


Examination of Zoning Plans on the Basis of Urbanism with an Exponential Function Approach within the Scope of Peer Ratios

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Geliş Tarihi / Received Date: 19.08.2022

Kabul Tarihi / Accepted Date: 14.03.2023

Abstract

After the 1/5000 scale master development plan is created, the relevant local governments create the 1/1000 implementation development plans based on the decision taken by the municipal councils. The aim is to provide the formation of areas that can meet all kinds of needs of the local people. Some islands have different features and notes. One of these featured lots is the zoning islands with only certain precedent values. It has been tried to investigate how and on what basis should be acted while giving building permits to the parcels on these lots with certain precedent values. In the study, it has been shown what should be given a zoning subbase status on these islands, where only the precedent values are given from various plan examples. While these draws are given, it is tried to find the sum of the zoning subbase and total upper areas by considering the definition and value set elements, which are an exponential function definition range, as a method. After the results of giving the zoning diameter on the ground were made in a comparative way against the precedents, how to place the value set on the ground as a subset exponentially from the main plot determined as the domain set was determined by the exponential approach method. The construction in the zoning islands has been made suitable for the building permit, and it has been approached with the exponential function method according to whether the zoning parcels are odd or even number of parcels. In line with the coefficient given by the peers, the approach distances on the ground and the total construction area were tried to be shown with examples.

Keywords: peer values, exponential function, zoning status

Şehircilik Bazında İmar Planlarının Emsal Oranları Kapsamında Üstel Bir Fonksiyon Yaklaşımı ile İrdelenmesi

Öz

1/5000'lik ölçekli nazım imar planı oluşturulduktan sonra ilgili yerel yönetimler, belediye meclislerinden aldığı karara istinaden 1/1000'lik uygulama imar planlarını oluştururlar. Amaç yöre insanının her türlü ihtiyacına cevap verebilecek alanların oluşumunu sağlamaktır. Kimi adalarda farklı özellik ve notlar vardır. Bu özellikli adalardan birisi de sadece emsal değerleri belli olan imar adalarıdır. Emsal değerleri belli olan bu adalarda parsellere yapı izni verilirken nasıl ve neye göre hareket edilmesi gerekliliği araştırılmaya çalışılmıştır. Çalışmada çeşitli plan örneklerinden sadece emsal değerleri verilen bu adalarda neye imar alt taban durumu verilmesi gerektiği gösterilmiştir. Bu çekmeler verilirken ise yöntem olarak bir üstel fonksiyon tanım aralığı olan tanım ve değer kümesi elemanları gibi düşünülerek imar alt taban ve toplam üst alanlar toplamı bulunmaya çalışılmıştır. İmar adaları içerisinde yer alan inşaat yapı iznine uygun hale getirilmiş, imar parsellerinin tek ya da çift sayıda parsel olmasına göre üstel fonksiyon metodu ile yaklaşmıştır. Emsallerin verdiği katsayı doğrultusunda zeminde yaklaşma mesafeleri ve toplam inşaat alanı örneklerle gösterilmeye çalışılmıştır.

Anahtar Kelimeler: emsal değerler, üstel fonksiyon, imar durumu

Introduction

With the adoption law, every citizen who wants to build a building is required to apply for a license together with the projects that he will have architects, engineers and scientists who are experts in their fields prepared. Upon the application, the relevant municipality inspects the compliance of the license application and the annexed projects with the zoning plans and zoning legislation.

With this arrangement, a number of possible problems are prevented by controlling the statics, durability, impact on the environment and population of the planned structure (Kaya, 2020). Zoning plans to reach the best solutions to the extent of the existing or to be provided opportunities among various urban functions, to provide a healthy structure for the physical environment that affects the personal and family happiness in human, society and environmental relations and social life, to direct the location choices of investments and development trends, and to guide the development trends of the land. Such as to determine the balance of protection and use in a measured way, to provide a good and civilized living space and conditions to the people of the town. Prepared for important purposes. The logic of land and land arrangement, which is the application tool of the development plans prepared for this purpose and which closely concerns the property rights of individuals, cannot be fully understood by the practitioners and the people who are dealing with this application. Therefore, the fact that the person/persons dealing with this regulation do not have sufficient information and that there is not enough resources on this issue, which has an important place in the development of societies, reveals the importance of this study (Mutlu, 2013).

In the Zoning Law, the building is defined as permanent or temporary, official and private underground and surface construction and fixed and mobile facilities including their additions, changes and repairs (Kaya, 2020). It states that the legislator aims to keep the building activities under control by keeping the concept of building broad (Kalabalık, 2005). In the zoning plans, it is clearly stated how many floors are allowed to be built on the island and the parcel on the island. Since the building permits have to be prepared in accordance with the zoning plans, the building should not exceed the number of floors in the zoning plan (Kaya, 2020). Accordingly, in the 4th article of the planned areas zoning regulation, titled definitions, published in the official gazette dated 03.07.2017 and numbered 30113, applied in areas with implementation zoning plans; the floor area is defined as the area covered by the projection of the part of the buildings above the natural ground or leveled ground in the garden, including the annexes and outbuildings, on the parcel without violating the building approach boundary (Kaya, 2020; Yıldırım, 1990). City planning is the process of evaluating the spatial, social, demographic, economic and technical data, aesthetic, cultural (historical, archaeological), natural/ecological factors together in all kinds of settlements from the whole country to the local scale, setting future goals and targets, defining the application tools and processes, and physical and spatial development planning (Topal, 2019). Property, within the limits drawn by the legal order and the duties it assigns, as the owner, the dominance of using the thing, benefiting from the benefits and saving it is defined as the most comprehensive absolute right in rem. From this definition as it can be understood, property is not only a concept that has powers; same it is a concept that includes assignments at the same time. Legal restrictions on the right to property Due to these duties that can be mentioned, the owner is obliged to do, not to do and not to do within the limits of law. Took on the folding duties. Here are the zoning practices, zoning law art. 18, subdivision applications made within the framework of the one of the assignments (Sevinç, 2019). Insufficient supply of serviced urban land in urban areas, land market the entry of low-income and even middle-income groups to the land for accommodation. Not being provided adequately, intense pressure towards the urban edge areas, as well as the lack of infrastructure and service areas in newly developed residential areas. common problems necessitated state intervention. governments in different countries, as a requirement of the intervention, they produced different policies and used different tools. Most of the tools or programs used were insufficient in solving these problems. These inadequacies have also been frequently revealed in various international studies. At this point, land and land arrangement is against all these tools in the international

literature. It is seen as an important alternative solution to be implemented by countries (Mutlu, 2013).

Theoretical Framework

The primary tool of city planning, also called urbanism and urban planning, is zoning plans. The planning process in our country starts on the basis of country development plans and is subsequently defined in a hierarchical structure as spatial plans, environmental plans and master and implementation zoning plans that contain physical plans (Topal, 2019; Kiper, 2013). Although different ideas are put forward in the doctrine, the view that zoning plans are a regulatory administrative action is dominant. As a matter of fact, it is not correct to say that zoning plans have equal power with the law, as this authority is only given to the administration by decrees having the force of law. The view suggesting that it is a mixed transaction, on the other hand, cannot be accepted because the zoning plans bring general, abstract and impersonal arrangements when considered as a whole (Çabri, 2005; Topal, 2019). In the execution of zoning activities; Legislative, executive and implementation decisions within the scope of zoning legislation were arranged, and solutions were sought for the complex problems of urbanization with these regulations (Palamutoğlu, 2019). The process of both preparation and implementation of zoning plans; Architecture, city planning, various branches of engineering, economics and sociology require the evaluation of the data of many disciplines together, and in this respect, the zoning plans that emerged as a result of a multidisciplinary study have a multidimensional structure (Orta, 2005; Palamutoğlu, 2019). The inputs related to the settlement are determined by the master development plans, and the inputs related to the area morphology are determined by the implementation development plans (Palamutoğlu, 2019; Tekel, 2013). He criticizes the fact that architectural activities are rendered impossible due to legislative restrictions, the neighborhood relations of the buildings, their heights, and even the internal relations after these two are defined in the records of this legislation. He states that this situation pushes the architect to design rather than architectural design or legislation or the owner's earnings efforts (Cansever, 2007; Palamutoğlu, 2019). With the application of parcellation, regardless of the ownership status of the land and lands, some lands turn into roads and some roads into lands, the locations of the lands change, the parcels grow and shrink. So much so that, regardless of the owner's wishes, the parcels are combined or separated, and even the area of the parcels is reduced by up to 45%. In that case, it is inevitable to have a legal or unlawful effect on the property right with the subdivision process, the essence of which is land and land ownership. In this study, the zoning law art. The effects of the parceling practices made according to Article 18 on the property right and the reflection of the parceling practices on the property disputes in private law have been examined (Sevinç, 2019). Land and land arrangement, used for developed and developing countries is a technique. With this method, both the development of new areas in urban areas and reorganization of the built areas can be achieved. Land combination, plan implementation, land acquisition, infrastructure construction, finance of land development, time bound land and land in terms of land development, land provision for low and cost housing the editing method has great potential. Therefore, both advanced and the application of this technique is of great importance for developing countries (Mutlu, 2013).

Regardless of the characteristics of the zoning lots created after the zoning plans are made, they are arranged with a plan legend that will give the coefficients such as drawing a certain approach distance and how the total construction area will be.

The zoning lots can be residential, the subject can be areas such as trade, commerce, social cultural area, education facility, religious facility, hospital. On some islands, the building approach distances are displayed directly on the plan, while on others they are not. The approach distances of the parcels within the undisclosed lots are found from their peers, number of floors, or the relationship of the total construction area with the floor area coefficient.

In addition, the area in the plan is determined by forming the lots as discrete, block or adjacent foundations according to the construction style. It has been shown how the approach distances of the parcels will be drawn on the zoning lots, whose approach distances have not been processed in the plan in line with the precedent rates, and the distances will be drawn in the planned areas regulation by how many floors they correspond to as a result of the average floor area coefficient of the precedents.

In the examination of the zoning blocks for which only the equivalent rate is given, whether it is a residence or a type with different characteristics, the approximation and total construction area determination in line with the peer rate will not change.

Material and Method

It is not difficult to determine that the different events encountered in the world we live in are in a certain order. The laws that enable us to understand every single event we encounter have always been the focus of attention of human beings. Studies have been carried out for the laws that have been put forward for many years and the scientists who contributed to the development of the laws have increased day by day. Physical phenomena corresponding to these laws generally have an important place in life sciences and engineering sciences. With the modeling of physical phenomena, the theory of differential equations was formed (Eliaçık, 2021). The exponential function method introduced to the literature by He; It allows obtaining exact solutions of partial differential equations. This method has been proposed to find solitary solutions, periodic solutions, and compacton-like solutions of nonlinear differential equations (Eliaçık, 2021; He & Wu, 2006). The exponential function method helped to find exact solutions of many equations, since the solutions were not previously expressed as containing a finite number of ordinary functions. Using symbolic computation, the exponential function method has been shown to be a powerful method for solving high-dimensional nonlinear evolution equations in mathematical physics (Eliaçık, 2021; Navickas et al., 2009). The first formation and development of the theory of partial differential equations begins with an attempt to make some processes in physical science more understandable with the language of mathematics (Kobak, 2021).

$$\lim_{h \rightarrow 0} \frac{f(a_1, a_2, \dots, a_k + h, \dots, a_n) - f(a_1, a_2, \dots, a_n)}{h} \quad (1)$$

If there is a limit, this limit is called the partial derivative of the f function at the point (a_1, a_2, \dots, a_n) according to the variable x_k (Kobak, 2021).

$$\frac{\partial f(a_1, a_2, \dots, a_n)}{\partial x_k} \text{ or } f_{x_k}(a_1, a_2, \dots, a_n) \quad (2) \text{ it is shown as (Kobak, 2021).}$$

In the most general form, the first and second order semi-linear partial differential equations with one dependent and two independent variables can be shown below, respectively; (Kobak, 2021).

$$A(x, y)Z_x + B(x, y, z)Z_y = C(x, y, z) \quad (3)$$

$$K(x, y, z, z_x, z_y)Z_{xx} + L(x, y, z, z_x, z_y)Z_{xy} + M(x, y, z, z_x, z_y)Z_{yy} + N(x, y, z, z_x, z_y) = 0 \quad (4)$$

If the independent variables are more than two, (3) and (4) can be written similarly to semi-linear equations (Kobak, 2021). In the exponential function determined as the definition and value set in line with the number of floors, it was examined how to make a session on the ground in line with the precedent and floor heights.

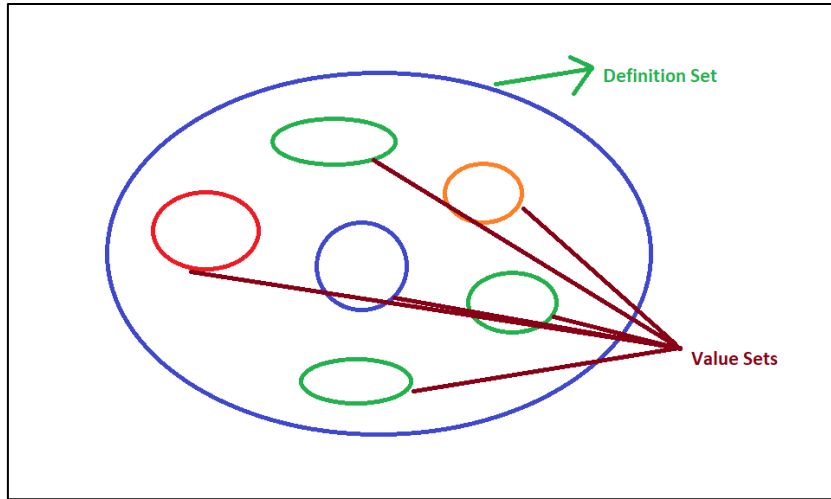


Figure 1. Graphical Representation of Definition and Value Set

It is a graphical representation of how the local areas determined within a defined area should be created without going beyond these limits. When the representation in the figure is fully explained, the part called domain set is the zoning parcels within the zoning blocks that are suitable for obtaining a building permit properly. Within the zoning plots, after drawings are made as front, side and back garden distances, the part that will be evaluated as the building residence area refers to the parts that are displayed in the form of small circles in the figure as the value set. That is, it is another approach of expression from the outside to the inside, or in other words, as sub-clustering, in the formation of the inventory sequence that will be required for the analysis of the operations named with the definition and value set on a parcel basis.

The exponential function, as we mentioned above, is the process of evaluating the definition and value set as a subset of each other. On the basis of plan, it is the association of parcels that fall within the zoning lots with each other.

The most important criterion in the process to be made with this method will be the process of giving the distances to be determined in the form of a split or block structure, the building approach distances to be determined only in line with the peer rates, so that the parcels that will coincide with the island will be an odd number or an even number. In other words, it should be evaluated together with the process of gluing the parcel on the ground according to the title deed area on a separate basis, if it saves alone, if it saves, on the basis of depth, if it does not save, on the basis of depth. Therefore, by iteration, the building approach and plot-based area are calculated by considering all the plots, as if all of them would be allowed for construction.

Findings and Discussion

1/1000 zoning plans are made in different cities and their districts in Turkey. The aim is the process of creating an order that will meet the needs of the people living in the relevant area. These plans may occur at different precedent values and heights, depending on the need. In the provincial borders, these procedures are carried out within the framework of the planned type zoning regulation (Planned Areas Zoning Regulation, 2017; Planned Areas Type Zoning Regulation, 1985). Within the borders adjacent to the zoning border, only vineyards and gardens are allowed to be built (Plan note, 2018). It has been tried to be shown with various examples about how the zoning blocks created will sit on the ground with an exponential function approach when considered as a domain set and considered as a value set in parcels suitable for building permits.

Inspections are made by considering two conditions only in parcels for which comparable rates are given. In the first plan, whether there are build approach distances on the zoning island and secondly, whether there are an odd number of parcels or an even number of parcels is examined. In all examples, we are talking about an empty zoning lot. In the zoning blocks where the construction is

completed to a large extent, the remaining vacant parcels are processed according to whether they are given alone or not.

In other words, there is no obligation for the parcels to come together in residential areas or in plan legends of other characteristics. Only the parcels that fall within the zoning island processed in the plan by giving the precedent ratios, if they have sufficient parcel sizes, can be processed in line with their surface areas and their peers. Apart from the regulation, the relevant local administration may allow the construction of all parcels in provinces, districts or towns in line with the plan notes.

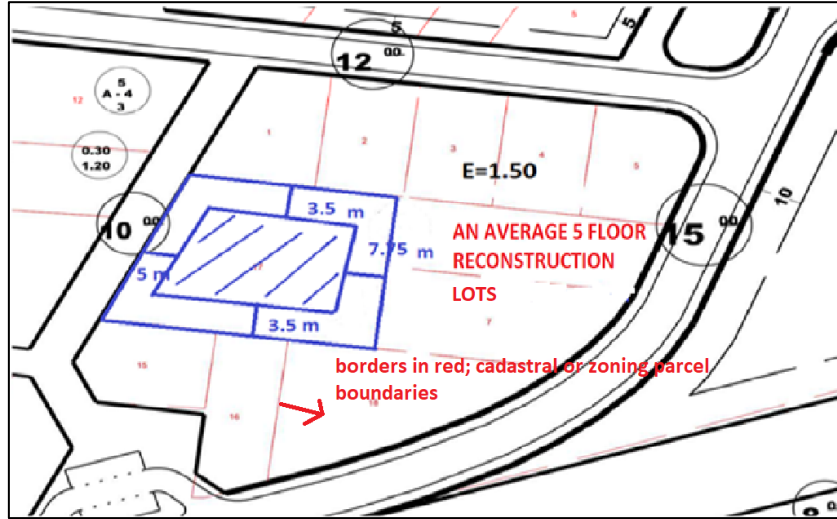


Figure 2. A Reconstruction Lots with a Total Construction Value of 1.50

In Figure 2, a zoning lots has been created in such a way that the beginning and end intervals from the limit infinity are clear. The total construction value was calculated as 1.50, as it should be on a parcel basis. Here, it is understood that in the case of an average building for a parcel given this value in the zoned area, a five-storey building will be built by taking 0.30 per floor over the probability of constructing a building in the form of ground plus four (Taşkaya, 2019a). According to the planned type zoning regulation, it is stated that up to a maximum of 0.40 can be used on the ground (Plan note, 2018). It was stated that when 0.40 is used, the remaining 1.10 part should be used on the remaining floors. Regardless of the total construction value given in the zoned areas, if there is no construction on the right or left side of the parcel, there will always be a five-meter withdrawal from the front (Taşkaya, 2019b). Based on the construction of an average five-storey building, 3.5 meters from the sides and half of the three meters from the back until 2017 by adding half a meter of eaves per floor, it was decided to act as a side garden with the arrangement made after 2017 (Planned Areas Type Zoning Regulation, 1985; Plan note, 2018). However, it is up to the local governments to make some additions to the plan notes in the cities and to make arrangements according to their needs. In the measurement of the plot, it has been shown that the back side is half of the height, thanks to the relevant plan note (Taşkaya, 2019c).

The lot, which was a total of 13 parcels before its blue image, is given only as a precedent, regardless of whether it is a residence or other property, depending on whether permission can be obtained only in terms of parcel size, according to the value set, whether the precedents alone will be sufficient for construction and whether the building approach distances are in the middle or adjacent to the adjacent parcel. Since it will not be adhered to, a parcel-based process has been carried out as a whole. By gluing the parcels in the north, assuming that there will be no merging, the building approach distance was calculated and the number of parcels was increased or decreased exponentially, and the use was carried out considering the island in general and the parcel in particular.

When the domain is evaluated as a zoning lot by approaching it exponentially, the value set will be the zoning parcel that has been brought into a state to receive permission for construction. When

the parts shown with black thick lines in the figures are evaluated as zoning islands, the parcels with clear borders in the form of red lines will be either cadastral or zoning parcels. The building approach distances and the total number of construction areas on the parcels whose dimensions have been adjusted will be determined in line with their precedents.

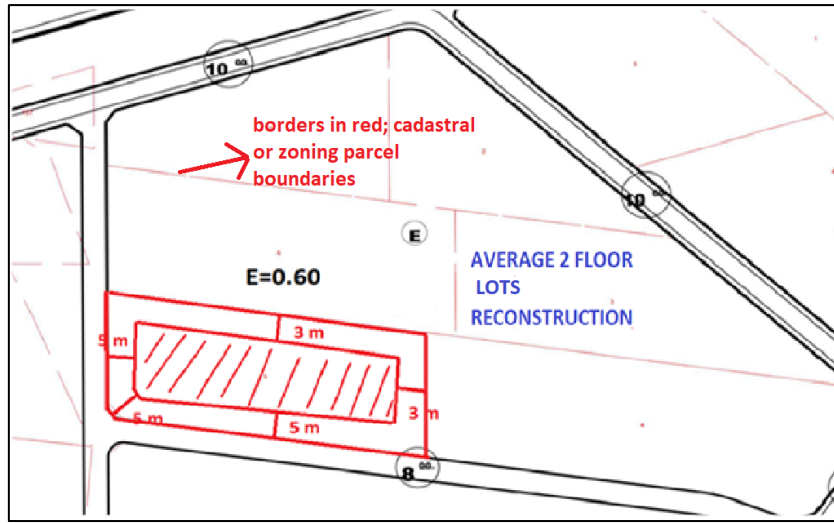


Figure 3. A Reconstruction Lots with a Total Construction Value of 0.60

In the example, a parcel shape is given in order to show the situation with an exponential approach in a zoning lot that allows the construction of structures such as a vineyard or garden area in the plan. The parcel located on the corner lot with double facades was given a fixed front shrinkage of five meters, and according to the planned type zoning regulation, the building settlement type of the parcel with a total construction area of 0.60 was shown by drawing 3 meters from both sides, based on the side distance of three meters in places up to four floors (Taşkaya, 2019d). Generally, the lots with a value of 0.60 are new type development lots outside the city centers.

According to the regulations, the average floor usage amount is determined as 0.30 in the zoning lots with precedent only, so the number of floors is determined in this way. Where there is no contrary plan note, it is used up to a maximum of 0.40, and the remaining total is reduced from the precedent and applied to the upper floors in this way. In other words, the importance of the exponential approach is that it is the method to be preferred because it helps to make the best decision in transforming the parcel into a discrete or block building style.

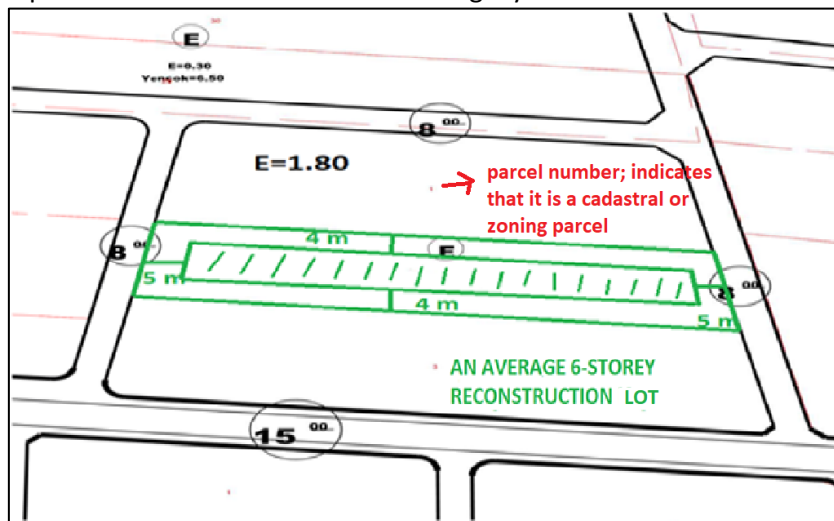


Figure 4. A Reconstruction Lots with a Total Construction Value of 1.80

In Figure 4, the situation regarding the construction of the parcels, which has a total construction

area of 1.80 and whose domain is a zoning lot, is examined. The construction island with a total construction area of 1.80 is accepted and since the domain will be parcels, the application of drawing operations in the west-east direction to the parcel in the middle is shown with an exponential approach (Taşkaya, 2019a). By showing examples of different floors, it has been shown how a ground session should be done on an lot where an average of six floors can be built. Since a structure that will be planned below 0.30 on the ground will be likely to suffer damage in a possible soil deformation, it would be appropriate to give it up to a maximum of 0.40, which is 0.30 and above. For this reason, especially the side drafts were determined as four meters based on an average of six floors (Taşkaya, 2019d).

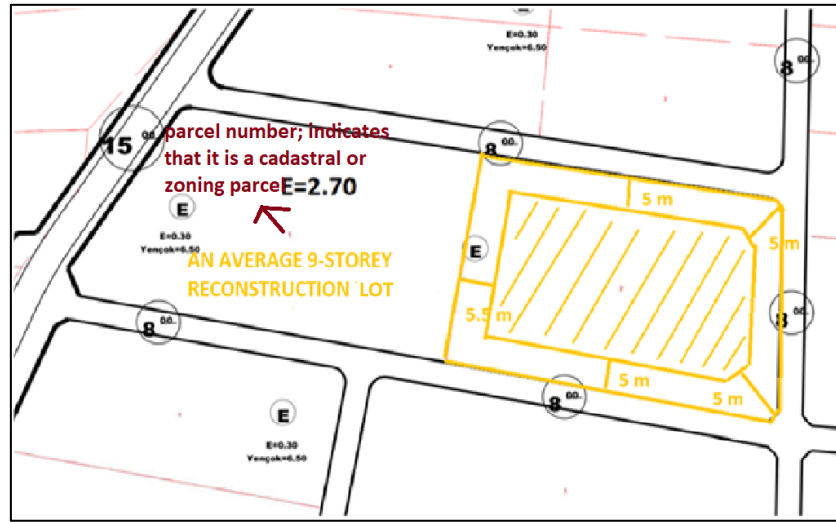


Figure 5. A Reconstruction Lots with a Total Construction Value of 2.70

In the example, this time, on a zoning lot with a total construction area of 2.70, the residential area of a three-sided parcel is shown as a local value, from the part specified as the definition. According to the planned areas type zoning regulation, it has been emphasized that the draft amount on the ground should increase by half a meter per floor in the side state, and in a structure that is normally possible up to nine floors, it is necessary to draw 5.5 meters from the side (Plan note, 2018). It has been stated that the front sides should be shot as fixed five meters in case there is no construction, and if there is construction, it should be applied by looking at the architectural project (Taşkaya, 2019b).

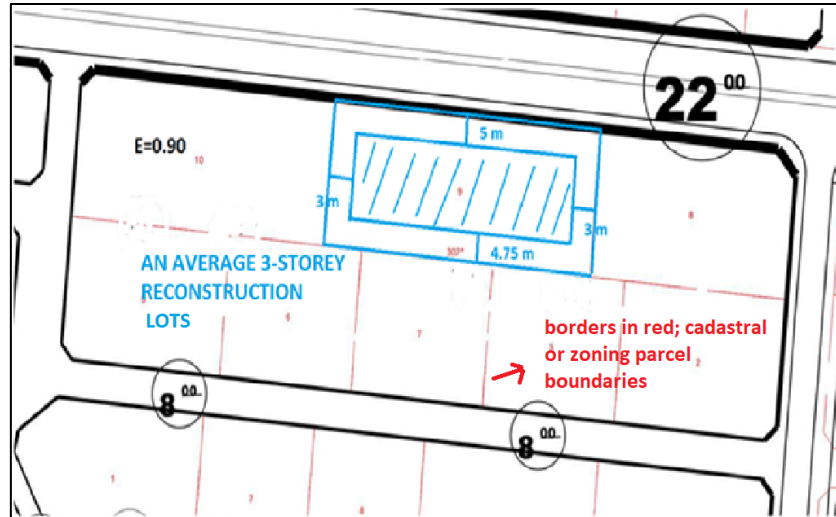


Figure 6. A Reconstruction Lots with a Total Construction Value of 0.90

In the figure, from the definition value of 0.90 with the total construction area, it is emphasized how the residence area of a single-sided development parcel should be on the ground when looking at the parcels on the basis of value. These shots on the ground can be made with various mathematical approaches. This happens in the light of a certain algorithm with a partial or logarithmic approach. In any case, the necessity of how to build in and out of the zoning parcels is in the light of this diagram. In the sample plot, taking the average three floors as the base, the moment shots were taken as three meters and the rear shots were taken as 4.75 meters by taking the plan note and half of the height and given in the middle.

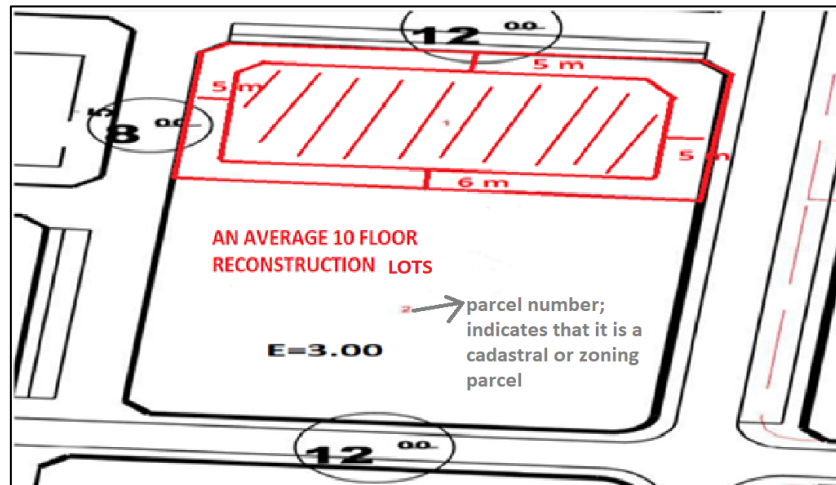


Figure 7. A Reconstruction Lots with a Total Construction Value of 3.00

Lots with a total construction area of 3.00 and above are generally considered as areas to be established by new settlements and residences. Tensile dimensions on the ground are determined only as the boundaries that the structures cannot cross, without considering the possibility of more than one block in the architectural project. In a domain consisting of two plots, six meters were drawn from the side, since an average of ten floors would be built, regardless of how many floors there are, on the north plot, which is inward, with an exponential approach (Taşkaya, 2019a).

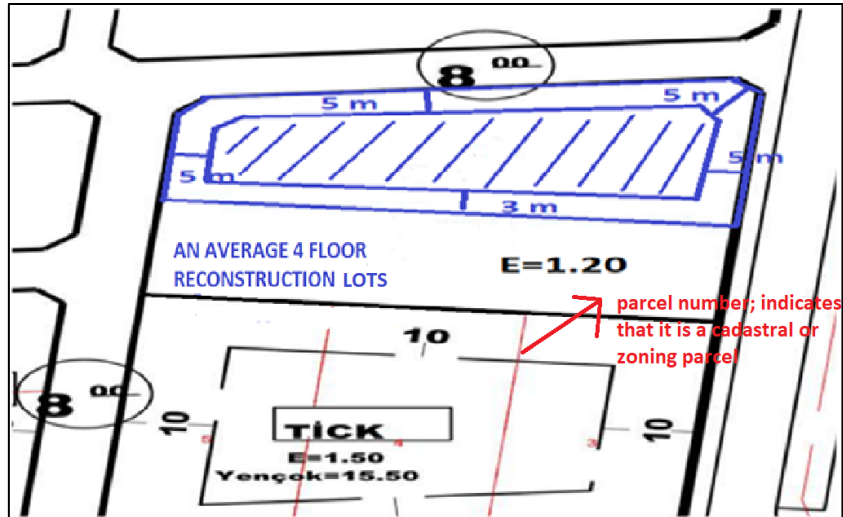


Figure 8. A Reconstruction Lots with a Total Construction Value of 1.20

In this zoning lot, which has been identified similarly to the previous example, the withdrawal principle will again be determined depending on the total construction area. Here, too, in the domain of 1.20, the inner plots will be tensiled on the ground over four floors. In the planned type zoning regulation, it is stated that side and rear tows should be made by increasing three meters up to four floors, and by increasing half a meter per floor after four floors (Plan note, 2018). Thus, the side measurement was taken as three meters.

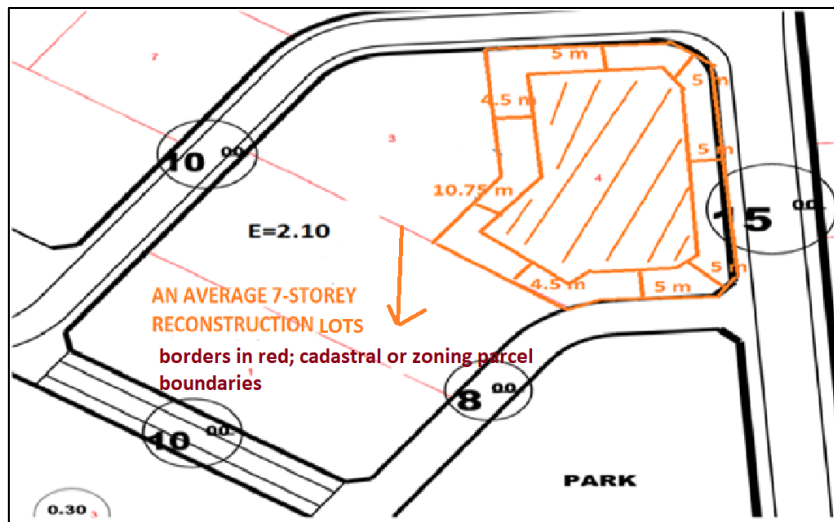


Figure 9. A Reconstruction Lots with a Total Construction Value of 2.10

In the example, in the definition function with a total construction area of 2.10, it is shown how the side and rear measurements are different, based on the construction of an average of 0.30. Accordingly, according to the plan note of the relevant plan, half of the height is engraved on the back as a draw. On the side, the ground session is shown by processing 4.5 meters.

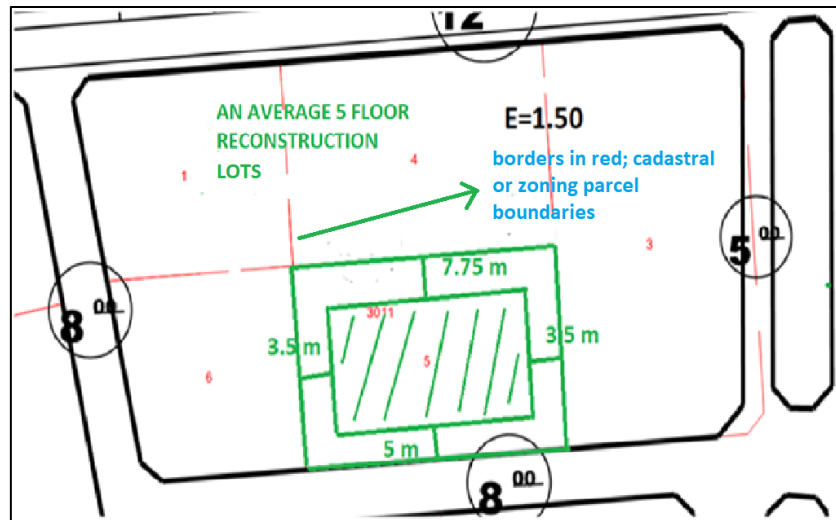


Figure 10. A Reconstruction Lots with a Total Construction Value of 1.50

In Figure 10, an example of the areas to be built on average five floors in city centers is given. Here, it is seen that in five-storey areas from the average, 3.5 meters from the side and the rear part will be given from the definition and value set relationship by adding the height plus the eaves.

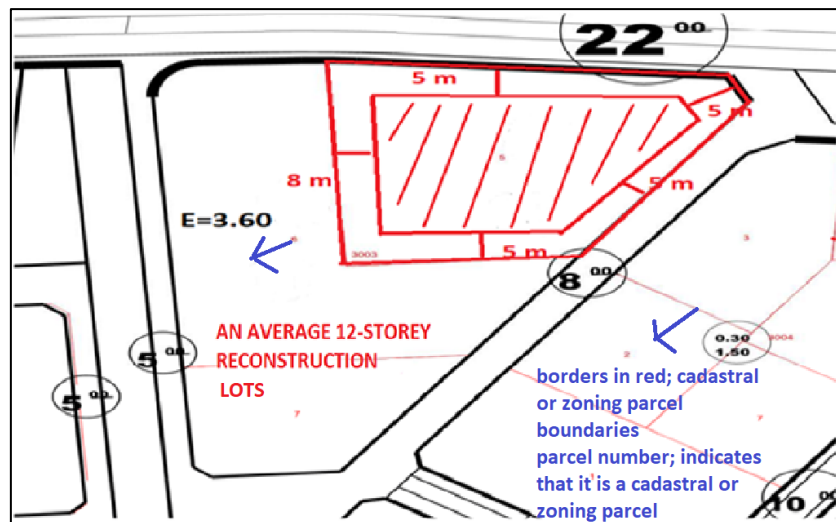


Figure 11. A Reconstruction Lots with a Total Construction Value of 3.60

In particular, it is shown how to give ground settlement to the parcel in the zoning lot, which is a definition set with a high total construction area representing the areas where shopping center buildings will be built. The important difference seems to be only the side shooting distance. It has been shown that in the value set that can be made up to twelve times on average, there will be an approximation of eight meters to the side plot.

Table 1. Garden Pulling Distances

Precedent Values	Number of Floors	Front Yard Pulling Distance (m)	Side Garden Pulling Distance (m)	Rear Towing Distance Before 2017 (m)	After 2017 Rear Towing Distance (m)
0.30	1	5	3	3	3
0.60	2	5	3	3.25	3
0.90	3	5	3	4.75	3
1.20	4	5	3	6.25	3
1.50	5	5	3.5	7.75	3.5
1.80	6	5	4	9.25	4
2.10	7	5	4.5	10.75	4.5
2.40	8	5	5	12.25	5
2.70	9	5	5.5	13.75	5.5
3.00	10	5	6	15.25	6
3.30	11	5	6.5	16.75	6.5
3.60	12	5	7	18.25	7
3.90	13	5	7.5	19.75	7.5
4.20	14	5	8	21.25	8
4.50	15	5	8.5	22.75	8.5

In the Table 1, by taking the direction from the main plot, which is considered as the domain set in the light of all the precedent values and the number of floors, how the building floor will be located in the facade and depth conditions as the value set, in the light of the garden distances, is shown. In addition, in the light of the planned areas type zoning regulation that changed in 2017, the rear pull distance will be obtained by adding 0.5 meters of eaves, and multiplying the fixed flat height of 3 meters by the number of floors, and dividing by 2. With the change made after 2017, 0.5 meters of eaves has been removed from consideration. Instead of this, the necessity of applying the rear drawing distance of the parcel in the form of a value set has been created by considering the rear drawing distance as a side garden.

Discussion and Conclusion

In Turkey, especially the ground settlement works of the buildings bring the citizens and the technical personnel face to face. Actions are taken according to the Zoning Law and the regulation on planned and unplanned areas. In some cities and districts, local governments obtain the permission from their own councils and create the plan notes by putting some conditions on the zoning islands, provided that they are not contrary to the regulation. The total construction areas should be determined depending on the population density and the conditions of the parcels on the land. By taking these islands as the definition function and the value function as plots, the ground settlement areas are determined. In the examples, it was shown what kind of ground-taking approaches should be on these islands with different densities. Our proposal should be determined and implemented according to the population density and ground conditions, especially in the long-term rather than short-term intervals for the zoning islands. Local governments should not make changes in applications with different grades for their own profits. In the light of the findings, the necessity of applying side and rear draw distances to the parcel, which is considered as the domain set, provided that the side and back garden distances are increased by 3 meters in parcels up to 4 floors, and 0.5 meters per floor after 4 floors, has been revealed with figures. It has been revealed that the front pulling distances should be given by taking 5 meters as a floor, regardless of what they are. However, as a result, it is explained how to create a parcel, which is determined as a domain set, in the light of tensile criteria with an exponential function approach in the form of a value set in the building ground settlement process.

- Logically, it is to find out the accuracy of the decision process in giving the residence area as a form by leaving, creating or combining the parcels that coincide with the zoning lot with the exponential function. If it is sufficient on its own, it is to provide the building approach

according to the total area amount given by the parcel alone and the amount corresponding to the number of floors. In parcels that are not suitable for construction alone, it is to ensure that the parcel is dimensioned in order to take it out of the split form and put it into a block form.

- In the zoning areas where only comparable rates are given, the process is examined only as a building regulation, without looking for housing or any other property.
- Generally, only the areas whose precedents are given are considered as residences.
- If the building approach distance is not processed in the plan, it is applied within the framework of the regulation according to the drawing amount corresponding to the number of floors given by the equivalent coefficient.
- Whether the parcels are residential areas or not, if there is no plan note otherwise, the building can take the approach limit for the construction permit alone as long as its dimensions are sufficient.
- With this applied method, it has been revealed that the fields called definition and value set are beneficial in determining the states of being together or alone in construction.

Acknowledgement

In this study, I would like to thank Semih Taşkaya, MSc.

Author Contributions

Selim Taşkaya, contributed to providing the necessary materials and environment for the research, conducting the experiment, guiding the analysis, statistical interpretation of the data and writing the article.

Ethic

There are no ethical issues with the publication of this article.

Conflict of Interest

The authors state that there is no conflict of interest.

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