ENFORCING ESTATE RULES

"Traffic law enforcement remains one of South Africa's biggest problems", (Transport Minister Sibusiso Ndebele Traffic Safety Summit, 2010-09-10). It is a known fact that numerous road users in the Woodhill Residential Estate and County Club deem it necessary to flaunt the rules of Woodhill. The guilty parties are not limited to residents, but include contractors and delivery vehicles too. To this end the Woodhill Homeowners Association (HOA) are thinking to engage the services of a traffic services consortium. The company is headed by Licence Plate Recognition cc, trading as I-Cube, a Durban based company, which will assist with the monitoring of traffic flow and driver behaviour in Woodhill using a wide range of technology. This will include mobile speed enforcement, IP and CCTV technology, to name a few. The other consortium members include Sentient Technologies, Video to Data and ASD.

It is the objective of Woodhill to remain as the "ESTATE OF CHOICE" in Gauteng and the surrounding areas. The HOA endeavours to provide a harmonious, safe and peaceful small-community lifestyle, structured around an excellent golf course, for both residents and visitors. In order for the HOA to achieve this objective, the Rules and Regulations in place are required to be applied and managed with due care, circumspection and discretion, and when required, to be enforced with the necessary due process.

Transport minister Sbu Ndebele warned motorists that the 1, 147 per month average road death toll meant they should be asking when rather than if their turn was coming...

The unfortunate truth is we average 1, 147 road accident deaths each month – way in excess of the 20 per month and 120 per month recorded in Australia and New Zealand respectively. Adjusting for our respective populations – there are roughly 49 million people in South Africa, 21 million in Australia and 4.5 million in New Zealand – we dominate the road accident deaths per 100 000 citizens per annum by quite some margin. We're miles in the lead with 28.08 deaths per 100 000 citizens per annum compared to Australia (6.85) and New Zealand (5.33).

According to Road Traffic Management's Road Traffic Accident Report 2009 there were 10, 857 fatal crashes and 13, 767 accident-related deaths. A total of 4 066 drivers, 5 023 passengers and 4 678 pedestrians lost their lives.

I-Cube boast the latest ground breaking offering, adding a new dimension to providing a meaningful and mutually rewarding service in gated communities, a society where safety and security are highly prioritized and valued.

Integrated, Intelligent Imaging or I-Cube was founded in 2000 and has developed an extensive range of technical experience with highly skilled staff, allowing for the provision of expertise in a wide range of technical disciplines. A passion for service sets I-Cube apart in delivering purpose design safety and security solutions which always deliver results.



FIGURE 1: All vehicles will be logged at multiple points



FIGURE 2: The 1st image of two used to calculate the speed



FIGURE 3: The 2nd image of two used to calculate the speed



ENFORCING ESTATE RULES (CONT.)

I-Cube have a system of integrated hardware and software including CCTV cameras that can be used to monitor traffic in terms of licence plate recognition, image analysis, verification, high and average speed determination. The quality of the images our equipment generates allows us to identify vehicles and drivers committing violations enabling the enforcement of a variety of traffic safety rules. Our systems are set up in several residential developments, municipalities, ports and sites around South Africa and Internationally. In some developments it has cut traffic violations by as much as 99.50% and assisted the Homeowners Association by changing driver behaviour, in turn making the environment safer for all, especially children and those who enjoy walking.

Using license plate recognition (LPR) technology to read the license plate of a vehicle at two separate points along the same path, our LPR-ASD system is able to calculate the average speed of that vehicle over the distance between the two points. Average Speed Determination (ASD) is the average speed a vehicle travels over a predefined distance. Quite simply the distance divided by the time a vehicle takes to cover that section of road. ASD is more accurate, fair and effective method of enforcing the speed limit as the driver is required to maintain an average speed below the allowed speed limit continuously to avoid being penalised. Unlike other traffic calming mechanisms, such as speed humps, our ASD technology only targets those who exceed the speed limit. Our ASD system is fully automated and operates 24 hours a day, 365 days a year, in any weather conditions.

In order to facilitate payment (it is expected that some transgressors may wish to remain anonymous), a number of options will be made available for the collection of fines violations including: Web-Based Payment Portal where the images and videos of the offence are available for the offender to review, and Online Payments where the offender may use their normal internet banking service to effect payment. In all cases payments will be effected using the Violation

Tracking Number (VTN) printed on every fine issued. This will allow for manual and automatic processing and allocation of paid fines.

It is important to remember that the installation of this system:

- **A) INCREASES SAFETY** By targeting vehicles and drivers who disobey the estate's traffic rules and thus a safer environment is created for residents and children and
- **B)** TARGETS OFFENDERS The system specifically identifies vehicles that disobey the estates traffic rules, leaving law abiding members unaffected.

If we hope to stem the tide of death on the country's roads we'll have to work on changing attitudes. Until then the 1, 147 per month average will probably escalate in line with the increase in road users each year.

THIS IS CURRENTLY JUST A PROPOSAL THAT THE BOARD OF DIRECTORS ARE CONSIDERING. IT IS SUCH A PITY THAT THE HOA HAS TO INCUR HUGE COSTS TO FORCE A MINORITY OF DELINQUENTS TO ADHERE TO THE ESTATE RULES



	F RECORDING OF ROAD TRAF	
	INFRINGER	Infringement Notice N ATL- 5536
Vehicle Details: C	JS413MP	
Infringer Details:		
Home Owners Address		
Home Owners Address		
	INFRINGEMENT PARTICULAR	S
ule 12 do apply to and are binding upon a exidents , visitors to his erf as per rule 16 a	members, residents and visitors. The mem ed 37, in terms of rules 36 regarding thresh. I. The infringement below refers to rule 56 and marked road signs arou in Atlantic Base by to read the Bosse plate of webble. C.	IS413MP between two fixed points along
	TON, DATE AND TIME OF INF	
First Position: A8_A_1	First Position: AB_A_2	License Plate Recorded
		CJS413MP
		Distance Covered: 270 m Time Over Distance: 8.01 Em Avg. Speed Over Dist.: 125.45 Km Speed Limit: 35 Km/h Over Speed Limit: 20.45 Km/h
Date: 6/11/2010 11:24:31AM	Date: 6/11/2010 11:24:40AM	Fine Amount: R1750
To avoid further action plea	ae enaure payment is made within 20	days of the date of the offerce.
IMPO	ORTANT PROVISIONS AND INFOR	RMATION
lebts on due date. In contravention of a	ny of the abovementioned rules the off t to appeal to the board against the abo	these rules and / or the payment of all his izer as appointed may act under rule 60 of overnentioned penalty in terms of the Appe
Onsite:	Off-Si	
 Direct Debit via Debit / Credit 0 Proshop / Reception (cash) Added to monthly levies 		ebsite (www.NuTreffic.co.ze) : ABSA 4021111809
9	MALTECH	NuTraffic

FIGURE 4: A typical ASD fine showing the vehicle at both locations

Home Owners A Tel: 011 74 Fax: 01174 Email: hoa@ebot P.O. Box 11919, R Reg. No.: 2005/	91620 91630 segplf.co.za ynfield, 1514	BOTS F & COUNTRY EST Your seiges lightly	E
No	tice of Estate Rules V	iolation	
Vehicle Registration Number:		VTN:	
Details of Driver: Name:		ID. No.:	
#L + B - III			
First Position	Second Position	License Plate Re	ecorded
First Position	Second Position	DVR 158	ecorded FS
First Position	Second Position	DVR 158 Distance Covered:	212m
First Position		DVR 158	212m 10.101secs
First Position		Distance Covered: Time Over Distance:	212m
First Position 02/09/2010 – 13-22:45.567		Distance Covered: Time Over Distance: Min. Avg. Speed:	212m 10.101secs 75.56km/h

FIGURE 5: A typical violation where both the front and rear of the vehicle can be seen