Wyndford Demolition

Risk Register	Preliminary Stage	
Version	7	
Date	01/12/2022	DEMOLITION
Author	Updated by Andrew Devine	

Ref	Category	Risk	Issue	Probability	Impact	Score	Mitigation	Owner(s)	Target Date	Status	% Resolved	Outcome/Update	Estimated Cost	Actual Cost	Cost Impact +/-
1.0	Programme														_
1.1	Operational	Risk of delivery dates not being met and potential financial impact once contractor is appointed.	Establish development programme and delivery dates for key critical path elements.	3	4	12	Agree delivery dates and critical path with all parties.	All	May-22	Open		Risk remains until completion			
2.0	Consents														
2.1	Operational	Planning (Prior Approval) to be confirmed	Timescales, consultations.	2	2	4	Formal sign off from planning may be required.	G3	Dec-22	Open		Submit prior approval application to planning department.			
2.2	Operational	Potential implications form consultation process with Planning Department.	Timescales and potential objections from neighbouring properties and owners during public consulations. SEPA involvement.	1	4	4	Early discussions with DRS. Maintain positive dialogue and clear, open communication. Community events and planning consultation process carried out.	G3	Dec-22	Open		Submit prior approval application to planning department.			
2.3	Operational	Building Standards to sign off Demolition Warrant application.	Potential objection to demolition methods if the contractor does not achieve warrant.	3	4	12	Formal sign off from building standards required. Early discussions with potential demolition contractors to understand preffered demolition methods.	PC	Apr-23	Open		Submit building warrant application to building standards & ensure Tender documentation states requriement for contractor to liaise with building standards to achieve warrant status.			
2.4	Operational	SEPA to sign off on Demolition proposals within close proximity to River Kelvin.	SEPA application still to be submitted. Timescales and potential objections to demolition methods.	3	4	12	Initial discussions with SEPA to achieve formal sign off from SEPA.	PC/G3	Dec-22	Open		Submit SEPA application.			
2.5	Operational	Ecologist sign off of potential ecological considerations that may arise. Roosting Bats - Risk of disturbing bat roosts. Tree Removals - Extent of unknown at this time and restrictions with potential nesting seasons. Risk to programme as no works may take place within the breeding season.	Unknown at this time pending ecological survey.	3	5	15	Formal sign off from Ecologist.	63	Dec-22	Open		Ecological Surveys are now complete and awaiting report. Currently being pursued by project architect.			
2.6		Wyndford Community Trust are threatening to submit a listed planning application for the 4 tower blocks.	Objection to demolition works if the application is sucessful.	3	5	15	Build justification on benefits of demolition + new build vs refurbishment of tower blocks, in the event that listed planning application is considered.	G3	Dec-22	Open					
3.0	Tender														
3.1	Operational	Tender document to comply with SBCC Demolition tender document for Wheatley Group.	Delay to release of tender documentation following review of Wheatley Group lawyers. Non compliant contractual clauses being released to tendering contractors.	2	2	4	Ensure document is compliant with most recent template as approved by Wheatley Group.	G3	Apr-22	Closed		Tender document to be compiled.			
3.2	Operational	Tender approval delayed, insufficient tender returns.	Delay to anticipated site commencement date. Potential for re- submission of Tender.	3	4	12	Wheatley to review with procurement.	G3	Apr-22	Open		Tender document to be compiled.			
4.0	Procurement														
4.1	Operational	Tender costs are higher than budget.	Project requires further significant value engineering	3	4	12	Further savings may require to be identified pending tender returns.	WG/G3	Jun-22	Open		Tender document to be compiled.			
4.2	Operational	Tender costs are higher than approved cost plan and appraisal	Project requires further significant value engineering	3	4	12	Further savings may need to be identified.	WG/G3	Apr-22	Open					
4.3		Personal Indemnity Cover	All parties to ensure that they carry the minimum personal indemnity cover, as stipulated by the client.	1	1	1	Appraisal of appointments and tender returns.	WG/G3	Apr-22	Closed					
5.0	Site Conditions & I	Design													

5.1	Operational	Site security, vandalism and theft	Increased cost and delays	4	3	12	As decants progress, units will remain unoccupied. Wheatley	PC/WG	Ongoing	Open	Risk remains until blocks are demolished.	
5.2	Operational	Attenuation tank within close proximity to site.		3	4	12	Group to consider temporary security. Principle contractor to design demolition methods to avoid potential damage to attenuation tank. Seek clarity from Scottish Water on anticipated completion date	PC	PC Appointment	Open	Risk remains until completion. Identify risks onrecord drawing.	
5.3	Operational	Decanting of Tenants	Delays if tenants refuse to leave tower blocks.	2	5	10	for works. WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	Dec-22	Open	Risk remains until completion	
5.4	Operational	Early Community Engagement	Potential for the surrounding community to object to demolition proposals and potential for tenants refusal to leave tower blocks.	2	2	4	WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	Apr-22	Open	Risk remains until completion	
5.5	Operational / Financial	Agreement on method of demolition	Principle contractors variable tendering prices given that demolition methods will not be stipulated within the tender documentation.	1	5	5	G3 to engage with demolition specialists to agree demolition methodology for tower blocks.	G3	May-22	Open	Risk remains until completion	
5.6	Operational / Financial	Structural Surveys to be carried out to assertain construction of tower blocks.	Unknown form of construction that could lead to financial implications.	1	4	4	Principle contractor to carry out CCTV surveys of Scottish Water sewerage systems to record dilapidation/condition surveys prior to demolition works progressing.	G3/PC	PC Appointment	Open	Risk remains until completion	
5.7	Operational	Roads/Traffic Management	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle designer to appraise until deemed satisfactory. Wider road network to be appriased to maintain access to surrounding neighbours. Temporary haul road to be considered for Distric Heating Centre as current access is via 151 Wyndford.	G3/PD	PC Appointment	Open	Risk remains until completion. Tender drawings allow for temporary haul road to District Heating Centre.	
5.8	Operational	River Kelvin within close proximity to site boundaries.	SEPA application required to be submitted and approved and potential delay to demolition works.	1	4	4	G3 to engage with SEPA at early stages to assertain requirements and achieve approval for methodology of demoltion works within close proximity to River Kelvin.	G3	Dec-22	Open	Risk remains until completion	
5.9	Operational / Financial	Asbestos content within Tower Blocks	Unknown volume of asbestos which could lead to financial implications.	1	4	4	ACS have been appointed to carry out demolition asbests surveys and oversee the asbestos removals.	WG/G3	Apr-22	Open	Asbestos surveys were icluded within the tender documentation and priced accordingly. Some areas were identified as being unable to access but the financial risk has been absorbed by the tendering contractors. Still risk of unknown asbestos content to certain location from H&S perspective.	
5.10	Financial	Recycling of Demolition Waste	Unknown construction that could lead to financial implications if disposal costs rise due to an inaccurate volume of recycling assumed.	2	4	8	G3 to carry out structural survey to determine form of construction of tower blocks. Asbestos surveys required to conclude exercise. New build development to be appriased to assertain approx quants of fill requirement.	WG/G3	Dec-22	Open	Allowance of 10km3 has been allowed for recycling of crushed material within demilition tender. Risk remains until completion	
5.11	Financial / Operational	Noise & Vibration Impact	Noise Impact and cost implications should additional measures be required.	3	3	9	Obtain noise and vibration impact assessment, all to comply with recommendations.	WG/G3	Dec-22	Open	Risk remains until completion	
5.12	Financial / Operational	Vibration Survey	Vibration Survey and development impact if found to be an issue.	3	3	9	Planning conditions to be reviewed for any requirements.	WG/G3	Dec-22	Open	Risk remains until completion	
5.13	Financial	Dilapidation Surveys	Dilapidation Surveys and existing defects and damage to surrounding areas not being recorded. Cost implications by potential claims.	2	4	8	Occupiers to be lettered regarding access and joint inspection with Roads Department on roads and footways to be carried out.	WG/G3/PC	Dec-22	Open	Risk remains until completion	

5.14	Operational	Undertaking Abestos Surveys	Contractor undertaking asbestos surveys to be aware of the sensative nature of the ongoing works as could lead to negative impact on overall progress if occupants become aware of ongoing preperations for demolition works.	2	2	4	Asbestos contrator to attend site with unmarked vans and operatives to be informed of sensitivity of information.	WG	Apr-22	Closed	Absestos surveys complete.		
5.15	Operational	Tree Removals - Ecological contraints that may prevent tree removals from being carried out.	Unknown at this time pending ecological survey.	2	2	4	Formal sign off from Ecologist.	G3	Dec-22	Open	Procure quotations for Ecological Surveys. Currently being pursued by project architect.		
5.16	Operational	Live bus route "94 " on Wyndford Road	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle contractor to liaise with local transport authority to ensure temporary alternative bus route is installed.	PC	Dec-22	Open	Risk remains until completion.		
6.0	Funding and exter					<u> </u>						II	
6.1	Political	Affect of Brexit	Cost of materials and availability of labour	0	2	0	Locally sourced materials	All	Ongoing	Open			
6.2	Political	Affect of Covid 19	Covid affecting ability to deliver to programme & risk of a future variant.	2	2	4	Social distancing measures in place and highlight potential delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project.	All	Ongoing	Open	Material supplies an issue. Households isolatons.		
7.0	Principle Designer												
7.1	Operational	Pre construction information not being released.	Delay to site start if not released.	1	3	3	PD to issue PCIP to suit programme.	G3	Jun-22	Closed	PCIP issued as part of Tender Information.		
7.2	Operational	Failure to obtain approval of Construction Phase Plan and delays to site start if not approved.	Delay to site start if not approved.	3	3	9	Principle Contractor to submit Construction Phase Plan for approval.	G3	Mar-23	Open	Risk remains until release if H&S CPP.		
7.3	Operational	F10 notification not submitted in accordance with programme.	Delay to site start if not submitted.	1	3	3	Principle Designer to lodge and provide copy for display.	G3	Mar-23	Open	Risk remains until site start.		
8.0	Utilities					I							
8.1	Operational / Financial	District Heating unit servicing tower blocks.	Delays and potential damages.	2	4	8	WG/G3 to arrange diversion/removal of pipework servicing the tower blocks and liaise with the networking companies to establish networking requirements to service the wider community.	WG/G3	Feb-23	Open	Risk remains until completion		
8.2	Operational	Drain Down of Distric Heating once properties are void.	The practicalities of draining the system.	2	4	8	Wheatley to investigate the procedures for draining the system i.e. volume of water and chemicals. Parties required to be involved.	WG/PC	Feb-23	Open	Risk remains until completion		
							WG/G3 to arrange diversion and removal of substation and liaise with the networking companies to establish networking requirements to service the wider community. Outcome of SP meeting 22/03/2022: VP advised that the substations in all blocks serve CCTV, street lighting, pump house, church. SP works to be carried out in two stages. Stage 1 disconnect streetlighting etc from substations. Stage 2 disconnect tower blocks for demolitoin (this may be done a block at a time). It may						

8.4	Operational / Financial	Disconnection of Radio Base Stations and associated equipment on roof of tower blocks.	Delays and potential damages.	2	5	10	WG/G3 to arrange removal of radio base stations and liaise with the networking companies to establish networking requirements to service the wider community.	WG/G3	Feb-23	Open	Radio MASTS operators include EE, Orange, Arqiva & Hutchison3G. Wheatley have attended meetings with the networking companies and designs are now progressing to accommodate the relocating of he radio stations.		
8.5		water drainage lines that may be affected	Potential damages to existing Scottish Water sewerage networks.	2	4	8	Principle contractor to carry out CCTV surveys of Scottish Water sewerage systems to record dilapidation/condition surveys prior to demolition works progressing.	G3/PC	PC Appointment	Open	Risk remains until completion		
8.6		Meter Removals Guru and SSE Meters (District Heating)	Removal and temporary storage of 339 Guru/Sharkey Meters. As of 22/09/22 there are 382 void properties.	2	4	8	Wheatley to explore options for temporary storage of guru meters and HIU equipment/parts. Wheatley to discuss with SSE possible benefits of offering up parts/equipment including pump stations. Wheatley to request confirmation from SSE regarding SSE meters (Not Guru) of disconnection procedures and if these are also required to be uplifted by SSE i.e. temp storage.	WG	Feb-23	Open	Risk remains until completion		
8.7	Operational	Meter Removals Scottish Power	Removal and temporary storage of SP meters. Scottish Power have confirmed there are 12 different suppliers that may seek to reclaim their meters.	2	4	8	Wheatley to explore options for temporary storage of meters and if these are also required to be uplifted by SP.	WG	Dec-22	Open	Risk remains until completion		
8.8	Operational	Booster Pump Housing adjacent to 151 Wyndford, services the 4 tower blocks	Pumping station to be decommissioned and outbuilding demolished as part of demolition works.	2	4	8	WG/G3 to arrange disconnection of existing pipework servicing the tower blocks. Pipework has been confirmed to contain asbestos	WG/G3	Dec-22	Open	Asbestos surveys are in hand for outbuilding and require to be included within tender documentation. Existing pipe network confirmed as having asbestos content. Risk remains until completion		
						0							

Probability	
Title	Score
Almost Certain	5
Likely	4
Moderate	3
Unlikely	2
Rare	1

Impact	
Title	Score
Catastrophic	5
Major	4
Moderate	3
Minor	2
Negligible	1

Overall Ris	k Score
PxI	Score
13 to 25	Unacceptable risk to be eliminated
7 to 12	Undesirable risk to be avoided
3 to 6	Acceptable provided management
1 to 2	No consideration
Owner	
WG	Wheatley Group
	Wheatley Group G3 - Contract Administrator/Engineer
G3	
WG G3 PD PC	G3 - Contract Administrator/Engineer
G3 PD	G3 - Contract Administrator/Engineer G3 Principal Designer
G3 PD PC	G3 - Contract Administrator/Engineer G3 Principal Designer Demolition Contractor

Wyndford Demolition

Risk Register	Preliminary Stage	
Version	8	
Date	01/02/2023	DEMOLITION
Author	Updated by Andrew Devine	

Ref	Category	Risk	Issue	Probability	Impact	Score	Mitigation	Owner(s)	Target Date	Status	% Resolved	Outcome/Update	Estimated Cost	Actual Cost	Cost Impact +/-
1.0	Programme														
1.1	Operational	Risk of delivery dates not being met and potential financial impact once contractor is appointed.	Establish development programme and delivery dates for key critical path elements.	3	4	12	Agree delivery dates and critical path with all parties.	All	May-22	Open		Risk remains until completion			
2.0	Consents														
2.1	Operational	Planning (Prior Approval) to be confirmed	Timescales, consultations.	2	2	4	Formal sign off from planning is required.	G3	Mar-23	Open		Submit prior approval application to planning department.			
2.2	Operational	Potential implications form consultation process with Planning Department.	Timescales and potential objections from neighbouring properties and owners during public consulations. SEPA involvement.	1	4	4	Early discussions with DRS. Maintain positive dialogue and clear, open communication. Community events and planning consultation process carried out.	G3	Mar-23	Open		Submit prior approval application to planning department.			
2.3	Operational	Building Standards to sign off Demolition Warrant application.	Potential objection to demolition methods if the contractor does not achieve warrant.	3	4	12	Formal sign off from building standards required. Early discussions with potential demolition contractors to understand preffered demolition methods.	PC	Apr-23	Open		Submit building warrant application to building standards & ensure Tender documentation states requriement for contractor to liaise with building standards to achieve warrant status.			
2.4	Operational	SEPA to sign off on Demolition proposals within close proximity to River Kelvin.	SEPA application still to be submitted. Timescales and potential objections to demolition methods.	3	4	12	Initial discussions with SEPA to achieve formal sign off from SEPA.	PC/G3	Mar-23	Open		Submit SEPA application.			
2.5	Operational	Ecologist sign off of potential ecological considerations that may arise. Roosting Bats - Risk of disturbing bat roosts. Tree Removals - Extent of unknown at this time and restrictions with potential nesting seasons. Risk to programme as no works may take place within the breeding season.	Unknown at this time pending ecological survey.	3	5	15	Formal sign off from Ecologist.	G3	Mar-23	Open		Ecological Surveys are now complete and report received. Bats located within garage alotments only. Additional surveys to be carried out in April.			
2.6	Operational	Wyndford Community Trust are threatening to submit a listed planning application for the 4 tower blocks.	Objection to demolition works if the application is sucessful.	3	5	15	Build justification on benefits of demolition + new build vs refurbishment of tower blocks, in the event that listed planning application is considered.	G3	Mar-23	Closed		HES have declined the listed building application.			
3.0	Tender							_							
3.1	Operational	Tender document to comply with SBCC Demolition tender document for Wheatley Group.	Delay to release of tender documentation following review of Wheatley Group lawyers. Non compliant contractual clauses being released to tendering contractors.	2	4	8	Ensure document is compliant with most recent template as approved by Wheatley Group.	G3	Apr-22	Closed		Tender documents returned and appointment of contractor complete.			
3.2	Operational	Tender approval delayed, insufficient tender returns.	Delay to anticipated site commencement date. Potential for re- submission of Tender.	3	4	12	Wheatley to review with procurement.	G3	Apr-22	Closed		Contractor appointed.			
4.0	Procurement			_					-		-		-		_
4.1	Operational	Tender costs are higher than budget.	Project requires further significant value engineering	3	4	12	Further savings may require to be identified pending tender returns.	WG/G3	Jun-22	Closed		Contractor appointed.			
4.2	Operational	Tender costs are higher than approved cost plan and appraisal	Project requires further significant value engineering	3	4	12	Further savings may need to be identified.	WG/G3	Apr-22	Closed					
4.3	Operational	Personal Indemnity Cover	All parties to ensure that they carry the minimum personal indemnity cover, as stipulated by the client.	1	1	1	Appraisal of appointments and tender returns.	WG/G3	Apr-22	Closed		Appointments complete.			
5.0	Site Conditions & I	Design													

5.1	Operational	Site security, vandalism and theft	Increased cost and delays	4	3	12	As decants progress, units will remain unoccupied. Wheatley Group to consider temporary security.	PC/WG	Ongoing	Open	Risk remains until blocks are demolished.		
5.2	Operational	Attenuation tank within close proximity to site.	Potential Damages & ongoing site works.	3	4	12	Principle contractor to design demolition methods to avoid potential damage to attenuation tank. Seek clarity from Scottish Water on anticipated completion date for works.	PC	PC Appointment	Open	Risk remains until completion. Identify risks onrecord drawing.		
5.3	Operational	Decanting of Tenants	Delays if tenants refuse to leave tower blocks.	2	5	10	WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	Apr-23	Open	Risk remains until completion		
5.4	Operational	Early Community Engagement	Potential for the surrounding community to object to demolition proposals and potential for tenants refusal to leave tower blocks.	2	2	4	WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	Apr-23	Open	Risk remains until completion		
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5.7	Operational	Roads/Traffic Management	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle designer to appraise until deemed satisfactory. Wider road network to be appriased to maintain access to surrounding neighbours. Temporary haul road to be considered for Distric Heating Centre as current access is via 151 Wyndford.	G3/PD	PC Appointment	Open	Risk remains until completion. Tender drawings allow for temporary haul road to District Heating Centre.		
5.8	Operational	River Kelvin within close proximity to site boundaries.	SEPA application required to be submitted and approved and potential delay to demolition works.	1	4	4	G3 to engage with SEPA at early stages to assertain requirements and achieve approval for methodology of demoition works within close proximity to River Kelvin.	G3	Apr-23	Open	Risk remains until completion		
5.9	Operational / Financial	Asbestos content within Tower Blocks	Unknown volume of asbestos which could lead to financial implications.	1	4	4	ACS have been appointed to carry out demolition asbests surveys and oversee the asbestos removals.	WG/G3	Apr-23	Open	Asbestos surveys were icluded within the tender documentation and priced accordingly. Some areas were identified as being unable to access but the financial risk has been absorbed by the tendering contractors. Still risk of unknown asbestos content to certain location from H&S perspective.		
5.10	Financial	Recycling of Demolition Waste	Unknown construction that could lead to financial implications if disposal costs rise due to an inaccurate volume of recycling assumed.	2	4	8	G3 to carry out structural survey to determine form of construction of tower blocks. Asbestos surveys required to conclude exercise. New build development to be appriased to assertain approx quants of fill requirement.	WG/G3	Apr-23	Open	Allowance of 10km3 has been allowed for recycling of crushed material within demilition tender. Risk remains until completion		
5.11	Financial / Operational	Noise & Vibration Impact	Noise Impact and cost implications should additional measures be required.	3	3	9	Obtain noise and vibration impact assessment, all to comply with recommendations.	WG/G3	Apr-23	Open	Risk remains until completion		
5.12	Financial / Operational	Vibration Survey	Vibration Survey and development impact if found to be an issue.	3	3	9	Planning conditions to be reviewed for any requirements.	WG/G3	Apr-23	Open	Risk remains until completion		
5.13	Financial	Dilapidation Surveys	Dilapidation Surveys and existing defects and damage to surrounding areas not being recorded. Cost implications by potential claims.	2	4	8	Occupiers to be lettered regarding access and joint inspection with Roads Department on roads and footways to be carried out.	WG/G3/PC	Apr-23	Open	Risk remains until completion		

5.14	Operational	Undertaking Abestos Surveys	Contractor undertaking asbestos surveys to be aware of the sensative nature of the ongoing works as could lead to negative impact on overall progress if occupants become aware of ongoing preperations for demolition works.	2	2	4	Asbestos contrator to attend site with unmarked vans and operatives to be informed of sensitivity of information.	WG	Apr-22	Closed	Absestos surveys complete.		
5.15	Operational	Tree Removals - Ecological contraints that may prevent tree removals from being carried out.	Unknown at this time pending ecological survey.	2	2	4	Formal sign off from Ecologist.	G3	Apr-23	Open	Procure quotations for Ecological Surveys. Currently being pursued by project architect.		
5.16	Operational	Live bus route "94 " on Wyndford Road	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle contractor to liaise with local transport authority to ensure temporary alternative bus route is installed.	PC	Apr-23	Open	Risk remains until completion.		
6.0													
6.1	Funding and exten	Affect of Brexit	Cost of materials and availability of labour	0	2	0	Locally sourced materials	All	Ongoing	Open			
6.2	Political	Affect of Covid 19	Covid affecting ability to deliver to programme & risk of a future variant.	2	2	4	Social distancing measures in place and highlight potential delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project.	All	Ongoing	Open	Material supplies an issue. Household isolations.		
		l									L		
7.0	Principle Designer Operational	Pre construction information not being released.	Delay to site start if not released.	1	3	3	PD to issue PCIP to suit programme.	G3	Jun-22	Closed	PCIP issued as part of Tender Information.		
7.2	Operational	Failure to obtain approval of Construction Phase Plan and delays to site start if not approved.	Delay to site start if not approved.	3	3	9	Principle Contractor to submit Construction Phase Plan for approval.	G3	Mar-23	Open	Risk remains until release if H&S CPP.		
7.3	Operational	F10 notification not submitted in accordance with programme.	Delay to site start if not submitted.	1	3	3	Principle Designer to lodge and provide copy for display.	G3	Mar-23	Open	Risk remains until site start.		
8.0	Utilities												
8.1	ounues												
	Operational / Financial	District Heating unit servicing tower blocks.	Delays and potential damages.	2	4	8	WG/G3 to arrange diversion/removal of pipework servicing the tower blocks and liaise with the networking companies to establish networking requirements to service the wider community.	WG/G3	Apr-23	Open	City Building Appointed to remove meters, cap supplies and drain down system. Risk remains until completion		
8.2		District Heating unit servicing tower blocks. Drain Down of Distric Heating once properties are void.	Delays and potential damages. The practicalities of draining the system.	2	4	8	tower blocks and liaise with the networking companies to establish networking requirements to service the wider	WG/G3 WG/PC	Apr-23 Apr-23	Open Open	supplies and drain down system.		

8.4	Operational / Financial	Disconnection of Radio Base Stations and associated equipment on roof of tower blocks.	Delays and potential damages.	2	5		WG/G3 to arrange removal of radio base stations and liaise with the networking companies to establish networking requirements to service the wider community.	WG/G3	Apr-23	Open	Radio MASTS operators include EE, Orange, Arqiva & Hutchison30. Wheatley have attended meetings with the networking companies and designs are now progressing to accommodate the relocating of he radio stations.		
8.5	Operational / Financial		Potential damages to existing Scottish Water sewerage networks.	2	4	8	Principle contractor to carry out CCTV surveys of Scottish Water sewerage systems to record dilapidation/condition surveys prior to demolition works progressing.	G3/PC	PC Appointment	Open	Risk remains until completion		
8.6		Meter Removals Guru and SSE Meters (District Heating)	Removal and temporary storage of Guru/Sharkey Meters. Staggered decants.	2	4		Wheatley to explore options for temporary storage of guru meters and HIU equipment/parts. Wheatley to discuss with SSE possible benefits of offering up parts/equipment including pump stations. Wheatley to request confirmation from SSE regarding SSE meters (Not Guru) of disconnection procedures and if these are also required to be uplifted by SSE i.e. temp storage.	WG	Apr-23	Open	Risk remains until completion		
8.7	Operational	Meter Removals Electrical	Removal and temporary storage of SP meters. Scottish Power have confirmed there are 12 different suppliers that may seek to reclaim their meters.	2	4	8	Wheatley to explore options for temporary storage of meters and if these are also required to be uplifted by SP.	WG	Apr-23	Open	Risk remains until completion		
8.8	Operational	Booster Pump Housing adjacent to 151 Wyndford, services the 4 tower blocks.	Pumping station to be decommissioned and outbuilding demolished as part of demolition works.	2	4	8	WG/G3 to arrange disconnection of existing pipework servicing the tower blocks. Pipework has been confirmed to contain asbestos	WG/G3	Apr-23	Open	Asbestos surveys are in hand for outbuilding and require to be included within tender documentation. Existing pipe network confirmed as having asbestos content. Risk remains until completion		
						0							

Probability								
Title	Score							
Almost Certain	5							
Likely	4							
Moderate	3							
Unlikely	2							
Rare	1							

Impact	
Title	Score
Catastrophic	5
Major	4
Moderate	3
Minor	2
Negligible	1

Overall Risk	k Score						
PxI	Score						
13 to 25	Unacceptable risk to be eliminated						
7 to 12	Undesirable risk to be avoided						
3 to 6	Acceptable provided management						
1 to 2	No consideration						
Owner							
WG	Wheatley Group						
G3	G3 - Contract Administrator/Engineer						
PD	G3 Principal Designer						
PC	Demolition Contractor						
NBM	NBM - Quantity Surveyor						
PS	Perses Ltd - Specialist Demolition Sub-Consultant						

Wyndford Demolition

Risk Register Preliminary Stage

 Version
 9

 Date
 01/05/2023

Author Updated by Andrew Devine

DEMOLITION

Risk remains until completion
Prior approval application submitted and liasons
Prior approval application submitted and liasons
ongoing.
Prior approval application submitted and liasons ongoing.
Building warrant application submitted and ongoing liasons with building standards underway. Separate application submitted to cover garage allotments and allow their demolition to commence as part of enabeling works.
Submit SEPA application.
Ecological Surveys are now complete and report received. Bats located within garage allotments only. Additional surveys to be carried out in April to carry nocturnel surveys of tower blocks and additional bird nesting surveys.
HES have declined the listed building application.
Tender documents returned and appointment of contractor complete.
Contractor appointed.
Contractor appointed.

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4 .2	Operational	Tender costs are higher than approved- cost plan and appraisal-	Project requires further significant- value engineering	3	4	12	Further savings may need to be identified.	WG/G3	Apr-22	Closed		
4.3	Operational	Personal Indemnity Cover	All parties to ensure that they carry the minimum personal indemnity cover, as- stipulated by the client.	1	1	£	Appraisal of appointments and tender returns.	WG/G3	Apr 22	Closed		Appointments complete.
5.0	Site Conditions &	Design										
5.1	Operational	Site security, vandalism and theft	Increased cost and delays	4	3	12	As decants progress, units will remain unoccupied. Wheatley Group to consider temporary security.	PC/WG	Ongoing	Open		Risk remains until blocks are demolished.
5.2	Operational	Attenuation tank within close proximity to site.	Potential Damages & ongoing site works.	3	4	12	Principle contractor to design demolition methods to avoid potential damage to attenuation tank. Seek clarity from Scottish Water on anticipated completion date for works.	PC	Jun-23	Open		Risk remains until completion. Contractor to Identify location and exclusion zones in CPP.
5.3	Operational	Decanting of Tenants	Delays if tenants refuse to leave tower blocks.	2	5	10	WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	May-23	Open		Risk remains until blocks are fully decanted. WG to seek legal guidance for removing tenants who refuse to leave.
5.4	Operational	Early Community Engagement	Potential for the surrounding community to object to demolition proposals and potential for tenants refusal to leave tower blocks.	2	2	4	WG to engage with tenants at early stages to mitigate risk to delay to contract commencement.	WG	May-23	Open		Risk remains until completion
5.5	Operational / Financial	Agreement on method of demolition	Principle contractors variable tendering prices given that demolition methods will not be stipulated within the tender documentation.	1	5	5	G3 to engage with demolition specialists to agree demolition methodology for tower blocks.	G3	May-23	Open		Risk remains until completion
5.6	Operational / Financial	Structural Surveys to be carried out to assertain construction of tower blocks.	Unknown form of construction that could lead to financial implications.	1	4	4	Principle contractor to carry out CCTV surveys of Scottish Water sewerage systems to record dilapidation/condition surveys prior to demolition works progressing.	G3/PC	Site handover to PC	Open		Risk remains until completion
5.7	Operational	Roads/Traffic Management	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle designer to appraise until deemed satisfactory. Wider road network to be appriased to maintain access to surrounding neighbours. Temporary haul road to be considered for Distric Heating Centre as current access is via 151 Wyndford.	G3/PD	May-23	Open		Risk remains until completion. Contractor to establish traffic management within CPP.
5.8	Operational	River Kelvin within close proximity to site boundaries.	SEPA application required to be submitted and approved and potential delay to demolition works.	1	4	4	G3 to engage with SEPA at early stages to assertain requirements and achieve approval for methodology of demoltion works within close proximity to River Kelvin.	G3	May-23	Open		Risk remains until completion
5.9	Operational / Financial	Asbestos content within Tower Blocks	Unknown volume of asbestos which could lead to financial implications.	1	4	4	ACS have been appointed to carry out demolition asbests surveys and oversee the asbestos removals.	WG/G3	May-23	Open		Asbestos surveys were icluded within the tender documentation and priced accordingly. Some areas were identified as being unable to access but the financial risk has been absorbed by the tendering contractors. Still risk of unknown asbestos content to certain location from H&S perspective. ACS have been appointed as 3rd party to review asbestos removals.
5.10	Financial	Recycling of Demolition Waste	Unknown construction that could lead to financial implications if disposal costs rise due to an inaccurate volume of recycling assumed.	2	4	8	G3 to carry out structural survey to determine form of construction of tower blocks. Asbestos surveys required to conclude exercise. New build development to be appriased to assertain approx quants of fill requirement.	WG/G3	Ongoing until new build proposals are confirmed.	Open		Allowance of 10km3 has been allowed for recycling of crushed material within demilition tender. Risk remains until new build proposals have been confirmed.

5.11	Financial / Operational	Noise & Vibration Impact	Noise Impact and cost implications should additional measures be required.	3	3	9	Obtain noise and vibration impact assessment, all to comply with recommendations.	WG/G3	Jul-23	Open	Risk remains until completion
5.12	Financial / Operational	Vibration Survey	Vibration Survey and development impact if found to be an issue.	3	3	9	Planning conditions to be reviewed for any requirements.	WG/G3	Jul-23	Open	Risk remains until completion
5.13	Financial	Dilapidation Surveys	Dilapidation Surveys and existing defects and damage to surrounding areas not being recorded. Cost implications by potential claims.	2	4	8	Occupiers to be lettered regarding access and joint inspection with Roads Department on roads and footways to be carried out.	WG/G3/PC	First week of site pocession.	Open	To be carried out on first week of contractors pocession.
5.14	Operational	Undertaking Abestos Surveys	Contractor undertaking asbestos surveys to be aware of the sensative- nature of the ongoing works as could- lead to negative impact on overall- progress if occupants become aware of- ongoing preperations for demolition- works.	2	2	4	Asbestos contrator to attend site with unmarked vans and operatives to be informed of sensitivity of information	₩G	Apr-22	Closed	Absestos surveys complete.
5.15	Operational	Tree Removals - Ecological contraints that may prevent tree removals from being carried out.	Unknown at this time pending ecological survey.	2	2	4	Formal sign off from Ecologist.	G3	Jun-23	Open	Procure quotations for Ecological Surveys. Currently being pursued by project architect.
5.16	Operational	Live bus route "94 " on Wyndford Road	Negative impact on surrounding community.	1	4	4	Principle contractor to include a traffic management plan within their contruction phase plan. Principle contractor to liaise with local transport authority to ensure temporary alternative bus route is installed.	PC	Jun-23	Open	Risk remains until completion. Contractor to establish Traffic Management within CPP.
6.0	Funding and exte							I			
6.1	Political	Affect of Brexit	Cost of materials and availability of labour	0	2	0	Locally sourced materials	All	Ongoing	Open	
6.2											
	Political	Affect of Covid 19	Covid affecting ability to deliver to programme & risk of a future variant.	2	2	4	Social distancing measures in place and highlight potential delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project.	All	Ongoing	Open	Material supplies an issue. Household isolations.
7.0				2	2	4	delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are	All	Ongoing	Open	Material supplies an issue. Household isolations.
7.0	Political Principle Designe			2	2	4	delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are	All	Ongoing	Open	Material supplies an issue. Household isolations.
7.0 7.1				2	2	4	delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are	All 63	Ongoing Jun 22	Open Closed	Material supplies an issue. Household isolations. PCIP issued as part of Tender Information.
	Principle Designe	r Pre construction information not being	programme & risk of a future variant.				delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project.				
7.1	Principle Designe Operational	P re construction information not being released. Failure to obtain approval of Construction Phase Plan and delays to site start if not	programme & risk o ^f a future variant. Dela y to site start if not released.	4	3	з	delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project. PD to issue PCIP to suit programme. Principle Contractor to submit Construction Phase Plan for	63	Jun 22	Closed	PCIP issued as part of Tender Information. Risk remains until release of H&S CPP. G3 require
7.1 7.2	Principle Designe Operational Operational	P re construction information not being released. Failure to obtain approval of Construction Phase Plan and delays to site start if not approved. F10 notification not submitted in-	programme & risk of a future variant. Delay to site start if not released. Delay to site start if not approved.	± 3	3	3	delays/issues and agree any mitigation measures as they arise. Potential loss of key staff and ensuring staff on stand by are familiar with the project. PD to issue PCIP to suit programme. Principle Contractor to submit Construction Phase Plan for approval.	G 3 PC/PD	Jun-22 May-23	Closed	PCIP issued as part of Tender Information. Risk remains until release of H&S CPP. G3 require contractors CPP 2 weeks prior to site start.

8.2	Operational	Drain Down of Distric Heating once properties are void.	The practicalities of draining the system.	2	4	8	Wheatley to investigate the procedures for draining the system i.e. volume of water and chemicals. Parties required to be involved.	WG/PC	Jun-23	Open	City Building Appointed to remove meters. SD to appoint Vital for final capping and drain down system. Risk remains until completion
8.3	Operational / Financial	Substation within tower block.	Delays and potential damages.	2	4	8	Phase 1 & 2 of the LV Diversion works complete. Phase 1 works included the diversion of the LV cable that services St Gregory's church and the supply from 191 Wyndford Road to the substation at Maryhill Health Centre. Phase 2 of LV Diversion works include the low voltage cabling that services the street lighting & CCTV located along Wyndford Road. The supplies are to be diverted from 171 Wyndford Road & 151 Wyndford Road to the multi occupancy maisonettes at Melvaid Place. HV diversion works remain outstanding, to be concluded following the full decant of all tower blocks.	WG/G3	Jun-23	Open	Risk remains until completion Fire & Rescue Service regarding the time sequencing for the disconnection of the pump house outbuilding servicing wet risers. SPEN are aware of this outstanding element.
8.4	Operational / Financial	Disconnection of Radio Base Stations and associated equipment on roof of tower blocks.	Delays and potential damages.	2	4	8	WG/G3 to arrange removal of radio base stations and liaise with the networking companies to establish networking requirements to service the wider community.	WG/G3	Jun-23	Open	Radio MASTS operators include EE, Orange, Arqiva & Hutchison3G. Wheatley have attended meetings with the networking companies and designs are now progressing to accommodate the relocating of he radio stations.
8.5	Operational / Financial	CCTV Surveys for existing foul and surface water drainage lines that may be affected by ongoing demolition works.	Potential damages to existing Scottish Water sewerage networks.	2	4	8	Principle contractor to carry out CCTV surveys of Scottish Water sewerage systems to record dilapidation/condition surveys prior to demolition works progressing.	G3/PC	PC Appointment	Open	CCTV to be carried out as part of delapidation surveys on pocession of site.
8.6	Operational	Meter Removals Guru and SSE Meters (District Heating)	Removal and temporary storage of Guru/Sharkey Meters. Staggered decants.	1	4	4	Wheatley to explore options for temporary storage of guru meters and HIU equipment/parts. Wheatley to discuss with SSE possible benefits of offering up parts/equipment including pump stations. Wheatley to request confirmation from SSE regarding SSE meters (Not Guru) of disconnection procedures and if these are also required to be uplifted by SSE i.e. temp storage.	WG	Jun-23	Open	CB nearing conclusion of meter and boiler removals.
8.7	Operational	Meter Removals Electrical	Removal and temporary storage of SP meters. Scottish Power have confirmed there are 12 different suppliers that may seek to reclaim their meters.	1	4	4	Wheatley to explore options for temporary storage of meters and if these are also required to be uplifted by SP.	WG	Jun-23	Open	WG have esablished communication with suppliers and meter removals are ongoing.
8.8	Operational	Booster Pump Housing adjacent to 151 Wyndford, services the 4 tower blocks.	Pumping station to be decommissioned and outbuilding demolished as part of demolition works.	2	4	8	WG/G3 to arrange disconnection of existing pipework servicing the tower blocks. Pipework has been confirmed to contain asbestos	WG/G3	Jul-23	Open	Asbestos surveys are in hand for outbuilding and require to be included within tender documentation. Existing pipe network confirmed as having asbestos content. Fire and Rescue to be contacted to confirm if wet risers require servicing throughout demolition works.
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Probability								
Title	Score							
Almost Certain	5							
Likely	4							
Moderate	3							
Unlikely	2							
Rare	1							

Impact								
Title	Score							
Severe	5							
Major	4							
Moderate	3							
Minor	2							
Negligible	1							

Overall Risk Score							
PxI	Score						
13 to 25	Unacceptable risk to be eliminated						
7 to 12	Undesirable risk to be avoided						
3 to 6	Acceptable provided management						
1 to 2	No consideration						

Owner	
WG	Wheatley Group
G3	G3 - Contract Administrator/Engineer
PD	G3 Principal Designer
PC	Safedem - Demolition Contractor
NBM	NBM - Quantity Surveyor
PS	Perses Ltd - Specialist Demolition Sub-Consultant