INTERNATIONAL JOURNAL OF CONSERVATION SCIENCE
ISSN: 2067-533X Volume 16, Issue 4, 2025: 1775-1786 www.ijcs.ro
DOI: 10. 36868/IJCS.2025.04.10

REVITALISATION OF THE CZEPURKA MANOR HOUSE: BALANCING LEGAL, TECHNICAL AND FUNCTIONAL CHALLENGES

Aleksandra KUŚMIERSKA[1,*], Mariusz KOSIŃ[1]

[1] Częstochowa University of Technology, Faculty of Civil Engineering, Częstochowa, Poland

Abstract

The paper analyzes the conservation (legal), functional, and technical challenges of the revitalization of the Czepurka Manor House located in Poland. The conservator's requirements were verified against the possibility of revitalizing the manor house, an analysis was made of currently available building materials and the possibility of their use in the restoration of the structure, and the architectural work carried out to date was reviewed. The aim was to adapt the historic manor house to contemporary requirements while considering the design and legal challenges associated with entering the structure on the Register of Historic Monuments.

Keywords*: Manor house; Adaptive reuse; Conservation; Revitalization*

Introduction

An increasing emphasis is being placed in Poland on the adaptation and revitalization of historic buildings, which constitute an important element of cultural heritage [1]. The process of adapting these buildings to modern functions involves various challenges related to the need to meet conservation (legal) requirements, technical issues, or financial aspects, to name a few. The specificity of the revitalization of historic residential buildings lies in maintaining the balance between protecting their authenticity and historical value and introducing functional solutions adapted to the contemporary user needs. However, thanks to the commitment of investors and cooperation with conservation institutions, preserving the authenticity and historical value of monuments is possible. At the same time, these buildings are taken into account and adapted in terms of the contemporary utilitarian and economic needs of the investors [2].

The comprehensive construction plan for the structure on which this article focuses was prepared by the co-author of this paper, who is also an architect and a design office owner. The adaptation process has been thoroughly studied and analyzed thanks to her personal involvement in preparing the design documentation from the concept stage to the final design [3].

The structure in question, the Czepurka Manor House, is located in Poland, in the Silesian Voivodeship (Janów Commune), in the village of Czepurka. The maps below show the exact location on the scale of Poland and the scale of the village of Czepurka (Fig. 1).

According to the structure's registration card, the Czepurka Manor House construction dates back to the turn of the 18th and 19th centuries, when it was erected as a manor building. The structure is located on a nearly 2-hectare plot of land where remains of other manor buildings can also be found. The building was listed on the Register of Historic Monuments in 1898. Figure 2 shows a photograph depicting the historical appearance of the manor house.

* Corresponding author: aleksandra.kusmierska@pcz.pl

Fig. 1. Location of Czepurka Manor House on the scale of the country (Poland) and on the scale of the village of Czepurka [4]

Fig. 2. Historical appearance of the manor house; photograph shows the Czepurka Manor House in the first half of the 20th century Photo – author unknown, ownership – structure owner

Little evidence survives on the history of the building to describe its original form or exact functions. However, architectural research and material analyses show that the individual floors of the structure date to different time periods. This proves the building's multi-stage development and adaptation [5] to the changing needs of its users. The oldest part of the building is the basement with its barrel vault made of solid brick. This space served as a granary. Above the vault, the ground floor and roof void were built a few decades or hundreds of years later, with the newest part being the kitchen annex. Figure 3 shows a view of the front elevation in sequence, followed by a photograph of the north elevation and a view of the kitchen annex (east elevation).

The Czepurka Manor House was an integral part of the larger manor complex, which included such outbuildings as barns, stables, and granaries. The manor farm was an important branch of the agricultural economy in the region, playing both an economic and social role.

Beginning in late 2021, intensive design work was carried out for several years to obtain a permit to begin the process of adapting the building to a modern function while maintaining maximum possible preservation of its character as a piece of history and a monument. Many formal, legal, technical, and economic difficulties were encountered during the design stage. Obtaining a building permit involved reconciling the requirements of the Voivodship Conservator

of Monuments with contemporary technical and functional standards, such as ensuring adequate thermal insulation.

Fig. 3. Contemporary condition of the manor house - 22/02/2022, from the left: front elevation (west), north elevation, kitchen annex view; own photographs

Despite the difficulties, the process was successfully completed as both the conservation permit and the permit for renovation and all other necessary works on the monument were obtained. At the concept design stage, the design unit developed visualizations of what the building would ultimately look like. Figure 4 presents selected visualizations of the final appearance of the manor house – view of the front elevation.

Fig. 4. Visualisations of the Czepurka Manor House, front elevation view [6]

Methodology

The conducted research aimed to analyze the process of adapting [7] the Czepurka Manor House to its contemporary function, taking into account both the technical and conservation challenges associated with the revitalization [8] of the historic building. The article authors answer the question of whether and how it is possible to adapt a historic building [9] to contemporary functions, taking into account the legal regulations and challenges involved.

The research was conducted as a case study. The research combined a qualitative approach with analytical methods of technical evaluation.

The research included the structure, the Czepurka Manor House located in the Silesian Voivodeship (Janów Commune), which is a structure with the status of a monument entered in the Register of Historic Monuments [10].

The data was obtained during many years of work on the conceptual, conservation, and construction design. A number of interviews were conducted (with the inhabitants of the village of Czepurka, representatives of the Office of the Voivodship Conservator of Monuments and the District Office in Częstochowa, the owners of the structure in question, and a constructor

specializing in works on historical buildings), and archival materials were analyzed before commencing the actual conceptual and drawing work.

Detailed data, on the basis of which this article was created, were obtained from:

1. Architectural documentation;

2. Consultations with the design team during the technical assessment of the building, excavations and technical analysis of the building;

3. Structural construction design documentation;

4. Geological and engineering documentation (8 boreholes were drilled and analyzed on the plot in question). The figure below (Fig. 5) shows the location of the boreholes on the plot of land in question and the cross-sections of borehole I and borehole II.

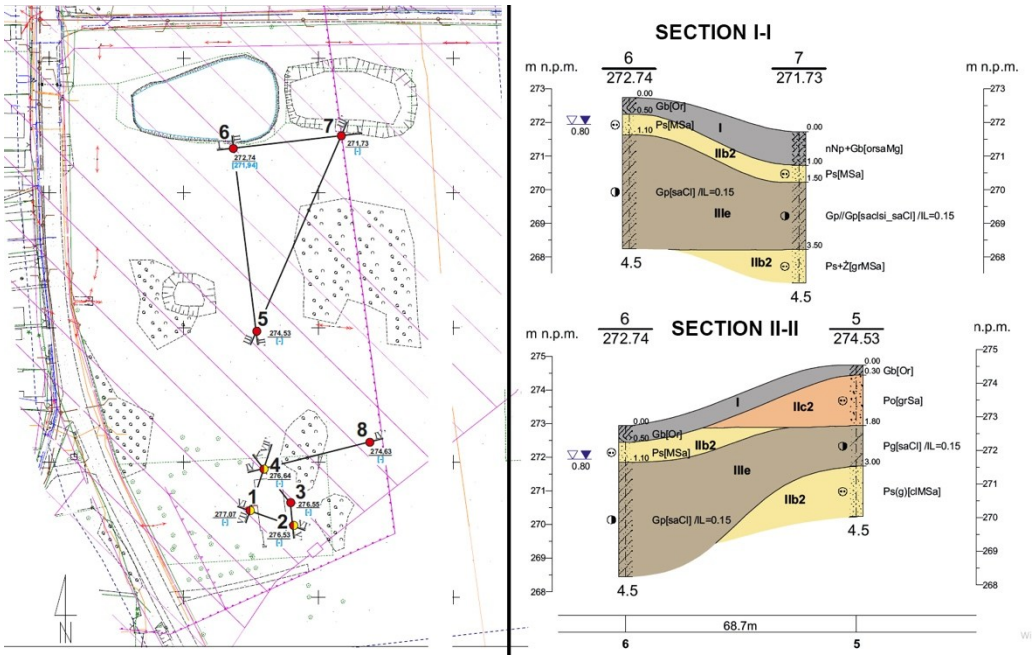

Fig. 5. From the left: location of boreholes on the plot of land in question; on the right: cross-section of boreholes I and II [11]

5. Consultations with a geological expert. The consultations included an analysis of the ground layers, landforms, and conditions of and changes in landforms over the last few decades. The consultations also included the issue of groundwater levels and the location of the historic fish ponds;

6. An inventory of the Czepurka Manor House including an analysis of the window and door woodwork and interior elements;

7. Conducting a series of site visits to the property in question and its immediate surroundings.

Research course

The research was conducted in multiple stages. First, a review and analysis of archival material on Chepurka was carried out, both in the context of the village and the specific building. Next, the local zoning plan for the area was reviewed. An interview was conducted with the investor and the building owner.

The next stage of the work concerned the preparation of a concept design on the basis of which an application for conservation guidelines from the Voivodship Conservator of Monuments was created.

The research included an analysis of the technical and functional possibilities of the building in question and a comparison of the results with the requirements set by the investors and the designer's vision.

The next part of the work was the creation of a project submitted to the Office to obtain a conservation permit allowing the carrying out of work on the monument in question. The design was prepared taking into account the documentation created by the constructor: an assessment of the technical condition and a program of conservation works planned for the monument, together with an analysis of the geological and engineering documentation.

Once the conservation permit was obtained, the design was adapted to the building permit requirements, and the relevant permit was obtained.

Currently (as of January 2025), the investors are in the process of obtaining funding for the project. Information that influenced this article was obtained at each of the above-mentioned stages.

Data analysis

The collected data was subjected to a qualitative analysis aimed at identifying the key technical and conservation issues [12] and methods of solving them in the process of adapting [13] the Czepurka Manor House to its contemporary function. An analysis of the information obtained from the interviews, data from the documentation, and own observations was carried out. It also took into account the influence of this data on the structure revitalization methods. On the basis of the results and analysis of the content of the documentation of the construction part – technical opinion—an assessment was made of the effectiveness of the applied technological solutions in the context of the protection of the historic values of the manor house.

Resolution

Based on the collected documentation, interviews, and the results of observations and data analysis, key aspects were identified that had a decisive impact on the successful creation of the design for the adaptation of Czepurka Manor House to a contemporary function, including, among others, the choice of appropriate construction technologies, the necessity to introduce modifications related to the functional conditions of the structure (the need to include a veranda-garden orangery), and the use of materials in accordance with conservation requirements.

The applied methodology combines various data sources, including documentation, interviews, and field observations, which allows for an in-depth analysis of the technical and conservation challenges posed by the revitalization [14] of a historic building located in a rural area.

Analysis of the conservation (legal), functional and technical challenges of the revitalisation of the structure in question

Conservation (legal, related to entry in the Register of Historic Monuments) and functional problems

When a building is listed in the Register of Historic Monuments, it is taken under control of the conservation officer responsible for the area. The architect presents a preliminary concept for the revitalization of the structure, and after reviewing it, the conservation officer responds in the form of conservation guidelines. There, they describe which changes proposed by the architect they agree to and which ones they reject. The architect is obliged to comply with the conservator's guidelines. Before obtaining a building permit for a structure entered in the Register of Historical Monuments, it is necessary to obtain the conservator's consent to carry out construction works on the structure in question.

Selected conservation guidelines obtained for the Czepurka Manor House:

- preservation of the original external contour of the building;
- prohibition of extension of the front and side elevations of the structure;
- restriction on building upwards;

- no option of insulating the elevation from the outside – protection of the existing elevation;
- preservation of the original appearance and character of the structure;
- preservation of the original colors and obligatory use of finishing materials typical of the time when the manor house was built (i.e., lime plasters [15] in subdued colors, lintels and the elements below the window sills made of bricks (solid or clinker bricks);
- preservation of the original appearance of the window and door woodwork;
- preservation of the kitchen in the annex.

Challenges relating to the function of the building have also arisen due to the conservation guidelines:

- no connection between the ground floor and the basement;
- investor's guidelines – plan to adapt the attic for residential functions (sleeping area – bedrooms);
- no staircase allowing access to the habitable attic;
- the need to modify the internal layout of the walls while maintaining the main structural layout;
- the need to provide lighting of the habitable attic;
- the need to remove the tiled stoves (stoves were in every room of the building). Their condition was very bad, and they no longer fulfilled their original function.

One of the investor's guidelines was a habitable attic, which was to house four bedrooms with bathrooms. The conservator agreed to add ox-eye dormers to the roof. This allowed natural lighting of the attic and the bedrooms to be properly designed with access to daylight sources. The first floor also provides space for a large hallway that serves as a reading and relaxation area. On the ground floor, the external outline of the building was retained, with a slight modification of the layout of internal walls, where the space was enlarged to create an open dining room with a living room. The kitchens were designed according to the guidelines, i.e., in the building annex.

A historic cellar (dated few hundreds of years or a few decades earlier than the building's ground floor and attic elements) can be found below the ground floor, accessed through a single entrance located on the rear elevation. According to the conservation guidelines, the architect was forbidden to relocate the entrance and window openings and to knock out new openings. Therefore, the functional challenge was to connect the basement level with the ground floor level so that the building user would not be forced to go outside when moving between the ground floor and the basement. The architect proposed to build a terrace with a winter garden (orangery) along the rear elevation. Thus, the user will be able to access the basement of the building by stairs directly from the covered terrace. The stairs were designed in such a manner as to not interfere with the historic layout of the ground floor and basement.

A major design challenge was the building insulation, which could not be carried out using the modern method where the insulation layer is placed on the outside of the building. Therefore, mineral insulation made from specially designed panels was chosen to be installed on the inside of the building.

All conservation guidelines were taken into account. The window and door woodwork that could not be renovated was carefully inventoried and planned for restoration, the elevations were designed in their original colors, and natural materials were used to maintain the authenticity of the manor house. Figure 6 shows photographs of the appearance of the door and window woodwork before the restoration construction work was undertaken. Figure 7 shows a selected part of the manor house elevation design, which was approved by the Voivodship Conservator of Monuments and granted a building permit.

Fig. 6. Window and door woodwork, selected examples, 23/08/2022;

Fig. 7. Front elevation (west) and north elevation [16]

Technical problems

The Czepurka Manor House, like many other [8] historic buildings, is struggling with progressive structural deterioration due to environmental factors and the passage of time. Among the key technical problems that require intervention are the significant leaning of the west wall of the building and the lack of connection between the external and internal walls, which weakens the stability of the structure and increases the risk of more serious damage. These are characteristic difficulties found in historic buildings [9] erected using traditional methods. Many of them face similar challenges, such as degradation of timber elements, subsidence of foundations, or loss of strength of materials due to years of use. Lack of regular maintenance and neglect over the years further exacerbate these issues, making it a necessity to adopt a comprehensive and sustainable approach [17] to their repair and revitalization [18].

As shown in the attached cross-section in Figure 8, the former basement was built in an open excavation and was backfilled without proper soil compaction. The building foundation walls were made outside the basement outline and are founded on backfill soil, which is subject to uneven compression, as illustrated by the cracking, fissures, and tilting of the building walls. In addition, the rotted beams and other roof truss components needed to be replaced to prevent further moisture penetration and degradation of the entire roof structure.

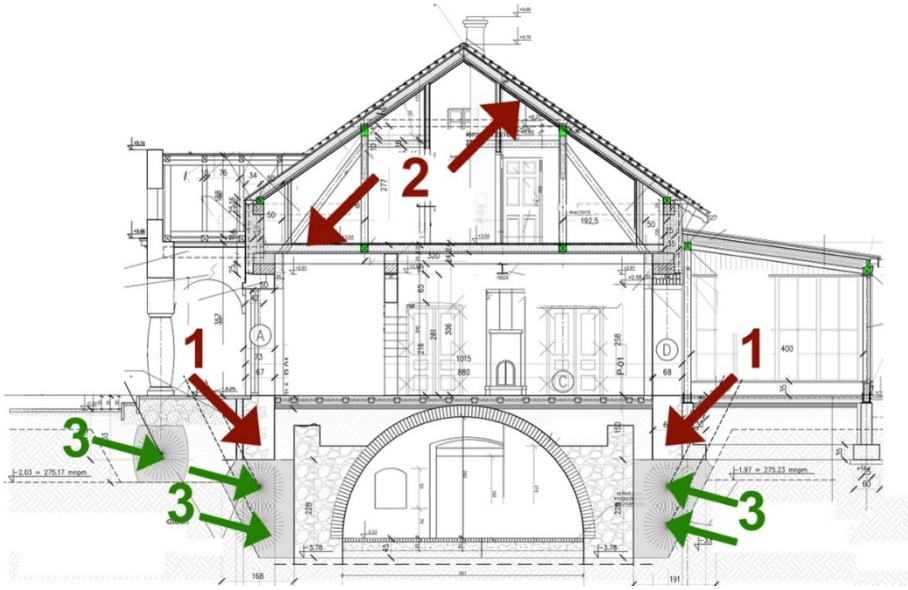

Fig. 8. Cross-section of the manor house [19]
For the purposes of this article, the above-described points were marked as follows: 1 - foundation walls outside the basement outline, 2 - rotten elements of the roof trusses, 3 - spots for planned geopolymer injection

To counteract further degradation of the Czepurka Manor House and protect its structural integrity, it is necessary to implement comprehensive remedial measures [20]. One of the key steps is to stabilize the soil [21] under the foundations. For this purpose, the plan is to use the geopolymer injection method [22]. This method allows to strengthen the soil [23] by injecting special geopolymer mixtures that fill voids, improve the foundation bearing capacity, and reduce uneven subsidence. Figure 9 shows a diagram of geopolymer injection under the foundation to stabilize the soil.

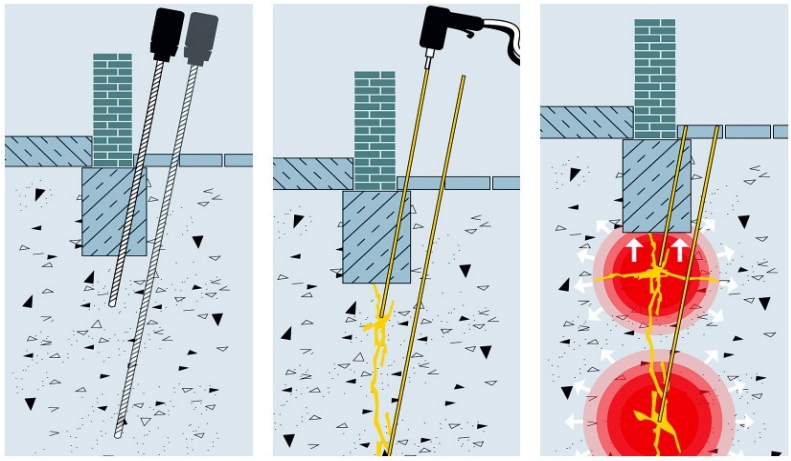

Fig. 9. Diagram of introducing geopolymer under the foundation to stabilise the soil [24, 25]

The next work stage involves complete demolition of the north wall of the building, whose technical condition does not allow applying other measures. This wall will then be rebuilt in accordance with conservation recommendations. The structure will be made using contemporary

technology (ceramic blocks), and the finishing layer will be limestone obtained from the demolition process.

The building foundations require underpinning. The introduction of this process will result in stabilization of the entire structure and reduction of the risk of further damage to the walls resulting from uneven backfill foundation movements.

A complete demolition of the roof is also planned due to the poor condition of the roof trusses. This work will include the removal of damaged elements and reconstruction of the roof structure using a durable material that will provide adequate load-bearing capacity. New roof sheathing, together with a vapor barrier, will ensure adequate waterproofing. The above changes were made with the aim of preserving the historic character of the roof (decorated rafters, preserved classical truss system), so that the shape of the overall structure would correspond to the original appearance of the manor house.

Heat sources in a historic building – use of modern technology

In the context of revitalization of historic buildings, increasing emphasis is being placed on the implementation of pro-environmental solutions that combine modern technologies [26] with respect for the historic character of the buildings. In the case of such structures, it is possible to introduce technologies that support energy efficiency, such as ground source heat pumps, photovoltaic systems, rainwater retention tanks, or natural insulation materials. However, the key challenge remains to adapt these solutions to the specifics of historic structures in order to minimize interference with their authentic form and preserve their historical value.

The Czepurka Manor House revitalization project envisaged the use of three heat sources: a ground source heat pump, a solid fuel boiler, and a wood-burning fireplace with a water jacket. After detailed technical studies, the ground source heat pump proved to be suitable for installation in this building. Although an environmentally friendly solution, its sustainability may be limited by changing ground conditions and seasonal heat demand, which may require regular monitoring of its performance over a longer period of use. A solid fuel boiler, as a traditional heat source, will act as a supplementary option (especially during periods of intense frost), while a fireplace with a water jacket will additionally support the heating of the building.

The combined use of modern and conventional heating methods has improved the energy efficiency of the manor house. In addition, it minimized the impact on its historic structure, bringing the building up to modern energy requirements.

Conclusions

The research provided an answer to the question of whether it is possible to adapt the historic manor house to both legal (conservation) and functional contemporary requirements. The authors also analyzed the technical requirements that are typical for historic buildings, where one of the problems is the progressive degradation of the structure. The research was conducted using the case study method, analyzing the Czepurka Manor House in the Silesian Voivodeship. Qualitative methods were used, including analysis of architectural and construction documentation, and consultations with experts and interviews with investors and local authorities were carried out. These were supplemented by site visits and a detailed inventory of the structure, including woodwork elements, spatial layout, and architectural details.

The analysis of the adaptation process [27] of the Czepurka Manor House allows key conclusions to be drawn regarding the revitalization of historic buildings to be adapted to meet contemporary use requirements. Firstly, it is important to have a precise understanding of the conservation guidelines and to take them into account at every stage of the design work. In the case of the Czepurka Manor House, the key constraints concerned the need to preserve the original shape of the structure, architectural details, and building materials characteristic of the period, which

required non-standard technical solutions, such as the introduction of internal thermal insulation. Another conclusion is the importance of dialogue between investors, designers, and conservation authorities. This process made it possible to obtain compromise solutions, such as the addition of the ox-eye dormers, which allowed natural lighting of the attic and its adaptation [28] as a residential area. This way, a balance was struck between contemporary requirements and the protection of historical values (the contemporary shape of the roof was retained).

It should be emphasized that the protection of cultural [29] heritage goes beyond the preservation of the physical substance of monuments, as it also includes their value from the point of view of the society [30]. Architectural monuments shape the sense of identity and belonging of local communities, acting as a bridge between the past and the present. Therefore, their adaptation [31] and preservation should take into account the social needs and historical values alike. Based on the above observations, it can be concluded that a comprehensive approach, integrating various technical, legal, and functional aspects [32], is crucial in the process of revitalization of historic buildings. The Czepurka Manor House is an example of a successful adaptation, where the needs of the modern user were successfully reconciled with the protection of cultural heritage [33], indicating at the same time the possibility of using this approach in similar revitalization projects.

The theses carried out within the framework of this paper included verification of the requirements of the conservator with the possibility of revitalizing the manor house, analysis of currently available building materials and the possibility of their use in the restoration of the manor house, as well as an examination of the architectural work carried out to date. The objective was to adapt the historic manor house to contemporary requirements. The theses were verified, and the objective was achieved.

References

[1] M. Del, B. Sedghpour, S. Tabrizi, *The semantic conservation of architectural heritage: the missing values*, **Heritage Science**, **8**(70), 2020, pp. 4-6. DOI:10.1186/s40494-020-00416-w.
[2] P. Molski, *Przekształcenia zabytkowych obiektów – próba kodyfikacji*, **Ochrona dziedzictwa kulturowego**, **11**, 2021. (in Polish)
[3] S. Conejos, C. Langston, J. Smith, *Improving the implementation of Adaptive reuse strategies for historic buildings*, **Conference Paper**, 2011, pp. 4-7.
[4] https://www.google.com/maps [accessed on 12.2024].
[5] D. Ordóñez-Castañón, T. Cunha-Ferreira, S. Sánchez-Beitia, *Adaptive Reuse of Manor Houses: Modernism and Tradition in Fernando Távora's Approach for Heritage Renovation*, **International Journal of Sustainable Development and Planning**, **16**(3), 2021, pp. 596-578. https://doi.org/10.18280/ijsdp.16031.
[6] A. Kuśmierska, *Visualizations for the conceptual design project Renovation and expansion of the residential building Dwór Czepurka A-129, in the village of Czepurka, Janów Municipality*, **Silesian Voivodeship**, **front elevation view**, Częstochowa, 2023.
[7] F. Arfa, H. Zijlstra, B. Lubelli, W. Quist, *Adaptive Reuse of Heritage Buildings: From a Literature Review to a Model of Practice,* **Historic Environment: Policy and Practice**, **13**(2), 2022, pp. 148-170. DOI: 10.1080/17567505.2022.2058551
[8] A. Golonka, *The problem of adaptation and conservation of historic buildings on the example of Dwór Czarne*, Scientific Papers of the Silesian University of Technology, **Architecture**, **44**, 2006, pp. 31-33.
[9] R. Chmielewski, J. Sankowski, *Analysis of the possibilities for revitalizing historic buildings in the former spinning mill complex in Łódź*, **Materiały Budowlane**, 8, 2024, pp. 46-53. DOI 10.15199/33.2024.08.07.
[10] * * *, http://wkz.katowice.pl/uslugi/rejestr-zabytkow/spis-obiektow-wpisanych-do-rejestru-zabytkow/rejestr-zabytkow-nieruchomych-a [accesed on 12.2024].

[11] * * *, **Geotechnical opinion for the recognition of soil and water conditions and the reconstruction of the existing building on plot no. 388 in the village of Czepurka (Janów Municipality)**, Geobios, Częstochowa, 2022.
[12] A. Taraszkiewicz, *Revitalization of Residential Buildings Dating Back to the Late 19th and Early 20th Century on the Example of "Willa Halina" in Sopot (Poland)*, **Buildings**, **11**(7), 2021, Article Number: 520. https://doi.org/10.3390/buildings11070279.
[13] F. Vafaie, H. Remoy, V. Gruis, *Adaptive reuse of heritage buildings: a systematic literature review of success factors*, **Habitat International**, **142**, 2023, Article Number: 102926. https://doi.org/10.1016/j.habitatint.2023.102926.
[14] G. Mikle, *Long-term transformation of Hungarian manors: The relevance of the rural restructuring approach and the concept of the precariat*, **Journal of Rural Studies**, **77**, 2020, pp. 105-112. https://doi.org/10.1016/j.jrurstud.2020.05.003.
[15] N. Arıoglu, S. Acun, *A research about a method for restoration of traditional lime mortars and plasters: A staging system approach*, **Building and Environment**, **41**(9), pp. 1223-1230. https://doi.org/10.1016/j.buildenv.2005.05.015.
[16] A. Kuśmierska, **Construction project: Renovation and expansion of the residential building Dwór Czepurka A-129, in the village of Czepurka, Janów Municipality, Silesian Voivodeship, front (western) and northern elevation**, Częstochowa, 2023.
[17] I. Djebbour, R.W. Biara, *The challenge of adaptive reuse towards the sustainability of heritage buildings*, **International Journal of Conservation Science**, **11**(2), 2020, pp. 520-521.
[18] D. Ordóñez-Castañón, T. Ferreira, *Toward the Adaptive Reuse of Vernacular Architecture: Practices from the School of Porto*, **Heritage**, **7**(3), 2024, pp. 1826-1849. https://doi.org/10.3390/heritage7030087.
[19] A. Kuśmierska, **Construction project: Renovation and expansion of the residential building Dwór Czepurka A-129, in the village of Czepurka, Janów Municipality, Silesian Voivodeship**, cross-section, Częstochowa, 2023.
[20] Z. Walczak, B. Ksit, A. Szymaczak-Graczyk, *Decision-support tools for diagnosing and selecting the optimal method of repairing building*, **Bulletin of the Polish Academy of Sciences**, **72**(6), 2024, pp 1-9. DOI:10.24425/bpasts.2024.151382.
[21] A. B. Villoria, R. Libre, P. Quiatchon, I. Dollente, E. Guades, M. Promentilla, L. Garciano, J. Ongpeng, *Geopolymers as Sustainable Material for Strengthening and Restoring Unreinforced Masonry Structures: A Review,* **Buildings**, **11**(11), 2021, Article Number: 532. https://doi.org/10.3390/buildings11110532.
[22] L. Ricciotti, A. Molino, V. Roviello, E. Chianese, P. Cennamo, G. Roviello, *Geopolymer Composites for Potential Applications in Cultural Heritage*, **Environments**, **4**(4), 2017, Article Number: 91. https://doi.org/10.3390/environments4040091.
[23] A. Banaś, L. Bałachowski, A. Kuryłowicz, A. Poteraj-Oleksiak, *Innovative method of soil reinforcement behind the abutment using geopolymer injections*, **Builder**, **278**(9), 2020, pp. 24-28. DOI: 10.5604/01.3001.0014.3581.
[24] * * *, http://beton-house.com/wp-content/uploads/2017/12/effekt-gidrorazryva.jpg [accessed 15.01.2025].
[25] D. D. Burduhos-Nergis, T. Fistos, A. V. Sandu, P. Vizureanu, The impact of adding timber waste on the microstructure of fly ash-based geopolymer composites, **European Journal of Materials Science and Engineering**, 10(2), Article Number: 151–162, 2025. https://doi.org/10.36868/ejmse.2025.10.02.151
[26] S. Conejos, C. Langston, J. Smitch, *Designing for Future Building: Adaptive Reuse as a Strategy for Carbon Neutral Cities*, **The International Journal of Climate Change: Impacts and Responses**, **3**(2), 2012, pp. 33-52. https://doi.org/10.18848/1835-7156/CGP/v03i02/37103.
[27] H. Remøy, V. Voordt, *Adaptive reuse of office buildings: opportunities and risks of conversion into housing*, **Building Research & Information**, **42**(3), 2014, pp. 381-390. https://doi.org/10.1080/09613218.2014.865922.

[28] K. Günçe, D. Mısırlısoy, *Assessment of Adaptive Reuse Practices through User Experiences: Traditional Houses in the Walled City of Nicosia*, **Sustainability, 11**(2), 2019, Article Number: 540. https://doi.org/10.3390/su11020540.

[29] S. Mazzetto, *Assessing heritage reuse interventions in the Gulf Countries*, **IOP Conference Series: Earth and Environmental Science**, **1026**, 2022, Article Number: 012044. DOI 10.1088/1755-1315/1026/1/012044.

[30] J. Sroczyńska, *The social value of architectural monuments in light of selected UNESCO, ICOMOS, and Council of Europe documents shaping the theory of cultural heritage protection*, **Conservation News – Journal of Heritage Conservation**, **65**, 2021, pp. 8-17. doi:10.17425/WK58MONUMENTS.

[31] K. S. Kyaw, S. M. Fufa, D. Kraniotis, *Adaptive reuse of industrial heritage building – comparative life cycle assessment using a case study in Norway*, **IOP Conference Series: Earth and Environmental Science**, **1196**, 2023, Article Number: 012107. DOI 10.1088/1755-1315/1196/1/012107.

[32] E. Węcławowicz-Bilska, M. Wdowiarz-Bilska, E. Kráľová, M. Vaščák, Y. Kryvoruchko, *Historical timber health resort architecture. Contemporary condition and state of conservation*, **International Journal of Conservation Science**, **13**(2), 2022, pp. 363-364.

[33] W. Liang, Y. Ahmad, H. Mohidin, *The development of the concept of architectural heritage conservation and its inspiration,* **Built Heritage**, **7**, Article Number: 21, 2023. https://doi.org/10.1186/s43238-023-00103-2.

Received: March 20, 2025
Accepted: November 10, 2025