

Harmonization of agricultural industrial zones, taking into account landscape design

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Abstract. The design of industrial zones and facilities, closed and open, in the agro-industrial sector must be comprehensive, systemic, and meet the requirements of modern robotics and electronics. An essential aspect of this complex is landscape design as a factor in the harmonization of industrial facilities and the implementation of ergonomics. Landscape design not only performs an aesthetic function of production, but also provides a high level of comfortable environment, based on life-saving technologies, taking into account employees and workers with disabilities. Modeling space, taking into account the nominal functioning of vehicles, special equipment, levels and slopes, as well as the use of types of road surfaces are aspects of the organization of the environment. The most successful solution to this educational problem will allow bringing the system of artistic training of students to a new educational level, since will allow remotely conducting classes by leading highly qualified specialists from various regions and countries.

1 Introduction

Landscape design implies a complex of architectural and planning and space-spatial solutions used to develop methods for decorating open space. It is based on the principles of design, construction and maintenance of environmental elements that are subject to change over time and in the course of interaction with nature and man, and also allows you to fit human activity into the natural landscape, minimizing the negative impact on the territory of agro-industrial complexes. The complex of agricultural administrative production facilities must be built as a full-fledged harmonious structure, taking into account not only industrial logistics, but also landscape design based on the conditions of comfortable human life

2 Materials and methods

Sketching, searching for an individual solution, creating a concept are the main structural units of creating a project. The key stages of a graphic solution are a clause, a sketch-idea and a draft version.

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Clausura makes it possible to reflect the author's opinion regarding the task at hand, expresses primary emotions and ideas that require analysis and elaboration in the future. At the same time, it is necessary to focus on the general composition, without going into detailed elaboration - the transition to it is carried out when determining the integrity and harmonious coexistence of the initial data and the concept.

A sketch idea is an intermediate stage at which the clarity of the further development of the topic appears. A number of ideas undergo critical analysis, some of them are eliminated, minor ones are added or removed, and the key one is also slightly changed.

The draft version phase involves the finalization of the main series of ideas, as well as their design. This stage forms a full-fledged proposal, a decision to achieve a result.

The appearance of the site is acquired by creating a visual range, which can be represented by perspective views, plans, sweeps, etc. Landscape design graphics provide an understanding of how an architect or designer sees a space solution.

Graphics is a type of fine art that uses lines, strokes, spots and dots as the main visual means. Drawing in landscape design involves not only displaying the boundaries of the site, its levels and existing buildings, but also analyzing the relief, humidity, illumination at different times of the day, the direction and strength of the wind, depending on the season; as well as fixing information about landscaping, small architectural forms, materials, pedestrian and vehicle flows.

Only man possesses the ability for creative activity; the connection of the brain, eye and hand at the same time is a circumstance that gives the master uniqueness.

The latest architecture goes back to the roots, contributes a lot and subsequently develops in the project schedule. During this period, there is an attempt to abandon the old foundations and oblivion of hand graphics - this refusal is motivated by the preference for machine technology. But this idea is defeated, as it gradually leads to the impoverishment of the architectural image; masters return to the drawing and endow it with new features.

The development of architecture in the field of art should take place, the trends of this development are dictated by human psychology: the need to demonstrate thinking leads to the emergence and flourishing of author's graphics. Graphics - a circumstance that gives rise to living design, as well as the connection of the past and the present; also fixing thoughts in graphic ways allows you to demonstrate projects that may never be implemented. Drawing is the foundation for understanding the subject space.

Landscape design is the process of solving a problem by visual means. The goal of landscape design is to create a visual solution to a communication problem. Creative design based on the achievements of the fine arts (print, lithography, illustration, poster, etc.). All visual solutions replicated in various technical ways, including labels, TV and video screensavers. The role of landscape design depends entirely on the development of the media with new information media for the design of newspaper pages, signs of visual communication, advertising intended for trade, business, and marketing. The scope of application is appliances, tools, furniture, dishes, electrical engineering, fabrics, perfumery, etc.

3 Results

It is advisable to use a variety of expressive techniques in the landscape design of agro-industrial complexes. It is more expedient to design the complexes taking into account urban and futuristic directions. (Figure 1).

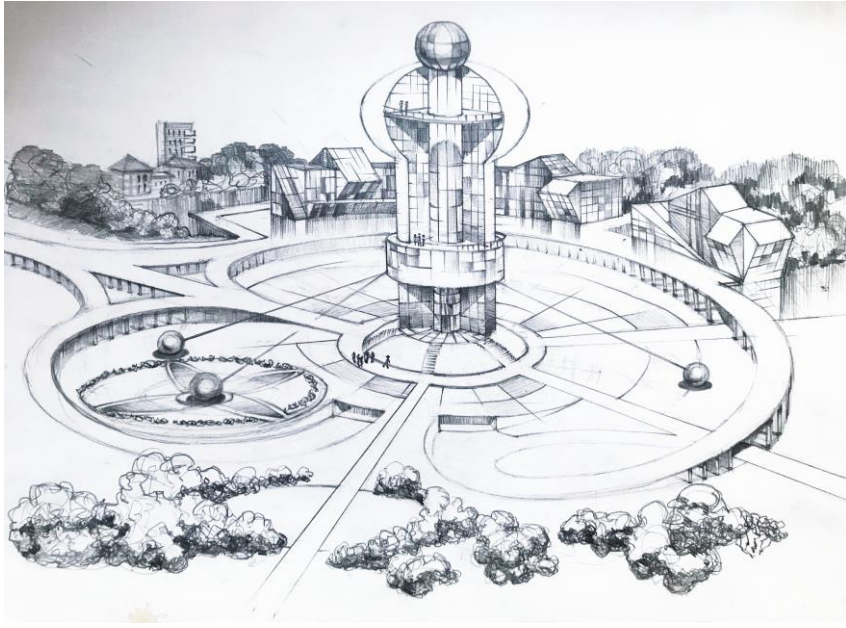


Fig. 1. Landscape segment of agro-industrial campus.

One of these techniques is the types of landscaping with architectural elements adopted in the design. This is a winter garden. The best material for creating a winter garden is evergreens such as spruce, pine, boxwood, thuja, juniper, etc. A winter garden is beautiful when it conveys a peaceful beauty on which the eye rests. Nature itself, the interweaving of black branches, snow, rowan berries, viburnum, wild rose gives rise to a graphic composition.

The French designer de Givenchy, near Paris, has created a regular park, composed of clean, clear lines, strict schemes and plans. To implement the idea, he used 36,000 trimmed boxwood bushes. His garden is built on geometric forms, most effectively manifested in the bosquets and free-standing trees and shrubs of the winter garden. Being covered with snow, these plantings provide the necessary constantly changing volume, complemented by a picturesque combination of branches. The winter garden is reminiscent of the technique of grisaille, a tonal painting of one color, occasionally complemented by bright colors of winter berries.

Due to the temperature difference in winter, the garden always looks different. Dazzling white on a sunny day, with swollen snowdrifts settling in a thaw, slightly powdered with snow, frosty, and on a fine frosty day, the snow crust plays with thousands of colors like on the canvases of the Impressionists.

The winter garden should be designed for both winter and summer time. A feature of such a garden is that its plastic solution does not change with the change of season, the clarity of the composition remains, due to the use of the principle of a regular garden, as well as evergreens. In summer, fences, trellises and pergolas play only the role of supports, but if their design is thought out with the expectation of the winter period, then in the winter garden they will turn into gracefully curved, mysterious elements of the composition that organically fit into the graphics of trunks and branches.

It is also necessary to think over the interior, which will allow you to admire the winter garden, being in a warm room. It can be a wide glazed plane of the living room wall. A greenhouse can be suitable as an observation room, which, of course, will enhance the impression of watching the winter cold while being in the thickets of southern tropical

plants. The ingrained opinion that “winter must be waited out” is not justified. Thanks to the creative imagination of the artist, designer, winter can turn into a miracle.

4 Discussion

One of the methods of organizing landscape design is a mixborder. A mixborder is a mixed flower plantation, the width and shape of which varies depending on the location and area of the site, however, should not exceed a width of more than 1.5 m. A free outline allows you to place the mixborder in any zone of the site, make it compact or stretched, surround them with a place of rest or sports grounds. It all depends on your design concept. Mixborder allows you to use an unlimited number of flowers, collect annuals and perennials, high and low, brightly flowering and non-flowering plants in one picturesque palette.

The main distinguishing feature of the mixborder is the gradation, which is formed due to the basic principles of the composition categories. It can be unidirectional or multidirectional, decreasing or increasing, centric or combined. Tall flowers (delphiniums, phloxes) are located either in the center, if the composition is centric, or along one of the sides adjacent to the wall or fence. Decreasing from tall plants to the edges of the mixborder, ending with low-growing or creeping plants (daisies, primroses, saxifrage, periwinkle). The duration of flowering of the mixborder is achieved by a combination of different types of flowering plants one after another.

Rabatka is one of the types of phyto-design organization, which is distinguished by its small size. The width of the rabatka is from 20 to 70 cm. This narrow flower alley can have an unlimited length and configuration. It is placed along rectilinear and curvilinear paths, along the edge of lawns, around trees and shrubs, or in the form of a wriggling snake on a short-cut green lawn. The principle of gradation in the organization of the discount is absent. It is formed on the basis of a color spot and a combination of flowers of different flowering times.

Lawns are divided into decorative and sports.

The group of decorative lawns includes: parterre, ordinary, meadow, Mauritanian, flower. Parterre lawn is characterized by the planting of typical lawn plants located on the territory, according to a strict plan with a horizontal surface. In the modern world, a person needs a new adaptive comfortable landscape. As GB Minervin notes: "According to the ideas of cultural researchers, the modern world - the sphere of existence of today's man - differs sharply in its characteristics from the world of the past" [1]. In compositional unity, they can be combined with areas lined with gravel, brick, wooden flooring, with the construction of ponds, pools, etc. An ordinary lawn has a large area, consists of typical and simple meadow plants, does not require careful maintenance. Meadow lawns are created as preliminary crops for several years to cultivate the soil. They consist of ordinary meadow plants and are used for fodder. When using perennial herbs, they can become quite long-term. Mauritanian lawns are distinguished by the use of different plants from botanical families. They are created from meadow, cereals and legumes, as well as from herbs. The characteristic of the location is the same as that of the meadow ones. Flower lawns are formed on the basis of the same type or contrasting perennials. One-color or multi-colored flowering cover can be sown either with strictly geometric shapes, or in a free compositional solution. Most often created from creeping plants. They are created on relatively small sites, near palace complexes, industrial zones, in parks, near buildings, as well as on changing relief elements - slopes, terraces. “In this regard, the task of harmonizing the structural links between a person and industrial products included in the process of human life in the social and domestic sphere in production is being updated” [2].

The group of sports lawns includes fields for football, hockey, golf, sports games, sports festivals, etc. They are created by sowing the most typical grasses and carry out the most thorough care and systematic mowing 2-3 times a week throughout the warm season. Without this practice, it will not be possible to create and maintain a classic lawn.

Phyto-design should take into account the mandatory impact of plants on human health. In addition to decorating, increasing or decreasing air humidity, plants process oxygen and emit carbon dioxide, which adversely affect our well-being. Some houseplants emit harmful vibes. If, however, we accept this hypothesis that the radiation emanating from plants is harmful, then we must take into account that all substances at a temperature equal to 0 emit positive and negative ions. The harmful radiation of plants has not yet been recorded by any measuring instruments, at the same time, no one pays attention to the radiation of a lamp and a television screen. "The designer carries out the modeling of the socio-aesthetic spatial environment using design techniques that include methods used in various fields of science and art, namely: engineering, ergonomics, physiology, social psychology, architecture, sculpture, arts and crafts, theater, cinematography. [3]

Many plants produce pollen that can cause allergic attacks in humans. This problem must be solved purely individually and in each case it is necessary to conduct a thorough medical examination. In multi-apartment residential buildings, indoor plants increase air humidity, for example, near heating appliances, air humidity is no more than 40% with the required rate of 60-65%. When placing indoor plants in a particular zone, it is possible to either lower or increase the humidity of the air. This is especially necessary for people suffering from chronic inflammation of the mucous membranes. Just like humans, plants emit carbon dioxide by absorbing oxygen. Therefore, in residential areas where a large number of indoor plants are located, good ventilation should be arranged.

Also, do not forget about poisonous plants. Their list is quite large and cannot be disclosed in this content. But some of them, such as aconite, dope, contain in their tubers an extremely harmful poison (alkaloid aconitine). The toxic properties of some plants are used in medicine for the manufacture of medicines. Dieffenbachia poison in small doses can be useful, it contains strychnine, used in small portions as a medicine. The widespread yew, in the presence of tasty and healthy berries, has prickly poisonous branches. So toxic is also the juniper needle, called in England "abortion-bush".

For a complete acquaintance with the rules of care and maintenance of the plant, their harmful and beneficial properties, it is necessary to thoroughly study the reference literature.

5 Findings

The opinion about the secondary nature of man-made craftsmanship is erroneous: the drawing should not disappear, since it is a means of the creative method, the basis for the search for an image. The architect thinks on paper, which means that regardless of the appearance or oblivion of certain technical means, the master will remain devoted to artistic ways of fixing thoughts and ideas.

The drawing is rapidly losing ground, but does not lose its importance. There is a decline in man-made graphic culture: thoughts developed by means of computer technology without relying on graphics lead to dryness, conventionality and the random nature of the image. Landscape design allows you to model open and closed spaces of agro-industrial complexes, taking into account an individual artistic solution, which gives originality, harmony, aesthetics to monotonous typical buildings, fit them into the environment, which at the same time allows you to harmonize the space, taking into account the ergonomics of human work in them.

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