

Spreadsheets & Culvert Hydraulics (HY-8) for Culverts with Natural Bottoms

--- Draft “Information to be Presented” ---

Dates: April 13 & 14, 2017

Time: 8:30 am to 4:30 pm

Location: Bangor Motor Inn, Bangor

2-day training session emphasizing **data analysis, preliminary design and hydraulics for culverts with natural bottoms**. Training will include numerous in class exercises. To get the full benefit from this training you will need to bring a laptop with Microsoft Excel & HY-8 already loaded. Laptop security should be set to allow Excel macros to be loaded and enabled.

Spreadsheets:

Pre-programmed/interactive spreadsheets to allow the user to:

- Automatically graph selected features from digital survey data (total station data or properly formatted level survey data).
- Data analysis to assist with Reference Reach selection.
- Graphically based maximum scour depth analysis.
- View survey data graphically to assist in proper siting of new/replacement culvert.
- Extract and make-ready HY-8 input data from survey data.
- In conjunction with HY-8, present data to allow designers to properly size new/replacement culvert.

HY-8 Culvert Hydraulics:

- Basic hydraulics
- Data requirements.
- Several methods for selecting a Manning’s n for a stream segment.
- How to design a natural bottom inside a culvert to obtain desired Manning’s n.
- How run the program and understand the results.