Design Delivery Plan

Morgan Sindall business unit / region:	**Construction North West**
Project name:	**Gorton Community Hub**
Project no.:	**13W009**
Customer:	**Manchester City Council**
Location:	**Gorton, Manchester**

Rev	Date Of Issue	Reason For Issue	Project Doc Ref	Issued By	Approved By	Next Scheduled Review Date / Point
0	Oct 2019	Appointments	Title	Design Manager	Project Manager	

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Design Delivery Plan (Construction Phase)

1.0 THIS DOCUMENT

1.1 Design management controls

This Design Delivery Plan is part of a suite of project controls that give effect to the DES STD1 Design Management Standard and Activity Map.

Project Design Management Plans comprise:

- Design Strategy (Opportunity Development) – none developed
- Design Development Plan (Pre-Construction) – none developed
- Design Delivery Plan (Construction Phase)

1.2 Purpose of this document

This Design Delivery Plan is the critical design management control for the construction phase of any Morgan Sindall project. It contains information and analysis to support management of the design team and control over design delivery.

1.3 When to use this document

This Design Development Plan should be developed as soon as possible following appointment. It should be based on information and analysis in the Design Strategy. It is a precursor to the Design Delivery Plan which controls design delivery activity during the construction phase.

1.4 How to use this document

The Design Management Standard should be referenced and applied in completing this document. The “must do’s” in the Standard should be addressed and critical controls and tools used.

This Design Development Plan should be populated with the best available information and analysis. Detail should reflect the size, risk and complexity of the project**.** It should be frequently reviewed and updated as new information becomes available**.** It should be shared with the design team to ensure an aligned and coordinated approach to controlling design delivery is maintained.

Actions identified in this document should be specific to the project, concise, bullet pointed with short narrative. These actions should be reviewed, progressed and monitored. Specific actions are not necessarily required for each activity.

2.0 OUTSTANDING ACTIONS

2.1 Outstanding Design Strategy Actions

The purpose of the Opportunity Development stage is to understand and evaluate the opportunity, develop the design / win strategy and identify the required consulting team.

Area	Significant finding	Key action	Owner	Completion
Opportunity appraisal				
Design strategy	• Design to Cost	Work with Estimating with agreed finishes and in line with Works information.		
Design consultant	• BIM	Complete co-ordination and formatting in line with BEP	IBI, QZ, Curtins	Stage 5 and handover MEP
Design consultant	• RIBA Stage 5	Issued information for construction in line with IRS or better	IBI, QZ, Curtins	6 Weeks after appointment begins

2.2 Outstanding Design Development Plan Actions

Upon completion of the preconstruction phase of the project any outstanding actions should be transferred into this Design Delivery Plan.

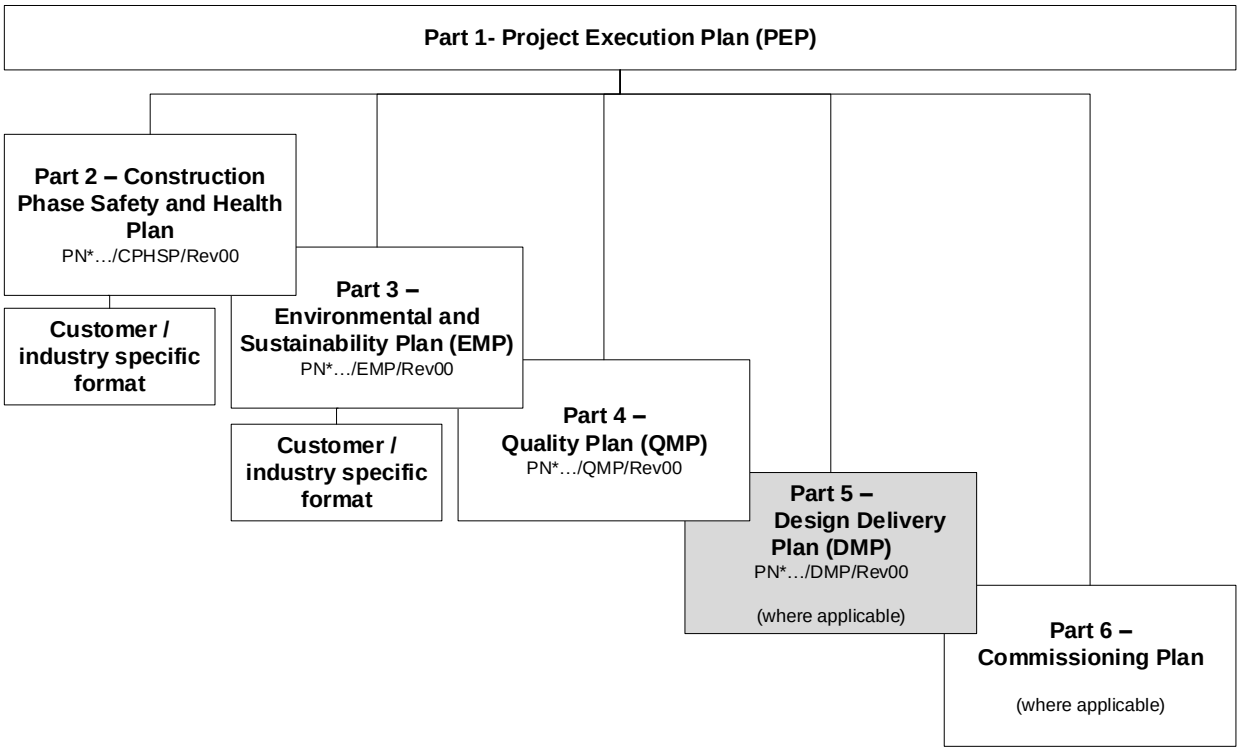
Area	Significant finding	Key action	Owner	Completion
Continuous activities	Stage 5 design, for construction and supply chain	Complete and co-ordinate stage 5 information	IBI	6 weeks after appointment begins
Tender information				
Design development				

3.0 DESIGN MANAGEMENT STRUCTURE

3.1 PEP Structure

This Design Delivery Plan forms part of the overall Project Execution Plan (PEP) for the project. A full revision schedule is in section one of the PEP (Part 1). Each box represents the sections of the whole PEP. Only in exceptional circumstances will a PEP consist of less than four documents. Note PN* represents the project number. (Update revision numbers as required)

The PEP structure is required to meet Quality Assurance requirements, unless otherwise authorised by the Project Manager and IMS team, in circumstances where an alternative PEP structure is required by the Client. In any event, the requirements of the Design Management Standard must be met.



3.2 Morgan Sindall Team

This section identifies the Morgan Sindall team carrying out design management related activities.

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Role title	Role description	Name
Design manager (DM)	Responsible to plan, manage and monitor design teams and their outputs in any given project stage.	Neil Campbell
Pre-construction manager (PCM)	Accountable for commercial decisions made regarding design in the pre-construction period	Jason Ward
Bid manager (BM)	Accountable for leading the tender design process	Jason Ward
Project manager (PM)	Accountable for the design delivery during the construction phase	Julian Saye
Pre-construction director (PCD)	Accountable for leadership and resolution of material commercial issues relating to design and escalated during the preconstruction phase	Stephen Ratcliffe
Area director (AD) or operations director (OD)	Accountable for the resolution of material design related issues	Shaun Jones
Heads of design management (HDM)	Responsible for ensuring effectiveness and consistency of Design Management practices across the business unit	Nathan Roberts
Quantity Surveyor	Accountable for contract and commercial management of design during the delivery phase and cost management of the design	Ursula Jones
Planner (P)	Responsible for production of integrated design, procurement and construction programmes, to deliver the project in line with contract milestones and the contract programme	Dan Burrell
BIM implementation manager (BIM)	Responsible for implementation of BIM on projects, and supporting the design management function on BIM delivery	Neil Campbell (Support from Backerhicks)
Document controller (DC)	Responsible for recording, distributing and quality control of information at any given stage of the project	Louise Noonan
Contracts manager (CMC) Construction	Accountable for delivery of overall programme of projects with oversight of performance during project delivery	Peter Millachip

3.3 Design Team

This section identifies members of the design team.

The scope of design team roles and responsibilities are defined in the Design Interface & Responsibilities Matrix (DIRM) and relevant Design Appointments.

Role	Organisation Name	Representative(s)
Architects (LEAD)	IBI	Tim Kilpatrick
Architects	IBI	Stuart Roberts
Civil & Structural	Curtins	Andy Roberts
Civil & Structural	Curtins	Sara Bailey
MEP	Futureserv	Mike Travis
MEP	Futurserv	Andy Morris
MEP (Contractor)	Quartzelec	Sam Grufferty
CDM	Backerhicks	Oliver Slade
Fire	Omega BB7	Abs Dawodu
Acoustics	Ramboll	Jon Howson
BREEAM	GWP	Shauna Buckley
Highways	Curtins	Aaron Tilley
Contractor	Morgan Sindall	Neil Campbell
Information Manager	Backerhicks	Alisdair Burns

3.4 Design Management Control Documents

This section lists the critical design control documentation for this project.

IMS Document Reference	**Control Document**	**Rev**	**Owner**	**Document Location**
3.1 Gorton Design Interface and Responsibilities Matrix 280319	Design Interface & Responsibility Matrix	01	Neil Campbell	Appointments and SIMS to be finalised
xxx	BEP (Contains MIDP, AIDP) – NOTE IRS still used on this project.	04	Alisdair Burns	Appointments and SIMS to be finalised
xxx	Integrated Design Procurement & Construction Programme	xx	Dan Burrel	xxx
xxx	Scopes of Service / Schedule of services	xx	Neil Campbell	xxx
xxx	Viewpoint Protocols & Workflows (or is this not in the BEP?)	xx	xx	xxx
xxx	Change Control Procedure - NEC	xx	Ursula Jones	xxx
xxx	*IRS*	xx	xx	xxx

3.5 Design Management Activities Plan

This section describes required design management activities, owners and frequency of activity.

Activity	Frequency of activity or due by	Responsible to undertake activity	Accountable to check activity
Continuous Activities			
Design management planning	Monthly	Neil Campbell	Julian Saye
Design team relationship management	Fortnightly	Neil or Jason	
Risk management	Monthly	Julian Saye	
Change management	Fortnightly	Ursula Jones	
Documentation management	Weekly	Louise Noonan (TBC)	
CDM compliance	Monthly	Julian Saye	
Digital activities management	Weekly	Neil and Louise	
Deliver Design			
Conduct Launch	Launch	Neil Campbell	
Manage design progress	Daily	Neil Campbell	
Manage design quality assurance	Daily	Neil & Louise	
Manage capital cost of design	Daily	Neil & Ursula	
Manage reporting	Monthly	Neil	
Manage approvals	Daily	Neil & Julian	
Manage handover of responsibilities	??	Neil to Julian	

4.0 CONTINUOUS ACTIVITIES

Continuous activities are the key systems, processes and plans that support and enable effective design management activity throughout pre- construction.



4.1 Design management planning

Activity	Design management planning is how we apply the design management controls throughout all stages of a project. We do this by setting project specific objectives, implementing plans and controls, to monitor design work
Purpose	We must ensure that leadership resources, activity and information management and assurance are deployed and evolved with the changing project environment to achieve successful design outcomes
Project Specific Actions	• First issue October 2019, Completion of Stage 4 RIBA, before going into contract. • Next review to be end of Stage 5

4.2 Design Team Relationship Management

Activity	Design team relationship management is how we strategically manage the performance and outputs. This includes design consultants and contractors design portions relationships throughout the project stages
Purpose	We must establish shared goals, behaviours and ways of working together with all members of the design team and hold the team to account for their performance
Project Specific Actions	• Use of COINs/IPortal 180 • The proposed schedule for performance reviews (3 monthly / key stages/other) • How to acknowledge excellent performance and manage poor performance

4.3 Risk and opportunity management

Activity	Conduct risk reviews in structured forums involving all key stakeholders in relation to design. This evaluation could include time, cost, safety or quality and compliance risks, and the timely implementation of risk mitigation measures through the project stages
Purpose	We must focus on understanding, prioritising and proactively managing key design risks that have the potential to have significant impact on outcomes throughout the project stages
Project Specific Actions	• Project Risks review meetings are lead by Jason Ward with MCC Paul Waite - • These are currently held once a month • The parties involved is MCC, Morgan Sindall and various Stakeholders where required • The key focus areas for design risk management to be established with Construction team with Regulation 9 Report from Backerhicks – First meeting 29/10/19 with PM

4.4 Change Management

Activity	Design change management is how we control deviations impacting or impacted by design from the agreed baseline in any phase of a project
Purpose	We must understand the design baseline, challenge the need for a design change and, if a change exists, understand impacts and manage implementation of change
Project Specific Actions	• The baseline design will be Stage 4 consultant information along with derogations to the Works Information agreed with MCC as part of contract. • This baseline design will be reviewed when packages released at Stage 5 and with supply chain. • Design changes will be instructed by MCC to MS, who will instruct accordingly. • Change control register and Early Warnings will be kept by QS (Ursula Jones) • Julian Saye will report significant changes to the Morgan Sindall Senior management.

4.5 Documentation management

Activity	Design documentation management is how all design related information is identified, captured, understood, exchanged, verified, stored and retrieved
Purpose	We must maintain a high standard of record management to facilitate and assure design information to support construction activity, and act as a record of what has taken place
Project Specific Actions	• RIF procedure on Viewpoint /4Projects. • CDE is Viewpoint / 4Projects. • BEP will be used

4.6 CDM compliance

Activity	CDM compliance is how we ensure and can demonstrate that the requirements of CDM Regulations are always complied with
Purpose	We must ensure a competent design team is in place and regularly monitor how the team are discharging their CDM responsibilities
Project Specific Actions	• Oliver Slade of Backerhicks is the Principle Designer in design and Construct stage on behalf of Morgan Sindall. • Where the responsibilities of the Principal Designer are set out • Where the client pre-construction information is to be stored – TBC with MCC, however most of this is survey work undertaken on behalf of Morgan Sindall. • The key outcomes of the designer competency assessment • Design Safety Risk Assessment Register (Regulation 9) is stored on viewpoint under CDMC in the reports section.

4.7 Digital activities management

Activity	Digital Activities Management is the application of our BIM systems and workflows to manage the physical and digital assets. The BIM systems set out controls to manage people, process and technologies
Purpose	We must adopt digital activities management where there is a BIM Level 2 requirement on any project and deploy BIM projects when tender standards criteria are achieved unless otherwise agreed by Business Unit MD

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Project Specific Actions	• BIM Level 2 • Individual and Federated models are store on Viewpoint /4Projects Information Manager is Alisder Burns of Backerhicks

5.0 PROJECT DESIGN DELIVERY ACTIVITIES

The purpose of this stage is to execute design delivery in accordance with pre-construction requirements to achieve on time delivery of quality design, for the best value.

The project manager is accountable for ensuring all project delivery activities are undertaken to requirements. The DM has responsibility for managing design related activities. The quantity surveyor is responsible for all consultant agreements.

Deliver design



5.1 Conduct launch

Activity	The activity involves introducing the design team, client and other key stakeholders, setting expectations for behaviours, communication, agreed success factors amongst the internal team and consultants
Purpose	We must set the tone for collaboration ensuring that there is a one team ethos to delivering project success with alignment on how design is going to be delivered and how we will solve challenges as they arise
Project Specific Actions	Once the Project Launch Meeting has been conducted record here the key meeting outcomes including critical success factors, agreements made and key outcomes from meeting and confirm actions have been communicated to stakeholders

5.2 Manage Design Progress

Activity	The activity involves ensuring the timely release of design information to enable client approval, procurement and construction activities to take place in accordance with the programme, while identifying potential for and mitigating any potential delay
Purpose	We must ensure that design information is delivered to the right parties, on time and to the requirements to enable construction activities to proceed to programme. to the DM is to proactively recognise and resolve design issues that have the potential to impact programme schedule
Project Specific Actions	Gorton Hub has been 2 stage tender with the design team and estimating team working together on cost and clients requirements. Stakeholder have been engaged and stage 3 RIBA signed off. Going into construction contract will be based on Stage 4 RIBA and Clients Works information with derogations noted. Reviewable Design Data for our client will be for finishes only within our cost plans. i.e material submittals and samples. There is minimal Contractor Design Portions.

5.3 Manage Design Quality Assurance

Activity	This activity involves ensuring that design information is contractually compliant, coordinated, and enables client approval, procurement and construction in line with the programme
Purpose	We must ensure that: • The design team takes responsibility for design • Morgan Sindall requirements are incorporated in the design process

	• Design outputs have been quality • Morgan Sindall is satisfied that the design outputs are buildable, safe and compliant
Project Specific Actions	Design packages are issued to the Project team for review and comment. These are combined and issued back to design team where required. Supply chain engagement during stage 4 has taken place on key packages with feedback directly to design team for incorporation into their stage 5 issue.

5.4 Manage Capital Cost of Design

Activity	This activity involves ensuring consultant and/or CDP design development does not result in additional capital cost or achieves improvement within the contract sum
Purpose	We must ensure that the impact of design development is proactively managed within the contract sum in consultation with the commercial team
Project Specific Actions	The cost plan has developed through stage 2, 3 with drawings a specifications provided and used to market test. Through stage 5 supply chain are free to offer up alternatives, but must be approved by design team, including BREEAM assessor. As this is a 2 stage tender and designing to cost, there is no Value Engineering taking place pre-contract as this was incorporated into the project as it progressed. (was a route to contract cost plan with adds / omits)

5.5 Manage Reporting

Activity	This activity involves timely communication of the status, progress and performance of design to the stakeholders identified in the design management plan
Purpose	DMs must ensure that project and client management team understand current status of design activity, key risks, and propose mitigation action to resolve problems where required. Achievements are to be recognised and celebrated
Project Specific Actions	Design team reporting meetings have been taking place in stage 4, once per month. With design team minutes and Action Log issued. In future these will include building control tracker and town planning conditions. Each design consultant provides report to site along site these minutes.

5.6 Manage Approvals

Activity	This activity involves timely coordination and communication with all necessary third parties regarding approval requirements relating to design
Purpose	Must understand and manage approvals relating to design. Work with the relevant parties to influence and progress approvals, to improve outcomes and reduce potential risks impacting design
Project Specific Actions	Stage 4 client gateway will be taken under the “15 days to contract route” Reviewable Design Data will be agreed and issued to client for comment atheistically as long as in accordance with specifications and Works Information.

5.7 Manage Handover of Responsibilities

Activity	This activity involves managing the handover of design management responsibilities to another project team member when the design manager is no longer required on the project
Purpose	We must ensure the best use of design management resources on projects by determining when design management specialist skills are no longer required and residual tasks can be handed over to a suitably competent project team member

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Project Specific Actions	• The dedicated design management resource will leave the project after Steelwork design approval and envelope design approvals have gone 60% through. • Project Manger Julian Saye and Quantity Surveyor Ursula Jones will take over • How to you plan to ensure a complete understanding of required residual design management activities and the reasons for them • What key outstanding design management activities will be handed over for completion • Where the handover action plan will be located