

BLIND SPOTS

Enhancing safety by addressing vehicle blind spot challenges

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75 YEARS

BLIND SPOTS

What is a Blind Spot?

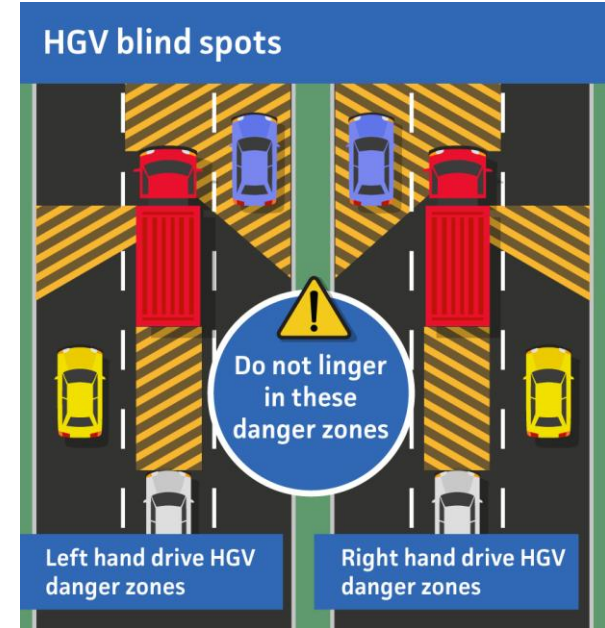
A blind spot is an area where vehicles, pedestrians or cyclists are not visible by the driver through mirrors or windows

Common Blind Spot Zones

Blind spots often occur at the front, rear, and passenger side of large trucks and trailers.

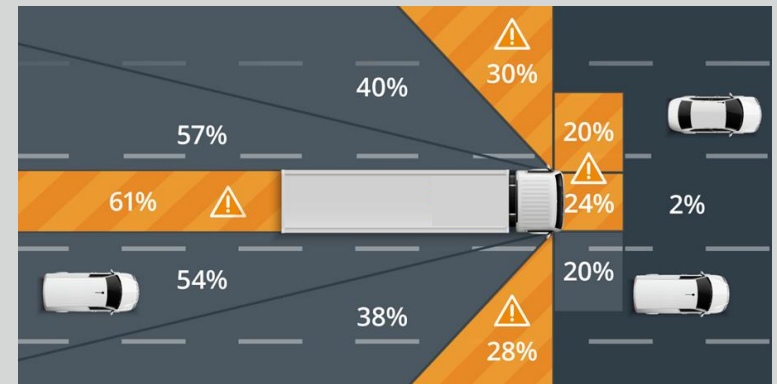
Importance of Awareness

Understanding blind spots helps drivers and road users avoid unsafe positioning and accidents.



Approximately 30% of all motor vehicle crashes occur in the driver's blind spots. Nearly 25% of vehicle accidents involving large trucks are caused by blind spot errors. 66% of drivers are unaware of the size of their blind spots. About 50% of all lane-change accidents are due to blind spot issues

<https://wifitalents.com/blind-spot-accident-statistics>



CONTROLS

CONTRIBUTING FACTORS

Factors include **vehicle size, mirror setup, driver fatigue, poor training, and adverse weather conditions**



Correct installation and maintenance of Mirrors



Driver competency , setup of mirrors and usage of mirrors



Technology such as blind spot sensors



Route and journey management



What could restrict mirror utilisation on an HMV (A)

1. Mirror Type or Positioning

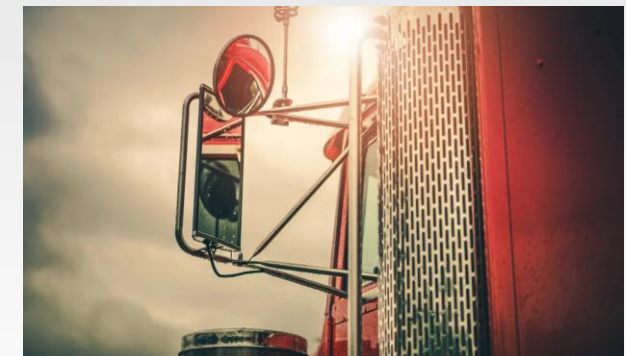
- Inadequate mirror size or poor placement.
- Missing or non-functional convex/blind spot mirrors.

2. Obstructed Mirrors

- Dirt covering the mirror or windows.
- Physical damage (cracked or broken mirrors).
- Items on windows (stickers, permits).

3. Driver Factors

- Poor posture or seat adjustment affecting the mirror's field of view.
- Inexperience or neglect in using mirrors effectively.
- Improperly adjusted mirrors





What could restrict mirror utilisation on an HMV (A)

4. Vehicle Load or Design

- Overhanging cargo or wide loads can block mirror views.
- Trailer design may obstruct the driver's rear view.

5. Blind Spots

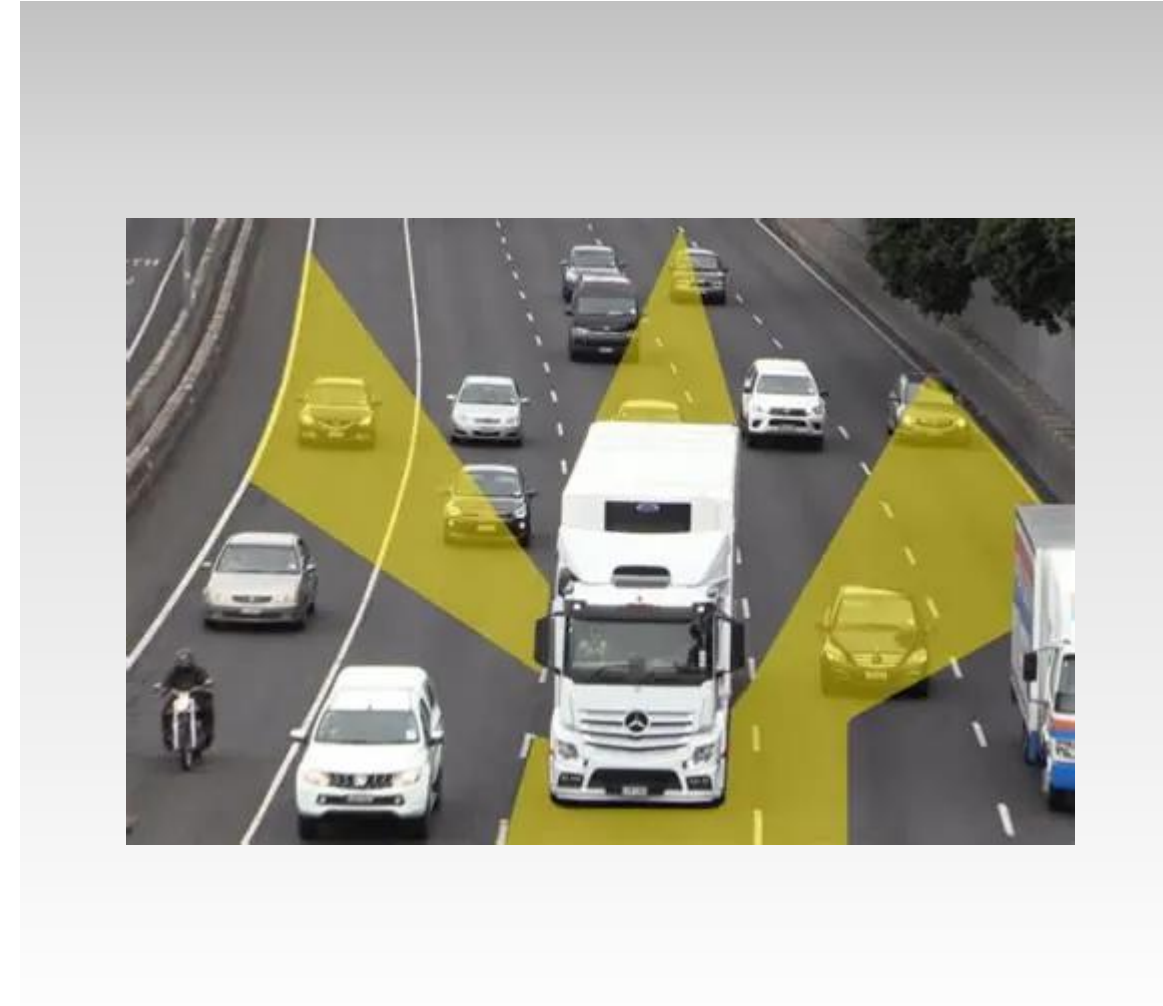
- Understanding of particular vehicles blind spots.
- Mirrors cannot eliminate all blind spots, especially on the near side and rear.

6. Technology Issues

- Malfunctioning camera-based mirror systems (if equipped).
- Electronic mirror adjustments not working.

7. Poor Weather Conditions

- Rain, fog, or glare from the sun can reduce visibility.
- Condensation or mist on the mirrors.





Driver Competency and wellbeing

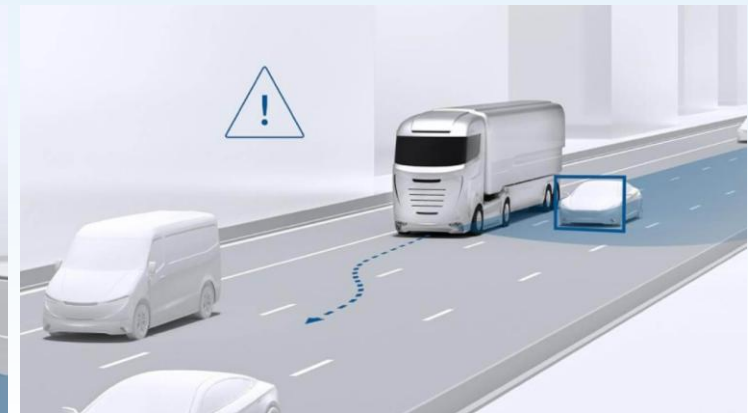


- Being well rested and in full control of your vehicle is critical, always take required rests, don't drive under influence of alcohol and drugs.
- Always have valid licences for the type of vehicle being operated
- Observe K53 requirements Before changing lanes or turning
 - This is the most critical and most failed aspect of the K53 test. Observation is everything. Physical proof that you are aware of your surroundings at all times. Simply glancing with your eyes is not enough; you must make deliberate head movements.
 - The core sequence, which you will perform before almost every action, is:
 - Check the appropriate exterior side mirror/s (e.g., the left and right mirror/s before moving).
 - Check the blind spot/s by observing all relevant mirrors and by looking over your right shoulder before moving right).
 - Signal your intention (if required).
 - Perform the action (e.g., change lanes, turn).
 - Check the opposite mirror after the action to confirm safety.
 - This sequence (or variations of it) must be performed consistently before moving off, turning, changing lanes, stopping, or performing any yard maneuver.



Many trucks are now fitted with proximity sensors or can be fitted with after market sensors that significantly increase operator safety, productivity, and peace of mind with intelligent proximity sensors that detect obstacles behind, alongside, and in front of the vehicle thus reducing blind spots, lowering the risk of collision, and improving visibility all around the vehicle.

Additionally, its critical that all basic technology like reverse alarms, indicators and lights are in place and work.





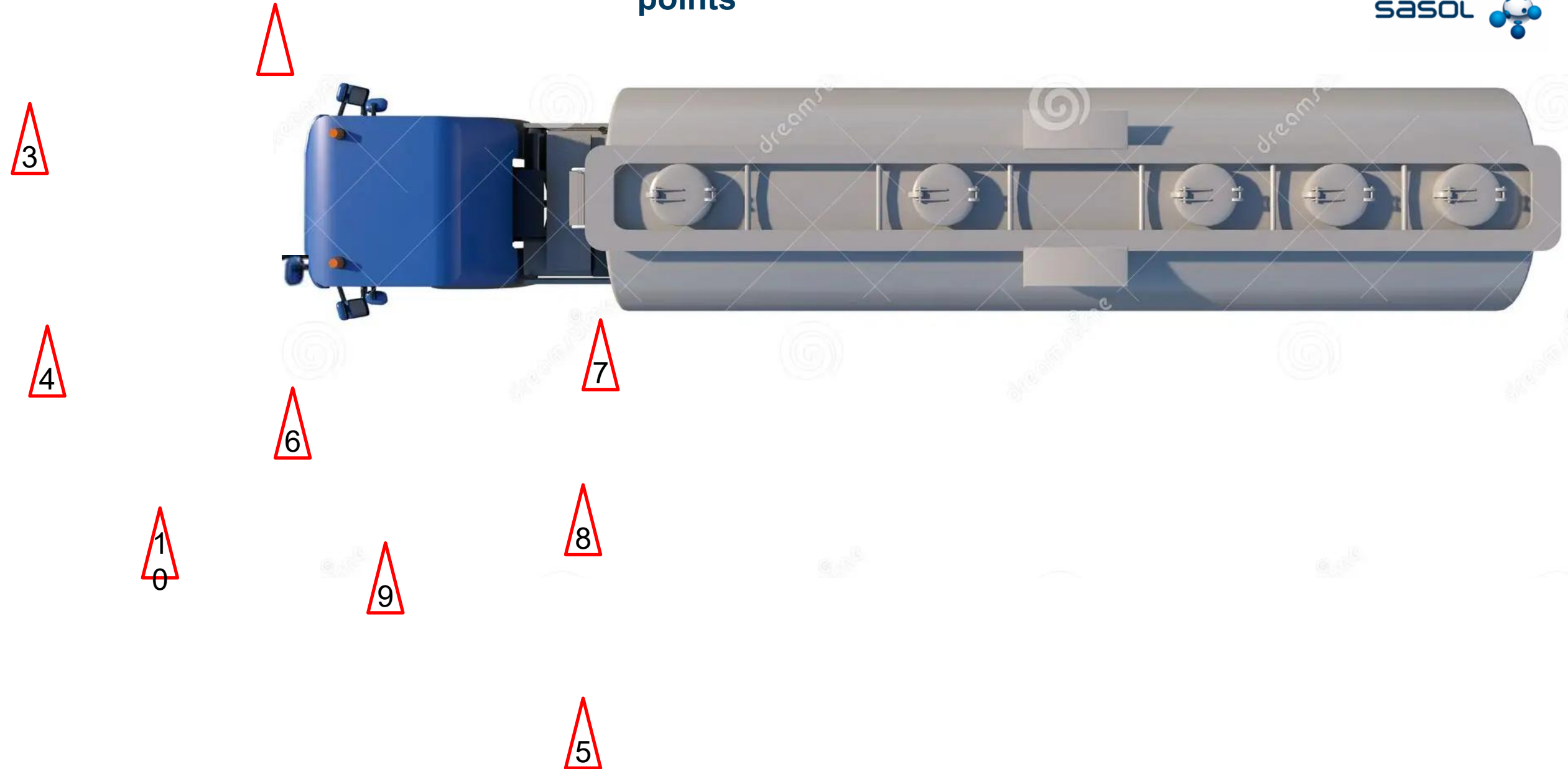
Route and journey management

Although you cannot control the weather and nature and often not even the routes you can travel, It is important when doing route planning that you try :

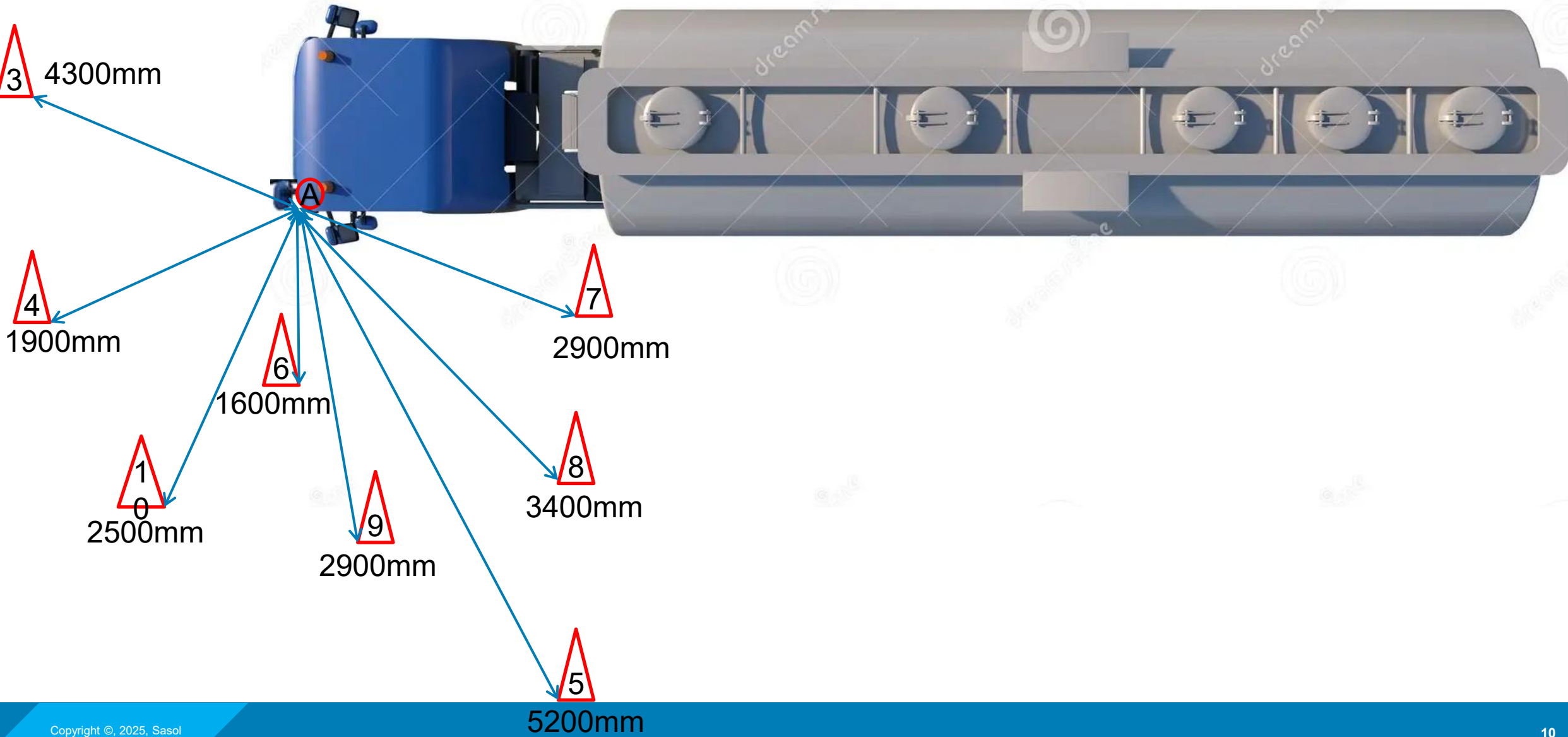
- Avoid highly congested routes
- Avoid, when possible, areas with high pedestrian and animal traffic
- Avoid peak traffic times
- Avoid driving at dawn and dusk
- Avoid routes with minimal maneuverability
- Avoid high rain and fog



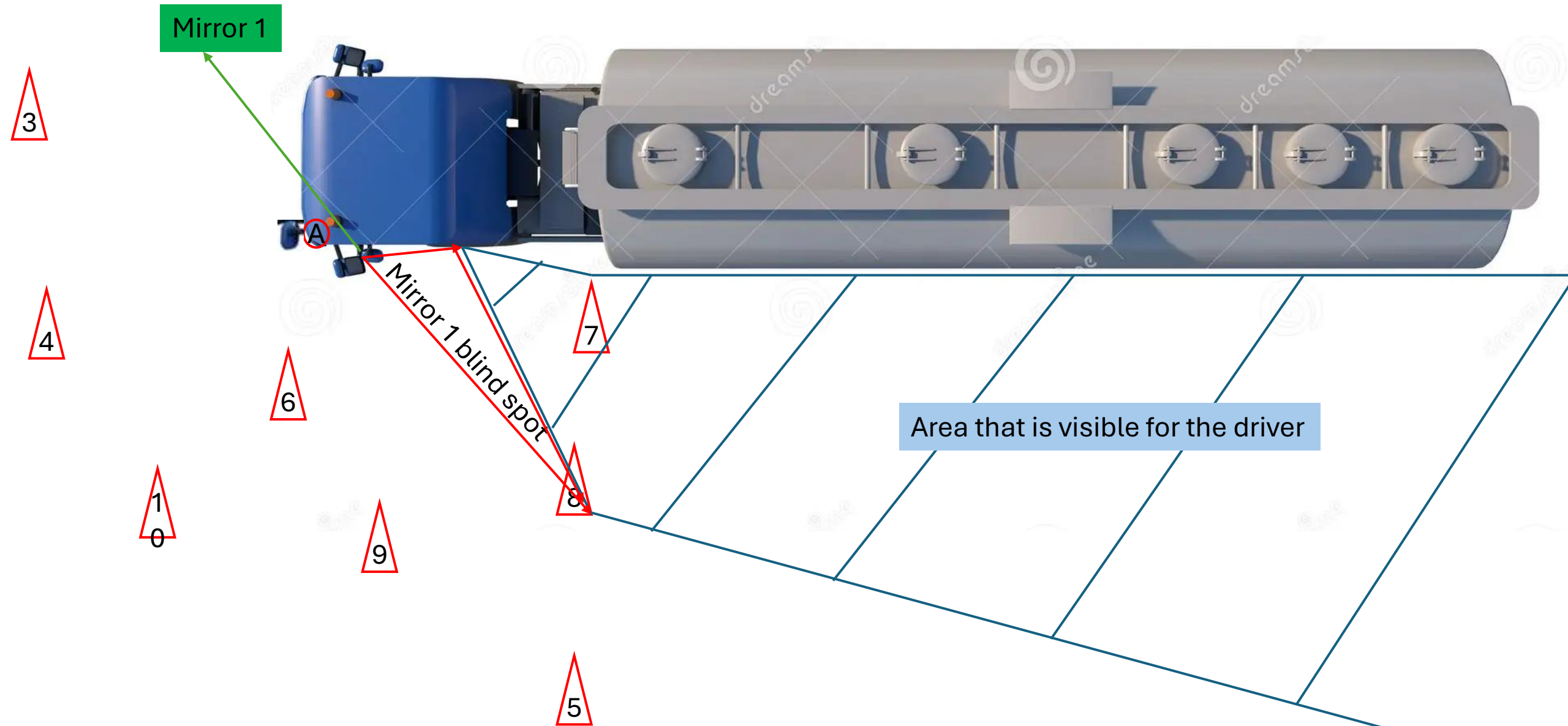
Areal view of cone and truck tractor in relation to all mirror limitation observation points



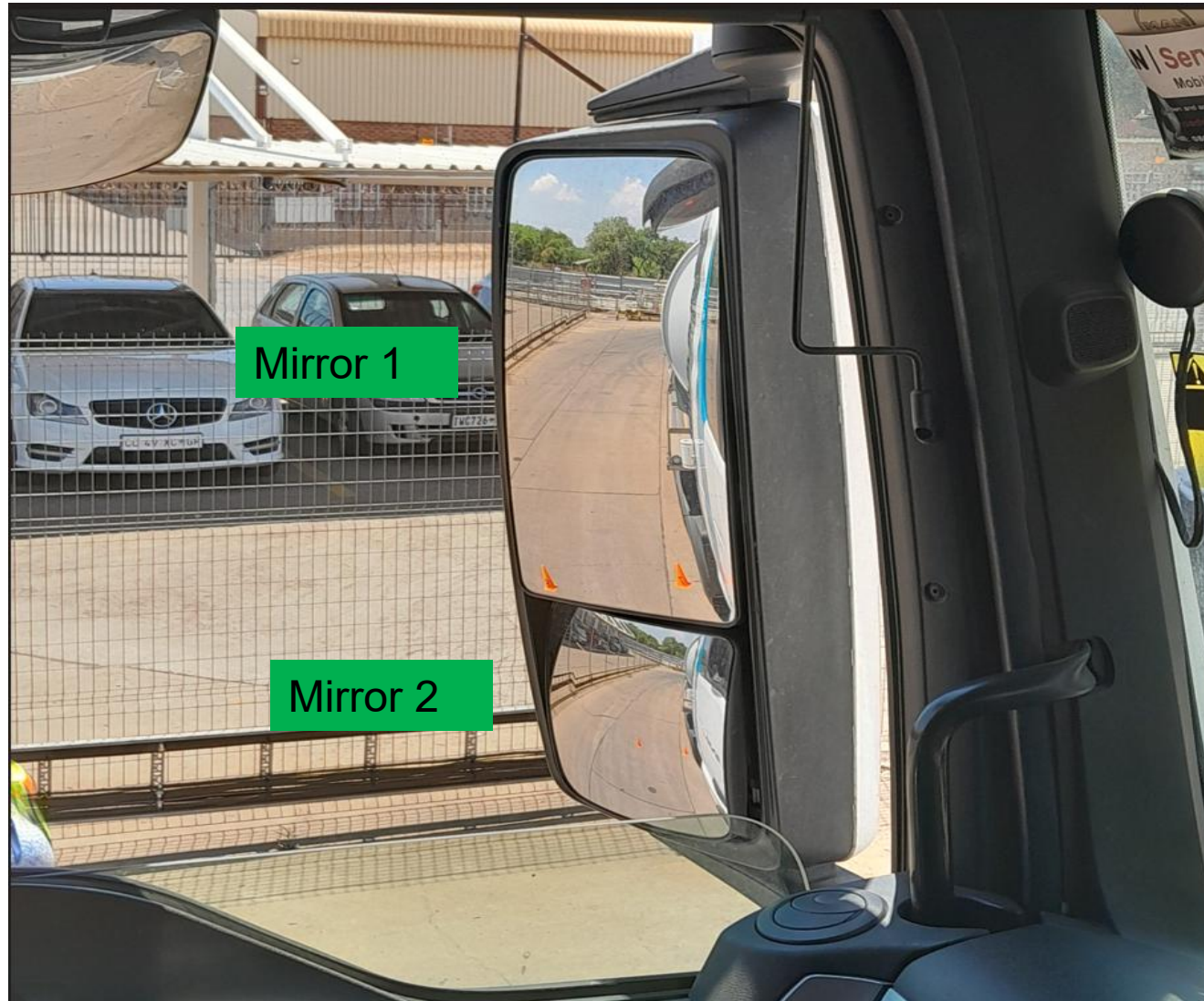
Areal view of distances from left front corner A of truck tractor to all mirror limitation observation points/cones



Lefthand side main truck tractor mirror view from front wheel side to cone 8 and back wards



Mirror 1 view of area of coverage in comparison to mirror 2



Mirror 1 and 2 area of coverage as per cones



Wide angle lefthand side mirror view from front side of truck tractor to cone 9 to cone 5 and backwards

Mirror 2

3

4

10

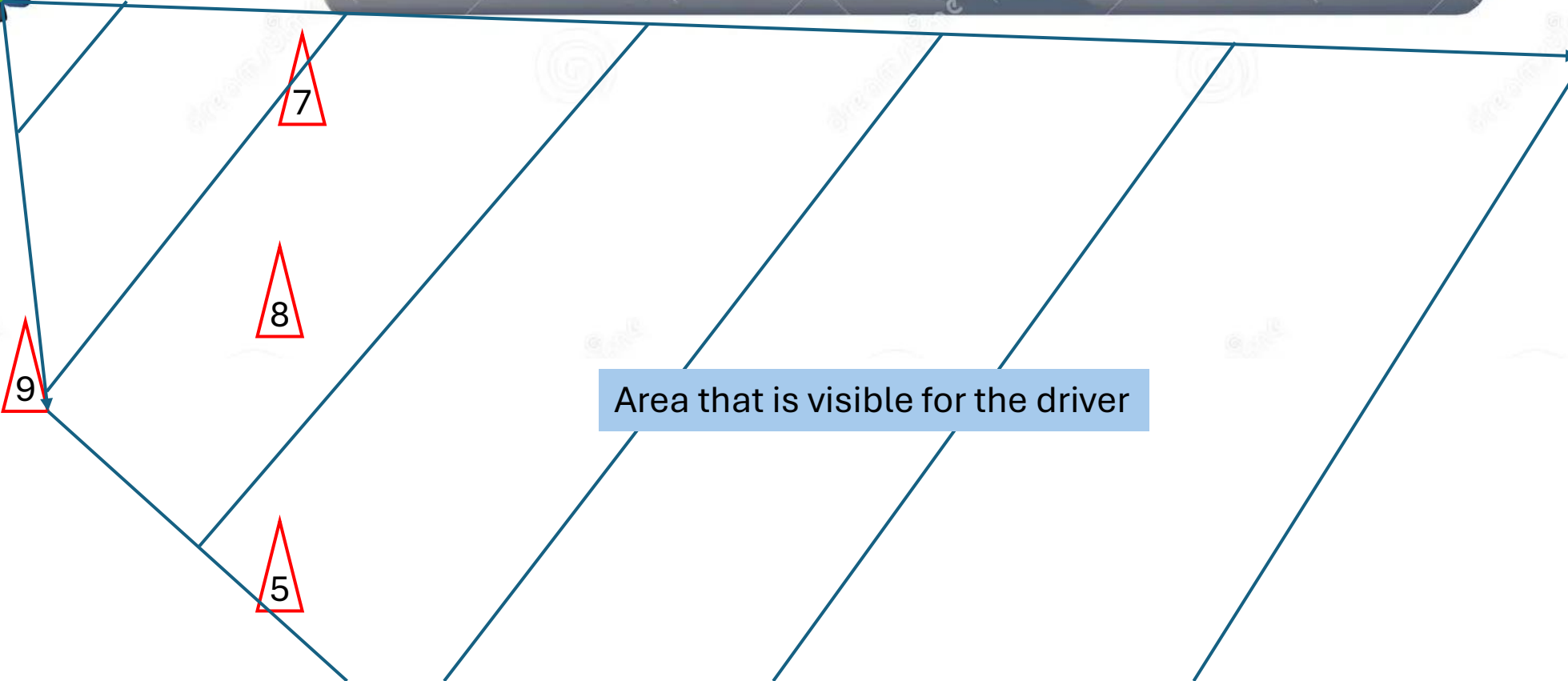
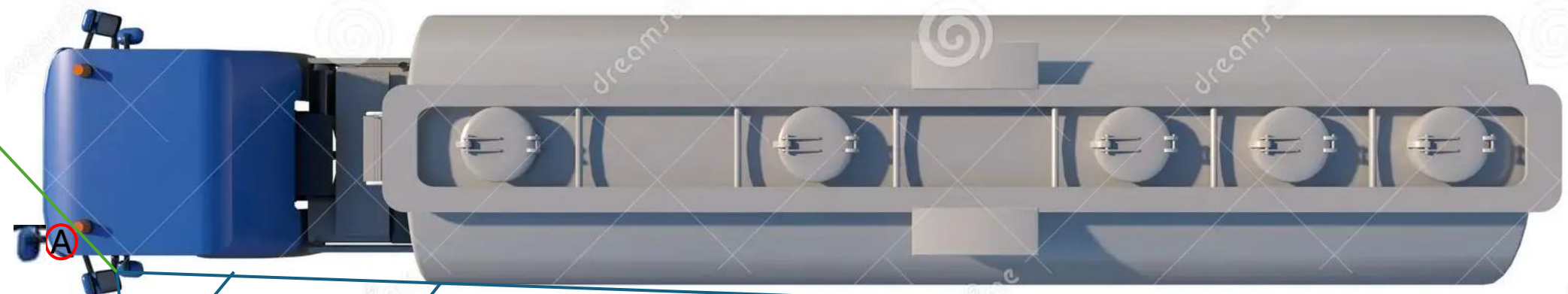
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9

8

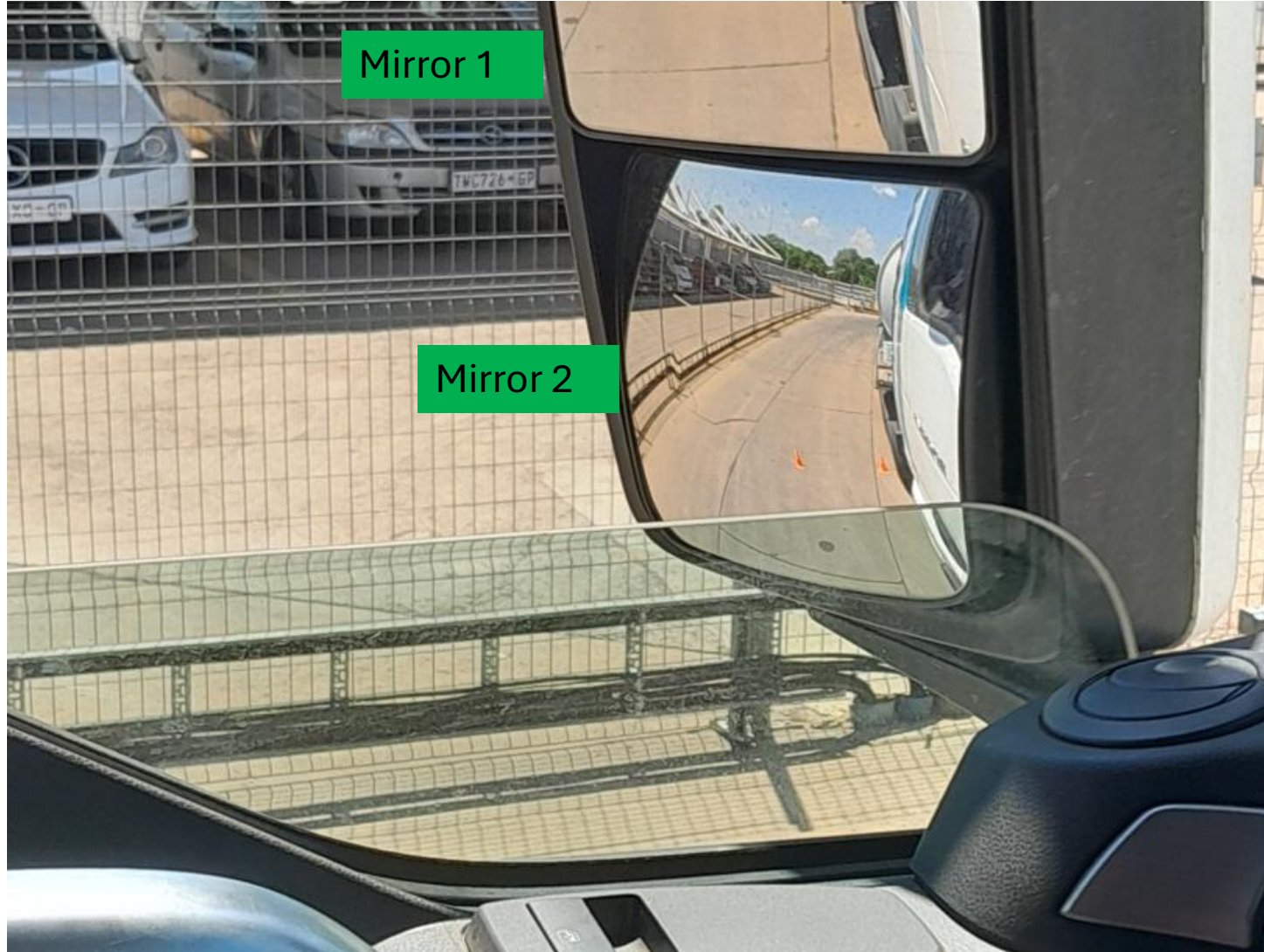
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Area that is visible for the driver

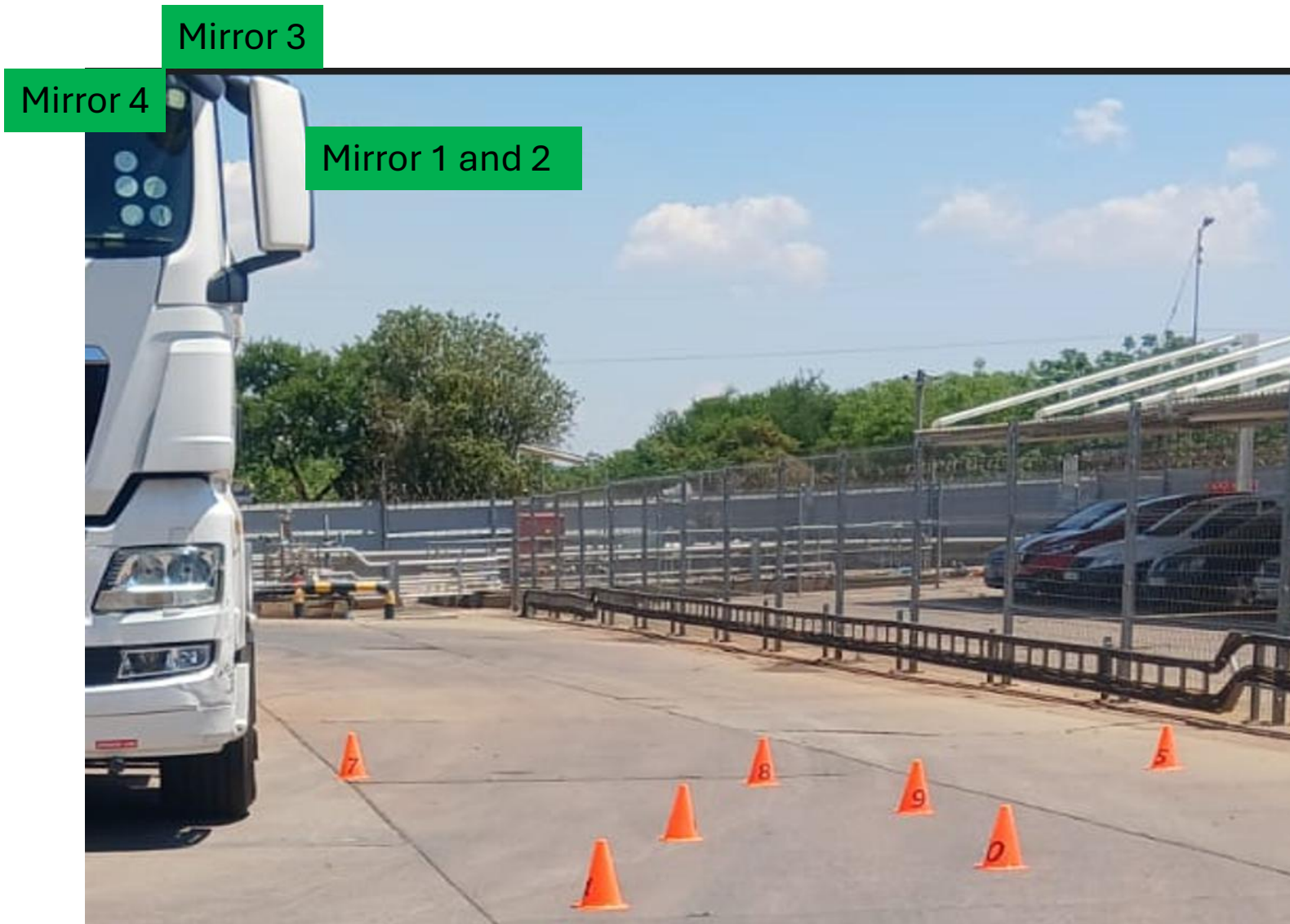
Wide angle lefthand side mirror 2 view from front side of truck tractor to cone 9 to cone 5 and backwards



Lefthand side mirror view from side to cone 5



Lefthand side mirror view from side and cones



Lefthand side blind spot mirror view from 6, 9, and 8

Mirror 3

3

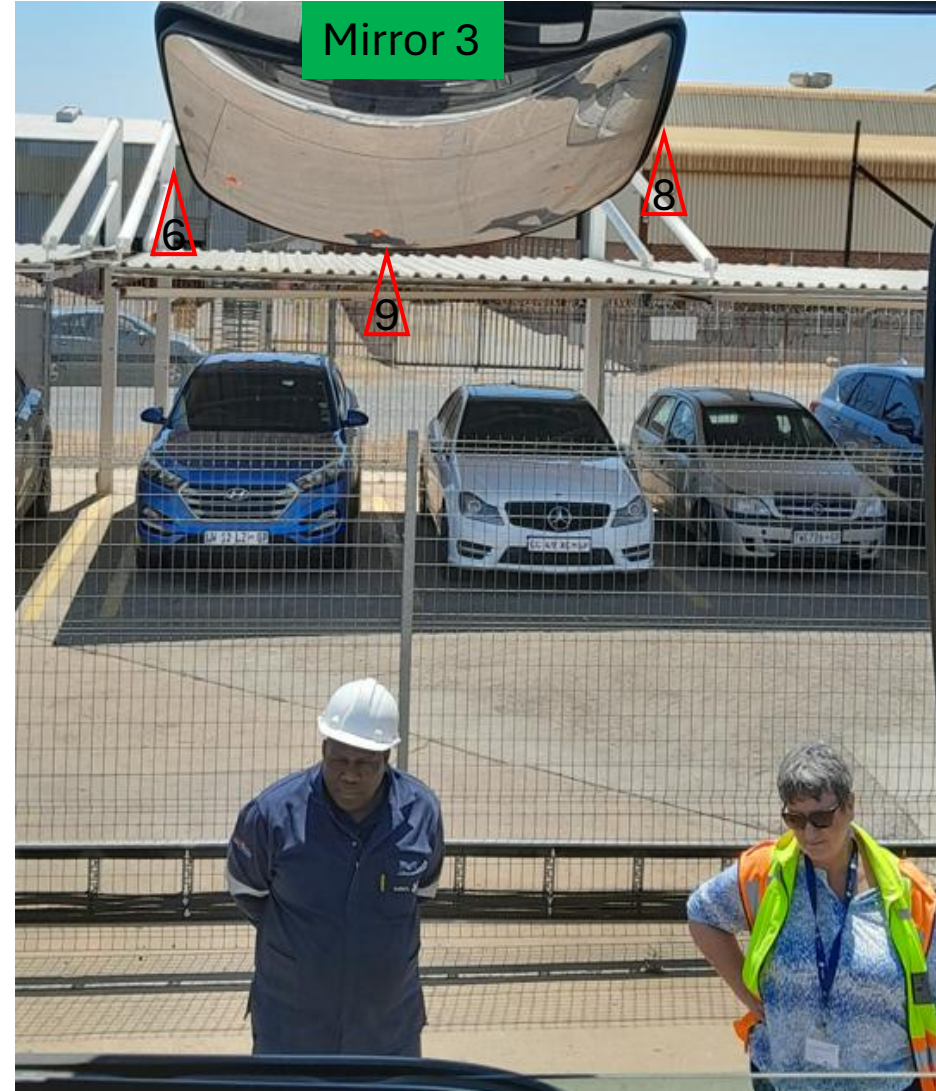
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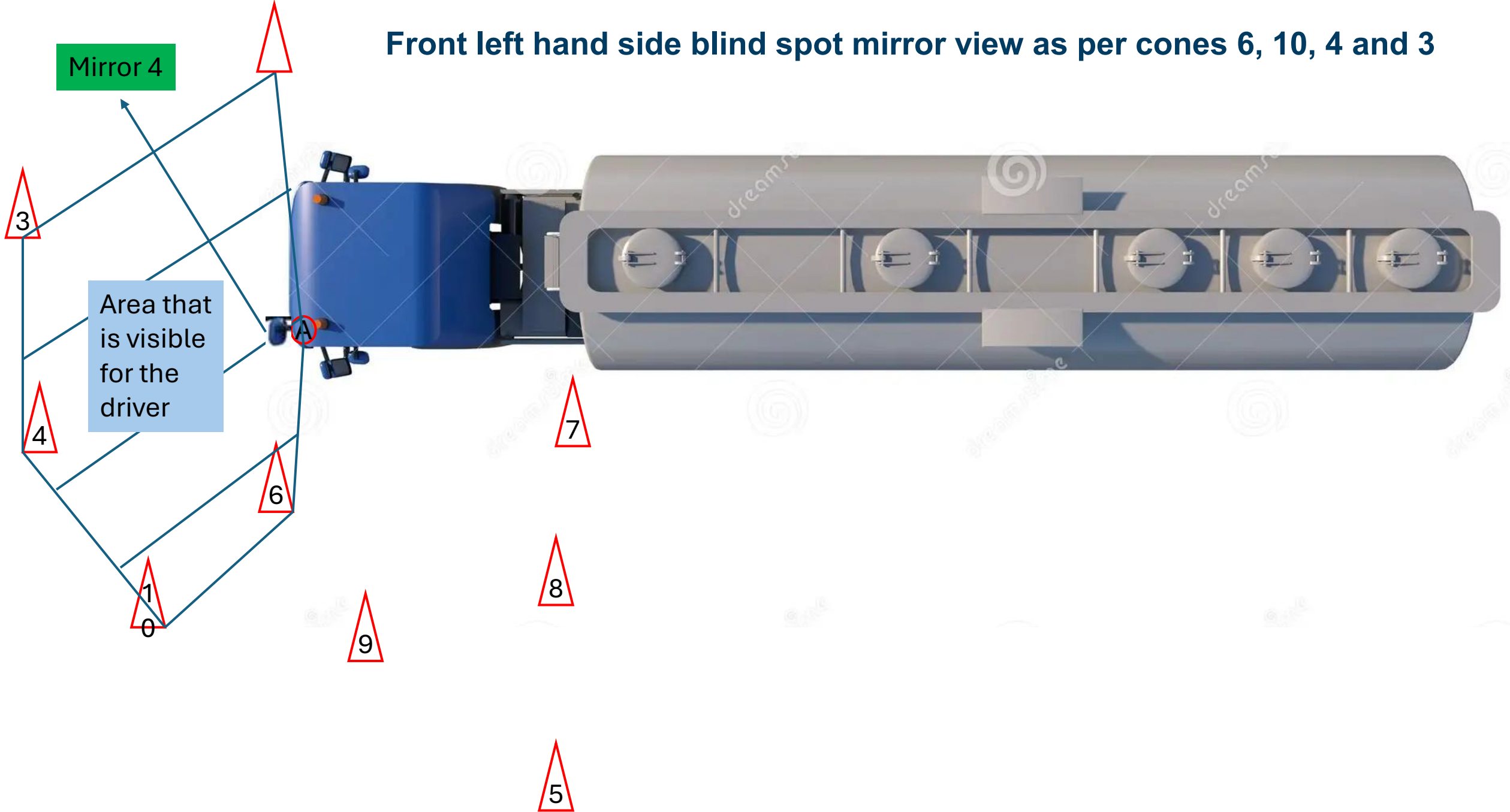
Lefthand side blind spot mirror view from side of truck tractor to cones 6, 9, and 8



Lefthand side blind spot mirror view from side of truck tractor to cones 6, 9, and 8



Front left hand side blind spot mirror view as per cones 6, 10, 4 and 3



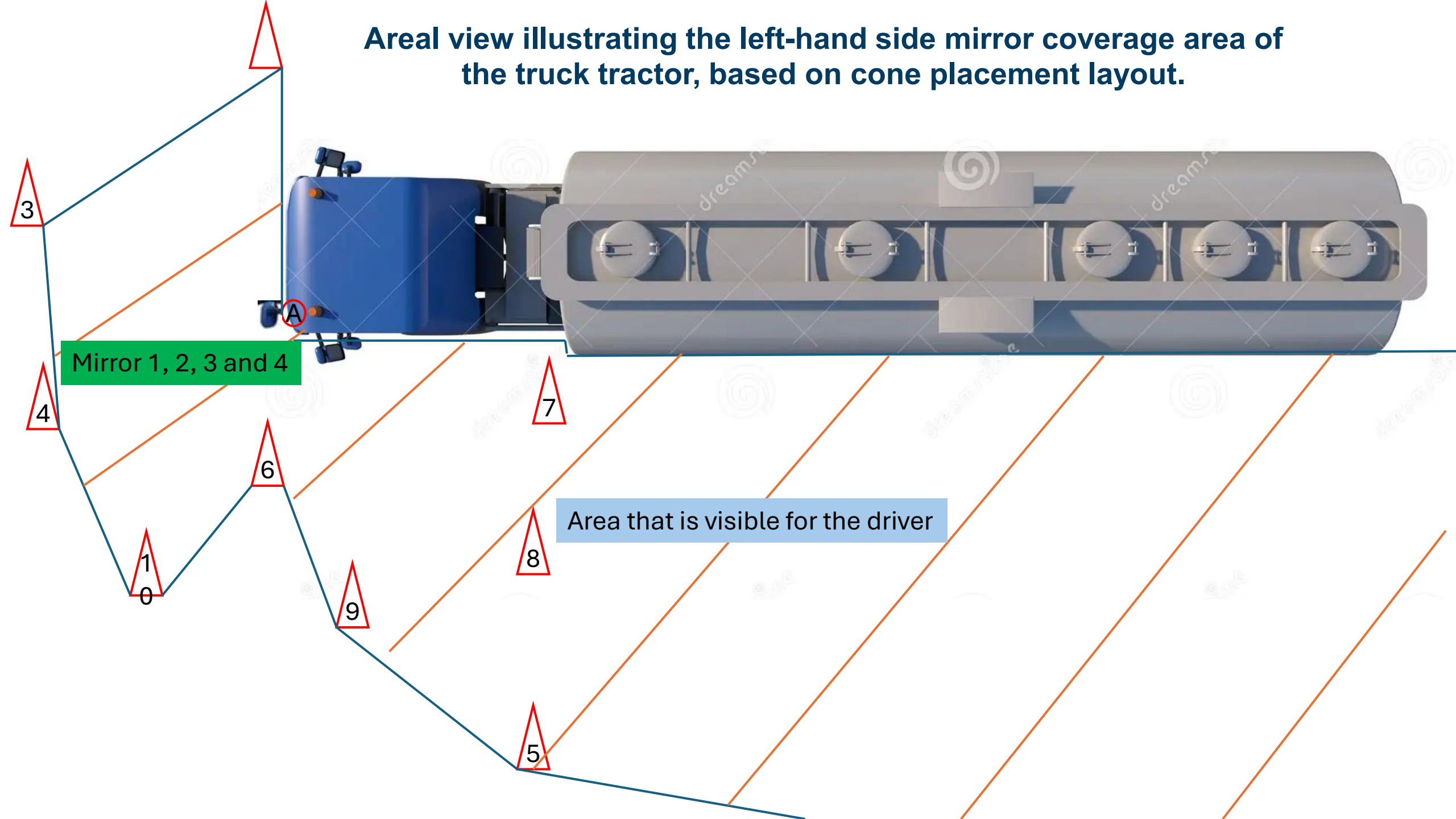
Mirror 4 front blind spot area from truck tractor to cones 6, 10, 4, 3 including a further cone distance to the right front of the truck tractor



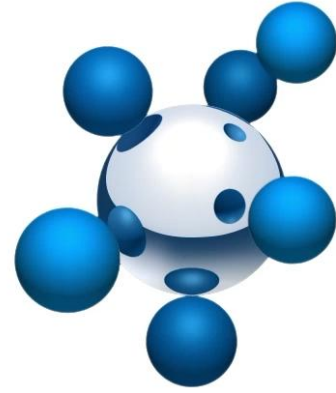
Lefthand side front blind spot mirror 4 view of cones 6, 10, 4, 3 to truck tractor



Areal view illustrating the left-hand side mirror coverage area of the truck tractor, based on cone placement layout.



**What have you as a transporter done
or implemented to manage blind spots ?**



SASOL