

SUMMARY REPORT OF A TECHNICAL INVESTIGATION INTO THEFT AND VANDALISM OF ROAD INFRASTRUCTURE ON THE N1, N2, N7 AND R300 FREEWAYS

1. BACKGROUND

During the afternoon of Monday, 8th February 2021, a number of children from the nearby residential settlement entered the road reserve of the road interchange between the N2 and Borcherd's Quarry Road. At some time later that afternoon, they were spotted playing on the embankment of the bridge crossing over Borcherd's Quarry Road on the Cape Town - bound carriageway of the N2, unaware that the area they were playing in had been undermined through criminals stealing fill material from the embankment over the preceding weekend.

The fact of the matter is that criminals targeting the theft of sand and other building materials from public infrastructure is an ongoing problem along certain stretches of the N2, the N1 and the N7. Other road infrastructure is also being targeted by criminals. Road signs, guardrails, fencing, block paving, streetlights and traffic signals are frequently stolen or vandalised soon after they are installed.

2. PURPOSE OF THE REPORT

The purpose of this report is not to duplicate what will be done by the SAPS and the various emergency and response services.

The purpose of this report is rather to look at the background of the main cause of this incident and propose possible actions that could be considered and investigated to mitigate against that.

3. HISTORY OF THEFT AND VANDALISM IN ROAD RESERVES

The scale of the problem is best illustrated by looking at the twelve-month period from the end January 2020 as set out in the table below.

Table: Summary of interventions over previous 12 months commencing 1 February 2020

Infrastructure Type	Borcherd's Quarry		N2 (inc Borcherd's Quarry)		N1/N2 and M5	
	Theft	Damage	Theft	Damage	Theft	Damage
Road Signs/Guardrails	25		43		57	
Cables <small>(from Aug 2020)</small>	12		12		12	
Fill/Materials	4		8		13	
Pavers/Bollards	3		5	1	13	3
Gabions		1		1		1
Fencing	1	1	3	3	18	9
Dumping				2		5
Total	45	2	71	7	113	18
As % of Total N1/N2/M5	40%	10%	63%	35%		

This list does not include all categories of criminal activity which takes place within these road reserves e.g. erection of illegal structures, vagrants, construction and use of illegal accesses and illegal electrical connections.

Cognisance must also be taken of the fact that over the same period of time, there have been no fewer than 30 incidents involving assault, attempted robbery or robbery of the various routine road maintenance teams of the contractor responsible for these sections of road. These records are only the reported instances for the road maintenance teams – it excludes the numerous other accounts of intimidation and threats which are levelled against these teams on an almost daily basis. The streetlighting teams have been operating with support of armed security personnel for a number of years now because of the threat posed to these teams during their operations.

4. APPORTIONMENT OF RISK

In the case of the C1114 and C1106 contracts, the contractors are required to take out and maintain insurance of the works as well as third party liability insurance in the name of themselves and the Department for any incidents arising out their works.

The routine road maintenance standard operating procedures require that roads are inspected regularly, which frequency is typically determined according to importance and traffic volume associated with that route. In the case of the N1, N2, N7 and M5 (all falling under Contract C1106) that frequency is at least five times per week. Further inspection is provided on a regular basis by the supervisors or consultants managing the teams or contracts. Other fault/incident reporting structures available include the Traffic Management Centre (TMC) hotline (within the City of Cape Town) and the Department's hotline/website (for the entire Western Cape) which allow members of the public to report incidents. The Freeway Management System – operated from the TMC – is a joint initiative between the WCG, CoCT and SANRAL aimed at managing traffic on selected major routes in and around the City, also identifies and reports incidents through the CCTV system.

Further contract operating procedures stipulate the maximum response times and methods for certain types of reported problems.

The Road Ordinance (19 of 1976) empowers the Department to make good any defects to the road and remove any illegal structures. It is a criminal offence, punishable by up to six months in prison, for any person to damage or steal any road infrastructure, intimidate or threaten any official or contractor going about their lawful business or erect any wall, structure or barricade within a road reserve or deposit. However, it does not empower the Branch or its contractors to effect the arrest and removal of any transgressors.

5. CHALLENGES

The reserves of roads are often the only available areas of open ground for recreation and are often seen as the safest areas for pedestrians, grazing of animals and sports matches. Expansion of communities is also partly to blame for the theft of materials from the road reserves – with members of the community justifying these actions as necessary in order that they can obtain the materials for their residences.

It is the view of the Branch that the overall solution to these problems will only be achieved with the direct involvement of the various law enforcement agencies which are themselves under pressure.

6. RECOMMENDATIONS ON THE WAY FORWARD

Fencing and barricading

No amount of fencing or barricading will make a road reserve completely inaccessible to persons other than legitimate road users. The very nature of a road requires access points for vehicles, which in turn can provide equal access to those on foot, bicycle and even horse back. In addition, such measures when taken are constantly vandalised, damaged or even stolen over time. However, careful consideration will be necessary before embarking on this solution.

Reporting of incidents

A critical look at reporting processes is necessary. The Chief Directorate: Departmental Operations have undertaken to develop a uniform and standard reporting procedure for future use. This will leave the Department in a better position to be able to plot and evaluate incidents and determine whether additional or enhanced interventions are required.

Permanent and temporary surveillance and response

It is proposed that additional fixed surveillance cameras, linked to the TMC/FMS system be installed at key hotspots to allow for constant supervision and monitoring of these areas. Furthermore, it is proposed that drone technology be investigated to ascertain whether it is viable to supplement the regular patrols by monitoring areas considered unsafe for foot patrols or otherwise obstructed from view or inaccessible.

Involvement of CPFs, NWAs, Private Security firms

It is proposed that the Department engage with and encourage Community Policing Forums, Neighbourhood Watch Associations and even Private Security firms to report suspicious activity within our road reserves to SAPS and the TMC. This will increase the visibility of these activities and allow both enforcement agencies and the Department to monitor incidents for planning and strategic purposes.

Enforcement and response by traffic and law enforcement agencies

It is proposed that the Department engage with SAPS, Metro Police and Traffic Services to establish a liaison group that can investigate and consider developments regarding criminal activity within roads reserves, with the aim of developing shared strategies to combat and mitigate such activities.

Stockpile and storage areas

It has been observed that theft of material is largely performed by means of reversing LDVs and small trucks up to the face of the stockpile and "pulling" the material into the vehicle. Steps must be taken to prevent this.

"Scorched Earth" interventions

It is proposed to continue with interventions to remove unnecessary obstructions and vegetation cover from within road reserves. The removal of the vegetation in the medians between carriageways, removal or trimming of vegetation cover above 500 mm or less than 3.5 m from the road reserves, placing of sharp stone and steep stone pitching of flat areas in hidden areas, installation of longitudinal "razor wire" berms across high pedestrian areas and other interventions can be implemented through routine and periodic maintenance programmes.