

## DE-RISKING THE RIBA PLAN OF WORK

RIBA STAGE 0 Strategic Definition	RIBA STAGE 1 Preparation & Briefing	RIBA STAGE 2 Concept Design	RIBA STAGE 3 Spatial Coordination	RIBA STAGE 4 Technical Design	RIBA STAGE 5 Manufacturing & Construction	RIBA STAGE 6 Handover	RIBA STAGE 7 Use
<b>PLANNING &amp; CONSENTS</b>							
<ul style="list-style-type: none"> <li>» Planning Applications</li> <li>» EIA</li> <li>» Transport Planning</li> <li>» Landscape &amp; Visual</li> <li>» Ecology &amp; Biodiversity</li> <li>» Heritage &amp; Archaeology</li> <li>» Arboriculture</li> <li>» Noise</li> <li>» Air</li> <li>» Land Contamination</li> <li>» Flood Risk &amp; Drainage</li> </ul>							
<b>BUILDING &amp; ENVIRONMENT</b>							
<ul style="list-style-type: none"> <li>» BREEAM/WELL</li> <li>» Acoustics</li> <li>» Air Quality</li> </ul>							
<b>ENGINEERING</b>							
<ul style="list-style-type: none"> <li>» Structural Engineering</li> <li>» Geotechnical Engineering</li> <li>» Civil Engineering</li> <li>» Process Engineering</li> </ul>							
<b>SUSTAINABILITY &amp; NET ZERO</b>							
<ul style="list-style-type: none"> <li>» Carbon (WLCA/Embodied)</li> <li>» Energy Efficiency &amp; Modelling</li> <li>» Sustainability</li> </ul>							
<b>PROJECT ADVISORY</b>							
<ul style="list-style-type: none"> <li>» Project Management</li> <li>» Health &amp; Safety/CDM</li> <li>» Construction Management</li> </ul>							

## SPECIALIST TEAMS ACROSS THE UK AND IRELAND, NOW DELIVERING AS ONE TEAM

Arthian may be a new name, but our legacy is anything but new. For 30 years, our specialist teams across the UK and Ireland have been solving complex environmental, engineering, and sustainability challenges for architects, planners, and developers. Today, those teams — once operating under multiple respected brands — stand together as one multidisciplinary consultancy with 17 offices and a shared purpose.

Our evolution into Arthian brings three decades of technical expertise under a single identity, shaped by the depth of our expertise and powered by the people who deliver for clients each day.

We've supported architectural practices of every scale, often behind the scenes, helping projects progress smoothly through planning, design, and delivery.

Now, as Arthian, we're sharing our expertise as one brand, one team, committed to de-risking development at every stage.

This guide shows how Arthian integrates environmental, engineering, sustainability, and planning expertise across the RIBA Plan of Work. Each stage outlines the key risks architects face — and the targeted support our teams provide to keep projects compliant, coordinated, and moving forward.

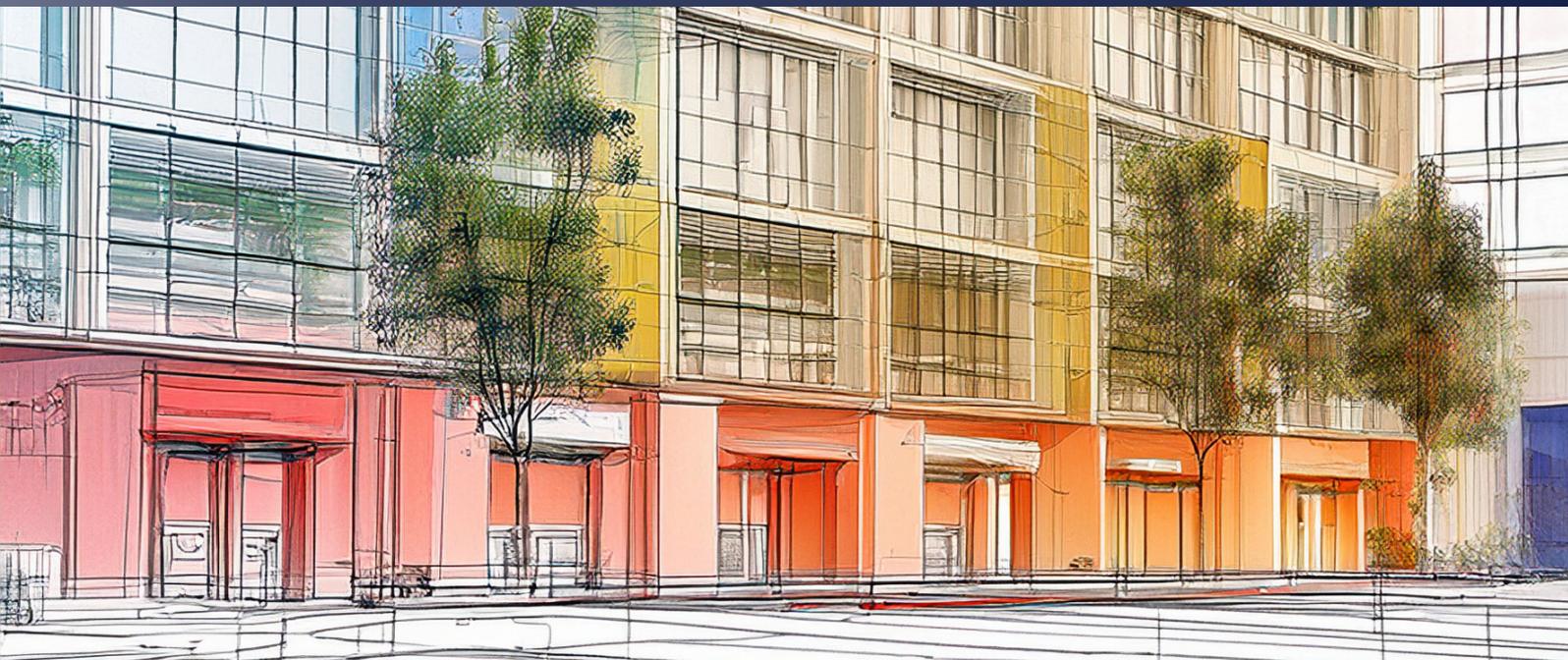


Derek J. McNab,  
CEO, Arthian



# DE-RISKING DEVELOPMENTS

Arthian helps architects de-risk development at every RIBA stage — identifying constraints early, coordinating solutions across disciplines, and ensuring designs progress smoothly from concept to completion.



## Feasibility

### 01

- Initial Geo-Environmental Appraisal
- Gap Analysis
- Opportunities
- Constraints
- Regulatory Liaison
- Site Reconnaissance



## Site Conditions

### 02

- Tier 1 Contaminated Land Assessment
- Preliminary Ecological Appraisal & INNS
- Geotechnical Desk Study
- Coal Mining Risk Assessment
- Landscape & Visual Feasibility



## Site Survey

### 03

- Ground Investigation
- Tier 2 Contaminated Land Assessment
- Geotechnical Assessment
- Ecological Surveys
- Hydrological Surveys
- Archaeological Surveys
- Topographical & Utility Surveys
- Landscape & Visual Impact Assessment (LVIA)



## Design Input

### 04

- Resource Efficiency
- Remediation Design
- Geotechnical Design
- Biodiversity Assessments
- Ecological Mitigation
- Stakeholder Liaison
- Regulatory Authorisation
- Landscape Design & Mitigation



## Development Support

### 05

- Masterplan Optimisation
- Technical Reports
- Input to Detailed Design
- Public Consultation
- EIAR



## Approval

### 06

- Support During Determination
- Abnormals
- BoQ & Specifications
- Attendance at Enquiry
- Condition Purification



## Construction Support

### 07

- Compliance with Licences and Consents
- Noise and vibration
- Environmental / Ecological Management Plans
- Material Management and re-use
- Temporary works
- Remediation
- EnCoW/ECOW

# RIBA STAGE 0

## STRATEGIC DEFINITION

### FOCUS: ESTABLISH FEASIBILITY, UNDERSTAND CONSTRAINTS EARLY, AND AVOID PURSUING UNVIABLE CONCEPTS.

- Identify planning and environmental risks early
- Understand site constraints that shape design
- Clarify access, utilities, drainage and servicing feasibility
- Establish early carbon and sustainability expectations
- Highlight programme-critical risks
- Define required surveys and assessments

### HOW ARTHIAN REDUCES RISK AT STAGE 0

- » Planning risk screening and early constraints mapping
- » Feasibility across land quality, drainage, access, utilities, ground conditions
- » Early access and highways feasibility to inform site strategy and development potential
- » Landscape, ecology, arboriculture and environmental context reviews
- » Structural, geotechnical and civil engineering feasibility
- » Multidisciplinary risk register + Stage 1 survey roadmap
- » Early energy, carbon and sustainability strategy

## 1

# RIBA STAGE 1 PREPARATION & BRIEFING

## FOCUS: BUILD AN EVIDENCE-BASED BRIEF THAT AVOIDS REDESIGN, PLANNING RISK, AND LATE-STAGE SURPRISES

- Confirm planning policy direction and evidence requirements
- Understand baseline environmental and land constraints
- Identify surveys needed for Stage 2–3
- Establish early energy, carbon and sustainability expectations
- Clarify engineering feasibility (access, utilities, drainage, ground risk)
- Define programme-critical risks and dependencies

## HOW ARTHIAN REDUCES RISK AT STAGE 1

- » Pre-application planning strategy and transport inputs
- » Baseline assessments across landscape, ecology, contamination, noise/air, heritage, archaeology, arboriculture and flood risk
- » Early energy, carbon and sustainability baseline to shape design ambition
- » Structural, geotechnical and civil engineering feasibility to inform the brief
- » Survey scheduling, ecological windows and critical-path planning
- » Multidisciplinary risk register and brief refinement aligned to feasibility

# RIBA STAGE 2

## CONCEPT DESIGN

### FOCUS: DEVELOP VIABLE CONCEPT OPTIONS BASED ON IDENTIFIED CONSTRAINTS, AVOIDING REDESIGN AND PLANNING RISK.

- Integrate planning, environmental and technical constraints into early design
- Understand land, ecology, noise/air, and drainage implications on layout
- Identify ground risk and engineering feasibility early
- Establish energy, carbon and sustainability direction for concept options
- Ensure concept choices remain planning-ready
- Mitigate risks that could derail Stage 3 coordination

### HOW ARTHIAN REDUCES RISK AT STAGE 2

- » Planning strategy refinement with early transport inputs (access, swept paths, servicing)
- » Preliminary LVIA, noise/air modelling, and Tier 1 land assessments
- » Ecology survey planning and heritage, archaeology, and arboricultural impact scoping
- » Concept-stage energy modelling, heat decarbonisation strategy and early WLCA
- » Structural, geotechnical, process and civil engineering inputs to inform massing, levels, drainage and utilities
- » Early identification of environmental and engineering risks to protect the Stage 3 programme

## 3

# RIBA STAGE 3 SPATIAL COORDINATION

## FOCUS: COORDINATE THE DESIGN ACROSS DISCIPLINES AND ASSEMBLE A PLANNING-READY, TECHNICALLY ROBUST PACKAGE.

- Ensure environmental and technical evidence aligns with the planning strategy
- Coordinate structural, civil, geotechnical and environmental inputs
- Resolve constraints that influence layout, massing and buildability
- Identify planning-critical risks early
- Ensure surveys and assessments feed directly into coordinated design
- Protect programme by avoiding clashes and late redesign

## HOW ARTHIAN REDUCES RISK AT STAGE 3

- » Inputs for planning application including transport for the Design & Access Statement (DAS)
- » LVIA, noise/air modelling, Phase 2 ground investigation and ecology surveys
- » Arboricultural Impact Assessment, FRA and drainage strategy
- » Detailed energy modelling, heat decarbonisation strategy and WLCA for planning
- » Structural, geotechnical and civil engineering coordination with architectural and MEP design
- » Identification and mitigation of planning-critical risks to keep the programme on track

# RIBA STAGE 4

## TECHNICAL DESIGN

### FOCUS: DEVELOP VIABLE CONCEPT OPTIONS BASED ON IDENTIFIED CONSTRAINTS, AVOIDING REDESIGN AND PLANNING RISK.

- Translate coordinated design into compliant, buildable technical detail
- Ensure all environmental, engineering and planning conditions are addressed
- Resolve outstanding constraints that affect construction or procurement
- Integrate structural, civil, geotechnical and environmental requirements
- Provide evidence needed for condition discharge and approvals
- Protect programme by preventing clashes, redesign and late technical surprises

### HOW ARTHIAN REDUCES RISK AT STAGE 4

- » Technical inputs for planning condition discharge, accurate visual representations (AVRs), and compliance evidence
- » Detailed mitigation strategies across noise, air, ecology, arboriculture, landscape & heritage
- » Remediation strategy, verification requirements and CEMP/LEMP preparation
- » Compliance-driven energy strategy, performance modelling and WLCA refinement
- » Detailed structural, geotechnical and civil engineering design aligned with architectural and MEP information
- » Technical risk mitigation, clash avoidance and support for tender and contractor queries

## 5

# RIBA STAGE 5 MANUFACTURING & CONSTRUCTION

## FOCUS: CONSTRUCTION DELIVERY SUPPORT THROUGH COORDINATED TECHNICAL INPUT, COMPLIANCE, AND ISSUE-RESOLUTION.

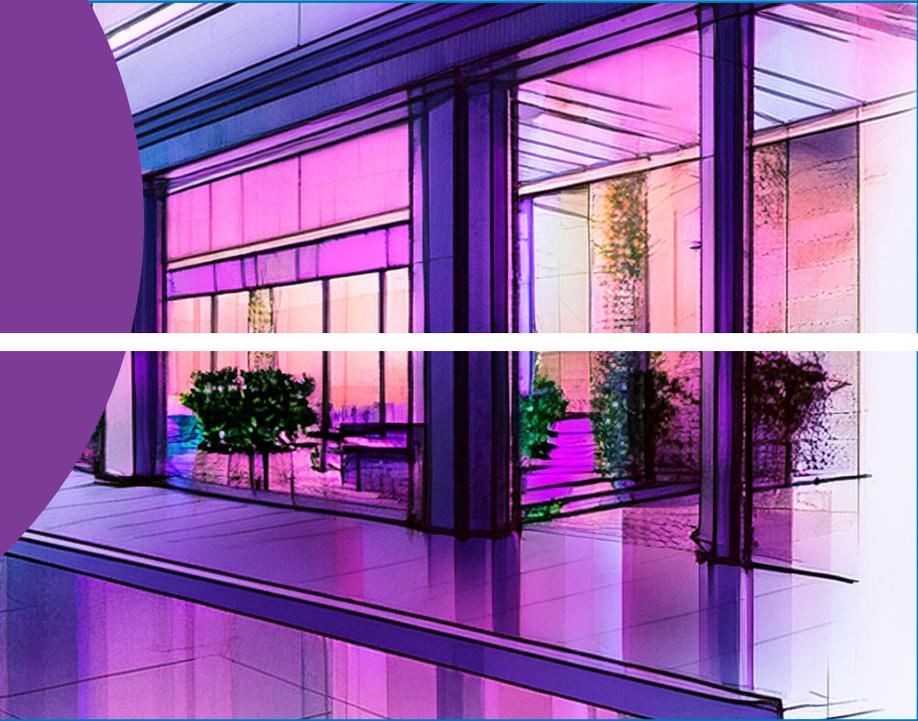
- Ensure construction proceeds in line with planning conditions and technical approvals
- Maintain compliance with environmental, ecological and land-quality requirements
- Resolve technical queries quickly to avoid delays or rework
- Support contractors with clear, coordinated engineering information
- Monitor risks that emerge during construction
- Keep programme on track through proactive issue management

## HOW ARTHIAN REDUCES RISK AT STAGE 5

- » Support for planning condition discharge and responses to contractor/site queries
- » Implementation and monitoring of mitigation measures (noise, air, ecology)
- » EnvCoW/ECoW for on-site environmental and ecological compliance
- » Verification of contaminated land remediation and CEMP/LEMP monitoring
- » Structural, geotechnical and civil engineering clarification, including temporary/enabling works
- » Construction Traffic Management Plan (CTMP) updates and access arrangements where required

# RIBA STAGE 6

## HANDOVER



### FOCUS: DEVELOP VIABLE CONCEPT OPTIONS BASED ON IDENTIFIED CONSTRAINTS, AVOIDING REDESIGN AND PLANNING RISK.

- Confirm planning and environmental conditions have been met
- Provide final verification and sign-off documentation
- Support smooth transition from construction to operation
- Resolve any outstanding technical or compliance issues
- Ensure environmental and land-quality obligations are closed out
- Protect client and design team from post-completion risk

### HOW ARTHIAN REDUCES RISK AT STAGE 6

- » Final verification of remediation, drainage, ecology and environmental mitigation
- » Completion reporting for contaminated land, ecology, arboriculture and landscape
- » Support with planning condition close-out and compliance evidence
- » As-built reviews for structural, geotechnical and civil engineering elements
- » Environmental and ecological monitoring handover to operational teams
- » Technical input to resolve any residual issues before occupation

## 7

# RIBA STAGE 7 USE

**FOCUS: SUPPORT EARLY OCCUPATION, CLOSE OUT REMAINING TECHNICAL DUTIES, AND ENSURE THE BUILDING PERFORMS AS INTENDED.**

- Provide post-occupancy technical support
- Resolve early defects or performance issues
- Review operational performance and user feedback
- Check energy, carbon and sustainability measures are functioning as designed
- Ensure environmental, drainage and land-quality systems remain compliant
- Capture lessons learned to strengthen future delivery

## HOW ARTHIAN REDUCES RISK AT STAGE 7

- » Verification that energy, carbon and environmental measures are performing as intended
- » Assistance with defects investigations linked to geotechnical, civil or environmental systems
- » Preparation of evidence for late planning, regulatory or warranty queries
- » Structured lessons-learned capture to reduce risk on future projects



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