

Mark Dignam**CEng MEngSc BE FIEI MICE****Current Position**

Director /Senior Structural Engineer -
Nicholas O'Dwyer Ltd.

Qualifications

M.Sc. (Construction Management), University
of Reading, United Kingdom - 1995 - 1996

MEng. Sc. (Civil Engineering Design and
Analysis), University College, Galway, Ireland -
1993 - 1995

BE (Hons), University College, Galway, Ireland
- 1989 - 1993

Chartered Engineer (C.Eng.
FIEI MICE)

Euro Engineer (Eur. Ing.)

Finalist in the IEI / Parc Chartered Engineer
of the Year 2000.

Chronology

2021 – Present Director Nicholas O'Dwyer
Ltd

2010-2020 – Associate Director /Associate,
Nicholas O'Dwyer Ltd

2002-2010 Senior Engineer, Nicholas
O'Dwyer Ltd

2000-2002 Senior Structural Engineer,
Thomas Garland & Partners, Dublin

1999-2000 Senior Engineer,
RG Parkin

& Partners, Dublin

1998-1999 Design Engineer, Ove Arup &
Partners, London

Memberships

Fellow, Engineers Ireland;

Member, Institution of Civil Engineers;

European Federation of National Engineering
Associations

Chartered Engineer (C.Eng.MIEI)

Euro Engineer (Eur.Ing.)

Finalist in the IEI / Parc Chartered
Engineer of the Year 2000

Experience Summary

Mark is a Chartered Structural Engineer with over 25 years' experience in the **structural design** and management of civil and structural engineering projects. Extensive experience in the analysis and design of structures, including finite element, dynamic and seismic analysis as part of major river and coastal infrastructure projects. Responsible for all aspects of contract administration including preparation of contract documents, tender reports, site supervision and project programming. Management duties have included Client briefing and reporting, tender submissions, presentations, and co-ordination of design team meetings.

Key Experience**Dublin Docklands Project**

Main project features: Project included Master Planning, including Traffic Impact Assessments; Mobility Plans, including Inter-modal infrastructures; Impact assessments of Pedestrian access plans; Transport/Road Safety Audits for the new regeneration area including existing Campshires and interlinked routes. Multi-disciplinary project for site development, ground improvement, design of drainage, roads, sewers, water supply, paving and all services for docklands site at Grand Canal Quay on former gasworks' site. **Positions held:** Project Director, **Work Carried Out:** Overall responsibility for delivery of the project.

Grand Canal Redevelopment

The Project was for the rehabilitation of the Grand Canal area on behalf of the Dublin Dockland Development Authority. The site area extended to over 12 acres and required extensive decontamination, excavations and temporary works. The site was surrounded by major access roads, properties and River Liffey. The excavations extended down to over 6m in places. During the initial planning stages a full Traffic Impact Assessment was carried out for the future developments and the impact to the surrounding road network. A major aspect of the development was the design and supervision of a new Central Plaza area adjacent to the hotel and canal basin. This was a high profile design commission which is the central community area. **Positions held:** Project Director, **Work Carried Out:** Overall responsibility for delivery of the project.

Refurbishment of George's Dock, Dublin Docklands.

Main project features: Feasibility study, detailed design, preparation of tender documents and construction supervision of refurbishment of dock walls and floor and provision of pontoon moorings for public amenity use. **Position held:** Project Engineer

Cork Lower Harbour Main Drainage

Main Project Features: Structural design of retaining walls, river defences and pumping station structures in tidal zone. Design of large diameter sewers with a dense urban areas, with retaining existing structures and buildings.

Rosslare Europort Offshore Wind Port Facilities Project Location: Rosslare, Ireland **Year:** 2023 - Present **Value:** €200m

Main project features: The ORE Hub is proposed to provide a staging area and maintenance facility for over 7GW of offshore wind farms off Ireland's South East coast. Nicholas O'Dwyer was appointed to carry out Phase 3 (Preliminary Design) to Phase 7(Close Out and Review) of the project, including Preliminary Design and Review of the existing Concept Design, Environmental Licencing, Planning and Statutory Process, Detailed Design and Tender Process, Contract Award, Construction Supervision and Contract Administration, PSDP , Stakeholder Engagement and Community Liaison. **Positions held:** Project Director, **Work Carried Out:** Overall responsibility for delivery of the project.

Sea Lock at Spencer Docks Location: Dublin, Ireland **Year:** 2008 - 2009 **Value:** €4.5m

Main project features: The project was for the reconstruction of the existing lock on the Royal canal at the entrance to the River Liffey incorporating a Flood Gate and lock facilities for access to the Royal Canal at a busy urban location. The works included extensive sheet piling in marine conditions, temporary coffer dams in tidal location, reconstruction of the lock walls and base, new lock gates and structures and major flood gates at the River Liffey. **Position held:** Project Manager **Work Carried Out:** Detailed design and site monitoring.

Repairs to Existing Sea Wall and Breakwater Location: Dun Laoghaire, Co Dublin **Year:** 2006 – 2007 **Value:** €400,000

Main project features: Repairs to existing sea wall and breakwater in Dun Laoghaire **Position held:** Project Manager **Work Carried Out:** Detailed design, project management and supervision of works.

Refurbishment of Service Reservoirs

Main project features: A number of critical service reservoir assets (treated water storage structures) at risk of failure that could impact significantly on service, water quality, costs, environment or safety were identified by Irish Water. This project for inspecting and repairing 14 No service reservoirs and 34 No water towers (potable water) was to address this problem through visual inspections, preparing a priority investment programme, and supervising the required concrete and mechanical repairs. **Position held:** Project Manager

Wad Drainage Catchment Study – Phase II Value: €10m

Main project features: Flood risk assessment of River Wad in North Dublin City. Final report recommended phased flood alleviation works from a hydraulic model. Design of culverts, storage control structure and upgrade of existing culvert with a trust bore. **Position held:** Structural Design Project Manager

Cork Lower Harbour Main Drainage Project Year: 2021 **Value** €144m

Main project features: This project serves the population / industrial centres of Cobh, Carrigaline, Crosshaven, Passage West, Monkstown, Glenbrook, Ringaskiddy, Shanbally, and Coolmore. It involves construction of a new wastewater treatment plant 80,000PE; 14 new main pumping stations; ca. 57km of new sewers up to 1050mm dia, including significant sections by microtunnelling; rehabilitation of existing sewers; and a drilled (horizontal directional drilling) crossing (ca. 1km) under the Lee estuary, County Cork. **Work Carried Out:** Mark was responsible for leading and overseeing development of all detailed civil / structural designs, contract documents, and Employers' Requirements and reviewing tender civil / structural submissions. Upon construction commencement, Mark fulfilled the role of Lead Civil / Structural Design reviewer for the design and build phase through to the commencement of the operation service period. Mark's duties also included liaising and coordinating with project PSDP, PSCS, and temporary works designers.

Dublin Waste to Energy Plant Value: €6.5m

Main project features: Waste-to-energy plant serving the Greater Dublin Area. The plant will produce 60 megawatts of electricity, enough to power 80,000 homes, and provide district heating for up to 50,000 homes in the area. The facility will process 600,000 tonnes of waste per year. The project involved the construction of a twin celled 12m deep pumping station, 80m long intake channel, cooling water pipes and intake screens in tidal river estuary. The pumping station is constructed with reinforced concrete walls and base. The intake channel is formed with permeant sheet piles and anchors with concrete capping beam. The intake is located within the existing quay wall with removal screens. The cooling pipes are supported on a steel frame and concrete piled foundations.

N11/N25 Bridge Refurbishment Contract: Wexford & Dublin **Year:** 2010 – 2013 **Value:** €0.5m

Main project features: Bridge refurbishment project as part of a combined contract for the National Roads Authority. Contract required removal and refurbishment of a steel footbridge and refurbishment of three reinforced concrete structures. **Position held:** Project Manager and Employer's Representative **Work Carried Out:** Detailed design, project management, certification, and supervision of works

N7 Naas Road Culvert Replacement Contract: Naas Road, Dublin **Year:** 2006 – 2007 **Value:** €0.6m

Main project features: Design of replacement of Camac River Culvert 3.0m x 3.0m over a 40m alongside N7. Major traffic management system implicated. **Position held:** Project Manager and Employer's Representative **Work Carried Out:** Detailed design, project management, certification, and supervision of works

Sherriff Street Sewer Network, Dublin Location: Dublin Ireland **Year:** 2009 - 2010

Main project features: The Sherriff Street Sewer Network project included tunnelling works under and adjacent to rail lines below street level. **Position held:** Senior Design Engineer, **Work Carried Out:** Responsible for the preparation of tender documents, including temporary works design and the detailed calculation of predicted settlements beneath the rail line for approval by Irish Rail.

Portrane Donabate Rush & Lusk WWTs DBO Location: Dublin, Ireland **Year:** 2010 - 2012 **Value:** €50m

Main project features: Project included 1km sea outfall, 7km of rising mains, up-grades to existing sewer network, 3 No. remote pumping stations and storm holding tanks. **Position held:** Structural Design Project Manager **Work Carried Out:** Overall responsibility for co-ordination of detailed design and submissions to Client for approval.