

## HY-8 7.6 Release Notes

### New Features in HY-8 version 7.6

- Interface Update
  - The Interface skin was changed from HY-8's traditional blue to an updated neutral skin
  - HY-8's color scheme has been updated and uniformly applied across all spreadsheets

### Issues fixed in HY-8 version 7.6

- Circular Embedment Coefficients
  - See the document "Reviewing Coefficients in Embedded Circular Culverts from NCHRP Report 734" for more information.
- Embedded culverts alters culvert rise
- Updates to Virtual Earth Map Locator
- HY-8 crashes with specific rating curve with multiple discharges
- Crash when reading specific file
- Issue with maximum flow not shown in results
- Report Generator interface issues
- Headwater table didn't match inlet or outlet control depths
- Water Surface Profile is plotted outside culvert
- HY-8 hangs during crossing analysis and energy dissipation
- Program hangs when reading specific file
- Issue with not enough precision in determining horizontal culverts from sloped culverts
- Issue with elevations being displayed instead of depths
- The water profile is not properly displayed when the units are changed to SI units
- Issue with not computing hydraulic data before inlet control computations with an elliptical pipe
- Water Surface Profile data button uses wrong flow with multiple culverts
- Tailwater rating curve using culvert flow instead of total crossing flow
- First roadway station isn't saved
- Values in the culvert summary table change when the water surface profile data is computed
- Issue with computing an hydraulic jump on the vena contracta
- issue computing tailwater rating curve that stopped ascending tailwater elevation
- Water surface profile is incomplete
- Issue with the columns shifted in the overtopping row
- Issue computing overtopping discharge with user-defined or recurrence discharge types
- The 'Lower Section Material' is blank in the report
- Problem with computations and plots for specific embedded culvert file
- Problem computing tailwater depth with very wide, very steep rectangular channel
- Water surface profile data does not match the data in the plot of the water surface profile

- Overtopping head and discharge problem with multiple barrel culverts with more than one culvert in a crossing
- Different in design flows through culvert and headwater elevations with the same design flow and culvert parameters
- Overtopping discharge changing with design flow change
- Unable to paste data into table
- Resize control does not appear to correctly in the analysis window
- Negative outlet control depth is output to report but is not displayed in the culvert summary table
- File takes a long time to run and never finishes loading in HY8
- Problem with constant tailwater elevation and HY-8 not converging on a solution
- AOP module blocks the user from progressing with a warning of incomplete or incorrect data

### Items Changed in HY-8 version 7.6

- Box Embedment Method
  - Previously, Box shapes (Concrete Box and South Dakota Concrete Box Culvert) were internally converted to a user-defined shape with new geometry computed to the embedded culvert. Because the shape of an embedded box does not change, this method was changed to apply the original box coefficients with a new embedded rise and span.
- Report exporting to Microsoft Excel
  - This feature is no longer supported by the third party library used to export to report and thus was removed.
- HY-8 Crossing data window is resized so all default data is visible without resizing or scrolling