

DEVÍNSKA KOBÝLA MISSILE BASE / STUDENT IDEA COMPETITION
COMPETITION CONDITIONS

Missile base at the top of the Devínska Kobyla National Nature Reserve
in Bratislava

DEVÍNSKA KOBYLA MISSILE BASE / Student idea competition

name of the competition

Missile base at the top of the Devínska Kobyla National Nature Reserve in Bratislava

goal/idea

LIBRETO

Devínska Kobyla is a mountain massif on the southwestern edge of Bratislava. Visually it dominates the western part of the city. It is connected with Devín Castle, the River Danube and the city districts of Devínska Nová Ves, Dúbravka, Karlova Ves and Lamač. From its summit you can see Bratislava, Austria and Hungary, and when there is good visibility the Czech Republic.



Observation tower in the area of the missile base – a view of the River Danube



Devín castle ruins – confluence of the Morava and Danube rivers

View of Europe.

The views from its summit have a symbolic meaning. As there was a military base in the past, the site was inaccessible to the public for many years. Today, visitors can move freely around the military base and the surrounding forests and enjoy freedom of movement and views. For older generations, it is a symbol of regained freedom and a symbol of a united Europe.

Missile base.

An air defence unit used the area to protect the “camp of socialism” from “imperialist aggressors”. Under socialism, the army was perceived negatively by ordinary people due to compulsory military service. Young men had to spend a year or two in barracks, separated from their families and friends, sometimes in very uncomfortable and indecent conditions. Even today, barracks evoke mixed feelings among the generations. Some still perceive them negatively, while others have more positive memories. Today, there is but a skeleton of the former launch sites and operation buildings on Devínska Kobyla, mostly concrete ruins, overgrown with vegetation, a refuge for the homeless, completed in graphite.

The Iron Curtain.

The term was first used by Winston Churchill in 1947 to describe the violent division of Europe into West and East, with the East entering the sphere of influence of the USSR and beginning its move away from democracy. Churchill used the term symbolically, a real iron curtain in the form of a barbed wire fence and watchtowers running under Devínska Kobyla along the River Morava and separating socialist Czechoslovakia from the free world. The existence of the Iron Curtain is associated with a number of tragic stories of people who risked their lives in their desire for freedom. To this day, this dark side of history does not have a sufficient museum presentation in Slovakia that would support the teaching of history.

Environmental burden.

The concrete skeletons of bunkers and buildings, the pollution left by the soldiers here, is gradually giving way to the forces of nature, but it represents a problem and at the same time a chance for an interesting conversion, recycling, and revitalization.

Urban and non-urban at the same time.

Building the observation tower in 2020, the destination became attractive and the number of visitors multiplied by an order of magnitude. At the moment, apart from the observation tower itself, a few benches and information boards, there are no functional devices in the location, which the public perceives to be negative. Several well-marked and well-maintained hiking trails lead to the top of Devínska Kobyla, including the former asphalt access road. The site is only accessible on foot or by bike. Although it is a natural site, it is part of urban life in Bratislava. It supports the idea of a city of short distances as it is easily accessible on foot or by public transport. The importance of the site in terms of spending leisure time in the wild increased greatly during the period of the travel ban due to the COVID crisis.

Observation tower.

It is a parametric structure that responds to the geopolitical symbolism of the view of the three countries. The viewing platforms are increasing upwards. The dynamic form was not the goal of the authors of the project, but the result of a consistent response to the structural logic, the direction of the views and the logic of the movement of visitors.

The staircase arms are inspired by comfortable Baroque staircases. During the tower's construction, an urban myth arose that the building is supposed to symbolize the praying mantis, which is typical for the site of Devínska Kobyla.

Inspirations in Slovak modern art.

Underground art was engaged in in the Eastern block countries, including by prominent Slovak artists such as Rudolf Sikora, Alex Mlynárčik, Jozef Jankovič and Stanislav Filko, who reflected the themes of militarism, war and armaments in their work, such as Rockets in the work of Stanislav Filko.



Stanislav Filko / Monument of Civilization – rockets



Rudolf Sikora – Airports 1971

Protected landscape area.

Devínska Kobyla, as a part of the Little Carpathians Protected Landscape Area, is of exceptional botanical, zoological, geological and palaeontological importance (Sandberg site) with its xerophytic and thermophilic – xerothermic vegetation.

Ownership vs. regulations.

The buildings and lands have a number of different owners with different interests (the Slovak Republic, the capital, citizens associations, sports clubs, private property). A conflict of interest among individual stakeholders can be expected in the near future. Therefore, it is necessary for the city of Bratislava to meaningfully regulate the development of the territory within the shortest possible time-frame, taking into account the balance of interests and the evaluation of its potential.

Expectations.

A proposal for a program for the use of the complex is expected (such as the Iron Curtain Memorial, military museum, gallery, campus for artists, ecologists, historians, tourist infrastructure, facilities for environmental activists ...) (... if necessary to address the overlap onto the wider area and wider relations, to deal with the design of transport connections and static transport – parking areas). Other new features are welcome. Expecting urban, landscape and architectural design of the proposed functional concept of use. Alternatively, a proposal for rules that will generate quality development of the site. Overlaps with virtual solutions are welcome. We expect original solutions to the mentioned problems, or their display in a new context. Proposals should be a catalogue of inspiration for property owners to find a program and also how to use them, they should be an inspiration for the city district for possible investments in infrastructure and also for the municipality to define the new regulations. Welcoming the use of ecological technologies and construction methods.

Questions and paradoxes.

How to present / exhibit historical and ecological themes in a combination of physical artefacts and virtual experience? How to synchronize the availability and remoteness of a place and its new features? What tools to support the preservation of the area and its recent military-political archaeology? How to make friends with the antagonistic interests of nature, the monument, the research campus and tourism?

inviting party
ARCHITEKTI ŠEBO LICHÝ
www.sebolichy.sk

contact person
Karin Jecková / jeckova@sebolichy.sk

for whom the competition is intended
An anonymous student idea competition for students and graduates who graduated in 2019 and
2020
1st PRIZE: EUR 3000
2nd PRIZE: EUR 2000
3rd PRIZE: EUR 1000

competition jury

Dana Čupková is the co-founder and design director of EPIPHYTE Lab, an interdisciplinary architectural and research team that was recognized as the Next Progressive design practice by ARCHITECT Magazine in 2018. She is currently an Associate Professor at the Carnegie Mellon School of Architecture of the Track Chair postgraduate program for Master of Science in Sustainable Design (MSSD). From 2014 to 2017 she served on the ACADIA Board of Directors and the Editorial Board of IJAC.

Miroslava Brooks is a founding partner of FORMA studio and a professor at the Yale School of Architecture and Weizman School of Architecture, where she has continuously taught since 2014. FORMA develops projects with architectural clarity and conceptual consistency, focusing on a harmonious combination of order and whimsy.

Lenka Petráková works for Zaha Hadid Architects in London. The winning project of the 8th Continent (Jacques Rougerie Foundation Grand Prix Award), which has made her well known recently, is a complex of floating buildings that would collect, sort, and then transport plastic waste ashore. Her other objects include the design of Natural Temples, the SCI-FI Museum in Washington, and the Performance Centre in Vienna.

Dárius Krajčír since 2008 has been working on the project of the Bratislava-Devínska Nová Ves district as part of his work at the Local Office, when in 2018 he became its mayor.

Ing. arch. Tomáš Šebo is the co-founder of the Barak architekti architectural studio and worked as an architect for the French company Bouygues. In 2003, together with Igor Lichý, he founded the company ITB Development together with the Architekti Šebo Lichý Architectural Studio.

Mgr. arch. Igor Lichý after finishing school he worked for Huma 90 Team Projekt for the next 3 years, and later for the German company SEFL + Partner Architekturbüro Hamburg. He later held the position of construction manager and design manager at Strabag. Since the founding of ITB Development together with the architectural studio in 2003, he has been working there to this day.

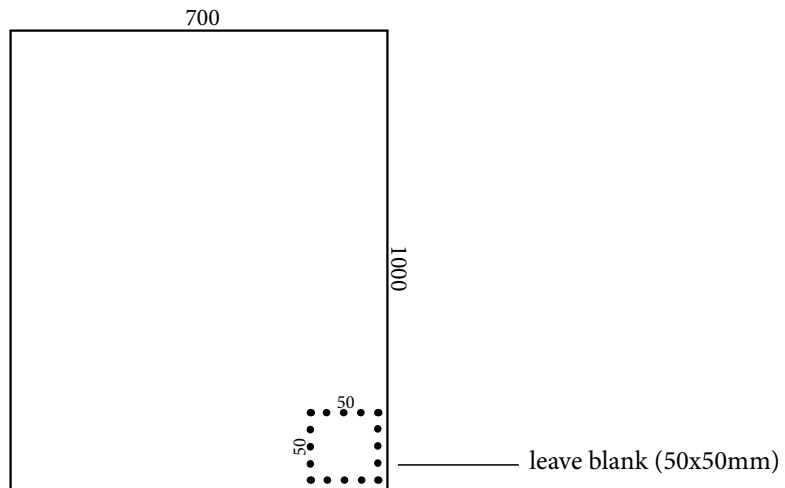
Prof. akad. arch. Imrich Vaško is an architect, writer, and professor at the Academy of Arts, Architecture and Design in Prague. After returning from a Fulbright Scholarship at Yale University, he founded the Laboratory of Architecture at the Academy of Fine Arts and Design and served as visiting professor at the Rhode Island School of Design. He also co-authored a joint exhibition of the Czech and Slovak Republics at the 7th Biennial of Architecture in Venice and co-founded the international Experimental Architecture Biennial in Prague.

competition secretary

Ing. arch. Aleš Hradecký, PhD.

design / form of submission

panels: min. 2 pcs, max. 3 pcs; format 700 mm (width) x 1000 mm (height) (PDF format) portfolio – A3 format (PDF)



method of submission

electronically to e-mail address: jeckova@sebolichy.sk
in the form of web storage (wetransfer.com/uschovna.sk/uschovna.cz)

competition announcement

1.6.2021

deadline for electronic delivery

29.10.2021

results announcement

November 2021

language of the competition

Slovak, Czech, English

registration

not required, documents are available for download at:

<https://drive.google.com/drive/folders/11tkVnBeFf-VYW9CtmXe7ki8L3Q3l0hw-?usp=sharing>

tender documents

historical context

nature and landscape protection

missile base – territorial defence context current state (text part)

current state (photo documentation)

technical map

current state (graphic part – pdf.dwg)

layout (pdf.dwg)

objects – plan views; sections (pdf.dwg)

3Dmodel – objects (skp)

3Dmodel – overall (skp)

You can send questions to the e-mail address jeckova@sebolichy.sk, questions will be answered and at the same time the answers will be placed at www.missilebase.sk



Definition of the territory and wider relations of
48°11'25.1"N 16°59'44.2"E



Historical context



Internal borders of the restricted zone. No sign pointed to the electric fence

The car stopped behind the protective dam and the young men and their dog ran to the state border, about 400 metres away. Two members of the Border Guard fired five bullets at each, but probably neither of them hit their fellow comrades. The young people tried to cross the River Morava, which was dangerously flooded at the time. Later it turned out that two of them (Brejka and Dlubáč) drowned in the flooded river. The mission was completed only by Imrich, who, thanks to his dog, swam to the other side and reached the Train-skirchen refugee camp.¹

An excerpt from the documented course of the escape of Milan Dlubáč, Ondrej Brejka and Jozef Imrich, who were friends and wanted to emigrate together across the green border near Moravský Ján to Austria. Only the last of them, Jozef Imrich, managed to escape.

After the Second World War, the Communist Party in Czechoslovakia (hereinafter the Communist Party) reassured its citizens that its main interest was to improve the lives of the lower working class in particular. Many people did believe that the Communist Party would help to create more social and solidarity-based living conditions. In February 1948, it succeeded in convincing the society of its competence and gained power in the state. The forced changes changed the character of socio-economic relations beyond recognition²: whether it was the establishment of Unified Agricultural Cooperatives among farmers (collectivization), the liquidation of male religious orders (Action K), the displacement of unwanted people from cities to other parts of the republic (Action B), or Action Move to Production, when almost 77,000 people were moved from administrative to labour professions.

1 Source: Project Documentation of the Dead on the Czechoslovak State Borders, 1948 – 1989, Portraits of the Dead, Institute for the Study of Totalitarian Regimes: <https://www.ustrcr.cz/uvod/dokumentace-usmrcenych-statni-hranice/usmrceni-statni-hranice-portrety/brejka-on-drej-dlubac-milan/>

2 Historians refer to this phenomenon as boiling a frog: when a frog is placed in cold water and the temperature to which it gets used is slowly raised, it boils.

One of the significant aspects of the curtailment of human rights was the lack of ability to travel abroad. Until February 1948, crossing the border without a valid passport was considered a misdemeanour; after the establishment of the Communist regime, it was a criminal offence punishable by an unconditional sentence of 5 years in prison. From March 1949, a government resolution was passed which completely banned private trips abroad. Why was that? The totalitarian regime was consolidating and needed to keep citizens in its territory for political reasons, so that people would not compare the regime in Czechoslovakia with the regimes in the West, and also for economic reasons, as the state needed to keep citizens as cheap labour. If travelling to the West were allowed, people would easily compare what it is like to work and live in a free country, and the same conditions would be required at home.

The post-war reality of Czechoslovakia indicated that all citizens who did not participate in building the regime became enemies of the state.



An attempt to escape in Bratislava.

Source: Nation's Memory Institute Documents

“Everyone had their opinion. Everyone, everyone had their own pain, because it’s not a joke – eleven years of punishment – for nothing. Well, if I had murdered someone, they would have given me two years, but for not being a Communist, for not agreeing with them, boom – eleven years – here you are and done.”³

A quote from an interview with Viliam Kasperkevich, who wanted to go to the West in 1951 to visit his family. When crossing, he and his friend were caught and sentenced to 11 years in prison. He went through prisons in Znojmo, Mikulov, Prague, Ilava and Jáchymov. He was released after eight years of physical and mental humiliation and hard labour.

3 Source: Project Witnesses of Non-Freedom of the Nation's Memory Institute: Viliam Kasperčeký: <https://www.upn.gov.sk/sk/vil-iam-kasperkevich-1929/>



Barbed wire along the Devín road in Bratislava.
Source: Nation's Memory Institute Documents

To prevent the possibility of crossing the border illegally, an armed, repressive unit called the Border Guard was created. The role of its members was to guard the border against illegal crossing into the West⁴, and, if the fugitive did not obey, they were to use firearms. Border guarding and the security of entry to and the crossing of border zones were fully superior to saving lives. If border guards injured a refugee while shooting, it was more important to secure clues and wait for other members than to give the sufferer first aid. In addition to the border guard, there were zones around the border that were at least two and at most twelve kilometres deep. The outer borders of the inner part, i.e. the restricted area, formed the state borders, while the inner ones formed barbed wires, between which there was a fence with a voltage of 4000 – 6000 W from 1951 to 1965. Places in their vicinity could not be inhabited and forced population movements affected at least 300 villages and settlements.

Entry into these zones was considered an offence even if it was not intentional. If someone tried to cross the border illegally, he was caught and the event qualified as an attempt to leave the Republic (punishable by up to five years in prison) or as an attempt at high treason and espionage (punishable by death).

The refugees were not only citizens of Czechoslovakia, but also of the German Democratic Republic and Poland.⁶ Prosecution also threatened all those who in any way helped their neighbours to cross the border. They were purposefully searched and exemplarily punished.



Documented description of the escape by the Border Guard.⁹
Source: Nation's Memory Institute Documents

4 The borders were closed on the southwestern section of the state border of Czechoslovakia with Germany (then the Federal Republic of Germany) and Austria. Border guards also patrolled the Devín area.

5 Source: Project Documentation of the Dead on the Czechoslovak State Borders, 1948 – 1989, Portraits of the Dead, Institute for the Study of Totalitarian Regimes: <https://www.ustrcr.cz/uvod/dokumentace-usmrcenych-statni-hranice/usmrceni-statni-hranice-fotogalerie>

6 Source: Institute for the Study of Totalitarian Regimes, Morbacher Lubomír, Mašková Tereza: Iron Curtain in Czechoslovakia: <https://www.ustrcr.cz/data/pdf/hranice/studie.pdf>

"...suddenly some strangers rang. God, but I really didn't connect it at all with them, with our acquaintances, because the year was almost over ... They threw everything, all the books. They searched for everything and asked: "Do you know why we're here?" "No, I do not know." And I still didn't know. I absolutely lost it. "Just get some toiletries for a few days; we need to talk to you about something." I really picked up a bag like this, and they put me in that car and, as we came out of Bratislava, they blindfolded me, my hands were free."

From an interview with Eugénia Vysočilová – Anoškinová, who helped a friend get across the border. For this act she was sentenced in 1953 to 3 years in prison for high treason. She served her sentence in prisons in Ruzyně, Pankrác and Želiezovce. According to her, the work in the field was hard for women and the clothing was poor.⁷ Dubovsky Patrik, Gula Marian: Actions, crimes and victims of state security and border guards in the years 1945 – 1989 (collection of the Slovak-Czech scientific conference), Nation's Memory Institute, 2020

According to the Nation's Memory Institute, a total of 9,556 people tried to cross the border between 1970 and 1989 alone.⁸ However, it is possible that the records are incomplete, as in many cases people drowned in the River Danube and washed ashore on the Austrian side. In those cases, the Border Guard did not search for their bodies.

In Slovakia, it is mainly the Nation's Memory Institute which is engaged in recording cases dealing with illegal border crossings during the period of imprisonment (1939 – 1989) and in the Czech environment the Institute for the Study of Totalitarian Regimes. For the purposes of this study, mainly expert studies and documents from these two rich sources were used. The author also studied other cases described in publications:

Karner Stefan: STOJ! Tragédie pri železnej oponě, Ústav pamäti národa, 2015

Navara Luděk: Příběhy železné opony, Host, 2004

Navara Luděk: Příběhy železné opony 2, Host, 2006



In the photo, Hartmunt Tautz, an 18-year-old student from the German Democratic Republic, tried to escape in Petržalka. The guard dogs caught him and, after being injured, the guards let him bleed. The photo shows the place where he fought with the dogs and his appearance before and after the escape attempt.¹⁰

Source: Nation's Memory Institute

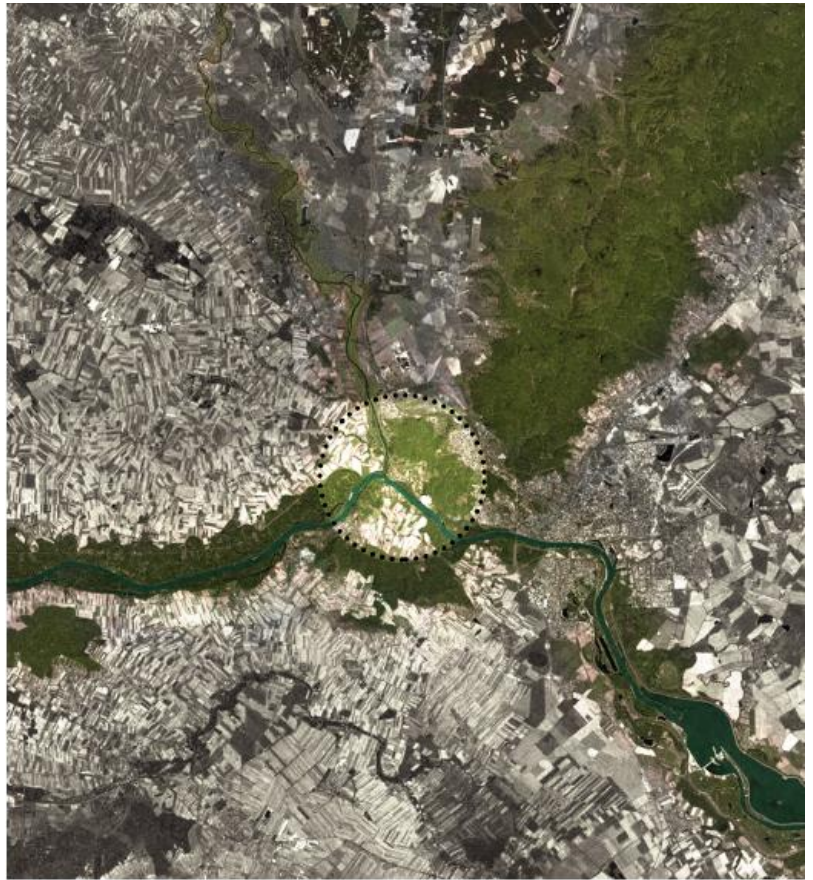
⁷ Source: Project Witnesses of Non-Freedom of the Nation's Memory Institute: Eugénia Vysočilová – Anoškinová: <https://www.upn.gov.sk/sk/eugenia-vyskocilova-anoskinova-1929/>

⁸ Source: Nation's Memory Institute, Project Unauthorized Leaving the Republic: <https://www.upn.gov.sk/projekty/nepovolene-opustenie-republiky/>

⁹ The border in the Devín area was not as strictly guarded as the others, especially the green parts of the border. The River Danube in connection with Moravia probably represented a sufficiently large barricade for the Border Guard during the crossing, especially in the times of its flooding. Nevertheless, there were many people who tried to cross this border.

¹⁰ More info at: <https://www.ustrcr.cz/uvod/dokumentace-usmrcenych-statni-hranice/usmrceni-statni-hranice-portrety/tautz-hartmut/>

Nature and landscape protection



Devínska Kobyla –
an important crossroads of the Little Carpathians,
the River Danube and the border with Austria –
a strategically advantageous location

The area is currently under the second degree of protection in accordance with Act No. 543/2002 Coll. on Nature and Landscape Protection, as amended (hereinafter referred to as the “Act”) – in the territory of the Little Carpathians Protected Landscape Area. At the same time, the area is part of the area that was included in the Natura 2000 system, the area of European significance (UEV) Devínska Kobyla.

The subject of UEV protection is the protection of habitats: Lowland hay meadows (6510), Sub-Pannonic steppe grasslands (6240), Xerothermic shrubs (40AO), Semi-natural dry grasslands and scrubland facies on calcareous substrates (6210), Pannonian woods with *Quercus pubescens* (91HO), *Tilio-Acerion* forests on slopes, screes and ravines (9180), Rupicolous calcareous or basophilic grasslands of the *Alyso-Sedion albi* (6110), Caves not open to the public (8310), Rupicolous pannonic grasslands (6190), *Asperulo-Fagetum* beech forests (9130), Pannonic woods with *Quercus petraea* and *Carpinus betulus* (91GO), and protection of selected significant European plant and animal species.

A protection project is being prepared for UEV Devínska Kobyla, as the areas of European significance must be declared in the national category. In the protection project, the area is proposed for declaration in the Nature Reserve Devínska Kobyla category with the proposed zoning of the entire area for the fourth and fifth level of protection. The affected lands located at the summit of Devínska Kobyla will be included in the fourth level of protection. From the point of view of the interests of nature and landscape protection and the proposed care of the protected area, the affected site is included in the ecological-functional area, which represents successive stages on former pastures with parts that are overgrown with forest communities together with parts that represent transitional stages to forest communities. In the affected site, these are mostly forest communities. These communities represent habitats for several plant and animal species. At the same time, existing structures could be an habitat for certain species of animals, of which it is necessary to mention bats that can use these structures.

According to the law, the restrictions and limits of the use of a given area are also based on the individual degrees of protection. The regime of protection resulting from classification into the fourth level of protection is defined by Section 15 of the Act. One of the important limits of land use is the ban on driving and staying with a motor vehicle, trike, quad bike, snowmobile or sleigh vehicle, especially a car, carriage or sledge off the road and local roads, and parking, which applies with the second level of protection; therefore, it is already currently valid in the territory. Due to this fact, it is necessary to consider alternative forms of transport – cycling, electric bicycles, scooters, etc. with the possibility of rental services located outside the protected area. With regard to the recreational use of the site, the conservation project proposes that certain restrictions applicable to the fourth level of protection should not apply to the site, such as allowing the free movement of persons outside the marked hiking or nature trails.

The buildings existing in the affected area can be reconstructed from the point of view of nature protection. However, we do not recommend expanding their built-up area and increasing the floor area. The architectural design needs to be adapted to the fact that they are located in a natural environment. In terms of nature and landscape protection, we propose adapting and focusing on the use of the entire area on the following activities:

- recreation in the open air (with the possibility of placing the relevant furniture related to this function, such as elements of small architecture, elements with artistic value, benches, relaxation seats, shelters, information boards, necessary transport equipment or reconstruction of existing paved areas for pedestrian paths, cycle paths, parking spaces for bicycles, etc. or small equipment for scientific research purposes);
- environmental education equipment using indoor and outdoor spaces;
- a museum focusing on the recent history of the area (former missile base);
- nature protection information centre;
- gallery, exhibition spaces;
- exhibitions focusing on the promotion of nature, the environment, local culture and history, restoration of monuments, local original architecture, alternative forms of architecture, etc.;
- use alternative energy sources when renovating buildings;
- facility infrastructure of a reasonable extent or alternative types of refreshments reflecting environmental friendliness.

Missile base – territorial defence context



Period photography / Radio detection and ranging at the top of the main command post

Construction of the RTH – Devínska Kobyla military missile base took place from 1979 until 1983. The area was to serve as a peacetime firing position (“palpost”) with the technology of Soviet missiles type S 125 Neva. The base was to be visible to the enemy in peacetime and, in the event of an attack, the equipment was moved from the base to backup palposts (e.g. to Most pri Bratislave, where the equipment and the team were placed during construction). From 1983 to 1997, the RTH-6th Anti-Aircraft Missile Division (“plro”) of the 186th Anti-Aircraft Missile Brigade (“plrb”) of the Czechoslovak People’s Army was based here. It was part of the air defence of the Warsaw Pact states against NATO attack. The gates of the unit were closed after the abolition of the palpost in 1997, when the equipment moved again to Most pri Bratislave. In 2003, the operation of the S-125M1 “Neva” technology in Slovakia was definitively ended.



Period photo / Launch area with S 125 Neva missiles

Morphology of missile bases in western Slovakia

There were 8 anti-aircraft missile units (“plo”) in western Slovakia. A common phenomenon of all these structures is a visually clear continuous radial system of arrangement of objects and main roads, which create a connection between the individual scattered buildings. Another recurring element is the central position of the main stands and launch pads. Just looking at the layouts, it is clear that these former military bases are potential structures with a logical arrangement that can be worked with in different ways. Nevertheless, most of these zones are decaying and will not find new uses.

1. PLTRO Lozorno (S - 75M)



2. PLTRO Senec (S - 75M)



3. PLTRO Rohovce (S - 75M)



4. PLTRO Dunajská Lužná (S - 125)



5. PLTRO Stupava (S - 125)



6. PLTRO Devínska Kobyla (S - 125)



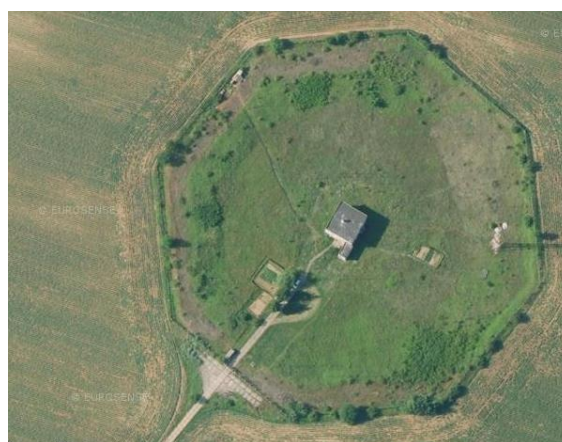
7. PLTRO Rusovce (S - 125)



8. PLTRO Most pri Bratislave (S - 125)



9. PLTRO Viničné (S - 125)



Current state



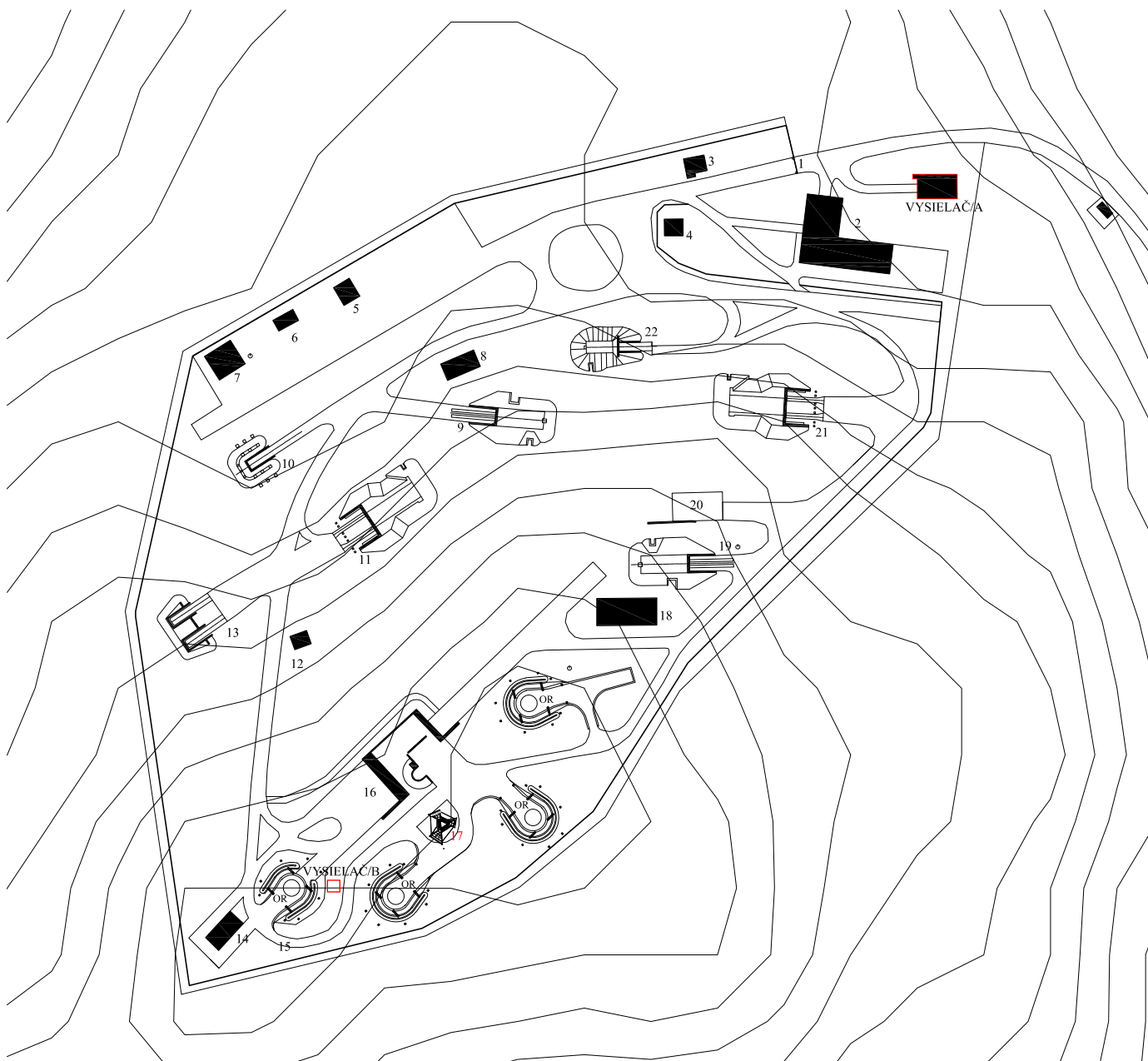
A bird's eye view – the current state

Existing transport connection

The current infrastructure solution does not allow access of car traffic directly into the area, as it is located in a protected natural area. The current state offers a parking space at the beginning of Dúbravská Hlavica a few km from the site, from where the site is accessible on foot after about a 20-minute walk with an elevation of about 150 m. The access road is of a service nature, closed by a locked ramp. The capacities of static transport are not sufficient even in the form of parking, as there is no parking lot and parking is on the access road.

Current state of the missile base

The missile base area is currently unused and dilapidated. The buildings are in poor technical condition, in many cases dangerous for the free movement of persons. The flora of Devínska Kobyla is gradually taking over over the missile base, the area is deserted and nature is looking for a way to deal with the “ruins” of the base objects in many cases. The roads are overgrown and, thanks only to access to telecommunication detectors, is the very top of Devínska Kobyla accessible.



Layout / Original site

- 1 Entrance gate to the
- 2 Accommodation monoblock
- 3 Guardhouse premises
- 4 Electrical substation
- 5 Fleet building/Garage
- 6 Fleet building/Fuel storage
- 7 Fleet building/Garage
- 8 Material storage
- 9 Technology shelter
- 10 Reinforced trench
- 11 Technical missile service workplace (PTOR)
- 12 Pumping station
- 13 Double shelter – 2 pcs of ZiL-131
- 14 Material storage
- 15 Engineer type shelter 6b – ÚŽ 6b
- 16 Reinforced command post
- 17 Observation post / observation tower
- 18 “Shortened” building
- 19 Shelter for P-15 surveillance radar
- 20 Playground
- 21 Technical missile service workplace (PTOR)
- 22 Shelter for equipment
- LP 5P73 launch pads for S-125M Neva

