

PROBLEMS OF CULTURAL MONUMENTS' PRESERVATION CONNECTED WITH THE CONSTRUCTION OF THE SOFIA UNDERGROUND

Having gone through the vicissitudes of its millennial history, Sofia today is a modern city. After the socialist revolution in 1944, it developed by leaps and bounds and passed into the group of cities whose population exceeds one million. The general planning of Sofia for the nearest future suggests fundamental changes in all the systems. The reconstruction and urbanisation in the city's centre result in a number of complex problems including the organisation of pedestrian zones and public transport within these¹.

Here we shall dwell on some town-planning and architectural problems in the central zone of the

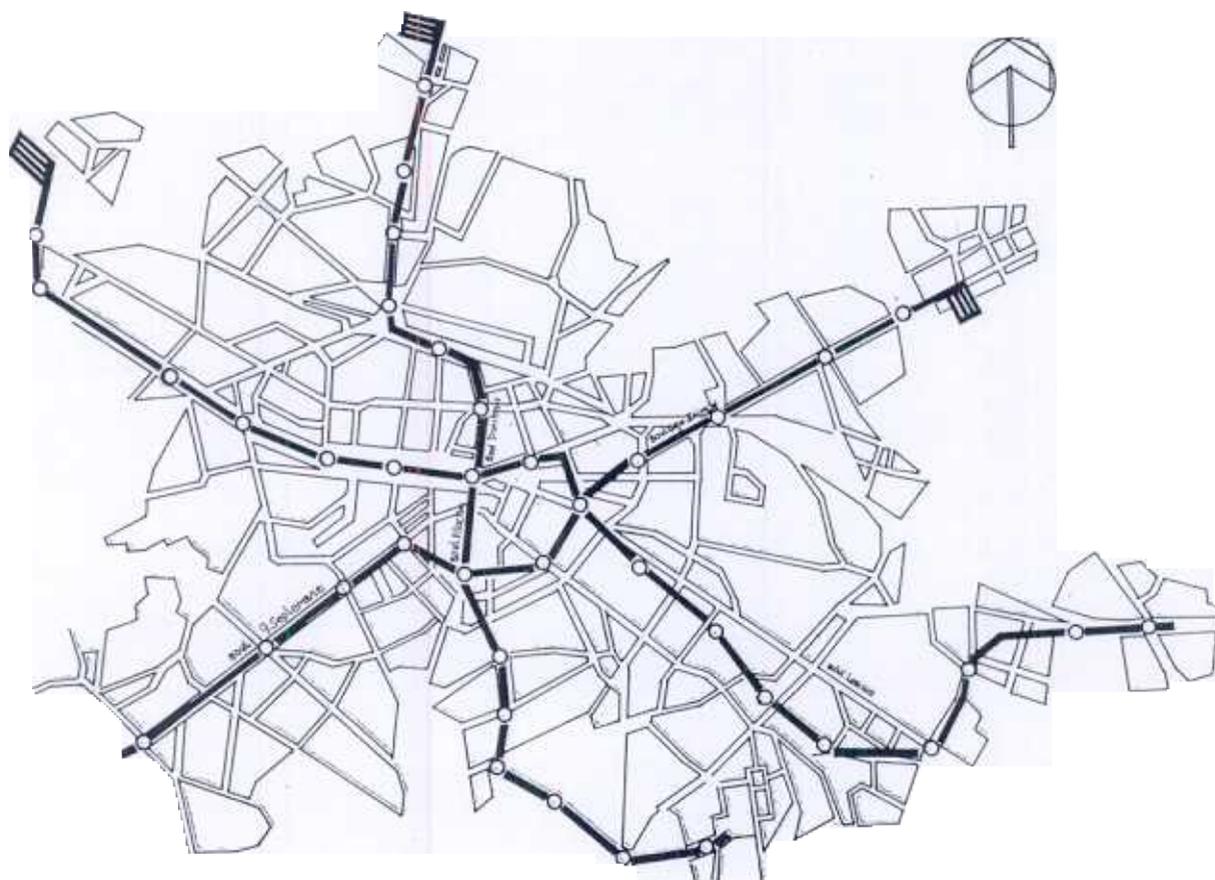
city, more specifically in the Serdica archaeological reserve when the underground of Sofia passes under it.

The plan is to build three lines which will cross the city in three directions:

northwest-southeast: Lyulin housing estate — Lenin Square — the University — Drouzhba housing estate.

north-south: Ilientsi neighbourhood — Central Railway Station — Lenin Square — Blvd. Vitosha — Baba Nedelya Square — Mladost housing estate.

southwest-northeast: Knyazhevo neighbour-



Sofia Underground — general plan

hood — Baba Nedelya Square — the University—village of Vrazhdebna.

The three lines will intersect on different levels to form three interchange stations in the central part of the town.

The building of the underground is an extremely complex task from the point of view of communication, technical equipment and integration with the urban environment.

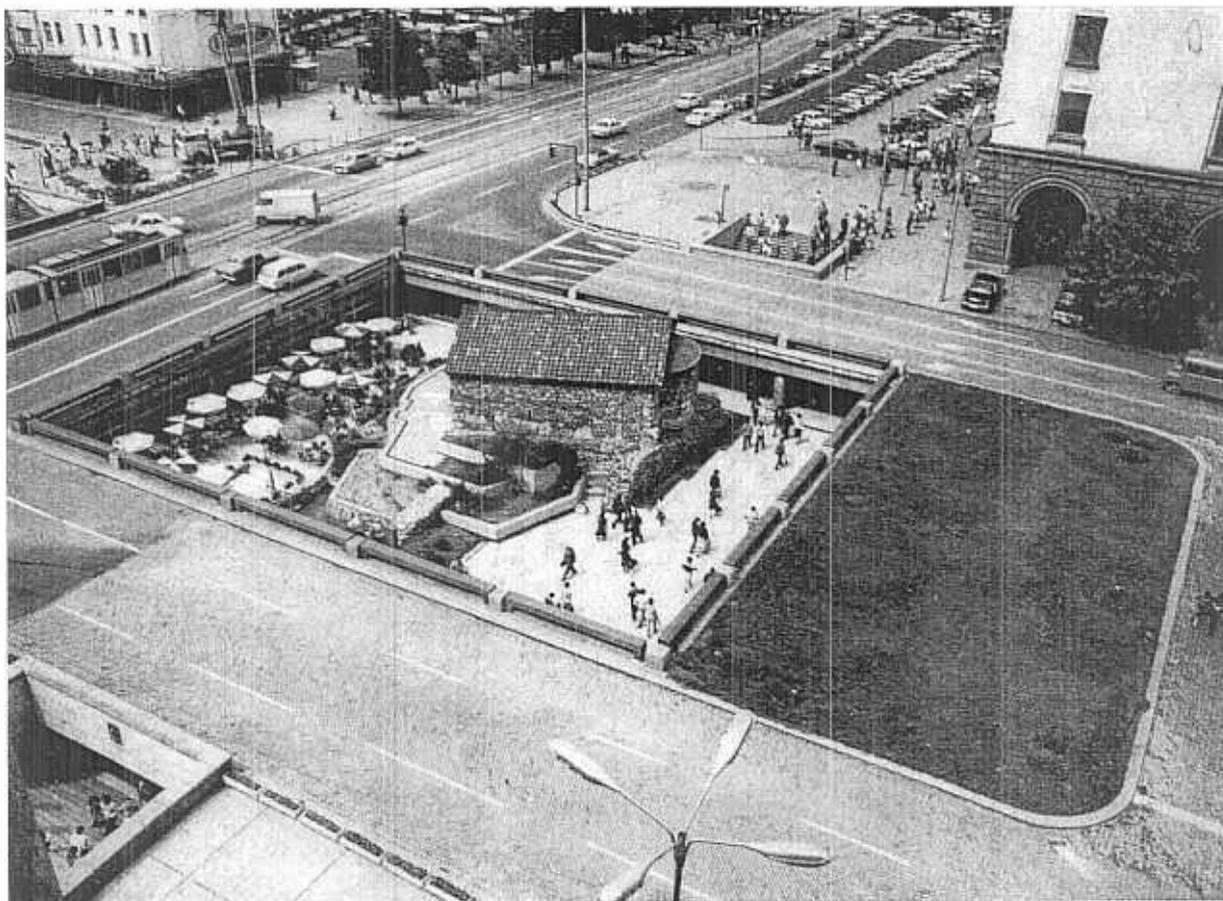
The abundance of cultural archaeological monuments in the city's centre complicate the design and construction of the underground. At the same time they provide great opportunities to build an urban infrastructure in which cultural heritage will find its due place in organising the underground urban spaces.

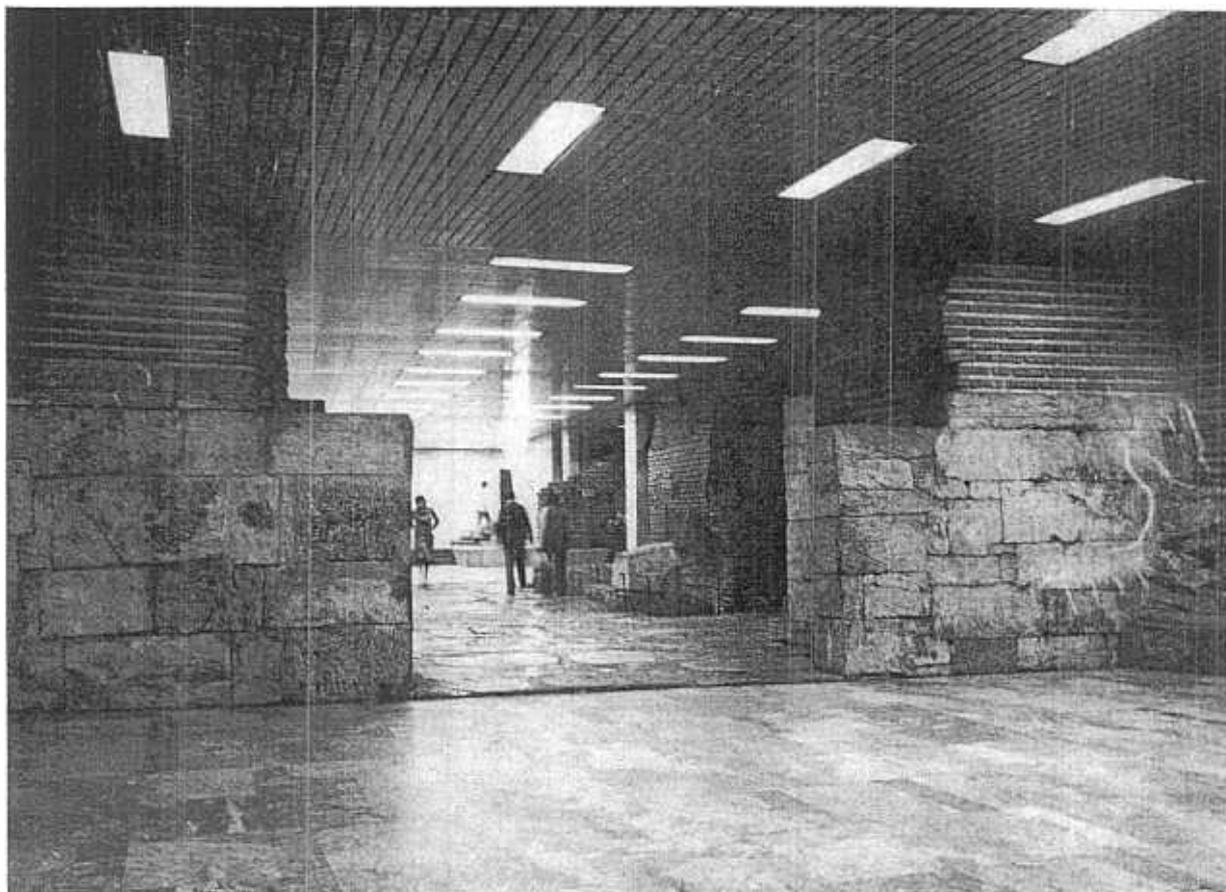
Various instances of archaeological excavations show that in the course of its long existence Sofia has been built on remnants of ancient Serdica and of mediaeval Sredets. Until 1944 it was unthinkable

to conduct thorough research and to present these valuable monuments and to get thus a clearer idea of what our predecessors' ancient culture was.

Mending the damage caused by World War II and reconstruction of the city centre in 1949 provided opportunities for serious archaeological research along with new building activities. Naturally, conditions for work immediately after the war were not favourable for comprehensive investigation and conservation the way they are today. Thanks to the great efforts of the bodies responsible for the protection of cultural monuments at that stage of building in the centre of Sofia, valuable archaeological specimens have been preserved like the ancient complex in the courtyard of hotel Balkan, the triangular defensive tower of Serdica's fortress wall in the basement of Sofia Shop, the Roman bath in the basement of the Central Supermarket, the ancient building in the basement of Corecom at Tsar Kaloyan Street, etc.

2. The church Sveta Petka Samardjiiska (St. Petka of the Saddlers) conserved and integrated in the architecture of the subway in front of the Central Department Store





3. The east city gateway of the Serdica fortress is preserved and presented in the subway in front of the Party House

Here we should mention the preservation and conservation of the east city gate of the Serdica fortress, the church St. Petka of the Saddlers and their skilful incorporation into the new architectural background of the two pedestrian subways in front of the Central Department Store and the Party House.

The things done so far are promising and prompt many ideas for the future revelation and conservation of the ruins of ancient Serdica beneath the surface and in compliance with the new urban requirements for the centre of a modern city.

Along with the design of the underground, building methods are being worked out for the archaeological reserve zone with the purpose to keep, conserve and adapt the discovered monuments of culture to the new buildings. In this connection a map was prepared to show the condition of the cultural architectural monuments in the city centre. The map contains all archaeological monuments known

so far in the zone of the preservation area. Some discoveries that might come in the future are marked on this map.

The town's fortress wall with its significant survivals the east and west gates, triangular and round defensive towers and other facilities plus the above mentioned archaeological objects together with a big ancient public building situated beneath St. Nedelya Church are all of special interest.

Investigation so far leads one to expect new finds in the eastern part of the Largo from the Party House to Lenin Square and in the continuation of the Largo to the west.

It is the perimetre of Via principalis — decumanus between the already discovered east and west gates. Discoveries can be expected along Blvd. G. Dimitrov, from Lenin Square to Tsar Simeon Street where the north gate is.

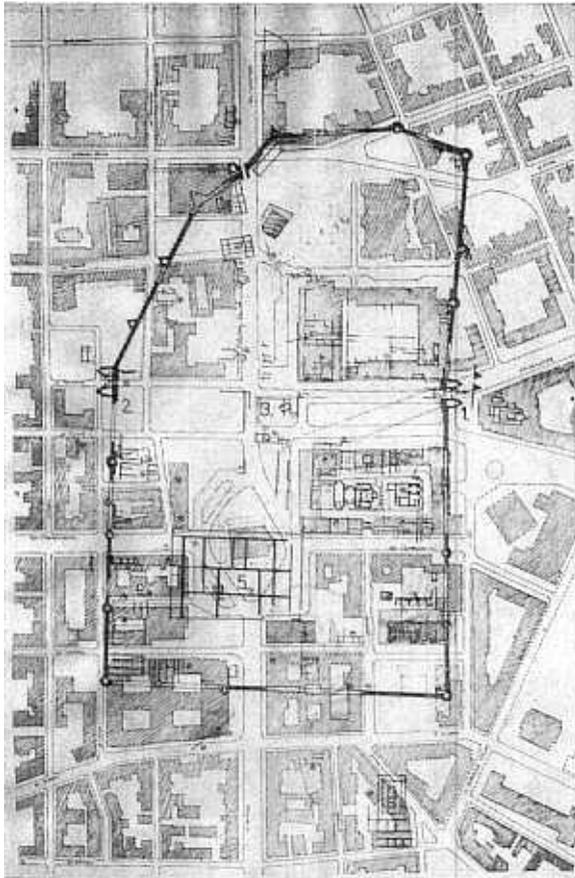
Such archaeological facts made necessary to work out two different solutions for the underground in

the centre suggesting, in principle, to treat these cultural monuments in two ways. The first option was to build the underground away from the archaeological reserve and to keep the archaeological finds for future discoveries; the second option suggested that the two lines should intersect on Lenin Square (beneath the archaeological reserve) and use the construction of the underground for obtaining archaeological data and for setting up an underground pedestrian zone with an archaeological exposition.

After discussion of the prepared projects and preliminary coordination with the Committee for Culture, it was decided to continue designing the underground according to the second option. It provides opportunities for more expedient transport service in the centre and for making the pedestrian zone on several levels and in correspondence with archaeological finds and the underground.

The idea to achieve full synthesis between new construction and cultural monuments existing on

4. A map of the archaeological cultural monuments in the Serdica reserve



the spot was taken into account in designing the Central Station. It makes it necessary to find the suitable engineering and functional solutions for facilities in the underground and the station on the one hand, and to seek architectural plan-and-space solutions which will be in tune with the archaeological monuments on the spot.

To put this idea in practice the team worked out a preliminary solution of how to organise the underground spaces in the city's central zone. The design suggests that three underground spaces should be built in the form of an archaeological exposition: first (A) — under the Largo of the centre — from the Party House subway to the subway in front of the Central Department Store; second (B) — under the continuation of the Largo along N. Tsanov Street to the newly uncovered west gate of the fortress of Serdica; third (C) — under Blvd. G. Dimitrov — from the subway in front of the Central Department Store to the subway in front of the Central Supermarket.

Discoveries to come could lead to a fourth space south of the subway under Lenin Square which includes the Roman building under St. Nedelya Church in the reserve. The spaces so formed coincide with the main world directions, therefore, they cover the main streets of the Roman city — *cardo* and *decumanus*.

The completion of the first stage of the underground's first line — Lyulin — Centre will realise the west branch of the system of underground spaces to which the subway Central Department Store Balkan hotel will lead.

The entrance hall of the Central Station will be situated here. By means of wide glass windows it will be spatially incorporated into the archaeological exposition. It is supposed that its level will be between 0.50 m and 1.000 m below the level of the existing subway. Westward lifts will lead from the entrance hall of the station down to the platform of the west-east line and lifts in the north — to the platform of the north-south line. The two lines will pass under the exposition grounds and will function separately from them. The exposition ground will develop under the future Largo along N. Tsanov Street; to the west it will reach what is now Boris I Street, to the north — the west end of the future culture complex building and thus the remnants of the newly discovered west gate will be integrated in it. In the south it will enter the Foreign Trade Bank and will include St. Spass Church and the remnants of some Roman buildings situated along the fortress wall.

The underground itself will pass in the southern

part of the Largo (what is now N. Tsanov Street) and under the cultural layer of the reserve in such a way that the ground appearing as the decumanus axis between the east and west gates will be unaffected by the construction. Thus all finds from the buildings situated on both sides of the main Roman street, the west gate included, will be fully presented and conserved.

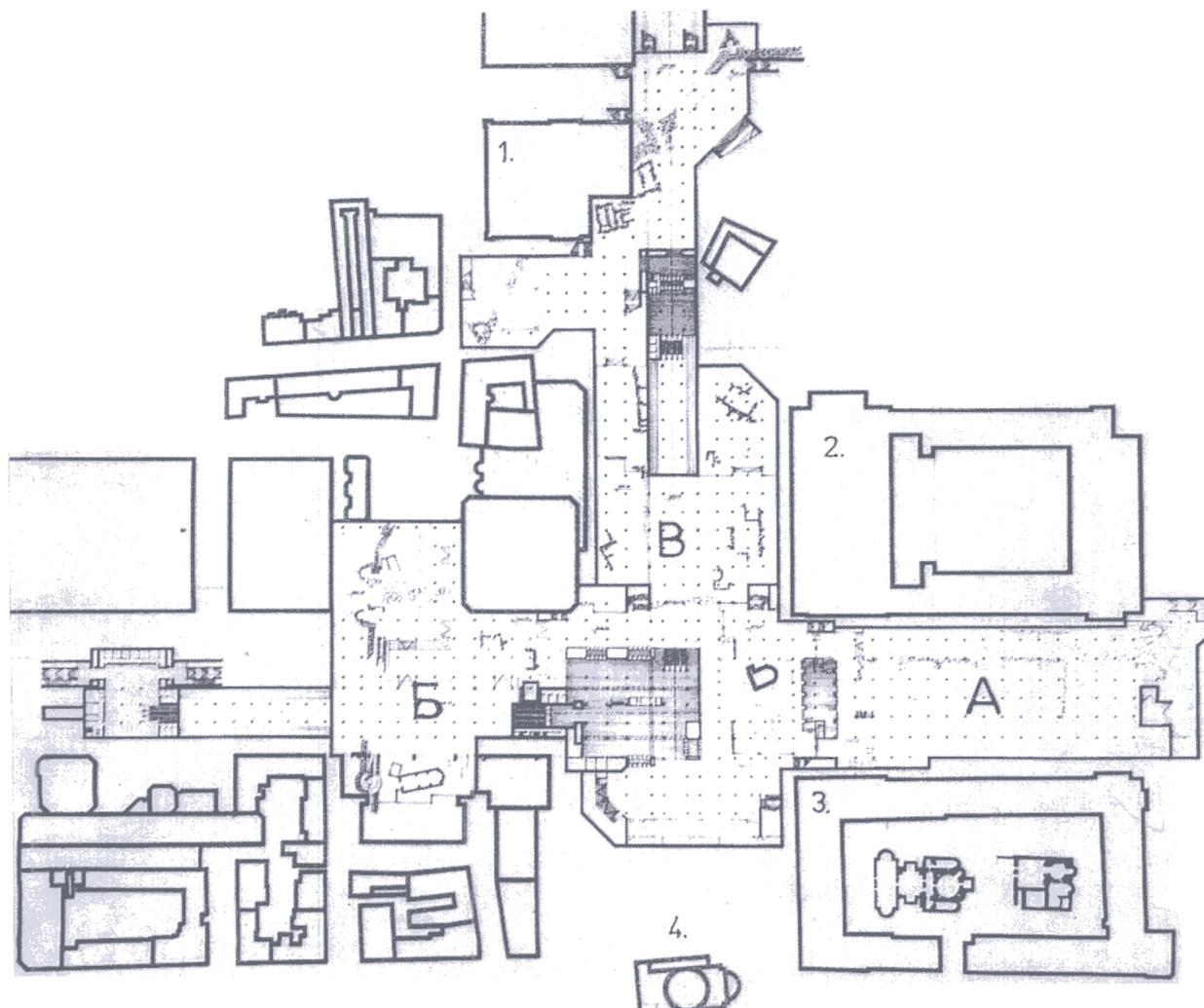
In principle, the first stage of the underground's construction in the central part of Sofia will be carried out using the system of groove walls and open digging and if necessary, tunnels may be dug in certain sections.

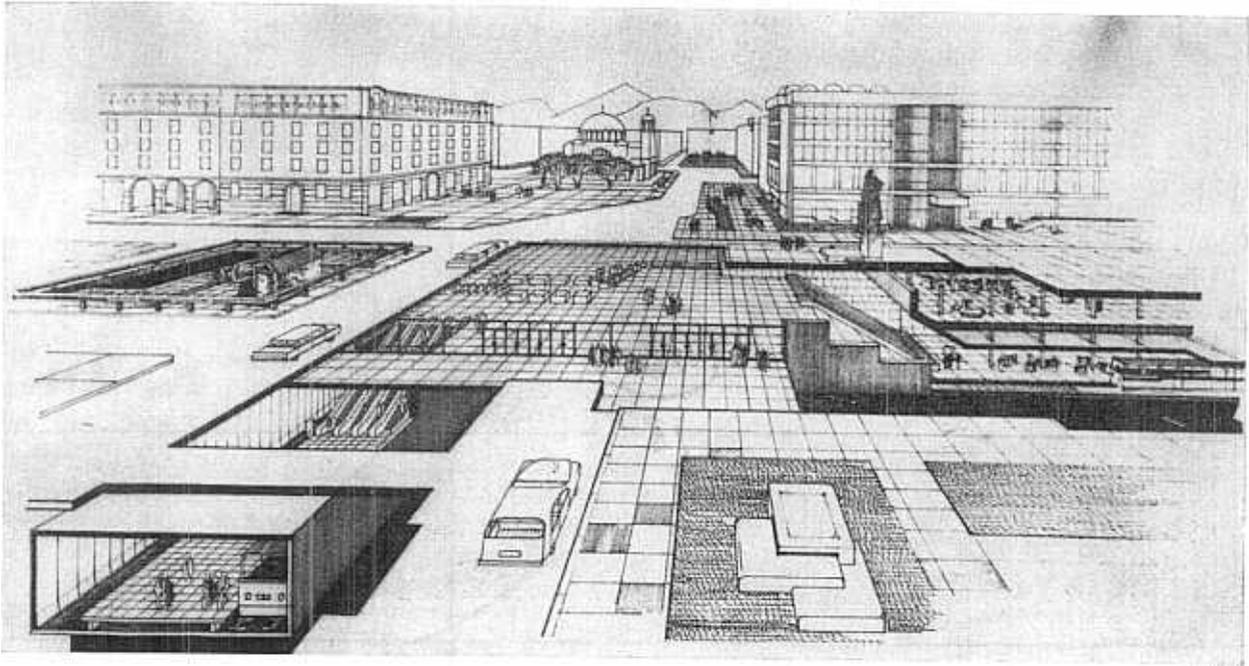
In the archaeological reserve the construction will take place in the following way:

in the west space (Tsar Boris Street — subway Central Department Store — hotel Balkan) and in the north space (Central Supermarket — subway CDP—Balkan) — with open digging.

in the east space (subway CDP-Balkan and the Party House subway) — by tunnelling so as to keep the east gate and the already prepared exposition in the two subways. The track south of the subway CDP — Balkan will also be built by tunnelling so as to preserve the archaeological finds under St. Nedelya Church.

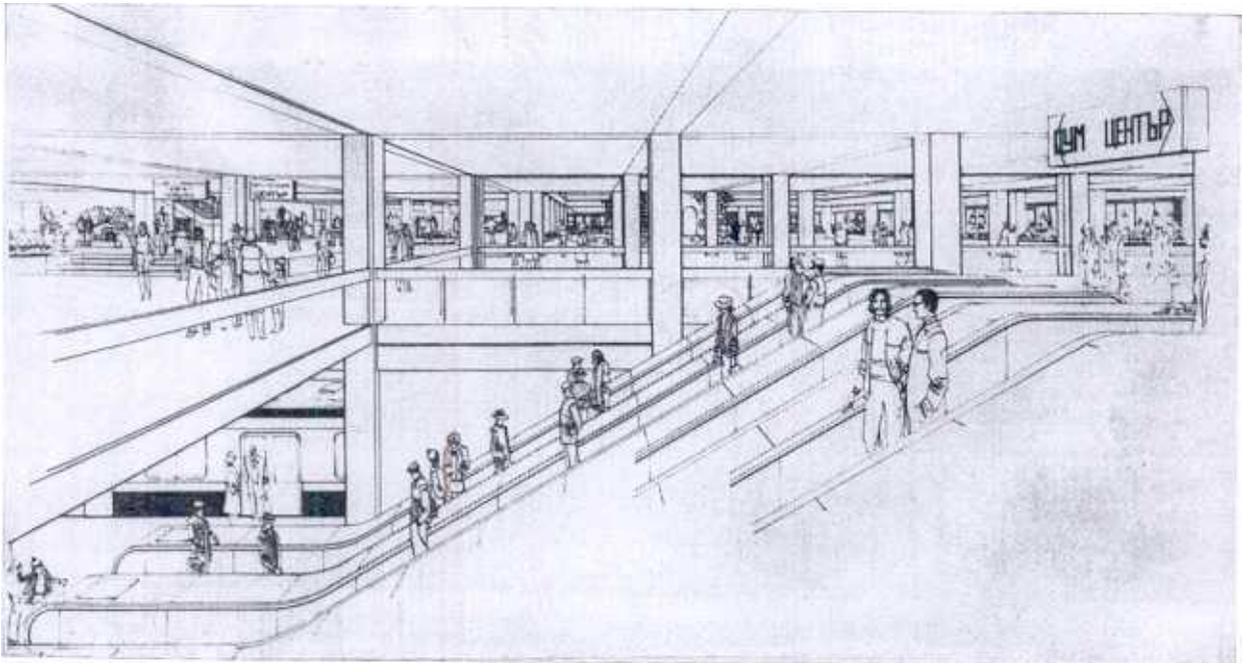
Preliminary draft for laying out the subterranean archaeological spaces which result from the underground's construction:
1. The Central Supermarket, 2. The Central Department Store, 3. Hotel Balkan, 4. St. Nedelya Church

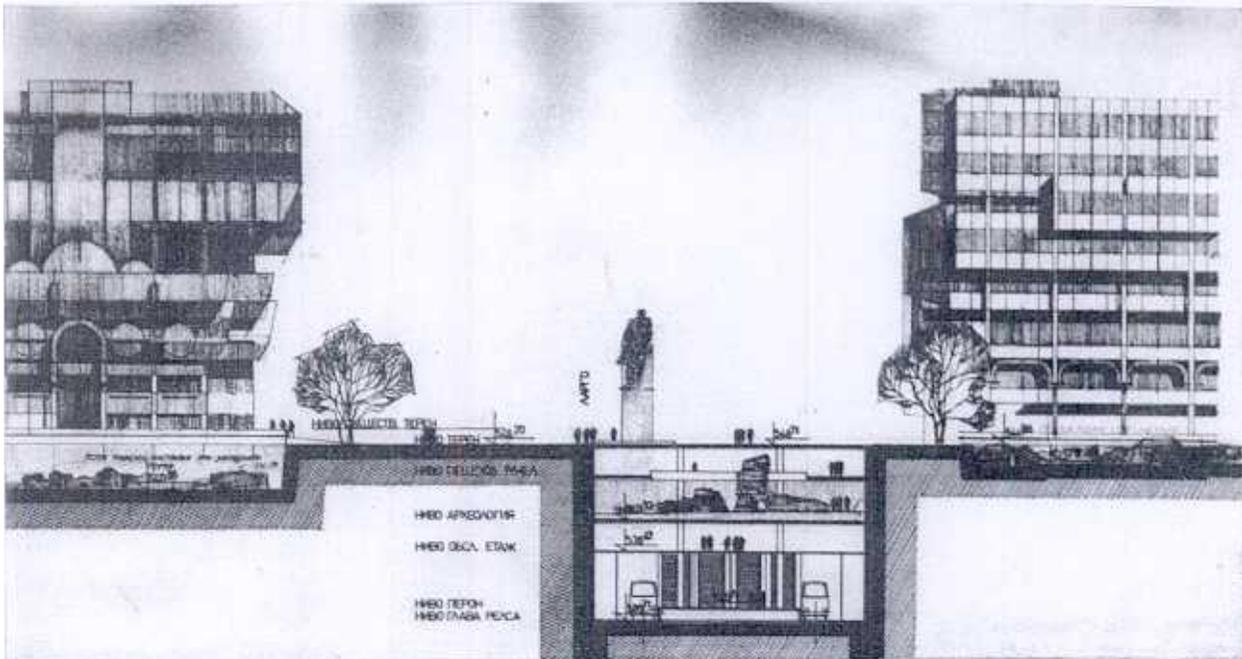




6. Intersection of the two underground lines under Lenin Square (left Sveta Petka Samardjiiska church)

7. The underground's entrance hall and a glimpse of the archaeological reserve





8. View of the archaeological reserve and the ways to the underground

The east and south archaeological grounds are to be exposed after the digging of the underground because they have nothing to do with the construction of the underground itself.

Exposition of the archaeological level in building the Central Station is the name of the design worked out for the western archaeological ground and on analogy, it is to be applied to the north space, too. The underground is to be built in two stages: preparation and building. The preparatory stage preceding building, consists of clearing the building site from existing buildings and facilities, reconstruction of the underground space, reorganization of communications and exposition of the designed archaeological level. The latter is to take place everywhere on the site destined for construction of the station. The full exposition of all archaeological monuments will be arranged after the completion of the station. This will allow the inclusion of archaeological finds outside the building site. The arrangement of the exposition under the very station will take place step by step. Consequently, the space under the Central Station will be open and integrated with the general archaeological exposition after its full uncovering and layout.

Longitudinal and cross profiles have been worked out to clarify the underground level of the archaeological layers and the situation of the underground in respect to them. If we examine the cross profile made for Lavele Street (12) we shall see that in respect to the square's designed level the upper end of the archaeological layer moves from 0.00 at the round tower to 3.30 m at the west gate and the lower end — from 1.44 m. at the round tower to 5.84 m. at the west gate whereas the underground's level (main track) on this point is approximately 18 m beneath the future ground or 13 m beneath the archaeological layer.

According to building methods, after the exposition of the archaeological specimens a commission of experts is to weigh their value and decide what is to be done with them.

The building of the station is to proceed along one of the following alternatives: 1. Dismantlement of fragments from the uncovered archaeological finds which will be taken away and kept there while construction is going on and returned when the archaeological level of the station is ready.

2. If we come across specimens of exceptional importance for archaeology and requiring urgent conservation on the spot this building technology

is to be changed and the station will be built using the tunnel method without affecting the archaeological cultural layer.

Irrespective of the great difficulties that will arise because of the special conditions of work in the preservation area the rich cultural heritage under

the surface of the city will have to be conserved at all costs and used in the urbanisation and building of the Bulgarian capital's new centre in conformity with the requirements of modern conservation science and practice.

Georgi KRUSTANOV

¹ In 1972 the Council of Ministers issued a decree for the design and building of an underground in Sofia. The Sofproekt designers' institute was entrusted with the task of planning jointly with other institutes and organisations.

² Publications by Prof. T. Gerassimov, Prof. Teofil Ivanov and Ass. Prof. Sava Bobchev show them to be successfully engaged in colossal rescue work to extricate from the

and frustrate the destruction of many monuments of culture. At the same time it was found out that many walls and foundations of ancient buildings, streets and other facilities were abolished by the construction of the Central Department Store, the Council of Ministers, the Balkan hotel, the State Council, the Communist Party House, etc.

RESUME

La reconstruction et le développement du centre de Sofia exigeaient d'apporter une solution rapide à certains problèmes fondamentaux tels que l'organisation de zones piétonnières et l'efficacité des transports en commun.

Les projets établis pour la construction d'un métropolitain à Sofia ont dû faire face à une série de problèmes tenant au fait que la ville actuelle a été construite sur les vestiges de la ville romaine de Serdika et de la ville médiévale de Sredets.

L'article expose brièvement les mesures prises pour assurer la sauvegarde des monuments historiques dans le cadre du projet de construction du métropolitain, dans la zone archéologique protégée. Il a été proposé sur la base des études effectuées à ces sujet et des travaux de conservation menés à différentes occasions, d'aménager parallèlement à la construction du métro, dans la partie centrale, de la ville, des zones piéton-

nières sur plusieurs niveaux, dans lesquelles les vestiges archéologiques seraient mis en valeur et présentés au public, sans que les constructions modernes leur nuisent. L'objectif final est de conserver et de présenter les vestiges de Serdika et de Sredets dans un système d'espaces souterrains.

1. Schéma général du métropolitain de Sofia
2. L'église Sveta Petka Samardžijska conservée et intégrée dans l'architecture du passage souterrain devant les Grands Magasins au centre de la ville
3. La porte est de la ville fortifiée de Serdika, conservée et présentée dans le passage souterrain devant la Maison du Parti
4. Plan de base des monuments archéologiques du secteur sauvegardé de Serdika
5. Avant-projet d'organisation des espaces archéologiques souterrains, créés pendant la construction du métro: 1. Halles, centrales, 2. Grands Magasins, 3. Grand Hôtel Balkan, 4. Eglise Sveta Nedelya
6. Intersection des deux lignes du métro, place Lénine (A gauche l'église Sveta Petka Samardžijska)
7. La station centrale du métro avec vue sur le secteur archéologique sauvegardé
8. Vue du secteur archéologique et des rames du métro.