Cobbins Brook Flood Storage Reservoir

S. LEE, Anser Project Managers (formerly of Halcrow Group Ltd.),J. CASS, Jackson Civil EngineeringS.CORNICK, NEAS, Environment AgencyM. BRADLEY, Halcrow Group Ltd.

SYNOPSIS. Cobbins Brook flood storage reservoir was the preferred option for a flood alleviation scheme to reduce the risk of flooding to the town of Waltham Abbey, Essex. The reservoir is formed from an earth embankment with a sheet pile cut-off and can hold 754,000m³ when full following a 1:100 year (1%) probability flood event. It is the largest flood storage reservoir in the Thames North East Area of the Environment Agency.

The paper will give the background as to how the scheme was developed, aspects of the engineering and environmental design, operational requirements, environmental impact assessment, and the construction phase of the dam, through to its commissioning. Features specific to the design of flood storage reservoirs will be highlighted, including best practice incorporated from other flood storage reservoirs in Thames NE Area.