DEMOLITION RISK ASSESMENT

Site Name	Agar Grove Phase 2	**Location**	Agar Grove Camden	**Date:**	2-3-18
Assessor	ST	**Operation**	Demolition and soft strip	**Ref No:**	001

Likelihood	How often could the hazard occur? Consider the task, frequency, duration, method of work, Employees involved.
Severity	How serious would the hazard's effects be if Realized? Consider the type of hazard, biological, ergonomic, physical and chemical.
Risk	Likelihood x Severity

RISK RATING = Likelihood (L) x Severity (S)		**HAZARD SEVERITY (S)** 1 **Negligible** Negligible injury, no absence from work	2 **Slight** Minor injury requiring first aid treatment	3 **Moderate** Injury leading to a lost time accident	4 **High** Involving a single persons serious injury/death	5 **Very High** Multiple serious injuries/death
1	**Very Unlikely** A freak combination of factors would be required for an incident / accident to result	LOW	LOW	LOW	LOW	LOW
2	**Unlikely** A rare combination of factors would be required for an incident /accident to result	LOW	LOW	LOW	MEDIUM	MEDIUM
3	**Possible** Could happen when accidental factors are present but otherwise unlikely	LOW	LOW	MEDIUM	HIGH	HIGH
4	**Likley** Not certain to happen but an additional factor may result in an incident/accident	LOW	MEDIUM	HIGH	HIGH	HIGH
5	**Very Likely** Almost inevitable that an incident / accident would result	LOW	MEDIUM	HIGH	HIGH	HIGH

LOW RISK (Score 1-6)	May be acceptable, however, review task to see if risk can be reduced further
MEDIUM RISK (Score 8-10)	Task should only proceed with appropriate consultation with specialist personnel and HS&E team. Where possible the task should be refined to take account of the hazards involved or the risks should be reduced further prior to task commencement
HIGH RISK (Score 12-25)	Task must not proceed. It should be redfined further control measures put in place to reduce risk. The controls should be re-assessed for adequacy prior to work commencement.

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HAZARDS	PERSONS AFFECTED	RISK			CONTROL MEASURES (List control measures that are provided and those required)	RISK		
		L	S	R		L	S	R
Planning – Poor execution of works	All	2	5	10	All Demolition works should be planned by a competent skilled and experienced team in line with BS 6187:2011 and best practice guidelines available from the NFDC, to ensure method and processes proposed are suitable given the site restraints. Clients should provide pre-construction information and consultants such as Structural Engineers, Demolition Engineers, temporary works Engineers and Health and Safety consultants should be employed to analysis the projects Works and planning should be supervised to ensure all operatives are fully briefed and conversant with equipment, method and scheme	1	4	4
Traffic Management - Vehicle collision and impact injures	All	4	5	20	Ensure an adequate traffic management plan (TMP) is in place and communicated to all. The TMP should avoid the need for reversing, employ one way systems and ensure operatives and plant/vehicles are segregated Were unavoidable Banksmen should control all reversing vehicles and vehicles leaving site. All vehicles leaving site should leave in forward gear only. All drivers of vehicles are to abide by site specific rules pertaining to speed restriction etc. i.e. 5mph. On site pedestrian's routes to be established particularly at the site entrance and where plant and operatives interface. Where practically possible all deliveries are to be notified in advance. Where reasonably practicable all traffic movement off site (waste transfer, plant delivery etc.) to be limited to the quieter periods of the day i.e. avoiding school and office start, dinner and finishing times.	1	5	5
Lifting operations – crushing	Operatives	3	4	12	A suitable project if plan should be developed by a skilled competent person. All lifting equipment should be tested, certified and regularly inspected to ensure suitability for use. Were large plant is being employed consideration should be given to ground conditions and imposed loads of outriggers.	1	4	4

Manual lifting – injury to operative					All Loads should be assessed on an operative-by-operative, lift-by-lift basis. There will be no maximum or minimum lift this should be assessed by the operative undertaking the lift. All lifts are to be undertaken in line with the on-site manual handling assessment form Ensure all access and egress routes are planned to avoid slips trips and falls Were possible manual handling should be avoided with the use of pallet trucks and sack barrows then 2-man lift should be assessed undertaken			
Hazardous Sub-stances	Operatives, members of public	2	3	6	Identify and assess any hazardous substances likely to be encountered or used. The specific Material Safety Data sheet and COSSH assessment sheet will be reviewed on site. Operatives are to ensure they are wearing gloves, glasses and coveralls and any other required PPE Spills are to be cleaned immediately with no waste product washed into the drains Refer to COSHH Regulations and sheets for further information	1	3	3
Contact of sub-stance with skin/Eyes	All opera-tives	2	3	6	All operatives to don appropriate PPE to include face RPE coveralls goggles and gloves. Method statement to be consulted for specific PPE for tasks	1	3	3
Working at height	Operatives	2	4	8	All operatives are to ensure access equipment is site compliant and we in line with manufactures. As a primary option the higher achy of equipment should be use Towers erected be PASMA operatives 1 man podiums Hop ups Ladders (for short term works) BY PERMIT ONLY	1	4	4

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Unauthorized access	All operatives and members of the public	3	4	12	Provide adequate site hoarding and entrance gates, barriers, signs and warning signs to prevent unauthorized persons entering the site. During street works operatives are to plan pavement closures and ensure the boundary of site is kept tidy and clear from materials The need for on-site security out of working hours should be assessed. All personnel entering site should sign in	1	4	4
Existing services	All Operatives	3	4	12	All known services must be located and marked prior to commencement of the work. If services cause unexpected hazards or unknown services are discovered during work, the scheme should be re-worked. All excavations should be surveyed prior to start by operatives trained in the use of CAT and GENY Prior to any excavation works the works should be planned and a permit issued by the main contractor supervisor	1	4	4
Inspection	All operatives	2	3	6	The work area should be inspected and results entered into an inspection register or similar.	1	3	3
Dust	All – Inhalation by operatives and MOP	2	4	8	Ensure controls to eliminate or reduce dust emissions are in place as noted on the safety plan or method statements. use of knock down atomising sprays, water bowsers to keep areas damp, specific water sprays to particular points and sheeting of loads in transit should be implemented.	1	4	4
Dust Nuisance hazard to	MOP and works	2	4	8	Check with residents or occupied premises that they are aware of the operations and likelihood of risk. Ensure that sensitive areas are adequately protected from the works. internal chutes within the structure will be used thus preventing dust migration. Carry out environmental monitoring during loading and demolition works. Ensure all measures in place are effective. Where this may prove to be inadequate, further measures should be carried out to improve the control and effectiveness of the dust reduction process.	1	2	2
Dust	All Damage to eyes	2	4	8	Ensure goggles and suitable dust masks are worn as per the attached PPE Assessment. Ensure controls are suitable and sufficient to control airborne particulars.	1	4	4

Access and Egress	All operatives	2	3	6	Access to a work is must be by a suitably safe method, e.g. podiums ladders. Must be secured. Ladders must be secured to prevent movement and must project about 1 meter above the landing surface at the top. Appropriate provisions for access in emergencies should be made when necessary. Provide suitable ladders - to be fixed at 75 degrees to the horizontal (1 in 4). Tie securely at the top and ensure a firm and level footing to prevent slip. Adequate provision must be made to prevent unauthorized access. Particular attention must be taken during out of hours. Access and egress routes should be kept clear of trailing leads, stores and tools at all times	1	3	3

Soft stripping Cuts Grazes and abrasions	Operatives –	2	5	10	Ensure operatives are aware of the hazards that may be present when handling abandoned waste in particular foot penetration etc. Ensure correct PPE as per the attached PPE assessment are worn at all times.	1	5	5
Soft stripping Contact with toxic materials -	Operatives	2	5	10	issue operatives with and ensure they wear appropriate PPE together with instructions to wash before eating, drinking or smoking.	1	5	5
Soft stripping operatives Slips trips and falls	All	2	5	10	Ensure a safe system of work is in place and is explained to all operatives. Employ good housekeeping, Safe clear access routes to be identified within and around the structure, these areas must be checked on a regular basis and any hazards identified must be rectified promptly. End of shift ensure all tools etc. are removed.	1	4	4
Soft Stripping Foot injures	All operatives	2	4	8	Ensure correct PPE as per attached PPE assessment. good housekeeping. Footwear must have mid sole protection and toe protection	1	4	4
Sot Stripping Contact with live services	All operatives	2	5	10	The client has arranged for the services to be disconnections. Evo is to receive drawing of service disconnection locations to enable the site manager to pass this information on to operatives on site.	1	5	10
Soft Striping Needle Spike	All operatives	2	6	12	Survey the work place prior to works, ensure operatives are briefed on the presence of sharps, dress operatives in correct PPE to remove Sharps to correct containers for disposal	1	6	6

Soft stripping - Fire trapped operatives	All operatives	2	6	12	Soft strip materials are not to be stored on site and are to be removed as early as possible from the work area. Ensure there is firefighting equipment in suitable location within the escape route (ensure these are not trip hazards in an emergency evacuation.	1	6	6
On site emergencies - Miss communication	All	2	5	10	DSM site manager / supervisor is to communicate and develop the emergency plan and ensure the instructions are communicated to all parties.	1	5	10
Mechanical demolition - Noise & Vibration	All	2	4	8	he operations of the plant equipment is not noisy however noise readings at the rear of the equipment can start to near the action limit of 80dB(A), this should not be an issue as no persons should be within close proximity to the plant equipment other than the operator. Plant operators will wear appropriate hearing protection.	1	4	4
Mechanical demolition - Premature collapse	All	2	6	12	Site supervisor and machine operator to carry out walk around survey. Ask advice if not sure of building and or structures construction. Ensure through good supervision that the work is being carried out according to the method statement.	1	6	12
Mechanical demolition - Collapse of retained structure	All	2	6	12	Walls of structures that are to be retained as site boundary walls are to be inspected prior to demolition work to the structure by a competent structural engineer. Any structural engineer's recommendations and propping/shoring designs are to be followed.			
Loading of Roll on off bins - Crush injury, tipping of plant, contact with overhead services	All	2	6	12	Clear area and plan delivers. High identified access and egress points. Ensure public and non-essential operatives are segregated from bin delivery and loading ops. Ensure truck is in line with laden bin for pick up. Maximum 5deg slop for transit. Level stable loads only, banks man present whilst loading bin in transit. If bin being loaded area and bin to have access and egress steps and be segregated from plant movement			
Mechanical demolition - Creation of open edges	All	2	6	12	Within the structure are significant ground differential and pits. Where required handrails will be installed. Pits are to be back filled with all other potential falls not protected battered back with suitable machine pulverised concrete and masonry material arising's.	1	6	6
Mechanical Demolition - Temporary instability of structure – crush/collapse	All	2	6	12	Control structure access during demo ops, train experienced demo ops to operate plant and plan works, maintain demolition exclusion zones at all times	1	6	12
Mechanical Demolition - Debris Falling onto Machine Operator	Machine ops	2	4	8	Ensure that the machine is large enough to carry out the work at arm's length, or that the machine is able to reach the structure safely. Banks- men will use two-way radios to keep in constant communication with the plant operator during the demolition phase. Machines have highly reinforced cabs.	1	4	4

Mechanical Demolition - Debris falling onto others adjacent to the site/work area	All	2	6	12	Ensure the physical barriers to prohibit unauthorised persons into the working area are effective. Ensure the warning signs posted are clearly visible. Banks-men will use two-way radios to keep in constant communication with the plant operator during the demolition phase.	1	6	6
Mechanical demolition - Falls into pit & voids	All	2	6	12	he machines operator and site manager are to fully investigate the extend of the basements and pits prior to demolition of the structure. At no time must the machine be allowed to track on to the floor slab directly above the known voids. The machine is to carry out the works at arm's length utilising the reach of the machine to carry out the works.	1	6	6
Changing of Quick hitch attachments Operatives working in the area	All	2	5	10	Ensure a dedicated and segregated area is allocated for changing of machine attachments. Ensure the machine operator is fully trained in the use of the quick hitch system on the machine. Where a semi-automatic or manual QH system is used ensure the safety pin is in place before using the machine. Ensure the site supervisor is aware of his responsibility to ensure that all machines operating on his site have the safety pins in place through regular inspections.	1	5	5
Changing of Quick hitch attachments - Manual Handling Injury	All	2	5	10	Do not overload bags or lift heavy objects etc., seek help at all times. use lifting aids where possible. Ensure the floor area is not wet as per Slips, trips and falls.	1	5	5
Oxy/propane cutting - Burns to operatives, clothing catching fife	All	2	6	12	Ensure hot work permit system is implemented and signed off at the end of the works. Ensure firefighting equipment is on hand during all cutting works. Ensure that all cutting operatives are competent in their task and have had sufficient information, instruction, training & supervision. Fire extinguishing medium to be present at all Hot Work Locations (Fire Extinguishers). Ensure permit is signed off. Cold cutting should be employed as an alternative, wherever practicable. PPE to be used as per the attached PPE assessment.	1	6	6
Oxy/propane cutting - Bottles exploding	All	2	6	12	All cutting equipment i.e. guns, bottles to be fitted with correct safety valves and ash back arrestors. All full and empty gas bottles to be stored in a safe area, preferably within a secure compound. Propane to be separated from oxygen by a minimum of 3 metres. no storage of bottles within the immediate boundary of any site.	1	6	6