



COST MANAGEMENT OF CIVIL ENGINEERING PROJECTS

PROFILE

ROGERSON REDDAN & ASSOCIATES LTD.





1.0 Cost Management of Civil Engineering Projects

Rogerson Reddan has been providing professional Cost Management (Quantity Surveying) services to the Irish construction industry for in excess of 20 years. During this time Rogerson Reddan have contributed to the provision of value for money and cost certainty on a wide variety of construction projects, for a range of clients, using the full spectrum of procurement routes and contracts.

Rogerson Reddan also provides cost management services on Civil Engineering projects. These services, generally provided in co-operation with the Client's Engineering team, have provided Clients with accurate early cost estimates, robust tender and contract documentation, and vigilant post contract cost control.

In the current market there are significant challenges facing any Client commissioning Civil Engineering works. On public sector projects, the new GCCC Contracts, while facilitating the appropriate transfer of risk, place increased emphasis on the adequacy of tender and contract documentation. It is likely that the contractual debates of the future will focus as much on the adequacy of documentation as on physical site conditions.

The current tendering market will inevitably cause Contractors to undertake projects at extremely challenging tender prices. While input costs are likely to reduce, they have not reduced at the same pace as tender prices. This pressure, and the inevitable need for contractors to make a profit in order to remain in business, can only result in greater emphasis on cost recovery (for contractors), and consequently greater need for cost control during the course of a project.



Distributor Roads & Associated Services, Balbriggan Co Dublin. (c. €10m)

Services Provided: Cost Management



Recycling Centre, Shannon, Co Clare.

Service Provided: Cost Management

All of the above place greater emphasis on the Cost Management function as part of Civil Engineering projects. Increasingly Clients are recognising the advantages of engaging a Design Team which includes a separate specialist Cost Management function. Rogerson Reddan possesses the Experience, Personnel and Systems to provide effective Cost Management on civil engineering projects.

We set out on the following pages, the services we provide in relation to Civil Engineering projects, and a representative sample of projects completed to date.



2.0 Services Provided

Rogerson Reddan offer all of the services set out below, and have specific relevant experience of providing all of these services on Civil Engineering projects.

We recognise that it may be appropriate on certain projects, that only some of these services are provided by specialist Cost Managers such as Rogerson Reddan. We have experience of situations where the cost management function was shared with the Client's Engineer, and we have been engaged, for example, to prepare tender documents, with subsequent cost control by the Client's Engineer. In other cases we have been engaged to provide post contract financial administration and cost control, based on tender and contract documents prepared by others.

- **Cost Estimating:** Our experience and systems provide us with the necessary tools to prepare accurate early cost estimates, ranging from early stage order of magnitude estimates, based on historic costs per functional unit (e.g. Km of road, LM of pipelines) to detailed cost plans based on scheme design and measured quantities of work.
- **Procurement Advice:** Rogerson Reddan has experience of all major procurement routes in use in Ireland, and consequently is qualified, based on this experience, to advise on the most appropriate procurement method for any given project.
- **Managing the Prequalification Process:** We have, on behalf of publicly funded Clients, managed and co-ordinated the entire pre-qualification process including drafting and placing OJEC notices, preparing prequalification documentation and assessment criteria, managing the assessment process, preparing assessment reports and debriefing applicants.
- **Tender Documents:** Our core business is the preparation of accurate comprehensive and "water-tight" tender documents. Rogerson Reddan have experience of preparing tender documents under all major forms of contract, including:
 - I.E.I Conditions of Contract
 - G.C.C.C. Conditions of Contract
 - G.D.L.A. Conditions of Contract



Large Diameter Sewer Outfall through Balbriggan Town Centre, including extensive thrust boring

Services Provided:

Cost Management

Rogerson Reddan have prepared Bills of Quantities under the following methods of measurement:

- National Roads Authority (NRA) method of measurement
- Civil Engineering Standard Method of Measurement (CESMM3)
- Agreed Rules of Measurement (ARM3)



2.0 Services Provided (Continued)

- **Tender Analysis and Appointment:** Rogerson Reddan have experience of preparing full tender analysis and reports under both the CONDOC procedures and the new GCCC procedures, together with bespoke procedures for private sector projects. Our tender analysis is thorough, diligent, and generates specific queries to be resolved as part of the tender review process. We will (when appropriate) chair and minute tender review meetings, and prepare formal Contract Documents for execution.
- **Interim Valuations:** We have significant experience of preparing interim valuations on Civil Engineering projects, and our Quantity Surveyors are conversant with all of the issues which may arise at this stage of a project, including dealing with potentially inflated payment applications, claims for payment for materials on site, and for materials stored off site. We provide comprehensive and clear details of our interim valuations.
- **Post Contract Cost Control & Final Accounts:** Rogerson Reddan have experience of all major civil engineering contracts, and methods of measurement, and are keenly aware of the differences between each, and the issues which typically arise post contract. Our Quantity Surveyors are experienced in the dedicated provision of post contract cost control to allow us to competently engage with the Contractor's Quantity Surveyors. Our change control systems and procedures (implemented with the agreement of the Client and Engineer) can contribute to a significant improvement in cost certainty through the life of a project.
- **Specialist Consultancy Services:** We provide a range of specialist consultancy services in relation to cost and contractual issues on infrastructure projects. These consultancy services range from straightforward assessment of & reporting on issues such as Price Variation Clause buy-out proposals, to extensive statutory reviews of Infrastructure projects & programmes, including benchmarking against international comparators.



Dublin Airport

Services Provided: Technical Advisor to Commission for Aviation Regulation re DAA Capital Expenditure Programme

- **Advice on Disputes & Contractual Claims:** We have long experience of preparing, negotiating and settling complex final accounts on all types of projects. Our knowledge of the Civil Engineering Contracts, and methods of measurement, together extensive experience of negotiations with Contractors is invaluable at final account stage. Our Project & Construction Management personnel, (qualified Civil Engineers) are available, if required, to analyse & respond to programme issues, extensions of time, and delay & disruption claims. We are also experienced in the preparation of submissions for dispute resolution forums.



3.0 Rogerson Reddan

Rogerson Reddan & Associates is a multi-disciplinary professional services practice providing a range of Consultancy Services in relation to Development and Construction Projects. Our Professionals comprise experienced Project Managers, Cost Managers (Quantity Surveyors), and Construction Managers (Qualified Civil Engineers).

Prioritizing our client's interests, delivery of best in class professional service and a pro-active approach to all commissions, are our hallmarks.

We serve both Public and Private Sector Clients. Services provided Include:

- **Project Management**
- **Construction Management**
- **Cost Management (Quantity Surveying):**
 - Full Service QS Service from inception to completion
 - Feasibility Studies / Developer's Budgets
 - Cost Estimates & Cost Plans
 - Risk Analysis & Management
 - Value Engineering
 - Preparation of Tender Documents
 - Negotiation of Contract Sums
 - Acting as Client's Agent under Design & Build Contracts
 - Preparation of Contract Documents
 - Post Contract Financial Administration
 - Interim Valuations
 - Design & Implementation of Change Control Procedures
 - Cost Reports & Cash Flow Monitoring
 - Negotiation & Agreement of Final Accounts
 - Cost Analyses for Taxation / Other Purposes
- **Specialist Consultancy Services**
 - Due Diligence & Project Monitoring for Banks & Funding Institutions
 - Specialist Technical Reviews for Regulatory bodies
 - Technical Representative Role under Development Agreements
 - Risk Management
 - Procurement Consultancy
 - Health & Safety - PSDP



National Gallery of Ireland,
Millennium Wing
Services Provided: Cost Management



4.0 Rogerson Reddan Management Profile

Managing Director: Seamus Reddan FSCS, FRICS

Construction Economics – Diploma with Distinction DIT Bolton St.
B. Sc. (1st Class Hons.) - Trinity College
Higher Diploma Project Management - Trinity College
Fellow of the Society of Chartered Surveyors in Ireland
Fellow of the Royal Institution of Chartered Surveyors,
30 years experience



Director: Fred Rogerson FSCS, FRICS

Construction Economics – Diploma DIT Bolton St.
B. Sc. (Hons.) - Trinity College
Higher Diploma Project Management - Trinity College
Fellow of the Society of Chartered Surveyors in Ireland
Fellow of the Royal Institution of Chartered Surveyors,
Graduate Diploma in Arbitration Law - DIT/C.I.Arb.
Graduate Diploma in International Arbitration Law DIT/C.I.Arb.
30 years experience



Director: David Keenan ASCS, MRICS

National Diploma in Construction Economics.
B.Sc. - Quantity Surveying
Associate of the Society of Chartered Surveyors in Ireland
Member of the Royal Institution of Chartered Surveyors,
21 years experience .



Director: John Hughes ASCS, MRICS

Construction Economics – Diploma DIT Bolton St.
B. Sc. (Hons.) - Trinity College
Higher Diploma Project Management - Trinity College
Associate of the Society of Chartered Surveyors in Ireland
Member of the Royal Institution of Chartered Surveyors,
17 years experience



Director: Colman Stack B.E. (Civil)

a graduate of UCD , Colman has over 25 years experience in
engineering and management experience in Building and Civil projects
Extensive experience as Project Manager, Construction Manager, PSDP
and PSCS



Director: John Higgins B.ENG. (CIVIL) HONOURS

25 years engineering and site management experience in Building
and Civil projects. Extensive experience as Project Manager, Construction
Manager, PSDP and PSCS



Director: Kieran Clohessy ASCS, MRICS

B. Sc. (Hons.) Quantity Surveying
Occupational Health & Safety Foundation Course Certificate.
Associate of the Society of Chartered Surveyors in Ireland
Member of the Royal Institution of Chartered Surveyors





5.0 EXPERIENCE — Typical Civil Engineering Projects:

Project	Cost	Service Provided	Client
Distributor Road Infrastructure & Associated Services, Balbriggan. Comprising road, water & drainage infrastructure and services to 6,000 houses, including dedicated bus routes, cycle lanes, landscaping. (phased, in multiple contracts)	€22m	Full QS Service from inception to completion including agreement of final accounts	Parkway Properties PPP Ltd.
New Watermain Infrastructure, including large diameter pipework, reservoir, pump station at Balbriggan	€7m	Full QS Service (project at tender stage)	Parkway Properties PPP Ltd.
Proposed upgrade of Townsend Street / Hanover Street, Dublin; including complete replacement of all street and footpath pavings, all street lighting, signage and furniture, together with diversions and upgrades to all underground services.	€6m	Full QS Service (project did not progress beyond cost plan)	Dublin Docklands Development Authority
Greenhills Road Re-alignment, Tallaght, Dublin 24; construction new road; upgrade and realignment of existing road, together with all associated services diversions etc.	€4m	Post Contract Financial Administration	South Dublin County Council
N18 Condell Rd Roundabout & Pipe-jacking contract – Pipejacking contract for watermain and drainage services under national route; new roundabout on national route	€4m	Tender Documents	Budelli Construction
Dublin Airport ; Specialist Technical Consultancy to Commission for Aviation Regulation re Dublin Airport Capital Investment Programme	N.A.	Provision of specialist technical and cost advice in relation to Airport capital projects totalling c. €1bn	The Commission for Aviation Regulation
Naas Town Centre - Infrastructure Upgrade – Corbans Lane Upgrade; Road realignment; new construction & overlay of heavily trafficked streets; including realignment of 4 major junctions in Naas town Centre	€5m	Preparation of tender documents.	O'Farrell McDermott Ltd.
Dun Laoghaire Golf Club Development, Off site Infrastructure Works - Redevelopment: Road & drainage infrastructure including realigned junction	€5m	Preparation of Tender Documents, tender analysis.	Cosgrave Developments Ltd.
Lisdeen Landfill – Drainage, gas management and capping soft landscaping of existing closed landfill site Co. Clare	€0.5m	Full QS services	Clare County Council