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Demolition of Torpedo Ladle Repair Workshop

Outline Method Statement

South Tees Development Corporation

12 November 2020

5192474-TRLS-MS-001

Notice

This document and its contents have been prepared and are intended solely as information for South Tees Development Corporation and use in relation to the Demolition of the Torpedo Ladle repair workshop

Atkins Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 22 pages including the cover.

Document history

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Client signoff

Client	South Tees Development Corporation
Project	Demolition of Torpedo Ladle Repair Workshop
Job number	5192474
Client signature/date	

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1. Introduction

1.1. Purpose

The purpose of this document is to present an outline method statement for the demolition of the former Torpedo Ladle Repair Workshop as part of the South Tees Development project. It has been written to provide guidance to the Client (South Tees Development Corporation – STDC) for some of the key works and considerations anticipated as part of these works.

The boundary of the Torpedo Lade Repair Workshop along with elevation photographs are included in Appendix A.

A Principal Contractor (PC) is to be appointed following contract award and it should be recognised that the responsibility for the demolition works shall lie with them. Atkins Limited assumes no responsibility to this regard and this document serves to highlight key considerations only.

The works are to be carried out in line with the PC's own Method Statement together with their policies and procedures, including all relevant Task-Specific Safe Working Procedures.

The works are to be carried out in line with all current relevant legislation and regulations and comply with BS 6187:2011 Code of Practice for Full & Partial Demolition, including the below mentioned regulations:

- The Control of Substances Hazardous to Health Regulations 2002;
- Health and Safety at Work Act 1974;
- Control of Asbestos Regulations 2012;
- Environmental Protection Act 1990; and
- As part of the works the PC will abide by the STDC site rules and receive a local induction to the site.

It is anticipated the works will be notifiable under the CDM 2015 regulations.

1.2. Site Location & Works Segregation

The structure is located west of the main site in an area known as Dorman Point and is located between Eston Road and Tees-dock Road, parallel to the A66. An access gate leads to the site via Whitworth Road and Stapyton Street, this gate is currently closed.

The principal Contractor is responsible for ensuring the work area is suitably segregated and secured within the site boundary and that no harm will come to members of the public or any other 3rd party. The project site is located within the former SSI steel works which is secured by fencing and patrolled on a regular basis. The workshop is positioned in a remote area of the site with no neighbouring facilities. The closest external neighbours are industrial units approximately 80 meters from the structure and are separated by the main site boundary fence.

The Contractor will take responsibility for the site boundary (CDM Site). The Contractors operations and segregation will control the CDM area and it shall be confined and limited to within the site fencing. The CDM project site fence will be installed using a 2.2-meter-high "heras" fence with suitable supports to form a safe and secure exclusion for the works. Th principle contractor will maintain security patrols out with the working time to prevent unauthorised access to the CDM area.

Warning signs are to be displayed in pertinent positions leading up to the site and around the boundary fence of the site. The boundary of the site is anticipated to be the outer extent of the exclusion zone which will be supplemented with internal double clipped Heras style fence required to form an Active Demolition zone (ADZ) but generally as indicated in the site plan in Section 4.

The welfare unit and works parking may be in the carpark adjacent to the former office and amenity block outside the ADZ, segregated with crowd barriers and signage.

The site gates shall be secured during working hours. The security of the site shall be monitored for evidence of trespass and break ins.

The site is to be accessed and egressed from the vehicular gate via the main STDC road network using the Lackenby gate entrance.

1.3. Works Segregation

The PC is responsible for ensuring the work area is suitably segregated and secured within the site boundary and that no harm will come to members of the public or any other 3rd party.

The site compound may be located adjacent to Torpedo Workshop as indicated in Section 4.

Welfare units and works parking are to be segregated with crowd barrier and signage.

1.4. Utilities and Services

All service isolations shall be carried out within the site boundary at incomers or back to the main substation switchgear. Isolations are to be completed by the Client's suitably qualified and trained engineers who will issue the PC with written confirmation upon completion, these records shall be held on site.

Water services are to be isolated by the Client at the nearest valve chamber and again the Client will provide the PC with written confirmation upon completion, these records shall be held on site.

As part of the works the industrial water supply will remain operational. It is an underground supply that will be disconnected away from the building but will be in use for dust suppression and fire control during hot works. The location of the water pipe will be fully communicated to all operatives and is defined in the Site Layout drawing.

Any drainage outlets or interceptors to be capped by the Client on completion of the works.

Isolation points will be fully identified and marked on a site drawing and clearly defined with pegs/signage on-site prior to the start of works.

1.5. Welfare

The principle contractor is responsible for the provision of suitable welfare facilities for the duration of the works to comply with CDM 2015 requirements. The facilities may include a self-contained unit with generator, toilet, messing facilities and site office. The unit is suggested to be located as per the plan in Section 4 within a dedicated barriered area.

At time of writing, the United Kingdom is currently within the COVID-19 Pandemic.

The PC, prior to site commencement, should refer the current UK Government Guidance to ensure that their site practices align with any restrictions and measures required to ensure conformance. Typical practices currently comprise social distancing, sanitation stations and limiting workforce interaction i.e. staggered break times.

Further advice is provided by the Construction Leadership Council and Public Health England.

It should be noted that any guidance documents associated with above bodies are to be considered live documents and will be updated as the pandemic develops. Methods of working may potentially change as a result.

The risk of COVID-19 to employees and site staff is to be captured within the PC (and any sub-contractors) risks and method statements (RAMS).

1.6. Asbestos

A Refurbishment & Demolition (R&D) Asbestos Survey is still to be carried out at the time of writing this document. A management survey is available this is in the process of being updated. Prior to any works commencing a full R&D survey will be provided, in good time, to the Principle Contractor for full review/consideration.

All asbestos will be removed prior to commencing demolition of the structure. Asbestos materials identified at this stage are mastic floor tiles, electrical flash guards and gaskets (non-licensed non-notifiable works). These products will be removed in accordance with the Control of Asbestos Regulations (CAR 2012) and all current amendments. Any licensed asbestos removal will be completed by specialist sub-contractors under their task specific Asbestos Plan of Work.

Should any suspect material, in addition to the R&D Survey, be discovered during the course of the project, works are to stop immediately, and the Client informed. The contaminated area will then be managed by the Contractor until a suitable asbestos management/removal plan has been implemented.

The PC is to ensure all notifications are made and that relevant clearance certificates are received for licensable works prior to demolition.

1.7. Demolition Works Scope

The following scope of works is anticipated as part of the structure demolition;

- Erection of temporary barriers / fencing and signage to supplement the existing site boundary and form an ADZ;
- Soft strip of office buildings and the amenity block;
- Removal of asbestos;
- Internal clear out of all debris, and existing plant from inside the main shed;
- Approved infill and compaction in layers of any service pits within the main shed;
- Existing services location, isolation, and removal from within building. Any remaining live underground services are to be identified and protected;
- Removal of the east elevation gable end;
- Demolition of the Boiler House adjoin the main workshop to the north;
- Removal of the roof structure;
- Removal of the gantry cranes;
- Demolition of the steel superstructure and frame;
- Crushing of demolition rubble to Class 6F2 fill material and infill of voids;
- General levelling of site to existing site contours using site won material; and
- Removal of all arisings off site including any recycled metal.

1.8. Building Construction

The main workshop structure is approximately 320m long, 45m wide and 20m high at its highest point - the top of the roof ridge. The north and south elevation are approximately 14m high. The structure is a steel framed building with two open span bays that stretch the length of the building, west to east. There are several redundant overhead gantry cranes. There are crane rails running the length of the structure, to the north and south elevations and double rails to the centre column lines. In total there are 34 no. columns to the south elevation, 14 no. double engineered columns to the centre and 18 no. columns to the North. The roof is a lattice steel framed pitched roof with metal sheet cladding. The same cladding is present to the side and end elevations of the structure.

The boiler house adjoins the main structure on the northern elevation, setback to the west. This is also a steel framed structure of similar construction to the main building. This is 160m long by 25m wide and 12m high with pitched metal clad roof and walls.

There are low level brick offices running the length of the south elevation constructed of double brick and concrete bison roofs. This is allowing for access through into the main structure. Prior to the main demolition these low level buildings will be removed.

To the west of the site there is a two story office building of steel framed construction with brick infill and concrete roof (this may be pre-cast concrete). This is approximately 30m long, 10m wide and 8m high. The second office is steel framed office with brick infill and pitched steel lattice frame covered in profile metal cladding. This is approximately 15m long, 12m wide and 8 meter high.

Photograph extracts are provided below.

Selected Photograph Extracts

Offices and South Elevation

East Elevation of the Workshop

North Elevation

Internal view of Crane Bay.

Boiler House Structure

Internal view of Overhead Crane.

Selected Photograph Extracts

Office and Amenity Block view to the north.

Office and Amenity Block view to the south.

1.9. Site Finishes and Hand Back to Client

All floor slabs and hardstanding's are to be retained at this stage. The site is to be left level on completion, with any voids backfilled utilising on site crushed material. The brick work to the buildings, including any concrete, is to be crushed to a Class 6F2 specification and used to infill any voids or pipe channels.

Existing roads and hardstanding areas, including site pathways and fence surrounding the site are to remain in place.

No remediation or sub surface works are to be undertaken as part of this project.

2. Method Statement Details

2.1. Overall Scope of Work

The scope of works covered within this method statement consists of the above ground demolition of all structures within the demolition zone hatched in green site boundary and associated plant and equipment.

- Establish the welfare facilities
- Secure the boundary
- Soft stripping of structures
- Asbestos removal
- Demolition of structures and process/clear arisings
- Level site
- De-mobilise.

As well as the Health & Safety Management System developed by the PC, the Construction Phase Plan, Drawings, Specification and the Project Risk Assessments collectively make up the safe systems of work for these above-mentioned tasks.

2.2. Contract Timescale

The following contract timescales are anticipated. Finalised timescales shall be determined by the PC once appointed for the works:

- Site Mobilisation **– 3 weeks**

- Demolition Contract timescales **– 16 weeks**

Working Hours are generally – Monday to Saturday 7.00am to 6.00pm

Sunday working is to be by agreement with the Client.

2.3. Pre-Commencement Surveys

Prior to commencement onsite the Contractor will undertake the following surveys to ensure there are compliant with the contract and applicable legislations.

This list is not exhaustive, the Contractor should undertake any further pre-commencement surveys to ensure the clients aims and brief are fully met.

- Baseline noise, dust and vibration assessments
- Ecology survey (see Section 2.7)
- Stakeholder engagement and communications
- Dilapidation survey of existing roads and infrastructure
- Dilapidation survey of any boundary structures and services.

2.4. Plant & Equipment

It is anticipated that the following items of plant & equipment will be required:

- 60 tonne – 25 m high reach excavator
- 2 no. 50 tonne & 2 no. 30 tonne, demolition specification excavator with various attachments (selector grab, shear, buckets)
- Telehandler with forks and bucket attachments
- 13 tonne loading shovel
- Various hand tools
- Oxygen and propane gas including cutting torches and hoses
- 1 no. 45 MEWP boom
- Motofog 100 dust suppression unit or similar
- Bunded fuel bowsers
- Heras Fencing (2.0 metres in height).

Certification for the above plant & operative training is to be held at the work site.

(Please note that this is not an exhaustive list and that plant & equipment will be provided at a frequency to deliver the works in a safe manner and in accordance with the agreed programme of works.)

2.5. Personnel

The following personnel requirements are anticipated; however, this is to be determined by the PC and any subcontractors performing site tasks. The number of site personnel stated below should be considered the absolute minimum.

- 1 x Full-time Site Manager
- 1 x Visiting Offsite Senior Manager(s)
- 5 x Plant Operators
- 2 x Topman burners/ small plant operators
- 2 x Ground burners
- 2 x Labourers/Banksmen.

2.6. Site Security

The former Redcar Steelworks Site is presently fully secured with a 2m high boundary chain-link fence to deter unauthorised access. The security of the site shall be monitored by the Client's Security guards in conjunction with the patrols of the wider site with programmed inspections out with working hours to be carried out. During working hours, the security of the site and the maintenance of the fence line surrounding the demolition works shall be the responsibility of the PC.

2.7. Environmental Considerations

Prior to any demolition works commencing an ecological survey is to be carried out to confirm any presence of nesting birds or other sensitive wildlife. If required any nesting birds will be relocated as per regulations.

The PC is to execute the works sympathetically to the surrounding environment. During the works a watching brief is to be in place to ensure the controls are in place to control dust migration and they are suitable and effective.

Demolition dust will typically be controlled by applying water spray manually and remotely using a (MOTFOG 100 or similar) dust water spray cannon as required.

Banksmen will be positioned as required during works to ensure the controls in place are suitable and dust is being controlled and will not affect any adjacent properties. Where possible cold cut techniques shall be employed and during the crushing and demolition of the brick structures it is expected that water and dust control will be in place.

Drain points shall be identified prior to commencing and shall be managed as the works proceed to prevent flooding, if required these will be capped and surface water displaced to flow away from the works to the North and into open ground. Due to the historical use of the building all site water passes through the site drainage containment/ interceptor systems. Upon completion any drains associated with the structure will be capped as required. Where it is expected that significant debris could enter the drains they should be protected with filter material and replaced regularly.

Demolition arisings are to be processed and segregated on site and loaded into the required transport to be removed off site to the licensed recycling or waste facility in line with the PC's Waste Management, Collection, Delivery and Recycling of Waste Policy. All waste vehicles leaving the site shall be covered using the vehicles automated net system and the waste transfer duty of care document completed.

Prior to demolition works commencing any nearby boreholes shall be sampled and monitored to establish current background conditions within the local groundwater, or perched water within the made ground. These same boreholes shall also be monitored and sampled during the demolition works to monitor any effect the works may have on the local groundwater or perched water within the made ground. These boreholes will be identified and protected with temporary fencing for the duration of the works.

2.8. Continual Liaison

It is imperative that the works do not impact unduly or as a nuisance to any site stakeholders or boundary neighbours. It is noted that there is an industrial estate on the southern boundary of the works area.

Initial pre commencement meetings are to be carried out with all stakeholders within the direct vicinity of the site, informing them of the upcoming works and the anticipated duration; contact details will also be provided should they have any queries or concerns. Due to the traffic and vehicle interaction the traffic management plan will take this into account and communicated to neighbouring stakeholders.

The PC is to be the initial contact with any concerned parties to maintain good neighbourly relationship. Any complaints are to be communicated to the Client as soon as practicable.

2.9. Site Inductions & Training

All persons undertaking works on site are to be suitably trained and competent to carry out their tasks. All PC or subcontractors' operatives are to hold a CCDO or CSCS card minimum and have undertaken both demolition activities and Asbestos Cat B training.

All plant operatives are to have relevant CPCS tickets or equivalent and have suitable experience undertaking demolition activities. All persons required to work on site will undertake a full site induction prior to commencing any works. The site inductions will be carried out by the PC. Programmed 'Toolbox Talks', 'Safety Meetings' and Briefings will be undertaken and records to ensure all person involved are engaged with the works continue their personal development.

All Site Managers are to be suitably trained and hold the relevant CCDO Supervisor/Manager Card or SSSTS/SMSTS as a minimum.

A copy of all training records for operatives will be held on site and form part of the site induction.

2.10. First Aid

First aid assistance is to be available from the trained first aiders on site. The PC is to confirm who these nominated individuals are and confirm they have had appropriate training.

The first aiders will be indicated on the first aid posters, which will be located around the welfare areas.

2.11. COSHH

Full set of COSHH Assessments are to be held on site by the PC for all materials that may be used during our works. Any new materials encountered will have a COSHH Assessment undertaken prior to commencement of use. It is expected that COSHH assessments shall be regularly checked to ensure they are relevant to the operations being carried out. This should take place at least once a year on release of the new EH40 standards (reassessed by HSE) or when operating circumstances change.

Hot cutting equipment will consist of liquefied oxygen & propane gas, supplied in pressurised cylinders. The storage of these will be in designated security fenced areas or purpose designed security cages away from welfare and office facilities.

Fuel oil for plant will be stored in double bunded tanks, their location will take into account features such as drain systems. This will ensure in the event of catastrophic failure released liquids will be contained locally. Spill kits will be maintained near fuel storage and refuelling areas.

2.12. PPE

The following site minimum PPE & RPE Requirements are recommended, however specific requirements are to be set out within the relevant method statements appropriate to each task.

- Cut resistant gloves
- Overalls
- Safety boots
- Light eye protection (LEP)
- Safety helmet
- Hi-vis vest/jacket or overalls
- P3 filtered half masks

In addition to the above, sanitation stations including hand sanitiser, are to be provided around site in line with current UK Government advice. Task specific PPE such as face coverings for close proximity working should be determined by the PC (and any subcontractors).

3. Method Statement

The anticipated method of works and tasks are indicated in the following sections.

3.1. Site Set-up, Mobilisation of Plant and Equipment

- Take delivery of Heras Fencing at site.
- Take delivery of telehandler.
- Take delivery of Self-Contained Welfare, Decontamination Units and Office Cabins as required.
- Take delivery of 50T & 35T Excavators with attachments at site.
- Plant delivery;
    - All plant & equipment is to be delivered to site utilising low loaders.
    - All plant & equipment off loaded on level firm ground.
    - All deliveries will access site via Shepherd Road.
    - When offloading, a banksman wearing hi-viz will always be present and will direct any traffic as required (in accordance with SWP 9).
- Operatives to erect Heras Fencing along site compound (to the rear of office area) of site as per site plan (in accordance with SWP 35).
- Welfare / offices cabins etc. shall be delivered by HIAB and positioned on a level surface within site compound and have a specific lift plan.
- Refer to Site Layout drawing further on within the Method Statement showing indicative traffic routes and positioning of site compound.

3.2. Removal of Asbestos-Containing-Materials

Non-Licensable only – Licensed Material shall have been removed by specialist subcontractor prior to demolition works mobilising.

At the time of writing, the full R&D asbestos survey had not been issued.

- All asbestos removal activities shall be carried out in strict accordance with CAR 2012 and HSE Asbestos Essentials Task Sheets.
- Asbestos removal, at this stage, is assumed to be all Non-Licensed Non-Notifiable Works. The PC is to refer closely to R&D survey, when available, and utilise as a checklist once sections of removals are complete.
- All operatives carrying out works will require to be trained to Cat B Non-Licensed Asbestos Removal Standard, have an approved Asbestos Medical and be correctly face-fitted for a Sundstrom Half Mask Respirator (in accordance with Asbestos Essentials EM2).
- An Asbestos Waste Skip is to be suitably lined in 1000g polythene and located nearby the asbestos removal activity to minimise transit of materials. Disposal of material will be to an asbestos landfill cell nearby transported under a Section 62 Hazardous Waste Consignment (in accordance with Asbestos Essentials EM9).

<u>Non-Licensed Asbestos Removal Activities- Floor Tiles</u>

- Control access to the building to essential personnel only;
- Place warning signs at the entry and exit points;
- Identify and area of floor tiles to be removed;
- Use “Big Mutt” floor scrapers or shovel to remove the tiles. RPE and PPE worn by operatives as per SWP;
- Using handheld spray (wetting and surfactant agent) to dampen the area down as floor tiles removed;
- Tiles to be shovelled up and placed in asbestos bags or direct into skip; and
- Tiles to be loaded into skip as required.

3.3. Soft Stripping Works to Buildings (Office & Amenity Blocks)

Following asbestos removal and issuance of clean air certificates, materials shall be soft stripped, including combustible materials which are not limited to wood, plastic, electrical items, fluorescent tubes, lamps, glass, plaster board, etc. and all of which can be recycled.

Soft stripping activities are to be undertaken as follows;

- The upper levels materials will be removed via the windows and dropped to pre-defined drop zones below with either 40 yard skips in place or designated drop zones. These will be cleared using the excavator with grab to load into skips. The drop zone will be fully fenced off and exclusion zones communicated to all with a strict out of bounds area for all operatives during the works.
- Using shovels and nail bars operatives are to lift all the carpet tiles to the floors and place in a central area so that the skid steer can transport items to the relevant skip.
- Operatives using hand tools including nail bar's, mattocks and hammers will then remove timber, plastic trunking and (non-load bearing) partition walls. All waste is to be removed either through window or door openings to allow the excavator with grab attachment to clear away and place in skips.

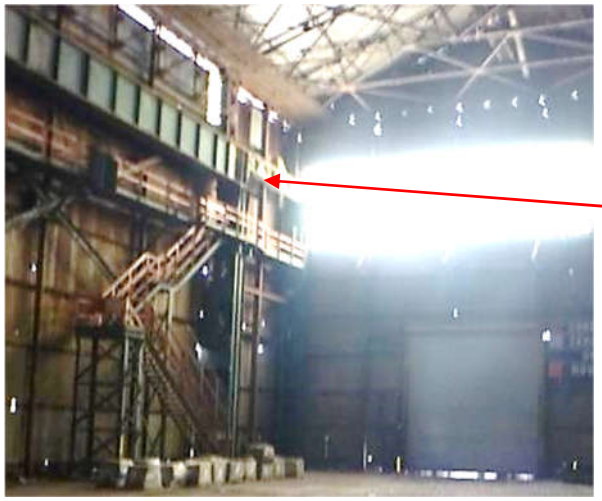
Throughout the soft strip, materials will be segregated and placed in separate containers except for general waste which will be mixed in one container.

3.4. Mechanical Demolition of Buildings

Table 1 below outlines the mechanical demolition activities with annotated photographs to provide clarity. The sequencing below is indicative only and is to be confirmed by the PC.

Table 1 – Mechanical Demolition Method

Area(s)	Notes /	Images
Office Buildings (incl. brick building adjacent to the main workshop)	The 50 tonne excavator with grab and shear attachment will commence from north end of the structures and remove the brick infill from the building to expose the steel frame. The steel frame will then be sheared to grade, working bay by bay to allow the concrete roof to fall into the footprint of the building. The first floor concrete pre-cast beams will be extracted and placed to one side for processing. The secondary excavator will follow on removing steel work and any large lumps of concrete ready for recycling. The same process will be carried out working through the structure bay by bay. The smaller building to the south will be demolished using the same process until down to ground level. All floor slabs to remain place. All steel work is to be cut to size and placed in waiting skips. The same process will be completed for all brick buildings that surround the main shed to leave a clear working area. All arisings and rubble will be stockpiled in the locality of the building ready for crushing. During the stockpiling the excavator will remove any rebar, steel and waste material to leave a clean brick and concrete product ready for crushing.	
Main Workshop	The main building will be commenced on the east elevation (roller shutter doors), using the 50 tonne excavator and high reach equipment. The building will be initially de-sheeted to expose the steel frame. The main columns will remain in place at this stage with only selected cross beams removed, subject to and by approval of structural engineer inspections. This is to ensure that the structural integrity of the building is maintained at this point of the project. At this stage the objective is to allow access for plant equipment into the building.	

Area(s)	Notes /	Images
	Following plant access the excavators and loading shovel will proceed to empty the building of all rubble and low-level plant and equipment to provide safe access routes for demolition works. Any inspection pits or open chambers will be infilled with loose rubble to prevent plant and operatives from failing into these. All rubble is to be transported out of the shed to the stockpiles. Any arising waste, timber, plastic etc. will be loaded into skips for onward disposal. Redundant low-level plant and scrap metal will be sheared into manageable sections and loaded into transport and taken off site.	
Main Workshop - Cranes	With access to the east gable available the overhead gantry cranes within the first section of the shed will be removed. Operatives will set up exclusion zones to this area and using a MEWP and hot cutting equipment will access the stop ends of the crane rails and cut these off. A diagonal cut will be made to the end of the rail. The crane brake, located adjacent to the access stair, will be released to allow the 50 tonne excavator to reach up and push the crane off the end of the rail into the exclusion zone. This same process will be carried out as works proceeds throughout the building for all cranes. The building will be sectioned off into three areas approx. 100m long and 10 column bays.	 Crane stop ends are to be cut off with diagonal cuts lines. These are to be cut in place, each side of the rails to allow the crane to fall.
Main Workshop - Roof	With the cranes removed the roof structure will be demolished and cut to grade using a 65 tonne high reach excavator with shear attachment. This will be carried out in one bay at a time and will be carried out in 100m sections and within the 10 bays as the structure is defined. Each lattice roof frame is at approx. 5m centres. The excavator will reach to the roof sheets and remove the first line to expose the purlins, these will then be cut away to expose the next line of sheets and dropped to floor level. This will give access to the	

Area(s)	Notes /	Images
	connecting point of the lattice frame and column. The excavator will proceed to cut and shear away from the connection, allowing it to be separated. The opposing side will then be sheared allowing the first roof bay to fall to floor level. Any loose purlins and sheeting will be removed to allow the secondary base excavator with grab attachment to follow on and remove the steel work at grade to the processing area and giving a clear access to the next bay of lattice roof.	 Lattice roof structure cut points to allow the roof frame to fall with the excavator at a safe standoff distance.
Main Workshop - Columns	With the roof structure removed, the upper crane rails and columns will be removed for each section of shed. The crane rails will be accessed using the MEWP and slit cut diagonally using hot cutting methods at either column end with a tag left on the bottom flange. The 50-tonne excavator with shear attachment will be used to pull the crane rail to grade with the lower flange tag tearing. This will allow for further processing at ground level which will be carried out via a mixture of hot cutting and excavator shearing. The same process will be carried out for the crane rails on either side of the works area and as works progresses sequentially. The columns will then be removed using the excavator. The shear attachment will cut the steel near its base at one side and then grip the upper section to pull the column to grade. It will then be removed by the secondary excavator to the processing area. This process will be carried out to all free-standing columns within the first section of work area. The outer cladding will be removed to subsequent side elevations as the works progress through each section.	 Crane rail accessed via MEWP. Hot cut diagonal slits are to be made to columns to allow Excavator to pull crane rail to grade.

Area(s)	Notes /	Images
Main Workshop – Cont.	The same process will be completed through the building working east to west, bay by bay and in 100m sections to each side of the shed. The excavators will continuously clear arising material to maintain good housekeeping and a safe working area. The upright steel columns that have been sheared at grade will be hot cut flush with the concrete floor to prevent trip hazards and to give a clear platform for future remediation works (by others).	

Notable Points

All rubble and brick work, scrap metal associated with the buildings will be stockpiled locally. All approved rubble and brickwork this will be crushed into a 6F2 product using an excavator mounted crushing bucket or processing plant. All scrap metal will be cut to manageable sizes of approximately 1.5m by 0.6m and stockpiled for transport off site by others at a later date. The stockpiling shall be orderly, safe and in a location of hardscaping for ease of collection by others.

The surrounding soil within the site area will then be graded level using the excavator and bucket to remove any trip hazards and leave a safe level area.

- All demolition activities to be carried out in accordance with BS 6187:2011 Code of Practice for Full & Partial Demolition;
- The methodology and sequence of demolition is determined by the PC to ensure a safe and controlled process and avoidance of any uncontrolled collapse of any structure;
- A suitable exclusion zone (ADZ) to be barriered off prior to any mechanical demolition commencing and all operatives briefed on activities;
- All machine operatives in direct contact with a banksman (in accordance with SWP 9) and site manager at all times through two-way radio communication;
- SWP 2, 8, 10, 11, 21 shall also be complied with;
- At the end of each shift trim off loose structure back to a strong point;
- Demolition will be carried out top-down and on a bay-by-bay basis and materials stockpiled in waste streams away from the workface as works progress;
- Once the building has been demolished waste will then be extracted and loaded into designated 40Yd recycling bins.

3.5. Segregation of Arising Materials and Removal Off-site

- Waste will be segregated at the demolition workface and loaded directly into 40 yard recycling bins.
- Skip and waste movements will be booked in advance and controlled under the PC Duty of Care including Waste Transfer Notes stating producer/registered haulier/registered recycling facility.
- Any LGV vehicles entering/leaving the site will be controlled by a banksman.

3.6. Grubbing Up Foundations and Crushing

- Floor slab and foundations are to remain at this stage;
- All concrete will be processed to remove steel reinforcing bars ready for crushing;
- Material will be stockpiled in a windrow ready for crushing;
- Back fill open trenches/pipe tracks with site won material;
- Do not leave any open excavations overnight, always backfill or fence off with double clipped Heras style fence;
- Grade off footprint of building by utilising crush to taper off slab edges;
- All brick and concrete will be crushed to a 6F2 Specification and stockpiled on site in the designated area. The crusher will be positioned on firm level ground as required as per the safe working procedure.
- Water supply connected to the crusher and dust suppression used as required as crushing is carried out.

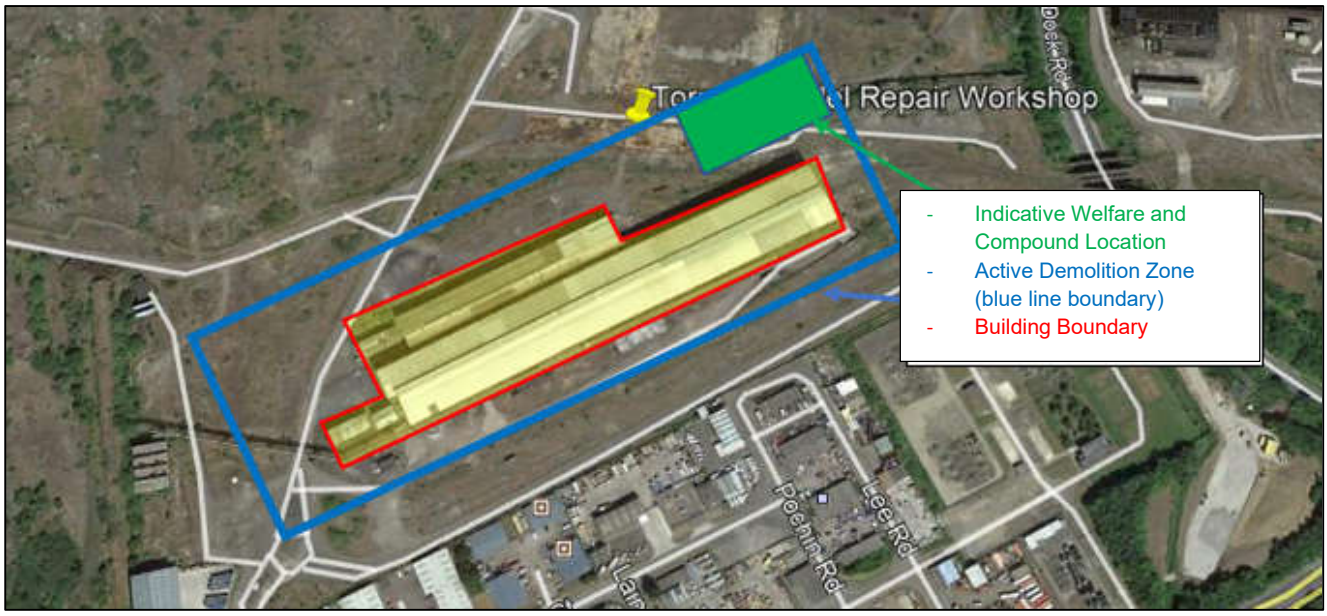
3.7. Site Finishes and Demobilise

- All unsafe edges, voids, trip hazards are to be infilled with site won material to leave site in a safe condition.
- Plant and equipment are to be demobilised in a reverse sequence to Section 3.1.

4. Site Location and Exclusion Zone Plan

The following marked up aerial imagery showing the potential site layout is for guidance only.

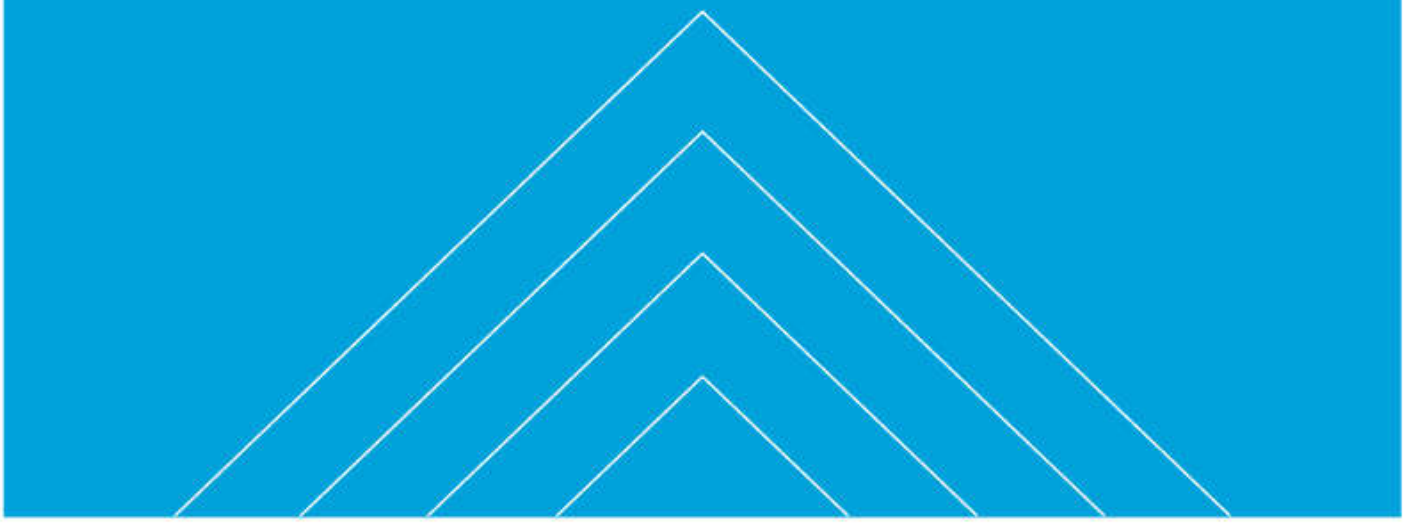
The establishment of the site layout and facilities required to undertake the works shall be determined by the PC.



The main entrance to the site is via the site road system and all accesses by the main security gate.

All operatives & visitors are required to sign in and out of site and shall be subject to a PC site induction. All vehicle movements to be strictly controlled by a banksman.

Appendices



Appendix A. Drawings

Drawing Reference	Title
TSWK-STDC-DMP-ZZ-DR-C-0001	Dorman Point Torpedo Shed Demolition Plan

DO NOT SCALE

Millimetres 0 10 100

EAST FACING ELEVATION

ACCESS TRACK ALONG SOUTH ELEVATION

SOUTH FACING ELEVATION

NOTES

1. DO NOT SCALE FROM THIS DRAWING
2. THE REDUNDANT BUILDING IS A STEEL FRAMED STRUCTURE WITH A NUMBER OF LARGE OVERHEAD GANTRY CRANES ASSOCIATED WITH THE FORMER HEAVY INDUSTRIAL USE. THE SHED MEASURES APPROXIMATELY 350METERS LONG, 50 METERS WIDE AND 24 METERS TO THE ROOF RIDGE.
3. THE STRUCTURES ARE TO BE DEMOLISHED TO SLAB LEVEL AND ANY VOIDS INFILLED WITH CRUSHED UNCONTAMINATED SITE WON 6F2 TO LEAVE A SAFE LEVEL SITE WITH NO TRIP HAZARDS.
4. ALL SERVICE UTILITIES ASSOCIATED WITH THE STRUCTURE TO BE CERTIFIED AS DISCONNECTED AND ISOLATED OUT WITH THE CDM AREA.

KEY

TORPEDO SHED BOUNDARY

Rev.	Date	Description	By	Chk'd	App'd
A	NOV 20	FIRST ISSUE	KW	LCD	DE

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South Tees Development Corporation

Project Title:

TEESWORKS
The UK's largest industrial zone

Drawing Name:

DORMAN POINT TORPEDO SHED DEMOLITION PLAN

Drawn by: KW	Date: NOV 20
Checked by: LCD	Date: NOV 20
Approved by: DE	Date: NOV 20
Drawing Number: TSWK-STDC-DMP-ZZ-DR-C-0001	Revision: A
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