TECHNICAL TRANSACTIONS 11/2019
ARCHITECTURE AND URBAN PLANNING
DOI: 10.4467/2353737XCT.19.117.11333
SUBMISSION OF THE FINAL VERSION: 29/10/2019

Magdalena Meller orcid.org/0000-0002-3849-0012
projekt@ogrodymagdaleny.com.pl
Institute of Land Improvement, Environmental Engineering and Geodesy,
Faculty of Environmental Engineering and Spatial Management, Poznań University of Life Sciences

The assessment of spatial changes in the size of the spa park in the Inowrocław spa town since the 19th century

Ocena zmian przestrzennych w wielkości parku zdrojowego w miejscowości uzdrowiskowej Inowrocław od XIX wieku

Abstract

The aim of this study was to document spatial changes in the size of the Spa Park in Inowrocław from the 19th century onwards based on archival maps as well as field research and observations of the current status. Towns providing a highly specialised health resort and spa services, such as Inowrocław, need large expanses of green areas as public spaces for outdoor therapy for spa town visitors and patients. In Inowrocław, this may not be limited only to the surroundings of the greatest asset of this spa town - its graduation towers. The fascinating history of the area and planning decisions concerning green areas over the years have brought many benefits to the town, which also extend outside the scope of health resort services. This article presents the multi-faceted changes and transformations of this area along with the plans and intended uses.

Keywords: spa park, spa town, spatial planning in spa towns

Streszczenie

Celem pracy jest udokumentowana na podstawie archiwalnych map oraz badań terenowych i stanu obecnego ocena zmian przestrzennych wielkości Parku Zdrojowego w Inowrocławiu na przestrzeni lat od XIX wieku. Miasta pełniące wysoko wyspecjalizowane usługi uzdrowiskowe, takie jak Inowrocław, potrzebują dużo obszarów dla terenów zieleni dzięki temu gwarantują kuracjuszom oraz turystom teren ogólnie dostępny potrzebny do terenoterapii i przebywania na wolnym powietrzu a nie tylko w pobliżu tężni, z których słynie Inowrocław. Bardzo ciekawa historia tego obszaru oraz decyzje planistyczne na przestrzeni lat przyniosły dziś miastu szereg korzyści – nie tylko zdrowotnych z punktu widzenia terenów zieleni. Przekształcenia i dążenia obszaru zaprezentowano w niniejszym artykule.

Słowa kluczowe: park zdrojowy, miejscowość uzdrowiskowa, planowanie przestrzenne w uzdrowiskach

1. Material and methods

This study comprised analyses of cartographic and graphical materials. The following maps were analysed: Messtischblatt 1:25,000, Berlin 1890, map sheet 1722 (Inowrozlaw) reference number UP 2290, Messtischblatt 1:25 000, Berlin 1911, map sheet 3275 (1722) (Hohensalza), Messtischblatt 1:25,000, Berlin 1944, map sheet 3275 (Hohensalza), the City Map of Inowrocław of 1910 scale 1:10,000, Berlin, PHARUS-PAN VON HOHENSALZA, the City Map of Inowrocław of 1933 scale 1:5,000, the City Map of Inowrocław. A review of literature on the subject of urban green was conducted and publicly available planning Study and other documents were analysed.

2. Results and conclusions

Results of spatial planning analyses were elaborated using the QGIS programme, which facilitated the presentation of the spatial changes in the Spa Park over the years. The spatial scope of this study covers zones A, B and C of the spa town protection. This research topic was investigated in more detail in 2017 within the framework of a B.Sc. thesis, of which this author was the scientific supervisor.

3. Introduction

Inowrocław is located in the Kujawsko–Pomorskie province (also referred to as the Kuyavian-Pomeranian voivodship) and thus it is a lowland spa town. In 2019 Poland has a total of 45 spa towns, of which only 17 are lowland spa towns. In addition to Inowrocław, the list also includes such towns located at an altitude of maximum 200 m a.s.l. as Augustów, Busko–Zdrój, Ciechocinek, Goczałkowice–Zdrój, Gołdap, Horyniec–Zdrój, Konstancin–Jeziorna, Kraków–Swoszowice, Krasnobród, Nałęczów, Połczyn–Zdrój, Przerzeczyn–Zdrój,Solec–Zdrój, Supraśl, Uniejów and Wieniec–Zdrój. The map below shows the locations of the Polish spa towns in 2019.

Other spa towns of Ciechocinek and Wieniec Zdrój are situated in the immediate vicinity of Inowrocław to the west. Its convenient position in central Poland is advantageous and enables greater accessibility. The beginnings of the Inowrocław spa town date back to 1875, when the company named Solanki Inowrocławskie [the Inowrocław Salt Springs] was established [3].

Inowrocław is one of the very few spa towns in Poland, which thanks to their spatial planning decisions managed to increase the area of the Spa Park from 5 ha in 1876 to 85 ha in 2017. As specified in the research hypothesis, this article describes the stages of the spatial changes and spatial planning decisions.

Such a spatial layout of the Spa Park is unique on the national scale, as in terms of its area it is at present one of the largest Spa Parks in Poland. In 1875, a salt mine began operating in Inowrocław, but it was closed and flooded in 1907. In 1929, salt mining operations were

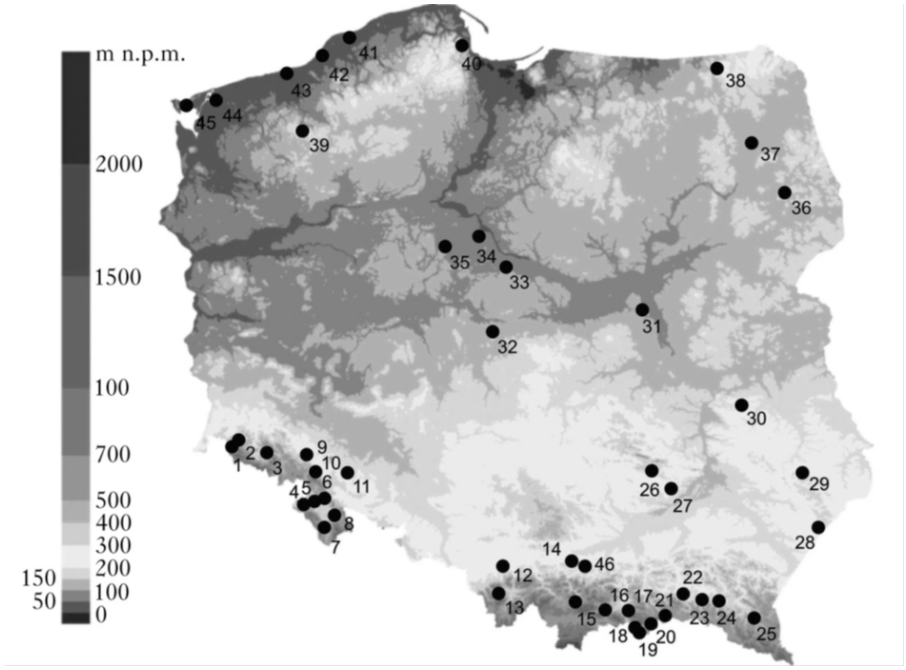

Fig. 1. Locations of spa towns in Poland [5]. Inowrocław is denoted by no. 35.
Locations of Polish spa towns: 1 – Czerniawa–Zdrój, 2 – Świeradów–Zdrój, 3 – Cieplice, 4 – Kudowa–Zdrój, 5 – Duszniki–Zdrój, 6 – Polanica–Zdrój, 7 – Długopole–Zdrój, 8 – Lądek–Zdrój, 9 – Szczawno–Zdrój, 10 – Jedlina–Zdrój, 11 – Przerzeczyn–Zdrój, 12 – Goczałkowice–Zdrój, 13 – Ustroń, 14 – Swoszowice, 15 – Rabka–Zdrój, 16 – Szczawnica, 17 – Piwniczna–Zdrój, 18 – Żegiestów–Zdrój, 19 – Muszyna–Złockie, 20 – Krynica–Zdrój, 21 – Wysowa–Zdrój, 22 – Wapienne, 23 – Iwonicz–Zdrój, 24 – Rymanów–Zdrój, 25 – Polańczyk, 26 – Busko–Zdrój, 27 – Solec–Zdrój, 28 – Horyniec–Zdrój, 29 – Krasnobród, 30 – Nałęczów, 31 – Konstancin–Jeziorna, 32 – Uniejów, 33 – Wieniec–Zdrój, 34 – Ciechocinek, 35 – Inowrocław, 36 – Supraśl, 37 – Augustów (Meller, Bernat 2019).

restarted and they continued until 1991 when they were ceased again and the remaining salt wells were flooded. The excavation operations led to mine-related subsidence being observed throughout the town (SUiKZP, Inowrocław, 2008) [12].

Inowrocław has been a spa town since 25 July 1967. In 2014, the registered population was 74,564 permanent residents (GUS, 2014). Most areas around Inowrocław are arable lands, with the other land use types including permanent grassland, permanent pastures, developed agricultural areas, and forests and other land use types (SUiKZP, Inowrocław 2008) [12].

The Act of 28 July 2005 on Health Resort Treatment, spa towns and spa town protection areas and on health resort communes stipulates that in order to be granted a spa town status, a given area has to meet the following conditions: to have deposits of natural therapeutic raw materials with confirmed therapeutic properties as specified in the Act; to have a climate with therapeutic properties confirmed as specified in the Act; to contain within spa treatment institutions and spa treatment facilities dedicated to spa treatment its area; to meet environmental requirements specified in the regulations concerning environmental

protection; to have technical infrastructure such as water supply and sewage management, power supply and public transport; to have implemented waste management procedures [11].

4. Material and methods k 18 - town

Studies on archival resources were conducted using cartographic and graphic materials pertaining to green areas in the city of Inowrocław, focusing on the Spa Park in Inowrocław. Analyses were carried out on secondary sources, literature on the subject, spatial planning documents, legal resolutions of the city authorities and internet sources. The final analysis was also performed on both maps and archive city plans.

5. Results

The beginnings of the spa park date back to 1876, when the Spa Park based on the initiative of Lucjan Grabski and design by Michał Budziński was established in an area of 5 ha. This original small park was rectangular in shape. The avenue, which in the past ran towards the city centre, has been preserved up to the present day. In the past, it was planted with roses and trees. Today, it is Solankowa street, linking the city with the spa town. The Bath house was the most prestigious building. In front of the Bath house, gravel roads were laid and lined with flower baskets. The park was surrounded by a circular parkway which linked transverse paths.

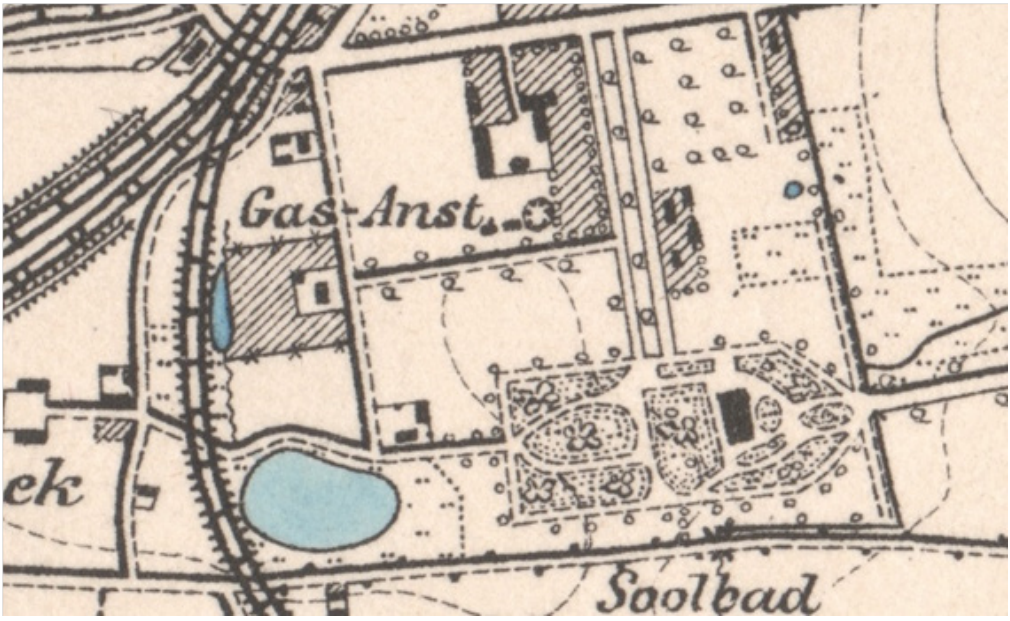

Fig. 2. A fragment of a map from 1890, presenting the area of Park Solankowy [the Salt Spring Park] in its original outline and with an area of almost 5 ha (the Poznań University Library), (Source: [1])

Fig. 3. A fragment of a map from 1911, presenting the area of Park Solankowy [the Salt Spring Park] (Poznań University of Life Sciences, the Division of Spatial Management and Geodesy), (Source: [1])

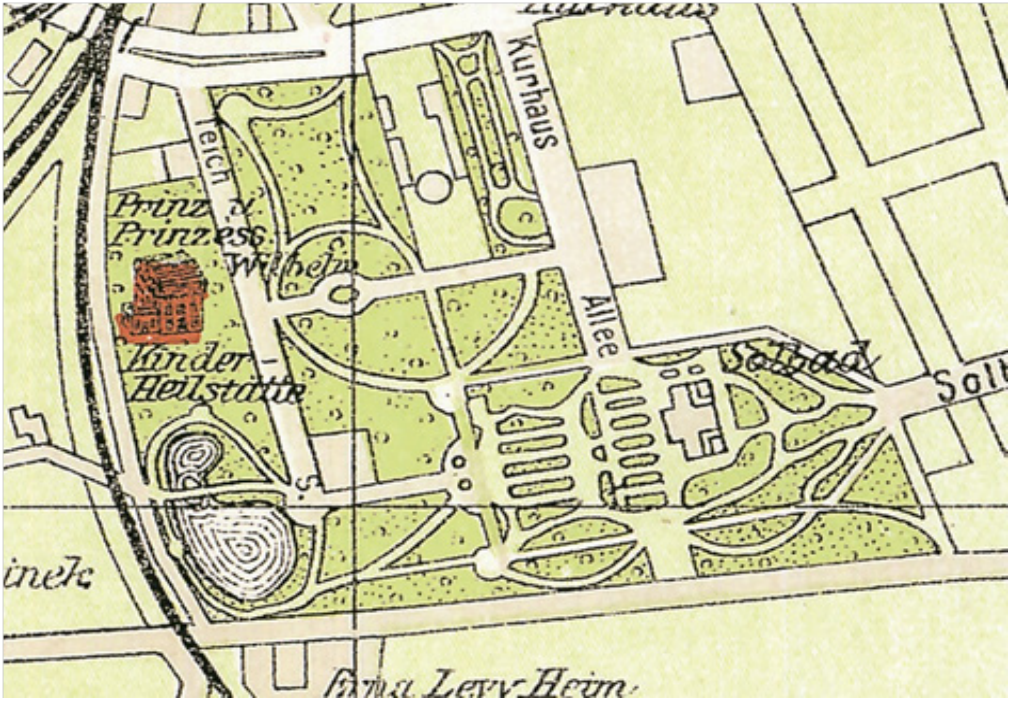

Fig. 4. A fragment of a city map from 1910, presenting Park Solankowy [the Salt Spring Park], (Source: [1, 14])

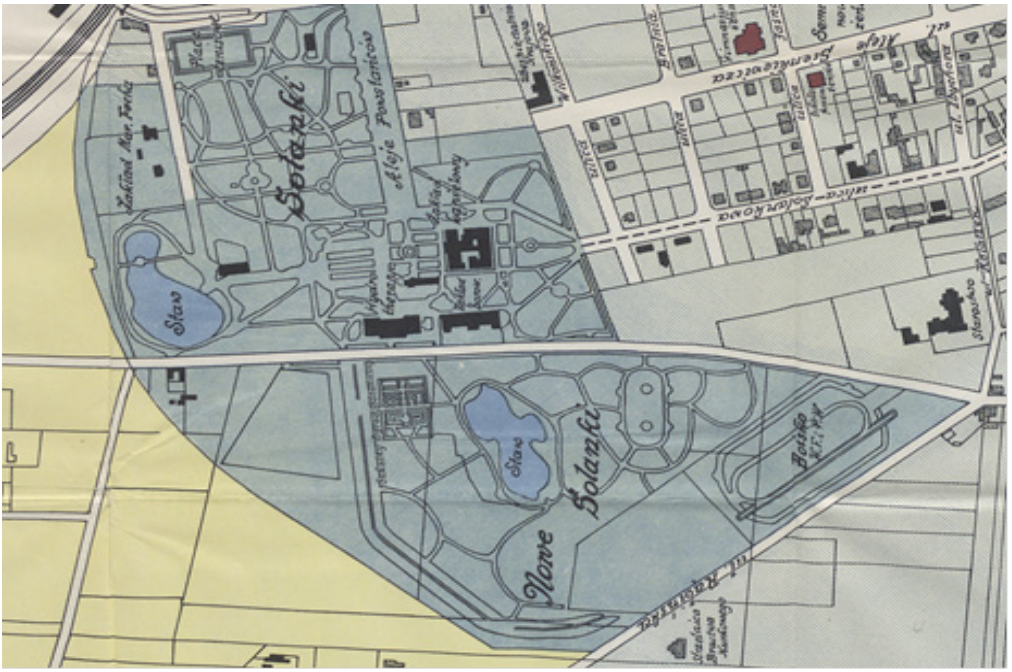

Fig. 5. A fragment of a city map from 1933 presenting the area of Park Solankowy [the Salt Spring Park] (Source: [1, 14])

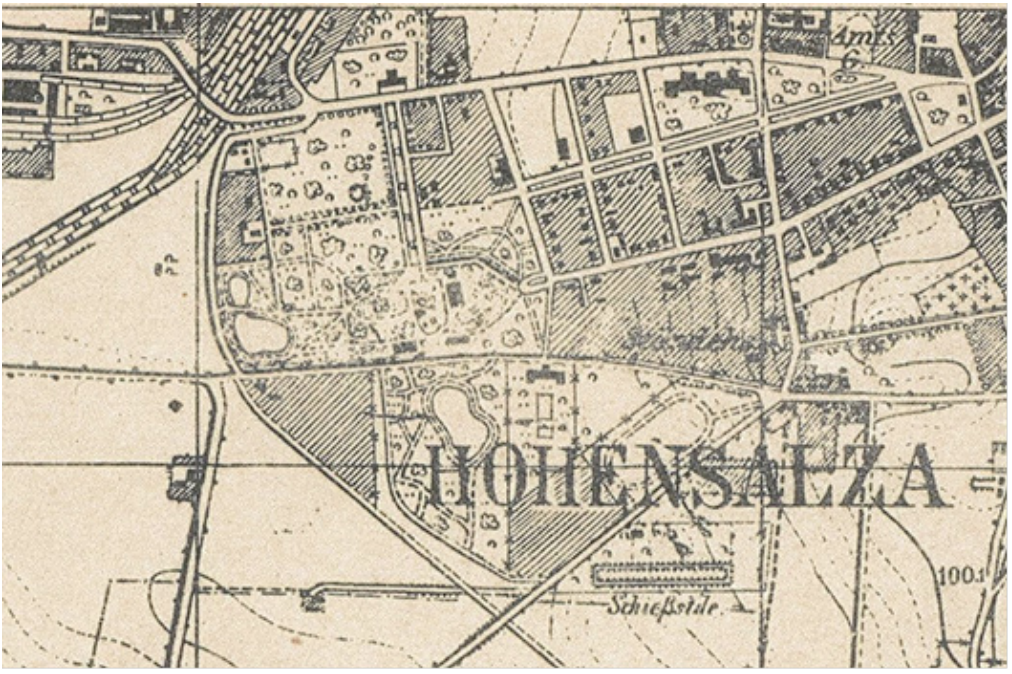

Fig. 6. A fragment of a map from 1944 presenting the area of Park Solankowy [the Salt Spring Park] (Poznań University of Life Sciences, the Division of Spatial Management and Geodesy), (Source: [1])

A pond was situated in the south-west corner. A two-lane avenue, accessible for horse riding, ran from the north [4, 6, 13].

On a map from 1890, we can clearly see the facility and the layout along the east-west axis with ponds at the end of the vistas. On the north-western side, the railway tracks are preserved to the present day as originally outlined in the past.

In the early twentieth century, changes were introduced as it was necessary to link the new buildings in the Spa Park with parkways. At that time, the landscape designs were stylistically linked with the geometric layouts of the park (e.g. marked by showy flower parterres, also called flower carpets). Former parkways intersect at the present-day bandshell and a fountain. Flower carpets of seasonal plants continued to be designed and planted [4 6, 13].

The city map from that period shows the parkways and the designed layout of the park plantings in detail.

In the mid nineteen-twenties, an area of 42.5 ha adjacent to the southern boundary of the Spa Park was purchased due to the initiative of Władysław Fabiszewski. This new area was named Nowe Solanki [the New Salt Springs] and the park green areas were also established there. An increasing numbers of spa town patients came to Inowrocław [6, 13].

The area of Park Zdrojowy [the Spa Park] has also been analysed in terms of noise nuisance [9]. These authors also stressed the importance of westerly winds, thanks to which, urban pollution does not reach the park [9]. Our spatial analyses and the area size were also independently confirmed in another study [9] stating that in the 19th century, one bath house dominated the park, with roads surrounding the park in the north-western section leading to the saltworks located on the other side of the railway tracks. Only the oldest part of the Spa Park (within the original boundaries) is covered by conservation protection.

6. Graphic analysis of the spa park

Old postcards show these places, the parks and spa town patients. Examples of such postcards are shown further.

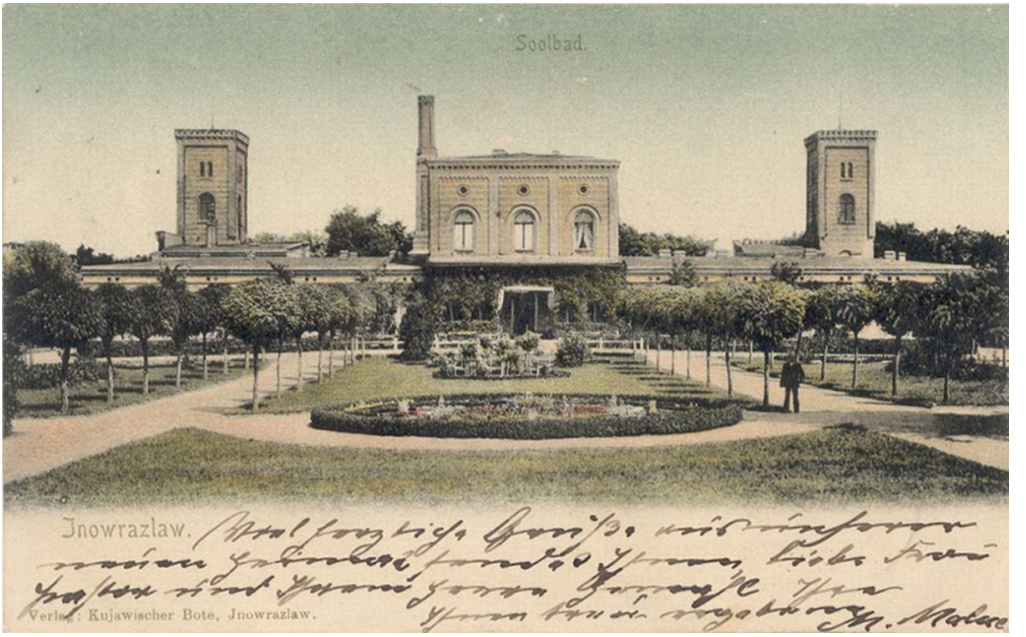

Fig. 7. The Spa Park in Inowrocław in 1903. The main axis of the park layout. At that time the future cafe had not yet been constructed, this was to be erected soon afterwards (Source: [15])

Fig. 8. The Salt Spring Park in 1911. Inowrocław. The lawn parterre is completed with a cafe and outdoor coffee tables. The axial layout is reinforced by the tree plantings (Source: [15])

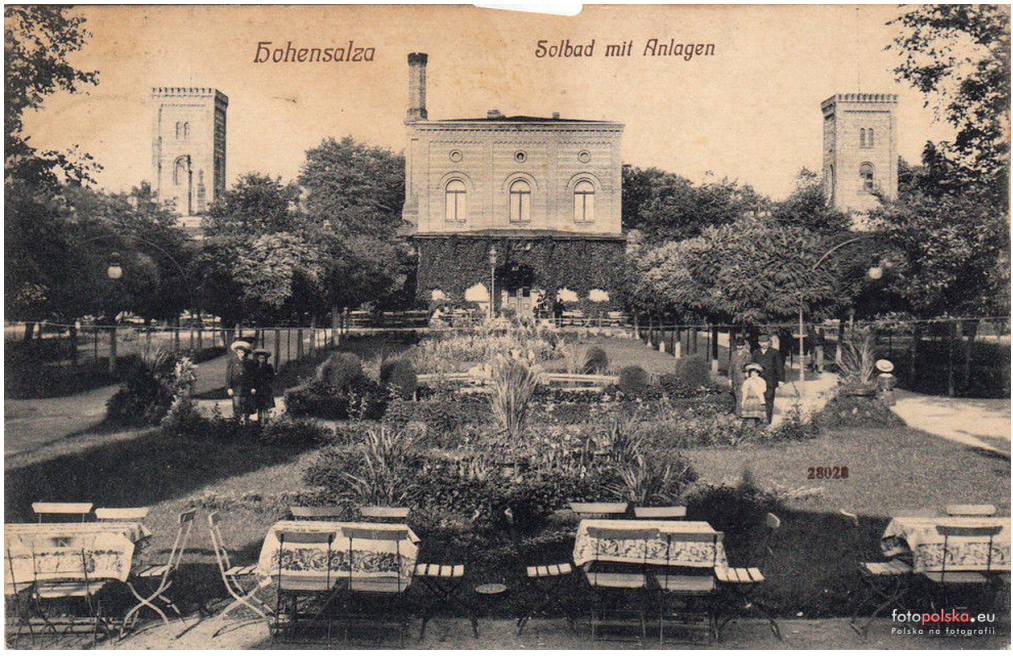

Fig. 9. The Spa Park in Inowrocław. The above image is a close-up from the previous postcard presenting specific details of the cafe. There are tables for the seating of sixpersons covered with table cloths and classical heavy chairs of a visually light design. The photograph was taken in the centre of the main axis of the park layout (Source: [15])

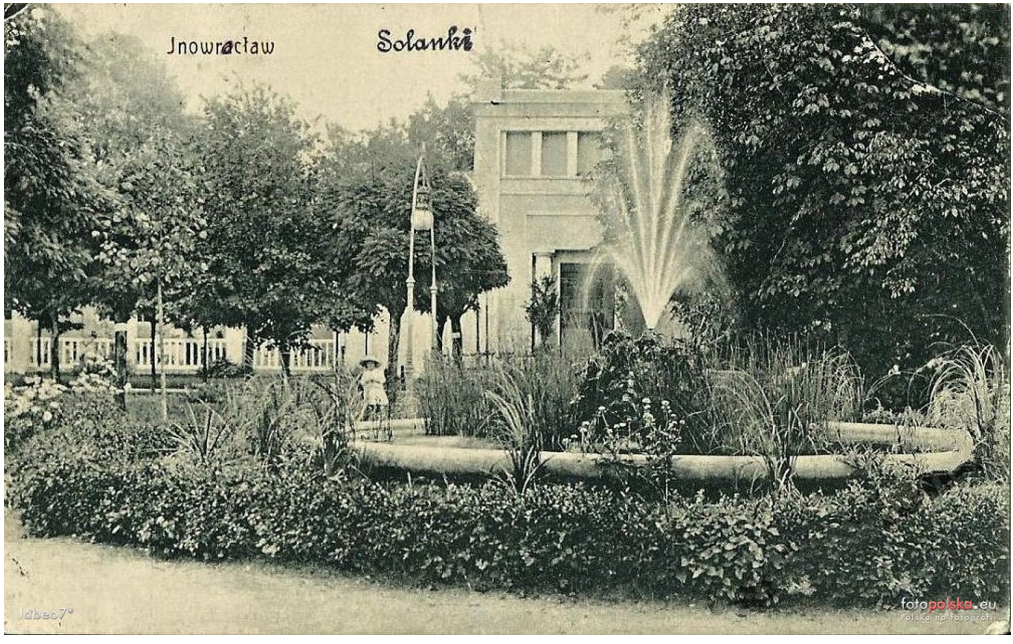

Fig. 10. The Spa Park in Inowrocław in 1913. The above image shows a fountain in the foreground with the Pump Room building in the background (Source: [15])

Fig. 11. The Spa Park in Inowrocław in 1915. The main axis of the park layout runs through the parterre planted with low box shrubs and trimmed trees. This is an iconic photograph of Inowrocław on an old postcard (Source: [15])

Fig. 12. Inowrocław – Zakład Kąpieli Borowinowych [the Peat Pulp Bath House] in 1926 (Source: [15])

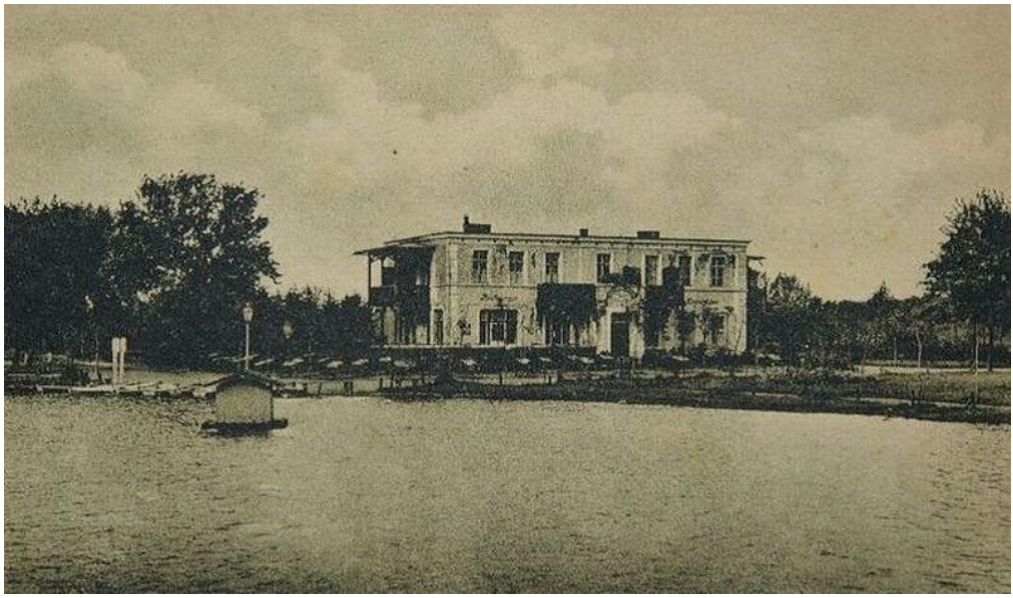

Fig. 13. The cafe building in Solanki [the Salt Springs] around 1920 (Source: [1, 16])

Fig. 14. Restauracja nad Stawkiem [Restaurant on the Pond] in Solanki, 2016. The view in the foreground – the water surface surrounded by old trees (Source: [1])

Fig. 15. A graphic from 2015 promoting the initiative "Solanki masz gratis" [you get the Salt Springs for free] (Source: [1, 17])

7. Discussion

As we can see from all the archive maps, the railway tracks located in the north-western section of the Spa Park constituted the spatial barrier. Thus, it may be concluded that the park was initially developing in stages in a northerly direction, then in an easterly direction and only recently in a south-westerly direction. Each of these maps is sufficiently detailed to indicate in separate analyses the status of the preservation of the historical layout, the impact and influences of the specific epochs and the system of parkways. This constituted the starting point for further studies and research hypotheses.

Initially, the Salt Spring Park was rectangular in shape, with an isosceles triangle on its eastern side. As was the case in the past, Solankowa street runs from its vertex, linking the spa town with the city. In the beginning, this area was approx. 5 ha [1]. Between 1890 and 1911, the Salt Spring Park was enlarged to incorporate areas located to the north of the original park, thus increasing the park area almost two-fold. Postcards from this period are presented in this article. In the period from 1911 to 1944, the area of the Salt Spring Park increased by 42.5 ha as a result of new land being purchased. This time, the newly acquired area was located to the south of the previous park boundary; it was triangular in shape and provided ground for Nowe Solanki [the New Salt Springs] comprising a pond, an indoor swimming pool and numerous park paths. During this period, the park also included a small plot of land in the northern part of the park [1].

In the diagram, the light-green colour marks an area which was incorporated into the park in the period from 1944 to the present. The area is situated to the west of the original park boundaries. It can be stated that during the period of approx. seventy years, the park area increased two-fold. This was the result of investments made in the years 2008-2013, when 30 ha of land were purchased and Nowe Solanki [the New Salt Springs] were designed to resemble those of the past. At present, the park is approx. 85 ha in area [1]. In the future, the park may be further expanded to the south-west of the Salt Spring Park because undeveloped land is located there [1].

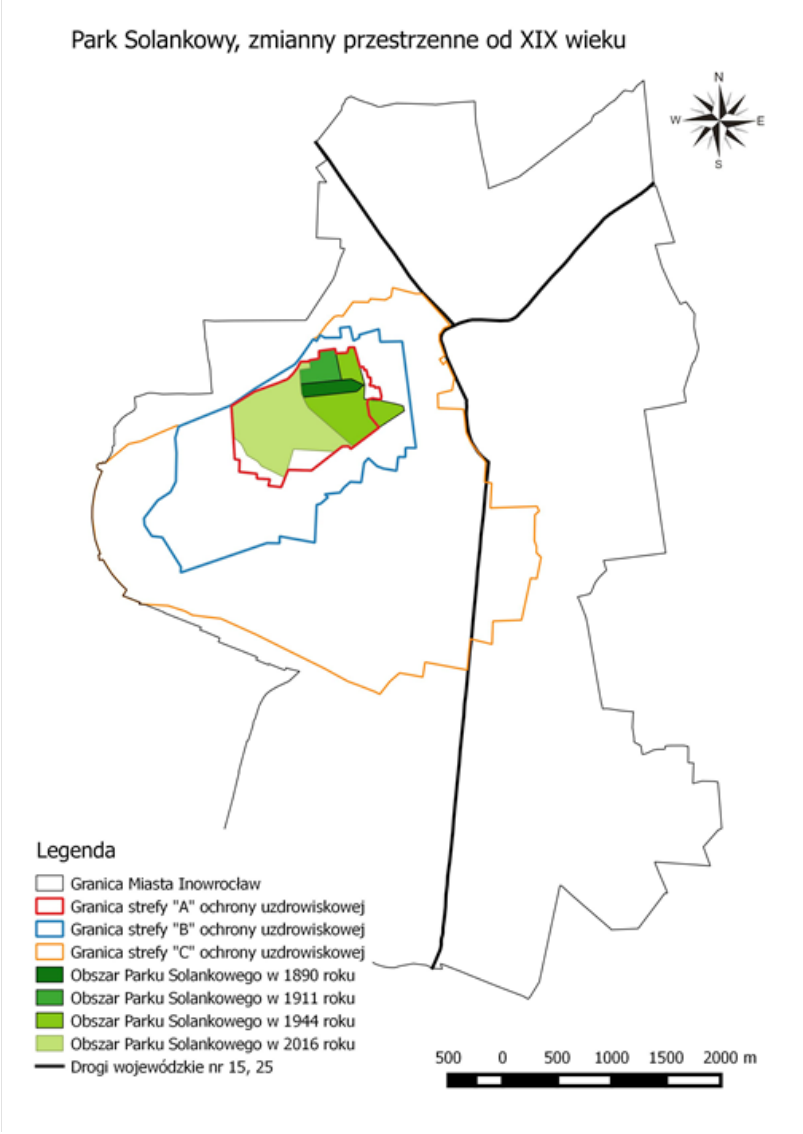

Fig. 16. Spatial changes in Park Solankowy [the Salt Spring Park] since the 19th century (Source: [1])

8. Concluding remarks

Unfortunately, the city of Inowrocław has no forests. The fact that the city authorities have managed to enlarge the Spa Park to such an extensive area is clear evidence of their willingness to preserve the natural value of the spa town and prevent so-called urban congestion which is so typical of other Polish spa towns. The establishment of zone A in a specific area indicates a reasonable potential for the establishment of new green areas there.

Research results show that in spa protection zone A, the percentage share of green areas as indicated by the diagnosis of the current status is as high as 90.72%. In zone B, the percentage share of biologically active green areas identified in the analysis of the actual status is as high as 80.49%, while in zone C, the percentage share of biologically active green areas according to the diagnosis of the actual conditions is 75.55% [10]. This means that the data considerably exceeds the requirements of the Act of 2005 because for zone A, this Act imposes the requirement of a minimum of 65% green areas, for zone B, a minimum of 50% green areas and for zone C, the percentage share of green areas is 45%.

In 2008, the total area of green spaces in Inowrocław was 343.30 ha, which gives approx. 43 m^2 per capita. By contrast, the national index of green areas per capita is only 16.3 m^2 [2] thus, in Inowrocław, this figure is over 2.5-fold higher. It needs to be stressed here that from 2008 to 2016, the Salt Spring Park increased in area by another 30 ha [1, 12].

The Salt Spring Park (Park Solankowy) in Inowrocław has expanded from the initial small area of 5 ha in 1876 to be one of largest areas in Poland in 2017 covering as much as 85 ha. It is a tremendous asset for the spa town of Inowrocław. Firstly, the increase in green spaces, being biologically active areas, provides an opportunity to enhance the health-promoting impact on the inhabitants, spa town patients and visitors. Trees producing oxygen (in the dark stage of photosynthesis) have a beneficial effect participating in the modification of the town's microclimate. Secondly, the considerable quantity and sizesof areas of green spaces in the spa town of Inowrocław create the therapeutic landscape. The green areas reduce the burden of pollutants, specifically suspended matter, dust and noise. Over a longer time perspective, green spaces also provide several tangible economic benefits to the city because prices of the local real estate and plots may soon increase as a result of their proximity to the highly attractive, prestigious park. All these and other benefits for Inowrocław will be brought about by the expansion of the Spa Park to an area of 85 ha.

References

[1] Gedowski P., *Analiza przestrzenna terenów zieleni na terenie miejscowości uzdrowiskowej Inowrocław od XIX w. [Spatial analysis of green areas in the spa town of Inowrocław since the 19th century]*, B.Sc. thesis prepared under the scientific supervision of dr inż. arch. kraj. Magdalena Meller, Poznań University of Life Sciences, Faculty of Environmental Engineering and Spatial Management, Institute of Land Improvement, Environmental Engineering and Geodesy, Poznań 2017.

[2] Main Statistical Office GUS, Główny Urząd Statystyczny, *Powierzchnia i Ludność w Przekroju Terytorialnym*, 2014.

[3] Kasińska B., Mikołajczak E., Strachanowski P., *Po prostu Inowrocław*, Drukarnia POZKAL, Inowrocław 2008.

[4] Majewski B., *Uroki starego Inowrocławia*, Biuro turystyczne PIAST, Inowrocław 2002.

[5] Meller M., Bernat S., *Drzewa pomnikowe na terenie uzdrowisk w Polsce*, Sylwan 163 (3): 258–264, 2019. DOI:https://doi.org/10.26202/sylwan.2018104.

[6] Sikorski Cz., Sikorska J., *Świadkowie 800-lecia: encyklopedia wiedzy o zabytkach Inowrocławia*, Oficyna Wydawnicza Muzeum im. Jana Kasprowicza, Inowrocław 2002.

[7] Study of Spatial Management Conditions and Directions in the Commune and Town of Inowrocław, 2008.

[8] Szczechowicz H., *Kujawy wschodnie i ziemia dobrzyńska w II Rzeczpospolitej*, Agencja reklamowa TOP, Włocławek 2013.

[9] Sztubecka M., Skiba M., *Warunki akustyczne na obszarach jednolitego zagospodarowania Parku Zdrojowego w Inowrocławiu* Uniwersytet Zielonogórski, Zeszyty Naukowe no. 16, Inżynieria Środowiska no. 41, 2016.

[10] Resolution no. XLVIII/639/2014 of the Inowrocław City Council of 20 October 2014 on the evaluation of the current status of spatial management conditions and directions and local spatial management plans of the city of Inowrocław.

[11] The Act of 28 July 2005 on Health Resort Treatment, spa towns and spa town protection areas and on health resort communes.

[12] Studium Uwarunkowań i Kierunków Zagospodarowania Przestrzennego Gminy Miasto Inowrocław, 2008.

[13] www.parki.org.pl (online: 18.12.2016).

[14] http://stareplanymiast.pl/wg-miast/inowroclaw (online: 5.11.2016).

[15] www.fotopolska.eu (online: 26.05.2017).

[16] http://www.inowroclawfakty.pl/galeria-fotograficzna/solanki-zdj%C4%99ciaarchiwalne (online: 23.11.2016).

[17] http://www.idk.inowroclaw.info.pl/aktua/2015/pazdziernik/sola1.jpg (online: 13.12.2016).

If you want to quote this article, its proper bibliographic entry is as follow: Meller M., *The assessment of spatial changes in the size of the spa park in the Inowrocław spa town since the 19th century*, Technical Transactions, Vol. 11/2019, pp. 85–100.