























About Us

Arthian Ltd. is a multidisciplinary consultancy formed from a group of highly skilled professionals, bringing together expertise across engineering, environmental, safety and sustainability disciplines. With a client-focused approach, we provide a comprehensive range of services to both private and public sector clients.

The Company operates from 16 locations across the UK and Ireland, and is supported by a number of specialist partners to allow us to provide the right practical expertise for the specific task.

Our development-related work includes environmental survey, assessment, design, planning and permitting advice, on large and small projects, for development and land-use planning purposes.

Monitoring, analysis and consultation work is also provided on construction and operational development sites, and on facilities using complex treatment processes. We aim to work as an integral part of your team, providing friendly, proactive and practical interdisciplinary expertise to help you reach your development and operational goals, using SSIP audited safe working systems, and via ISO 9001 and ISO 14001 certified Quality and Environmental Management Systems.

Sectors and Clients:

- » Energy & Renewables
- » Minerals and Waste
- » Residential and Mixed-Use
- » Industrial & Manufacturing
- » Infrastructure
- » Health and Leisure
- » Rural Economy
- » Site Developers
- » Civils Contractors
- » Site Operators
- » Planning Consultancies
- » Architects
- » Planning Authorities
- Estates Managers



PLANNING CONSULTANTS

At Arthian, we take a full life-cycle approach to development, guiding projects from initial feasibility through the planning process to enable construction and operation. Our Chartered Planners are results-driven experts, dedicated to securing positive outcomes for our clients.

Our team includes RTPI-accredited Town and Environmental Planners with extensive experience delivering successful renewable energy, battery storage, waste, minerals, commercial, industrial, and residential developments across the UK and Ireland. We provide tailored planning solutions for projects of all sizes and welcome early engagement to understand your needs.

Planning Services:

Planning Applications & Consent Management

- » We navigate complex planning regulations, streamlining applications for everything from small-scale projects to major developments.
- » Discharge of planning conditions and input to the planning appeals process

Planning Documentation & Support

» Our team prepares essential reports, including Planning Statements, Design & Access Statements, and Consultation Reports, ensuring clear and compelling submissions.

Environmental Impact Assessment (EIA)

» We assess and mitigate environmental risks, aligning projects with sustainability principles and regulatory requirements to enhance viability.

Development Plan Representations

» Decades of experience in policy engagement enable us to represent clients effectively in securing planning allocations and policy support.

Community Consultation (Online & In-Person)

» We facilitate meaningful engagement through public meetings, virtual consultations, surveys, and stakeholder discussions, ensuring transparency and community involvement.

Interdisciplinary working

With years of experience in complex projects, we integrate seamlessly with your project team, whether supporting specific aspects or leading EIA coordination. Our services include Screening and Scoping requests, technical assessments, ES chapters, figures, and NTS, ensuring efficient, well-considered outputs.

We support projects from residential to energy, commercial, and infrastructure, including Public Inquiries, LDOs, and Judicial Reviews.

Key areas of EIA:

- » Screening, Scoping, Regulator and Key Stakeholder
 Engagement, Community
 Consultation
- » Landscape / Visual (LVIA, RVAA, LCA)
- » Ecology (EcIA, HRA)
- » Biodiversity Assessments
- Contaminated LandAssessments
- » Hydrology, Hydrogeology, Ground Conditions
- » Ground Investiations
- » Coal Mining Risk Assessments
- » Heritage & Archaeology
- » Flood Risk & Drainge Design
- » Noise/Air Quality/Lighting
- » Arboricultural Surveys

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Landscape Architecture

The Company has provided landscape architecture services for over 12 years, and employs a number of chartered landscape architects with a range of experitise in areas of landscape and visual impact assessment (LVIA), landscape planning, landscape design (masterplanning through to detailed design), landscape management and landscape contract specification and administration.

Our landscape architects hold a huge range of experience in a variety of sectors, including minerals, waste, wind, energy, highways, residential and leisure, and at strategic planning level. Key staff are proficient to Expert Witness level and have contributed expertise for many years to Technical Committees at the Landscape Institute and the International Association for Landscape Ecology (ialeUK). The Company is also a Registered Practice of the Landscape Institute.

Landscape Assessment:

- » Landscape & Visual Impact (LVIAs)
- » Visibility (Viewshed) Calculations
- » Residential Visual Amenity (RVAAs)
- » Green Belt
- » Landscape Character
- » Townscape Character
- » Nightscape Character
- » Seascape Character
- » Tranquillity
- » Colour Environment



Landscape Design:

- » Landscape Masterplanning
- » Landscape / Planting Detailing
- » Restoration Schemes
- » Golf Course Design
- » Water-based Schemes
- » 3D Landform Design
- » Volumetric Calculations
- » Landfill Settlement Calculations

Landscape Management:

- » Landscape Management Plans
- » Grounds Maintenance Plans
- » Soils Management Plans
- » Conservation Habitat Plans
- » Agricultural Aftercare Plans
- » Green Infrastructure Strategies

Landscape Contracts:

- » Landscaping Budgets
- » Landscape Specifications
- » Contract Administration
- » Contractor Supervision
- » Quality Control Assurance

Graphic Communication:

- » 2D, 3D, 4D Visuals
- » High quality presentation drawings
- » Verified Photomontage
- » GIS analysis
- » Augmented / Virtual Reality











ARCHAEOLOGY & HERITAGE

Consultancy Services

Arthian provides archaeology and heritage advice for a host of developments ranging from large scale (e.g. residential, minerals or infrastructure) to small scale (e.g. private householder projects) around the UK and Ireland, with international and Expert Witness level knowledge.

Whilst our work is always undertaken in accordance with best practice guidance, our extensive experience allows us to balance the commercial needs of our clients with ensuring all heritage requirements are met.

We offer a full suite of services and always guide clients through the various heritage-related consenting and legal requirements, whatever the stage of the project, from initial advice, to planning-related assessments, mitigation, investigation, recording and monitoring, and completion of required consent applications.

Archaeology Surveys:

- » Written Schemes of Investigation (WSI)
- » Watching Brief (controlled soil strips)
- » Geomatics
- » Geophysical Surveys
- » Aerial Surveys
- » Metal-detector Surveys
- » Field Walking Surveys
- » Trial Trench Evaluation
- » Open Area Excavation





Assessment & Analysis:

- » Risk Appraisal
- » Clerk of Works (Archaeological)
- » Desk-Based Assessments (DBA)
- » Heritage Management
- » Heritage Setting Assessments
- » Heritage Statements
- » Historic Character Appraisals
- » Archaeology / Heritage ES Chapters

Heritage Consent Applications:

- » Scheduled Monuments
- » Listed Buildings
- » Conservation Areas







- » Environmental Archaeology
- » Forensic Archaeology
- » Osteoarchaeology
- » Finds Analysis & Reporting

Built Heritage:

- » Building Recording (Levels 1-4)
- » Scheduled Monument Consents
- » Conservation Management Plans
- » Visitor Interpretation









ARBORICULTURE & FORESTRY

Arboriculture Consultancy

Arthian provides arboricultural consultancy expertise to a variety of clients using professional arboriculturists.

Arboricultural work for developers is undertaken primarily following the requirements of BS5837, to assist clients with design constraints and solutions.

Tree hazard risk assessments are also undertaken for landowners and managers, including local authorities, communicated in innovative 3D ways.



BS5837 Trees & Development Surveys:

- » Arboricultural Impact Assessments
- » Tree Constraints / Protection Plans
- » Arboricultural Method Statements
- » Arboricultural Works Supervision
- » Soil shrink / swell assessment

Other Tree Surveys:

- » Tree Condition Hazard Surveys
- » Visual Tree Health Inspection
- » Pests and Disease Survey
- » Veteran Tree Surveys
- » Tree Root Radar and Identification
- » Capital Asset Valuations (CAVAT)

Applications:

- » Felling Licences
- » Tree works consents:
 - TPOs
 - Conservation Areas



Forest & Woodland Consultancy

Forestry and woodland design, creation and management draws on multidisciplinary skills available to the Company to produce schemes which take full consideration of soil, ecology, landscape, forestry, water, heritage and other important aspects to help maximise the potential value of the land in monetary, ecosystems services and natural capital terms.

Our experience stems from designing woodland and forestry schemes, producing management plans and undertaking grant applications and EIA Screening and Scoping submissions in England, Scotland and Wales. Expertise is also held in relation to compliance with Forest Stewardship Council (FSC) certification criteria, for the UK and abroad.

Surveys:



- » Ancient & Other Woodland
- » Ash Dieback
- » Woodland Evaluation

Design and Assessment:

- » Site Suitability Assessment
- » Visualisation of forested landscapes
- » EIA Screening & Scoping submissions
- » Forestry and Woodland design
 - Community Woodland
 - Urban Forestry
 - Restoration of despoiled land
 - SRC Willow Energy Crops

Management and Grants:

- » Woodland creation specifications
- » Woodland Management Plans
- » Woodland Grant applications
- » Carbon Fund advice
- » Countryside Stewardship applications
- » Invasive species management advice
- » Fire Management Plans
- » Timber harvest contract supervision







GEOSPATIAL VISUALISATION

CAD, GIS & Visualisation

Arthian utilises a range of CAD, GIS, Visualisation, Games Engine and specialist graphics and animation software to achieve a variety of high quality outputs for a variety of uses, including design review, Environmental Impact Assessment (EIA, SEA), planning applications stakeholder interpretation and data communication.

Outputs are tailored to the viewer / requirement and may range from detailed construction engineering drawings, to large format glossy presentation images, to animated visualisations, incorporating Augmented and Virtual Reality (AR / VR), in accordance with industry guidance where required.

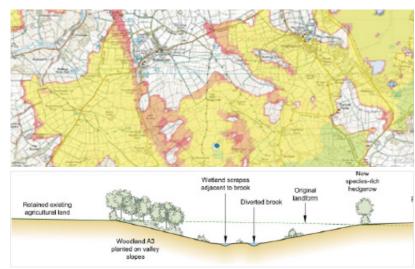
Our outputs, analyses and designs are based on accurate 3D geolocational data such that they can be interpreted in the field in real-time, or used for setting out or further analysis.

Plan-based Graphics:

- » Planning and Development Plans
- » Interpretative material and flyers
- » Public Consultation material

GIS / 3D Modelling / Analysis:

- » Design and Analysis (2D/3D/4D)
- » Visibility Assessment (ZTV, ZVI)
- » Digital terrain modelling
- » Volumetric calculations
- » Isopachyte, Slope & Elevation Analysis









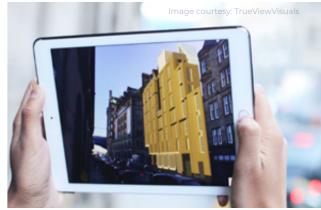
3D / 4D Visualisation:

- » Accurate Visual Representations:
 - Animated Construction Phasing
 - Verified Photomontages
 - Photorealistic still images
 - Artistic impressions
 - Animated fly and walk-throughs
 - Drone Videomontages

Mixed Reality (AR and VR):

- » Augmented / Virtual Reality:
 - Accurate on-site visuals
 - Design proposals / options
 - Environmental data
 - Heritage 'reconstruction'
 - Interactive interpretation











ECOLOGY & BIODIVERSITY

Ecology Services

Arthian employs a variety of experienced and licensed ecological consultants trained to provide a comprehensive ecological consultancy service, with experience in working on a wide variety of habitats, protected species and development projects around the country and abroad.

Our staff understand the importance of integrating practical ecological solutions in development situations and have decades of combined ecological and conservation experience, being accomplished in providing pragmatic solutions that work for our clients and wildlife.

Work in all sectors revolves around preliminary and protected species surveys, assessment, mitigation design, licence applications, translocation, monitoring and supervision. Expertise has been applied to authoring publications such as British Standard 42020.

Ecology Surveys:

- » Extended Phase 1 Habitat Surveys
- » Plant Communities & Species (inc. NVC)
- » Hedgerow
- » Great Crested Newt (inc. HSI & eDNA)
- » Bats (inc. sonogram analysis)
- » Badger, Dormouse, Otter, Water Vole
- » Aquatic & Terrestrial Invertebrates
- » White-Clawed Crayfish
- » Reptiles
- » Birds (inc. Barn Owl)
- » Invasive Alien Species
- » River Corridor Habitat



Ecology Assessment:

- » Preliminary Ecological Appraisals (PEAs)
- » Ecological Impact Assessments (EcIAs)
- » Biodiversity Net Gain (BNG)
 calculation / appraisal &
 Biodiversity Offsetting
- » Landscape & Ecology Constraints& Opportunities Plans (LECOPs)
- » Habitat Regulations Appropriate Assessments
- » BREEAM Ecology input for Eco Credits

Management & Mitigation:

- » Construction Environmental Management Plans (CEMPs)
- » European Protected Species(EPS) Licence applications
- » Translocation and Monitoring Schemes
- » Protected Species Method Statements
- » Development Licence applications
- » Ecology Management Plans
- » Biodiversity Action Plans
- » Green Infrastructure Plans







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LAND QUALITY ASSESSMENT







GEOTECHNICAL SERVICES



Contaminated Land Assessments

A Contaminated Land Assessment begins with a Phase 1 Environmental Desk Study/ Tier 1 Preliminary Risk Assessment (PRA).

WE RECOMMEND YOU COMPLETE A DESK STUDY WHEN YOU ARE:

- » Developing a site (Planning Consent)
- » Buying or selling a commercial/ industrial property (Due Diligence)

Our contaminated land team review the site's historical, geological and environmental use by compiling Ordnance Survey maps, aerial photos, geological records, groundwater maps and Regulatory records.

This information is used to develop a Preliminary Conceptual Site Model (CSM) to set out potential contamination sources, pathways and receptors that could present potential risks to human health, ecosystems, water environment/controlled waters and water supply pipes. The desk study will identify:

» Whether potential sources of contamination /pathways/receptors may be present on the site or nearby.

- » The consequence or severity of contamination
- » The risks to users and the environment.

Additional Services:

- » Phase 2 Ground Investigation:
 - » Design & supervision
 - » Generic quantitative risk assessment
 - » Detailed quantitative risk assessment
- » Phase 3 Options Appraisal & Remediation Strategy
 - » Option appraisal
 - » Remediation design
 - » Support to BOQ development
- » Phase 4 Supervision, Verification & Validation
 - » Remediation verification and validation
 - » Landfill gas membrane
 - » Verification
 - » Advice and direction onsite
 - » Stakeholder liaison
 - » Preparation of validation reports

Other services:

- » Hydrogeology & surface water
- Site condition reports (SCRs)
- » Hydrogeological risk assessment
- » Landfill gas risk assessment

Consultancy Services

Arthian has in-depth understanding of ground behaviour (both soil and rock) and the influence of groundwater conditions on design and construction activities.

Arthian Geotechnical and Ground Engineering team has over 20+ years' experience providing practical and comprehensive geotechnical advice and project management for the full range of geotechnical services.

Geotechnical Investigations:

- » Geotechnical desk studies
- » Intrusive site investigation
- » Geotechnical reporting
- » Coal mining risk assessments and mineworking consolidation
- » Peat surveys

Geotechnical Interpretation & Design:

- » Foundations full suite ranging from shallow strip to deep pile types
- » Specification for earthworks and site drainage
- » Transportation geotechnics -road and rail subgrade assessments
- » Assessing and improving slope stability both soil and rock
- » Permanent retaining structures design

- » Soil nail design
- » Ground improvement
- » Pile design
- » Peat stability assessments and peat management plans

Construction Phase Support & Temporary Works Design:

- » Working platform design piling working platform
- » Mobile crane nearing capacity assessments & working platform
- » Temporary haul roads









FLOOD RISK & DRAINAGE

Water Management

Arthian offers expert consultancy in surface water, drainage, hydrology, hydrogeology, and flood risk assessments.

Our multidisciplinary team integrates hydrogeology, water quality, flood risk, drainage design, ecology, soils, and heritage to deliver comprehensive solutions.

Using 3D design alongside landscape and ecological expertise, we create water features, courses, and bodies with realworld coordinates for precise calculations and construction.

Projects include SuDS*/WSUD*, reedbed treatment, watercourse diversions, wetland habitat design, and surface water management plans.

Survey and Assessment:

- » Water Features & Systems Surveys
- » Hydrographic Surveys
- » Flood Risk Assessment (FRA)

Design:

- » Sustainable Drainage Schemes*
- » Water Sensitive Urban Design*
- » Rain garden design
- » Water course / diversion design
- » Water body design (e.g. habitats)
- » Reedbed treatment system design

Management Plans & Monitoring:

- » Surface water management plans
- » Diffuse pollution management plans
- » Aquatic habitat management plans
- » Groundwater monitoring
- » Discharge point monitoring

Consents:

- » CAR Licensing
- » EA Permitting
- » OWC consents

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AIR QUALITY

Arthian can cover all aspects of air quality from pre-planning, detailed design to post-planning and integrate these with other considerations such as environmental permitting and interdisciplinary assessment.

Our integrated air quality service allows us to establish baseline air quality and future effects on air quality, to specify and evaluate appropriate mitigation controls, and to measure and manage air quality to meet target requirements.

We adopt a proportional and pragmatic approach to assessment by proactively engaging in communication and consultation to ensure the scope of work comprises all the necessary elements to allow regulators to reach robust decisions. Where required, the assessment process can be undertaken in parallel with our air quality modelling and monitoring services to provide a cohesive and comprehensive assessment and solution.

Our work extends to dust, bioaerosols and odour allowing us to provide services relating to a variety of circumstances.

Services Overview:

- » Air Quality Screening Assessment
- » ADMS Air Dispersion Modelling
- » Chimney Height Calculations
- » Air Quality Assessment
- » Expert Witness work
- » Bioaerosol Risk Assessment
- » Odour Assessment
- » Dust Management Plans
- » Assessment of effects on habitats







NOISE & ACOUSTICS

Noise Consultancy

In addition to our survey and monitoring work Arthian can assist with a range of strategic options for assessment, management and compliance with noise standards as well as more practical monitoring, measurement and impact assessment relating to:

- Planning and EIA
- Environmental Permitting
- Licensing
- Occupational noise

Core sectors include construction, minerals, waste, manufacturing, industrial, residential and transport, around the UK, up to Expert Witness level.

Where required, we will use cost-effective digital noise modelling techniques to help predict impacts, or verify compliance levels, and allow any mitigation requirements to be identified and understood.

We can provide multi-purpose integrated solutions through interdisciplinary in-house working or provide stand-alone services, as required.

- » Noise Impact Assessments (EIA)
- » Expert Witness work
- » Section 61 Prior Consent applications
- » Entertainment Noise Assessments
- » Noise Mapping
- » Tranquillity Assessments
- » Noise Management Plans
- » Noise monitoring:
 - Baseline surveys
 - Compliance surveys
 - Noise at Work (Dosimetry)
- » Noise Risk Assessments
- » Mitigation & Control Measures



LIGHT & LIGHTING CONSULTANCY



Light, Lighting & Nightscapes

Arthian employs experienced light and lighting consultants who understand how to work effectively with a variety of clients including architects, developers, planning consultants and local authorities, across a diverse range of sectors.

Our services can be provided as independent service expertise, or in conjunction with the Company's Landscape, Ecology, Heritage and Environmental Health experts for an informed, integrated, interdisciplinary approach, allowing clients' designs and strategies to be fully optimised.

Our experts include those who have written interdisciplinary guidance on the assessment of lighting and nightscapes and are at the forefront of this developing area.

- » Lighting Surveys
- » Night-time photography
- » Nightscape Character Assessments
- » Dark Skies & Astrotourism input
- » Lighting Impact Assessments
- » Ecological impacts from lighting
- » Obtrusive Light reports
- » Lighting masterplans
- » Lighting & Nightscape Strategies
- » Lighting designs:
 - Outline / Detailed
 - External / Internal
- » Visualisations & Isolux Plans
- » Mitigation strategies
- » Lighting Control
- » Daylight and Sunlight studies







ENVIRONMENTAL MANAGEMENT

Environmental Management

We provide proactive compliance solutions, starting early in the project lifecycle to produce considerable programme savings and minimise scheduling delays. Through regular liaison with planning and environmental regulators, Arthian successfully develops client solutions that allow key project performance objectives to be met. Our staff are fully CSCS Qualified.

Licensing, Consents & Permits:

- » Design development and interdisciplinary review
- » Development of consenting programmes
- » Early Contractor Engagement to de risk construction programmes
- » Discharge of Planning Consent requirements
- » Production of Management Plans -CEMPS, Surface Water, Waste, Peat
- » Licensing and Consents to support construction phase

Environmental Manager & Clerk of Works:

- » Compliance with permits/ consents/licences
- » Onsite training
- » Auditing
- » Compliance monitoring
- » Bespoke mitigation strategies
- » Environmental management documents
- » Pollution Prevention Plans (PPP)
- » Development of risk registers
- » Liaison with Regulators / Stakeholders
- » Advice on Restoration Plans
- » Post Construction
- » Monitoring / Close out reports
- » Incident response plans and monitoring

SURVEYING



Survey & Monitoring Services

Arthian provides a range of surveying services for key stage 1 inputs to environmental and engineering teams for design, land modelling, EIA areas and volumes.

Surveys may relate to pre-application baseline/background data for EIA or other assessments, monitoring of compliance with planning, Permit or statutory requirements, occupational health monitoring, nuisance or to gauge performance of implemented control measures or of 'as built' or operational parameters in relation to that consented or targeted.

Sectors include construction, minerals and waste (including composting facilities) and commercial, manufacturing and industrial operations, in addition to all receptor types.

Surveying Services:

- » Topographic Surveying with area, volume and section details coordinated to OS National Grid
- » Site & Project Boundary surveys
- » Laser scanning
- » Utility Detection & Mapping Surveys
- » PAS 128 GPR (Ground Penetrating Radar) Categories Type B, C & D
- » We can support category A studies if required.
- » Depth of cover surveys

Aerial Drone Lidar Surveys:

- » Aerial Drone Lidar Surveys for Environmental Impact Assessments including:
- » Extents of existing structures
- » External eaves and ridge levels of all buildings within survey area including overhead power lines and telegraph wires
- » Street furniture and visible ground features including manholes, covers, gullies & lighting columns
- » Tree line extents
- » Water & drainage features
- » Location & levels of roads, tracks, soft landscaping, hard standings





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ENVIRONMENTAL PERMITTING & WASTE

Waste Consultancy

Arthian provides consultancy services to the solid waste sector, so is steeped in waste expertise.

The Company has successfully dealt with a huge range of projects working with all the statutory bodies and a variety of planning authorities across the UK.

The Company employs Chartered Wastes Managers (CIWM) and Chartered Water and Environment Managers (CIWEM) and staff with many years' of regulatory expertise relating to permitting and compliance. Working together with environmental management professionals experienced at working in the waste sector, the integrated approach and a deep understanding enables a comprehensive service to be provided.

Whatever your waste management requirements Arthian is perfectly placed to assist you.

Waste Consultancy Services:

- » Site Layout (inc. landfill) design
- » Waste planning and EIA
- » Environmental Permitting*
- » Environmental Monitoring
- » Landfill void / settlement calculations
- » Restoration & aftercare schemes
- » Site closure plans
- » Leachate treatment consultancy
- » Expert Witness work
- » Market appraisals
- » Materials Management Plans (MMP)
- » Site Waste Management Plans (WMP)
- » Waste Management Exemptions (WME)

Environmental Permitting*

The Company prepares all types of permit applications under the Environmental Permitting (England and Wales)
Regulations 2016 and Pollution Prevention Control (Scotland) including those relating to:

- Part A1 and A2 Installations (Schedule 1)
- Part B Installations (Schedule 1)
- Waste Operations (Schedule 9)
- Discharge Consent to Surface Waters
- Mining Wastes

Arthian provides applied practical expertise from the initial pre-application stage, through consultations, preparation and submission of the application stages, through post-submission queries, to negotiation of final permit conditions.

We will advise on the most cost-effective approach for your business, whilst ensuring legal compliance, including Standard Rules and Bespoke permit options, as well as activities that are exempt from Environmental Permits or are classed by the Regulator as being of 'low impact'.



Environmental Permits for Waste:

- » Waste Treatment Facilities
- » Materials Recycling Facilities (MRFs)
- » Anaerobic Digestion Plants (AD)
- » Combined Heat & Power (CHP) plants
- » Composting Facilities
- » Waste Transfer Stations
- » Energy from Waste (EfW) schemes
- » End of Life Vehicles / Scrap Metal
- » Household Waste Recycling Centres
- » Waste Recovery (inert waste)
- » Landfill (hazardous / non-hazardous)





Anglesey

Belfast

Cardiff

Carlisle

Dublin

Dundee

Edinburgh

Forres

Grangemouth

Inverness

London

Manchester

Pembroke

Winchester

Wolverhampton

