

Purpose

To provide piling contractors with a clear understanding of St William / St James requirements for piling operations to ensure they are adequately resourced and planned. The requirements have been collated from the current H&S Management System, i.e. they are not new or additional requirements.

Scope

Applies to all piling operations.

Main Requirements

Item	Requirements
Work Planning	<p>St William / St James implement a Safe System of Work Procedure. This involves the contractor submitting an H&S Management Plan for review at pre-start. Following review of this management plan a number of task plans will be agreed with the St William / St James Project Management Team before works commence.</p> <p>Typical task plan requirements could include the following:</p> <ul style="list-style-type: none"> • Piling Operations – e.g. CFA, Rotary etc. • Dealing with a blocked auger/hose • Establishing/maintaining exclusion zones during piling operations • Rigging/derigging the piling rig • Lifting & installation of pile cages • Rig/hose cleaning/concrete washout • Sheet piles <p>The above are examples, St William / St James may require additional plans depending on site conditions.</p> <p>The task plans will be written by the supervisor and reviewed by St William / St James. The supervisor will then brief site operatives on the task plan prior to undertaking works. The briefing will be recorded on the task plan template.</p>
Training & Competency Requirements	<p>St William / St James expects operatives to arrive at induction with an appropriate CSCS card, plant operators must hold an appropriate CPCS or NPORS card; examples of acceptable cards include:</p> <ul style="list-style-type: none"> • Piling Operative – Blue Skilled Worker CSCS card • Piling Operative – Gold Advanced Craft CSCS card • Specialist Operative: Piling – Gold Advanced Craft CSCS card • Piling Rig: Driven – CPCS Red or Blue card A45/A46 • Piling Rig: Bored – CPCS Red or Blue card A47/A48 • Piling Rig Attendant – CPCS Red or Blue card A74 <p>Should an operative arrives on site without an appropriate competency card, the contractor is required to prepare a training plan (SW-F 4.2H Operative Competence Assessment) to St William / St James for review and authorisation, prior to allowing the operative to start on site.</p>
Temporary Works	<p>St William / St James will appoint a temporary works co-ordinator (TWC) to the site. The piling contractor must have a temporary works procedure and appoint a TWC to oversee the implementation of their procedure on site.</p> <p>Each element of temporary works will require; a design brief, a construction issue design, an appropriate design check and a task plan and SSOW prior to commencing works.</p>

Contractor Requirements – Piling

Item	Requirements
	<p>A Permit to Proceed (or similar) must be issued prior to taking the temporary works into use. The person responsible for issuing the permit and undertaking any subsequent inspections will be identified during the pre-start meeting.</p> <p>Temporary works designs must be produced by a competent engineer. The contractor must issue CV's to the St William / St James TWC for review prior to undertaking any temporary works.</p> <p>Contractor TWCs or TWS, in addition to being a competent Supervisor (see training and competency requirements above), must have evidence of formal temporary works training.</p> <p>Further temporary works requirements will be identified by the contractor and St William / St James.</p>
Permits to Work	<p>St William / St James will expect a Permit to Break Ground to be completed on a daily basis prior to commencing piling operations.</p> <p>Other permits may include:</p> <ul style="list-style-type: none"> Hot Works Permit to be completed on a daily basis (i.e. sheet piling) Permit to Proceed to be completed prior to taking temporary works in use.
Temporary Works	<p>St William / St James will require information on the loads imposed by piling rigs (ground bearing pressures) to facilitate the design of the piling mat.</p> <p>The piling mat will be designed and installed by others. However, the piling contractor must confirm that the mat has been appropriately designed and installed (i.e. the design and the permit to load) prior to delivering the rig to site.</p>
Lifting Requirements	<p>All lifting activities must be appropriately planned by a competent person (i.e. a CPCS/NPORS qualified Appointed Person, including the lifting of pile reinforcement cages or sheet piles.</p> <p>All lift plans must be recorded on a Lifting Risk Assessment, and authorised by the St William / St James Appointed Person for Lifting before lifting commences.</p>
Exclusion Zones	<p>Primary and secondary exclusion zones must be established for piling operations, as follows:</p> <p>Primary Zone:</p> <ul style="list-style-type: none"> A primary zone shall be established that encompasses the piling rig area of operations and that of any other attending plant, such as 360° excavators and dumpers and includes all pile locations for at least one day of piling operations. The zone is to be demarcated with linked physical barriers with a defined pedestrian entrance and defined vehicle/plant entrance; At all entrances signs are to be displayed stating that piling is ongoing and that only authorised personnel are permitted to enter the area. <p>Secondary Zone:</p> <ul style="list-style-type: none"> A secondary zone shall be established 2m away from the auger. No one is to enter the zone whilst the rig is operating, i.e. while the auger is rotating or the rig is moving. Should personnel need to access this zone, the auger must be stationary and within the bore or cleaned of spoil and on the ground. For rotary piling, the 2m zone must include the path of the auger from the pile location to the auger spin-off area. The zone is to be demarcated using pedestrian barriers or similar; as the barriers will be regularly moved during the day these barriers do not need to be linked.

Contractor Requirements – Piling

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	<ul style="list-style-type: none"> Signs must be displayed on the barriers, stating that only authorised persons may enter, and only when the rig is not operating and the auger is in a safe position.
Concrete Hoses	<p>Concrete pump hoses and pipework used in association with piling rigs are subject to the following requirements. Hoses and pipes shall:</p> <ul style="list-style-type: none"> i. Must be new to site. ii. Be uniquely identifiable; iii. Undergo a daily visual inspection, and weekly recorded inspection; iv. Be pressure tested at three monthly intervals; v. Where the pressure is highest from the agitator the pipework must be rigid (steel) for the at least the first 10m; or if flexi-hoses are used they must be wrapped in an “Oslo” type bag. vi. Be positioned to avoid plant & vehicles driving over them. <p>If this cannot be achieved, then at clearly identified crossing points the hose or pipe must be protected, e.g. by burying within a trench or covered by a ramp.</p> <p>360°excavators must not use a bucket to directly pull or push hoses; hoses should only be moved by the attachment of a webbing sling, and then lifted to minimise dragging;</p> <p>All quick-release hose and pipe couplings shall have a safety pin inserted to prevent the coupling from inadvertently opening.</p>
Other Requirements	<ul style="list-style-type: none"> A MEWP must be available on site for rigging, inspection and maintenance of piling rigs. Steel fixing areas must have appropriate access provided and be segregated from site traffic routes by physical barriers. For rotary piling, casings must protrude at least 1.2m above ground level or a fixed cover be installed when left in-situ. Auger guards must be maintained in good condition and be compliant with Federation of Piling Specialists guidance.