

ENGINEERING THAT WORKS FOR YOU

CLEAN WATER REHABILITATION– PX Wilton Raw Water Pipeline

Contract	Value	Location
May-Oct 2007	£1m	Middlesbrough

Client

PX Limited

Teesside Power Station
Greystone Road-
Grangetown
Middlesbrough, TS6 8JF

Design Consultants:

Entec UK Ltd

Northumbrian House
Regent Centre
Gosforth
Newcastle-Upon-Tyne
NE3 3PX



Project Description:

The scope of works involved the construction of 1,500m of new raw water pipework from the existing Northumbrian Water Limited (NWL) Conduit 74 to the Cooling Water Return Channel within the TPS Site.

Pipes laid: Approximately 1300m of 710mm OD HPPE (SDR 17) with butt fusion welded joints, constructed below ground across level open farmland and through the A1053 underpass. The pipeline was constructed within a granular bed and surround with concrete bed and surround through the A1053 underpass, at ditch crossings and other areas likely to receive traffic loading. The pipeline had cover to soffit of between 900mm and 1200mm. Approximately 200m of 610mm OD carbon steel to ASME B31.3 with internal and external epoxy coating and welded joints, constructed above ground on concrete supports within the TPS Site.

NWL undertook tie-in connection works to the existing raw water main (defined as TPI). The existing 711mm OD steel raw water main (Conduit 74) is cathodically protected was installed in the mid 1970's.

It is approximately 3m deep at the tie in point. Power to the actuated valve and flow meters within the TPS Site was installed by the PX Limited Term Contractor. PX Limited also undertook connections to the existing site DCS system and all associated integration works.

As the works were located in a high security area within the Wilton complex, all staff and operatives were required to undergo the PX Limited inductions and security checks with security passes issued for access. Due to the associated hazards within the power station there were a number of restrictions imposed upon workforce including flame retardant clothing, no mobile phones and protective eyewear.

