GJF Risk Register Phase 1 FBC November 2018

R	ef Risk description	Risk	Time	R	isk taı	rget	Current Mitigation and risk le	evel			Planned I		Risk
		Owner	Scales longevity	Likelihood (initial)	Impact (initial)	Risk score (initial)	Current controls in place	Likelihood (initial)	Impact (initial)	Risk score (initial)	Gaps in controls Additional controls required to reduce risk as far as is practical	Actions needed to address gaps	review date
0	If the project disrupts day to day business operations (site access and day to day business within hospital) Strategic: Risk to delivery of strategic activity targets. Financial: Potential requirement to run extra, compensatory sessions to offset shortfall caused by the disruption incurring additional costs. Reputation: Damage to GJF reputation as a high quality, reliable provider of activity for NHS Scotland. Regulation: Dust and noise may present an infection control risk to other areas. H&S requirements in ensuring safe environment. Workforce: GJF staff must be released from regular activities to support project, resulting in a depleted workforce to deliver patient services. Operational Delivery: Infection control, H&S and site access issues may affect daily activity.	JS	Project lifespan Review Monthly	2	2	4	Build separate to main building until breakthrough, minimising impact within the building significantly. Also the build area is at some distance to the current clinics and theatres, minimising the rise of dust and noise contamination. Provision made in contact with contractor to safeguard against operational disruption. Plan for Project Team in place with backfill arrangements for staff released to maintain service provision.	4	3	12	Impact on site flow when work is active to be considered via traffic management plan; currently in development. Risk increases at the stage of breakthrough into the main building; detailed assessment and planning is ongoing with the affected area. Communication to heads of department and clinical managers of site set up, and wider staff. Likely specific disruption to East of building from start of construction phase site set up: Orthopaedic OPD clinic Ward 2 East & 3 East	Site set up and traffic management plan to be approved, discussed and agreed with affected areas and subsequently communicated widely both internally and externally. Plan agreed to manage disruption in East elevation and subsequent breakthrough into Orthopaedics.	Nov 2018

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S2	Poor stakeholder involvement results in a lack of support for the project Strategic: Project is not approved by stakeholders in Government or the wider NHS impacting overall project outcome. Financial: Lack of support leads to insufficient provision of funds for the project, making it unfeasible. Reputation: Damage to GJF reputation as a values based organisation. Regulation: Scottish Health Council (SHC) guidance on service change (CEL4) not met. Workforce: Adequate staff cannot be recruited to deliver the increased level of service. Impact on staff morale if project at risk. Operational Delivery: Unable to deliver operational capacity.	JR	Project lifespan Review Monthly	1	2	2	Communications plan agreed by Project Board and reviewed regularly. Patient engagement workshops held as part of IA, option development and appraisal, OBC and FBC development. AEDET workshops held with full stakeholder involvement. Ongoing, close engagement with Scottish Government territorial Board partners, and West Dunbartonshire Council. Steering Group established which includes key internal stakeholders. Links established with Board Involving People Group. West Engagement Group well established and will continue to meet throughout planning and implementation process Workstream specific subgroups established to support clinical and operational engagement.	1	2	2	No gaps at present.		Nov 2018

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S4	Poor communication ignores stakeholder interests Strategic: potential impact on delivery of project aims. Financial: impact to the Communications resource and associated budget of ensuring robust communications plan. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: failure to comply with the Scottish Health Council (SHC) guidance on service change (CEL4) Workforce: could result in poor staff engagement and low morale Operational Delivery: reduced productivity, impact on overall project timelines.	JR	Project Lifespan Review bi- monthly	2	3	6	Stakeholder list remains live and will be updated regularly Stakeholder engagement assessment positive Communication plan agreed. Support and input from SHC EQIA completed and associated action plan in place. Significant engagement and involvement from entire ophthalmology team via several events (e.g. consultant meetings, CME). Regular WoS engagement group meetings. Regular engagement with volunteer forum.	2	3	6	No further mitigation at this time.		Nov 2018

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R5	Adverse Publicity occurs due to an issue with the project Strategic: little impact strategically – may prompt queries requiring reassurance to Scottish Government. Financial: no impact identified. Reputation: Negative press; anticipated most likely to be short term and local news as opposed to national. Regulation: no impact identified. Workforce: May impact on staff morale if negative press associated with project. Operational Delivery: No impact identified.	JR	Project Lifespan Review bi- monthly	3	1	3	Project specific communications plan in place that outlines frequency of updates to the public/ media and public engagement plans. Programme Board structure in relation to communication of any issues to proactively anticipate any issues of public interest. Current arrangements for management of adverse publicity linked to Communication Department.	3	1	3	Links to travel management work.	Group established with links to Project Team and Comms	Nov 2018

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07	Agreement and management of critical programme dates Strategic: Completion of this project is key to delivering NHS Scotland and Scottish Government's 2020 priorities, failure to deliver the project on time may undermine the national strategy. Financial: Delays and associated costs arising as a result of GJF have the potential to negatively impact GJF's budget. There is an opportunity cost to GJF's partner Boards if they are not able to send activity to GJF in line with the original timescale. Reputation: Project is public and high profile, failure to deliver it to time may result in a negative public impact of GJF. Regulation: No regulatory impact identified. Workforce: negative impact on staff morale and engagement if project delayed. Operational Delivery: Patient services are maintained in temporary accommodation, with knock on delays to Expansion Phase 2.	JR	Project lifespan Monthly review	3	3	9	Contract with Principal Supply Chain Partner. A detailed project plan with defined milestones and governance to identify and manage any potential delays.	4	3	12	Ongoing monitoring of current controls via Steering Group and Programme Board.	No further mitigation at this time.	Nov 2018

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F8	The project revenue funding estimate is poorly prepared and inaccurate Strategic: delays in the business case process which could affect overall timeline for programme. Financial: risk of underestimate of funds required and inability to deliver in cost. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: none identified. Workforce: workforce becomes unaffordable due to agency/ bank/ waiting list payments, impact on morale Operational Delivery: current model unsustainable, project outcomes required to sustain service.	JC	Planning	1	3	3	Detailed financial planning has been undertaken demonstrating that the Board will continue to break even	1	3	3	None identified at present		Nov 18

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S9	Demand for the service does not match the levels planned, projected or presumed. Strategic: National service delivery has been planned on the basis of the demand forecasts; if incorrect then it may undermine GJF and NHS Scotland's ability to deliver patient needs. Financial: If demand exceed forecast then the allocated budget may be insufficient to service it. If demand falls short of forecast, opportunities may have been missed to invest in other parts NHS Scotland which may have benefitted. Reputation: Potential negative impact to GJF reputation if it was seen to have designed a service which is not fit for purpose. Regulation: No regulatory impact identified. Workforce: Undermines ability to attract the best candidates. If demand is lower than anticipated, may have surplus of staff. Operational Delivery: Pressure on operational services if demand exceeds designed capacity. If demand falls short of forecast then GJF's operational feasibility may be questioned.	JR	Project Lifespan Review Bi monthly	2	3	6	Negotiation of three year Service Level Agreements with referring Boards to help ensure referral numbers are consistent and predictable. Ongoing, planned review of demand forecasts as new information emerges. Economic analysis undertaken at time of proposal. Detailed demand modelling undertaken in conjunction with Scottish Government which considers patient demographic profiles.	2	3	6	Development of alternative uses for capacity if demand were to fall short of plan e.g. converting theatre time to another specialty.		Nov 2018

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\$10	The available accommodation is unable to support the proposed service model Strategic: if model cannot be achieved then would impact ability to realise the productivity/ efficiency gains that have been modelled. Could impact on phase 2. Financial: no known financial penalties but impact could translate to ongoing use of private sector to achieve model if capacity not realised. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: need to ensure that proposed model meets any regulatory requirements in relation to clinical standards of care and also workforce regulations. Workforce: if model not fully realised then workforce benefits may be at risk. Operational Delivery: inability to meet TTG and support planned increased activity. Potential impact on phase 2.	JR	Project lifespan Review monthly	1	4	4	Clinical brief developed Concept design workshops commenced with frontline staff input Administration pathway linked to EPR project Programme of fact finding visits to other new builds Equality Impact Assessment completed Virtual reality walk through sessions completed with staff including all consultants	1	4	4	Ongoing patient and stakeholder engagement		Nov 2018

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S11	The need for clinical change and expected outcomes aren't clearly defined – relates to change within GJNH and expectations across the region. Strategic: this could lead to being over or under capacity and affect delivery of project aims. Expectation that all Boards will improve current; impact on regional capacity if this is not realised. Financial: financial impact associated with being under capacity. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: unable to meet TTG if capacity not available. Workforce: failure to actively engage the workforce in project. Risk that workforce not developed to deliver outcomes. Operational Delivery: impact on ability to deliver service model and for Boards to realise efficiencies.	MH /HE	Project Lifespan Review monthly	2	3	6	Intensive modelling on future requirements Input and data from ISD. Engagement with clinical leads and West of Scotland Boards. Design for flexibility of use in ensuring ability to adapt to changing clinical needs. IA approval. Participation in WoS Ophthalmology review group. OBC Approval from WoS Engagement Group and regional Chief Execs and DoFs	2	4	8	Ongoing engagement with Clinical Leads	Development of theatre training programme to support additional workforce requirements Joint WoS appointments to support recruitment to the difficult to fill consultant posts	Nov 2018

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\$12	The design fails to meet the Design Assessment expectations Strategic: potential impact on delivery of project aims. Financial: costs associated with design changes. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: regulatory compliance may b affected. Workforce: could affect staff engagement and support of project.	JR	Design Review monthly	2	4	8	Use BIM virtual model Room mock ups to inform design Clear design plan to outline agreed decision makers and levels of authority. Programme Board and governance to support design sign off. Ongoing engagement with staff, ownership locally by staff in participating in process.	2	4	8	Interior design strategy to be agreed. External materials to be agreed and approved. Way Finding work to be completed.	Interior design strategy to be agreed and approved via programme Board. Sign off of external materials by planning and programme board. Way Finding to be developed.	Nov 2018

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S14	Client (GJF) doesn't have the capacity or capability to deliver the project Strategic: could impact on quality of outputs and overall achievement of project if realised which would impact GJF and wider West of Scotland region. Financial: financial impact associated with late or non delivery of key project objectives. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: lack of capacity/capability could affect ability to meet regulatory requirements. Workforce: Ensuring specialist skills required to support project are secured and sustained throughout. Operational Delivery: current model unsustainable, project outcomes required to sustain service.	JR	Project lifespan Review quarterly	1	3	3	Programme Director role appointed, commenced 1 st June 2017. Programme Team Lead and expanded team in place. Microbiology support in place via SLA. IA and OBC approval. Project Manager, Cost Advisor, Supervisor and CDM Advisor roles appointed. Relationship with PSCP developed Programme Board and supporting structure in place. Detailed project plan to be developed. Cost control group established.	3	3	9	NHS G&C unable to support microbiology SLA; discussions ongoing to finalise alternative microbiology SLA support.	Support for FBC in place, work ongoing to finalise SLA for project.	Nov 2018

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F16	Inflation costs are above those projected, can impact both capital and revenue, anticipate more impact on capital. Strategic: Negative impact to Expansion Phase 2 due to overspend on Phase 1, undermining GJF's ability to deliver national activity projections. Financial: Board returns an overspend position in a tight fiscal environment. Most likely to impact on capital. Reputation: Negative public perception of GJF if Board returns overspend position. Regulation: No regulatory impact identified. Workforce: No workforce impact identified. Operational Delivery: No operational impact identified.	JC	Project lifespan	3	2	6	Contract with Principal Supply Chain Partner. A detailed project plan with defined milestones and governance to identify and manage financial risks. Target costs agreed. Monitoring of Brexit in place reported via SRC and SMT	3	2	6	None identified at present		Nov 18

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F17	Changes in legislation or tax rules increase project costs Strategic: impact of increased costs on meeting overall project aims and timelines. Potential impact of Brexit during project Financial: ability to deliver project within budget, potential cost implications of Brexit Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: none identified. Workforce: none identified Operational Delivery: none identified	JC		2	3	6	Current financial processes in place to detect upcoming changes and assess impact Impact of Brexit being monitored SLWG established to assess impact of IFRS 16 within the Board.	2	3	6	Direction from HM Treasury is awaited regarding adoption of the standard.	Review of supplier contracts for supply of Opthalmology consumables and equipment to ascertain asset right of use.	Nov 18

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F18	Changes to non-legislative policy affect programme costs and/ or progress Strategic: impact of increased costs on meeting overall project aims and timelines and Phase 2. Financial: ability to deliver project within budget. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: none identified. Workforce: none identified Operational Delivery: unknown potential to disrupt operational activity	JC		2	2	4	Horizon scanning process via Strategic Risk Committee Detailed cost control process with robust operational implementation	2	2	4			Nov 18

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S19	There are uncertainties over national future policy/ strategy changes Strategic: National waiting Times Improvement plan published; letter from Cabinet Secretary to Boards on repatriation Financial: A review of NHS targets is underway. If target priorities change then less funding may be provided to GJF from Scottish Government, undermining the Board's ability to deliver the project. Reputation: No reputation impact identified. Regulation: No regulatory impact identified. Workforce: potential BREXIT impact (EU27status scheme) Operational Delivery: Changes in patient flows or health priorities in Scotland may require a change in the planned use of the expansion e.g. a change in specialty. Were this to happen then there is potential for a knock on effect to Expansion Phase 2.	JR	Project Lifespan Review ongoing	2	3	6	Close engagement with Scottish Government. GJF representatives on key national groups at which future policy is discussed e.g. Chief Executives Group. Flexibility in design to accommodate changing future needs. National Waiting Times plan published with reference to ophthalmology unit.	2	3	6	No further mitigation identified at this time.		Nov 2018

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S21	Potential delays to project as a result of uncertainty over Regional Delivery Planning Strategic: RDPs linked to national care strategy with potential for changing expectation of GJNH within this. Financial: A review of NHS targets is underway. If target priorities change then less funding may be provided to GJF from Scottish Government, undermining the Board's ability to deliver the project. Reputation: No reputation impact identified. Regulation: No regulatory impact identified. Workforce: No workforce impact identified. Operational Delivery: Changes in patient flows or health priorities in Scotland may require a change in the planned use of the expansion e.g. a change in specialty. Were this to happen then there is potential for a knock on effect to Expansion Phase 2.	JR		2	3	6	Early and continued engagement has been established with the West of Scotland Engagement group. General space to be designed as flexible future proof space should the needs of the region change. National Waiting times plan published.	2	3	6	Ongoing engagement with each Wos Health Board and Regional Planning Group.		Nov 2018

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F22	The project capital funding estimate is poorly prepared and inaccurate Strategic: delays in the business case process which could affect overall timeline for programme. Financial: risk of underestimate of funds required and inability to deliver in cost. Reputation: Negative impact on reputation of GJF within NHSScotland and publicly. Regulation: none identified. Workforce: none identified Operational Delivery: none identified	JC		1	3	3	Support to project from Finance Director and Deputy Director Finance Financial Accounting & Governance Revised optimism bias applied to FBC Further validation of medical equipment costs undertaken as part of FBC Target costs agreed Build timetable agreed Ongoing monitoring for capital funding via Cost Control group and Steering Group	1	3	3	E-health equipment costs	Further validation of e-health costs	Nov 18

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W23	If we fail to develop and implement an innovative workforce plan then we may not be able to recruit an appropriate number of consultants required to deliver the service model. Strategic: Potential to impact on the ability to increase provision from current and therefore not realise benefit of expansion Financial: Failure to realise the investment in expansion; could incur additional costs in trying to boost service Reputation: Potential for negative media impact for us and SG if facility not fully utilised Regulation: none identified. Workforce: Increased pressure on existing workforce to deliver; impact on morale Operational Delivery: Unable to deliver on performance targets and impact to waiting times	DM		2	2	4	Plan for HR support to project agreed.	4	3	12	Workforce Strategy to be agreed	Strategy to be developed and brought to Steering Group	Nov 2018

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C24	Increased risk of exposure to infection, particularly to NSD patients during works Strategic: ability to support delivery SNAHFS service Financial: financial implications of service delivery affected Reputation: Potential for negative media impact if any infections associated with works Regulation: full risk assessment undertaken in line with best practice and regulations including monitoring arrangements Workforce: education and awareness of staff to support patient discussions and measures Operational Delivery: disruption to service whilst works underway to support mitigation of risk; need to ensure compliance with measures across site for duration of project	JR	Ongoing	2	4	8	Full risk assessment undertaken with input of SNAHFS clinical team, Infection control and microbiology. Mitigation agreed in line with RA – see full document for details. Monitoring of levels 2 or more incidences of IA will trigger a PAG and immediate review of all mitigation	2	4	8			Nov 2018

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O25	Impact to site if unexploded WW2 bomb identified during works Strategic: potential to impact timeline; link to SG if site evacuation required Financial: financial implications of any delay and of disruption if evacuation required; impact to hotel business Reputation: potential for media interest, could be significant if site evacuation required Regulation: Police and military would co-ordinate response Workforce: Support to ensure safe evacuation and communication with staff Operational Delivery: potential major impact if site evacuation required.	JS		2	4	8	Remedial works previously undertaken on site, ground remediated to 5m at site of build. UXO surveys undertaken during stage 1.	2	4	8	Protocol to be agreed for detection of bomb including sharing with relevant external agencies.	Discussions underway with PSCP and external contractor to agree.	Nov 2018

Risk Register HEAT Map

Likelihood		Co	onsequence/ Impa	act	
Likelii100d	1	2	3	4	5
5					
4			(O1)(O7) (W23)		
3	(R5)	(F16)	(S14)		
2			(S4)(S9) (F17)(F18) (S21)	(S11)(S19) (S12)(O25) (C24)	
1		(S2)	(F8)(F22)	(S10)	

PSCP Risk Register Phase 1 FBC November 2018

Ref	Risk description	Risk Owner	Time Scales longevity		sk targ	et	Current Mitigation and risk level				Planned Mitig	ation	Risk review date
			iongevity	Likelihood (initial)	Impact (initial)	Risk score (initial)	Current controls in place	Likelihood (initial)	Impact (initial)	Risk score (initial)	Gaps in controls Additional controls required to reduce risk as far as is practical	Actions needed to address gaps	- date
Site Is	sues												
1.1	VANDALISM Vandalism occurs during construction. Cost and delay arises as a result of vandalism during the construction phase.	PSCP	Jul 2020	3	2	6	Provision for security and CCTV to be included. Hoarding to be put in place.	3	2	6			Jan-20
1.3	SITE TRAFFIC Site traffic, both vehicle and pedestrian impacted by the construction traffic on the accessing/egressing the construction site. Potential impact on site logistics. Potential H&S implications. Failure to establish robust strategy for traffic management could result in delay to works.	PSCP	Jul 2020	2	4	8	Clear segregation of site traffic to be established through the Construction plan developed by the PSCP. Temporary car-parking provision to be determined. Ongoing discussions through pre-construction phase.	2	4	8			Jan-20
1.8	WORKING IN A LIVE SITE PLANNED DISRUPTION Delays and reputational damage associated with disruption working in a live site.	PSCP	Jul 2020	2	4	8	Detailed programming and phasing of works to mitigate disruption to live site. And ongoing communication with Health Board will take place.	3	4	12			Jan-20

1.9	SITE PARKING DURING CONSTRUCTION WORKS Insufficient access and parking on the operational site, during the construction period. Increased risk of local resident frustrations due to parking overspill in local area.	PSCP	Jul 2020	2	3	6	Initial planning regarding temporary parking arrangements is underway and will be progressively reviewed and updated as the design progresses. Temporary car-parking provision to be determined. Ongoing discussions through key stakeholders to establish preferred strategy. Site staff to part on cable depot road - away from hospital designated car park.	3	3	9		Jan-20
1.18	ACCESS ROAD DILAPIDATION Potential for vehicle movement to service the works causing wear and tear and impacting condition of existing drainage.	PSCP	Jul 2020	2	2	4	Dilapidation survey to be carried out prior to works commencement, to enable differentiation between damage created by the works and pre-existing damage.	3	2	6		Jan-20
2. Utili	ity/Services Issues					<u> </u>						
2.5	OFF SITE network upgrade delays (Sewerage - Scottish Water/ HV Supply - SPN/) Delay and cost implications for connection of new utility supplies to the site.	PSCP	Jul 2020	2	4	8	Dialogue with utility providers throughout the design/ pre-construction process as required.	2	4	8		Jan-20
2.6	Existing Service connections and isolation/disconnections Delay to disconnection will delay	PSCP	Jul 2020	2	3	6	Ongoing dialogue required to establish if any disconnections/isolations of live services are required.	3	3	9		Jan-20

	commencement of construction											
2.7	Achieving HFS/NHS thermal modelling requirement for the building. Outcomes may result in change in current thinking's on proposed fabric and m&e specifications.	PSCP	Dec 2018	2	4	8	Detailed simulation exercise will be required. CIBSE 2020 forecast weather data advised as required. Thermal modelling data issued to HFS for comment.	3	4	12		Jan-20
2.8	Planning and/or Building Control constraints may influence on use of certain LZCTs. E.g. air quality conditions impacting the use of CHPs, visual impacts of flues and PV arrays. Outcomes may result on current thinking on fabric and m&e specifications.	PSCP	Dec 2018	2	3	6	No requirement has been identified in the Planning Conditions. Feedback from Building Control still to be obtained.	3	3	9		Jan-20
3. Pro	curement and Commercia	al Issues										
3.1	CAPEX ESTIMATION ERROR The estimated cost of construction may be incorrect. Failure to present the works within the required affordability cap will impact on OBC and FBC approval.	PSCP	Dec 2018	3	3	9	Ongoing affordability checks carried out throughout the design process. The works are to be a 100% market tested at financial close, enabling confirmed cost for delivery of the works. VM to progress through design stages. Market returns are elevated from original Cost Plan. VE exercise	4	3	12		Jan-20

				1	1		underway.					
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3.3	INCORRECT COST ESTIMATE FOR COMMISSIONING NEW BUILDINGS Additional costs incurred due to incorrect cost estimate of commissioning activities required.	PSCP	Jul 2020	2	2	4	Ongoing affordability checks carried out throughout the design process. PSCP to review scope and affordability of proposed commissioning strategy during preconstruction phase.	2	2	4		Jan-20
3.4	INFLATION RISK Post Financial Close Impact on project affordability due to inflation exceeding forecast.	PSCP	Jul 2020	3	3	9	Inflation forecast ongoing. Affordability cap set against current inflations projections. Delays to construction timing due to decant works will increase this risk. Track against monthly indices - current economic / political picture unsettled	3	3	9		Jan-20
3.7	EARLY ENGAGEMENT WITH SUBCONTRACTORS	PSCP	Jul 2020	1	3	3	Potential meet the buyer event. Develop M&E procurement strategy.	2	3	6		Jan-20
3.8	BREXIT IMPACT ON CONTRACTOR PRICING Uncertainty in the market leading to premium in cost due to risk associated with Brexit uncertainty.	PSCP	Dec 2018	2	2	4	100% market testing has been carried out.	3	2	6		Jan-20

3.9	TIMING TO	PSCP	Jul 2020	1	2	2	Early review of Collateral Warranties,	2	2	4		Jan-20
	CONCLUDE COLLATERAL WARRANTIES Extended duration to conclude Collateral Warranties with subcontractors.						to be tied into contract appointments and to align with HFS Framework requirements.					
4. Des	ign Risks											
4.1	FAILURE TO MEET PERFORMANCE REQUIREMENTS Building does not meet spatial design requirements. The building does not meet user requirements once constructed.	PSCP	Jul 2020	1	4	4	Health Planners engaged throughout the briefing and initial design stages to ensure spatial requirements are fully considered within the design. Staged review and sign off of based design by NHS carried out. Ongoing review of design against the brief, with key stakeholders.	2	4	8		Jan-20
4.2	ARCHITECTURE & DESIGN SCOTLAND/HFS Lack of support from A&DS at the OBC and FBC (and Planning) stages. Delay/abortive works required to incorporate differing inputs from A&DS/HFS on design proposals.	PSCP	Dec 2018	1	3	3	Ongoing engagement with HFS (A&DS) throughout the design process. Formal issue of report awaited. Further discussions to be held in due course.	3	3	9		Jan-20
4.4	FAILURE TO DESIGN TO THE BRIEF	PSCP	Jul 2020	1	3	3	Ongoing review of design against the initial clinical and technical brief	2	3	6		Jan-20

	Failure to translate the requirements of NHS into the design. The facility does not meet the clinical and technical requirements of NHS. Abortive design works are required resulting in cost and programme delays.						provided. Refresh of clinical brief to be carried out during Stage 3, to reflect instructed changes in scope during the design process. Mock up rooms to be provided during construction phase.					
4.5	CONTINUING DEVELOPMENT OF DESIGN The detail of the reviewable design data should be developed within an agreed framework and timetable for review and approval during the construction stage. Failure to do so may lead to additional design and construction costs.	PSCP	Jul 2020	2	3	6	Clear design freeze point to be established at end of 1:50 design stage. Design submissions to be clearly set out.	3	3	9		Jan-20
4.6	FAILURE TO BUILD TO DESIGN Misinterpretation of design or failure to build to specification during construction may lead to additional design and construction costs.	PSCP	Jul 2020	2	3	6	Regular progress meetings to be carried out throughout the construction phase to enable early identification of any breakdown in the design information.	2	3	6		Jan-20
4.7	DESIGN EXCEEDS GIFA ALLOWANCES Impact clinical/therapeutic spaces to accommodate additional communication space requirements and/or increase in affordability	PSCP	Dec 2018	1	3	3	Ongoing review of design against the schedule of accommodation to ensure the SoA is not exceeded. Clear identification of any client changes to the brief that may impact on the SoA. Good use of Design Development Tracker.	2	3	6		Jan-20

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4.8	DESIGN STATEMENT COMPLIANCE Non-negotiable objectives set out in Design Statement not met by Ph 1 design. Failure to achieve the non-negotiable objectives detailed within the Design Statement will impact on obtaining FBC approval.	PSCP	Jul 2020	2	3	6	Design statement has been issued to the team by NHS. HFS / A&DS reviews will help ensure compliance. Project team to also review design against the design statement	2	3	6		Jan-20
4.11	CONTRACTOR DESIGN PORTION Design not complete due to coordination of CDP design creating programme delay, quality and cost.	PSCP	Jul 2020	2	3	6	Develop construction phase programme and early engagement with Subcontractors with design input.	3	3	9		Jan-20
5.1	NOISE LEVELS or	PSCP	Jul 2020	1	3	3	Agreements to be in place between	3	3	9		Jan-20
	DISTRUPTION DURING CONSTRUCTION Noise levels exceed the tolerances proposed - resulting in staff and patient disruption. Enforced re- sequencing or revised methodology of the works potentially resulting in additional time/cost to the project delivery.						the PSCP and NHS, prior to commencing construction regarding working hours and quiet working requirements (i.e. Protected meal times etc). Design consideration regarding construction methodology used to minimise disruption. Construction noise strategy developed.					

5.2	COMMISSIONING DEFECTS Problems with the new building following occupation. Disruption to users.	PSCP	Jul 2020	2	4	8	PSCP Contractor will be contractually obligated to address defects during defects period.	2	4	8		Jan-20
5.3	REPORTABLE ACCIDENTS HSE reportable accidents on site. H&S implications.	PSCP	Jul 2020	1	5	5	PSCP to have Health & Safety Plan in place prior to works commencing. Regular inspections of the site also to be carried out by the PSCP to enable early identification of any potential H&S risks.	1	5	5		Jan-20
5.5	SUBCONTRACTOR DEFAULT In the event of Contractor default, additional costs may be incurred in appointing a replacement and may cause a delay.	PSCP	Jul 2020	2	4	8	PSCP to carry out appropriate due diligence of any subcontractors appointed. Any additional costs incurred as a result of default at PSCP expense. With the fall in tender price index moving against the rise in inflation this has increased this risk of subcontractor default.	2	4	8		Jan-20
5.6	BREEAM: Planned / targeted BREEAM credits not achieved. Failure to achieved BREEAM target agreed with HFS.	PSCP	Jul 2020	3	3	9	Early submission of information to BREEAM Advisor and ongoing review of BREEAM deliverables. Identify contingency BREEAM credits if required.	3	3	9		Jan-20

5.7	AIRTIGHTNESS: Failure to achieve stipulated design value. Failure to achieved thermal model planned outputs resulting in deviation from Planned TER score (If this is below the BER them this could lead to failure to meet building control requirements)	PSCP	Jul 2020	2	3	6	Design to be developed in accordance with identified parameters. Peer review of air tightness to be carried out.	2	3	6		Jan-20
5.8	DAMAGE: damage caused to structure, fabric, finishes, MEP etcas a result of construction works on site. Remedial works required. Potential programme disruption.	PSCP	Jul 2020	1	3	3	Careful sequencing of works and protection strategy to be put in place.	2	3	6		Jan-20
5.9	SCOPE GAPS: between Work Packages Scope gaps become evident during build phase.	PSCP	Jul 2020	1	3	3	Holisiic design review to be carried out prior to works commencement.	3	3	9		Jan-20
5.1	MAINTENANCE / ACCESS: Inadequate allowance made for maintenance provisions e.g. access hatches, valve arrangements,	PSCP	Jul 2020	1	3	3	Holisiic design review to be carried out prior to works commencement with NHS Estates. Regular interation on site.	2	3	6		Jan-20

	hop over steps, changes required to MEP installation. Inadequate provision made resulting in cost and potential programme delay.											
5.11	ACOUSTICS: reverberation times require additional measures to be taken. Inadequate provision made resulting in cost.	PSCP	Jul 2020	1	3	3	Acoustician input to assist architectural design. Quality control and monitoring to be checked on site.	2	3	6		Jan-20
5.12	ACOUSTICS: failure to achieve required design criteria. Additional works required to achieve specified performance criteria and re-testing required to areas.	PSCP	Jul 2020	1	3	3	Acoustician input to assist architectural design. Quality control and monitoring to be checked on site.	2	3	6		Jan-20
5.13	DDA COMPLIANCE: Additional works required to satisfy DDA requirements. Additional works required to satisfy DDA requirements not evident at Stage 2 e.g. level issues externally, colour contrast between components etc	PSCP	Jul 2020	1	3	3	DDA compliance statement to be provided by IBI. DDA design review to be carried out.	1	3	3		Jan-20
5.14	EXTERNAL ROAD REPAIRS: additional road repairs required due to excessive wear and tear of site traffic. Additional works / preparation required to	PSCP	Jul 2020	2	2	4	PSCP to carry out site dilapidation survey in advance and return site in condition obtained.	4	2	8		Jan-20

	bring base course up to standard following use for site traffic.											
5.15	CHANGE TO KEY STAFF: Due to length of contract duration there is a risk to a turnover in key staff members. Loss of continuity and relationships. Additional cost to bring new team members on board and bedding in period.	PSCP	Jul 2020	2	3	6		2	3	6		Jan-20
5.16	INFECTION CONTROL: Additional requirements not capture within Stage 2/3 design requested.	PSCP	Jul 2020	2	3	6	Ongoing engagement with Infection Control.	2	3	6		Jan-20
5.17	VIBRATION DISRUPTION Programme and cost implication due to unplanned stoppages.	PSCP	Jul 2020	1	3	3	Programme and methodology to be communicated to NHS and agreed in advance of works taking place.	2	3	6		Jan-20
5.18	BUILDABILITY Clash detection in design potential cost/programme and quality impact.	PSCP	Jul 2020	1	3	3	Use of BIM for clash detection. Review of existing as built information for any tie ins and early subcontractor engagement.	4	3	12		Jan-20

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5.19	LOGISTICS Adjacency of building to existing building and main entrance. Potential disruption, health & safety risk. Programme/cost implication for delay.	PSCP	Jul 2020	1	3	3	Pre-construction logistics planning to enable early plan to be developed for agreement with NHS.	4	3	12		Jan-20
5.2	FALSE FIRE ALARMS IN EXISTING BUILDING Potential disruption to users.	PSCP	Jul 2020	2	3	6	Communication with Estates to agree any isolation required in advance of works being carried out on existing site.	2	3	6		Jan-20
5.21	FIRE DURING CONSTRUCTION STAGE Health and safety risk. Disruption to site operation. Time and cost implication.	PSCP	Jul 2020	2	4	8	Fire strategy to be put in place and agreed prior to construction commencement.	2	4	8		Jan-20
6. Thir	rd Party/Stakeholder Issu	es										
6.1	BUILDING WARRANT APPROVAL Failure to obtain Building Warrant in line with programmed dates (16 weeks). Delay to obtaining key approvals and ultimately delay in the overall project programme.	PSCP	Dec 2018	4	4	16	Ongoing liaison with Building Control Department throughout the planning process to mitigate risk of delay to obtaining planning approvals.	4	4	16		Jan-20

6.2	BUILDING REGULATIONS 2015 Building regulations more onerous than previous standards. Additional cost and design implications associated with obtaining 2015 Building Regulation Compliance.	PSCP	Jul 2020	2	4	8	Ongoing liaison with Building Control Department throughout the planning process to mitigate risk of delay to obtaining approvals.	2	4	8		Jan-20
6.4	PLANNING CONDITIONS Planning conditions more onerous that anticipated from previous dialogue with the Planners. Additional cost to the project to comply with the planning condition.	PSCP	Jul 2020	3	4	12	Open dialogue with the Planners throughout pre-planning application stage	3	4	12		Jan-20
8. Pro	PROGRAMME RISK Poor construction performance and/or incorrect programme estimate. Delay to overall programme. Liquidated damages incurred by PSCP.	PSCP	Jul 2020	2	3	6	PSCP to closely monitor works progress once on site, to ensure appointed subcontractors are delivering works to the standards required and within the programme parameters.	2	3	6		Jan-20
8.2	PROGRAMME RISK Clinical orientation and commissioning delays due to lack of Contractor personnel availability. Delay to building handover.	PSCP	Jul 2020	2	3	6	PSCP to prepare a realistic commissioning programme that has committed resource for the commissioning phase of the works.	2	3	6		Jan-20

8.3	DESIGN PROGRAMME Inaccurate design programme for design release to support construction information. Potential delay in overall programme delivery if insufficient time allocated to the design programme.	PSCP	Dec 2018	2	3	6	PSCP design team leader to ensure that the design programme is realistic, including sufficient time for review and update of design as required. Stage 2 and 3 Design and Market testing programme periods to be reviewed	2	3	6		Jan-20
8.4	CONSTRUCTION PROGRAMME ESTIMATION ERROR Inaccurate estimation of construction phase duration. Construction handover date delayed.	PSCP	Jul 2020	2	3	6	PSCP to ensure that the construction programme is realistic and achievable,	3	3	9		Jan-20
8.5	LEAD IN PERIODS: change in stipulated lead in periods. Change in lead in periods resulting in delay to programme.	PSCP	Jul 2020	2	3	6	Monitoring market activity as construction progresses. Place orders early where possible.	2	3	6		Jan-20
8.6	ADDITIONAL STAFF: required at tail end of project to assist handover process. Additional provision of staff to manage works towards handover.	PSCP	Jul 2020	2	3	6	Workflow planning in parallel with programme.	2	3	6		Jan-20

8.7	INSTRUCTION TO STOP WORKS/NEW RESTRICTIONS: works suspended at hospital request due to nuisance / noise / vibration - operational issues not defined preconstruction. Implications could result in delay and disruption to planned sequence of works.	PSCP	Jul 2020	2	3	6	Management processes in place to report any matters arising and regular liaison between NHS and PSCP.	2	3	6		Jan-20
8.9	NPO: working period requires NPO to maintain programme/ risk of overrun. NPO allowance to be made.	PSCP	Jul 2020	2	2	4	Workflow planning in parallel with programme.	3	2	6		Jan-20
8.1	PERFORMANCE OF DESIGN TEAM: delays to issue of information / inadequate / incorrect information. Risk of late of inadequate information delaying and disrupting the planned progress of the works.	PSCP	Jul 2020	3	3	9	Production of construction issue information prior to commencing works on site to mitigate impact on critical path.	3	3	9		Jan-20
	ly Warnings New SER standards &	DCCD I	Jul 2020	3	3		Agrand King to appoint substructure	2	2			Jan-20
9.5	new SER standards & procedures for Building Warrant	PSCP	Jul 2020	3	3	9	Agreed Kier to appoint substructure contract packages prior to submission of warrant to enable design to be developed sufficiently to align with the SER standards.	2	3	6		Jan-∠∪

9.2	BIRD HAZARD MANAGEMENT PLAN Timeous issue of bird hazard management plan required to satisfy planning condition raised by Glasgow Airport.	PSCP	20 July 2018	2	3	6	Bird hazard management plan procured and concluded.	1	3	3		Jan-20