



# A Torn Construction Ltd

Building and Civil Engineering



## QUALITY | SERVICE | DELIVERY

Issue 3

A T O R N C O N S T R U C T I O N N E W S L E T T E R

Spring 2015

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## BULGING ORDER BOOK...



It is with a huge sense of pride in our team that I can report on a significant growth in the company since our last newsletter, with a £7.5m order book going forward in to 2015. Our strong order book is made up of a wide range of projects from a £4m bulk store at ABP to further AD Plants, and is testament to our dedication to find the very best alternative, engineered solutions for our clients.

"Quality, Service and Delivery" is the ethos throughout the company at all levels, and this has continued to gain us respect in the industry, with our clients and our suppliers.

We hope you enjoy reading this edition of our newsletter, and seeing the diverse range of projects that we have been undertaking, and the wide range of significant contracts from the £1.8m Bulk Store at Humber International Terminal at Immingham, to the Hadfield Weir Fish Pass at Meadowhall and the Anaerobic Digestion Plant at Singleton Birch Ltd.

The company has recruited in a number of areas to ensure that quality is maintained and that projects continue to be delivered on time and within budget, and to make certain that our customers receive the very best level of service.

A huge thanks to all our employees for their outstanding commitment and work ethic and to our clients for their continued business.

**Andy Torn**  
Managing Director

## FROM GRAIN TO GAS... ANAEROBIC DIGESTION PLANT OPERATIONAL

**The Anaerobic Digestion Plant at Singleton Birch's Melton Ross site forms part of the Company's commitment to finding low carbon solutions to its large energy requirements. ATC Ltd partnered with the client in developing the scheme from conception and also worked alongside a German Technology provider (PlanET Biogastechnik) who installed the technology which changes organic materials into biogas by bacterial means.**

The site is a redevelopment of the restored quarry and has required extensive ground stabilisation and excavation to keep the plant profile low and reduce its visual impact. The plant initially started and was registered as a 0.5MW plant but was built to increase to 1.5MW production.

The works included construction of a 16,900m<sup>3</sup> lagoon for Leachate and dirty water storage resulting from the digestion process and rainfall. The lagoon included a 300mm engineered clay liner overlaid with 1m HDPE liner with a 1mm LLDPE cover and leak detection system.



Three silage clamps for maize and energy beet were constructed with 21,000T storage capacity. The walls were formed from the Bock walling system, which ATC installed, and agricultural surfacing. ATC also designed and installed all the concrete reinforced foundations for the mechanical and electrical equipment.

A liner under the AD plant is used to collect rain water from the clean area which is stored in a 100m<sup>3</sup> underground storage tank and is then pumped to be reused in the lime making process.

Further works included:- Installation of dirty water drainage included the installation of 193m<sup>3</sup> underground storage tank, construction of an extensive ductwork system and cable turning chambers, which also included construction of a switch room and transformer pen.

The project was successfully completed as a design and construct scheme in Spring 2014 and is now fully operational.

ATC Ltd are currently working on AD Plants at Thorganby, Elsham and Willoughton with phase three at Melton Ross about to start.



## HADFIELD WEIR FISH AND EEL PASS

**This project is part of a European directive to help with the ecological issues facing fish and eels in inland waterways, and is designed to ensure that they can move upstream to their natural habitats and locations.**

This pass was required to form access upstream beyond a manmade weir at Meadowhall, Sheffield. The Fish Pass is a sloping channel which is approximately 12m long by 3m wide and is constructed from reinforced concrete with textured finished walls and a smooth finish coping completed using a coloured concrete.

The pass incorporates marine grade aluminium floor mounted baffle units to generate counter currents and reduce water velocities. A debris boom has been installed on the upstream end of the fish pass which is fixed to the existing river bank wall via a concrete "support".

A fixed ladder access platform extending out over the river has been provided for maintenance and repair access. The eel pass is fixed to the existing weir next to the river wall.

The primary challenge faced by the team was to construct the structure on an existing weir in the middle of a river which was subject to flooding and next to the pedestrian area at the Oasis at Meadowhall Shopping Centre. Access to the site was through the busy pedestrian area. The work area needed to be dammed to carry out the work which was achieved using a combination of 25kg and 1t sand bags to create a split level "cofferdam" on the upstream and downstream sections of the River Don.

Early planning, ecological and habitat surveys, along with constant communication with Meadowhall staff meant that the construction was carried out with minimal disruption to members of the public and Meadowhalls' daily activities and local wildlife. ATC Ltd worked alongside the client, the Environment Agency and Meadowhall to delivery this project to the satisfaction of all parties involved.

The project was delivered

on a Design and Build basis by A Torn Construction, with the initial design undertaken by consultants, Mike & Matt Beach. ATC Ltd worked with HBPW who were the civil engineering designer in conjunction with Fishtek who undertook the detailed hydrological design of the fish pass. The project was managed by Turner & Townsend on behalf of the DCRT.

ATC Ltd are delighted to be working with various consultants on a number of additional Fish Pass projects in the future.

For more information about the work of Don Catchment River Trust please visit their website at [www.dcrct.org.uk](http://www.dcrct.org.uk).



## TOTAL SUBSTATION - TOTAL TEAMWORK

**Working closely with the client was essential on this project, to ensure that key milestone dates could be met to ensure that installation teams from Total Lindsey Oil Refinery could progress the complicated change over sequence as required.**

The Replacement of Substation 16 Project comprised the construction of a new substation at Total Lindsey Oil Refinery to be known as Substation 30, to house new 11kV Switchgear and associated equipment. The substation is blast resistant in accordance with Total Lindsey Oil Refinery Specifications. The project also included the necessary infrastructure including extensive exposure of existing cables, buried cable diversions, surfacing, fencing and drainage works.

The foundation comprises a reinforced

concrete cabling basement with 1.2m high walls and shear keys. It also includes an 80m reinforced concrete cable trough trench, with removable cover slabs. The superstructure for the new substation is built on top of the trough foundation walls and is a blast resistant steel frame with built up profiled steel cladding, and suspended composite concrete floor.

It was necessary to excavate around a 33kV live mains and numerous incoming and outgoing live power supplies to the Refinery and surrounding villages, which required extensive management and supervision on site to ensure the work was completed safely.

**CLIENT:** Total Lindsey Oil Refinery  
**PROJECT:** Substation 30  
**LOCATION:** Immingham  
**VALUE:** £960k+

*Total Lindsey Oil Refinery is a company owned by TOTAL Limited.*





## BULKING UP!

At ATC we are growing and building on our expertise and strong partnerships to construct Bulk Stores using engineered solutions resulting in cost savings for our clients.

Bulk Stores allow for the medium or long term storage of a wide range of products and their construction is tailored to the specific needs of a client.



### CASE STUDY

**5,000m<sup>2</sup> Bio-mass Storage Bulk Store**  
Contract Value:- £1.8m

As part of the emerging renewable sector in the Humber Region, ATC Ltd recently completed the new bulk store for Associated British Ports at Immingham, which was designed to house bio-mass pellets. Consisting of a reinforced concrete floor and 5m high concrete walls, the top section of the walls and the roof were fully cladded. The floor is supported on pre-cast concrete piles in order to cope with the weight of the bulk products to be stored in the shed.

We worked alongside our design partners HBPW Consulting to find the very best solution to a number of key challenges:-

- The preferred position of the bulk store was against an existing shed where the structure and the floor had settled, a solution was found to ensure the successful "meeting" of these two buildings.
- Much of the ABP site is constructed on reclaimed land and the design needed to take into account a revetment running across the site and an old wave wall.



### CASE STUDY

**2,200m<sup>2</sup> Clinker Bulk Store Warehouse**  
Contract Value:- £600k

Hope Construction Materials is Britain's leading independent producer of cement and readymix concrete, and also supplies aggregates and asphalt to the construction industry. They required a 2,200m<sup>2</sup> storage facility, with a capacity of 20,000t, which would allow for continuous production and storage of materials despite seasonal changes in demand and this project was started, constructed and handed to the client within 12 weeks.



ATC Ltd are currently working on a number of bulk stores including the **£3.8m Bulk Cargo Shed at ABP Hull**, and the **£2.1m Immingham Fertiliser Terminal at Immingham**.

## LOCK GATES

The impressive lock gates at King George Dock Hull required the anchorage system to be replaced. The original system had been built at the beginning of the 20th Century, and following problems with one of the restraints ABP decided that remedial work to both top gate anchorages needed to be carried out as a priority. It was essential that during the refurbishment works, the lock gates remained operational.

Extensive temporary works were required to ensure that the gates remained operational for shipping in and out of the King George Dock and Queen Elizabeth Dock. This entailed excavation of the existing dock walls and installation of permanent reinforced concrete pits and anchorages. A temporary steel anchor beam was then installed to remove the loads from the existing anchorages to enable them to be replaced. After over a year of working on the project the works were handed back to ABP in November 2014



## CLIENT TESTIMONIALS

*"A Torn Construction Ltd have always given an excellent service and have never failed to deliver"*

**Vanessa Kenyon**, ABP Connect

*"A well organised company with a committed workforce"*

**Alan Potter**, Total UK Ltd

*"Very attentive supplier. Always communicating to ensure that inevitable variations/changes encountered are discussed and solutions found. Results orientated and focussed on customer satisfaction"*

**Mark Sacker**, Singleton Birch Ltd

## WELCOME TO THE TEAM!

We are pleased to welcome two new key additions to the site management team. Senior Engineer Joe Bolton joined the company in November and brings enthusiasm, and great experience having worked in the construction sector for the last 12 years on a wide range of projects. Declan Gilboy is a Graduate Site Engineer, having successfully completed his BA(Hons) in Civil Engineering from Leeds Beckett University. Having enjoyed 6 months working and travelling in Australia Declan is now keen to start his career and is joining our experienced site teams. Both these key appointments will support and strengthen the site management teams as ATC embark on major projects in 2015.

## STOP PRESS...

**ATC Ltd has now completed a number of additional Train Cleaners across the country including Port of Blyth, Redcar and Tata Steel, Immingham. We are now working on an improvement to the current design.**

## CONTACT US

**If you would like to have an informal chat about forthcoming projects or would like to receive an ATC Capability Folder then please contact us now on 01652 649063.**

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## NEW PURPOSE BUILT HEAD OFFICE!

We are now delighted to have relocated to new purpose built Head Offices. Still based in Kirton in Lindsey the new offices provide a more spacious and comfortable environment and ensures that the company has the best facilities possible for continuing to provide an excellent service to customers, suppliers and staff.

The site now provides not only great office space, but a dedicated area for servicing plant and vehicles as well as a working yard.

The £300k investment is indicative of the forward thinking long term planning for the company which has seen turnover increase, number of employees grow and the client base develop in new and exciting markets.

ATC Ltd were successful in their application for a Regional Growth Fund grant of £50k from North Lincolnshire Council towards the cost of the development.



## TRAINING ACHIEVEMENTS

**Huge Congratulations to Head Office Admin staff Nicola Rhodes and Hannah Cowling on both successfully completing training in 2014. Nic achieved her Level 3 AAT Accounts, following months of hard work and commitment to this challenging course and Hannah achieved her Level 2 Apprenticeship in Administration – a great way to end her first year with us at ATC Ltd.**



▲ The A Torn Construction Ltd team at a recent Staff Training Day 2014