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Nota di contenuto	Intro -- Book_5129_C000 -- Half Title -- Title Page -- Copyright Page -- Contents -- Preface -- Acknowledgments -- Book_5129_C001 -- Chapter 1 : Introduction and Background -- 1.1 Background -- 1.2 Manual of Practice Organization -- 1.3 Concept of Sustainability -- 1.4 Sustainability and Practice -- 1.5 Manual of Practice General Objectives -- References -- Book_5129_C002 -- Chapter 2 : Pipeline Products -- 2.1 Scope Limitations and Purpose -- 2.2 Product Sustainability Assessment -- 2.2.1 Performance -- 2.2.2

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in. diameter), coatings and linings -- 5.4.3.3 Sliplining. Sliplining is mainly used for structural applications when old pipes do not have joint settlements or misalignments. In this method, a new pipeline of smaller diameter is inserted into the old pipeline and usually the annulus is -- 5.4.3.4 Modified Sliplining. The MSL includes methods in which pipe sections or plastic strips are installed in close-fit with the existing pipe and the annular space is grouted. There are three variations of the MSL method: panel lining (PL), spi -- 5.4.3.5 In-Line Replacement. When the capacity of pipelines is found to be inadequate, then ILR should be considered. There are two categories representing ILR: pipe bursting and pipe removal (also called pipe eating). Pipe bursting, as the name i -- 5.4.3.6 Close-Fit Pipe. This type of trenchless pipeline renewal temporarily reduces the cross-sectional area of the new pipe before it is installed, then expands it to its original size and shape after placement to provide a close fit with the ex. 5.4.3.7 Localized Repairs or Point-Source Repair. When local defects are found in a structurally sound pipeline, localized or point-source repairs are considered. Systems are available for remote-controlled resin injection to seal localized defect -- 5.4.3.8 Lateral Renewal. Sewer service laterals can be renewed using any of the methods used for renewal of main lines such as chemical grouting, CIPP, CFP, pipe bursting, and spray-on lining. Table 5-10 presents the main characteristics of LR me -- 5.4.3.9 Sewer Manhole Renewal. Sewer manhole renewal methods are provided to prevent surface water inflow and groundwater infiltration, repair structural damage, and protect surfaces from damage from corrosive substances. However, when renewal met -- 5.5 Summary -- References -- Book_5129_C006 -- Chapter 6 : Best Practices-Operation and Maintenance -- 6.1 Introduction -- 6.2 Testing -- 6.3 Maintenance -- 6.4 General Maintenance Activities -- 6.5 Rehabilitation -- 6.6 Monitoring -- 6.7 Asset Management -- 6.8 Data Collection -- 6.9 Condition Assessment Methods -- 6.10 Pipeline Inspections -- 6.11 Determining Cathodic Protection Performance -- 6.11.1 Sacrificial Anode -- 6.11.2 Impressed Current -- 6.12 System Optimization -- 6.12.1 Reducing Energy Usage -- 6.12.2 Reduce Peak Demands by Utilizing Storage -- 6.12.3 Reduce Energy Peaks -- 6.13 Reduce Third-Party Damage -- 6.14 Reduce Outages and Catastrophic Failures -- 6.15 Summary -- Book_5129_C007 -- Chapter 7 : Life-Cycle Inventory/Life-Cycle Analysis: Achieving Sustainable Functionality in Pipeline Design and Manufacturing -- 7.1 Introduction -- 7.2 Standard History and Methodology -- 7.3 Cradle to Grave -- 7.4 Water/Wastewater Infrastructure -- 7.4.1 Production Constraints -- 7.4.2 Installation Constraints -- 7.4.3 Use Constraints. 7.4.4 Recovery/Disposal Constraints -- 7.5 Social and Environmental Costs -- 7.6 Pipe Diameter -- 7.7 Owner Costs -- 7.7.1 Preconstruction Costs -- 7.7.2 Construction Costs -- 7.7.3 Postconstruction Costs -- 7.8 Environmental Costs-The Envision Rating System -- 7.9 Social Costs -- 7.10 Life-Cycle Cost Analysis -- 7.11 Reducing Social Costs -- 7.12 Conclusions -- Book_5129_C008 -- Chapter 8 : Envision Project Rating System -- 8.1 Background and Development -- 8.2 Rating System Purpose and Goals -- 8.3 Organization and Structure -- 8.3.1 Tools -- 8.3.2 Phases -- 8.3.3 Categories and Subcategories -- 8.3.4 Credits -- 8.3.5 Levels of Achievement -- 8.3.6 Evaluation Criteria -- 8.4 Project Scoring and Guidance -- 8.4.1 Guidance Manual -- 8.4.2 Categories and Credits -- 8.4.3 Quality of Life -- 8.4.4 Leadership -- 8.4.5 Resource Allocation -- 8.4.6 Natural World -- 8.4.7

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Sommario/riassunto

MOP 151 details the sustainable design and construction of pipelines and presents methods, practices, and decisions that influence and guide sustainable planning, design, construction, and operation, including the Envision infrastructure sustainability rating system.
