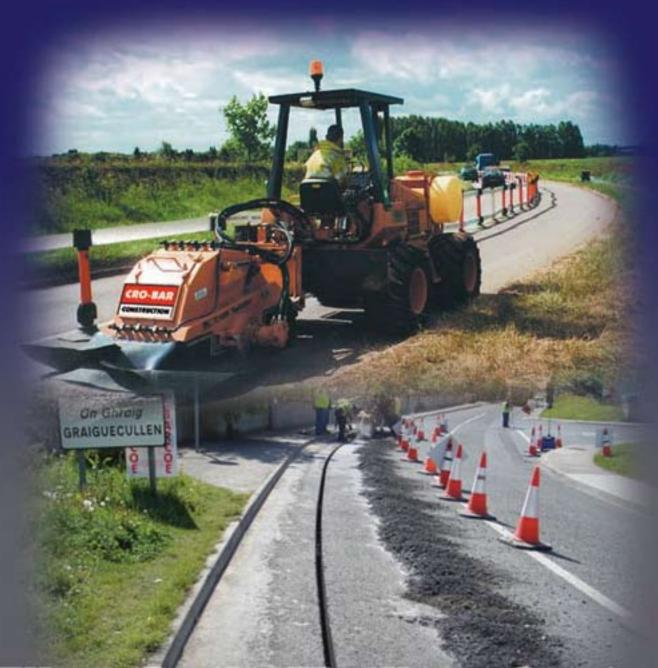


# Cro-Bar Construction Ltd. Utility & Civil Engineering Contractors



Fibre Optic Flatliner System

The complete cost effective end to end installation solution

## CRO-BAR CONSTRUCTION LTD.



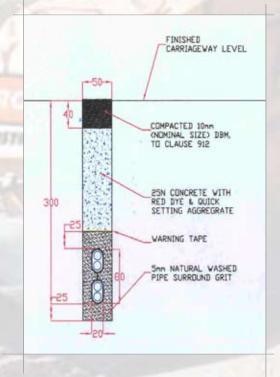
#### "THE FLATLINER SYSTEM"

**Cro-Bar Construction Ltd.** has developed a rapid deployment, cost effective duct installation solution for the build of Fibre Optic Networks.

"The Flatliner System" is a mini-duct solution and along with its various products and designs, was developed and utilised as part of the Irish Government National Broadband Scheme, the NDP 2007-2013.

Now being introduced in the UK and Europe **Cro-Bar Construction Ltd.** can bring this technology to suitable international Fibre Optic Network builds.

**Cro-Bar Construction Ltd.** will pre-plan projects and offer this and alternative cost effective solutions in the deployment of Long Haul and Metropolitan Fibre Network builds.



**Cro-Bar Construction Ltd.** will carry out a full design and detailed survey of the proposed route prior to any works commencing. Assessing the ground conditions is paramount for the Flatliner solution to be installed successfully and delivering cost efficiencies and savings.

This may include trial holes at various points along the proposed route so that existing services can be identified and the quality of the ground can be assessed for correct deployment of the Flatliner mini-ducts.

# CRO-BAR CONSTRUCTION LTD.



#### TRENCHING SOLUTIONS

The total "Flatliner" system was developed in conjunction with our innovative trenching solutions. For instance, using our specialised carriageway trenching machine, we deliver a fast narrow slot-trench which is an absolute favourite with Local Authorities.

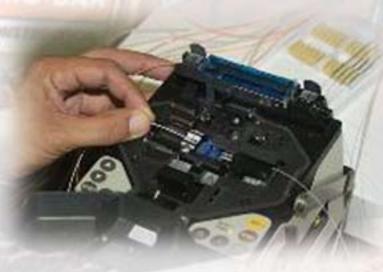
Our customised chain trencher is efficient on roadside verge installations in rural network construction. These coupled with other engineering solutions makes the Flatliner system the obvious choice.

#### CABLE BLOWING, SPLICING & TESTING

The system is flexible in the size and number of mini-ducts to meet the clients needs. The 16mm Flatliner version allows for the install of cable counts up to 144 fibres.

Traditional fibre blowing methods can be deployed to install cable lengths to a client's specifications. Mobilising additional crews can deliver cable lengths of up to 10km between joints.

**Cro-Bar Construction Ltd.** will deliver the project using experienced splicing and testing crews and complete the handover with an as-built package to a client's specifications.



### **EMERGENCY RESTORATION**

Another advantage of the Flatliner solution is that it is extremely robust and protective of the cables.

Should damage occur to the network it can be repaired in minimal time using a two man crew with standard tools and equipment ensuring a speedy return of the network to full operation.

**Cro-Bar Construction Ltd.** will work with local resources to deliver this advanced duct installation solution. We will also train local firms to provide the necessary 24/7 maintenance and restoration services.



# **CRO-BAR** CONSTRUCTION



Springhill Business Park, Carrigtwohill,

Co. Cork, Ireland

Coppermill Lock, Harefield, Middlesex UB9 6TQ

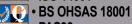
+353 [0]21 602 4200 +353 [0]21 602 4201 Tel: Fax:

info@cro-bar.ie Email:

Website: www.cro-bar.ie www.cro-bar.co.uk



• ISO 9001 • ISO 14001



• PAS99