

# Department of Examinations and Assessment

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Louisiana State Licensing Board for Contractors

LSLBC

Highway, Street and Bridge  
Construction

**Highway, Street and Bridge Construction** is a **closed** book examination with 100 multiple-choice questions which are equally weighted. You will have **four hours** to complete this examination.

Listed below is only a sample of the many good references available on this subject which may be helpful in studying for this examination. This is not a comprehensive listing. Please note that it is not necessary to read all of the books in order to pass the examination. Rather, this list is intended to suggest what types of books might be useful in helping to acquire the basic knowledge needed to perform this type of work.

We try to keep this list current with books in print, but some books go out of print from time to time. These books may be available in your local library's collection or through your local library by using the services of Inter-Library Loan.

If still in print, these books may also be available through your local bookstore or by contacting the publisher.

All references available via the internet are followed by the appropriate website address for obtaining the reference. From time to time, website addresses may change and no longer be available. In such cases, please search for the appropriate new website address or contact the publisher or a library to obtain a copy.

**Content Outline**

<b>Construction Layout</b>	<b>6%</b>	<b>Concrete Pavement</b>	<b>12%</b>
<b>Clearing, Grubbing, and Demolition</b>	<b>6%</b>	<b>Asphalt Pavement</b>	<b>12%</b>
<b>Drainage</b>	<b>8%</b>	<b>Incidental Construction</b>	<b>7%</b>
<b>Earthwork</b>	<b>12%</b>	<b>Lights, Signs, Barricades,</b>	
<b>Bridges and Structures</b>	<b>17%</b>	<b>Traffic Control, and Safety Devices</b>	<b>8%</b>
<b>Soil Treatments and Base Courses</b>	<b>12%</b>		

**Concrete Pavement Field Reference: Pre-Paving;** American Concrete Pavement Association; Skokie, IL; 2008.  
[https://netforum.avectra.com/eweb/Shopping/Shopping.aspx?pager=1&cart=0&Site=ACPA\\_ORG](https://netforum.avectra.com/eweb/Shopping/Shopping.aspx?pager=1&cart=0&Site=ACPA_ORG)

**Concrete Pavement Field Reference: Paving;** American Concrete Pavement Association; Skokie, IL; 2010.  
[https://netforum.avectra.com/eweb/Shopping/Shopping.aspx?pager=0&cart=0&Site=ACPA\\_ORG](https://netforum.avectra.com/eweb/Shopping/Shopping.aspx?pager=0&cart=0&Site=ACPA_ORG)

**Culvert Repair Practices Manual,** Volume 1; Publication No. FHWA-RD-94-096; Ballinger, Craig A. and Drake, Patricia G.; Office of Engineering and Highway Operations R&D, Federal Highway Administration; McLean, VA; 1995.  
[http://www.fhwa.dot.gov/engineering/hydraulics/library\\_arc.cfm?pub\\_number=36&id=94](http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=36&id=94)

**Culvert Repair Practices Manual,** Volume 2; Publication No. FHWA-RD-95-089; Ballinger, Craig A. and Drake, Patricia G.; Office of Engineering and Highway Operations R&D, Federal Highway Administration; McLean, VA; 1995.  
[http://www.fhwa.dot.gov/engineering/hydraulics/library\\_arc.cfm?pub\\_number=37&id=90](http://www.fhwa.dot.gov/engineering/hydraulics/library_arc.cfm?pub_number=37&id=90)

## References Continued

**Design and Control of Concrete Mixtures**, Fifteenth Edition; Wilson, M. L. and Kosmatka, S. H.; Portland Cement Association; Skokie, IL; 2011.

**Developing Your Stormwater Pollution Prevention Plan: A Guide for Construction Sites**; U.S. Environmental Protection Agency; Washington, DC. Available at:  
[www.epa.gov/npdes/pubs/sw\\_swppp\\_guide.pdf](http://www.epa.gov/npdes/pubs/sw_swppp_guide.pdf)

**Hoisting and Rigging Standard**; U. S. Department of Energy; Washington, DC.  
<http://energy.gov/ehss/downloads/doe-std-1090-2007>

**Integrated Materials and Construction Practices for Concrete Pavement: A State-of-the-Practice Manual**; Taylor, Peter C., et. al.; National Concrete Pavement Technology Center Center for Transportation Research and Education and the Federal Highway Administration, Office of Pavement Technology; Ames, IA.; 2004.  
<http://www.cptechcenter.org/publications/imcp/index.cfm>

**Hot-Mix Asphalt Paving Handbook**; by the U. S. Army Corps of Engineers and the U. S. Department of Transportation, Federal Aviation Administration; Washington, DC.  
[www.faa.gov/airports/resources/advisory\\_circulars/index.cfm/go/document.information/documentNumber/150\\_5370-14A](http://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.information/documentNumber/150_5370-14A)

**Louisiana Standard Specifications for Roads and Bridges**; State of Louisiana, Department of Transportation and Development; Baton Rouge, LA; 2006. [www.sp.dotd.la.gov](http://www.sp.dotd.la.gov)

**Managing Your Environmental Responsibilities: A Planning Guide for Construction and Development**; Office of Compliance, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency; Washington, DC; 2005.  
[www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myerguide.pdf](http://www.epa.gov/compliance/resources/publications/assistance/sectors/constructmyer/myerguide.pdf)

**Manual on Uniform Traffic Control Devices**; United States Department of Transportation - Federal Highway Administration; Washington, DC; 2009.  
[http://mutcd.fhwa.dot.gov/pdfs/2009/pdf\\_index.htm](http://mutcd.fhwa.dot.gov/pdfs/2009/pdf_index.htm)

**Moving the Earth**; Nichols, Herbert L., Jr. and Day, David A.; McGraw-Hill; New York.

## References Continued

**Pile Driving Equipment;** Technical Instructions 818-03; U. S. Army Corps of Engineers; Washington, DC; 1998. [www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti818\\_03.pdf](http://www.wbdg.org/ccb/ARMYCOE/COETI/ARCHIVES/ti818_03.pdf)

**Principles and Practices of Commercial Construction;** Andres, Cameron K. and Smith, Ronald C.; Prentice-Hall, Inc.; Upper Saddle River, NJ; 2009.

**Recommended Procedures for the Safety Performance Evaluation of Highway Features,** NCHRP Report 350; Ross, H. E., Jr., Sicking, D. L., et. al.; National Academy Press; Washington, DC; 1993. Available at: [http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_rpt\\_350-a.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_350-a.pdf)

**Safety and Health Regulations for Construction;** Code of Federal Regulations, Title 29, Part 1926; U. S. Department of Labor, Occupational Safety and Health Administration; Washington, D.C.; 2011. <http://www.gpo.gov/fdsys/pkg/CFR-2011-title29-vol8/pdf/CFR-2011-title29-vol8.pdf>

### ***The Highway, Street and Bridge classification includes the work of all of the following subclassifications:***

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- Clearing, Grubbing, and Snagging
  - Concrete Bridges, Over and Underpasses
  - Culverts and Drainage Structures
  - Driveways and Parking Areas, Etc., Asphalt and/or Concrete
  - Earthwork, Drainage, and Levees
  - Fencing
  - Highway and Street Sub-surface Drainage and Sewer Work
  - Landscaping, Grading, and Beautification
  - Permanent or Paved Highways and Street (Asphalt Hot and Cold Plant Mix)
  - Permanent or Paved Highways and Streets (Asphalt Surface Treatment)
  - Permanent or Paved Highways and Streets (Concrete)
  - Permanent or Paved Highways and Streets (Soil Cement)
  - Secondary Roads
  - Steel Bridges, Over and Underpasses
  - Wood Bridges, Over and Underpasses
  - Undersealing or Leveling of Roads