

EENSALU & PIHEL

Reg. No: 10891141

Licence permit: E 109/2003, VS 693/2013

Office: Suurtüki 2-12, 10133 Tallinn

Tel.: 5139814

Operation no: 21-18

Object: Defence barracks, building monument reg.no. 8485

Settlement 13.-16. century, archeological monument reg.no. 2628

Heritage Conservation Zone: Tallinn Old Town Heritage Reserve I-II tuh reg. no. 2589
protection zone

Address of the object: Kalaranna St 28, District of Põhja-Tallinn, City of Tallinn, Harju County

Owner: Riigi Kinnisvara AS (State Real Estate, Ltd)

Client: SA Eesti Mälu Instituut (Estonian Institute of Historical Memory)



SPECIAL CONDITIONS FOR HERITAGE CONSERVATION

To restore the east wing of the gorge building, the eastern end of the south wing of the lunette and the building of individual chambers of the Kalaranna Patarei defence barracks

Compliers: architectural historian Monika Eensalu-Pihel architect Laur Pihel

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1. Introduction. References

This work deals with two lots, Kalaranna street 28 (cadastral code is 78408:801:0311) and Kalaranna street 30 (78408:801:0312). Historical Kalaranna defence barracks 1829-1840 (hereinafter referred to as **building** or **defence barracks**) is located in the city of Tallinn, in the district of Põhja-Tallinn on the shore of Kalaranna, Kalaranna street 28. The building is an architectural heritage monument, reg.no. 8485. Kalaranna street 28 and Kalaranna street 30 belong under archeological monument reg.no. 2628. "Settlement site 13.-16. century" and in the protection zone of the heritage reserve I-II tuh reg. no. 2589 in the Old Town of Tallinn, see. ill.2.

This study concentrates on the historical defence barracks' **eastern wing of the gorge building** (first floor, sector 1, second and third floor sectors 1 and 2), the eastern end of the south wing of the lunette and the building of individual chambers, and buildings directly adjunct to them (fencing, dog kennels, prisoners' walking sites, see ill 1) and the lot of Kalaranna street 30 without existing buildings, because the owner has developed a first version of the vision to create a museum of red terror and locate the office space of the Estonian Institute of Historical Memory in this section. Special conditions for the heritage conservation for the rest of the building will be completed in the second stage.

III. 1. Kalaranna street 28 defence barracks, monument reg. no 8485. The parts of the building used in the present study have been marked with the red boundary line: the eastern wing of the gorge building, the building of individual chambers. The courtyard buildings of the south and south-east part of the grounds; prisoners' walking sites with green, fences with purple, dog kennels with brown. Updated sketch, base Land Board (Maa-amet) 2018.



III. 2. The grounds border of the Kalaranna street 28 and Kalaranna street 30 has been marked with orange, light blue vertical hatching marks the protection zone of the heritage conservation area I-II tuh **reg. nr. 2589** of the Old Town of Tallinn, blue diagonal hatching. Land board, 2018.

The purpose of special conditions is to fixate the most important historic events (from the fortress, before and after World War II prison period) and their material manifestations in the building. Mapping valuable details (symbol VD) and make suggestions for exhibiting.

- **Hällström** - Olof af Hällström, Sveaborg Viapori Suomenlinna. The Island Fortress of Helsinki, Andres Nyborg AS, Akadeeminen Kirjakauppa
- **Maiste 2011** - Juhan Maiste, David Vseviov, Patarei merekindlus ja vangla Tallinnas. Koolibri 2011.
- **Maripuu** - artikkel "Patarei vangla"
- **Nurk 2011** - Ragnar Nurk, Tallinna eeslinnade ajalooliste kaartide töötlus ja sidumine tänapäevase kaardiga, Osaühing Agu EMS, 2011
- **Gustavson 1994** - Heino Gustavson, Tallinna vanemad merekindlused. Tallinn, 1994
- **Nerman 1996** - Robert Nerman, Kalamaja ajalugu, 1996
- **Treufeld 2012** - Muinsuskaitse eritingimused mälestistele reg nr 2628, 8485, 8486. Castellum. Tallinn, 2012.

- **Military art** - "Military art – Fortification." The Encyclopedia of Diderot & d'Alembert

Collaborative Translation Project. Translated by Ann-Marie Thornton. Ann Arbor: Michigan Publishing, University of Michigan Library, 2010. Web. [fill in today's date in the form 18 Apr. 2009 and remove square brackets].

<<http://hdl.handle.net/2027/spo.did2222.0001.382>>. Trans. of "Art militaire – Fortification," Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, vol. 1 (plates). Paris, 1762.
[https://quod.lib.umich.edu/did2222.0001.382--military-art-fortification/rgn=main;view=full text](https://quod.lib.umich.edu/did2222.0001.382--military-art-fortification/rgn=main;view=full%20text)

- **Defensive Barrack**- Defensive Barrack System German Military 1860 Fortification Plan Print, Jewett & Hemming Buffalo, New York. www.historicaccents.com
- **EAA** - Eesti Ajalooarhiiv Tartus
- **ERA** - Eesti Rahvusarhiiv Tallinnas
- **ERAF**- Eesti Rahvusarhiivi fotokogu Tallinnas
- **EKM** - Eesti Kunstimuuseum
- **TLA** - Tallinna Linnaarhiiv
- **EFA** – Eesti Foto- ja Filmiarhiiv
- **KrA** - Sõjaarhiiv (*Krigsarkivet*); Stockholm
- **RGAVMF** - Venemaa Riiklik Sõjamerelaevastiku Keskariiv (*Rossijskij Central'nyj Gosudarstvennyj Arhiv Voennno-Morskogo Flota*) Peterburg
- **RGVIA** - Venemaa Riiklik Sõjaajaloo Keskariiv (*Rossijskij Central'nyj Gosudarstvennyj Voennno-Istoričeskij Arhiv*) Moskva
- **EKM** - Eesti Kunstimuuseum
- **TLPA arhiiv**- Tallinna Linnaplaneerimise Ameti arhiiv
- **MM** - Eesti Meremuuseum
- **Maa-amet** - Maa-Ameti kaardiserver

Earlier studies, surveys and restoration projects:

- Patarei Merekindluse tehnilise seisundi uurimise tulemused ja renoveerimisettepanekud. Karl Õiger, 2005
- Inventariseerimisjoonised, Reaalprojekt OÜ, mõõdistaja K.Kuurberg, 2018

Laws:

Muinsuskaitseseadus (Heritage

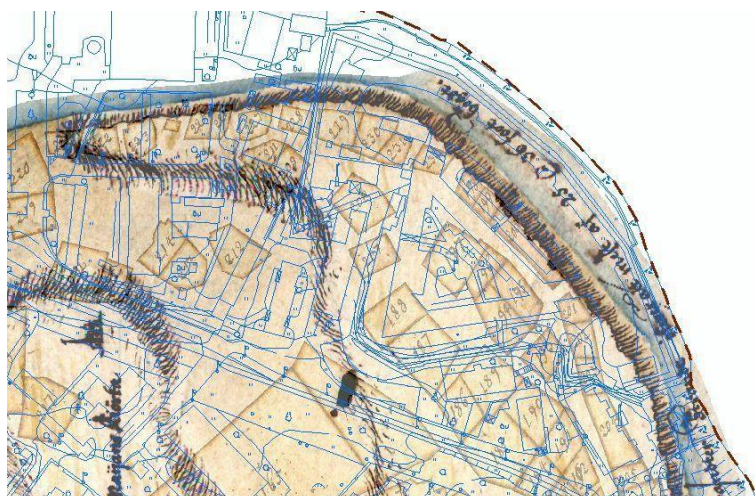
Conservation Act)

Ehitusseadus (Building Act)

2. The architectural history and structural development of Kalaranna defence barracks

In history, Tallinn has been a boarder city of two often rival cultural spaces, the Orthodox East and the Catholic Lutheran West. Constant ambitions of the neighbouring countries have brought the need of the potentate to protect the city as the centre of power: to build city walls, bastions, redoubts, barracks, boarder guards, batteries. This work is mainly based on Heino Gustavson's previous sea fortress themed research (Gustavson 1994). During the Swedish rule, already in the 17th century, Toompea and downtown were planned to be connected with the sea harbours into one protection system by surrounding it with fortresses. Stuart redoubt and a **primitive learning battery** were built in the eastern part of Kalarand, where is the current gas power plant.¹ This location was an old fishing village crowded with many small lots, see ill. 3. Russian victory in the Great Northern War (Tallinn surrendered to the Russians in 1710) gave the opponents hope for power in the Baltic Sea after the death of Peter I on February 8th 1725. In the summer of 1726, Britain and Denmark brought their navy in the Gulf of Finland. Russia responded with its deterrence tactics by arranging and strengthening old coastal protections around Tallinn. So, the first star fort was built in Väike-Paljassaare and the second one **Estonian Battery** (*Batterie d'Esthonia*) was built on the old westward entrenchment in Kalaranna, which was finished in 1728, see ill. 4.² The wooden battery of the Estonian battery, namely Double battery (initial name West Battery) was built in the sea. Double battery was renovated in 1748 as a stone building.

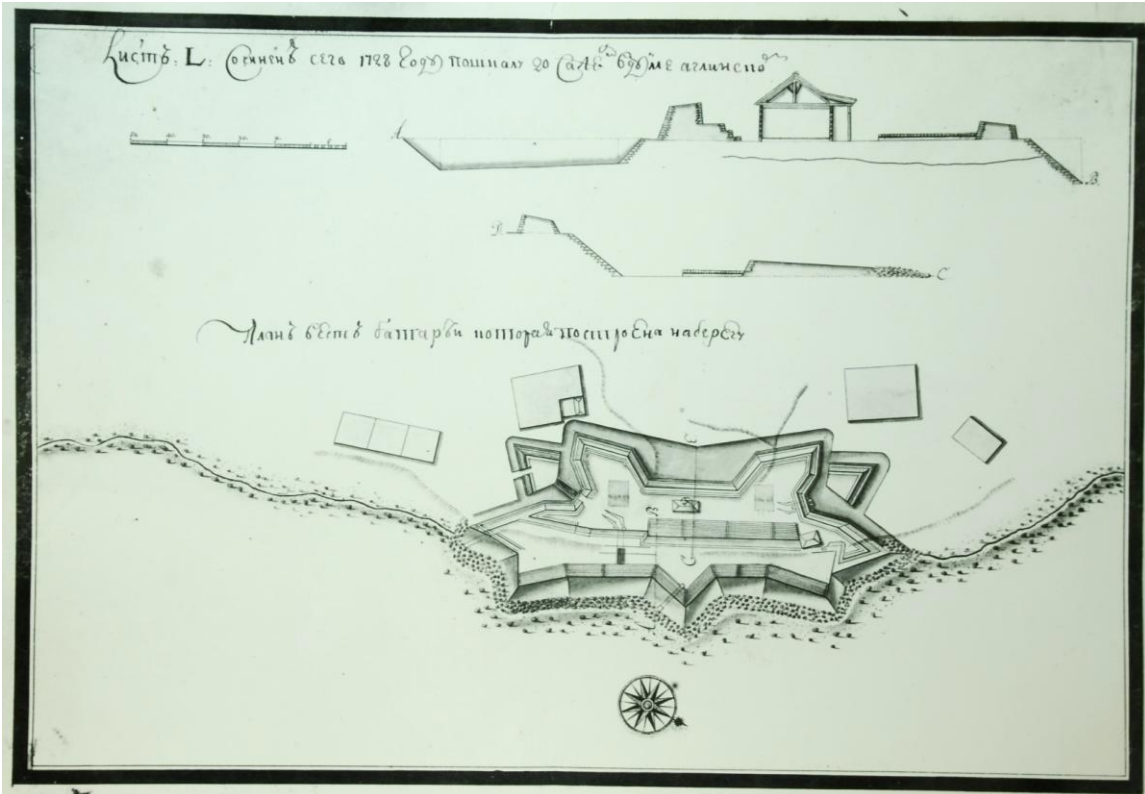
III. 3. Before the Great Northern War, a suburb of Tallinn was located on the future learning battery. Tallinn city plan from 2005 on the background, Nurk 2011. Maps may not match the reality completely.



¹ Gustavson 1994: 10

² In addition, a brand new Miiduranna star fort, Naissaare bastion fort and a citadel on the dock of Tallinn were built. Gustavson 1994: 14

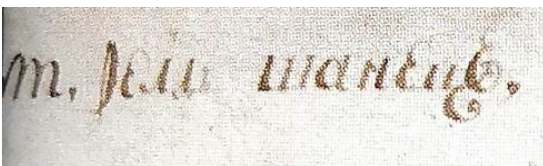
III.4. The construction project of the Estonian Battery from 1728, namely, a star fort that replaces the learning battery established in Kalaranna during the Swedish rule. RGAVMF.3.26.292



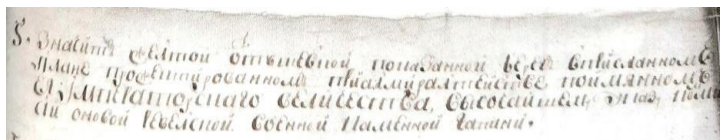
III. 5. Estonian Battery built on the second half of the 1820s on the Kalaranna entrenchment established during the Swedish rule. City plan from 1766. KrA 0406:28:040:051



5.1.



5.2.



5.3.

III. 6. Estonian Battery (building K- *Batterie d'Esthonia*) with the double battery remained relatively unchanged between 1730-1829. Tallinn city plan from 1812. RGVIA, f 349 s171



Kalaranna star fort remained as an unchanged coastal fortification until the second half of the 1820s, see ill 6. The time of the big entrenchments began to run out with the coming of the 19th century. In the beginning of the 19th century, new defence plans were created, specifically for Tallinn, by the Russian emperor Aleksander I in 1820. Based on ideas from Prussia, a network of large stone fortified buildings with cannons began to be planned in Russia. There were reportedly 7-9 stone fortresses planned around Tallinn, four of which are known: **West Battery defence barracks in Kalaranna** on the former star fort of Estonian Battery, with Montalembert-type artillery tower, fort in Väike-Paljassaare and in Pirita river mouth, in addition, a reconstruction of the Double Battery was made. The new emperor Nikolai I basically took over the protection plan of Aleksander I and formed a plan 'Tallinn's fortress' in 1827-1829. According to the plan, four powerful forts were planned to be built around the city, half of them in Kalamaja. Defence barracks dealt with in this work and a similar one in the Kopli-Graniidi street intersection. (Gustavson 1994: 37) Only the first one was brought to life – The fortress of Tallinn Kalaranna defence barracks. The establishment of the defence barracks named as the **West Battery** (Russian *оборонительных казарм* is a name from the 1831 construction project, see ill.7. With the disappearance of the defence function the name Patarei barracks, commonly adapted to just Patarei³, name *West Batterie* in German, namely West Battery appears on the city plans from 1879, ill. 11) started in 1829, and the main construction ended in 1937, the complex consists of entrenchments, moats, and a mortar battery built in 1840.

³ Gustavson 1994: 85

The defence barracks complex was designed to simultaneously fulfill both defence and military accommodation functions. This type of pure military-type building is also referred to as a citadel, or a smaller fort with a regular base plan, where garrison can hide, if the adjacent fortified city (in this case Toompea in Tallinn and the downtown) has been conquered by the enemy.⁴ Patarei was planned to resist the enemy from all the cardinal points, both from the sea and land. In the present work, Patarei building parts are named by the historical tradition, as they were initially called in the 19th century project documentation and 20th century in case of the individual chamber building:

1) A three-storey **curved limestone gorge building** was established by the sea (in Russian *горж*)⁵, where the external facade with three round half-towers was full of gun ports, namely embrasures. Waiting the enemy by the sea has made the gorge building unusually powerful.

2) A **two-wing lunette building** (in Russian *люнет*) joined the south façade of the gorge building on the land side at an acute angle.⁶ A triangle shaped courtyard occurred in the heart of the defence barracks, which was divided into two levels, the upper lunette's place i.e. park-like court with footpaths for the officers (*плац люнета*), lower gorge place (*плац горжа*), hereafter referred to as the gorge courtyard in the present work. The gorge courtyard has an outdoor toilet and an artesian well.⁷

3) **Entrenchment, esplanade and a mortar battery on the land side.** The outer perimeter of the lunette building was surrounded by a moat, and this in turn by a flat bastion-like entrenchment using the ground relief, and an uninhabited esplanade in front of it, see ill.10. The **mortar battery** built in the southernmost point of the complex was connected with the outer entrenchment (*мортирной батареи*, the name comes from the 1837 plans)⁸. Clearly it was intended for strengthening the land protection. The defence barracks was planned to be manned with a maximum of 2000 soldiers.⁹

⁴ Hällström:200

⁵ Gorge, French. *gorge*, Russian *горж* (*горжевое укрепление*), meaning "cucumber", the back of the fortress. Wikipedia. In case of the battery, a powerful three-storey building with casemates has been built on the site of the gorge.

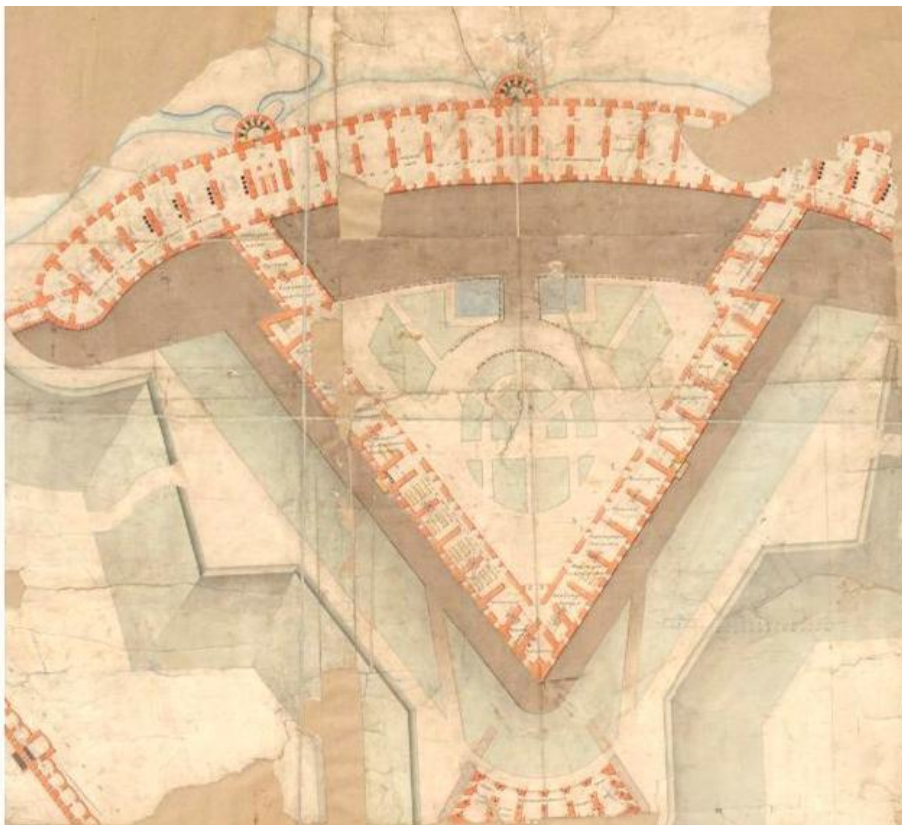
⁶ Lunette, French *Lunette* (translated as little moon, half-round object), Russian *люнет*.

⁷ The granite enclosure of the well was relocated to the Square of Towers in 1935 together with a sculpture by Juhan Raudsepp.

⁸ According to Robert Treufeld, the gun ports of the current caponier do not suit with the high-flying mortars, instead to the cannons with flat flight level. Treufeld 2012: 7-8

⁹ From 1840 there have been reports about 1630 sailors and 48 non-commissioned officers (Gustavson 1994: 46), 820 Reserve Battalion Soldiers of Ladoga Infantry Regiment in 1858, there are reports of two naval crews from 1861, then the regiment of Tartu, infantry regiment of Ostrov, Onega regiment, Krasnoyarsk regiment. There were 2134 soldiers living in the gorge in 1881. Onega and Daugavpils regiment were in the Patarei barracks during the World War I. (Gustavson 1994: 85, 86) From this it can be concluded that during the barracks function, the building was tightly manned, even overpopulated.

III. 7. The initial construction project of Kalaranna defence barracks, May 1, 1831. Second floor plan. План оборонительных казарм с показанием размещения полкового штаба. Фрагмент карты, 1831. ЕАА.79.2.165



7.1.



7.2. Detail from the layout plan of the second floor of the eastern wing of the gorge. There is a military hospital on the second floor of the lunette wing.

III. 8. The inner view of the Kronstadt castle casemates, the milieu of the Patarei barracks could have been the same in the 19th century. Репродукция из книги А. А. Раздолгина и Ю. А. Скорикова «Кронштадтская крепость» 19th century watercolour.

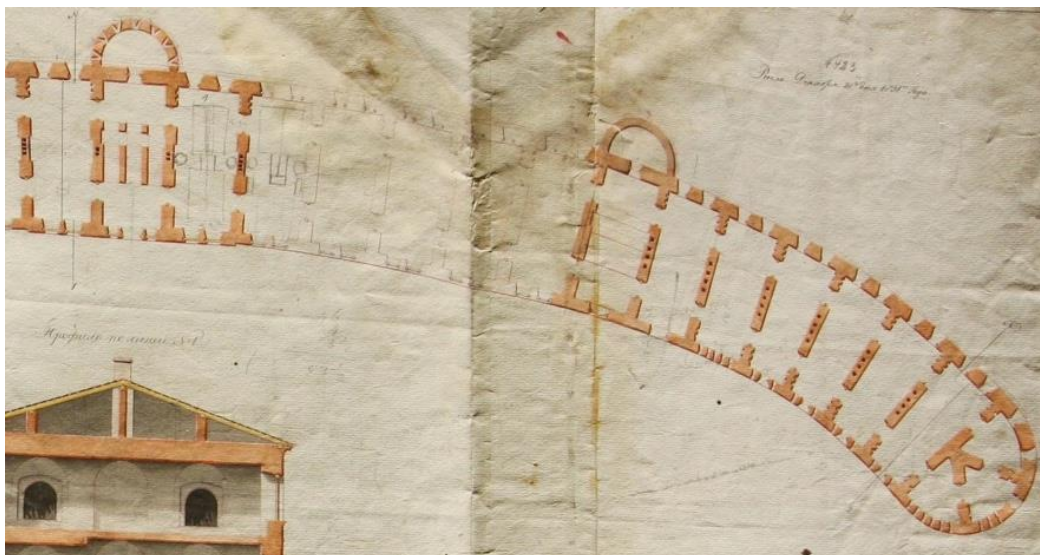
http://www.kronstadt.ru/gallery/gallery_kr_21.htm



4) The building of individual chambers, namely the section of lifelong prisoners, extension of the eastern wing of the gorge, year 1932.

The construction of the Patarei defence barracks was started from the gorge building, and even that happened in stages: construction began at the central staircase and western wing. The last built part of the gorge building was the eastern wing. Projects from the 1831 and 1832 reflect this state well, see ill.7, ill. 9. Projects do not include all floor plans, probably due to their equivalence.

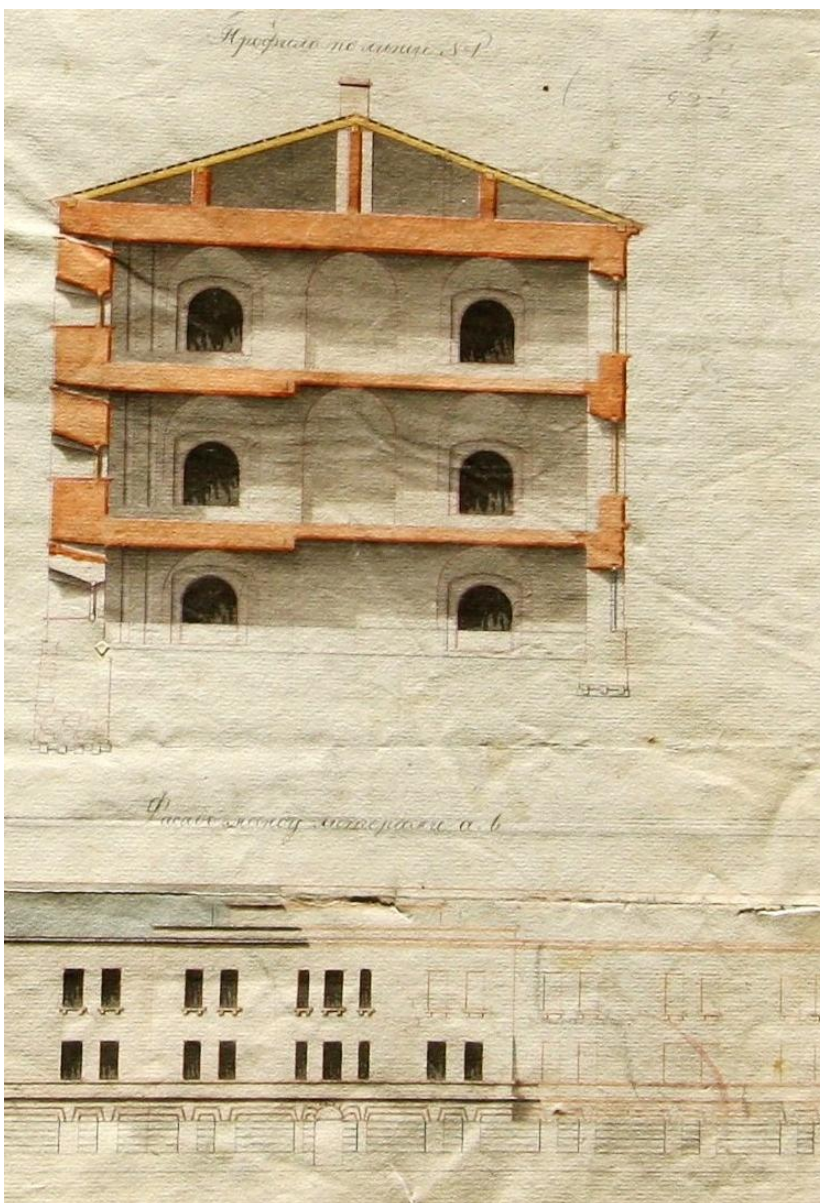
III 9. The construction project of the eastern wing of the gorge building with the finished and unfinished construction parts, project December 1831. Detail from the project. EAA.79.2.166





9.1. First floor plan of the eastern wing of the gorge building

9.2. Landward façade of the eastern wing of the gorge building (unbuilt parts marked with the red line), finished ground floor foundation and walls.



9.3. Section of the western wing of the gorge building, and the landward façade of the eastern wing (on the right) and the façade of the central staircase.

inside the seaward wall, above which there was a vent line for extracting gases emerging from a cannon shot. There were two wooden cannon bases inclined towards the sea, metal loops were on the walls to mount the cannons in order to prevent the blowback and metal hooks in the ceiling to lift and rotate the cannons. Soldiers were settled in the casemates, wooden beds for sleeping, side cabinets for storing guns and items and furnaces in both side walls were built for them (see ill. 17). Grooves were constructed for the temporary protective wall in the seaward room part (wooden beams as exterior side filled with cobbles). There was a protective moat in front of the seaward façade of the gorge (ill. 16). In parallel with the rounded ends of the gorge, there was a built-out protective curved wall with buttresses, which extended to the caponier built in the ends of the gorge (ill. 12). Outside that wall, there was an entrenchment with a support wall made out of stone and between them there was a buffer area (there was a semi-arch bridge gate set up in its seaward end sometime, ill. 29). The caponier had embrasures on both sides, the entrance was just from the gorge.

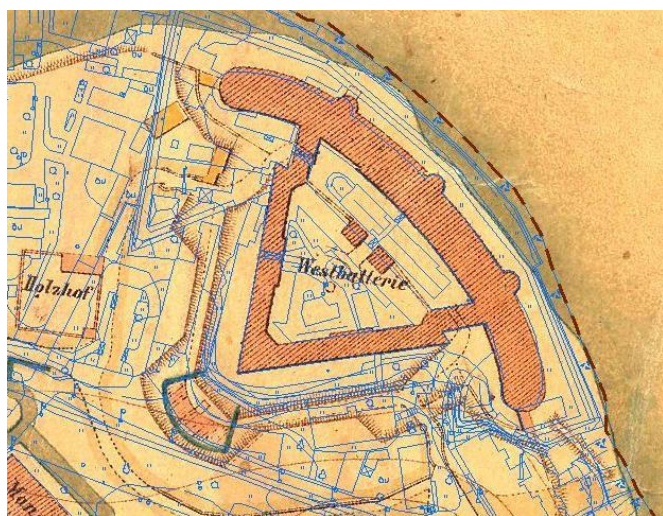
2) Patarei defence barracks complex was completed in 1840, and already in **1842 the building was minimally reconstructed to a barracks for approximately 2000 soldiers**. The bachelor subordinates were housed in the gorge casemates (26-38 people in one casemate) and non-commissioned officers with families (12 of them lived in the casemate in 1845, every room had up to 7 families), lunette officers and the military hospital. Embrasures were window-framed. There were 32 bread ovens, 6 kitchen cauldrons, separate canteens for servants in different ranks, end rooms that were used as offices or armoury built on the first floor of the gorge. The cannons were kept in their place, but they needed to be protected from the kitchen steams (in 1845 16 cannons were moved out of the kitchens to the shed) and from the vandalism of the soldiers living in the same space, by rebuilding the wooden planks. There were serious humidity problems, the wooden floors rot. In 1847 a granite-edged artesian well was built in the gorge square, its water was directed to the house inside the tanks in the attic.

3) **Completion of the insurance works and arming in the defence barracks in 1854.** The intense situation on the Baltic Sea in 1854 led the Ministry of War give out an order to the Tallinn's Engineering Brigade, who managed the defence barracks at that time, to equip the barracks with all given cannons. Two protected gates were built in the embankments, one bullet melting pot on the first and second floor of the gorge. Trees growing on the esplanade were lowered. Iron hatches were installed to some of the gorge windows, the gun carriages were reinforced, gun ports of the half-towers were bricked up. Partitions on the first floor of the gorge were ordered to be demolished.

4) Smaller repair works and adjustments in the 19th century. After the end of the Crimean

War in 1856, the fortifications were given to the civil use, the same happened with Patarei. In 1866, the third floor casemate in the gorge was adjusted to the Orthodox church, later waiting room for the court order. In 1869, most embrasures of the external façade were adjusted to windows, see ill. 24. In 1899 the bread ovens on the first floor of the gorge were demolished, because a krons bakery was established as a separate building in the eastern side¹⁰. Across the road from the same bakery, there were some buildings constructed (one Lender-type wooden apartment house and one one-storey stone house), that filled the residential function and were likely to be used by prison officers.

III. 11. City plan in 1885, city plan from 2005 in the background, **Nurk 2011.**



5) In 1892 a third floor was built on top of the lunette in order to house 640 soldiers.

III.12. Eastern wing of the gorge. Instead of bastion-type entrenchments, vague ground forms have been created (light blue), the flat outside area in front of the external façades of the lunette and the ends of the gorge in dark brown. At the end of the gorge, there are caponiers (small defence buildings with gun ports), which were accessible through the door from the casemate of the gorge end. Project from 1837. Detail from the project. EAA.79.2.169



¹⁰ The prisoners called the baked goods from the bakery according to their looks and taste respectively 'peat' or 'turf'. Era.4946.1.21

12.2. The courtyard area is passed through by a stone wall with external buttresses from the caponier to the crenel of the lunette. There is a buffer zone outwards from the stone wall, and then comes the bastion-type entrenchment with a support wall.



III. 13. Not all casemates were equipped with cannons during the planned peacekeeping situation (the command for all casemates to be armed with cannons came only in 1854). The rooms were furnished with kitchen utensils, sleeping beds and other necessities. The first floor plan of the eastern wing of the gorge building prepared in 1838. Detail from the project.

EAA.79.2.185

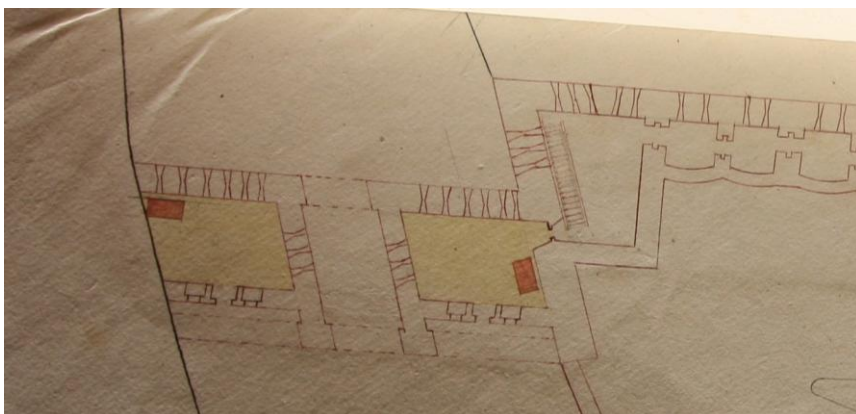


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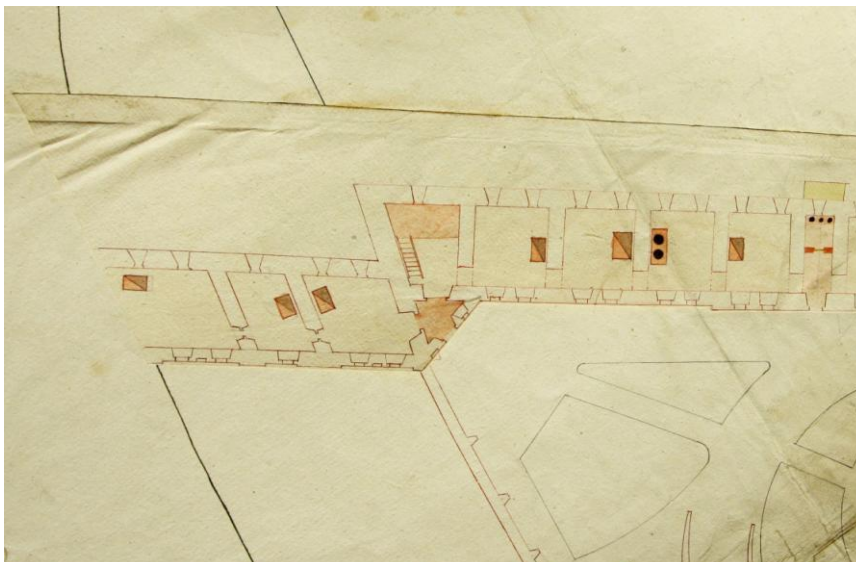


13.2.

III. 14. The eastern end of the southern wing of the lunette, project in 1838. EAA.79.2.170



14.1. First floor of the lunette. The under-arch passage is well observable, gun ports in the walls and niches on the gorge courtyard side. The steep part has a staircase.



14.2. Second floor of the lunette.

III. 15. The lunette was initially two-storied, the centre salient part of the façade with the under-arch passage had a gradient cornice. Well-observable niches on the first floor. Section of the gorge and the view of the eastern wing of the lunette in 1838. EAA.79.2.172



III. 16. Eastern wing, one stairway is extended to the seaward stair-hall in the eastern staircase. Only the sector between the middle and the eastern staircase is equipped with cannons. Partitions separating cannons and soldiers' dwellings are planned in the casemates. The casemates in the eastern wing of the lunette have been divided into smaller rooms by partitions.

Project of the defence barracks in 1839. Detail from the project. EAA.79.2.182

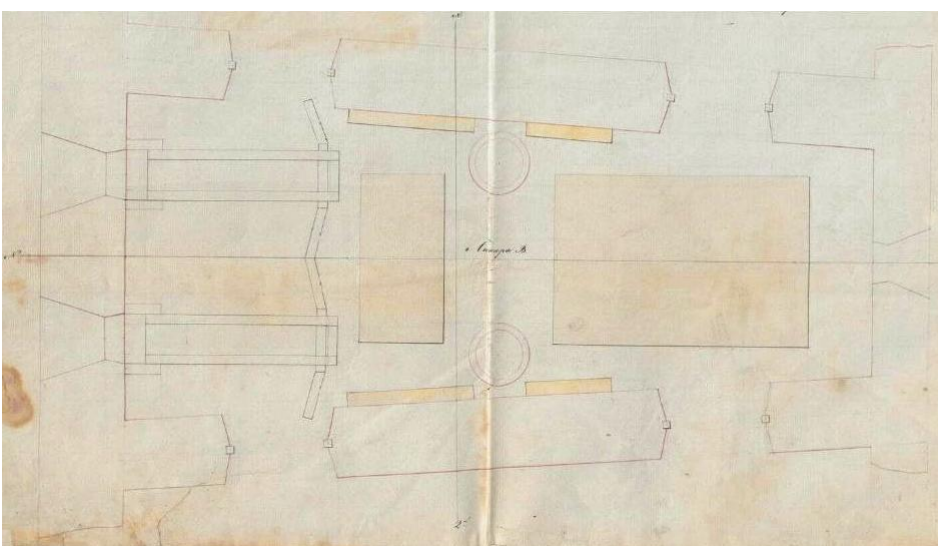


16.1. There is no indication of the under-arch passage in the eastern wing of the lunette. On top, the canal of faecal and wastewater is directed from the half-tower to the sea.

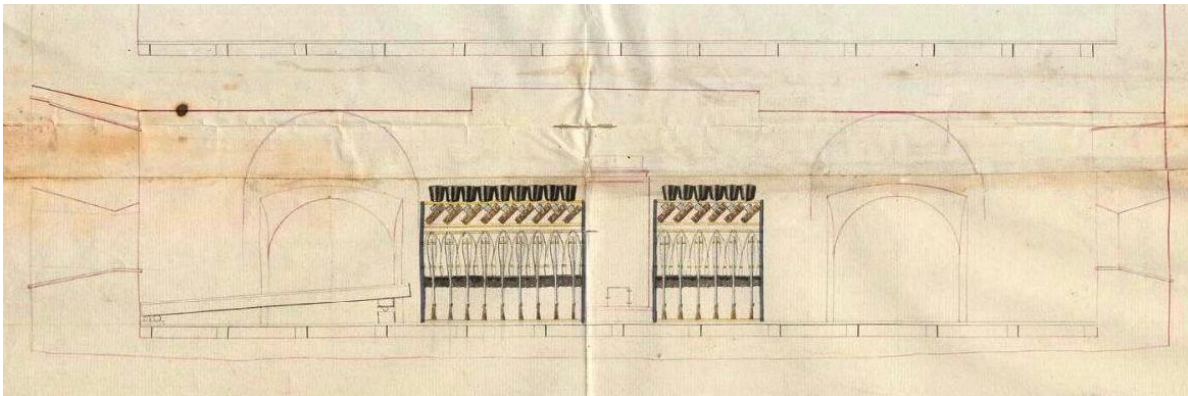


16.2. The eastern part of the entrenchment. There is a flat courtyard in the landward side of the eastern wing of the gorge, from the lunette to the caponier, which is bounded by a semi-circular wall on the outside. A curved road surrounded by a fence starts from the western end of this wall. The road runs through the bastion-type embankment, in this section the road is surrounded by the stone walls on both sides.

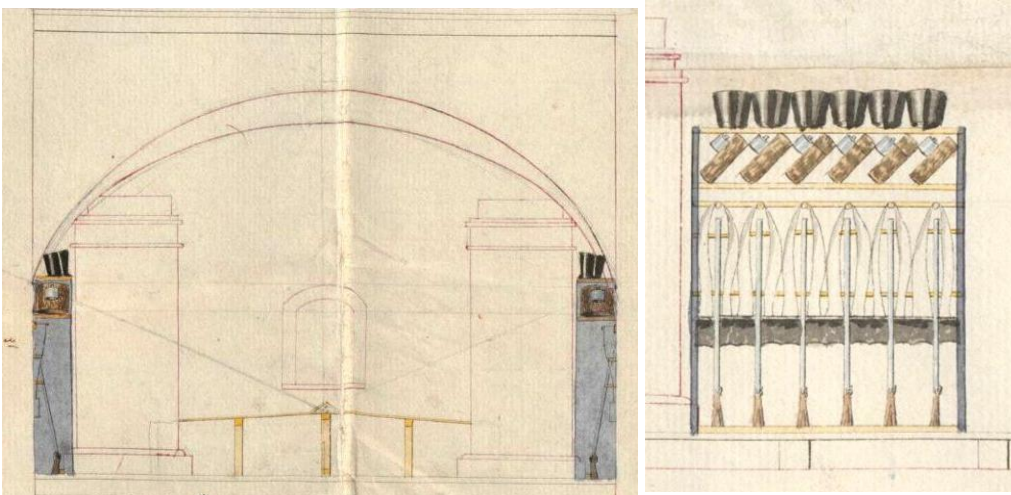
III. 17. Interior design of the casemate in 1839. EAA.79.2.188



17.1. Plan of the casemate, on the left, namely on the seaward side, there are two cannon vessels. Two sleeping places for soldiers in the middle of the room, two double-arched lintel doors on each sidewall, furnaces and shelves between them.



17.2. Side view of the casemate, embrasure on the left end wall and smoke channel at the top of the ceiling. Flooring boards on the floor. Ceiling straightened in the middle.

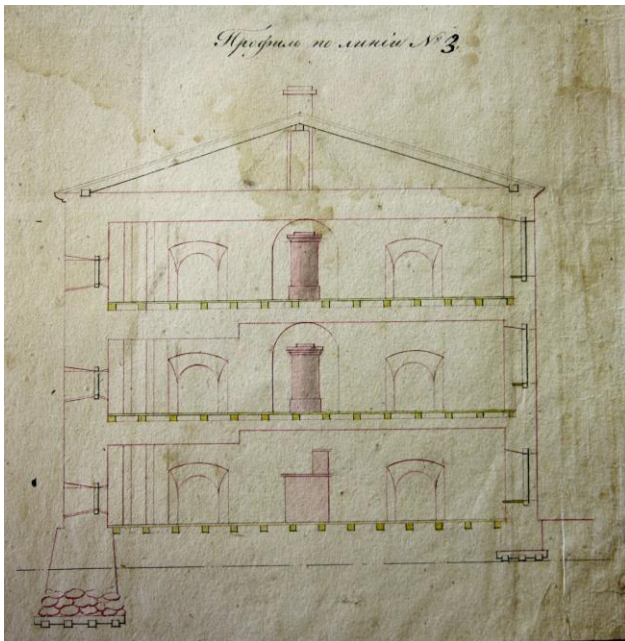


17.3. Section of the casemate

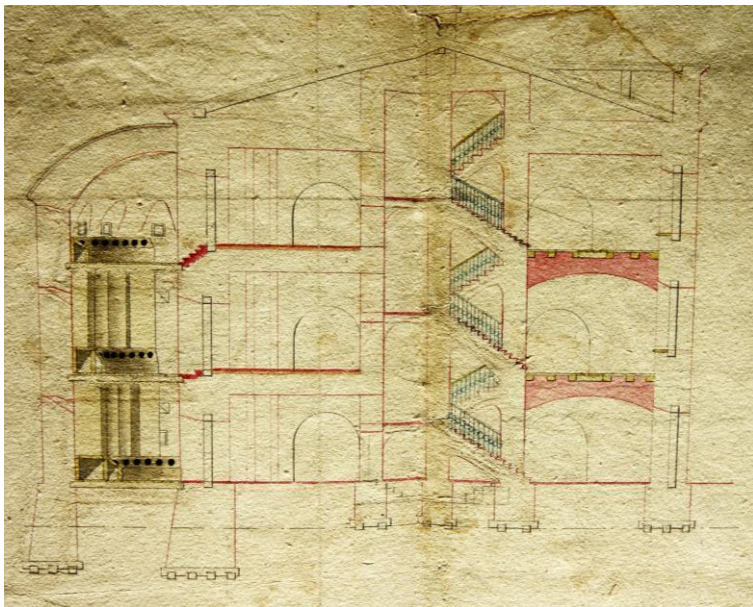
17.4. Soldiers wall cabinet, top down: hats, satchels, guns.

III. 18. Seaward embrasures in the external wall on the left, regular windows on the yard side. Intermediate ceiling shown thicker here in the seaward part. Section of the gorge building in March 1839. EAA.79.2.183

Проект по линии №3



III.19. The big staircase connecting floors is located in the middle, wooden floor staircase is in the courtyard side, where is also the access to the casemates. From the second doorway of the casemate it is possible to go to the compartment with stone floors and from there to the toilet. There is no direct access from the compartment to the big staircases, but visually the partition was open and cut with just two posts and the intermediate of the staircase. The openings between the compartment and the stairway had to have some kind of barrier in front of them, which is not exactly known. The round towers have common toilets, there were wooden boxes collecting and conducting faecal with stairwells built next to the wall, which in turn had a slightly inclined toilet with a sitting hole. The foundation walls are more powerful on the seaside. Section of the staircase, project March 1839. Detail from the project. EAA.79.2.183



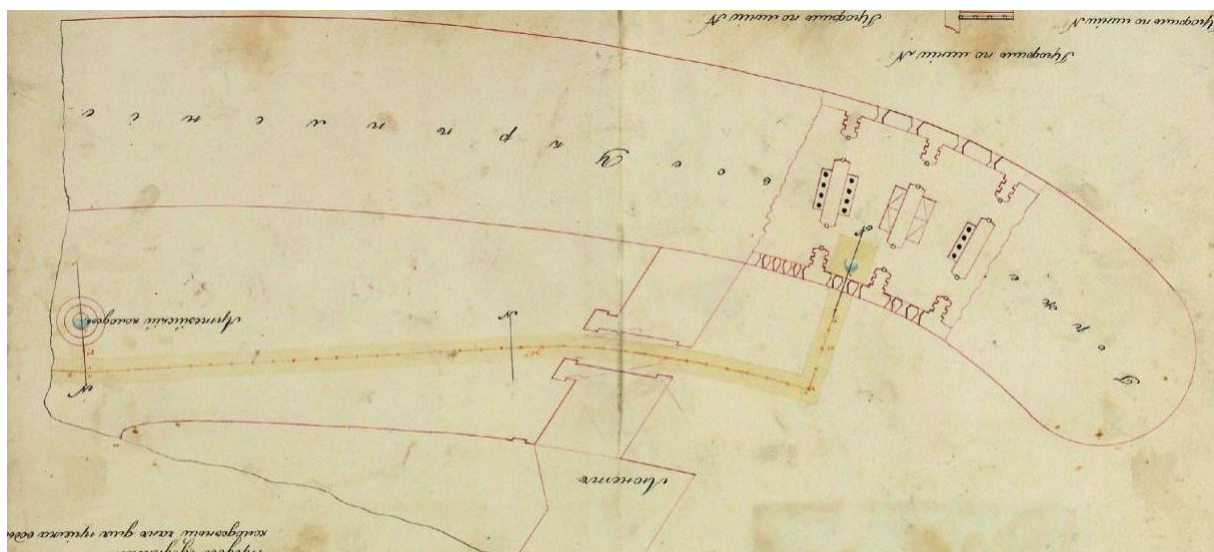
III . 20. Half-towers and stairs have been handled differently in the 19th century projects, it is unclear if they were actually carried out.



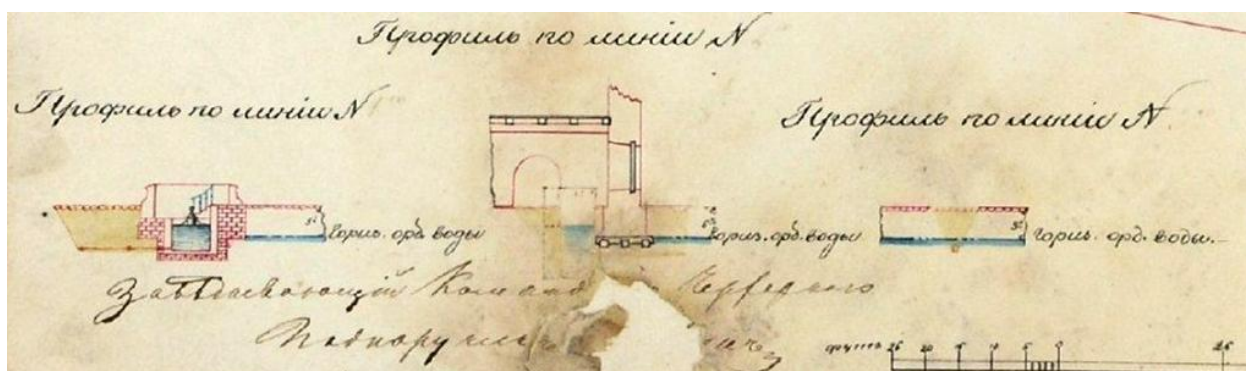
20.1. Staircase of the eastern wing, first floor, 1839. EAA.79.2.181

20.2. Centre staircase, first floor, 1839. It is not certain, if the stairs were actually extended like that. EAA.79.2.182

III. 21. Conducting water from the artesian well (*артезианского колодца*) built in the gorge courtyard of the gorge's eastern wing to the first floor kitchen rooms of the eastern wing. 1852. Detail from the project. EAA.79.2.197



21.1.

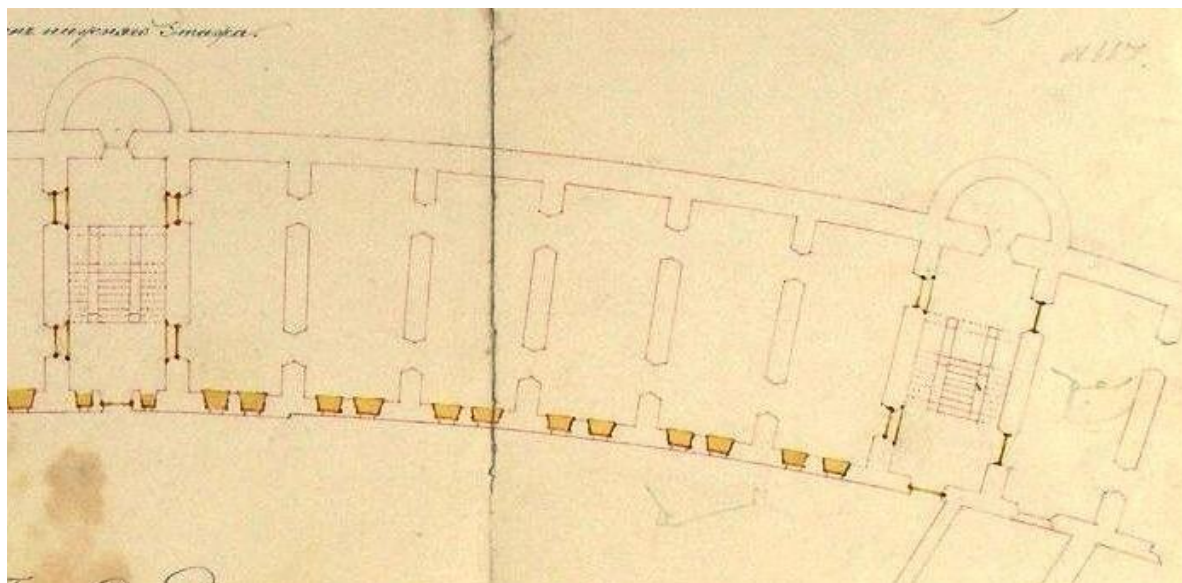


21.2. Artesian well, section of the inlet to the gorge and water canal

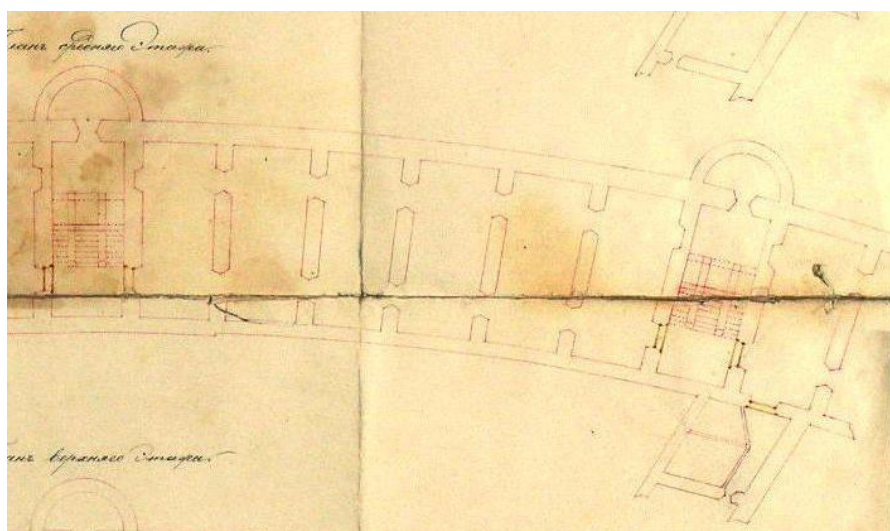
III. 22. Patarei defence barracks on the right, the port of Tallinn. Painting by Alexey Bogolybovi from 1853. EKM j153:412



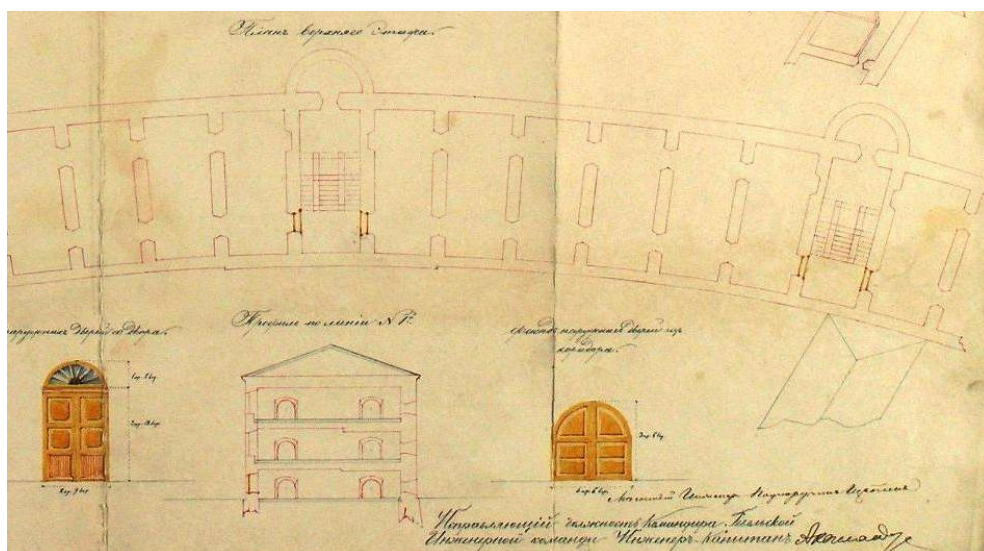
III. 23. The project of the doors between casemates and the front doors of the staircases in the eastern wing of the gorge building, 1866. Detail from the project.
EAA.79.2.215



23.1. 1st floor

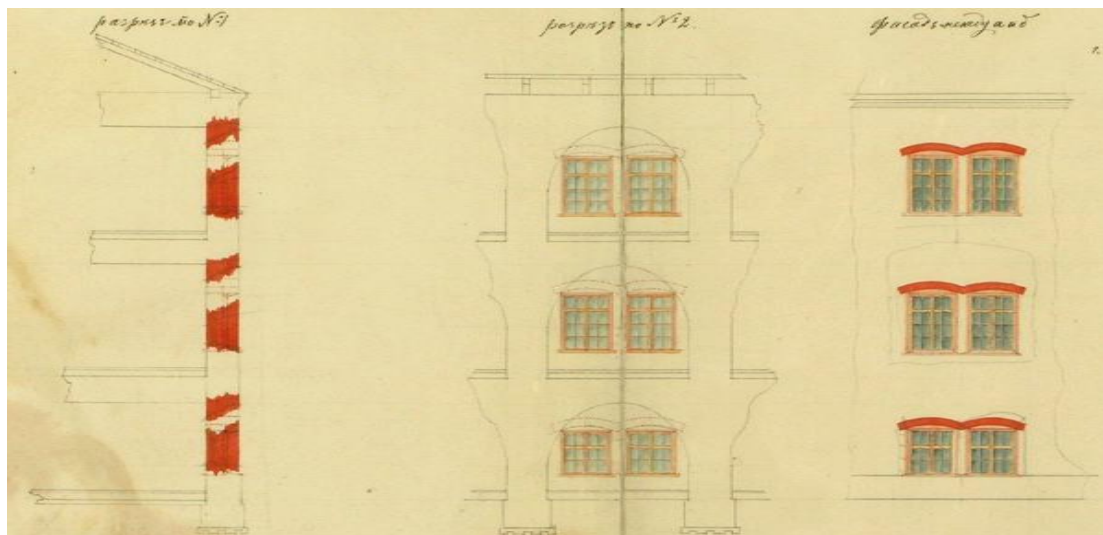


23.2. 2nd floor

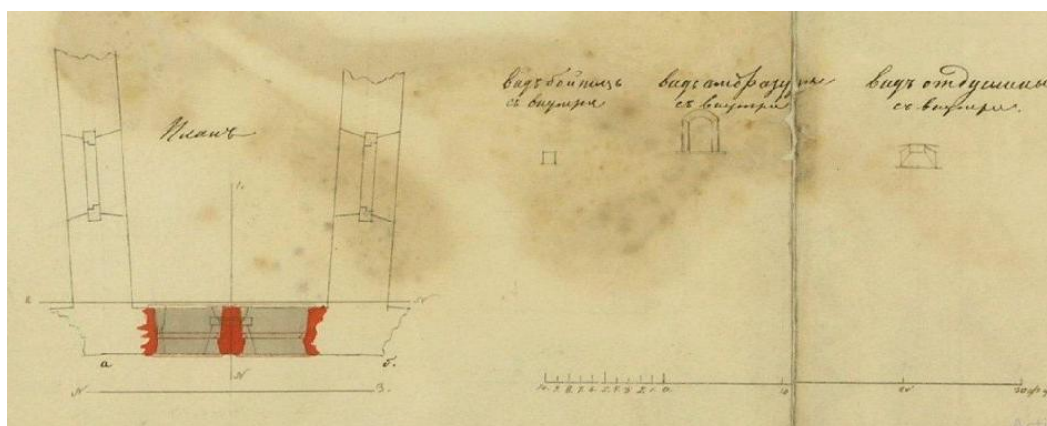


23.3. 3rd floor

III. 24. The rebuilding of embrasures into windows in the seaward façade of the gorge building, project from 1869. Detail from the project. EAA.79.2.225



24.1. Cannon smoke channels were bricked-up, embrasures were expanded into windows. In reality, a greater gap was left between two windows.

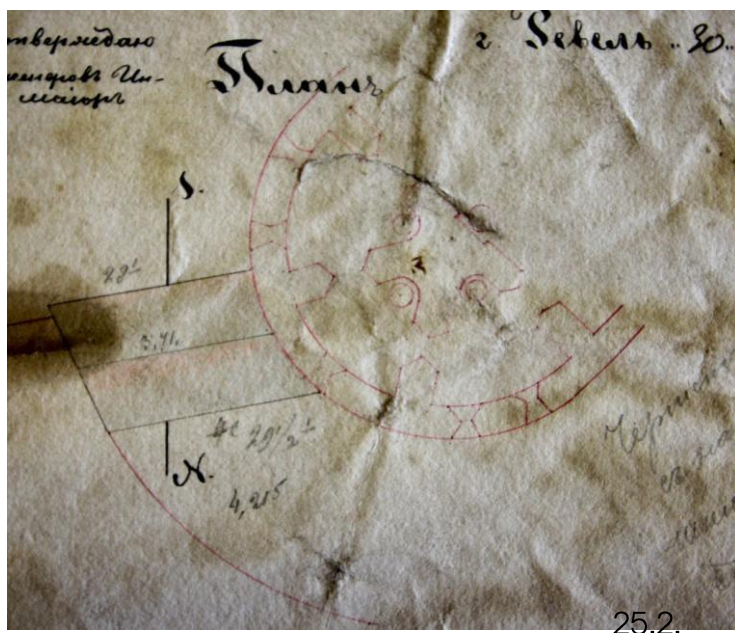


24.2.

III. 25. The project to rebuild the roof of the caponire of the eastern wing of the gorge building in 1872. Detail from the project. EAA.79.2.227



25.1.

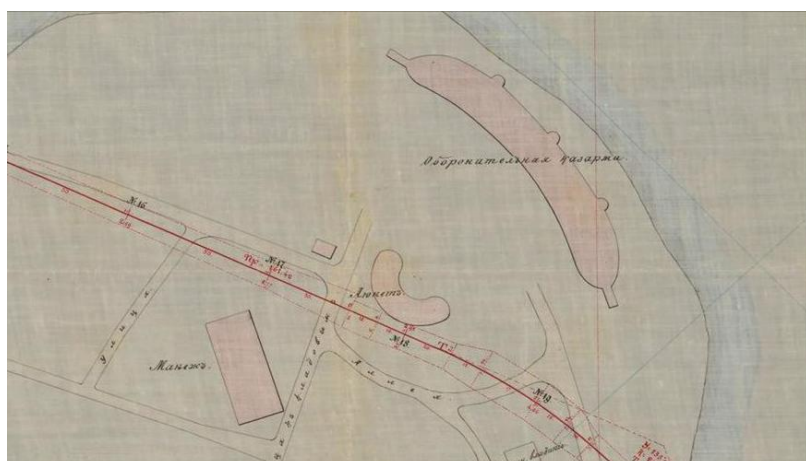


25.2.

26. The first railway design in Kalarand in 1876, the streetcar runs very close to the lunette.

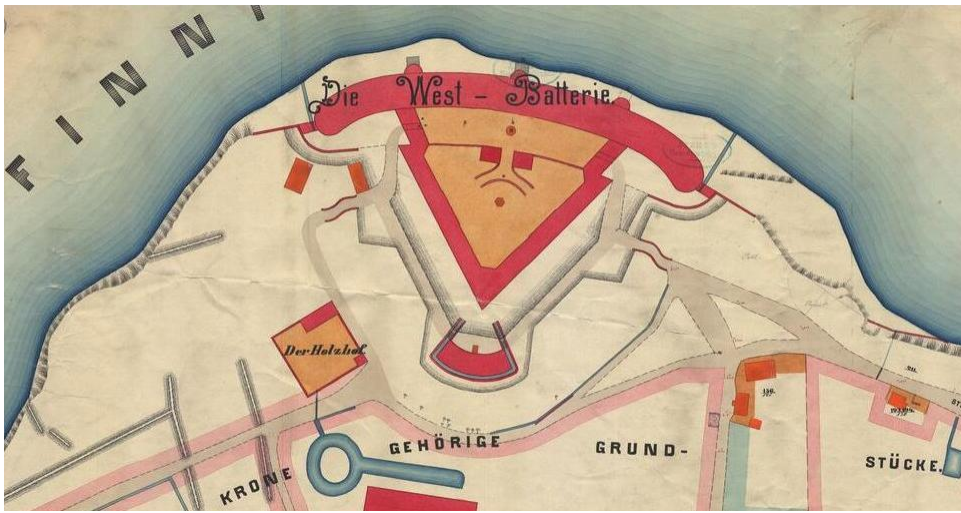
Проект обходной железнодорожной ветви от ранжирной станции к гавани в г.Ревеле.1876.

TLA.149.4.70



III. 27. Western Battery on the city plan in 1879. Detail. *Fol.XV. Die Neue Fischermay u.d. Hafen Strasse. Die Gas und Bade Anstalt. Der Fischgraben. Die West-Batterie Kaserne. Der Fischermay Kirchhof.* 1879.

TLA.149.5.1416 page 1



III.28. View from Kalarand towards Patarei, the beginning of the 20th century. The entrenchment in its initial height can be seen in front of the eastern part of the gorge building. Detail of the photo. TLM f 9101



III.29. View from the Double battery toward Patarei, between 1900-1925. Detail of the photo. AM n 5631.518



29.1.



29.2. Detail of the photo, the eastern end caponire of the gorge has been rebuilt, next to it, on the left hand side a semi-arched gate in a former guard wall.

III.30. Aero photo from the east, in 1900-1925. MM f 1196.32



30.1.



30.2. The top of the entrenchment is fenced, the caponire has been rebuilt to a long one-storey building facing the sea.

6) **Rebuilding into a prison.** In 1919, the Government decided that the Ministry of War would provide Kalaranna's defence barracks to the Central Government of Detention Centres, which would gradually assemble all the prisons in the counties. The Central prison was supposed to have *'exemplary workshops and departments for convicts, persons of reformatory, jailed and detained individuals... housing easily 2000-3000 prisoners...'*.¹¹ A detention house was established in the building on May 15th, 1920, which was converted to the central prison of Republic of Estonia in October 15th.

The rebuilding of the defence barracks has been documented in the National Archives documents from 1920-1922¹². The first adjustments into a prison took place chaotically and without the involvement of an architect or engineer, the process was put on hold in the second half of 1921. The military food storage and potato storage were still on the first floor of the eastern part of the gorge building in 1921, the prison had planned to establish a sauna and a laundry room in there. Large double-sided board gates were established. One stone staircase was demolished (Ed. – where, not specified).

The Russian State eagle was taken down.¹³ The first floor windows of the building were covered with window lattice (next year second and third floor windows). A blacksmith shop was established in the prison for on-site forge work. Casemates were divided into detention cells by brick or concrete walls: a hallway was created along the wall on the yard-side, some casemates were split along the wall. Archways were rebuilt into ordinary doorways. The walls were plastered with lime plaster and whitewashed, the old plaster was replaced by the new one. The existing wood doors (cleaned, undercoated, oil painted), summer and winter window frames, board floors were adjusted, repaired or there were new ones made.

¹¹ era.60.1.56

¹² era.60.1.56

¹³ Era.60.1.55

51 stoves were repaired or reset. Sewer and electrical wiring was established. There is a strange description in the archival document, how *'the tin roof was repaired with trench (old dugout) ovens in 205 places.... Tarred with coal tar sq. fathoms 2150'*. There were 31 galvanized sheet metal containers in the prison cells that collected the stools, which had to be taken out by the prisoners themselves. This container was also used as a floor washing receptacle. There were 337 wooden bunks, benches and dining tables made in the chambers. 16 square fathoms of *'concrete parquet'* floors and 13 square fathoms of limestone tiles were reloaded. Asphalt floors were poured in lock-ups. Wire fence was built on the courtyard, height 1.5 fathoms, which was enlaced and put between bars with 17 lines of barbwire. New gate. The courtyard was *'paved'* with cobblestones 3.15 square fathoms. Six slammers were built for the outdoor posts. A clothes disinfect room *'Louse hell'*¹⁴ was created on the ground floor of the eastern part of the gorge, it was equipped with window shutters and clothes hangers. A peat storage and a morgue with a coffin and a table was set up in the adjunct rooms. There were partitions out of boards built in the meeting room of prisoners and their visitors.

In October, 1921, a younger assistant of the Prosecutor of the Judicial Chamber, J. Sass drafted a prison visit report¹⁵ showing that there are 745 prisoners in the detention centre, 21 of them are arrested detainees. The prisoners do not have sleeping equipment (there are only 50 sleeping bags per prison) and some, who do not get a bunk, sleep even on the floor. There was no sauna and laundry room in the prison. The prisoners use the military sauna near the battery twice a month.

Review about prison situation of a former political prisoner from the 1920s¹⁶ reveals that on the third floor of the gorge considering toward Kalarand from the air docks, there was a station I (workmen), II ('more intelligent' prisoners and two slaughterhouses), III (individuals under investigation and 'short-lived' prisoners) and IV (foreign workers, debtors), on the second floor there was a station V (10-year lock-up, life-imprisoned, political prisoners, criminals) and the station VI (prisoners with an average sentence, political prisoners, 'criminals'). The arrest and *'bourgeoisie'* chamber was on the second floor. The I station had a hospital, under the hospital there was a kitchen. There were six individual chambers in the building and 10 lock-ups. There were mainly workshops on the first floor. The windows of the political prisoners were insured the best: dense wire mesh outside, bars in the middle and inside. There is a notification from 1927, about a new brick wall on the courtyard side with a 2.5 brick thickness, the old slate wall demolished.¹⁷

¹⁴ In the meantime, the louse-killing steam engine 'Lahtlu Schläger' was in the courtyard.

Era 4946.1.21

¹⁵ era.60.1.56

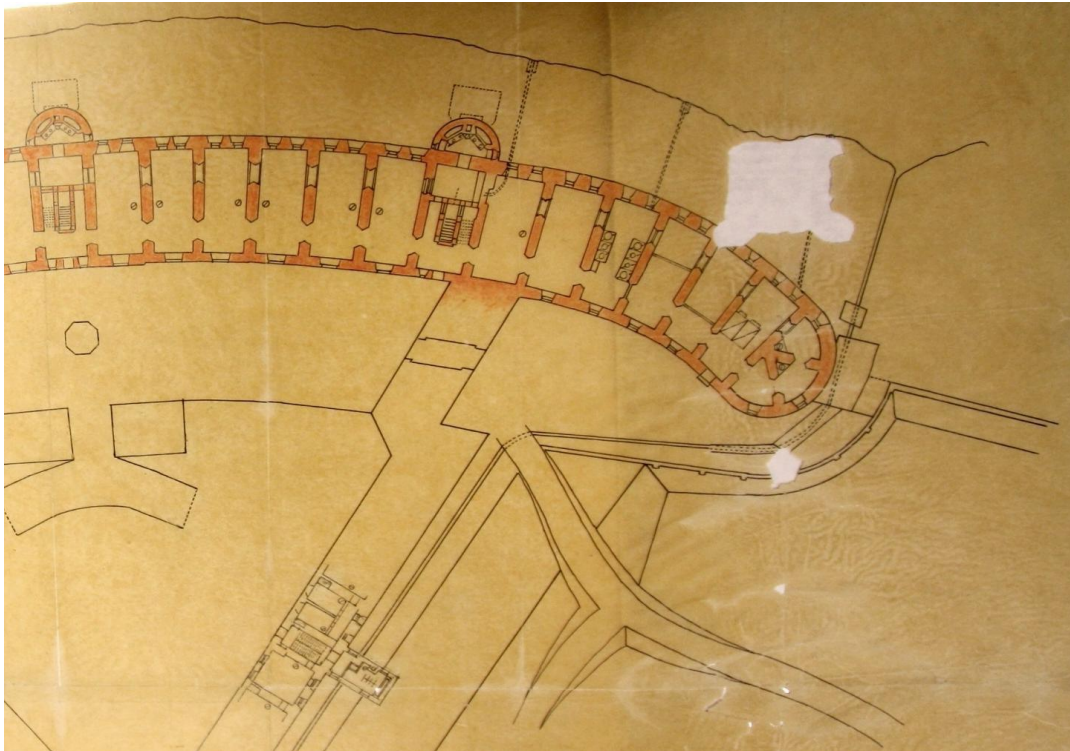
¹⁶ Era 4946.1.21

¹⁷ Era.60.1.83

7) Expanding the prison to the eastern wing of the gorge in 1932 in the form of individual chambers i.e. a building for prisoners sentenced to life. The building of individual chambers was built in several phases (the caponire situated in the same location has been demolished beforehand), the ground floor was probably built in the beginning of the 20th century, the second one a little later, the third and fourth in 1932. The communication building was built in the lunette courtyard in 1935.

III. 31. The project of installing electric lighting in the eastern wing of the gorge building, 1921.

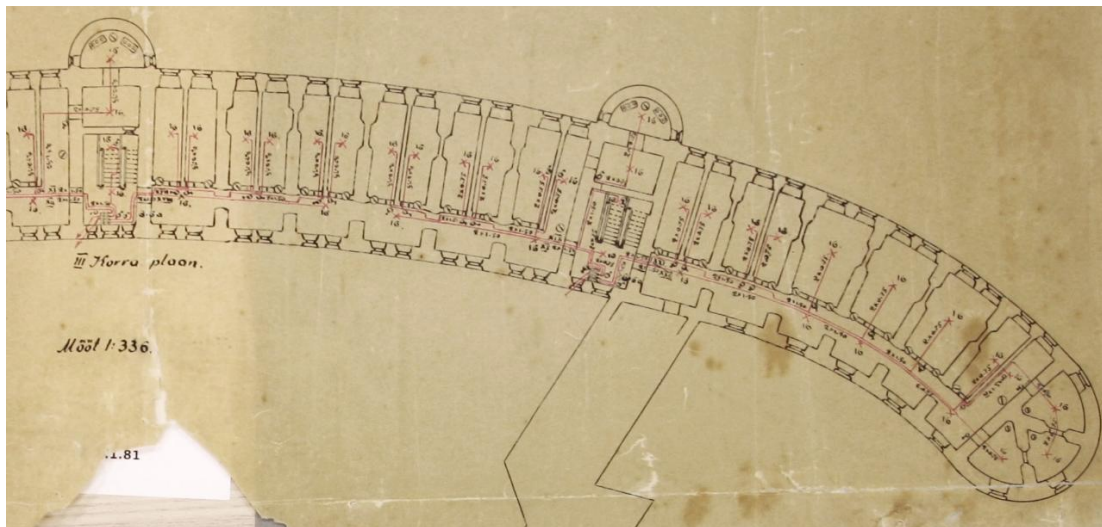
Detail from the project. ERA.1868.1.81



31.1. First floor. Caponire has been rebuilt, it is penetrated by a sewer canal coming from the lunette and flows into the sea (the gorge has its own sewer channels directed to the sea, cesspits for collecting faeces under the half-towers). Still in 1921, there were entrenchments with a S-curved path through it and an arched wall with buttresses (obviously original) in front of the eastern wing of the gorge. The eastern wing of the gorge has a laundry room (cookers in the corners) in two of the triangle-shaped end rooms, louse-hell furnaces in the next casemate, and wash basins in the room after that. Toilets are in the half-towers.

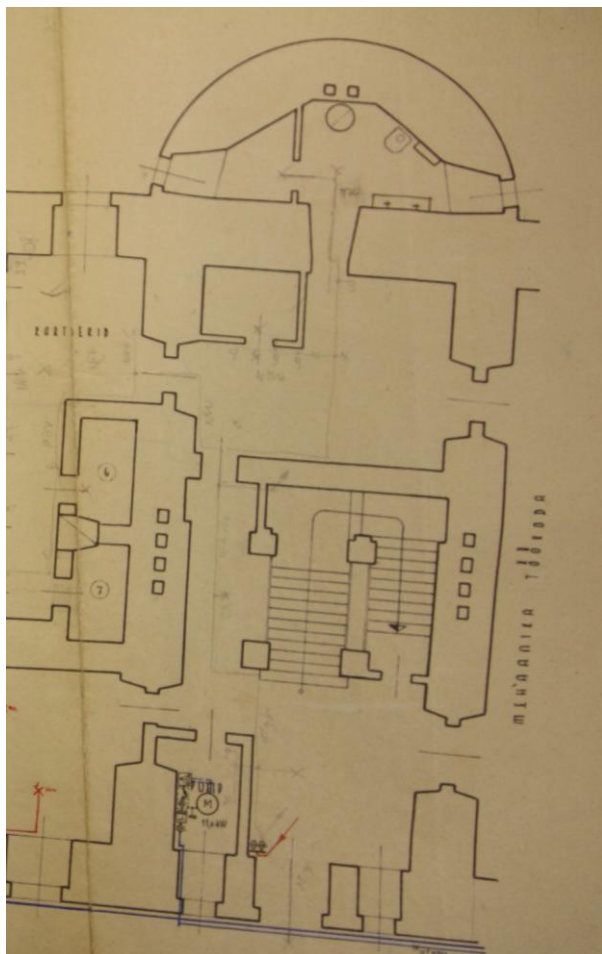


31.2. Second floor, most casemates are in their original size, the three next to the central staircase are divided by partitions, so that a hallway is created from the quarter facing the courtyard. All the sideward doors of the casemates are bricked-up. Half-towers are not marked as sewers.

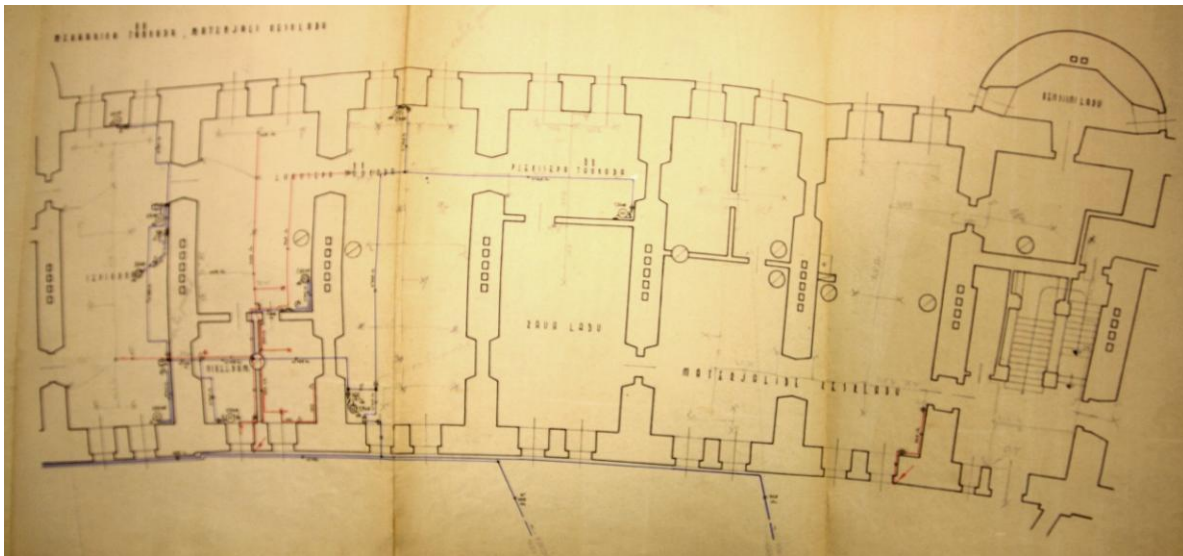


31.3. Third floor, the hallway on side of the courtyard has been created at the expense of all the casemates. More than half of the prison cells have been split with partitions lengthwise.

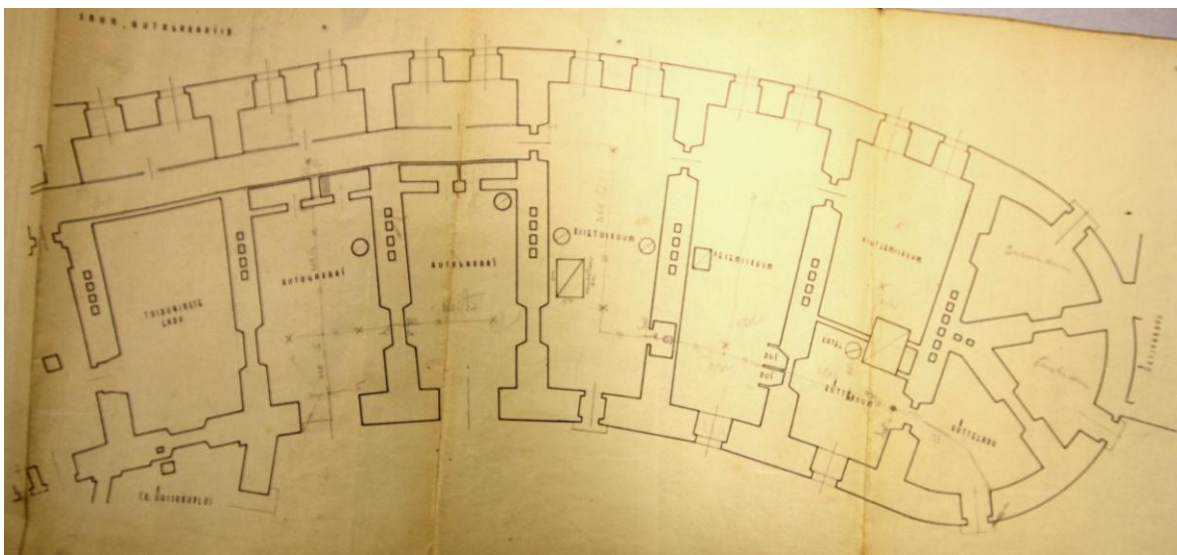
III. 32. The ground floor plan of the eastern wing of the gorge building, 1939. Detail of the project. ERA.1868.1.83



32.1. The central staircase



32.2. The sector between the central and eastern staircase



32.3. The sector to the east from the eastern wing staircase, morgue, peat and heating storage in the end rooms.

III. 33. One of the only soviet layout plans from 1949. There is an arched stone wall at the end of the eastern wing, founded on the old arched wall (see ill 12). Detail. ERA.5083.1.1



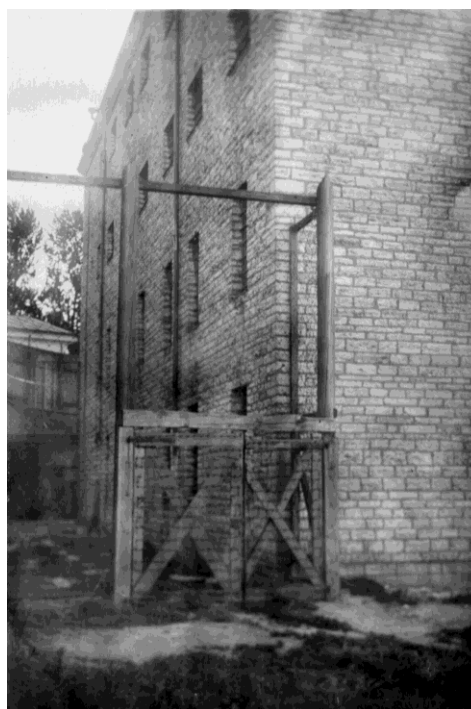
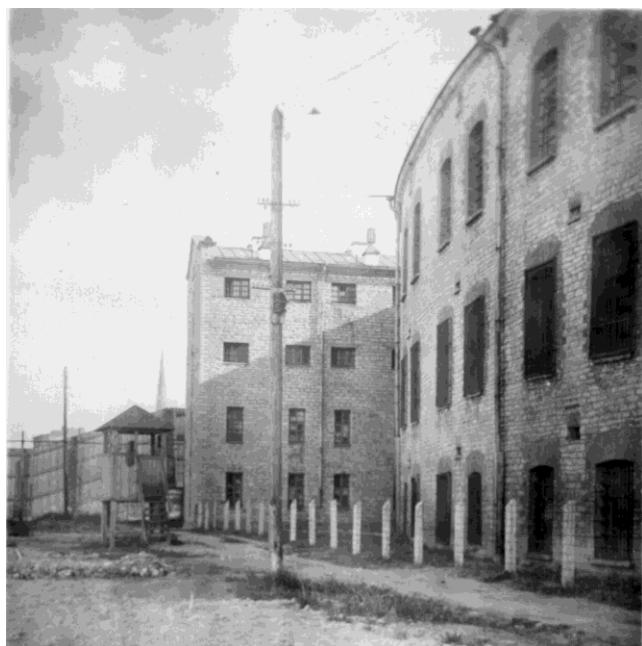
III. 34. Seaside façade of the eastern wing of the gorge in the central prison, second half of the 1940s. ERAF 17. SM.9.105a

III. 35. Building of the individual chambers i.e. eastern façade of housing 3, view from the north. Second half of the 1940s. ERAF 17.sm9.105



III. 36. Seaside façade of the third housing, the building of individual chambers in the background. Second half of the 1940s. ERAF 17 sm.9.105a

III. 37. The gates of the individual chamber building. Second half of the 1940s. ERAF 17 sm.9.105a



III. 38. Eastern part of the gorge square, prisoners' wooden walking boxes in the middle of the square. Second half of the 1940s. ERAF 17 sm.9.105a



III. 39. The central part of the gorge, southern façade. Second half of the 1940s. ERAF 17 sm9.105



III. 40. The northern façade of the gorge. ERAF 17. sm 9.105

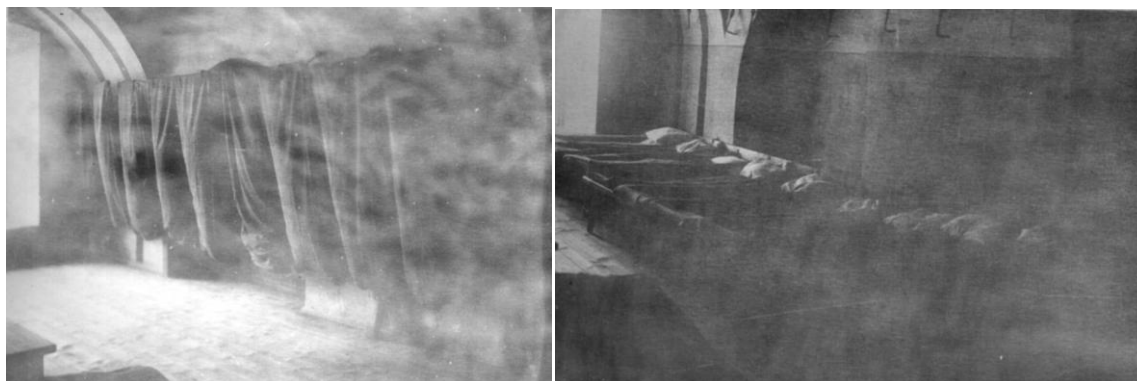


III. 41. Gorge hallway. ERAF 2.2.7271.6



III. 42. Retractable fabric beds. 35. Second half of the 1940s. ERAF 17 sm

9.105a III. 43. Beds in the cell. Second half of the 1940s. ERAF 17 sm 9.105a



III. 44. The eastern end of the southern wing of the lunette. ERAF 17sm.9.105a



III. 45. Patarei prison in 1995. EFA.519.0.162995



III. 46. Aero photo in the 1990s. EFA



III. 47. Plan to conduct inventory in the vicinity of the eastern wing in 1966. Kalaranna st 2, PI Communal project, 1966. TLPA archive File 13412



8) After the change of the regime during the World War II, the building was continued to be used as a prison, names throughout the years Estonian SSR NKVD Jail no 1 i.e. General Prison no1, Тюрма но. 1, Isolator of preliminary investigation no. 1, Central Prison of Tallinn, Labour and Education Camp of Tallinn. In the eyes of Estonians, Patarei became a symbol of foreign rule and suffering of thousands of innocent people. Patarei prison became a place of detention, where all the Estonian statesmen, soldiers, police officers and individuals of economy had to go through before death or sending to Gulag.¹⁸ In 1945, during the Soviet time, the number of prisoners reached 3620, the maximum during its entire history. In August 1941 and in September 1944 the prison was briefly closed.¹⁹ The complex was complemented with several auxiliary buildings in the 1960s. In the 1970s, the stove heating was replaced by central heating and stool containers by flushable Turkish toilets in all cells. Until 2001, the sewage was directed to the sea. In 1980, the seaward windows were covered with iron bars so that the foreigners sailing on the sea would not see the prisoners. Much of the prison documentation was destroyed at the end of the Soviet period.²⁰

¹⁸ Maripuu: 251

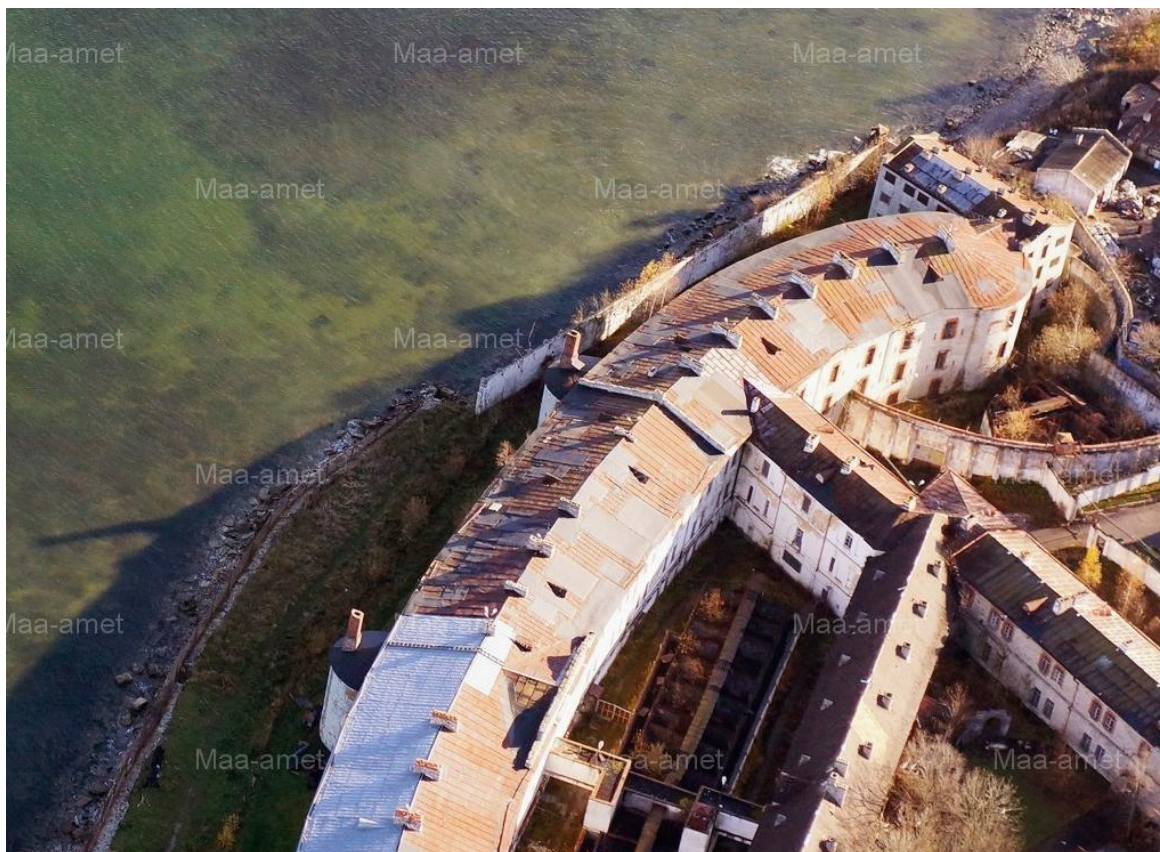
¹⁹ Sama: 263, 264

²⁰ In 1992, after Estonia had regained its independence, the conduct and preserving documents of the Ministry of the Interior of Estonian SSR and its subordinate agencies did not belong under national archival supervision. The agency management confirmed the document destruction acts, materials with permanent and long-term retention period were preserved in the special department archive of the Ministry of the Interior. The quantity of the records determined to be destroyed was relatively big. Permanent and long-term

The prison reconstruction project from 1954 is preserved exceptionally in the Historical Archives²¹, where there is no sketch, there is just an explanatory letter: corpus 1 setting silicate brick wall, building sheet metal shelled round furnaces, board floors, plastering, walking plaza built for the prisoners. The exterior and interior of the building were constantly adjusted through minor repairs.

13) After Estonia regained its independence, the prison was actively used until December, 2002, the business entity and hospital were open until 2005. At the end, only cosmetic changes were made to the building, only the building of individual chambers was in use, which was adjusted to double chambers by that time. Until today, Patarei has been used for exhibitions, concerts and adventure tourism. Recently, there has been shore work done, storm affected roof has been repaired, soviet buildings and fences have been demolished in the complex.

III. 48. View from the west to the eastern wing of the gorge. Maa-ameti (Land Board) tilt aero-photo 2014.

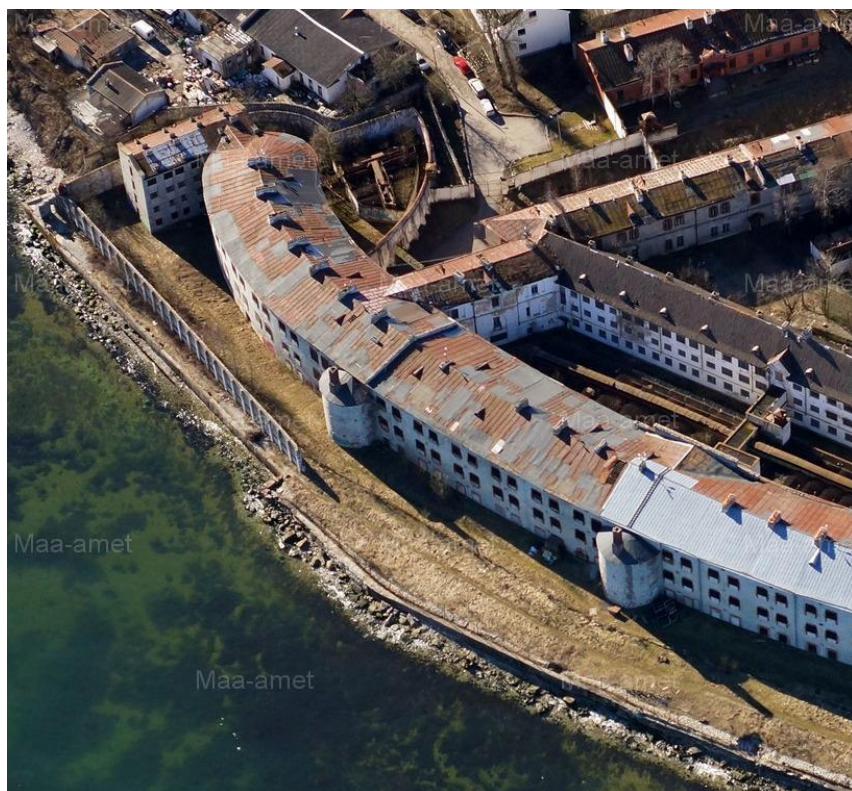


records were handed over to the archive of the Ministry of the Interior. In 1991, the

departmental archive of the Ministry of the Interior was given under the command of the Information Office of the State Police Board. Reference: Riigiarhiiv

²¹ eaa.88.42.1

III. 49. View from north to the eastern wing of the gorge. Maa-ameti (Land Board) tilt areo-photo 2015.



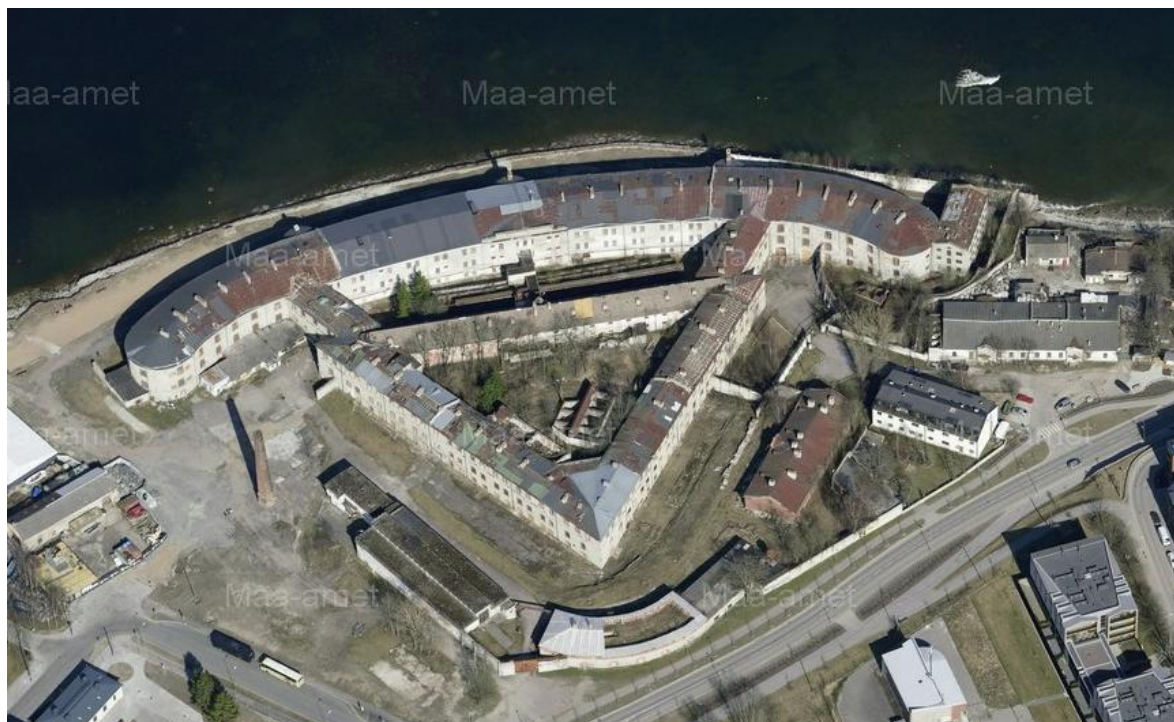
3. Description of the current situation of the building

The historical Kalaranna defence barracks is located on the southern bank of Tallinn Bay, west from the Old City Harbour, in the area between Kalaranna and the seaplane hangars.

III. 50. View from the north-east. Maa-ameti (Land Board) tilt aero-photo 2017.



III. 51. View from the south-west. Maa-amet (Land Board) tilt aero-photo 2018



Kalaranna st 30 lot (ill. 52-54) is on the limestone shore along the coast, its northern edge is shaped by a limestone barrier, which has been reinforced with armoured concrete. There are no buildings on the lot, however, there is a 3 meters high enclosure wall of silicate stone in the eastern part of the northern boarder, and barbed wire fence with tube poles in the western part. It is possible to see the foundation of the coastal enclosure wall in the ground and the second fence concrete foundation with metal pole stumps running parallel to the southern border of the lot. The lot has grass, a contemporary pedestrian walkway with freckles, high trees inside the silicate wall. During the time of the defence barracks, the area served as a free territory to fire from the embrasures against the attacking enemy coming from the sea, during the prison time, it was used as a guarded buffer zone between the prison and the free world. The area has been expanded to the sea during Soviet times.

III. 52. View from the east



III. 53. View to the north-west from the building of individual chambers



III. 54. View to the south-east, silicate enclosure wall on the left



Kalaranna st 28 is boarded with Kalaranna st 30 on the north and east, on the south with Kalaranna street, on the west with the lots Vesilennuki st 6/8 and Vesilennuki st 4.

Kalaranna st 28 has multiple buildings, they form a northeast-southwest oriented ensemble of buildings. The biggest out of all the buildings is the defence barracks, later prison, which is composed of a seaward arched three-storey gorge building (length 247 m) and two-wing buildings aligned at an acute angle i.e. to a lunette, joined by a building wing in the courtyard. Present work deals only with the eastern end of the lunette's south wing, which has three floors and two staircases. The work is focused on the eastern wing of the gorge (except the second sector of the first floor) and the building of the individual

chambers in the end of the gorge and to the surrounding courtyard buildings (see 9. Exterior Photos 5-48, 10. Layout plan). The gorge building is divided from the centre axis into east and west wing, which in turn, into two sectors (from staircase to staircase, however, the half-tower and compartment belong to the smaller sector). The first sector of the eastern wing of the gorge starts from the most eastern round end of the gorge, the second sector from the western wall of the eastern staircase. The staircases are divided into: central staircase in the centre axis and eastern staircase in the middle of the eastern wing.

The facades of the eastern wing of the gorge. The seaward façade of that part of the building and the landward façade segment outward the lunette, are not plastered. The thickness of the exterior walls is 1.8 meters. The eaves cornice of all the limestone façades is hewed out with a semi-arched profile from the limestone blocks. The seaward façade (exterior photos 11-16) is shaped by a planar black-hewed limestone. The windows with terracotta brick segment-arched lintels (their width, height and proportions vary) and window jams with the rustic motif positioned regularly and rhythmically two by two. A small bricked up vent hole with a brick lintel at the top between them. The windows are upright with a rectangular proportion. There are two initial embrasure holes (exterior photo 11) preserved on the second and third floor in the façade of the curved end of the eastern wing of the gorge against the individual chamber building. Proportioned wide and low, segment-arched lintel from terracotta bricks and brick-stacked rustics on the window jams. Landward part of the façade outwards from the lunette (exterior photos 35, 38, 40) differs from the sea-side one by the fact that the rectangular proportioned windows are placed one by one in terms of floors, they are flanked with small brick lintel gun ports, most of which are not bricked-up square with the façade, but have been left as niches. The lower part of the gun ports is designed with a flagstone tilted outwards. There are four initial embrasure holes preserved on top of the curved end of the gorge, which have been bricked-up (exterior photos 39, 40). There are two big garage doors cut in on the first floor. The façades of the half-towers are black-hewed limestone, which is not plastered (exterior photos 17-18, 24-25). The opening design is different from the rest of the building, there are high round-arched lintel gaps on the side of its façade, the jams are limestone or bricked rustics, the gaps have been stacked with limestone or silicate brick. Due to the reconstruction, the window holes have strongly lost their initial shape in the eastern and western side of the central staircase. For each of the three floors, there is a lower line of long narrow gun ports on the façade and one line of vent holes on top of them. Most of these holes have been bricked up. The roof shape of the half-towers is a low cylinder, covered with bitumen roll material. A high

faceted clay brick chimney on the roof, lower part wider than the top. The courtyard façade that is fenced with two lunette wings is characterised by axisymmetry (exterior photos 26-32). The façade does not have any significant volumetric articulations. The façade makes the gorge curve. The motif of the salient part of the façade forms the central axis, which is emphasised by a gradual gable frontispiece (exterior photo 32). Window gaps are placed two by two in all the floors, according to the rhythm of the inner casemates. The gaps are with an upright rectangular proportion, the lintels and jams from terracotta bricks, the plaster design of the second and third floor windows is completely ruined. The façade is with a plaster refinement, which is severely damaged, especially on the two top floors. There is a plaster rustics modelled with plaster on the first floor (exterior photo 28). Later plaster corrections, specifically near the drainpipes, there is a smooth plaster. The plinth is a bit salient, the colour darker. There is a gradual plastered mid-cornice between the first and second floor. The roof eaves are shaped by the limestone-hewed gradual cornice, which has no stucco finish, the limestone has decayed at times.

The roof. A shallow gable roof is covered with a rolled steel sheet that is heavily rusted. Gutters installed on the eaves edge. Both sides of the roof plane have half-arched dormer windows. The roof has been repaired with a bitumen roll material. Two stone firewalls come out of the roof and every casemate partition is marked by wide chimney laces with gradual cornice (some partially demolished). Materials used for the chimney laces are terracotta bricks as well as silicate bricks. The plaster on the chimney laces is crumbling or has been covered with a new smooth plaster. Barbwire enlaced metal frames mark the prison zones on the roof. The main part of the roof structure are rafters hewed from logs that lean on stone poles in addition to the eaves, dense patching is from boards.

Interiors of the eastern wing of the gorge. There is an internal staircase aligned with each half-tower in the gorge building vertically connecting all the floors and the attic. One side march on all the stairs has been demolished and shut (at times, there are still steps to rise to the stair ranges). Two staircases, the central and eastern, are dealt with here. Staircases are basically with similar structure, the stairs rise from the centre of the stair hall and either left or right from the stair range. The structure of the staircase is formed by slim stone posts, vaulted with round-arched or rib vaults. There are niches of the openings on the side- and seaward walls of the staircases, these mark wall parts that were once open. There are flagstones in the ranges between stairs. The steps of stairs are made from slate, however, some are replaced by concrete casting. The stair railings are simple metal bars, wooden handrail. Stair holes are barred or meshed with metal, to prevent prisoners from jumping down. Third floor ceilings are the only ones in the stair hall staircases that have been paved with rib vaults, in between them, there is a cannon lifting hook preserved in the

eastern part of the staircase. The intermediate ceilings in other parts are brick vault stacked between iron beams or a smooth ceiling with added reinforcements.

The staircases have been plastered, there are many different finishing layers on the walls. The lower part of the eastern staircase has been tiled with glazed tiles. There is mainly a corridor and a system of prison cells and store rooms on the second and third floor of the eastern wing of the gorge. The intermediate ceiling is made out of three limestone rib vaults heaped up in cross-sections, between which two large vaults bolster up the arc aperture. As a rule, the most yard-ward arc aperture is filled with a bulkhead and creates a wall with a ventilation frame and corridor doorway of the cells. The most yard-side rib vault from this arc aperture belongs to the corridor and to the yard-facing spaces (some cells, some rooms of the prison workers). The corridor takes advantage of the existing round-arched apertures located in the wide enfilade in the former casemates. All the round-arched apertures have been bricked up in the bulkheads of the cells. Many seaward cells are split halfway in the middle by a partition. A door of a regular cell is made out of metal, which has a hatch, a peephole, and a number of the cell written on it.

There was an additional peephole next to the door inside the wall. Next to the door, there is a welded metal console for holding the food bowl. The corners on the cell-side of the wall on the two sides of the door have been closed, and they have a steep slope so that the prisoner could not ambush the person entering from the door as well as hide from the peephole view. The wall of the most door-ward arch way between the cells is covered with metal plates, as there are former furnace flue holes in the wall. The preserved furniture is mostly from metal and has been attached on the wall or the floor: hooks, shelves, beds, benches and tables. The furniture is robust welded from metal laths, boards inside the frame on top. There are shelves installed in the bricked-up niches. A window stacked smaller from the bottom is in the exterior wall of the room. The window fillers are the following from inside out: glazed double-sided wooden frame, bars, wooden frame with wooden flanges, bars, metal strips. Variations occur in terms of extra bars or in the placement of the wooden windows. Under the window in the corner, there is a concrete or cast iron Turkish toilet with a low stone or a metal wall, and a sheet metal sink on the other side.

The exceptions are former casemate-wide cells, for example cell number 82 on the second floor, where there is a Turkish toilet with two holes and two sinks. The grooves of a temporary protective wall from the defence barracks time have mostly been bricked up, primarily in a former shape in the auxiliary rooms. On the first floor, there are all possible secondary rooms: prisoners' wash rooms- louse hell, workshops, staff break rooms with a sauna and a pool, execution rooms, garages, storage rooms and prayer room.

The eastern end of the southern wing of the lunette. The lunette wings are standing on

the limestone foundation with full slate exterior and bearing walls. The wing takes a step back in this part. The southern façade of the lunette is made out of the black-hewed limestone, the surface is not plastered (photos 51-55). The third floor is with a small back step, a gradual slate eaves cornice in the place of transition point. Three embrasures have been preserved on the southern façade of the second floor, gun ports on the first floor. The other windows are positioned upright. The lintels and jams of the openings are from the terracotta bricks, stacked in rustics on the façade. There are memorial plates on the façade for the fallen Jews. There is a segment-arched gate opening in the middle, which has been bricked up with hollow bricks, it used to be the prisoner visitors' entrance. The north façade of the lunette on the side of the gorge courtyard has been plastered with smooth plaster and finished with paint. Plaster collapse on the façade. The salient part motif on the central axis with a two-storey tall round-arch niche. There is a window on the second floor of the niche and a bricked-up under-arch passage on the first floor. On both sides of the salient part of the façade, there are triple window groups on each floor: regular height window, which is surrounded by narrow windows. Half of the windows have been bricked up into a niche. There are large arc apertures on the first floor, with a preserved lock stone.

Interior. On the first floor of the eastern end of the southern wing of the lunette, there are prisoners' visitor rooms, boxes separated with partitions. In this part of the building, there are mostly prison staff rooms and offices, which have been created from dividing the former casemates with bulkheads. The floors are connected with two separated staircases: lunette staircase 1 leading from the first to the second floor (limestone steps, decorative metal boarder, wooden handrail) and lunette staircase 2 leading from the second to the third floor (limestone steps, stone boarder with a handrail, metal grill on the top march). A chamber hall in the third floor spaces. Wooden doors with three boards, concrete slab on the floor.

The building of the individual chambers. A four-storey extension, so-called the individual chamber building, has been built siding the eastern wing of the gorge (exterior photos 5-10). The building with a rectangular ground plan has a gable roof. The building has not been partitioned. The façades have been black-hewed from the limestone in a clean line. The joints between the stones have been emphasised with lines drawn in the grout. The horizontal window lines run monotonously in all the floors. Under the roof eaves, there is a slate cornice modelled with plaster. Socket masonry is slightly protruding, remaining in the soil. The gables of the end façades create a battlement with a gradual cornice, in the centre of the gables there is a half-arched attic window, stone lock motif on the lintel. The window on the southwest façade has the original window frame.

Window proportions differ by floors. The window proportions on the third and fourth floor are

square-shaped. The windows on the first and second floor are upright, lower part bricked up with a silicate stone. Lintels are from concrete. The windows are covered with metal bars. Upright central corridor windows in the end walls, straight slate lintels, barred. The main entrance to the building is on the central axis of the south-west façade, designed as a traditional limestone portal. Decorative bars in front of the light window. The window frames of the building are generally very depreciated, there are original part, but fragmentary. From the gorge, the building is accessible from the second and third floor, due to the height difference of the intermediate ceilings, there are stairs built into the connecting doorways. Interior. The inner planning of the building is identical to the floors: central staircase, cells on two sides. Older type cell furnishing on the first floor cells and the majority of the doors are original cell doors adapted from wooden doors on open hinges. The other floors have soviet furnishing. Each floor has a room for the prison guards (except 1st floor) in the west corner and a staircase in the closest edge to the gorge. There are limestone steps and the parts between the stairs have glazed tiles in the staircase. The stair railing has a decorative barrier made out of metal laths, wooden handrail. The walls of the staircase have been covered with soviet tile plates, the upper part has been plastered and whitewashed. There is a small room created in the western side of the staircase i.e. between the staircase and former gorge façade. The room has original wooden doors with four panels and profiled enclosure railings.

The surroundings of the eastern wing of the gorge is a paved square in front of the courtyard façade, a landscaped light traffic road on the seaward side. There are rainwater gutter stones hewed from granite and a cobblestone pavement preserved in front of the courtyard façade. Next to the eastern wing of the gorge and individual chamber building, there are prison dog kennels, complex of the prisoners' walking boxes and enclosure walls of the prison. The named buildings have been surrounded with a high curved wall from the west. The guard's booth on the metal framed platform leans partially on the wall. Inside the wall curve, there are metal consoles with electric jugs and multi-row barbed wire.

The walking complex is a structure with a rectangular base and curved angles without a roof, with a concrete foundation and socket masonry and ca 3-meter high exterior wall from silicate bricks. The construction is covered with metal structure, which is rounded on each walking box. The structure is capped with a mesh from metal bars. There is one metal light with two electric jugs in each box on top of the silicate wall. The walking complex consists of corridors and the prisoners' walking boxes that open to them. The doors of the walking complex are from metal, floors from concrete casting, simple benches with metal frames and table tops, attached to the floor, in the middle of the room. The top parts of the corridors

have been fringed with metal plates, these are former parapets of the guard's pathway. Metal structure is attached to the parapets. The walkway ran over the corridor, its floor is removed. There is a construction with a metal structure and barred lattice, ceiling and doors for prisoners' movement from the cells to the walking boxes and back, built between the walking complex and the gorge façade.

Dog kennels are a low rectangular based construction, which bellied slightly with the hindering enclosure wall. The structure has a concrete foundation and floors. Contains six dog kennels, exterior walls are from silicate bricks, roofing tiles-covered bolt roof. Wooden dog bed inside. There is an open-air cage in front of each kennel separated by silicate wall, metal mesh doors.

The exterior gate of the prison. West from the walking complex, there is the gate of the prison, with silicate brick poles and a wall, as well as with a gate made out of metal bars (car gate and pedestrian gate). The gate poles have flood lamps and contemporary barbed wire. There is a double silicate brick wall in this section, metal consoles with electric jugs on top of the wall. On the seaward façade of the gorge, there are three three-storey round half-towers, which are lower than the main building, there are two in this particular eastern wing: the middle and east-ward. The foundation, exterior walls and bearing walls of the gorge building have been built from limestone, the seaward relative structure parts are bigger and thicker compared to the landward ones.

Prison's enclosure walls on the eastern wing of the gorge. The prison wall is doubled in this section. The prison-ward wall is ca 6-meter high plastered silicate brick wall, with lights and barbed wire consoles on the prison-side. The external silicate brick wall is lower than the internal one. The buffer zone between the two walls is accessible only through metal grid door situated outside the external wall. The wall has two-sided iron gates and one pedestrian gate.

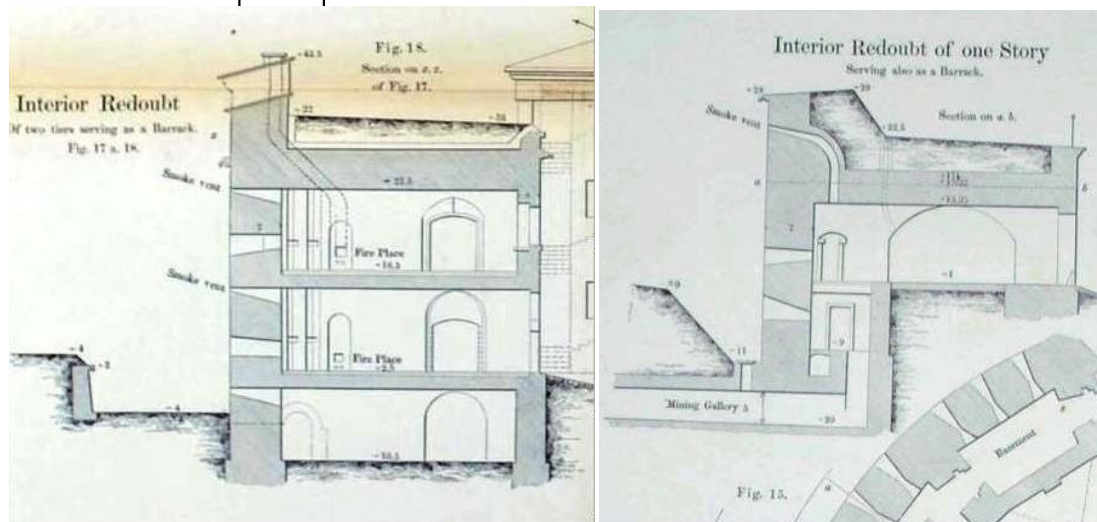
4. Architectural analysis and conclusion of the research

Kalaranna defence barracks has been designed as a polygonal so-called Prussian system²² fortress, see ill. 55. Historian of fortress architecture, Robert Treufeld²³ points out that similar Paratrei-type defence complexes were also built by the crown power on other coasts of their country in the Baltic Sea: Paul I fort in Kronstadt (b. 1838, architect Tottleben Eduard Ivanovic) and Bomarsund fort in Åland. At the same time, architectural similarities with Patarei are also found in other parts of the Kronstadt fortress. (ill. 56, 57).

²² Historically, Prussian officers overtook the idea of French Marquis of de Montalembert' Marc René to their military reform to create defence against firearms. The weapons were held in the multi-storey stone casemates. This type of forts did not have bastions (over time their conquest became clear), every part of the fortress is only protecting the other part, this creates the so-called circle of protection in the building.

²³ Treufeld 2012

III. 55. Defence barracks sketches in the Prussian system. Patarei defence barracks was built with the similar principle. Defence Barrack



55.1. Embrasures and smoke channels on the protection side of the casemates, temporary protective wall grooves in the casemate room, furnaces and large enfilade arched doors.

55.2. Lunette section, first floor casemates as half-floor rooms

III. 56. The salient part of the façade on Kronstadt defence barracks. Крепость Кронштадт 4-я северная оборонительная казарма http://www.kronstadt.ru/gallery/gallery_kr_46.htm



III. 57. View of the northern part of the Kronstadt fortress in 1831. Северное ботардо с капониром 1831. Акварель XIX века. Репродукция из книги А. А. Раздолгина и Ю. А. Скорикова «Кронштадтская крепость»



The architectural terms of forts used in the present work such as gorge, lunette and mortar battery have been taken directly from the project documentation of Patarei defence barracks from the 19th century. The building part terms of Patarei do not correspond with classical architectural term explanations of fortresses. Traditionally, gorge is considered to

be a bastion-type security zone, for example, an open inner side of the lunette and a sharpened-edged defensive structure under the lunette, originally an entrenchment, later a stone building. The Patarei gorge resembles more a classicist building with the central salient part of the façade with two arched wings. The Patarei lunette corresponds more to its architectural term. The Patarei building fortification should be viewed as a modern security building of its time built according to the original solution according to the local needs: so-called a giant casemate building was built on the site of the gorge, the lunette was designed as a wedge-shape building also with casemates. The fact is, Kalaranna defence barracks did not take part in any armed conflict so it did not serve its primary function. According to Robert Treufeld, Patarei may have not been touched by the English and French fleets because of the high reputation of the crown infantry.²⁴ The building was a barrack for different regiments from construction to the end of World War I. From the architectural style, the original volume of the defence barracks embraces classicist features the most, especially on the courtyard façades: upright openings, plaster rustics on the first floor of the gorge, gradual frontispiece on the roof eaves in the central axis, accentuation of lunette's under-arch passages with two-storey rustics, half-arch niches and curved apertures with the lock-stone motif window. Exterior façades were initially focused on protection and did not have any specific architectural design techniques, only the windows try to introduce Romanesque element with jams stacked in rustics with bricks. The body of Patarei defence barracks has preserved relatively well, chopping embrasures into regular windows, bricked-up smoke channels and the courtyard façade plaster collapse have changed the appearance the most. Casemate staircase structure has been preserved in the interior plan, despite the vast and long-term reconstruction into prison. The biggest change was made in the stairwells, where the historic third stair march was lost during the Soviet era. The initial space impression of the defence barracks casemate with embrasures (plus, from the defence barracks time, there are wooden doors with iron hinges, cannon eyelets in the end rooms of the gorge, and cannon-lifting hooks in the third floor ceiling) can be perceived in the end rooms of the eastern wing. The prison milieu is best conveyed through the second floor of the gorge and first and second floor of the individual chamber building, this all is backed by the courtyard facilities around the end of the eastern wing. In summary, it can be said that Patarei defence barracks-prison has material extant from the defence barracks time as well as from the prison period, and they can be exhibited (*in situ* or rearranging details in spaces), as witnesses from one of the spicy stages of Estonian history. _____

²⁴ Treufeld: 9

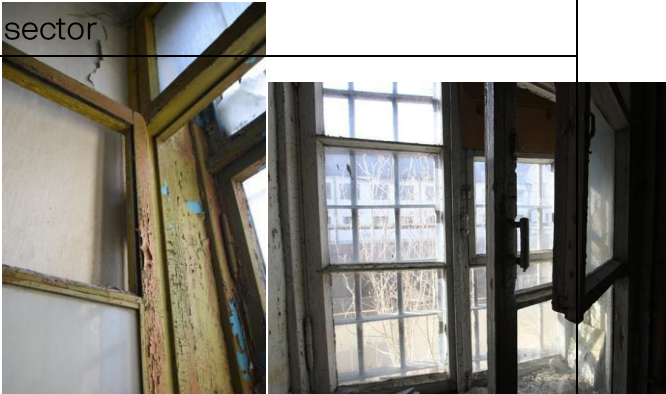
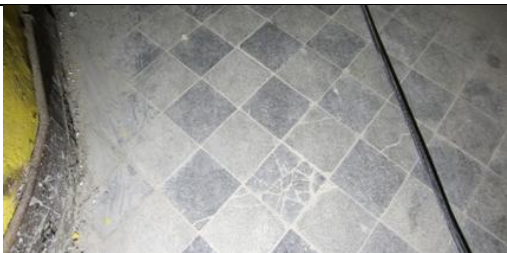
5. A list of valuable details

original – construction period 1831-1840

older – built before World War II 1841-1940

VD No	description	photo
VD1	Original limestone foundation and its imposts of the eastern wing of the	
VD2	Original limestone socket masonry and slate masonry of the walls of the eastern wing of the gorge	
VD3	Original embrasures, their segment-arched lintels and window jams stacked in rustics in the external walls of the	
VD4	Original door and window openings in the external walls of the eastern wing of the gorge and the	

VD5	Not plastered limestone façade décor of the eastern wing of the gorge and the eastern end of the southern wing of the lunette and the plaster décor of the inner courtyard façade of the gorge	 Not plastered limestone façade décor  plaster décor of the inner courtyard façade
VD6		

	Foundations, slate walls, façade décor and original window openings in the	
VD7	The original central staircase-structure, stair marches, slate steps, limestone floor tiles, stair railings-	 2nd floor 2 sector
VD8	The original eastern staircase of the eastern wing of the gorge - structure, stair marches, slate steps, stair railings-	 3rd floor 1 sector
VD9	Older type window frame from the eastern wing of the gorge	
VD10	Older floor tiles in sector 2 of the second floor in the eastern wing of the gorge	 Photo 64. Gorge 2nd floor sector 2

VD11	Well preserved parts of the older ceiling structure in the eastern wing of the gorge	
VD12	Metal tanks in the attic of the eastern	
VD13	Barred wall in the corridors with doors and mirrors	
VD14	Cabinets and storerooms walled inside the wall with doors and contents	 photo 74 gorge 2nd floor sector 2

VD15	Wall tables (Wall mounted tables)	 photo 263 gorge 2nd floor sector 1
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		 photo 69, gorge 2nd floor sector 2
VD16	Separated single cell	
VD17	Prisoners' sorting area. Cell furnishing	
VD18	Rooms to photograph the prisoners with the	
VD19	Cells with integral furnishing No. 82, 101, 102, 105, 105A, 106	 cell 101

VD20	Older type laundry room with furnishing	
VD21	Original doors and latches, hammered hinges on the jambs, iron strap hinges on the sheet, wood blank sheet, latch bolts, lock boxes	  3rd floor sector 1
VD22	Original hook in the ceiling for cannon-lifting	 photo 426 gorge 3rd floor sector 1

VD23	Original cannon brake loop on the wall		
		photo 666 gorge 1 st floor sector 1	
VD24	Embrasure in its original size		
		photo 425, gorge 3 rd floor sector 1	
VD25	Furnace in the former church room in sector 1 on the third floor of the gorge		

VD26	Original doors and boundary rails of the staircase small room in the individual chamber building		
VD27	Single barrack building stairs of the staircase, stair structure, fences, floor tiles on the stair range		
VD28	Corridors and cells on the 1 st and 2 nd floor of the individual chamber building holistically		
VD29	Older Turkish-type toilet pot, individually in space		photo 716, gorge 2 nd floor sector 1

VD30	Older stairs of the lunette in the eastern end of the southern wing of the lunette 1 Slate steps, metal bars with a handrail	  metal bars 
VD31	Slate tiles on the floor	 Photo 574, gorge 1st floor sector 1

VD32	Louse-hell. Rails on the floor, two metal steam closets for clothes, clothing hooks, benches for prisoners	
VD33	Prisoners' washing complex holistically	
VD34	Execution rooms: Room 1 preparation, room 2 vestibule, room 3 execution of the sentence by	
VD35	Staff resting complex: gym, break room with a fireplace, sauna, pool	

VD36	Rainwater gutter stones hewed from granite in one piece in front of the gorge courtyard façade 2 pcs		
VD37	Breakages of the cobblestone pavement in front of the gorge courtyard façade		
VD38	Original chimney laces on the roof		

VD39	Lunette stairs 2 Slate steps, fences, metal grid on top march	  metal grid of the top march
VD40	Prisoners' visitors room holistically	

Room Table

The table shows more vivid details that bear the history of the building, which have been marked as valuable details (marking VD) with a claim to be preserved or conserved in their place, marked details or detail assemblies.

VD no. of the valuabl e detail	Cell number (on the door) or room/rooms function,	List of preserved details	Interior - photo no	Heritage Prescripti on
	Cell 82 B 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet and sink corner, all the	23, 26-32	The details can be stored at their location or moved around the building
	Cell 82 A 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet and sink corner, all the	34, 35	The details can be stored at their location or moved around the building

VD19	Cell 82 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 2 benches, 1 table, 1 double toilet- sink corner, 7 double metal bunk beds, 1 wall hook, all the finishing layers,	47-54	Preserve details at their location, conserve
	Cell 83	1 door, 1 peephole, 1	59,	The details can be stored at their location or moved around the building

	2 nd floor Sector 2	Food bowl holder, corner filling, 4 shelves, 1 bench, 1 table, 1 toilet- sink corner, 1 wall hook, all the finishing layers	60-61	
	Cell 84 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet- sink corner, 1 wall hook, all the finishing layers	62	The details can be stored at their location or moved around the building
	Cell 85 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet- sink corner, 1 wall hook, all the finishing layers	65	The details can be stored at their location or moved around the building
	Cell 86 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet-sink corner, 1 wall hook, all the finishing layers	66	The details can be stored at their location or moved around the building

	Cell 87 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 bench, 1 table, 1 toilet-sink corner, 1 wall hook, all the finishing	70, 71	The details can be stored at their location or moved around the building
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	Cell 88 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 toilet-sing corner, 1 wall hook	70, 73	The details can be stored at their location or moved around the building
	Cell 89 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, corner filling, 2 shelves, 1 toilet-sing corner, 1 wall hook, 2 tables, 2 benches (one bench, table brought from somewhere else, from the cell 88?) ,	75, 76	The details can be stored at their location or moved around the building
VD16	Single cell on the western side of the eastern staircase 2 nd floor Sector 2	1 door, 1 peephole, 1 food bowl holder, metal plate wall lining and texts scraped by the prisoners on it, bars in front of the window and radiator 1 toilet, metal bed,	78, 79-83	Preserve details at their location, conserve
VD14, 15	Corridor between the central and eastern wing 2 nd floor Sector 2	1 wall closet with metal door, 1 switchbox, 1 wall-table	74	Preserve details at their location, conserve

VD15	Corridor between the central and eastern wing. 2 nd floor Sector 2	1 wall-table, wall cupboard for the fire extinguisher	69	
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VD17	Prisoners' sorting block, cells for prisoners who have just arrived to detention and ja operations	4 cells, every cell has 1 bench, 4 metal doors, 2 tables attached to the wall, Storage room – metal shelves, alphabet written on	250, 253-267	Preserve details at their location, conserve
VD18	The photographing room of the prisoners, darkroom 2 nd floor Sector	1 metal corridor wall, two prisoners' waiting boxes with doors, the platform to photograph the prisoners. Built-in table in the darkroom, 1	270-276	Preserve details at their location, conserve
	Cell 101 2 nd floor Sector 1	1 door 1 peephole, 1 food bowl holder, corner filling, 2 benches, 1 table, 2 shelves, 1 toilet-sink corner, 1 wall hook, four wooden board beds attached to the floor, all the finishing layers, 2 lampshade	277, 287, 279, 281-283	The details can be stored at their location or moved around the building
VD19	Cell 102 2 nd floor Sector 1	Long wall bench, 1 table, 1 toilet-sink corner, 2 wide beds attached to the floor, all the finishing layers, 2 lampshade, 1 shelf	284-285	Preserve details at their location, conserve

	Cell 103 2 nd floor Sector 1	1 door, corner filling, 1 peephole, 1 food bowl holder, 1 toilet-sink corner, 1 shelf, 1 wall hook	289, 290-293	The details can be stored at their location or moved around the
	Cell 104 2 nd floor Sector 1	There is no entrance	289	
VD13	Corridor opposite the cell 103 and 104	Metal mesh wall entirety, 2 metal doors, the bottom of the stone wall	288	Preserve details at their location, conserve
VD19	Cell 105 2 nd floor Sector 1	1 door, corner filling, 1 peephole, 1 toilet-sink corner, 1 bench, 1 table, 1 shelf, 1 wall hook, 2 loft- type bunk-beds	294, 295, 296	Preserve details at their location, conserve
VD19	Cell 105A 2 nd floor Sector 1	1 door, corner filling, 1 peephole, 1 foodbowl holder, 2 loft-type bunk- beds, 1 bench, 1 table, 1 toilet-	297, 298	Preserve details at their location, conserve
VD19	Cell 106 2 nd floor Sector 1	1 door, 1 foodbowl holder, 1 bench, 1 table, 1 toilet-sink corner, 2 loft-type bunk-beds	301, 302	Preserve details at their location, conserve
	Medical cabinet 2 nd floor Sector 1	1 medical metal table without a glass plate	304	The details can be stored at their location or moved around the

VD20	Prisoners' wash room and toilet 2 nd floor Sector 1	1 original wooden door with iron hinges, degrades doorjamb, 1 concrete washbasin on cast iron feet, 5 concrete sitting holes, 1 drain	310-312	Fully conserve the room with details and finishing layers
	3 rd floor sector 1 Three triangular casemates	In the three triangular casemates at the curved end of the gorge, there are 4 bricked up and 1 open original embrasure, total 4 cannon loops on the wall, 1 original door and a cannon lifting hook in all the	424-432	Original details to be preserved and restored at their location, embrasures re-established into openings, smoke channels to be opened
VD25	Former church room i.e. later judgment notification room 3 rd floor sector 1	Wooden podium, iron furnace in the wall VD25	456, 457	VD 25 to be preserved

VD28	Cells in the individual chamber building 1 st and 2 nd floor sector 1	1 st floor cells have older type furnishing (flip-beds, benches-tables on the metal pipe end), 8 pcs original doors adapted to cell doors, usual soviet cell furnishing on the 1 st floor		Fully conserve the room with details and finishing layers
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VD32	Iron closet for steaming clothes i.e. louse-hell 1 st floor	Metal case and doors, rails on the ground, on which the clothing racks run	630-632, 629, 649	Fully conserve the appliance with details and finishing layers.
VD33	Prisoners' washing complex 1 st floor sector 1	Louse-hell steam engine with rails, long benches, two wash rooms with ceiling showers, 6 pcs. concrete benches, 7 pcs. zinc-plate	629-653	Fully conserve the room with details and finishing layers
VD 34	Execution rooms 1 st floor sector 1	Room 1 wall closet VD14 and a counter.	513-517	Fully conserve the room with details and finishing layers
VD35	Staff resting complex 1 st floor sector 1	In the gym, punching bags, wrestling mat on the platform, hanging consoles for the punching bags, 2 pcs. In the sauna rest room, fireplace, seats with leather backrests, table, shelves with carvings, hooks, 2 pcs mirrors, sheet metal lampshade,	522, 523	Preserve the named details at their location. Wooden boards in the break room to be processed or exchanged to replicas due to dry rot.

VD40	Prisoners' visitor room	Boxes separated with partitions, bars, tables	215, 216	Fully conserve the room with details and finishing layers. Details can be rearranged if
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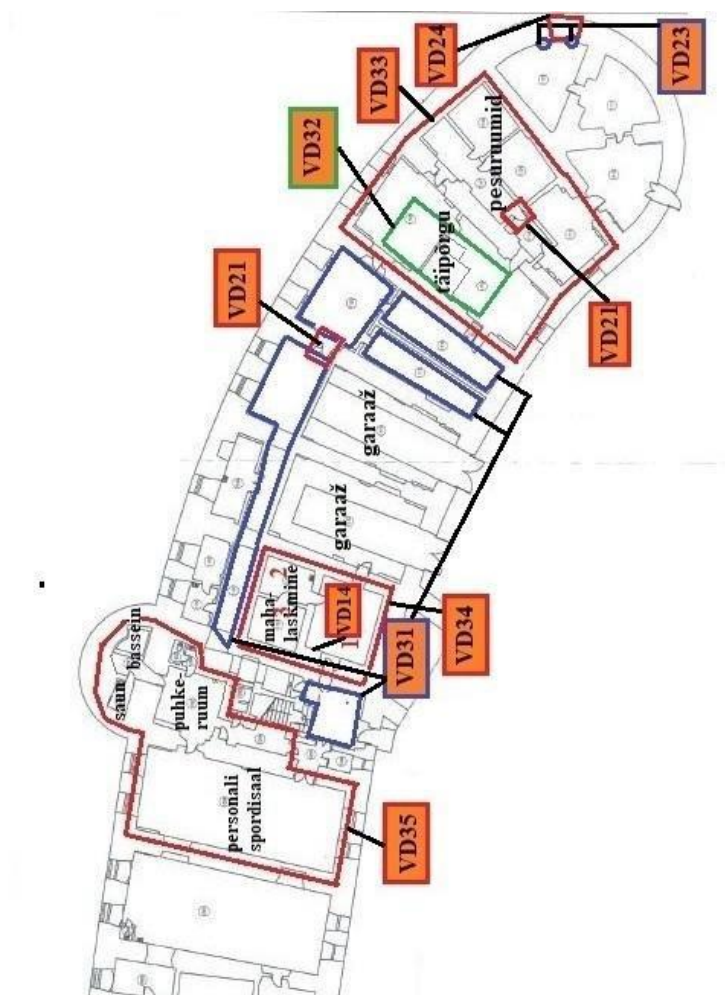
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6. A plan for valuable details

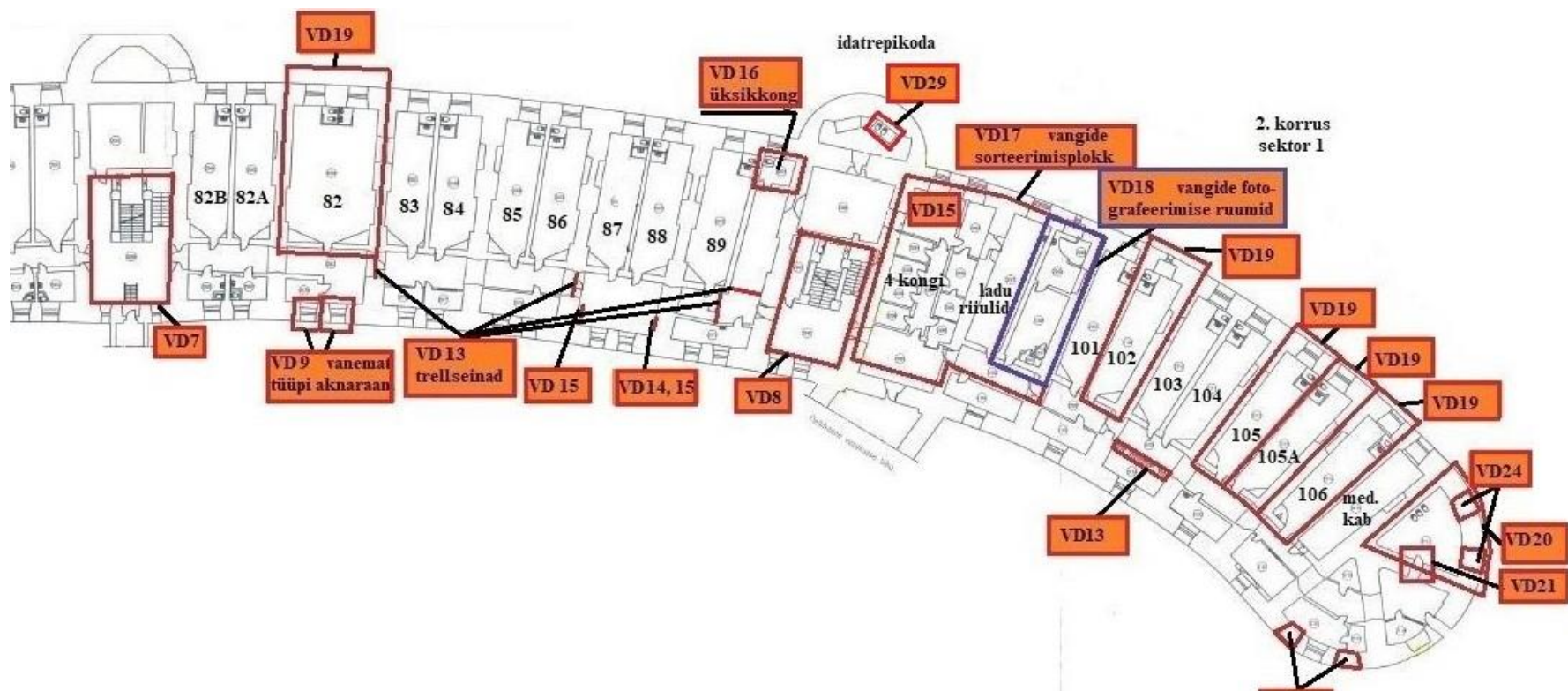
VD ... – valuable detail no ..., see VD table chapter 5.

Gorge

First floor

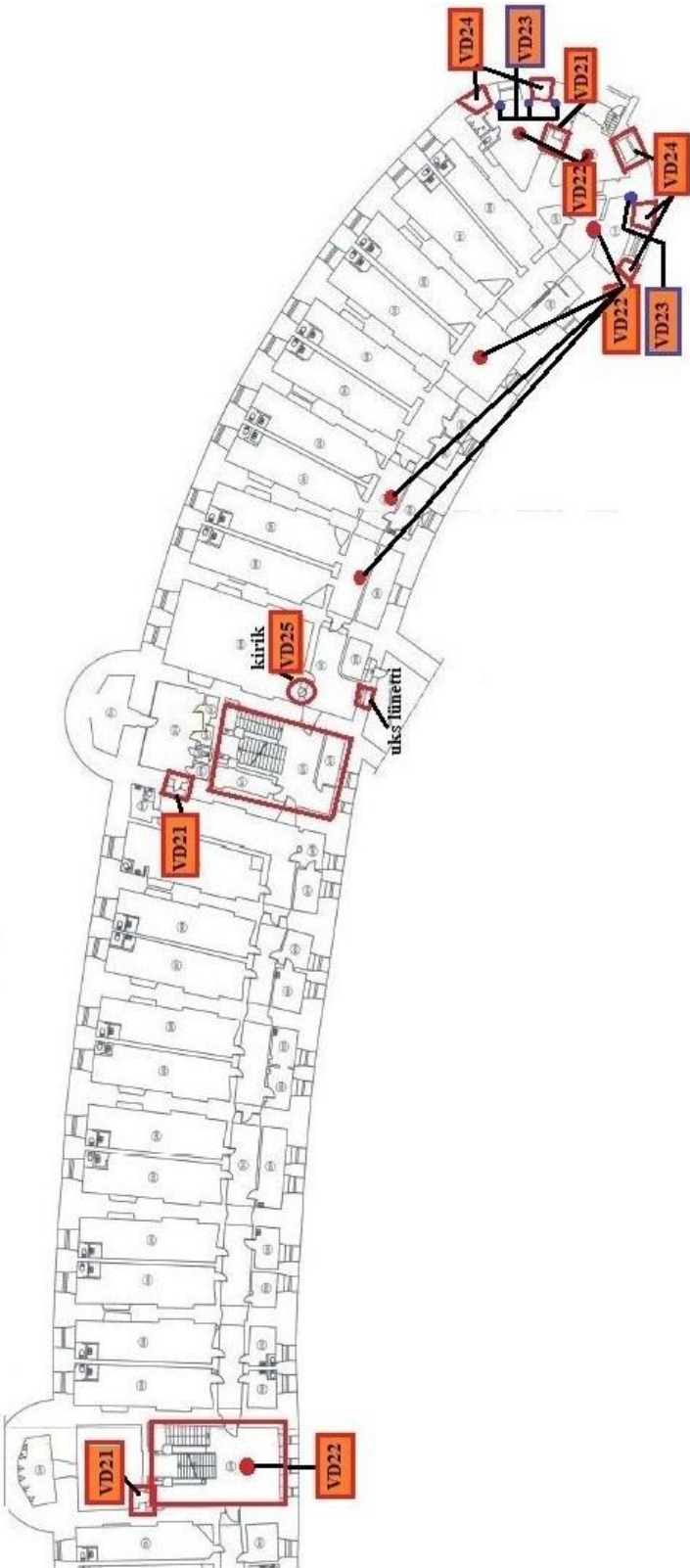


Second floor



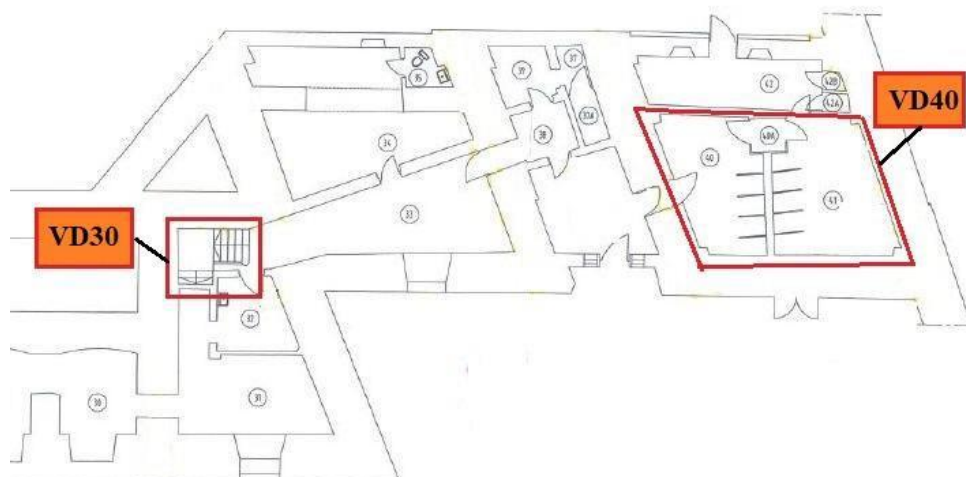
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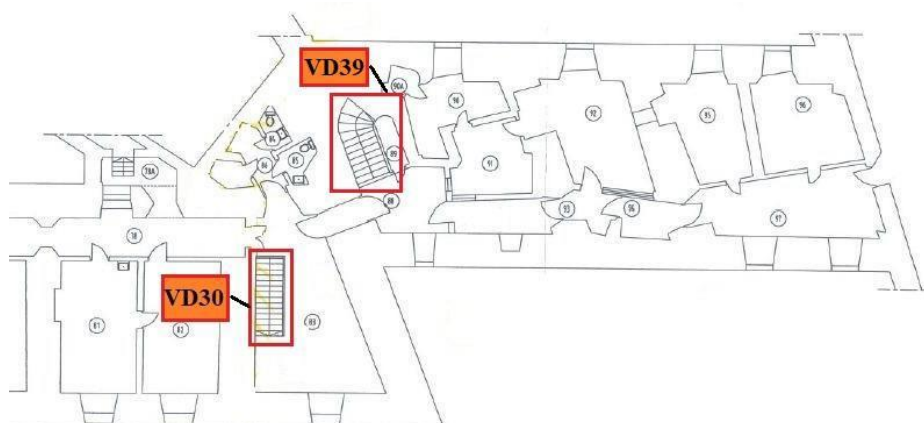


Eastern end of south wing of the lunette

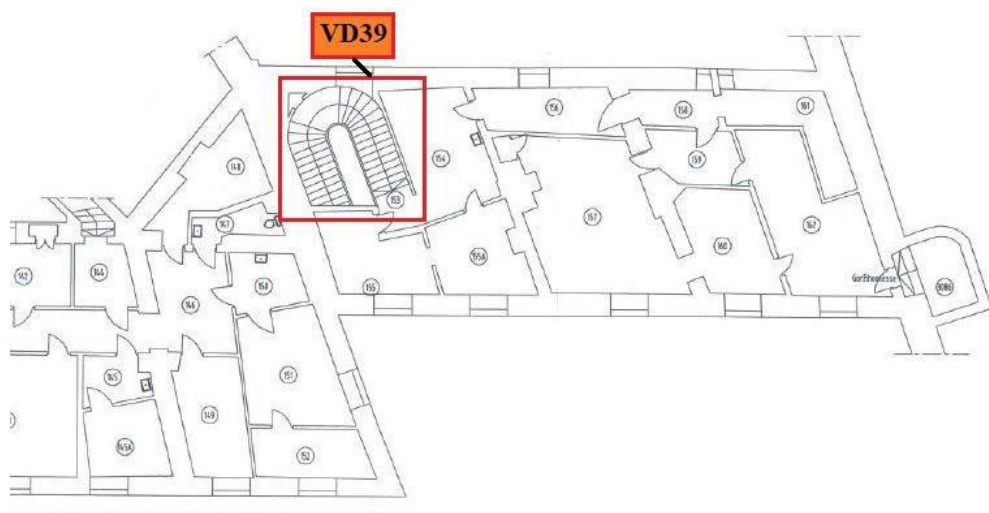
First floor



Second floor



Third floor



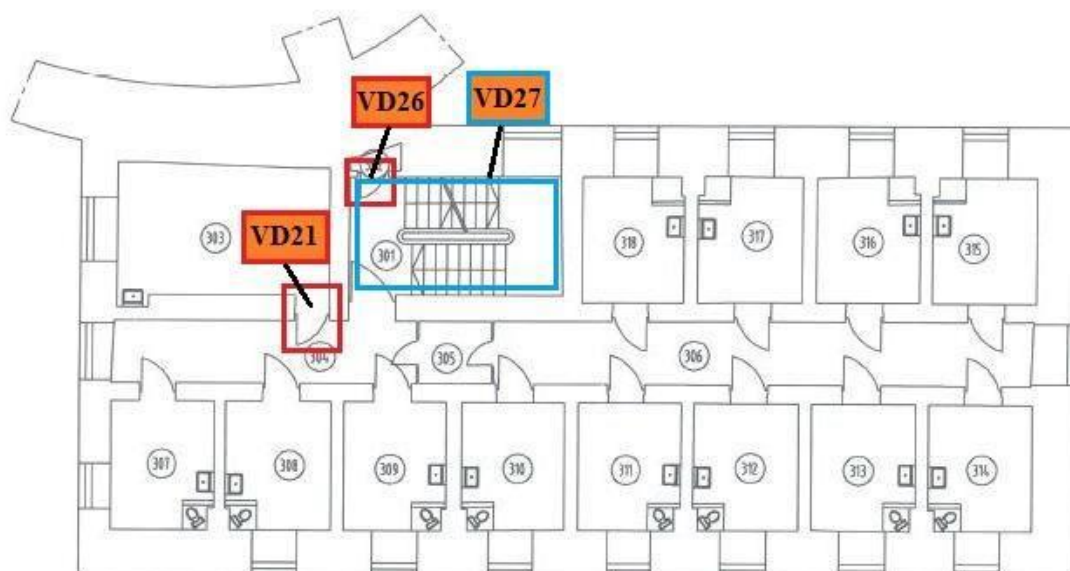
First floor



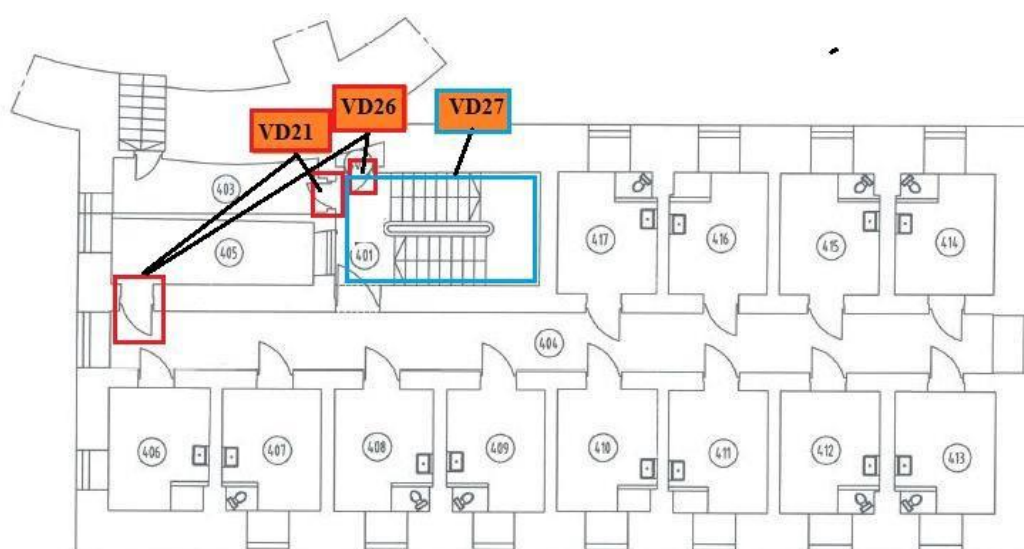
Second floor



Third floor



Fourth floor



7. Building parts in critical condition and the list of primarily emergency works

In general, the building is in a bad condition. A building that has not been heated over 10 years has a severe damp damage. The excessive moisture in the walls causes collapsing plaster, crumbling masonry, especially on the third floor of the gorge.

- Roofing material and rainwater drainage system needs constant inspection.
- The building needs to be heated.
- Foundations and socket need to be insulated from the ground.
- Remove soil that has accumulated against the socket wall, ground to be planned outside, use drainage.
- Provide room ventilation.
- There are huge intermediate ceiling collapses in the third floor ceiling of the lunette. Eliminate collapse, repair roof structure and cover material.

8. Special conditions to restore Kalaranna Patarei defence barracks

1. General conditions

1.1. Special conditions Kalaranna Patarei defence barracks building and structures located on the property or the construction project of the buildings (building monument reg.no. 8485) needs to be approved in the Heritage Protection Department of the Urban Planning Department of Tallinn. The project must be ordered from an entrepreneur or a person with heritage protection activity licence.

1.2. An application for a permit to commence construction must be prepared for the site before any repairs-restorations are carried out to the building. Upon obtaining permission, construction work may commence according to the agreed project documentation.

1.3. Heritage conservation supervision must be ensured during the construction work of the monument.

1.4. Archeological supervision must be ensured during ground works. In case a discovery is made during the construction works, heritage conservation or archeological supervision must be immediately notified, who will then evaluate the cultural value of the find and will thereupon inform the Heritage Conservation Department. Depending on the finding, it might be required to preserve the cultural heritage *in situ* that is, in its current location. The transformation, placement and exhibiting details are only permitted by the decision of the Heritage Conservation Department. Decisions are made separately for each finding.

1.5. The special conditions for heritage conservation are valid for five years.

2. Foundation, walls, intermediate ceiling structure

2.1. The original foundations of the eastern wing of the gorge, see list chapter 5, must be preserved and restored.

2.2. The original foundations of the individual chamber building VD6 must be preserved and restored.

2.3. Old foundations may be analysed, if necessary, and develop techniques for strengthening and moisture isolation from the results. Possible new foundations need to be separated from the old and the stability of the old foundations needs to be ensured.

2.4. The original limestone socket masonry of the gorge's eastern wing and individual chamber building must be preserved and restored. The socket masonry needs to be preserved as not plastered, cleaned slate masonry (gorge courtyard-side socket masonry plastered as an exception). Remove soil filling that has gathered against the socket. The ground to be planned outside, use drainage if necessary.

2.5. The original limestone walls VD2 of the gorge's eastern wing and individual chamber building must be preserved and restored. Decayed wall parts to be repaired by sealing with the respective original material- bricks or slate.

2.6. The limestone and brick structures of the intermediate ceilings of the gorge's eastern wing (incl. arch belts, vaults and brick vault- metal joints) need to be preserved and restored. New passages must not be made from the vaults, must use existing ones. Later intermediate ceilings from reinforced concrete can be demolished, prove their scope with analysis.

2.7. The reinforced concrete intermediate ceilings of the individual chamber building to be preserved and restored, to prevent metal joints and reinforcement from rusting. An elevator shaft can be cut into the intermediate ceilings.

2.8. Openings with concrete lintels of the individual chamber building to be preserved and restored remaining the present shape in the exterior walls.

2.9. All the original limestone walls of the gorge staircases and casemates must be preserved and restored, the original openings can be opened, except locations where it is assigned VD16, Vd18, VD19, VD20, VD21, VD30, VD34, VD35.

2.10. All post World War II bearing and non-bearing foundations and walls from steel structures, silicate bricks or artificial stone blocks may be demolished or reconstructed. The heritage of the walls needs to be proved, if necessary, with analysis

(plaster or other cover materials to be removed for that purpose).

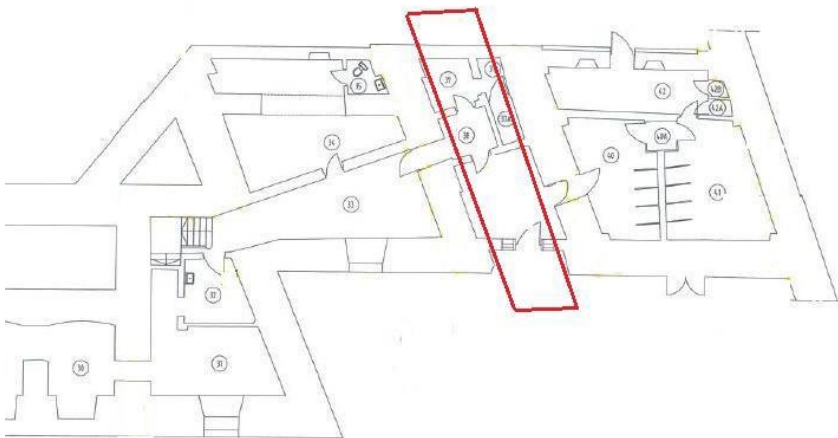
2.11. The eastern end of the lunette's southern wing foundations need to be preserved and restored. Same point 2.3.

2.12. The socket masonry of the eastern end of the lunette's southern wings must be preserved and restored. The southern façade socket wall is not plastered, northern façade is plastered. Remove the soil filling gathered against the socket. The ground to be planned outside, use drainage if necessary.

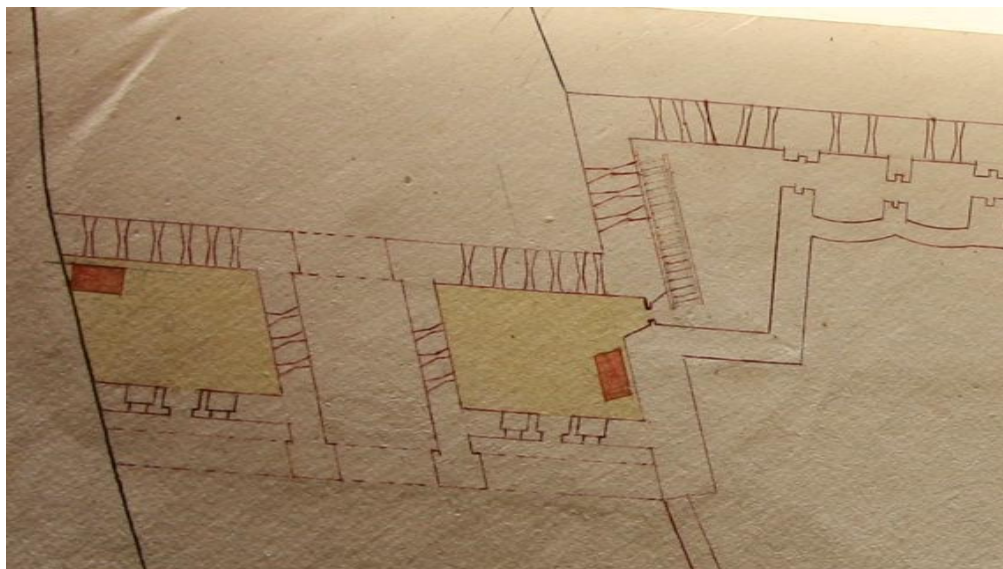
2.13. Preserve and restore the intermediate ceiling structures and stairwell structures of the eastern end of the lunette's southern wing. Depreciated intermediate ceilings may be replaced by the new ones.

2.14. The original limestone walls of the eastern end of the lunette's southern wing must be preserved and restored. Decayed wall parts to be repaired by sealing with the respective original material- bricks or slate. The original limestone walls in the casemates must be preserved and restored. It is recommended to open the original apertures: bricked-up windows, bricked-up inner doors, under-arch passage see ill 58 within the marked area, wall niches with arched lintels see ill 60 and ill. 61. Example ill. 59 ja ill. 62.

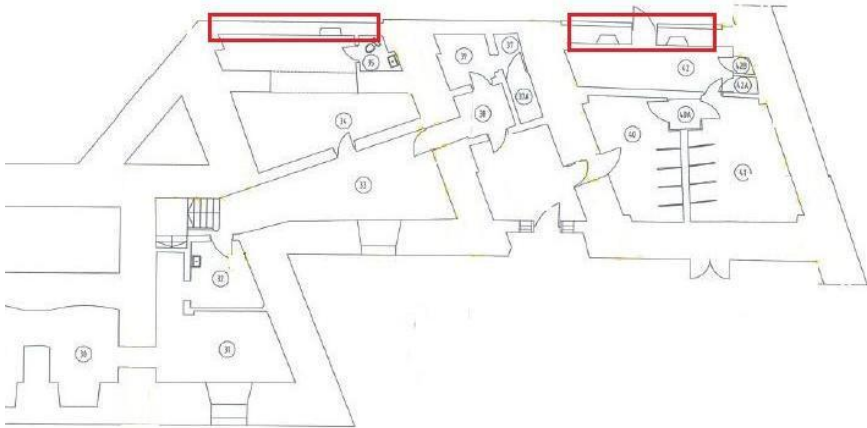
III. 58. Former under-arch passage marked with red.



III. 59. The first floor plan of the eastern end of the lunette's southern wing: central under-arch passage, walls densely filled with gun ports, a niche with an arc aperture on the gorge courtyard façade. Project from 1838. eaa.79.2.170



III. 60. Wall parts of the former curved-lintel wall niches marked with red.



III. 61. Wall parts of the bricked-up curved-lintel niches and central segment-arched lintel opening of the under-arch passage on the northern façade marked with red.



III. 62. The original curved-lintel wall niches extant on the western wing of the lunette, on the eastern façade of the gorge courtyard in the 1940s. ERAF 17sm.9.105a



2.16. The outdoor opening of the eastern and western staircase on the first floor of the eastern wing of the gorge must be restored in their original shape, with the rounded arch lintel. Examples for the light window and door panel designs can be seen ill. 64. or ill. 65.

Ill. 63. Eastern staircase door today Ill.

64. efa.204.0.262781



Ill. 65. The exterior door sketch of the gorge courtyard staircases from 1866. EAA.79.2.215



2.17. Restore arch lintel doorway on the central staircase, similarly to the point 2.16.

3. Façades

3.1. Façades of the gorge must be preserved and restored.

3.2. The limestone surface must be exhibited on the façades of the gorge, except the inner courtyard façade between the lunette wings. Avoid plastering and other covering materials. Decayed limestone to be sealed with a similar stone or with a special sealing mixture in case of smaller damage. The outer surface of the walls to be cleaned (pressure-washing should be enough, soda wash or mechanical cleaning with a steel brush to be used on dirtier places). Joints to be arranged, loose joint filling to be removed, empty joints to be filled with a low-cement lime mortar squared with the limestone façade. The broken stones in the slate cornice to be replaced by replicas.

3.3. The plaster finishing of the inner courtyard façade between the lunette wings of the gorge must be restored. If possible, restore the first floor plaster rustics and gradient cornice in the top part, plaster corrections to be made in the decayed areas according to the exact example of the original. Later seals to be removed. Low-cement content lime mortar to be used, smooth finishing. Second and third floor façade surface to be covered with the smooth plaster, jams of the openings to be finished rectangular.

3.4. The gable frontispiece of the gorge courtyard to be plastered, gradual cornices to be modelled with plaster (profile destroyed, make a traditional classicism). Façades to be covered with whitewash, light tone, cornices and first floor's rustics to be emphasised with a darker tone.

3.5. Cables to be removed from the façades.

3.6. All the pre-World War II red brick lintels and openings with jams (including the smoke channels) in the limestone façades of the eastern wing of the gorge must be preserved as a general principle, excluding p 3.6. Lintels of the openings and bricks of the jams to be restored. Broken bricks to be sealed: under 5x5 cm damages to be left or sealed with the special Remmers repair mixture, bigger damages to be repaired with bricks as similar as possible.

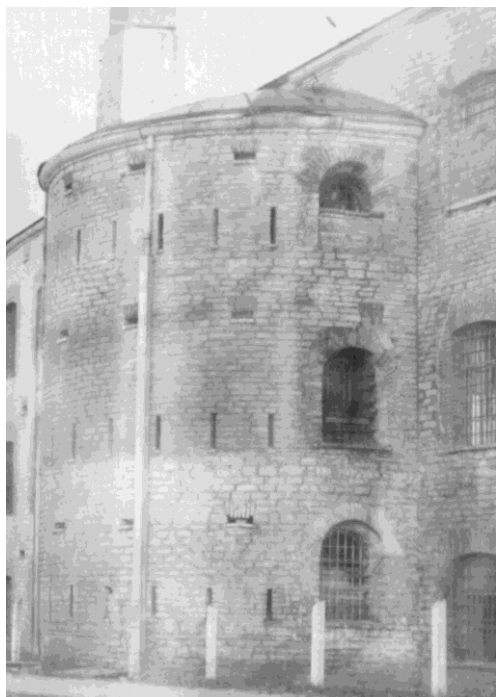
3.7. All the original embrasure openings must be preserved and opened. The regular window between them can be closed, leaving ca 5 cm niches stepping back on both side of the wall. Embrasures are not allowed to be opened in the room VD20.

3.8. The original smoke channels are recommended to be opened, if not completely, then with a 5 cm step back from both sides of the wall surface, so that the openings would be more visible. Smoke channels can be used as possible ventilation passages, with the outer valve to be a customised modest design element on the façade.

3.9. Gun ports in the gorge's half-towers and elsewhere on the limestone façade must be preserved and exhibited preferably opened (without glass) or half-opened, i.e. at least 5 cm

step back on both sides of the wall surface.

III. 66. The gun ports and smoke channels of the half-tower were still open in the 1940s.



3.10. All the metal bars installed for the Olympics can be removed, two of them must be preserved on the 2nd floor of the gorge sector 1 on top of the windows in rooms VD19. Metal bars installed for the Olympics on five windows on the 2nd floor of the gorge must be preserved in their place or somewhere else in the building.

3.11. 2nd floor of the gorge 1st sector rooms VD19 window bars and the layers of the frames to be preserved and conserved. The new window frames without the breakdown to be installed between the bars as discreetly as possible.

3.12. The wooden window frames are depreciated, which can be replaced with the new ones. The division of the new frames traditional classicist frame: horizontal light window in the top part, window sides opening on two sides from the bottom of the centre. An inside espagnolette. There is a square-shaped light window on top of the narrow windows and one window side at the lower part.

The windows are double-framed, the inside frame as a double glass, the outer has a single glass.

Examples for the new wooden frame profiles can be drawn from the existing preserved older frames VD9.

3.13. The façades of the individual chamber building must be preserved and restored. Limestone surface to be exhibited. Plastering and other cover materials to be avoided. Decayed limestone to be sealed with a similar stone or with a special sealing mixture in case of smaller damage. The outer surface of the walls to be cleaned (pressure-washing should be enough, soda wash or mechanical cleaning with a steel brush to be used on dirtier

places). Joints to be arranged, loose joint filling to be removed, empty joints to be filled with a low-cement lime mortar squared with the limestone façade.

3.14. The window bars on the first and second floor of the individual chamber building and the most external metal bars installed for the Olympics must be preserved on its place. Window frame between bars to be restored if possible or be replaced by a simple double wooden frame without a breakdown. The window bars on the third and fourth floor can be removed.

3.15. The rest of the window frames of the individual chamber building are depreciated, these need to be replaced with new double-framed wooden frames. 3rd and 4th floor windows with a pros breakdown, which created three vertical glass surfaces.

3.16. Wooden boxes can be recovered in front of the cell windows on the second floor of the individual chamber building, see ill. 67.

Ill. 67. Side façade of the individual chamber building 1940s, ERAF



3.17. Eastern end of the southern wing of the lunette

3.18. A wooden balcony with a prison function can be restored on the third floor of the lunette's northern façade on the side of the gorge courtyard, see ill 68.

Ill. 68. The northern façade of the lunette's eastern wing on the side of the gorge courtyard on the 1940s. The first floor niches and some windows have been bricked up. The under-arch passage of the salient part of the central façade is open, wooden balcony on the third floor. ERAF 17sm.9.105a



4. Roof and roof structure

4.1. Preserve and restore the roof structure of the individual chamber building and the eastern wing of the gorge according to their situation, severely damaged rafters and beams must be replaced with something closer to the original, individual damaged parts to be cut out or sealed through wood splicing. Emergency repairs of the roof structure must be removed and replaced with new details that follow the example of the old building parts. The existing roof slope must not be significantly changed.

4.2. Remove the depreciated roofing sheet and bitumen roll material from the roofs of the eastern wing of the gorge, eastern end of the lunette's southern wing and individual barrack building and replace with the new pre-painted hand-rolled zinc sheet. Rooftop gutter system to be used on the eaves. Preserve the half-round loft windows in the same place on the roof.

III. 69. The roof of the individual chamber building in 1940s.



4.3. The original chimney laces from the red bricks to be preserved and restored, plastered and painted white. Decayed or later repaired chimney laces to be restored as the originals.

4.4. The rooftops of the gorge half-towers to be finalised as low round forms, see ill. 70. Chimneys to be preserved on the roof.

III. 70. The roof of the gorge's half-tower in the 1940s.



- 4.5. The barbed wire barrier walls on the roof can be preserved in their location.
- 4.6. The destroyed parts of the eastern end of the lunette's southern wing roof structure to be replaced with new wooden material as close to the original as possible.

5. Interior

5.1. As a general principle, to preserve the existing lime plaster layers and their finishing layers to the maximum, and exhibit them as multi-layered as possible. This especially at the bottom of the wall, where the dado motif has been used through times. Avoid their extensive removal and replacement with the new ones. The zinc-white lime glue colour needs to be used to refresh the ceilings and top parts of the walls, lime plaster for the plaster repairs. Avoid using plaster with a high cement consistency.

5.2. As a general principle, it is recommended that in cells not marked as VDs to preserve a door, peephole, corner fillings, food bowl holder. If possible, but optional to preserve the toilet corner. Attached furniture is recommended to be left in its place, however, can be removed and placed in a new location in the building. Window frames to be replaced by new double frames. Preserve cell partitions and bricked-up walls. The walls of the cells can be delicately and mechanically cleaned from loose parts, so that different finishing layers could be exhibited. Stencil or roll paintings may appear. Cell floors to be cleaned by washing.

5.3. In rooms, where all the parts are required to be conserved (VD19 marking), the existing details must be preserved and exhibited in the same location (loose parts can be moved) without changing their appearance. Bricked-up openings left unchanged. Water can only be used to wash the floors, not the walls or the ceiling, other details can be cleaned with a dry mechanical cleaning method (brush, scalpel).

5.4. The finishing analysis must be carried out in the lower parts of the walls, the staircases are more important.

5.5. The channels of communication embedded in the walls can be used for new communications, old wires and pipes can be moved. Remove the sheet covering the bigger wiring harnesses, this can be covered with plaster or a new suitable metal case. The installation of the wires on the walls and ceilings of the room must be solved superficially by hiding the wire inside the metal tube.

5.6. Remove all piping related to central heating, existing bushings to be used for new pipes.

5.7. In case of the original doors, namely defence barracks original doors VD 21, all the initial iron details to be preserved (hinges, latches, box locks). If the doors have been marked as fully VD in front of the doors, then they must be conserved (both the original and later additions equally). If the initial door is a door of the restorable room or a casemate, it must

be restored with the lost parts following the historical example, later additions to be removed, finishing works should be guided by the results of the finishing analysis.

5.8. All the original details in the interiors must be preserved: cannon lifting hooks VD22, break loops VD23, embrasures, vaulted doorways.

5.9. Later metal doors, namely metal cell doors (it is very hard to distinguish doors from before and after war) must be preserved as best as possible on the 1st and 2nd sector of the gorge's second floor and 1st and 2nd sector on the first floor. Doors of the rooms VD16, VD19, VD17, VD18, VD20 must be conserved and preserved in the same location. Non-loose paint layers and pasted additions on the doors (such as tinfoil layers) to be preserved and conserved by over glazing with Brunox varnish.

5.10. Other room doors can be relocated or replaced by new ones if necessary.

5.11. Preserve slate plating and floor plating with cement plates, in case communications need to be taken through the floor and the plates can not be removed, a part of the floor must be cut open with a water cutter along the joint line, and after the communications have been put in place, the part must be put back in its initial location.

5.12. The original arc apertures between casemates can be opened (except the openings that connect with rooms that are marked with VD19). The apertures can be left open or closed with doors depending on the interior decor conception, whether with the contemporary solution (such as glass etc.) or double-sided wooden doors following the historical examples to be made, see ill.71.

III. 71. The front doors of the arc apertures between the gorge's casemates from 1866. EAA.79.2.215



Staircases.

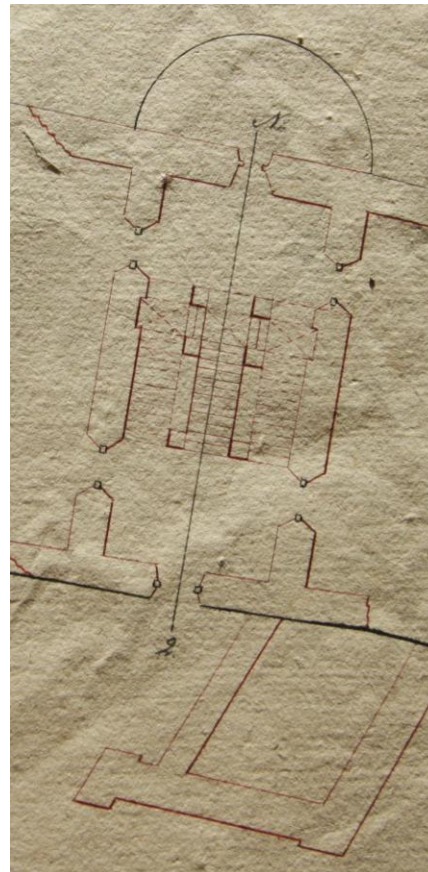
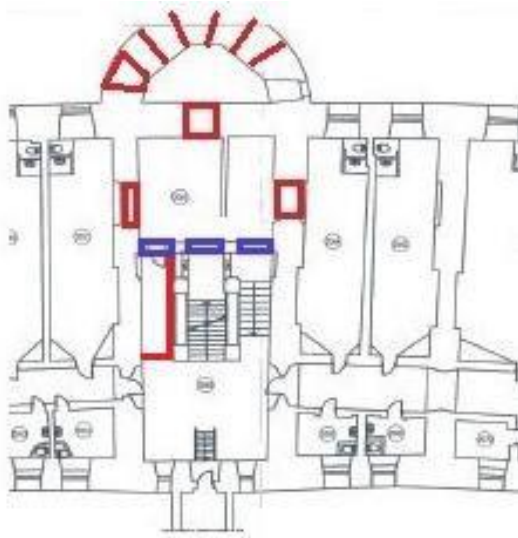
5.13. Preserve and restore the existing stair structure, limestone steps, metal barriers and handrails, slate plates of the floors.

5.14. The bricked-up round arched doorways of the initial casemates between compartments in the staircases and half-towers may be opened on each floor.

5.15. All the later partitions and gap fillings marked on the below places on the ill. 72 are allowed to be demolished in the staircases: wall parts marked with red have bricked-up openings. The wall parts that were originally opened are marked with blue, these were divided by a partition and the edge was bounded by a barrier. Example ill. 50 staircase sketch.

III. 72. Wall parts allowed to be opened in the staircases marked with red, the intermediate ceiling between open wall layers must be preserved in the part marked with blue.

III. 73. Eastern staircase layout plan from 1838. eaa.79.2.178



5.16. Preserve and restore stair fences with metal rods.

The central staircase

5.17. The original stairwell solution in the central staircase is advised to be recovered, which means that the western stair march will be reconstructed (demolish the intermediate ceiling in the original stair hole, limestone steps and barriers to be made following the existing wall examples).

5.18. All later partitions may be demolished on the first floor and the original stair hall to be restored.

5.19. Demolish stair-ward straight partition on the third floor, ill. 74.

III. 74. 3rd floor of the central staircase.



5.20. All the bars can be removed from the central staircase.

Eastern staircase

5.21. Preserve glazed tiles on the walls of the second floor (museum floor) of the eastern staircase, but remove from other parts, and exhibit the revealing finishing layers.

5.22. Preserve limestone plates on the stair hall floor.

5.23. Open bricked-up arc aperture on the second floor, ill 75. Do the same with the bricked-up stair side on the third floor.

Ill. 75. View from the 2nd floor stair hall, photo 251



5.24. The meshed cell can be preserved on the 3rd floor stair hall.

5.25. Preserve stair bars on the 1st and 2nd floor, can be removed from other places.

Gorge 1st floor sector 1

5.26. Limestone plates within the scope of VD31 to be preserved, because most if the plates are loose, they can be installed in the same sector on the same floor.

5.27. Fully preserve and conserve rooms VD35, VD34, VD33.

5.28. Open the embrasure on VD24, preserve the break loops on VD23 in their place.

Gorge 1st floor sector 2

5.29. Open arc apertures of the former casemates to the full size in the sidewalls of the compartment between the staircase and the half-tower.

5.30. Preserve and restore brick-vault-metal-beam between the 1st and 2nd floor of the half-tower.

5.31. Fully preserve and conserve rooms VD35. In the gym, preserve punching bags, hanging consoles of the boxing bags (2 pcs), wrestling mat on the concrete platform in their own place. Collect pieces of furniture with wooden carvings, mirrors, hooks, wall benches, shelves and ceiling-wall lamps in the front room of the sauna. The deck lining on the walls and ceilings has a severe fungal damage, it must be replaced with a copy as similar as possible. The pool and the steam room of the sauna in the half-tower must be preserved and conserved in their existing form.

Gorge 2nd floor sector 1

5.32. New prisoners' sorting area VD17. Maintain the inner planning and interiors unchanged. Contemporary details, such as sinks may be removed and replaced by older type exemplars. Plaster repairs may be done in places where the plaster is loose or there is no plaster. Clean the walls delicately mechanically from loose parts, except in storage (exhibit letters painted on the walls). Preserve shelves in the storage. Preserve the new prisoners' waiting cells conserved. Conserve the photographing platform, two prisoners' retention closets, darkroom table and wall closets in the photographing rooms VD18.

5.33. Fully preserve and conserve the cells VD19.

5.34. Fully preserve and conserve prisoners' wash room VD20 with the original door VD21. Embrasures can not be opened there.

5.35. The prisoners' toilet in the half-tower needs additional analysis, because there was no access. It may be assumed, that it is worth to retain its interior in the sense of the museum, bring suitable details from other half-towers, if necessary (toilet pots, wash benches, wash basins).

5.36. Preserve and conserve the barred walls in the corridor VD 13, glazed with Brunox varnish, if necessary. Keep the hinged mirror on the barred wall. Preserve two metal doors in addition to the mesh in the room 226, stone walls may be demolished.

Gorge 2nd floor sector 2

5.37. Fully preserve and conserve cell VD19.

5.38. Maintain and conserve barred wall VD13 in its place.

5.39. Fully preserve and conserve individual cell VD16.

5.40. All the room partitions on the courtyard façade side corridor may be demolished. Doors to be collected and stored in a safe place, to use them in places with missing doors or to implement other spatial solutions (for example external installations, etc.).

5.41. Maintain the concrete board on the corridor floors. Clean by washing with water. Preserve the broken plates and joint the cracks if necessary.

Gorge 3rd floor sector 1

- 5.42. Preserve and restore the original details in the three triangular casemates at the curved end of the gorge, restore embrasures as openings, open smoke channels.
- 5.43. All the partitions, bars and doors built in the 20th century may be demolished. Details preserved in the cells can be used in other necessary places in the building.
- 5.44. It is recommended to restore the arc apertures between the casemates.
- 5.45. Maintain the cannon ceiling hooks VD23 in their place.
- 5.46. Preserve the furnace VD25 in its place.
- 5.47. The interiors of the half-tower and the compartment may be cleaned from the soviet time layers, gun ports to be opened and glassed.

Gorge 3rd floor sector 2

- 5.48. Collect cell doors and preserved details from the cells and reuse in the necessary places in the building.
- 5.49. All the partitions, bars and doors built in the 20th century may be demolished.
- 5.50. It is recommended to restore the arc apertures between the casemates.
- 5.51. Repair wall damages with the similar material to the original wall, low-concrete content mortar to be used. Finish with a new lime plaster and lime glue paint. Unpaved masonry can optionally be exhibited.
- 5.52. The interiors of the half-tower and the compartment may be cleaned from the soviet time layers, gun ports to be opened and glassed.

Building of the individual chambers

- 5.53. Preserve and restore staircase VD27 extending between 1st to 4th floor. Limestone steps to be cleaned by washing (soda spray can be used to remove the greater dirt), if necessary, seal with a special sealing mixture.
- 5.54. Clean the stairs from paint, restore twisted or missing parts following the original, and repaint. The handrail of the fence to be painted with an oil paint.
- 5.55. Glazed tile plates can be removed from the staircase walls, however, it could be exhibited as an example on the first and second floor part of the museum. Walls to be mechanically cleaned highlighting different finishing layers (especially in the dado part).
- 5.56. Conserve the plaster surface of the top part of the first and second floor walls, ceilings and under the stairs. Places where plaster has come off from a large surface, re-cover with lime plaster, smooth surface finish, follow examples of the oldest layers of the finishing layers when finishing with the lime glue paint.
- 5.57. The top part of the walls, ceilings and under the stairs to be whitened with lime glue paint on all the floors.

5.58. Preserve the plating on the area between the stairs and clean by washing. Plates should not be picked up. Levelling cast mould to be made out of concrete over the broken tiles or just fill the cracks and joints. The floor must remain as authentic as possible.

Building of the individual chambers 1st floor

5.59. The central corridor and cells VD28 to be preserved and conserved in a comprehensive manner to the maximum authenticity.

Building of the individual chambers 2nd floor

5.60. The central corridor and cells VD28 to be preserved and conserved in a comprehensive manner to the maximum authenticity.

5.61. Preserve the staircase-bound door sign '2nd floor' on the second floor and the barred guard's window.

Building of the individual chambers 3rd floor

5.62. Small room door of the staircase VD26, leafs, jambs and fence boards to be preserved and restored at their location.

5.63. The original strap-hinged doors VD21 photo 369 VD21 to be preserved and restored, can be placed in a suitable place in the building.

5.64. All the partitions can be demolished, finishing layers removed.

5.65. Cell doors and cell furnishings to be gathered together and recycled in the other parts of the building.

Building of the individual chambers 4th floor

5.66. The original strap-hinged doors VD21 to be preserved and restored, can be placed in a suitable place in the building.

5.67. Small room door of the staircase VD26, leafs, jambs and fence boards to be preserved and restored at their location.

5.68. All the partitions can be demolished, finishing layers removed.

5.69. Cell doors and cell furnishings to be gathered together and recycled in the other parts of the building.

Eastern end of the lunette's southern wing

5.70. Lunette staircase 1 VD 30 to be preserved in its location, steps to be cleaned, metal barrier to be cleaned and repainted. The broken parts of the handrail to be restored close to the original.

5.71. Lunette staircase 2 VD 39 to be preserved in its locations, steps to be cleaned, the barrier and handrail to be cleaned from the paint, plaster repairs to be made and repainted. Preserve the metal grill in its location on the top part of the staircase, to be cleaned and repainted.

5.72. Glazed tiles on the walls of the lunette staircase 1 and 2 can be removed (some parts can be exhibited as examples), mechanically clean the wall, exhibit older

appearing lime plaster formations.

5.73. Doors between the lunette and the gorge can be re-opened on all the floors.

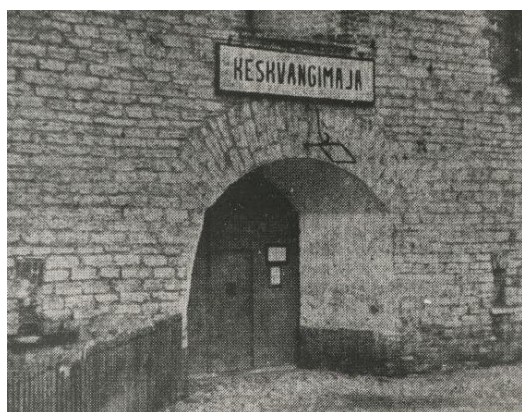
Eastern end of the south wing of the lunette 1st floor

5.74. Prisoners' visitor room VD40 must be preserved and conserved in the current form and location, including the partition, which has both the prisoners' and the visitors' boxes, lights in the ceilings, which are separated by the grilles and double-doors with a decorative metal grille in the same wall.

5.75. Exhibit gun ports in the walls if the under-arched passage is restored. Display limestone on the walls-ceilings, which is not plastered. The exterior walls of the bricked- up under-arch passage can be demolished and replaced with traditional double-sided wooden doors or prison-type welded doors (one side may have a small gate door, see ill. 76, 77, 78). A profiled boarding for the exterior finishing of the wooden doors, linen oil paint for the finish. Hinges on the under-arch passage walls must be used by the gates.

III. 76. The main door of the prison in the façade of the eastern end of the southern wing of the lunette, former under-arch passage, ca 1930s. ERAF 2.2.3016.1

III. 77. Same 1940s, from the outside. ERAF 17. sm.9.105a



III. 78. Same in 1940s, from the inside. eraf 17. sm.9.105a



5.76. Later silicate-bricked etc. partitions can be demolished.

Eastern end of the south wing of the lunette 2nd floor

5.77. Lunette staircase 1 remove glazed tiles from the walls of the stair hall room, expose older lime plaster layers. Plaster in bad shape can be removed and replaced with a new lime plaster and finish with whitewash.

5.78. Later silicate-bricked etc. partitions can be demolished, refresh the wall plaster.

5.79. Maintain and clean concrete floor tiling and if necessary, joint.

Eastern end of the south wing of the lunette 3rd floor

5.80. Partitions that have not been built from limestone can be demolished.

6. The courtyard of the gorge

6.1. Preserve the stones from the cobblestone pavement in the inner courtyard that is bound with the lunette wings of the gorge. F (marked 9. Layout plan) and reuse them as inner courtyard surface coating. Take the lead or inspiration from ill. 79 historical pavement: small cobblestones inclined outwards on the façade, pathway of rectangular limestone tiles, cobblestone pavement.

Ill. 79. The gorge courtyard in 1940s. eraf 17. sm.9.105a



6.2. Two rainwater drainage stones cut out from the granite stone VD36 in front of the courtyard façade of the gorge need to be preserved and reused in the same function near the same site.

7. Courtyard buildings

7.1. Preserve and architecturally conserve the prisoners' walking complex in the courtyard A (hereinafter all the yard structures are marked 9. Layout plan)

7.2. Barred outdoor corridor B.

7.3. Preserve and conserve dog kennels in the courtyard C.

7.4. Preserve and conserve the guard tower in the courtyard D.

7.5. Preserve and conserve enclosure walls in the courtyard E in the area indicated in red. Preserve metal gates and the pedestrian gate out of the gates. Preserve the barbed wire carries and barbed wire, floodlights, lights on top of the wall.

8. New extensions

8.1. It is not allowed to add new extension or rebuilds to the gorge building, eastern part of the lunette's south wing and to the building of the individual chambers.

2. Layout and inventory plan (with photo directions) in PDF file format