THE ROAD ZIPPER SYSTEM®

FOR CONSTRUCTION APPLICATIONS

ROAD ZIPPER™
BY LINDSAY

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

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

SPEEDS CONSTRUCTION
By combining or eliminating stages due to the larger work space, contractors can save months or even entire construction seasons.

CREATES EFFICIENCIES
Dedicated haul lanes create safer, more efficient deliveries and material staging.

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

RAPID STAGE CHANGES
The Zipper changes the road layout in minutes. It can take days to reposition miles of temporary concrete barrier.

ROAD WIDENING OR SHOULDER / MEDIAN REPAIR

H-1 FREEWAY, HAWAII: ROAD WIDENING

When working in the shoulder or median, the Road Zipper allows the contractor to expand the work zone during off-peak traffic hours by taking one or more lanes from traffic. More work zone space can be used for dedicated haul lanes or allow for larger, more efficient equipment. These options help the contractor combine stages and accelerate construction for early job completion with better quality repairs.


More room to work during off-peak


More lanes for traffic during peak

An extra lane is returned to motorists prior to the peak traffic period - Honolulu, HI

EDGE OF ROAD CROSS SECTIONS

Peak Traffic Condition

Off Peak Traffic Condition

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 create additional work zone space for construction crews, and to provide more lanes to the peak traffic direction to mitigate congestion.

For widening work and shoulder / median repair, the Road Zipper allows the contractor to increase the size of the work zone during off-peak traffic hours to create dedicated haul lanes and use larger, more efficient equipment to combine or eliminate stages and significantly accelerate the construction process.

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

PARTIAL WIDTH CONSTRUCTION WITH TRAFFIC SWITCH

ST. CROIX RIVER BRIDGE, WISCONSIN: PARTIAL WIDTH CONSTRUCTION

During partial width construction, the Road Zipper helps keep more lanes open in the peak traffic 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 asphalt widening to meet minimum traffic flow requirements.

AM PEAK: 3 lanes in, 2 lanes out

PM PEAK: 2 lanes in, 3 lanes out

Award winning I-94 St. Croix Bridge construction project – Wisconsin, USA

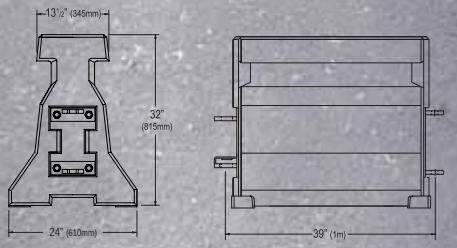
TRAFFIC SWITCH CROSS SECTIONS

AM Peak Traffic

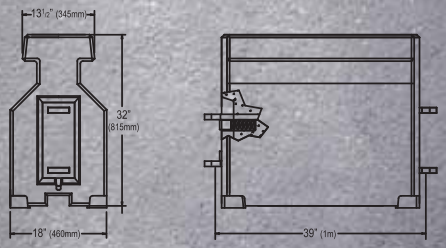
PM Peak Traffic

PHYSICAL SPECIFICATIONS

24" QuickChange® Moveable Barrier
Heavily reinforced concrete barriers have similar deflection and superior vehicle stability when compared to standard Temporary Concrete Barrier.
Tested and Approved to NCHRP Report 350, Test Level 3 (100 km/h)
Maximum Deflection at TL-3: 52 in. (1.3m)
Mass of Each Barrier Element: Approximately 1425 lbs (646 kg)



18" Reactive Tension Moveable Barrier
Heavily reinforced concrete barriers have superior deflection and vehicle stability when compared to standard Temporary Concrete Barrier.
Permanent deflection:
NCHRP 350 TL-3: 24 in. (610mm), MASH TL-3: 39 in. (990mm)
Mass of Each Barrier Element: Approximately 1500 lbs (680 kg)



BARRIER TRANSFER MACHINE			
Transfer Speed	5 mph (7km/h)	Max. Single Transfer	18 ft (5.5m)
Roading Speed	20 mph (32km/h)	Transfer Time	1 mile in 12 minutes

Devore, CA I-15

Type: Pavement Reconstruction
Contractor: Coffman Specialties
Project Length: 2 miles

- Project completion accelerated from 8 months to 6 weeks[1]
- Construction savings of more than $6M
- Traffic queues and user delay costs minimized

[1] CalTrans, CA4PRS

Salt Lake City, UT SR 171

Type: Arterial Widening
Contractor: Granite Construction
Project Length: 1.7 miles

- Project completed 7 months ahead of schedule
- Moveable barrier benefits estimated at $1.7M to $2.4M
- B/C ratio of 10:1 "if all benefits are considered"[2]

[2] T.Y. Lin International, Evaluation of Moveable Barrier in Construction Work Zones

DISTRIBUTED BY:

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