Economic Development Committee

Inquiry into the road safety benefits of fixed speed cameras

Submission 38

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admin@singletransportservices.com.au

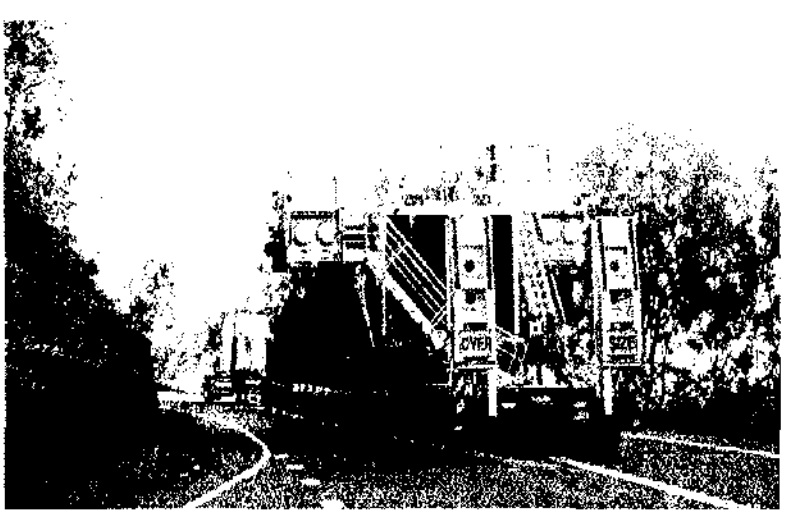
The Research Director
Economic Development Committee
Parliament House
George Street
Brisbane, Qld. 4000
edc@parliament.qld.gov.au
30/04/10
Ref: Issues Paper No.2

Re: Inquiry into the road safety benefits of fixed speed cameras

I was contacted by the office of the Member for Mackay, Minister Tim Mulherin, requesting my input into this inquiry.

I have been working with State and Federal Ministers, Police, Main Roads Departments, the Mackay Road Accident Action Group (RAAG), Australian Trucking Associations, Queensland Trucking Association, Natroad, Transport Women, and all stakeholders for many years to try and address the horrific numbers of crashes, issues and closures of the Eton Range which is located 45 kilometres west of Mackay. This range is a Critical Infrastructure Link of Major Importance to our National Economy.

Crashes, loss of traction of heavy vehicles, huge loads over 200 tonne and 10.5 metres wide, combined with MRD official speeding stats in February 2008, and in June 2009 show this site should be the first location outside the South East Corner to see the installation of a fixed speed camera.



Mackay Police has previously requested a fixed speed camera be placed at the top of Eton Range. Statistics have shown that a very large percentage of these crashes on the Eton Range are speed related and the MRD speeding statistics are horrifying.

RAAG's submission "Vital Infrastructure of National Significance Peak Downs Highway Eton Range Re-Alignment" was presented to Federal & State Politicians 21.12.2007. (Copy available)

I will attach three submissions (1-4) with photos which will show why a speed camera should be installed at Eton Range. These should be read in conjunction with this current submission.

1. "Eton Range Peak Downs Highway". I have presented this to the Peak Downs Corridor Road Safety Committee Meeting which was made up of Police, MRD, and road safety stakeholders at Nebo 24.2.2009. I have also presented this power point to state and federal politicians. This clearly shows why Eton Range should be allocated a fixed speed camera.

2. "Highway Madness" showing an update of that presentation and another heavy vehicle crash 27.4.2009.

3. Infrastructure Australia – "Priority for Realignment of the Eton Range" 15.10.2009. This submission reached the 2nd round.

4. MRD speeding stats June 2009.

We have met with Prime Minister Kevin Rudd and he advised "He knew more about Eton Range than any other road in Australia". During meetings at both Federal and State Country Cabinets we meet with over a dozen ministers to highlight the issues on Eton Range. One of our RAAG members Dr Dale Hansen, head of the emergency department at the Mackay Base Hospital, advised ministers "His worst accident scenario in this district has been identified as a crash on Eton Range involving a full bus load of drunken footballers, miners or school children and a heavy vehicle." In emergency he has had to deal with so many crashes and fatals from Eton Range. The crashes on the range and over the cliffs of Eton Range have occurred since 1863 when the track was opened for the bullock dray teams between Mackay and Nebo. The current Eton Range follows this same track with its very steep grade and the steepness in one section is approx 14.9% with a 9% cross grade, a "safety ramp" is located on the wrong side of the range requiring all vehicles to cross upcoming traffic to access this ramp, huge drops offs and geological and structural problems.

Following is MRD speeding statistics **13-28th Feb 08.** These statistics showed urgent methods were needed to slow down traffic approaching the Eton Range. During this period, we experienced lots of rain and a major flood occurred in Mackay, 15.2.2008. This closed mines west and traffic was considerably reduced on the Range during this time.

Approaching Range	% Speeding	Max speed recorded
100 km/h zone	58.6%	153.6 km/h
80 km/h zone	82.88%	140.9 km/h
Top of the Range		
60 km/h zone	89.47%	131.2km/h
100m over crest	64.3%	113.4 km/h

RAAG has consistently campaigned to improve safety on Eton Range and road works were completed by Main Roads in early 2009. New signage including large flashing signs was erected at the approaches and at the top of the range and these became operational in May 2009. Police again increased patrols and operations. Many speeding motorists were apprehended.

MRD again conducted speeding statistics and for the **4-23rd June 2009**.

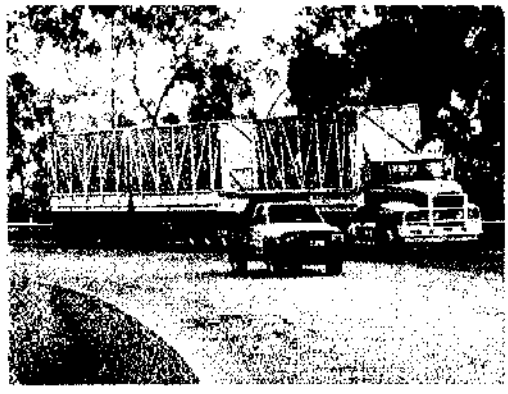
Approaching Range	% Speeding	Max speed recorded	
100km zone	4.83%	**198.1 km/h**	
80km zone	recording rubber broke data incomplete		
Top of the range			
60km zone	81.75%	**129.5km/h**	***
100m over crest	58.86%	**130.6 km/h**	

Data in the 100km zone was greatly improved compared with in 2008 and I feel this is the result of a greatly increase Police presence in this area. However stats showed 13 vehicles recorded between 190-200km/hr, 14 at 180-190, 11 at 170-180, 16 at 160-170, 39 at 150-160, 121 at 140-150, 122 at 130-140, and 305 at 120-130.

Data recorded 35,203 vehicles in the 60km zone at the top which is 250 metres from the drop off point of this very steep range. An alarming 27,734 vehicles were doing more than 60km an hour!!!

The best position for a Speed Camera on Eton Range is at this sign which is located close to the crest of Eton Range. *** 81.75% of vehicles speeding - June 2009 as per MRD statistics.

Data recorded total 35,758 vehicles 100metres below top of Eton Range (close to the safety ramp) with 19,569 vehicles recording more than 60km an hour.



This photo shows a car overtaking a heavy vehicle across double lines in the overtaking lane for vehicles going up the range! Daily heavy vehicle drivers are faced with impatient speeding idiots who continually overtake heavy vehicles on DOUBLE LINES on Eton Range endangering all road users. Within 2 minutes two vehicles were observed speeding & overtaking on the wrong side of the road across double lines. (Photo Barry Ferguson, Manager (Road Freight Strategy) | Road Business Strategy Road Safety & System Management Division | Department of Transport and Main Roads Brisbane.

MRD data on Eton Range shows that a **heavy vehicle** in the **100km zone minimum speed** was recorded travelling at **4.4km/hr** and **100metres over the crest** data shows the **minimum speed at 2.9km/hr.**

Both RAAG and the Police are concerned with drivers who continue to put the lives of not only themselves but and all other road users at risk.

In the next five years Police intelligence indicate an extra 7,500 vehicles per day will use this range. Currently 500 escorted wide loads use this Range each month, many requiring the range to be closed. The number of escorted loads will dramatically increase with the current mining boom.

We believe the only solution is a fixed speed camera for Eton Range.

Carol Single

Director Single Transport Services.
2009 National Transport Women of the Year.
RAAG committee member
QTA, Natroad, ATA, Trpt Women member.

ETON RANGE

Peak Downs Highway

Peak Downs Corridor Road Safety Committee Meeting - Nebo

Carol Single
Mackay Road Accident Action Group
Single Transport Services
24.2.2009

"Eton Range is vital infrastructure of national importance."

RAAG

Identified Eton Range
as a major black spot
with alarming safety issues.

RAAG looked at how to:

- Dramatically improve safety
- Immediate measures to reduce accidents
- Loss of lives
- Continual range closures
- Huge economic costs
- Achieve support from all stakeholders
- Political awareness and support
- Have Eton Range identified for realignment
- Achieve funding for the realignment

Who needed to be involved?

- RAAG looked at all stakeholders who used Eton Range?
- Who is involved with Eton Range issues?
- Who were the accidents, deaths, road closures affecting?
- Who in the Chain of Responsibility needed to know?
- Who were aware but does not want to know?
- Who needed to be approached to assist dramatically improving the safety of Eton Range
- How to achieve this?

IDENTIFIED CRITICAL STAKEHOLDERS

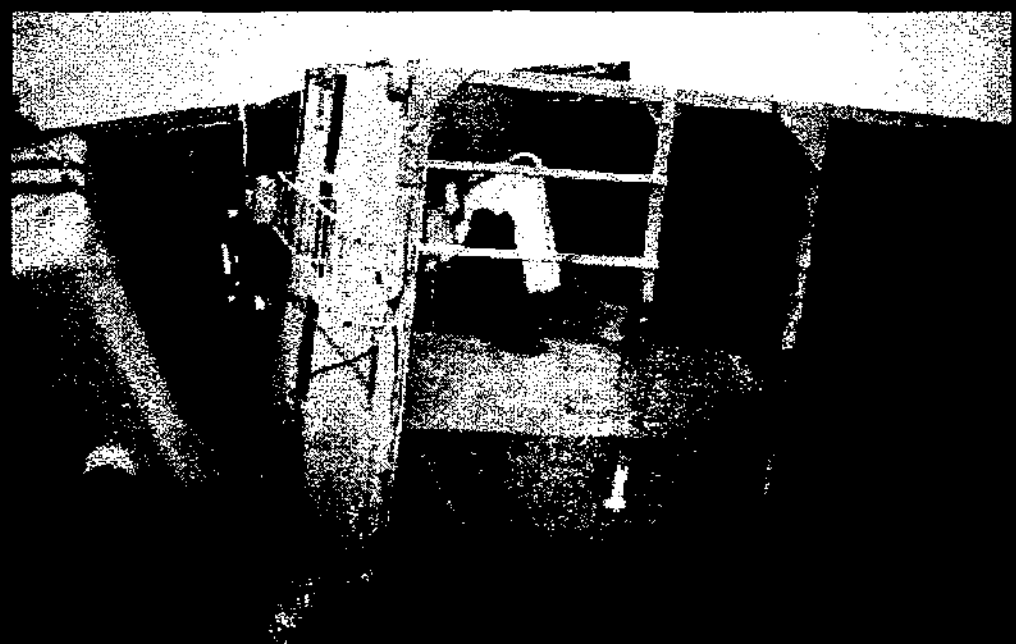
- Police
- Main Roads
- Queensland Transport
- Emergencies Services
- RAAG / MIRSA / Nebo Community Development Group
- Transport Companies
- Politicians – sitting and shadow
- Australian Trucking Association, QTA, Natroads & Livestock Carriers Assn.

- Safe Community Groups / REDEC
- Contractors
- The Mines
- Cattle Industry
- Grain Industry
- Local / Regional Councils
- Buss companies - Schools / Mines
- Parents & Citizens Groups
- Media– Radio, Newspapers & Television
- Emergency – Mackay Base Hospital

RAAG Looked at Past History of Heavy Vehicle Accidents

Semi of Cattle – Roll over Crash Descending 1st Corner

Decades of crashes / incidents on Eton Range have rarely been recorded.
Roll over Crash 1st Corner Descending

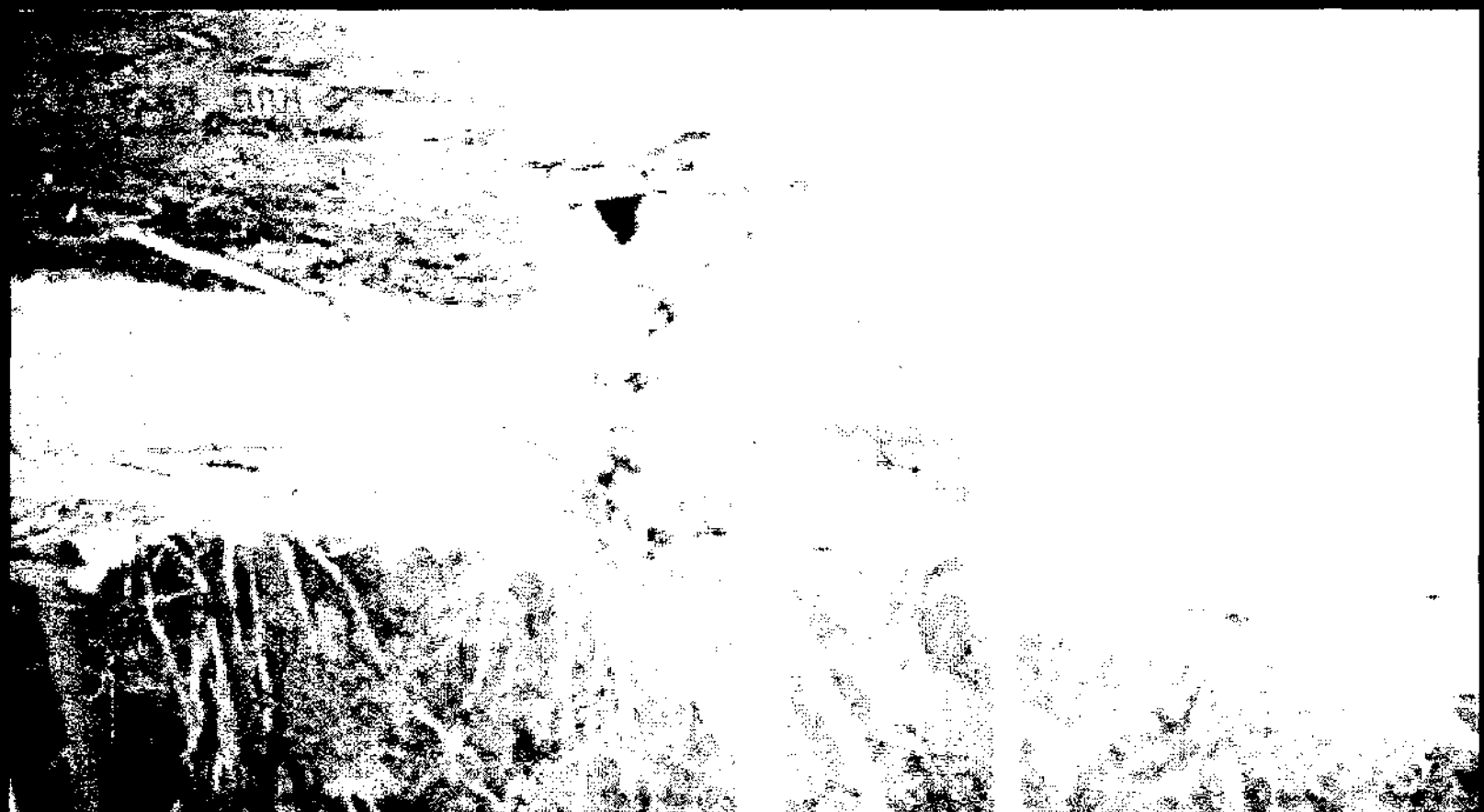


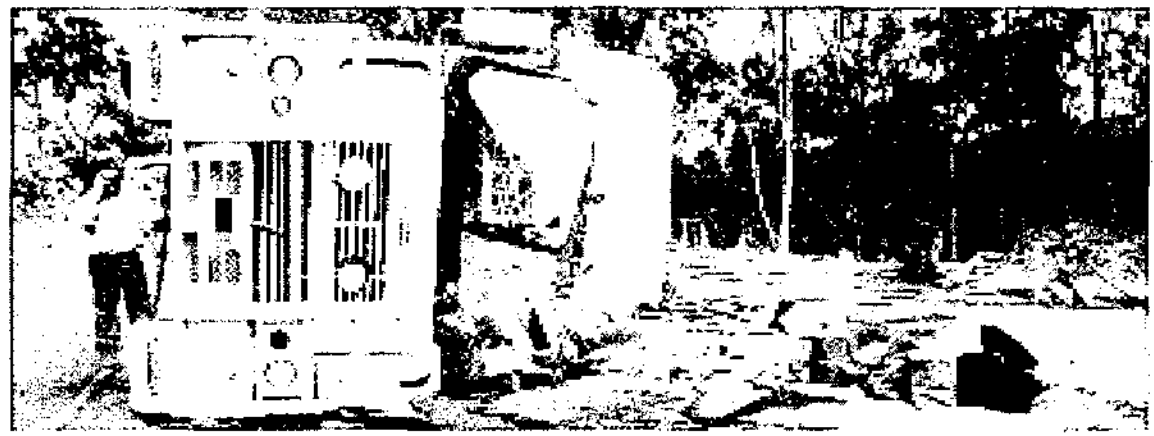
FATAL Roll over Crash 1st corner Fridge Van 10.8.2007

Another life

8 DAYS LATTER - Another Roll Over Crash 1st Corner descending Eton Range 24.8.2007

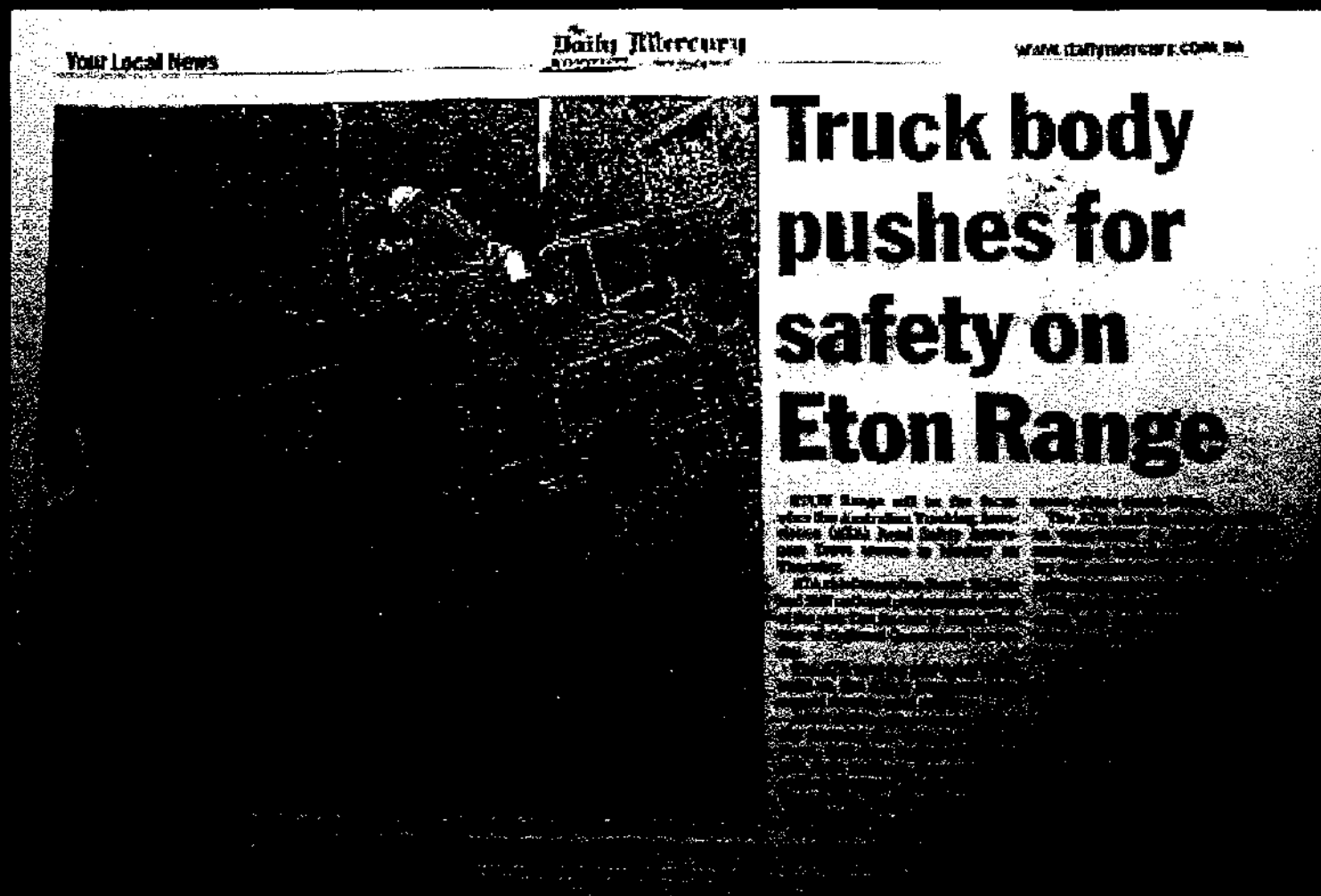
Majority of these Heavy Vehicles Crash well before reaching the "Safety Ramp" which would require the vehicle to cross upcoming traffic to enter a near impossible alignment.





Canberra's cage needs a rattle over range safety

Media supports RAAG



Your Local News

The Daily Mercury

www.dailymercury.com.au

Truck body pushes for safety on Eton Range

Roll over crash ½ way down Eton Range

RAAG APPROACHES

- All Government Departments
- Everyone who was prepared to assist
- All stakeholders who **NEEDED** to be involved & support the campaign to improve safety issues, accidents, loss of lives, & continual closures on Eton Range.

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* MEETING at ROAD TRAIN PAD *

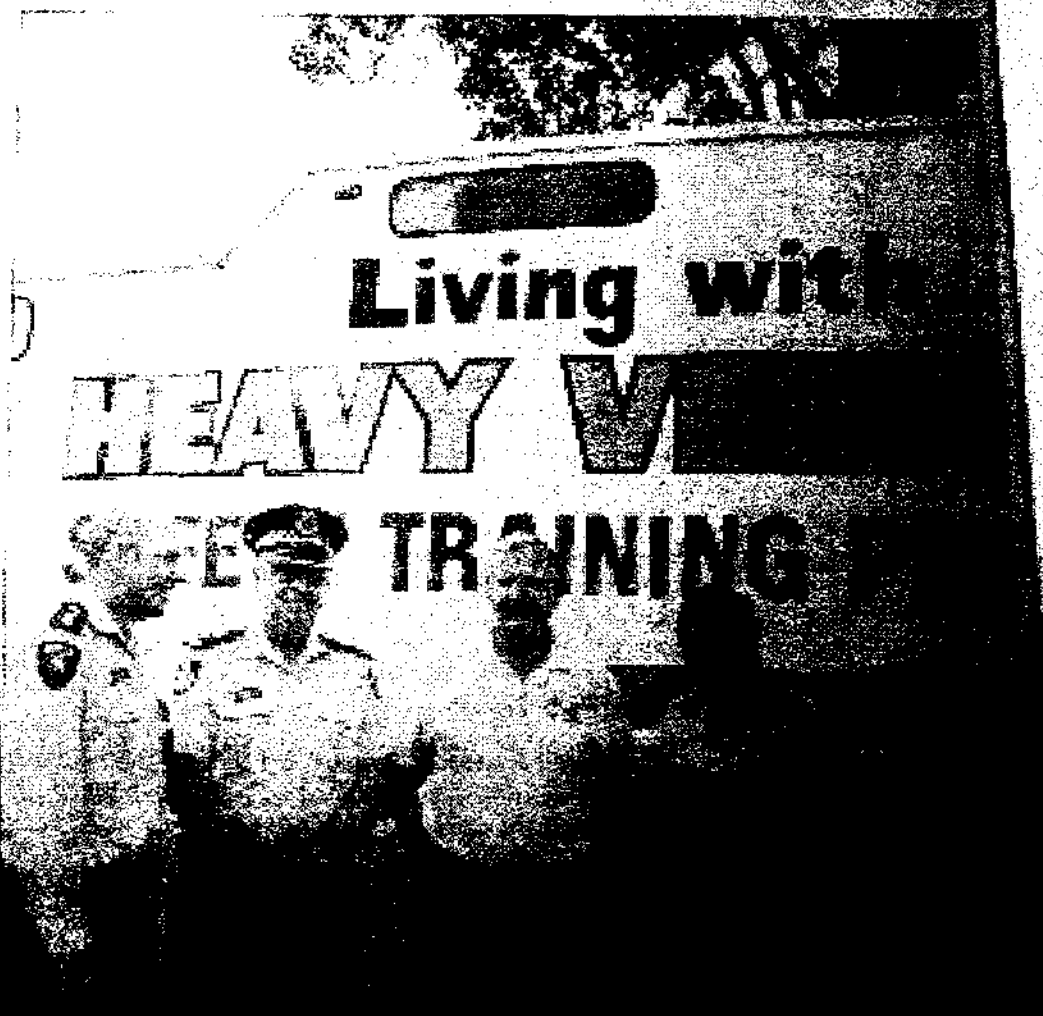
"Drive For Safety" Australian Trucking Association meet with all stakeholders

CEO ATA Stuart St. Claire

11.10.2007

Community drives move to improve death descent

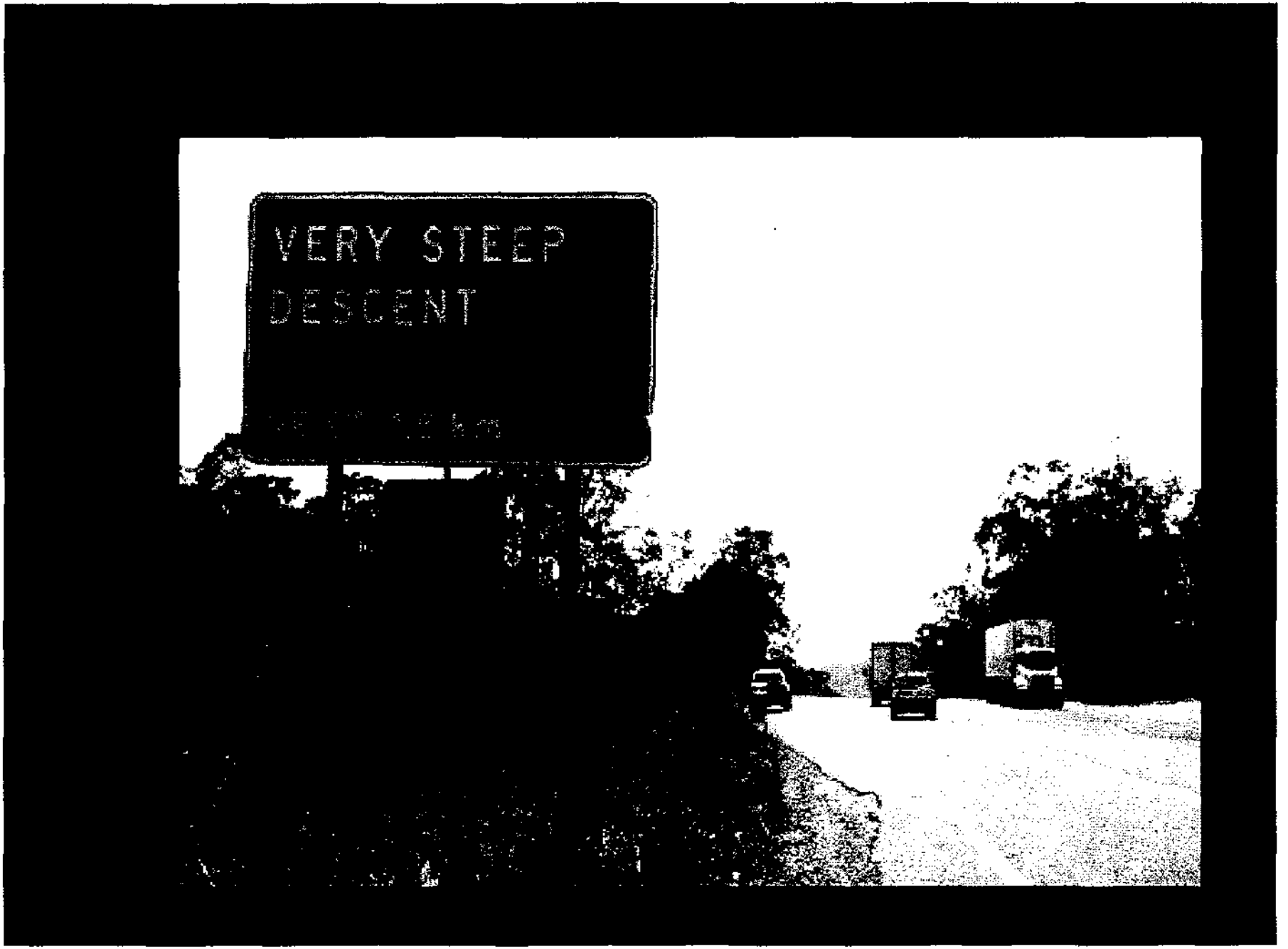
By SARAH CRAWFORD



MRD & RAAG examined the signage which was identified as inadequate at the meeting. 11.10.2007

60


REDUCE
SPEED
NOW

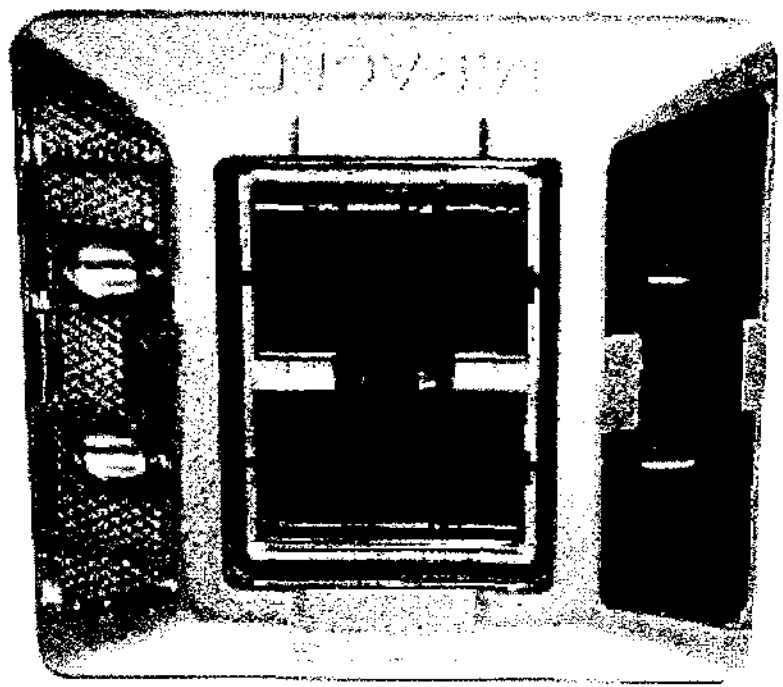

VERY STEEP
DESCENT

MRD engineer Chris Herring experiences his 1st heavy vehicle descent of Eton Range with Ian Single, Single Transport Services.

Road Accident Action Group Mackay
Mining Industry Road Safety Alliance
Nebo Community Development Group
on 21 December 2007 Presented a
Submission to Federal & State Politicians
Vital Infrastructure of National Significance
Peak Downs Highway Eton Range Re-Alignment
& the Walkerston Bypass

MRD has completed several safety improvement.

Solar Cell Reflectors Eton Range.



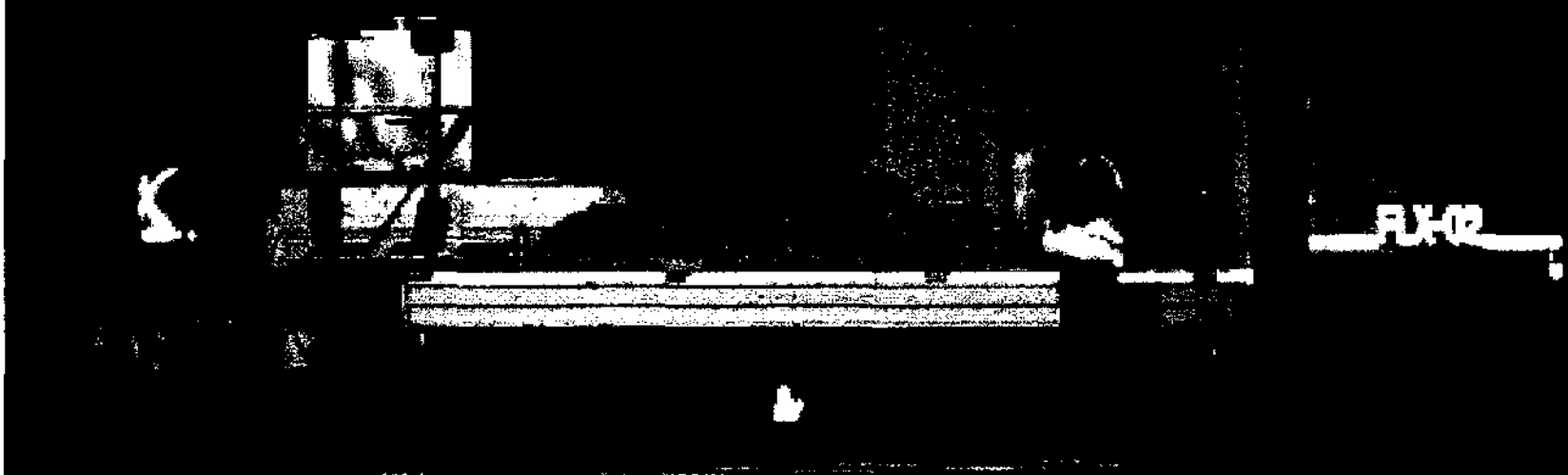
New signage for Eton Range.

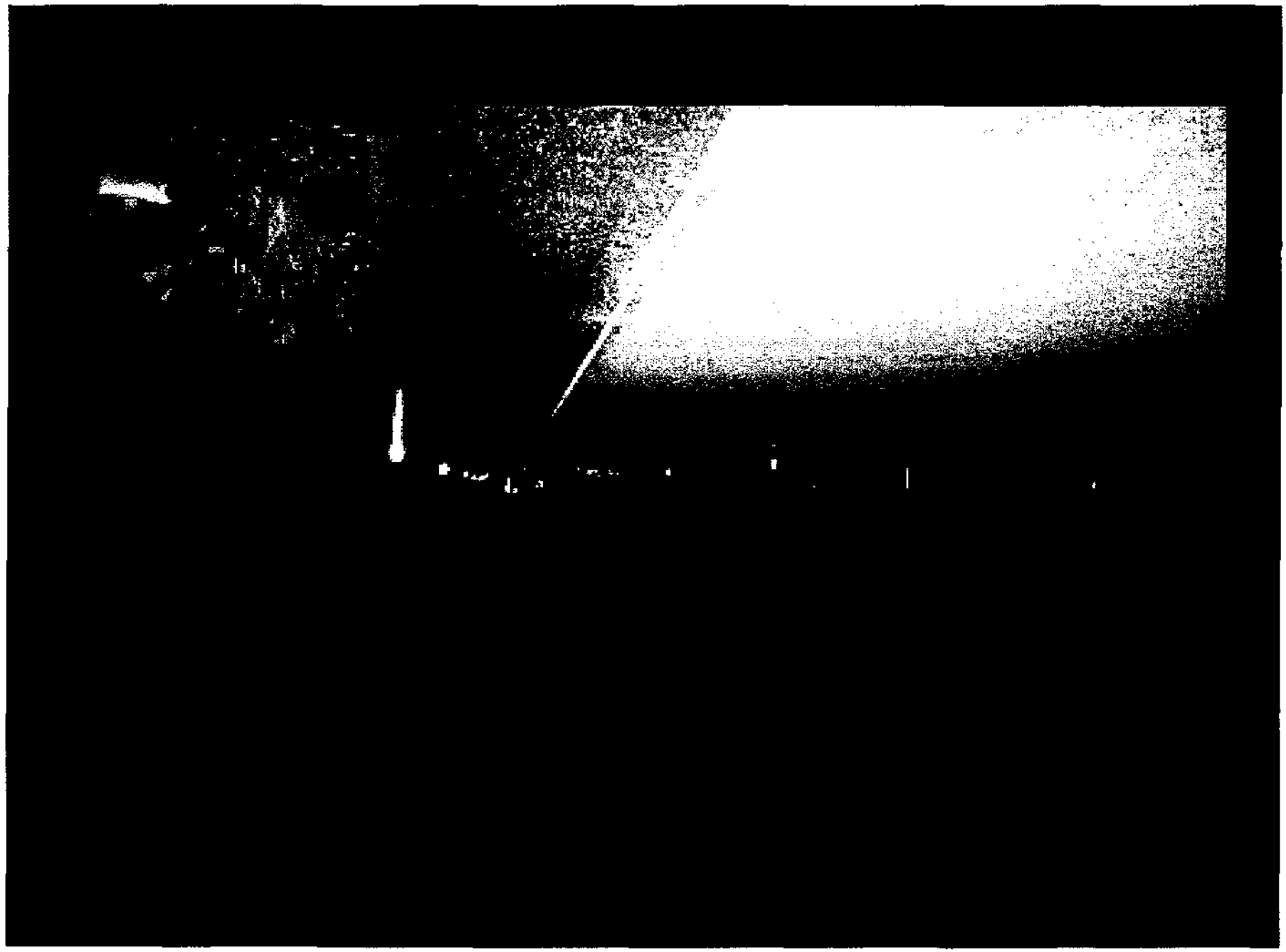
Suggested speed reduced from 40km/hr - 20km/hr.

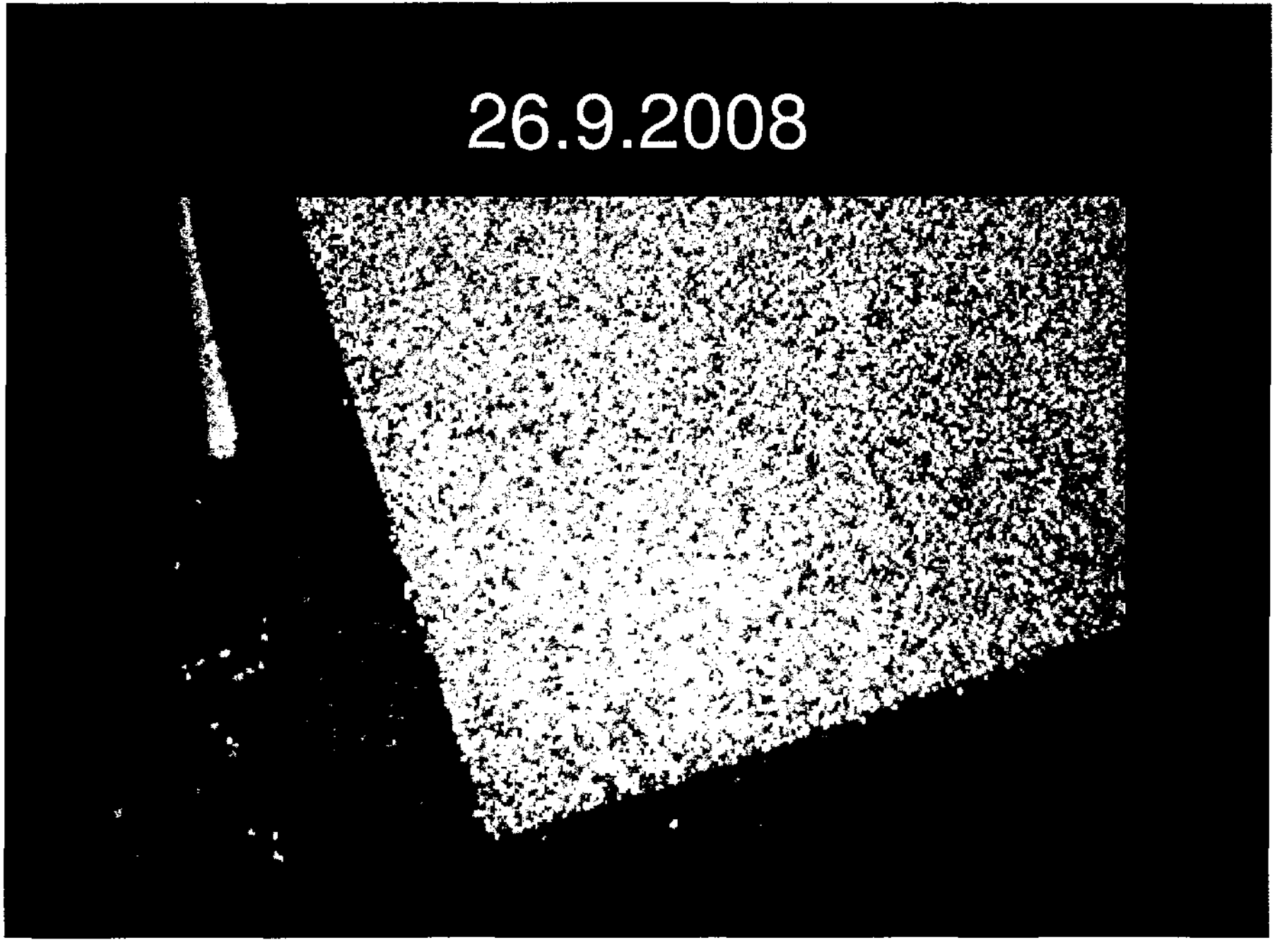
New “Use Low Gear” sign.

Road works + introduced new 80km zone.

Calcined Bauxite placed to address traction issues






26.9.2008

MRD
Construct Earth Burm
on 1st Corner Descending
in an attempt to prevent heavy
vehicle roll over / crashes

November 2008.

Calcined Bauxite extended to
safety ramp some weeks latter.

Stats on Eton Range

- Since mid 2004 there has been at least 10 major heavy vehicle crashes

- In just over 2 years RAAG has recorded 51 heavy vehicle crashes / loss of traction issues

- *" Past 5 years attended **7 Crashes – of these 4 were fatals**." Dec 2007. Ian Hair (Manager Austruck)* From support letter.

Reasons for Eton Range Realignment

- Infrastructure bottleneck with alarming safety issues.
- Fastest growing freight route in Australia
- Economic lifeblood to mining, grain, beef, tourism.
- Only B double route west
- Approx 4000 vehicles per day
- > 10 million litres of fuel per week
- Approx 500 wide loads per month
- Highest % over dimensional loads in Qld
- > 200 coaches with mine workers per month
- Australian Automobile Assn 2007 report - Eton range- "Best and Worst" List. **RISK HIGH**

1st Corner on Eton Range is the Tragic Location of many Heavy Vehicle Crashes, several being fatal.

Eton Range is regularly closed to allow movement of Excess Dimensional Loads to transverse the Range.
Some loads are 200 tonne - HUGE - 10 meters wide

Many Heavy Vehicles Regularly Lose Traction on Eton Range.

Loaded B-Double fuel tanker lost traction, jacknifed & crashed into bank

19.12.2007

Horror!!! Alarmingly dangerous situation as cars drive around both sides of B-Double that lost traction in the wet. 18.1.2008.

No traffic control.
Tow truck operator lays on roadway to attach recovery vehicle to standard b-double, traffic continued.

18.1.2008 Another land slip onto the range

21.5.2008 Loaded B-double of fuel uses middle lane to attempt to get more traction in the wet, stranded.

Start of Meetings - 4 April 2008 – Brisbane

- *Leigh Spenser – Advisor to Minister Warren Pitt*
- *Jenny Hocken – RAAG (Mackay Road Accident Action Group) (MIRSA)*
- *Peter Garske - CEO Queensland Trucking Association*

Meeting Canberra - **Friday 30 May 2008**

- **Daniel Cheverton** - Advisor to Minister for Infrastructure, Transport, Regional Development & Local Government, Hon Anthony Albanese.
- **Carol Single** - RAAG (Mackay Road Accident Action Group), Single Trpt Services
- **Ian Single** - RAAG (Mackay Road Accident Action Group), Single Trpt Services
- **Peter Garske** - CEO Queensland Trucking Association
- **Liz Schmidt** - President Livestock Transport Assn Queensland

200m of cracking on hairpin corner May 2008

Geotechnical Engineers, June 16, 2008 report completed. Eton Range has known structural weaknesses that require major repairs & these repairs will cause significant traffic issues and closures.

RAAG Meets Prime Minister

Country Cabinet – Federal

Mackay Meeting Sunday 29 June 2008

Prime Minister of Australia – Mr. Kevin Rudd
Mr. Terry Morron – Private Secretary to PM
Minister Martin Ferguson - Resources & Energy, Tourism
Minister James Bidgood - Local Member for Dawson
Minister Kirsten Livermore - Local Member for Capricornia
Minister Anthony Albanese's advisors
Carol Single - RAAG Single Trpt Services
Ian Single - RAAG Single Trpt Services
Graeme Ransley – RAAG Youth Drive Safe

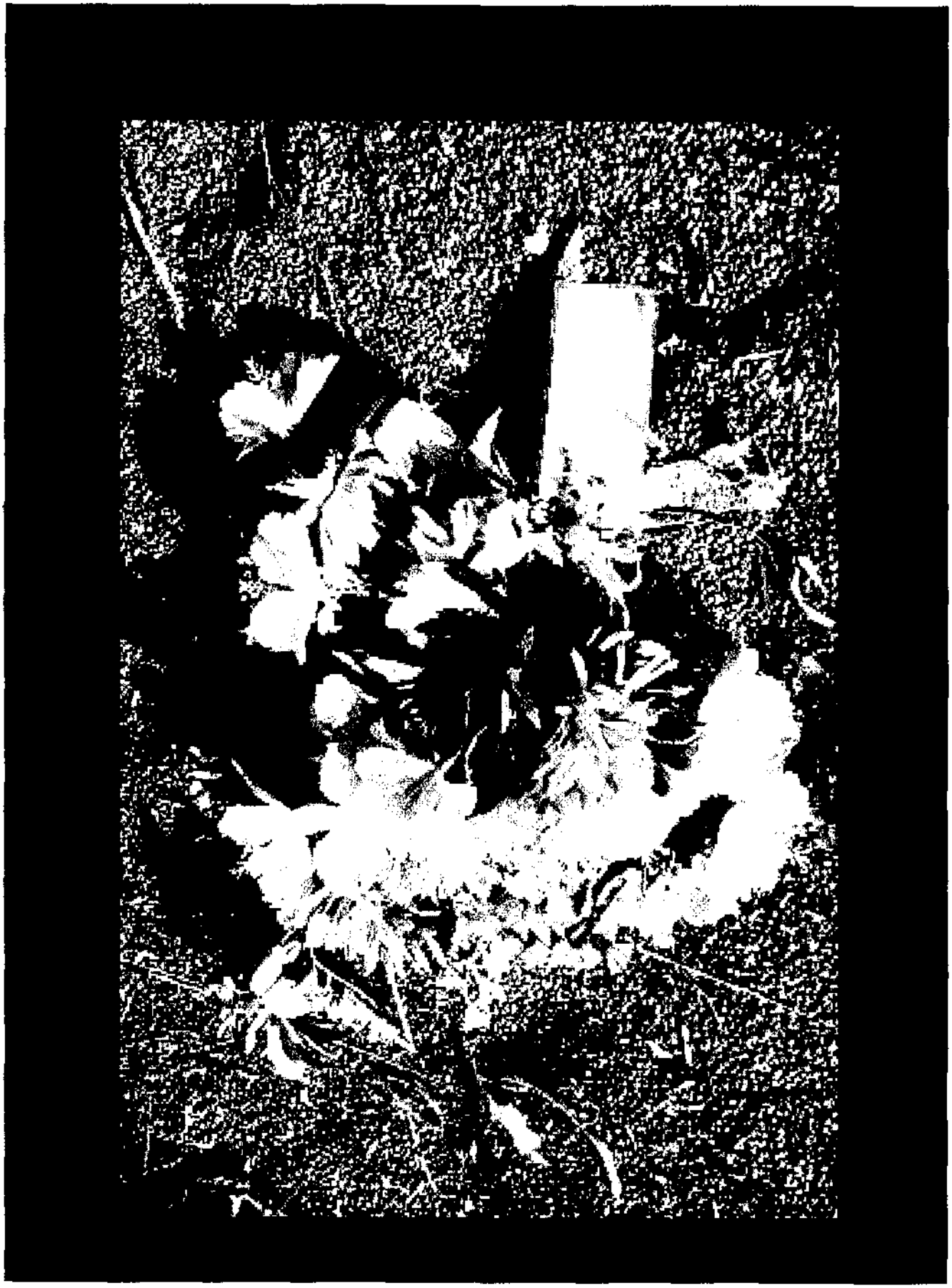
13 June 2008 – Mackay – Presentation on Eton Range
Minister Kirsten Livermore - Member Capricornia, Advisor – Brad Matthews
Carol Single

18th June 2008 – Meeting Mackay
Minister Tim Mulherin – Member Mackay, MRD Ian Husband, Graeme Ransley, Carol & Ian Single

Semi Load of Grain covers Eton Range 1.7.2008

Massive costs to so many.

Emergency service do a excellent job



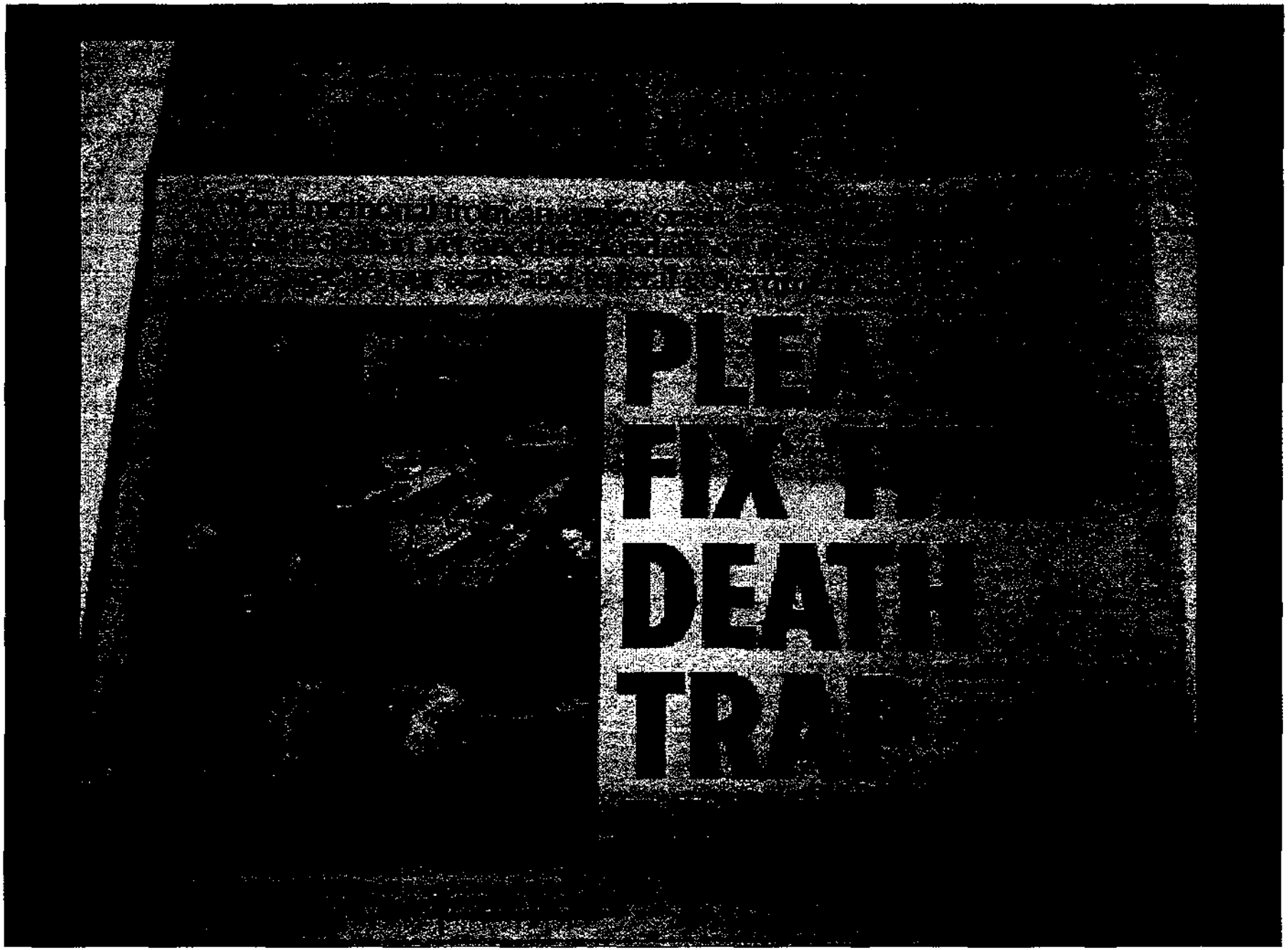
1.7.2008 Wide load passes the accident

Huge loads traverse the Range using pushers and pullers.

ALARM

ESCORTED WIDE LOADS WERE USING SARINA RANGE WHILE ETON RANGE WAS CLOSED FOR THIS ACCIDENT

SARINA RANGE IS **NOT** A B-DOUBLE OR WIDE LOAD ROUTE


PLE
FIX
DEATH
TRA

Federal / State $ for planning & design Eton Range Realignment

1/7/2008 **Minister Martin Ferguson** announced "**The Federal & State Government will jointly fund planning & design work for Eton Range realignment** & advised the **Rudd Government has identified the importance of Eton Range as being part of a key vital economic infrastructure corridor.**"

9/7/2008 **Minister Warren Pitt's** announcement that the "**Bligh Government will match Federal Government Funding for a planning study to identify a new Eton Range Crossing.**"

More recoveries

Draft Audit Eton Range
Maunsell Engineers
August 2008

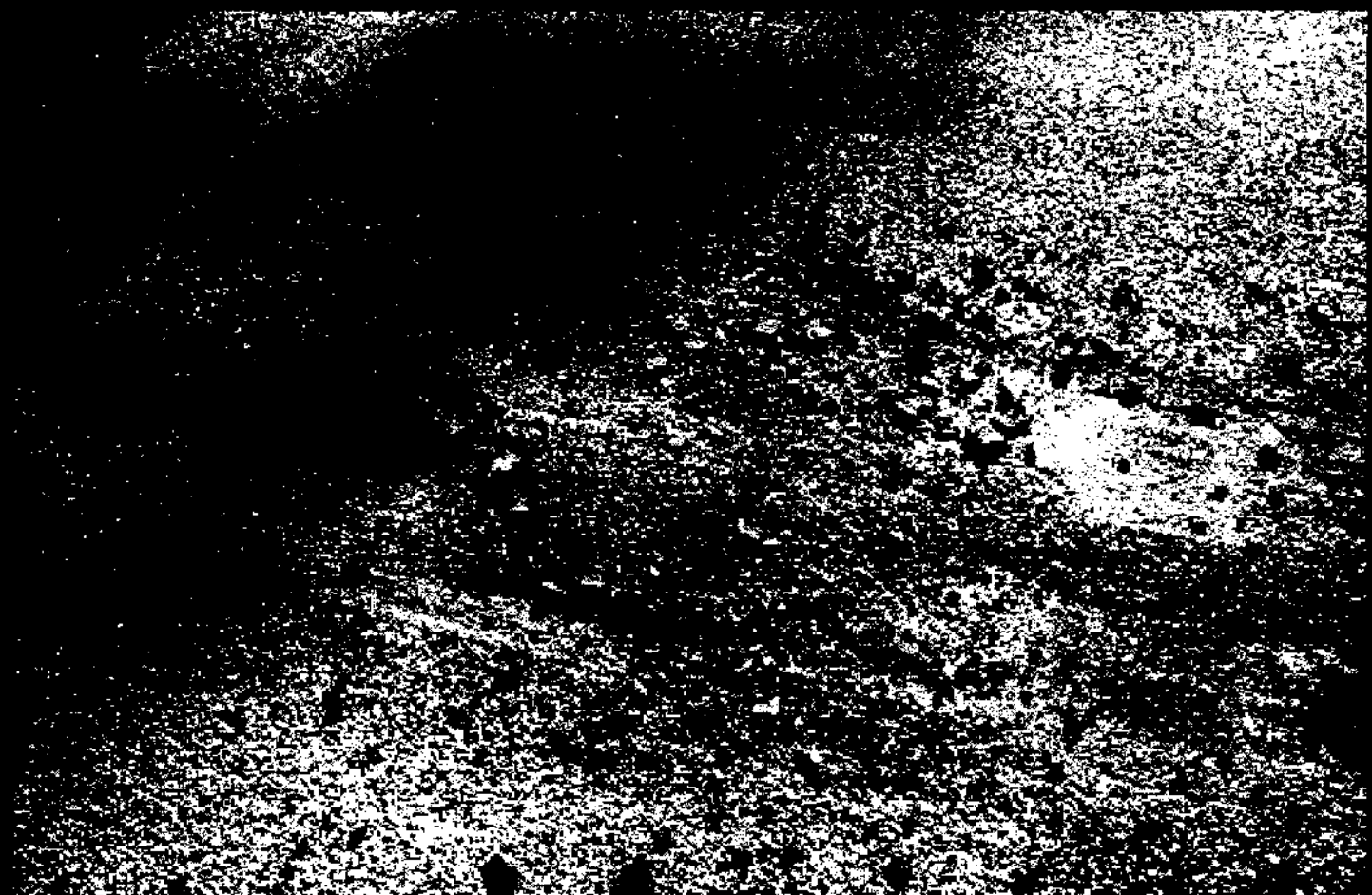
Country Cabinet Mackay 31/8/08

State Ministers

- Honourable Warren Pitt – Queensland Minister for Main Roads and Local Government
- Paul Lucas – Deputy Premier
- Tim Mulherin – Member for Mackay
- John Miekel – Minister for Queensland Transport
- Geoff Wilson – Mines & Energy
- Phil Reeves – Parliamentary Secretary to Premier
- David Steward – DD Qld Transport
- Carol Single R.A.A.G. (Road Accident Action Group)
- Single Transport Services
- Noel Lang (RAAG Chair)
- Graeme Ransley RAAG (Road Accident Action Group employee) Youth Drive Safe

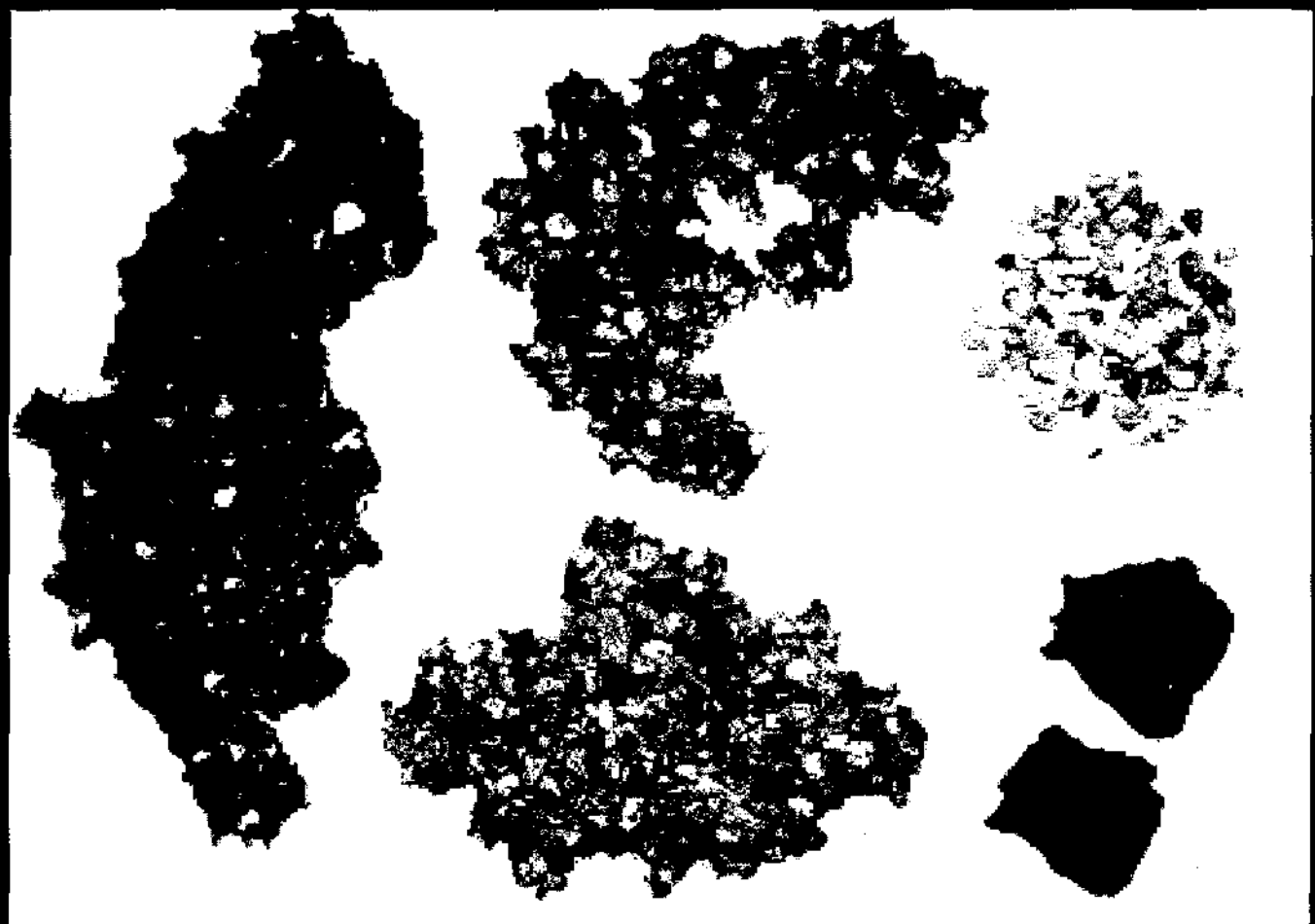
Loose calcined bauxite regularly required sweeping & caused vehicles to loose braking capacity & major issue for motorbikes.

Some heavy vehicles still loose traction due to the steep grade on the calcined bauxite section & truck tyres are shredded.



Extremely hot day, underneath bitumen melted & stranded heavy vehicle lost traction.

Sections peeled off in the heat



INFRASTRUCTURE AUSTRALIA

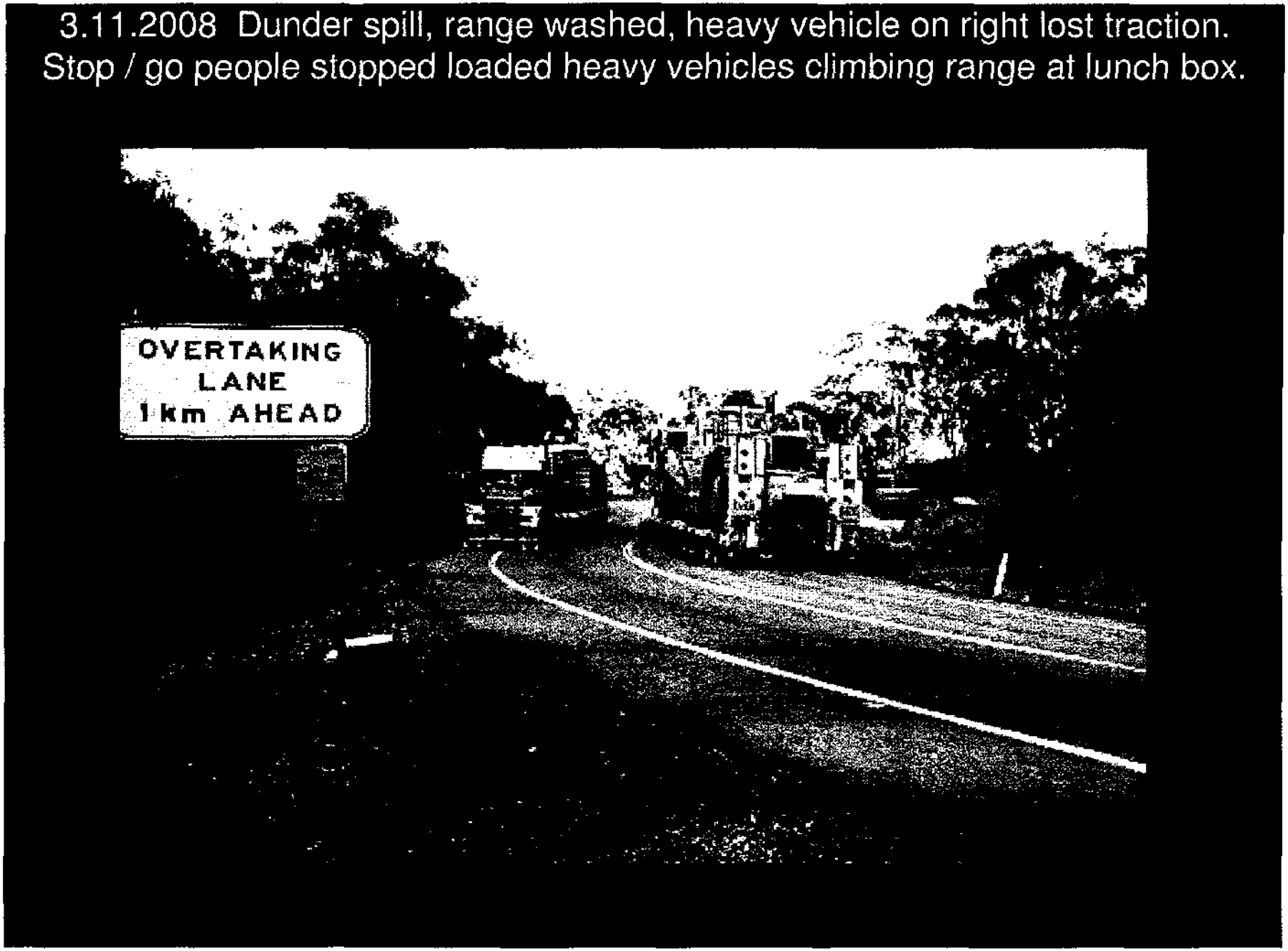
15.10.2009

RAAG Submission to Infrastructure Australia
Priority for Realignment of the Eton Range.

1. Why the Eton Range is of National Significance
2. What are the problems?
3. What are the impacts of these problems?
4. How did these problems come about?
5. How might these problems be addressed?
6. Given the situation, what should be done first?

"It is essential that funding is committed for the construction of the Realignment of Eton Range, a Critical Infrastructure Link of Major Importance to our National Economy."

3.11.2008 Dunder spill, range washed, heavy vehicle on right lost traction.
Stop / go people stopped loaded heavy vehicles climbing range at lunch box.



3.11.2008

NEXT DAY Another loss of traction 4.11.2008

CEO Natroad – Canberra

Bernie Belachi inspected Eton Range 12.11.2008

with RAAG Members Graeme Ransley & Carol Single

Piece of trail shaft lay on the calcined bauxite section as we walked up from the "Safety Ramp"

Meeting MRD Mackay: Bernie Belachi, Robert Perna, Scott Whittaker, Brendan Day, Carol Single.

Natroad included "Eton Range Realignment" as part of their submissions to Infrastructure Australia.

MRD also included Eton Range in submission to Infrastructure Australia.

Horrifying Speeding Statistics

- These MRD speeding stats 13-28th Feb 08 shows urgent methods are needed to slow down traffic approaching the range. (Major flood Mackay 15.2.2008)

- 100 km/h zone 58.6% speeding max 153.6 km/h
- 80 km/h zone 82.88% speeding max 140.9 km/h
- 60 km/h zone 89.47% speeding max 131.2km/h
- 100 metres over crest 64.3% speeding max 113.4 km/h

Superintend Rowan Bond Q.P.S. has requested a fixed speed camera to be placed in this location. This is on the evaluation list.

Crash Last Corner 30.1.2009 – site 3 accidents within 24 hours.

Major Infrastructure Highway again Blocked.

1863 the "Traveller's Rest" Hotel was built at top of Eton Range. Bullock dray teams traveled between Nebo and Mackay. The range road was a challenge. The Bullock teams retrieved carriages & cars from crashes over the range!!!

2009 The Current Eton Range road follows the same route as prior to 1863. Only B-double Route west of Mackay. No Road Train access into Mackay – Access point 45km west Mackay.

Both Federal & State Governments has acknowledges a realignment of Eton Range is essential and committed $.

Aerial photography, planning & design are underway.

Queensland Trucking Association
Industry Safety Award
2008
presented to
Mackay Road Accident
Action Group Inc
1st November 2008
Recognising Outstanding Contribution
to
The Road Transport Industry

Following photo: Hon John Mickel- Minister Qld Transport ,
Carol & Ian Single, & Tony Buckley - Transuper


Platinum
sland
ment

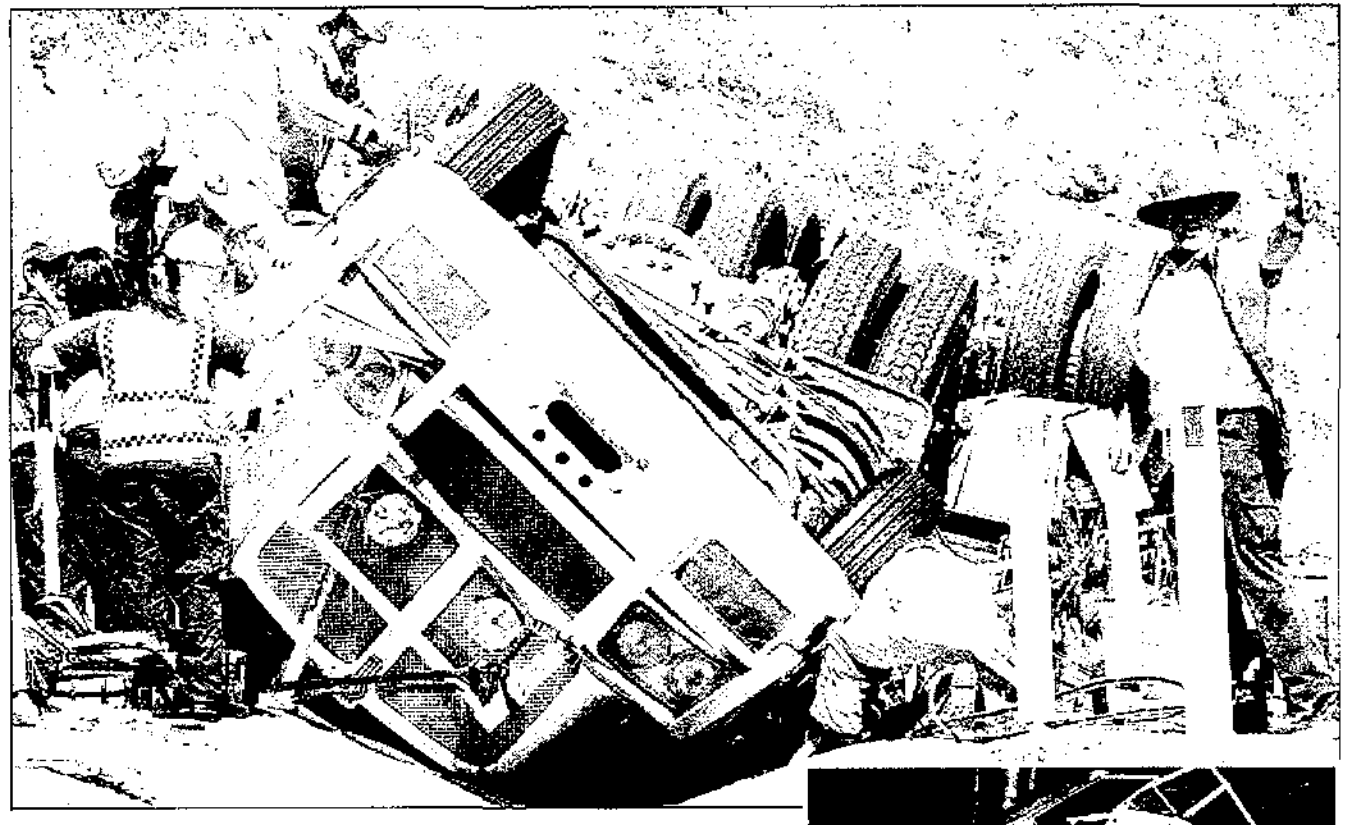
RAAG

Acknowledges the support of all stakeholders and what can be achieved by working together to achieve Road Safety Outcomes.

Thank you.

Daily Mercury 150

www.dailymercury.com.au Tuesday, April 28, 2009 $1.10*



HIGHWAY MADNESS

Two injured in Eton Range truck roll-over

TOP: Emergency service personnel work on freeing a male driver and female passenger from this overturned truck at the bottom of Eton Range yesterday.

PHOTO: PETER NOSWORTHY

of traffic accidents on our district's horror highways in recent days

Free at last – the female victim is carried on a hardboard stretcher to a waiting ambulance. PHOTO: PETER HOLT 270409 [illegible]

Emergency crews work frantically to free the two victims of the Eton Range crash. PHOTO: 270409[illegible]

Crash rescue vehicles and ambulances surround the overturned truck. PHOTO: 270409[illegible]

Two rescued from latest Eton Range truck crash

By BRUCE MCLEAN
[illegible]@dailymercury.com.au

THIRTY emergency personnel worked for three hours to free two people trapped in an overturned truck at the bottom of Eton Range yesterday.

It was the 50th traffic incident on Eton Range in the last 24 months and the eighth involving a heavy vehicle, road safety campaigner Carol Single said at the site.

The male driver and female passenger were both trapped and the jaws of life had to be used to free them.

They were both transported to Mackay Base Hospital. The woman had minor injuries and was later released. The man was treated for a leg fracture.

Four fire engines, three ambulances and five police vehicles responded to the emergency. Queensland Transport inspectors arrived. Other truck drivers stopped to help until emergency crews arrived and stood by carrying their personal fire extinguishers in case of a fire.

It is believed the B-double truck was heading east down the range when it missed the final, sharp, right-hand bend, skidded and ended up on its roof in a ditch. The truck was carrying [illegible] bags and the two occupants were trapped in the crushed cabin.

There were three crashes on that corner in 24 hours in February.

– Road Accident Action Group campaigner Carol Single

Four paramedics treated them while rescuers erected [illegible] ladders over the wreck and strung up black plastic to shield the victims from the harsh sun.

The crash happened around midday and it was 3.30pm before one lane was opened to traffic which had built up at both the top and bottom of the range.

While the Daily Mercury was at the site several double-decker trucks went up and down the range along with other traffic. They included several B-double, two-deck cattle trucks and two B-double fuel tankers, as well as cars and four-wheel drives towing boats and caravans.

Heavy haulage vehicles were needed to [illegible] get the wrecked prime mover and trailers off the side of the highway.

Road Accident Action Group spokeswoman Mrs Single, who was named National Trucking Industry Woman of the Year last week, took photographs of the scene to add to her mounting collection of bad accidents on the range.

"I pray they are okay. I have no idea what happened but it is a sharp bend. There were three crashes on that corner in 24 hours in February," Mrs Single said.

The Road Accident Action Group is campaigning to have Eton Range upgraded and Mrs Single said she had received information from federal transport officials that the range upgrade would become a priority in their 2009-[illegible] infrastructure program.

ETON RANGE

PEAK DOWNS HIGHWAY

27.4.2009

ANOTHER LOADED HEAVY VEHICLE CRASHES at the BOTTOM OF ETON RANGE!!!

THE LIVES OF JOSEPH IN A COMMODORE COMING UP THE RANGE, OSSIE IN A LOADED B-DOUBLE GOING DOWN THE RANGE & THE LOADED SEMI DRIVER & HIS PASSENGER ALSO GOING DOWN THE RANGE TRYING TO FIT BETWEEN BOTH & REACH THE "SAFETY RAMP" FLASHED BETWEEN ALL OF THEM. THEY ALL BELIEVED IT WAS OVER!!!

SECONDS LATER THE LOADED SEMI CRASHED AT THE BOTTOM OF RANGE. ANOTHER CAR WAS FRANTICALLY REVERSING TO AVOID ALSO BEING INVOLVED IN THE HORRIFIC HEAVY VEHICLE CRASH / ROLLOVER ON THE ETON RANGE.

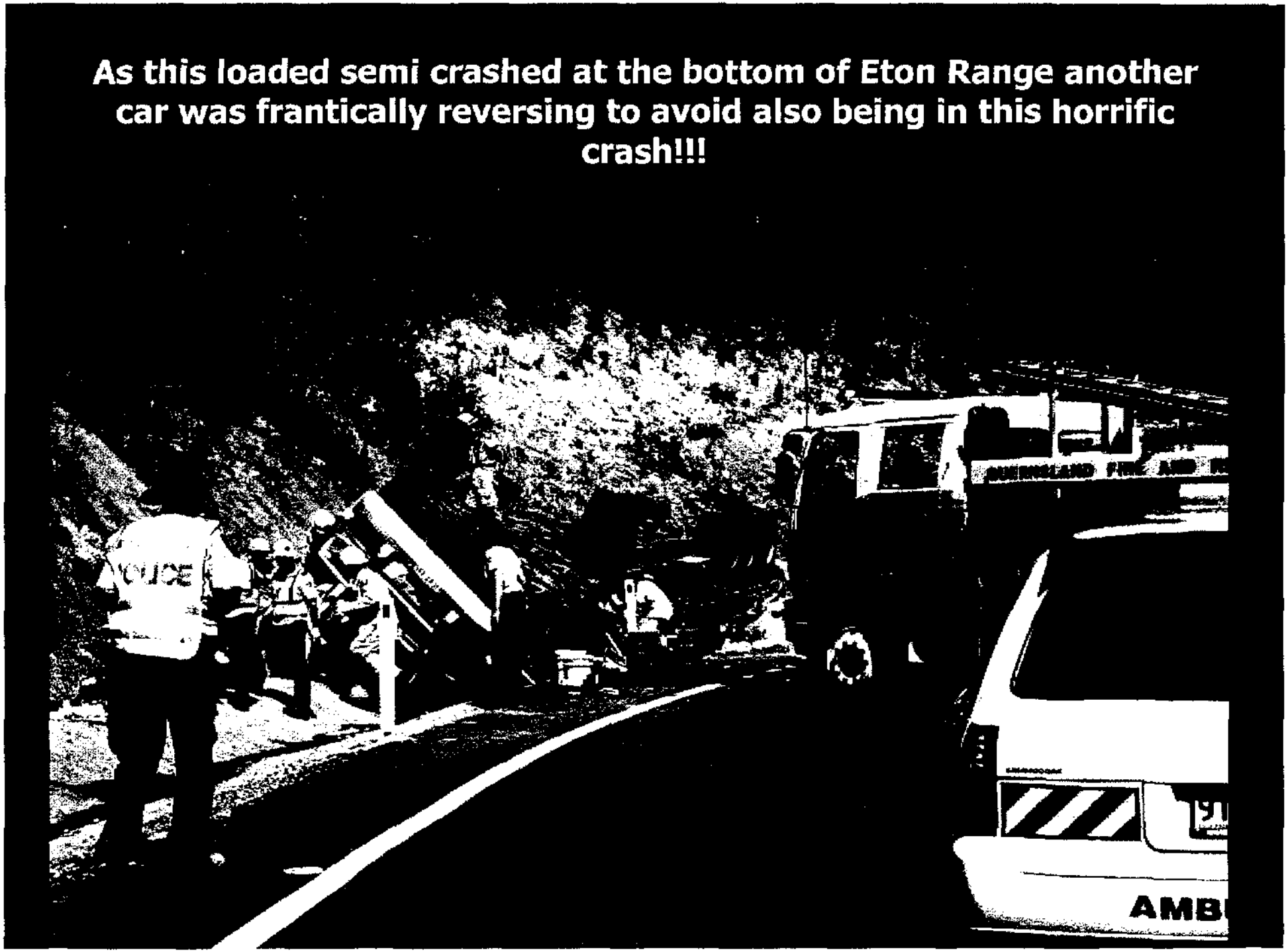
A REALIGNMENT MUST BE BUILT AS A MATTER OF URGENCY!!!

Eton Range - Monday 27 April 2009, just past this sign, the site of fatal & heavy vehicle crashes & loss of traction issues – the only B-Double route & major infrastructure highway west of Mackay was again closed due to the 52nd issue recoded in the past 2 years.

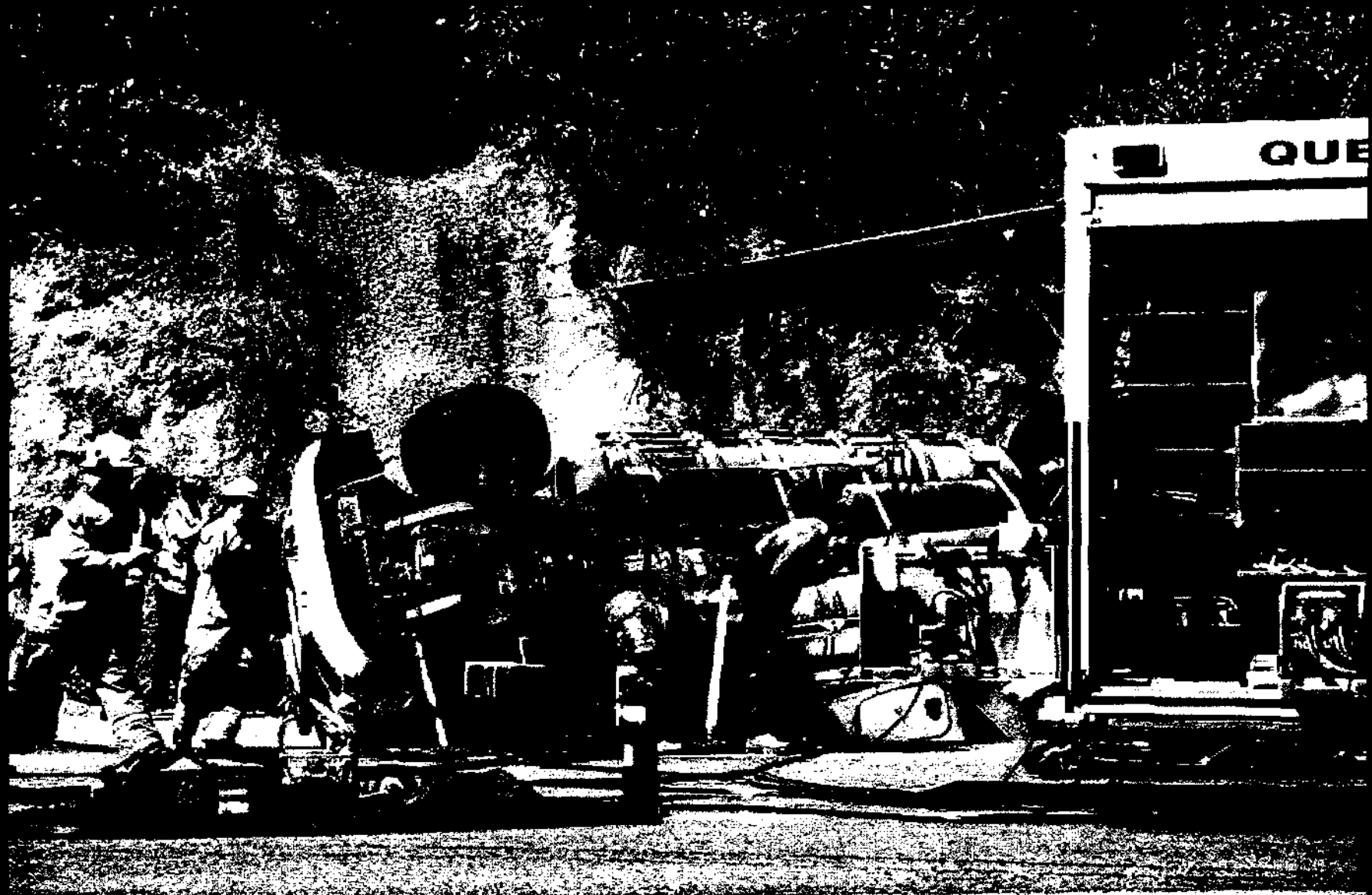
These skid marks show the semi braking as it passed a loaded b-double in the left lane driven by **Ossie Fatnowna.** It was heading for the "safety ramp" located on the right in the background. A commodore driven by **Joe Fatnowna,** his brother was coming up the range & frantically pulling up in the drain on the right. "I closed my eyes, I believed it was all over. I can still smell the burning rubber a week latter. Somehow the semi fitted between us. It was the scariest day of my life. It wasn't until I drove back down the range I found it was my brother driving the b-double!!! "(Joe)

Photo from the "Safety Ramp" is example of how a heavy vehicle must travel to get around this corner of the Eton Range. At this location is where a "Guardian Angle" saved the lives of Joseph in his commodore in the drain on the left & Ossie in a loaded B-Double with machinery on the right coming down the range - **his trailer hanging over the edge of the range with no road under him as he rounded the corner.** Somehow the semi which crashed at the bottom went between both of them!!!

As this loaded semi crashed at the bottom of Eton Range another car was frantically reversing to avoid also being in this horrific crash!!!

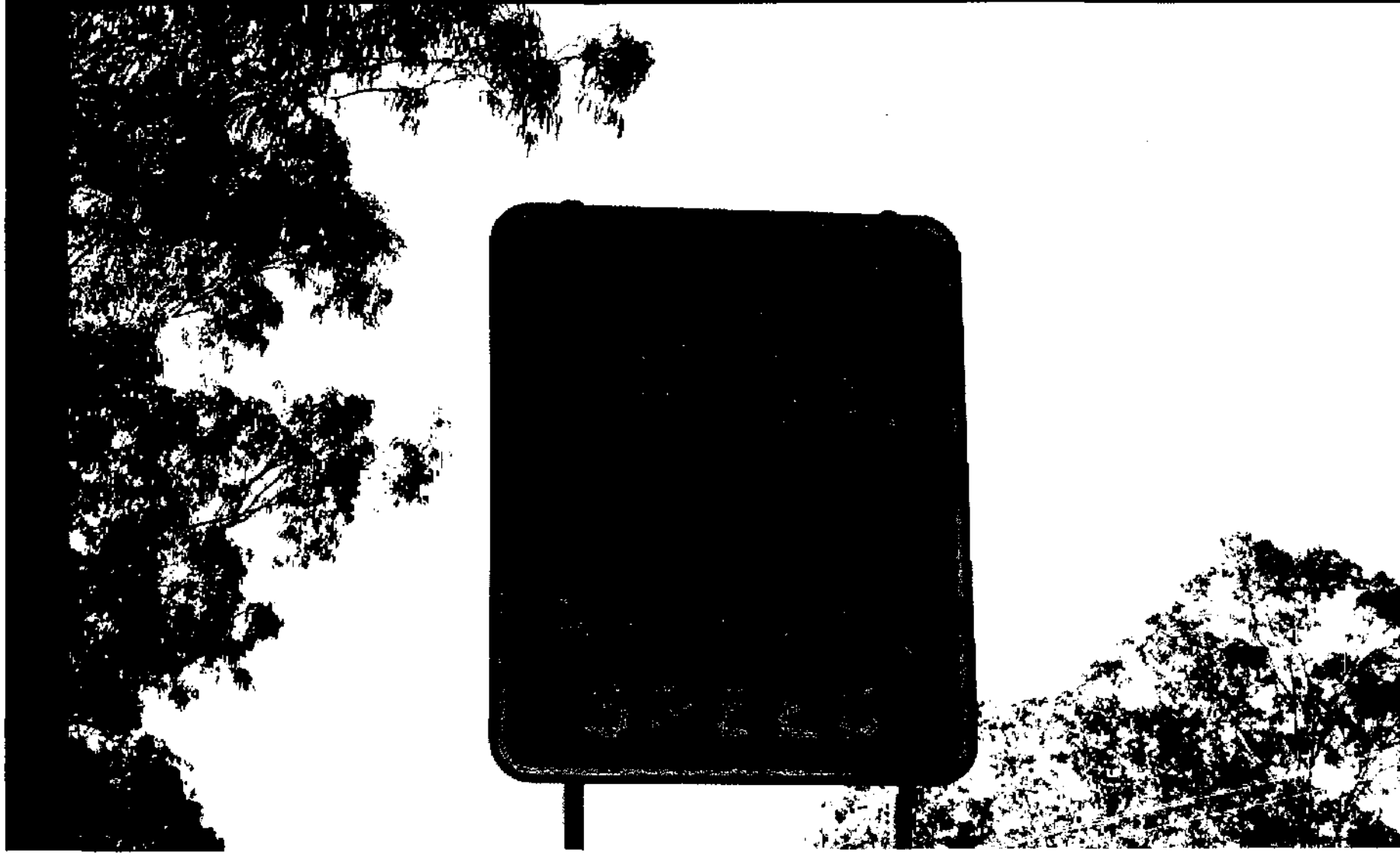


30 Emergency Personnel worked to free the trapped occupants.
At what cost to Government departments, the community?

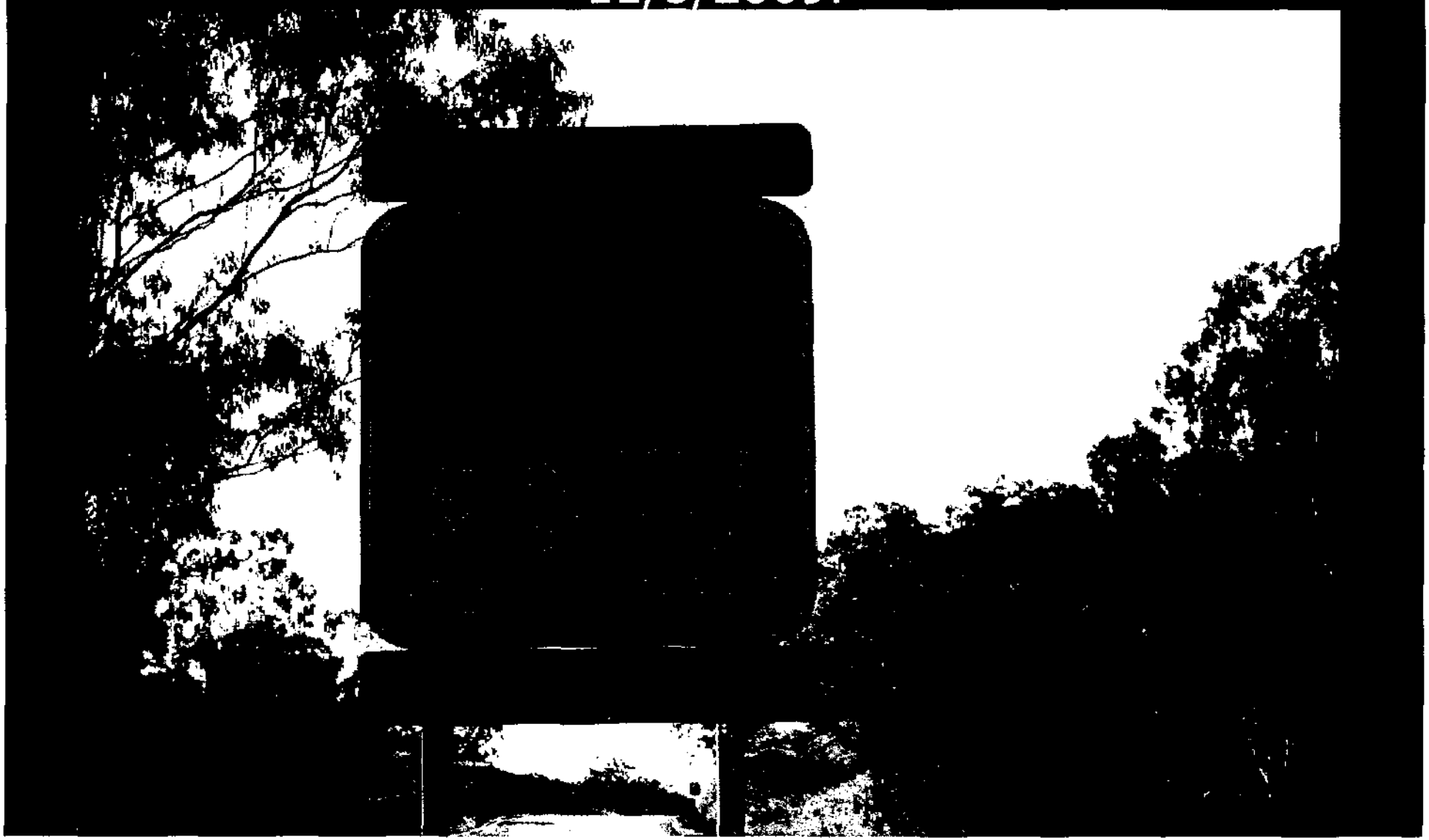


One way traffic control required for **20hrs** on Eton Range 27.4.2009 for accident and cleanup.

Alarming accidents are still occurring regularly on Eton Range.
Some of the new signage.



MRD advised Rumble (ripple) strips installed 7/5/2009, Flashing lights will operate 24/7 from 11/5/2009.



Despite new signs, alarming speeding is still being recorded by the local Police & the Police Taskforce. **Traffic approaching the range are being recorded travelling at more than "Double the speed limit". <u>Does this justify installation of a speed camera?</u>**

INSIDE: Did the Kangaroos gain revenge for their World Cup loss to NZ last night? — Sport

Daily Mercury

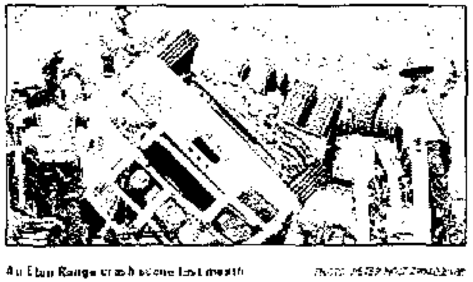
www.dailymercury.com.au

Saturday, May 9, 2009

$1.50*

89% OF DRIVERS SPEED IN HORROR ETON BLACK SPOT

CONTINUED ON PAGE 2



An Eton Range crash scene last month

'I can't sleep ... I close my eyes and see two trucks coming ... at me'

Near miss nightmare on range of death

By SARAH CRAWFORD
sarah.crawford@dailymercury.com.au

TRUCK driver Brian McKellar said he could barely remember narrowly missing an oncoming white sedan on the notorious Eton Range as he swung his out-of-control B-double truck into the opposite lane to avoid a semi-trailer ahead of him.

But the driver of the car, Joseph Fatnowna, remembers clearly the B-double and the semi-trailer Mr McKellar was trying to overtake both bearing down on him.

"I can't sleep at night, each time I close my eyes I see two trucks coming straight at me. I just got off the road. I don't know how I survived," Mr Fatnowna said.

Mr McKellar does not know how he survived the crash on Monday (April 27) either. He managed to steer the runaway truck carrying [illegible] down the range taking one corner on two wheels before the vehicle crashed into a concrete culvert and rolled onto its roof.

"I don't know how I got it down that far," he said.

Mr McKellar said the steep winding descent was partly to blame for the crash, not speed.

Police are still making their investigation into the cause of the accident, the [illegible] at [illegible] on the range.

He and his partner Beatrix Lazar were trapped for several hours in the upside-down cabin that had been crushed down to the windows. Yesterday Mr McKellar and Ms Lazar thanked everyone who helped.

"It was the devotion, care, compassion and tirelessness of the ambulance, fire brigade, police and SES – and to the individual truck drivers who pulled up with their fire extinguishers – we say 'thanks mate, you'll always be a hero to us'," Ms Lazar wrote in a card.

It took firefighters three hours to get Ms Lazar out and a further hour and a half to extricate Mr McKellar.

"I was stuck on my back with blood in my eyes, the truck was [illegible] on top of me," he said.

Mr McKellar received a gash on his leg 10cm long and 5cm deep.

He spent several days recovering in hospital.

"I also wanted to say thanks to the nurses at Mackay Base Hospital who put up with my jokes," he said.

"My friends have told me I [illegible] Mr McKellar said.

Mr Fatnowna feels the same. "I thought I was gone," he said.

But the near miss on the Eton Range becomes even more alarming – the driver of the semi-trailer that Mr McKellar overtook was being driven by Mr Fatnowna's brother Oswald Fatnowna. Three wheels of the semi-trailer were in the air as he tried to get out of the way of the runaway truck. "We could have lost two members of our family that day," Joseph Fatnowna said.

Brian McKellar and Beatrix Lazar thanked emergency workers who got them out of a wrecked truck on the Eton Range. PETER HOLT [illegible]

Oswald, left, and Joseph Fatnowna with Eton Range road safety campaigner Carol Single. PETER HOLT [illegible]

Most speed in Eton black spot

FROM PAGE 1

difference," Mrs Single said.

A Main Roads spokesman said on Thursday they installed three sets of ripple strips on a section of the east-bound lane at the top of the range to alert motorists that they needed to slow down.

Main Roads has also installed flashing lights on signage to advise motorists, particularly heavy vehicle operators, to select a low gear.

The signage was installed earlier this month and became operational on Wednesday.

Ms Single congratulated Main Roads for the upgrades.

"The recent safety improvements on the Eton Range were implemented as part of a strategy to reduce driver speed and improve safety at this location," the spokesman said.

"The installation of speed cameras is a matter for the Queensland Police Service."

Supt Bond said police planned to periodically place a micro-digicam at the top of the range which would take speed readings and photographs of offending vehicles.

A police officer further down the range would then book the motorists.

Supt Bond said Eton and Nebo police regularly patrolled that section of the Peak Downs Highway and recently a state traffic operation was conducted on the range.

The Main Roads spokesman said the department encouraged community feedback on the Eton Range.

RAAG believes it is critical that

THE REALIGNMENT of ETON RANGE is a PRIORITY

Dennis Quinn from Cummins South Pacific, 2009 National Trucking Industry Woman of the Year Carol Single and 2008 winner Helen Savage.

Carol Single – Single Transport Services, Mackay, Committee Member RAAG. Carol has been heavily involved with the Mackay Road Action Awareness Group and Safety Committees for almost 30 years. She is passionate about road safety and has been a key player in the Eton Range project and the dangers the area poses for drivers. Carol is a dedicated member of the Australian trucking industry. She has been a long term supporter of improving safety standards and actively volunteers her time for the betterment of the trucking industry.

RAAG
ROAD ACCIDENT ACTION GROUP

Submission to Infrastructure Australia
RE: Priority for Realignment of the Eton Range

1. Why the Eton Range is of national significance.

The Eton Range forms part of the Peak Downs Highway, the major arterial highway servicing the northern Bowen Basin mining industry – a major contributor to the Australian economy. It is located 30 km south west of Mackay in Central Queensland.

The cattle, grain, sugar, and tourism industries also use the range as an access point between Mackay and the Central Highlands, and it is one of the fastest growing freight routes in the country.

The Bowen Basin contains much of Queensland's coal resources, including virtually all Queensland's prime coking coal reserves (Department of Mines and Energy). Please refer to Appendix A for a map of this region, showing existing mines.

According to the Mackay Whitsunday Regional Economic Report June 2008, mining accounted for 51.9% of the region's total GRP in 2006-07. The Mackay Whitsunday Region's GRP grew by 5.2% to $10.6 billion in 2006-07.

In 2005/2006, the region's economic growth rate of 42.5% was triple that of Queensland, driven by mining, and four times more reliant on mining than the state average (Pearse, N: Growth in the Mining Industry Economic Baseline Audit conducted by the Regional Economic Development Organisation (August 2007) report that GRP)

"Boom 2" predicted to double the Bowen Basin coal sector by 2020.
"Coal Mining Tidal Wave" (Saturday 24th May 2008 Daily Mercury)

- Bowen Basin 55 New Coal Mining Projects
- 33 New Coal Mining Projects for Mackay
- Mackay currently 32 mines
- Qld Resources Council 2008-2009 (ROYALTIES 2.5 – 3 BILLION)
- Qld Coal Exports – Expected growth 42% by 2010
- Further growth 40% by 2015
- Value coal production $18b to $38b in less than 2 yrs. (24.5.08 Daily Mercury)

RAAG, C/o PO Box 1850, Mackay, Queensland, 4740. Phone: 0429 881 400. Fax: (07) 4957 8818.

It is vital that the Eton Range, which is already an infrastructure bottleneck, with significant inherent safety issues, on the Peak Downs Highway, is realigned as a matter of urgency.

Eton Range is one of the shortest ranges on the Eastern Seaboard. A new alignment can be built with virtually no disruption to the existing highway and initial investigations suggest close to a straight road could be achieved.

Boom Two is expected to pump 15,000 new jobs into the local mining industry and inject millions of dollars into the region's economy.

Traffic on the Eton Range:

As well as being the economic lifeblood to the mining sector, the highway is recognised as a major connecting arterial road to the Gregory Development Road (the proposed major inward freight route to North Queensland). The Peak Downs Highway is one of Australia's fastest growing freight routes. It is the only B-Double route west of Mackay.

According to figures from the Department of Main Roads (2007), the Eton Range has an average traffic flow of 3738 vehicles a day.
Of these, 3218 (or 86.09%) were classed as light vehicles and 520 (or 13.91%) were classed as heavy vehicles.
Of these heavy vehicles, 286.7 (or 7.67%) were trucks or buses, 138.7 (or 3.71%) were articulated vehicles and 94.6 (2.53%) excess dimensional.

On average, the Peak Downs Highway carries:

- Major fuel tankers (approx 10 million litres per week).
- Freight vehicles carrying fuel, explosives, livestock, mining supplies and general goods.
- An estimated 500 wide loads per month.
- This vital road carries the highest percentage by volume of over-dimensional loads in Queensland. Over-dimensional loads over 4.5 metres require the road to be closed several times per day.
- Approx 200 coaches with mine workers per month, anticipated growth 30%p.a

The mining industry depends heavily on the Eton Range for delivery of machinery, equipment and supplies, and thousands of employees and contractors use the range to access the Central Highlands.

"Drive-in/drive-out" arrangements are common for mining company employees and associated contractors who are unable to find accommodation in nearby mining towns or prefer to spend their days off in or close to Mackay.

The number of Mackay residents employed in the mining industry increased by 202% between the 2001 and 2006, and Mackay had more residents employed in the mining industry than did Mount Isa or any Bowen Basin town, the report said.

Most of these mine employees use the Eton Range to access the Bowen Basin, and it is predicted an extra 15,000 workers will be travelling to and from the mines by 2015.

The Peak Downs Highway is one of the fastest-growing freight routes in Australia, yet the Eton Range remains one of the country's greatest infrastructure challenges. Every time the range is closed, whether for a wide load or an accident, the country pays the price. With ongoing expansion in the mining sector and growth in population, it is essential to ensure this route is urgently realigned.

Knock-on effect for the nation:

While visiting Mackay, Prime Minister Kevin Rudd was quoted (Mackay Daily Mercury, July 1, 2008) saying that infrastructure challenges facing the Mackay region had a knock-on effect that was felt around the nation. "We've got to get it right, not just for local people here. Getting it right here means getting it right for the nation as well."
The same article quoted Treasurer Wayne Swan saying the Mackay region was "central to the national economy - vitally important to some of the key industries upon which Australia's prosperity was built".

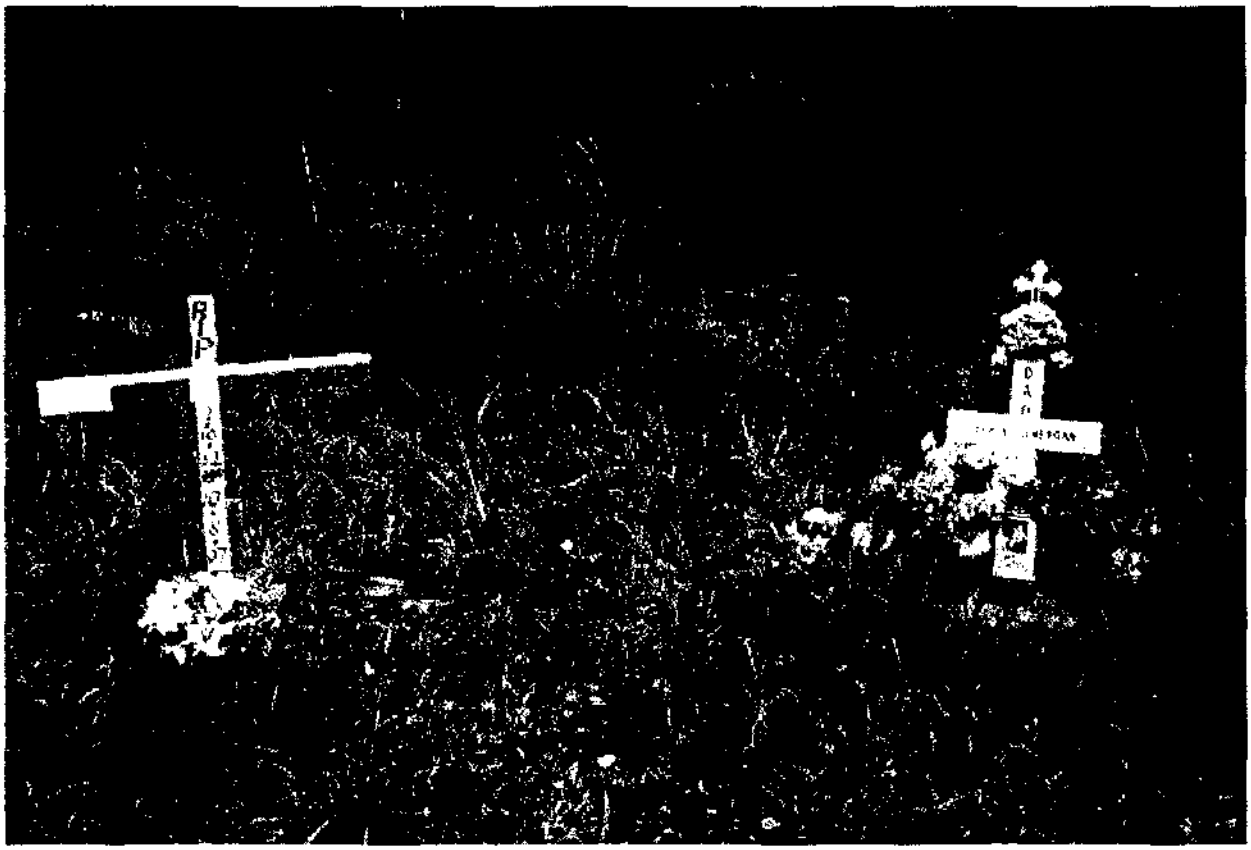
2. What are the problems?

Put simply, the Eton Range is an infrastructure bottleneck with alarming safety issues and regular road closures that come at great cost to the Australian economy.

In just a two-year period, there have been six major heavy vehicle accidents, including two fatalities, plus numerous accidents and incidents on the range. These tragic fatalities are accompanied by a line-up of other serious problems - problems so bad they earned the range more than just a mention in the Australian Automobile Association's "How Safe are Queensland's Roads?" report. The 2007 report nominated the Eton Range for its "Best and Worst" list.

WHEN Ian Hehir got the early morning call that a truck had rolled on the Eton Range yesterday, he thought to himself 'not again'.
"I have pulled two dead blokes out in the last 12 months from crashes in exactly the same spot," the Austruck Heavy towing and Salvage operator said... "How many people have to die up here?"
...Last week The Daily Mercury spoke to truck drivers, wide-load pilots and tow-truck operators who called for something to be done about the thoroughfare they call Suicide Highway Number Two.

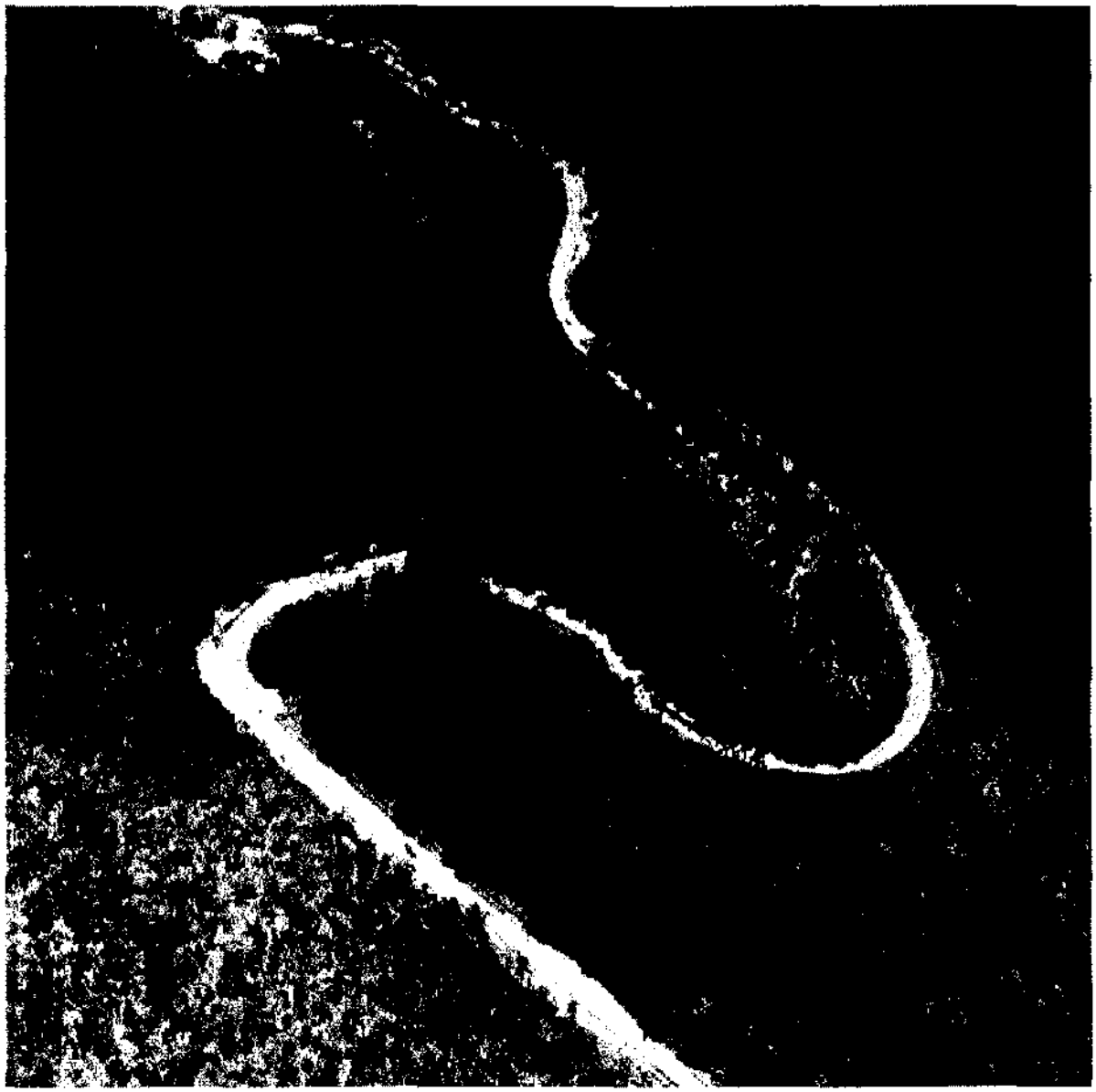
Daily Mercury, August 25, 2007

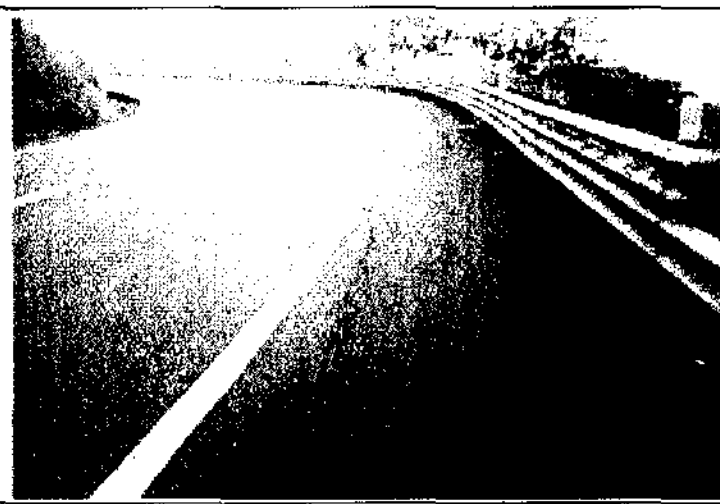


The problems in a nutshell:

- Eton Range is one of the steepest gradients on a major arterial highway in Queensland. This gradient is shown as 11%, but the climbing lane in one section is estimated to be approx 14% with a 9% cross grade.
- After a shower of rain many heavy vehicles need to be towed up the range by a heavy vehicle recovery truck, causing major safety issues.
- The lives of recovery workers are risked every time they lay under and a heavy vehicle recovery truck on the edge of the range to hook up the stranded vehicle as there is often no traffic control.
- The range has dangerous traction issues affecting heavy vehicles, causing B-doubles to slide backwards and jacknife.
- Wide loads, loss of traction, and accidents force police to close the range regularly. The Eton Police have attended approximately 20 major breakdown / accidents in 2007, many more in 2008, which causes this major highway to be totally shut on an alarmingly regular basis due to accidents and breakdowns, which risks the lives of police and emergency staff. Many times Police are not in attendance due to staffing issues, the breakdowns are resolved by breakdown crews with significant risk.
- The only alternative route is via Sarina range, which is not available for over dimensional vehicles or B Doubles and is 100 km longer, also creating driver fatigue issues. The Sarina range creates even more safety issues than the Eton Range.
- An estimated 500 wide loads use the Eton Range each month, many requiring it to be closed to traffic.

- Excess loads to 10.5 metres wide and over 200 tonnes require up to three prime movers/pusher trucks to negotiate the range.(See photo below)
- No road trains can use Eton range. This means they need to leave trailers at the top of Eton range at the truck pad which is approx 45 km from Mackay.
- Continual closures for wide loads and accidents increase fatigue issues, workplace health and safety, chain of responsibility issues for all road users and have a large economic impact, crippling the busy freight route and cutting the main artery to the Northern Bowen Basin.
- This situation will only get worse as more mines open up, increasing traffic flow.





- The Eton Range has known structural weaknesses that require major repairs and these repairs will cause significant traffic issues and closures.

Geotechnical & Environmental Consultants Report commissioned Main Roads Department Mackay. 2008. *Report by Ground Environments Pty Ltd.*

- Investigation to determine cause of longitudinal cracks in East Bond Lane on Eton Range
- Section of road exhibiting cracking widened 10 years ago
- Widening constructed on a fill embankment
- Sector of road close to geologic faults
- Unsuitable materials represented by significant boulders at the base of the embankment fill
- Poor ground preparation below the embankment is major contribution factor to crack formation

Remedial Works either:

- Full reconstruction of the widened section. Major Traffic Disruption.
- Embankment toe support with retraining structures. Traffic Disruption, Risk Unsuitable Material, Difficulties with Anchor Installation.

Observations:

- Cracking distance 200 meters
- Entire section manifesting longitudinal cracks is built on an extremely weathered seam
- Geologic literature shows two faults in the vicinity of the boundary
- Highway runs parallel to and crosses one such fault somewhere in the vicinity of the cracking phenomenon.
- Cracks extend in to outer wheel paths
- Cracks in wheel patch partially healed under traffic load
- Cracks in guard rail concrete footings
- Cracking in the verge
- Cracking in the stone pitching around one culvert outlet
- Section exhibiting cracking widened about 1997
- Entire Section of Road Widening Over An Embankment Fill
- Cracks evident in the verge beyond the guard rail for some time
- Cracks in sealed section of the road recent
- Excavations through road pavement & embankment fill indicate in one section cracking not a surface phenomenon.

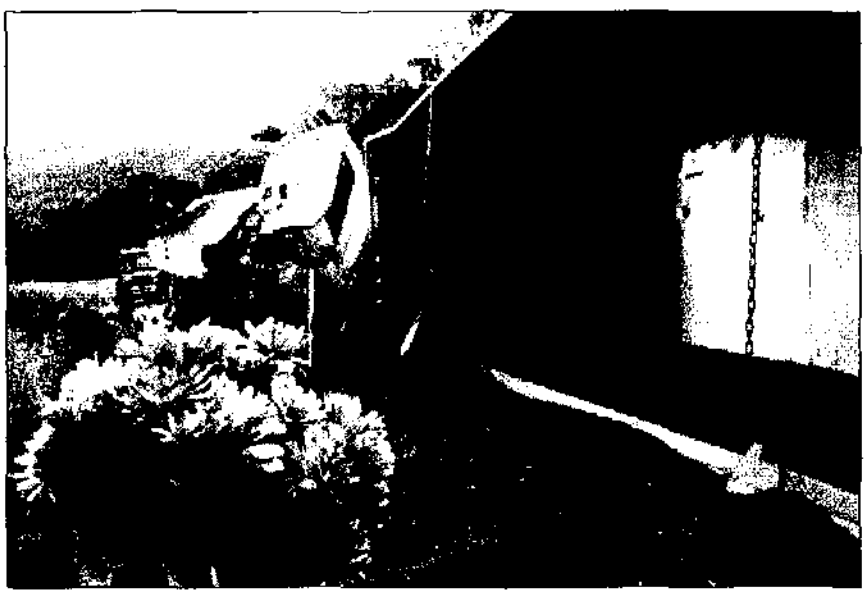
- Extent crack 400mm below road bed level – 60mm wide.
- Zones embankment fill contains oversize fractions

Accidents:

There have been six major heavy vehicle accidents on the Eton Range, causing two deaths, in just over the last two years.

The Eton Range gradient and its steep crossfall corners is a major contributing factor to these crashes.

The truck pictured below, which trapped its driver and spilt a full load of grain on the range, is just one of six to come to grief in the same spot.



AMONGST a twisted wreck of metal, a tribute of flowers from an earlier crash acts as a stark reminder of what so easily could have been. At 6am, a truck laden with grain lost control and rolled at the first corner on the range.

It came to rest at the same corner as five others in the past two years have done. The 49-year-old Nebo driver escaped death with multiple lower back fractures and broken ribs unlike two others from earlier crashes. Reaching out from yesterday's mangled mess a note attached to the flower tribute read: "To my darling Kym, you're with me forever, your loving wife Megan." (Daily Mercury 1/7/08)

- Four of these heavy vehicle accidents on the first corner (descending) occurred well above the "safety ramp". Access to this "safety ramp" would require a heavy vehicle to cross upcoming traffic as it is situated in a position which is virtually impossible to access due to the extremely poor alignment.

Traction:

More than 30 trucks have lost traction on the steep carriageway in the last two years. This is attributed to the range's steep gradient and crossfall as well as spillages from cattle trucks and a variety of vehicles, and a shower of rain makes the roadway extremely slippery.

Australian standard compliant B-double fuel tankers regularly get stuck on the last corner, requiring operators to enlist the assistance of heavier equipment.

On the 19th of December 2007, a loaded B-Double fuel tanker lost traction while travelling up the range and required a heavy vehicle recovery vehicle to assist climb the range. The vehicle lost traction after a shower of rain.

The Department of Main Roads recently covered sections of the road surface with calcined bauxite. It is hoped this will help with traction issues, but its effectiveness is yet to be determined.

These heavy vehicles do not have an alternative. The Eton Range is the only B-Double route west of Mackay.

Regular road closures for wide loads:

The Eton Range is not just closed to traffic after accidents: it's closed every time a Police escorted wide load passes through on its way to deliver machinery to the mines.

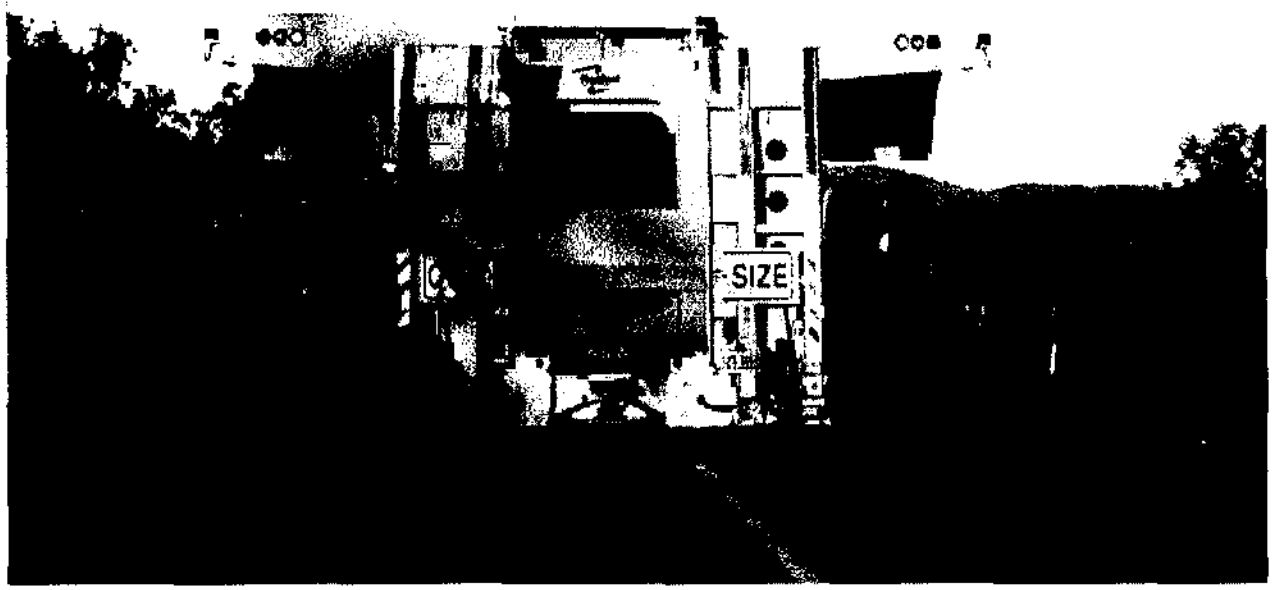
It is estimated that 500 wide loads a month use the range, many requiring closure of the Peak Downs Highway.

Police escort loads up to 10.5 metres wide and over 200 tonnes that require up to three prime movers/pushers to get the load up the range.

- This major highway is closed to all traffic while these loads traverse the Eton Range.

While light vehicles can be diverted when the range is closed, the alternative route can be up to 100km and are not to be used by b-doubles and wide loads.

The Eton Range does not allow access for Road Trains due to the steep gradient and alignment.



3. What are the impacts of these problems?

- Major economic costs.
- Major disruption to freight including grain, cattle, sugar, mining industries.
- Delays in fuel, machinery, and contractors being able to get to their jobs.
- Safety Issue due to fatigue.
- Livestock stress due to loaded cattle trucks.
- Major disruption to workers going on and off shift from the mines.
- School buses disrupted.
- Graziers, contractors, rail workers delayed.
- The transport industry stops.
- Emergency vehicles have severe delays.
- Eton Range was closed for four consecutive days in January 2008 due to issues with the Range, loss of traction, accidents, roadwork and landslides.

4. How did these problems come about?

The expansion of the coal mining industry in the Bowen Basin in recent years has resulted in substantially increased traffic flows on regional highways and road systems in Central Queensland – and advancement of infrastructure such as the Eton Range has not kept up.

The Eton Range follows the same route as in 1863 when it was built.

It was not purpose built to handle the heavy loads and wide loads of today.

Although the range has been patched up and improvements made over the years, the gradient, and other issues cause it to be unsafe and impractical for the volume, size, and weight of current and anticipated usage in coming years.

With 33 new mines approved west of Mackay and 55 in the Bowen Basin, this bottleneck is set to worsen unless urgent action is taken.

5. How might these problems be addressed?

We believe an immediate realignment of the Eton Range is the only acceptable solution.

The need for realignment has been recognised by both State and Federal Governments, who have each committed $3 million to $5 million to investigate this further.

However, for the sake of safety and of the Australian economy, members of the Mackay Road Accident Action Group believe this realignment needs to be planned and constructed immediately.

Significant financial contribution will be required to achieve this realignment, however we believe it is a small price to pay for the future of Australia's economy.

There are infinite financial rewards to be gained by ensuring this vital piece of infrastructure can not only survive current loads, but also cope with future demands.

Realignment will minimise the economic impact of range closures causing delays to all stakeholders in the Bowen Basin.

It will also ensure the range can cope with substantial increases in volumes of traffic when a predicted 15,000 extra workers are travelling to and from the mines by 2015.

SAFETY. Realignment will improve safety for heavy vehicles, particularly B-doubles and over-sized loads transporting machinery to the mine sites, lessening delays caused by accidents and loss of traction.

Fewer delays will equate to less driver fatigue. That, coupled with safer driving conditions, will reduce road trauma on the Peak Downs Highway, cutting reliance on valuable Queensland Government emergency service resources.

6. Given the situation, what should be done first?

RAAG is delighted with funding announcements for Eton Range Realignment:

- 1/7/2008 Minister Martin Ferguson announced the Federal and State Government will jointly fund planning and design work for Eton Range realignment and advised the Rudd Government has identified the importance of

Eton Range as being part of a key vital economic infrastructure corridor. (Daily Mercury 1.7.2008)

- 9/7/2008 Hon Minister Warren Pitt's media announcement that the Bligh Government will match Federal Government Funding for a planning study to identify a new Eton Range Crossing is gratefully acknowledged. (Daily Mercury 9.7.2008)

State and Federal Government funding is currently being used to commence the planning and design of the realignment of the Eton Range.

RAAG see the realignment of Eton Range as an urgent matter.

RAAG has been advised by Main Roads Mackay that Aerial Photography for the planning and design of the Realignment of Eton Range will commence in October 2008.

Every day the Eton Range remains in its current condition, our mining industry, and in turn our economy, is suffering and the lives of our residents are being put at risk.

New Information

Maunsell Australia Pty Ltd – "Draft" report for Main Roads Dept. 2.7.2008

Traffic Safety Review – Top of Eton Range. (A formal audit of the Eton Range)

Some of the Recommendations from the Report Include-:
Short term:
Improve signage, improve delineation, and include rumble strips.
Remove the truck rest area.

Long term:

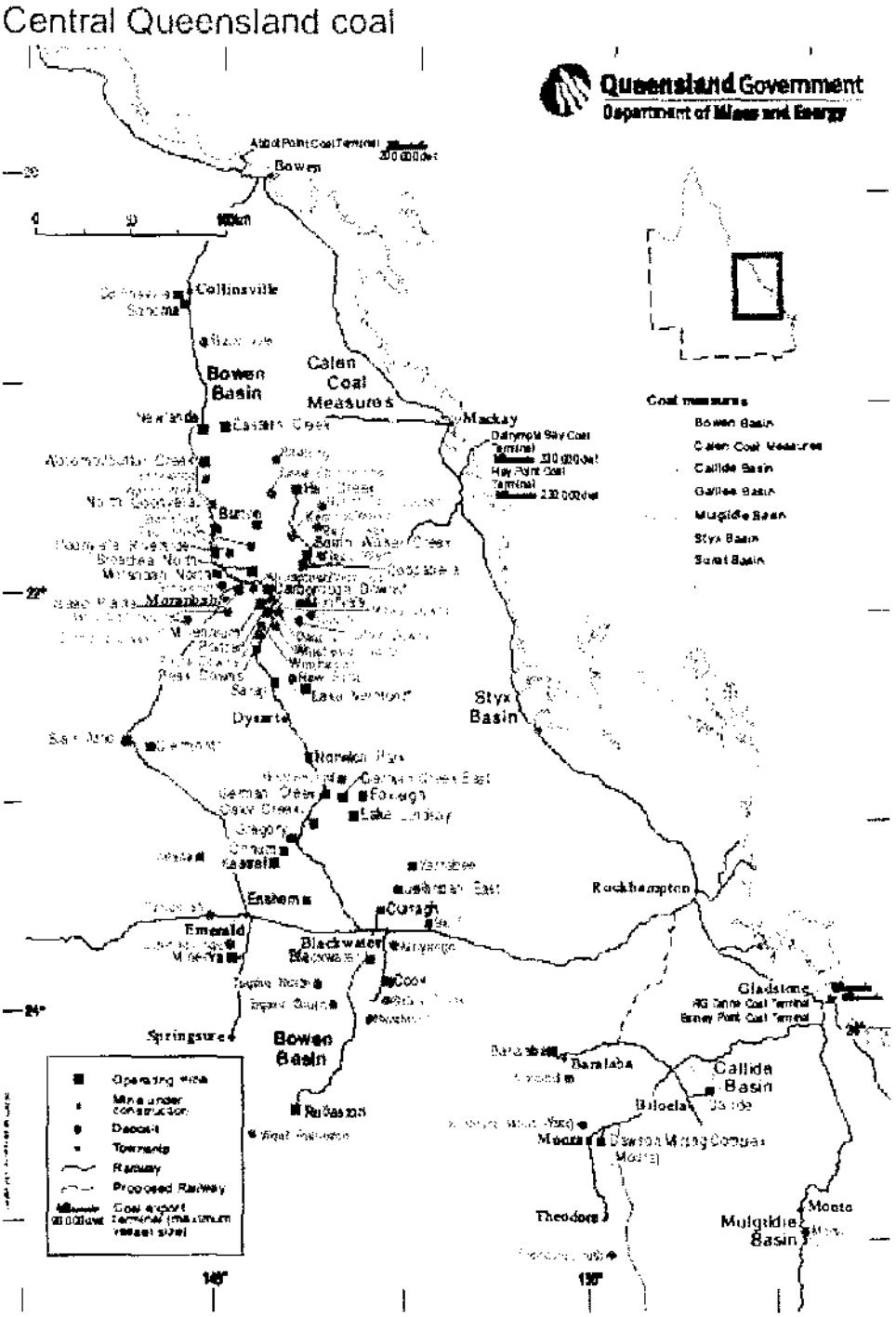
Install a reverse curve alignment of lessening radii to slow northbound traffic by physical means prior to the start of the range.
"**Total Realignment of this section of road** to remove the winding range geometry and replace with desirable grades and higher speed curves. The new alignment should include appropriate auxiliary lanes in both directions including appropriate speed arrestor systems."

RAAG believes it is essential that a Truck Pull Over area is located before the decent to the steep Eton Range so Heavy Vehicles can check and retighten their load before proceeding if necessary. The same for when they reach the top of the Range, a Truck Pull Over area is essential to check loads.

It is essential that funding is committed for the construction of the Realignment of Eton Range, a Critical Infrastructure Link of Major Importance to our National Economy.

RAAG, C/o PO Box 1850, Mackay, Queensland, 4740. Phone: 0429 881 400. Fax: (07) 4957 8818.

APPENDIX A



RAAG, C/o PO Box 1850, Mackay, Queensland, 4740. Phone: 0429 881 400, Fax: (07) 4957 8818.

MetroCount Traffic Executive
Speed Histogram

SpeedHist-836 -- English (ENA)

Datasets:

Site:	**[33B_1] EAP_33B 100km zone top of Eton Range (Site 1) Lane A**
Direction:	8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration:	15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009
File:	33B_123Jun2009.EC0 (Plus)
Identifier:	T858AH92 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	Greater than 4.00 seconds. - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AustRoads94)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 21743 / 86891 (25.02%)

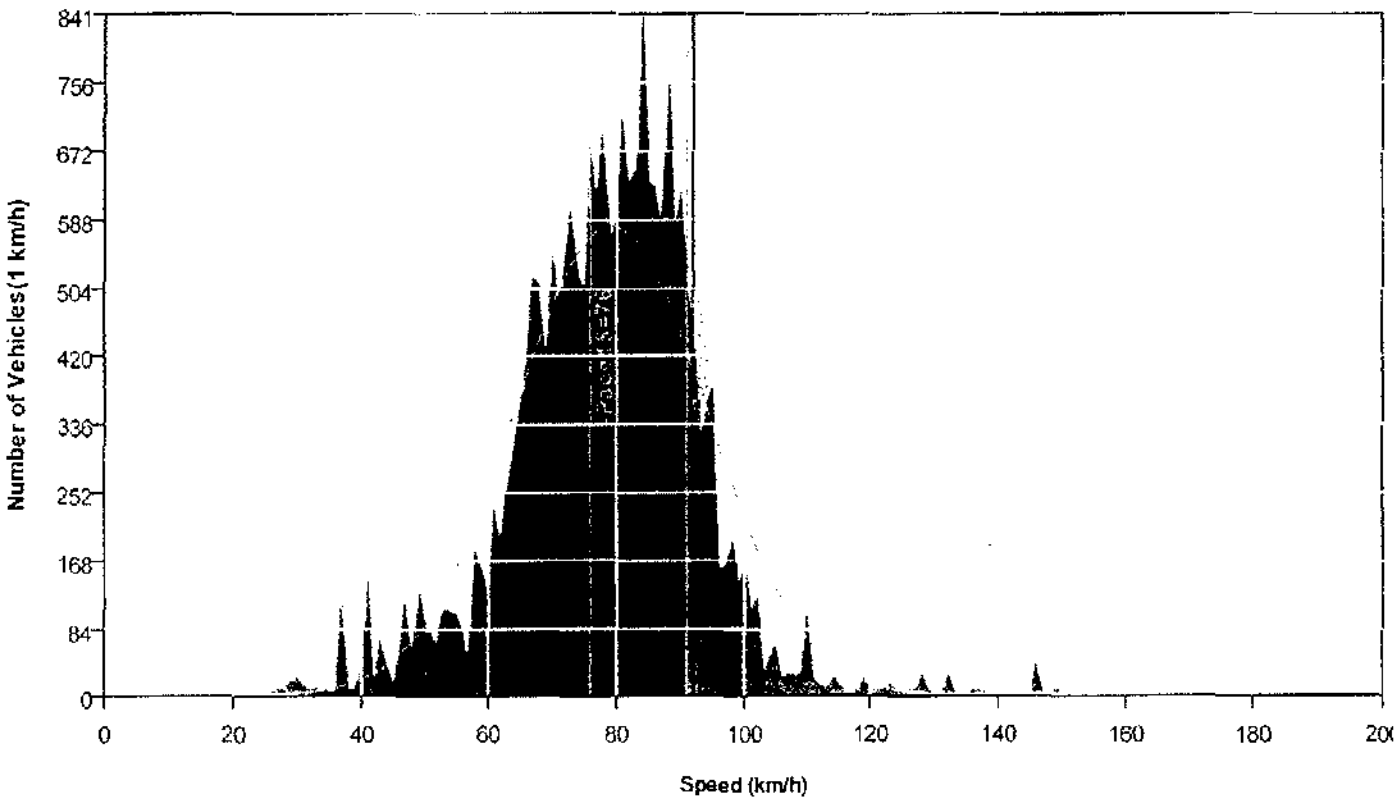
Speed Statistics

Vehicles = 21743
Posted speed limit = 100 km/h, Exceeding = 1051 (4.83%), Mean Exceeding = 112.32 km/h
Maximum = 198.1 km/h, **Minimum** = 4.4 km/h, **Mean** = 79.1 km/h
85% Speed = 91.8 km/h, **95% Speed** = 99.4 km/h, **Median** = 79.9 km/h
15 km/h Pace = 76 - 91, **Number in Pace** = 9829 (45.21%)
Variance = 224.92, **Standard Deviation** = 15.00 km/h

ALL VEHICLES

Speed Histogram

SpeedHist-836 (Metric) Site:33B_1.0EW
Description: EAP_33B_100km zone top of Eton Range (Site 1) Lane A
Filter time: 15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>4)
Scheme: Vehicle classification (AustRoads94)



ALL VEHICLES

MetroCount Traffic Executive
Speed Histogram

SpeedHist-837 -- English (ENA)

Datasets:

Site:	**[33B_10] EAP_33B_80km zone top of Eton Range (Site 2) Lane A**
Direction:	8 - East bound A>B, West bound B>A; **Lane: 0**
Survey Duration:	16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009
File:	33B_1023Jun2009.EC0 (Plus)
Identifier:	T896TP03 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	Greater than 4.00 seconds. - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AustRoads94)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 9821 / 14184 (69.24%)

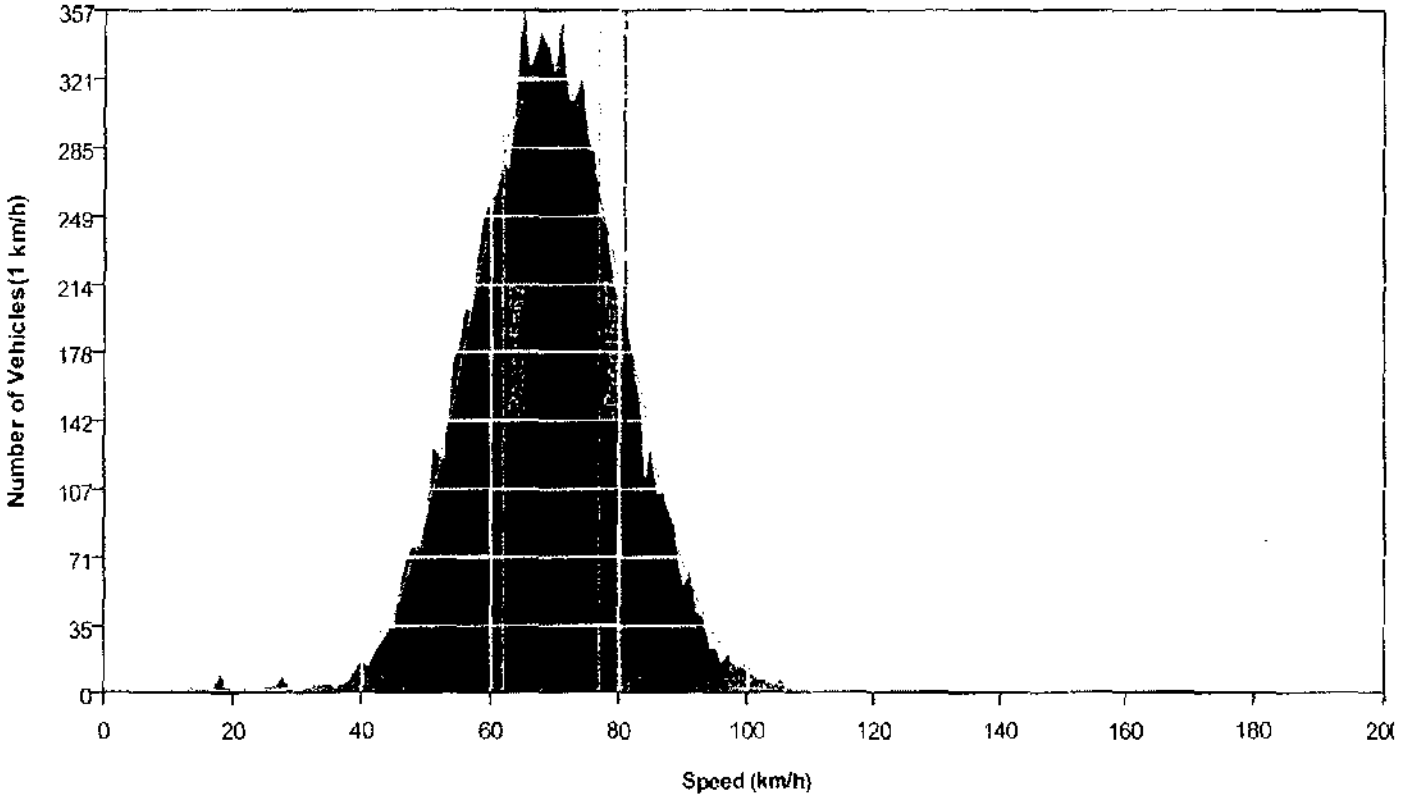
Speed Statistics

Vehicles = 9821
Posted speed limit = 80 km/h, Exceeding = 1671 (17.01%), Mean Exceeding = 86.37 km/h
Maximum = 119.4 km/h, Minimum = 9.4 km/h, Mean = 68.9 km/h
85% Speed = 80.6 km/h, 95% Speed = 87.8 km/h, Median = 68.8 km/h
15 km/h Pace = 62 - 77, Number in Pace = 4784 (48.71%)
Variance = 141.05, Standard Deviation = 11.88 km/h

ALL VEHICLES

Speed Histogram

SpeedHist-837 (Metric) **Site:**33B_10.0EW
Description: EAP_33B_80km zone top of Eton Range (Site 2) Lane A
Filter time: 16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>4)
Scheme: Vehicle classification (AustRoads94)



ALL VEHICLES.

MetroCount Traffic Executive
Speed Histogram

SpeedHist-839 -- English (ENA)

Datasets:

Site:	**[33B_11] EAP_33B 60km zone 250m before Eton Range (Site 3) Lane A**
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009
File:	33B_1123Jun2009.EC0 (Plus)
Identifier:	Y752CYPY MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	Greater than 4.00 seconds. - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 23110 / 69853 (33.08%)

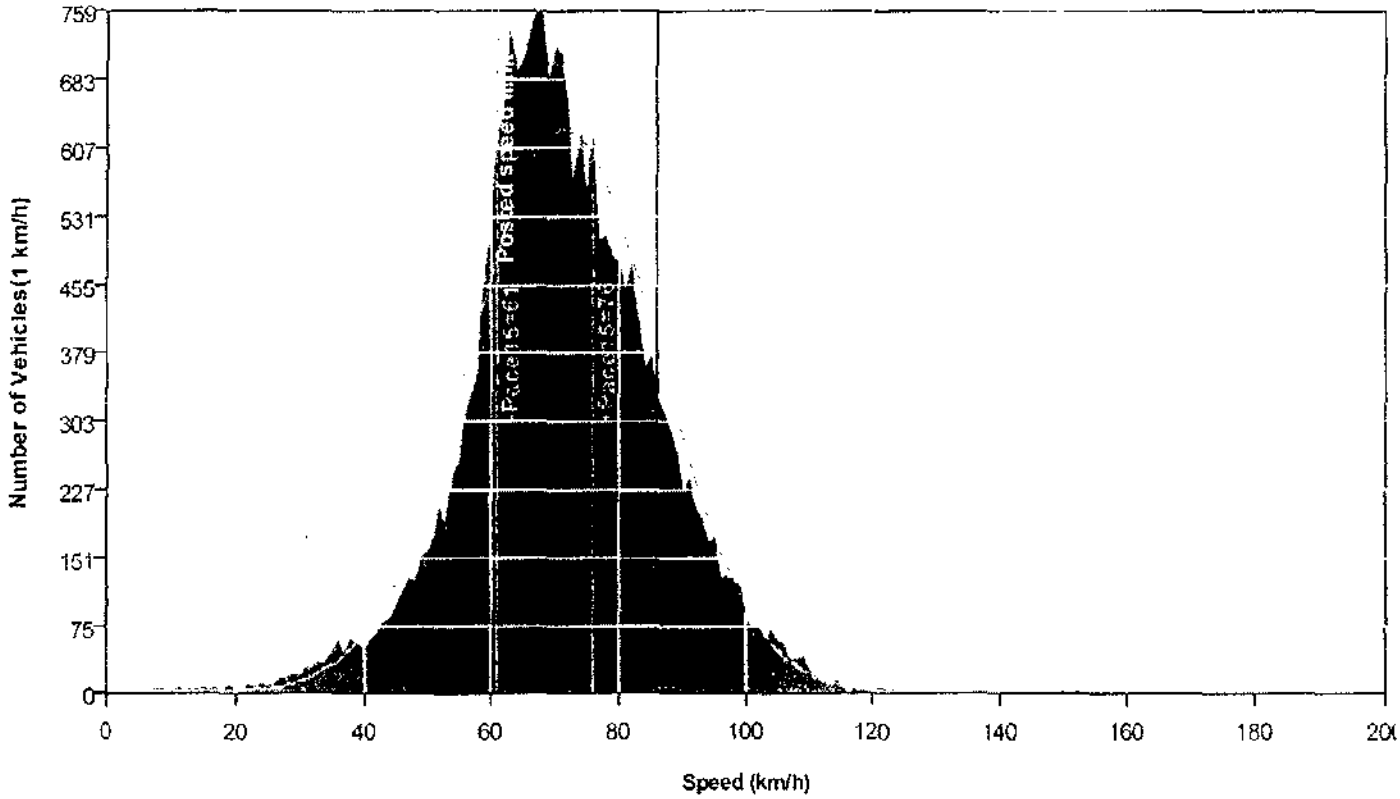
Speed Statistics

Vehicles = 23110
Posted speed limit = 60 km/h, Exceeding = 18893 (81.75%), Mean Exceeding = 76.12 km/h
Maximum = 129.5 km/h, Minimum = 6.2 km/h, Mean = 71.5 km/h
85% Speed = 86.0 km/h, 95% Speed = 96.1 km/h, Median = 70.6 km/h
15 km/h Pace = 61 - 76, Number in Pace = 10210 (44.18%)
Variance = 217.86, Standard Deviation = 14.76 km/h

ALL VEHICLES

Speed Histogram

SpeedHist-839 (Metric) **Site:**33B_11.0EW
Description: EAP_33B_60km zone 250m before Eton Range (Site 3) Lane A
Filter time: 14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>4)
Scheme: Vehicle classification (AR94 Mod 325m)



ALL VEHICLES

MetroCount Traffic Executive
Speed Histogram

SpeedHist-841 -- English (ENA)

Datasets:

Site:	**[33B_12] EAP_33B 60km zone 100m below Eton Range (Site 4) Lane A**
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009
File:	33B_1223Jun2009.EC0 (Plus)
Identifier:	Y75744W3 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	Greater than 4.00 seconds. - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 33m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 23653 / 71097 (33.27%)

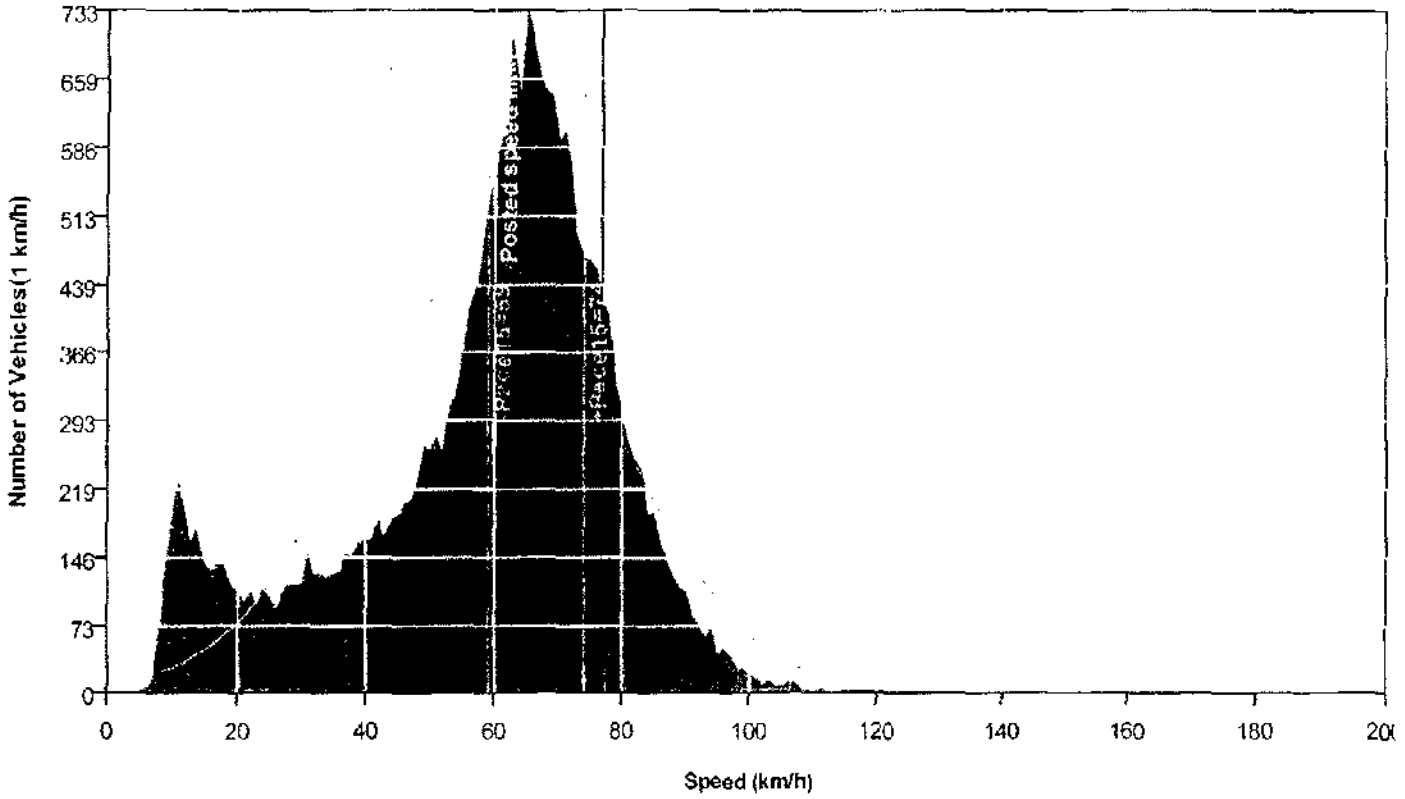
Speed Statistics

Vehicles = 23653
Posted speed limit = 60 km/h, Exceeding = 13922 (58.86%), Mean Exceeding = 72.54 km/h
Maximum = 130.6 km/h, Minimum = 6.5 km/h, Mean = 59.1 km/h
85% Speed = 77.4 km/h, 95% Speed = 86.0 km/h, Median = 63.4 km/h
15 km/h Pace = 59 - 74, Number in Pace = 9315 (39.38%)
Variance = 414.23, Standard Deviation = 20.35 km/h

ALL VEHICLES

Speed Histogram

SpeedHist-841 (Metric) **Site:**33B_12.0EW
Description: EAP_33B_60km zone 100m below Eton Range (Site 4) Lane A
Filter time: 14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>4)
Scheme: Vehicle classification (AR94 Mod 33m)



ALL VEHICLES

MetroCount Traffic Executive
Class Speed Matrix

ClassMatrix-851 -- English (ENA)

Datasets:

Site:	**[33B_1] EAP_33B 100km zone top of Eton Range (Site 1) Lane A**
Direction:	8 - East bound A>B, West bound B>A. **Lane:** 0
Survey Duration:	15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009
File:	33B_123Jun2009.EC0 (Plus)
Identifier:	T858AH92 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 42967 / 86891 (49.45%)

Class Speed Matrix

ClassMatrix-851
Site: 33B_1.0EW
Description: **EAP_33B_100km zone top of Eton Range (Site 1) Lane A**
Filter time: **15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009**
Scheme: Vehicle classification (AR94 Mod 325m)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)

Speed (km/h)

	Class												Speed Totals	
	1	2	3	4	5	6	7	8	9	10	11	12		
0 - 10	1	.	.	.	.	.	.	.	.	.	.	.	1	0.0%
10 - 20	13	.	.	.	.	.	.	.	.	.	.	.	13	0.0%
20 - 30	59	.	.	.	.	.	.	.	.	.	.	.	67	0.2%
30 - 40	358	.	.	.	.	.	.	.	.	.	.	.	372	0.9%
40 - 50	1010	.	.	.	.	.	.	.	.	.	.	.	1067	2.5%
50 - 60	1863	.	.	.	.	.	.	.	.	.	.	.	1903	4.4%
60 - 70	6264	.	.	.	.	.	.	.	.	.	.	.	6583	15.3%
70 - 80	11230	.	.	.	.	.	.	.	.	.	.	.	11854	27.6%
80 - 90	12315	.	.	.	.	.	.	.	.	.	.	.	12898	30.0%
90 - 100	5514	.	.	.	.	.	.	.	.	.	.	.	5754	13.4%
100 - 110	1264	.	.	.	.	.	.	.	.	.	.	.	1324	3.1%
110 - 120	470	.	.	.	.	.	.	.	.	.	.	.	490	1.1%
120 - 130	293	.	.	.	.	.	.	.	.	.	.	.	305	0.7%
130 - 140	114	.	.	.	.	.	.	.	.	.	.	.	122	0.3%
140 - 150	114	.	.	1	.	.	.	.	.	.	.	.	121	0.3%
150 - 160	25	.	.	2	.	.	.	.	.	.	.	.	39	0.1%
160 - 170	10	.	.	.	.	.	.	.	.	.	.	.	16	0.0%
170 - 180	6	.	.	.	.	.	.	.	.	.	.	.	11	0.0%
180 - 190	11	.	.	.	.	.	.	.	.	.	.	.	14	0.0%
190 - 200	12	.	.	.	.	.	.	.	.	.	.	.	13	0.0%
	40925	170	189	1021	155	1	17	24	223	224	17	1	42967	
	95.2%	0.4%	0.4%	2.4%	0.4%	0.0%	0.0%	0.1%	0.5%	0.5%	0.0%	0.0%		
	Class Totals													

MetroCount Traffic Executive
Class Speed Matrix

ClassMatrix-852 -- English (ENA)

Datasets:

Site:	**[33B_10] EAP_33B 80km zone top of Eton Range (Site 2) Lane A**
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009
File:	33B_1023Jun2009.EC0 (Plus)
Identifier:	T896TP03 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 13838 / 14184 (97.56%)

Class Speed Matrix

ClassMatrix-852
Site: 33B_10.0EW
Description: **EAP_33B_80km zone top of Eton Range (Site 2) Lane A**
Filter time: **16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009**
Scheme: Vehicle classification (AR94 Mod 325m)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)

Speed (km/h)

	Class												Speed Totals	
	1	2	3	4	5	6	7	8	9	10	11	12		
0 - 10	1	.	.	.	.	.	.	.	.	.	.	.	1	0.0%
10 - 20	16	.	2	6	.	.	.	.	.	.	.	.	24	0.2%
20 - 30	30	.	2	3	1	.	.	.	1	.	.	.	37	0.3%
30 - 40	58	4	3	2	.	.	1	1	4	4	.	.	77	0.6%
40 - 50	443	27	30	32	5	.	1	4	32	63	2	.	639	4.6%
50 - 60	1547	95	109	72	13	5	6	9	163	232	7	1	2264	16.4%
60 - 70	4257	310	195	93	21	5	23	16	193	242	3	.	4258	30.8%
70 - 80	3446	103	142	72	18	4	15	14	115	173	10	.	4156	30.0%
80 - 90	1046	64	58	21	3	1	3	3	42	45	1	.	1886	13.6%
90 - 100	347	10	13	5	.	.	.	3	4	6	.	.	430	3.1%
100 - 110	57	.	.	2	.	.	.	.	1	.	.	.	60	0.4%
110 - 120	4	.	1	.	.	.	.	.	.	.	.	.	5	0.0%
120 - 130	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
130 - 140	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
140 - 150	1	.	.	.	.	.	.	.	.	.	.	.	1	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
160 - 170	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
170 - 180	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
180 - 190	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
190 - 200	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
	10892	561	552	308	61	15	51	52	555	767	23	1	13838	
	78.7%	4.1%	4.0%	2.2%	0.4%	0.1%	0.4%	0.4%	4.0%	5.5%	0.2%	0.0%		

Class Totals

MetroCount Traffic Executive
Class Speed Matrix

ClassMatrix-853 -- English (ENA)

Datasets:

Site:	**[33B_11] EAP_33B 60km zone 250m before Eton Range (Site 3) Lane A**
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009
File:	33B_1123Jun2009.EC0 (Plus)
Identifier:	Y752CYPY MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 35203 / 69853 (50.40%)

Class Speed Matrix

ClassMatrix-853
Site: 33B_11.0EW
Description: **EAP_33B_60km zone 250m before Eton Range (Site 3) Lane A**
Filter time: **14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009**
Scheme: Vehicle classification (AR94 Mod 325m)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)

Speed (km/h)

Speed (km/h)	Class 1	2	3	4	5	6	7	8	9	10	11	12	Speed Totals	
0 - 10	10	.	2	.	.	.	.	.	.	.	.	.	12	0.0%
10 - 20	87	2	10	5	2	2	.	1	3	.	.	.	92	0.3%
20 - 30	159	5	9	9	8	1	.	1	25	27	2	.	246	0.7%
30 - 40	296	17	44	47	13	.	4	4	88	187	11	1	712	2.0%
40 - 50	809	56	128	98	7	2	19	25	222	359	25	1	1753	5.0%
50 - 60	2685	184	428	162	51	9	40	30	455	573	17	.	4654	13.2%
60 - 70	6466	499	561	257	58	10	47	34	348	449	16	1	10707	30.4%
70 - 80	7843	371	306	82	24	9	12	13	119	108	5	.	8878	25.2%
80 - 90	4773	192	107	27	5	1	2	4	16	21	1	.	5106	14.5%
90 - 100	2067	46	34	10	4	1	1	1	5	8	.	.	2173	6.2%
100 - 110	705	10	17	1	.	1	.	.	.	1	.	.	735	2.1%
110 - 120	105	.	3	.	.	.	.	.	.	.	.	.	109	0.3%
120 - 130	26	.	.	.	.	.	.	.	.	.	.	.	26	0.1%
130 - 140	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
140 - 150	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
160 - 170	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
170 - 180	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
180 - 190	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
190 - 200	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
	27990	1344	1649	678	174	36	125	113	1281	1733	77	3	35203	
	79.5%	3.8%	4.7%	1.9%	0.5%	0.1%	0.4%	0.3%	3.6%	4.9%	0.2%	0.0%		

Class Totals

MetroCount Traffic Executive
Class Speed Matrix

ClassMatrix-854 -- English (ENA)

Datasets:

Site:	**[33B_12] EAP_33B 60km zone 100m below Eton Range (Site 4) Lane A**
Direction:	8 - East bound A>B. West bound B>A. **Lane:** 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009
File:	33B_1223Jun2009.EC0 (Plus)
Identifier:	Y75744W3 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 33m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 35758 / 71097 (50.29%)

Class Speed Matrix

ClassMatrix-854

Site:	33B_12.0EW
Description:	**EAP_33B_60km zone 100m below Eton Range (Site 4) Lane A**
Filter time:	**14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009**
Scheme:	Vehicle classification (AR94 Mod 33m)
Filter:	Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)

Speed (km/h)	Class 1	2	3	4	5	6	7	8	9	10	11	12	Speed Totals	
0 - 10	34	.	6	55	31	.	.	1	55	32	4	.	231	0.6%
10 - 20	1257	19	114	226	106	5	9	29	273	346	20	.	2401	6.7%
20 - 30	990	54	179	174	34	4	12	23	236	138	14	.	1838	5.1%
30 - 40	1133	80	254	203	41	6	24	30	279	276	8	1	2335	6.5%
40 - 50	1860	167	321	173	43	7	23	24	312	347	13	1	3285	9.2%
50 - 60	4859	344	340	94	33	10	21	16	135	192	10	1	6100	17.1%
60 - 70	9099	380	301	36	9	5	6	6	25	51	2	1	9921	27.7%
70 - 80	6201	150	91	8	1	2	1	1	3	9	.	.	6473	18.1%
80 - 90	2355	26	17	.	.	2	.	.	1	.	.	.	2402	6.7%
90 - 100	635	5	5	.	.	.	.	.	.	.	.	.	645	1.8%
100 - 110	101	.	2	.	.	.	.	.	.	.	.	.	103	0.3%
110 - 120	17	.	.	.	1	.	.	.	.	.	.	.	18	0.1%
120 - 130	4	.	.	.	.	.	.	.	.	.	.	.	4	0.0%
130 - 140	2	.	.	.	.	.	.	.	.	.	.	.	2	0.0%
140 - 150	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
150 - 160	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
160 - 170	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
170 - 180	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
180 - 190	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
190 - 200	.	.	.	.	.	.	.	.	.	.	.	.	0	0.0%
Class Totals	28598	1205	1671	950	297	36	101	130	1304	1391	71	4	35758	
	80.0%	3.4%	4.7%	2.7%	0.8%	0.1%	0.3%	0.4%	3.6%	3.9%	0.2%	0.0%		

MetroCount Traffic Executive
Speed Histogram

SpeedHist-855 -- English (ENA)

Datasets:

Site:	**[33B_1] EAP_33B 100km zone top of Eton Range (Site 1) Lane A**
Direction:	8 - East bound A>B, West bound B>A Lane: 0
Survey Duration:	15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009
File:	33B_123Jun2009.EC0 (Plus)
Identifier:	T858AH92 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 42967 / 86891 (49.45%)

Speed Statistics

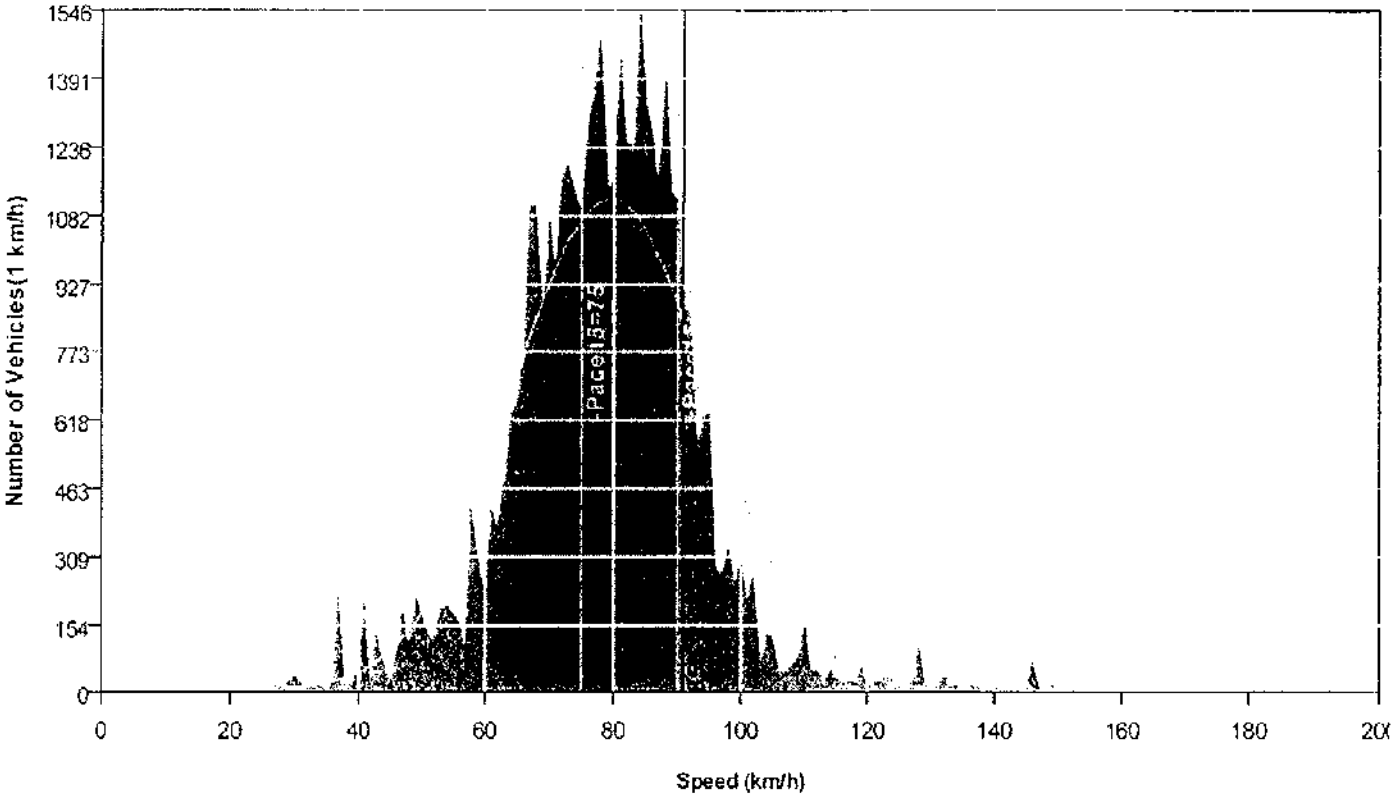
Vehicles = 42967
Posted speed limit = 100 km/h, **Exceeding** = 2455 (5.71%), **Mean Exceeding** = 114.38 km/h
Maximum = 199.4 km/h, **Minimum** = 4.4 km/h, **Mean** = 79.4 km/h
85% Speed = 91.4 km/h, **95% Speed** = 100.8 km/h, **Median** = 79.6 km/h
15 km/h Pace = 75 - 90, **Number in Pace** = 19475 (45.33%)
Variance = 236.44, **Standard Deviation** = 15.38 km/h

HEAVY VEHICLES ONLY

(HVO)

Speed Histogram

SpeedHist-855 (Metric) Site:33B_1.0EW
Description: EAP_33B_100km zone top of Eton Range (Site 1) Lane A
Filter time: 15:00 Thursday, 4 June 2009 => 11:38 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)
Scheme: Vehicle classification (AP94 Mod 325m)



HVO

MetroCount Traffic Executive
Speed Histogram

SpeedHist-856 -- English (ENA)

Datasets:

Site:	[33B_10] EAP_33B 80km zone top of Eton Range (Site 2) Lane A
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009
File:	33B_1023Jun2009.EC0 (Plus)
Identifier:	T896TP03 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

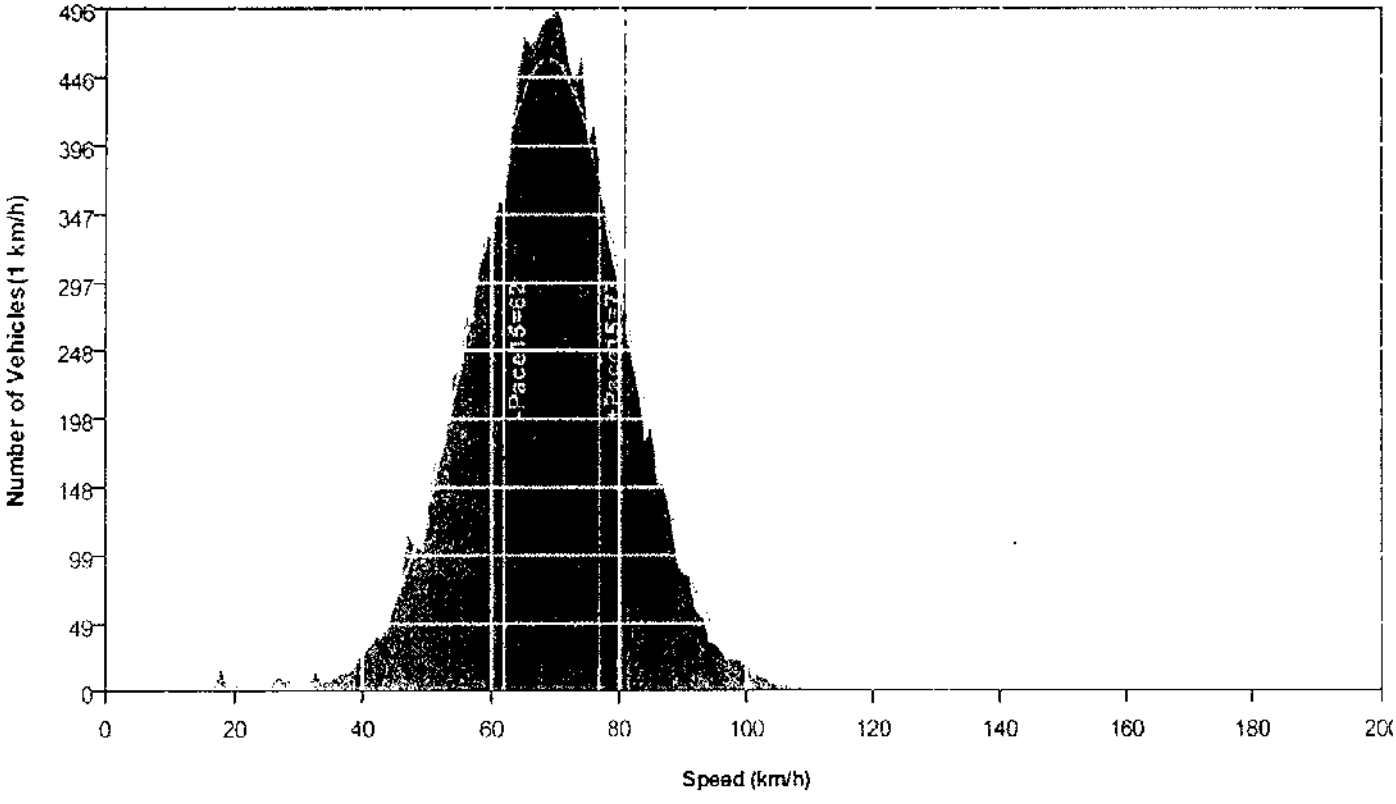
Filter time:	**16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 13838 / 14184 (97.56%)

Speed Statistics

Vehicles = 13838
Posted speed limit = 80 km/h, Exceeding = 2382 (17.21%), Mean Exceeding = 86.37 km/h
Maximum = 143.3 km/h, **Minimum** = 9.4 km/h, **Mean** = 69.0 km/h
85% Speed = 81.0 km/h, **95% Speed** = 87.8 km/h, **Median** = 69.1 km/h
15 km/h Pace = 62 - 77, **Number in Pace** = 6788 (49.05%)
Variance = 144.94, **Standard Deviation** = 12.04 km/h

Speed Histogram

SpeedHist-856 (Metric) **Site:**33B_10.0EW
Description: EAP_33B_80km zone top of Eton Range (Site 2) Lane A
Filter time: 16:00 Thursday, 4 June 2009 => 11:36 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)
Scheme: Vehicle classification (AR94 Mod 325m)



HVO

MetroCount Traffic Executive
Speed Histogram

SpeedHist-857 -- English (ENA)

Datasets:

Site:	[33B_11] EAP_33B 60km zone 250m before Eton Range (Site 3) Lane A
Direction:	8 - East bound A>B, West bound B>A. Lane: 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009
File:	33B_1123Jun2009.EC0 (Plus)
Identifier:	Y752CYPY MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h.
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 35203 / 69853 (50.40%)

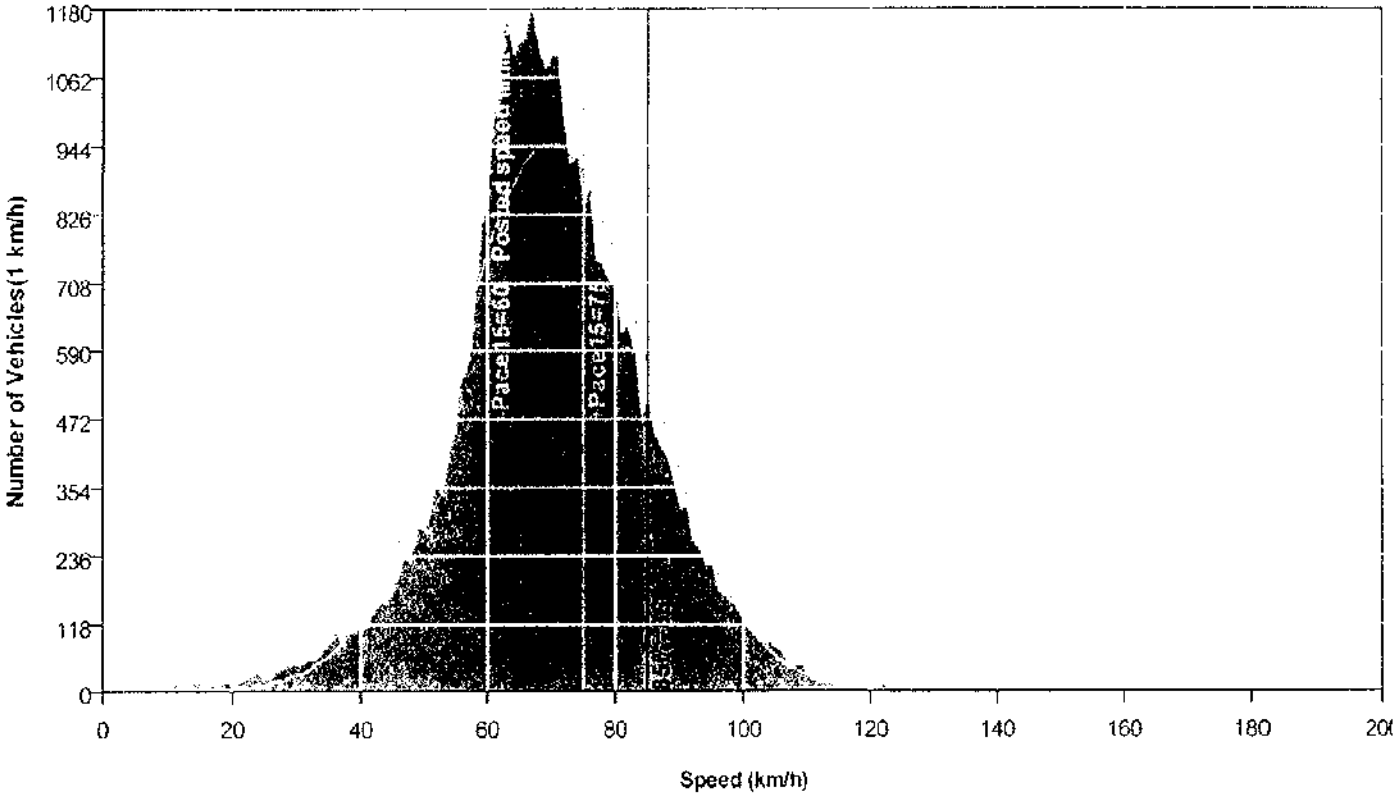
Speed Statistics

Vehicles = 35203
Posted speed limit = 60 km/h, **Exceeding** = 27734 (78.78%), **Mean Exceeding** = 75.28 km/h
Maximum = 129.5 km/h, **Minimum** = 6.2 km/h, **Mean** = 69.9 km/h
85% Speed = 84.6 km/h, **95% Speed** = 94.7 km/h, **Median** = 69.5 km/h
15 km/h Pace = 60 - 75, **Number in Pace** = 15814 (44.92%)
Variance = 220.10, **Standard Deviation** = 14.84 km/h

HVO

Speed Histogram

SpeedHist-857 (Metric) Site:33B_11.0EW
Description: EAP_33B_60km zone 250m before Eton Range (Site 3) Lane A
Filter time: 14:00 Thursday, 4 June 2009 => 11:50 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0,200) Headway(>0)
Scheme: Vehicle classification (AR94 Mod 325m)



HVO

MetroCount Traffic Executive
Speed Histogram

SpeedHist-858 -- English (ENA)

Datasets:

Site:	[33B_12] EAP_33B, 60km zone 100m below Eton Range (Site 4) Lane A
Direction:	8 - East bound A>B, West bound B>A Lane: 0
Survey Duration:	14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009
File:	33B_1223Jun2009 EC0 (Plus)
Identifier:	Y75744W3 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	0 - 200 km/h
Direction:	North, East, South (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AR94 Mod 325m)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 35758 / 71097 (50.29%)

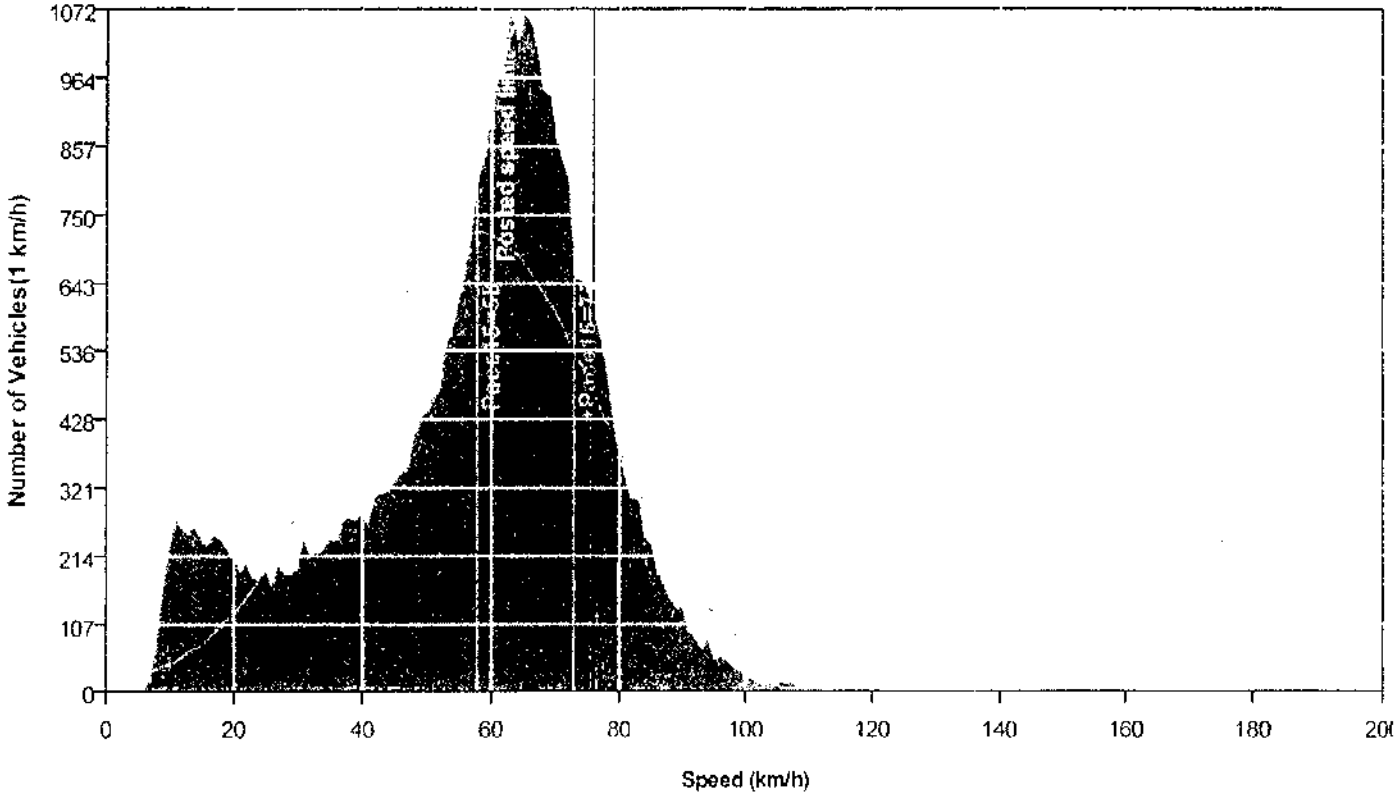
Speed Statistics

Vehicles = 35758
Posted speed limit = 60 km/h, Exceeding = 19568 (54.72%), Mean Exceeding = 71.67 km/h
Maximum = 139.1 km/h, Minimum = 2.9 km/h, Mean = 57.5 km/h
85% Speed = 75.6 km/h, 95% Speed = 84.2 km/h, Median = 61.6 km/h
15 km/h Pace = 58 - 73, Number in Pace = 14137 (39.54%)
Variance = 392.98, Standard Deviation = 19.82 km/h

HVC

Speed Histogram

SpeedHist-858 (Metric) **Site:**33B_12.0FW
Description: EAP_33B_60km zone 100m below Eton Range (Site 4) Lane A
Filter time: 14:00 Thursday, 4 June 2009 => 11:44 Tuesday, 23 June 2009
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(NES) Sp(0.200) Headway(>0)
Scheme: Vehicle classification (AR94 Mod 325m)



HVO

OVER
SIZE