



Road Survey Berth – Aktobe – Nur Sultan - Erementau

Project: ENO Wind Turbines / Erementau (KZ)

Doc. No: ENO_RS_2021902

Date: 29.01.2021

1. INTRODUCTION

Documentation of the project organization of transportation heavy and oversized cargo meets all the necessary requirements of technical regulations and regulatory documents and provides for measures to ensure traffic safety in compliance with all required conditions and operating rules. For general calculation we recommend to our subcontracted design engineers using of tachymeter.

The main task during the work was to check the transport condition of the state highway including evaluation of the possibility of the transit on it of a large-sized heavy-duty vehicle, without causing damages to the road, pavements and artificial constructions on it. In order to solve this problem, a complex analysis was made to check if the road, pavement, roadbed and artificial constructions can handle the thrust.

Based on these results a scientific-technical report has been developed containing the results of the evaluation of transport and operational condition of highways and artificial constructions.

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4. TECHNICAL SURVEY

4.1. Technical survey of the route for the delivery of oversized and heavy cargo on the public roads by transport vehicle was made from Point of Loading in Port KCOI (KZ), to site in Nur Sultan (KZ).

4.2. Technical survey of roads on the route was made by means of visual survey, measuring and studying of technical characteristics of carrying capacity of roads and constructions (quality of load-carrying structure, elements of roads and measurements of bridges, overpasses, engineering service lines and other constructions).

4.3. Characteristics of roads and constructions on them.

4.3.1. Bridgework

Bridges and overpasses have strategic significance. Maximal axial load is 10 to on every bridgework. Quantity of axes used for the transportation of oversized cargo has to be exactly determined for the transportation on the bridgework taking into account maximal axial load 10 to.

4.3.2. Roads

For the transportation of oversized cargo on the road has to be taken into account quality of roads, type of traffic-bearing surface, radius of degree of rotation and permissible maximal axial load.

4.3.3. Overground (air) engineering communications and constructions:

For the transportation of cargo through engineering communications and construction is necessary to take into account the height and width of empty space. On the route the main such constructions are piping (electrical, gas, water, etc.), traffic signs, overhead power lines and electric communications, traffic police station.

4.3.4. Railway crossings

Crossing over railway has to be coordinated and agreed with Government/ Road Authorities.

4.3.5. Slopes

The possibility of transportation on longitudinal slopes has to be thoroughly calculated taking into account weight of cargo, technical characteristics and systems of transport vehicles, appropriate choice of truck and trailer.

4.3.6. Turns to the right and to the left

Taking into account the measurement of cargo in this survey was indicated the maximal length of a road train for passing of each turn. At some places it will be necessary to widen a road so that road-train can better manoeuvre while turning.

4.3.7. Road transportation

The rules of organization and executing of transportation of oversized cargo are regulated by the Resolution of Ministry of Government

5. BERTH INFORMATION



Location:	KCOI (nr 12_1)
Coordinates:	43.876965, 51.01057
Obstacles:	Berth
Remarks:	Berth deep: 3m 2 mobile cranes 280 t and 180 tn, leght of the total length of the berth is 200m and the concrete area 120 m



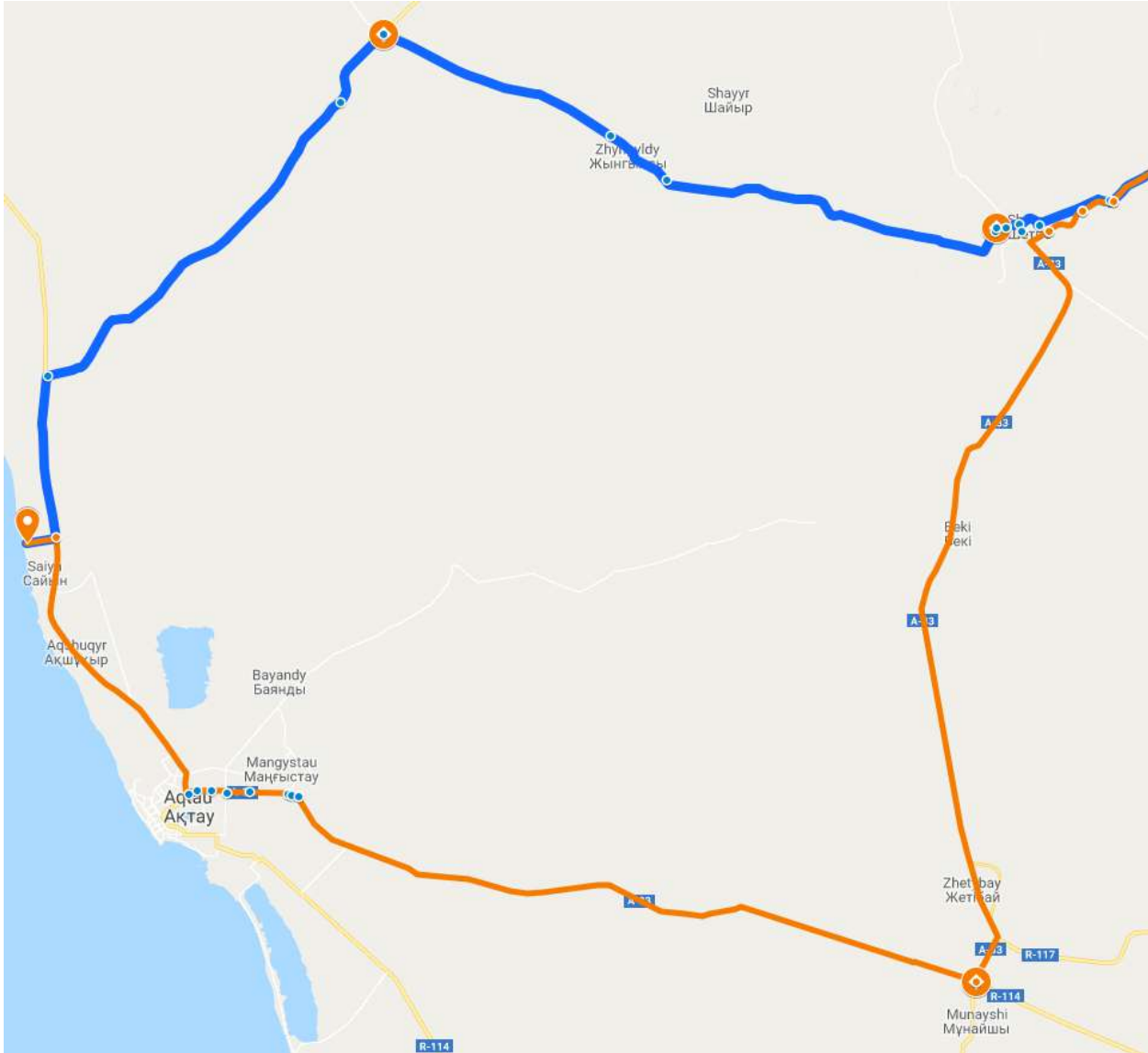
6. ROUTE OVERVIEW

Turn to Shetpe – Shetpe (blue route).....	5
Turn to Shetpe – Shetpe (orange route)	10
Shetpe – Atyrau	17
Atyrau – Uralsk	35
Uralsk - Aktobe	41
Aktobe - Kostanay.....	89
Kostanay - Astana	123
Astana - Erementau	158

Route: Turn to Shetpe – Shetpe (blue route)

Distance: 116 km

Cargo type: Heavy lift, general (blue route)





Location:	KCOI-Shetpe (nr 13_12)
Coordinates:	44.24093, 51.370518
Obstacles:	Road
Remarks:	Road construction
Navigation:	



Location:	KCOI-Shetpe (nr 13_13)
Coordinates:	44.29718, 51.420208
Obstacles:	Turn
Remarks:	no construction required
Navigation:	



Location:	KCOI-Shetpe (nr 13_14)
Coordinates:	44.213673, 51.681038
Obstacles:	Archway
Remarks:	archway height h = 7 m
Navigation:	



Location:	KCOI-Shetpe (nr 13_15)
Coordinates:	44.17697, 51.745544
Obstacles:	Archway
Remarks:	archway height h = 6,9 m
Navigation:	



Location:	KCOI-Shetpe (nr 13_17)
Coordinates:	44.137604, 52.125317
Obstacles:	Turn
Remarks:	no construction required
Application №3	
Navigation:	



Location:	KCOI-Shetpe (nr 13_18)
Coordinates:	44.138325, 52.13496
Obstacles:	Culverts
Remarks:	pipelines
Navigation:	



Location: KCOI-Shetpe
(nr 13_19)

Coordinates: 44.14031, 52.17364

Obstacles: Turn

Remarks:
no construction required
Application №4

Navigation:





Location: **KCOI-Shetpe**
(nr 13_20)
Coordinates: 44.16014, 52.255554
Obstacles: **Turn**
Remarks:
Road signs remouving
Application №5

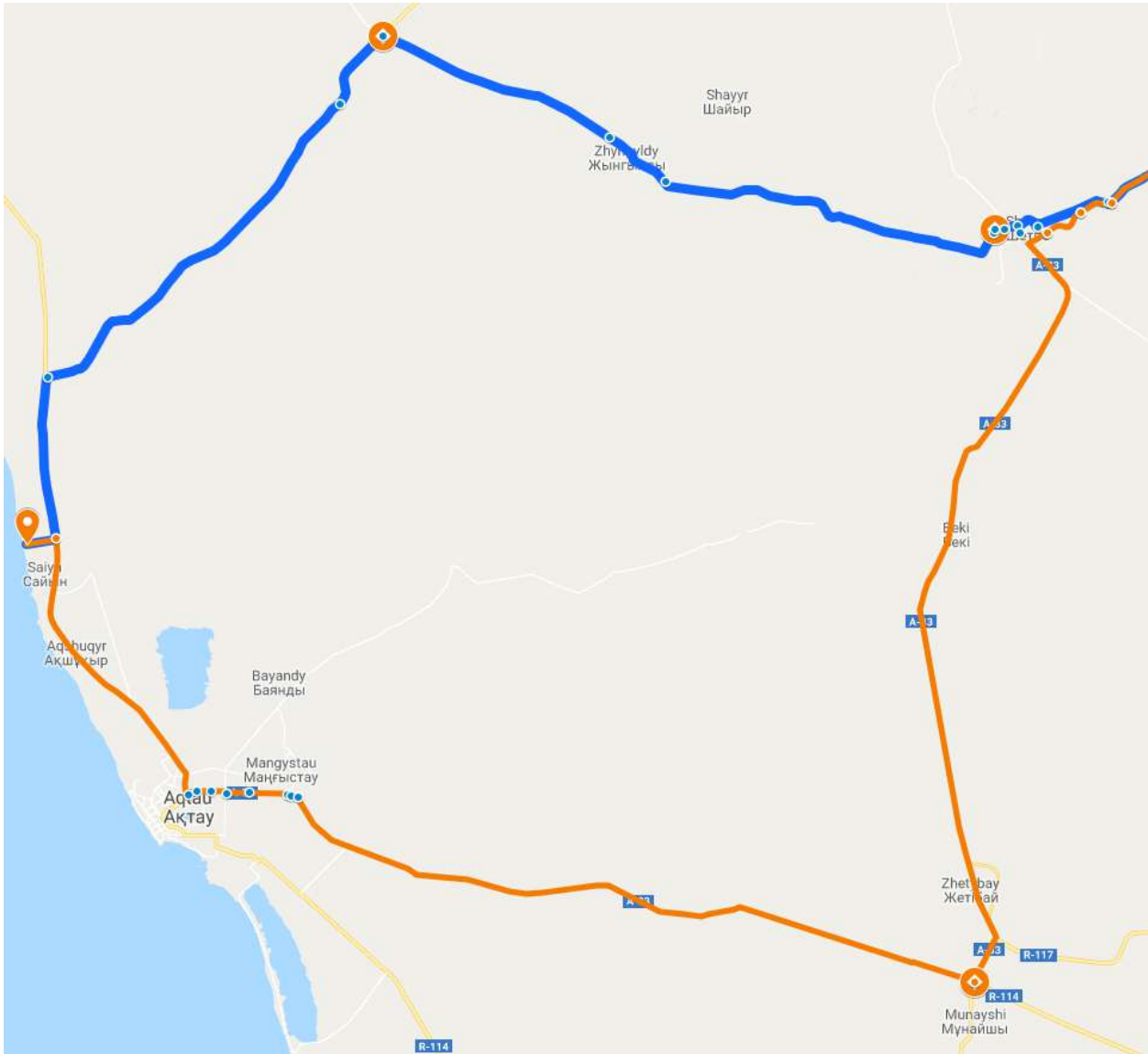


Navigation:



Location:	KCOI-Shetpe (nr 14_21)
Coordinates:	44.15996, 52.259274
Obstacles:	Turn
Remarks:	no construction required Application №5
Navigation:	

Route: **Turn to Shetpe – Shetpe (orange route)**
 Distance: **206 km**
 Cargo type: **Blades (orange route)**



Obstacles:

	Location: Aktau - Shetpe - Manata - Beineu (nr 14_01)
	Coordinates: 43.668724, 51.196255
	Obstacles: Turn



Remarks:
no construction required

Application №6

archway height $h = 6,0$ m

Navigation:



Location: **Aktau - Shetpe - Manata - Beineu**
(nr 14_02)

Coordinates: 43.671783, 51.20637

Obstacles: **Archway**

Remarks:
archway height $h = 5,8$ m

Navigation:



Location:	Aktau - Shetpe - Manata - Beineu (nr 14_03)
Coordinates:	43.67178, 51.22196
Obstacles:	Archway
Remarks:	archway height h = 5,7 m
Navigation:	



Location:	Aktau - Shetpe - Manata - Beineu (nr 14_04)
Coordinates:	43.67007, 51.239716
Obstacles:	Turn
Remarks:	To pass the turn, you must first turn left - move backwards through the railway crossing to the intersection
Application №7	



Navigation:	
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Location:	Aktau - Shetpe - Manata - Beineu (nr 14_05)
Coordinates:	43.67049, 51.266193
Obstacles:	PTL
Remarks:	110 / height h = 7 m
Navigation:	



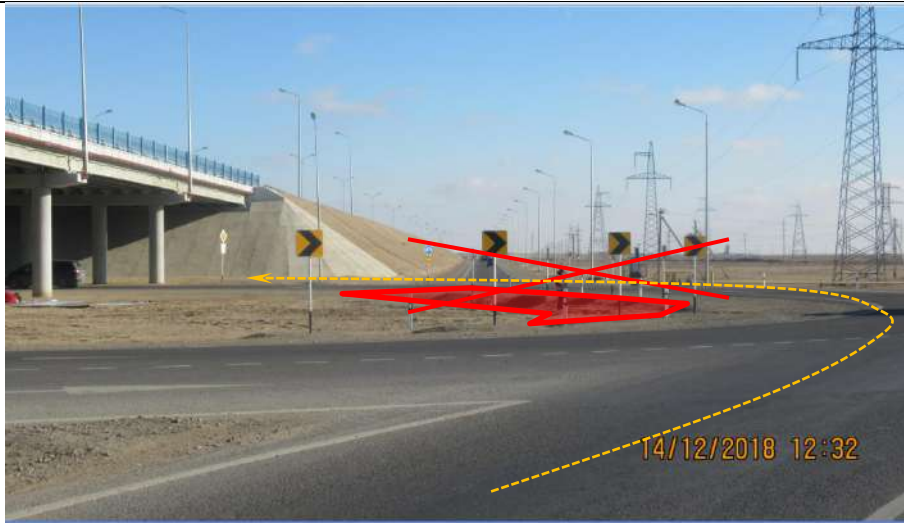
Location:	Aktau - Shetpe - Manata - Beineu (nr 14_06)
Coordinates:	43.66921, 51.310295
Obstacles:	Archway
Remarks:	archway height h = 5,4 m; highway over crossing h = 5,9; archway height = 6,2 m
Navigation:	



Location:	Aktau - Shetpe - Manata - Beineu (nr 14_07)
Coordinates:	43.668064, 51.314426
Obstacles:	Archway
Remarks:	archway height h = 7,5 m
Navigation:	



Location:	Aktau - Shetpe - Manata - Beineu
(nr 14_08)	
Coordinates:	43.666412, 51.323025
Obstacles:	Traffic circle
Remarks:	all right
Navigation:	



Location:	Aktau - Shetpe - Manata - Beineu
(nr 14_18)	
Coordinates:	43.513016, 52.100983
Obstacles:	Highway over crossing /traffic circle
Remarks:	archway height = 6,4 m, expanding of the road, dismantling of road signs on traffic circle, Application №8
Navigation:	



Location: Aktau - Shetpe - Manata - Beineu
(nr 14_19)

Coordinates: 44.134438, 52.1851

Obstacles: Traffic circle / Bridge

Remarks:
 traffic circle - all right
 Bridge technical characteristics:
 total length: - 72 m
 bridge scheme - 24x24x24 [m]
 total width- 10m including pedestrian crossings with width 1m
 pier height- 6,3 m
 technical state- without visible damage
 Transportation in a

Navigation:



Location: Aktau - Shetpe - Manata - Beineu
(nr 14_20)

Coordinates: 44.151493, 52.223324

Obstacles: Bridges

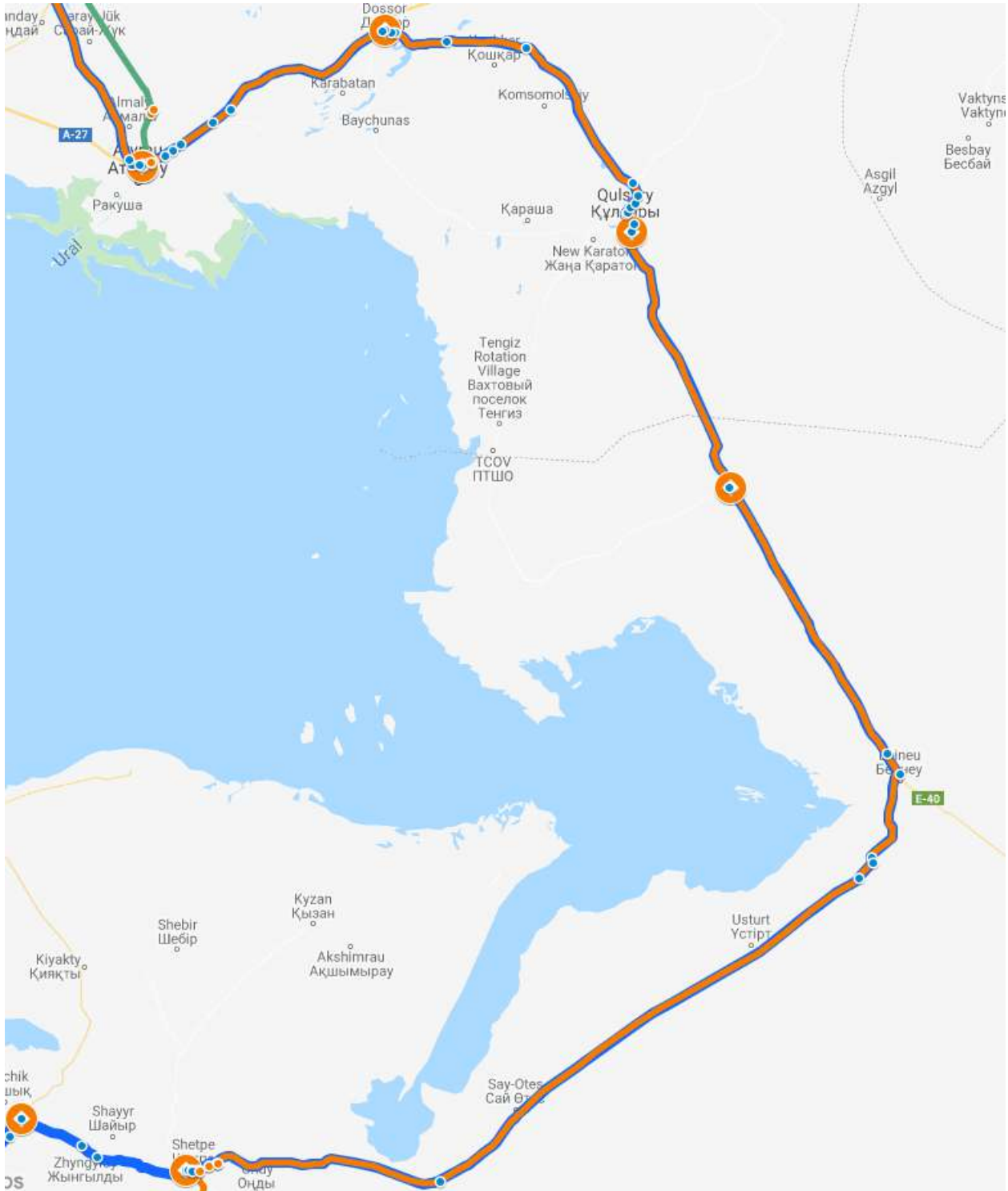
Remarks:
 Bridge technical characteristics:
 total length: - 15 m
 bridge scheme - 15 [m]
 total width- 12 m including pedestrian crossings with width 1m
 technical state- without visible damage/
 bypass existing
 removing of the pillar and fences needed
 Transportation

Navigation:

Route: **Shetpe – Atyrau**

Distance:

Cargo type: **Blades, heavy lift, general**





Location: Aktau - Shetpe - Manata - Beineu
(nr 14_22)

Coordinates: 44.103252, 53.210026

Obstacles: MANATA

Remarks:
Length from 100m till 800m with slopes from 5% till 10%
4 high voltage lines with height from 8m up to 11m. It is necessary to switch off both.

Navigation:



Location: Aktau - Shetpe - Manata - Beineu
(nr 14_25)

Coordinates: 45.072144, 55.06185

Obstacles: Bridges

Remarks:
Bypass for heavy cargo existing, checking of pipes, driveways is necessary

Navigation:



Location: Aktau - Shetpe - Manata - Beineu
(nr 14_25)

Coordinates: 45.085631, 55.058406

Obstacles: Bridges

Remarks:
Bypass for heavy cargo existing, checking of pipes, driveways is necessary

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_01)

Coordinates: 45.34179, 55.177814

Obstacles: Turn

Remarks:
no construction required

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_02)

Coordinates: 45.40045, 55.123787

Obstacles: Archway

Remarks:
archway with camera, height $h = 6,2$ m

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_03)

Coordinates: 46.19458, 54.452847

Obstacles: Turn

Remarks:
billboard dismantling

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_04)

Coordinates: 46.194534, 54.45072

Obstacles: Turn

Remarks:
no construction required

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_05)

Coordinates: 46.94513, 54.028774

Obstacles: Turn

Remarks:
Dismantling traffic signs if necessary
Application №9

Navigation:





Location: Beineu - Quisary - Atyrau
(nr 15_06)

Coordinates: 46.970177, 54.04142

Obstacles: Bridges

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 12x12x12 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 3 m
 technical state- without visible damage
 Transportation in a single order along the bridge

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_07)

Coordinates: 46.997643, 54.00907

Obstacles: **Bridges**

Remarks:
 Bridge technical characteristics:
 total length: - 48 m
 bridge scheme - 12x12x12x12 [m]
 total width- 12 m including pedestrian
 crossings with width 1m
 pier height- 3 m
 technical state- without visible damage
 Transportation in a single order along the br

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_08)

Coordinates: 47.001957, 54.011837

Obstacles: Archway

Remarks:
archway height h = 6,5 m

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_09)

Coordinates: 47.016174, 54.026943

Obstacles: Bridges

Remarks:
Bridge technical characteristics:
total length: - 36 m
bridge scheme - 12x12x12 [m]
total width- 12 m including pedestrian crossings with width 1m
pier height- 3 m
technical state- without visible damage
Transportation in a single order along the bridge

Navigation:





Location: Beineu - Quisary - Atyrau
(nr 15_10)

Coordinates: 47.029575, 54.04468

Obstacles: **Bridges**

Remarks:
 Bridge technical characteristics:
 total length: - 48 m
 bridge scheme - 12x12x12x12 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 3,4 m
 technical state- without visible damage
 Transportation in a single order along the



Navigation:



Location:	Beineu - Quisary - Atyrau (nr 15_11)
Coordinates:	47.051716, 54.05884
Obstacles:	Bridges
Remarks:	<p>Bridge technical characteristics: total length: - 210 m bridge scheme - 21x21x21x21x21x21x21x21x21 [m] total width- 10 m including pedestrian crossings with width 1m pier height- 3,5 m technical state- without visible damage Transportation in a sing</p>



Navigation:



Location:	Beineu - Quisary - Atyrau (nr 15_13)
Coordinates:	47.481777, 53.577785
Obstacles:	Bridge over railway
Remarks:	<p>Bridge technical characteristics: total lenght: - 48 m bridge scheme - 12x12x12x12 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 3,4 m technical state- without visible damage Transportation in a single order along the</p>
Navigation:	



Location:	Beineu - Quisary - Atyrau (nr 15_14)
Coordinates:	47.49817, 53.237034
Obstacles:	Bridges
Remarks:	<p>Bridge technical characteristics: total lenght: - 36 m bridge scheme - 18x18 [m] total width- 10m including pedestrian crossings with width 1m pier height- 3 m technical state- without visible damage Transportation in a single order along the bridge ce</p>
Navigation:	



Location: Beineu - Quisary - Atyrau
(nr 15_15)

Coordinates: 47.525208, 53.022537

Obstacles: Bridges

Remarks:
 Bridge technical characteristics:
 total length: - 42 m
 bridge scheme - 12x18x12 [m]
 total width- 10m including pedestrian crossings with width 1m
 pier height- 7 m
 technical state- without visible damage
 Transportation in a single order along the bridge

Navigation:



Location: Beineu - Quisary - Atyrau
(nr 15_16)

Coordinates: 47.52485, 53.003063

Obstacles: Archway

Remarks:
 archway height $h = 6,7$ m

Navigation:



Location:	Beineu - Quisary - Atyrau (nr 15_17)
Coordinates:	47.531307, 52.977673
Obstacles:	Turn
Remarks:	no construction required
Application №10	
Navigation:	



Location:	Beineu - Quisary - Atyrau (nr 15_18)
Coordinates:	47.52949, 52.963074
Obstacles:	Archway
Remarks:	archway height h = 8,2 m
Navigation:	



Location:	Beineu - Quisary - Atyrau (nr 15_19)
Coordinates:	47.300926, 52.315205
Obstacles:	Bridges
Remarks:	Bridge technical characteristics: total lenght: - 36 m bridge scheme - 12x12x12 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 8 m technical state- without visible damage /bypass existing Transportation in a single ord
Navigation:	



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Location:	Beineu - Quisary - Atyrau (nr 15_20)
Coordinates:	47.2625, 52.239628
Obstacles:	Archway
Remarks:	archway height h = 7,4 m
Navigation:	



Location:	Beineu - Quisary - Atyrau (nr 15_21)
Coordinates:	47.199886, 52.104767
Obstacles:	Bridges
Remarks:	Bypass for heavy carco existing
Navigation:	



Location: Beineu - Quisary - Atyrau
(nr 15_22)

Coordinates: 47.18394, 52.070995

Obstacles: **Bridges**

Remarks:
Bypass for heavy carco existing



Navigation:



Location:	Beineu - Quisary - Atyrau (nr 15_23)
Coordinates:	47.1685, 52.03601
Obstacles:	Bridges
Remarks:	Bypass for heavy carco existing
Navigation:	

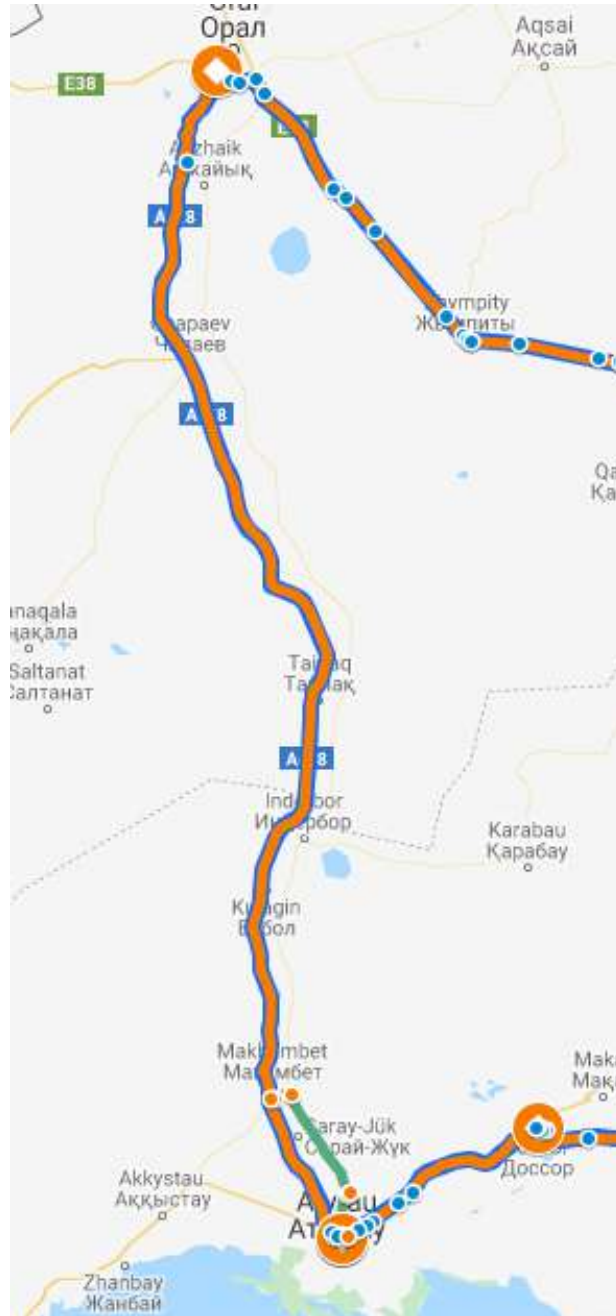


Location:	Beineu - Quisary - Atyrau (nr 15_24)
Coordinates:	47.14605, 51.975815
Obstacles:	Archway and turn
Remarks:	archway height $h = 7$ m Topography will be created
Navigation:	

Route: **Atyrau – Uralsk**

Distance: **Main route**

Cargo type:





Location: Atyrau-Uralsk (green route)
(nr 16_7)

Coordinates: 47.290623, 51.979023

Obstacles: Bridges

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 18x18 [m]
 total width- 10m including pedestrian crossings with width 1m
 pier height- 2 m
 technical state- without visible damage
 Transportation in a single order along the bridge center line.

Navigation: IMG_1909 IMG_1908



Location: Atyrau-Uralsk (green route)
(nr 16_6)

Coordinates: 47.293728, 51.980923

Obstacles: Archway

Remarks:
 archway height $h = 7$ m

Navigation:
 IMG_1911



Location: Atyrau-Uralsk (green route)
(nr 16_5)

Coordinates: 47.30039, 51.984947

Obstacles: Bridges

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 18x18 [m]
 total width- 10m including pedestrian crossings with width 1m
 pier height- 2,5 m
 technical state- without visible damage
 Transportation in a single order along the bridge center line.

Navigation:
 IMG_1915 IMG_1916



Location: Atyrau-Uralsk(green route)
(nr 18_04_01)

Coordinates: 47.65144, 51.67734

Obstacles: Turn

Remarks:
 Turn OK

Navigation:
 IMG_20190418_140409



Location:	Ayrau-Uralsk (green route)
(nr 18_04_02)	
Coordinates:	47.635715, 51.593853
Obstacles:	Bridges
Remarks:	new bridge
Navigation:	IMG_20190418_135730



Location:	Ayrau-Uralsk (green route)
(nr 18_04_03)	
Coordinates:	47.634766, 51.567406
Obstacles:	Turn
Remarks:	Turn ok
Navigation:	IMG_20190418_135435



Location:	Atyrau - Uralsk (nr 16_06)
Coordinates:	50.856747, 51.128498
Obstacles:	Bridges
Remarks:	Bridge technical characteristics: total length: - 63 m bridge scheme - 21x21x21 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 3 m technical state- without visible damage Transportation in a single order along the bridge
Navigation:	



Location:	Atyrau - Uralsk
Coordinates:	50.95547, 51.145367
Obstacles:	Bridges
Remarks:	Bridge technical characteristics: total length: - 48 m bridge scheme - 15x18x15 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 5.3 m technical state- without visible damage Transportation in a single order along the bridge
Navigation:	



Location:	Atyrau - Uralsk
Coordinates:	51.02798, 51.206314
Obstacles:	Bridges
Remarks:	Bridge technical characteristics: total length: - 30 m bridge scheme - 15x15 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 4.4 m technical state- without visible damage Transportation in a single order along the bridge
Navigation:	

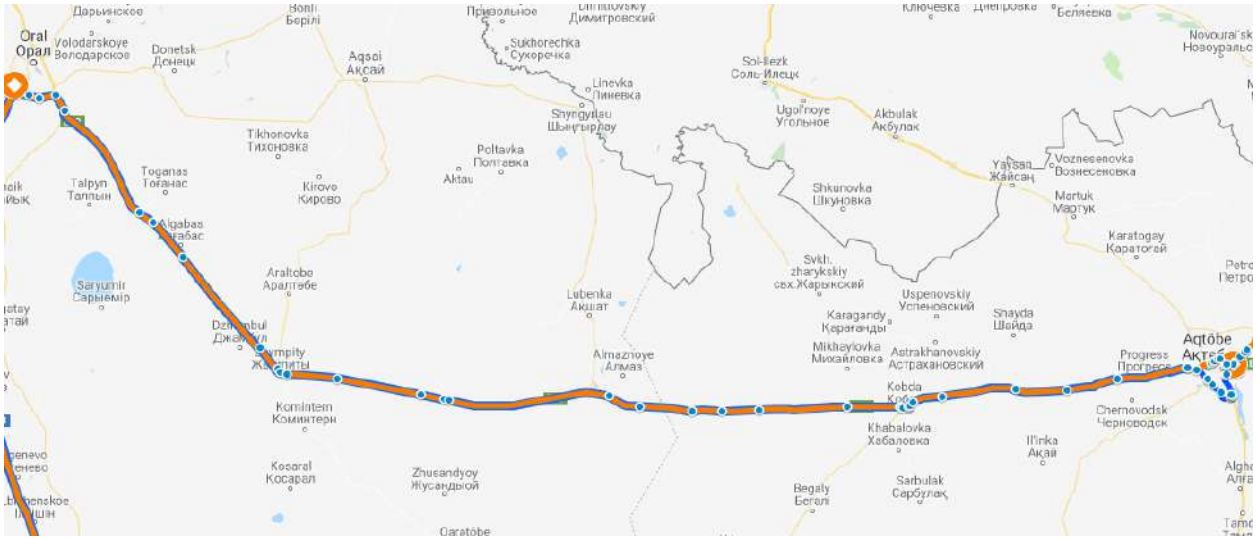


Location:	Atyrau - Uralsk
Coordinates:	51.15875, 51.287792
Obstacles:	Turn
Remarks:	no construction required
Application №	11
Navigation:	

Route: **Uralsk - Aktobe**

Distance:

Cargo type:



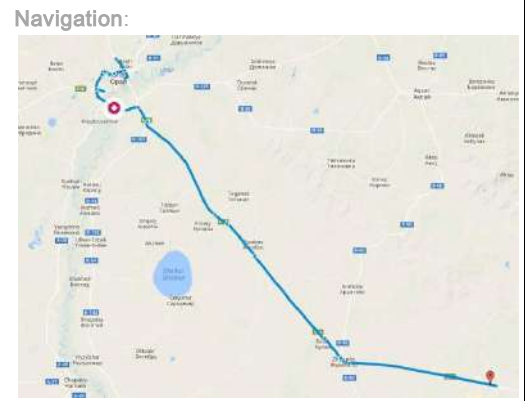


Location: E38 / Ural river
(nr 32)

Coordinates: 51.12603, 51.36016

Obstacles: Bridge

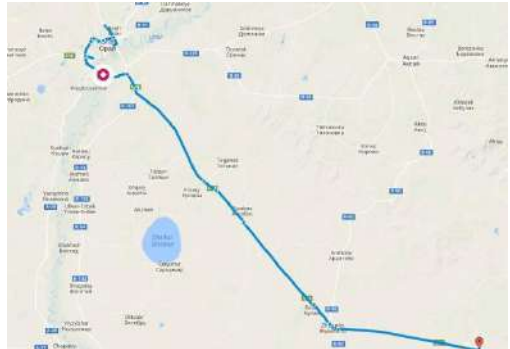
Remarks:
 Bridge technical characteristics:
 total length: - 500 m
 bridge scheme - 100x100x100x100x100 [m]
 total width- 12m including pedestrian crossings with width 1m
 pier height- 16 m
 technical state-long service life, year of construction 1998
 Transportation in a single order along the bridge center line



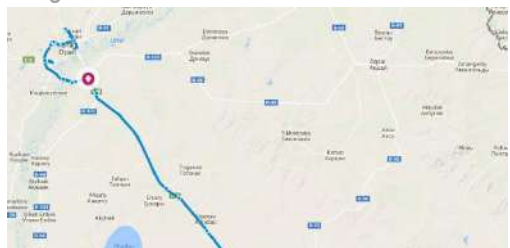


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Location:	E38
	(nr 33)
Coordinates:	51.11724, 51.40859
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 1500 m very long bridge, can not drive up and ban with a fence
Navigation:	



Location:	E38
	(nr 34)
Coordinates:	51.129242, 51.492954
Obstacles:	Turn
Remarks:	turn - ok
Navigation:	

Site plan

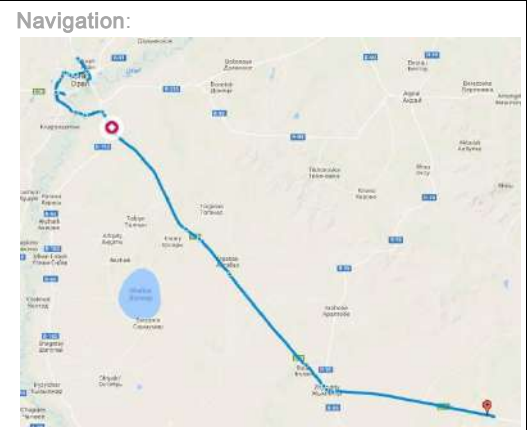


Location: E38 / Barbastau river
(nr 35)

Coordinates: 51.08006, 51.538918

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: -72 m
 bridge scheme - 24x24x24 [m]
 total width- 12m including pedestrian crossings with width 2m
 pier height- 7 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.





21/07/2018 14:06



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21/07/2018 14:07

Location: E38 / Sholakankaty river
(nr 36)

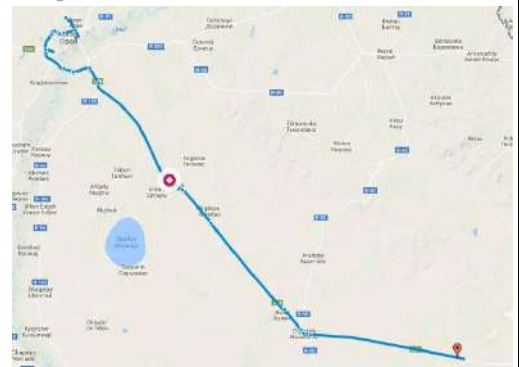
Coordinates: 50.765495, 51.904694

Obstacles: Bridge

Remarks:

Bridge technical characteristics:
total length: -54 m
bridge scheme - 18x18x18 [m]
total width- 12m including pedestrian crossings with width 1m
pier height- 8 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation:



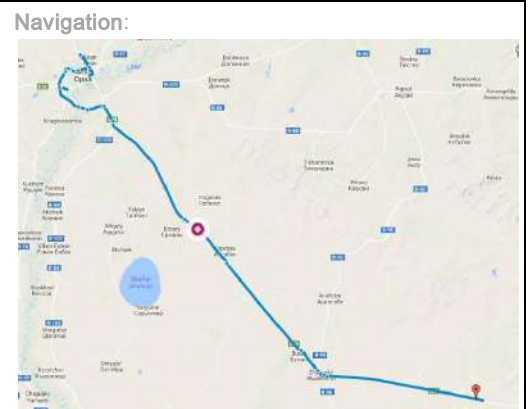


Location: E38 / Uzynankaty river
(nr 37)

Coordinates: 50.733658, 51.970745

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: -54 m
 bridge scheme - 18x18x18 [m]
 total width- 12m including pedestrian crossings with width 1m
 pier height- 5,5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.



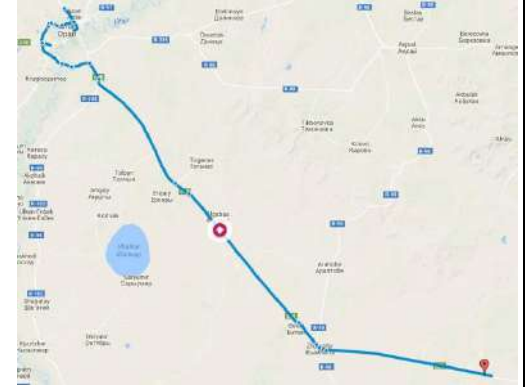
Location: E38 / Yesen Ankaty river
(nr 38)

Coordinates: 50.624535, 52.118683

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: -72 m
 bridge scheme - 24x24x24 [m]
 total width- 11m including pedestrian crossings with width 1m
 pier height- 10,5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation:





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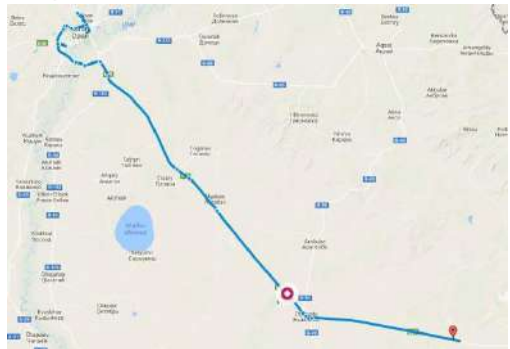


Location:	E-38 / Shiderti river
	(nr 39)
Coordinates:	50.340534, 52.49753
Obstacles:	Bridge

Remarks:
 Bridge technical characteristics:
 total length: -45 m
 bridge scheme - 12x21x12 [m]
 total width- 10m including pedestrian crossings with width 1m
 pier height- 5,6 m
 technical state-cracks on the supports
 Transportation in a single order along the bridge center line bypass construction is possible.



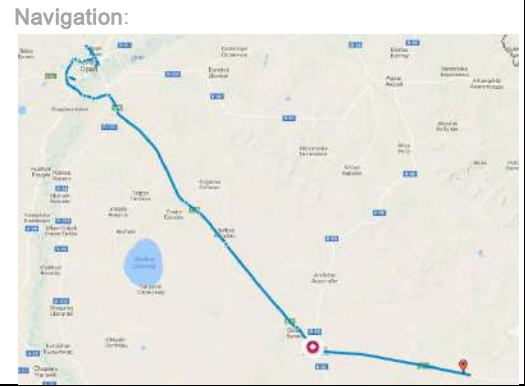
Navigation:



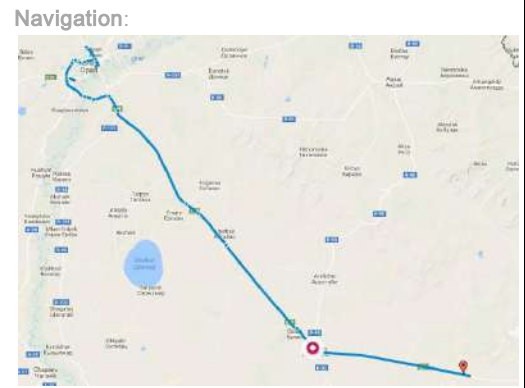




Location:	E-38 / Zhypity (nr 40)
Coordinates:	50.274063, 52.584118
Obstacles:	Archway
Remarks:	archway height h = 5,9 m



Location:	E-38 / Zhypity/ Oleni river (nr 41)
Coordinates:	50.264595, 52.59764
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: -72 m bridge scheme - 24x24x24 [m] total width- 12m including pedestrian crossings with width 1m pier height- 6 m technical state-without visible damage, Transportation in a single order along the bridge center line.



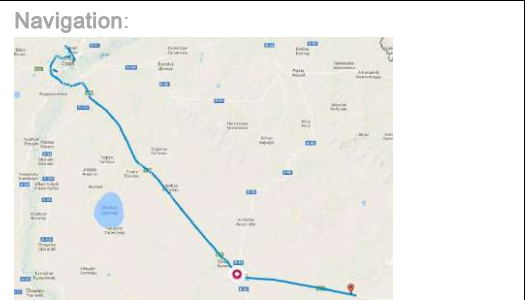


Location: **E-38 / Zhypity**
(nr 42)


Coordinates: 50.257694, 52.628967

Obstacles: **Archway**


Remarks:
archway height $h = 5,5 \text{ m}$






Location:	E-38 / Zhympity (nr 44)
Coordinates:	50.25765, 52.62888
Obstacles:	Archway
Remarks:	archway height h = 6,0m
Navigation:	



Location:	E-38 / Amansay river (nr 45)
Coordinates:	50.245144, 52.87697
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 18 m bridge scheme - 18 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 5 m technical state-without visible damage, Transportation in a single order along the bridge center line.
Navigation:	



Navigation:	
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Location:	E-38 / Tamdy river (nr 46)
Coordinates:	50.195065, 53.28938
Obstacles:	Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 54 m
 bridge scheme - 18x18x18 [m]
 total width- 10 m including pedestrian crossings with width 1m
 pier height- 3 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.



Navigation:





Location:	E-38 / Buldurty river (nr 47)
Coordinates:	50.180786, 53.40417
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 42 m bridge scheme - 21x21 [m] total width- 10 m including pedestrian crossings with width 1m pier height- 4 m technical state-without visible damage, expanded Transportation in a single order along the bridge center line.</p>



Navigation:



Location:	E-38 / Shieli river (nr 48)
Coordinates:	50.17731, 53.42785
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 63 m bridge scheme - 21x21x21 [m] total width- 10 m including pedestrian crossings with width 1m pier height- 5 m technical state-without visible damage, expanded Transportation in a single order along the bridge center line.</p>



Navigation:



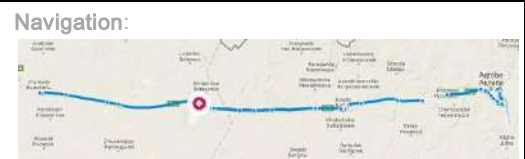


Location: E-38 / Kuagash river
(nr 49)

Coordinates: 50.189255, 54.216923

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 21x15 [m]
 total width- 10 m including pedestrian crossings with width 1m
 pier height- 3 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.





Location: E-38 / Bayanas river
(nr 50)

Coordinates: 50.15658, 54.36593

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 15 m
 bridge scheme - 15 [m]
 total width- 10 m including pedestrian crossings with width 1m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation:



Location: E-38 / Kiyl river
(nr 51)

Coordinates: 50.142185, 54.622753

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 54 m
 bridge scheme - 18x18x18 [m]
 total width- 10 m including pedestrian crossings with width 1m
 pier height- 7 m
 technical state-parts of reinforcement is open
 Transportation in a single order along the bridge center line.



Navigation:



Location:	E-38 / Kartaldy river (nr 52)
Coordinates:	50.142235, 54.770805
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 30 m bridge scheme - 15x15 [m] total width- 10 m including pedestrian crossings with width 1m pier height- 5 m technical state-without visible damage, expanded Transportation in a single order along the bridge center line, bypass construction is possible.</p>



Navigation:





Location: E-38 / Cuel-Bulak river
(nr 53)

Coordinates: 50.146717, 54.95227

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 30 m
 bridge scheme - 15x15 [m]
 total width- 10 m including pedestrian crossings with width 1m
 pier height- 5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation:





Location: E -38 / Veselyy
(nr 54)


Coordinates: 50.15702, 55.38734

Obstacles: Bridge


Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 18x18 [m]
 total width- 10 m including pedestrian crossings with width 1m
 pier height- 3 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.






Location:	E-38 / Kobda (nr 55)
Coordinates:	50.1548, 55.643997
Obstacles:	Archway
Remarks:	archway height h = 5,7 m
Navigation:	




Location:	E-38 / Kobda (nr 56)
Coordinates:	50.15376, 55.65302
Obstacles:	Archway
Remarks:	archway height h = 5,8 m
Navigation:	



Location:	E-38 / Kobda (nr 57)
Coordinates:	50.152943, 55.660225
Obstacles:	Turn
Remarks:	For Blades: traffic directly under the prohibiting traffic sign in the city center
Navigation:	

Site plan



Location:	E-38 / Kobda (nr 61)
Coordinates:	50.15595, 55.690018
Obstacles:	Archway
Remarks:	archway height h = 6,0m
Navigation:	



Location:	E-38 / Big Kobda river (nr 62)
Coordinates:	50.157143, 55.691414
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics:</p> <ul style="list-style-type: none"> total length: - 150 m bridge scheme - 15x15x15x15x15x15x15x15x15 [m] total width- 10 m including pedestrian crossings with width 1m pier height- 5,7 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:



Location: **E-38**

(nr 63)

Coordinates: 50.16103, 55.695328

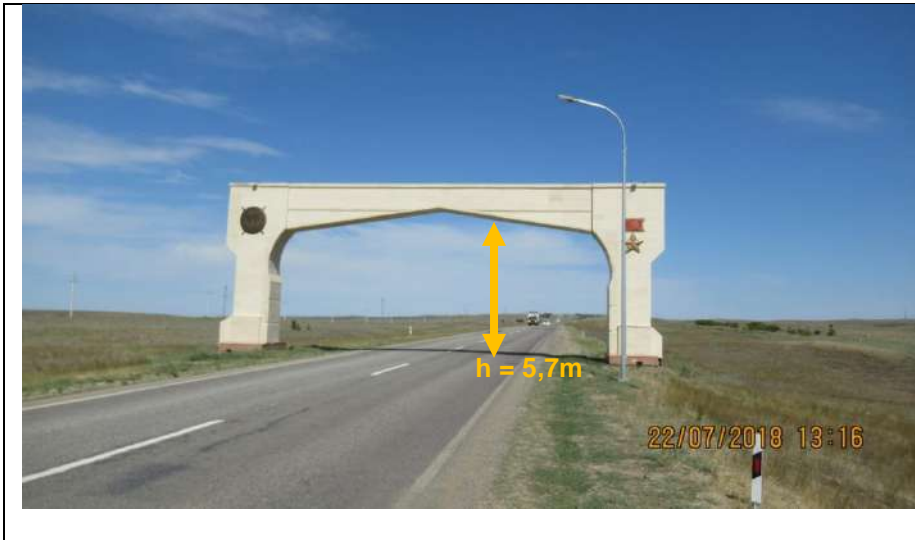
Obstacles: **Archway**

Remarks:

archway height $h = 5,5 \text{ m}$

Navigation:





Location: E-38
(nr 64)

Coordinates: 50.168274, 55.710434

Obstacles: Archway

Remarks:
archway height $h = 5,7\text{ m}$



Location: E-38 / Terisakkan river
(nr 65)

Coordinates: 50.189156, 55.853027

Obstacles: Bridge

Remarks:
Bridge technical characteristics:
total length: - 81 m
bridge scheme - 13,5x13,5x13,5 [m]
total width- 12 m including pedestrian crossings with width 1m
pier height- 3 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.





22/07/2018 13:27



22/07/2018 13:49



22/07/2018 13:49

Location: E-38 / Balakobda
(nr 66)

Coordinates: 50.21065, 56.218063

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 81 m
 bridge scheme -
 13,5x13,5x13,5x13,5x13,5 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 6,7 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation:







Location: E-38 / Karakobda river
(nr 67)

Coordinates: 50.20789, 56.470264

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 75 m
 bridge scheme - 15x15x15x15x15 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 3,1 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation:





Location: E-38 / Tanirbergen river (nr 68)

Coordinates: 50.243984, 56.716362

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 54 m
 bridge scheme - 18x18x18 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.





Location: **E-38 / Zhanakonys**
(nr 69)

Coordinates: 50.279186, 57.059025

Obstacles: **Turn**

Remarks:
Turn to right side - ok



Site plan



Location: **E-38 / Zhanakonys**
(nr 70)


Coordinates: 50.278454, 57.066303

Obstacles: **road**

Remarks:
bad covering of the road





Location:	E-38 / Aqktobe (nr 71)
Coordinates:	50.271255, 57.10715
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 6 m bridge scheme - 6 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 2,4 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>
Navigation:	

Location:	Aqktobe (nr 72)
Coordinates:	50.242214, 57.15999
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: -48 m bridge scheme - 16x16x16 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 3,4 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>



Navigation:





Location: **Aqktobe**
(nr 73)

Coordinates: 50.24023, 57.162086

Obstacles: **Traffic circle**

Remarks:
ok


Navigation:



Site plan






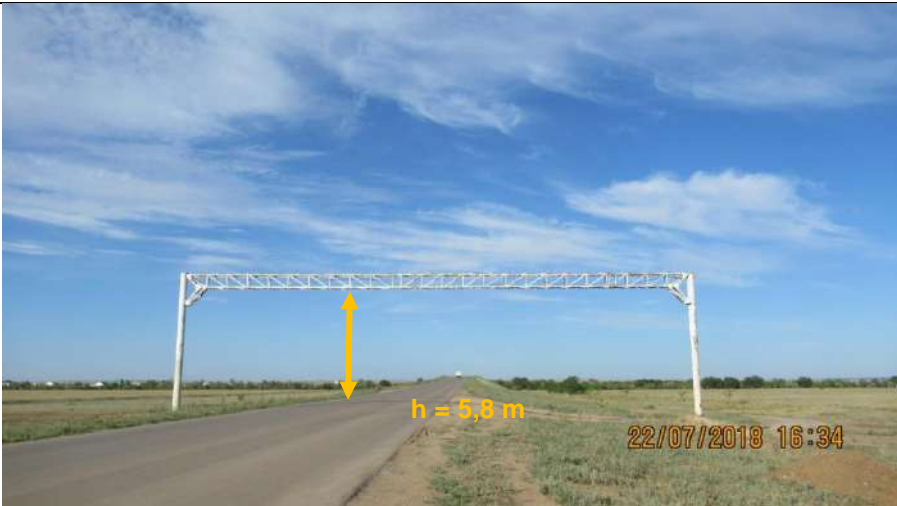
Location:	Aqktobe (nr 74)
Coordinates:	50.224503, 57.18636
Obstacles:	road repair
Remarks:	road repair at the moment of the dirt road
Navigation:	



Location:	Aqktobe (nr 75)
Coordinates:	50.199974, 57.22691
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: -51 m bridge scheme - 17x17x17 [m] total width- 12 m including pedestrian crossings with width 1m pier height- 5 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	
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Location: **Aqktobe**
(nr 76)

Coordinates: 50.186382, 57.271374

Obstacles: **Archway**

Remarks:
archway height h = 5,8 m





Location: Aqtobe
(nr 78)

Coordinates: 50.188797, 57.27918

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: -90 m
 bridge scheme - 12x18x21x21x18, [m]
 total width- 24 m including pedestrian crossings with width 1m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.





Location: A-340 / Aqktobe
(nr 79)

Coordinates: 50.18963, 57.280956

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: -105 m
 bridge scheme - 12x21x12 [m]
 total width- 12 m including pedestrian crossings with width 1m
 pier height- 5,5 m
 technical state- cracks on the supports and two central beams
 Transportation in a single order along the bridge center line.





Location: A-340 / Aqktobe
(nr 80)

Coordinates: 50.1897, 57.280262

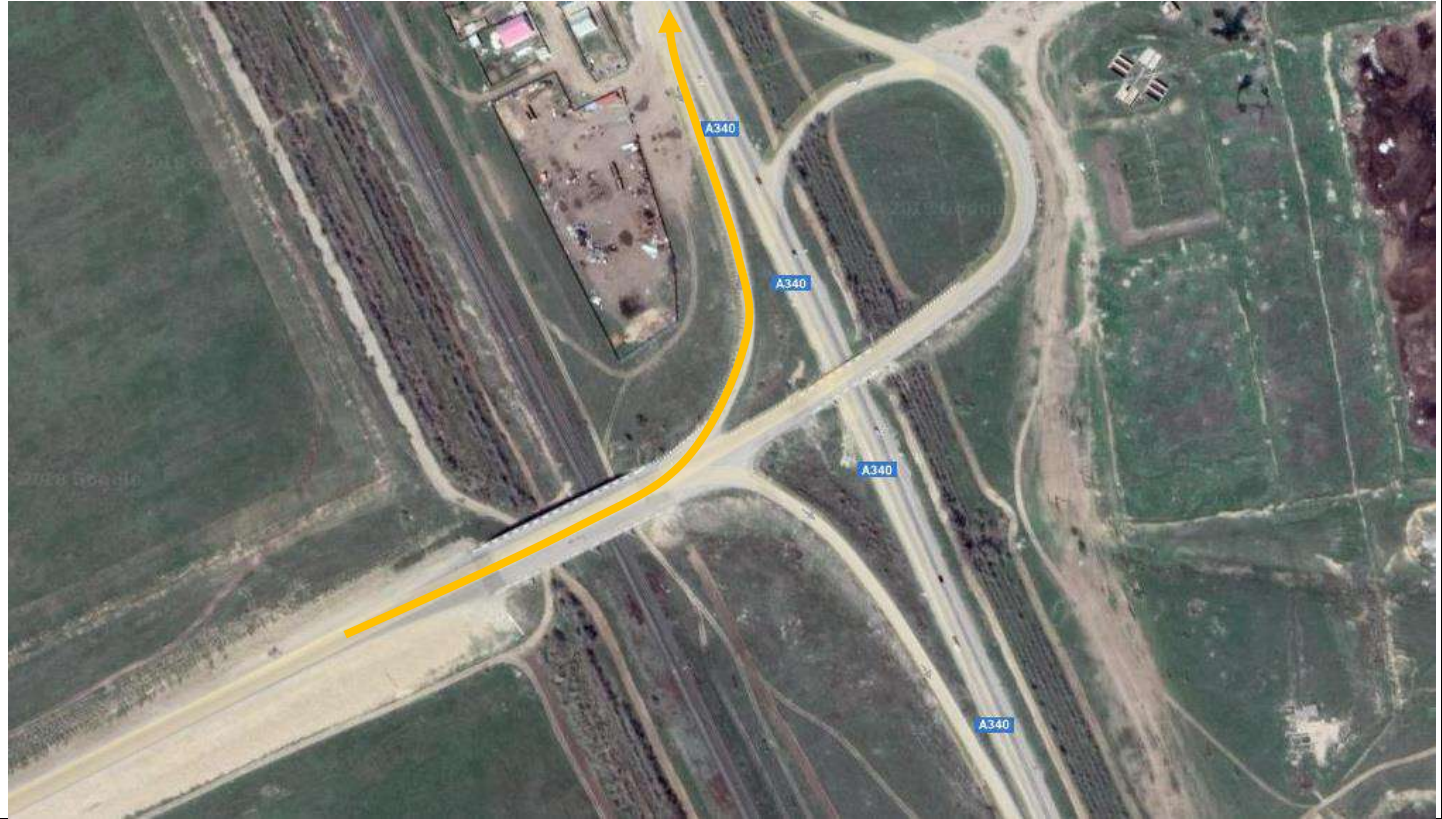
Obstacles: Turn

Remarks:
for heavy loads traffic to the intersection
on the opposite lane, width 7m



Site

plan





Location: **A-340 / Aqktobe**
(nr 81)

Coordinates: 50.190907, 57.28207

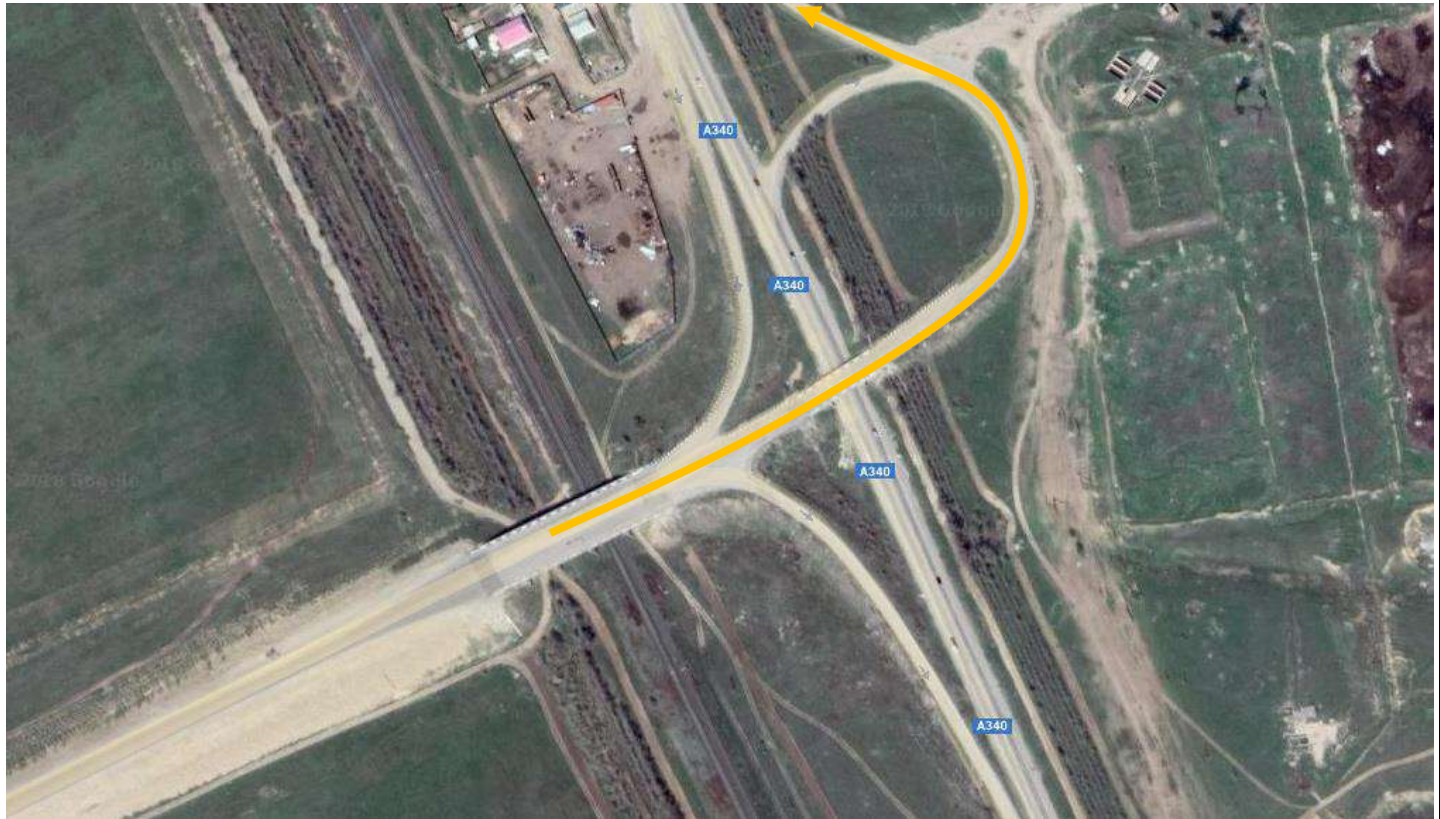
Obstacles: **Turn**

Remarks:
for blades




Site


plan






Location:	A-340 / Aqktobe (nr 82)
Coordinates:	50.19342, 57.278244
Obstacles:	Archway
Remarks:	archway height h = 6,4 m
Navigation:	



Location:	A-340 / Aqktobe (nr 83)
Coordinates:	50.25343, 57.252472
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: -54 m bridge scheme - 18x18x18 [m] total width- 16 m including pedestrian crossings with width 1m pier height- 7 m technical state-without visible damage, Transportation in a single order along the bridge center line.
Navigation:	



Navigation:	
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Location: A-340 / Aqktobe
(nr 84)

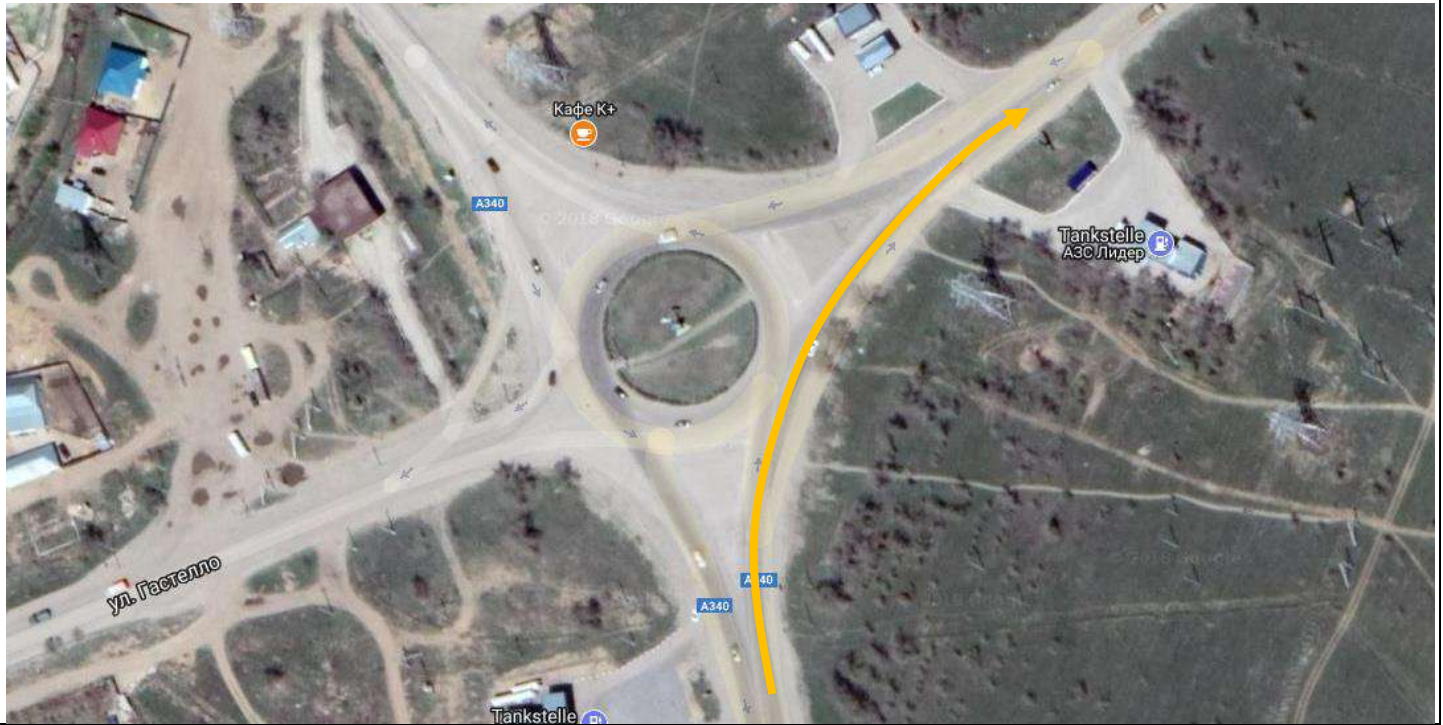
Coordinates: 50.257446, 57.25365

Obstacles: Traffic circle

Remarks:
ok



Site plan



Location:	A-340 / Aqktobe (nr 85)
Coordinates:	50.285923, 57.25145
Obstacles:	Archway
Remarks:	archway height $h = 7,2 \text{ m}$
Navigation:	



Location: A-340 / R-87 / Aqktobe
(nr 86)

Coordinates: 50.286465, 57.250385

Obstacles: Traffic circle

Remarks:
ok



Site plan

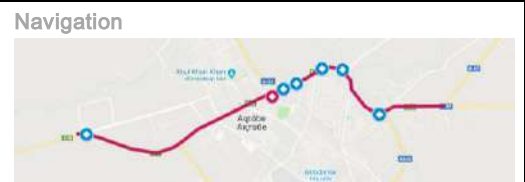


Location: Aktobe, red route
(nr 18.02)

Coordinates: 50.2943, 57.179886

Obstacles: Archway / Bridge

Remarks:
after construction, all right, technical state- without visible damage



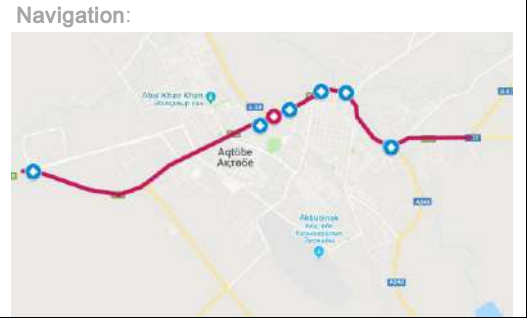


Location: Aktobe, red route
(nr 8.03)

Coordinates: 50.29753, 57.18682

Obstacles: Pipeline

Remarks:
archway height $h = 6$ m;

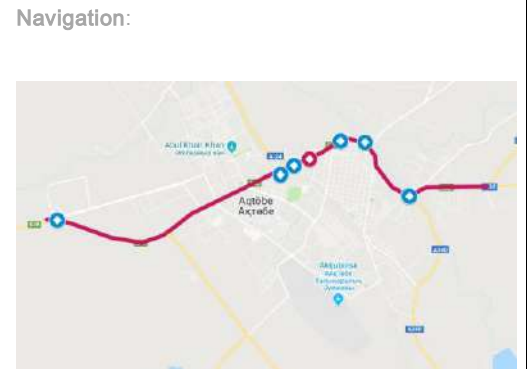


Location: Aktobe, red route
(nr 18.04)

Coordinates: 50.299606, 57.19526

Obstacles: Bridges

Remarks:
Bridge technical characteristics:
total length: - 36 m
bridge scheme - 18x18 [m]
total width- 28m including pedestrian crossings with width 2m
pier height- 3,7 m
technical state- without visible damage
Transportation in a single order along the bridge



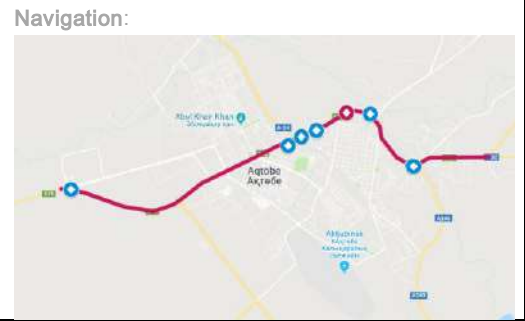


Location: Aktobe, red route
(nr 18.05)

Coordinates: 50.305817, 57.211758

Obstacles: Archway

Remarks:
archway height ok

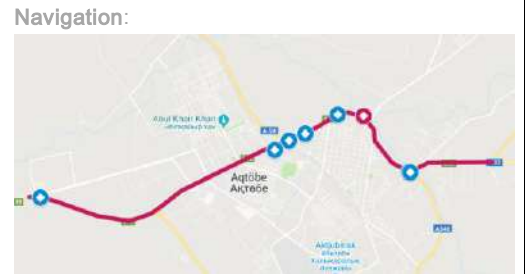


Location: Aktobe, red route
(nr 18.06)

Coordinates: 50.30541, 57.2247

Obstacles: Archway

Remarks:
archway height $h = 6$ m; $h = 6$ m

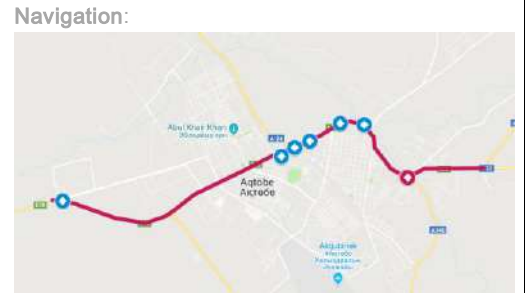


Location: Aktobe, red route
(nr 18.07)


Coordinates: 50.287395, 57.247585

Obstacles: Archway

Remarks:
archway height $h = 7$ m






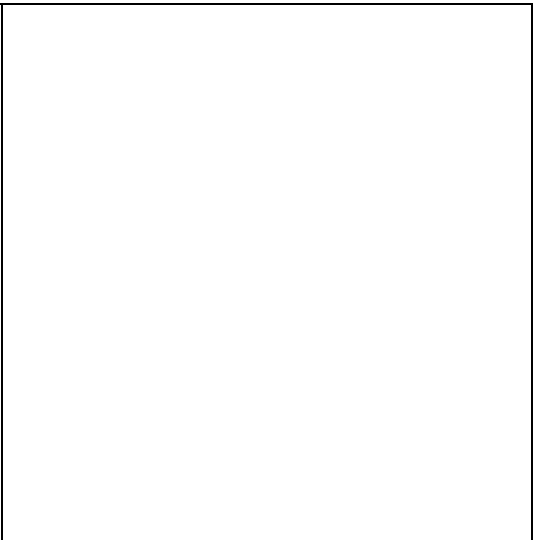
Location:	Aktobe, red route (nr 18.08)
Coordinates:	50.287113, 57.24837
Obstacles:	Traffic circle
Remarks:	all right
Navigation:	



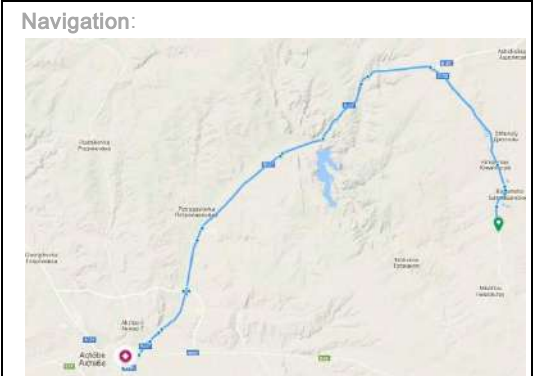
Location:	E-38/ R-87 / Zarechiny (nr 87)
Coordinates:	50.288742, 57.252888
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length - 216 m bridge scheme - 24x24x24x24x24x24x24x24x24 [m] total width- 12m including pedestrian crossings with width 1m pier height- 6,6 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	
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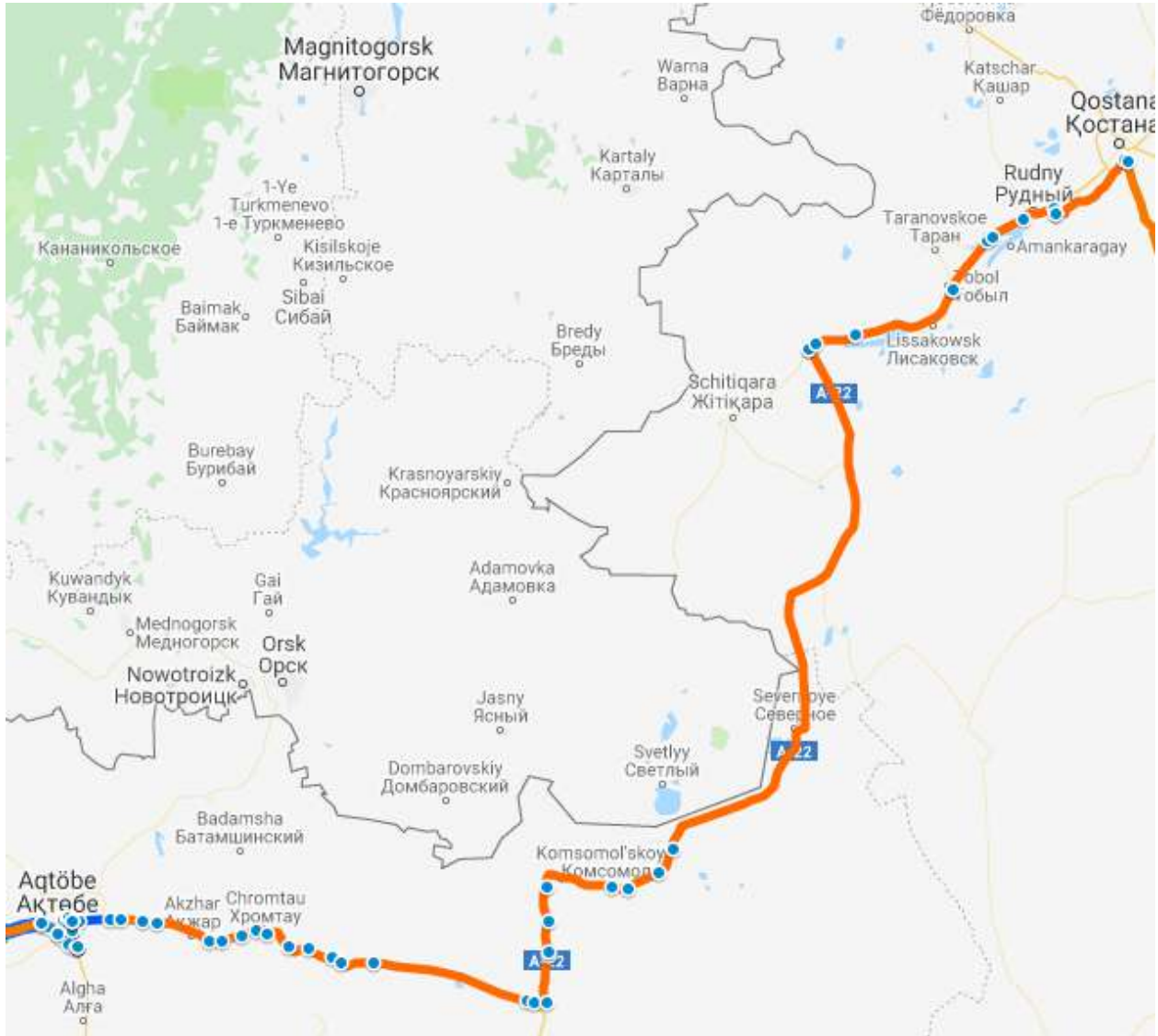
Location:	E-38/ R-87 / Zarechiniy (nr 88)
Coordinates:	50.28916, 57.253635
Obstacles:	Archway
Remarks:	Archway h=5,8 m



Route: **Aktobe - Kostanay**

Distance: **469 km**

Cargo type: **Heavy lift, Blades, General**





Location: M-32 / Aktobe
(nr 324)

Coordinates: 50.294342, 57.48587

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 18x18 [m]
 total width- 24 m including pedestrian crossings with width 1 m
 pier height- 6 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_0085, IMG_0086, IMG_0087



Location: **M-32**
(nr 323)

Coordinates: 50.29385, 57.543354

Obstacles: **Bridge**

Remarks:
Bridge technical characteristics:
total length: - 36 m
bridge scheme - 18x18 [m]
total width- 24 m including pedestrian crossings with width 1 m
pier height- 6,5 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
IMG_0079, IMG_0081, IMG_0083



Location: M-32
(nr 322)

Coordinates: 50.29013, 57.677586

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 54 m
 bridge scheme - 18x18x18 [m]
 total width- 12 m including pedestrian crossings with width 1 m
 pier height- 6,2 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_0075, IMG_0076, IMG_0078



Location: **M-32**
(nr 321)

Coordinates: 50.283085, 57.761642

Obstacles: **Bridge**

Remarks:
Bridge technical characteristics:
total length: - 54 m
bridge scheme - 18x18x18 [m]
total width- 12 m including pedestrian crossings with width 1 m
pier height- 9,5 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
IMG_0067, IMG_0068, IMG_0069,
IMG_0070



Location:	M-32 (nr 320)
Coordinates:	50.21339, 58.083847
Obstacles:	Railwaycrossing
Remarks:	unmanned level crossing
Navigation:	Kostanai-Aktobe IMG_0063



Location:	M-32 (nr 319)
Coordinates:	50.20945, 58.1577
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total lenght: - 33 m bridge scheme - 33 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 4 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation: Kostanai-Aktobe
 IMG_0058, IMG_0060



Location:	M-32 (nr 318)
Coordinates:	50.234047, 58.280716
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 90 m bridge scheme - 18x18x18x18x18 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 8,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>



Navigation: Kostanai-Aktobe
 IMG_0053, IMG_0054, IMG_0055,
 IMG_0057



Location:	M-32 (nr 317)
Coordinates:	50.252346, 58.368603
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 33 m bridge scheme - 33 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 7,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>
Navigation:	Kostanai-Aktobe IMG_0049



Location: M-32 /Chromtau
(nr 316)

Coordinates: 50.240856, 58.4353

Obstacles: Archway

Remarks:
archway height h = 6 m

Navigation: Kostanai-Aktobe
IMG_0045, IMG_0046



Location: M-32
(nr 315)

Coordinates: 50.193794, 58.56317

Obstacles: Bridge

Remarks:
Bridge technical characteristics:
total length: - 18 m
bridge scheme - 18 [m]
total width- 10 m including pedestrian crossings with width 1 m
pier height- 4 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
IMG_0044



Location: **M-32**
(nr 314)

Coordinates: 50.184383, 58.691856

Obstacles: **Bridge**

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 18x18 [m]
 total width- 12 m including pedestrian crossings with width 1 m
 pier height- 3 m
 technical state-cracks on the supports, beams are ok, bypass construction is possible
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_0034, IMG_0036, IMG_0037,
 IMG_0038, IMG_0039, IMG_0042





Location: **M-32**
(nr 313)

Coordinates: 50.145287, 58.82817

Obstacles: **Bridge**

Remarks:
Bridge technical characteristics:
total length: - 24 m
bridge scheme - 6x6x6x6 [m]
total width- 10 m including pedestrian crossings with width 1 m
pier height- 1,5 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
IMG_0031, IMG_0032



Location: **M-32**
(nr 312)

Coordinates: 50.13081, 58.887165

Obstacles: **Bridge**

Remarks:
Bridge technical characteristics:
total length: - 36 m
bridge scheme - 18x18 [m]
total width- 12 m including pedestrian crossings with width 1 m
pier height- 2 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
IMG_0028, IMG_0029, IMG_0030



06/08/2018 16:27



06/08/2018 16:27



06/08/2018 16:12

Location: M-32 / Or iver
(nr 311)

Coordinates: 50.12481, 59.086002

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total lenght: - 105 m
 bridge scheme - 21x21x21x21x21 [m]
 total width- 8 m including pedestrian crossings with width 1 m
 pier height- 6,5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_0021, IMG_0022, IMG_0023,
 IMG_0026



	Location: A-22 (nr 310)
	Coordinates: 49.97611, 60.02224
	Obstacles: Bridge
	Remarks: Bridge technical characteristics: total lenght: - 12 m bridge scheme - 12 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 3 m technical state-without visible damage, Transportation in a single order along the bridge center line.
Navigation: Kostanai-Aktobe IMG_0020	

	Location: A-22 (nr 309)
	Coordinates: 49.970722, 60.058414
	Obstacles: Bridge
	Remarks: Bridge technical characteristics: total lenght: - 48 m bridge scheme - 12x12x12x12 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 2,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.
Navigation: Kostanai-Aktobe IMG_0009, IMG_0016,	



Location: A-22 / Karabutak
(nr 308)

Coordinates: 49.97466, 60.135147

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 6x6x6x6x6 [m]
 total width- 12 m including pedestrian crossings with width 1 m
 pier height- 2,5 m
 technical state-cracks on the supports, beams are ok, bypass construction is possible
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_9997, IMG_0007, IMG_0006,
 IMG_0008, IMG_0009



Location: **A-22 / Araltobe river**
(nr 307)

Coordinates: 50.15748, 60.148834

Obstacles: **Bridge**

Remarks:

Bridge technical characteristics:
total length: - 48 m
bridge scheme - 6x6x6x6x6x6x6 [m]
total width- 10 m including pedestrian crossings with width 1 m
pier height- 2,5 m
technical state-cracks on the beams
Transportation in a single order along the bridge center line.



Navigation: Kostanai-Aktobe
IMG_9988, IMG_9990, IMG_9992,
IMG_9994, IMG_9995, IMG_9996







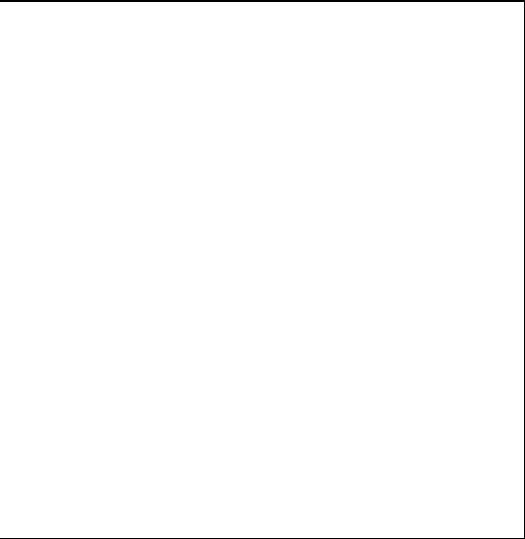
Location: A-22 / Araltobe river
(nr 306)

Coordinates: 50.17187, 60.148357

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 45 m
 bridge scheme - 15x15x15 [m]
 total width- 9 m including pedestrian crossings with width 1 m
 pier height- 4 m
 technical state-long service life, parts of reinforcement are open.
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_9977, IMG_9976, IMG_9978,
 IMG_9980



Location:	A22 / Sheder river (nr 305)
Coordinates:	50.289757, 60.154533
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 30 m bridge scheme - 15x15 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 4 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>

Navigation:	Kostanai-Aktobe	
IMG_9969,	IMG_9970,	IMG_9973,
IMG_9972		



Location:	A-22 (nr 304)
Coordinates:	50.424923, 60.139336
Obstacles:	Railwaycrossing
Remarks:	unmanned level crossing
Navigation:	Kostanai-Aktobe IMG_9968



Location:	A-22 (nr 303)
Coordinates:	50.423958, 60.53521
Obstacles:	Railwaycrossing
Remarks:	unmanned level crossing
Navigation:	Kostanai-Aktobe IMG_9967



Location:	A-22 (nr 302)
Coordinates:	50.414497, 60.629574
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 60 m bridge scheme - 15x15x15x15 [m] total width- 8 m including pedestrian crossings with width 1 m pier height- 6,5 m technical state-long service life Transportation in a single order along the bridge center line.</p>



Navigation:	Kostanai-Aktobe IMG_9956, IMG_9958, IMG_9959, IMG_9960, IMG_9962, IMG_9964
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Location: **A-22**
(nr 301)

Coordinates: 50.476234, 60.821682

Obstacles: **Bridge**

Remarks:
 Bridge technical characteristics:
 total length: - 42 m
 bridge scheme - 12x18x12 [m]
 total width- 10 m including pedestrian crossings with width 1 m
 pier height- 4,5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.



Navigation: Kostanai-Aktobe
 IMG_9948, IMG_9949, IMG_9950,
 IMG_9951



Location:	A-22 (nr 300)
Coordinates:	50.570473, 60.906376
Obstacles:	Railwaycrossing
Remarks:	unmanned level crossing
Navigation:	Kostanai-Aktobe IMG_9944



Location: **A-22 / Antonovka**
(nr 299)

Coordinates: 52.45989, 61.736706

Obstacles: **Bridge**

Remarks:
 Bridge technical characteristics:
 total length: - 231 m
 bridge scheme - 33x33x33x33x33x33x33 [m]
 total width- 12 m including pedestrian crossings with width 1 m
 pier height- 17 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Kostanai-Aktobe
 IMG_9925, IMG_9927, IMG_9928,
 IMG_9929



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Location:	A-22 / Antonovka (nr 298)
Coordinates:	52.460903, 61.72901
Obstacles:	Turn
Remarks:	ok
Navigation:	Kostanai-Aktobe IMG_9924



Location:	A-22 / Antonovka (nr 297)
Coordinates:	52.485405, 61.774693
Obstacles:	Road
Remarks:	Road under construction
Navigation:	Kostanai-Aktobe IMG_9923



Location:	A-22 / Pereleski (nr 296)
Coordinates:	52.513863, 62.019028
Obstacles:	PTL
Remarks:	500 kV, height h = 10,5 m
Navigation:	Kostanai-Aktobe IMG_9920



Location:	A-22 / Tobol (nr 294)
Coordinates:	52.68422, 62.613388
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 99 m bridge scheme - 33x33x33 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 7 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	Kostanai-Aktobe IMG_9890, IMG_9893, IMG_9894
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Location: **A-22 / Tobol**
(nr 292)

Coordinates: 52.685925, 62.614437

Obstacles: **Bridge**

Remarks:
Bridge technical characteristics:
total length: - 15 m
bridge scheme - 15 [m]
total width- 12 m including pedestrian crossings with width 1 m
pier height- 5,5 m
technical state-without visible damage,
Transportation in a single order along the bridge center line.



Navigation: Kostanai-Aktobe
IMG_9888, IMG_9889



Location: A-22 /Ayat river
(nr 291)

Coordinates: 52.862305, 62.81607

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 189 m
 bridge scheme -
 21x21x21x21x21x21x21x21 [m]
 total width- 12 m including pedestrian
 crossings with width 1 m
 pier height- 6 m
 technical state-without visible damage,
 Transportation in a single order along the
 bridge center line.

Navigation: Kostanai-Aktobe
 IMG_9882, IMG_9885, IMG_9884,



Location:	A-22 (nr 290)
Coordinates:	52.878807, 62.857246
Obstacles:	Railwaycrossing
Remarks:	level crossing, archway = 6,2 m, reinforcement needed
Navigation:	Kostanai-Aktobe IMG_9879



Location:	A-22 / Rudny (nr 289)
Coordinates:	52.942432, 63.039803
Obstacles:	PTL
Remarks:	500 kV, height h = 10,2 m
Navigation:	Kostanai-Aktobe IMG_9876



Location:	A-22 / Rudny (nr 288)
Coordinates:	50,506440; 64,984131
Obstacles:	Archway
Remarks:	7 units, h=6,5-7 m
Navigation:	Kostanai-Aktobe IMG_9875



Location:	R 278 (nr 287)
Coordinates:	52.981186, 63.227142
Obstacles:	Bridge / highway over crossing
Remarks:	driving on the oncoming traffic lane
Navigation:	Kostanai-Aktobe IMG_9847



Location:	Kostanai /Tobol river (nr 286)
Coordinates:	52.96514, 63.2359
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics:</p> <p>total lenght: - 264 m</p> <p>bridge scheme - 24x24x24x24x24x24x24x24x24x24x24 [m]</p> <p>total width- 12 m including pedestrian crossings with width 1 m</p> <p>pier height- 7,5 m</p> <p>technical state-long service life</p> <p>Transportation in a single order along the bridge center line.</p>
Navigation:	Kostanai-Aktobe



Navigation:	Kostanai-Aktobe	
IMG_9849,	IMG_9856,	IMG_9851,
IMG_9854		

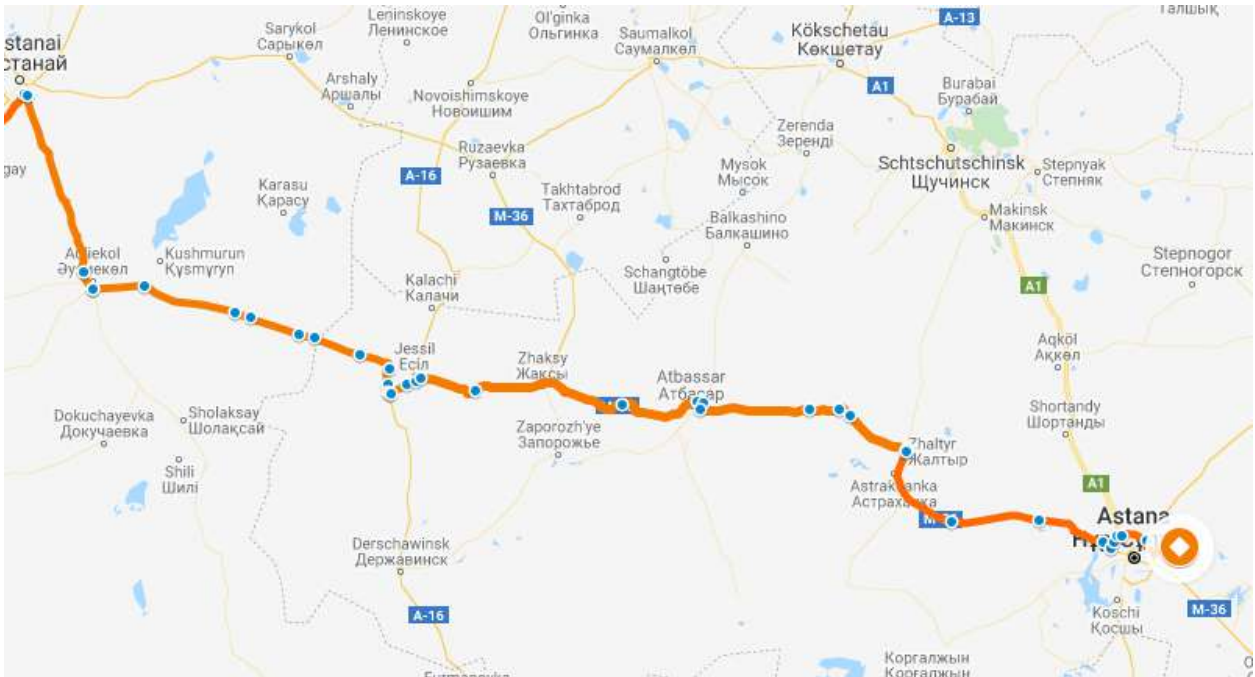


Location:	Kostanai (nr 285)
Coordinates:	52.962326, 63.23736
Obstacles:	Turn
Remarks:	trees cut and widening of right corner
Navigation:	Kostanai-Aktobe IMG_9860



Location:	P-38 / Kostanai (nr 284)
Coordinates:	53.161316, 63.65983
Obstacles:	Bridge / highway over crossing
Remarks:	driving on the oncoming traffic lane 900 m
Navigation:	Kostanai-Aktobe IMG_9866

Route: **Kostanay - Astana**
 Distance: **769 km**
 Cargo type: **Heavy lift, Blades, General**





Location:	R-265 / Kostanai (nr 282)
Coordinates:	53.155308, 63.67632
Obstacles:	Archway
Remarks:	archway height h = 7,3 m
Navigation:	Atbassar-Kostanai IMG_9683



Location:	R-265 (nr 281)
Coordinates:	52.40497, 64.07577
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 72 m bridge scheme - 12x24x24x12 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 7,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	Atbassar-Kostanai IMG_9681, IMG_9679, IMG_9677, IMG_9676
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04/08/2018 12:22



04/08/2018 12:23



04/08/2018 12:20

Location:	R-265 (nr 281)
Coordinates:	52.40497, 64.07577
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 72 m bridge scheme - 12x24x24x12 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 7,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>
Navigation:	Atbassar-Kostanai IMG_9681, IMG_9679, IMG_9677, IMG_9676





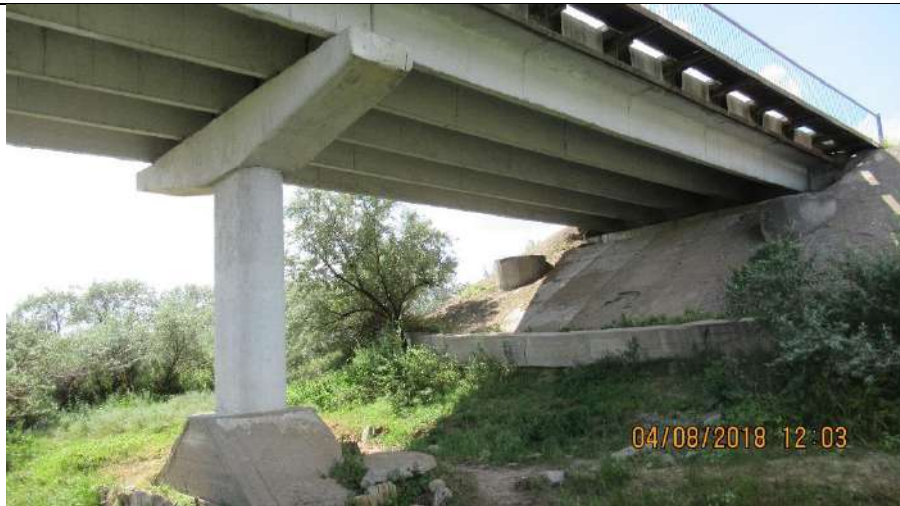
Location:	R-263 / R-265 (nr 280)
Coordinates:	52.33082, 64.14186
Obstacles:	Turn
Remarks:	ok
Navigation:	Atbassar-Kostanai IMG_9672



Location:	R-263 / Ashibai river (nr 279)
Coordinates:	52.33178, 64.14017
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 504 m bridge scheme - 18x18x18 [m] total width- 8 m including pedestrian crossings with width 1 m pier height- 6 m technical state- long service life, without visible damage, bypass construction is possible Transportation in a single order along the bridge center line.</p>



Navigation:	Atbassar-Kostanai IMG_9674, IMG_9662, IMG_9667, IMG_9665, IMG_9669
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Location:	R-263 (nr 278)
Coordinates:	52.341583, 64.49848
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 105 m bridge scheme - 21x21x21x21x21 [m] total width- 9 m including pedestrian crossings with width 1 m pier height- 4,3 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>

Navigation:	Atbassar-Kostanai	
IMG_9656,	IMG_9658,	IMG_9659,
IMG_9661		



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Location:	R-263 (nr 277)
Coordinates:	52.227325, 65.14112
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 90 m bridge scheme - 18x18x18x18x18 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 3 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>



Navigation:	Atbassar-Kostanai IMG_9654, IMG_9653
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Location: R-263
(nr 276)

Coordinates: 52.20562, 65.24818

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 36 m
 bridge scheme - 12x12x12 [m]
 total width- 10 m including pedestrian crossings with width 1 m
 pier height- 3,7 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.



Navigation: Atbassar-Kostanai
 IMG_9647, IMG_9649



Location: R-263
(nr 275)

Coordinates: 52.135883, 65.58961

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 18 m
 bridge scheme - 6x6x6 [m]
 total width- 10 m including pedestrian crossings with width 1 m
 pier height- 4 m
 technical state- without visible damage,
 reinforcement with metal plates necessary
 Transportation in a single order along the bridge center line.



Navigation: Atbassar-Kostanai
 IMG_9644, IMG_9643



Location: **R-263 / Tyuntyugur river**
 (nr 274)
 Coordinates: 52.11691, 65.695305
 Obstacles: **Bridge**

Remarks:
 Bridge technical characteristics:
 total length: - 45 m
 bridge scheme - 15x15x15 [m]
 total width- 10 m including pedestrian crossings with width 1 m
 pier height- 5,5 m
 technical state-very long service life, cracks on the supports and beams, need reinforcement or bypass
 Transportation in a single order along the bridge center line.



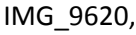
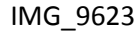
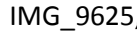
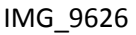
Navigation: Atbassar-Kostanai
 IMG_9633, IMG_9631, IMG_9635,
 IMG_9638, IMG_9639, IMG_9641





Location:	R-263 / Kovylnoe-2 (nr 273)
Coordinates:	52.04245, 66.020996
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total lenght: - 60 m bridge scheme - 15x15x15x15 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 4,5 m technical state-very long service life, cracks on the supports and beams, parts of reinforcement are open, need reinforcement or bypass Transportation in a single order along the bridge center line.</p>



Navigation: Atbassar-Kostanai
  




Location:	R-263 /Busuluk (nr 272)
Coordinates:	51.985554, 66.22039
Obstacles:	PTL
Remarks:	220 kV, height h = 7,6
Navigation:	Atbassar-Kostanai IMG_9617



Location:	R-263 /Busuluk (nr 271)
Coordinates:	51.914894, 66.21048
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 36 m bridge scheme - 12x12x12 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 3,7 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>

Navigation: Atbassar-Kostanai
IMG_9610, IMG_9613, IMG_9615



Location:	R-263 / Karakol river (nr 270)
Coordinates:	51.882206, 66.21325
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 75 m bridge scheme - 15x15x15x15x15 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 8 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>

Navigation:	Atbassar-Kostanai IMG_9603, IMG_9607, IMG_9608
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Location:	A-16/ R-263 (nr 269)
Coordinates:	51.873676, 66.22418
Obstacles:	Turn
Remarks:	removing of traffic signs
Navigation:	Atbassar-Kostanai IMG_9602



Location:	A-16 / Esil river (nr 268)
Coordinates:	51.8787, 66.240326
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 241 m bridge scheme - 9x33x33x33x31x31x31x31x9 [m] total width- 7 m including pedestrian crossings with width 1 m pier height- 10 m technical state-very long service life, investigations are necessary, crack on the support and metal reinforcement, brackets on two supports each 15 m Transportation in a single order along the bridge center line.</p>



Navigation:	Atbassar-Kostanai	
IMG_9571,	IMG_9574,	IMG_9576,
IMG_9579,	IMG_9584,	IMG_9585,
IMG_9589,	IMG_9590,	IMG_9592,
IMG_9599		







Location:	A-16 / Aksay (nr 267)
Coordinates:	51.914417, 66.350006
Obstacles:	Railwaycrossing
Remarks:	unmanned level crossing
Navigation:	Atbassar-Kostanai IMG_9570



Location:	A-16 / Essil (nr 266)
Coordinates:	51.933258, 66.41483
Obstacles:	PTL
Remarks:	110 kV, height h = 7 m
Navigation:	Atbassar-Kostanai IMG_9569



Location:	A-16 / Essil (nr 265)
Coordinates:	51.94746, 66.44608
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 60 m bridge scheme - 18x24x18 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 8 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	Atbassar-Kostanai IMG_9564, IMG_9566, IMG_9568
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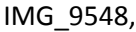

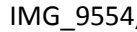
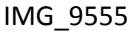


Location:	R-262 /Krasiviye (nr 264)
Coordinates:	51.888123, 66.8352
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 57 m bridge scheme - 18x21x18 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 5,6 m technical state-without visible damage, Transportation in a single order along the bridge center line.</p>
Navigation:	Atbassar-Kostanai IMG_9556, IMG_9559, IMG_9562



Location:	M-36 / Perekatnoe (nr 263)
Coordinates:	51.83096, 67.862274
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 96 m bridge scheme - 24x24x24x24 [m] total width- 10 m including pedestrian crossings with width 1 m pier height- 8,5 m technical state- long service life, investigations are necessary, bypass construction is difficult Transportation in a single order along the bridge center line.</p>



Navigation: Atbassar-Kostanai
  




Location: M-36 / Atbassar/ Zhabay river (nr 262)

Coordinates: 51.84193, 68.38517

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 165 m
 bridge scheme - 33x33x33x33x33 [m]
 total width- 12 m including pedestrian crossings with width 1,5 m
 pier height- 7,6 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Atbassar-Kostanai
 IMG_9539, IMG_9542, IMG_9544, IMG_9545





Location:	M-36 / Atbassar (nr 261)
Coordinates:	51.83296, 68.4344
Obstacles:	Turn
Remarks:	ok
Navigation:	Astana-Atbassar IMG_9534



Location:	M-36 / Atbassar (nr 260)
Coordinates:	51.807602, 68.409035
Obstacles:	Turn
Remarks:	ok
Navigation:	Astana-Atbassar IMG_9532



Location:	M-36 / Marinovka (nr 259)
Coordinates:	51.80627, 69.18063
Obstacles:	PTL
Remarks:	500 kV, height h = 8,7 , to deep, bypass on the right side
Navigation:	Astana-Atbassar IMG_9526, IMG_9528



Navigation: Astana-Atbassar
 IMG_9514, IMG_9518, IMG_9520



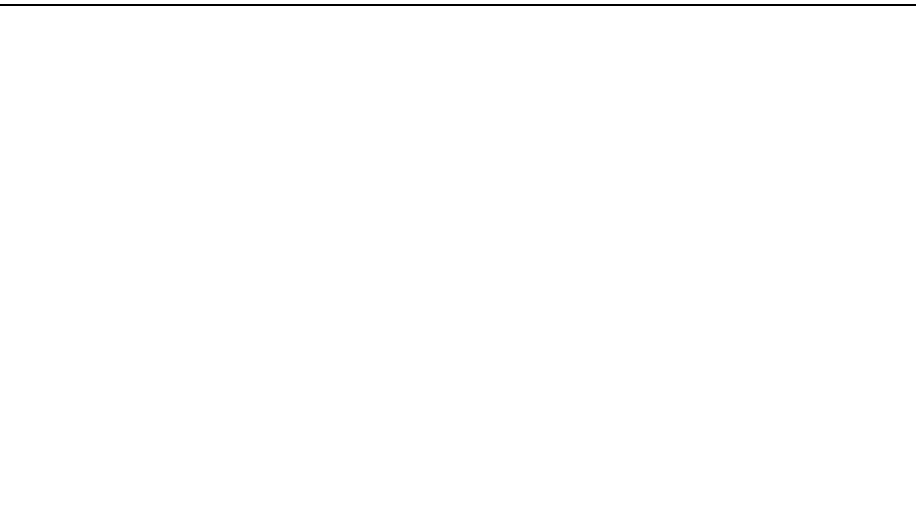
Location:	M-36 / Dzhaltyr (nr 256)
Coordinates:	51.634422, 69.85776
Obstacles:	PTL
Remarks:	500 kV, height $h = 8$ m, to deep, bypass on the right side
Navigation:	Astana-Atbassar IMG_9506



Location:	M-36 / Dzhaltyr (nr 254)
Coordinates:	51.632843, 69.86878
Obstacles:	Traffic circle
Remarks:	driving on the oncoming traffic lane
Navigation:	Astana-Atbassar IMG_9503



Location:	M-36 / Dzhaltyr (nr 253)
Coordinates:	51.62667, 69.866776
Obstacles:	Archway
Remarks:	archway height h = 6 m
Navigation:	Astana-Atbassar IMG_9502



Location:	M-36 / Dzhaltyr (nr 252)
Coordinates:	51.6241, 69.86545
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 69 m bridge scheme - 21x24x24 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 8 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation: Astana-Atbassar
 IMG_9499, IMG_9501



Location:	M-36 (nr 251)
Coordinates:	51.320034, 70.18167
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics: total length: - 54 m bridge scheme - 18x18x18 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 3,7 m technical state- long service life of the center supports Transportation in a single order along the bridge center line.</p>



03/08/2018 11:08



03/08/2018 11:08

Navigation: Astana-Atbassar
 IMG_9495, IMG_9496, IMG_9497



03/08/2018 10:38

Location: **M-36 / Sraritsa river**
 (nr 250)

Coordinates: 51.324566, 70.80061

Obstacles: **Bridge**

Remarks:
 Bridge technical characteristics:
 total length: - 48 m
 bridge scheme - 15x18x15 [m]
 total width- 10 m including pedestrian crossings with width 1 m
 pier height- 3,5 m
 technical state-without visible damage,
 Transportation in a single order along the bridge center line.

Navigation: Astana-Atbassar
 IMG_9487, IMG_9488, IMG_9490



Location:	M-36 (nr 249)
Coordinates:	51.224274, 71.25102
Obstacles:	Archway
Remarks:	archway height $h = 6,1$ m
Navigation:	Astana IMG_9486



Location:	R-10 / M-36 (nr 248)
Coordinates:	51.20303, 71.30247
Obstacles:	Turn
Remarks:	removing of the railings part on the left side
Navigation:	Astana IMG_9485



Location:	R-10 (nr 247)
Coordinates:	51.22874, 71.32589
Obstacles:	Bridge
Remarks:	Bridge technical characteristics: total length: - 129 m bridge scheme - 21x24x21x21x21x21[m] total width- 24 m including pedestrian crossings with width 1 m pier height- 13,5 m technical state-without visible damage, Transportation in a single order along the bridge center line.



Navigation:	Astana IMG_9470, IMG_9471, IMG_9475
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Location: R-10
(nr 246)

Coordinates: 51.251865, 71.34997

Obstacles: Bridge

Remarks:
 Bridge technical characteristics:
 total length: - 57 m
 bridge scheme - 18x21x18 [m]
 total width- 24 m including pedestrian crossings with width 1 m
 pier height- 7,4 m
 technical state-cracks on the supports and beams, parts of reinforcement are open
 Transportation in a single order along the bridge center line.



Navigation: Astana
 IMG_9460, IMG_9461, IMG_9464,
 IMG_9465



Location:	R-10 (nr 245)
Coordinates:	51.255913, 71.374016
Obstacles:	Bridge / highway over crossing
Remarks:	archway height left side h1 = 5,3 m, right side h2 =4,7 m
Navigation:	Astana IMG_9458



Location:	R-10 (nr 244)
Coordinates:	51.23344, 71.55436
Obstacles:	Bridge / highway over crossing
Remarks:	archway height h1 = 5,1 m, h2 =5,2 m
Navigation:	Astana IMG_9454



Location:	R-10 (nr 243)
Coordinates:	51.199226, 71.573105
Obstacles:	Bridge
Remarks:	<p>Bridge technical characteristics:</p> <ul style="list-style-type: none"> total length: - 63 m bridge scheme - 21x21x21 [m] total width- 12 m including pedestrian crossings with width 1 m pier height- 4 m <p>technical state-without visible damage, Transportation in a single order along the bridge center line.</p>

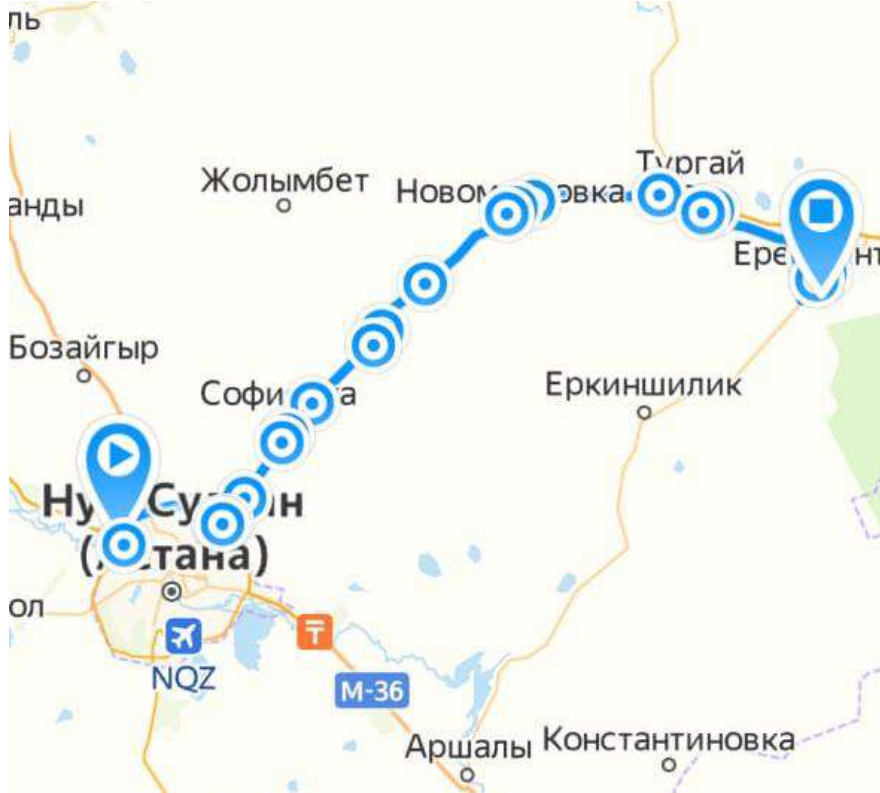


Navigation:	Astana IMG_9448, IMG_9450
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Route: **Astana - Erementau**

Distance: **769 km**

Cargo type: **Heavy lift, Blades, General**





Location: (nr 244)
Coordinates:
Obstacles: Turn to right / road surface
Remarks: Road leveling, turn must be expanded to right side



Location: (nr 244)
Coordinates:
Obstacles: Turn to right
Remarks: turn must be expanded on left side,



Location: (nr 244)
Coordinates:
Obstacles: Railway + road gradient increase
Remarks: Road leveling, PTL lifting



Location: (nr 244)
Coordinates:
Obstacles: Railway + road gradient increase
Remarks: Road leveling, PTL lifting



Location: (nr 244)
Coordinates:
Obstacles: Railway + road gradient increase
Remarks: Road leveling, PTL lifting Dismantling of 2 road signs and 3 road posts, bushes cutting



Location:

(nr 244)

Coordinates:

Obstacles: **road gradient increase**

Remarks:

Geodesi required