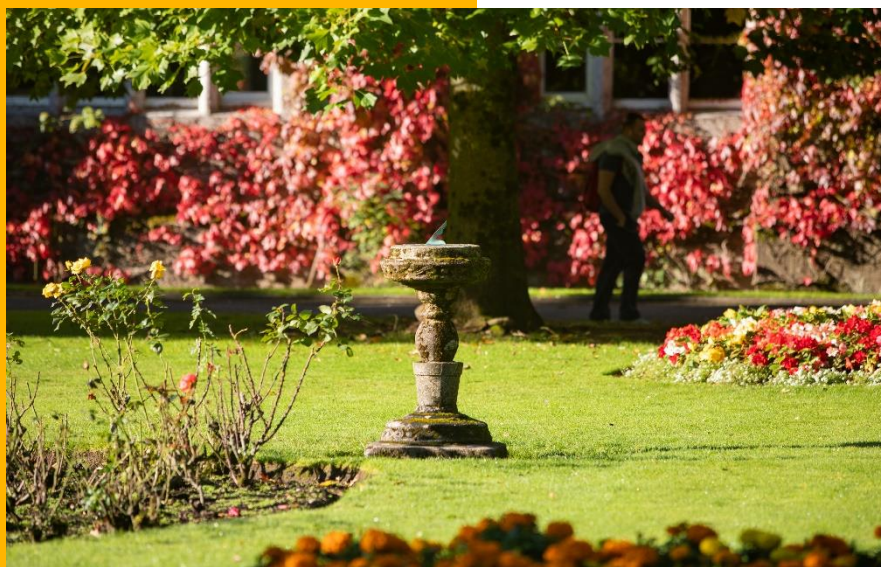


CAPITAL PROJECTS OFFICE

DIGITAL PROJECT MANUAL HAND OVER FILE PROCEDURES



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Document Revisions

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1.0 INTRODUCTION

For all construction projects undertaken by UCC's Capital Projects Office, a Digital Project Manual is initiated. This document outlines the digital folder structure of the manual, those responsible for populating the various sections, and the file format for documentation.

The DPM is a live manual, that is to be populated as the project progresses from concept right through to hand-over and occupation.

Upon appointment of the design team, the electronic folder structure will be provided to the Design Team Lead, and the Design Team Lead, assisted by design team members will be responsible for compiling Section 1 – Project Information, the Pre-Commencement Phase.

Upon issuing of the Construction Tender Report to UCC, the Design Team lead shall deliver to UCC's appointed Project Manager, the fully compiled Section 1 of the DPM. UCC will then maintain Section 1 and update the appropriate sections designated with UCC responsibility.

It is the responsibility of the Design Team Lead to ensure that Section 1 is fully and comprehensively completed prior to submitting to UCC. The Design Team is to note that payment of Stage 3 fees will be dependent upon UCC receiving the fully and comprehensively compiled Section 1 of the DPM.

Upon commencement of the works on site, the responsibility for compiling Section 2 – "The Project – Building Work Phase" of the DPM will lie with the Main Contractor, with the Design Team Lead / PSDP responsible for quality checking and delivering Section 2 of the DPM to the appointed UCC's Project Manager.

The PSDP, in conjunction with the Main Contractor and Design Team is also responsible for compiling Section 3 – "The Building in Use" of the DPM

It is the responsibility of the Design Team Lead to ensure that Sections 2 & 3 is fully and comprehensively completed prior to submitting to UCC. The Contractor and Design Team is to note that the release of retention monies and payment of Stage 5 fees will be dependent upon UCC receiving the fully and comprehensively compiled Sections 2 & 3 of the DPM, in UCC prescribed format.

2.0 FILE FORMAT

All files are to be in PDF format. Where drawings are to be provided, they are to be provided in both CAD and PDF format.

For projects undertaken using BIM and in addition to the above requirements, the BIM files for the project are to be included in the DPM in the following file formats

- *.IFC
- *.NWD
- *.RVD or Native file format.

3.0 DIGITAL PROJECT MANUAL FILE FORMAT.

Ref.	Description	Responsibility
1.0	Project Information, the Pre Commencement Phase	
1.01	Site Address	Design Team
1.02	Site Location	Design Team
1.03	Project Description {Overview of the completed project Include; Architects summary of how the building was constructed & how it is intended to achieve its objectives. Any operational requirements and constraints of a general nature which are not relevant to other parts of the Building Manual. Digital Photos of; - the site pre-commencement - Significant events during construction - significant elements of the completed building The size of the building – in square metres, broken down in sections as per the HEA schedule of room types	Design Team
1.04	The Brief – what the Projects Office was asked to do. In a multi department building this is particularly important. It should identify the individual department requirements & also any common or shared areas or facilities. The brief should be accompanied by comments, to include; - any changes or compromises agreed on the scope of work - any future plans to carry out further work. It should be signed off by all interested parties	UCC / Design Team
1.05	Project Team –Names & contact Information for; - The UCC Project Leader - The Lead Designer - The PSD {& H&S Co-Ordinator if applicable} - All other designers/consultants associated with the project incl the QS. The PSC {& H&S Co-Ordinator if applicable} - COW's & others involved in the design or supervision team.	Design Team
1.06	Design or other documentation at Pre-Planning Application stage; - Feasibility Study - Site investigation. EIS or similar. - Dilapidation survey - Structural survey - Asbestos or Hazardous survey.	Design Team

Ref.	Description	Responsibility
1.07	Planning Documentation The planning application itself in its entirety ; - Cover letter to the Planning authority - The Planning Application {Text, forms, site notices, newspaper ad, fee, drawings etc.} - The Planning authority's acknowledgement of receipt of application. Any correspondence with the planning authority during the planning period. - Notification of decision to grant. Any appeals. - Decision to grant – including all conditions	Design Team
1.08	The Fire Safety Certificate & Disability Access Certificate Application documents, Application documents in their entirety {Cover letter, Text, forms, fee, drawings etc.} Any supplementary information requested by the planning authority Grant of the Fire Safety Cert.	Design Team
1.09	Post DAC / FSC Certificate Alterations A statement of the differences between the design arrived at after the planning/fire safety cert process & the original brief, listing the reasons for the differences & recording the agreement of all parties	Design Team
1.10	A full set of Tender Documents {Specs, Drgs, BOQ's etc} as issued to the contractors {Unpriced}& clearly marked "Tender Issue".	Design Team
1.11	Preliminary Health & Safety Plan Including all Design Risk Assessments	Design Team
1.12	Written acceptance of the PSDP of the responsibilities & role of PSDP	UCC / PSDP
1.13	Summary of the various Design Criteria which designers used in their calculations Floor Loads Electrical loads, at least the mains feed to the building & sub-distribution to each floor. HVAC – list the design parameters {Air changes, Temperature, Humidity etc.} & the design capacity of the HVAC equipment intended to meet these design criteria. Other criteria as appropriate.	Design Team
1.14	Confidential Project information BUILDINGS COMMITTEE - Record of Buildings Committee - Approval Space Allocation (where applicable)	UCC

Ref.	Description	Responsibility
	• Finance Committee/Funding • approval Code number assigned to project PLANNING DOCUMENTATION • Planning Application (full submission) • Planning Fee • Planning Permission Capital Contributions PROCUREMENT <u>Design Team Appointment</u> • EU Journal PIN Notice • Newspaper Advertisement (PIN notice) EU Journal Contract Notice • Newspaper Advertisement (Contract Notice) EU Journal Contract Award Notice • Initial short-listing score sheets (completed and signed) Letters of appointment • Fee Agreement letter • Collateral Warranties • Sub-consultancy Agreements <u>Appointment of Contractor/Sub Contractors</u> • EU Journal PIN Notice • Newspaper advertisement (PIN Notice) EU Journal Contract Notice • Newspaper Advertisement (Contract Notice) EU Journal Contract Award Notice • Initial Short-listing Score Sheets (completed and signed Letters of appointment <u>Main Contract Documentation</u> • Tender Opening Sheet (signed) • Tender Report • Contract Documents • Final Account Details	

Ref.	Description	Responsibility
2.0	The Project – Building Work Phase	
2.01	Main Contractor - Contact Details - Key personnel {Minimum site agent & contract manager}	Main Contractor
2.02	All Sub Contractors Contact details & principle person involved	Main Contractor
2.03	The Developed Project Health & Safety Plan as prepared by the PSCS, to include written acceptance by the PSCS of the responsibilities & role as PSCS	UCC / Main Contractor
2.04	Building Control Amendment Regulations (2013) - Include copy of all documentation uploaded to the BCMS system - Print out of the Project Details including Certificate of Compliance on Completion number as displayed on the BCMS System upon completion.	Design Team
2.05	Notification to the HSA. - AF1 - AF2 - Asbestos Notification - Near misses & Dangerous Occurrences - Notifiable accidents - Other	UCC / Design Team / Main Contractor.
2.06	Practical Completion Certificate Practical Completion Certificate & BCMS Completion Certificate / Confirmation of Registration.	Design Team / Main Contractor.
2.07	Schedule of Key Dates during the course of the project	Main Contractor / Design Team
	Temporary Works All Temporary Works Certificates issued including; - Drawings - Calculations - Methodology	Main Contractor
	Photographs Record of Monthly Progress Photographs in JPEG format, and compiled by dates.	Main Contractor

Ref.	Description	Responsibility
2.08	As built drawings, laid out by category & clearly marked "As Built" <u>Architectural</u> • Floor Plans • Elevations & • Sections • Finishes schedule Landscaping <u>Structural</u> Details of all structural elements <u>Mechanical</u> • All plant items. • Main services runs and sizes. All services outlets/intakes • Location of all mechanical service runs to the building from their connection point with existing mains services. <u>Electrical</u> • Main & all Sub boards • Cable runs & Cable sizes to all boards All power outlet/supply locations. • Lighting layout to include switching, • emergency lighting, • power supplies & location of Emergency Lighting • Test Switch Fire Detection & Alarm system layout • Fire Detection & Alarm system Address codes. • Fire extinguisher & hose reel location drawing. • Location of mains & site services electrical supply cables, from the building to their connection point with existing mains services. <u>Any other relevant drawings</u> e.g. Fall Protection etc	Main Contractor / Design Team
2.09	Builders work O&M Manual <u>Decoration</u> • Name & contact details of the contractor. Summary of all paint finishes & colour schedule. • COSHH dated Data sheets/maintenance requirements for any specialist paints. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. Copies of all test certificates and reports required in the specification. <u>Floor Covering</u> • Name & contact details of the contractor. Summary of all floor finishes & colour schedule. • COSHH dated Data sheets for any specialist flooring.	Main Contractor / Design Team

Ref.	Description	Responsibility
	• Maintenance/cleaning requirements for all floor finishes. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. • Copies of all test certificates and reports required in the specification. <u>Built in Furniture</u> • Name & contact details of the contractor. • Spec & Drawings • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. • Copies of all test certificates and reports required in the specification. <u>Loose furniture</u> • Name & contact details of the supplier. • Schedule of equipment installed. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. • Copies of all test certificates and reports required in the specification. <u>Fire Doors, Ironmongery, Door controls</u> • Name & contact details of the contractors. • Ironmongery schedule incl Name of supplier & Catalogue Nrs of items fitted. • Details of the master key system incl main & sub-suites to incl the re-order code for keys on a door-by-door basis. • Fire door Certificates for all fire doors. • Details of any electromagnetic door locks to include hierarchy of access controls {if applicable}, product data on the equipment and Commissioning certificates for all electromagnetic door locks. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. Copies of all test certificates and reports required in the specification <u>Audio Visual Equipment</u> • Name & contact details of the contractors. • Schedule of equipment installed with manufactures data sheets. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. • Copies of all test certificates and reports required in the specification. <u>Precast concrete elements</u> • Name & contact details of the contractors. • Schedule of equipment installed with manufactures data sheets. Copies of all guarantees warranties and maintenance	

Ref.	Description	Responsibility
	agreements offered by subcontractors and manufacturer. - Copies of all test certificates and reports required in the specification. <u>Suspended Ceilings & Partitions</u> - Name & contact details of the contractors. - Schedule of equipment installed with manufactures data sheets. Fire Rating certificates, where applicable. - Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. - Copies of all test certificates and reports required in the specification. <u>Windows, glazing & Curtain Walling</u> - Name & contact details of the contractors. - Schedule of equipment installed with manufactures data sheets. Fire Rating certificates, where applicable. - Safety glazing certificates, where applicable. - Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. - Copies of all test certificates and reports required in the specification. <u>Any Other sub-contractors/suppliers.</u> - Name & contact details of any other contractor/supplier not included here or in the M&E O&M Manuals – state - Schedule of equipment/materials installed with manufactures data sheets, Commissioning Certs, etc. as appropriate	
2.10	Electrical O&M Manual <u>Electrical Contractor</u> - Name & contact details of the contractor. - The name address and telephone number of the manufacturer of every item of plant and equipment together with catalogue list numbers. - Manufacturer's technical literature for all items of plant and equipment installed for the project and including detailed drawings, electrical circuit details and operating and maintenance instructions - Diagrammatic drawings of each system indicating principal items of plant, equipment, switchgear etc. - Main & Sub-board distribution charts corresponding to power outlet/supply alpha/numeric designation. - Legend for all colour-coded services. - A copy of all Test Certificates associated with the electrical installation, including but not limited to; - ECTI Commissioning tests - Fire Detection & Alarm Commissioning Cert. Emergency Lighting Commissioning Cert. - FAT's for Switchgear SAT's for Switchgear - Commissioning certs for all plant items TTL results on all data points - Starting up operating and shutting down instructions for all equipment and systems installed. - Control sequences for all systems installed. Schedules of all	Main Contractor / Design Team

Ref.	Description	Responsibility
	fixed and variable equipment settings established during commissioning. • Procedures for seasonal changeovers. • Recommendations as to the preventative maintenance frequency and procedures to be adopted to ensure the most efficient operation of the systems. • Lubrication schedules for all lubricated items. A list of normal consumable items • A list of recommended spares to be kept in stock by the Employer being those items subject to wear or deterioration and which may involve the Employer in extended deliveries when replacements are required at some future date. • Procedures for fault finding. • Emergency procedures including telephone numbers for emergency services. • Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer <u>Fire Detection & Alarm Commissioning Sub-contractor</u> • Name & contact details of the contractor. • Fire Detection & Alarm system Address codes. <u>Other Sub-Contractors to the Electrical contractor</u> • Name & contact details of the contractor.	
2.11	Mechanical O&M Manual <u>Mechanical Contractor</u> • Name & contact details of the contractor. • The name address and telephone number of the manufacturer of every item of plant and equipment together with catalogue list numbers. • Manufacturer's technical literature for all items of plant and equipment installed for the project and including detailed drawings, electrical circuit details and operating and maintenance instructions. • Diagrammatic drawings of each system indicating principal items of plant, equipment, valves etc. • Schedules (system by system) of plant equipment valves etc. stating their location, duties and performance figures. Each item must have a unique number cross-referenced to the record and diagrammatic drawings and schedules. • Legend for all colour-coded services. • A copy of all Test Certificates associated with the Mechanical installation, including but not limited to; ○ Corrosion tests ○ Works tests ○ Start and commissioning tests ○ Pressure tests • Starting up operating and shutting down instructions for all equipment and systems installed. • Control sequences for all systems installed. Schedules of all fixed and variable equipment settings established during	Main Contractor / Design Team

Ref.	Description	Responsibility
	commissioning. - Procedures for seasonal changeovers. - Recommendations as to the preventative maintenance frequency and procedures to be adopted to ensure the most efficient operation of the systems. - Lubrication schedules for all lubricated items. A list of normal consumable items - A list of recommended spares to be kept in stock by the Employer being those items subject to wear or deterioration and which may involve the Employer in extended deliveries when replacements are required at some future date. - Procedures for fault finding. - Emergency procedures including telephone numbers for emergency services. - Copies of all guarantees warranties and maintenance agreements offered by subcontractors and manufacturer. <u>Gas Services Commissioning Sub-contractor</u> - Name & contact details of the contractor. <u>Other Sub-Contractors to the Electrical contractor</u> - Name & contact details of the contractor.	
2.12	Lifts - Name & contact details of the contractor. - Commissioning Certificates - A Mechanical Operation/Maintenance Manual Detailing Catalogue Nr, supplier & routine operation and maintenance/replacement requirements	Main Contractor / Design Team

3.0	The Project – Building in Use Phase	
3.01	Safety Hazards & Procedures Describe in lay terms, any hazards & procedures necessary for safe day to day use of the buildings. E.G. window cleaning, access to roof etc. Include details of construction methods and materials which may present significant residual hazards with respect to cleaning, maintenance or demolition.	Main Contractor / Design Team
3.02	Services Description. Describe in lay terms, the basic layout, scope, design thinking, restrictions, capacity, safety measures and operation of the various systems in the building. Include at a minimum, - Electrical distribution HVAC - Water supply - Gas Supply {Mains & Bottled} Lighting - Fall Arrest/Fall protection systems. Lifts. Include procedures for the safe shut down & isolation of the various services. Include procedures for the safe re-energising of the various	Main Contractor / Design Team

Ref.	Description	Responsibility
	services after a shut down. Include details of Inter-Related dependencies, i.e what systems depend on what {if the Fire Alarm Panel is activated and that in turn is linked to the gas slam shut valve, this will have to be manually reset etc.} & list the proper procedures for re-energising of services after an unplanned shut down. Procedures for fault finding. Emergency procedures including telephone numbers for emergency services.	
3.03	Fire Safety. Describe fire safety strategy for the building. Include drawings showing; • emergency escape routes • location of emergency and fire fighting systems services shut-off valves switches etc. • Fire Detection & Alarms system with a schedule of device reference numbers & written description {as per the control panel read out} • Emergency Lighting	Main Contractor / Design Team

4.0	The Plant & Asset Register for the Building	
4.01	The Digital Safety File is also to incorporate an asset register with linked maintenance/management functions, intelligent graphics, linking to the asset register	Main Contractor / Design Team
4.02	Schedules (system by system) of plant, equipment, valves etc. stating their location duties and performance figures. Each item must have a unique number cross-referenced to the record and diagrammatic drawings and schedules.	Main Contractor / Design Team