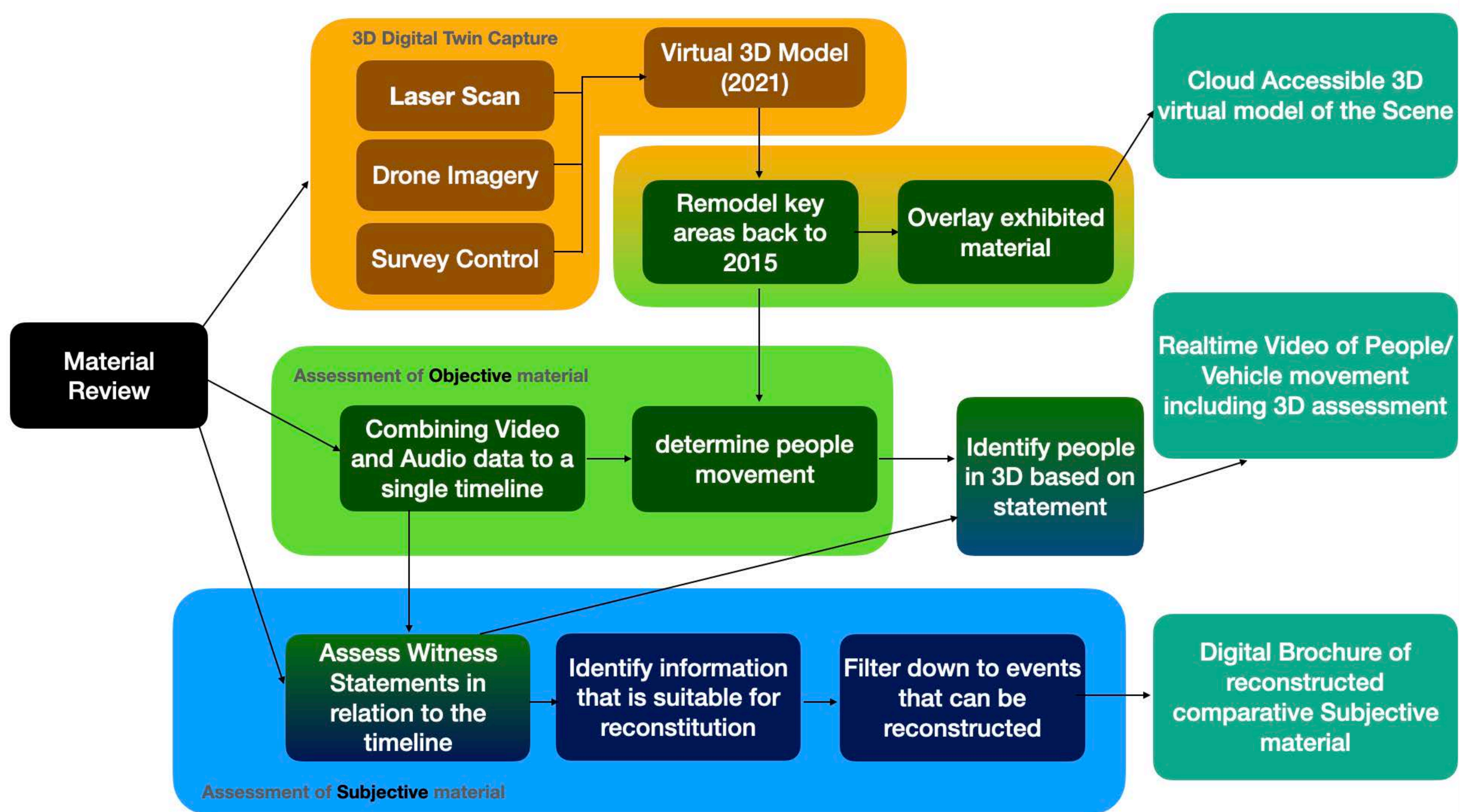
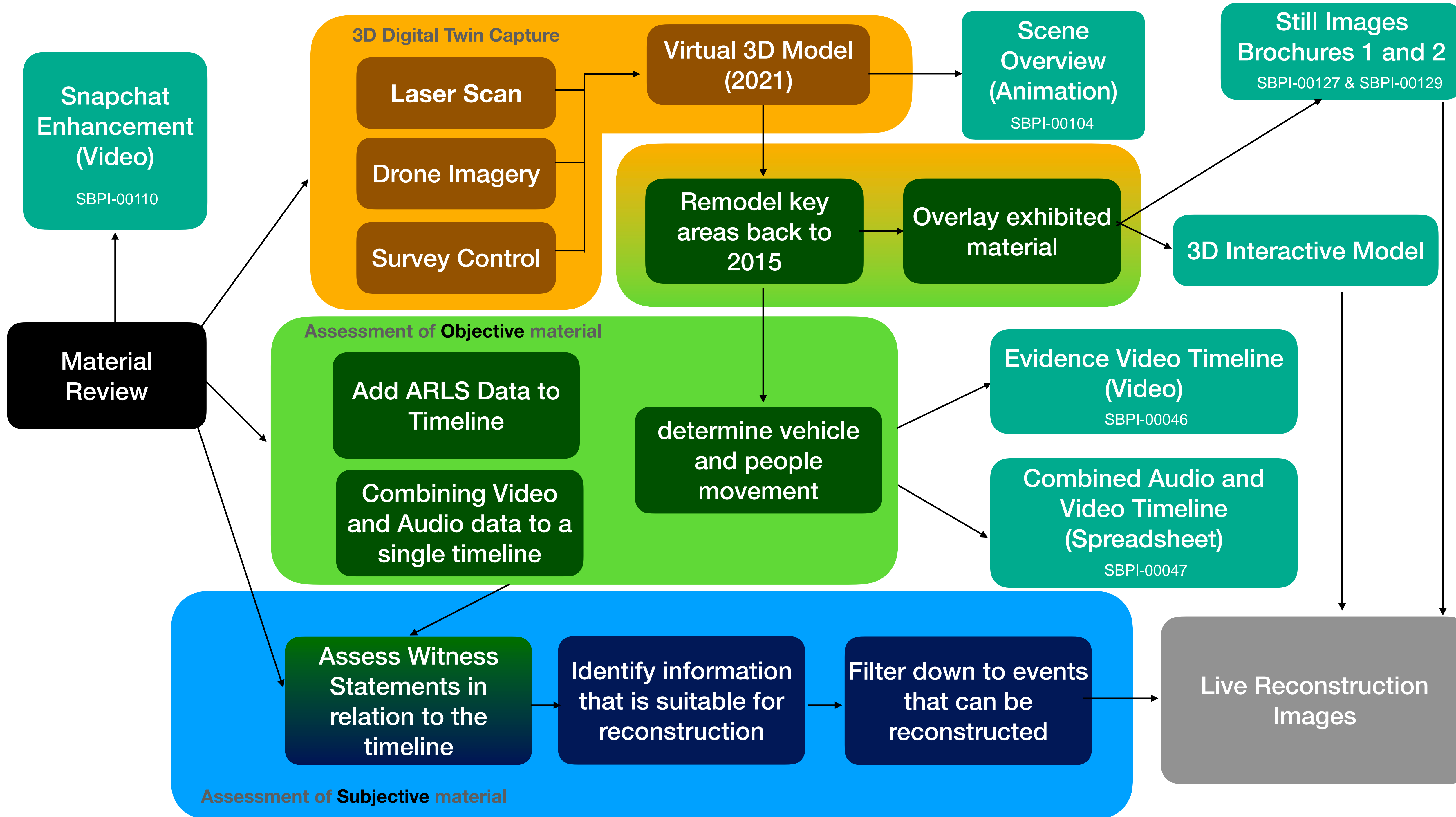


December 2022 Update

Sheku Bayoh Inquiry

INITIAL METHODOLOGY





INQUIRY METHODOLOGY

Evidential Considerations

- To reduce the potential of leading of witnesses which could lead to incorrect recall
- All witnesses will go through the same methodology when using the 3D system
- Not limiting questions that can be asked of a witness
- Limited information shown initially

Practical Considerations

- Operations must be simple and fast.
- Large pauses in the hearing should be avoided to keep engagement with witnesses.
- Live assessment will be limited to moving people's positions and orientations within the 3D scene.

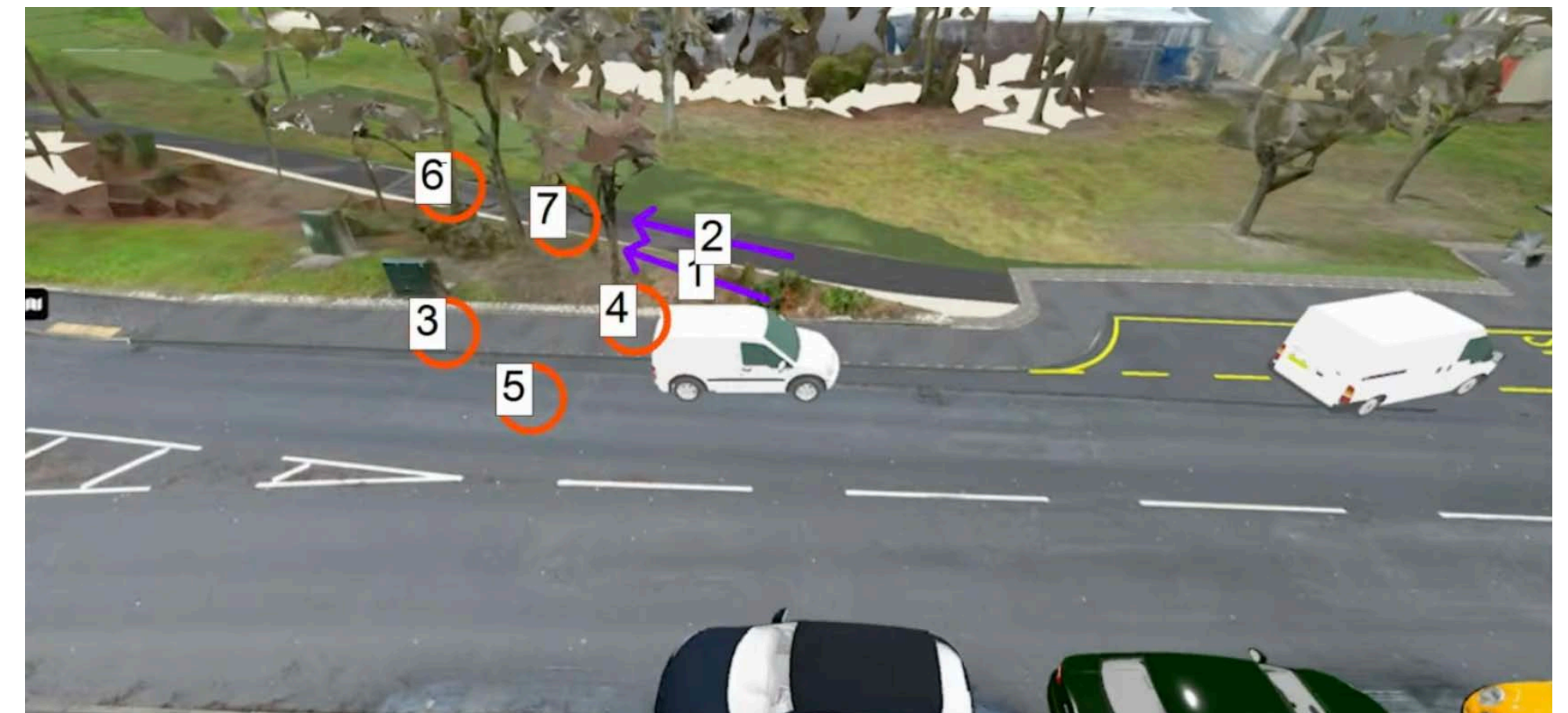
INQUIRY METHODOLOGY

Step 1: Initial placement

- Use of pre-rendered images
- Vehicles in place based on analysis of Ashley Wyse's Snapchat footage.
- Some images without vehicles that can be used if more appropriate
- Using the Inquiry's touch screen system to place circles and lines onto the scene
- Images recorded as part of the hearing's live stream

Witness Positioning Methodology

- (a) Location
- (b) Orientation
- (c) Pose



INQUIRY METHODOLOGY

Step 2: 3D Positions Reconstructed

- An operator recreates the circles and lines to 3D position and orientation in the scene.
- Model Heights based on evidence
- Sequence of Events shown through a series of 3D reconstructions.



Step 3: Live Adjustment of 3D Positions

- Witnesses were then able to review and describe any alterations they wanted to make live in the 3D reconstruction
- An operator was able to move the virtual camera and get better views of the areas they were describing
- Movements were limited to position and orientation.
- Option of 'line of sight' view
- All views and reconstructions were stored on the digital system

FORD TRANSIT VAN POSITION

PIRC-03371 - Ashley Wyse Snapchat footage

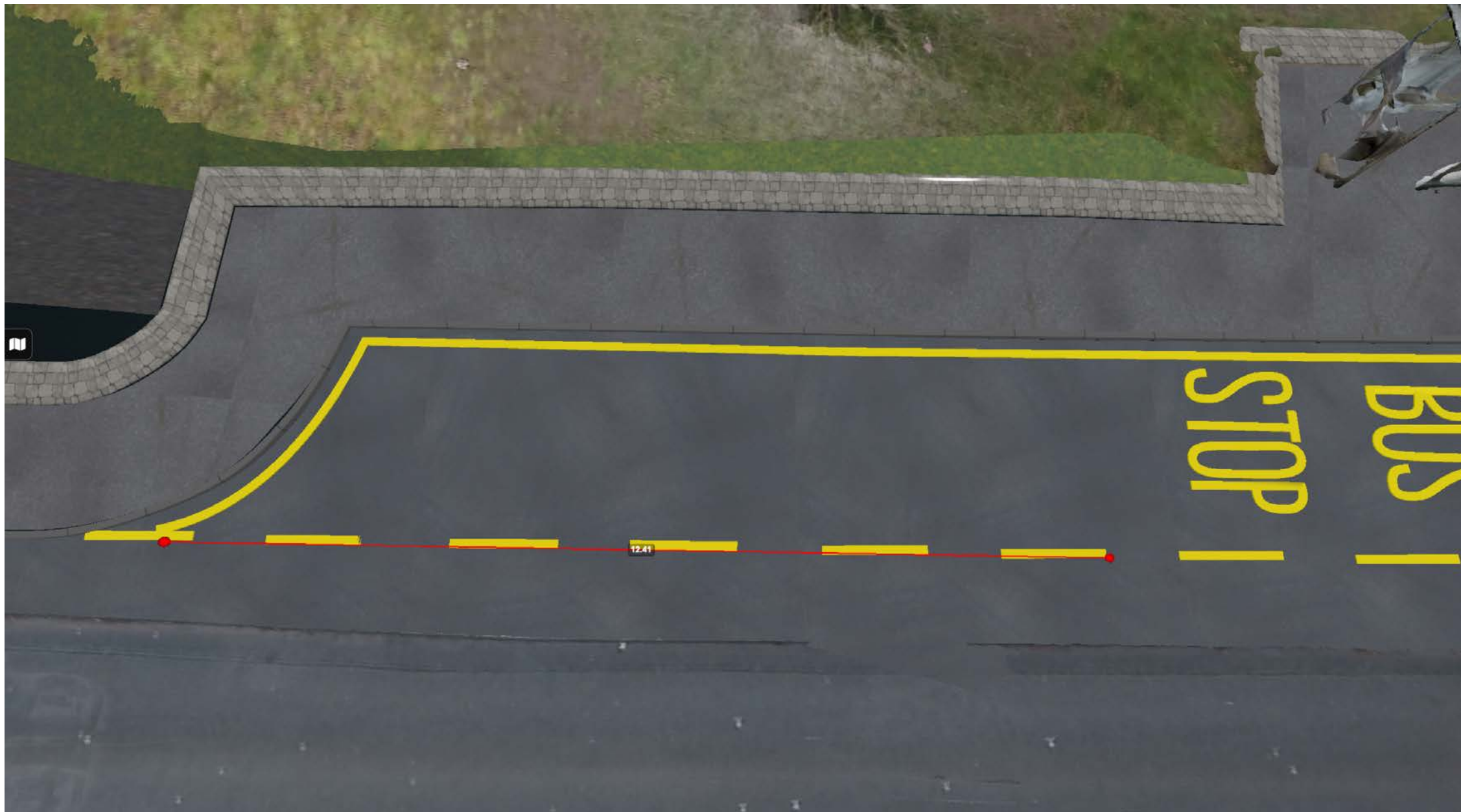


Location of model



FORD TRANSIT VAN POSITION

(a) Ensure Line markings are modelled correctly



(a) 3D model



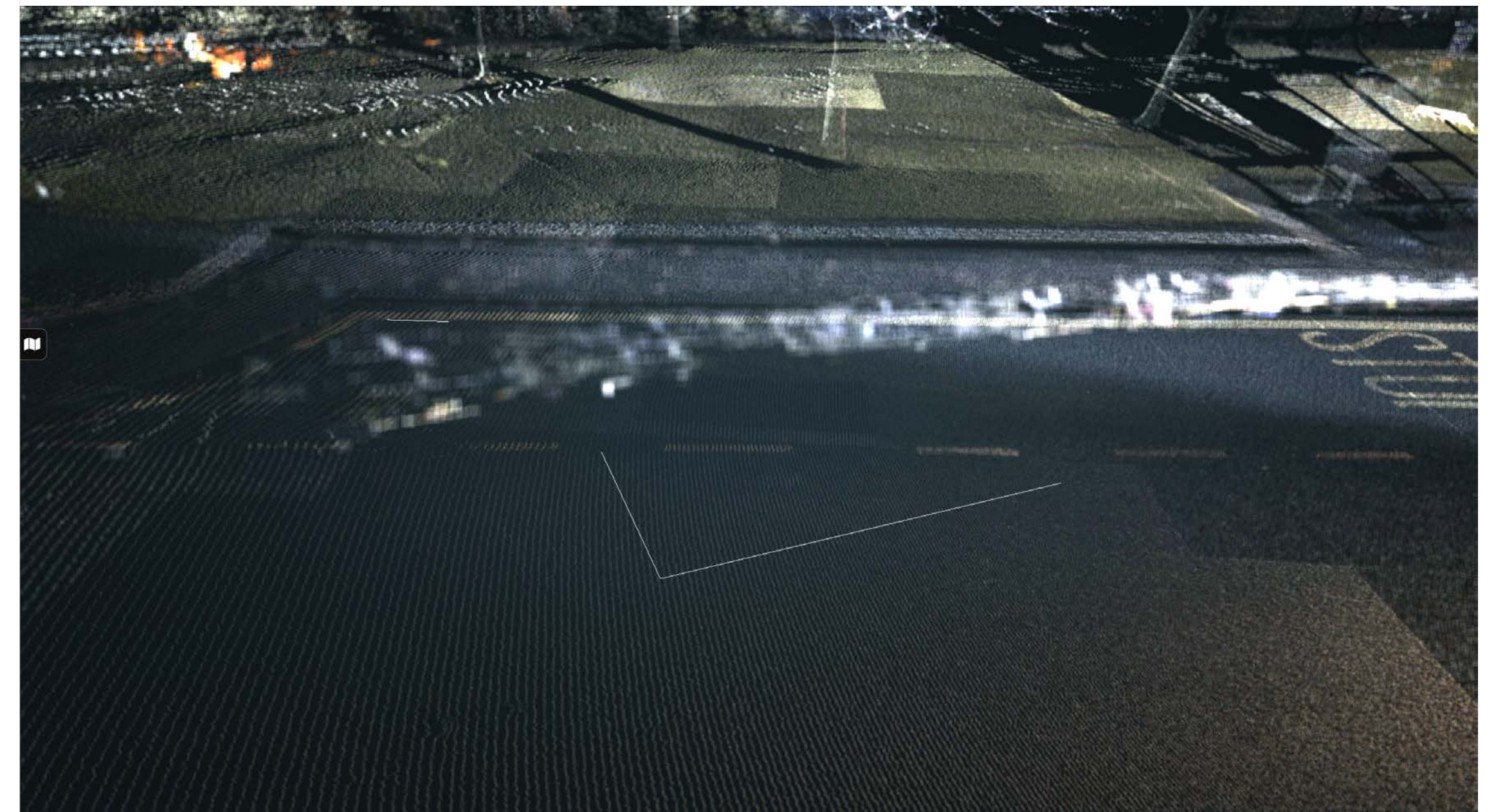
(b) Laser Scan Data from 2015

FORD TRANSIT VAN POSITION

(b) Verify the photogrammetry



(a) linework in Photogrammetry Package



(b) linework in 3D view

FORD TRANSIT VAN POSITION

(c) Verification of Vehicle Positioning



(a) Incorrect model with rear wheels in correct position



(b) Corrected model used but vehicle is in incorrect position

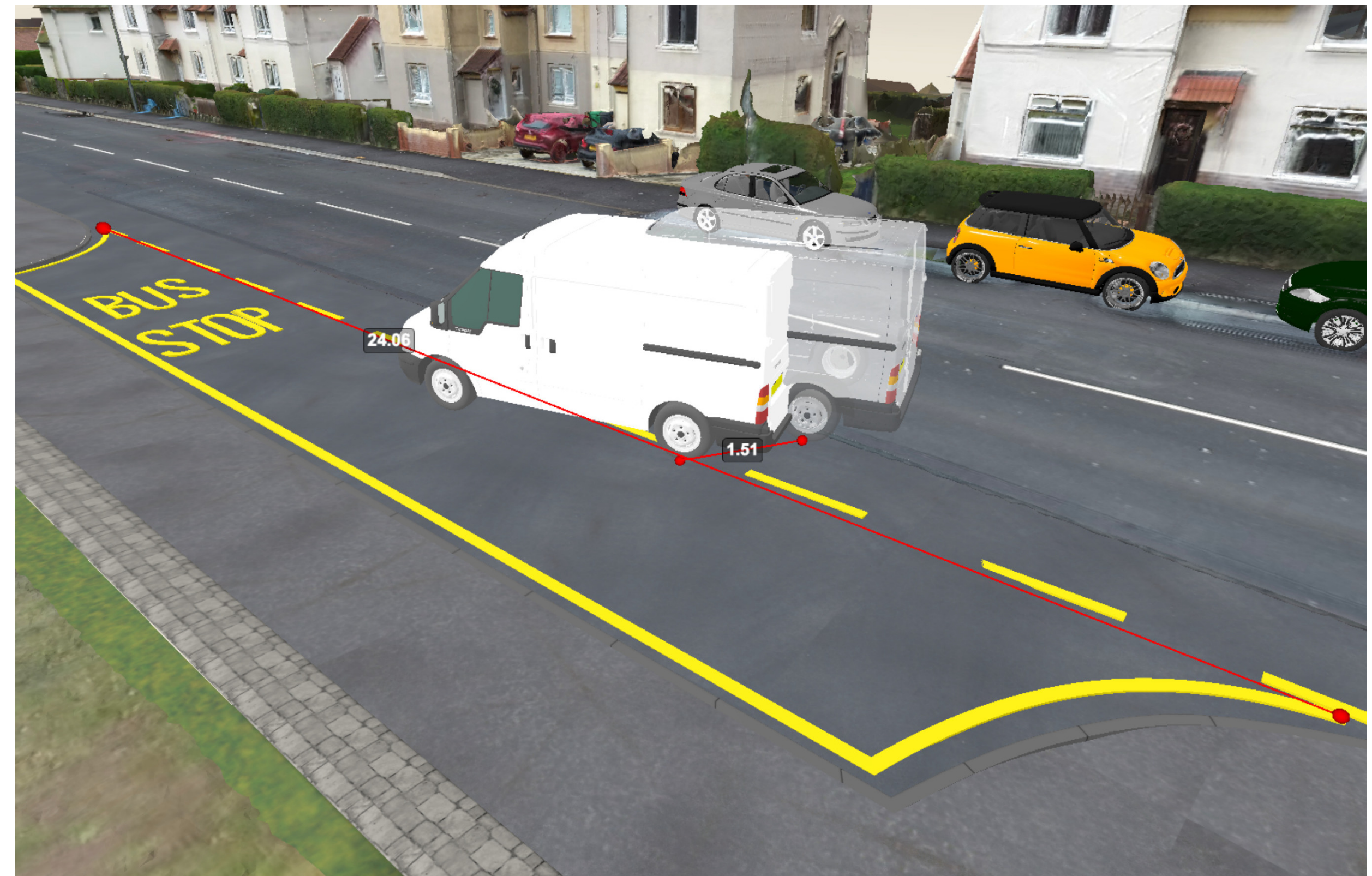


(c) Correct model used in correct position

FORD TRANSIT VAN POSITION

Steps taken to Rectify:

- PC Walker - Evidence has already been taken. Limited benefit to retaking that evidence, therefore a note has been added to all affected images in the Supplementary Report and this presentation.
- All other witnesses -The vehicle position was corrected for the pre-rendered images and the 3D live view
- Adjustment of the 3D reconstruction tile in the top centre of the screen of the Evidence Video Timeline was not done due to limitations on the time available and the work required.



Transparent model shows incorrect position, opaque model is in the corrected position

LIVE RECONSTRUCTION IMAGES

Witnesses who used the live reconstruction process were:

(a) PC Walker

(b) PC Short

(c) PC Tomlinson

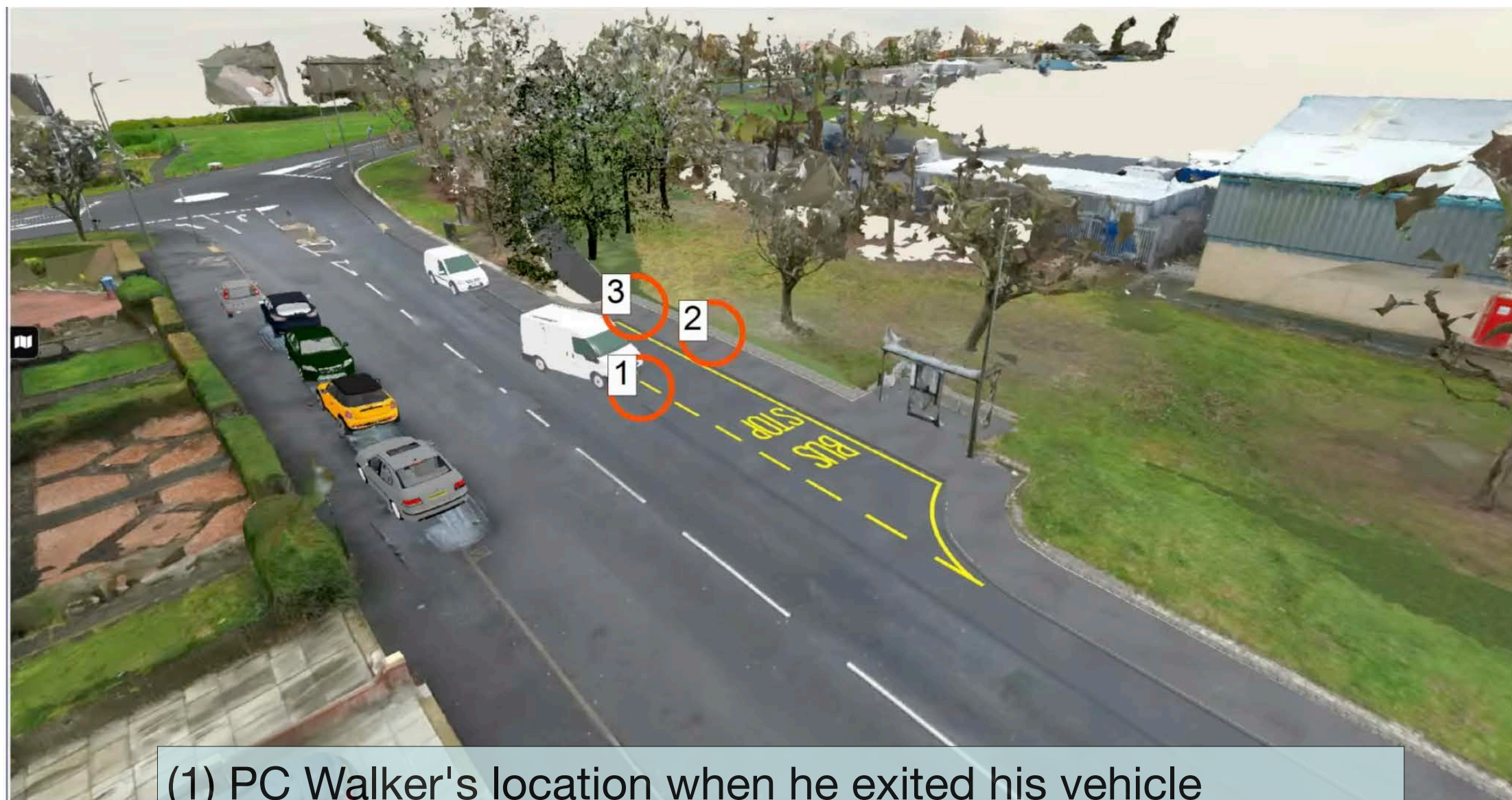
(d) Mr Nelson

(e) PC Paton

- The brochures, animations and spreadsheet were used with other witnesses but they were not asked to position people.
- In the following images the reconstructions are ordered by sequence of events, not by the order that the evidence was given by a witness.

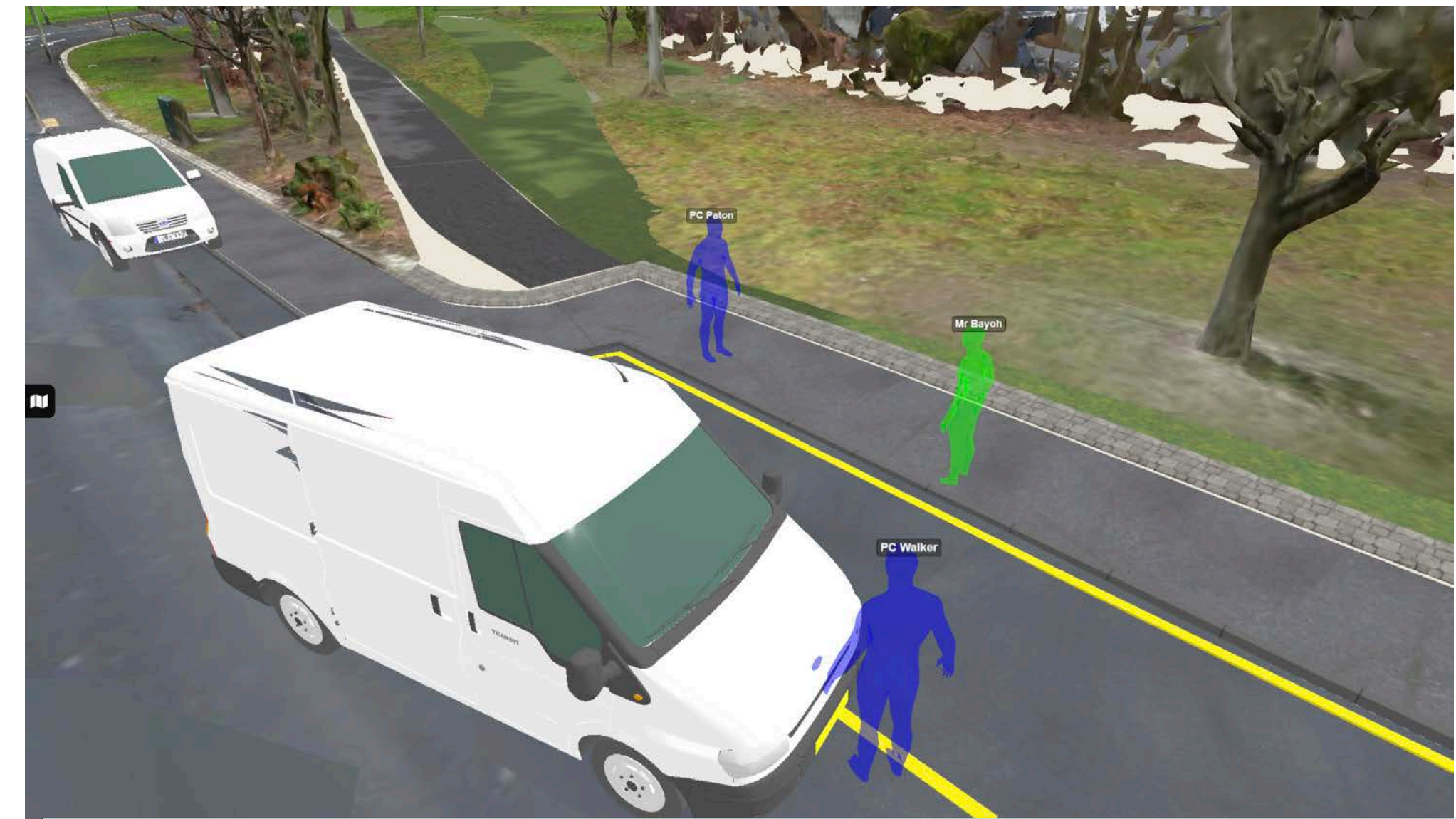
PC WALKER'S IMAGES

A.1 PC Walker describing the locations of people as he exits the vehicle



- (1) PC Walker's location when he exited his vehicle
- (2) Mr Bayoh's location when PC Walker exited his vehicle
- (3) PC Paton's location as PC Walker exited his vehicle

(a) Initial locations identified, PC Craig Walker (pm) - 19/05/2022. From 00:54:35.



- Blue figure - PC Walker) PC Walker's location when he exited his vehicle
- (Green figure) Mr Bayoh's location when PC Walker exited his vehicle
- (Blue figure - PC Paton) PC Paton's location as PC Walker exited his vehicle

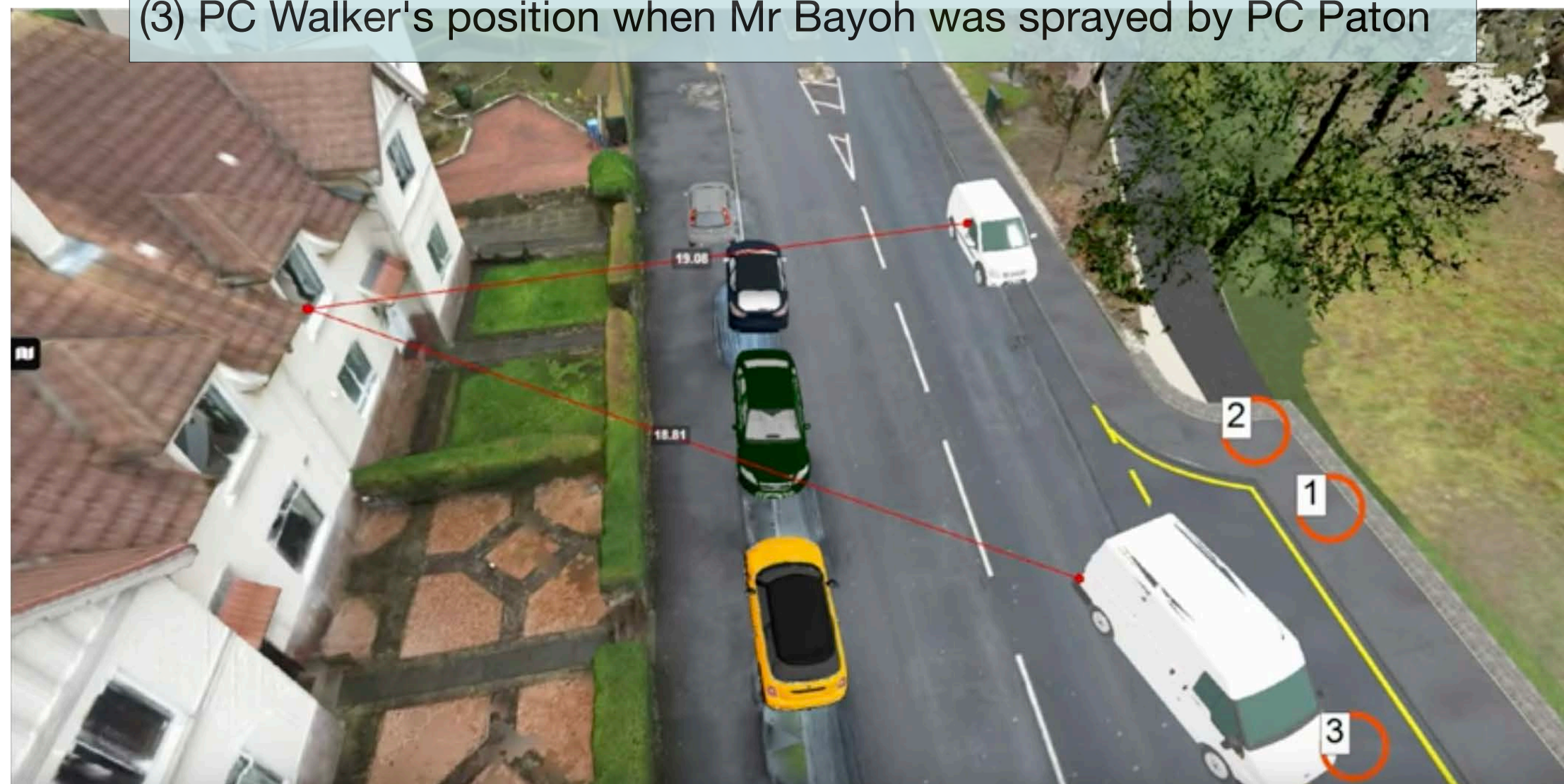
(b) Refined positions, PC Walker (am) - 20/05/2022. From 02:01:30.

Note: Ford Transit location is incorrect, See Supplementary Report, Section 3 for details

PC WALKER'S IMAGES

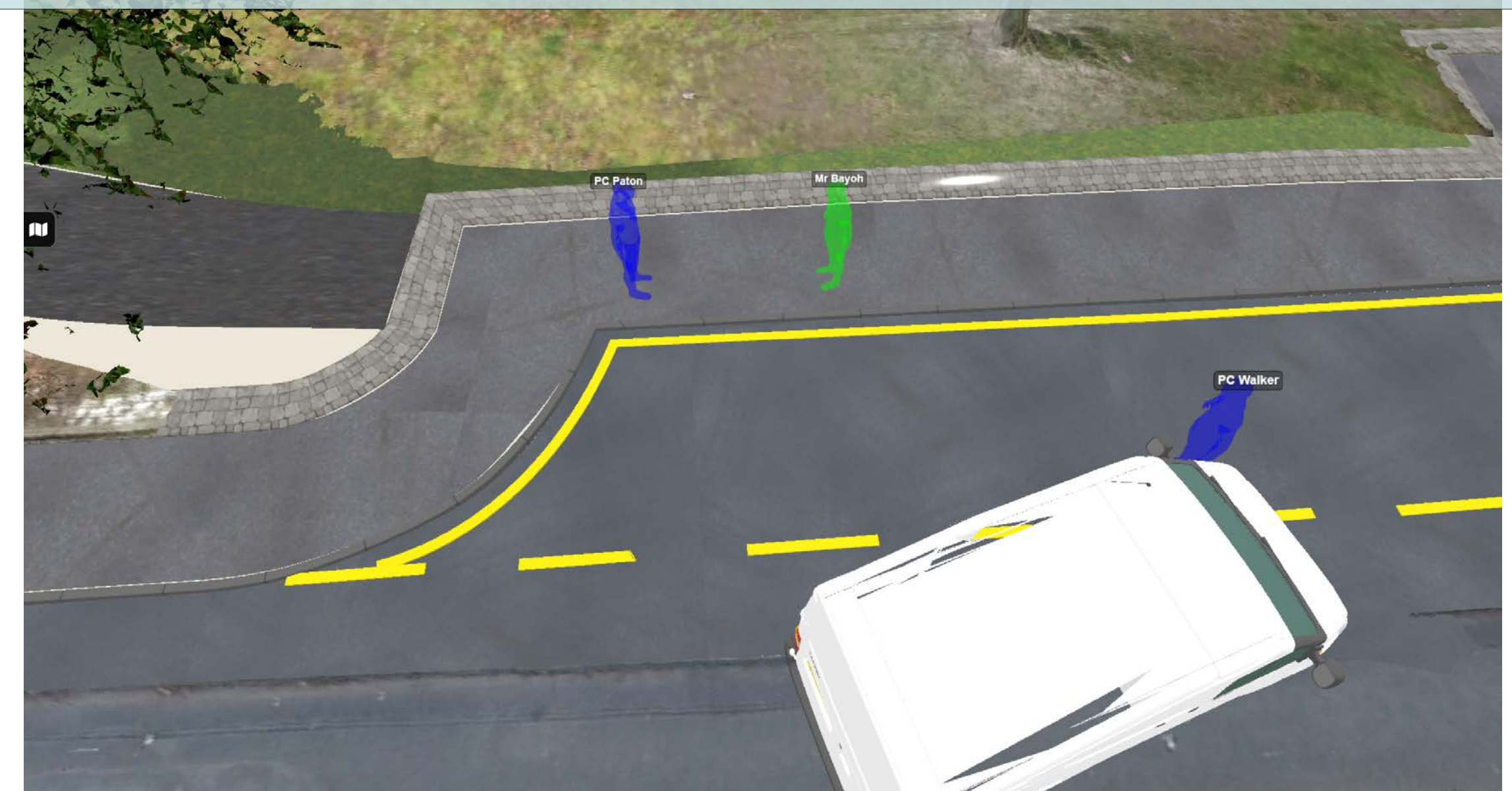
A.2 PC Walker describing locations of people as PC Paton deploys CS Spray

- (1) Mr Bayoh's position when he was sprayed by PC Paton
- (2) PC Paton's position when he sprayed Mr Bayoh
- (3) PC Walker's position when Mr Bayoh was sprayed by PC Paton



(a) Initial locations identified, PC Craig Walker (pm) - 19/05/2022. From 01:04:10.

- (Green figure) Mr Bayoh's position when he was sprayed by PC Paton
- (Blue figure - PC Paton) PC Paton's position when he sprayed Mr Bayoh
- (Blue figure - PC Walker) PC Walker's position when Mr Bayoh was sprayed by PC Paton

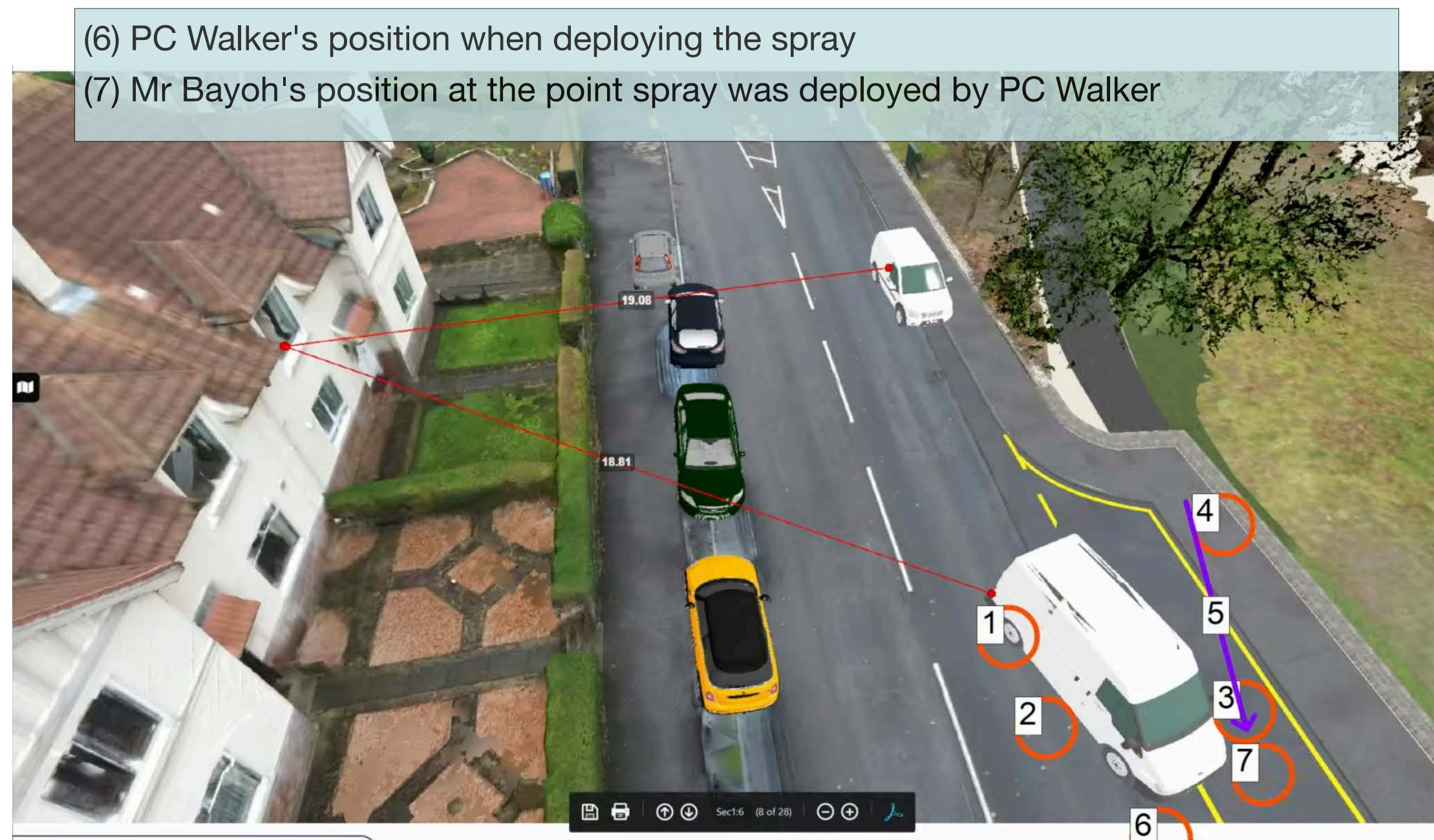


(b) Refined positions, PC Craig Walker (am) - 20/05/2022. From 02:04:50

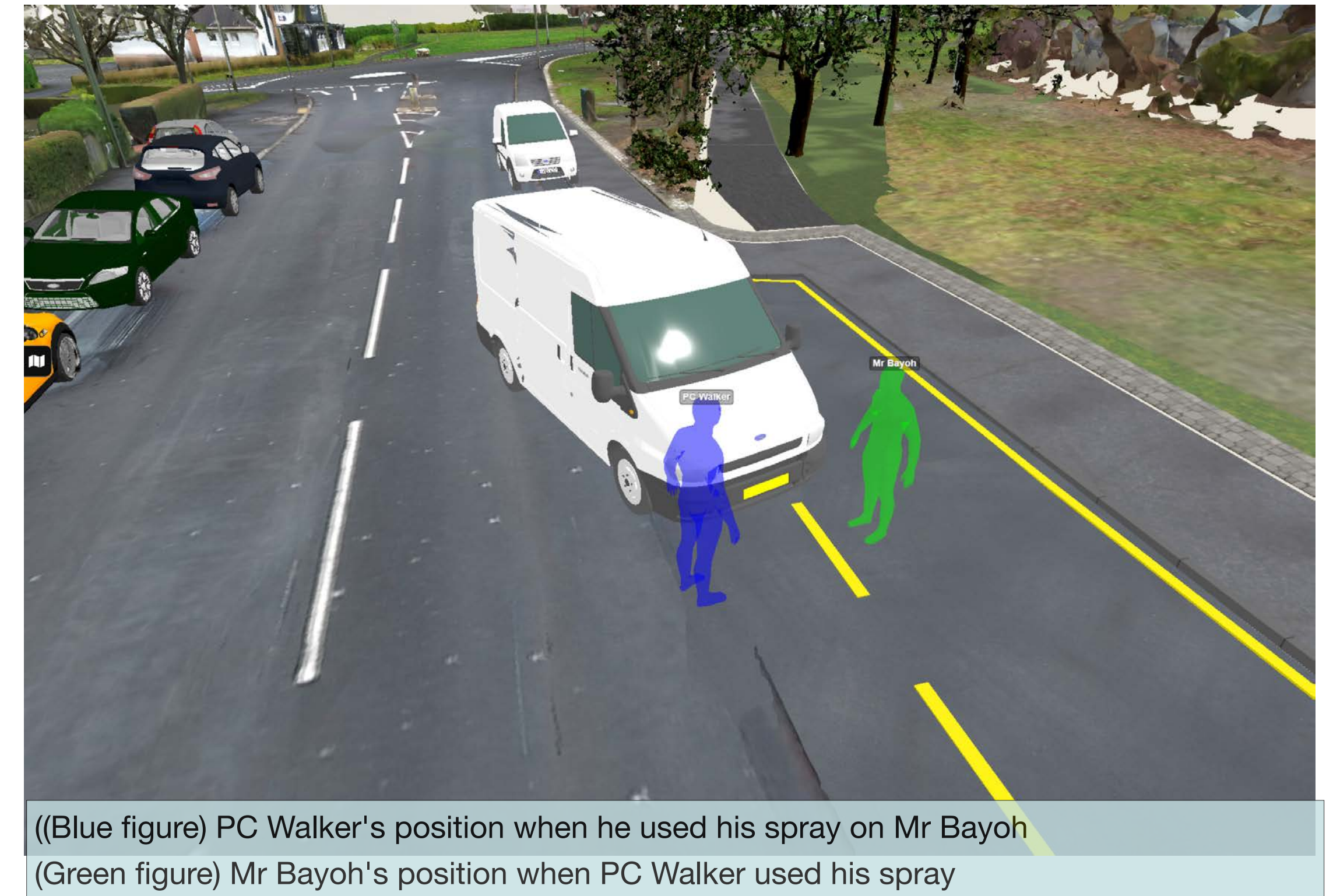
Note: Ford Transit location is incorrect, See Supplementary Report, Section 3 for details

PC WALKER'S IMAGES

A.3 PC Walker describing locations of people as he deploys Pava Spray



(a) Initial locations identified, PC Walker (pm) - 19/05/2022. From 01:50:25.



(b) Refined positions, PC Walker (am) - 20/05/2022. From 02:07:10.

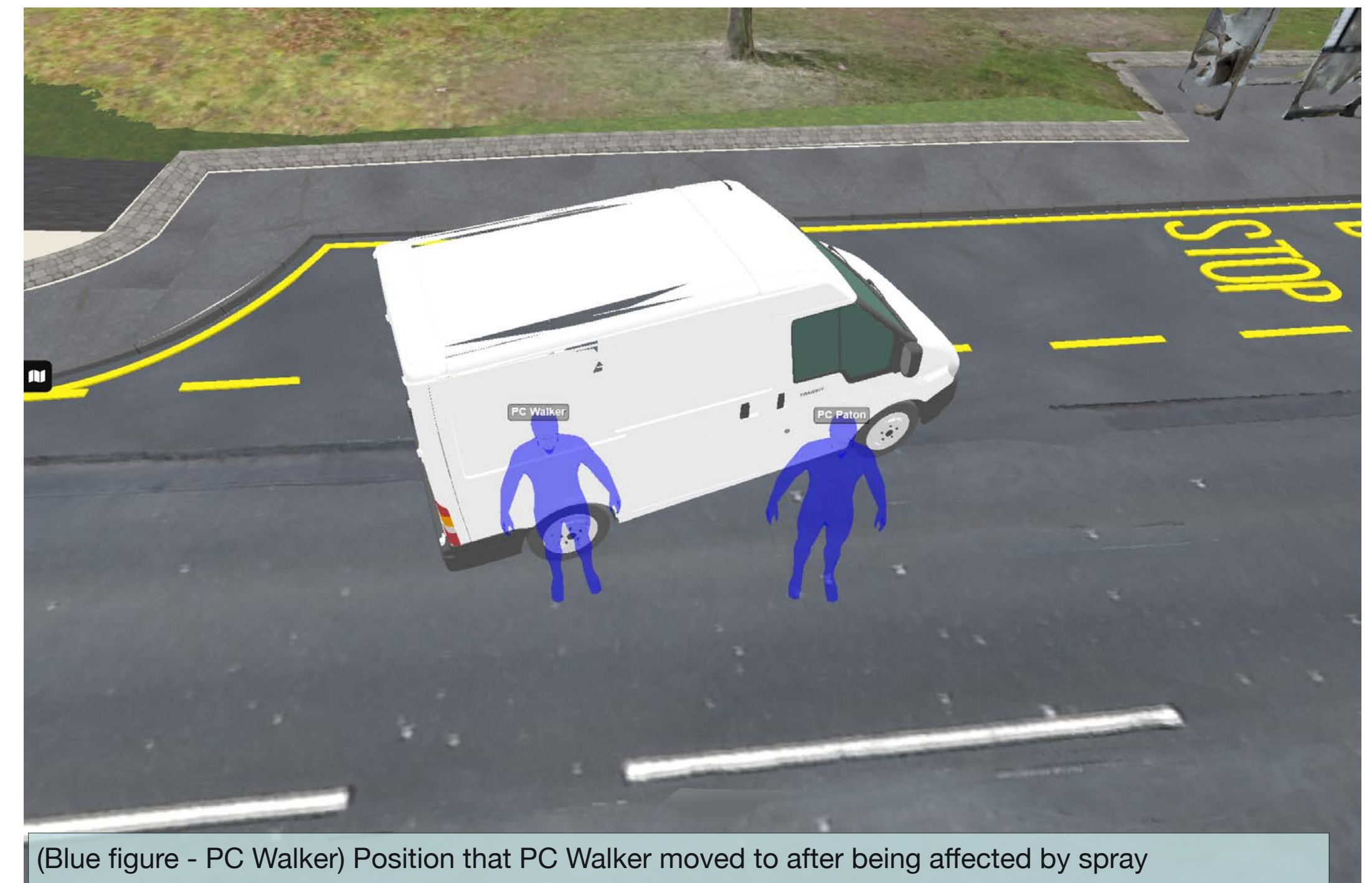
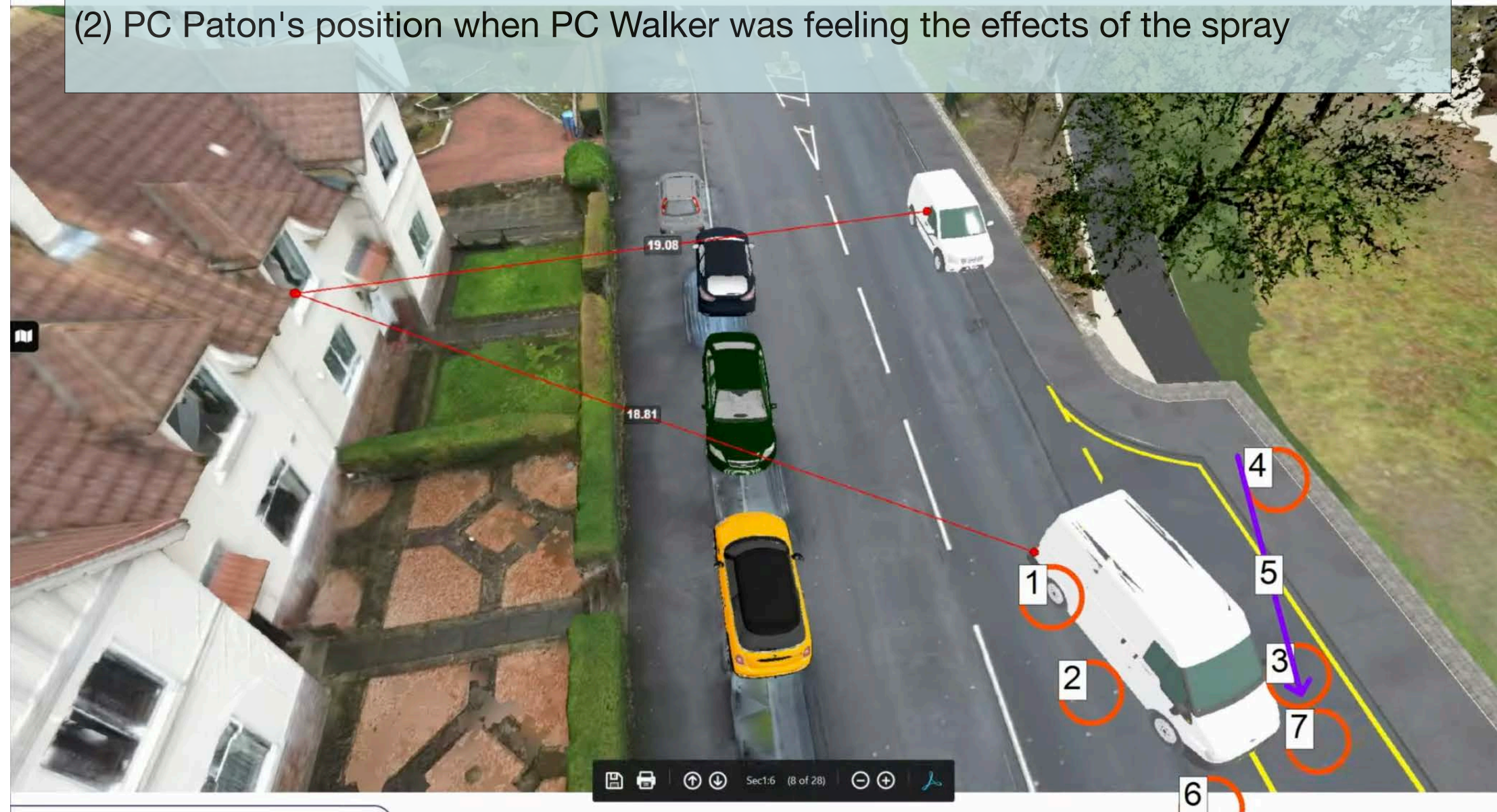
Note: Ford Transit location is incorrect, See Supplementary Report, Section 3 for details

PC WALKER'S IMAGES

A.4 PC Walker describing locations of people post Pava deployment

(1) PC Walker position when he "ducked away" after spray took effect.

(2) PC Paton's position when PC Walker was feeling the effects of the spray



(Blue figure - PC Walker) Position that PC Walker moved to after being affected by spray

(Blue figure - PC Paton) PC Paton's position when PC Walker was feeling the effects of the spray

(a) Initial locations identified, PC Walker (pm) - 19/05/2022. From 01:50:25.

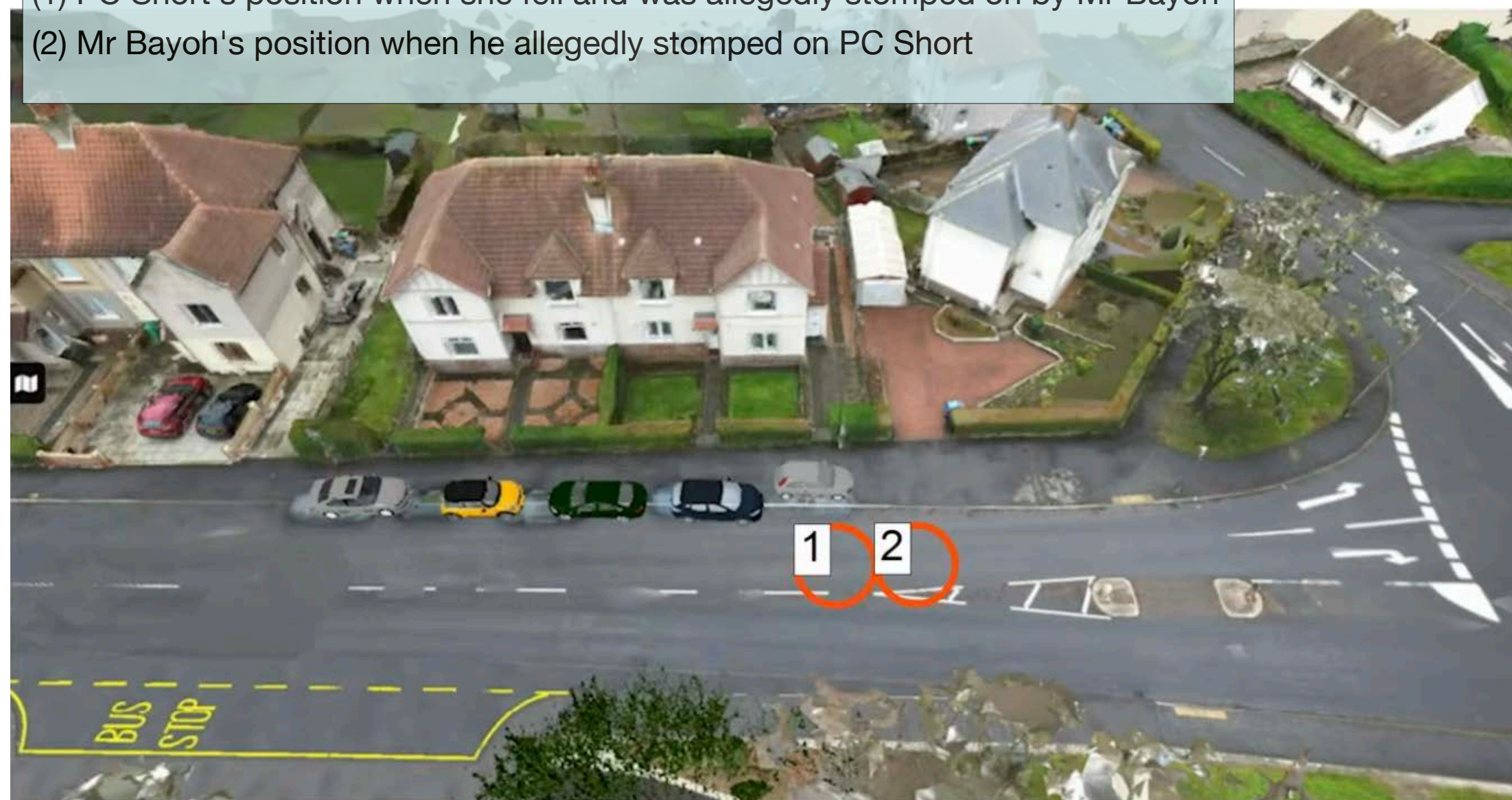
(b) Refined positions, PC Walker (am) - 20/05/2022. From 02:08:50

Note: Ford Transit location is incorrect, See Supplementary Report, Section 3 for details

PC WALKER'S IMAGES

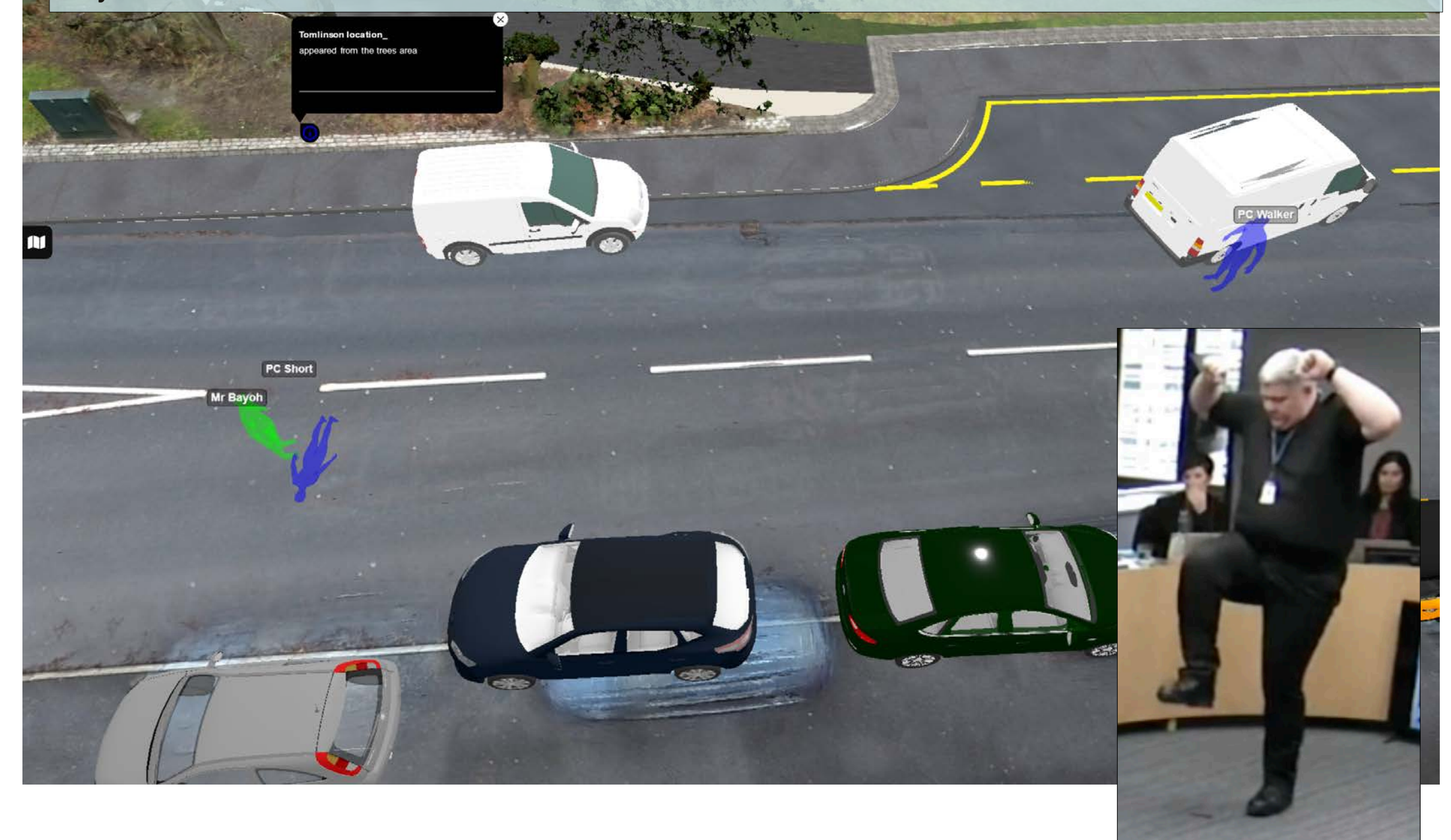
A.5 PC Walker describing location where PC Short fell and was allegedly stomped

- (1) PC Short's position when she fell and was allegedly stomped on by Mr Bayoh
(2) Mr Bayoh's position when he allegedly stomped on PC Short



(a) Initial locations identified, PC Walker (am) - 20/05/2022. From 00:26:22.

- (Green figure) Mr Bayoh's position when he allegedly stomped on PC Short
(Blue figure - PC Short) PC Short's position when she was allegedly stomped by Mr Bayoh
(Blue figure - PC Walker) PC Walker's position when PC Short was allegedly stomped on by Mr Bayoh

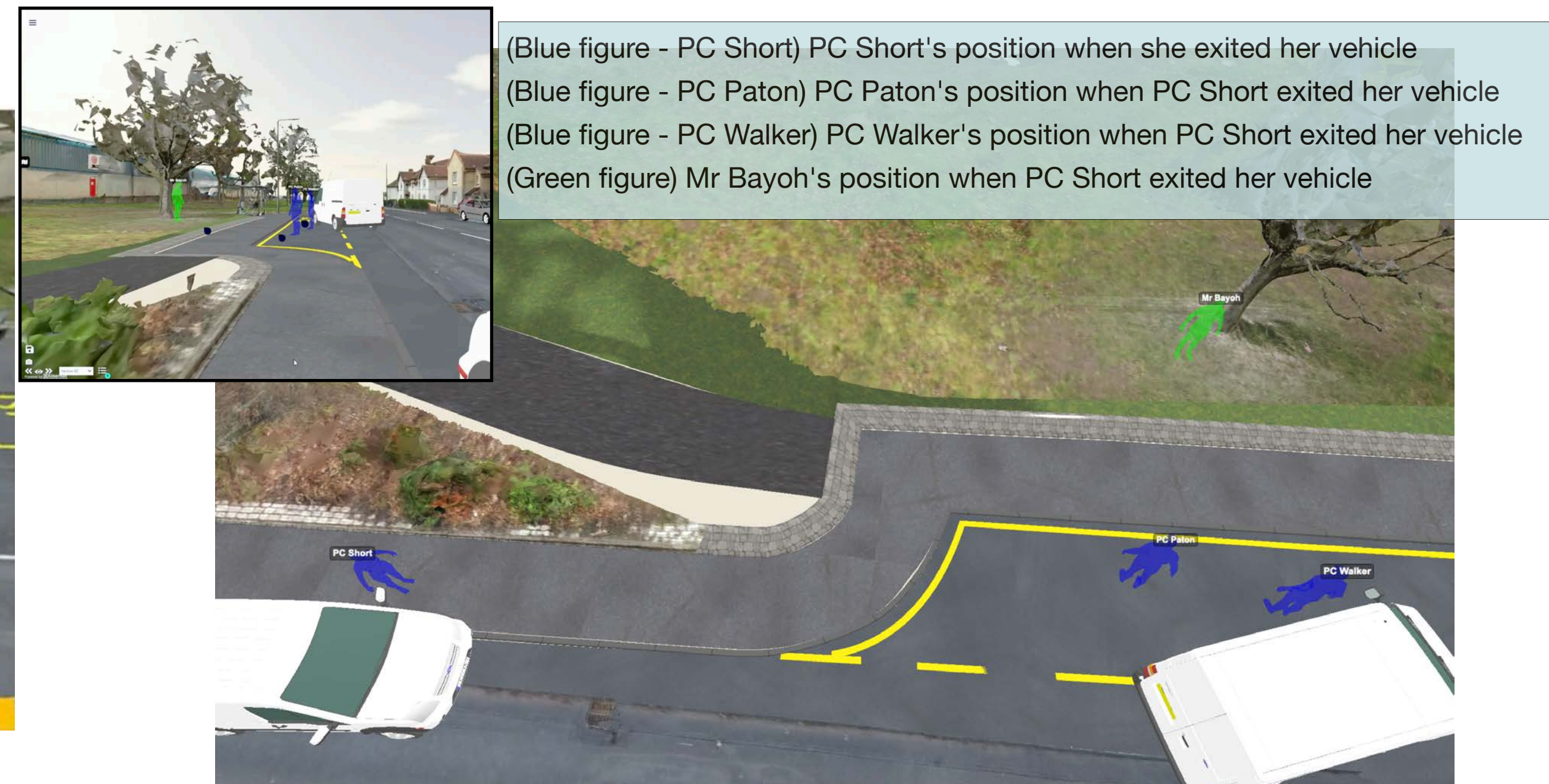
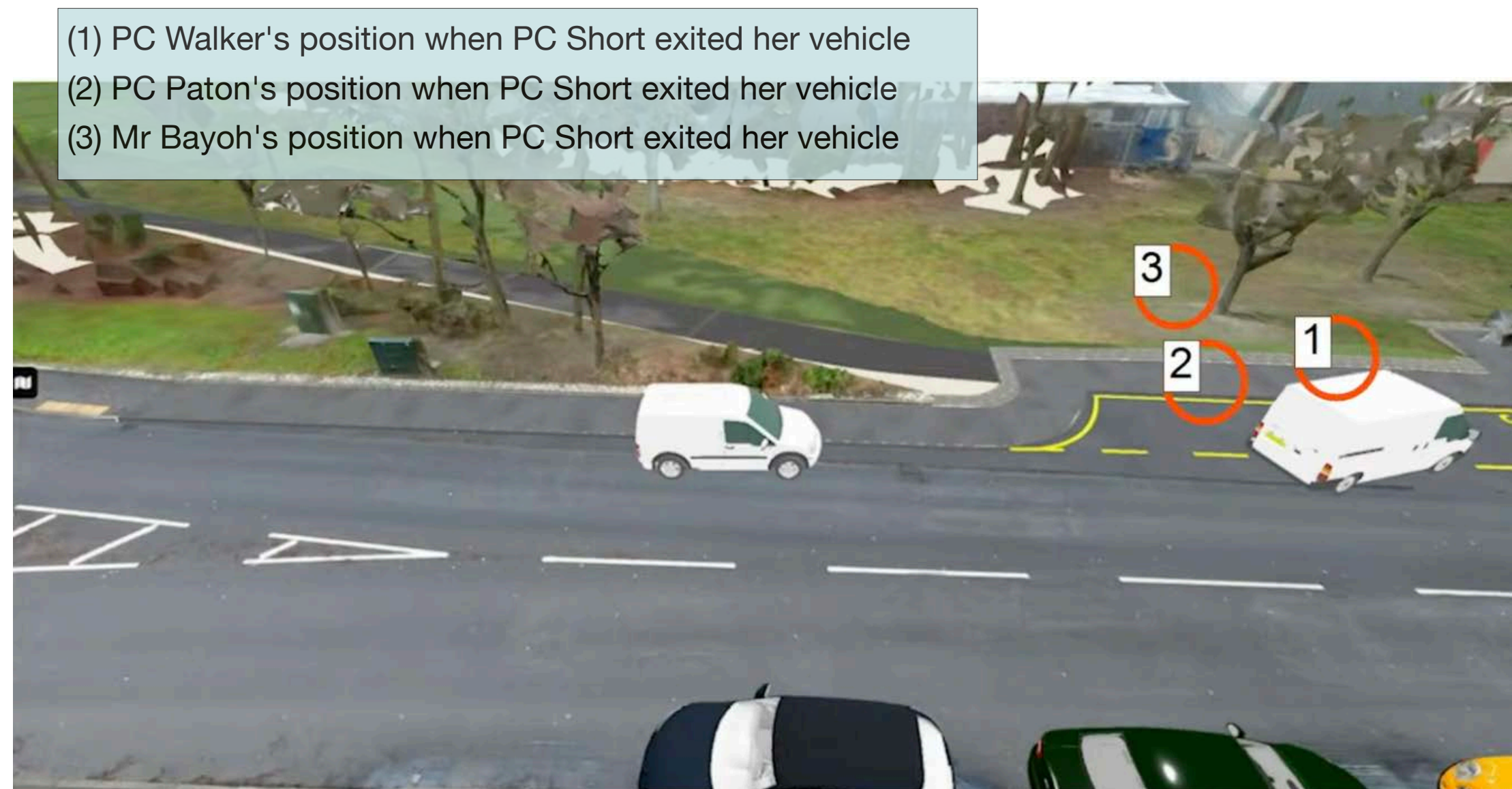


(b) Refined positions, PC Walker (am) - 20/05/2022. From 02:13:30 - Inset PC Walker demonstrating the alleged stomp, PC Walker (am) - 20/05/2022. From 00:31:00.

Note: Ford Transit location is incorrect, See Supplementary Report, Section 3 for details

PC SHORT'S IMAGES

B.1 PC Short describes locations of people as she exits her vehicle

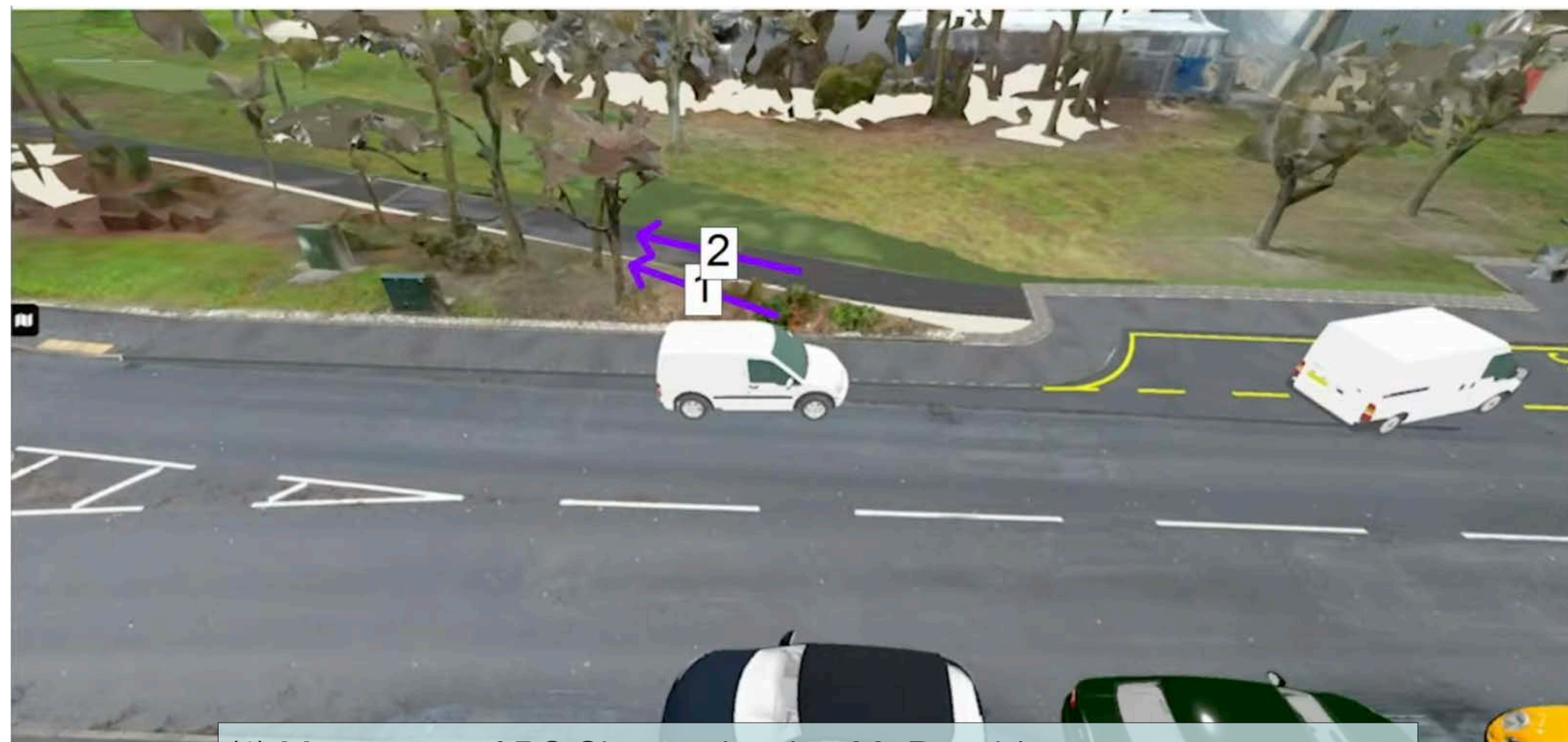


(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 01:14:30.

(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:29:40 - Inset, Line of sight view from PC Short, Nicole Short (pm) - 24/05/2022. From 00:32:25

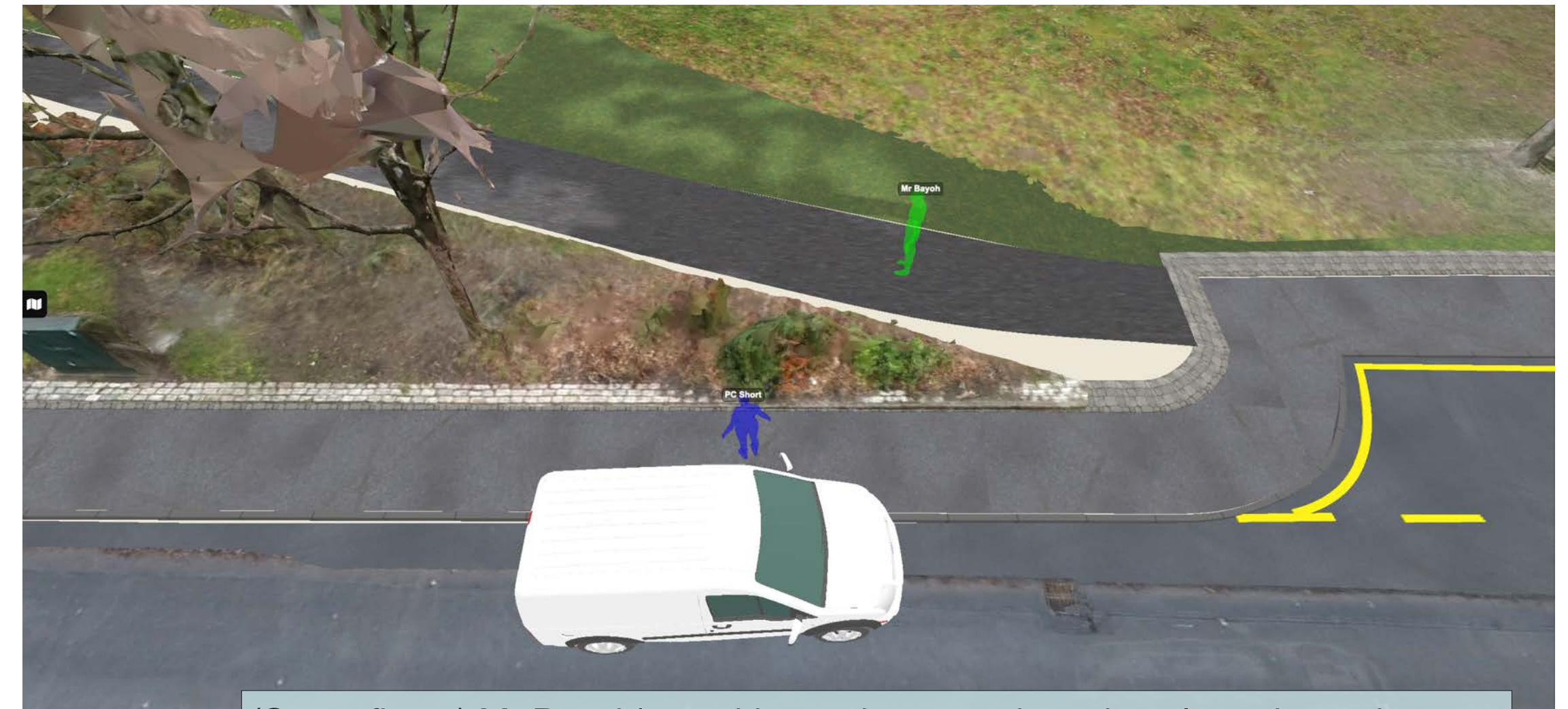
PC SHORT'S IMAGES

B.2 PC Short describes movement of Mr Bayoh along path



(1) Movement of PC Short, mirroring Mr Bayoh's movement
(2) Movement of Mr Bayoh along path

(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 02:04:50.

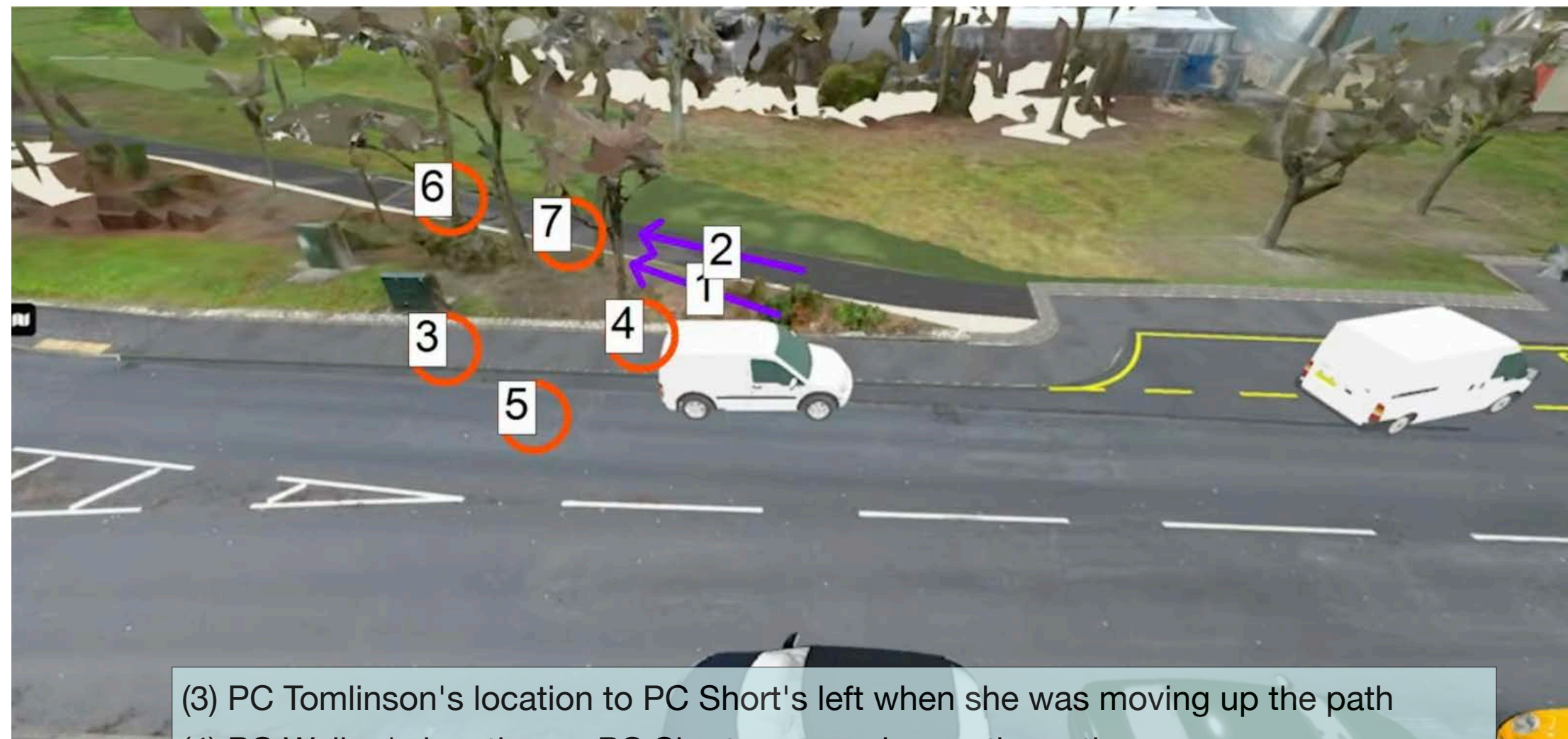


(Green figure) Mr Bayoh's position as he started moving along the path
(Blue figure) PC Short's position as Mr Bayoh started moving along the path

(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:33:20.

PC SHORT'S IMAGES

B.3 PC Short describes locations of people as Mr Bayoh reaches furthest point along path.



- (3) PC Tomlinson's location to PC Short's left when she was moving up the path
- (4) PC Walker's location as PC Short was moving up the path
- (6) Furthest point that Mr Bayoh reached on path
- (7) PC Short's position when Mr Bayoh turned to face her

(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 02:06:30.

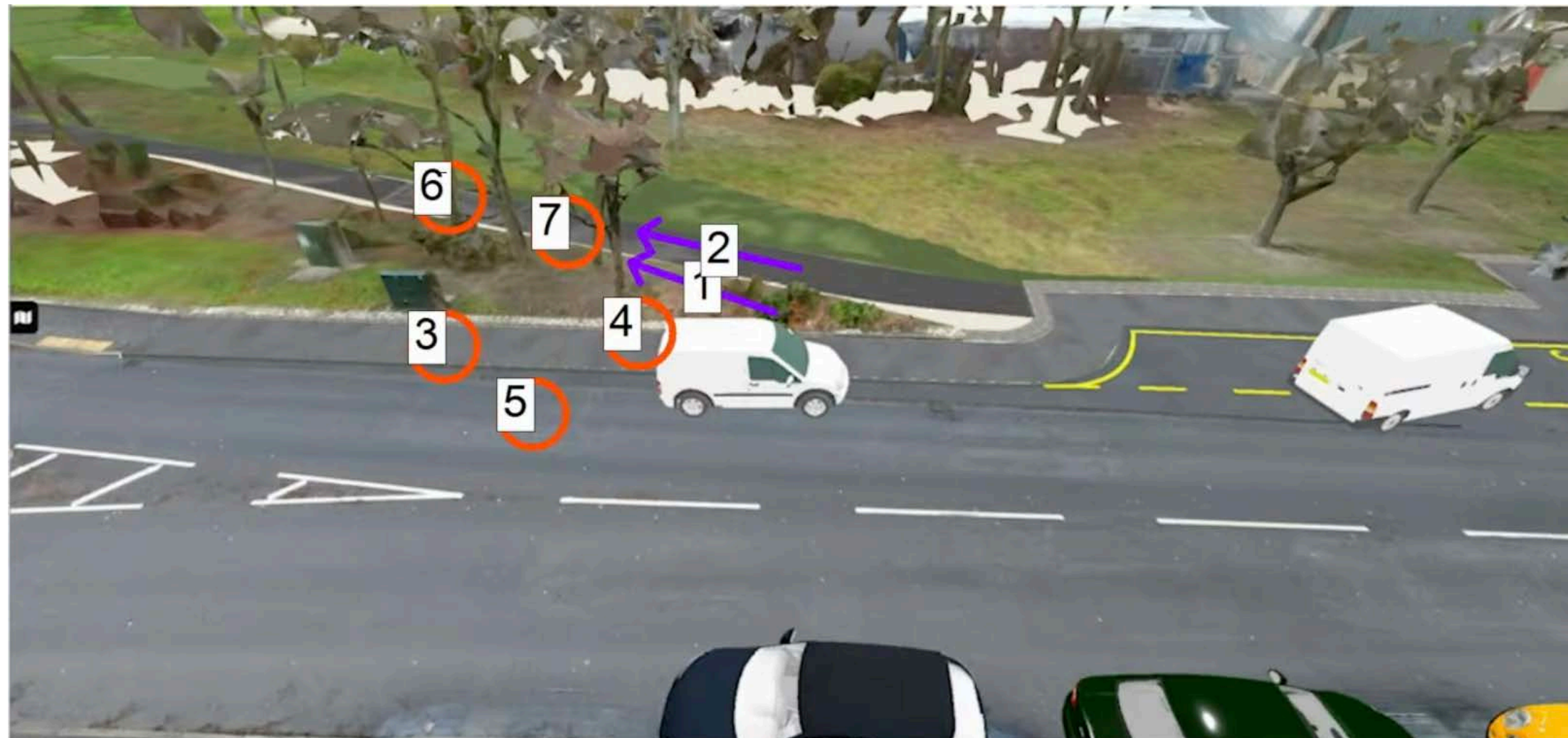


- (Green figure) The furthest position reached by Mr Bayoh on the path
- (Blue figure - PC Short) The point PC Short reached when mirroring Mr Bayoh's movement along the path
- (Blue figure - PC Tomlinson) PC Tomlinson's position when Mr Bayoh reached his furthest point along the path
- (Blue figure - PC Walker) PC Walker's position when Mr Bayoh reached his furthest point along the path

(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:33:20.

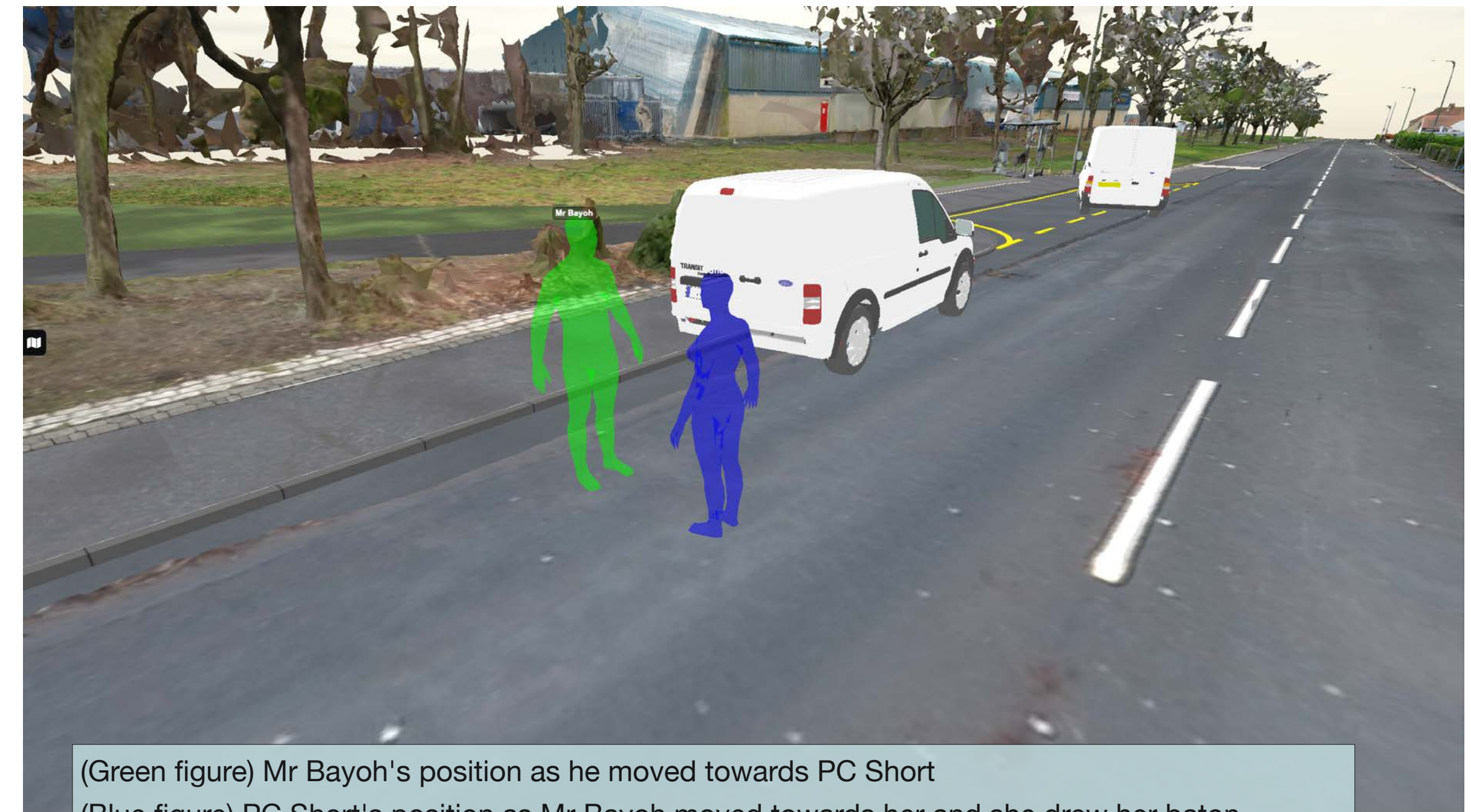
PC SHORT'S IMAGES

B.4 PC Short describes her position on the road before turning to run, with Mr Bayoh 'closing the gap'



(5) Position that PC Short "shuffled" back to, before turning to run

(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 02:06:30.

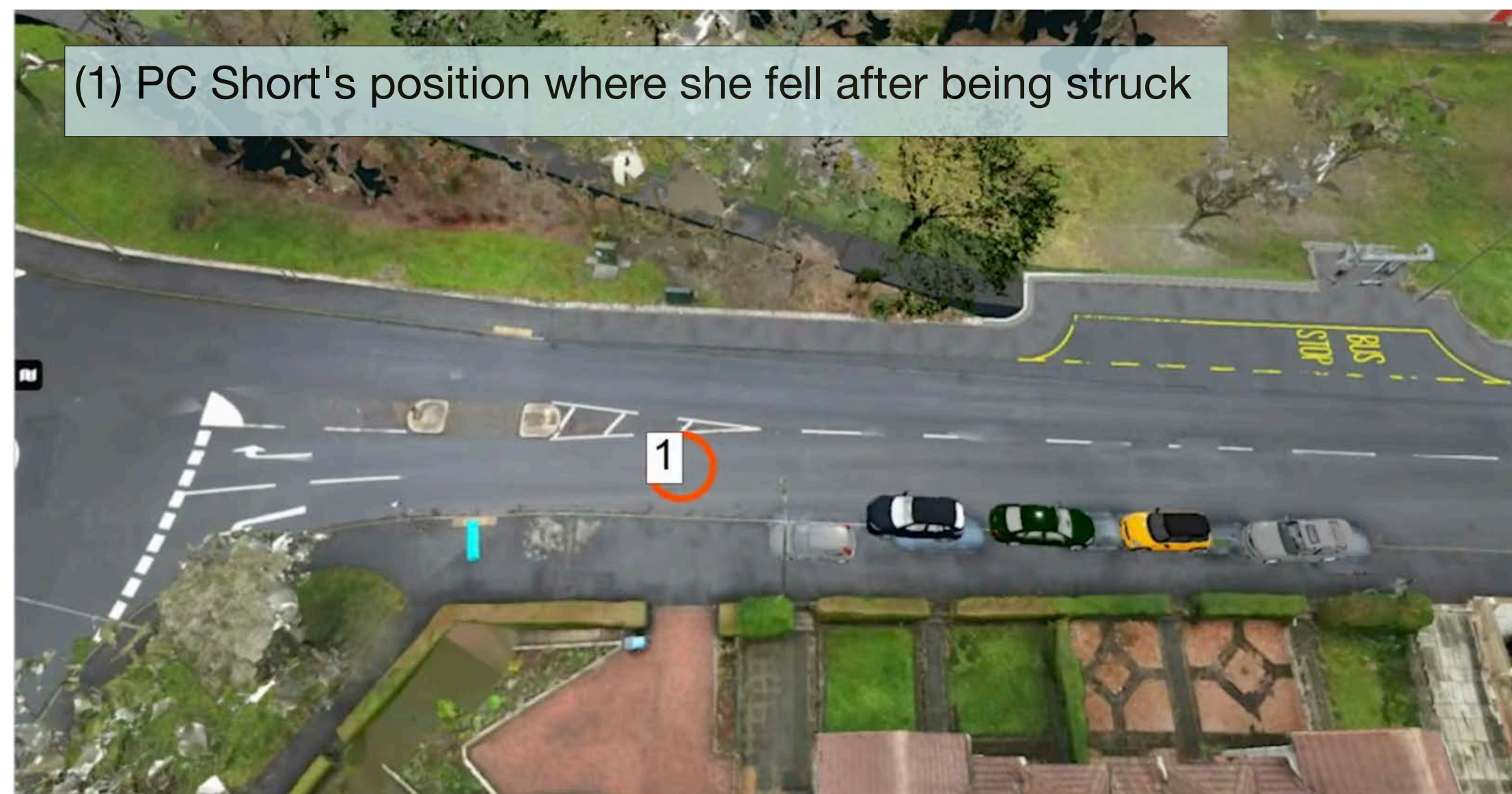


(Green figure) Mr Bayoh's position as he moved towards PC Short
(Blue figure) PC Short's position as Mr Bayoh moved towards her and she drew her baton

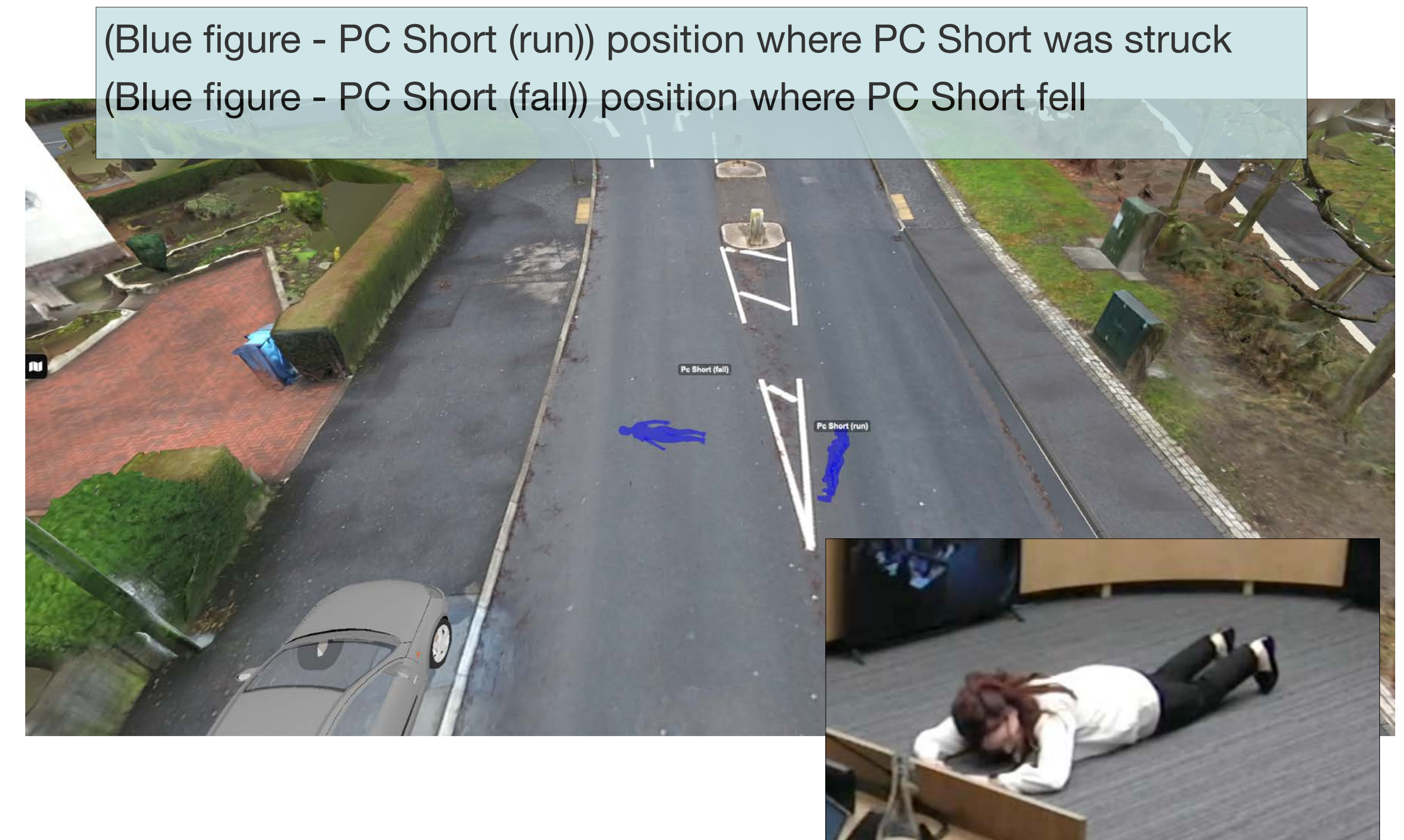
(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:36:30.

PC SHORT'S IMAGES

B.5 PC Short describes where she ran to and where she landed in the road



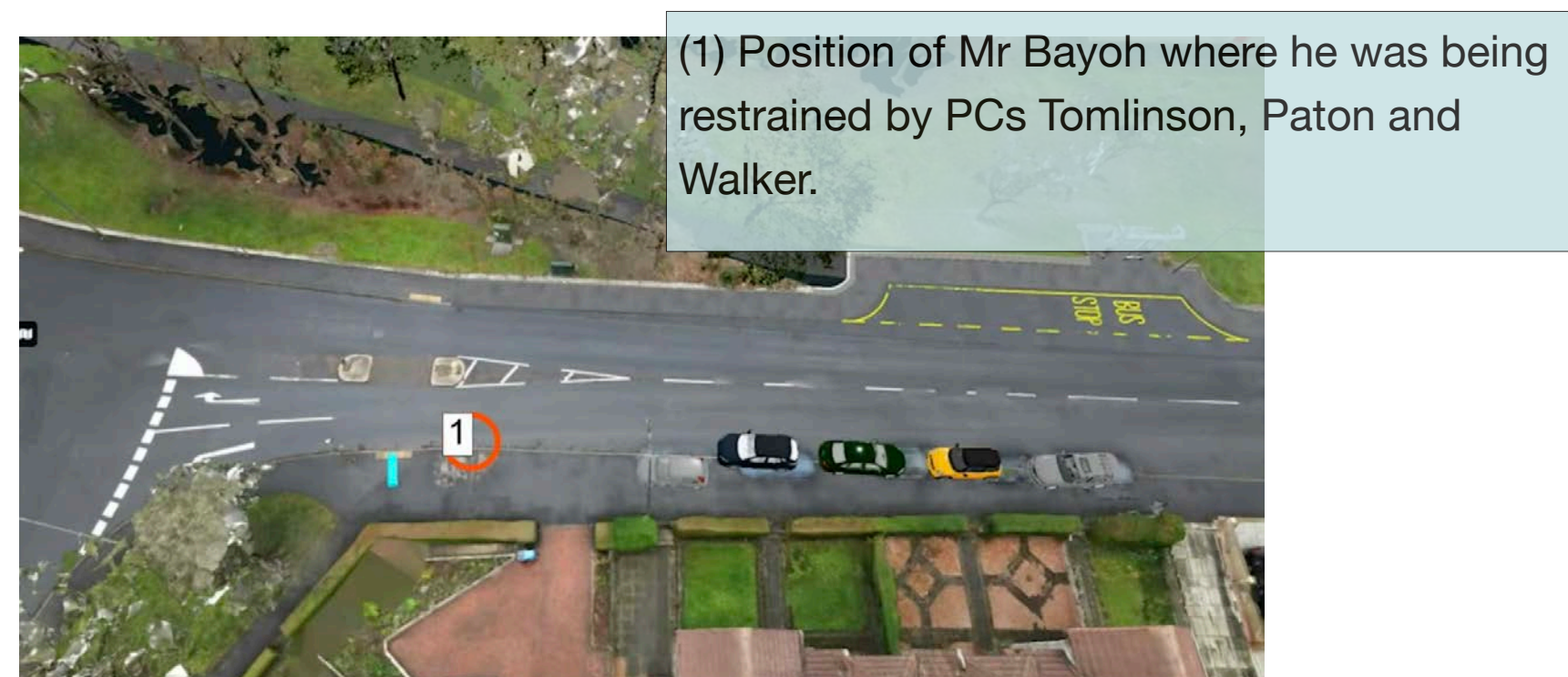
(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 02:26:00.



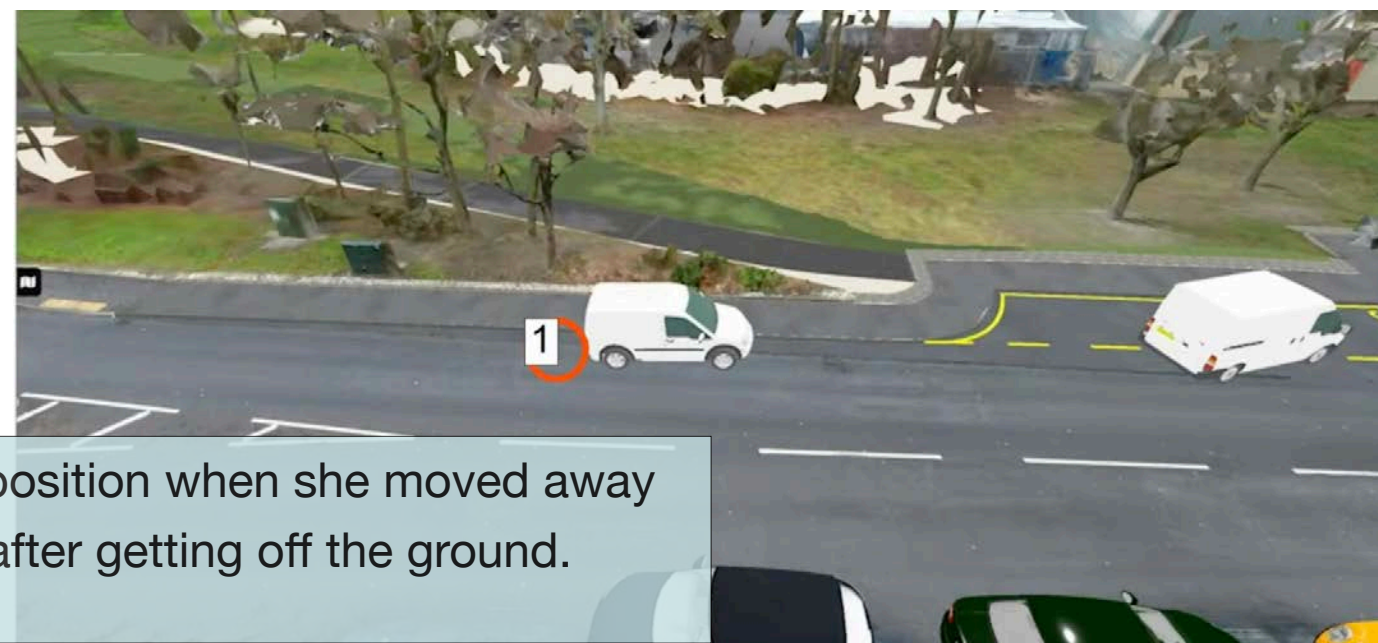
(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:37:50 Inset- PC Short demonstrating her pose on the ground, Nicole Short (am) - 24/05/2022. From 02:45:10.

PC SHORT'S IMAGES

B.6 PC Short describes the area of restraint and her immediate position after getting up from the ground.



(a) Initial locations identified - where Mr Bayoh was being restrained, Nicole Short (am) - 24/05/2022. From 03:16:25 and again from 03:22:20



(1) PC Short's position when she moved away to the Fishvan after getting off the ground.

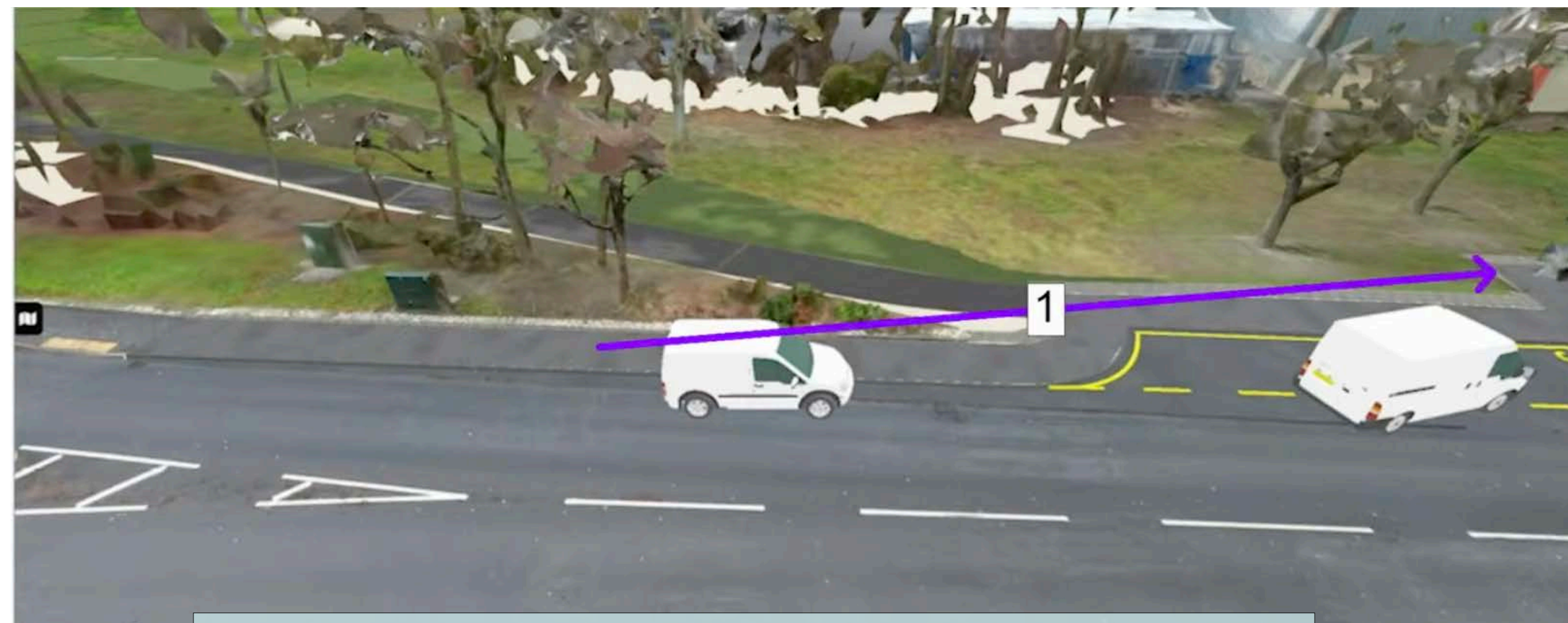
(b) Initial locations identified - where PC Short moved to after getting up from the ground, Nicole Short (am) - 24/05/2022. From 03:15:10.



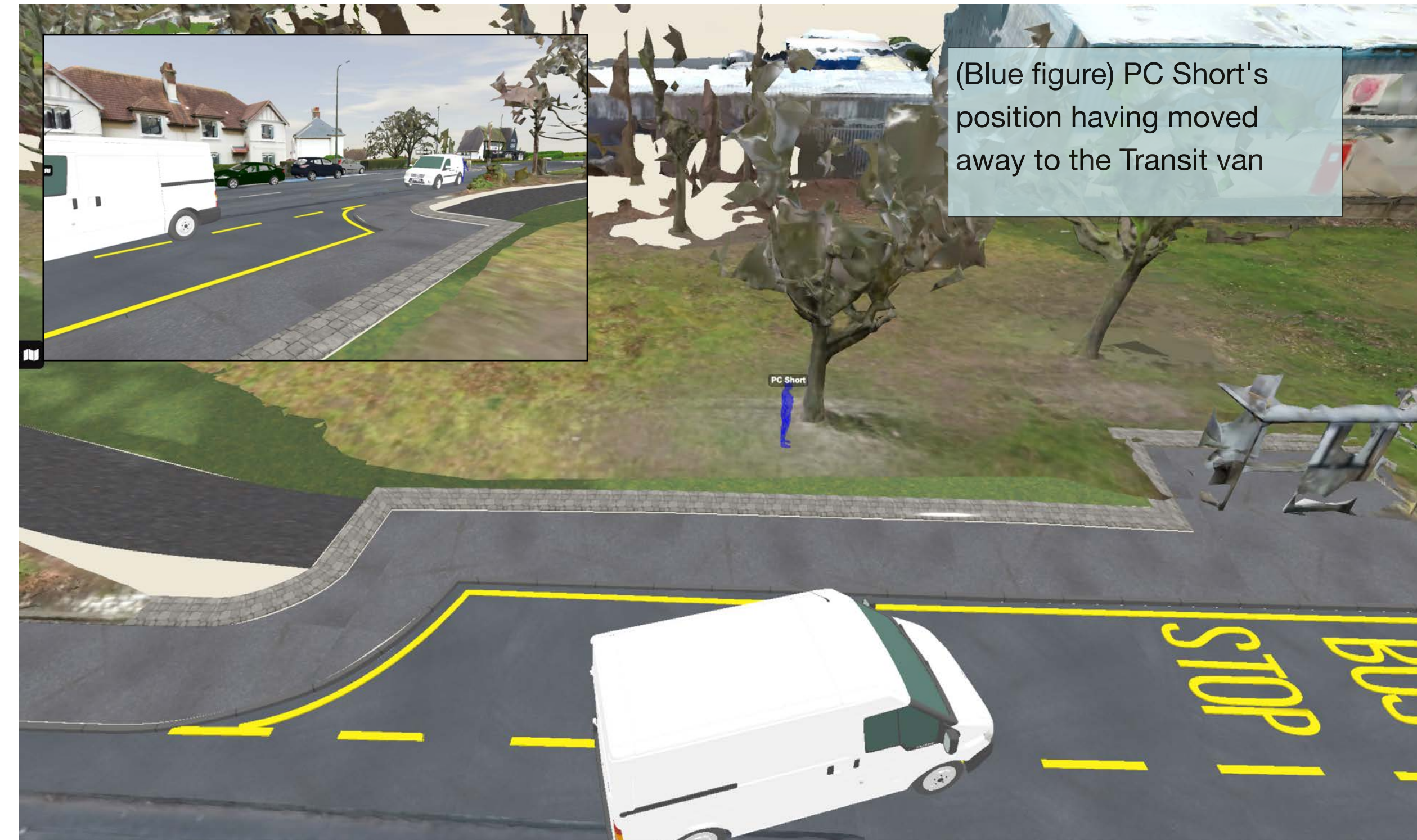
(c) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:41:30.

PC SHORT'S IMAGES

B.7 PC Short describes moving away from the 'Fishvan' (Ford Connect)



(1) PC Short's movement from "Fishvan" towards Transit van



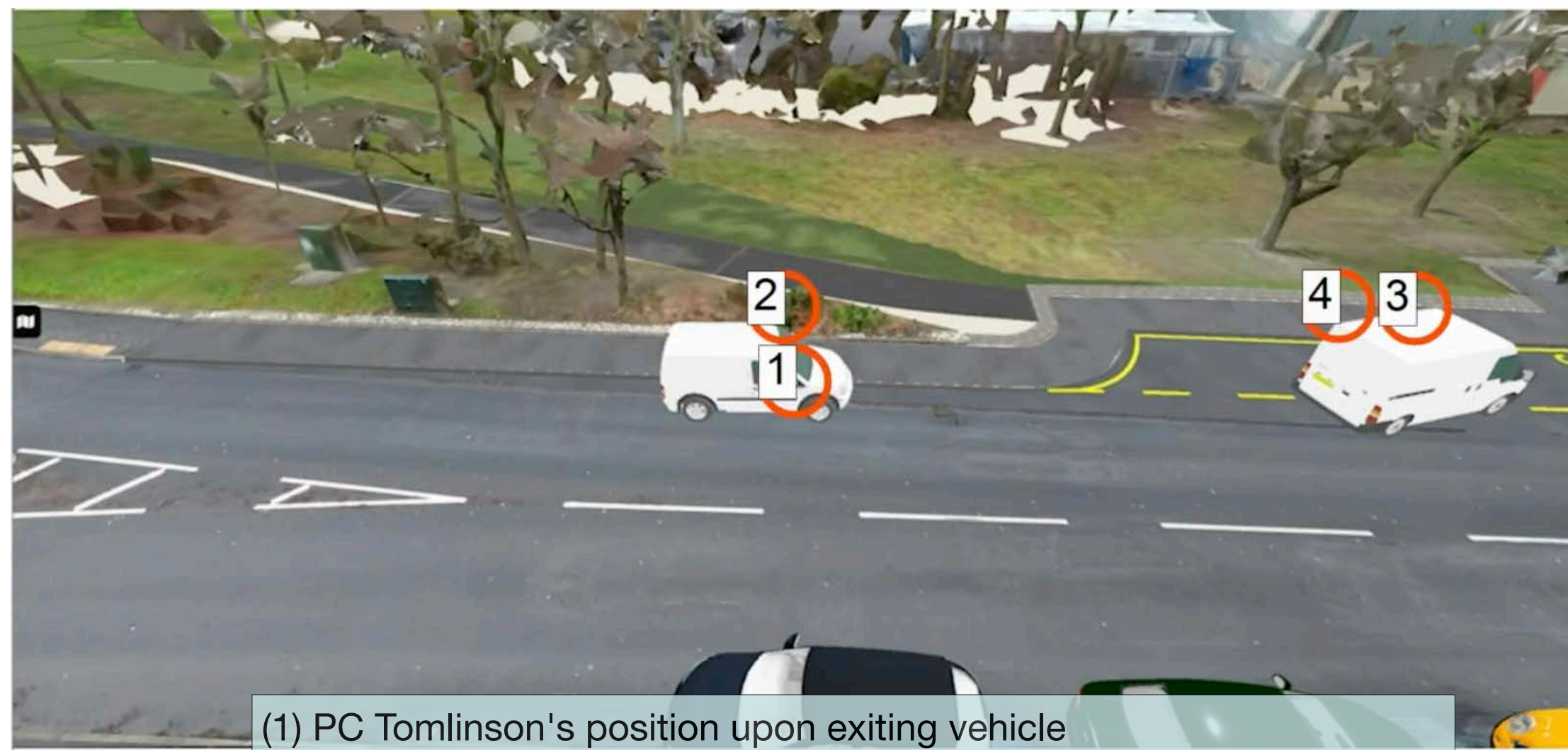
(Blue figure) PC Short's position having moved away to the Transit van

(a) Initial locations identified, Nicole Short (am) - 24/05/2022. From 03:24:20.

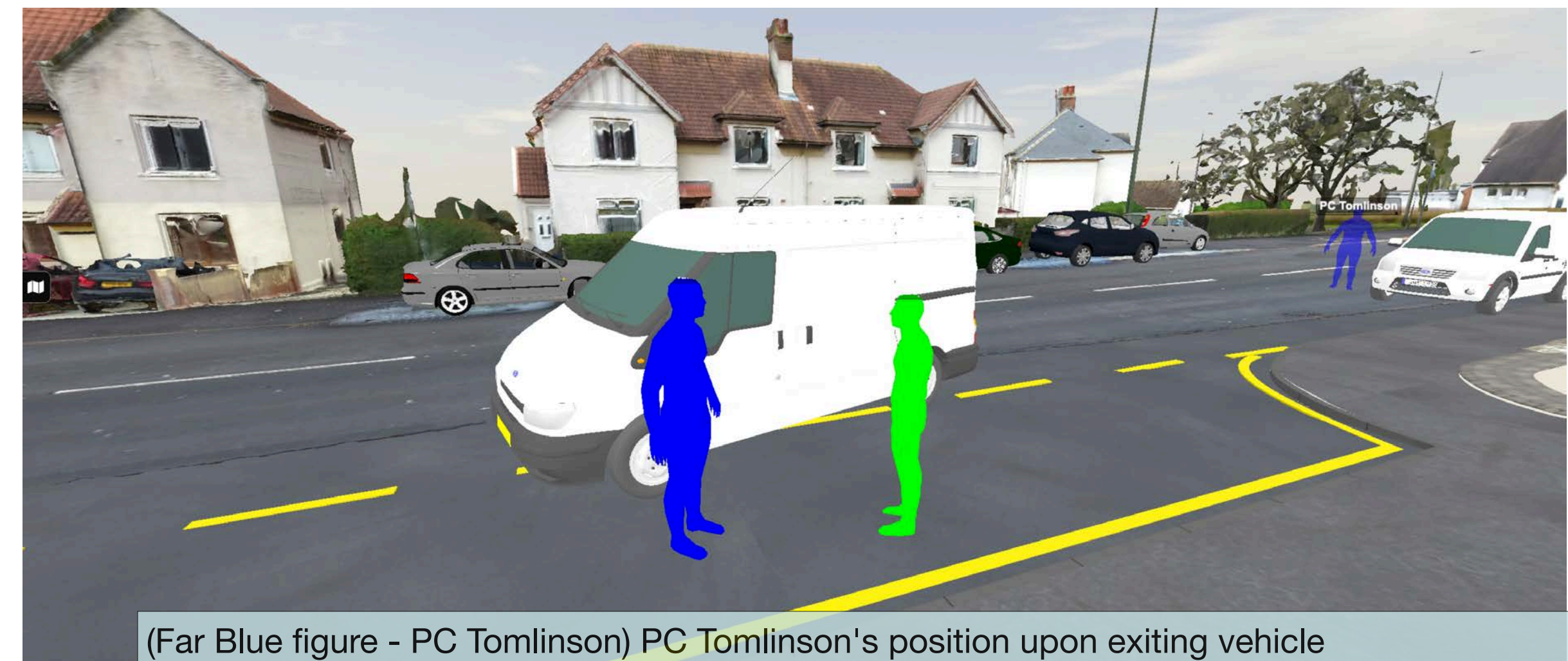
(b) Refined positions, Nicole Short (pm) - 24/05/2022. From 00:43:00 - Inset - line of sight. Nicole Short (pm) - 24/05/2022. From 00:44.10.

PC TOMLINSON'S IMAGES

C.1 PC Tomlinson describes locations of people after exiting his vehicle



- (1) PC Tomlinson's position upon exiting vehicle
- (3) PC Walker's position when PC Tomlinson exited his vehicle
- (4) Mr Bayoh's position when PC Tomlinson exited his vehicle



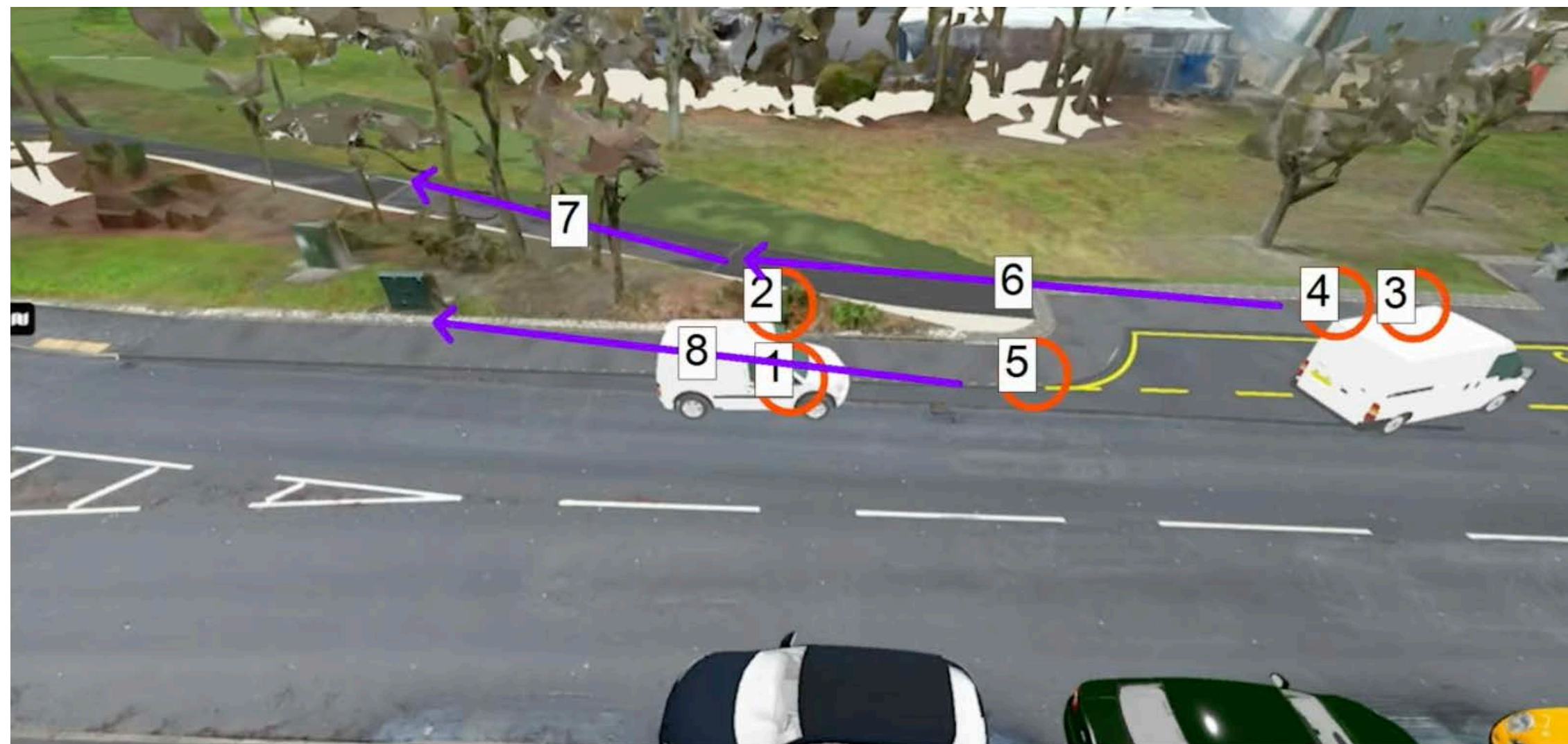
- (Far Blue figure - PC Tomlinson) PC Tomlinson's position upon exiting vehicle
- (Near Blue figure in foreground) PC Walker's position when PC Tomlinson exited his vehicle
- (Green figure) Mr Bayoh's position when PC Tomlinson exited his vehicle

(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. From 01:42.10.

(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 02:34:50.

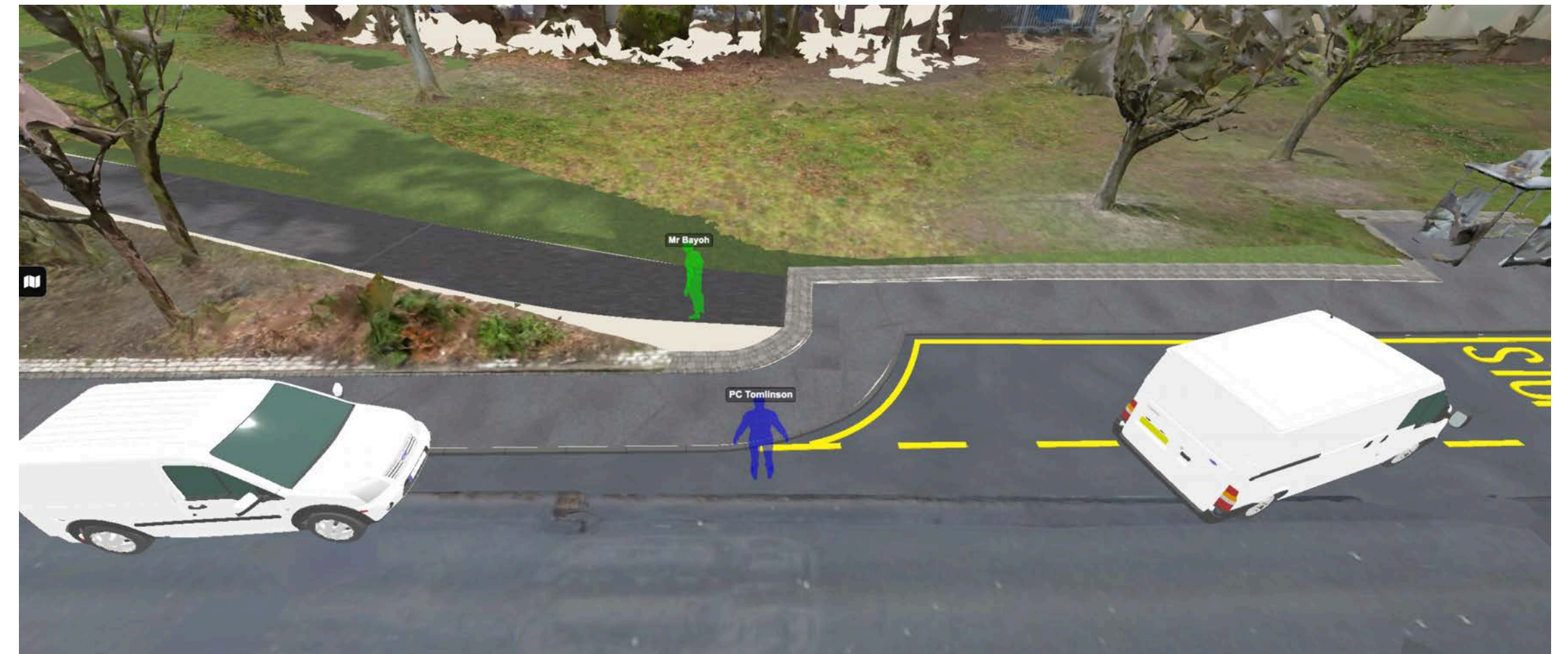
PC TOMLINSON'S IMAGES

C.2 PC Tomlinson describes Mr Bayoh walking up the path



(5) Position PC Tomlinson moved to following arrival at scene
(6) Mr Bayoh's movement away from PC Walker

(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. Numbers 1 - 4 from 01:42:10. Numbers 5 and 6 from 01:47:15. Numbers 7 - 8 from 01:54:45.

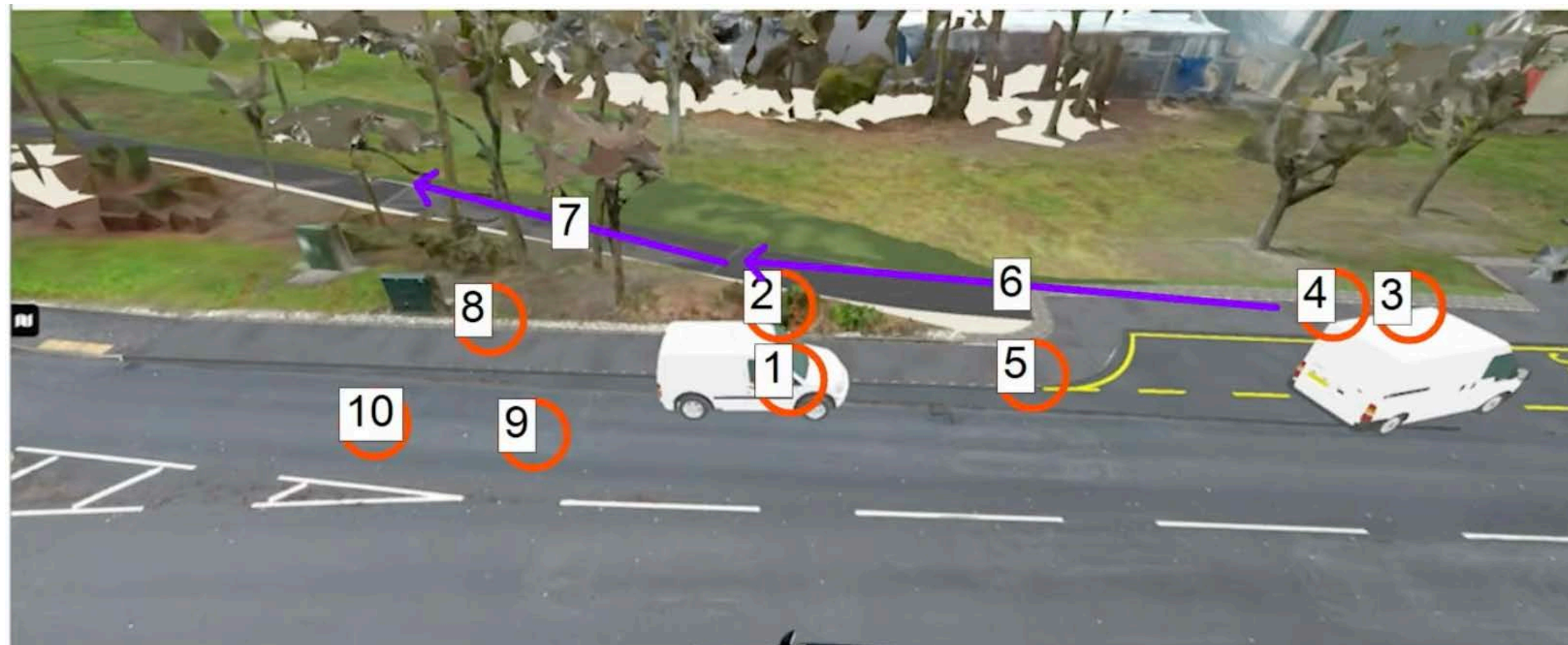


(Blue figure) Position that PC Tomlinson moved to following arrival at scene
(Green figure) Mr Bayoh moving down path

(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 02:40:00.

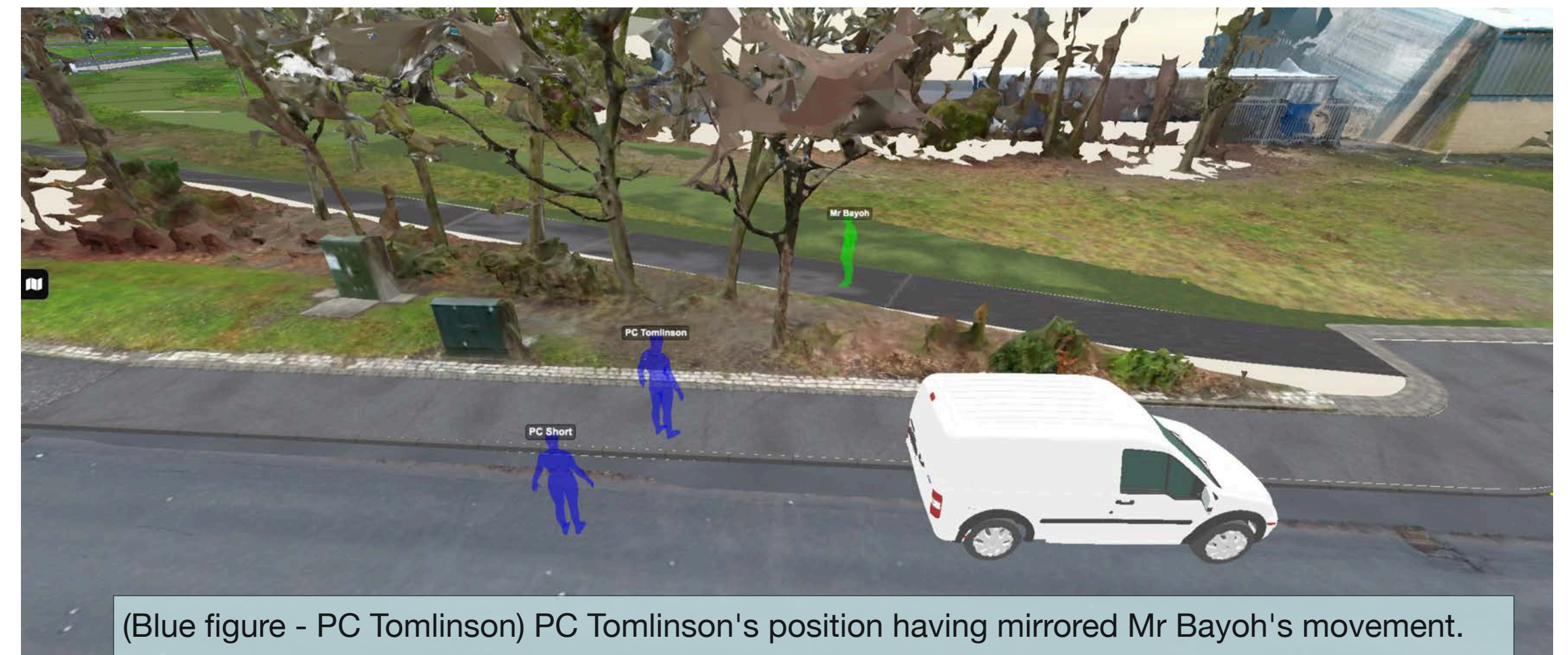
PC TOMLINSON'S IMAGES

C.3 PC Tomlinson describes Mr Bayoh walking up the path



- (7) Mr Bayoh's continued movement down the path
- (8) PC Tomlinson's movement mirroring Mr Bayoh walking down the path
- (9) First option for PC Short's position when PC Tomlinson was at position (8). PC Short was behind PC Tomlinson.
- (10) Second option for PC Short's position when PC Tomlinson was at position (8). PC Short was behind PC Tomlinson

(a) Initial locations identified PC Tomlinson (pm) - 25/05/2022. Numbers 1 - 4 from 01:42:10. Numbers 5 and 6 from 01:47:15. Numbers 7 - 8 from 01:54:45.



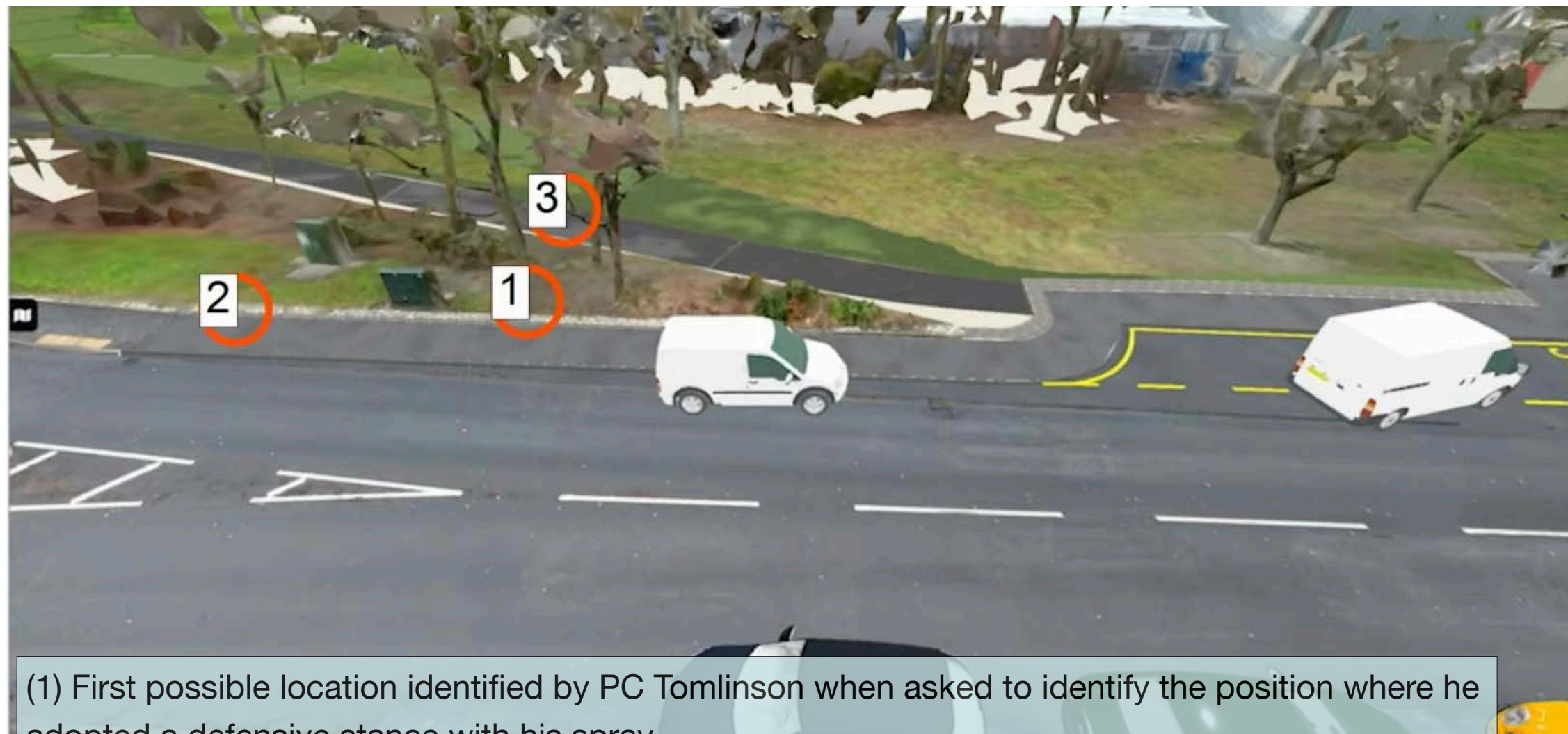
- (Blue figure - PC Tomlinson) PC Tomlinson's position having mirrored Mr Bayoh's movement.
- (Green figure) Mr Bayoh's position on the path
- (Blue figure - PC Short) PC Short's position behind PC Tomlinson

(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 02:44:55.

Note: PC Tomlinson knows PC Short is behind him, but not sure where.

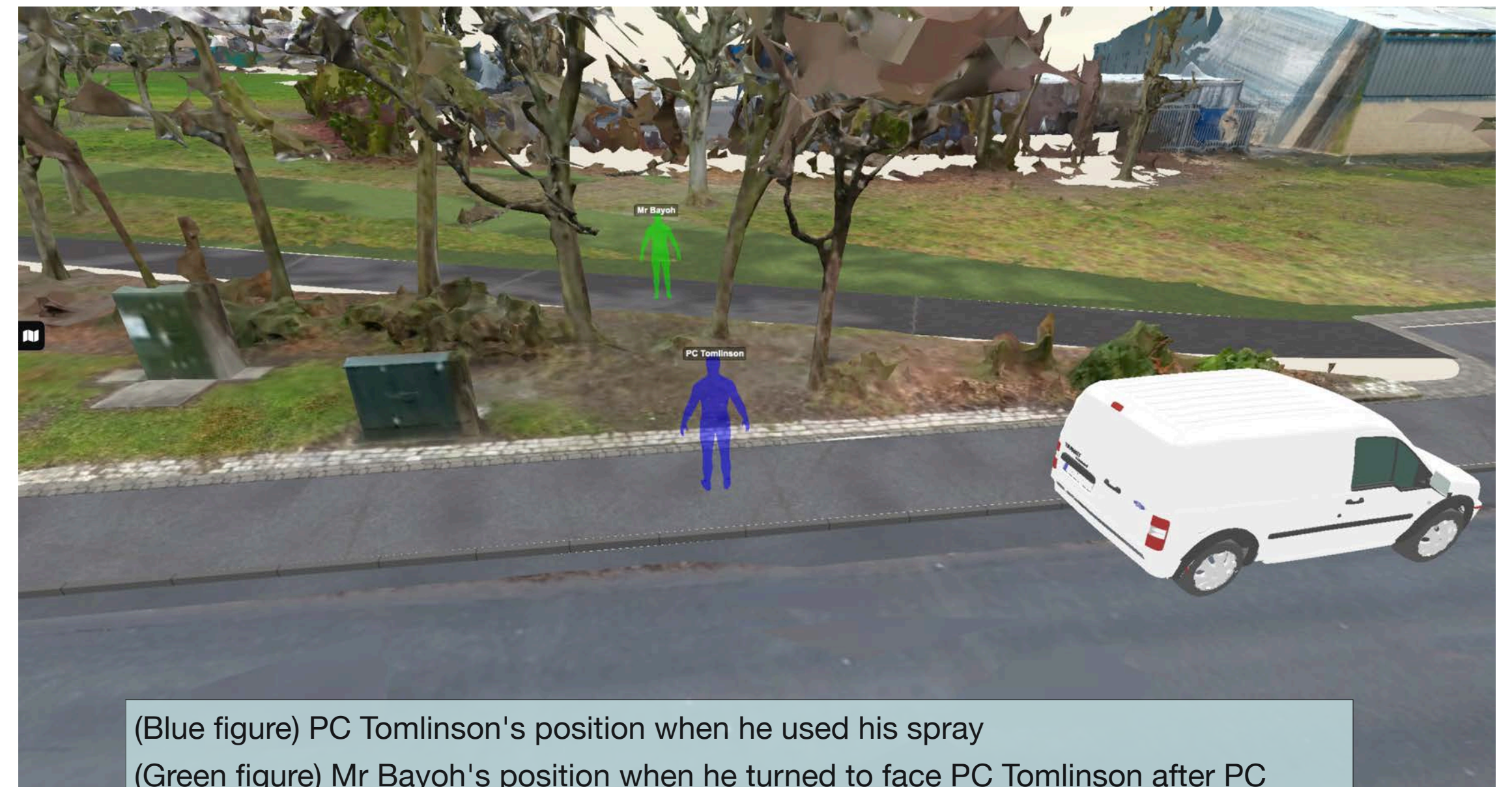
PC TOMLINSON'S IMAGES

C.4 PC Tomlinson describes Mr Bayoh turning to face him after Pava Deployment



- (1) First possible location identified by PC Tomlinson when asked to identify the position where he adopted a defensive stance with his spray.
- (2) Second possible location identified by PC Tomlinson when asked to identify the position where he adopted a defensive stance with his spray.
- (3) Mr Bayoh's position when PC Tomlinson adopted a defensive stance with his spray

(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. From 02:29:15.

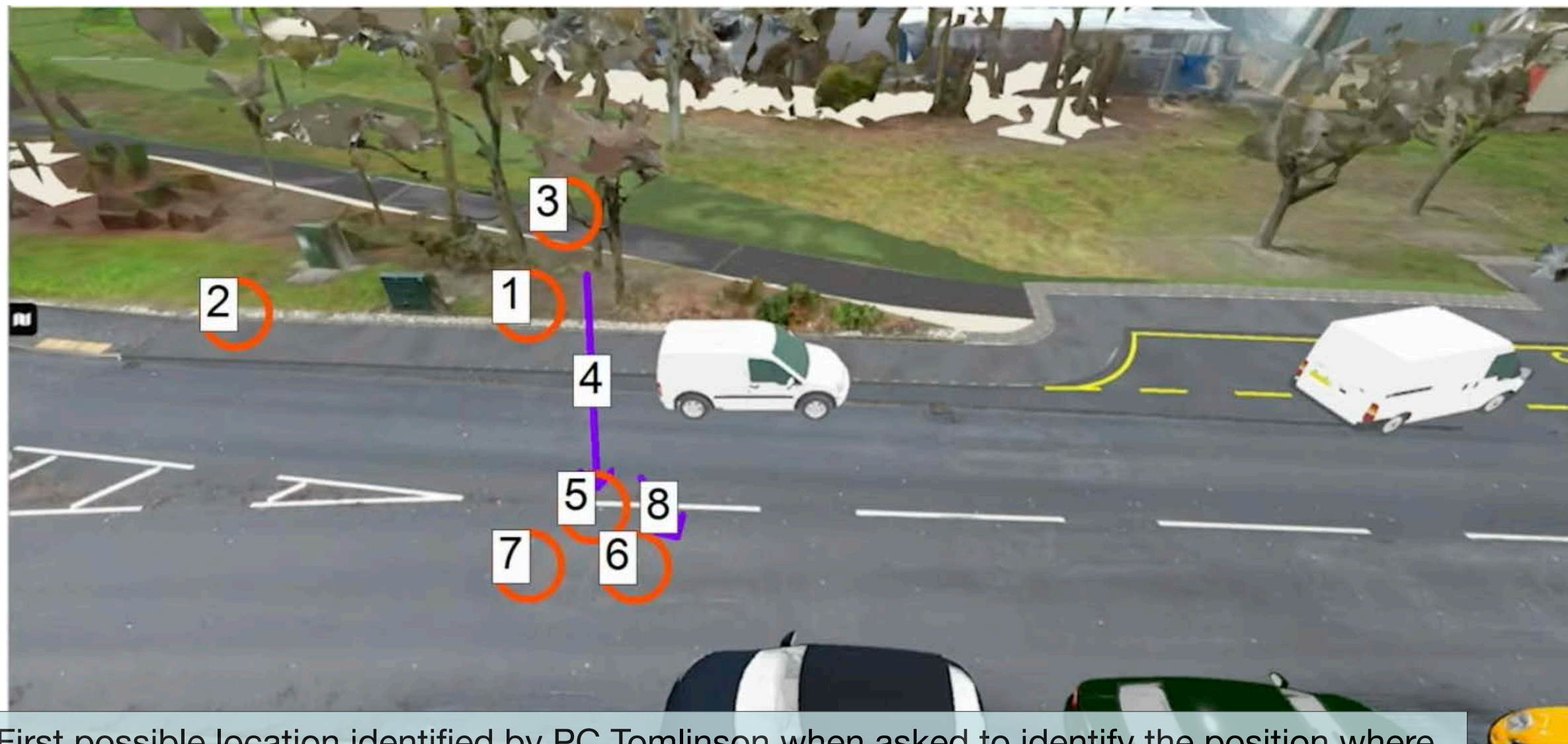


- (Blue figure) PC Tomlinson's position when he used his spray
- (Green figure) Mr Bayoh's position when he turned to face PC Tomlinson after PC Tomlinson used his spray

(b) Refined positions , PC Tomlinson (am) - 26/05/2022. From 02:53:00

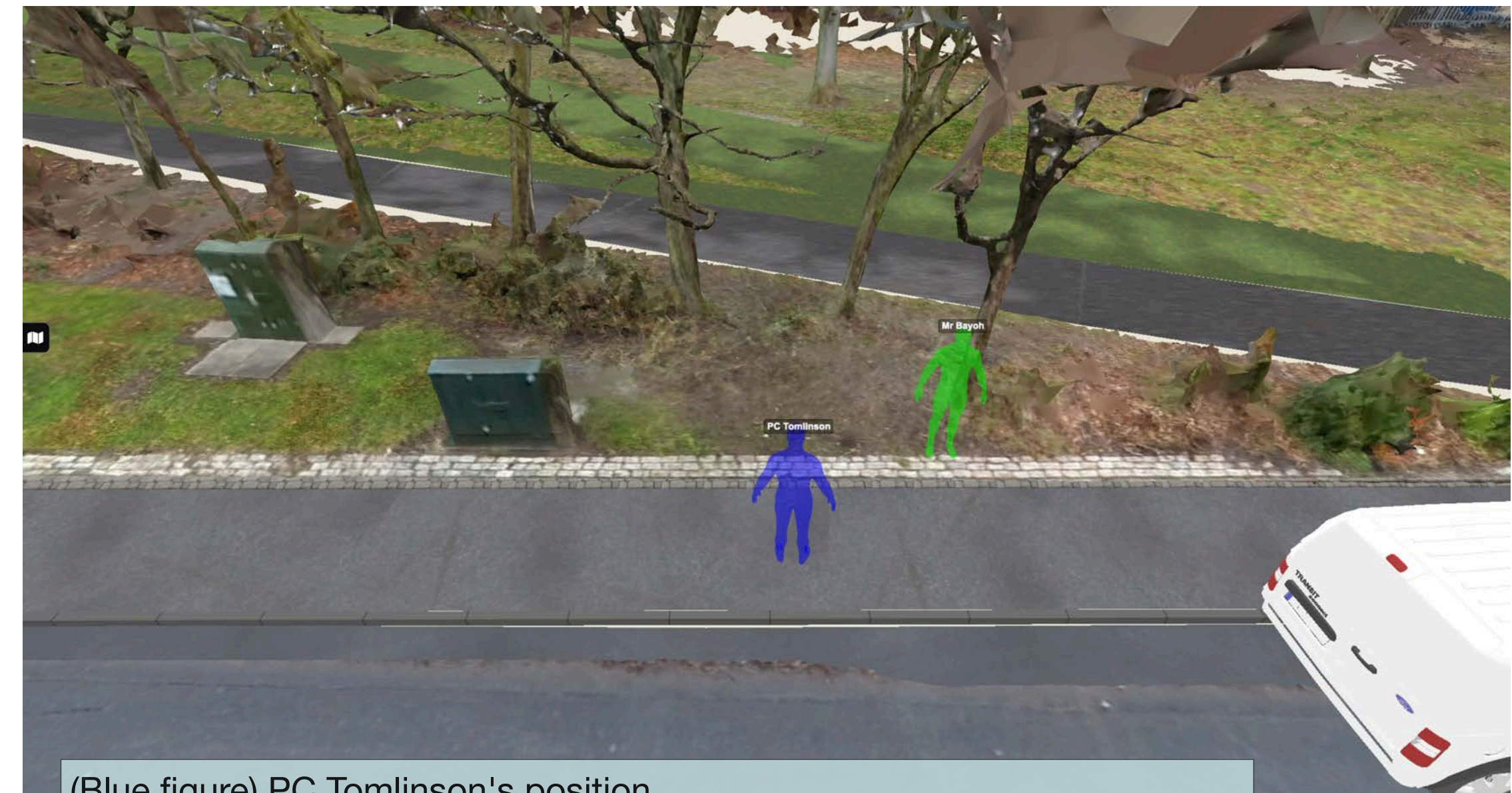
PC TOMLINSON'S IMAGES

C.5 PC Tomlinson describes Mr Bayoh passing him to his right side



- (1) First possible location identified by PC Tomlinson when asked to identify the position where he adopted a defensive stance with his spray.
(4) Mr Bayoh's movement past PC Tomlinson

(a) Initial locations identified, PC Tomlinson (p) - 25/05/2022. Positions 1 -3 from 02:29:15. Positions 4 - 8 from 02:46:15

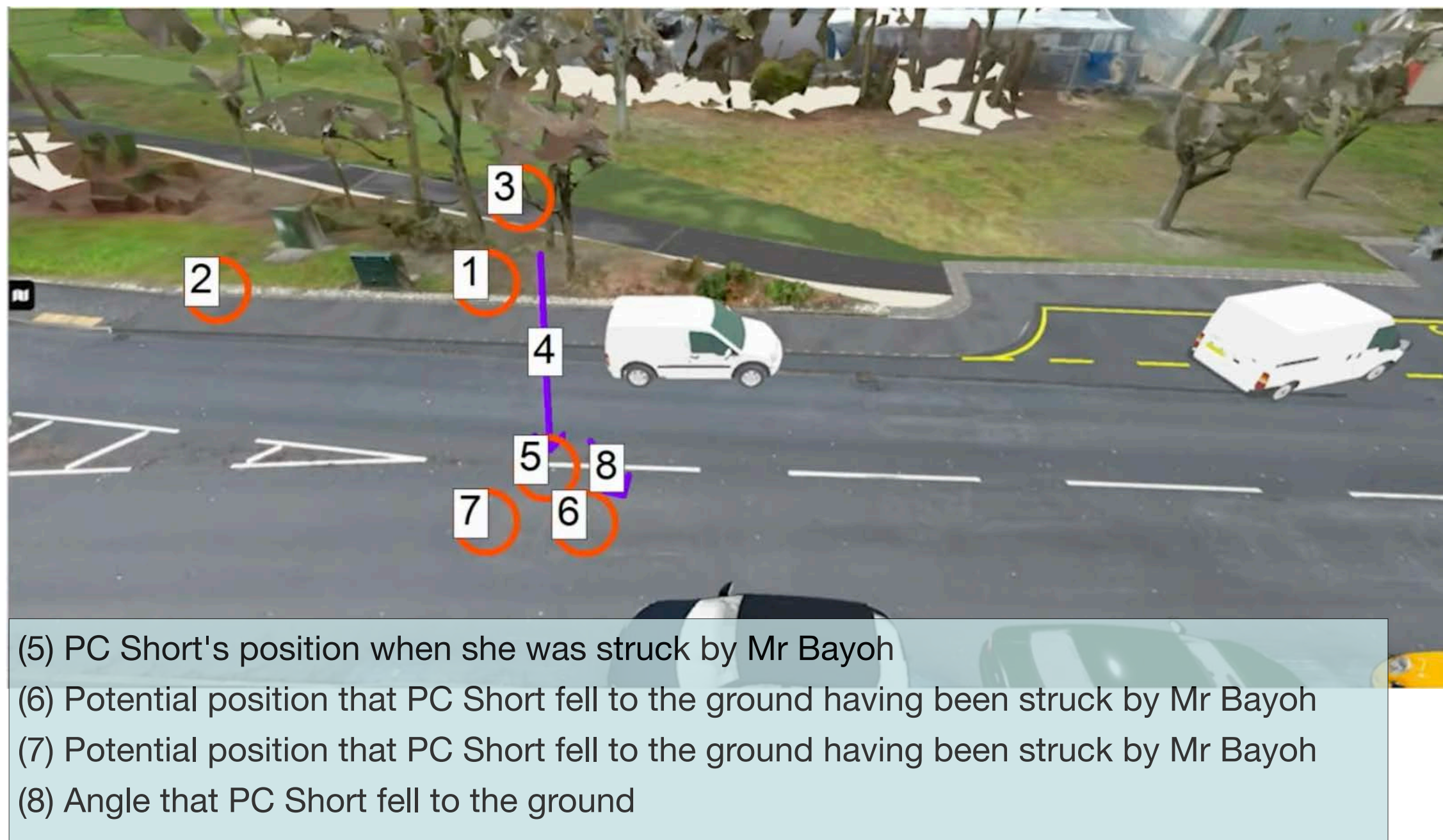


- (Blue figure) PC Tomlinson's position
(Green figure) Mr Bayoh passing PC Tomlinson to PC Tomlinson's right

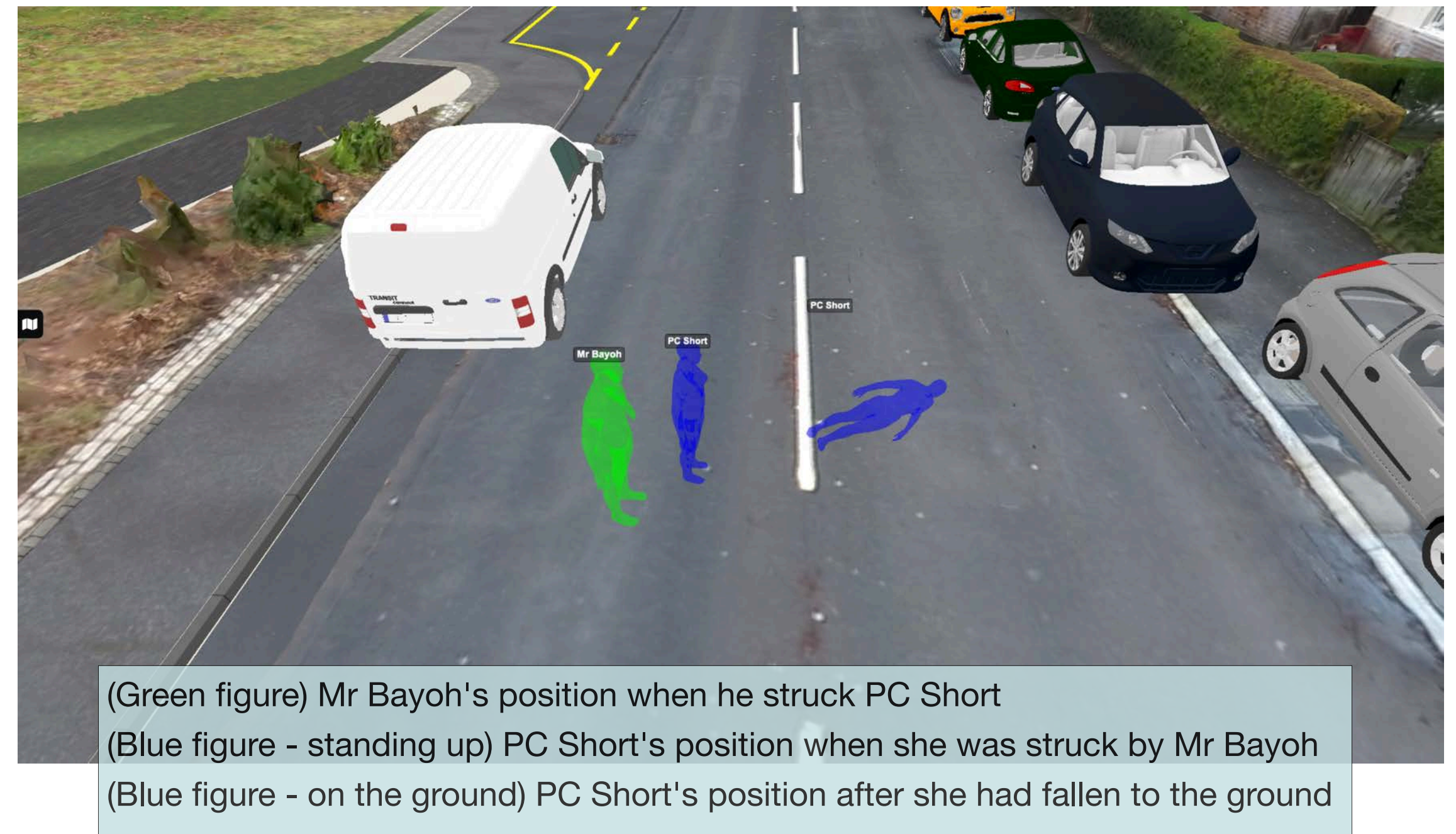
(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 02:57:05.

PC TOMLINSON'S IMAGES

C.6 PC Tomlinson describes PC Short being struck and going to the ground



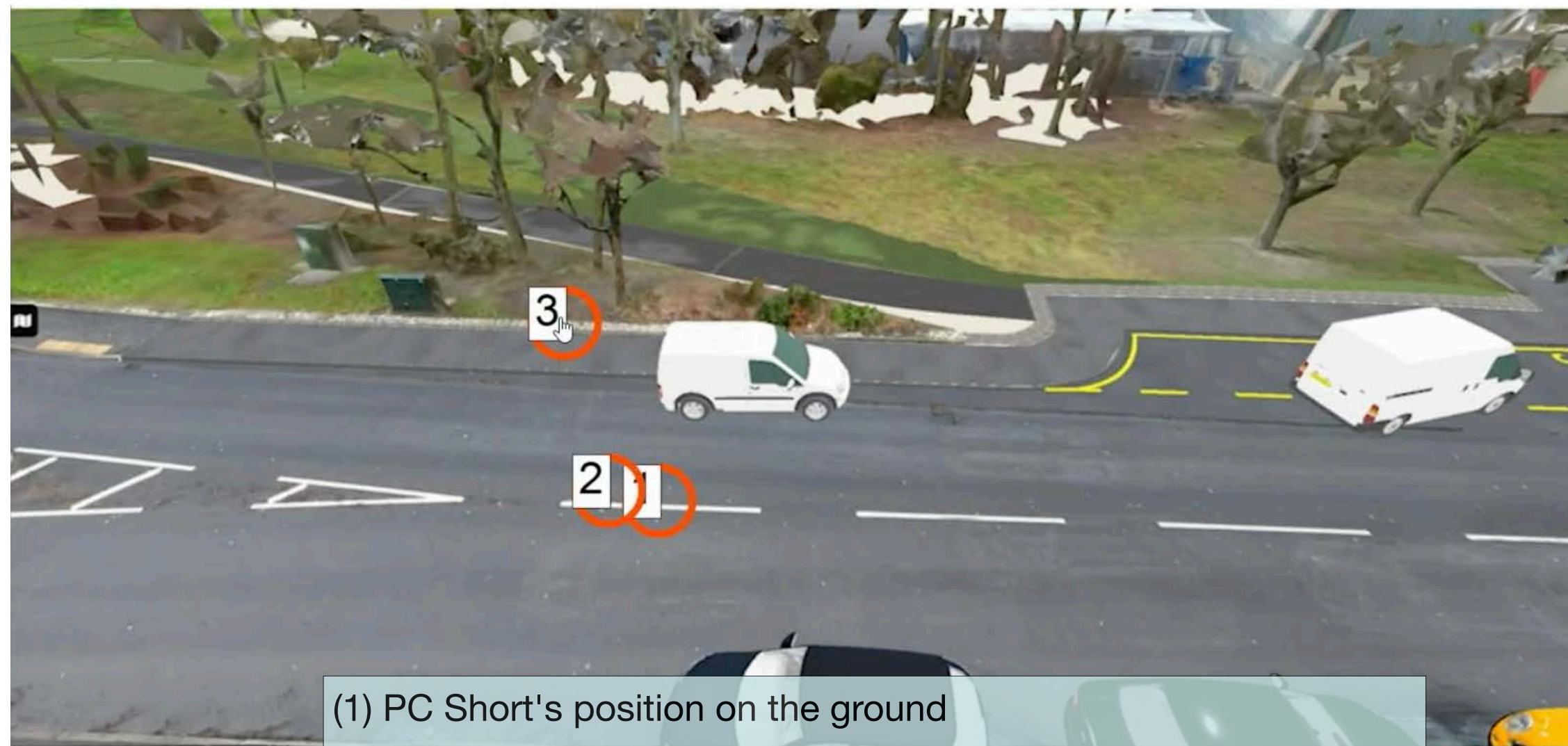
(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. Positions 1 -3 from 02:29:15. Positions 4 - 8 from 02:46:15



(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 02:59:50.

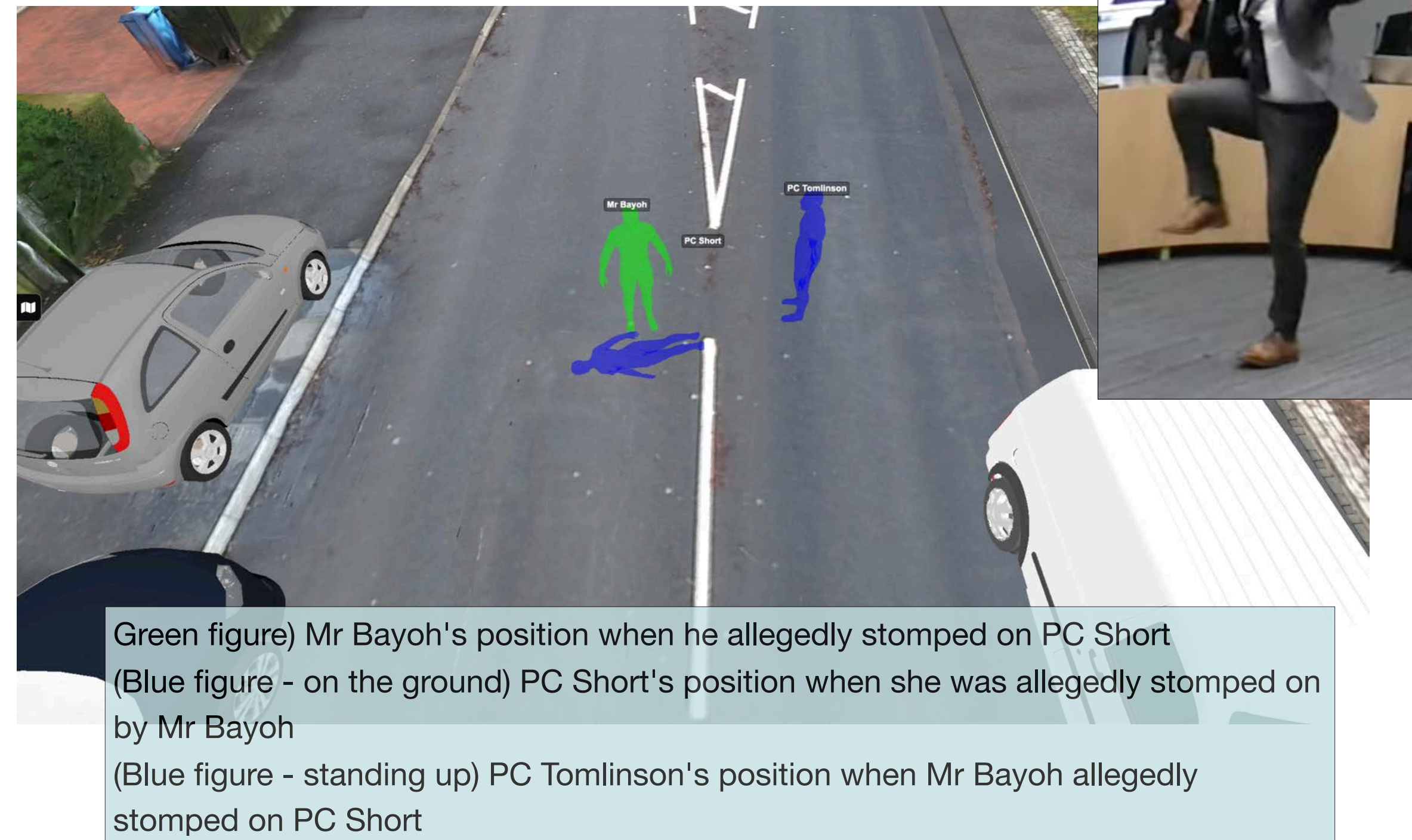
PC TOMLINSON'S IMAGES

C.7 PC Tomlinson describes PC Short alleged stomp



- (1) PC Short's position on the ground
- (2) Mr Bayoh's position when PC Short had fallen to the ground
- (3) PC Tomlinson's position when PC Short had fallen to the ground

(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. From 02:53:35.

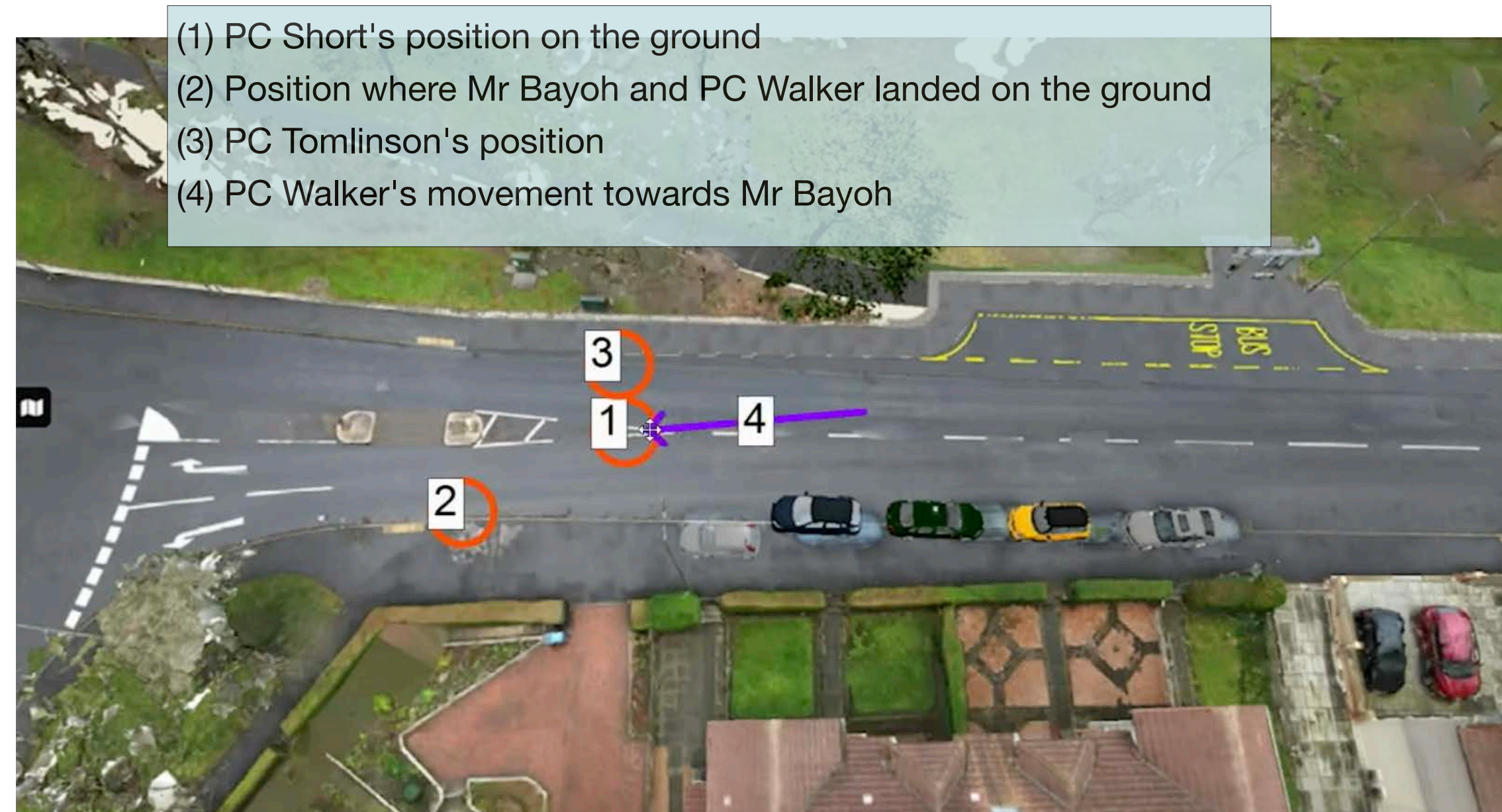


- Green figure) Mr Bayoh's position when he allegedly stomped on PC Short
- (Blue figure - on the ground) PC Short's position when she was allegedly stomped on by Mr Bayoh
- (Blue figure - standing up) PC Tomlinson's position when Mr Bayoh allegedly stomped on PC Short

(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 03:05:20 - Inset PC Tomlinson demonstrating alleged stomp, PC Tomlinson (pm) - 25/05/2022. From 02:58:00.

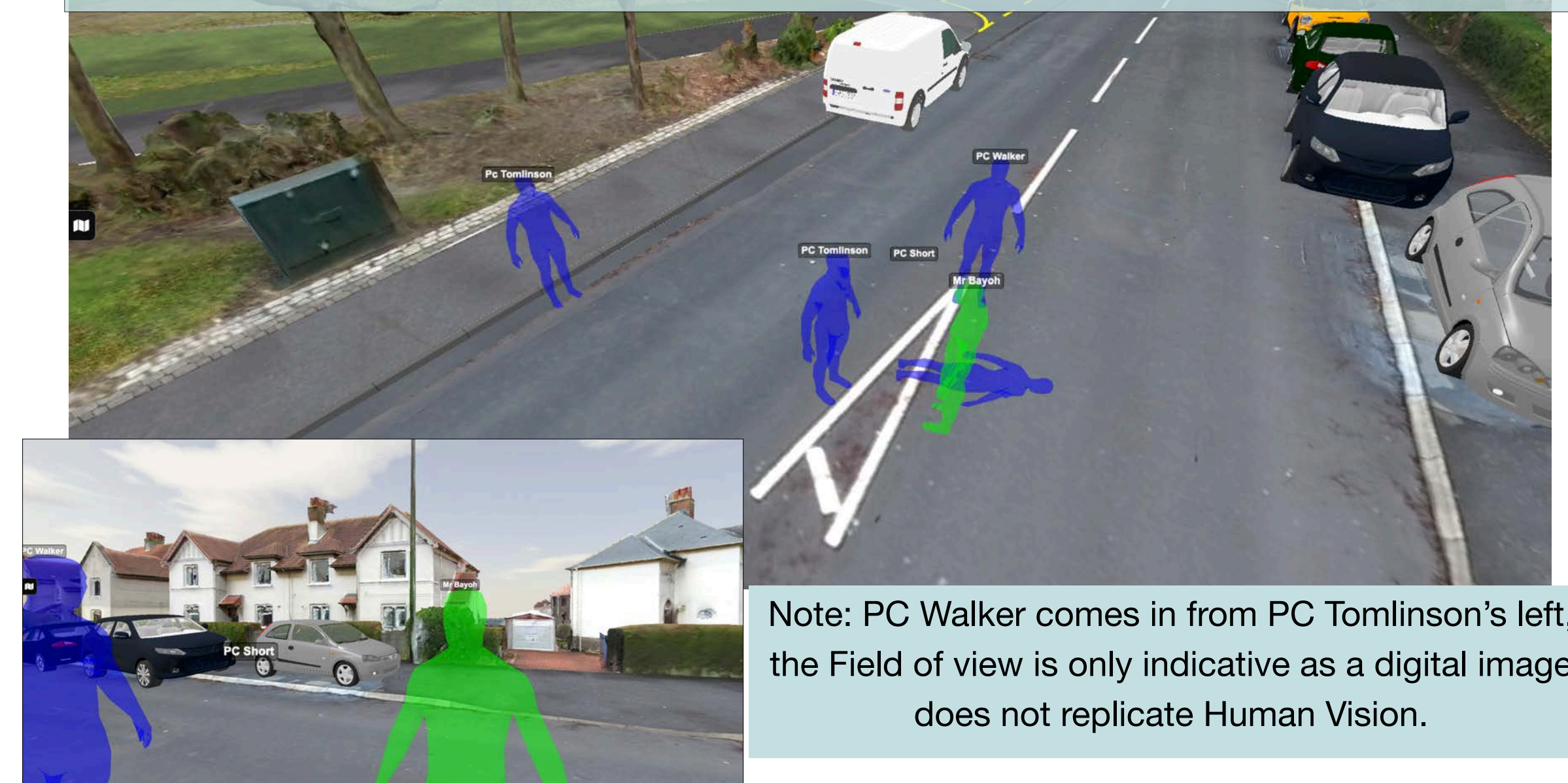
PC TOMLINSON'S IMAGES

C.8 PC Tomlinson describes moving towards and striking Mr Bayoh



(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. Numbers 1 - 2 from 03:30:50. Numbers 3 - 4 from 03:36:00

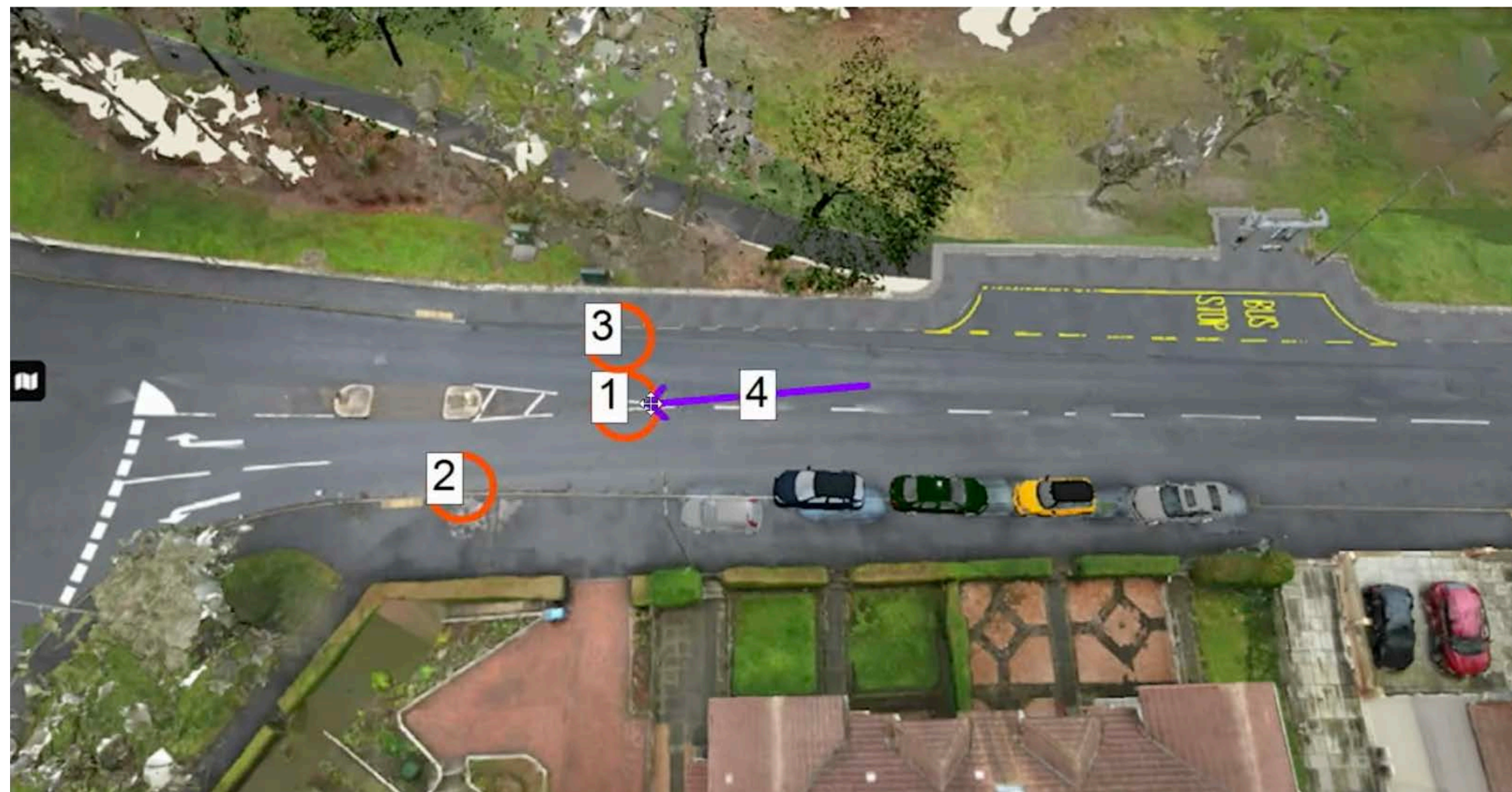
(Blue figure - PC Tomlinson) PC Tomlinson moving forward to strike Mr Bayoh with his baton
(Green figure) Mr Bayoh's position when he was struck by PC Tomlinson
(Blue figure - PC Short) PC Short's position on the ground
(Blue figure - PC Walker) PC Walker's position as he approached from PC Tomlinson's left



(b) Refined positions, PC Tomlinson (am) - 26/05/2022. From 03:09:00. - Inset, Tomlinson's Field of view

PC TOMLINSON'S IMAGES

C.9 PC Tomlinson describes Mr Bayoh being taken to ground



(2) Position where Mr Bayoh and PC Walker landed on the ground

(a) Initial locations identified, PC Tomlinson (pm) - 25/05/2022. Numbers 1 - 2 from 03:30:50. Numbers 3 - 4 from 03:36:00



(Green figure) Position of Mr Bayoh when he landed on the ground

(b) Refined positions, Akhtar Ali and PC Tomlinson (pm) - 26/05/2022. From 00:44:20.

MR K. NELSON'S IMAGES

D.1 Mr Nelson describes people's positions as police arrive



- (1) Mr Bayoh's position when he was first seen by Mr Nelson
- (2) The direction of Mr Bayoh's movement
- (3) Position that the male police officer who came out of the driver side of the vehicle moved to
- (4) Mr Bayoh's position when the male officer was at position (3)
- (5) Male officer moving backwards from position (3)
- (6) Direction of Mr Bayoh's movement after male officer had discharged his spray

(a) Initial locations identified, Kevin Nelson (am) - 31/05/2022. Positions 1 - 2 00:40:00. Positions 3 - 5 from 00:43:50. Position 6 from 00:48:55

Officer height set to 1.73 metres - Average Male

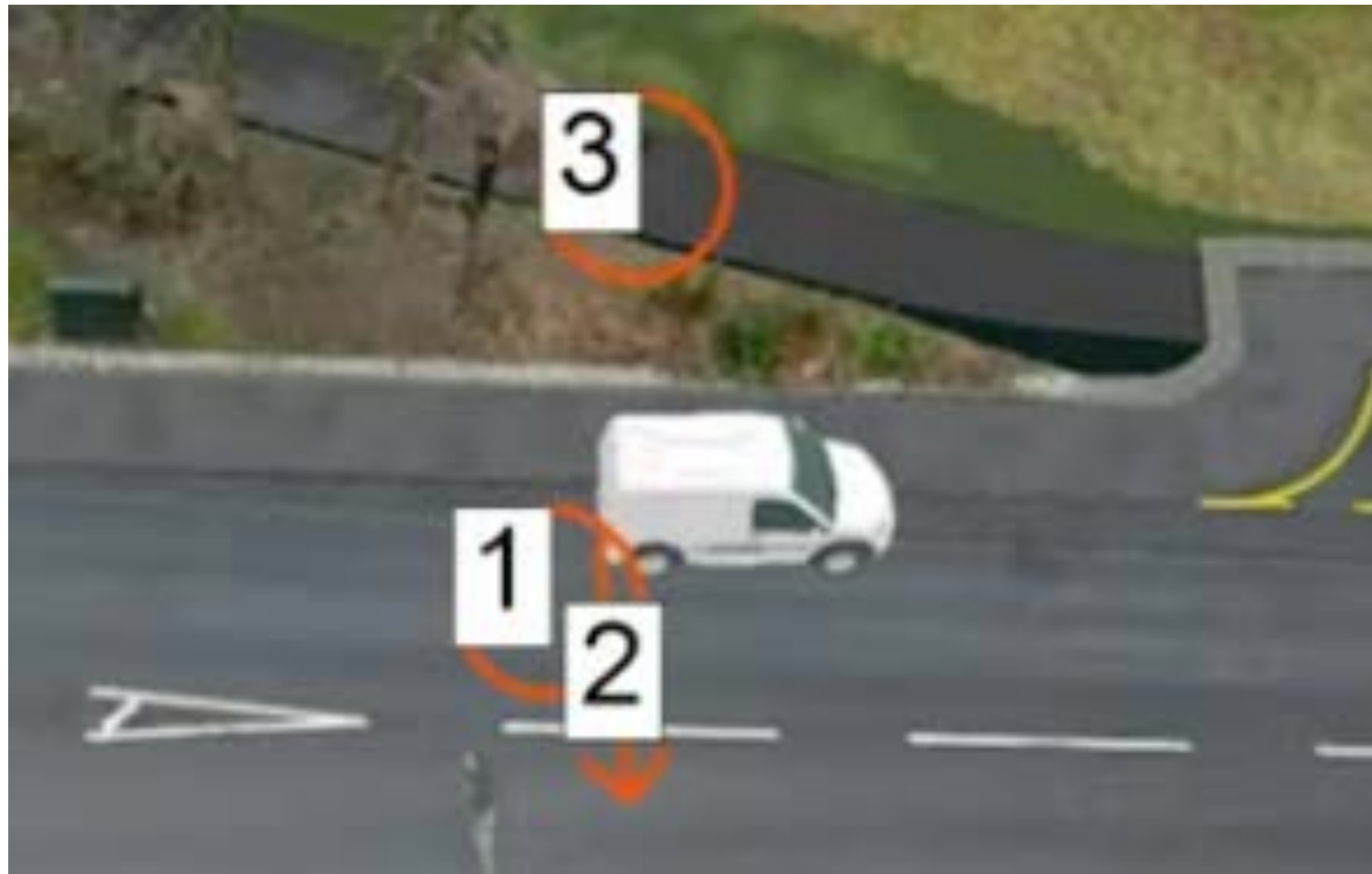


- (Green figure) Mr Bayoh's position after he had moved along the pavement
- (Blue figure - PC_01) Position of male police officer who Mr Nelson saw "pointing with something at his side"
- (Blue figure - PC_01_a) Position of same male police officer as he moved backwards trying to maintain a distance with Mr Bayoh
- (Blue figure - PC_01_b) Further position of male police officer as he moved backwards trying to maintain a distance with Mr Bayoh

(b) Refined positions, Kevin Nelson (am) - 31/05/2022. From 02:10:00.

MR K. NELSON'S IMAGES

D.1a Mr Nelson describes people's positions as police arrive



INSET, K. Nelson (am) - 31/05/2022. From 00:51:50.

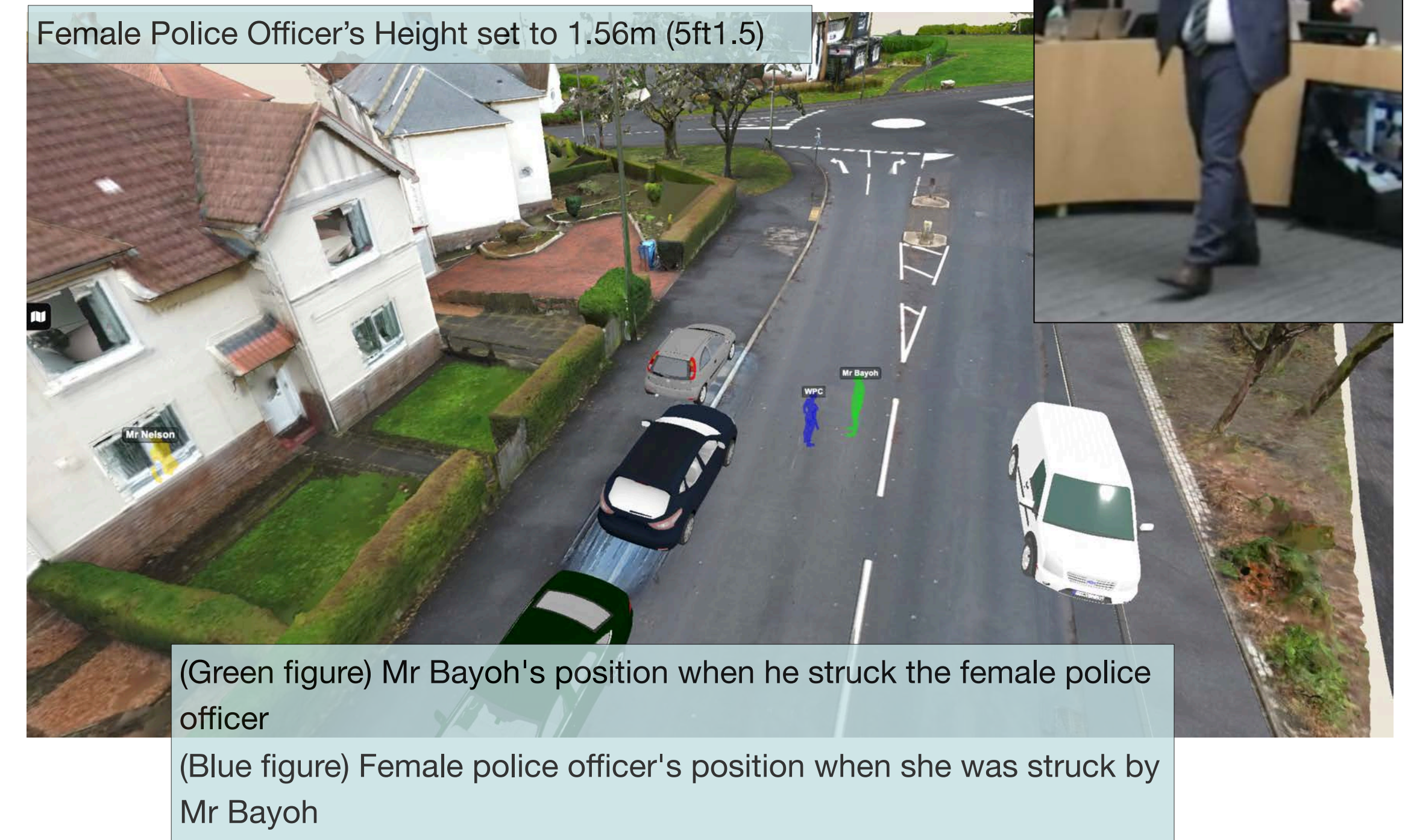
- (1) Position of female police officer
- (2) Mr Bayoh's movement
- (3) Male police officer affected by the spray after male officer had discharged his spray

MR K. NELSON'S IMAGES

D.2 Mr Nelson describes the location of the female officer as she stumbled and fell



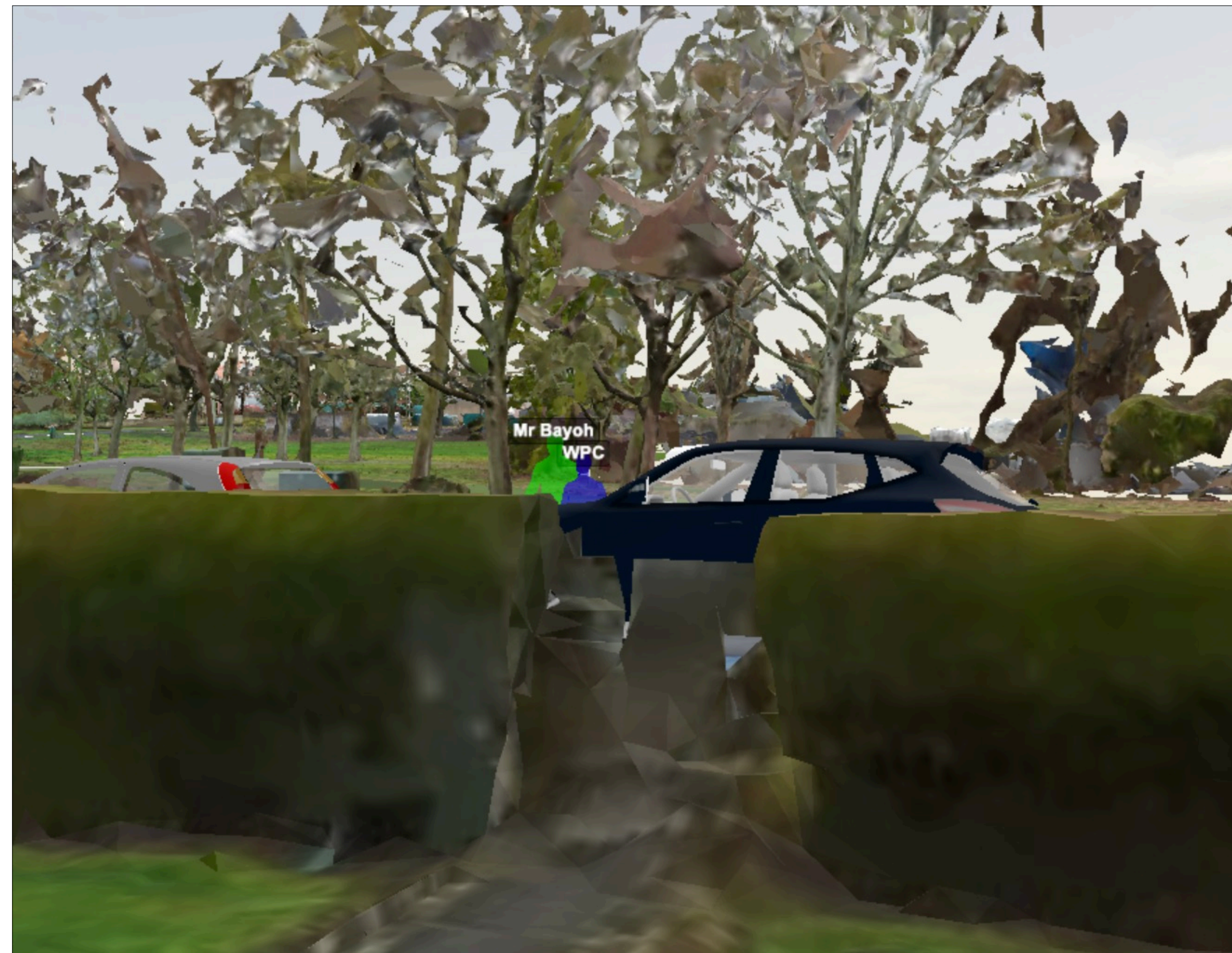
(a) Initial locations identified, Kevin Nelson (am) - 31/05/2022. From 00:59:10



(b) Refined positions, Kevin Nelson (am) - 31/05/2022. From 02:14:00
Inset (c). Demonstration of how female officer was struck by Mr Bayoh. Kevin Nelson (am) - 31/05/2022. From 02:04:50.

MR K. NELSON'S IMAGES

D.2a Representation of Line of sight from window of Mr Nelson



Kevin Nelson (am) - 31/05/2022. From 02:14:00

Adjustment to methodology

- Closed Session for his evidence.
- An operator wasn't present therefore Stages 2 & 3 not conducted.
- Stage 1 images were conducted only.

PC PATON'S IMAGES

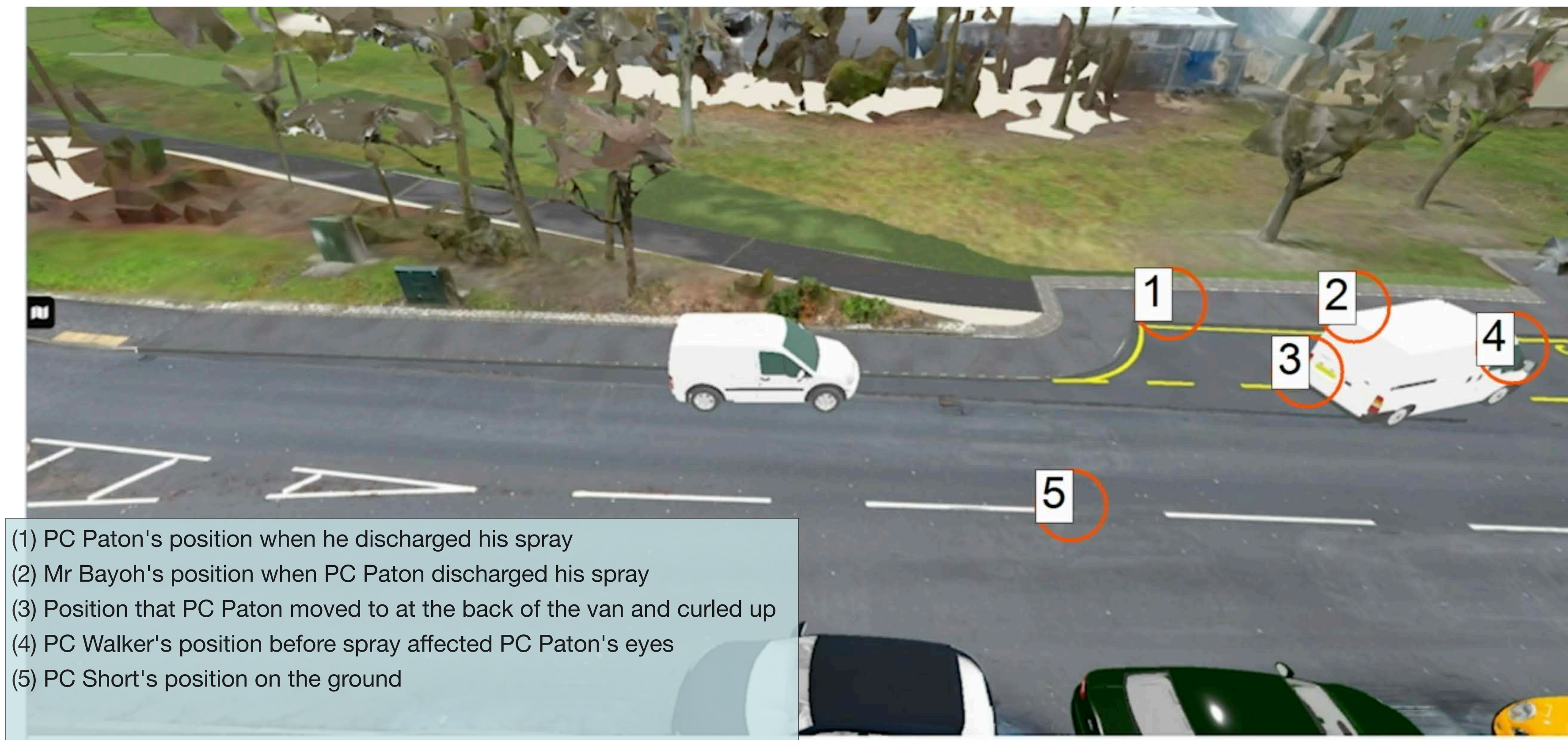
E.1 PC Paton describes Mr Bayoh's position as the van arrives



Initial locations identified, Alan Paton (am) - 21/06/2022. From 00:40:50.

PC PATON'S IMAGES

E.2 PC Paton describes the location of people after leaving the van



Initial locations identified, Alan Paton (am) - 21/06/2022. From 01:12:30

PC PATON'S IMAGES

E.3 PC Paton describes the location of the restraint



Initial locations identified, Alan Paton (am) - 21/06/2022. From 01:22:30.

