti-exotic herbs and harmful: Through hoeing and removed by hand or through special tools and the optional use of pesticides deadly herbs only.
- **Finally, you should clean the park:** From fallen leaves and all the dirt and weeds removed, branches and twigs broke land and migrated out of the park to keep the garden fresh bright meet ambitious please check happiness to its visitors.