

## Landscape Design Risk Register

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Project: Building S4, Kings Cross

Job No: 1620006900

Client: Argent

Issue date: 11/11/2021

Rev: PO2



Site Wide (SW)									
Hazard Identification					Design Mitigation				
Ref No.	Item / Activity	Hazard	Persons at Risk	High/Medium/Low	Design measures taken, or to be taken, to eliminate or reduce the hazard	Action by	By When	Critical H&S Design Assumptions / Information / Outline of Required Controls	Open/Closed Transfer to H&S File
01	Risk of fall in locations where raised planters are positioned adjacent to balustrades, effectively reducing height of railings.	Fall injury risk if raised planters are used to climb over the balustrades	End user	Low	Offset planters from edge of terrace by min 1100mm following diagrammatic studies using average 5 year old height. No planters placed adjacent to balustrades and balustrade height Raised on 9FL communal SRT to 1300mm. Perimeter planters on LVL 1 are located on outer edge of balustrade and are not accessible to climb on.	RUK/ Contractor	Construction Phase		Open
02	Lifting trees to roof level requires appropriate heavy lifting equipment (such as crane) appropriate to raise and position approx. 250kg trees into planting locations.	Risk of damage to trees/completed building. Risk of injury due to falling debris	Construction workers	Medium	Suitable lifting equipment to be used, and trees to be secured appropriately during lifting (i.e. strapping and guide ropes). Area beneath lifting area to be fenced off incase of falling debris.	Contractor	Construction Phase	Contractor to provide plan of exclusion zone during use of cranes to lift trees.	Open
03	Regular maintenance of planting to roof terraces will require trained staff to accessing raised planters near to balustrades.	Fall injury risk when undertaking maintenance near to balustrade.	Maintenance operatives/ Construction workers	Low	Use of long-reach tools as needed to prune trees. Use of MEWP/scaffolding to maintain 1FL terraces from ground floor. Where possible, planting maintenance to be undertaken away from balustrade. Anchor point and hand rail for biodiverse roof planting areas (under architects scope).	RUK/ A&M/ Contractor	Construction Phase	Biodiverse roof still in abeyance. Access strategy to be confirmed by A&M.	Open
04	Securing large trees. Trees will need to be secured to mitigate risk of blowing over or moving in high winds.	Risk of injury if plants are not secured appropriately. Risk of damage to building and/or tree.	End user/ Maintenance operatives	Low	Suitable anchoring systems should be used when planting trees that pose a risk of falling (i.e. anything over 1.8m), such as underground guying system. Tall Trachycarpus trees will require additional fixing back to anchor point on screens/facades.	RUK/ Contractor	Construction Phase		Open
05	Cutting paving slabs on site. Use of pedestal system reduces the need for cutting pavers, however, due to curving planters, some pavers will need to be sawn on site.	Risk injury when using cutting equipment and risk of inhalation of dust particles.	Construction workers	Low	Suitable training and appropriate use of PPE and masks. Design to minimize requirement for cutting where possible.	RUK/ Contractor	Construction Phase		Open
06	Risk of falling branches in high wind.	Falling branches pose risk of injury if blown clear of terraces.	End user/ Public	Low	Specified trees resistant to wind. Regular arboricultural checks once trees reach maturity. Regular checks that rootball and anchor system have not become exposed, ensure soil coverage is thorough. Weekend branches to be removed as part of routine maintenance. Trees positioned away from the edge of terraces	RUK/ Contractor	Construction Phase	If tree species specified in schedule need to be sourced, Landscape architect to approve species change to check wind resistant. Maintenance operatives to be briefed. Qualified arboriculturist to be engaged into maintenance team.	Open

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07	Falling furniture	Potential for unfixed furniture to be blown, or thrown from terraces.	End user/ Public	Low	All furniture to be securely fixed in place to manufacturers recommendations. No un-fixed furniture to be specified.	RUK/ Contractor	Construction Phase		Open
08	Wind lift of log piles and sand surface treatment of mounds from biodiverse roofs	Risk of injury from sand/ grit in eyes and/or injury from falling logs or debris	End user/ Public	Low	Use larger logs with lower likelihood of displacement and ensure they are well bedded down into substrate. Maintenance inspections to check for smaller loose pieces which may become hazardous. Sand surface should be well watered in and irrigation maintained to prevent very dry conditions which will loosen material.	RUK/ Contractor	Construction Phase		

**Design Mitigation:** All risks, including risks that are normal to the type of work, should be avoided or reduced as far as reasonably practicable by altering the design.

**Significant Residual Risks:** , A 'residual risk' is one that remains after design mitigation. Whatever its likelihood/severity a residual risk, is 'significant' only if it is unusual, unexpected, abnormal or difficult to manage, assuming a competent contractor.