

WALTERS

Major Clean Up For Former Rail Yard



Project:

Monmouthshire Bank Remediation,
Newport

Client:

Redrow Homes South Wales

Value:

£5.1 million

At-a-glance:

- 20 hectare site located south-west of Newport City Centre
- Bio-Remediation
- Dynamic compaction
- Over 500,000m³ of earthworks
- Cement stabilisation
- Construction of a rail over bridge
- On site infrastructure

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Walters is accredited to ISO 9001 for Quality Management, ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health & Safety.

Challenges

The former Monmouthshire Bank Railway Sidings is a 20 hectare site located south-west of Newport City Centre being developed to accommodate 575 homes. Reclamation and remediation work was necessary to remove all potential obstructions and to treat Japanese Knotweed and contamination in soils and ground water. Treated soils had to be placed as engineering fill to provide the platform for housing development and the major infrastructure necessary to access and serve it.

Solution

A void free, compacted zone 5m deep was provided by dynamic compaction with the top 2m fully compacted with all oversized, contaminated or deleterious material removed. Over 400,000m³ of material was processed to remove oversized with 10,000m³ bio-remediated and a general cut to fill of over 110,000m³. Remediation of contamination complied with guidelines set out in DEFRA/EA Soil Guidance Values (SGVs) for Contamination 2009 and agreed site specific Soil Screening Values (SSVs).

Earthworks operations were carefully sequenced and programmed to ensure that dynamic compaction was carried out at the base of the 2.0m turn and compact operation at a rate consistent with earthmoving operations in order to minimise both standing time and the requirement to stockpile or double handle material.

In order to progress works through a very wet winter period, Walters took the decision to cement stabilise several areas of the site in order to allow access for show home construction and all infrastructure corridors were cleared to a depth of 4/5 metres for ease of future construction

Under a separate contract, Walters provided access from the north via a new traffic signalised junction on the widened Cardiff Road dual carriageway and a new road over rail bridge consisting of precast concrete beams on piled reinforced concrete foundations in addition to on-site infrastructure consisting of approximately 2km of 6.1m wide carriageway including associated foul and storm drainage and two storm retention tanks with a combined capacity of approximately 1800m³ and an attenuation pond.