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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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2. On page 11, paragraph 6, the words Otdel and Tsekh have been correctly transliterated, but they are incorrectly written in the Cyrillic alphabet on the diagram of the pass.

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STATE	#X	ARMY	#X	NAVY	#X	AIR	#X	FBI		AEC					

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REPORT

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SUPPLEMENT TO REPORT NO. 50X1-HUM

THIS IS UNEVALUATED INFORMATION

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SITE LAYOUT

1. 50X1-HUM the following points on layout sketch of State Research Plant 2, known as Zavod 2, in Upralvencheskiy, Kuybyshev, USSR (see page 13). 50X1-HUM All of the buildings and sheds were well-supplied with fire extinguishers, and each building had a fire watch guard and a fire alarm box which was activated by breaking the glass and pushing a button inside the box. Most of the buildings had supplies of water and sand on their roofs for use in case of fire, and several of the buildings had fire towers on top of their roofs. The Soviets were very fire conscious, and their fire prevention regulations were rigidly observed.

Point 1 Large Workshop Hall

This hall had concrete foundations, brick walls, and a curved steel girder roof which was covered with wood. The hall was 300-350 m. long x 80-100 m. wide x 7 m. high, and 12 m. to the top of its curved roof. It was said that this hall had been built in 1937-39 by technicians 50X1-HUM as a research plant for hydro-technical problems in connec-

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tion with the building of a power plant which was to have been located on the Volga near Krasnaya Glinka. When World War II came and plans for building the power plant were abandoned, the large workshop hall was used for manufacturing weapons. Water tanks used for hydro-technical experiments were still in the basement, but they had been covered over with concrete. The hall was heated by warm air blowers which were fed by the central heating plant (Point 2). There was a fire watch tower on the roof of this building. In this building were located the Sheet Metal Shop, which had previously included Workshop 3, the Manufacturing Workshops 1-A and 1-B, the Tool Making Workshop 4, and the Small Parts Manufacturing Workshop 6. Along the walls around these shops were glass partitioned offices which were used by various workshops and departments.

Point 1-a Lateral Wing of Workshop Hall

This portion of the large hall was two stories high and made of brick. It had a slanting wooden roof covered with tarpaper. The Sheet Metal Workshop 2 was on the ground floor. On the second floor were the offices of the Planning Department, Deadlines Section, Technology Section, Jig Design Department, Archives, Chief Engineer, Chief Electrician, and Chief Mechanic.

Point 1-b Workshop Hall Extensions

The physical description of this extension is the same as for Point 1-a above. On the ground floor of the eastern part were the smithy which was part of Workshop 3, office space for the Safety Engineer, rooms for the Telephone Section, and the Cashier's office. On the second floor was the office space for the Finance Section, the Administrative Section, and the Statistics Section. On the ground floor of the western part was the heat treating part of Workshop 3, including several electric ovens. On the second floor was the office space for the Plant Director and his staff, the Administrative Director, the Welfare Inspector, and the Shipping and Purchasing Department.

Point 1-c West Wing of Large Workshop Hall

This wing was of brick, two stories high, 35 m. long x 25 m. wide. It contained one large hall which was two stories high. The hall contained the office space and small apparatus test stands of Department 23. Several of the small apparatus test stands projected outside the walls of the building.

[redacted] 50X1

Point 1-d East Wing of Large Workshop Hall

Until summer 1953, the Carpentry and Paint Workshops were located on the ground floor. In summer 1953, the Carpentry Workshop was moved, and ovens for the Electroplating Workshop were moved in. Parts of Workshop 3, such as the acid ovens, solution tanks, etc., were located on the second floor.

Point 1-e Sand Blasting Shed

This was a small brick shed containing the sand blasting part of Workshop 3.

Point 1-f Hydraulic Press Shed

In 1953, a small brick shed connecting Points 1-e and 1-b was built. A hydraulic press was installed which [redacted] was used for manufacturing turbine blades. 50X1-HUM

Point 1-g Air Compressor Shed

A small brick shed was built onto the east wing of the large workshop hall (Point 1-d). The shed contained a diesel motor driven air compressor which supplied the entire zavod with compressed air. The pressure supplied was always 2-3 atms. (excess). Outside this shed were two compressed air tanks, each with 20,000-30,000 liters capacity.

Point 2 Central Heating Plant

The heating plant was a brick building, 10 m. high x 20 m. long x 25 m. wide, with an iron chimney 20 m. high. This plant was operated with coal and heated all the buildings of the zavod. The insulated pipes carrying the steam heat were laid directly in the ground for the older buildings and in concrete channels for the newer buildings.

Point 3 Assembly Hall Building

This building was made of plastered brick with a tarpaper roof. It was 40 m. long x 20 m. wide x 10 and 12 m. high. The middle portion of the building was the engine assembly hall 10 m. high. The ground floor of the two end wings was also part of this assembly hall. There was an overhead traveling crane in this assembly hall. On the second floors of the end wings, which were 12 m. high, were storage rooms for parts and various offices. In summer 1953, an annex was built onto the north side of this building.

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This building was a restricted area and a special stamp on the worker's pass was required for admittance.

Point 4 Material Storage Point

This building was a wooden shed, 30 m. long x 10 m. wide x 5 m. high. It was used as a storage point for engine materials. It had a loading ramp leading up to it, so that trucks could easily unload. It was well-constructed and had a slanted roof made of wood and tarpaper.

Point 5 Scrap Area

This was an area 40 m. wide x 50 m. long, surrounded by a 2 m. high board fence. There was a crane in this area. The scrap consisted of old metal lying around the plant from previous work.

Point 6. Electrical Workshop Building

This was a small wooden house 15 m. long x 20 m. wide x 3 m. high with a wooden shingle roof. It contained Electrical Workshop 33 which had armature winding machines, lathes, electrical test machines, etc. The house also contained several offices.

Point 7 Transportation Department, Fire Department, and Medical Offices

This small house had the same dimensions as the electrical workshop building (Point 6). It had a partition in the middle. On one side were located the Transportation and Fire Departments. On the other side was located the zavod's Medical Office, which contained a first aid room, a waiting room, the dentist's office, and the doctor's office.

Point 8 Storage Sheds

These three small sheds for material storage were 20 m. long x 10 m. wide x 2.5 m. high. They were made of wood with slanted tarpaper roofs. Light metals, plexiglass, rubber, steel, etc. were stored here. One shed held an office.

Point 9 Department 17

This was a two-story, white plastered brick building with a tarpaper roof which housed Department 17 - Materials Testing and Laboratories. It was 40 m. long x 20 m. wide x 10 m. high. It contained several workshops with materials testing machines, such as bending machines and pulling machines, plus regular workshops with lathes, milling

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machines, etc. The building also contained an organic chemistry laboratory, an inorganic chemistry laboratory, a thermo-electricity laboratory, and office space for the engineers. There was a storeroom in the cellar and a fire watchtower was located on the roof.

Point 10 Zavod Entrance and Guard House

The main entrance to the zavod was through a wooden house, 10 m. long x 3 m. wide x 2.5 m. high, with a slanted tar-paper roof. The building was in three parts. The west side was an office for the watch officer of the day, a weapons storage point, and a guard room. The east side housed the regular guard commandant and zavod pass issuing office. The middle of the building was divided into two channels through which the workers entered the zavod area. Between the two channels there was a small island, from which the passes were given out. The recipient then showed this pass to the guard at the end of the channel and was permitted to enter the zavod. At the end of the day, passes were also surrendered at this point.

Point 11 Acetylene Gas Generating Plant

This was a small brick building, 12 m. long x 6 m. wide x 3 m. high with an iron plate roof. This building housed a large acetylene gas generator. Pipes fed the gas under pressure to the various shops and test stands of the zavod.

Point 12 Storage Sheds

These were two or three small wooden sheds which were used to store steel plates and scrap metal. One of the sheds had a press machine to press the scraps together. The surrounding area (up to Point 13) was enclosed by a simple two or three strand wire fence and contained scrap heaps.

Point 13 Curved Wooden Building

This building had a log frame, covered with boards. It had a rounded wooden roof, with overlapping rounded shingles. It was 100-120 m. long x 35 m. wide x 3 m. high at the sides and 6 m. high in the middle. Along the lengths of both walls were glass partitioned offices for the Technology Department, offices for the OTK, a storeroom, a spare parts room, and a day room for the workers. About two-thirds of the main body of the hall was occupied by Workshop 5 with lathes, milling machines, etc. The remaining one-third was occupied by the welding machines of Workshop 2. A large hydraulic heat press, used for forming various engine parts, was also located in this building.

Point 20 Water Pumping Station

The water pumping station was a one story brick building, 20 m. long x 8 m. wide x 3 m. high, with a flat tarpaper roof. It was completed in summer 1953. It contained electrical pumps which pumped the water coming from the water brakes up to the cooling tower (Point 20a). The pumping station had not been put into operation prior to [redacted] June 1953. This station and the water cooling tower (Point 20a) were built by forced laborers. The entire area was surrounded by a board fence. 50X1-HUM

Point 20a Water Cooling Tower

The water cooling tower was made of logs, about 25 m. long x 10 m. wide x 18 m. high. It was built at the same time as the pumping station (Point 20). The water was pumped to the top of the tower, from which it trickled down and was collected in a basin at the base of the tower. Between the water pumping station and the cooling tower (Points 20 and 20a), there was a water storage basin, 12 m. long x 12 m. wide x 5-8 m. deep.

Point 21 Temporary Tanking Station

This temporary tanking station supplied the test stands. It had two 20,000 liter tanks for kerosene. It also had three pumps, two in operation and one in reserve, which were located above the earth. This area was not fenced in. [redacted] no protective earthworks around the tanks; however, red buckets, axes, and water and sand containers were on hand. The area was well-illuminated at night. 50X1-HUM

Point 22 Test Stand Building (Korpus 22)

This building, which was called Korpus 22 and which contained permanent Test Stands 1-4, was finished in summer 1951. Test Stands 1 and 2 were also finished at this time. Test Stand 3 was finished at the beginning of 1952, and Test Stand 4 was finished in May-June 1953. This building was a restricted area.

Point 23 Test Stand Building

This building, which held Test Stands 5 and 6, was made of concrete and brick with a slanted concrete roof. The walls were 600-700mm. thick, and the foundations were of extremely heavy construction. The building was roughly finished and Test Stand 5 was in operation in fall 1952; Test Stand 6

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was in operation in fall 1953. Pipes, cables, etc. were laid in an underground shaft. Parallel to this shaft was a tunnel for personnel which led to Korpus 22 (Point 22). The main difference between this building and Korpus 22 was that here the gas exhaust channels were laid parallel to the earth, while in Korpus 22 the exhaust gas channels were led up into the air, thus also causing more vibration. This building also was of much more massive construction. In it were a small assembly room with a propellor-balancing bench, personnel offices, and measuring cabins. It was a restricted area.

Point 24 <u>New Tanking Station</u>

The new tanking station was started in the fall of 1952. It was almost finished in summer 1953, and it probably was completed by fall 1953. The pumping building, built of brick, was 6-8 m. high, had a frontal length of 14-16 m., and had a radius in the rounded section of 15 m. It was recessed 1.5-2 m. in the ground. The building held at least 12 electric pumps; the type was unknown The circular wall consisted of a solid bank of windows. In the earth opposite these windows were imbedded five of six tanks; however, excavations had been made for additional tanks. Each tank had approximately a 50,000 liter capacity. From the center of the top of each tank, two or three pipes went to the side, down the side, along the ground where they were later covered with earth, and to the corresponding pump within the pumping building. If the tanks have been covered over with earth for fire protection or concealment they would project perhaps one-half meter above the earth. The pumping station was located on a gradual slope, below the level of the test stand buildings. Underground pipes led from the pumping station to the test stand buildings (Points 22 and 23). The pumping station was to replace the older two pumping stations (Points 17 and 21). A group from Bezymyanka did the construction work on the test stand building and the new tanking station (Points 23 and 24). Source is positive that the construction people had some connection with the Bezymyanka plant, although most of them lived in Kuybyshev. The construction group was made up of Soviet Army engineers and civilian workers. A road was also built leading directly to the pumping station; previously, tank cars had only been able to drive as far as the kerosene storage point (Point 17).

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Point 25 <u>High Tension Lines</u>

The high tension lines ran from the lines connecting Kras-

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naya Glinka and Kuybyshev to the transformer station (Point 19). They were carried by 14-15 ft. high wooden towers.

Point 26 Housing Area

This was a housing area called Quarter 2 which was made up mostly of wooden block houses. It was occupied primarily by workers from Zavod 2.

Point 27 Club Building

This two-story wooden building, 18 m. long x 20 m. wide x 14 m. high, was located opposite the entrance to the plant. It had a wooden shingle saddle roof. It contained a club room, a movie room, and a library.

Point 28 Watch Towers and Guard Houses

The watch towers were 4-5 m. high and were occupied by one guard at a time. (The towers have been accurately pinpointed on the sketch on page 13 and are indicated by boxes with diagonal lines through them.) They were all equipped with searchlights and telephones for communicating with each other as well as with the guard house at the main entrance (Point 10). The guard houses (indicated by boxes with crossed lines on page 13) were small wooden sheds which served the same general purpose as the towers; however, they guarded restricted sections within the zavod area.

Point 29 Board Fence

This fence was 3.5-4 m. high and surrounded the plant area. Three or four strands of barbed wire, directed outwards, were atop the fence, which was of boards. Directly inside the fence was a 3 m. wide strip of sand, which in turn was followed by a three or four strand wire fence. The sand strip was checked each morning and evening by the guard officer of the day for footprints and similar markings. Lights on poles inside the plant area illuminated the fence after dark.

SECURITY MEASURES

Physical Security and Entrance Procedures

1. The plant was surrounded by a high board fence (Point 29). There were three entrances (indicated by A, B, and C on page 13). A was the main personnel entrance (Point 10). B was the vehicle entrance but also was used for personnel during rush hours. C was used as a temporary entrance,

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for vehicles only, while construction in the new test stand areas (Points 22 and 23) was going on.

3. Personnel, upon reporting at the plant, told their pass numbers to the guard at the main entrance. The guard, after checking the person against his photograph, issued the pass. The person then proceeded into the zavod proper, after showing the pass to a guard just as he entered. On many occasions, the specialists exchanged passes to see if the guards were really alert. They found that the guards usually were alert and noticed the discrepancies. The passes had to be shown to guards again when a worker entered a restricted area such as the test stand area, the OKB building, and Workshop 1. In addition to the usual restricted areas, any area could be declared restricted if a State Test was to be run in it.

4. When the workers arrived at their specific offices and workshops, the passes were dropped into a box for that purpose located at the door. The time and attendance people closed the box and took it away at working time so that it was immediately apparent who was late or missing.

Passes

5. Passes at the plant were the same in format for all workers. The passes were reissued each year, usually in January or February, and all workers were photographed each year for this purpose. Visitors to the plant had to report to the pass issue office (Point 10), where a temporary pass was issued.

6. The pass itself was paper glued into a calico folder. The pass had the words Otdel (Section) and Tsekh (Workshop) and blank lines printed on it; all other data were written in ink. The pass picture was printed so that one corner was left blank, over which a stamp was affixed.

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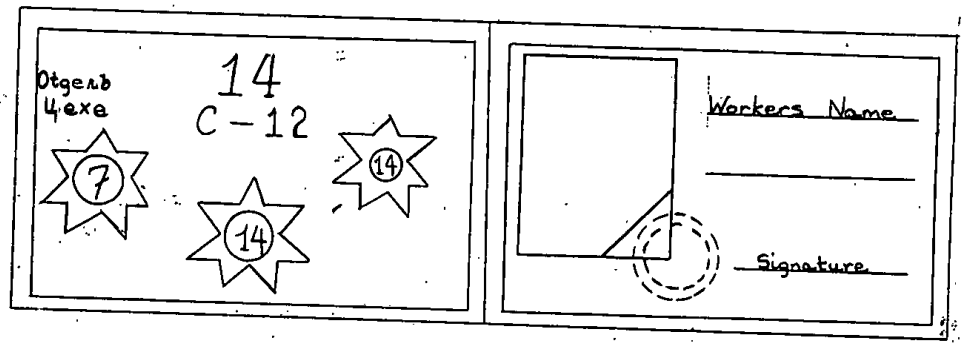
The size shown, however, is approximately accurate.



7. In order to gain admittance to a restricted area, a special stamp was needed in the pass. This was usually a circled number which had no relation to the respective section number and which was changed from year to year. A workman working in a certain restricted section would have the number valid for that section stamped twice on his pass. If he occasionally had business in another restricted section, he had the number valid for that section stamped only once on his pass. However, when visiting the second restricted section, an additional paper was needed to supplement the stamp. This pass system for restricted areas was introduced during the beginning of 1953. For those workers who had to work during evening or unusual hours, a list of names was provided the guards, or another special stamp with a signature across it was necessary.

Guards

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8. [redacted] estimated [redacted] number of guards employed at the plant to be 80-100 persons, equally divided between men and women. The guards had no special uniforms. They were armed for the most part with carbines. The hours of guard duty varied according to the time of the year and the weather. In the wintertime, for example, a guard would have an outdoor post for one hour, whereas in the summer he would have the same post four to six hours. The guards seemed to be on duty for 24 hour periods, during which time they alternated between indoor and outdoor posts and rest periods. 50X1-HUM

[redacted] **Comments** 50X1-HUM

[redacted]

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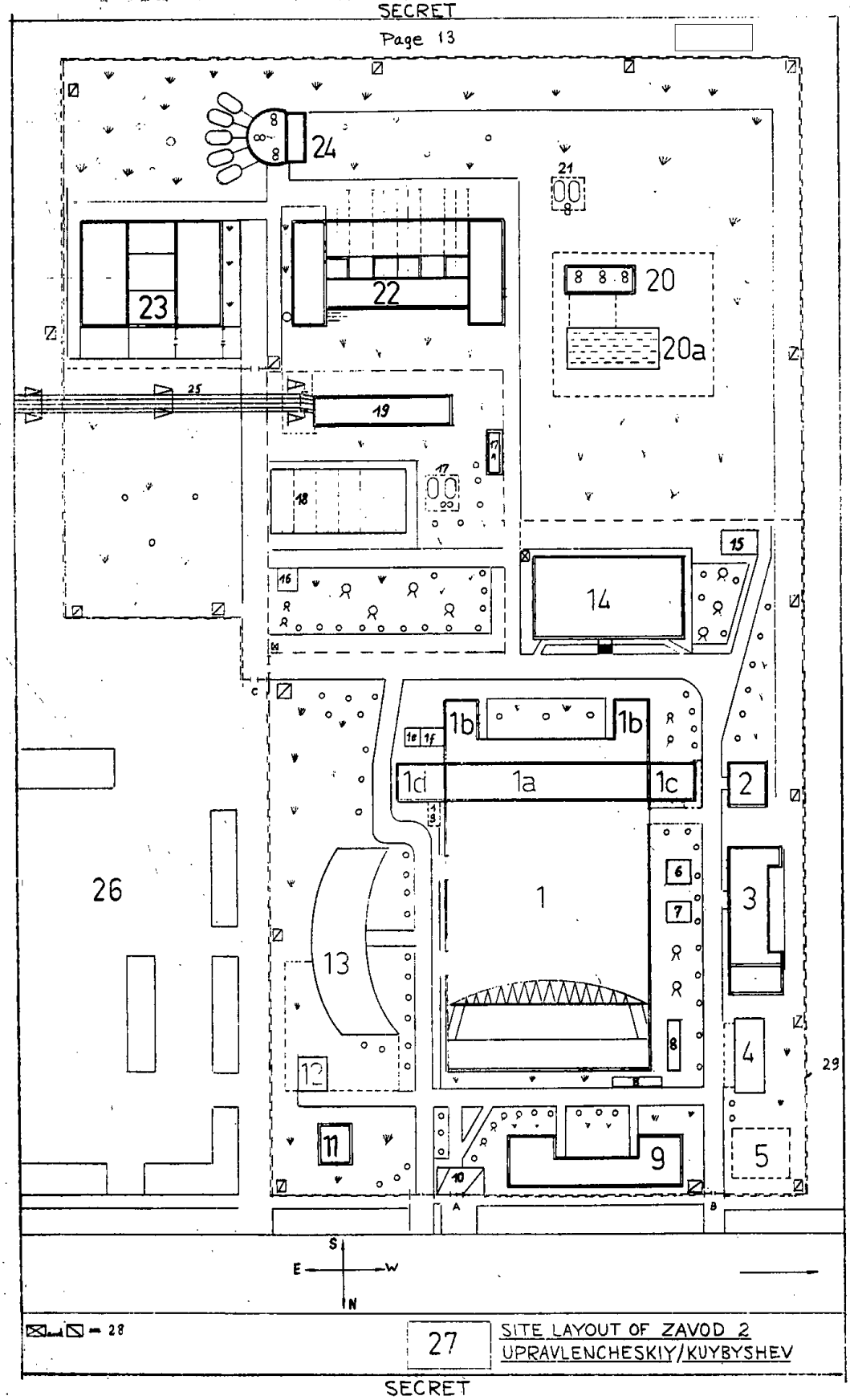

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