



# **Brimley Development Center**

Today's Proving Ground for Tomorrow's Vehicles

[www.continental-corporation.com](http://www.continental-corporation.com)



# About the Brimley Development Center



The Brimley Development Center is located in Michigan's upper peninsula, outside Sault Ste. Marie, near the Canadian border. It offers the perfect environment for year round testing with multiple track configurations on more than 20 different test surfaces.

Established in 1996, the 540 acre Brimley Development Center offers an up to date, state of the art automotive test site. The surfaces and configurations allow for the testing of technologies like: vehicle braking systems, vehicle handling, advanced driver assistance systems and tire testing. Additionally, an 18' x 29' environmental chamber allows for -40 deg to +140 deg F temperature testing adjacent to test surfaces.

The Brimley Development Center offers one of the nation's most comprehensive winter vehicle testing facilities. During the winter track configuration Brimley offers 3 different test surfaces: Snow, Ice and Asphalt. This includes spacious test pads, handling courses, snow and ice circles, various grades and a specialty surface area with split-mu and alternating-mu. Unique to the Brimley Development Center is the ability to provide and maintain a large Vehicle Dynamics Area measuring 2500' in length and 600' wide, allowing for asphalt tests year round.

# Testing Capabilities

## ❑ Electronic Brake System Testing & Development

- Anti-Lock Brakes
- Traction Control
- Electronic Stability Control
- Active Roll Protection
- Hill Start Assist
- Hill Decent Control

## ❑ Advanced Driver Assistant Systems

- Automatic High Beam Control
- Forward Collision Mitigation
- Lane Keeping System
- Lane Change Assist
- Adaptive Cruise Control
- Pedestrian Safety



- ❑ Environmental Chamber with extreme heat and cold capabilities
- ❑ Tire Testing
- ❑ Drivetrain Testing & Development
- ❑ Automotive durability support
- ❑ Autonomous Vehicle Testing
- ❑ Vehicle Benchmarking Activities



# Track Protocol & Safety

- ❑ Safety Rules and Local Operating Practices are a Part of each Employees Training.
- ❑ Employees and Visitors are Required to Complete an Orientation/Drivers Training Course and acquire a Level 0, 1, 2, or 3 License.
- ❑ Brimley's Safety Record Includes 0 Serious Injury Accidents to Date.



# Track Security Features

## □ Facility & Building Features

- Modular Customer Garage areas
- Programmable Electronic Badge access
- Separate secured vehicle bays available (key access)
- Motion Sensing Alarm system

## □ Test Area Features

- 540 Acre Site surrounded by forest.
- Single point of entry.
- Isolated location more than ½ mile off public roads.
- Facility is unmarked.
- No Security Breaches



# Warm Weather Surface Capabilities

- Gravel Road / Dynamics Area
  - Length – 1,100 feet (335 m)
  - Width – 200 feet (61 m)
- Gravel Handling Course
  - Length – 1 mile (1.6 km)
  - Width – 35 feet (11 m)
  - Left turns – 6 Right turns – 4
  - Straight away – 1,000 feet (305 m)
- One-mile Oval
  - Length – 1 mile (1.6 km)
  - Width – 35 feet (11 m)
  - Width – 75 ft. (22.9 m) for ½ mile
- Sand Pit
  - Length – 600 feet (183 m)
  - Width – 200 feet (61 m)
- Deep Gravel
  - Length – 300 feet (91 m)
  - Width – 12 feet (4 m)
  - Depth – 12 inches (35 cm)
  - Type of Rock – Washed Crushed Rock
- Asphalt/Gravel Split-mu
  - Length – 450 feet (137 m)
  - Width – 8 feet (2 m)
- Asphalt VDA (with lane markings)
  - 21 acre asphalt pad (8.5 Hectare)
  - 2 mile loop (3 km)
- 30% Rock Crawl, 30% Roller Traction Control Grade
- ¼ Mile Gravel Circle
- Traction Control Grades
  - 10, 15, 20 and 30% hills
  - split Mu (Concrete / Tiles)
- Ceramic Tile
  - 500' x 16'



# Cold Weather Surface Capabilities

- Snow Field (North)
  - Length – 1,200 feet (366 m)
  - Width – 400 feet (122 m)
- Snow Field (South)
  - Length – 3,500 feet (610 m)
  - Width – 600 feet (183 m)
- One Mile Circle
  - Length – 1 mile (1.6 km)
  - Width – 75 feet (11 m)
- Snow Handling Course
  - Length – 1 mile (1.6 km)
  - Width – 35 feet (11 m)
  - Left turns – 6
  - Right turns – 4
  - Straight away – 1,000 feet (305 m)
- Ice Field
  - Length – 1,200 feet (366 m)
  - Width – 300 feet (91 m)
- Specialty Surfaces
  - Split Mu (Asphalt / Ice)
  - Alternating Mu Transitions
  - Checkerboard Transitions
- Traction Control Grades
  - 10, 15, 20 and 30% hills
  - split Mu (Concrete / Ice)
- 1/4 Mile Circle
- Twist Ditch
- South Snow Handling Course
- West Snow Handling Course



# Surface Locations



- 1) South Snow Field
- 2) North Snow Field
- 3) Circle - ¼ mile
- 4) Circle - 1 mile
- 5) North Handling Course
- 6) Ice Field
- 7) Snow Grade – 7%
- 8) Specialty surfaces
- 9) Traction Grades
- 10) Vehicle Dynamics Area
- 11) 2-Mile Loop
- 12) Highway Ramp
- 13) Gravel Dynamics Area
- 14) Artificial Low-mu Tile
- 15) Environmental Chamber
- 16) South Handling Course
- 17) West Handling Course
- 18) Snow Grades
- 19) Twist Ditch
- 20) 4" Step