



IPLOCA
Novel Construction Meeting
Earthworks Committee
Spring Session 2023



IPLOCA

TOGETHER - DELIVERING SUSTAINABLE ENERGY INFRASTRUCTURE

Earthworks Committee Composition

- **Joseph Gilmartin (Chairman) , Flour – England**
- Benet Chan, Caterpillar, Singapore
- Pablo Guerra, Mears Group – USA
- Erhard Kracht, HDI – Germany
- Daniel Gasquet, IPLOCA - France
- Kimberly Abrams, Petra – USA
- Elie Majdalani, C.A.T. Group
- Corne Willemsen, Sitetec
- Craig Larson, LaValley Ind – USA
- Petra Soda, KVV Co
- Diana Rennkamp, Herrenknecht
- Brian Jorgensen, American Augers
- Dominique Huc, American Augers
- Renzo Chirulli, Vermeer
- Etienne Pfister, SCAIP
- Roberto Zillante, Petra - USA

Team Findings

New Committee
Chair Selected

ISSUE 1: Committee Direction

- Discussion on how group will focus on specific areas and make them:
 - Generic (No trademarks)
 - Future proof – do not give specifics if likely to change with time (max/min diameter for example)
 - Use references to other publications where they already exist and are recognised
- **Joseph Gilmartin - Flour**
- **ACTION: RESOLVED**

ISSUE 2: RTS Chapters Need Review/Refresh

- Assigned authors to certain sections, left some in the “Parking Lot”.
 - 7.4 HDD draft ready for review. Pictures need refreshing/updating
 - 7.7 “Direct Pipe” is a trade name, this will be renamed and refreshed.
 - Details of other sections on next slide.
 - Some group members in checking only roles
- **ACTION: Topic refresh prioritized, Topic owners assigned, and deadlines established**

RTS Chapters Under Review / Development

Chapter 6: Earthworks

Prioritization and
Owners
Established

- **6.1 Right of Way (1 Sub) - Joseph**
- **6.2: Earthworks Design / Trenching (40 Subs) – Joseph / Benet**
- **6.3: Environment (1 Sub) – Daniel**
- **6.4: Health and Safety (1 Sub) – Daniel**
- 6.5: On-shore pipeline survey (9 Sub) – No changes this cycle
- 6.6: Site investigate (5 Sub) – No changes this cycle
- 6.7: Non-intrusive Survey Techniques (12 Subs) – No changes this cycle
- 6.8: Buoyancy Control (5 Subs) – No changes this cycle
- 6.9: Groundwater Prediction Methods (1 Sub) – No changes this cycle

Chapter 7.0: Crossings

- **7.1: Trenchless Crossings - Erhard**
- **7.2: Decision Criteria – Launch Team Collaboration**
- **7.3: Auger boring – Dominique Huc**
- **7.4: HDD – Pablo: Review by Group**
- 7.5: Tunneling – No changes this cycle
- 7.6: Pipeline installations within casing/tunnel/pipe – No changes this cycle
- **7.7: “Direct Pipe” – Diana: Rename Chapter with Generic Title**
- 7.8: Overview of existing trenchless technology – No changes this cycle
- **7.9: New Technologies: Pipe Express – Kimberly/Roberto**

Road To Success: Earthworks Committee

ACTIONS / NEXT STEPS:

- Process Owners: Review and proposed text changes prior to Fall 2023 session
- Entire Team: Recommend chapters to delete before Fall 2023 Session
- Entire Team: Review and act on recommendations at Fall 2023 session
- Chair: Arrange meetings via video conference before Fall 2023 session

Chapters Proposed or In Process

- **Estimation of Trench Digging Production by Excavators**

- Chapter has been uploaded on working platform
- May need to be cut or merged into main chapter

- **HDD Equipment and New Technologies**

- ACTION: Erhard Kracht to review chapter and make recommendations to working team prior to Fall 2023 session

- **Other Chapters**

- ACTION: Review document length and decide on next steps by working group prior to Fall 2023 Session
 - Connection Onshore / Offshore – Trenchless Technologies
 - Blasting and Rock Breaking
 - Compaction
 - Trenching Methods
 - Trenchers

RTS Subjects - Parking Lot - *Primary Level*

- Ground Characterization , Classification of Excavation Capabilities, Geotechnical Datasheets
- Pipe Hammering
- Backfill
- Fiber-Optic Cable in natural gas transmission networks
- Earthworks Design:
 - Geotechnical Activity
 - Sampling and Field Testing
 - The Accuracy Requirements of Topographic Surveys
 - Fault Crossings
 - Survey Methods and their Applicability
 - Earthquake-related geohazards / pipeline seismic design

RTS Subjects

- Parking Lot -
Secondary Level

- Well Pointing & Dewatering & Water Table
- Pipeline Integrity Preservation in Trenchless Installations
- Padders
- Aerial Crossings
- Riverbank Protection and Design
- Water Crossings
 - Dredging
 - Pump Around
 - Flumes/Water slides
 - River Diversions
 - Lake & Wetland Crossings