Study of Methods of Water Surface Profile Calculation in Gradually Varied Flow

Prepared by: Tan Shi Ngin

ABSTRACT

This research paper is mainly about gradually varied flow. There are six parts to be considered in this research paper:

1. Introduction to gradually varied flow

2. Basic assumption for gradually varied flow

3. Dynamic equation for gradually varied flow

4. Characteristic and classification of flow profile

5. Introduction of the computer program, Dodson Hydrocalc hydraulics

6. Computation of gradually varied flow

   ➢ Graphical and Integration method

   ➢ Direct Integration method

   ➢ Direct Step method

   ➢ Standard Step method

   ➢ Numerical Integration method

This research paper provides the first point of references and can be a guideline to anyone who wants to calculate the water surface profile or wants to know more about gradually varied flow.

DIPLOMA IN CIVIL ENGINEERING