

**Romanian National 10km
Racewalk Championship**
Deva, Romania
Measurement Report
26. April, 2026



INTRODUCTION

At the request of the Romanian Athletic Federation the measurement of a 1km loop was carried out with the purpose of having the 10km Romanian National Championships on a 1km loop. The race will be held on Bulevardul Decebal, Deva, Romania.

The measurements was done according to World Athletics standards using the JONES Counter on 26 April 2026.

APPLICATION FOR CERTIFICATION OF A ROAD COURSE

NAME OF EVENTS	Romanian National 10k RaceWalk Championships
RACE DATE	23 May 2026
ADVERTISED RACE DISTANCES	10km, Half Marathon, Marathon
LOCATION OF START	Parcul Operei on Bd. Decebal, Deva, Romania. Close to the Bus station.
LOCATION OF FINISH	Parcul Operei on Bd. Decebal, Deva, Romania. Close to the Bus station.
MEASURER	Eduard Lukinich (B measurer) Email: leduard@gmail.com Contact: +40723470066 Address: Apicultorilor Nr. 8c, Giroc 37220, Romania
RACE ORGANIZER	Federatia Romana de Atletism Race coordinator: Ioan Buliga Aleea Primo Nebiolo, nr. 2 București, Sector 1, 011349 România Tel: +40-21-3192444 Email: competitii@fra.ro
TYPE OF TERRAIN	Flat
TYPE OF COURSE	Loop
ELEVATION	<u>Elevation of Start/Finish: 189m</u> Min. Elevation: 188m Max. Elevation: 191m <u>Separation between Start and Finish:</u> 1k Loop: 0m



CERTIFICATE OF MEASUREMENT OF A ROAD RACE

I certify that I have carried out on 26 April, 2026 according to the World Athletics / A.I.M.S. protocol for the bicycle calibrated with the Jones Counter, the measurement records for the running race of “*Campionatul Național de 10km*” that will be organized on: 23 May 2026

This statement is the conclusion of my personal measurement records, allowing me to conclude that the proposed loops measured the distance of 1k.




The calibration course was measured with a 50m steel tape (20°, 50N) on a 300m long and straight line, and both end of the calibration course were nailed for future use.

I attach to this certificate the plans of the circuit as well as the description of the detailed statements of all the landmarks and all the restrictive conditions agreed with the organizer (marking of the sidewalks, location of the barriers, details of departure and arrival).

Signature of the measurer

Eduard Lukinich



 WORLD ATHLETICS.		
INTERNATIONAL MEASUREMENT CERTIFICATE		
Name of Race Deva Race Walk	Distance 1,0000 km	
Location Deva	Country ROU	
Date of Race 23.05.2026.	Date of Measurement 26.04.2026.	Elevation Change 0 m/km
Separation 0 % of race distance		
Name(s) of the measurer(s) Eduard Lukinich	World Athletics – AIMS Grade B	
Country ROU	Certificate Number ROU2026-033	Expiry Date 31.12.2030.
International Measurement Administrator Lucija Kolic		Registered On 11.05.2026.
Signed 		
<small>This certificate certifies that the length of the above road race has been established by an accredited World Athletics – AIMS Grade A or B measurer employing the method of a bicycle calibrated with a “Jones Counter”. It remains valid for 5 years subject to the course defined in the full measurement report submitted by the measurer being unchanged in any way. Any modifications to the course, however minimal, will nullify this Certificate and require a new measurement to be undertaken. Possession of this certificate does not indicate any sanction of the race by World Athletics or membership of AIMS.</small>		
In cooperation with		
 AIMS Association of International Marathons and Distance Races <small>The home of world running™</small>		





INTERNATIONAL MEASUREMENT CERTIFICATE

Name of Race
Deva Race Walk - 21,0975 km

Distance
21,0975 km

Location
Deva

Country
ROU

Date of Race
23.05.2026.

Date of Measurement
26.04.2026.

Elevation Change
0 m/km

Separation
0,46 % of race distance

Name(s) of the measurer(s)
Eduard Lukinich

World Athletics – AIMS Grade
B

Country
ROU

Certificate Number
ROU2026-034

Expiry Date
31.12.2030.

International Measurement Administrator
Lucija Kolic

Registered On
11.05.2026.

Signed

In cooperation with



This certificate certifies that the length of the above road race has been established by an accredited World Athletics – AIMS Grade A or B measurer employing the method of a bicycle calibrated with a "Jones Counter". It remains valid for 5 years subject to the course defined in the full measurement report submitted by the measurer being unchanged in any way. Any modifications to the course, however minimal, will nullify this Certificate and require a new measurement to be undertaken. Possession of this certificate does not indicate any sanction of the race by World Athletics or membership of AIMS.



INTERNATIONAL MEASUREMENT CERTIFICATE

Name of Race
Deva Race Walk - 42,1950 km

Distance
42,1950 km

Location
Deva

Country
ROU

Date of Race
23.05.2026.

Date of Measurement
26.04.2026.

Elevation Change
0 m/km

Separation
0,46 % of race distance

Name(s) of the measurer(s)
Eduard Lukinich

World Athletics – AIMS Grade
B

Country
ROU

Certificate Number
ROU2026-035

Expiry Date
31.12.2030.

International Measurement Administrator
Lucija Kolic

Registered On
11.05.2026.

Signed

In cooperation with



This certificate certifies that the length of the above road race has been established by an accredited World Athletics – AIMS Grade A or B measurer employing the method of a bicycle calibrated with a "Jones Counter". It remains valid for 5 years subject to the course defined in the full measurement report submitted by the measurer being unchanged in any way. Any modifications to the course, however minimal, will nullify this Certificate and require a new measurement to be undertaken. Possession of this certificate does not indicate any sanction of the race by World Athletics or membership of AIMS.



BICYCLE CALIBRATION DATA SHEET

MEASURER	Eduard Lukinich
LENGTH OF CALIBRATION	300

Pre Calibration	
Date	26.04.2026
Time:	6:45:00
Temperature:	5
Short Course Prevention Factor	1.001

Ride	Start Count	Finish Count	Difference
C1	98400	101992	3592
C2	101992	105582	3590
C3	105582	109174	3592
C4	109174	112765	3591

Working Constant is: 11.98280

Post Calibration	
Date	08.02.2026
Time:	8:10:00
Temperature:	6
S.C.P.F.	1.001

Ride	Start Count	Finish Count	Difference
C1	91000	94590	3590
C2	94590	98182	3592
C3	98182	101773	3591
C4	101773	105365	3592

Finish Constant is 11.98280

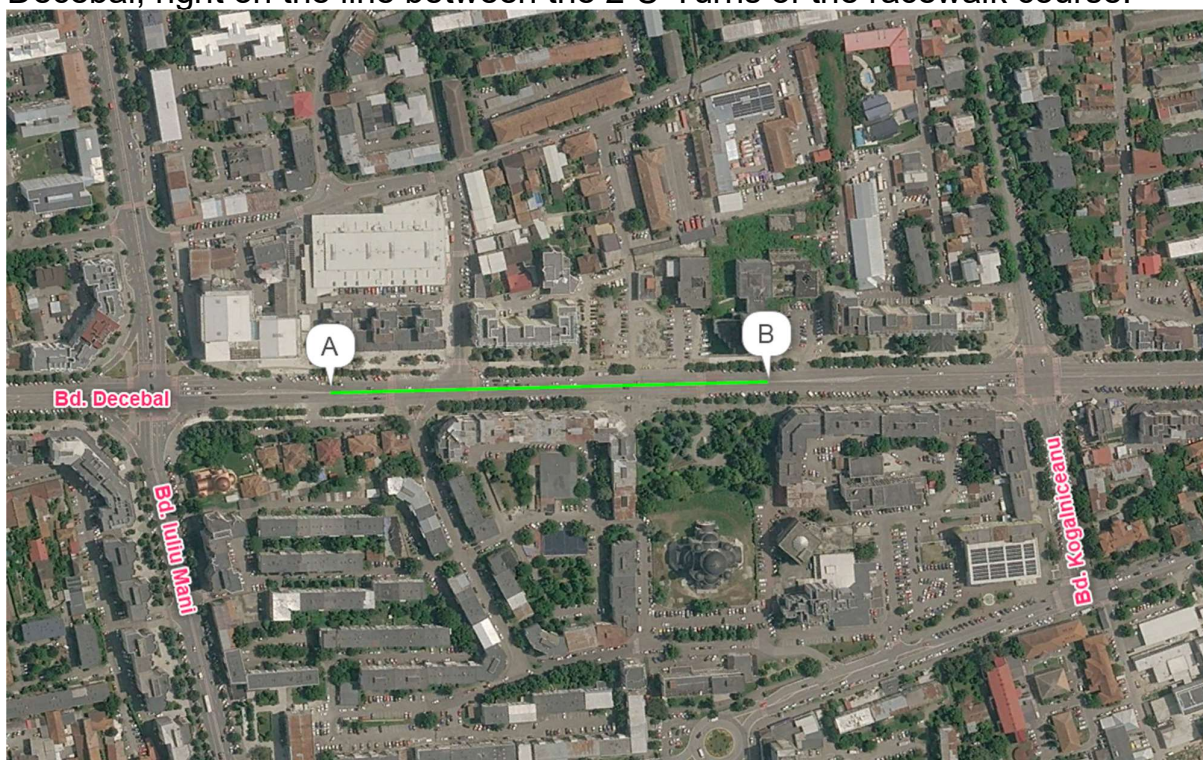
CONSTANT OF THE DAY IS: 11.98280



DETAIL OF THE CALIBRATION COURSE

NAME OF EVENT	Campionatul Național de Mars 10km
LOCATION OF CALIBRATION COURSE	From Bd. Decebal nr 6 until the end of Operei Parc
LENGHT OF CALIBRATION COURSE	300m
CITY	Deva, ROMANIA
DATE AND TIME/temperature	26.04.2026, 6:00 AM, 5 degree Celsius
METHOD OF MEASURING	STEEL TAPE, 50m
MARKINGS	STEEL NAILS, Green spray
MEASURERS	Eduard Lukinich (B grade)

For the calibration course we chose a 300m straight line starting at Bd. Decebal, right on the line between the 2 U-Turns of the racewalk course.



Calibration Course Measurement

Start Time: 26 April 2026, 6:00 AM, Temperature: 5

End Time: 26 April 2026, 6:30 AM, Temperature: 5

The length of the measurement was:

Measurement1 – 300m

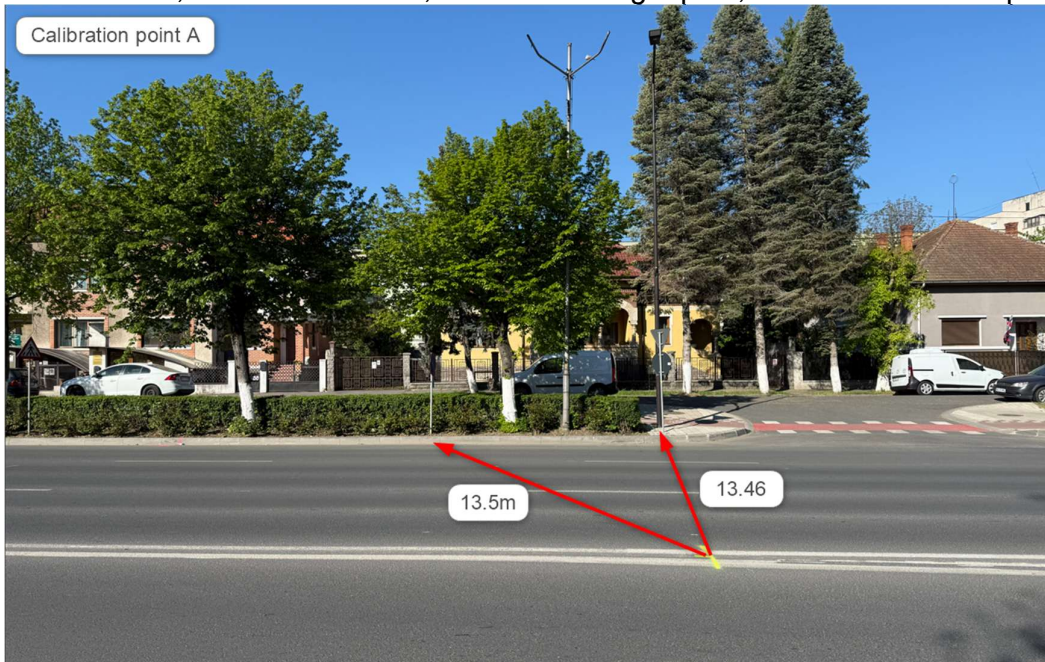
Measurement2 – 300m

Adjustments: 5.22 cm (temperature factor) = +5.22cm



I have nailed both ends of the calibration course for future use. The pictures below show both ends of the calibration course.

Calibration Point A, on Bb. Decebal 6, 13.46m from light pole, 13.5m from do not park pole



Calibration Point B, at the end of Operei Park on Bd. Decebal 16, 11.95m from left light pole, 11.57m from right light pole.



COURSE MEASUREMENT DATA SHEET

Start Time: 6:50 AM Temperature: 5 C
 Finish Time: 8:10 AM Temperature: 6 C
 CONSTANT OF THE DAY IS: 11.98280

The 1 km loop sits on the middle of Bd. Decebal, between Bd. Iuliu Maniu where we can find U-Turn 1 while U-Turn 2 is close to the intersection with Bd. Kogalniceanu. I marked U-Turn 1 with Red spray as that side will be fixed, and i used Neon green spray for temporary marks for U-Turn2 and pink for final markings.



There will be 2 U-turns with the same radius: 3.5m

$$\text{The arc length of each U-Turns} = \pi * R = 3.14 \times (3.5 + 0.3) = 11.94\text{m}$$

I will measure the distance between the center of the of the U-Turns on straight center line:

Ride1

Measured Point	Location	Counter	Counts	Distance
UT1	The Center of the U-Turn1, on Bd. Decebal with Bd. Iuliu Maniu, 16.5 m from traffic light pole and 13.10m from straight kerb end.	78500	0	0.00
TC1	Temporary center of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 20.67m from 4-th light pole, 14.98 from 5-the light pole.	84320	5820	485.70
		Total	Total	485.70



Ride2

Measured Point	Location	Counter	Counts	Distance
UT1	The Center of the U-turn1, on Bd. Decebal with Bd. Iuliu Maniu, 16.5 m from traffic light pole and 13.10m from straight kerb end.	84320	0	0.00
TC1	Temporary center of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 20.67m from 4-th light pole, 14.98 from 5-the light pole.	90140	5820	485.70
		Total	Total	485.70

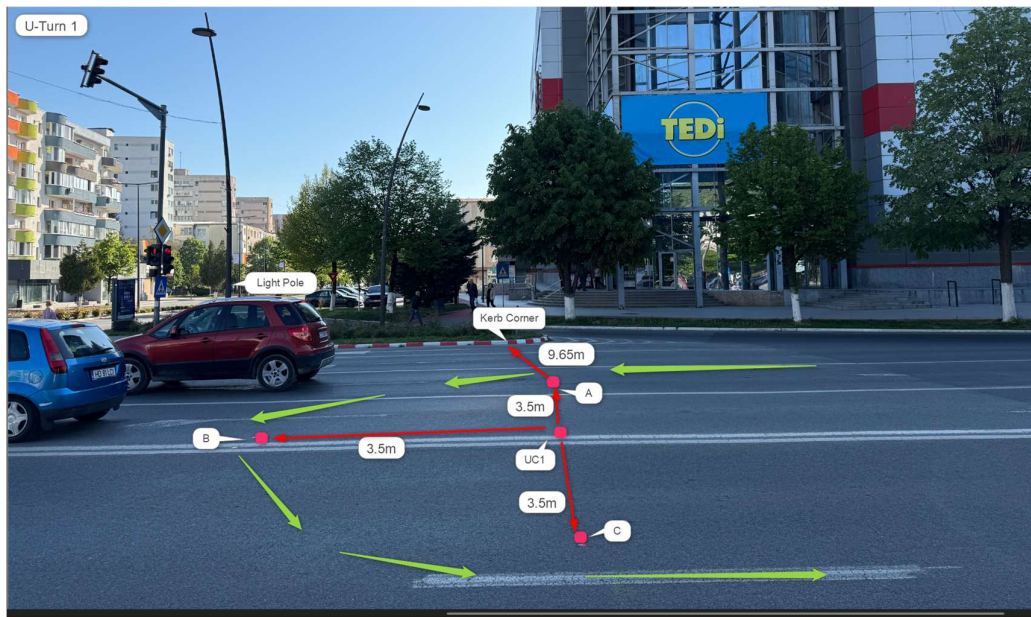
The distance between the center of the 2 U-turns has to be:

$$1000\text{m} - (11.94 + 11.94) = 976.12 / 2 = 488.06$$

Both measured distances are the same, between the center of the 2 U-turns: 485.70

$$488.06 - 485.7 = 2.36$$

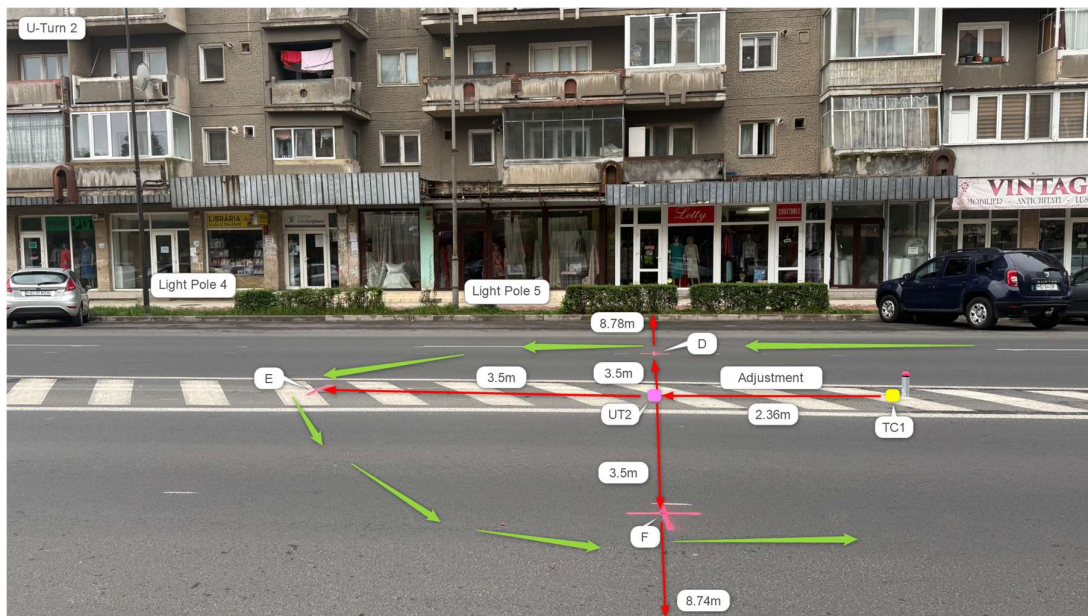
The distance between the center of the U-turns is too short. Need to add 2.36m.



Distances for U-Turn 1

Distances for U-Turn 1	Light Pole near semaphore	Kerb Corner
UC1	16.6m	13.10
A	13.86	9.65
B	14.96	13.38
C	19.61	16.61





Distances for U-Turn 2

Distances for U-Turn 2	Light Pole 4	Light Pole 5
TC1	20,67	14,98
UT2	18,86	13,96
D	16,82	10,87
E	16,5	13,16
F	21,36	17,24

After making the adjustment, i made 2 rides on the actual loop, to see if I can confirm the distance.

Ride3

Measured Point	Location	Counter	Counts	Distance
F – Start	Temporary right of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 21.36m from 4-th light pole, 17.24 from 5-the light pole.	14500	0	0.00
F- Finish	Temporary right of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 21.36m from 4-th light pole, 17.24 from 5-the light pole.	26487	11987	1000.35
		Total	Total	1000.35



Ride4

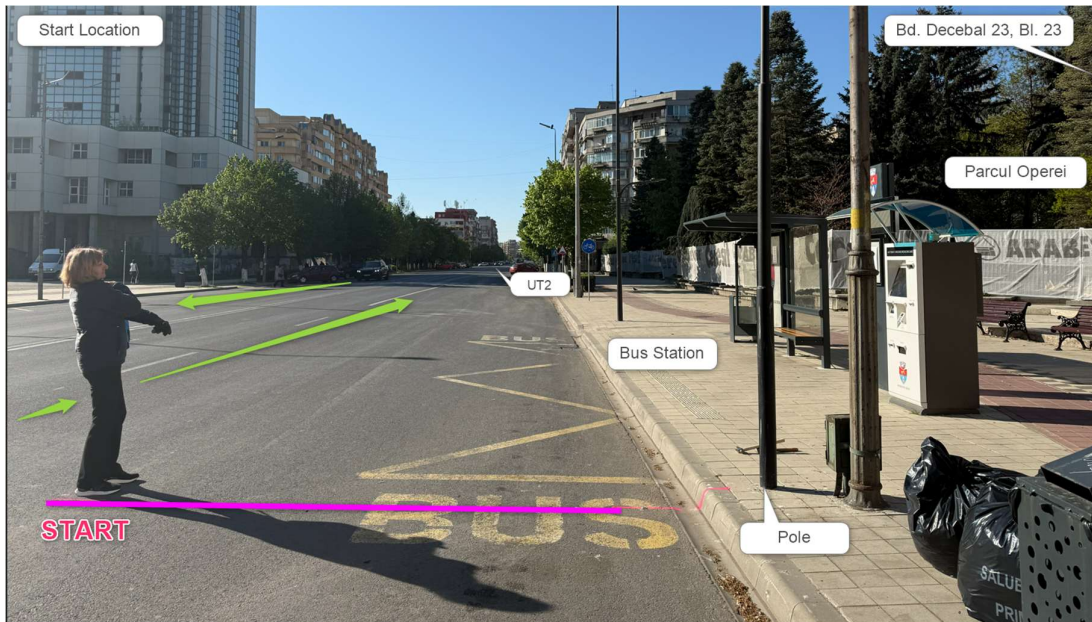
Measured Point	Location	Counter	Counts	Distance
F – Start	Temporary right of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 21.36m from 4-th light pole, 17.24 from 5-the light pole.	26500	0	0.00
F- Finish	Temporary right of the U-turn 2, on Bd. Decebal close to Bd. Kogalniceanu intersection, 21.36m from 4-th light pole, 17.24 from 5-the light pole.	38483	11983	1000.02
		Total	Total	1000.02

The loop is 1000.02m



Start Line

The start location was chosen in such a way so that the Half Marathon or the Marathon start locations would not be in either of the 2 U-Turns and be close to the parc and electricity. It will be next to Bd. Decebal Bl 23, at the start of the Bus Station, inline to the Camera Pole.



Measurement for the Half Marathon Start Line

The Half Marathon race is 21097.5 meters. That means: $21097.5m - 21 \times (1km \text{ lap}) = 97.5m$
The start of the race has to be 97.5 meters before the finish line.

For this I measured 97.5 meters from the finish line against the race direction toward U-Turn1, toward Bd. Iuliu Maniu using the jones counter and the finish constant. Location is at Bd. Decebal 23, Bl 24, 6.25m from the light pole and 9.13m from the pedestrian semaphore.

The racewalkers will cover the distance from this line to the start/finish plus another 21 whole laps.

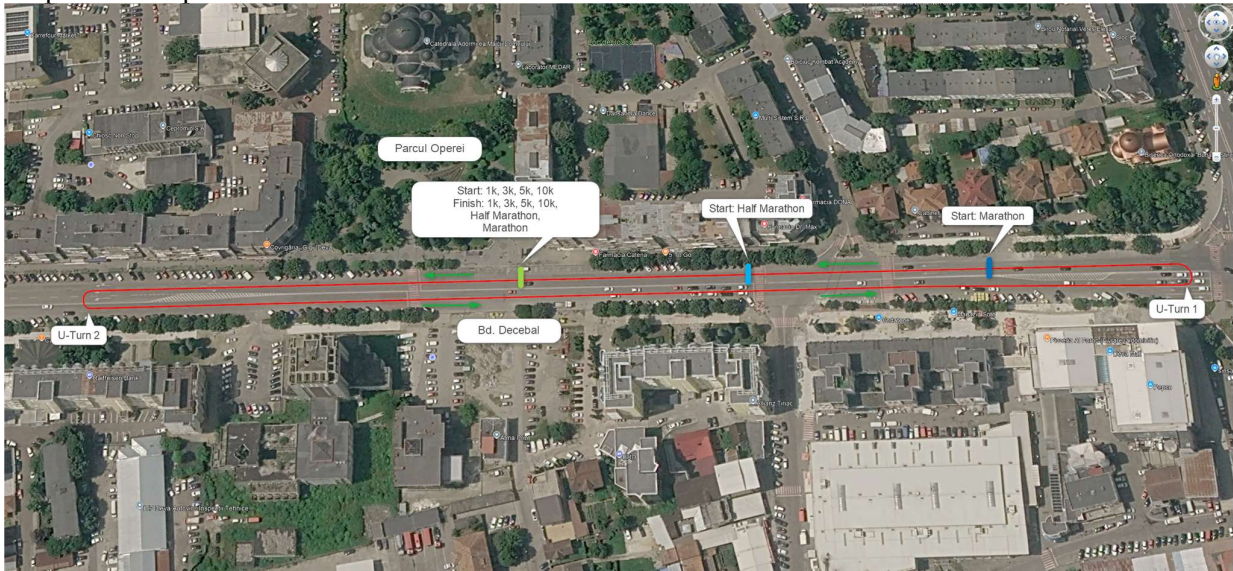


Measurement for the Marathon Start Line.

The Marathon race is 42195 meters. That means: $42195\text{m} - 42 \times (1\text{km lap}) = 195\text{m}$. The start of the race has to be 195 meters before the finish line that we already have. For this I measured 195 meters from the finish line against the race direction toward U-Turn1, toward Bd. Iuliu Maniu using the Johnes counter and the finish constant. Location is at Bd. Decebal nr. 6, 9.70m from the light pole. The racewalkers will cover the distance from this line to the start/finish plus another 42 whole laps.



Map of the loop with all Start / Finish lines:



Fencing:

