

Bridge Rating & Analysis of Structural Systems

# **BRASS-CULVERT**<sup>TM</sup>

Version 3.5

Getting Started Manual September 2019

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#### Disclaimer

Portions of this system were developed cooperatively by the Wyoming Department of Transportation, the Federal Highway Administration, the New York State Transportation Department, the North Carolina Department of Transportation, and the University of Wyoming. These organizations assume no liability or responsibility for and make no representations or warranties as to applicability or suitability of this computer system. Anyone making use thereof or relying thereon assumes all responsibility and liability arising from such use or reliance. This software is a tool for the design, analysis, or rating of structures. The engineer using this software is responsible for verification of the reasonableness of the results produced by BRASS-CULVERT<sup>TM</sup>.

## **AASHTO Specification**

The BRASS-CULVERT<sup>TM</sup> program is current with the AASHTO *Standard Specifications for Highway Bridges*, 17<sup>th</sup> Edition, 2002, the AASHTO LRFD *Bridge Design Specifications*, 8<sup>th</sup> Edition, 2017, and the AASHTO *Manual for Bridge Evaluation*, 3<sup>rd</sup> Edition, 2018, with 2019 Interim Revisions.

### **Additional Information and Technical Assistance**

Additional information may be obtained from:

Wyoming Department of Transportation Bridge Program 5300 Bishop Boulevard Cheyenne, WY 82009-3340 Telephone: (307) 777-4427 Fax: (307) 777-4279 Web Page: www.dot.state.wy.us/home/engineering\_technical\_programs/bridge/brass.html FTP Site: ftp://brass:*password*@wydot-filestore.dot.state.wy.us

Technical assistance may be obtained from: Telephone: (307) 777-4489 E-mail: BRASSTechSupport@wyo.gov

Purchasing, billing and licensing assistance may be obtained from:

Telephone: (307) 777-4489 E-mail: <u>BRASSBilling@wyo.gov</u>

When requesting technical assistance, please visit the incident tracking system at <u>www.wydot-brass.com</u>. Users without an account on the incident tracking system can request an account by clicking on the "Open a Technical Support Account" link/button and e-mailing the address or calling the phone number listed. A username and password will be created and sent to the user. With this system, you may upload your data file and a description of the incident, any error messages, any bridge drawings, and any hand computations, which illustrate the concern. An Incident number will be assigned to track the progress of resolving the incident.

# Installing BRASS-CULVERT<sup>™</sup>

The installation programs for all the BRASS<sup>™</sup> programs are loaded on a single DVD or may be obtained from the WYDOT FTP server. Instructions for accessing the FTP server are provided in the file **BrassDownloadInstructions.pdf**. A password is required to install this program.

Listed below are the necessary system requirements to install BRASS-CULVERT<sup>TM</sup> on your computer's hard drive.

#### **System Requirements**

Operating System	Microsoft Windows <sup>™</sup> XP (SP2 or SP3), Vista, 7, 8, 8.1, or 10.
Microprocessor	Pentium IV or higher
Microsoft .NET Framework	4.7.2
Memory	512 MB required, more is better
Hard Disk Space	Approximately 63 MB
Disk Drive	DVD drive

#### Installation

The following procedure describes how to install BRASS-CULVERT<sup>TM</sup>. This method may also be used for installation onto a network drive.

- 1. Browse to the **Culvert\Exe** directory on the DVD or FTP server to locate the installation executable **BrassCulvert-3.5-Install.exe**.
- 2. If using the FTP server, download the installation executable.
- 3. If you have a previous version of BRASS-CULVERT<sup>™</sup> installed, make a copy of the vehicle library and bar spacing library files so any changes you have made are not erased by the installation.
- 4. Run the installation file **BrassCulvert-3.5-Install.exe** and follow the prompts.
- 5. During the installation, static program files are installed in the *Destination Folder* while dynamic program files and example files may be written to a separate *Program Data Destination Folder* if desired. This may be necessary if your agency restricts file permissions in certain directories, e.g., the *C:\Program Files* directory. The *Program Data Destination Folder* defaults to the *Destination Folder* if not overridden in the installation prompts.
- 6. Overwrite the newly installed vehicle library and bar spacing library files with any backup files.

BRASS-CULVERT<sup>TM</sup> requires a version of the Microsoft .NET Framework. Download and install the appropriate Microsoft .NET Framework version from <u>www.microsoft.com</u>.