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## Redevelopment of the Old Waste Incineration Plant in Poznań: Contribution to the Discussion on the Approach to Post-Industrial Cultural Property

### Przebudowa Starej Spalarni w Poznaniu. Głos w dyskusji na temat zasad postępowania z zabytkami budownictwa poprzemysłowego

**Keywords:** architecture, conservation, industrial architecture, waste incineration plant, Poznań

**Słowa kluczowe:** architektura, konserwacja, budownictwo przemysłowe, spalarnia, Poznań

#### Introduction

The Old Waste Incineration Plant is one of the few post-industrial buildings from the period of the Second Polish Republic which have survived to this day in Poznań. Plans to build a waste processing facility were made shortly after Poland regained independence in 1918. Subsequent to the requirement for solutions that would ensure a higher level of cleanliness in the growing city, an idea was put forward to build an incineration plant which would manage the waste that had previously been disposed of on barren areas outside the city limits.<sup>1</sup> The construction of the incinerator in Poznań, like many other municipal investments, might have also been related to the organization of the General National Exhibition in 1929.<sup>2</sup> The cleanliness of the city was one of the concerns of the then mayor, Cyryl Ratajski, whilst the animated development activity aimed to improve the urban infrastructure, as well as the difficult housing situation of Poznanians on the eve of the exhibition.<sup>3</sup>

The construction of the incinerator, designed by Stanisław Kirkin, commenced in 1926 (consuming a considerable amount of PLN 3.8 million) and was completed in December 1927.<sup>4</sup> Along with the actual

incinerator, homes were also provided for employees, as well as an administration building in Szelaż Street, a waste reloading facility in Przepadek Street and garages in Bergera Street.<sup>5</sup> At the time, the building was very modern and in line with the latest international trends. The technological design of the incinerator was developed by the British Heenan & Froude engineering company, which had extensive experience in the field and boasted a portfolio of 250 similar plants around the world. The waste was incinerated using a Babcock & Wilcox water-tube boiler built by Fabryka H. Cegielskiego of Poznań and L. Zieleniewski S.A. of Cracow (Polish factories producing machines and train carriages).<sup>6</sup> To start up the plant, eight thousand galvanized iron 110-liter waste containers were purchased, in addition to a fleet of vehicles for collecting and transporting waste to an out-of-town storage site, as well as equipment for dust-free waste transfer. Waste from individual premises was collected on rubber-coated wheelbarrows and was subsequently loaded onto five-ton trucks with a tipping mechanism on the side. Furthermore, fourteen special motorized vehicles and two tractors with trailers were used to transport waste to the plant. This was ventilated by a so-called *ekshauser*, a ventilator with an air intake capacity of

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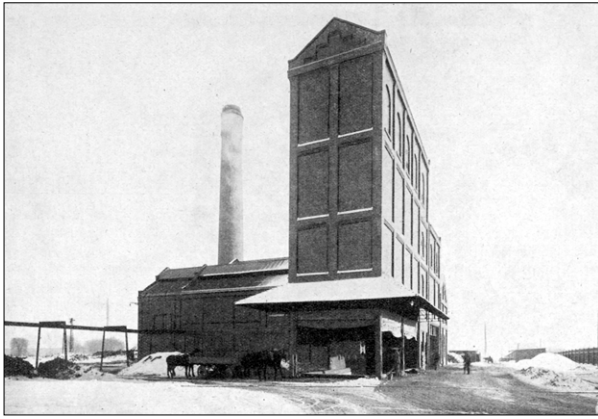


Fig. 1. Waste Incineration Plant in Poznań, view from the west; archival photo.

Ryc. 1. Spalarnia śmieci na Szeląg w Poznaniu, widok od strony zachodniej; fotografia archiwalna.

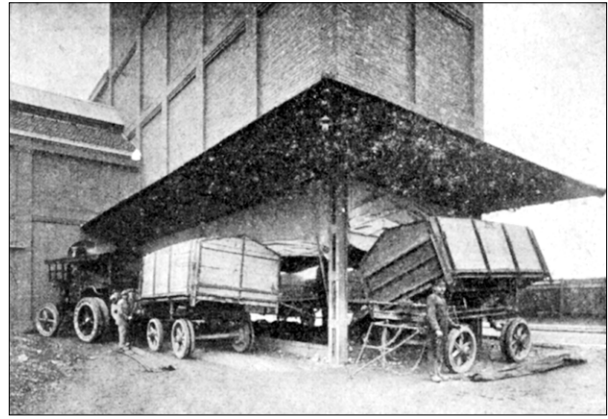


Fig. 2. Incineration Plant, waste chute; archival photo.

Ryc. 2. Spalarnia, zasyp śmieci; fotografia archiwalna.

200 m<sup>3</sup>/min. The electrical power generated by the incinerator was used to supply a prefabricate plant and the municipal grid.<sup>7</sup> Opened in December 1927, the Waste Incineration Plant at Wilczak Street was the first of its kind in Central Europe and the only one built in Poland during the Second Polish Republic.

In the 1930s, the Waste Incineration Plant operated on a commercial basis, as a separate municipal economic unit. In 1938, in order to streamline work, all the sections of the City Cleaning Department, together with the Incineration Plant, were merged into a single economic unit called Miejskie Zakłady Oczyszczania (Municipal Cleaning Works).

The incinerator ceased to operate on the outbreak of the Second World War in September 1939, and during the military operations of 1945 approximately 40% of the plant was destroyed.<sup>8</sup> After the war, plans were put in place to rebuild it, following the organization of a fleet of vehicles. Initially, this consisted of two old tractors with trailers and ten horses, which hauled away dirt from the streets and waste from municipal production plants. In practice, the incinerator restarted on 23 December 1955, the tenth anniversary of Poznań's liberation from the Nazi occupant. Only two years later, in 1957, the authorities closed it down claiming "lack of economic effectiveness" and difficulties in repairing the unusual equipment.<sup>9</sup>

In subsequent years, the incinerator and its surroundings accommodated, among other enterprises, the headquarters of a taxi company, including garages, repair workshops and a club (Klub Taxi). The actual plant was not used, except for the ground floor, where a repair garage and car wash operated. Later, the nearby halls and buildings housed Wilmarkt, Poznań's first complex of market halls for local merchants, which operated in Wilczak Street from 1993 to 2006, when the buildings were demolished. The site of the former market was acquired by Howard Holdings from Ireland, with plans to develop a luxury housing estate comprising 440 flats and seven lofts, located in the actual building of the former incinerator. Ultimate-

ly, due to the economic crisis, the investment did not come through, and in 2010 the site was acquired by the Poznań-based developer Agrobex. The new owner decided that building flats in the post-industrial building was unprofitable and planned to convert it into commercial premises. Despite these plans, the building remained unused for several more years.

From the time when the plant ceased to serve its original purpose of a waste incinerator, it was used by various tenants who were unconcerned about its technical condition and gradually stripped it of its original form and character. From then on, the structure gradually fell into disrepair. The actual incinerator building, although valuable and historic, was not listed in the National Registry of Cultural Property, but only in the local records.<sup>10</sup> However, the inclusion of the investment area in the local zoning plan made it possible to put the property under the protection of the Municipal Conservator of Cultural Property in Poznań.<sup>11</sup> Ultimately, the owner decided to rebuild it for commercial functions. From the very beginning, the project enjoyed wide public interest, and information about its progress was regularly published by the local media.<sup>12</sup> The redevelopment of the building turned out to be a feasible venture; however, a number of technical and formal problems emerged, in addition to practical (or even doctrine-related) conservation considerations.

All of the above should be put in the context of the complex demands facing the protection of post-industrial sites, albeit numerous successful examples in this field can serve as a source of creative inspiration.<sup>13</sup>

### Research and design methodology

The surviving incinerator building consisted of four fragmented blocks of varying heights, ranging from 8.5 to 20.5 m, and an adjacent over 30-m-high brick smokestack. The incinerator was built on brick and concrete foundations. It was a mixed steel and brick construction featuring columns, binding joists, a steel and wood rafter and ceramic brick walls. These con-

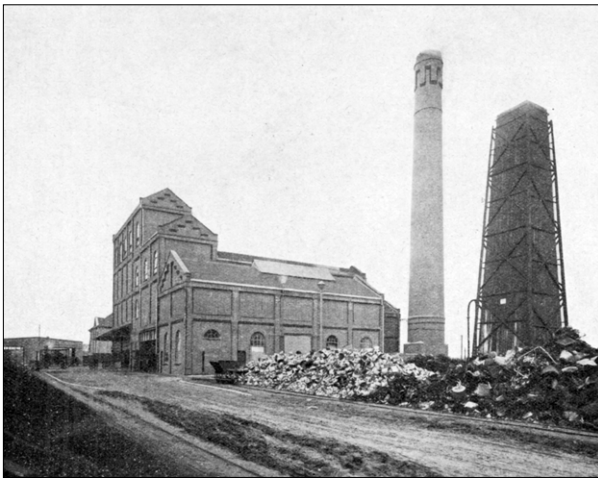


Fig. 3. Waste Incineration Plant in Poznań, view from the east; archival photo.  
Ryc. 3. Spalarnia śmieci na Szelażu w Poznaniu, widok od strony wschodniej; fotografia archiwalna.



Fig. 4. Incineration Plant, image from 2007 showing the missing smokestack top and the additions on the ground level; photo courtesy of Litoborski+Marciniak.  
Ryc. 4. Spalarnia, zdjęcie z roku 2007 ukazujące brakujący wierzchołek komina oraz dobudówki na poziomie parteru; fotografia dzięki uprzejmości Litoborski+Marciniak.

stituted a group of different blocks with pitched roofs covered with ceramic tiles. The original conversion design was commissioned to an architectural studio in Poznań by an Irish developer. The design foresaw the conversion of the incinerator building into commercial and residential premises. In the course of preparing the construction and conservation documentation, a number of technical surveys were carried out to determine the technical condition of the property.

The evaluation of the building's technical condition was crucial to determining if it could be redeveloped to serve new functions. In February 2001, the authors of the conservation "white sheet" wrote: "The general condition of the building is good. The walls are not cracked, which suggests that the downward movement of the whole building is stable."<sup>14</sup> The first technical survey of 2007 permitted the redevelopment with the reservation that the technical condition of the building was deteriorating. This suggested that the existing brick wall structure should be repaired, but because of its overloading, this required "an additional support frame," which would take over the load from the new additional inter-story ceilings, while transferring it to independent foundations.<sup>15</sup> Simultaneously, the roof structure had to be replaced because of progressing corrosion of the steel elements and its insufficient load-bearing capacity. At that time, the technical condition of the smokestack did not raise any objections. The design documentation for the adaptation of the building was developed on the basis of the aforementioned guidelines and obtained an appropriate building permit in 2008.<sup>16</sup>

The crisis in the real estate market brought the works to a halt and forced the then owner to sell the designed investment together with the incinerator building. The new investor, after several failed attempts to sell the property, decided to independently develop the building into commercial premises.<sup>17</sup> The poor techni-

cal condition of the building, which was deteriorating year by year, proved to be an immense problem. Key elements in assessing the building's condition were the passage of time, changing weather conditions, and above all, the fact that the building had been unused for over a decade.

Fourteen years after the first technical survey, a new one was conducted in March 2015. This demonstrated progressing technical deterioration and the urgent need to renovate the building. Already at that time, its technical condition was judged as bad and very bad, or "pre-failure [condition] threatening the safety of the structure," with the conclusion that its further use may pose a safety risk to the health or life of its users.<sup>18</sup> It also found numerous cracks in the walls, missing bricks, mechanical damage, overgrown vegetation and numerous damp patches.

Based on these findings, the designers foresaw the restoration of the original architectural form of the facade, while adapting the building to its new functions.<sup>19</sup> The ground level was intended for retail premises, and the first and second floor for offices. The last story of the highest, slender part of the building was to be used to house the technical infrastructure for air exchange in the building. This solution made it possible to effectively "conceal" within the massing the considerable air handling units. Moreover, several haphazard additions that had "grown" around the building on the ground level shortened the width of the front facade by approximately 2 m, whilst the roof geometry remained unchanged. Subsequently, these extensions were to be removed.

Another expert survey of 2017 confirmed the property's dramatic technical condition, including a threat to the structural stability of the high part of the incinerator building and the smokestack, which deviated from the vertical by 13 cm. Of crucial significance was the deterioration of the "existing steel structure

which [was] coupled with the column structure of the walls,<sup>20</sup> as well as numerous vertical cracks in the plasters reinforcing the external walls.

According to the authors of the study, due to the pre-failure state of the property, it was necessary to demolish the main part of the incinerator building and the adjacent smokestack.<sup>21</sup> Considering the preservation requirement stipulated in the zoning plan, based on the conclusive opinion of the Municipal Conservator of Cultural Property and the designers, the investor decided to reconstruct the incinerator section and adapt it to its new functions.

### Architectural form versus conservation guidelines

The former incinerator building with the adjacent generally accessible square is the main element of the composition and, simultaneously, the dominating feature of the neighboring housing estate. As regards the facade, the design aimed to restore it (to the highest possible extent) to its original state, reflecting the building's unique character. This included the removal of all the non-original haphazard layers that had accumulated through the post-war adaptations and alterations, such as distorted or bricked-up openings (windows and doors), garage doors, canopies, etc. Furthermore, this also included the restoration of the window joinery and ironwork, and based on this, additional doors and windows were designed, maintaining the original proportions, divisions and arched lintels. The plans foresaw the replacement of the damaged parts of the facade or individual bricks, as well as repairing those features that were to undergo conservation and renovation. The smokestack and the uppermost part of the building (of key significance to its form) were planned to be demolished due to their very poor technical condition, and then to be rebuilt in their original form. The inner structure of the ceilings, partition walls and vertical passageways, which had been repeatedly altered and were unsuitable for adaptation to their new functions (also due to their poor technical condition), were to be extensively rebuilt with a new support structure added from the inside of the brick wall cladding.

Subsequently, a likely course of construction and conservation work was determined and approved by the conservation authorities in Poznań. This was released in the following stages:

1. The best-preserved walls of the lowest part on the north and north-west side underwent conservation, including filling in the missing small ceramic features.
2. The middle part of the building situated on the south-east side was restored, preserving as much as possible of the original substance. The treatment included its conversion, as well as filling in and partially reconstructing the damaged features to restore the maximum of the original appearance, but in different shades underlining the original and rebuilt parts of the building.



*Fig. 5. The high section during the demolition of the deformed and cracked walls with visible corroded steel structure; photo by P. Paradziński.*

Ryc. 5. Część wysoka w trakcie rozbiórki oraz odkształcone i spękanne ściany z widocznie skorodowaną konstrukcją stalową; fot. P. Paradziński.

3. Due to the building's poor technical condition, the highest north-western large-volume part, the roof structure and cladding, and the smokestack were demolished. They were then reconstructed retaining the layout of the block and facade but using modern construction techniques (layered walls with ceramic cladding).

These decisions were dictated by the existing archive materials, and by a detailed architectural, constructional and photographic inventory. A diverse set of conservation methods was used for the external walls and the interior, in accordance with the evaluation of the conservation authorities.<sup>22</sup> The adaptation of the preserved part included restoration, repair and reinforcement works. The damaged parts of the facade and individual bricks were replaced, and the missing elements were filled in. These complex and diverse conservation and construction procedures were the only way to preserve the maximum of the original features and to restore the original form of the building.

The inner structure of the ceilings, partition walls and vertical passageways, which had been repeatedly altered and were unsuitable for adaptation to their new functions (also due to their poor technical condition) were extensively rebuilt with a new support structure added from the inside of the brick wall cladding. The most complicated part were the structural

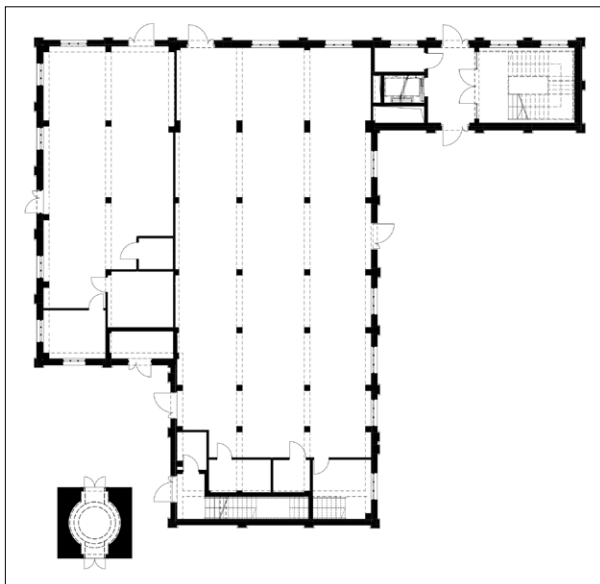


Fig. 6. Incineration Plant, ground floor plan of the building and smokestack; image courtesy of Litoborski+Marciniak.

Ryc. 6. Spalarnia, rzut parteru budynku i komina; dzięki uprzejmości Litoborski+Marciniak.

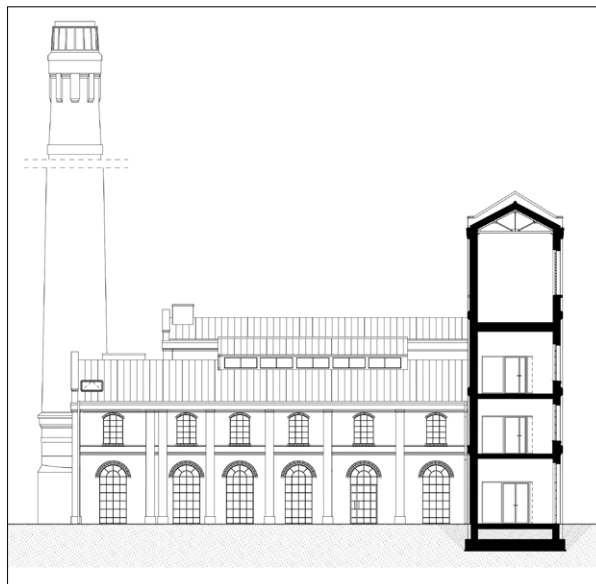


Fig. 7. Designed cross-section of the high part of the incinerator with a view of the eastern facade; image courtesy of Litoborski+Marciniak.

Ryc. 7. Projektowany przekrój wysokiej części spalarni z widokiem na elewację wschodnią; dzięki uprzejmości Litoborski+Marciniak.

solutions. The deteriorated inner steel structure was replaced by a reinforced concrete one, which met strict fire safety regulations. A few internal walls were also demolished and rebuilt. The foundation of part of the reconstructed section was made on a reinforced concrete slab. The internal foundations under the columns and under the new internal walls were made of reinforced concrete footings and benches, respectively. The building's structural system, due to fire protection requirements (for a mid-high building), was designed as a massive structure using the spatial formwork calculation model. This featured reinforced concrete columns and binders, and 18-cm-thick multi-area Filigree floor slabs. The walls of the upper stories were made of 20-cm-thick reinforced concrete. The existing outer brick walls were fixed to the new reinforced concrete structure with steel ties (anchors).

The conservation and restoration of the lower parts of the building did not go beyond standard procedures, including hydrothermal cleaning of the masonry and filling it with ceramic material similar in size to the authentic one (post-demolition and new bricks). On the other hand, the reconstructed parts were entirely made of new bricks to make them clearly stand out from the original materials.

### Construction and conservation regulations and requirements

The conversion of the Old Waste Incinerator Plant featured its redevelopment and changing its form of use, whilst preserving as much as possible of its original features. In addition to the building's technical condition and the scope of changes required for its adaptive reuse, the challenge also included the existing technical

and construction regulations.

It is worth noting that the building, although a historic one, was not listed in the National Register of Cultural Property, and the scope of protection specified in the zoning plan was limited to "the preservation of its existing shape and facade."<sup>23</sup> Nonetheless, even historic buildings are not exempt from the existing technical and construction regulations, in particular the Regulation of the Minister of Infrastructure on the technical conditions to be met by buildings and their placement.<sup>24</sup>

Paragraph 2.2 of the said Regulation permits alternative solutions in "buildings and areas that are listed in the Register of Historical Monuments or areas protected by conservation authorities based on the provisions of zoning plans." Moreover, pursuant to Article 5, Paragraph 1, Section 4 of the Construction Law,<sup>25</sup> buildings and related construction equipment should, taking into account their expected life, provide the necessary conditions for the use of public and multi-family residential buildings by disabled persons, as stipulated in Article 1 of the Convention on the Rights of Persons with Disabilities (2006), in particular persons in wheelchairs. In the case of historic buildings, this raises far-reaching implications and the need to use, for example, passenger lifts, which due to the different usable levels in the incinerator building, proved to be necessary.

Ultimately, the building was fully adapted to the needs of persons with disabilities. This involved designing the site in front of the building to ensure direct access from the pavement level to level 0 through all public entrances to the main hall and commercial premises. A passenger lift was also provided for transporting persons with disabilities and connecting all

the usable levels. Moreover, doors and corridors were made wide enough to ensure access of such persons to all the public spaces.

### Construction work and project execution

Due to the dramatically poor, or even pre-failure condition of the upper part of the building and smokestack,<sup>26</sup> the architects decided to demolish these and partly reconstruct them in shapes corresponding to their original form. Analyses of the feasibility of redeveloping the property in modern form, using modern materials (e.g., glass) highlighted the building's architectural incoherence, raising concerns about its ultimate aesthetic expression.

Following consultations with the conservation authorities, a section of the building was reconstructed in its historical shape using modern technology and a different color of ceramic material to make it stand out from the original bricks. To fulfil the requirements of efficient energy use, the reconstructed external walls were layered and thermally insulated with external brick cladding (corresponding to the other parts of the building), which was tied to the load-bearing reinforced concrete structure.

The remaining external brick walls, after appropriate treatment (replacing missing bricks and damaged sections, removing dirt and light red paint coating, etc.) were preserved to serve as wall cladding, strengthened from the inside with a new reinforced concrete support structure. The entire facade of the building, after repairing the bricks, producing new ones and restoring the old openings, was grouted to obtain a uniform, coherent architectural expression, whilst preserving and exposing the historical layers.

In light of the existing regulations, an architectural and conservation challenge was posed by the ventilation solutions, especially the mechanical ventilation system. In particular, this involved the large size of the air handling units and the considerable width of the ducts, as well as the necessity to locate the air intake and exhaust within the facade. Ultimately, the air handling units were located on the last, open level of the high section and the ducts were channeled under the ceiling structure and the roof trusses, which corresponded to the industrial character of the building. Furthermore, the air intakes and outlets were incorporated into the dimensions of the existing wall openings.

The window and door joinery were reconstructed in dimensions corresponding to the original characteristic divisions and profiles. Due to the technical parameters of the partitions, they were made using aluminum profiles, since steel profiles were not feasible.

Another difficult feature was the roof. The existing roof covering, and above all the steel structure, were corroded and did not meet modern strength standards. The existing purlin and rafter roof based on steel lattice girders was dismantled and replaced with new steel lattice trusses meeting the current, revised regulations



*Fig. 8. Second floor interior of the lower part of the plant, visible reconstructed steel structure of the roof; photo by P. Marciniak*  
Ryc. 8. Wnętrze pierwszego piętra niższej części spalarni, widoczna odtworzona konstrukcja stalowa dachu; fot. P. Marciniak.

for snow and wind loads, as well as taking into account the need for roof insulation and adequate fire protection. Roof pitches and truss heights were modelled on the original trusses, as were the purlin and rafter structures. The roofing was made of graphite-colored coated steel with a standing seam. The gutters, downpipes, roofing and other details were adapted to the color and architectural expression of the roof and its structure and were made of similar material.

A particular challenge was the brick smokestack located near the main building of the incinerator. Since the end of the Waste Incineration Plant's operation, it had not performed any specific function, other than being a distinctive high dominant feature among the surrounding buildings. Its upper part was probably destroyed during the war, lowering its height and irretrievably destroying its slender proportions. Additionally, disfiguring mobile telecommunication antennas were installed on its top in the early twenty-first century. Expert surveys carried out in 2015 and 2017 showed, beyond any doubt, the catastrophic technical condition of the smokestack, namely cracks in its upper part, as well as a significant 13-cm deviation from the vertical, which posed a destruction risk. In the expert's opinion, the smokestack required immediate demolition. Both the designers and the conservation authorities were aware that without the characteristic dominant feature of the smokestack, the incinerator complex would never regain its unique architectural expression.



Fig. 9. Thermal wall insulation installed from the inside; photo by P. Marciniak.  
Ryc. 9. Izolacja termiczna ścian mocowana od wewnątrz; fot. P. Marciniak.

Therefore, they decided to rebuild it in a shape corresponding to the original form. The structural guidelines adopted for the construction plans assumed the option of reconstructing the smokestack according to various technical and material requirements, with an emphasis on ceramic material (solid bricks). In the course of the construction work, it turned out that it was impossible to find any contractor who would undertake to build the smokestack using this technology. Moreover, none of the contacted brick manufacturers would produce ceramic fittings needed to reproduce the original shape. Ultimately, the smokestack was rebuilt to its original height (from the late 1920s), but using a mixed technology, namely a reinforced concrete structure encased in ceramic material. The only contemporary-looking feature is the glazed and internally illuminated smokestack top cap, which is a modern reinterpretation of a “shining lantern.” The final function of the smokestack remains open to discussion. Since the building is supplied by the municipal heating provider, the smokestack’s function of removing flue gas is no longer relevant.

The realization of the project (between 2018 and 2020), is a noteworthy example of redevelopment cooperation due to the commitment of the conservation authorities and the developer, as well as the competence and experience of the site manager.<sup>27</sup>

## Conclusion

The redevelopment, adaptation and modernization of the historic building of the Old Incinerator Plant brought to light a number of technical and conservation-related conclusions, as well as observations concerning the doctrine and methodology related to the protection and preservation of post-industrial architectural heritage.

In a situation where a building is not listed as historical monument but only registered in local monument records, and where the scope of its protection in the local spatial development plan is limited to the preservation of the “existing shape and facade,” there is a dangerously wide area for the interpretation and range of preservation of its authentic features. On the other hand, it is also an opportunity for a unique approach to preserving such features. In the latter case, it is key to determine the value of such property, which can be supported by assessment and valuation criteria. Fortunately, these have been established for buildings from the twentieth century in Poznań.<sup>28</sup>

Based on the individual example of the Old Incinerator Plant in Poznań, we can formulate some general conclusions regarding the practical aspects of preserving historic post-industrial sites. We can, thus, refer to the general guidelines for the methodology of treating post-industrial sites, whilst focusing on a specific project.<sup>29</sup> It seems that in the case of a building with an interesting history, a specific preservation status and a limited scope of protection, as well as the complex requirements of the target users, it is not possible to define one “correct” and compulsory method for the conservation process. To salvage such assets, it is essential to combine many approaches and, in some cases, use non-standard solutions.

In practice, due to the varying technical condition of a building, as well as a limited scope of protection (e.g., being specified only in local property records), it might not be practical to undertake an extensive (and costly) process to salvage it. The existing condition of a historic building, especially in the face of dynamic (or even aggressive) activities of investors and private developers, requires answers to questions about the priorities and forms of preservation, as well as the scope and feasibility of such interventions. Assuming that the key issue is the survival of cultural property and the preservation of as much of its authentic substance as possible, it is necessary to use an unconventional approach to the construction and conservation work. The Old Incineration Plant in Poznań is a perfect example of how an interventive adaptation is an opportunity to preserve cultural property in its entirety.

The final observation concerns the responsibility of the owners of cultural property, confirming the known fact that unused buildings are subject to much faster technical degradation. In the case of the Old Incineration Plant in Poznań, this was a period of approximately fifteen years, which was enough to cause



Fig. 10. Waste Incineration Plant in Poznań after restoration, view from the east; photo by B. Jankowski.  
Ryc. 10. Spalarnia śmieci w Poznaniu po restauracji, widok od strony wschodniej; fot. B. Jankowski.

significant changes and structural damage due to the lack of proper exploitation procedures. This shows that even a relatively short period without continuing maintenance in relation to the age of a facility can, in the case of post-industrial buildings, lead to the rapid deterioration of their technical condition. In many cases, the widely promoted idea of leaving a historic site for future generations does not stand the test of time and its passage decreases the chances of preserving it in good condition.

It would seem that the answer to the question “to demolish or to preserve?” should not raise any doubts. However, in practice it is not straightforward (although of course, every effort should be made “to preserve”).<sup>30</sup> This is particularly difficult in the context of a “free market game,” where the value of expenditure must be weighed against the benefits of the developer, who

would often prefer to get rid of the “historic” problem. Arguments for the importance of a building to national culture and heritage are not always respected, especially when the preservation options are limited by the type of heritage listing. In such a situation, providing a wide range of restoration work, or even partial and limited reconstruction, should be accepted as a feasible solution.

The restoration of the Old Incineration Plant in Poznań shows that the complex history of post-industrial buildings and their technical condition require non-standard solutions. The plant has survived, and as such, should be preserved for future generations. The preserved valuable, authentic substance requires protection and further care, which should also be based on the knowledge and awareness of all the participants of the investment process.

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<sup>1</sup> D. Lotyczewska, *Przedsiębiorstwa Miejskie*, "Kronika Miasta Poznania" 1945, No. 2, p. 54–62.

<sup>2</sup> L. Ławicki, *Architektura Poznania w latach 1927–1929*, "Kronika Miasta Poznania" 1993, No. 3–4, p. 106–130.

<sup>3</sup> W. Czarniecki, *To był też mój Poznań*, Poznań 1987.

<sup>4</sup> S. Pajzderski, *Księga pamiątkowa miasta Poznania: dziesięć lat pracy polskiego zarządu Stołecznego Miasta Poznania*, Poznań 1929.

<sup>5</sup> J. Paradowska, Litoborski+Marciniak, *Stara spalarnia śmieci w Poznaniu. Rys historyczny*, Poznań 2006, p. 1.

<sup>6</sup> *Spalarnia śmieci w Poznaniu. Plan sytuacyjny, plan kotłowni, projekt komina, obliczenia statyczne*, photocopies, 1927, APP, ref. No. 5028 and 5029, Urząd Wojewódzki Poznański 1919–1939 file set, Archiwum Państwowe w Poznaniu.

<sup>7</sup> P. Litoborski, *Spalarnia śmieci. Czy poznańska jakość to już historia?*, "Kronika Miasta Poznania" 2012, No. 3, p. 229.

<sup>8</sup> J. *Stara spalarnia śmieci w Poznaniu. Rys historyczny*, p. 9.

<sup>9</sup> *Spalarnia śmieci. Czy poznańska jakość to już historia.*, p. 233.

<sup>10</sup> Gminna Ewidencja Zabytków m. Poznania (Municipal Records of Cultural Property of the City of Poznań, Waste Incineration Plant Complex, 1926–1927), No. 5109.

<sup>11</sup> The Local Spatial Development Plan for "Wilczak–Czapla"

in Poznań, Resolution LVIII/758/V/2009 of the Council of the City of Poznań of 7 July 2009 specified the provisions for the preservation of the incineration plant. According to par. 21 art. 2) and par. 6 and par. 6 art. 1) the former waste incineration plant complex in area 5-U was to be protected by the conservation authorities, and that it was possible to redevelop it, whilst maintaining its current shape and facade. In practice, these provisions became a strong tool for ensuring that the site was protected by the conservation authorities.

<sup>12</sup> Portal epoznań, *Wilmarkt: wyburzają hurtownię, powstają bloki*, [https://epoznan.pl/news-news-30930-wilmarkt-wyburzaja\\_hurtownie\\_powstaja\\_bloki](https://epoznan.pl/news-news-30930-wilmarkt-wyburzaja_hurtownie_powstaja_bloki) (accessed: 9 III 2021).

<sup>13</sup> J. Kobylarczyk et al., *Sposoby rewitalizacji historycznych obiektów przemysłowych – doświadczenia międzynarodowe*, "Wiadomości Konserwatorskie – Journal of Heritage Conservation" (hereinafter: "WK") 2020, No. 62, p. 97–103.

<sup>14</sup> E. Mieloch, B. Kasprzak, *Spalarnia śmieci*, MKZ Poznań, "Biała Karta" No. 487, p. 3.

<sup>15</sup> E. Przybyłowicz, *Ekspertyza dotycząca oceny stanu technicznego budynku Starej Spalarni Śmieci połączona z opracowaniem zaleceń odnośnie przebudowy wnętrza obiektu i restauracji jego elewacji*, Ekspert-Bud-Projekt, Poznań 2007, p. 62.

- <sup>16</sup> All surveys and design for the incineration plant were made by Litoborski+Marciniak Biuro architektoniczne sp. z o.o. of Poznań.
- <sup>17</sup> The new owner did not approve the concept of new residential premises in the form of spacious lofts. The key counterargument was the lack of balconies, which according to the investor, made it practically impossible to sell such premises.
- <sup>18</sup> P. Łęcki, P. et al., *Ekspertyza techniczna budynku dawnej spalarni śmieci przy ul. Wilczak w Poznaniu*, Swadzim 2015, p. 21–24.
- <sup>19</sup> Litoborski+Marciniak, *Projekt budowlany zamienny dawnej spalarni śmieci przy ul. Wilczak w Poznaniu*, architecture: Piotr Litoborski, Piotr Marciniak, Filip Osiński; construction: Zbigniew Czerwiński; sanitary systems and ventilation: Marek Kubacki; electric and telecommunications systems technical: Rafał Wesoły, Poznań 2018.
- <sup>20</sup> K. Zieliński, M. Boniak, *Ekspertyza techniczna. Opinia na okoliczność określenia stanu technicznego zespołu budynków wraz z kominem przy ul. Wilczak w Poznaniu*, Embud Inwest, Leszno 2017, p. 29–31. The technical condition was so poor that the findings of the technical evaluation were reported to the Poznań Construction Supervision Authority (PINB) requesting immediate demolition.
- <sup>21</sup> Ibidem.
- <sup>22</sup> K. Michalak, *Opinia konserwatorska dotycząca ceglano-budynku starej spalarni śmieci przy ul. Wilczak 20 w Poznaniu*, Poznań 2015.
- <sup>23</sup> See footnote 12.
- <sup>24</sup> Rozporządzenie Ministra Infrastruktury z 12 kwietnia 2002 w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie, Dz.U. 2002, item 690, as amended.
- <sup>25</sup> Ustawa z 7 lipca 1994 Prawo budowlane, Dz.U. 1994, No. 89, item 414, as amended.
- <sup>26</sup> These included mainly a longitudinal fracture in a gable wall, fractured pillars, deformed gable walls, corroded steel structure, fractures in the smokestack, etc. See: expert surveys specified earlier in the article.
- <sup>27</sup> Execution: Agrobex Sp. z o.o. of Poznań. The construction and conservation work were managed by Patryk Paradziński, MEng.
- <sup>28</sup> H. Grzeszczuk-Brendel et al., *Prolegomena do ochrony obiektów architektonicznych i zespołów urbanistycznych Poznania XX wieku*, Poznań 2009.
- <sup>29</sup> O. Ivashko, *The issues of conservation and revitalization of the monuments of industrial architecture*, “WK” 2019, No. 58, p. 113–117.
- <sup>30</sup> E. Węclawowicz-Gyurkovich, *Wyburzać czy zachować dla przyszłości*, “WK” 2020, No. 62, p. 85–96.

## Abstract

The article presents the redevelopment process of an old waste incineration plant, one of the few examples of post-industrial architecture from the period of the Second Polish Republic which have survived to the present day in Poznań. The goal of the project was to adapt the building to a new purpose and function, and to renovate it preserving, as far as possible, its authentic structural elements. The challenge included not only the poor technical condition of the building and the scope of changes required for its adaptation to the new functions, but also its adjustment to meet the existing technical and construction regulations. The example of the redevelopment and modernization of the historic building serves as a basis for outlining and analyzing the technical, organizational and legal issues facing designers, conservation authorities and investors who undertake to redevelop locally listed cultural property that is also protected by the provisions of zoning plans. The methodology and solutions adopted at the intersection of practice and the conservation doctrine contribute to the discussion on redeveloping post-industrial sites.

## Streszczenie

W artykule przedstawiono proces przebudowy starej spalarni śmieci, jednego z niewielu obiektów architektury przemysłowej z okresu II Rzeczypospolitej zachowanych do dnia dzisiejszego w Poznaniu. Zrealizowany projekt zakładał zarówno zmianę przeznaczenia i zmianę funkcji obiektu, jak i jego przebudowę z zachowaniem w jak największym stopniu autentycznych elementów budowlanych. Wyzwaniem okazał się nie tylko istniejący stan techniczny obiektu i zakres zmian wynikających z przystosowania do nowych funkcji, lecz także dostosowanie do funkcjonujących przepisów techniczno-budowlanych. Na przykładzie przebudowy i modernizacji historycznego obiektu zarysowano i przeanalizowano wybrane problemy techniczne, organizacyjne i prawne, stające obecnie przed projektantami, służbami konserwatorskimi oraz inwestorami podejmującymi przebudowę obiektów chronionych wpisem do gminnej ewidencji zabytków i zapisami miejscowego planu zagospodarowania przestrzennego. Metodyka prac oraz przyjęte rozwiązania na styku praktyki i doktryny konserwatorskiej są głosem w dyskusji na temat prowadzenia prac przy obiektach przemysłowych.