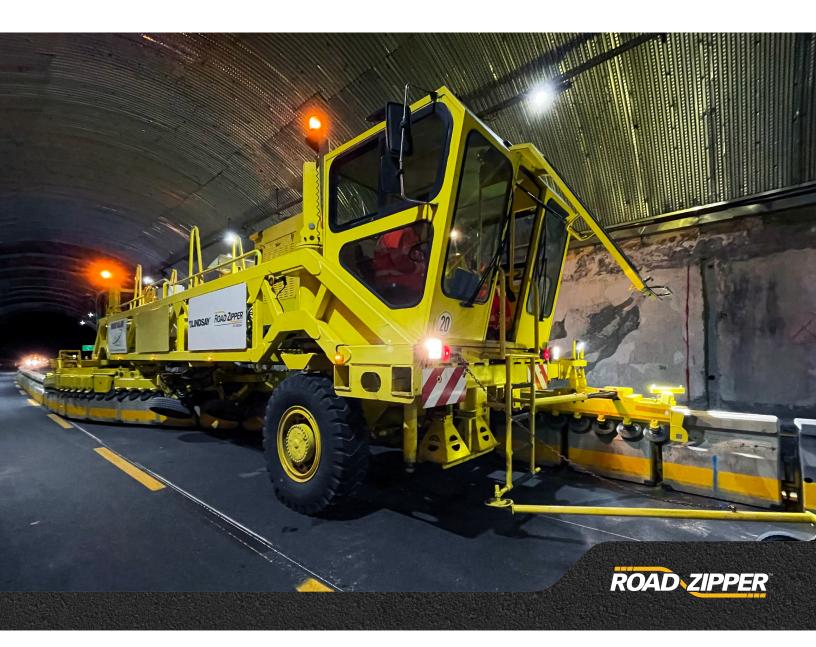
# THE ROAD ZIPPER SYSTEM<sup>™</sup>

# For International Construction

- + Reduces Congestion
- + Increases Safety
- + Speeds construction
- + Improves efficiencies
- + Better quality repairs
- + Quick traffic control changes



#### **Construction Applications**

The Road Zipper System® is designed to create a flexible, positive traffic barrier between opposing lanes of traffic, or between motorists and construction work zones. The system uses a wall of interlocked 1-meter barriers that can be lifted and repositioned by a transfer machine to quickly reconfigure travel lanes creating additional work zone space for construction crews and/or providing additional travel lanes in the peak travel direction to mitigate congestion.

Many projects are challenged to maintain motorist mobility during peak travel hours and provide safety for both workers and motorists. Plastic delineators are often used to create off-peak lane closures which may decrease safety for the project. The Road Zipper provides flexible barrier that is quickly deployed to provide positive barrier separation between live travel lanes and the closed work zone to increase work zone safety and peak travel hour mobility.

For partial width construction with traffic switches, the Road Zipper reduces congestion by enabling more lanes to be open during peak travel period. The barrier is moved several times per day to reconfigure the roadway in real time, maximizing the number of lanes available for peak traffic.

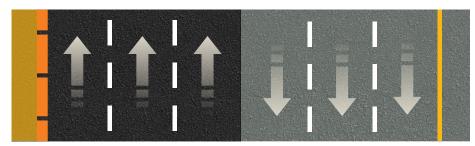
#### **Off-Peak Lane Closures with Barrier Separation**

When working in the shoulder or median, the Road Zipper allows the contractor to expand the work zone during off-peak traffic hours by quickly closing one or more lanes to traffic. More work zone space or roadway width allows the use of larger, more efficient equipment. These options help the contractor combine stages and accelerate construction for early job completion with better quality repairs.

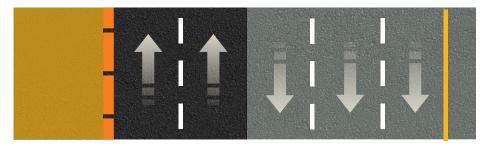


The Road Zipper barrier maintains traffic flow while separating construction work from live traffic.

# **Roadway Cross Sections (Shoulder Work Zone)**



**Peak Traffic Condition** 



**Off-Peak Traffic** 



#### Improved safety

Workers and motorists have the safety of high-level positive barrier separation at all times.

#### **Reduces congestion**

The Road Zipper reconfigures the travel lanes in real time to open the maximum number of lanes for peak traffic periods.

## **Speeds construction**

Due to the larger work space, contractors can combine or eliminate stages saving months or even entire construction seasons.

#### Improves efficiency

Dedicated haul lanes create safer, more efficient deliveries and equipment/material staging.

#### **Better quality repairs**

More work zone space allows contractors to use larger, more efficient equipment, resulting in better quality repairs that last longer.

# Quick traffic control changes

The Road Zipper changes the travel lane configuration in minutes to accommodate traffic control changes in different project stages.

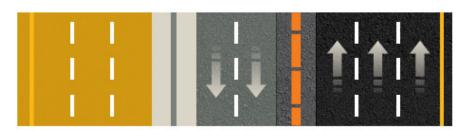
#### **Partial Width Construction with Traffic Switch**

During partial width construction, the Road Zipper helps keep more lanes open in the peak travel direction at all times by reconfiguring the road in real time as a "moveable median" with no disruption to live traffic. This significantly reduces traffic queues and user delay costs, and it saves hundreds of thousands, or even millions of dollars in temporary pavement widening to meet minimum traffic flow requirements.

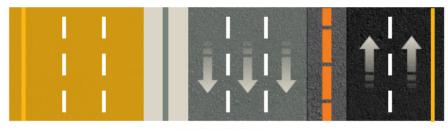


The moveable barrier provides more traffic lanes while offering the protection of positive concrete separation

#### **Traffic with Cross Sections**



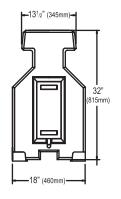
AM Peak Traffic

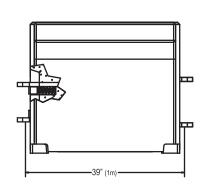


PM Peak Traffic



# **BARRIER TRANSFER MACHINE** TRANSFER SPEED 8 km/h (5 mph) **ROADING SPEED** 20-32 km/h (12.5-20 mph) LATERAL TRANSFER 3-5.5m (10-18 ft) TRANSFER TIME 1 km (0.6 mi) in 7.5 minutes.





#### **Barrier Specifications**

#### 18" Concrete Reactive Tension System (CRTS)

Heavily reinforced concrete barriers have superior deflection and vehicle stability when compared to standard Temporary Concrete Barrier.

#### **Permanent Deflection**

MASH TL-3: 990 mm (39 in) NCHRP 350 TL-3: 610 mm (24 in) EN 1317-2 N2: 700 mm (27 in) EN 1317-2 H2: 1.4 m (55 in)

#### **Mass of Each Barrier Element**

Approximately 680 kg (1500 lbs)

#### **Case Study**

## A26 Highway / Italy

Type: Highway Tunnel Rehabilitation

#### **Benefits:**

- / Project team won the 2024 International Tunneling Awards
- / Reduced risk of traffic queues during peak travel times compared to a static barrier lane closure
- / Enhanced safety measures for motorists and construction workers
- / Increased work space for construction workers
- / Minimized mobility and safety concerns with a complete separation of work zone and moving traffic





18135 Burke Street, Suite 100 | Omaha, NE 68022 +1 (402) 829-6800 | U.S. Toll Free: (888) 800-3691