

20 – WHS Report

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Waitara Public School Work Health and Safety Report

School: Waitara Public School

The following checklist provides information and prompts for consideration of Schematic Drawings (Statutory Planning Stage) as a part of the Major Capital Works -Client Side Design Sign off Process for Work Health and Safety. Please review the following items and confirm that WHS issues and concerns have been taken into consideration and risks have been reduced to as low as reasonably practicable and no further risks are created.

Recent WHS Incidents for consideration

Within last two years for Waitara Public School incidents of note include:

Number of slips trips and falls in playground.
Falling on uneven surfaces and stairs– need to ensure smooth surfaces, change in height between asphalt and Astroturf, garden beds etc and sufficient grassy areas for games free of obstacles with segregated areas for seating/no running zones,
Wet stairs caused by lack of awnings?
Allergy to mold caused by wet weather and building leaks
Manual Handling incidents.

General WHS considerations

- **People:** Consider student's maturity, age, skill level, general behaviour and level of supervision required.
- **Weather:** Consider how weather conditions (wet, stormy, cold, foggy, hot, sunny) may increase risk.

Element to be considered	Y/N/ NA	Finding/comment/recommendation
Review of recent incident and hazard data. Does the school's data indicate: • Areas of common hazard and/or incident in the school? E.g. slips trips and falls: manual handling, unauthorised access (e.g. roof access by students), ergonomic concerns, and traffic management issues. • Does the design address any of the common hazards/incidents?	Yes	• No roof access by students is proposed, maintenance access is via a controlled room • There are no traffic within the school premises, teaching spaces are kept as far as possible from the existing carpark • New Play Area to have rubber soft fall finish. • New heritage courtyard will have brick surface broken by seats, turf and tree plantings. • Surface areas are designed to have required slip resistance. • Building stairs are weather proofed by external walls and roof, they are part of interior spaces • New or additional playground equipment is not included in this project. • Stair nosings are designed to comply with AS and the BCA.



Access (entry) & Egress (exit) locations • Are access and egress paths sufficiently wide and free from obstruction and trip hazards? • Are entry and exits to buildings safe and include disabled access (e.g. ramps/lifts) where necessary and hand rails on stairs? • Are surfaces suitable and manage the risk of slips, trips and falls? • Do rooms offer alternative exit points should emergency situation block one exit? (e.g. fire, intruder) • Have Lockout and Evacuation practices been considered in regards to number and location of entry / exit points to rooms, buildings, site? • Have Lockdown practices been considered in enabling students/staff fast access to large buildings (e.g. hall) during recess periods?	Yes	• Access and egress paths are compliant with the BCA, they are sufficiently wide and free from obstruction and trip hazards. • Entry and exits to buildings include disabled access (e.g. ramps/lifts) and hand rails on stairs. • Surfaces include required slip resistance. • Level 1 space has alternative egress points direct to the outside perimeter, giving an alternative emergency access route. • Upper levels have three exit points in each level • Balustrade heights to be a minimum of 1300 mm, including in stairs. • A C-bus system will have ability to turn off lights for security whenever required.
Security • Have measures for unauthorised access been considered where necessary? (e.g. between publicly accessible areas and working/learning spaces) • Does the design unintentionally create access points to other building areas? (e.g. roof) • Can neighboring buildings/businesses impact on the school? If yes, can the scope of works address these issues and how? Have these been factored into the planning (discuss with Workplace Manager)? • Working alone ○ Has visibility (lighting, CCTV) in dark or obstructed areas been considered? (e.g. after hours exits, pathways, car park) ○ Has access to GA or Cleaner storage areas been located in visible areas (e.g. not in an isolated areas like staff toilets, basement) • Have Lockdown practices been considered and blinds installed in ground floor and upper level corridor areas?	Yes	• Access restrictions have been considered. Public access is via a separate entry in the new building on L1 which is separate to the teaching spaces. Administration & staff facilities are at a different level to teaching spaces. Design does not create access points to other buildings. • One of the drivers of proposed building location is nearby buildings, new building is located away from South and Eastern property boundaries • The existing vehicle entry off Highland Avenue is not impacted by this project. • Access to the roof is via an access ladder in the cleaners room which is lockable for security and maintenance • Site is fenced and gated. • New lights are proposed in open spaces • Lighting design for After Hours was considered for general external lighting but not included due to minor change in existing conditions. • Cleaners store located in a non public circulation space near main toilet area for levels 1, 2, 3 & 4.



Traffic Management • Does the design enable vehicles to access the school grounds? (including waste collection / deliveries / contractors) • What measures have been considered to manage the interaction between vehicles and pedestrians? (e.g. shortcuts across car parks, undefined walkways, combined vehicle and pedestrian entrances, play area proximity to driveways, loading zones, reversing points, GA shed, and location of large waste bins.) • Does the design limit the visibility of pedestrians? (e.g. blind corners, plants)	Yes	• There is vehicle entrance off Highland Avenue and a service lane to access carpark. • Bin access and storage is proposed to be maintained in its current location. • Traffic Impact Assessment (TIA) done for overall traffic impacts. Refer to TIA within Schematic Design Report. • There are currently 12 parking space provided within the school site for the exclusive use of the teaching staff. It is proposed to maintain this parking supply within the school. Current location of the carpark is maintained and the new building and play spaces are further away from it. • A high-quality pedestrian environment is provided in proximity to Waitara Public School to facilitate the safety and mobility of students, their guardians and teachers. This includes concrete footpaths, signal controlled crossings at signalised intersections and pedestrian crossings. • Proposed building is setback from the roads by 9-10 metres, hence it doesn't limit the visibility of pedestrians
Welfare Provisions • Do buildings provide appropriate welfare amenities, including areas for general storage, food storage and consumption, adequate toilet facilities, first aid room for anticipated building occupants?	Yes	• Administration & staff areas of the building are designed in line with EFSG guidelines that include the areas mentioned. • A sick bay is provided in the Administration area of the building near Clerical (SAS) staff. • Toilet facilities meet EFSG guidelines and BCA requirements.



Fall Hazards • Does the design include any falls risks of greater than 1m where no edge protection is provided? ○ Is the height and type of edge protections proportionate to the fall risk? (e.g. accessibility, student's age, maturity, mischief/desire to climb or self-harm/jump) ○ How have edge protection areas near moveable or items been addressed as they can be used as leverage to climb onto edge protection. (e.g. chairs/free-form furniture/bubblers near balcony or stairwell) ○ Where upper level corridor railing adjoins a staircase, has the risk of climbing it and falling been minimized? • Has tree branches falling been considered. • Has the design and placement of the following been considered to minimise climbing and access? ○ Roller or multi-fold doors ○ Down pipes ○ Fences adjoining the school buildings • Has the design and placement of the following been considered to minimise falls? ○ Garden learning area (e.g. terraced vegetable patch accessible by steps) ○ Terraced outdoor learning space (e.g. terraced amphitheater area made from large sandstone slabs or similar) • Consider students' access to: roofs, unfenced retaining walls. Also safety tread or nosing on stairs, furniture placement. • Where windows can be opened, are mechanisms installed to prevent falls risk? • Are stair raisers free of graphics?... or through the stairs creating a visual distraction.	Yes	• Balustrade designs considered for limiting climbing and falls from height and height. Balustrade height increased to 1300 mm including in stairs as part of the Schematic Design Report to improve protection in light of the children's age and maturity. • Anchor points to be provided on roof for maintenance staff in Schematic Design Report. • Falls from external retaining walls considered and balustrades in Schematic Design Report • Loose furniture are kept clear of stairways and the amphitheatre. • Arborist report received and falling branches has been considered, unhealthy trees are proposed to be removed. • Building design has considered and limited potential for climbing on structure. • Design has considered falling and safety in regard to changes in level and height with stairs added to external terrace areas. • Safety tread or nosing on stairs and furniture placement has been considered to reduce falling hazard. • Opening sizes in windows are limited to 120 mm. • Stairs will be free of graphics.
Insulation and Noise • Is Roof Sarking (silver insulation lining) to address noise reduction during heavy rain?	Yes	• Sound insulation lining will form part of the roof build-up to prevent excessive noise in learning environments during events of heavy rainfall
Hazardous Building Materials • Where demolition, refurbishment or excavation works are planned, is a hazardous building materials survey available to indicate the location of any hazardous building materials and the management protocols for these?	Yes	• Hazardous materials register will be reviewed and will be incorporated into the specifications if required for demolition.



Hazardous Substances - Does the design enable the safe and secure storage of hazardous substances and dangerous goods (specific storage cabinets, bunding, options for segregation, emergency showers and eye wash). - Does the design of the GA and Cleaner storage areas provide adequate ventilation and distance from ignition points? (e.g. petrol must be stored 3m from any power points, ride-on mowers) - Has allowance been made for a flammables cupboard with correct separation distance (to Code) from ignition points? - Extraction fan in place for the room? - Wiring to code for combustibles? - Is access to the GA and Cleaner areas secure and independent to other rooms? (E.g. visible and accessible from corridor rather than from within staff toilet area?) - Is a tap/sink, basin/trough provided in the GA and Cleaner areas? (e.g. for washing down surfaces, hand washing; filling buckets, disposal of dirty water)	Yes	- Storage of hazardous cleaning materials will be in lockable cleaning distribution stores on each level. - Communications rooms, toilets, cleaners' rooms, and OOSH kitchen and clerical print area design will have mechanical ducted exhaust systems. - Electrical design meets EFSG and Australian Standards - Cleaners' rooms are to have a sink detailed in hydraulic design. - There is no storage of flammable & combustible materials. - Cleaners stores are located in open area near main toilet area for each upper level and will have a lockable door to prevent unauthorised access. - All cleaners' rooms have sinks and mechanical ventilation and will have a lockable door to prevent unauthorised access.
Extra Emergency Fire Fighting Equipment - Does the design meet building code requirements for the fitting out of emergency fire-fighting equipment? - Does this include the fit for purpose extinguishers in GA and Cleaner storage areas, and relevant learning areas? (e.g. Science, TAS) - Does this include fire blankets in kitchen areas? (e.g. including canteen)	Yes	Firefighting equipment considered and outlined in specifications to comply with EFSG. Final detail to be added to drawings in detail design. Refer to Hydraulics engineers drawings.
Environmental Conditions - Is the school in a bushfire prone area, on the Bush Fire register or in a flood prone area? - Can the design consider the impact of these events and minimise their impact and/or recovery from such events? - Does the orientation of the building and building materials used introduce potential ergonomic hazards (e.g. glare)? Do controls for this need to be considered? - Is shade provided for outdoor learning areas, or other areas where people congregate? (e.g. 'play in shade' options) - Does the design adequately minimise the spread of smoke and fire?	Yes	- Bush Fire Protection (NSWRFS 2006) and the requirements of AS3959:2009 do not apply. - Existing COLA to be maintained and an additional COLA area is created under the building. - Design team considered smoke or fire spread in the design and fire rating of the floors. The building is too close to the boundary and other buildings and will require an alternative solution which is being written by the Fire Engineer.



Plant and Equipment • Are workers exposed to noise and/or vibrations from plant or surrounding area? • Has allowance for space and clearance been considered when using plant and equipment? • General Assistant shed/room ○ Is there a separation from work space to storage area?	Yes	• Plant and equipment is limited to toilet and common exhaust systems and will not impact workers or student with noise or vibrations. • There are no new GA facilities in this new building project.
Manual Handling/Ergonomics • Has the design of storage, space, work surfaces been considered to minimise risks for manual handling tasks? For Example: ○ Has the degree of bending/twisting (or restricted movement) been minimised in the placement of furniture and equipment in the space? (e.g. unsuitable work heights, assisting disabled students with toileting, bench proximity to related equipment) ○ Are compactus handles ergonomic in reducing risk of wrist and finger injury? ○ Does furniture design and placement minimise injuries from contact with sharp edges/handles, hot objects? ○ Is adequate storage provided for manual handling aids close to area of use? (e.g. step ladders, trolleys) ○ Are sliding doors installed with tracking in ceiling (or at top of door) <i>and</i> floor?	Yes	• Initial furniture selections to be included in FF&E drawings and to be updated for final design • Architect to provide detail on sliding doors in final design • At this stage compactus has not been selected to be used in this building. • Interior designer considered location of furniture in regard to corners. see FF&E • Initial storage room fitouts to be in FF&E and final selections once approved by PRG to be included in final design.
Work and Circulation Spaces • Do schematic drawings allow sufficient work and circulation spaces for anticipated number of workstations? • Consider space allowed per workstation, passageways and walkways. • Is the sick bay/first aid room located in appropriate proximity to staff for monitoring during use?	Yes	• Circulation and space allowances are considered during initial design. • No first aid room is included in the new building but a sick bay is located in the Admin building area near admin (SAS) staff.



Garden learning area (vegie patch) Is there a worm farm, compost bin or pond? If yes, how are associated risks minimized? (e.g. fingers jamming in rotating compost apparatus; secure access to garden, worm farm and pond)	Yes	- No learning gardens or worm farms are designed at this stage but it is being considered in discussion with PRG. A Herb garden will be added to landscape plan. - No new play equipment which will be clarified in Landscape plan. - Architect to consider Large open play areas ie COLA soft-fall surfaces however PRG has requested concrete. - PE sporting equipment storage on level 1 and is lockable. Review of doors and access undertaken resulting in bigger door for PE store. Doors are to be lockable.
Playground areas - Does the design comply with EFSG Guidelines? (Including DoE's "Playing Safe: Guidelines for the installation and maintenance of playground equipment in NSW Gvt schools" (2006). Consider also, Australian Standards 4685:2014 – "Playground Equipment and Surfacing (Main changes to Standard)" which may assist, given the DoE doc above is 2006.) - Are structures made from materials that minimise injuries from sharp edges/ objects, inappropriate climbing, protruding items at head height. - Are soft-fall surfaces installed in appropriate play areas? - Have injuries from collisions in the playground been minimised? (e.g. students colliding with structures or each other - due high running speed attained in large open play area) - Are sporting equipment storage areas secure to prevent unauthorised access? - Has the design and placement of structures, accessible via playground areas, been considered to minimize risk? For example: - Storm water run-off collection area, and drain, in open grassed area adjacent to playground; - Terraced amphitheater accessible from playground at running speed and made from large slabs of sandstone; - Terraced garden learning area (vegie patch).	Yes	- Visual indicators for level change and barriers to be considered by Architect further in final design. - Design team has considered climbing on seats and falls from heights. - Architect has considered indication of height change or barriers to falling from terrace areas. - We will consider safety for level 1 external amphitheater, with signage to let people know of the level drop. - Civil designers considered storm water runoff.



Green spaces/plantings • Is the landscaping compliant with DoE's EFS Guidelines? • Will the introduction of green spaces and new plantings increase the risk of some incidents? For example: ○ Poor maintenance increases risk of snake habitats, exposure to bees/wasps (allergens), tree limbs. ○ Environmental conditions exacerbated by landscaping (e.g. shade extends duration of frost / water on walkways, trees close to buildings in bushfire prone areas) • What controls have been considered? • Has the design and placement of trees been considered to minimise climbing, falls and building/roof access? • Has the type of plants been considered to minimize toxins, allergens, thorns, insects, falling debris?	Yes	• Landscape is compliant with the following DoE's guidelines. - Landscape Design, Landscape Fixtures, Landscape Hardworks and Landscape Softworks • The majority of planting beds are located away from the direct play zone/ forecourt of the building. Therefore we do not anticipate the presence of snakes or bees to outdoor education/play areas. • The majority of garden beds include low groundcovers for clear sightlines – shrubs will only be used for screening in limited areas such as screening bin areas or adjacent to neighbors. • The plating species nominated are native, low maintenance, local species that will suit the existing landscape character. • Grass areas are away from high pedestrian areas and where we do have hi use areas we have nominated astro turf. • Small native tree planting is located to minimise tree root disturbance and leaf dropping. • Sub soil drainage will be nominated for efficient water penetration to root ball. • The use of resin bound gravel has been nominated in high use areas where existing tree roots need protection – this product provides a hard surface for walking that allows stormwater penetration. • The design and location of trees have been located to minimise roof access. • The types of plants do not have thorns. • No evidence of the chosen plants attracting particular insects or debris release • Some of the species we have selected are actually known for improving water quality through water sensitive urban design treatments.
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