

N
↑

Turn at 1st
connecting
path

A map of the study area showing the location of the Lightpost, Parking lot, and Finish line relative to Harbor Drive. The map includes a scale bar from 0 to 100 meters. The Lightpost is marked with a black square, the Parking lot is marked with a black rectangle, and the Finish line is marked with a black line. Harbor Drive is a vertical line on the right side of the map.

Mile 1: 3rd lightpost E of 5th Av bridge.
Mile 2: 1m S of cement slab next to Lakewalk.
Mile 3: 3m W of utility cover at turn onto Railroad St.

Cross parking
lot to driveway
exit to L on
Railroad St

Garage
Doors*

*Garage Doors must be open to allow runners to pass through

Utility plate

1.59m

Railroad St

Harbor Dr

cement
platform

Start: S edge of cement platform near bow of Irvin



**Road Running Technical Council
USA Track & Field
Measurement Certificate**



Name of the course William A Irvin 5km Distance 5km
Location (state) MN (city) Duluth
Type of course: road race ☒ calibration course ☐ track ☐
Measuring methods: bicycle ☒ steel tape ☐ electronic distance meter ☐
Measured by (name, address, phone & e-mail) Rick Recker - IAAF Measurer - 19 S 1st St #2203 - Minneapolis
MN55401 - 612 375 0805 - rick_recker@hotmail.com
Race contact (name, address, phone & e-mail) Grandma's Marathon - Bx 16234 - Duluth, MN55816 - 218 727
0947 - grandmas@grandmasmarathon.com
Date(s) when course measured: Mar 25, 2016
Number of measurements of entire course: Two Course Configuration: Loop
Elevation (meters above sea level) Start 184 Finish 184 Highest 204 Lowest 184
Straight line distance between start & finish 45m Drop 0 m/km Separation .9 %
Type of surface: paved 98.64 % dirt % gravel 1.36 % grass % track %
Effective date of certification: May 12, 2016 Certification code: MN16008RR

Notice to Race Director: Use this Certification Code
in **all** public announcements relating to your race.

Be It Officially Noted That

Based on examination of data provided by the above named measurer, the course described above and in the map attached is hereby certified as reasonably accurate in measurement according to the standards adopted by the Road Running Technical Council. If **any** changes are made to the course, this certification becomes void, and the course must then be recertified.

Verification of Course — In the event a National Open Record is set on this course, or at the discretion of USA Track & Field, a verification remeasurement may be required to be performed by a member of the Road Running Technical Council. If such a remeasurement shows the course to be short, then all pending records will be rejected and the course certification will be cancelled.

This certification expires on December 31 in the year **2026**

AS NATIONALLY CERTIFIED BY:

Rick Recker

Date: May 12, 2016

Rick Recker - USATF/RRTC National Certifier
19 S 1st St #2203 - 612 375 0805 - rick_recker@hotmail.com