

CADASTRAL WORKS TO UPDATE TECHNICAL INFORMATION IN THE LAND REGISTER AND APARTMENT BUILDINGS WITH THE DESTINATION SOCIAL HOUSES

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Abstract: The building that is the subject of cadastral works is located in the city of Deta, 1 Mai street, number 32 A, Timiș County, is the property of the City of Deta - public domain and represents land with intended industrial buildings. Through the project of "Rehabilitation, consolidation, building arrangement" and change destination in Social Housing, the constructions were converted into social housing, project based on the building authorization issued by Deta City Hall. The cadastral works are carried out in two stages: **Stage 1 : Update Of Technical Information** - Cadastral work carried out on integrated cadastre and land register workflow. It consists in drawing up the graphic form of the building, land and constructions with registration in the integrated cadastre and land register system, based on the documents provided by the owner and the topographic survey carried out in the field. For the cadastral work, a topographic survey was carried out using G.P.S. equipment, Stonex S9 II with precision in RTK (Real Time Kinematic) mode and the Stonex R60 Total Station by routing combined with erasures. Data processing of the G.P.S. measurements was carried out with the Stonex SurvCE 2.54 and TopoLT program. Since the standard deviation of the newly determined points fell within the maximum admissible tolerance, the situation plans were computerized and edited on magnetic media and on paper, operations performed in the AutoCAD LT 2010 program together with the TopoLT auxiliary program. **Stage 2: Apartment Of Buildings** - Cadastral work carried out on the interrupted flow of cadastre and land register: It consists in: a) **technical reception** (cadastre operations); b) **registration of the apartment in the land register** (land register operations). For this stage, measurements were carried out inside the building, the component of each I.U. (Individual Unit) proposed to be created according to the project of "Rehabilitation, consolidation, building arrangement" and change of destination in Social Housing the useful area of each room of the building was determined, then the useful area / I.U. (Individual Unit), the general undivided common parts - p.c.i. (undivided common parts) and the corresponding % / I.U. (Individual Unit), were identified, as well as the related land share. A Survey Plan with the initial situation and a Survey Plan for each UI (Individual Unit - apartment) was drawn up. The apartment proposal can be found in the Collective Sheet.

Key words: Social Housing, Survey, Documentation, Cadastral Works, City of Deta, Timiș

INTRODUCTION

Location: The building that is the object of the cadastral works is located in Deta City, 32 A 1 Mai Street, Timiș County, and is the property of Deta City - public domain and represents land with industrial buildings.

The city of Deta is a small administrative, economic and cultural center located in the western part of our country, between Timisoara and the border with Serbia (<https://www.detatm.ro/despre-orasul-deta/asezare-geografica/>)

Through the project of "Rehabilitation, consolidation, construction arrangement" and change of destination in Social Housing, this work **aims to** create individual units (apartments) registered in the land book, made available to disadvantaged people by the local public administration of Deta City through construction lease contracts for social housing.

The old buildings were rehabilitated and transformed into social housing through the project carried out based on the building permit no. 20/10.09.2021 issued by Deta City Hall.

Topo-cadastral identification represents the performance of location operations and measurements in the field, superimposed on the database of the Office of Cadastre and Real Estate Publicity Timis, using plans and sketches existing in the database of the Office of Cadastre and Real Estate Publicity at the date of the cadastral works.

The information made available by the Office of Cadastre and Real Estate Publicity Timis based on the request for information is: P.A.D. (Site and Delimitation Plan of the Building) old – and Framing in the area – extract from the DETA intra-urban cadastral plan.

The beneficiary has provided the necessary documents in order to carry out the requested cadastral operations, for updating the technical information in the CF, and registering the property in the integrated cadastre and land book system (Șmuleac et al., 2020, 2022).

Objective: Social housing is housing that is granted to individuals or families who do not have a good economic income and cannot afford to own a home or rent a home compared to the market price (https://lege5.ro/gratuit/gu4doobs/locuinta-sociala-norma-metodologica?dp=he4tmnzqgy2a#google_vignette).

The cadastre works represent the identification, measurement, description and registration of real estate in technical documents, their representation on cadastral plans and storage of data on computer supports, but also the identification of owners, possessors and other owners of real estate, in order to be registered in the land book (Popescu et al., 2016).

The land register (Pascalau et al., 2020, 2021) includes the description of the immovable property and the entries relating to the real estate rights, personal rights, acts, facts or legal relations in relation to the immovable property, as well as the encumbrances encumbering the immovable property or the manner of exercising the right of ownership.

By **owner of immovable property**, we mean the holder of the right of ownership, of other real rights over it or the one who, according to the civil law, has the quality of possessor. (<https://legislatie.ancpi.xyz/odg/1427-2017/1-1-definirea-lucrarilor-sistematice-de-cadastru/>).

MATERIALS AND METHODS

The topographic equipment used to carry out the cadastral works is G.P.S. Stonex S9 II (Figure 1) and the Stonex R60 Total Station (Figure 2), namely, a topographic survey was carried out using the G.P.S. Stonex S9 II equipment with RTK (Real Time Kinematic) precision and the Stonex R60 Total Station by combined travel with deletion. For the measurements inside the apartments, the Electrooptical telemetry was used to measure distances.



Figure 1. Total Station Stonex R60



Figure 2. G.P.S. Stonex S9 II

The processing of the data resulting from the measurements made with G.P.S. was carried out with the help of the Stonex SurvCE 2.54 and TopoLT programs. Since the standard deviation of the new determined points was within the maximum permissible tolerance, the situation plans were computerized drafted and edited on magnetic and paper support, operations performed in the AutoCAD LT 2017 program together with the TopoLT auxiliary program.

RESULTS AND DISCUSSIONS

The building that is the subject of the cadastral work represents land with constructions C2, C3, C4, C5, C6, C7 which through the project "Rehabilitation, consolidation, construction arrangement" and change of destination in Social Housing were consolidated, arranged and rehabilitated in 2024.

The cadastral works are carried out in two stages, namely:

1. **The first stage - is the stage of Updating Technical Information in the land book**

This cadastral work (Şmuleac et al., 2017, 2019) is carried out on an integrated flow of cadastre and land book and consists of drawing up the graphic form of the building, land and buildings, with the registration in the integrated system of cadastre and land book, based on the documents made available by the owner and the topographic survey carried out in the field.

- The initial situation in the land book, the building represents construction yards within the built-up area with the buildings: C2 - Carpentry workshop, C3 - Warehouse, C4 - Mechanical workshop, C5 - Office, C6 - Boiler room and C7 - Workshop.

- The current situation on the ground - through the project of "Rehabilitation, consolidation, arrangement of building C2, C3, C4, C5, C6, C7" and change of destination in Social Housing based on the Building Permit no. 20/10/09.2021 and the drawings annexed to the Building Permit (Casian et al., 2019).

The constructions C2, C3, C4, C5, C6, C7 were consolidated, arranged and rehabilitated in 2024 and have the following description:

- C6 - Building (P) - Social Housing with covered terrace - former C6 buildings, consolidated, rearranged and transformed (Figure 3);

- C7 - Building (P) - Social Housing with covered terrace - former C7 constructions, consolidated, rearranged and transformed (Figure 4);

- C8 - Building (P) - Social Housing - the former buildings C2 and C3 rehabilitated, consolidated, rearranged and transformed into a single building, renamed C8 (Figure 5);

- C9 - Building (P) - Social Housing with covered terrace - the former buildings C4 and C5 rehabilitated, consolidated, rearranged and transformed into a single building, renamed C9 (Figure 6).



Figure 3. C6 - Social Housing



Figure 4. C7 - Social Housing



Figure 5. C8 - Social Housing



Figure 6. C9 - Social Housing

Topographic measurements and data processing

The topographic survey was made using electro-optical topographic equipment, namely the Stonex R60 Total Station by routing combined with radiation through the following station points: S1 (GPS 1) - S2 (GPS 2) and S3, combined with station points S1 (GPS 7) – metal bolt, from which the station points S0 (GPS 15) and the station point S3 were targeted, from which the boundaries of the property concerned and its vicinity were deleted. from which the boundaries of the property concerned and its vicinity were further deleted.

Processing of data resulting from measurements made with G.P.S. It was performed with the help of the Stonex SurvCE 2.54 and TopoLT programs. Since the standard deviation of the new determined points was within the maximum permissible tolerance, the situation plans were computerized drafted and edited on magnetic and paper support, operations performed in the AutoCAD LT 2010 program.

The calculation of the plot area was done analytically, from the coordinates of the contour points (Herbei et al., 2013, 2018; Mita et al., 2020).

Establishment of the documentation

The cadastral documentation is prepared according to the ANCPI Order (National Agency for Cadastre and Real Estate Publicity) - **Order no. 600/2023 for the approval of the Regulation on reception and registration in the cadastre and land book records**, as follows:

- Deletion from the land book of constructions C2, C3 (included in C8), C4, C5 (included in C9)
- Construction registration:
 - C8 Building (P) Social Housing the former buildings C2 and C3 rehabilitated, consolidated, rearranged and transformed into a single building, renamed C8.
 - C9 Building (P) Social Housing the former constructions C4 and C5 rehabilitated, consolidated, rearranged and transformed into a single building, renamed C9.

- Update description and functions C6 Building (P) Social Housing, C7 Building (P) Social Housing

Based on the topographic measurements and the documents made available by the beneficiary at the end of the works:

- Reception report at the end of the works no. 8057/01.08.2024 issued by the reception commission of Deta City Hall

- Building certificate no.8105/02.08.2024 issued by Deta City Hall

- The certification of the existence of the constructions after the rehabilitation, arrangement and transformation into constructions for housing - social housing was certified by the City Hall of Deta by:

- Building certificate no.8105/02.08.2024 issued by Deta City Hall

- Tax certificate nr.8213/06.08.2024 Primary Deta.

Submission of the paper to OCPI

The cadastral work of Technical Information Update was submitted to OCPI (Timis Cadastre and Real Estate Advertising Office) for reception and registration in the land book on integrated cadastre and land book flow.

Completion of the cadastral work

The cadastral work of Technical Information Update was completed by obtaining the OCPI approval through a cadastral admission report (Paunescu et al., 2020; Popescu et al., 21019), **Site Plan and delimitation of the property** concerned by OCPI (Timis Cadastre and Real Estate Publicity Office) and **conclusion of the land book** and **land book** extract resulting in the graphic form of the land and of the buildings after rehabilitation and consolidation, with the destination of social housing: C6, C7, C8 and C9 with the following description (Figure 7):

- C6 - Building (P) - Social Housing with covered terrace;

- C7 - Building (P) - Social Housing with covered terrace;

- C8 - Building (P) Social Housing - composed of 6 Apartments - 6 I.U. (Individual Units).

- C9 - Building (P) Social Housing with covered terrace - composed of 3 Apartments - 3 I.U. (Individual Units) (Figure 7).

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2. The second stage - is the stage of Apartment Building

At this stage, the cadastral work is carried out on an interrupted flow of cadastre and land book and consists of:

a) technical reception (cadastral operations)

b) registration in the land book of the apartment (land book operations)

The apartment documentation was made based on the measurements inside the buildings, the plans aimed at not changing according to the Building Permit and based on the owner's agreement on the number of individual units resulting from the apartment expressed by:

• Certificate no. 8570/20.08.2024 issued by the Deta City Hall - apartment agreement

According to the situation in the land book, the site that is the object of the cadastral work located in Deta City 1 Mai Street, no. 32A, county. Timis, is the property of the city Deta - public domain, Land with an area of 1503 sqm with constructions: C6, C7, C8 and C9.

The buildings that are subject to the apartment are:

- C8 – Building (P) Social Housing – registered in CF 400425, – C8 DETA composed of 6 Apartments – 6 I.U. (Individual Units).

- C9 - Building (P) Social Housing with covered terrace registered in CF 400425 - C9 DETA composed of 3 Apartments - 3 I.U. (Individual Units).

Thus, by flattening the C8 building, 6 apartments are created – 6 I.U. (individual units), and by flattening the C9 building, 3 apartments are created – 3 I.U. (Individual Units), according to:

- Certificate - apartment agreement no. 8570/20.08.2024 issued by DETA City Hall;

The building is to be flattened in order to create a separate land book for each apartment and then rent social housing. Previously, these constructions were rehabilitated, consolidated, rearranged and transformed into Social Housing through the project "Rehabilitation, consolidation, construction arrangement" and change of destination in Social Housing, based on the Building Permit no. 20/10/09.2021 and the plans annexed to the Building Permit registered in the previous CF, through the work of Updating the technical data of the building.

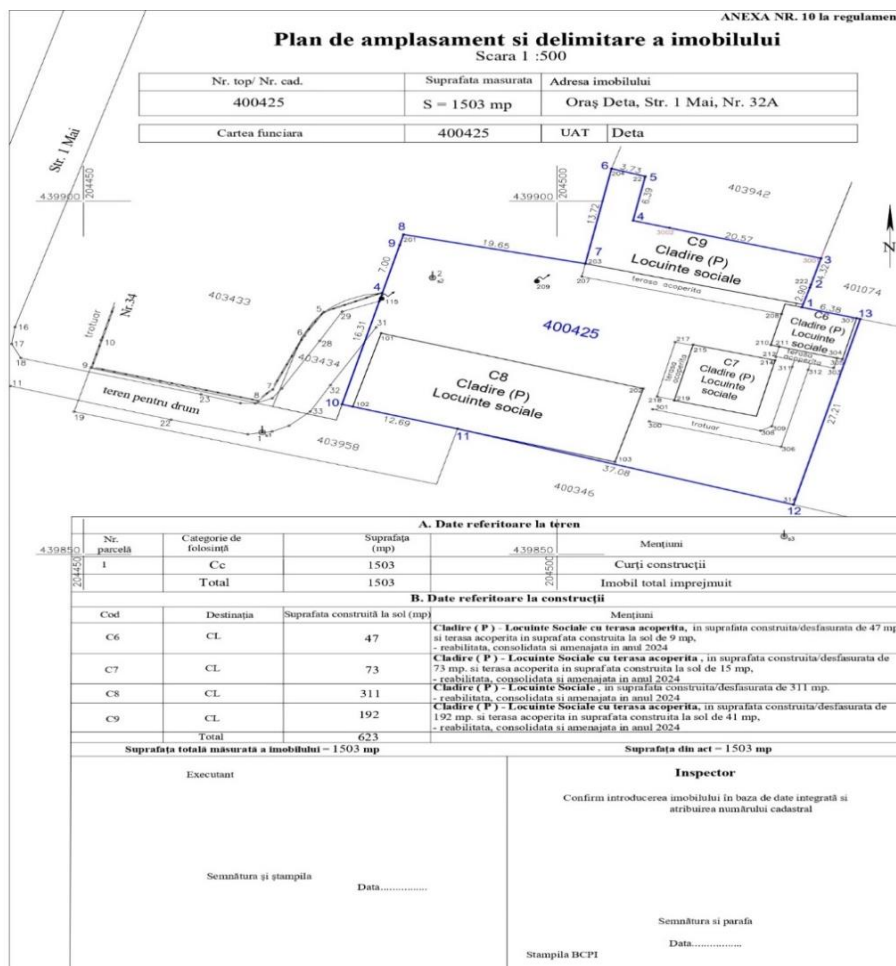


Figure 7. Location and delimitation plan of the building

Thus, the apartment project was drawn up on this occasion - according to the plans annexed to the Building Permit, respectively construction surveys:

- Construction survey plan C2 - C3- from the project "Rehabilitation, consolidation, construction arrangement" and change of destination in Social Housing, the current construction C8;

- Construction survey plan C4–C5-from the project of "Rehabilitation, consolidation, construction arrangement" and change of destination in Social Housing, the current construction C9;

The apartment building is carried out according to the Survey Plan, annexes to the above-mentioned Building Permit and attached to the documentation.

Measurements were made inside the building using the Electrooptic Telemetry (Figure 8) for measuring distances, the general undivided common parts (p.c.i.) related / I.U. (Individual units) were identified.



Figure 8. Electro-optical Telemetry

The component of the apartment and the usable area of each component room, of the apartment, were determined, then the usable area / I.U. (Individual units) was determined, the general undivided common parts - p.c.i.g (general undivided common parts) were calculated. and p.c.i. % related / I.U. (Individual units), as well as the share of land related.

The Survey Plan was drawn up with the initial situation and the Survey Plan for each UI (individual unit - apartment)

Result after flattening

The apartment proposal can be found in the Collective Sheet.

The technical documentation has been prepared for the purpose of submission to the OCPI (Office of Cadastre and Real Estate Advertising Timis) for the reception of the apartment

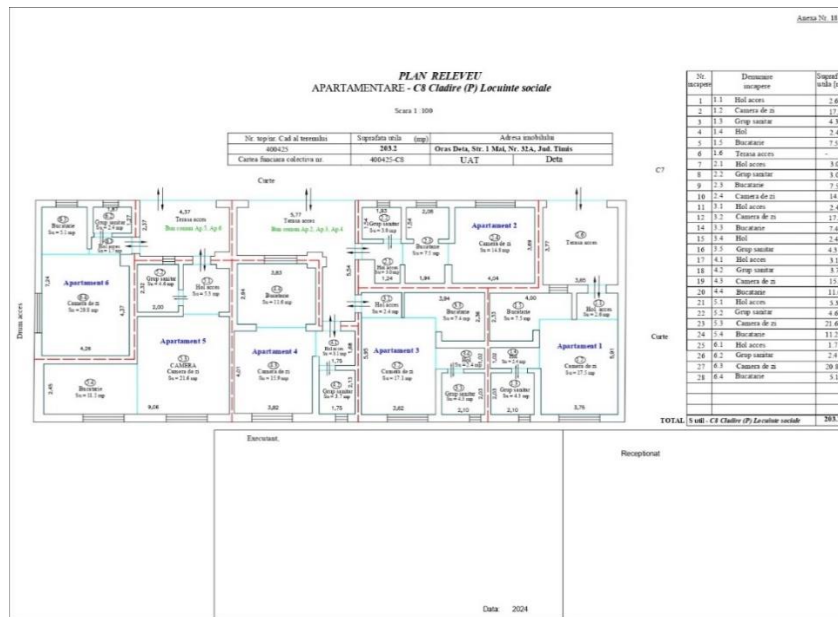


Figure 9. C8 Survey Plan

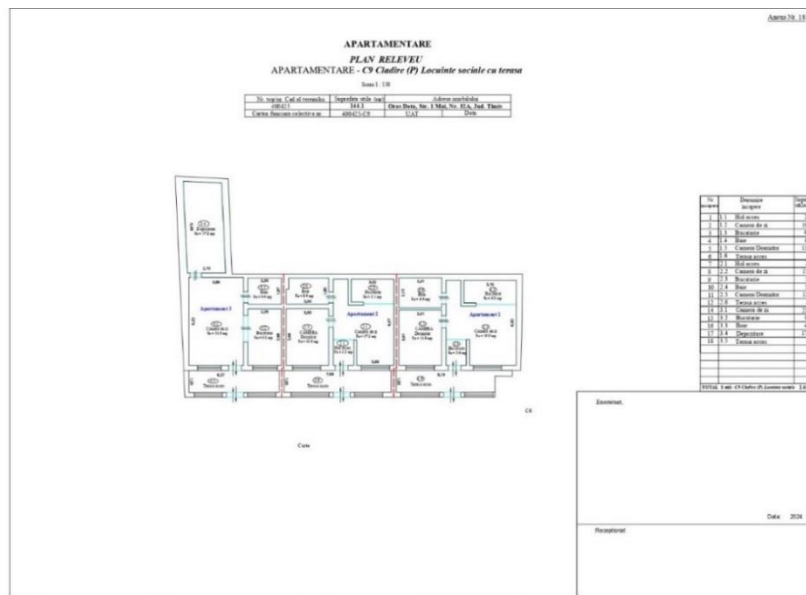


Figure 10. C9 Survey Plan

Foale colectiva

Anexa nr.19

Carte Funciara Colectiva nr.: **400425** UAT: **DETA**

Descrierea constructiei: Apartamente: **C8 Cladirii (P) Locuinte Sociale -inregistrata in CF 400425 DETA-4-U1**
C9 Cladirii (P) Locuinte Sociale -inregistrata in CF 400425 DETA-3-U1

Adresa constructiei: **Com. Deta, Str. 1 Mai, nr. 32A, Jud.Timis**
 Nr. cadastre: **400425**
 Suprafata teren: **1652 mp**

Nr. tronson	Scara	Nivel	Nr. apartament aportiv cu diferenta de destinatie	Cod Unitate Inchisura 8 (U1)	Nr. CF individuala*	Suprafata utila U1 dupa 1976	Cuota parte indivizie din patejle comune afiliate la (CPI)	Cuota parte teren afiliate la (CPI)	Obs.
C8 Locuinte Sociale		Parter	AP 1	U 1	400425-C8-U 1	34.3	16.88%	131 / 1503	Apartmentul nr.1 - compoz din Camera, Bucatarie, Hol acces, Hol tr. Grup sanitar , cu Terasa acces in suprafata utila de 34.3 mp, cu 16.88 % din p.c. indivizie generale si 131/1503 mp teren.
		Parter	AP 2	U 2	400425-C8-U 2	28.3	13.95%	106 / 1503	Apartmentul nr.2 - compoz din Camera, Bucatarie, Grup sanitar si Hol-de acces, in suprafata utila de 28.3 mp, cu 13.95% din p.c. indivizie generale si 106/1503 mp teren.
		Parter	AP 3	U 3	400425-C8-U 3	33.6	16.54%	129 / 1503	Apartmentul nr.3 - compoz din Camera, Bucatarie, Hol acces, Hol si Grup sanitar in suprafata utila de 33.6 mp, cu 16.54% din p.c. indivizie generale si 129/1503 mp teren.
		Parter	AP 4	U 4	400425-C8-U 4	34.3	16.88%	131 / 1503	Apartmentul nr.4 - compoz din Camera, Bucatarie, Grup sanitar si Hol acces, in suprafata utila de 34.3 mp, cu 16.88% din p.c. indivizie generale si 131/1503 mp teren.
		Parter	AP 5	U 5	400425-C8-U 5	42.7	21.01%	163 / 1503	Apartmentul nr.5 - compoz din Camera, Bucatarie, Grup sanitar si Hol acces, in suprafata utila de 42.7 mp, cu 21.01 % din p.c. indivizie generale si 163/1503 mp teren.
		Parter	AP 6	U 6	400425-C8-U 6	39.8	14.79%	115 / 1503	Apartmentul nr.6 - compoz din Camera, Bucatarie, Grup Sanitar si Hol acces, in suprafata utila de 39.8 mp, cu 14.79% din p.c. indivizie generale si 115/1503 mp teren.
TOTAL						203.2	108.00%	777 / 1503	
C9 Locuinte Sociale		Parter	AP 1	U 1	400425-C9-U 1	46.9	22.99%	186 / 1503	Apartmentul nr.1 - compoz din 2 Camere, Bucatarie, Baie si Hol acces, cu Terasa acces in suprafata utila de 46.9 mp, cu 22.99 % din p.c. indivizie generale si 186/1503 mp teren.
		Parter	AP 2	U 2	400425-C9-U 2	42.3	23.95%	171 / 1503	Apartmentul nr.2 - compoz din 2 Camere, Bucatarie, Baie si Hol acces, cu Terasa acces, in suprafata utila de 42.3 mp, cu 23.95 % din p.c. indivizie generale si 171/1503 mp teren.
		Parter	AP 2	U 2	400425-C9-U 3	59.9	38.16%	222 / 1503	Apartmentul nr.3 - compoz din Camera, sp Depozitare, Bucatarie si Baie, cu Terasa acces in suprafata utila de 59.9 mp, cu 38.16 % din p.c. indivizie generale si 222/1503 mp teren.
TOTAL						149.1	108.00%	589 / 1503	
C8	Locuinte sociale cu terasa acoperita								47
	Terata acoperita								56 / 1503
TOTAL C8									103
C7	Locuinte sociale cu terasa acoperita								73
	Terata acoperita								16
TOTAL C7									89
TOTAL general									1663 / 1503
Descrierea unitatilor indivizie generale - apartamente C8		Terenul construit si reconstruit, fundatilor, izolare, izolatilor, acoperitului/patejii							
Descrierea unitatilor indivizie pe apartamente construite C8		Terasa acces A2-2, Ap.3, Ap.5							
Descrierea unitatilor indivizie generale - apartamente C9		Terasa acces A2, 5 Ap.6							
Descrierea unitatilor indivizie pe apartamente construite C9		Terenul construit si reconstruit, fundatilor, izolare, izolatilor, acoperitului/patejii							
Intenctie:		Receptiune							
		(semnatura, pecete)							

Data August 2024

Figure 11. Collective Sheet

A) TECHNICAL ACCEPTANCE

-The cadastral documentation of the apartment is drawn up, which contains documents according to the ANCPPI Order (National Agency for Cadastre and Real Estate Publicity)- **Order no. 600/2023 for the approval of the Regulation on reception and registration in the cadastre and land book records**

- registers with the Office of Cadastre and Real Estate Advertising
- an opinion is obtained from the Office of Cadastre and Real Estate Advertising – Survey Plan for each apartment targeted by OCPI (Office of Cadastre and Real Estate Advertising Timis) and an apartment admission report containing the number of new land books resulting from the apartment as follows:

- 1) 400425-C8-U1 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.1, Timis County, UAT Deta having a usable area of 34.3 sqm;
- 2) 400425-C9-U1 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C9 - Ap.1, Timis County, UAT Deta having a usable area of 46.9 sqm;
- 3) 400425-C8-U2 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.2, Timis County, UAT Deta having a usable area of 28.3 sqm;
- 4) 400425-C9-U2 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C9 - Ap.2, Timis County, UAT Deta having a usable area of 42.3 sqm;
- 5) 400425-C8-U3 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.3, Timis County, UAT Deta having a usable area of 33.6 sqm;
- 6) 400425-C9-U3 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C9 - Ap.3, Timis County, UAT Deta having a usable area of 59.9 sqm;

7) 400425-C8-U4 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.4, Timis County, UAT Deta having a usable area of 34.3 sqm;

8) 400425-C8-U5 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.5, Timis County, UAT Deta having a usable area of 42.7 sqm;

9) 400425-C8-U6 located in Loc. Deta, Str 1MAI, Nr. 32A, Ap. C8 - Ap.6, Timis County, UAT Deta having a usable area of 30 sqm (Figure 9, 10 and 11).

Based on the admission report from the Office of Cadastre and Real Estate Publicity regarding the apartmentization of the building, the Deta City Hall asked the Deta Local Council to approve the apartment building and, in this regard, it was issued:

- HCL 128/24.09.2024 issued by the DETA Local Council

B) REGISTRATION IN THE LAND REGISTER OF THE APARTMENT

It is done by application for registration to OCPI TIMIS (Office of Cadastre and Real Estate Publicity), BCPI Deta (Office of Cadastre and Real Estate Publicity) accompanied by the following documents:

- CF 400425 Deta;
- OCPI admission report no. 22616 of 22-08-2024
- Collective sheet – APARTMENT – endorsed by OCPI no. 22616 of 22-08-2024;
- Certificate no. 8570/20.08.2024 issued by the Deta City Hall - apartment agreement
- HCL 128/24.09.2024 issued by the DETA Local Council;

Completion of the cadastral work

The cadastral work of Apartment was completed by obtaining the approval of OCPI (Office of Cadastre and Real Estate Publicity Timis) by concluding **the land book and the resulting land book extract** for each individual unit (apartment).

CONCLUSIONS

Through the cadastral works presented, the proposed purpose for which these documentations were prepared was achieved, resulting in the effect registered in the land book, apartments for Social Housing registered in individual land books U.I. (Individual Unit) for each apartment and collective land book for land with constructions.

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