

The Effects of Drawing Distance Applications Stated in Development Plans on Environment

Sabahattin AKKUS, Tayfun CAY and Fazil NACAR, Turkey

Keywords: Construction Plans, Setback Distance, Environment, Public Interest

ABSTRACT

Construction plans, closely affecting people's social and cultural livings, family happiness, contact with environment, their plans about future; are prepared for an efficient usage of physical environment and assessment of investments for land protection and highest level of usage balance.

Construction plans which are prepared for creation of modern urban areas and environments should be done according to its aims.

If setback distances of the buildings, which are prepared proper to construction plans, are used in different ways and damaging environment by effecting people in a negative way, authorised institutions and establishments should take necessary precaution. Local Authorities has important missions about application step of the construction plans which aim to fulfil every kind of necessities of urban people in the best way. In this notice, problems sourced by misusage of areas between roads and building (setback distance) are studied and assessed.

The Effects of Drawing Distance Applications Stated in Development Plans on Environment

Sabahattin AKKUS, Tayfun CAY and Fazıl NACAR, Turkey

1. INTRODUCTION

Industrialization and urban migration which has taken 150-200 years in Europe and America, is tried to be realized in Turkey in 50 years along with a rapid population growth. In our very fast developing world, we are changing newly established settlements and areas in 25-30 years again, and demolishing the old houses and building bigger ones as is we are in a race. (URL1).

Nevertheless while constructing these buildings, unlearning incomes are get especially by opening avenues for commercial activities and using building's setback distances which are out of settlement area (area of neighbourhood, road) for commercial benefits. Habitants of these buildings and environment are damaged. It emerges that construction plans are not used proper for their aim, on the contrary it capitalize on some people as they are not controlled.

In some countries these areas are belong to public. Commercial activities cannot be done in close building distances. In these areas people are on move (areas between road and commercial activities). These areas are common areas. In these areas people sustain their social lives. Social life of human being is possible with the existence of others. And the concept of public emerges in where other people exist. Common areas should be used for benefit of public. (Gür, 2010).

Public areas (common areas) are constructed or unconstructed areas. Constructed areas; are areas such as service, management, industry, recreation, entertainment which creates urban structures. Unconstructed areas are; squares, streets, parks, avenues (Aydemir,1999).

Public areas are the areas which gain meaning of personal freedom of people by being together with others, at the same time these are the areas that person meet with others and enrich his existence. (Yoldaş, Gürbüz, 2007).

Usage of public squares (common areas) for commercial activity areas significantly damages environment. Especially, malls which sell staple food and necessity articles damages local community as they do not show attention for hygiene and health regulations, cause noise pollution and cause traffic accidents by effecting traffic in avenues.

This kind of usage of such areas should be controlled and prevented. Or these areas are used out of their purposes and effects landscaping in a very negative way.

2. LOCAL ADMINISTRATIONS IN TURKEY

Most organised form of the social life is state. States; establishment, operation, applications, government and system changes from country to country. Definition of state is done in different forms. One of them is union of people who are depended on a responsible authority in determined aims for realizing public interest according to provisions of law. Common necessities of a community who live in country borders are provided by public services controlled by state. General interests are controlled and protected by state. In our country settlement units has specific specifications and problems. Some kind of organisations is needed in time for the solution of locally changing problems. So the idea of local management (local administration) is emerged. Local administrations change according to countries. In Turkey, Special Provincial Administration (Special Provincial Management), Municipalities and Village Management are the local management organisations. We will mostly consider construction plans' conformity of usage of the buildings for their purposes which are done under the control of Special Provincial and Municipalities.

2.1 Special Provincial Management and Its duties

Special Provincial Managements are accepted by basic law and legal entitled public enterprises. According to 1982 Basic Law's 127th statement, city, municipality and villages are considered as Local Management Institutions and it is indicated that general decision organs of these will be chosen by public.

Also it is explained in the mentioned code of Basic law that local institutions are public corporate entities which provide common necessities of the public.5302 numbered Special Provincial Management Law, gives wide authority and study area for Special Provincial Managements. Special Provincial is a Basic Law institute. Their repealing is depended on changes in Basic Law (Yıldız, 2006).

Establishment of Special Provincial Managements are not connected to any form, it is established by the law about the establishment of the city and ends with corporate entity about the repealing of the city. Special Provincial Managements are authorised for below as long as local shared;

- a.** Within city borders, health, agriculture, industry and commerce, landscaping plan of city, public works and settlement, protection of land, preventing erosion, social services and support, providing micro credit for poors, nursery schools and orphanages; land provision for primary and secondary education, services for supplying necessities of construction, renovation and maintenance of the buildings,
- b.** Construction, road, water, sewer system, solid waste, environment, immediate aid and rescue, culture, tourism, youth and sport; supporting forest villages, forestation, services about park and park facilities. (URL2).

2.2 Municipalities and their duties

Most important of the local managements is municipalities. Approximately 80% of the Turkey population live within municipality borders. Municipalities can be established in settlements with 5000 population and more. It is a must to establish municipalities within city

and county seats. Municipalities cannot be established in drinking water and utility water basins and sit and other protection areas and residential area commission which are closer than 5000 meters to a municipality.

Municipality has around 150 years of past in our management system. Municipality is one of the management establishments such as Special Provincial Managements which are inherited to Republic from Ottoman. 1580 numbered Municipality Law which is accepted in 1930, has made a major contribution to municipalism experience and give place to 5393 numbered Municipality Law, which is accepted in 03.07.2005, after a 75 year old application.

There are two kinds of municipalities in Turkey. First, municipalities which are totally established and functioning to Municipality Law; and the second one is metropolitan municipalities which function only in metropolitans and having a different statue.

According to 5393 numbered Municipality Law, Statement 14,on condition that shared locals;

a. Construction, water and sewer system, urban structures such as transportation; geographical and urban information systems; environment and public health, cleanliness and solid waste; constabulary, fire department, immediate aid, rescue and ambulance; local traffic, sepulchre and cemeteries; forestation, park and green areas; houses, culture and art, tourism and presentation, youth and sport; social service and help, marriage, providing occupation and skills; development of economy and commerce services. Metropolitan municipalities and municipalities with over 50.000 population; establish protection homes for women and children.

b. It can make construction, renovation and maintenance of school buildings in every level which belong to state, can provide necessity of every kind of equipments, can open any kind of facility about health, can provide protection of culture and natural assets/properties and historic fabrics and places which are of importance for city history, and can reconstruct the ones which are not possible to protect.

It provides equipment to students and amateur sport clubs and provides necessary support when necessary, arranges every kind of amateur sport matches, and can reward players who give an outstanding performance in domestic and abroad and can make food banking. (URL3).

Construction plans are the plans which aim providing social and cultural necessities of inhabitants, creating a healthy and safe environment, increasing life quality. For this aim, it is a document which is prepared according to surveys related with city's economical, demographical, social, cultural, historical, physical studies and datas, determining urban settlement and development inclinations by constituting alternative solutions, including land usage, protection, limiting decisions, organising and application criterias and consist of map sections, reports and notes. Construction plan consists of two steps as land use plan and application construction plan (Yıldız, 2006).

Land use plans; are the plans which are prepared on approved ready maps and cadastral situation is processed if available, and prepared proper to area and environment order if available. It shows general usage process of land pieces', main area types, plans including future population density of areas, structure density if necessary, direction and growth and principles of various settlement areas. It is a plan which is prepared for showing matters of transportation systems and solution of the problems and arranged in 1/1000 or 1/5000 scales for being base for application construction plans and explained by a detail report.

Application Construction Plans are the plans which are prepared on ready maps and cadastral situation is processed if available, and prepared according to land use plans. It is a plan which shows structure islands of some areas, density and order of these, ways and basic application steps and basics which are necessary for construction application programmes and shows other information detaily and arranged in 1/1000 scale.

In situations which existing construction plan do not correspond to necessities within developing areas, it is a plan which is prepared adjacent to existing construction plan and consistent to general area usage of existing construction plans and again in unity and transportation with existing construction plan (URL4).

2.3 Park Distance in Construction Plans

It is the minimum distance of the building to the road and neighbour parcels which will be constructed within parcel. There is four kind of park distance which are front park, side park, back park distance and neighbour park. (Figure1). Front park is the distance that parcel's face distance to the widest road. Side park is the face distance between corner parcels and other road. Neighbour park is its distance from side park. This value is $h/2$. So it can come close as half as building height. Other values are given on the plan. (Yıldız, 2006).

According to property ownership law; Negotiations, Statement 2;

a. Whole of the real estate which is subject to property ownership (main real estate); only the real building part, if the real estate is proper for usage on its own and separately, its parts which are subject to independent property according to this provisions of law (independent part); place which are out of an independent part, and directly consigned to that part (addition); property right on the independent parts (property ownership) and holders of this right (property owners).

b. The parts which are out of main real estate's independent parts, and used for protection and common usage (common places); property owners' right of usage for these places in the capacity of coparcener (right of usage);

Common places, according to statement 4; Subject of the common places can be defined by a contract. Places written below and things are described as common in any condition regarding law.

- a. Groundwork and main walls (Additional Statement 14/11/2007-5711 S.K./2.statement) beam which constitutes carrier system, column and curtain wall, ceiling and grounds yards, general entrance doors, entranceway, stairs, elevators, stair heads, corridors and public toilets in there and sinks, housekeeper's apartment and its rooms, common laundry hangers and cloth drying places, common coal bin and common garages, places and closed areas which are for electric meters, water meters and gas meters, utility rooms, wells and reservoirs, common water tanks of the building and shelters,
- b. Sewer system of each property owner out of their own part and rubbish chutes and radiator, water, gas and power plants, common networks for telephone, radio and television and antennas, hot and cold water plants.
- c. Roofs, chimneys, common roof terraces, rain gutters, fire safety stairs.

Other places out of stated ones above, which are subject to common usage, protection or benefits are also subject to (common place) issue (URL7).

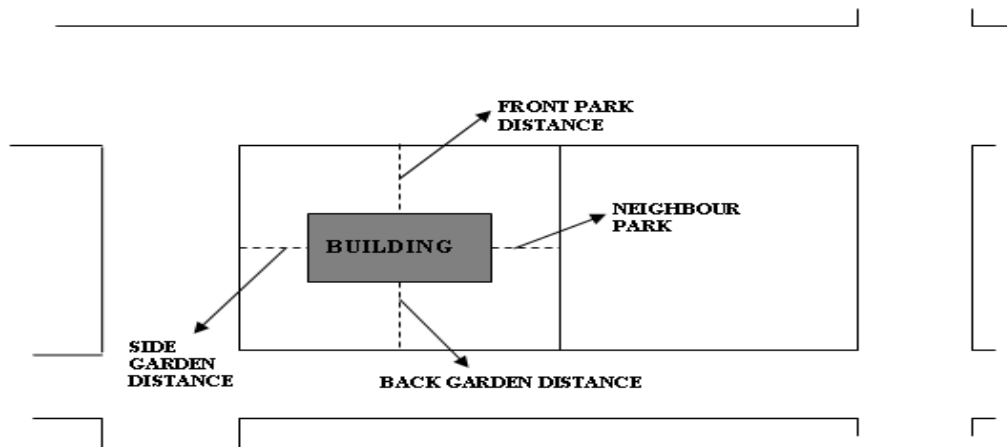


Figure 1. Park setback distances

3. SITUATION OF THE CONSTRUCTIONS WHICH ARE USED OUT OF THEIR PURPOSES

Permission which is taken from a municipality in city borders for constructing a building out of construction border is called as building license (construction licence). Building licence is given by local construction authority on behalf of mayor if available, if not by directorate of technical works or bureau which is authorised by this task. If it is out of construction borders, building licence is given by provincial directorate of public works and settlement on behalf of city authority.

According to 3194 numbered construction law; **Statement 1** - This law is regulated for providing settlements and structuring in these places; **proper organization for health and environmental conditions.**

Statement3 – Any area cannot be used for **contrary aims** to plan basis in every scale, conditions of the area it is situated and management regulations.

Statement 21 – For all buildings which are included in the scope of this Code,except for exception in 26th statement, all buildings must get a building licence from municipalities or governorship.

Making any kind of **change** in licenced buildings also connected to getting licence again. In this situation; if there is not a gross part in the independent parts and **qualification** is not changing, licence will not be subject to any tax, picture or charge. But; joint, interior exterior dye, whitewash, rabbit, brook, shredding, laying, and covering of ceiling, power and sanitation repairing and roof repairing and roof tile transfer and other repairs which are proper to regulations and will not effect carrier elements which are indicated in construction plans prepared by municipalities are not subject to licences.

Municipalities or governorships are authorised for providing **harmony, achieving beautiful view** which will be proper for surrounded buildings. Building which are constructed before taking effect of this law are also subject to this provision. (URL5).

By this provision of the law, it presents the appropriate making of construction plans, carrying environmental, health related and technical conditions, responsibility and inspection of authorised technical staff.

4. A SURVEY ABOUT THE WORK PLACES WHICH MERCHANDISE BY USING COMMON AREAS

In most places of our country, avenue faceted offices, are using setback distances for their own benefits, and gives serious harm to environment by getting unearned income. We have observed Konya, which is one of the important cities of our country, Rauf Denktaş Caddesi (Rauf Denktaş Avenue) which is of a intense traffic (Figure 2 and 3) and have various merchandise centres in right and left which uses public areas for their own benefits. In this locality, shopping centres narrows living area of habitants, rapes common places and carry out their sales stands, makes site common place like a three-ring circus, in fruit sellers fruit and vegetables wastes, nylon bags, paper boxes pollute the environment and prevents the entrance of site, signboards which are assembled to building wall damages common areas, totems of the shopping centres are bigger than standards and narrows the road for this reason, watchman's huts effect living areas, sales of ice cream or corns in common places according to season and weather conditions (Photo1) cause a lot noise. Also, customers of these shopping centres park their vehicles to this common place and site habitants cannot find place for their vehicles.

There is a heavy traffic in Rauf Denktaş Avenue. Cars which stops on the avenue for shopping clog the road in some hours and cause traffic accidents. (Photo 2.a and 2.b). Especially in winter season, as the roads are snow and icy it cause trouble for customers who stop in this avenue for shopping.

Site management has declared that this merchandise harms site habitants and environment in 14.08.2009 and in previous dates; but tradesman have not considered this warning. Site management then sued these shopping centres in Konya court of first instance. Court asked for expert opinion and case between the site habitants and tradesman still going on.



Figure 2. Existing map of application area

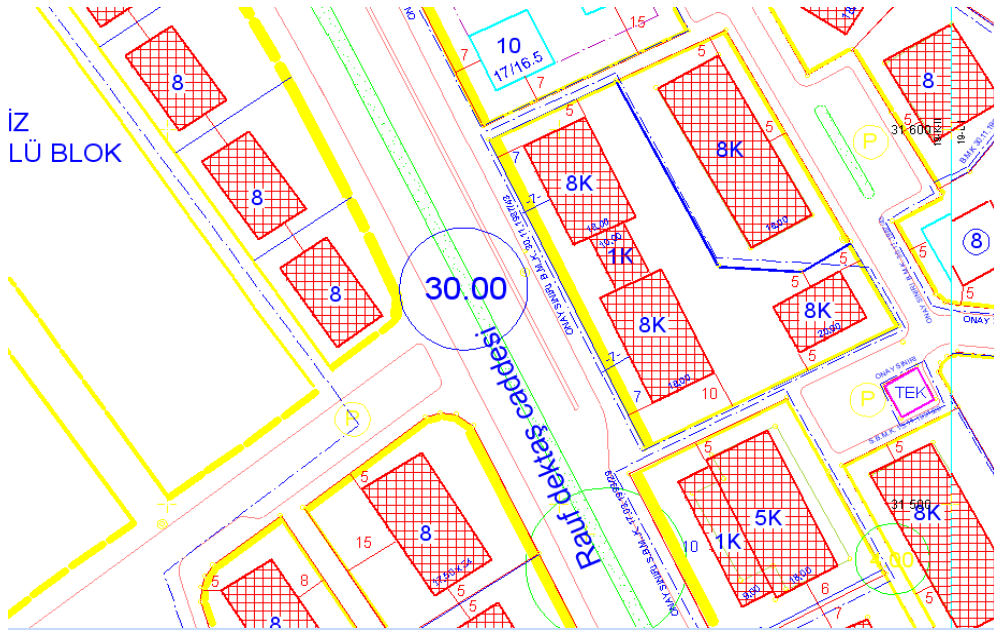


Figure 3. Construction Map of Application Area



Photo 1. Existing occupied view of communal area



Photo 2. a Traffic accident caused by occupation of communal area (30.01.2009)



Photo 2.b Traffic accident caused by occupation of communal area (17.12.2011)

5. ASSESSMENT

Considering existing positions before starting a construction is a study which is of a great importance. Lacking or wrongness of these studies creates great problems on technical, economical, social or legal issues in the future.

A constructed area is needed for the building. Building should not be constructed to an area in a superficial way. Place of the building should be chosen in a position to serve people and building should satisfy expected needs. Building should be constructed in a proper way to its aim and should be qualified for operation. (URL6).

After constructing the building by getting the building licence, one can make entrance floor of his building a office. But he should not harm environment. It should not ruin the social and cultural structure of the city. If merchandise is done like offices in application area Rauf Denktaş Avenue, people will be dissatisfied and some problems come along.

Legislators, should be a bit more careful about the usage of common areas and make some enforcements. This issue causes greater problems day by day in some of our cities. There should be m2 limitations for shopping centres in city centre which do not have parking places, harming site habitants hygienically and about health.

Problems in the application area are that municipality is giving licence for shopping centres without parking place condition. There is a need for new legal regulations about this issue for public interest.

6. RESULT

As stated in existing construction regulation (3194 Construction Law 1, 3 and 26th statements), usage of buildings should be constructed proper to health and environment conditions, not out of regulation legislation purposes, harmony and acquiring a nice view.

In construction plans, the areas which are in setback distance should be used in commercial purposes in an incongruous way to construction regulation. These areas are common areas of the public. When these areas are occupied pedestrians will have to use the places that vehicles use. Especially in morning and evening hours, going to work and clock out times are very busy, there is traffic accidents happen in these places. Areas which are in setback distances must not be used out of their purposes.

Common areas that urban people wander freely should be a device to make people happy. The more the people happy and peaceful are the more productive and hardworking they are.

REFERENCES

Aydemir, Ş., 1999. Kentsel Alanların Planlanması ve Tasarımı, K.T.Ü. Mühendislik Mimarlık Fakültesi Ders Notları, No:54, s 339, Trabzon (in Turkish).

Gür, S., 2010. Kamu Yararı Kapsamında Kamusal Alan Olarak Transfer Merkezlerinin İncelenmesi-Bağcılar Meydan Transfer Merkezi Örneği Yüksek Lisans Tezi, Bahçe Şehir Üniversitesi, İstanbul Bahçe şehir üniversitesi İstanbul (in Turkish).

URL 1.www.yazilisorulari.org (exam questions)

URL 2.www.mahalli-idareler.gov.tr (local governments)

URL 3.www.mevzuat.adalet.gov.tr (statute justice)

URL 4.www.arastirmaplanlama.com (research planning)

URL 5.www.toki.gov.tr

URL 6.www.santiyeci.com (shipyard)

URL 7. www.mevzuat.adalet.gov.tr (statute justice)

Yıldız, F.,2006. İmar Bilgisi,Nobel Publishment Distribution, 4 press, Ankara.

Yoldaş Gürbüz, N., 2007. Study of Anatolian Traditional Housing Structure and Function of Dead End's Today's Situation Postgraduate Thesis, Selçuk University, institute of science department of architecture, Konya

BIOGRAPHICAL NOTES

Sabahattin Akkus is teaching assistant Kadinhani Vocational School of Higher Education at the Selcuk University of Konya, Turkey. He has been with Selcuk University since 1998. He has an BSc from Selcuk University (1989), in Geomatic Engineering. His research interests; Land management, public works, cadastre and law of inheritance.

Dr. Tayfun Cay is a Assoc. Prof. Dr. of Geomatic Engineering at the Selcuk University of Konya, Turkey. He has been with Selcuk University since 1989. He completed his PhD study at Selcuk University (1994), in “Project planning and management in land consolidation activities” subject. He has an MSc from Selcuk University, Department of Geomatic Engineering, (1989), and a BSc from Selcuk University (1987), in Geomatic Engineering. His research interests; Land consolidation, public works, cadastre law, project planning and management and GIS.

Fazıl Nacar is teaching assistant Osmaniye Vocational School of Higher Education at the Korkut Ata University of Osmaniye, Turkey. He has been with Korkut Ata University since 2000. He has an MSc from Cukurova University, Department of archeometri, (2003), and a BSc from Selcuk University (1991), in Geomatic Engineering.. His research interests; Land management, public works, cadastre and cadastral renewal

CONTACTS

Assoc. Prof. Dr. Tayfun CAY
University of Selcuk
Faculty of Engineering - Architecture
Department of Geomatic Engineering
42031 Konya
TURKEY
Tel. +90 332 223 19 44
Fax +90 332 241 06 35
Email:tcay@selcuk.edu.tr

Sabahattin AKKUS
University of Selcuk
Kadınhanı Faik İcil Vocational School of Higher Education
42800 Kadınhanı-Konya
TURKEY
Tel. +90 332 834 03 06-141
Email: sakkus@selcuk.edu.tr
Fazil NACAR
University of Osmaniye
Osmaniye Vocational School of Higher Education
Osmaniye
TURKEY
Tel. +90 531 7908753
Email: fazilnacar@osmaniye.edu.tr