



IPLOCA
Novel Construction Meeting
Earthworks Committee
Fall Session 2022



IPLOCA

TOGETHER - DELIVERING SUSTAINABLE ENERGY INFRASTRUCTURE

Earthworks Committee Composition

- Joseph Gilmartin, Flour – England
- Pablo Guera, Mears Group – USA
- Erhard Kracht, HDI – Germany
- Maria Ana Revilla, Sepcon - Peru
- Mikhail Zubkov, Caterpillar – Russia
- Daniel Gasquet, IPLOCA - France

Team Findings

New Committee
Co-Chairs Selected

ISSUE 1: Committee Leadership

- Committee leadership has not been clearly established in past
- Members in attendance voted to select new committee leader
 - Committee agreed to creating Co-Chairs to ensure leadership continuity
 - **Joseph Gilmartin - Flour**
 - **Mikhail Zubkov - Caterpillar**
- **ACTION: RESOLVED**

ISSUE 2: RTS Chapters Need Review/Refresh

- Limited results by the group last year
 - Often requires on-going review of projects and topics and documents
 - Evaluate published RTS Earthworks chapters to refresh/review/update/delete
 - Seeking member engagement to share advances in technology, project techniques, safety, environmental protection
- **ACTION: Topic refresh prioritized, Topic owners assigned, and deadlines established**

Road To Success Chapters Under Review / Development

Chapter 6: Earthworks

Prioritization and
Owners
Established

- **6.1 Right of Way - Joseph**
- **6.2: Earthworks Design / Trenching– Joseph/Mikhail**
- **6.3: Environment – Maria Ana**
- **6.4: Health and Safety – Maria Ana**
- 6.5: On-shore pipeline survey – No changes this cycle
- 6.6: Site investigate – No changes this cycle
- 6.7: Non-intrusive Survey Techniques – No changes this cycle
- 6.8: Buoyancy Control – No changes this cycle
- 6.9: Groundwater Prediction Methods – No changes this cycle

Chapter 7.0: Crossings

- **7.1: Trenchless Crossings - Erhard**
- **7.2: Decision Criteria - Erhard**
- 7.3: Auger boring – No changes this cycle
- **7.4: HDD - Pablo**
- 7.5: Tunneling– No changes this cycle
- 7.6: Pipeline installations within casing/tunnel/pipe – No changes this cycle
- 7.7: Direct Pipe– No changes this cycle
- 7.8: Overview of existing trenchless technology– No changes this cycle
- 7.9: New Technologies: Pipe Express– No changes this cycle

Road To Success: Earthworks Committee

ACTIONS / NEXT STEPS:

- Process Owners: Review and proposed text changes prior to Spring 2023 session
- Entire Team: Recommend chapters to delete before Spring 2023 Session
- Entire Team: Review and act on recommendations at Spring 2023 session

Chapters Proposed or In Process

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

- Chapter has been uploaded on working platform
- ACTION: “Proof Reading” due by entire team prior to Spring Session

- **HDD Equipment and New Technologies**

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

- **Other Chapters**

- ACTION: Review document length and decide on next steps by working group prior to Spring 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