



**Watercom**  
**DRAINS**

# **DRAINS Core Workshop Notes**

**Benjamin Kus**

Kustom Engineering Pty Ltd

**Hossein Ansari**

Kustom Engineering Pty Ltd

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## PROGRAM – DAY 1 – DRAINS Core Workshop

- 9.00 am Chapter 1 – Introduction to ARR 2019  
Introduction to ARR 2019, the ARR Data Hub and Ensembles of Storms  
Bureau of Meteorology 2016 IFD Rainfall Data  
Horton ILSAX & Initial Loss Continuing Loss (IL-CL) Hydrological Models
- 11.00 am *Morning Tea*
- 11.15 am Chapter 1 – Introduction to DRAINS and Design Methods  
The DRAINS Interface  
Overview of DRAINS Databases (Pipe, Pit & Overflow Routes)
- 12.30 pm *Lunch*
- 1.00 pm Chapter 2 – Assembling a DRAINS Model  
Exercise 2 – Taree  
ARR 2019 Initial Loss - Continuing Loss (IL-CL)  
Importing DXF, Entering Pits, Pipes and Catchments  
DRAINS Overflow Routes  
DRAINS design, analysis and interpretation of results
- 3.00 pm *Afternoon Tea*
- 3.30 pm Overview of alternative Hydrological Models with Taree Exercise including  
Rational Method, ERM and Horton ILSAX
- 3.45 pm Chapter 3 – Large Drainage Networks with Open Channel Systems  
(Wagga 2 Example)
- 4.00 pm Chapter 4 – DRAINS Pit Database  
Creating on-grade pits using the HEC-22 Wizard  
Creating sag pits using the Table Wizard  
Creating new pits using the Generic Pits Spreadsheet
- 4.30 pm Close of Workshop – Open for Questions & Answers



## PROGRAM – DAY 2 – DRAINS Core Workshop

- 9.00 am Chapter 5 – Simple model at Wodonga Victoria
- 10.15 am *Morning Tea*
- 10.30 am Chapter 6 – Street Drainage System Characteristics, Design Procedures  
Premium Hydraulic Model (Caboolture 3)
- 11.00 am Chapter 7 – Design Considerations  
Possible Overdesign and Model Optimisation (Caboolture 4)
- ▶ automatic estimation of pit pressure change coefficients,
  - ▶ pre-and post-processing spreadsheets,
  - ▶ survey data defining surface levels and other services,
  - ▶ importing information from spreadsheets
- Flood Mapping with the DRAINS Premium Hydraulic Model  
Difficult Design Situations (Albany or Gympie)
- 12.00 pm *Lunch*
- 12.30 pm Chapter 8 – On-Site Detention Systems  
Example (Sydney OSD)  
Other Detention Basin Examples
- 1.30 pm Chapter 9 – More Detention Systems  
Example - Medium-sized Basin System with Multi-Staged Outlets
- 3.15 pm *Afternoon Tea*
- 3.30 pm Chapter 10 – Data Exchange with Civil Site Design
- 4.00 pm Chapter 11 – Other Aspects of DRAINS
- 4.15 pm Chapter 12 – Troubleshooting
- 4.30 pm Close of Workshop – Open for Questions & Answers