

Bulletin 49: 13 September 2016

Intersection inter-visibility accident trend

CTOC have undertaken analysis of worksite accidents reported in Christchurch over the last three years involving vehicle inter-visibility after a noticeable trend was identified. At least 9 accidents have occurred over the last 1 ½ years at TTM worksites where diminished inter-visibility between vehicles was identified as a contributing factor.

Some common situations were:

- Work in the centre of the road through an intersection where a work vehicle (eg hydro / camera truck) within the closure compromises inter-visibility between a vehicle undertaking a turning maneuver and non-turning traffic (see Diagram 01)
- Worksites in the centre of the road approaching an intersection with a work vehicle compromising inter-visibility between a vehicle undertaking a turning maneuver and non-turning traffic (see Diagram 02).
- Worksites in the shoulder of the main road where access to the a side road is restricted and within the workspace a work vehicle is parked in the shoulder closure close to the side road compromising inter-visibility between vehicles exiting the side road and through vehicles on the main road (see Diagram 03).
- Worksites encroaching on an intersection surrounded by six foot fences with anti-gawking screening, blocking visibility of traffic passing alongside the worksite.

CTOC wishes to remind planners and STMS' of their responsibilities to provide a fit for purpose TTM layout for work being undertaken.

Planners must:

1. Consider the risk of visibility becoming blocked by the TMP layout or work operation. Ask yourself 'Will vehicle inter-visibility be diminished as a result of the site layout, plant positioning, or work operations?'
2. Adapt TMP to ensure visibility risk is managed. For example:
 - Restricting what can/cannot enter the visibility sensitive area.
 - Modifying the TMP to eliminate or minimize the hazard.
 - Setting a minimum inter-visibility distance, and ensuring that the STMS checks that this is maintained throughout the operation.

An average at-grade intersection, inter-visibility distance is recommended to match the Stopping Sight Distances provided in the NZTA Geometric Design Manual (draft) - Table 2.12. Table 1 below is an excerpt from that table.

Design speed (km/h)	Stopping Sight Distance (SSD)
30	30
40	40
50	55
60	75
70	95
80	115
90	140
100	170

Table 1 – Sight Stopping Distances

STMS' must:

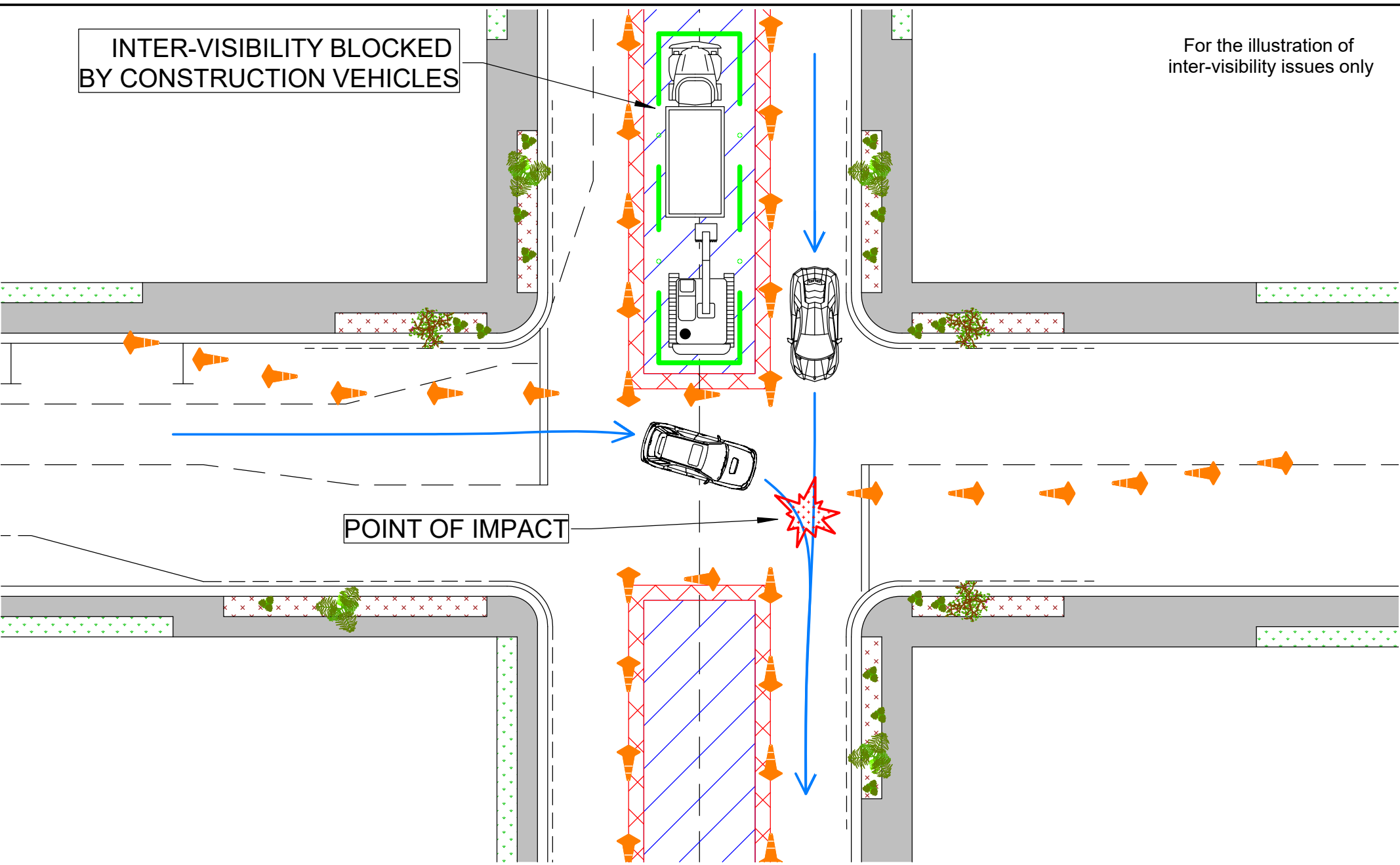
1. Actively monitor vehicle inter-visibility and must postpone, cancel or modify sites (in adherence with STMS authority in CoPTTM) if safety is compromised due to visibility issues.
2. Any surplus plant or equipment is removed or relocated away from any areas where visibility may be compromised.

On behalf of the CTOC Temporary Traffic Management Team

Lance Hammond / Temporary Traffic Management Coordinator
Christchurch Transport Operations Centre (CTOC)

INTER-VISIBILITY BLOCKED BY CONSTRUCTION VEHICLES

For the illustration of inter-visibility issues only

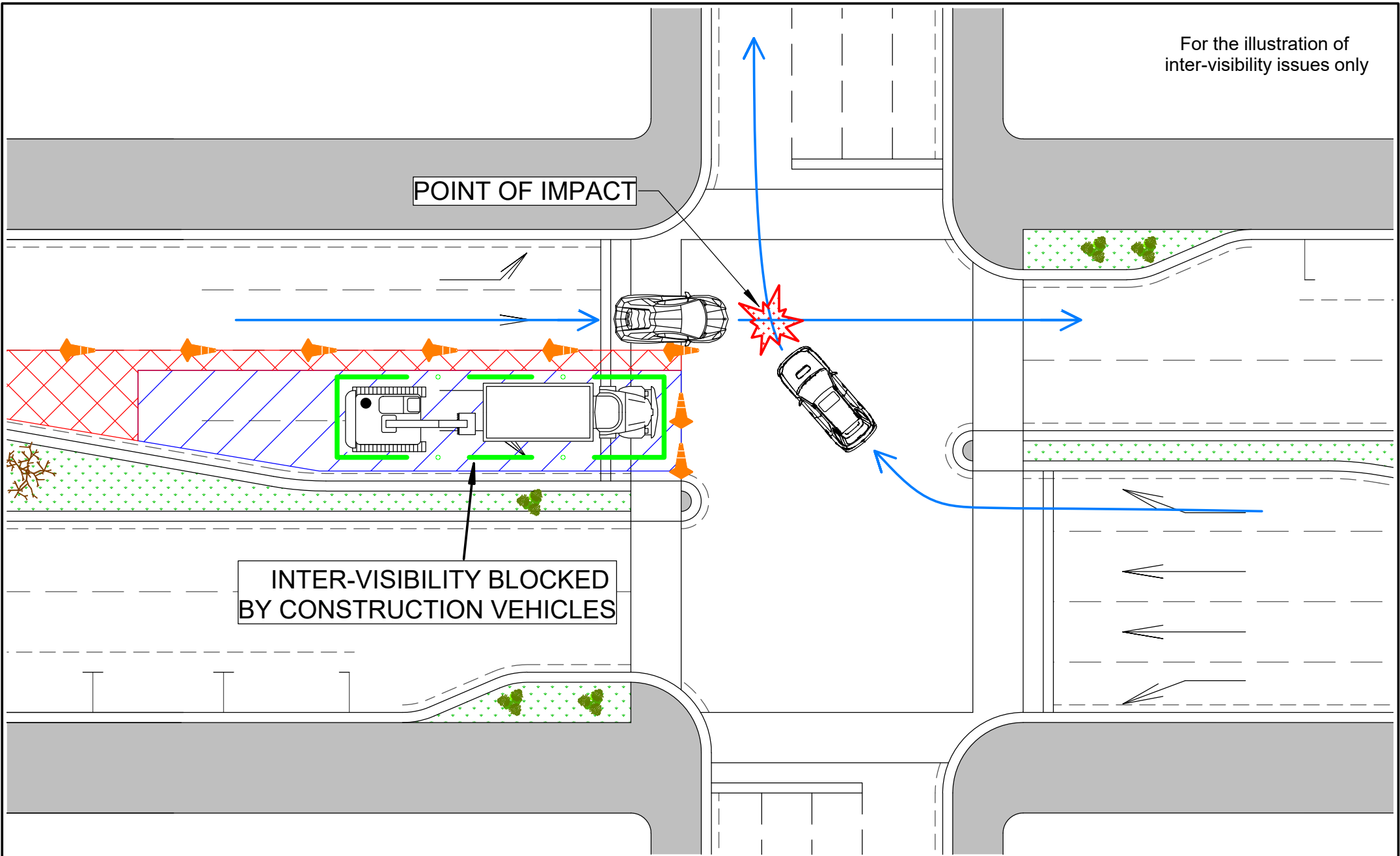


Reference No: 01	Level:	Operation:	Christchurch Transport Operations Centre	Road:	Intersection	Method:	Blocked Inter-visibility
				Version: 1 Date: August 2016	Closure:		
This drawing is not to any defined scale.							

For the illustration of inter-visibility issues only

POINT OF IMPACT

INTER-VISIBILITY BLOCKED BY CONSTRUCTION VEHICLES



Reference No:

02

Level:

Operation:



Road:

Intersection

Method:

Blocked Inter-visibility

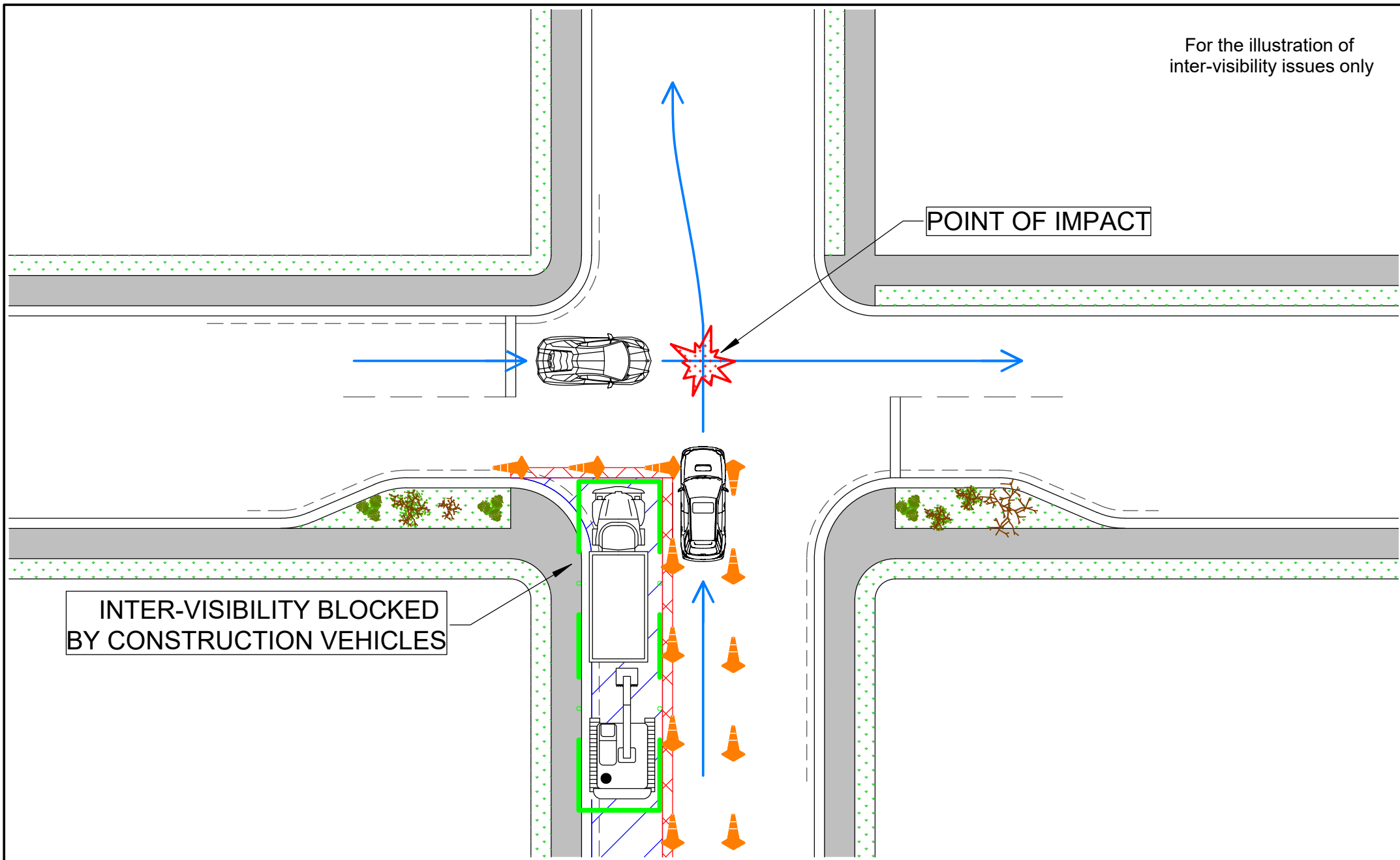
Version: 1

Date: August 2016

Closure:

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POINT OF IMPACT

INTER-VISIBILITY BLOCKED BY CONSTRUCTION VEHICLES

Reference No: 03	Level:	Operation:	 Christchurch Transport Operations Centre	Road: Intersection	Method: Blocked Inter-visibility
				Version: 1 Date: August 2016	Closure:
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