



COVID-19 Pandemic Impacts on Construction Projects

**Claims Avoidance and Resolution
Committee**

Hossein Ataei, Ph.D., P.E., P.Eng.

Dan Becker

Joseph R. Hellenbrand, P.E.

Mohammed S. Hashem M. Mehany, Ph.D.

Thomas E. Mitchell, P.E.

David M. Ponte, P.E.



**CONSTRUCTION
INSTITUTE**

This is a preview. [Click here to purchase the full publication.](#)

COVID-19 Pandemic Impacts on Construction Projects

Hossein Ataei, Ph.D., P.E., P.Eng., F.ASCE

Dan Becker, CCM, PMP

Joseph R. Hellenbrand, P.E., PSP

Mohammed S. Hashem M. Mehany, Ph.D., PMP

Thomas E. Mitchell, P.E., M.ASCE

David M. Ponte, P.E., CFCC

Sponsored by the Claims Avoidance and Resolution Committee
of the Construction Institute of ASCE



**CONSTRUCTION
INSTITUTE**

Published by the American Society of Civil Engineers

This is a preview. [Click here to purchase the full publication.](#)

Published by American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, Virginia 20191-4382
www.asce.org/bookstore | ascelibrary.org

Any statements expressed in these materials are those of the individual authors and do not necessarily represent the views of ASCE, which takes no responsibility for any statement made herein. No reference made in this publication to any specific method, product, process, or service constitutes or implies an endorsement, recommendation, or warranty thereof by ASCE. The materials are for general information only and do not represent a standard of ASCE, nor are they intended as a reference in purchase specifications, contracts, regulations, statutes, or any other legal document. ASCE makes no representation or warranty of any kind, whether express or implied, concerning the accuracy, completeness, suitability, or utility of any information, apparatus, product, or process discussed in this publication, and assumes no liability therefor. The information contained in these materials should not be used without first securing competent advice with respect to its suitability for any general or specific application. Anyone utilizing such information assumes all liability arising from such use, including but not limited to infringement of any patent or patents.

ASCE and American Society of Civil Engineers—Registered in US Patent and Trademark Office.

Photocopies and permissions. Permission to photocopy or reproduce material from ASCE publications can be requested by sending an email to permissions@asce.org or by locating a title in the ASCE Library (<https://ascelibrary.org>) and using the “Permissions” link.

Errata: Errata, if any, can be found at <https://doi.org/10.1061/9780784483398>.

Copyright © 2021 by the American Society of Civil Engineers.
All Rights Reserved.

ISBN 978-0-7844-8339-8 (PDF)

Manufactured in the United States of America.

26 25 24 23 22 21 1 2 3 4 5

Contents

Preface and Acknowledgments	v
Introduction	vii

Chapter 1 Dealing with New and Evolving COVID-19 Regulations 1

Federal Guidelines for Restarting and Continuing with Construction.....	1
Physical Distancing.....	1
Protective Equipment	3
Cleaning and Hygiene.....	3
Communications.....	4
Screening.....	4
Recent Developments.....	5
Construction-Focused COVID-19 Websites.....	6
Review Your Contract Provisions to Recover COVID-19 Impacts.....	6
Typical Construction Agreements.....	6
Delay Clauses	9
Suspension Clauses.....	9
Notification Clauses.....	10
Change Clauses.....	11
Dispute Clauses.....	15
Insurance Policies and Provisions.....	16

Chapter 2 Time and Schedule Impacts of COVID-19 Pandemic on

Construction Projects 17

Identification of Impacts and Their Consequent Delays.....	17
Types of Impact	17
Types of Delay.....	18
Analysis of Impact and Delays.....	18
Rules and Considerations	18
Schedule Validation	19
Process.....	20
Methodologies.....	21
Strategies for Delay Impact Mitigation.....	32

Chapter 3 Financial Impacts of COVID-19 on Construction Projects 35

Realizing the Financial Impacts	35
Providing Notice.....	35
Documenting the Financial Impact.....	36

Estimating the Financial Impacts..... 37

Communication during the Crisis..... 44

References 45

Preface and Acknowledgments

COVID-19 (Coronavirus disease 2019) hit the world without warning; there was little time to prepare for the resulting effects. As construction consulting practitioners, the authors made virtual presentations that addressed potential COVID-19 effects and impacts on construction projects, specifically regulations, time and schedule impacts, and financial impacts. This publication is a result of their presentation. The authors are members of ASCE Construction Institute, Claims Avoidance and Resolution (CAR) Committee. They are also experts in their respective fields. As chair of the CAR Committee, I share the authors' passion to pass on knowledge to the ASCE community and other civil engineering and construction professionals.

On behalf of the authors, I wish to express our sincere appreciation to our families who have supported our efforts with this publication and our professional endeavors.

Thomas E. Mitchell, P.E., M.ASCE