APPLICATION OF PROJECT MANAGEMENT CONCEPT ON ROAD AND BRIDGE CONSTRUCTION CLAIMS

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Degree of Master of Science

Department of Civil Engineering

University of Moratuwa Sri Lanka

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Thesis submitted in partial fulfillment of the requirements for the degree Master of Science

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DECLARATION

"I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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ABSTRACT

Road Development Authority of Sri Lanka (RDA) is the client organization for the National Roads administration operating under the supervision of the Ministry of Highways. Since 1986 up to end of 2003 most of the road and bridge construction works were handled by Road Construction and Development Co (pvt) Ltd.which was known as (RC & DC), the main contractor organization and the subsidiary of the Road Development Authority. Independent Consultants and Contractors were handling some of the road and Bridge construction works procured through competitive tenders that was mainly foreign funded projects. After the closure of RC & DC in December 2003, the works which could not be handled by RDA directly were given on contract following the procurement procedures provided in government tender guidelines. Those contracts were categorized as foreign and locally funded projects. In contracts administration claim situations are common due to disputes with parties where independent consultants administrate the works of independent contractors. The appointment of an independent consultant to work as the contract administrator is one of the important arrangements in contract Administration.

It was examined in this research how far the Construction Project Management approach could be used to minimize delays in claim situation in road and bridge construction works. The main objective of this research is to study how far the Construction Project Management concepts can be used for road and bridge construction works while evaluating selected case studies to see how this concept could be applied in road and bridge construction claims.

To full fill this purpose a literature survey was carried out. It was revealed that there was a necessity to appoint an independent Project Manager for large projects to take impartial decisions in the interest of both the client and the contractor. The findings are based on 7 case studies carried out in depth during the research.

Keywords: Construction Project Management (CPM), Claims & Disputes, Arbitration, Independent Project Manager, Client and contractor.

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LIST OF ABBREVIATIONS

Abbreviation Description

ADB Asian Development Bank

BOQ Bill of Quantities

CPM Construction Project Management CSC **Construction Service Consultants**

C/SCSC Cost and Schedule Control System Criteria

Dispute Adjudication Board DAB

EOT Extension of Time

FDOT Florida Department of Transportation

FIDIC FEDERATION INTERNATIONALE DES

INGENIEURS-CONSEILS

(International Federation of Consulting Engineers)

FTA Federal Transit Administration

ICB International Competitive Bidding

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Joint Bidding Contract Committee **ICE**

ICTAD

JBCC

LCB **Local Competitive Biding NBT** National Building Tax

Overseas Economic Corporate Fund **OECF**

PM Project Manager

RCC Reinforced Cement Concrete

RC & DC Road Construction and Development Company (pvt) Ltd

RDA Road Development Authority

RFI Request for Information

World Bank WB

WBS Work Breakdown Structure