

CURRICULUM VITAE

MOHAMMAD YADOLLAHI SENIOR DIRECTOR



QUALIFICATIONS

BSc, Civil Engineering, Azad University

MSc, Structural Engineering and Mechanics, University of Edinburgh & University of Glasgow, UK

MSc, Construction Law and Dispute Resolution, King's College London, UK

MEMBERSHIPS

Member, Institution of Civil Engineers (CEng MICE) Member, The Chartered Institute of Arbitrators (MCI Arb)

Member, The Academy of Experts (Full member in the Practising Category as a Civil & Structural Engineer)

Member, World Association for Waterborne Transport Infrastructure (PIANC), Seismic Design Guidelines for Port Structures, MarCom WG 225

Member, World Association for Waterborne Transport Infrastructure (PIANC), Inspection, Maintenance & Repair of Waterfront Facilities, MarCom WG 233

Member, World Association for Waterborne Transport Infrastructure (PIANC), Design, Maintenance and Sustainability of Container Terminal Pavements, MarCom WG 243

Member, World Association for Waterborne Transport Infrastructure (PIANC), Safety by Design of Maritime Infrastructure Projects, MarCom WG 252

PROFESSIONAL ROLES & PERSONAL DEVELOPMENT

ICE Supervising Civil Engineer/Mentor

Legal Experience Training Advanced Professional Award in Expert Witness Evidence (LETAPAEWE) accredited by Pearson Learning at a level 7 (Masters level) BTEC.

PROFILE

Mohammad Yadollahi is a Chartered Structural / Civil Engineer with over 17 years industry experience, predominantly in ports and maritime sector. He has worked as project director, project manager and design engineer for a wide range of infrastructure projects worldwide.

Mohammad has been part of the PIANC Technical Committee for Working Groups 225, 233, 243 and 252 which develop international guidelines for design, maintenance and repair of maritime facilities.

In 2022, Mohammad was invited by Oil Companies International Marine Forum (OCIMF) to review the draft of the second edition of their Jetty Maintenance and Inspection Guide before its publication.

He is a testifying expert who has been cross examined in major international arbitrations and has produced reports as named expert witness in issues of disputed design liability (including duty of skill and care), specifications defects, materials and workmanship deficiencies, project management issues, alleged breach of health and safety regulations/protocols, and poor risk management.

Mohammad's key skills include:

Project Management

- Project Director with proven technical and leadership skills to deliver multi-million-dollar infrastructure projects (up to a value of US\$500)
- Hands-on Project Manager able to facilitate punctual delivery of complex projects to high quality standards

Contractual Management

- Detailed knowledge of construction contracts (predominately FIDIC and NEC)
- Proposal management – tender preparation/evaluation, employer's requirements writing (including technical specifications) and sub-consultant interface
- CDM 2015 Regulation advisor (particularly to the Principal Designer)

Engineering Design

- Structural concrete design
- Structural steel design
- Design of maritime structures (wharf structures, quay walls, jetties, dolphins, breakwaters, slipways, etc.)
- Design of container terminals
- Design of dry docks and dock/lock gates (including water ingress and waterproofing issues)
- Dredging and reclamation
- Concrete quality, crack control and repair (including marine and tremie concrete)
- Heavy duty pavement design
- Seismic design
- Structural FE analysis and modelling (STAAD, SAP2000 and LUSAS)
- Geotechnical analysis and modelling (WALLAP and Plaxis)
- Detailed knowledge of Eurocodes, British and American Standards
- Detailed knowledge of buildability (buildable design)
- Detailed knowledge of vessels types and functions
- Port masterplanning (including the change of use)

Forensic Engineering

- Forensic Investigations of Civil Infrastructure Deterioration and Failure
- Structural Failure Analysis and Investigation
- Concrete Defects or Failure Analysis
- Structural Steel Defects or Failure Analysis

- Forensic Investigations of Temporary Works Defects or Failure

EXPERIENCE

EXPERT WITNESS & ADVISORY

Heavy Duty Port Pavement, UK (2024) – Litigation Case

The named expert witness provided opinion on the causation(s) of the observed defects of a reinforced concrete port pavement. Undertook visual and intrusive site inspections, assessed the adequacy of the design and workmanship, and produced an expert witness report.

Port Masterplanning and Dredging, Albania (2024) – ICSID Arbitration Case

The named expert provided opinion on the adequacy of technical/industry assumptions made by the financial accounting expert in his calculations of damages (damage valuation model). Undertook a desk study of the port masterplan, assessed the impacts of dredging campaigns, port's infrastructure rehabilitation works and different types of vessels on operational performance of the port, and produced an expert witness report.

LNG Terminal, Middle East (2022/24) – ICC Arbitration Case

The named expert witness provided opinion on the root cause(s) of the observed cracks on the reinforced concrete deck structure of an LNG jetty and the adequacy of the remedial works undertaken by the contractor. I produced an expert witness report along with various joint statements for the purpose of arbitration.

Heavy Duty Port Pavement, UK (2023) – Early Client Advice

Expert provided opinion on the adequacy of a heavy-duty pavement design for container storage. Carried out a detailed review of the contractual documents (including the technical specifications) and the design calculations, assessed the adequacy of the design and whether the designer undertook its services with reasonable skill and care and in accordance with the contractual requirements, and produced an expert advisory report.

Hydropower Infrastructure (Dam), Africa (2023) – FIDIC DAB Case

Expert advisor provided opinion on the adequacy of the design and construction of marine temporary works (i.e., temporary dam and breakwater) associated with the construction of a strategic hydropower facility in Africa. Undertook a desk study, assessed the adequacy of the adopted design codes and the temporary works design, and produced an expert advisory report.

Heavy Duty Port Pavement, UK (2022/23) – Mediation Case

The named expert witness provided opinion on the causation(s) of the observed defects of a Roller Compacted Concrete (RCC) port pavement. Undertook visual and intrusive site inspections, assessed the adequacy of the design and workmanship, and produced an expert advisory report.

Buildability of Flood Prevention Scheme and Marine Temporary Works, UK (2022/24) – Litigation Case

Appointed as the named expert to provide opinion on the buildability of the design of the permanent works for a Flood Prevention Scheme, and to opine on whether a temporary works scheme could have been constructed, without any amendment to the design of the permanent works. Assessed adequacy of specifications, and design (including duty of skill and care) at various stages, undertook a desk study of viable temporary works solutions materials, and produced an expert witness report to be used in the Court of Session.

Waterproofing, UAE (2022) – DIAC Arbitration Case

Technical expert undertook detailed investigations to identify the root cause(s) of water ingress into a multi-storey basement.

Building Cracking, UAE (2022) – DIAC Arbitration Case

Technical expert produced an expert report opining on the causation(s) of cracking on an Aerated Sandwich Partition System. Thoroughly investigated the defects on site and assessed adequacy of design, materials and workmanship.

Port Dredging, UK (2022) – Adjudication Case

The named expert witness provided opinion on the adequacy of the dredging works for construction of a flood defence barrier, and produced an expert witness report for the purpose of adjudication.

Highway (Asphalt Road), UK (2022/24) – Litigation Case

Expert witness provided opinion on the causation(s) of the observed road defects. Attended a site visit, assessed the soundness of the reinforced concrete slabs and pavements and produced an expert advisory report.

Highway (Block Paving Road), UK (2022/23) – Litigation Case

Expert witness produced an expert report opining on the causation(s) of pavement defects. Assessed adequacy of specifications, design, materials and workmanship, and road management and maintenance.

LNG Terminal, Location – Confidential (2022) – Mediation Case

Expert witness provided opinion on piling works defects, contractor's workmanship, and issues relating to unforeseen ground conditions. Attended meetings with the client, evaluated the piling works design and construction and produced an expert advisory report.

Port Infrastructure, UK (2022) – Early Client Advice

Expert provided opinion on reinforced concrete slabs and pavement defects. Attended a site visit, assessed the soundness of the reinforced concrete slabs and pavements and produced an expert advisory report.

Dock/Quay Wall, UK (2021) – Early Client Advice

Expert witness, provided expert support to a contractor in a dispute with its employer with respect to CDM responsibilities, design adequacy of a quay wall structure and the overall contractor's workmanship.

Confidential Expert Witness Assistance, Qatar (2020) – ICC Arbitration Case

Provided technical support to an expert witness appointed to act on behalf of a lead designer in a litigation on design of an infrastructure project in Doha, Qatar. Responsible for providing expert opinion on the design of concrete reinforcement to control thermal cracking and supporting the witness in preparing his response for the litigation process and the cross examination.

Technical Expert Assistance (2014-2017)

Responsibilities included the detailed assessment of the disputed maritime structures including the fitness for purpose of dock/lock gates and dry dock sill structure. Additionally, I was responsible to investigate the root cause(s) of water ingress through the as-built lock/dock gates and leakage of dry docks concrete floors and walls. Also involved in the expert witness report writing to outline the findings of the assessment in plain English.

INFRASTRUCTURE

Shakespeare Marina, UK (2021-2022)

Peer Design Reviewer of the permanent and temporary works designs of the Shakespeare Marina.

Environment Agency Minor Works Framework (2020-2022)

Project Director and Peer Design Reviewer accountable for delivering various maintenance and repair works including erosion control of riverbanks, repair of defective coastal flood embankment and civil engineering

repair of locks and weirs.

Recent Tender Designs (2021-2022)

Project Director/Manager responsible for tender design, quality, commercial and contractual submissions of the following tenders:

- Barking Riverside Jetty – Design and construction of a new Thames Clipper jetty and jetty approach.
- ABP Southampton 30 Berth – Design, fabrication and installation of a new linkspan and a new pontoon along with strengthening of the existing bankseat structure.
- Montrose CTV Pontoon – Design, fabrication and installation of a new pontoon with a brow and an access platform.

Pembroke Docks, UK (2020)

Project Director for independent design check of a new supersize slipway and new workboat berthing facility to maximise operational efficiency for Marine Energy Developments (including offshore windfarms) in Wales.

10 Dock Devonport Naval Base, UK (2020)

Peer Design Reviewer provided value engineering support to a contractor during ECI stage for temporary dock closure works associated with upgrading the existing naval dry dock.

Dawlish Sea Wall – Phase 2 UK (2019-2022)

Project Director and Peer Design Reviewer accountable for delivering various temporary and permanent design works for Phase 2 of Dawlish Sea Wall replacement. The work involves the design and construction of approximately 400m of new sea wall and high-level promenade running along the Dawlish Station and adjacent sections, as part of a three-phase £80m project to construct approximately 1km of new sea wall.

Northumberland Energy Park – Phase 1, UK (2019-2022)

Project Director/Manager responsible for the delivery of the detailed design, the associated temporary works design (including a dock closure system) and construction supervision of the works to redevelop the former Blyth Power Station for use of offshore renewable sector. Main works include masterplanning of the dock area to address berthing and landside space requirements for the offshore energy sector, demolition and decommissioning of below ground relic structures, widening and deepening of the existing Ash Barge Dock, construction of a protection sheet pile wall to safeguard a Grade II Listed timber jetty for the new dredge pocket and construction of two dolphins to provide an extended berthing and mooring interface. Also responsible to liaise with the Contractor, the Employer, the Employer's Technical Advisor and other stakeholders to resolve various design and construction issues in an effective and timely manner throughout this D&C project. I also acted as CDM Principal Designer Advisor to assist the D&C Contractor to fulfil its duties under the CDM Regulations.

Twelve Quays Ferry Terminal, UK (2019)

Project Director responsible for supervising the CAT3 independent design check of marine structures for upgrading the Ro-Ro berth at Twelve Quays, Merseyside. The works included, a 55m linkspan to provide access to the pontoon's new upper platform at all states of the tide, a 110m fixed bridge to provide access to the linkspan including a landward bankseat, a new mooring pile and a berthing pile with a Parallel Motion Fender to allow berthing of new class of Stena vessel.

Dover Western Docks Revival, Port of Dover, UK (2018-2019)

Technical Lead responsible for independent design check of marine structures for redevelopment of Dover Western Docks to transform them into a new cargo terminal and a new marina with public-realm waterfront to attract tourists. The works included the geotechnical and structural verification of 1km quay walls for two new berths, a marina curve including tied and cantilever quay walls, mooring dolphins and various quay furniture including bollards and fenders.

Northumberland Energy Park – Phase 1, UK (2018)

Project Director/Manager responsible for the delivery of the successful tender design services for the



redevelopment of the former Blyth A and B Power Stations comprising demolition and decommissioning of below ground relic structures, widening of the existing Ash Barge Dock, construction of a new heavy lift area and dolphin structures to protect a listed timber jetty and provide a berthing and mooring interface.

Batemans Bay Bridge Vessel Impact Assessment, Australia (2018)

Responsible for an independent design review of the new Batemans Bay Bridge piers against vessel impact. The assessment took into account the pier shape and stiffness, and the dynamic interaction between the vessel and the pier.

King's Wharf Jetty, Bermuda (2018)

Project Director/Manager for independent design check of a new deck structure to replace the existing suspended deck comprising a steel frame encased in reinforced concrete, founded on steel H piles. The works were carried out to allow the jetty to accommodate larger cruise vessels. My main responsibilities included leading the project team, providing technical advice, and liaising with the Lead Designer and the Employer to facilitate on time delivery of the project.

Posorja Container Terminal (a DP World Terminal), Ecuador (2017-2018)

Technical Lead and Head Office Project Manager responsible for port masterplanning, liaising with the site supervision team to aid the progress of works on site, reviewing and approving the Contractor's detailed design submissions and liaising with the Employer, Independent Design Verifier and the Contractor's Designer to effectively resolve various design issues. Also responsible for reviewing and approving the contractors risk management plans on site, preparation and review of financial and contractual correspondence including assessment of the interim payment applications, variations to the works and the Contractor's claims for this Design and Construct project. This terminal has been designed in accordance with DP World's 'GO GREEN' programme.

GSEZ Mineral Port – Barge Berth Design Assessment, Gabon (2017)

Lead Design Engineer for the detailed design assessment of the barge berth designed by others for Gabon Special Economic Zone Mineral Port in Libreville, Gabon. My main responsibilities included leading and managing the design team, reviewing design assessment of the as-built sheet piled wall (including a Plaxis model) and preparing a desk study report summarising the results of the assessment, including the adequacy of the wall for handling the cargos and the required modifications for allowing it to be effectively used.

Peel Ports Great Yarmouth – South Beach Development, UK (2017)

Lead Design Engineer and Project Manager for masterplanning, the feasibility study and concept design of infrastructure works for the proposed development of a new offshore wind port at Outer Harbour, Great Yarmouth. The main works included the feasibility study and concept design of three proposed berths; a 350m long berth, a 100m long berth and a 50m wide Ro-Ro berth; considering a range of structural forms, load capacities and construction methods.

Shell Leman Platform Decommissioning – Western Quay Assessment, UK (2017)

Lead Design Engineer responsible for the detailed design assessment of the Western Quay at Peel Ports Great Yarmouth, to evaluate the structural capacity of the quay for set-down and transportation of the Shell Leman Platform to the Peterson decommissioning yard.

Fairview Container Terminal (a DP World Terminal), Canada (2017)

Provided technical and contractual support to the site team for the berth expansion works at Fairview Container Terminal. The project involved a 150m new wharf construction and 250m widening of an existing caisson wharf, 8 hectares of new container yard, reclamation works and associated services. This terminal designed in accordance with DP World's 'GO GREEN' programme.

Posorja Container Terminal (a DP World Terminal), Ecuador (2017)

Responsible for the technical evaluation of tender documents, interface management and tender interviews as part of support services for the prequalification, tender and contract negotiations for the development of the Posorja multi-purpose terminal Design and Construct project. This terminal designed in accordance with

DP World's 'GO GREEN' programme.

London Gateway Port (a DP World terminal) – Berth 7 Empty Park, UK (2017)

Responsible for preparation of a budget cost estimate and tender documents for the development of a 5 acre Empty Park facility at the Berth 7 area at London Gateway Port.

Jawaharlal Nehru Port 4th Terminal, India (2016-2018)

Providing technical and contractual support to the construction site team for the Phase I wharf and approach bridges, consisting of a 1000m long 61m wide suspended deck wharf on rock-socketed reinforced concrete piles, and five 100m long approach bridges. Other responsibilities included the review and approval of the construction risk management plans, and the technical appraisal of the Design and Construct elements of the works such as the design for a bridge over the existing buried oil and natural gas pipelines passing through the approach access road to the JNP4 Terminal.

London Gateway Port, UK (a DP World Terminal – awarded the Green Planet Mark) (2016-2018)

Provided assistance with reviewing the Contractor's proposed alternative designs and provided technical support to the site supervision team throughout the construction stage. The works included the construction of the Berth 3 and development of 200ha logistics park.

Compas Cartagena Terminal Wharves, Colombia (2016-2017)

Lead Design Engineer and Manager for the desk study assessments of the existing wharves at the Port of Cartagena for a change of use and utilising new mobile harbour cranes. My main responsibilities included the assessment of structural capacity of the wharves and identification of the remedial measures to address the Client's operational requirements.

Aegean Gateway (an APM Terminal), Turkey (2016-2017)

Provided technical support to the site team for the construction of a container terminal on Turkey's Aegean coast in Izmir. The facility will have 700 meters of quay and will provide an initial capacity of 1.5 million TEU during its first phase of development. Other responsibilities included interacting with the Employer, the Contractor, and the Contractor's designer to address the technical and health and safety issues arose throughout this Design and Construct project.

Port of Dover – Principal Inspections and Design Modifications, UK (2016)

Lead Engineer responsible for inspections and design modifications of the assets within Admiralty Pier, Pier A (Berth 3) and Pier F (Berth 8 and Berth 9). Main responsibilities included the structural assessment of the assets and identification of the remedial measures including design modifications. Other responsibilities included participating in the meetings between the Employer and the Contractor as part of an early contractor involvement approach to discuss the remedial measures.

Peel Ports Great Yarmouth – Wind Turbine Tower Assembly Base, UK (2016)

Responsible for technical lead and management of the preliminary and detailed design of infrastructure works at Peel Ports Great Yarmouth, as the Siemens wind turbine assembly base for the Galloper Offshore Wind Farm project. The main works included construction of a heavy-duty ro-ro ramp, a piled heavy lift pad, a crane operation pad and pavements for the storage and handling of wind farm equipment.

Red Sea Gateway Terminal, Saudi Arabia (2016)

Tender design of a new pier structure and required civil infrastructures at a container terminal within Jeddah Islamic Port in Saudi Arabia. Responsibilities included the development of a concept design, tender and contract documentations including a Design Criteria and Employer's Requirements for this Design and Construct project.

Port of Dover – New Breasting Mooring, UK (2016)

Lead Design Engineer responsible for the option assessment and detailed design of a new breasting mooring on Pier A in the Eastern Docks.

Crossrail – Farringdon Station, UK (2015-2016)

Working on the heavy civil works for the construction of a new ticket hall from bottom of three deep shafts, approximately 33m below street level, as well as platform tunnels.

Technical:

Responsibilities included leading and supervising site engineers, controlling quality and design changes, responding the site's technical queries and preparing/monitoring method statements.

Commercial:

Responsible for procurement and change management of different work packages including Metalwork and Fit Out.

Cochin Shipyard – New Dry Dock, India (2015)

Preparation of a proposal with approximate value of £5.0m for a new dry dock at Cochin Shipyard. Responsibilities included the review of Client's requirements, preparation of required evidence, producing the scope of works, programme and other tender documents.

Cannington Flood Prevention Scheme – Coastal Structures, UK (2015)

Responsibilities included supervising the design team for a flood prevention project, preparing the detailed design of RC structures (including retaining walls) and updating the design programme including resources, scope of works and plan of actions.

Huisman Dry Dock – Temporary Quay Structure, Brazil (2015)

Responsible for the concept design of a temporary quay structure including two independent crane platforms to enable the lifting of a load from land onto a vessel moored alongside.

DGNP Mumbai Dry Dock – Intermediate Gate Review, India (2015)

Responsibilities included the review of the intermediate gate design carried out by Hindustan Construction Company (HCC) for Director General Naval Projects (DGNP).

Hinkley Point C Power Station – Ro-Ro Vessel Access Ramp, UK (2015)

Preparation of a proposal with approximate value of £0.5m for a ro-ro site access ramp at Hinkley Point C power station including evaluating and producing the scope, programme, key deliverables and cost estimate.

Pertama Dry Dock, Indonesia (2014)

Responsible for the detailed design and project management of the propped steel intermediate gate for a new dry dock 380m long and 72m wide.

Lower Mole Flood Alleviation Scheme Emergency Work, UK (2014)

Acted as Resident Engineer for a contract for emergency repair works on the banks of the River Mole for the Lower Mole Flood Alleviation Scheme. Responsibilities included supervising the contractor and sub-contractors, preparing and updating the plan of action daily due to the urgent nature of the works.

Benoi Dock No.2 Expansion, Singapore (2014)

Project management of a dry dock expansion project at Dock No.2 at Keppel's Benoi Yard, Singapore. Also, preparation of a feasibility study for the proposed expansion of the dock from 300m x 60m to 400m x 80m. Other responsibilities included health and safety risk assessments of each option considered in design and construction.

ASRY Slipway, Cradle Modification, Bahrain (2013)

Feasibility study and design modification of an existing cradle to facilitate docking of a new vessel on the slipway. The design works included design risk assessment of the modified cradle.

HMNB Portsmouth, Boathouse 4, UK (2013)

Project manager for a feasibility study to investigate a methodology for removing the lock gates in No 4 Boathouse. Also involved in an HSE assessment of the options considered in the study.

Bahrain Defence Force Facility, Bahrain (2013)

Main involvement in this project was the detailed design of a quay wall including a cofferdam for the load-out pier as part of the works to provide an approximately 200m x 300m reclaimed area and berths for vessels up to approximately 70m long.

Mubarak Al Kabeer Seaport, Kuwait (2013)

Responsible for the design of various reinforced concrete elements for the Main Quay Wall, the Breakwater, the Ro-Ro Berth and the Small Boat Harbour, including pontoons.

Queen Elizabeth II Lock Gate, UK (2013)

Responsible for design of a steel support frame for a new winch motor system serving new lock gates. Also responsible for managing the EMS (Environmental Management System) for the project.

Navengantes Dry Dock, Brazil (2012-2013)

Responsible for detailed design of the entrance and intermediate gates for a new dry dock 180m long and 32m wide.

Langton Lock Gate, UK (2012-2013)

Design assessment and modification of the caisson gate No.3 as part of the refurbishment of Langton Lock. The works comprised the strengthening of various steelworks (i.e. damaged access shaft) and design of a new access system due to current H&S requirements. Other responsibilities include developing structural drawings, design risk assessments, frequent site visits during repair works and weekly progress monitoring of the deliverables.

Lamongan Shipyard, Indonesia (2012)

Responsible for design of various elements of the shipyard expansion including the gravity counterfort walls and pump house for the proposed dry dock, using Eurocodes.

Ras Laffan Shipyard, Qatar (2012)

Responsible for design and design checking of various maritime structures (i.e. bollard foundations, dock floor) including a design risk assessment to enhance safety on site.

Tuas Shipyard – Raffles Dock Widening & Lengthening, Singapore (2012)

Worked as design engineer for the widening and lengthening of an existing dry dock at Keppel's Tuas Shipyard. The project included diaphragm wall design, a reinforced concrete dock floor and extensive modifications to the cope structure.

Port of Bar, Jetty Structural Assessment, Montenegro (2012)

Responsible for the structural assessment of a container berth quay at the Port of Bar. The works comprised the determination of the structural resistance of the jetty under its existing and repaired states. An additional assessment was also carried out to indicate the capability of the structure to accommodate the desired new cranes.

The Helix Project, 13 Sea Lock Gate, UK (2012)

Responsible for review of the Contractor's AIP (Approval in Principle) documents for the design of sea lock gates as part of the works to extend the Forth and Clyde canal under the M9. The works comprised the design and construction of a new sea lock including all associated M&E, lock gates and river works from the River Carron to a new extension to the Forth and Clyde canal.

TNG Shipyard, Strategic Development Plan, Mexico (2012)

Responsible for preparation of a ROM cost estimate for the reconfiguration and modernisation of an existing shipyard to support a project comprising market research, shipyard capabilities study and strategic planning for the TNG Master Plan Development.

Knowle Burn Flood Prevention Scheme, UK (2011-2012)

Responsible for detailed design of culvert inlet screen structures for Stirling, Garshake and Crosslet Roads, founded on RC piles/supporting strata. Responsible also for preparation of a design proposal including design cost/time estimates.

Hinkley Point C Power Station – Seawall, UK (2010-2011)

Responsible for the detailed analysis and design of 760m seawall and associated defence structures to protect the nuclear facility against a 1 in 10,000-year natural hazard, such as tides, storm surges and tsunami as isolated or in-combination event.

Scottish Water Solutions – Water Treatment Plants, UK (2010-2011)

Seconded to Scottish Water Solutions as part of the design team for refurbishment of a Water Treatment Works in Scotland. Acting as structural engineer and assistant project manager, my role on the project included detailed design/assessment of a variety of structures (i.e. steel portal frame buildings, water storage tanks, chemical waste tanks, RC and steel retaining walls and RC foundations) to Eurocodes. I also was RE during the refurbishment works at Mid-Skye Cluster and Lochcarron WTWs. Other responsibilities included developing structural drawings, inspection reports, financial and design risk assessments and weekly progress monitoring.

Breakwater and Outfall Channel – Confidential Power Generation & Desalination Facility, Saudi Arabia (2010)

Design engineer working on the design of an outfall channel for a power generation and desalination facility in Saudi Arabia. Responsibilities included design of the outfall channel to return process water from the Power Island to the Red Sea. The structure consists of a concrete channel lining, rubble mound breakwaters and a levee along the onshore portion. Other responsibilities included calculation of the material take-off quantities and a design risk assessment.

Oil/Gas Marine Jetty – Confidential Power Generation & Desalination Facility, Saudi Arabia (2010)

Design engineer working on the design of a power generation and desalination facility in Saudi Arabia. Responsible for the design of a marine jetty and approach structures such as loading platform, berthing dolphins, mooring dolphins and walkways using American Standards and International Building Code.

Hinkley Point C Power Station – Combrwich Wharf, UK (2009-2010)

Worked on the detailed analysis and design of maritime structures for the refurbishment of Combrwich Wharf to facilitate the berthing of vessels for the delivery of Abnormal Indivisible Loads for the construction of the Hinkley Point Power Station.

Commercial Quay East – Aberdeen Harbour, UK (2009-2010)

Worked on the detailed analysis and design of maritime structures for Commercial Quay East within Aberdeen Harbour. The works comprised the upgrading of a 160 metre length of the quay wall to deal with inadequacies resulting from excessive corrosion of the sheet piles. Main responsibilities included outline design of the sheet pile wall, concrete duct cable chambers, special heavy duty covers for manholes, interceptor cover slab, heavy-duty pavement and cathodic protection system, in addition to assisting with quantity surveying.

Hunterston Nuclear Power Station, UK (2008)

Responsible for the design assessment of the intake jetty for Hunterston Nuclear Power Station in Scotland. The works comprised the determination of the structural resistance following concrete spalling and reinforcement corrosion at some parts of the jetty, thereby decreasing the structural resistance. Responsibilities included design evaluation of the pile caps, transverse beams and edge beams.

Dinish Wharf Replacement, Ireland (2008)

Assisted with the detailed analysis and design of maritime structures for the Dinish Wharf replacement at Castletownbere, Ireland. The marine works comprised the redevelopment of the old fishery harbour through construction of a new precast concrete wharf. Main responsibilities on this project included the design of the transverse beams and the berthing face as precast elements.

Iran National Library, Iran (2006-2007)

Assisted the Resident Engineer during construction of the Iran National Library in Tehran. Roles included ensuring construction was undertaken in compliance with client/design team requirements and to specification, issuing site instructions and recording contractual correspondence.

Iran National Library, Iran (2004-2006)

Assisted the Resident Engineer during construction of the Iran National Library in Tehran. Roles included ensuring construction was undertaken in compliance with client/design team requirements and to specification, issuing site instructions and recording contractual correspondence.

EMPLOYMENT HISTORY

2024-present	Alvarez & Marsal [London, UK] Senior Director - Building Structures and Infrastructure
2022-2024	HKA [London, UK] Associate / Technical Director - Building Structures and Infrastructure
2018-2022	Tony Gee and Partners LLP [Esher, UK] Associate Director
2017-2018	Cullen Grummitt & Roe [London, UK] Principal Maritime Structural / Civil Engineer
2016-2017	Cullen Grummitt & Roe [London, UK] Senior Maritime Structural / Civil Engineer
2015-2016	Bam Nuttall (secondment from Royal Haskoning DHV) [London, UK] Senior Site Engineer
2012-2015	Royal HaskoningDHV [Haywards Heath, UK] Maritime Civil / Structural Engineer
2008-2012	Jacobs Engineering [Glasgow, UK] Graduate Maritime Civil / Structural Engineer
2006-2007	Pirraz Consulting Engineers [Tehra, Iran] Graduate Civil / Structural Engineer
2004-2006	Pirraz Consulting Engineers [Tehran, Iran] Undergraduate Civil / Structural Engineer

PUBLICATIONS & PAPERS

Mohammad Yadollahi, 'Risk of Accretion Within Port Entrances and Tidal Navigational Channels in Dredging Projects' (2024) Proceedings of 35th PIANC World Congress 2024.

PRESENTATIONS & SPEAKER ENGAGEMENTS

Risk of Accretion Within Port Entrances and Tidal Navigational Channels in Dredging Projects. 35th PIANC World Congress. Cape Town, May 2024.

LANGUAGES

Persian (native)

English (full professional proficiency)

Arabic (basic)