

**(PREVIEW)**  
***Indian Standard***  
**CODE FOR**  
**CONSTRUCTION AND MAINTENANCE OF**  
**SURFACE FARM DRAINAGE SYSTEMS**

**0. FOREWORD**

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 31 January 1986, after the draft finalized by the Farm Drainage Sectional Committee had been approved by the Agricultural and Food Products Division Council.

**0.2** Surface drainage is normally required for efficient crop production on slowly permeable soils with restricted topography. It is not required when excess water is removed naturally. The objectives of surface drainage are:

- a) To prevent water from ponding on land surface or in surface drains that are crossed by farm equipment,
- b) To remove excess water in time to prevent damage to crops, and
- c) To accomplish the above without excess erosion.

**0.3** Complete drainage systems shall be planned and designed after considering all aspects. The collection system consisting of the land surface and shallow drains removes excess surface water from individual areas within fields. The disposal system consisting of some what larger ditches receives drainage water from the collection system and removes it from the farm. Transitions, including structures, that permit drains to discharge into larger or deeper drains must provide for adequate erosion control without holding water on field surfaces for excessive periods of time. The system shall be designed as an integrated component of the land and water management activity on the farm.

**0.4** This standard is intended to serve as a guide for proper construction and maintenance of surface drainage systems in the farms.

**0.5** In preparation of this standard, assistance has been derived from ASAE EP 302 : 2-1973 'Design and construction of surface drainage systems on farms in humid areas', published by the American Society of Agricultural Engineers, USA.

**0.6** For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

## **1. SCOPE**

**1.1** This standard covers the recommended practice for construction and maintenance of surface farm drainage systems