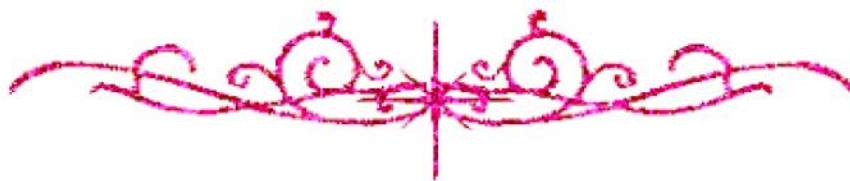


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار





OPPORTUNITIES AND THREATS IN USING FIDIC RED BOOK STANDARD FORMS UNDER THE EGYPTIAN LAW

By

Omar Ahmed Hicham Kandil

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
STRUCTURAL ENGINEERING

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
2021

**OPPORTUNITIES AND THREATS IN USING FIDIC
RED BOOK STANDARD FORMS UNDER THE
EGYPTIAN LAW**

By
Omar Ahmed Hicham Kandil

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
STRUCTURAL ENGINEERING

Under the Supervision of

Prof. Dr. Nabil Abdelbadie Yehia

Dr. Tarek Hussein Hamed

.....
Professor of Concrete Structures
Structural Engineering
Faculty of Engineering, Cairo University

.....
Contracts Consultant and Lecturer
CEM Program

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
2021

OPPORTUNITIES AND THREATS IN USING FIDIC RED BOOK STANDARD FORMS UNDER THE EGYPTIAN LAW

By
Omar Ahmed Hicham Kandil

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE
in
STRUCTURAL ENGINEERING

Approved by the
Examining Committee

Prof. Dr. Nabil Abdelbadie Yehia

Thesis Main Advisor

Dr. Tarek Hussein Hamed

Advisor

- Contracts Consultant and lecturer at CEM Program

Prof. Dr. Mohamed Mahmoud Mahdy

Internal Examiner

Dr. Sherif Mostafa Elhaggan

External Examiner

- Contracts and Claims Consultant and Expert

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
2021

Engineer's Name: Omar Ahmed Hicham Kandil
Date of Birth: 19 / 12 / 1991
Nationality: Egyptian
E-mail: ohkandil@yahoo.com
Phone: 00201062638648
Address: Elmahroosa st., Giza, Egypt
Registration Date: 01 / 10 / 2014
Awarding Date:/....../ 2021
Degree: Master of Science
Department: Structural Engineering



Supervisors:

Prof. Nabil Abdelbadie Yehia
Dr. Tarek Hussein Hamed

Examiners:

Prof. Nabil Abdelbadie Yehia (Thesis main advisor)
Dr. Tarek Hussein Hamed (Advisor)
- Contracts consultant and lecturer at CEM
Prof. Mohamed Mahmoud Mahdy (Internal examiner)
Dr. Sherif Mostafa Elhaggan (External examiner)
- Contracts and Claims Expert

Title of Thesis:

Opportunities And Threats In Using FIDIC Red Book Standard Forms Under The Egyptian Law

Key Words:

FIDIC Red Book; Egyptian Law; Egyptian Civil Code; Egyptian Administrative Law; Private and Public Works Contracts

Summary:

The Egyptian Civil Code (ECC) and FIDIC Red Book form of contract conditions are based on concept and philosophies, which may be somehow different. This thesis addresses some provisions of the Egyptian Civil Code (ECC), and the Egyptian Law for Tenders and Bids; Law 89 for year 1998 (ELTB 89) and law 182 for year 2018 (ELTB 182), to understand the parties' legal rights and obligations, when using FIDIC Red Book under such applicable law, and to assess the degree of integration and contradiction between their terms. The topics to be analyzed and discussed are the consequences of severe increase in quantities and their impact on the contract price, parties' responsibilities towards the defaults of design, and finally the perquisites needed for applying liquidated/delay damages.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Omar Kandil

Date: / /2021

Signature:

Dedication

I am dedicating this thesis to my grandfathers, grandmothers, my father (Prof. Ahmed Hicham Kandil), mother (Prof. Sahar Aly Fawzy), my brother (Mr. Mohamed Kandil) and sister (Eng. Heba Kandil), my professors and friends.

.

Acknowledgments

I would like to express my sincere gratitude to my advisors Prof. Nabil Abdelbadie Yehia and Dr. Tarek Hussein Hamed for their support, patience, and deep knowledge.

I would like to show extreme appreciation to Dr. Sherif Mostafa Elhaggan for his knowledge, and for its wonderful diplome “Contractual and Legal Aspects in Construction Contracts”, which content has helped a lot in this research.

I would like to acknowledge Dr. Walid Elnemr, Mr. Abdullah Elshehaby, Dr. Mohamed Enaba, Mr. Saif Gamal, Mr. Mohamed Eltaky, Mrs. Haidy Ahmed, Mrs. Shaimaa Adel, Eng. Mohamed Saeed Ahmed, Eng. Mohamed Magdy Ahmed, Mr. Amr Ibrahim for their extreme support, legal knowledge, and advices.

I would like to express my appreciation to Dr. Ahmed Eldokhmessi and Prof. Omar Alanwar for their amazing lectures in the master’s degree courses at the Faculty of Engineering Cairo University.

I would like to thank everyone who have really supported this research; Dr. Salwa Fawzy, Dr. Engy Serag, Eng. Marwa Gamal Eldin, Eng. Nada Khaled, Mohamed Elhusseiny, Eng. Mohamed Fekry, Eng. Wadie Eid, Eng. Ahmed Samir, Eng. and Eng. Mina Samy,, Eng. Ahmed Hamdy Gamil, , Eng. Heba Eldibeki, Eng. George Labib, Eng. Ahmed Mohey, Eng. Ahmed Elgazzar, , Eng. Shereen Mahmoud, Eng. Mary Soliman, Eng. Fady Adly.

Finally, I would like to thank Orascom Construction, FCC-Aqualia and Besix for the exposure that they have provided me, and that gave me precious insights to the construction industry.

TABLE OF CONTENTS

DISCLAIMER.....	I
DEDICATION.....	II
ACKNOWLEDGMENTS	III
LIST OF TABLES	VII
NOMENCLATURE	VIII
ABSTRACT	IX
CHAPTER 1 : INTRODUCTION AND LITERATURE REVIEW	1
1.1. ECONOMIC IMPACT OF CONSTRUCTION INDUSTRY	1
1.2. WHAT IS A CONTRACT?	2
1.3. BENEFITS OF STANDARDIZATION	3
1.4. CIVIL LAW AND COMMON LAW	4
1.5. CIVIL LAW INTRODUCTION	5
1.6. COMMON LAW INTRODUCTION	6
1.7. WHAT IS FIDIC?	6
1.8. FIDIC FORMS	7
1.9. FIDIC RED BOOK	9
1.10. EGYPTIAN LAW.....	9
1.10.1. Private Law	10
1.10.2. Public Law (Administrative Law Part Only)	10
1.10.3. Egyptian Civil Code	11
1.10.4. Egyptian Law for Tenders and Bids	11
1.10.4.1. Tender Procedures for Public Works Contracts	12
1.11. FIDIC AND ITS USE UNDER DIFFERENT LAWS AND JURISDICTIONS ..	13
1.12. PROBLEM STATEMENT	15
1.13. THESIS OBJECTIVES	18
1.15. THESIS ORGANIZATION.....	19
CONSEQUENCES OF CHANGE IN QUANTITIES	20
2.1. INTRODUCTION	20
2.2. EGYPTIAN LAW PROVISIONS FOR CHANGE OF QUANTITIES IN UNIT PRICE	
CONTRACTS.....	22
2.2.1.1. Change of Quantities under the ECC	23
2.2.1.3. Adjudication by the Egyptian Court of Cassation (Application of Article 657).....	25
2.2.1.4. Discussions on Article 663 of the ECC.....	25
2.2.1.5. Conclusion of Employer Entitlement to Terminate the Contract Pursuant to Articles 657 & 663	
	of the ECC 25
2.2.1.6. Change of Quantities under ELTB 89 and ELTB 182	26
2.2.1.6.1. Priority of Offer Concept	27
2.2.1.7. Consequences of Unforeseeable Physical Conditions under Public Works Contracts	
	28
2.2.1.8. Termination Under Public Works Contracts due to Quantities Change	29

2.3.	Application of FIDIC 1987, FIDIC 1999 and FIDIC 2017 under the Umbrella of the Egyptian Law	30
2.3.1.	FIDIC 1987	30
2.3.2.	FIDIC 1999	32
2.3.3.	FIDIC 2017	34
2.4.1.	Re-measurements under private works contracts	37
2.4.2.	Re-measurement under Public works contracts	37
2.4.3.	C Delayed Notice and Termination for Convenience When Using FIDIC 1987 in Public and Private Works Contracts	38
2.4.4.	CDelayed Notice and Termination for Convenience When Using FIDIC 1999 in Public and Private Works Contracts	38
2.4.5.	Delayed Notice and Termination for Convenience When Using FIDIC 2017 in Public and Private Works Contracts	39
CHAPTER 3 CONSEQUENCES OF DESIGN DEFAULTS UNDER FIDIC RED BOOK AND EGYPTIAN LAW		40
3.1.	INTRODUCTION	40
3.2.1.1.	Design Liability	44
3.2.1.1.1.	<i>Geotechnical Issues</i>	46
3.2.1.1.2.	<i>Employer's Faulty Instructions</i>	46
3.2.2.	CASE LAWS BY THE COURT OF CASSATION	47
3.2.2.1.	Case Law #1 dated 18 th November 1993	47
3.2.2.2.	Case Law #2 dated 8 th December 1966	47
3.2.2.3.	Case Law #3 dated 12 th June 1989	47
3.3.	THE EGYPTIAN LAW FOR TENDERS AND BIDS (ELTB 89 AD ELTB 182)	48
3.4.	FIDIC RED BOOK	50
3.4.1.	FIDIC 1987	51
3.4.2.	FIDIC 1999	52
3.4.3.	FIDIC 2017	53
3.5.	DISCUSSION	54
3.5.4.1.	Degree of Compatibility between FIDIC Red Book and ECC	57
3.5.4.1.1.	<i>Inaccurate instructions by the employer</i>	57
3.5.4.1.2.	<i>Geotechnical issue</i>	58
3.5.4.2.	Degree of Compatibility between FIDIC Red Book and laws 89 for year 1998 (ELTB 89) and 182 for year 2018 (ELTB 182)	58
3.5.4.2.1.	<i>Option #1; Contractor's Design Review before Submission of its Offer</i>	61
3.5.4.2.2.	<i>Option #2; Contractor's Design Review after Submission of its Offer</i>	62
3.5.4.2.3.	<i>Recommendation</i>	63
CHAPTER 4 APPLICABILITY OF DELAY DAMAGES OF FIDIC RED BOOKS UNDER THE EGYPTIAN LAW		65
4.1.	INTRODUCTION	65
4.2.	THE EGYPTIAN LAW	66
4.3.	THE EGYPTIAN CIVIL CODE (ECC	66
4.3.1.	Case of the Egyptian Court of Cassation	67
4.4.	EGYPTIAN LAW FOR TENDERS AND BIDS (ELTB 89 AND ELTB 182)	68
4.5.	FIDIC RED BOOK	69

4.6.	COMPATIBILITY BETWEEN FIDIC RED BOOK AND EGYPTIAN LEGAL SYSTEM	70
4.6.1.	Compatibility between FIDIC Red Book and ECC	71
4.6.2.1.	FIDIC 1987	73
4.6.2.2.	FIDIC 1999	73
4.6.2.3.	FIDIC 2017	73
4.6.2.3.1.	Under ELTB 89	73
4.6.2.3.2.	Under ELTB 182	75
CHAPTER 5 CONCLUSION AND FUTURE RESEARCH.....		76
5.1.	CONSEQUENCES OF QUANTITIES CHANGE	77
5.1.1.	Applicability of FIDIC 1987 in Public and Private Works Contracts	79
5.1.2.	Applicability of FIDIC 1999 in Public and Private Works Contracts	79
5.1.3.	Applicability of FIDIC 2017 in Public and Private Works Contracts	80
5.2.	DESIGN RESPONSIBILITIES	81
5.2.1.	Design Responsibility when Using FIDIC Red Book in Public Works Contracts	81
5.3.	PERQUISITES OF APPLYING LIQUIDATED DAMAGES/DELAY DAMAGES	83
5.3.1.	Perquisites of Applying Liquidated Damages/Delay Damages in Private Works Contracts:.....	83
5.3.2.	Perquisites of Applying Liquidated Damages/Delay Damages in Public Works Contracts:.....	84
5.4.	RECOMMENDATION FOR FUTURE WORKS	84
REFERENCES		87

List of Tables

Table 1. 1 Sources of Civil and Common Legal Systems.....	5
---	---

Nomenclature

ECC:	Egyptian Civil Code
ELTB 89:	Egyptian Law number 89 for Year 1998 and its executive regulations
ELTB 182:	Egyptian Law number 182 for Year 2018 and its executive regulations
FIDIC 1987:	Conditions of Contract for Works of Civil Engineering Construction, Edition of 1987
FIDIC 1999:	Conditions of Contract for Construction, First Edition 1999
FIDIC 2017:	Conditions of Contract for Construction, Second Edition 2017