HORIZONTAL DIRECTIONAL DRILLING EXAMINATION

# of Questions	Minimum Passing Score	Time Allowed
30	21 (70%)	75 Minutes

CONTENT OUTLINE

Content Area	# Items Test
Piles	3
Excavation and Grading	6
Trenching and Boring	3
Underground Piping including Pipe Welding, Concrete, Ductile Iron	9
Underground Electrical Cable Installation and Safety	5
OSHA Safety	4

EXAMINATION STUDY MATERIALS

The reference materials listed below were used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge or general industry practices. Except for Code books, you can base your answers on later editions of references as they become available. For Code questions, the examinations will be based only on the edition of the Code book that is listed.

This examination is OPEN book. The following references are allowed in the test room.

Code of Federal Regulations - 29 CFR Part 1926 (OSHA), with latest available amendments, U.S. Government Printing Office, (866) 512-1800 or https://www.osha.gov/lawsregs/regulations/standardnumber/1926
OR
Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI, with latest available amendments, www.psionlinestore.com, (866) 589-3088

National Electrical Code or The National Electrical Code Handbook, 2017 edition, National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169, (800) 344-3555, https://www.amazon.com/National-Electrical-Code-Handbook-International/dp/1455912840

Construction Planning, Equipment, and Methods, 9th edition, 2018, Robert L. Peurifoy, Clifford J. Schexnayder, Robert Schmitt, Aviad Shapira; McGraw-Hill Education, https://www.amazon.com/Construction-Planning-Equipment-Methods-Ninth/dp/1260108805

Pipe and Excavation Contracting, Dave Roberts, 2011, Craftsman Book Company, (800) 829-8123, https://www.amazon.com/Pipe-Excavation-Contracting-Revised-Roberts-ebook/dp/B005DNTFQE/ref=sr_1_1?keywords=pipe+and+excavation+contracting+2011&qid=1559162328&s=books&sprefix=%EF%82%A7%09Pipe+and+Excavation+Contracting%2Cstripbooks%2C440&sr=1-1

Concrete Pipe and Box Culvert Installation, 2007 - 2020, American Concrete Pipe Association, info@concretepipe.org, https://www.concretepipe.org/wp-content/uploads/ConcretePipeInstall.pdf

Installation Guide for Ductile Iron Pipe, 2015 with latest updates, Ductile Iron Pipe Research Association (DIPRA), https://www.amazon.com/Installation-Guide-Ductile-Iron-DIPRA/dp/B01HH74ATK

Pipe Welding Procedures, 2nd edition, Industrial Press, https://www.amazon.in/Pipe-Welding-Procedures-2nd-Ed/dp/0831131411

Candidates are responsible for bringing their own references to the examination center. Reference materials may be highlighted, underlined, **annotated**, and/or indexed prior to the examination session. However, references may not be written in during the examination session. Any candidate caught writing in the references during the examination will have the references confiscated and will be reported to the department. Furthermore, candidates are not permitted to bring in any additional papers (loose or attached) with their approved references. Any additional materials will be removed from the references and confiscated. References may be tabbed/indexed with

permanent tabs only. Temporary tabs, such as Post-It notes, are not allowed and must be removed from the reference before the exam will begin.