

Underground Utilities for Construction Practitioners and Homeowners

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Library of Congress Cataloging-in-Publication Data

Names: Al-Bayati, Ahmed Jalil, author. | Panzer, Louis, author.

Title: Underground utilities for construction practitioners and homeowners / Ahmed Al-Bayati, Ph.D., P.E., Louis Panzer.

Description: Reston, Virginia : ASCE Press, 2021. | Includes bibliographical references and index. |

Summary: "Authors Al-Bayati and Panzer discuss the use of utility location services and the role that all stakeholders contribute to the reduction of damages to underground utilities during construction"—Provided by publisher.

Identifiers: LCCN 2021018088 | ISBN 9780784415818 (print) | ISBN 9780784483572 (PDF)

Subjects: LCSH: Underground utility lines—Safety measures. | Excavation—Safety measures.

Classification: LCC TD168 .A43 2021 | DDC 624.1/9—dc23

LC record available at <https://lcn.loc.gov/2021018088>

Published by American Society of Civil Engineers

1801 Alexander Bell Drive

Reston, Virginia 20191-4382

www.asce.org/bookstore | ascelibrary.org

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Errata: Errata, if any, can be found at <https://doi.org/10.1061/9780784415818>.

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ISBN 978-0-7844-1581-8 (print)

ISBN 978-0-7844-8357-2 (PDF)

ISBN 978-0-7844-8359-6 (ePub)

Manufactured in the United States of America.

27 26 25 24 23 22 21 1 2 3 4 5

Chapter opening photo credits: Courtesy of NC 811 and Ahmed Jalil Al-Bayati

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Preface

The 2017 infrastructure report card created by ASCE was designed to evaluate the current state of America's essential services such as energy, rail, bridges, and water. ASCE produces a letter grade, much like those in our children's report cards. Sadly, the grade of our nation's infrastructure was a disappointing D+. One of the key recommendations was the replacement of aging facilities. While the 2021 report has shown improvement to a grade of C+, recommendations to replace aging infrastructure remain a high priority. Accommodating the work to make this happen will mean increased excavation activity. The subject of this book is how to protect the existing infrastructure while working around it or replacing it.

Excavation in the United States happens thousands of times every day. Some of this work, as indicated, is done to repair damaged facilities. However, most of the work is done to install new facilities by professional contractors. In addition to the brand-new infrastructure being placed daily, infrastructure is placed at risk by excavation activities that are not associated with utilities. Those affected include homeowners, nurseries, fence companies, agriculture, and many other types of digging and demolition. This book explores the evolution of the protection of millions of miles of underground utilities in the United States from every kind of activity that disturbs the Earth.

While it is impossible to include every nuance of the laws in each state, the authors provide an overview of the process that is generally followed across the United States. For more specific details about individual state laws or enforcement practices, links are provided in an appendix, as well as in a summary matrix, providing a current snapshot of key differences such as tolerance zones, exemptions, and wait times for excavators.

If terms such as "tolerance zone" are not clear to readers now, they will be by the time they finish reading this book. It can be read cover to cover or used as a reference when looking into one's unique situation.

A key caveat is that this book does not answer questions about the legality of any specific issue being experienced by the reader. The purpose is to make the full process understood and to provide insight into how the various laws are enforced. It should also be understood that laws are constantly changing, so this book represents a snapshot of the industry as of 2020.

As discussed, the safety and protection of assets are a shared responsibility. We hope that this book helps to reveal the role that all stakeholders in the process contribute to the reduction of injuries and damage to property.