

**FEHILY
TIMONEY**

**DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE**

Construction Support Services



PROJECT DESIGNERS OF SUSTAINABLE SOLUTIONS

Fehily Timoney is an Irish civil and environmental engineering, scientific and planning multidisciplinary consultancy, specialising in the delivery of complex projects for our global clients.

FT offers a total project management solution, acting as consultants from initial project planning and feasibility through to detailed design, construction supervision, commissioning and handover.

**CENTRES OF EXCELLENCE COMPRISE OF A WIDE RANGE OF SPECIALIST CAPABILITIES INCLUDING:
ENERGY & PLANNING | INFRASTRUCTURE | WASTE & RESOURCE MANAGEMENT | URBAN DEVELOPMENT**

ENVIRONMENTAL MITIGATION DESIGN



FT provides environmental mitigation design services to the construction sector. Depending on the nature of the project and consent procedure the mitigation measures can be specific, e.g. installation of a noise barrier with specification and dimensions or the mitigation measures may require further design at construction stage, e.g. propose a methodology to NPWS with drawings for approval.

As **FT** carries out design at both pre-consent and construction stages of a range of projects, our team has considerable expertise in design mitigation measures including;

- Environmental barriers (noise, visual and anti-glare) during and post construction
- Invasive species burial cells
- Monitoring or sampling programmes
- Compensatory wetlands or intertidal areas
- Temporary attenuation or stilling ponds and drainage
- Mammal fencing
- Hardblocking and screening
- Habitat creation
- Watercourse crossings including culvert and mammal underpasses
- Landscaping
- Stockpile management

Main background Photo -
Galway Wood Park

Environmental Risk Assessment:

FT is experienced in all phases of environmental risk assessment from Generic Risk Assessments to Detailed Quantitative Risk Assessments including;

- Stage 1 Characterisation and assessment (detailed site assessment, QRA, GQRA and DQRA, development of conceptual site models (CSM)
- Stage 2 Corrective Action Feasibility and Design
- Stage 3 Corrective Action Implementation and Aftercare
- Historic Waste – Tier 1, 2 and 3



MATERIALS MANAGEMENT



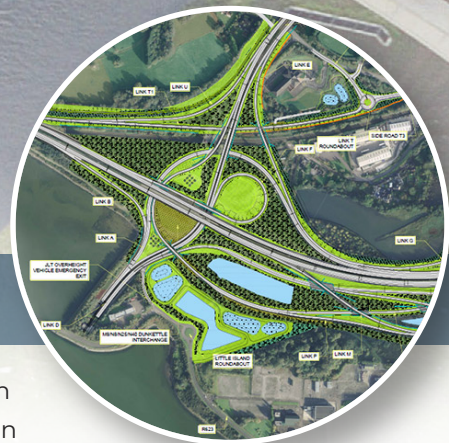
FT provides consultancy advice to landowners, local authorities, regulatory authorities and contractors regarding options for: managing soil import or export, soil testing to determine the presence of contamination and testing requirements for waste soils for disposal including waste characterisation and waste classification (to determine if a waste is hazardous or non-hazardous).

The in-house team of experts recommend forward planning for materials management to prevent waste, seeking to reuse material on site, advocating the preparation of materials management plans in place of waste management plans. This facilitates planning for reuse, thereby preventing waste arisings at construction stage.

FT advises on and can manage the Article 27 notification process to the EPA, whereby soil is notified as a by-product and exported off site for use elsewhere (avoiding becoming a waste with associated costs).

Key Services:

- Soil sampling and interpretation
- Contaminated land investigation
- Soil characterisation
- Waste classification
- Waste characterisation
- Material reuse
- Import and/or export of soil under Article 27
- Waste management
 - > Waste facility permit applications
 - > Waste licence applications
 - > IED licence applications
 - > Planning consent for waste activities



MANAGEMENT PLANS AND CONSULTING ADVICE



FT has experience in the preparation of management plans for all aspects of construction projects. Management plans may be required of planning conditions, or may be required in accordance with the Contractors EQHS system. They are used to document controls to mitigate potential impacts and can be shared with stakeholders to demonstrate commitment to environmental protection.

Materials Management Plans are becoming more common, documenting the proposed reuse of excavated uncontaminated material and surplus materials from excavations and demolition driving resource efficiency on site and avoiding waste and associated costs. FT has prepared the following:

- Construction Environmental Management Plans
- Materials Management Plans
- Waste Management Plans
- Dust Management Plans
- Noise & Vibration Management Plans
- Surface Water Management Plans
- Groundwater Management Plans
- Invasive Species Management Plans
- Habitat Remediation Plans



Geotechnical Construction Support:

- Specification and supervision of site investigation
- Groundwater control
- Geomorphology and geohazard mapping
- Remedial stabilisation
- Ground/slope failure impact assessment
- Basement impact assessment
- Geotechnical CoW

SURVEYS & REPORTING

FT has a team of environmental scientists, hydrogeologists, hydrologists and ecologists equipped with the relevant skills and tools to survey, interpret, report and make recommendations.

Our survey skill set includes:

- Monitoring, interpretation and reporting on:
 - > Surface water
 - > Groundwater
 - > Leachate
 - > Ground gas
 - > Soil
 - > Waste
 - > Noise and vibration
 - > Dust and particulate matter
- Risks assessments and modelling
 - > Groundwater risk assessment and modelling



- Ecological surveys
 - > Terrestrial mammals
 - > Bats
 - > Aquatic freshwater
 - > Terrestrial invertebrates
 - > Amphibians and reptiles
 - > Lepidoptera
 - > Flora including rare plants
 - > Invasive species



CONSTRUCTION SUPERVISION

FT provides Environmental and Ecological Clerk of Work (CoW) personnel to the construction sector. Experience includes:

- Supervision of tree felling
- Supervision of construction works
- Consultation with NPWS
- Ecological surveys
- Design of mitigation measures
- Environmental monitoring and modelling
- Competent advice
- Supervision of water crossings
- Compliance with SoC
- Management Plans
- Audit reports
- Supervision of trenching works
- Technological CoW
- Bridge Inspection
- Derogation licences
- Supervision invasive species



PROJECT PROFILE

DUNKETTLE INTERCHANGE UPGRADE SCHEME **STAGE 1 & EARLY WORKS**

FT was appointed to the design team to support Sisk and Son Holdings Ltd. for Phase 1 Pre-Construction of the N8 Dunkettle Interchange Upgrade in Cork. The upgrade will consist of the following elements of infrastructure:

- A series of direct road links between the N8, the N25 and the N40 and links to the R623 Regional Road in Little Island and Bury's Bridge in Dunkettle
- 1 grade separated junction arrangement at the existing N25 to the east of the existing Dunkettle Interchange
- 4 roundabouts – 2 at the grade separated junction and 2 at tie-ins with the existing road network
- 52 structures of various forms
- Several culverts where the scheme crosses watercourses or intertidal areas
- Intelligent transport systems
- Pedestrian and cyclist facilities

FT is the Environmental Design Lead responsible for the implementation of the Schedule of Commitment.

FT carried out ecological surveys and a range of construction support services:

Ecological Surveys

- Bat surveys
- Bird surveys
 - > Little Egret and Grey Heron
 - > Kingfisher
 - > Barn owl
- Mammal surveys
- Flora surveys
- Lepidoptera surveys
- Water Beetle surveys
- Amphibian surveys
- Invasive species surveys
- Habitat surveys
- Rare plant translocation
- Moth food plant translocation
- Water Beetle translocation
- Ecological supervision

Construction Support Services

- Groundwater monitoring & risk assessment
- Groundwater monitoring
- Surface water and tidal monitoring
- Noise and vibration monitoring and modelling
- Dust and particulate matter monitoring
- Derogation licence applications
- Screening and hardblocking (otter holts and badger sett)
- Materials management options report
- Constraints mapping
- Landscape design
- Management options for 16 no. invasive species
- Consultation with NPWS



DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

www.fehilytimoney.ie

 CORK OFFICE

 DUBLIN OFFICE

 CARLOW OFFICE

