



### **Engineer Grade III**

The Office of Public Works (OPW) is the lead agency in co-ordinating flood risk management policy and the flood relief capital programme in Ireland. Flood Risk Management Services is the Business Unit in the OPW tasked with discharging this responsibility.

The OPW now requires the assistance of additional engineering staff at Engineer Grade III (Civil) level to support the flood risk management programme.

Recruitment to this competition is being carried out by the Public Appointments Service through their website [www.publicjobs.ie](http://www.publicjobs.ie)

The successful candidate(s) will hold a Level 8 qualification on the National Framework of Qualifications in Civil Engineering (minimum honours bachelor degree in Civil Engineering) that is accredited by Engineers Ireland **or** a qualification which would be acceptable to the Public Appointments Service as being at least equivalent for the purpose of this competition.

For full job descriptions please see below.

### **Engineer Grade III**

#### **The Role**

Engineers Grade III (Civil) are required in the following three Divisions of Flood Risk Management Services:

- **Arterial Drainage Maintenance and Construction Services (including Environment Section)**
- **Flood Relief and Risk Management Services**
- **Flood Risk Management Data Services**

Vacancies exist in a number of the component Sections. Officers appointed may be based in the OPW Headquarters (Trim, Co. Meath) or in one of the existing regional Engineering offices in Dublin, Trim (Newtown), Headford (Co. Galway), Mungret (Co. Limerick) or in Sub Offices of the Regions. A panel will be formed from this competition to fill any further vacancies which may arise.

Candidates accepting an offer in a location will not be offered a position in any further location should vacancies arise.

## **Arterial Drainage Maintenance and Construction Services**

### ***Arterial Drainage Maintenance and Construction Section***

The Arterial Drainage Maintenance and Construction Section is responsible for the management of the maintenance requirements on drainage schemes completed under the Arterial Drainage Act, 1945 and for the construction and maintenance of capital flood relief schemes executed under the Arterial Drainage (Amendment) Act, 1995. The Section is responsible also for the maintenance of coastal protection schemes completed under the Coast Protection Act, 1963.

Principal duties of Engineers Grade III (Civil) include:

- Organisation, direction and supervision of project construction and maintenance, including direction and supervision of direct labour force.
- Investigation and reporting on matters arising from project construction and maintenance, including review of technical reports and outputs prepared by engineering consultants as part of the delivery of flood relief schemes.
- Liaising with other public bodies, local authorities, local organisations and individuals including the assessment of applications for funding from local authorities to undertake minor flood alleviation and coastal protection works.
- Assessment of technical applications for statutory consent for the construction / alteration of bridges, culverts and weirs.

### ***Environment Section***

The Environment Section provides direction and assistance across all areas of Flood Risk Management Services to continuously improve environmental performance and to ensure compliance with environmental requirements and best practice in undertaking OPW functions.

Principal duties of Engineers Grade III (Civil) include:

- Project managing consultancy contracts, guiding environmental assessments and directing environmental good practice development programmes.
- Identifying environmental requirements and developing strategies, guidance and procedures to direct implementation.
- Inspection of on-site works, auditing of operations, coaching of staff, identification of ongoing improvements and opportunities for environmental enhancement.
- Communicating across multiple OPW sections and liaising with environmental authorities and other environmental stakeholders.

## **Flood Relief and Risk Management Services Division**

The Flood Relief and Risk Management Services Division provides design and advisory services for the technical aspects of the implementation of the national flood management policy, including the capital flood relief programme. The services involve hydrological analysis and flood estimation, hydraulic modelling and flood mapping, flood risk assessment and the design and appraisal of flood risk management measures, including flood relief schemes.

The Division provides these services in the following areas:

- Flood Relief Scheme Design: The design of flood relief schemes, and the provision of advisory and review services to support contracted services for same.
- The Implementation of the EU 'Floods' Directive: Undertaking of the Preliminary Flood Risk Assessment (a national flood risk assessment), the preparation and review of flood maps and the preparation of Flood Risk Management Plans.
- Climate Change Services: An advisory service internally within the OPW and to local authorities, state bodies and other Government Departments on the potential impacts of climate change on future flood risk, and appropriate adaptation strategies.

- Planning Advisory Service: A technical advisory service to the Department of Housing, Planning and Local Government and to planning authorities on the consideration of flood risk in spatial planning in support of the implementation of the Guidelines on the Planning System and Flood Risk Management.
- Other Technical Services: The provision of other services related to the function of the Division, including the maintenance of the National Past Flood Event Database, responding to specific questions and issues, the provision of data, etc.

### **Flood Risk Management Data Services Division**

The services provided by the Flood Risk Management Data Services Division are delivered through three Sections, described below.

#### ***Hydrometric Section***

The Hydrometric Section is responsible for the provision, operation and maintenance of a national hydrometric network and dataset, and producing hydrometric data (water levels and river flows) and hydrological analysis to support the OPW in fulfilling its functions under the national flood risk management policy and the EU 'Floods' Directive. The core operations of the Section are the collection, processing, archiving, analysis and dissemination of hydrometric data.

Principal duties of Engineers Grade III (Civil) include:

- Processing, analysis and maintenance of hydrometric data.
- Assisting in the management of the data processing system and Internet sites.
- Supervising the field operations of the Section in the collection and validation of hydrometric data.
- Developing and maintaining the hydrometric network, including introduction of technological applications to improve data collection, processing and analysis methods.

#### ***Hydrology and Coastal Section***

The main responsibilities of the Hydrology and Coastal Section are to administer and maintain the Flood Studies Update (FSU) Web Portal; undertake risk assessments associated with coastal flooding and coastal erosion; provide an advisory service in relation to coastal flooding and coastal erosion to support the preparation of annual coastal protection funding programmes and to inform broader policy development; and developing and managing programmes to enhance flood forecasting and warning capacity within the OPW and Ireland.

Principal duties of Engineers Grade III (Civil) include:

- Supporting the development of coastal erosion Planning Guidelines.
- Supporting policy development relating to combined major coastal erosion and coastal flood risk management measures / schemes.
- Supporting Arterial Drainage Maintenance and Construction Section in the evaluation of coastal protection works scheme (minor and major) applications.
- Undertaking tidal (harmonic) analysis and statistical analysis of tide gauge data to identify current astronomical tides and surge and trends in relation to mean sea level associated with climate change.

## ***Flood Risk Management (FRM) Data Management Section***

The purpose of the FRM Data Management Section is to provide systems, processes and infrastructure to manage data required for Flood Risk Management and to manage, store and publish this data. Much of this work arises from the national Flood Risk Management Policy, the EU 'Floods' Directive, the Inspire Directive and the Public Service Reform Plan.

Principal duties of Engineers Grade III (Civil) include:

- The collection, creation, management, analysis, dissemination and presentation of digital data, particularly spatial data and large datasets.
- Working with end users to identify, deliver, commission and operate appropriate tools for the management and dissemination of data.
- Assisting in the management and development of management systems and technologies.
- Providing support and advice to other OPW Business Units in the management of spatial data.