

02 Vehicle Entry and Exit Points - Standard

Guiding Principle:

- ❖ *Vehicles and Pedestrians shall not share the same entry/exit points at site.*
- ❖ *Entry and Exit points shall be designed to prevent vehicle to vehicle and vehicle to pedestrian interaction.*
- ❖ *All vehicles shall stop before exiting the site.*
- ❖ *Where vehicles exit the site across a public footpath, there shall be suitable audible & visual warning devices to alert pedestrians.*
- ❖ *There shall be clear vision for drivers entering or exiting the site*

Introduction

Where there is the likelihood that pedestrians will enter the site, vehicles and pedestrians shall not enter or exit the site via the same entry or exit gates.

Vehicle entry and exit gates shall be designed to prevent or reduce the risk of vehicle to pedestrian interaction.

There are mandatory and recommended requirements which sites must either comply with or strongly consider as controls for the reduction of risk in respect to vehicle and pedestrian segregation.

The following Vehicle and Pedestrian Segregation standards should be referenced when developing controls in relation to this standard.

- 01 Pedestrian Entry and Exit Points
- 05 Vehicle and Pedestrian Interaction
- 06 Signage
- Site and Vehicle Safety Equipment

Mandatory:

Controls should be implemented to restrict or prevent pedestrians entering the site via the vehicle entry or exit gates.

Where vehicles exit the site across a public footpath and where there is potential for vehicles exiting the site to interact with those pedestrians, there shall be suitable audible & visual warning devices to alert pedestrians of exiting vehicles.

- ❑ Warning alarm is triggered as vehicles travel towards the exit gate. Where site have noise sensitive neighbours, Broad Band Back up Alarms may be considered as an alternative. These can be purchased in a range of noise emitting levels and may be suitable for these situations.
- ❑ Warning flashing orange light that is triggered as vehicles travel towards the exit gate. This must be bright enough to alert pedestrians during night, low level or daylight situations

Potential Solutions	
<p>Photo: 1</p>  <p>Photo: 2</p>  <p>SOLAR TRAFFIC LIGHT 8" DIAMETER 24 HOUR SLX-129-24HR</p>	<p>Examples of warning devices</p> <p>Photo: 1</p> <p>Twin flashing orange lights provide high visibility to alert pedestrians that a vehicle is exiting the site</p> <p>Photo: 2</p> <p>Solar powered flashing light. Can be installed where it is difficult to run power to the gate</p>

Potential Solutions

Photo: 1



Photo: 2



Photo: 1

Combination flashing light and warning alarm provides both a visual and audible warning to alert pedestrians that a vehicle is exiting the site.

Photo: 2

Broadband reversing alarms may be used at sites in noise sensitive areas

Broadband sound is also more directional and reduces noise pollution outside the danger zone. This model automatically adjusts to within 5dB above the surrounding noise

Mandatory Continued:

- There shall be signage alerting pedestrians of vehicles exiting the site. Caution sign – Beware of Vehicles

Potential Solutions

Signs – Installed on both sides of the exit gate/s where pedestrians cross the gate



Beware of vehicle sign should be installed in clear vision for pedestrians. The sign should be reflective where the site operates during non-daylight hours, or illuminated

Mandatory Continued:

- ❑ All vehicles exiting the site shall stop at the exit point before crossing the public footpath.
There shall be a stop sign that is either reflective or illuminated to instruct vehicles to stop.

Potential Solutions



A stop sign complying with AS 1742 shall be installed at all exit gates. The sign should be reflective where the site operates during non-daylight hours, or illuminated

Recommended

The controls implemented should be as minimum signage, but may extend to physical controls such as self closing gates or boom gates.

Vision

Clear vision for both vehicles and pedestrians is critical to reducing the risk of vehicle to pedestrian or vehicle to vehicle interaction and as such the entry or exit gates should be clear of obstructions such as trees or shrubs, excessive signage, solid fences that impact on vision or any other obstacles.

The site should ensure that all vehicles entering or exiting the site have clear vision in both directions:

- ❑ This is both when entering the site to ensure the driver enters without interaction with vehicles exiting the site or vehicles and mobile plant operating on site
- ❑ When exiting the site to ensure the driver does not interact with pedestrians crossing the gate or other traffic on the roadway.

There are options for creating more visibility for entry and exit gates:

- ❑ Trimming or removing trees and shrubs where practical
- ❑ Installing see through fencing such as chain link or tubular steel industrial fencing
- ❑ Installing convex mirrors to increase vision

Potential Solutions	
<p>Clear Vision at entry and exit gates.</p>	
<p>Photo: 1</p> 	<p>Photo: 2</p> 
<p>Photo: 3</p>	<p>Clear unrestricted vision is essential to provide a safe entry and exit to the site.</p> <p>Photo: 1&2</p> <p>Showing two styles of commercial fencing that may be installed to provide increased vision for vehicles entering and exiting the site. Open fencing such as this assists pedestrians to view trucks that are exiting the site as well</p> <p>Photo: 3</p>

Convex Mirrors



Convex safety mirrors such as this can provide extra vision at site exit gates.

Site Security

Concrete plants typically operate with entry and exit gates open during the normal course of operation and as such, site security, particularly preventing unauthorised vehicles or pedestrian from entering the site can be challenging. Potential solutions for this risk are:

- Installing self closing gates that are operated by remote control.
- Installing boom gates that are operated by remote control: Install gates at both entry and exit.

Note: If practical boom gates at entry point should be located such that vehicles entering the site can be off the roadway with the boom still in the down position

Potential Solutions

Site Security

Photo: 1



Photo: 2



Photo: 3



Site Security:

Boom gates installed assist to prevent unauthorised access to the site by vehicles and pedestrians

Photo: 1

Photo of boom installed in a Holcim Australia concrete plant. This is the exit gate. The gate is opened when a truck drives over induction loops located in the roadway (same as traffic lights)

Photo: 3

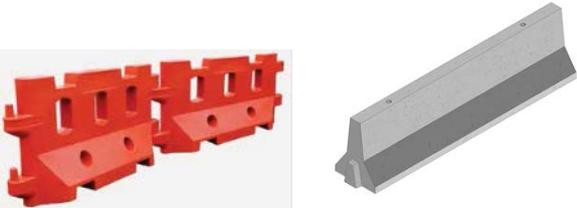
Boom gate with a hanging fence. The fence further discourages unauthorised access to the site by pedestrians

Segregated Entry/Exit

Where practical, separate entry and exit gates provide segregation between vehicles entering and exiting the site and therefore assist to reduce the risk of vehicle to vehicle interaction. Where the site has a single entry/exit gate it is recommended that the driveway is separated as is reasonably practical into two lanes, entry and exit.

The separation can be achieved with:

- Line marking can be installed to provide lane division
- Rumble strips can be installed to provide lane dividers
- Solid barriers such as Jersey kerbs. These can provide total separation between vehicles entering and exiting the site through a single gate

Potential Solutions	
<p>Rumble Strips</p> 	<p>Rumble strips for lane dividers</p> <p>These strips can be installed simply by anchoring to the roadway with either masonry anchors or by gluing to the surface or gluing pins into the roadway.</p> <p>When in place traffic is visually divided but can still cross over the rumble strips if required</p>
<p>Jersey Kerbs</p> 	<p>Jersey kerbs can be installed to provide total segregation of vehicles entering and exiting the site through a single gate. This assists to reduce the risk of vehicle to vehicle interaction</p>