From the Desk...

Kiran Bhujun

August 2004 has brought a fair amount of excitement and hard work, with the preparation of the SADC Meeting, the Grand Bay Blast, the preparation of a farewell party, as well as the prize distribution ceremony to winners of the Engineering Section extra-curricular activities.

As part of our “Know-Thyself Programme”, we went to meet one of the icons of the Civil Engineering Section for a brief interview. This Interview, given its importance and our respect for the interviewee, has been given the centre-page of this newsletter.

August 2004 has also witnessed a blast in Grand Bay, wherein two people died; the results of the official enquiry is still being awaited. While we do not have the pretension of calling ourselves “Experts” on the matter, *MOMENTS* has carried out a study on this blast, and we are publishing the same in this issue.

On the office front, *MOMENTS* takes pride that its last month HOT SPOT seems to have had some sort of catalyst effect on the Engineers of this Section. It is with pleasure that we have—finally—witnessed some reaction on the RDA issue, with Engineers finally shaking off the torpor and feeling of intimidation from years of constraints instilled in them. The Team remembers the time when even laughing was banned in the corridor of the Civil Engineering Section.

On a wider scale, *MOMENTS* welcomes the set-up of the long awaited LAN project at the Technical Office. This will enable a wider electronic distribution of this Newsletter, more specifically to our Quantity Surveyors and Architects colleagues.

Finally, from The Team side, this third issue proved a very trying one, with some unexpected loss of momentum midway down the task... Luckily, we managed to catch up with the time ☺. We will also soon be launching invitations from interested Engineers to submit their candidature for inclusion in The Team.

Happy Reading...

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Think like a wise man but communicate in the language of the people

William Butler Yeats (1865-1939)

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LOCAL NEWS

Analysis of a Blast... Grand Bay— the aftermath

HISTORY
25 July 2004 at 0144. A date to remember by all Mauritians. Grand Bay, a wonderful tourist spot, was spoiled by a huge blast in the Grand Bay Store building killing two persons. The blast occurred on the first floor level of the building and was so violent that half of the store collapsed. The explosion was so powerful that the detonation was heard over hundreds of meters. The neighbouring wall of a house located at less than 10m was riddled with huge debris. The adjacent roads were covered with concrete dust and debris. Till now the exact cause of the explosion is unknown. Two hypotheses have been put forward by the investigating team. The blast may have been caused by either gas or explosives.

THE INTEROGATIONS
Those who have been on the site could witness how important the blast was and how powerful it was to cause such huge damages to the structure. We, Engineers, immediately think about the design considerations that could be taken to protect any building against such disasters. Under such impact loads half of the building just fell down like a house of cards. What are the effects of the blast on the remaining part of the building? Is it safe enough to carry out investigations in it? Did the blast affect the neighbouring buildings and houses? Should we design buildings to resist such impact loads?

DESIGN CONSIDERATIONS AT INTERNATIONAL LEVEL
Here in Mauritius all these questions do not seem to be of great interest as we still think that terrorism is not a threat to our island. Abroad building owners and developers are taking a closer look at incorporating measures to reduce the effects of a blast on their building. Bomb attacks are considered to have the highest average money loss of all hazardous events and therefore owners are considering another cost factor entering today’s construction and building operation economy. The single most important design consideration is to construct buildings to save lives in the event of a blast. There is absolutely no concern for saving the structure other than to save the people.

Continued on page 4
LOCAL NEWS

Analysis of a Blast... Grand Bay— the aftermath

The commercial buildings should be designed to resist a certain amount of impact loads so as to allow for limited localised damage – not total failure – to permit rescue teams to evacuate the victims. The structural engineers cannot design the building to be bombproof but can limit the acceptable damage to a confined area.

Some simple structural modifications should include designing redundancies into the structure to carry additional loads imposed after explosions. These provisions should include properly designing beams, girders and columns to carry damaged slabs or columns. The slab may fail locally but the entire floor must not collapse. Similarly columns should be designed to carry additional loads such that if one column is severely damaged to the point where it cannot properly function, the load will be distributed to the neighbouring columns. In addition, all beams and beam/column connections also must be properly detailed to resist blast loads which can be upward or downward force.

Another major structural consideration includes the construction of the exterior façade. It is built of two elements, the structural skin or wall section and the window or glazing. The exterior wall should be designed with a more durable material such as reinforced concrete instead of block walls at least for the lower floors so as the building could resist certain blast loads resulting in less bodily injury and building damages. This will also help in preventing progressive collapse as the wall will assist in carrying the load of a damaged column.

Another structural consideration is to design the staircase to resist certain impact loads and should not collapse so as to facilitate the evacuation of the injured people.

CONCLUSIONS

Such a decision to consider blast in the structural design should come from the owner of the buildings, given the obvious cost increase, and despite the Engineer’s advice to consider the same.

MOMENTS invites its readers to submit their views on this blast.

To be continued in the next issue

Norbert Seevathean

A special note of thanks to Mr. D.D. Bunjun, Architect Advisor at the Ministry of Public Infrastructure for his contribution in providing invaluable information to the Team about the American Blocks.
The Thames Barrier has been described as the eighth wonder of the world. It is certainly a very impressive work of engineering. The barrier is located at Woolwich reach where it spans 520 metres.

High water level at the London Bridge has risen about two and a half feet per century, due to the melting of the ice caps and man’s activities. However the main possible cause of flooding in the London area is surge tides. These originate in the North Atlantic, and generally flow to the north of the British Isles. Northerly winds force them down into the North Sea, sending millions of tons of extra water up the Thames. One and a quarter million people, spread over 45 square miles are at risk.

The first plans for a flood barrier were put forward in 1907 but no decisions were taken until 1953, when a particularly disastrous flood occurred. Over 300 people drowned and around 65,000 hectares of farmland were covered with seawater.

Many proposals were put forward to cater to the situation; one of them was that a barrier be erected across the Thames. The design had to allow cargo ships to pass through while holding back surge tides in emergencies. The winning design came from Engineer Charles Draper and the design was based on the same principle as a domestic gas tap. His design was also chosen because it minimised interference with the natural flow of the river. Works started in 1972 and was completed in 1982. The cost of construction was over £1,000 million.

Foundation Construction
For the foundation works, chalk was first removed from the river bed. Piles were then driven into the riverbed and interlocking steel beams used to form cofferdam. Horizontal steel joists were located within the foundation to withstand pressure. The piles driven were followed by the placing of 250,000 tons of rock on the river bed to counter the tidal flow effect. The foundation was completed by pumping concrete into the riverbed.

Barrier Construction
Elements of the barrier were constructed both on site and as prefabricated units. A total of half a million tons of concrete was used to build the piers and sills. First of all, the piers were erected in the river. These supported the gate and housed the machinery. All that are visible of the piers above the water level are the stainless steel domes. The domes house the electric supplies required to drive the gate arms.

Continued on page 14
This month’s ASPECTS will be a continuation of last month’s article. It was noted that the cost of a typical house has increased from the year 2000 to 2004 and this trend seems likely to continue. Subsequently, it has become important to find alternative methods of construction to reduce the cost factor as much as possible.

One such alternative method considered is the use of ‘American Block’, instead of the traditional concrete blocks. American blocks are 400 mm long, 200 (or 100) mm deep and 200 (150 or 100) mm wide. Its compressive strength ranges from 6 to 14 KN/m², in increments of 2 KN/m². This is a definite advantage over the currently used concrete blocks, which have a maximum compressive strength of 3.5 KN/m². American blocks are manufactured with two different finishes: rough, like the blocks presently being used, and fair face. Another very important aspect is that there is a variety of different shapes, so that they can be used as permanent formwork, which results in yet another saving.

**HOW DO AMERICAN BLOCKS WORK?**

**Foundation**
The blocks are of the load-bearing type so that only strip footing is used as a foundation.

**Columns**
At about every 1.2 m, one vertical 12mm diameter reinforcement bar (Y12) is fixed into the strip footing prior to casting. After casting the strip footing, blocks, which are open on both sides, are placed so that the Y12 bar passes through the blocks. Typical such blocks are as shown above; these are also used to erect walls. Concrete is then poured into the hollow block containing the Y12 bar. Columns of size 170x160 mm for 200mm blocks and 170x110 mm for 150mm blocks having one Y12 as reinforcement are thus cast without shuttering.

**Beams**
For the beams, another type of block is used, as shown below. It has a U shape and is available in two heights: 100mm and 200mm. This block is laid in the last row of a wall. Two bars of 10mm diameter reinforcement (Y10) are fixed into the hollow part together with the links. Again, the blocks act as formwork and concrete is poured in it.

**Slab**
For the slab, precast concrete battens are used. These battens are laid on the beams, at a spacing of 500mm. The size and reinforcement of these battens depend on the distance between the two beams on which they are laid. Concrete slab blocks are then placed on the battens one after the other. Steel mesh A142 is laid on the blocks and a 40mm layer of concrete is cast on the blocks.

**Openings**
With regards to the openings types, Aluminium, PVC or wooden openings seem to be ideal. Metal openings can also be used, but they would then need to be screwed at the top and bottom and this could be rendered for aesthetic purposes.
Alternative method of Construction... a Cheaper solution?

**Water tightness**
The concrete block wall has so far been found to be satisfactorily water tight. However, the surface can be painted with waterproof cement slurry to ensure total impermeability of the wall.

**Savings**
No temporary formwork is required. The American block itself acts as the permanent formwork. The amount of concrete and reinforcement is also reduced. Furthermore, no rendering is required and the most required skill is mainly that of blocks laying. Also, the time for the construction of our typical house has been estimated to have been reduced from 90 days to about 60 days. Therefore, the American block can be said to have pleasant advantages.

**COST OF THE TYPICAL HOUSE**
The ordinary concrete blocks in our typical house were replaced by the American blocks and the amount of materials and resulting costs were calculated. The same factors were taken into account as that for the typical house using traditional concrete blocks, considered in our July issue.

A decrease in the amount of materials was noted. This is due to the following:
1. less concrete being used since blocks were also used in the slabs. The sizes of the other concrete members were also less compared to the ones usually used.
2. Less reinforcement in columns, beams and slab.
3. No rendering was required hence the amount of cement and rocksand used were further reduced
4. No formwork was required.
5. One of the main skill required was that of laying blocks; it was hence easier to build this house than the one using traditional blocks. Thus less time and less skill were required.

A comparison of the typical houses, using American blocks and that ordinary blocks has been made. It can be seen from the charts that the use of the ‘American blocks’ method of construction require less money than the traditional method. In fact, the price of our typical house while using American blocks reduces from Rs 611,000 to about Rs. 510,000

As a brief conclusion, it is seen that, with the increasing costs of all materials these days, the use of American blocks should be considered in the future.

Nalini M-Jhowry / Sabrina Gaya
September 2004 will see two high profile exits from the Civil Engineering Section. The Team has decided to devote this month centre page to the first one of them: Mr. A. R. Ozeer, Deputy Chief Engineer.

The Team went to meet him for an interview, and here is what we learnt:

Mr. Ozeer graduated in Civil Engineering from the Strathclyde University of Glasgow, UK in July 1973. He subsequently worked as Graduate Engineer on several projects at the Glasgow Corporation and Airdrie Burgh.

He joined the Civil Service on 15 July 1975 as Civil Engineer in the-then Ministry of Works, and was entrusted the engineering responsibility of some Districts.

In 1981, he left the department for a year to complete his post-graduation studies at the Ecole Nationale des Ponts et Chaussée at Paris, from which he graduated in July 1982 with a C.E.S en Circulation et Transport Urbain.

In 1985, he followed a two month attachment course in the Design of Motorways, funded by the Ministry of Construction in Japan. Subsequently, under the guidance of a Japanese expert, he did the re-design and prepared the Tender Documents of the Motor-way through Port Louis.

Mr. Ozeer has been involved in a few pioneer projects at the Ministry, among which the design of the Maryse-Justin stadium in Réduit. For recall, this stadium was the first in the country to have a synthetic track, and was used to host the 1985 Indian Ocean Island Games (IOIG).

Along the same line, he has also been involved in the Structural design of Traffic Centres, such as the ones at Goodlands and St-Pierre.

Mr. Ozeer worked as Civil Engineer (Roads & Buildings) for the period 15 July 1975 to 26 June 1990; during this period, he has had the responsibility of the various district at different times.

On 27 June 1990, Mr. Ozeer was promoted Principal Engineer, and in this capacity, has worked as PE (Roads), PE (Buildings) and PE (Traffic Management Unit)

He was promoted Deputy Chief Engineer on 8 August 2003, and has, to date, been holding this post.

The Team also had a small Q&A session with Mr. Ozeer. Here is a summary of our conversation:

Q: Mr. Ozeer, tell us of the most memorable time of your career?
A: My contribution to the two IOI Games, as well as my involvement as representative of the Civil Engineering section in the organization of the numerous Independence day celebrations will remain as strong plus points of my career.
Q: Can you briefly tell us about your working career?
A: I retain many good memories of my working time at the Ministry. I have had many excellent and hard-working subordinates, be it when I was myself a young Engineer responsible of Districts or as a Principal Engineer, till date. I believe that we have some of the best Engineers of Mauritius in our ranks.

Of course, life has, with time, brought along its fair share of ups and downs, but I have been able to live through. I reckon that I have learnt a lot from my experience at this Ministry.

In my career, I have worked under seven different Chief Engineers (CE), namely Mr. Limbada, Mr. Mangar, Mr. Kurramtally, Mr. Rajah Gopal, Mr. Moreea, Mr. Huree and now Mr. Ramjan, and have worked with tens of Engineers. I have also served under several Governments and under various Ministers.

Q: Since you have worked under so many Chief Engineers, can you make a comparison between them?
A: A comparison might not be appropriate. Each CE has his own style of working, and of making people work... let’s say that some were soft-spoken, some were harsh, some were oriented towards group decisions while some were more of an authoritative style and others of the type who were too busy for the staff... It’s just a question of adapting to the people, and doing the work assigned to you

Q: Tell us of your feeling on a technological front about the Civil Engineering Section since your debut
A: I will answer you by a funny anecdote—when I started working, we were using log tables in here, then we graduated to slide rules, then to calculators and now to powerful desktops and laptops. This fully summarises my feeling about the Civil Engineering Section...we have progressed by leaps and bounds

Q: On a more personal front, Mr. Ozeer, what are your hobbies?
A: Just like everyone else, I love football, and enjoy watching football matches on TV. But I also watch tennis, cycle race, etc. I have also played football in my youth among friends.

Q: As one of the elders of the Civil Engineering Section, what is your message to the younger generation of Engineers at the Ministry?
A: Work hard and have patience in life. In your working time, remember that everything won’t come on a silver plate.

Q: Mr. Ozeer, any regrets about your career at this Ministry?
A: (smiles... lost in thought...) Well, you surely know about it... let it be... let’s discuss something else.

Q: Now that you are nearing retirement, what are your post-retirement plans?
A: I am going to enjoy my life to the fullest. I will definitely spend my time more leisurely, without the rush and stress of the working time. I have always compared my working time like a clock, which has to be always kept wound and on time.... I am now going to spend some time unwinding... A famous saying goes:

“What is life for someone who has no time to stand and stare”

Thank you Mr. Ozeer. The Team wishes you a long and very peaceful retirement.

... and Sir...if we may... happy staring too 🌟

The Team
The Team wishes to express its sincere wishes for a Happy and Blissful married life to

Mr. and Mrs. Nuvin Jogee

who tied the knot on Sunday 8 August 2004.

My dear, don’t walk too fast on this path, for I may not be able to keep up with you…

My dear, don’t walk too slow on this path, for I fear that I might walk too fast and move away from you...

Just hold my hand and walk along with me…

On this long path……

the path of Life…

Congratulations to the newly married couple

The Team

September B’Day Boys

- S.P. Anadachee
- M. Balloo
- A.R. Ozeer
- M.R. Ramjan

A farewell lunch was organised on 11 August 2004 to wish Mr. A. K. Ramdoyal a peaceful retirement. On that occasion, a memento was offered to him by the Chief Engineer on behalf of all the Engineers.

Domino Tournament

The Winning and Runner-Up Teams of the Engineers’ Winter Domino Tournament were rewarded by the Chief Engineer on 11 August 2004.

The Winners were Kaviraj Santchum and Osman Mahomed while the Runners-Up were Fazool Bisessur and Reza Salauroo. Congrats again!

Chess : Mauritius Closed Championship Competition 2004

A special congratulations to Mr. D. Chinasamy, Engineer (Civil) for having come third in the Mauritius Closed Championship Competition for the year 2004.
August 2004 will be remembered as one to have witnessed a mystery blast with lethal consequence in Mauritius... and which I will also remember by the scampering in our Civil Engineering Section to get an “expert” to go to that blast site and give his opinion... An anxious and embarrassing time when all our members with structural knowledge were not available in office.

While general knowledge about reinforced concrete, the most commonly used material at the Ministry, is available, the same cannot be said about specialised expert knowledge on the matter. The same cannot also be said about other material of constructions, such as steel or timber. Evidence of this is the number of steel works projects that are currently being contracted out to Consultants. Is this the right attitude? And the wisest decision? And also, who is deciding that the Ministry cannot undertake those works and why?

In view of the current trend in Infrastructural development in the country, and when considering the type of requests being made to the Civil Engineering Section, it is felt that now might be the right time to initiate actions for the creation of “niches” i.e. specialised fields with a group of people being truly experts in that particular field... may I repeat this: a group of people...

Several new avenues have emerged in recent years from the Civil Engineering field; among these, a few are Traffic Engineering, Sanitary Engineering, Road Safety Engineering. While it can - and we know that it will - be argued that these branches have little to do with building works, there are still numerous more where some level of specialisation from MPI Engineers would be most welcome. A few of these fields are:

- Specialisation in Structural Steel,
- Forensic Engineering,
- Geo-technical Engineering,
- Project Management,
- Contractual and Procurement Laws,
- Specialisation in Marine Structures,
- Specialisation in Sports Infrastructures,
- Landslide Expertise,
- Specialisation in Reinforced Concrete,
- Specialisation in Pre-Cast Concrete.

It is good to recall that previously, many Engineers had benefited from sponsorship from the Ministry to undergo specialisation. Thus, some availed of that policy to obtain graduate education in Bridge Design, Geo-technical Engineering, Highway Engineering, Traffic Engineering or Master in Business Administration among others.

But this policy seems to be no more... why? We hope that this decision will be reviewed.
HOT SPOT

Let's be Experts...

To ease the shortage of “experts” – or let’s call them “people of added abilities” – at the Civil Engineering Section, MOMENTS is proposing a three-fold solution:

(a) **Continued on the Job Training**
Engineers should be given the opportunity to see how innovative concepts in Civil Engineering are being used elsewhere and whether the same techniques can be imported onto the local concepts.

But it should here be pointed out that our Engineers to be trained should first be willing to share their acquired knowledge, and not create conditions of monopoly, as is currently the case...

One vivid recent example is when only ONE Engineer was selected – why? – to attend a seminar on Contract Management. After that seminar, all requests to share the knowledge received, or even the handouts distributed were met with evasive answers and tactics... shame...

(b) **Refresher Courses**
Currently fourteen out of our thirty Engineers at this Ministry have done their Engineering studies from countries not using the British Codes of Practice; for recall, these codes are the ones being used for all structural designs in the Ministry so far. It is a fact that the British Codes will be superseded by 2007 by the European Noms (EN), but so far no one at this Ministry seems to be bothered by this fact - we will come back to this in another issue.

It is felt that refresher tailor-made courses, in some specific fields, should be made available to our Engineers in collaboration with, say, the University of Mauritius. Such an endeavour will, in time, produce rich dividends as it will enable, for example, more Engineers to help in the design of structures and hence

(i) reduce outsourcing engineering works, and by extension reduce the Ministry’s expenses in such services.

(ii) enable a better distribution of work and reduce the stress on some of our more brilliant – and most sincere – Design Engineers

However, again, for this solution to be a success, full participation of our Engineering staff is essential. Engineers of this Ministry should realise that so many things are missing in their professional life, may be because of their own undoing, and that the Civil Engineering Section will only progress if these same deeds are NOT repeated...

Recently, a training programme in AutoCAD was funded by the Ministry and some privileged ones were hand-picked for the same. Persistent news prevailed during the whole duration of this refresher programme that these people did not even attend the course... Let’s not be like that any more, please...

(c) **Specialised Courses**
It is felt that our Ministry’s policy to sponsor Civil Engineers for further studies should be revived. The need for Mauritian experts in many essential fields is very real; and what better wealth than to have them within our ranks?

Continued on page 13
LEGAL CORNER

Engineers. Do we have legal status? We knew that the answer was “YES” some time back, but is it still so?

For recall, all those desiring to call themselves “Engineers” are required, as per the Council of Registered Professional (CRPE) Act of 1965, to have themselves registered with the CRPE. The regulations, to our knowledge, is that any applicant is required to undergo two years professional training under a fellow registered Engineer, submit a comprehensive report thereon, attend and pass a professional interview before being able to either practice Engineering or give advice of an Engineering nature. The only persons whose training can be waived are those who are already members of an International Engineering body, recognised by the CRPE.

Concern has however been raised by the numerous job vacancies in the local papers for “Engineers” without any mention that the candidates have to be registered with the CRPE… Are they legal? Or are we stupid to contribute annually to the CRPE money box?

Similarly, concern should be there for the recent request for Indian candidates only from a Ministry for the post of “Civil Engineer”… Are these recruits going to undergo training and be registered prior to joining their lucrative posts? And by extension, does this mean that no Civil Engineer of that calibre exist in Mauritius?

Lets hope that the “legal” Engineering community will be provided with some answer soon….

HOT SPOT (continued)                                             Let’s be Experts...

However, it is humbly requested that the archaic method of selecting people by seniority will have to be reviewed… It is time now to start thinking intelligently; with so much competence and willingness among the newer generations, it is our Ministry’s duty to ensure the best returns for any Government investment. Why pay for someone who will be here for at most 5-10 more years, or who has crossed the age of productive learning, when you can sponsor someone who will work for you for another 25 or more years?

It is a request to the concerned authorities, however, that any such specialised courses be given to at least three Engineers; this will ensure non-monopoly as well as a better distribution of work.

We avail of this opportunity to request our Permanent Secretary and in-coming Chief Engineer to consider our proposals and we do hope that we will be able to report on their decision very soon.

We also avail of this column to send a strong message to all that HOT SPOT is not and will not be a personal weapon against anyone, but will remain an objective view of how to make the Civil Engineering Section move forward…

Kiran Bhujun
CONCEPTS

Innovative Civil Engineering Structures: The Thames Barrier

The sills were assembled next. These are located on the riverbed to support the gates when not in operation.

The sills were prefabricated and are in reinforced concrete. Cross sectional hollow steel tubes are located in the sills, providing access, service and power to the piers.

After the piers and sills were constructed, the sills were positioned to few millimetres in between the piers. The sills were then flooded and lowered into the river.

Each main sector gate has a semi-cylindrical shape and was constructed out of 4000 tons of steel. Computer controlled cranes manoeuvred each gate into place during construction. Each main sector gate is as high as a five-storey building and 61 metres wide. The gates are raised and lowered by hydraulic reciprocating gate arms weighing some 8700 tons. Power is provided from 3 alternative sites, and 3 on-site power generators are available in case of emergency.

Operation

More than 50 staff members are employed for the operation of the barrier. Computers are used for fault detection and backup systems are in place for the control of the Barrier. The gates are usually closed very slowly to prevent reflective waves travelling back to London. Such reflective waves can cause a flood even if one main sector gate is open.

Usage

The barrier has been raised 27 times since its construction, mainly as a means of precaution. The Thames Barrier is an excellent showcase of Civil, Mechanical, Electrical, Electronic and Information Technology Engineering. The construction of the Thames Barrier highlighted the importance of project management, while its continued successful operation is due to the expertise of the Engineers and operators involved.

Kavi Santchurn
For the newly married… :-)

I just married Miss Right.
I just didn’t know her first name was “Always”

Top Tips:
- Before attempting to remove stubborn stains from a garment always circle the stain in permanent marker pen so that when you remove the garment from the washing machine you can easily locate the area of the stain and check that it is gone.
- A sheet of sandpaper makes a cheap and effective substitute for costly maps when visiting the Sahara desert.
- A mouse trap placed on top of your alarm clock will prevent you from rolling over and going back to sleep.

One day, Bill was out working in the garden when he noticed a hearse slowly drive by. Following the first hearse, was a second hearse which was followed by a man walking solemnly along, followed by a dog, and then about 200 men walking in single file. Intrigued, Bill went up to the man following the second hearse and asked him who was in the first hearse.

"My wife," the man replied.

"I'm sorry," said Bill. "What happened to her?"

"My dog bit her and she died."

Bill then asked the man who was in the second hearse. The man replied, "My mother-in-law. My dog bit her and she died as well."

Bill thought about this for a while. He finally asked the man, "Can I borrow your dog?"

To which the man replied, "Get in the line."

**HUMOUR**

**MOMENTS** is now on the web and can be downloaded from our Ministry’s web-page web: [http://publicinfrastructure.gov.mu](http://publicinfrastructure.gov.mu). Please use this visit to check out the Civil Engineering Section web-page too...

The Team invites all those interested in submitting articles to **MOMENTS** to do so as soon as possible after the publication of each issue. Please contact any of the Team members for any additional information.

Articles and any suggestions towards improving the quality of this newsletter are most welcome.

Please direct your comments/letters to
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  MPI, Phoenix
  @ (Email): kbhujun@mail.gov.mu;
  ℡ (Phone) 698-8376
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**The Team**

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**Disclaimer**: Opinions expressed are those of the respective authors, and are not, **IN ANY CASE**, to be taken as those of the Ministry of Public Infrastructure, or of the Government of Mauritius.