# **Job title:** Senior Civil Engineer

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| **Knowledge and experience** | Essential | Desirable |
| Real world experience of designing open piled/ continuous bulkhead maritime structures (dolphins and platforms, combi-walls, blockwork walls) subject to vessel berthing and mooring forces, and quayside crane loadings. |  | X |
| On-site experience of maritime or heavy civils construction. |  | X |
| Working knowledge of current design codes and standards (ISO, BS6349, Eurocodes) and the CDM regulations. | X |  |
| Experience of structural analysis using industry standard FE packages, and detailing of reinforced concrete and steel structural members. |  | X |
| Real world experience of geotechnical design, including seismic response and liquefaction assessment, of a variety of structure types including retaining walls and pile foundations. |  | X |
| Experience of geotechnical design of slope stability, settlement analysis, soil improvement techniques. |  | X |
| Experience of dynamic analysis of structures subject to seismic or wave loading. |  | X |
| Real world experience of reviewing and managing the preparation of technical engineering drawings from feasibility to construction stage issue.  | X |  |
| Real world experience of site investigation, and laboratory testing of a variety of soil types. |  | X |
| Real world experience of geotechnical interpretative reporting, including geological and engineering characterisation of soils, including selection of soil constitutive model, and derivation of geotechnical design input parameters, soil springs. |  | X |
| Real world experience of geotechnical design of piled and shallow foundations, including driveability and installation assessments, including knowledge of current international design standards, in particular Eurocodes.  |  | X |
| Knowledge in project management with the planning, management and delivery of projects on time and on budget. | X |  |

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| **Personal attributes/behaviours** | Essential | Desirable |
| Ability to support discussion on clients’ technical problems; contribute to proposed solutions; and communicate complex technical themes in an easy-to-understand manner. |  | X |
| Ability to write clear technical proposals and reports. | X |  |
| Strong attention to quality and detail. | X |  |
| Good time management when handling multiple technically challenging tasks. | X |  |
| Ability to take technical and commercial ownership of allocated tasks. |  | X |
| Experience of working closely with other members of the Engineering Team to optimise the design of maritime structures and facilities. | X |  |
| Experience to take the initiative, find solutions and proactively drive progress. | X |  |

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| **Qualifications and skills** | Essential | Desirable |
| An engineering or science related civil or structural engineering degree with a strong numerical and analytical background. | X |  |
| Professional membership of a relevant body (e.g. Institution of Civil Engineers), ideally Chartered or working towards Chartered status, and or a postgraduate degree in a relevant field.  | X |  |