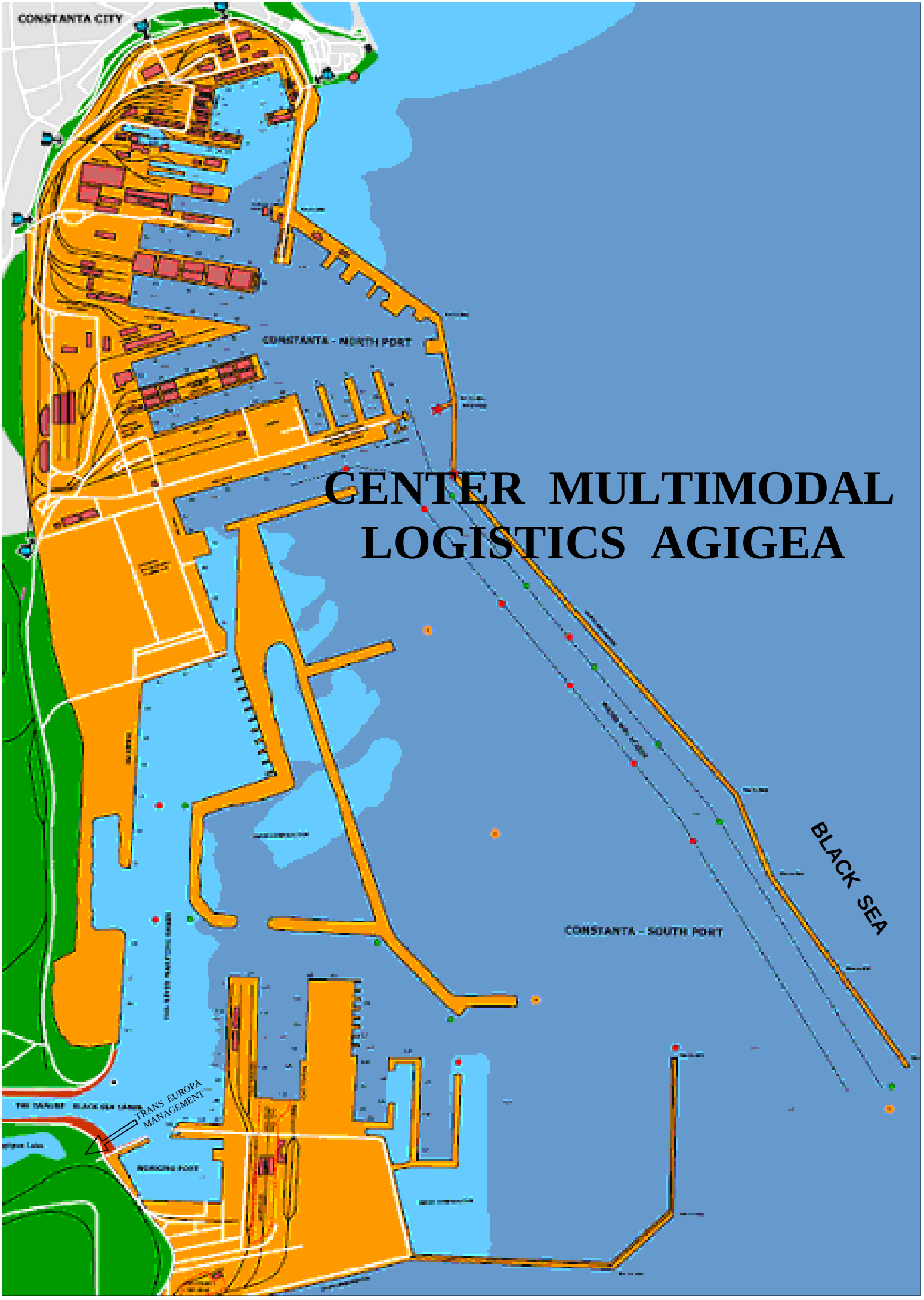


CENTER MULTIMODAL LOGISTICS AGIGEA

The land is situated in the commune of AGIGEA with total area of 46.767 m^2 with the following characteristics:

- South side is bordered by the Danube - Black Sea Canal;
- the East side opens to the Black Sea;
- the North side is found near the railway terminal and Constanta-Bucharest the highway and makes the junction with Highway Sun via a taxiway located in the vicinity land;
- the west side is bordered by Lake Agigea;

The land is private property.

The land is found in the built-up area Agigea.

1.1.South (South of Danube – Black Sea Canal)
1.1.1.Site AGS1
1.1.1.1.Land Surface

Figure 29 – **Agigea South** area and site **AGS1**

Situated in the immediate proximity of the Black Sea and the Danube – Black Sea Canal, the envisaged site is bound on the north by the Danube – Black Sea Canal and the Harbor of Constanța, on the west by private lands and Agigea Lake, on the south by a rail-road extension of APM with its railhead in the Harbor of Constanța South Agigea and on the east by the Harbor of Constanța South. From an administrative point of view, AGS1 site is situated in the commune of Agigea.

As can be seen in Figure 29, the site is consisting of four neighboring plots:
Plot 1 – Surface: approx. 15.000 m² Teren CN APMC (Adminitratia Porturilor Maritime Constanta)
Plot 2 – Surface: approx. 20.000 m² Teren CN APMC
Plot 3 – Surface: approx. 22.000 m²
Plot 4 – Surface: approx. 46.767 m² Teren TRANS-PEC IFN
Plot 5 – Surface: approx. 5.000 m²

TOTAL SURFACE: 12,8 h

Plot 1 represents a surface owned by the Romanian state through the APM and **Plot 2** through the ACN. **Plot 3**, the majority of which is covered by water (on the northern part: Lake Agigea), is owned by the commune Agigea.
Plot 4 and plot 5 are owned by private individuals.

As can be seen in Figure 27, a new road over the Danube – Black Sea Canal that would connect the Harbor of Constanța with the facilities in the southern part of the harbor will be finished during 2015.

For a better view of the site, please see the pictures below (Figures 30 - 33).

Figure 30 – View from north towards **Plot 3**

Figure 31 – View from north towards **Plot 4**

Figure 32 – View from the centre of the AGS1 site towards west

Figure 33 – View from **Plot 2** towards AGN3 site

1.1.1.2.Soil Properties

Some drilling logs performed in the proximity of AGS1 site have been obtained on 04.08.2011. These have been made within a study which refers to the construction of the harbor road over the Danube - Black Sea Canal at Km 0+540 m (please see abutment 1 in the Figure 34).

Figure 34 – Drilling in the area of AGS1 site

The relevant information from these logs are presented in Table 1.

Table 1 – Abutment 1

ELEVATION (m)	LAYER THICKNESS (m)	STRATIFICATION
+4,86 - + 0,30	4,56	Brown and reddish dusty clay packing with spoiled lime Φ 1–125 mm
+0,30 - -3,60	3,90	Reddish plastic clay with concretions of lime
-3,60 - -4,30	0,70	Mucous layer
-4,30 - -5,60	1,30	Bluish plastic consistent clay with sulphur odor
-5,60 - -11,80	6,20	Brownish shaly dust, light
-11,80 - -14,90	3,10	Yellowish virescent sandy dust, light
-14,90 - -28,80	13,90	Plastic consistent reddish clay
-28,80 - -38,79	9,89	Yellowish plastic consistent clay

Platform elevation = +4,86 m, Hydrostatic level = -2,35

However, as a preliminary evaluation, the soil bearing capacity would not involve special actions.

1.1.1.3.Proximity to harbor

The envisaged site has direct access to the Danube – Black Sea Canal and to the Black Sea via the Harbor of Constanța South. According to a bathymetric map provided by APM, the water depth in harbor area, where the Canal flows into the Black Sea comprises approximately 7 m.

On 02.08.2011 an official request has been lodged with the ACN in order to provide us with the water depths in front of Plot 2.

Additionally, an official request has been lodged on 02.08.2011 with the Constanța South Harbor Master's Office in order to provide us with water depths in the respective area. In its response from 03.08.2011, the Master's Office informed us that the requested information should be obtained at the APM.

On 04.08.2011 an official request has been lodged with the APM in order to provide us with the water depths in the southern area of the Harbor of Constanța. In its response from 08.08.2011, APM informed us about the possibility of offering us bathymetric maps of the respective area for a specific fee.

However, after analyzing the maps that have been of- fered, no need for acquiring the respective maps has been ascertained, as the map obtained in 2008 from APM provides identical information.

Regarding the utilization of the Canal, according to the Danube – Black Sea Canal Navigation Statute, vessels with a maximum draught of 5,5 m are allowed to operate on the Canal.[1]

1.1.1.4.Proximity to national railroad network

As can be seen in Figure 29 (in light brown color), a railroad line exists at the southern proximity of the site.

It represents a special extension of the APM out of the national railroad network and this is intended for the connection with the southern part of the harbor area, as its railhead is located in the direct proximity of the water of the Black Sea. Based on discussion with representatives of CFR, an individual extension may be executed at the request of the Client. According to the Romanian legislation, costs to connect to the system, as well as infrastructure costs from the plant to the connection point are to be supported by the beneficiary.

1 http://www.acn.ro/index.php?id=18

In this way, the site would be directly connected to the entire Romanian railway infrastructure.

1.1.1.5.Proximity to national road network

At the western limit of the site, a new road over the Danube – Black Sea Canal that would connect the Harbor of Constanța with the facilities in the southern part of the harbor will be finished during 2015. The same road will be also directly connected with the future Constanța Bypass and Constanța – Bucureşti A2 Highway, at approximately 50 m distance from the site (please see Figure 28). In this way, AGS1 site will be directly connected to the entire national road infrastructure.

1.1.1.6.Electricity supply

A **110 kV electricity line** is situated on the neighboring plots in the north, at approximately 2,5 km distance from the AGS1 site. The respective line is owned by Enel Electrica Dobro- gea (Enel), the local electricity distributor.At other 1,5 – 2 km distance, a 110/20 kV Enel transformer station (Petrol Sud Station) is located. **According to Mr. Petrică Cristea (Chief Engineer, High-voltage networks, Enel), there is enough capacity in the station for a new consumer with the capacities mentioned at point 2.6.**

Additionally, it should be mentioned that an individual extension should be executed solely at the request of the Client.

According to the Romanian legislation, costs to connect to the system, as well as infrastructure costs from the plant to the connection point are to be supported by the beneficiary.

1.1.1.7.Gas supply

Regarding gas supply, it should be mentioned that the entire Constanța area has been connected to gas solely in the recent years. Even today, there are areas in Constanța that do not have a proper access to gas. When referring concretely to Agigea, where the site AGS1 is located, there is no proper gas access for any kind of consumers. According to Mr. Dumitru Bedivan (Gas Supply Director, Congaz), the entire area south to Constanța does not represent an area with an important economic interest for establishing a gas supply. The issue will be subject to further negotiations with the supplier, based on the foreseen consumption of the Client.

According to the Romanian legislation, costs to connect to the system, as well as infrastructure costs from the plant to the connection point are to be supported by the beneficiary.

1.1.1.8.Fresh and sewage water supply

According to Mrs. Maria Bube (Constanța Autonomous Regie of Water (RAJA), sufficient capacity exists in the respective area for fresh and sewage water supply.

Additionally, it should be mentioned that an individual extension should be executed at the request of the Client.

According to the Romanian legislation, costs to connect to the system, as well as infrastructure costs from the plant to the connection point are to be supported by the beneficiary.

1.1.1.9.Urbanism

According to the **PUG** of Agigea from 2009, plots 1 and 2 are zoned as residential area of the Agigea commune. However, plot 3, the northern part of plot 4 and plot 5 have been rezoned and have been included in the non-residential category.

1.1.1.10.Special Issues

At a first glance, the site seems to be clean and unsuggestive of contamination.

A significant issue in respect of site AGS1 represents the future slip road of the new harbor road (please see Figure 35), that affects parts of the Plots 3 and 4. Regarding Plot 4, a sig- nificant surface (5.860 m² according to a land registry excerpt from 09.08.2011) has been already expropriated by the Romanian State (please see the red surface highlighted in the Figure 36).

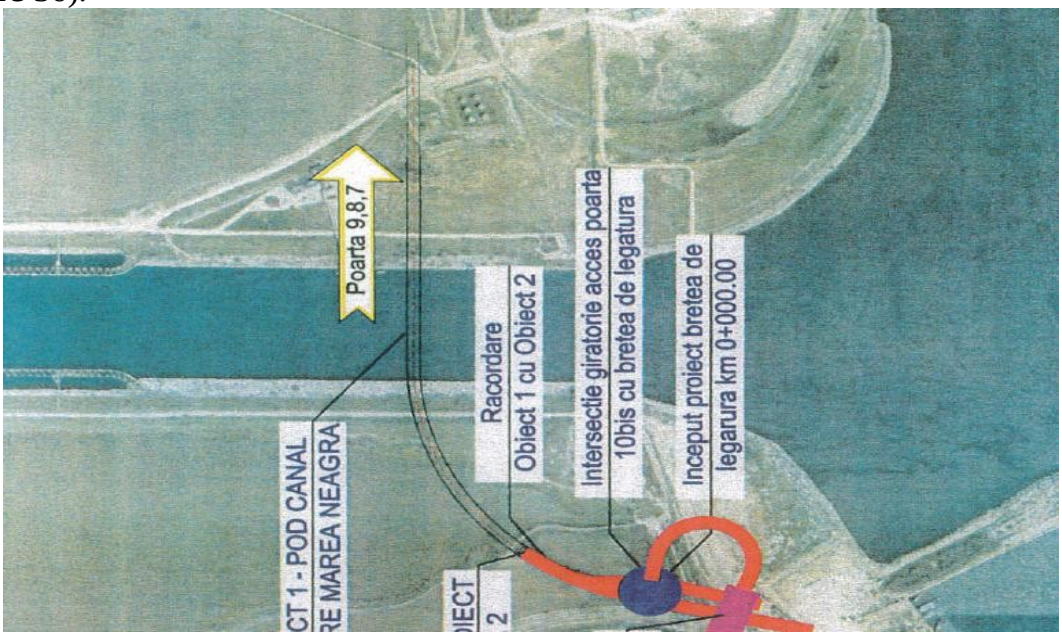


Figure 35 – Slip road

Figure 36 – Expropriated surface on **Plot 4**

1.1.1.11.Ownerships structure

Plot 1 and 2 represent surfaces owned by the Romanian state through APM and ACN. It should be mentioned here that APM/ACN have the right to lease to third parties lands granted by the State. In practice this is done either at the direct initiative of APM/ACN or at the initiative of an interested entity.

Plot 3 is owned by the commune of Agigea. A part of it, namely a surface of the Lake of Agigea, has been leased to Acvamar Grup SRL (shareholders: Gabriel Andrei – 10%, Mihăiță Adrian Andrei – 90%).

According to a land registry excerpt from 09.08.2011, **Plot 4** is owned by Trans PEC Leasing IFN SA (shareholders: Adrian Marcel Comşa – 25%, Ion Ovidiu Peligrad – 25%, Florin Radu – 5%, Benoni Toni Radu – 25%, Maria Statie – 20%) and a 5.860 m² surface by the Romanian State (after the expropriation procedure).

Additionally, according to our investigations, **plot** 5 is owned by Mr. Comşa Adrian.

It should be mentioned here, that no concrete discussions regarding the lease/acquisition price have been conducted with the respective landowners.

STUDY REGARDING THE OPPORTUNITIES OF DEVELOPMENT FOR INVESTMENT PROJECTS IN CONSTANTA SOUTH – AGIGEA PORT

September
2013

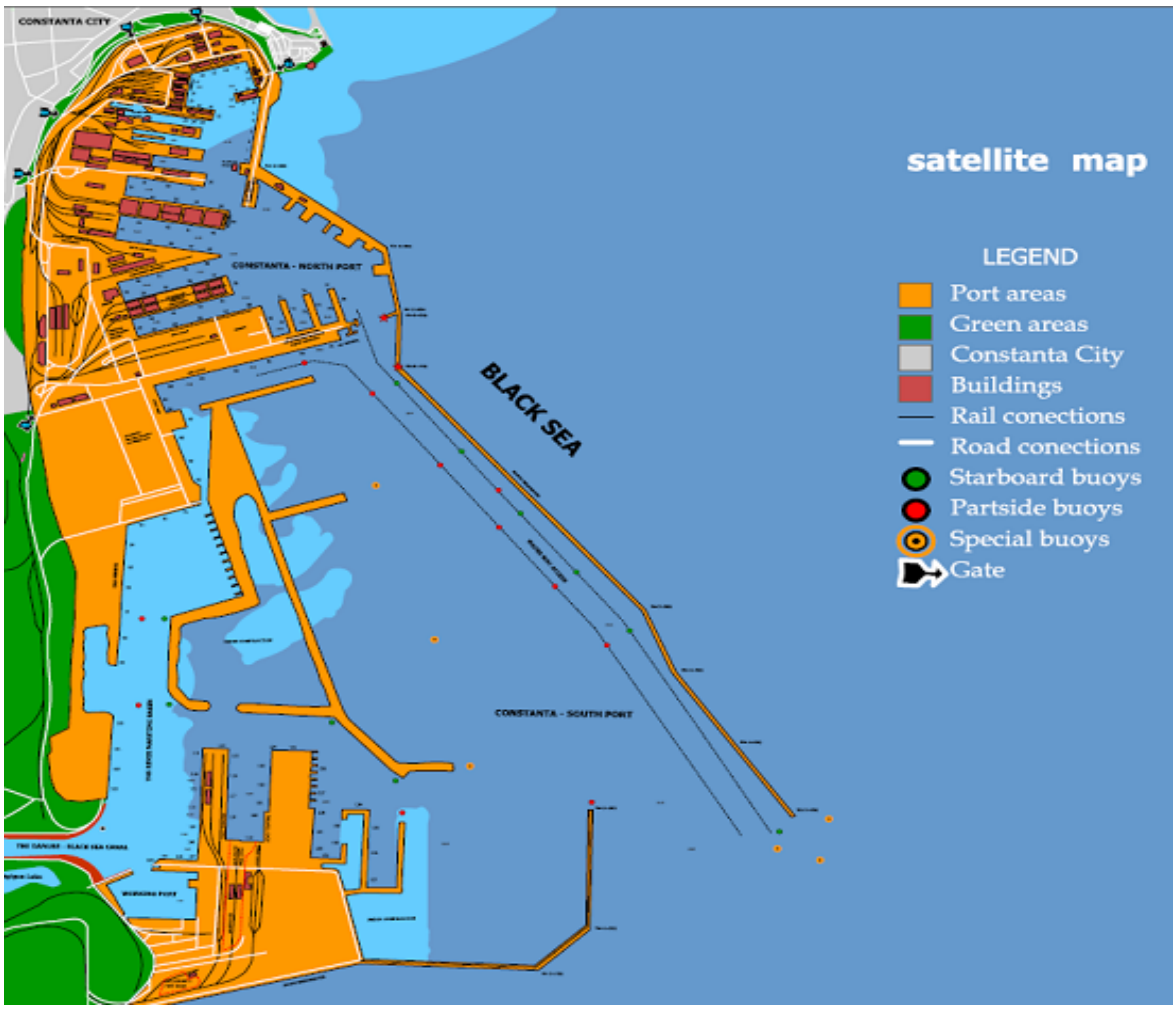
1.The strategic importance of Constanta Port

In the context where the European economies are active in the business development on the emergent markets, Romania has an important potential of becoming one of the major commercial routes, through Constanta port, which is situated among the first 10 ports at European level and which has a strategic importance at regional level that results not only from the fact that it has a favorable geographic positioning, but also from the fact that it is located at the cross-roads of commercial routes that connect the Central and Eastern Europe to the Middle/Mid East and Northern Africa.

Located on the western coast of the Black Sea, at 179 nautical miles (nM) from the Bosporus Strait and at 85 nM from Sulina Branch, on the routes of 3 Pan-European transport corridors: Corridor IV, Corridor IX and Corridor VII (Danube) – which connects the North Sea to the Black Sea through Rhine – Main – Danube Canal, Constanta port covers a total area of 3,926 ha, out of which 1,313 ha land and 2,613 ha water, offering a yearly operation capacity of around 120 million tons, being serviced by 156 berths, out of which 140 are operational, with a total quay length of 29.83 km and depths that range between 7 and 19 m, allowing the access of vessels with a maximum capacity of 220,000 dwt.

Constanta Port is both a maritime and a river port, having a terminal specialized for barges that allow the mooring of any type of river vessel.

The connection of Constanta Port to the Danube is achieved through the Danube – Black Sea Canal and it represents one of the main advantages of Constanta Port, due to the access to the river transport network that offers the advantage of reduced transport costs and important volumes of goods that can be delivered on the Danube.



Being one of the main distribution centers from Central and Eastern Europe, Constanta Port offers the following advantages:

- The statute of free zone and multifunctional port with facilities and water depths in the port dock sufficient for the mooring of the vessels of Handymax / Supramax / Panamax type, but also of river vessels;
- Direct access to the Central and Eastern Europe countries through Pan-European Corridor VII – Danube;
- Center of operation and distribution of the containers to the ports from the Black Sea;
- Connections to all ways of transport: by rail, by road, by river, by air and by pipelines;

According to the data communicated by Maritime Ports Administration (APM) Constanta, the total traffic of goods registered in the year 2012 in Constanta port was 50,584,662 tons, an increase with 10% as against the volume of 45,972,095 tons registered in 2011.

Traffic data	Year 2004	Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012
Total traffic (tons)	50,914,096	60,631,737	57,126,389	57,779,915	61,837,716	42,014,178	47,563,879	45,972,095	50,584,662
Bulk goods (tons)									
Liquid bulk	17,782,350	15,393,709	14,731,819	14,066,523	14,444,476	11,810,554	11,210,940	10,616,509	10,014,672
Solid bulk	28,517,010	31,367,349	28,023,866	25,281,750	30,303,512	21,150,690	27,157,391	24,732,592	29,521,193
General goods (tons)	5,691,420	6,426,900	4,554,946	5,788,639	4,059,746	3,154,924	3,307,669	4,105,327	4,512,443
Containers									
Quantity (tons)	3,923,316	7,443,779	9,815,758	12,643,003	13,029,982	5,898,010	5,887,879	6,517,667	6,536,354
Number	241,782	495,068	672,443	912,509	894,876	384,076	353,711	414,096	416,807
TEU[1]	373,702	771,126	1,037,066	1,411,414	1,380,935	595,303	556,694	662,796	684,059
Number of calls for maritime vessels	5,300	5,511	5,771	5,760	5,950	4,959	5,202	4,874	5,057
Number of calls for river vessels	7,572	8,778	8,180	7,240	8,030	6,823	7,945	7,829	9,312

In the period analyzed, the maritime traffic was 38,854,222 tons (as against 37,224,663 tons in 2011), and the river traffic was 11,730,440 tons (as against 8,747,432 tons in 2011).

In the last 10 years, the sector with the most important development in Constanta Port is represented by the operation of agricultural products (cereals, oleaginous seeds, fodder) and chemical fertilizers, sector which practically has doubled its activity in this interval.

There is a number of 7 operators specialized exclusively in cereals operation, having a storage capacity of about 350,000 tons and 1 operator specialized exclusively in operating chemical fertilizers, with a storage capacity of about 100,000 tons.

In the year 2012, according to the date from APM Constanta, 34% from the total volume of goods was represented by the operations with cereals, fodder, oleaginous seeds and chemical fertilizers.

Type of goods	Year 2004	Year 2005	Year 2006	Year 2007	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Cereals	4,176,434	6,009,885	7,168,508	4,257,869	6,670,362	10,418,679	12,061,966	9,534,972	12,628,340
Fertilizers (natural and chemical)	1,865,040	2,310,446	2,093,175	1,863,531	1,896,207	1,344,468	1,765,865	2,015,114	2,153,597
Wood and cork	1,257,318	1,011,969	906,363	971,432	836,120	838,430	961,855	941,453	928,522
Food products and forage for animals	566,899	551,210	537,579	302,755	432,859	303,011	368,935	525,758	497,245
Oleaginous seeds, oleaginous fruit and fat	550,834	453,659	877,076	895,629	1,131,469	1,567,059	1,759,849	1,932,248	736,300
Total	**8,416,525**	**10,337,169**	**11,582,701**	**8,291,216**	**10,967,017**	**14,471,647**	**16,918,470**	**14,949,545**	**16,944,004**

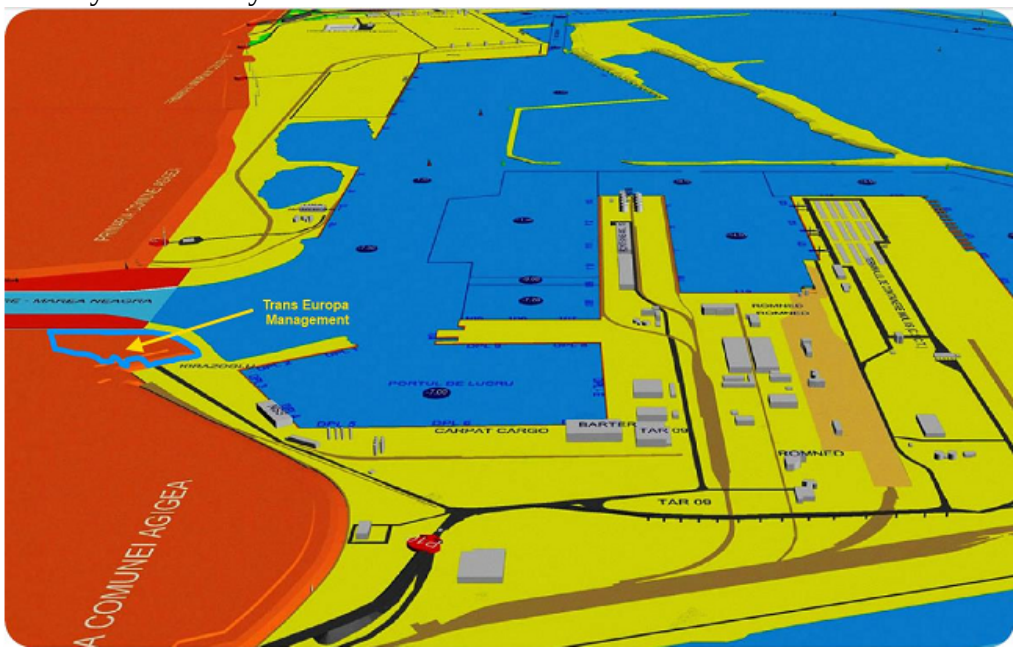
2.Opportunities of development for the investment projects in Constanta Port

Constanta Port is managed exclusively by Maritime Ports Administration Constanta, institution subordinated to the Ministry of Transports.

If in the northern area of Constanta Port, the opportunities of development for some investment projects are very limited due to the fact that most of the port operators are grouped in this area and the land areas free and available for the development of some projects are almost inexistent, the south area has a high potential of development, being the newest component of Constanta Port.

Constanta South Agigea Port has a direct connection to the Danube – Black Sea Canal, depths comprised between – 7 m and – 16 m, access to the railroad network and access to A2 Motorway through the new bridge which is in an advanced stage of construction, which crosses the Danube – Black Sea Canal and performs the connection between the north and south components of the port.

Trans Europa Management has in administration a location of approximately 51,000 m^2, located in the area of Constanta South Agigea Port, with a potential attractive for the development of some investment projects. The land is positioned near the operating basin of the Danube – Black Sea Canal and Agigea – South railway station, having also a direct access to the new bridge over the Canal and A2 Motorway, aspects that constitute a major advantage in what concerns the possibilities of development for an investment project with access to all ways of communication: maritime way, river-way, roadway and railway.

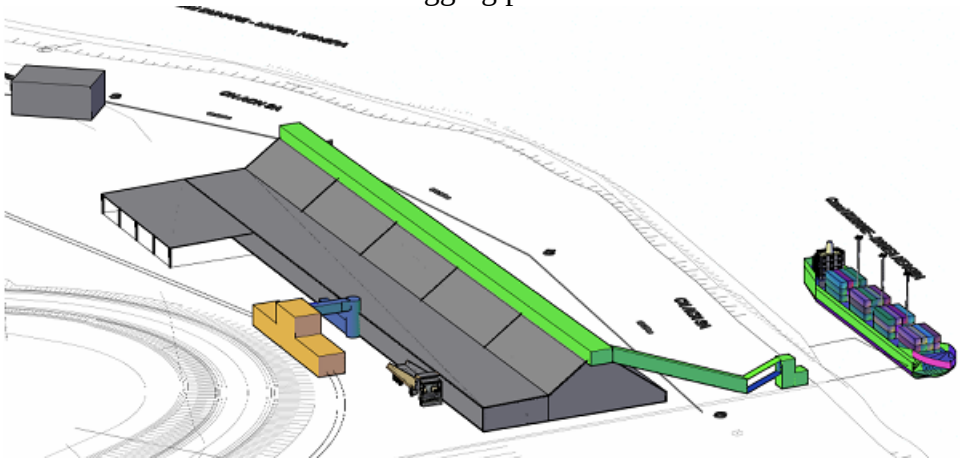


The proposals had in view by Trans Europa Management in order to make available the potential which this location presents, have the following variants on how to proceed:

A. Terminal specialized in the operation of chemical fertilizers.
B. Terminal specialized in the operation of cereals and chemical fertilizers

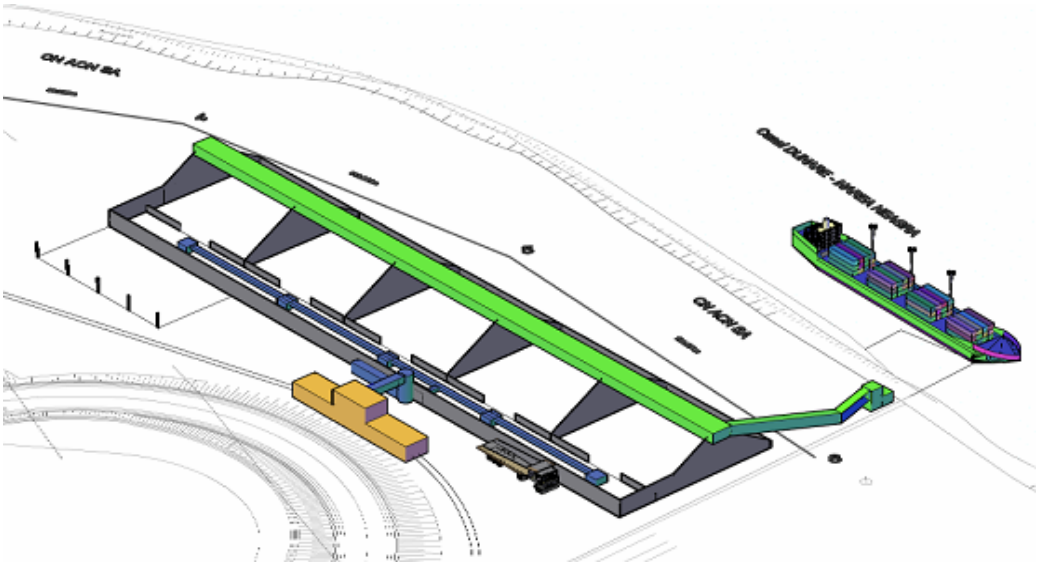
A. Terminal specialized in the operation of chemical fertilizers

The first proposal has in view the construction of a storage facility for storing the chemical fertilizers with a capacity of 40,000 tons, the endowments including: installations of on-loading to / off-loading from maritime / river vessels, equipments for preparing the mechanical mixtures of chemical fertilizers and chemical fertilizers bagging plants.



Technical characteristics:

- The warehouse has a footprint of 181 m length, with 42.40 m width, resulting a building footprint area of 7560 square meters, it is done with reinforced concrete walls with a thickness of 30 cm and height of 6.00 m, hardened with reinforced concrete pillars at 6.00 m, central precast reinforced concrete pillars at a distance between pillars of 12.00 m and precast reinforced concrete beams with openings of 21.00 m and a eave height of approximately +8.20 m.
- The paving over the soil has a thickness of 20 cm, it is done from reinforced concrete, calculated in order to support the weight of the goods stored. The covering will be done from precast double T elements, from reinforced concrete, with a height comprised between 40 and 60 cm.
- The storage facility is provided with compartments separated through reinforced concrete fixed walls.

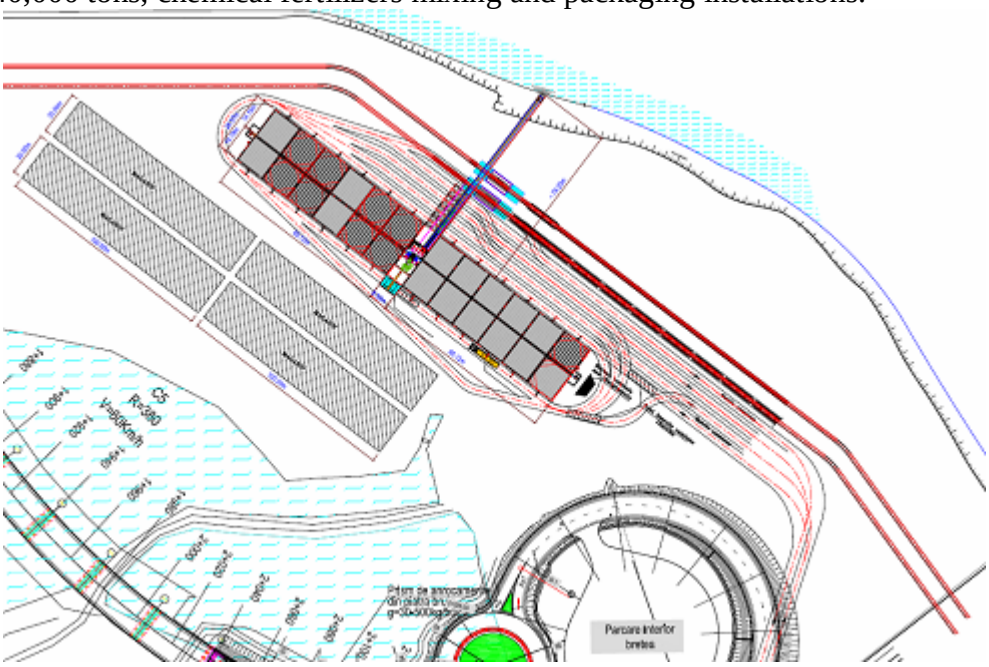


- The maximum filling height will be 8,00 m on the centre and between 0-4 m on the margins; over the structure, on the precast concrete pillars, a conveyer belt will be erected on the metallic structure, necessary for taking over the goods from the commercial port.
- The technology of handling the stored products is semi-mechanical, by using the mobile car loaders or mobile and fixed conveyer belts.
- The proposed external concrete platform, with an area of about 10,000 square meters, will be done from reinforced concrete, with thickness of 20 cm, used for developing transport and storage activities.
- Conveyer belts capacity: 300 tons/hour, chemical fertilizers blender capacity: 120 tons/hour, capacity of bagging plants: 60 tons/hour.

The storage facility will allow achieving a yearly traffic of 260,000 tons of chemical fertilizers, operated and delivered through the terminal from Agigea.

B. Terminal specialized in operating the cereals and chemical fertilizers.

The second proposal considered for turning to advantage the potential of the land managed by Trans Europa Management, has in view placing a silo for storing the cereals with a capacity of 40,000 tons, cereals seasoning installations, a hold for storing the chemical fertilizers in bulk with a capacity of 40,000 tons, chemical fertilizers mixing and packaging installations.



Technical characteristics:

- Silo for cereals storage, with square cells (12 cells x 3,500 to/cell), total silo dimensions: (L) 85 m x (l) 25 m), having a capacity of 42,000 tons and the possibility of extension with other 42,000 tons. The silo has foreseen the possibility to operate on vehicles/railway/maritime and benefits from complete endowments: equipments tower, tap and dehumidifier (in original taror, uscaror).
- Holds for storing chemical fertilizers in bulk. In the case of these objectives, the blueprint provides only 4 holds, this bordering being a preliminary one. The capacity provided for the storage holds is 32,000 tons, that will determine the placement of minimum 4 holds x 8,000 tons capacity / hold, with dimensions of approximately: 100 m (L) x 20 m (l) x 10 m (height at ridge), on condition that the maximum opening can be extended up to 25 m.

The project allows achieving a yearly traffic of 400,000 tons of cereals and 200,000 tons of chemical fertilizers.

ANNEXES

PROJECT SHEET

A. Project description

A.1. Project's name: "QUAY AT THE ENTRANCE OF THE DANUBE - BLACK SEA CANAL (TOWARDS THE WORK PORT)".

A.2. Final beneficiary: CN APM SA Constanta

A.3. Contracting authority: CN APM SA Constanta

A.4. Project's category: Ports

A.5. Type of project: New infrastructure

A.6. Actual status: Plan

A.7. Implementing calendar:

Stages:	Start date	End date
1.Pre-feasibility studies	There were not issued	There were not issued
2.Feasibility studies	There were not issued	There were not issued
3.Cost-benefit analysis		
4.Study of the impact on the environment		
5. Technical project		
6.Preparing the tender documentation		
7. Estimated data of launching the tender procedures		
8. Land procurement		
9. Construction phase		
10. Operating period		

B. General information

B.1. Project description (*not more than 200 words*)

Works for the execution of the quay, performed from simple concrete blocks of 100 tons/piece underlain at -7m, fillings for achieving the port territory, operating platforms.

B.2. Project objectives (*not more than 120 works*)

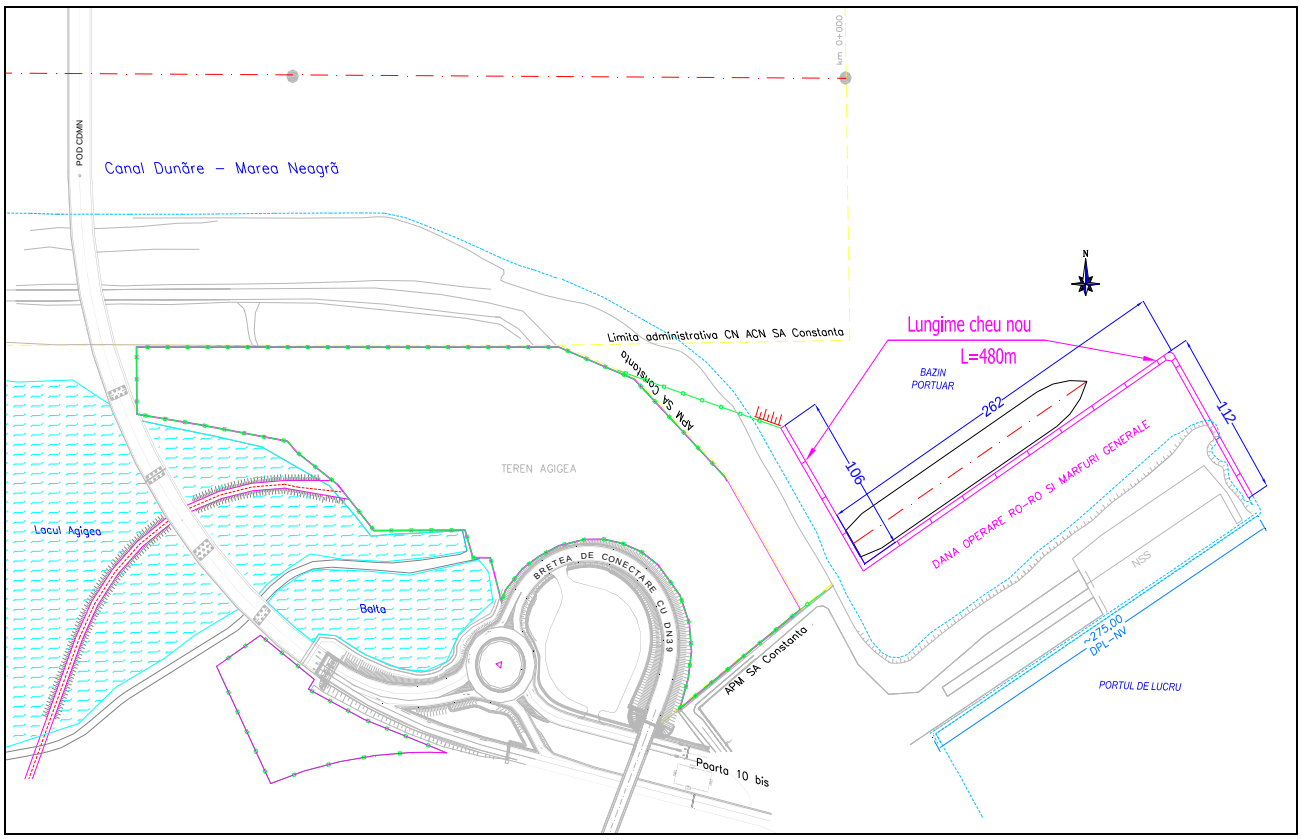
The project objective consists in closing the pier adjacent to the access area of the Danube – Black Sea Canal with a quay made from heavy blocks underlain at -7 m, on a length of around 480 m and performing this way a vessels' landing quay of about 262 m on the side opposed to DPL1 and DPL2 berths and an area of operation in their rear of about 18,000 square meters. In these conditions, through performing Gate 10 bis and the new access towards the south area of Constanta port, a new port territory of interest in developing some new commercial activities is achieved in this work port area.

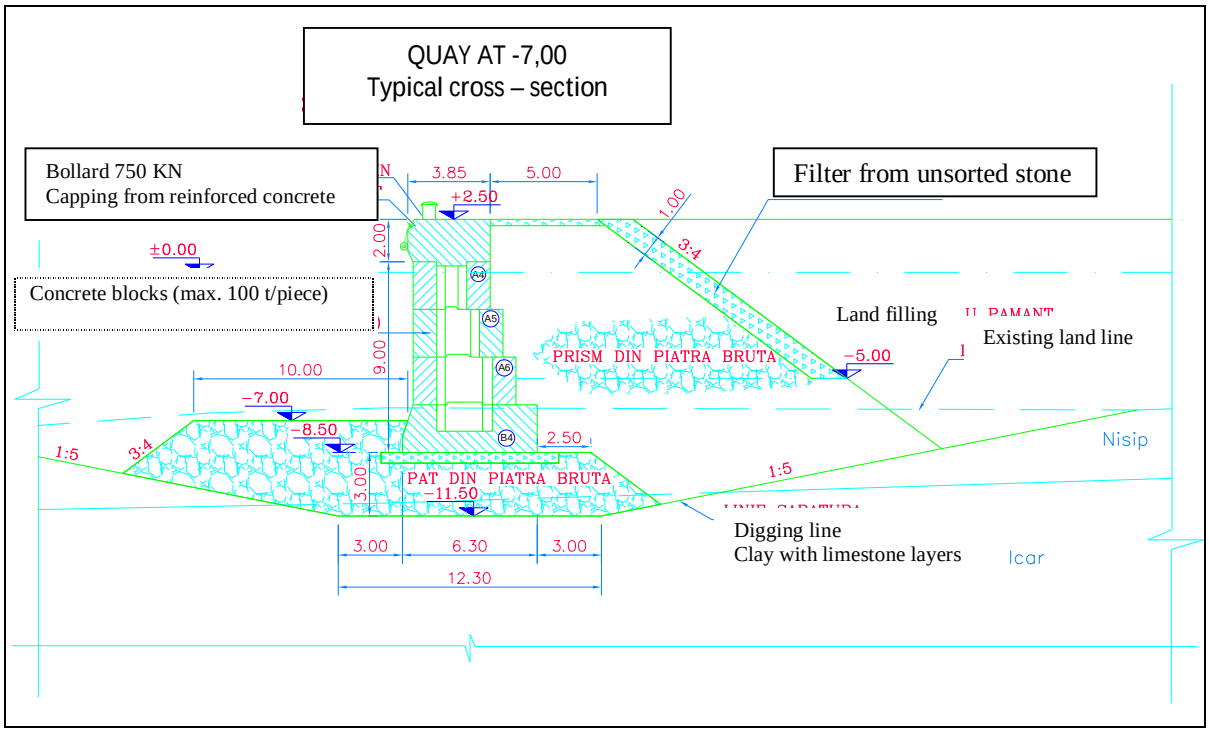
C. Technical description

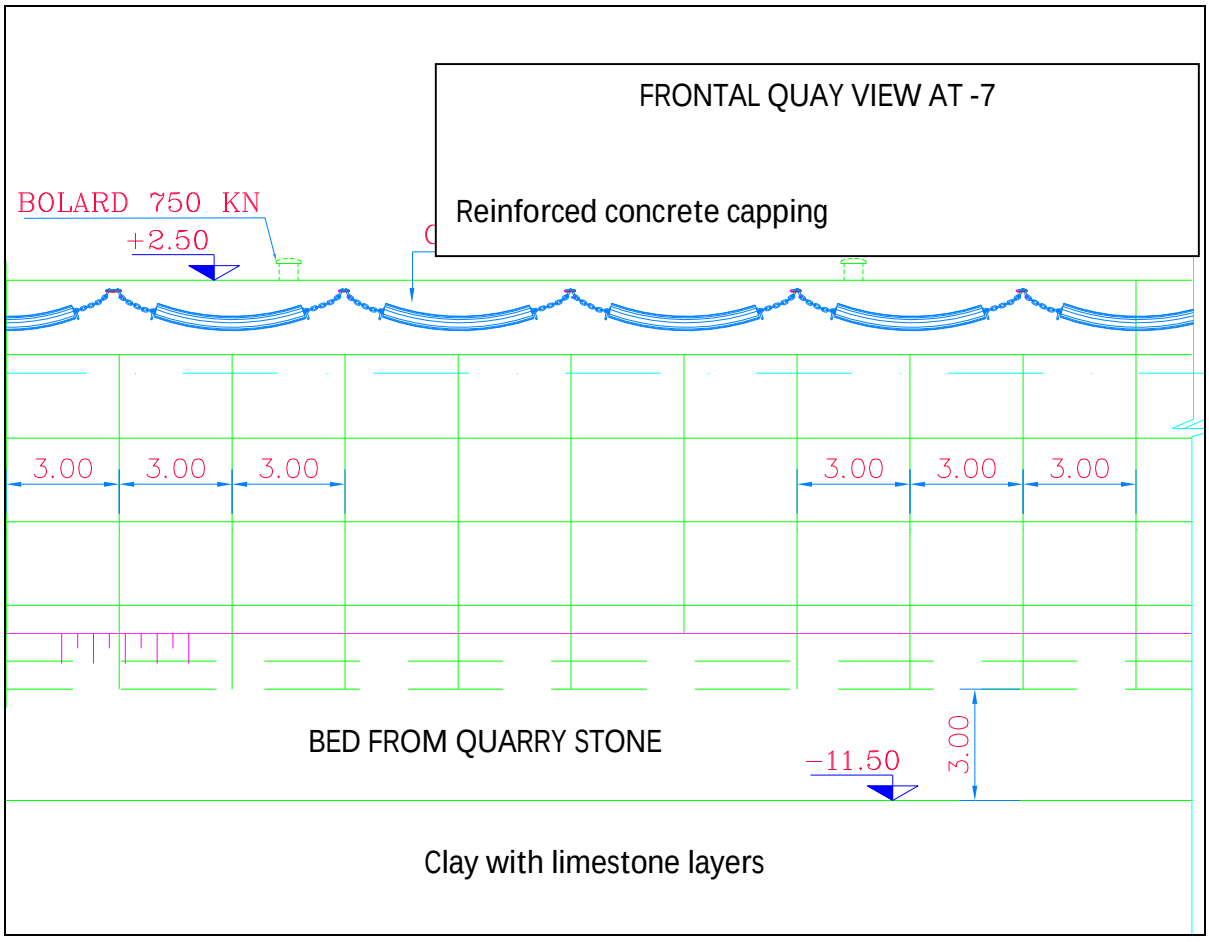
C.1. Technical indicators

Quay from simple concrete blocks of 100 t / piece: 480 m; operating platform in the rear of the quay adjacent to the pier: 18,000 square meters; Operating platform in the rear of the quay from the entrance of the Danube – Black Sea Canal: 6,000 square meters.

C.2. Project blueprint




QUAY AT -7,00
Typical cross – section
Bollard 750 KN
Capping from reinforced concrete
Concrete blocks (max. 100 t/piece)
Filter from unsorted stone
Land filling
Existing land line
PRISM DIN PIATRA BRUTA
PAT DIN PIATRA BRUTA
Digging line
Clay with limestone layers
Nisip
Icar
±0.00
+2.50
−5.00
−7.00
−8.50
−11.50
3.85
5.00
1.00
2.00
9.00
10.00
2.50
3.00
6.30
12.30
1:5
3:4


FRONTAL QUAY VIEW AT -7
Reinforced concrete capping
BOLARD 750 KN
+2.50
3.00
3.00
3.00
3.00
3.00
3.00
BED FROM QUARRY STONE
−11.50
3.00
Clay with limestone layers

D. Costs of the project

D.1. Estimation of the cost categories, in case a Feasibility Study is available.
Estimation of the cost categories (EURO, without V.A.T.), according to Government's Decision no. 28/2008.

1.Land procurement and management	0
2. Ensuring the utilities	
3. Designing and technical assistance	630,000
4. Basic investment	12,600,000
5. Other costs	1,260,000
6. Technological samples	0
Total capital costs	**14,490,000**

D.2. The moment in time for costs evaluation

D.3. Anticipated financing sources (EURO, without VAT)

State budget	
Local budget	
Loans	
EU funds	
Private sources	

D.4. Estimated level of not updated, average yearly maintenance costs (EURO, without V.A.T.)

D.5. Total income not updated for the lifespan of the Project (EURO, without V.A.T.)

E. Project assessment for AMC

E.1. Economic efficiency: RIRE
E.2. Environment: The impact on Natura 2000 – it has no impact
E.3. E.U. Policy: - Is the Project included in TEN-T basic network?
- Is the Project included in TEN-T comprehensive network?

F. Other specific information

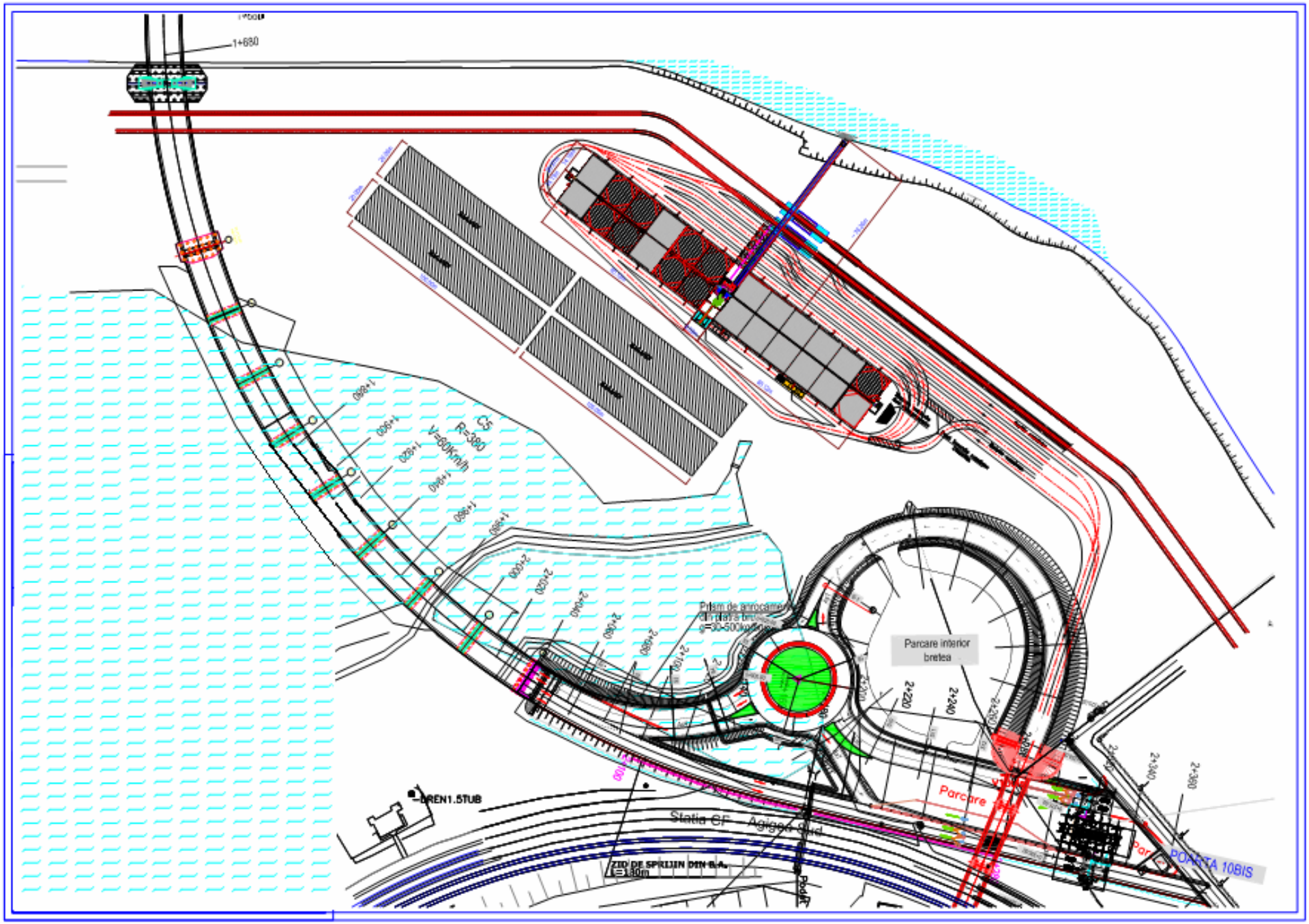
F.1. Connections with other projects and / or strategies: deepening the work port; road bridge at 0+540 km of the Danube – Black Sea Canal
F.2. Specific information

LOCATION VARIANTS

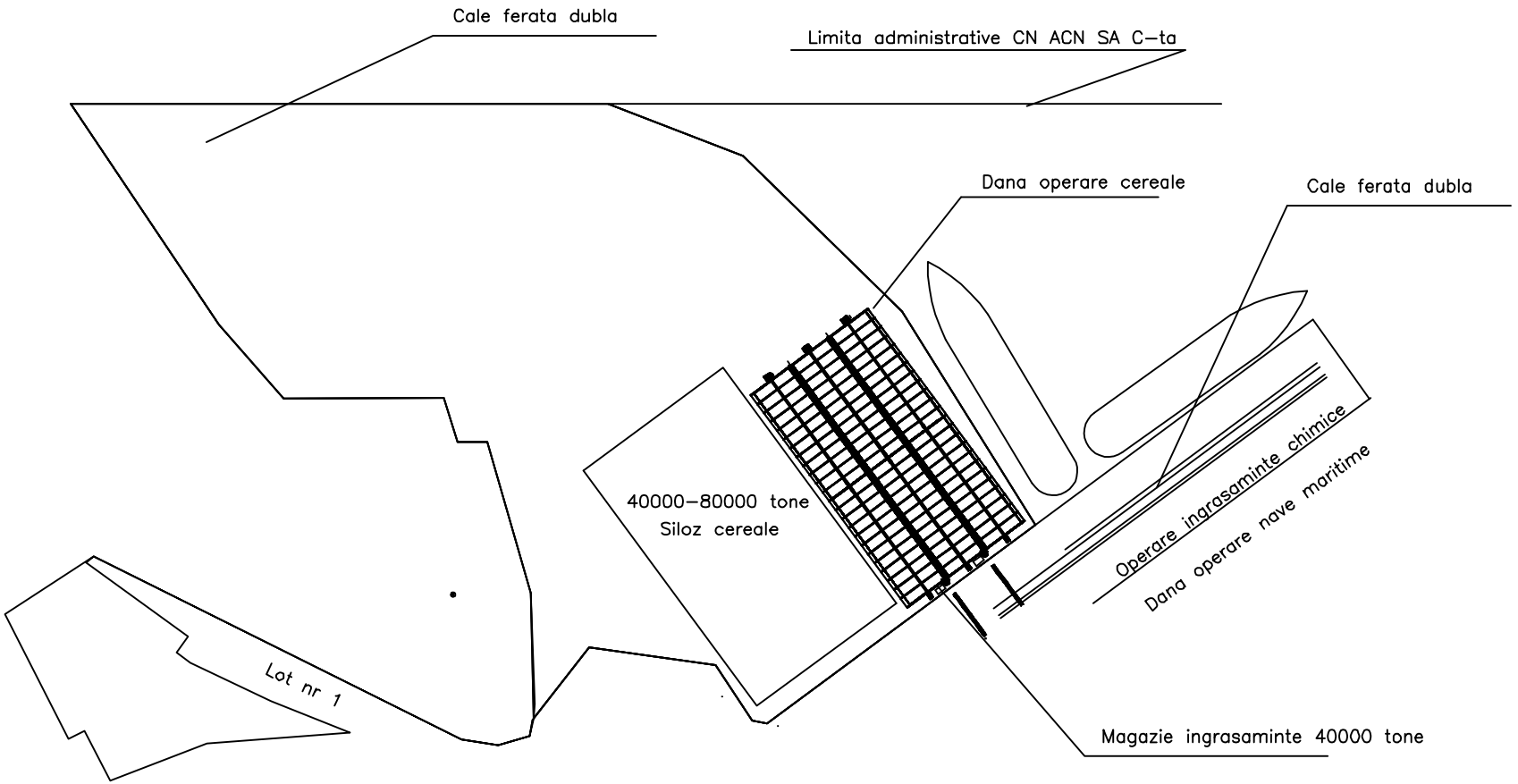
On the land from Agigea, we present 2 location variants of some storage facilities for cereals with a capacity between 40,000 – 120,000 tons.

There were taken into consideration the two operating berths and the double railway line that must exist unconditionally.

The route of the technological flow was drawn with a thick line, taking into consideration that the operation with the vessel is a priority and without intersecting with other methods of operation (by roadway, by railway, etc.).


1+680
C5
R=380
V=60Km/h
Parcare interior
bretea
Parcare
Statia CF Agigea Sud
ZID DE SPRIJIN DIN B.A.
L=180m
DREN1.5TUB
POARTA 10BIS

VARIANTA AMPLASRE IN TEREN AGRIUM–AGIGEA



VARIANTA AMPLASRE IN TEREN AGRIUM–AGIGEA