

Purpose

To provide Frame contractors with a clear understanding of St William / St James requirements for scaffolding works to ensure operations 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 superstructures and frames construction carried out by St William / St James.

Main Requirements

Item	Requirements
Work Planning	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. Typical task plan requirements could include the following: - Construction elements, including – Slabs, columns, cores & staircases. This should include the methodology and sequence for the frame construction. - Installation, use, adaption and dismantle of temporary works (e.g. formwork, edge protection, temporary platforms etc.) - Loading and unloading vehicles - Establishing/maintaining exclusion zones during RC Frame operations - Concrete pump works and hose / pipe installation - Hose cleaning/concrete washout - Installation and use of hazardous storage areas – e.g. CoSHH & Flammable - Concrete sampling - Use of plant and machinery – e.g. daily and weekly inspections, servicing and maintenance, segregation of plant and pedestrians, controls to prevent plant falling from slab edges. - Cantilevered deck installation and dismantling - Access areas designated as confined spaces (where applicable) The above are examples, St William / St James may require additional plans depending on site conditions. 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.
Training & Competency Requirements	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: - Chemical Grouting Operative - Blue Skilled Worker CSCS card - Construction Operative: Excavation and Reinstatement - Blue Skilled Worker CSCS card - Construction Operative: Structural Concrete - Blue Skilled Worker CSCS card - Construction Operative: Concrete Repairer - Blue Skilled Worker CSCS card - Construction Operative: Drainage Construction - Blue Skilled Worker CSCS card - Construction Operative: Drainlayer - Blue Skilled Worker CSCS card - Construction Operative: Kerbs & Channels - Blue Skilled Worker CSCS card

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	- Construction Operative: Structural Concreter - Blue Skilled Worker CSCS card - Formworker - Blue Skilled Worker CSCS card - Formworker - Gold Advanced Craft CSCS card - General Construction Operative - Blue Skilled Worker CSCS card - Precast Concrete Installer - Blue Skilled Worker CSCS card - Steelfixer - Blue Skilled Worker CSCS card - Steelfixer - Gold Advanced Craft CSCS card - Sub-Structure Operative: Retaining Structures - Blue Skilled Worker CSCS card - Crawler Crane (over 10T) – CPCS Red or Blue card A02 (A66d required for pick and carry) - Truck Mounted Concrete Pump – CPCS Red or Blue card A06 (A44 if trailer mounted) - Excavator 360 (above (A59) or below (A58) 10 tonnes – CPCS Red or Blue card (endorsement c 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. In addition to the requirements above the following training requirements will be applicable: <table><tr><th colspan="5">Trade Type 3 / High Risk</th></tr><tr><td>Example Trades:</td><td colspan="4">Ground Remediation / Demolition / Piling / Groundwork / Civil Engineering / PCC Floors /RC Frame / Roof Carpentry / Scaffolding / Steel Erection / Any trade acting as Principal Contractor & other unspecified, similar high risk trades</td></tr><tr><th colspan="5">Number of Operatives on site</th></tr><tr><th>Up to 4</th><th>Up to 15</th><th>Up to 30</th><th>Up to 60</th><th>Each 30 thereafter</th></tr><tr><td>1 x SSSTS + visiting SMSTS</td><td>1 x SMSTS</td><td>1 x SMSTS + 2 x SSSTS</td><td>2 x SMSTS + 3 x SSSTS</td><td>1 x SMSTS + 2x SSSTS</td></tr></table> - Supervisor/Manager – SSSTS/SMST - Temporary Works Designers – Experience of the type of TW that the EDB requires; A Degree or HND in Civil or Structural Engineering - Temporary Works Supervisors / Co-ordinator – Experience of the type of TW to be undertaken on site; Temporary Works Supervision or Temporary Works Co-ordination course. - Leading edge works - IPAP (MEWP Operators) - PASMA: - Working at height - Edge protection installation familiarisation - RPE Face fit training - Fire marshal - Abrasive wheels - Confined Space – Applicable City & Guilds qualification - Lifting – Applicable CPCS/NPORS for AP, Crane Supervisor or Slinger - Banksman/Traffic Marshal – Formal banksman training - Plant operators – Evidence of familiarisation training and fit for work cert (within past 12 months).	Trade Type 3 / High Risk					Example Trades:	Ground Remediation / Demolition / Piling / Groundwork / Civil Engineering / PCC Floors /RC Frame / Roof Carpentry / Scaffolding / Steel Erection / Any trade acting as Principal Contractor & other unspecified, similar high risk trades				Number of Operatives on site					Up to 4	Up to 15	Up to 30	Up to 60	Each 30 thereafter	1 x SSSTS + visiting SMSTS	1 x SMSTS	1 x SMSTS + 2 x SSSTS	2 x SMSTS + 3 x SSSTS	1 x SMSTS + 2x SSSTS
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Permits to Work	St William / St James will expect the following permits to work to be completed by the relevant Supervisor prior to undertaking works: Permit to Proceed to be completed prior to taking temporary works in use or dismantling.																									

Contractor Requirements – Superstructures and Frames

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	• Permit to climb (Used with protective screens). • Confined Space Permit to be completed prior to accessing areas designated as confined spaces. • Hot Works Permit to be completed on a daily basis • Leading Edge permit
Temporary Works	St William / St James will appoint a temporary works co-ordinator (TWC) to the site who is responsible for producing the Temporary Works Management Plan. • The falsework, formwork and RC frame contractor must have a temporary works procedure and appoint a TWC to oversee the implementation of their procedure on site. • Each element of temporary works will require; an engineering design brief, a construction issue design (including design calculations if required) , an appropriate design check certificate and a task plan covering the installation and dismantle SSOW prior to commencing works. • A Permit to Proceed must be issued prior to taking the temporary works into use or dismantle. The person responsible for issuing the permit and undertaking any subsequent inspections will be identified during the pre-start meeting. • 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. • 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. All appointments within the Temporary Works procedure must be appointed by letter Typical temporary works requirements will include the following: • Formwork/Falsework • Crane Bases Further site specific temporary works requirements will be identified by the contractor and St William / St James.
Working at Height	When working at height, measures must be taken to prevent the fall of equipment, materials and tools, and to protect persons at ground level
Lifting Requirements	All lifting activities must be appropriately planned by a competent person (i.e. a CPCS/NPORS qualified Appointed Person). 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. Where excavators are used as cranes the operator must hold either all duties or a lifting operations designation on their CPCS card. Any structures (i.e. re-bar cages, sheer walls) must have ties and lifting points sprayed by the contractor's TWC/ TWS. The structure must be tagged and a declaration displayed showing the check completed by the TWC/ TWS and Crane Co-ordinator / Supervisor.
Exclusion Zones	Exclusion zone requirements must be identified within the relevant task plan. Exclusion zones will be demarcated using physical barriers and warning signage. The contractor will be required to co-ordinate their exclusion zones with St William / St James on a daily basis.
Edge Protection Systems	K-Guard, Combisafe, Tammet and similar systems that are bolted to structural concrete: Design: The system that is selected is to be fully designed by the manufacturer, approved as appropriate for the sequence and type of work to be undertaken and the risks created by the working environment in which it is to be used. This should ensure the integrity of the solution complies with the requirements of BS EN 13374 and is managed as temporary works. Procurement of bolts (for fixing to the structure) 1. Bolts must be newly purchased from the system manufacturer for each project i.e. bolts must be new on delivery to site;

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	2. Where manufacturers do not supply bolts, newly-purchased bolts must be demonstrably compliant with the manufacturer's specifications; 3. Bolts supplied new to the project can be re-used on the project for which they have been purchased. This will be subject to a quality inspection and check. Installation: The installation of the system must be planned through a site specific task plan and QITP – records to be kept on site. Handover: Before use, newly installed edge protection can only be taken into use after a formal inspection has been completed by the installer. Records are to be kept on site for checking by site management. Change of responsibility: In the event of a transfer of responsibility for managing the edge protection, the change must be formalised. The new responsible organisation is to ensure the requirements of this section of the HSMS are complied with. Adaptions: When the protection is dismantled and re-installed on site, the above Task Plan, QITP and systems of work checks must be repeated and recorded. Monitoring: Formal arrangements are to be in place and recorded on a weekly basis. Any defects are to be corrected immediately by the organisation with responsibility for the protection.
Concrete Screw Bolts	Where self-tapping concrete screw bolts (a.k.a concrete bolts, Excalibur™ bolts) are used to, e.g. fix push-pull props, fix edge protection systems, the bolts must be: - Supplied new to the project, i.e. the bolts must not have been previously used; - Installed as per the manufacturer's instructions; - Tightened to the manufacturer's specification with a torque wrench or similar – installation tools, e.g. impact drivers must not be capable of over-torquing the bolts; - Used only once, i.e. bolts are to be discarded after a single use.
Other Requirements	Protective Climbing Screens are large edge protection panels that typically give protection over several storeys at the same time: - Only competent contractors must be appointed for the supply, design, delivery, safe installation, use and dismantle of the system with training provided to operatives and supervisors involved in assembly installation, lifting, climbing and dismantling of screens - Steel fixing areas must have appropriate access provided and be segregated from site traffic routes by physical barriers. A designated bucket changing area must be established and demarcated using physical barriers