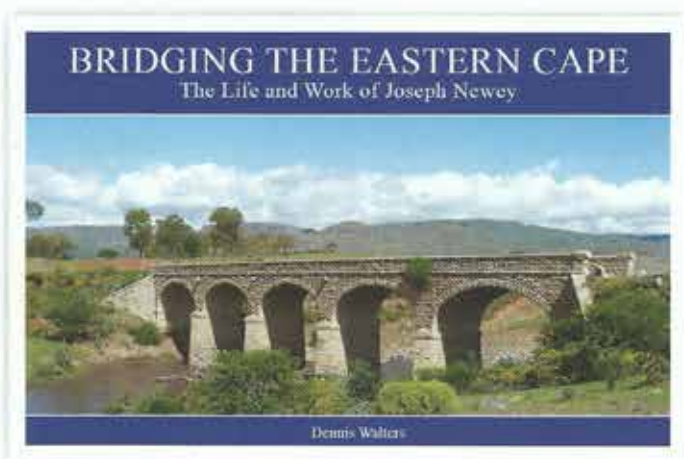


Bridging the Eastern Cape



PUBLISHING DETAILS

Title:	Bridging the Eastern Cape The Life and Work of Joseph Newey
Author:	Dennis Walters
Publisher:	Coral Tree Press, East London
ISBN:	987-0-620-59478-3
To purchase (A):	SAICE Bookshop (contact Angelene Aylward) angelene@saice.org.za
To purchase (B):	http://www.easterncapebridges.co.za

SOUTH AFRICA has seen a number of valuable contributions on its civil engineering history in recent years. A new book by Dennis Walters, consulting structural engineer from East London, has recently taken its place amongst the finest of these publications. Walters picked the life of English engineer Joseph Newey and his bridge-building career in the Eastern Cape as focal points, but the book offers much more than a narrow biography and a sterile catalogue of completed bridges. He starts with a vivid description of the stark conditions during the Industrial Revolution in the "Black Country" of England in the 19th century, then briefly follows the career of Newey through six countries before the 27-year old engineer stepped on shore at East London in January 1873. Once in South Africa, he erected new bridges, and also had to repair widespread bridge damage following the exceptional floods of December 1874. One of his best known projects, the Great Kei River Bridge, was completed in the midst of the Ninth Frontier War, with parts of the work being completed while under guard for protection. Upon its completion in 1879, Newey built bridges over the Orange and Kraai Rivers at Aliwal North before he was promoted to oversee all Public Works Department projects in the Eastern Cape in 1882. Hereafter he was involved with a broader range of projects, such as bridges, public buildings, roads, lighthouses, fencing the Cape Colony during the 1896 rinderpest, and drilling for groundwater during the Boer War. He retired in 1905 and died two years later on his farm in the Kei Road district. He was a founding member of the Cape Society of Civil Engineers in 1903, the forerunner of SAICE today.

Interspersed with the Newey story, the reader finds general snippets on, for example, iron and steel manufacture (Chapter 1), tunnelling practices (Chapter 3), early military works and bridges in the Eastern Cape (Chapters 3, 8), the Frontier Wars (Chapter 7), and the design and erection of stone arch bridges (Chapter 11). The author communicates this flood of interesting information with a rich variety of more than 200 photographs (140 were lifted from archives and previously unpublished sources), 60 diagrams, maps, paintings and sketches, and 20 information boxes providing

background information on contemporary personalities, localities and events. A useful list of 74 historic bridges is provided in an appendix, complete with completion dates, coordinates and current status. The wide and diverse variety of topics covered, interesting as they may be to readers, unfortunately weakens the coherence and focus of the book. There are often too many unconnected bits to permit a smooth, natural development of the Newey narrative. Some readers, however, may prefer the newspaper-like layout used for this coffee table book in landscape format.

The book is hard-bound and printed on high quality paper. The review copy was sturdily packaged and arrived by mail in perfect condition. The content could have been improved with more rigorous review and proof-reading. Typical problems were formatting errors such as easily avoidable widows and orphans (p 40, p 50); uneven breaks between paragraphs (box p 47, p 91); inconsistent spelling (Komgha/Komga), capitalisation (river/River, drift/Drift, war/War), decimal points/commas, and units (lbs./lbs/lb, inch/in); line break within numbers (35 000 p 58); spelling errors (pouring p 10, ironwork p 64, birdges p 80, Herzog p 82, destoyed p 129); the incorrect Colesburg rather than Colesberg; and the tautological Karnmelkspruit River. The sources of many old photographs are often not provided (starting with the first two in the book) and some sources remain obscure (where would future researchers find the "Pandora's box" of family memorabilia, or the Aidan Dreyer Collection, as examples?).

Bridging the Eastern Cape, to the reviewer's knowledge, brings aspects of South African civil engineering history together in a published form that had never been systematically researched or

addressed before. Like any good book, the fascinating events and insights presented beg more questions. How was the Public Works Department of the Cape Colonial Government organised and funded, and how did Newey fit into its organisational structure? While the author covers some aspects of the structural design considerations of the bridges, how were the bridge levels determined in the almost complete absence of hydrological flood data? What were the criteria for prioritising the construction of bridges in an undeveloped frontier region where almost all communities were clamouring for improved road communication? Nobody is better qualified than the author, both as structural engineer and having studied the historical record, to address these and many other related questions. Civil engineers will be chanting for more!

In the preface to the book, Walters sets a goal to "add to the record of the history of civil engineering works in our country". He meets this goal in an admirable way, putting the spotlight on Joseph Newey and numerous lesser-known civil engineers and engineering projects, supported with an unusually large collection of valuable, previously unpublished photographs, sketches and paintings. The value of the book extends beyond Joseph Newey, as it brings an era and a world to life shared by a generation of British engineers that left an indelible mark on the development of South Africa in the second half of the 19th century. All civil engineers interested in our history should get a copy.

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