

### Project Information:

<b>Consulting Engineers:</b>	Planning & Transport Renfrewshire Council
<b>Blackwell Role:</b>	Main Contractor
<b>Form of Contract</b>	ICE 5 <sup>th</sup> Edition
<b>Contract Start</b>	August 2008
<b>Contract Period</b>	30 weeks
<b>Contract Value</b>	£1.9M

### Blackwell Site Management:

#### Contracts Manager:

Adam Lane

#### Project Manager:

Lee Swift

#### Site QS:

John Armstrong

#### Project Office:

**Scottish Regional Office**  
Suite 3, Epoch House, Falkirk Road,  
Grangemouth. FK3 8WW

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### Services Include:

Civil Engineering    Earthworks    Geotechnical    Remediation



### Contract Summary:

Blackwell were awarded phase one of the North Renfrew flood prevention scheme. The site is situated on part of the former Clydeport Oil refinery with the remainder of the site located on an infilled dock and wasteland.



### Key Processes:

#### Earthworks

- Earthworks to form four flood embankments along the length of the works comprising approx 15,000 cu.m of Clay to be placed and compacted to a high specification.
- Excavation and backfilling of a central proving trench to establish underlying ground conditions.
- Disposal offsite of contaminated material stockpiled within the site

#### Structures

- Reinforced concrete retaining structures formed at the end of embankments where the flood defence scheme intersects existing roads.
- Tarmac ramps to the existing highways in preparation for the provision of flood control barriers.

#### Drainage

- 1600mm diameter length of storm sewer constructed upon driven precast concrete piles within an infilled dock
- Associated buried structures to the pipeline, comprising a 8m x 6m reinforced concrete chamber and a 3.5m diameter pre-formed HDPE proprietary chamber.
- Live connection into an existing brick culvert
- Toe drainage and connection to the existing outfall culvert
- Construction of on line flow control devices to an existing 900mm and 1200mm dia. pipe and associated precast chambers.
- Associated penstocks and flap valves.

