

Civil Engineering 2001

Index

TITLE	Magazine No & Page
Advertorial features	
90-year-old KZN dam given facelift	5/37
Aveng aiming to become global construction player	4/14
Franki concentrating on the marine environment	3/24
Technocad launches MXRAIL design software	6/18
Around KwaZulu-Natal	
Bulk sewage transfer scheme at Umhlanga of strategic value	7/18
Chemically aggressive water necessitates protective measures	7/14
Civil engineering and the wood-chip industry	7/21
Historic KZN landmark receives new lease on life	7/23
Innovative and cost-effective extension to waste water treatment works	7/15
Maintenance gantry a one-of-a-kind project	7/16
Millennium Bridge new icon on Natal North Coast	7/11
Novel features at Gateway	7/7
Surfing facility at Gateway's Wavehouse	7/10
World-class Gateway scheduled to open in September	7/5
Around Pretoria	
Innovative GAC filters for Rietvlei Water Treatment Plant	4/23
Around the Eastern Cape	
BoTT project wins SAICE annual award	6/27
East London Industrial Development Zone	6/25
Filter system meets strict international water quality standards	6/21
National trade eyes the Eastern Cape	6/25
Uitenhage brothers solve SA problem	6/25
Work resumes on Kei Cuttings	6/27
Around the Free State	
Koffiefontein emergency pipeline project	9/27
Around the Highveld	
Highveld Branch - some facts	5/35
New fine ash dam for Sasol	5/36
Slagment used in road rehabilitation	5/37
Around the Lowveld	
Air Transport in Mpumalanga set to change	10/19
Novel methods used in construction of new footbridge	10/20
Earth Lodge opens at Sabi Sabi	10/21
New Letaba River Bridge	10/22

TITLE	Magazine No & Page
Around the Northern Cape	
Can the engineers of the Northern Cape do community participation?	1/30
Hopetown Munisipaliteit: nuwe waterskema	1/33
New Legislature building for Northern Cape Province	1/29
Nuwe rioolskema vir Hartswater Munisipaliteit	1/33
Rehabilitasie van die N12-roete; Brakrivier-Strydenburg-Hopetown	1/29
SAISI se Kimberley-tak	1/29
Around the Vaal Triangle	
Zoo built for Emerald Safari resort	8/19
Around the Western Cape	
Civil engineering happenings in and around Cape Town	3/28
Around the Witwatersrand	
Chairman's report for 2000	2/27
News from Wits Branch	8/19
Awards	
Another world first! Gravity base structure for tethered control buoy	2/4
BoTT project wins SAICE annual award	6/27
Call for nominations: Bob Laburn Award for 2001	4/31
Durban Water Recycling Works to save millions of litres of water for city	8/7
EED Best Technical Paper Award 2000: Call for nominations	4/31
Geotechnical Division Awards - Call for Nominations	3/19
Geotechnical Division Awards for 2000	3/21
Invitation for National competition: PIARC	7/34
Meiringspoort project a remarkable achievement	9/6
Nominations for Basil Read Award - 2001/Nominasies vir Basil Read-toekenning - 2001	5/39
Quay wall 'exported' to the Port of Luanda	10/3
SAACE recognises engineering excellence at annual awards	7/47
SAICE awards: the winners!	8/4
World-class Phakisa Freeway	1/9
Bookshelf	
A Concise Comparison of Limit State Structural Steel Design to SABS 0162 and Eurocodes	8/17
Code of practice for housing	2/17
HELP! Call for assistance for reviewing the handbook <i>Flood Hydrology for Southern Africa</i>	2/42
Leading SA concrete handbook revised	3/59
The South African Road Safety Manual	1/20
Thomas Telford Publications for Sale	2/36
Thomas Telford Publications for Sale: Water	5/27
Comment – see Viewpoint	
Communication	
Useful websites	8/25
Why does communication matter?	8/26
Free smalls!	8/27
A two-way street: listening to your market is as important as talking	9/28

TITLE	Magazine No & Page
Planning to grab your share	10/25
Company Profile	
Infraset - leading the way in infrastructure products	6/11
Plasserail - Committed to quality, productivity, high production and flexibility	6/9
Congress	
A selection of congress papers	7/29
Congress resolutions 2001	7/29
Lack of skills sabotaging economic upturn	7/33
SAICE Congress 2001	2/39
SAICE Congress: CAW in George	7/26
Zim team wins bridge building	7/28
Editorial	
Editorial - The Health Connection	4/2
Editorials, viewpoints, opinions and letters	4/37
Education	
A career in civil engineering	3/57
Bridge building at the branches	6/32
Certificate Programme in Construction Health and Safety	4/39
Course on PHREEQC-2	4/35
Experiential training - technikon students facing a dilemma	3/54
Internationally recognised qualification	2/15
Scholarships for young professionals in civil engineering to France	10/33
SPEBS: a splashing big thank you to the Water Division	8/33
Workshop on the future of civil engineering & training in South Africa	5/39
Zim team wins bridge building	7/28
Environmental Engineering	
Call for nominations: Bob Laburn Award for 2001	4/31
Course on PHREEQC-2	4/35
EEC4 Update	4/31
EED Best Technical Paper Award 2000: Call for nominations	4/31
EED committee for 2001	4/31
Environmental legal obligations	4/36
From penguins to people: environmental engineering in transition	4/33
Message from the Chair	4/31
Financial and Public-Private Partnerships	
Capital gains tax: a tax on inflation	8/24
Employment ahoy! Short-term Engineering Personnel	8/34
Financial challenges facing new municipalities	3/50
Find a fund - the funding source for engineering professionals	3/39
Lessons learned from recent municipal services partnerships contracts	3/48
Long-awaited board announced for the Home Builders Registration Council	4/37
New modalities for doing business in Africa	6/35
South Africa's infrastructure service delivery needs: the role of and challenge to public-private partnerships	3/39
The Municipal Infrastructure Investment Unit: the government's PPP-enabling strategy	3/46

TITLE	Magazine No & Page
The need for an integrated approach to market-based municipal finance	3/39
What is the role of the Special Purpose Reserve Fund?	10/30
Why keep on investing in residential property?	8/21
Focus (special features)	
<i>Focus on Construction Engineering</i>	
• Abnormally tight tolerances for Africa's Eye to the Sky	4/11
• Construction of R750m Eastern Cape brewery now complete	4/21
• Diarise this!	4/17
• Site visit to Johannesburg International Airport	4/17
• Standardisation and uniformity in procurement documents for construction works in South Africa: progress made and the challenges ahead	4/18
• The state of the civil engineering construction industry: fourth quarter 2000	4/15
•	
<i>Focus on Geotechnical Engineering</i>	
• Geotechnical Division Awards - Call for Nominations	3/19
• Geotechnical Division awards for 2000	3/21
• Gold mining from 1900 presents challenges for road construction	3/15
• Ground improvement seminar coming up	3/18
• Managing risks of a landslide rehabilitation project affecting a railway line	3/9
• News snippets	3/23
• Stone column solution for Welgedacht Water Treatment Works	3/18
• Vertical mining of small ore bodies	1/35
• Walking a dragline at Middelburg Colliery	3/19
<i>Focus on Information Technology</i>	
• Advanced structural engineering solutions	9/26
• An engineered Internet: structuring the web with portals	9/11
• Communication in the engineering workplace made easy	9/23
• ICT tools are helping to make the construction process more productive	9/17
• Land use management at the City of Cape Town	9/21
• Project management and the Internet	9/14
• Web-enabled programme, project and resource management	9/21
<i>Focus on Railway and Harbour Engineering</i>	
• A brief history of railways	10/17
• Committed to quality, productivity, high production and flexibility	6/9
• Computer-based wave modelling in Algoa Bay	10/15
• Concrete masts on major electrification project	6/15
• Continuous welded rail using the mobile flash butt welding machine	6/7
• Design considerations for the new port of Coega	10/9
• Exciting new technology	6/19
• Gauteng Rapid link	6/17
• Infraset - leading the way in infrastructure products	6/11
• New patron	6/19
• Note from the Chairman	6/5
• Quay wall 'exported' to the Port of Luanda	10/3
• Ship-maneuvring simulation as tool for port design	10/7
• Technocad launches MXRAIL design software	6/18
• Ultrasonic rail flaw detector system	10/17
• Upgrading underground tracks at Konkola Mine, Zambia	6/13

TITLE	Magazine No & Page
<i>Focus on Structural Engineering</i>	
• Are there any differences in designing structural steelwork to Eurocode or SABS 0162?	2/20
• Code of practice for housing	2/17
• Do engineers understand what a cube strength is - and what it isn't?	2/21
• Guide for design and construction of earth buildings	2/15
• Internationally recognised qualification	2/15
• Lessons to learn from natural disasters!	2/18
• SAISC silo guideline	2/19
• SEMC 2001: The International Conference on Structural Engineering, Mechanics and Computation	2/17
• Tensile structures	2/15
• Tensility in natural and man-made structures	2/9
• The Joint Structural Division	2/7
• Visit of ISE President	2/7
<i>Focus on Transportation Engineering</i>	
• CMC public transport achievements	1/27
• Integrated transportation study for Coega	1/22
• New rail link for Gauteng	1/17
• Road safety info bits	1/20
• Road use taxation and external costs in South Africa	1/13
• Simulating Pretoria's Fountain Circle and freeway complex	1/24
• The SAICE Transportation Quadrennial	1/18
• The South African Road Safety Manual	1/20
• Who built and maintained our essential roads? And who will build and maintain them now?	1/25
<i>Focus on Water Engineering</i>	
• 'Free water - necessity is the mother of invention' - a practical approach by local authorities	5/17
• Cholera awareness programme in North West Province	5/27
• CMIP funds national water leakage pilot project	5/23
• Development of deep groundwater reserve of strategic importance	5/13
• New project set to address water shortages in the Northern Province	5/9
• New software for water service institutions	8/36
• The Thukela Water Project	5/31
• Upgrading of Kwamashu Waste Water Treatment Works	5/25
• Water conservation and demand management strategy for the agricultural sector	5/28
• Water demand projections in Rand Water's area of supply	5/22
Geotechnical Engineering	
Focus on Geotechnical Engineering	3/9
Vertical mining of small ore bodies	1/35
Gijima	
A message of Hope and Goodwill	10/36
Branch visits	6/40
Branch visits	7/52
Branch visits	9/36

TITLE	Magazine No & Page
Dubs 2001	2/44
National office	2/44
Takbesoeke	10/36
Time to say goodbye	10/36
Van John Brown en kernkrag ...kom weer?	10/36
Welcome, Dr Wall!	2/44
Health and Safety	
Cholera in Eshowe	6/30
HIV/Aids, STD/s and TB in South African construction	10/27
Public safety: what the Institution of Structural Engineers is doing following the World Trade Centre disaster	9/34
History	
A brief history of railways	10/17
Cape mountain pass histories: Meiringspoort	3/37
Van John Brown en kernkrag ...kom weer?	10/39
Who built and maintained our essential roads? And who will build and maintain them now?	1/25
Industry news	
Employment ahoy! Short-term Engineering Personnel	8/34
Pipe and Infrastructure Products: a new division of the Concrete Manufacturers Association	8/28
In lighter vein	
Engineer in hell	7/46
Engineers!	7/46
You know if you're an engineer if...	3/59
International	
African Engineers Forum: Protocol of Understanding	7/40
African engineers sign protocol of understanding	7/39
Exporting of professional services the answer for SA consulting engineers	3/54
Mutual exemption signed between ECSA, ICE and SAICE	9/33
New bridge in Tanzania is cutting costs	4/29
Public safety: what the Institution of Structural Engineers is doing following the World Trade Centre disaster	9/34
Scholarships for young professionals in civil engineering to France	10/33
Visit of ISE President	2/7
IT	
Focus on IT	9/11
IT symposium: Exploiting the Internet for Engineers	6/38
New software for water service institutions	8/36
Useful websites	8/25
Useful websites from the ISE	6/34
Legal	
Arbitration for small claims: at last the answer - SCAT!	3/55
Environmental legal obligations	4/36
Ethics for Civil Engineers	9/31
Public sector procurement in South Africa	1/36

TITLE	Magazine No & Page
Standardisation and uniformity in procurement documents for construction works in South Africa: progress made and the challenges ahead	4/18
The Construction Industry Development Board and the new professional regulatory Acts are here!	1/40
Letters - Stop and listen	
Stop and Listen/Hoor bietjie hier	1/3
Stop and Listen/Hoor bietjie hier	3/2
Stop and Listen/Hoor bietjie hier	4/4
Stop and Listen/Hoor bietjie hier	7/4
Stop and Listen/Hoor bietjie hier	9/4
Personalia/Profiles	
A life to celebrate (Kallie Strydom)	3/5
Hans Blersch - 'n huldeblyk/a tribute	6/31
Hennie Loots - 'n huldeblyk	3/60
Her success stems from a disciplined mind (Danai Magugumela)	8/13
In Memoriam: Kallie Strydom	2/41
Malcolm Dixon †	4/39
Master of the practical solution - Will Alexander	5/3
Meet our new President	1/6
New Fellows/Nuwe Genote	4/40
New Fellows/Nuwe Genote	5/40
New fellows/Nuwe genote	7/49
New patron	6/19
Product News	
Advanced structural engineering solutions	9/26
Autodesk Inventor software aids recovery of Kursk wreck	8/35
Communication in the engineering workplace made easy	9/23
Computer-generated visualisations provide valuable competitive advantage	2/37
Curing Compounds for concrete versus full immersion cure	5/32
Exciting new technology	6/19
Horizontal crack injection simplified	5/32
Land use management at the City of Cape Town	9/21
New retaining wall system	3/17
Pipe and Infrastructure Products: a new division of the Concrete Manufacturers Association	8/28
Proven performance secures new contract	5/33
Sika comes to the rescue of Free State Bridge	2/37
Structural designs with DES	2/37
Uitenhage brothers solve SA problem	6/25
Ultrasonic rail flaw detector system	10/17
Web-enabled programme, project and resource management	9/21
Project News	
Autodesk Inventor software aids recovery of Kursk wreck	8/35
Bridge at Umhlanga nearing completion	2/35
Innovative solutions for bridge repairs	2/28
Largest project ever undertaken by ACSA	8/36
Menlyn Park Shopping Centre redevelopment	2/34
New Letaba River Bridge	10/22
New software for water service institutions	8/36
Routine hard-surfaced repairs - some common misconceptions in the industry	6/29

TITLE	Magazine No & Page
Wireless camera applications - countering production line downtime	8/35
Quotable quotes	
Quotable quotes	1/27
Quotable quotes	2/36
SAICE and professional news	
A career in civil engineering	3/57
African Engineers Forum: Protocol of Understanding	7/40
African engineers sign protocol of understanding	7/39
Appropriate technologies and standards - a key to sustainable development	7/42
Arbitration for small claims: at last the answer - SCAT!	3/55
At the Annual General Meeting	4/39
Awards banquet	8/29
Bridge building at the branches	6/32
Bridging gaps	3/56
Centenary Corner	10/33
Certificate Programme in Construction Health and Safety	4/39
Coming events	2/41
Coming events	4/40
Coming events	7/45
DTM Seminar	9/35
Editorials, viewpoints, opinions and letters	4/37
Employment ahoy! Short-term Engineering Personnel	8/34
Empowering the infrastructure delivery process	2/39
Ethics for Civil Engineers	9/31
Experiential training - technikon students facing a dilemma	3/54
Exporting of professional services the answer for SA consulting engineers	3/54
From the pen of the Vice-President Organisational Transformation	9/35
Growth and participation: 3000 new members by 2003	7/37
Hans Blersch - 'n huldeblyk/a tribute	6/31
HELP! Call for assistance for reviewing the handbook <i>Flood Hydrology for Southern Africa</i>	2/42
Hennie Loots - 'n huldeblyk	3/60
In Memoriam: Kallie Strydom	2/41
Invitation for National competition: PIARC	7/34
IT symposium: Exploiting the Internet for Engineers	6/38
Judging the Fulton Awards	8/31
Leading SA concrete handbook revised	3/59
Long-awaited board announced for the Home Builders Registration Council	4/37
Malcolm Dixon †	4/39
Member's Banquet a memorable event	3/52
Mutual exemption signed between ECSA, ICE and SAICE	9/33
New Fellows/Nuwe Genote	4/40
New Fellows/Nuwe Genote	5/40
New fellows/Nuwe genote	7/49
New modalities for doing business in Africa	6/35
Nominations for Basil Read Award - 2001/Nominasies vir Basil Read-toekenning - 2001	5/39
Paul Runge's Business Whisperings from Africa: Environmental and social impact consultants - Trojan horses for access to African projects	7/43
President's diary	6/39
President's diary	10/34
Procurement and Management Practice Committee to be established	10/32
Public safety: what the Institution of Structural Engineers is doing following the	9/34

TITLE	Magazine No & Page
World Trade Centre disaster	
Public sector procurement in South Africa	1/36
SAACE recognises engineering excellence at annual awards	7/47
SAICE 2002 Essay topics for professional registration	8/33
SAICE Congress 2001	2/39
<i>SAICE Journal</i> : submission and refereeing of papers	6/34
SAICE Roundabout	9/30
SAICE subscriptions 2002	6/37
SAICE team building 2000	2/43
SAISI-suurdeeg	1/40
Scholarships for young professionals in civil engineering to France	10/33
SPEBS: a splashing big thank you to the Water Division	8/33
Sustainable Development	9/4
Symposium: World Commission on Dams Report	5/40
Tensile structures workshop	5/38
Thank you!/Baie dankie!	6/31
The Construction Industry Development Board and the new professional regulatory Acts are here!	1/40
Useful websites from the ISE	6/34
Visit to Upington	3/60
What is the role of the Special Purpose Reserve Fund?	10/30
Workshop on the future of civil engineering & training in South Africa	5/39
You know you're an engineer if...	3/59
Structural engineering	
Paying for lip-services - cold-formed purlins	7/25
Soils	7/24
Transportation	
Pull-away	6/28
Routine hard-surfaced repairs - some common misconceptions in the industry	6/29
Urban and Rural	
News snippets from Urban and Rural	10/23
Viewpoint	
Civil engineers - always acting in the public interest?	8/3
Editorials, viewpoints, opinions and letters	4/37
Engineering profession lacks understanding	2/3
Membership fees: a thorny issue	9/3
Much more than a transportation project	6/3
Sustainable engineering	7/3
Viewpoint on road use taxation and external costs	4/9
Water Engineering	
Vaal 2000	2/24
A glimpse into the future of potable water supply in Gauteng: the Clarens-Johannesburg pipeline	2/25