

Method Statement

MECHANICAL DEMOLITION OF 'THE KOP' STAND, WREXHAM FOOTBALL CLUB

WXM-AFL-00-XX-RP-A-00002
REV P03



Project: The Kop Stand, Wrexham

Client: Wrexham Football Club

Location: Racecourse Ground, Mold Lane, Wrexham, LL11 2AH

Method Statement No.: FDL001 Rev.02

Report Creators: David Churchward – Forshaw demolition Ltd and AFL Architects

Anticipated start date; Q1-Q2 2022

Anticipated duration; 10-14 weeks

Executive Summary

To mechanically demolish the former 'Kop' terrace using a demolition specification excavator. Once the structure has been demolished the concrete terrace will be grubbed up and the highlighted area will be dug down to formation level.



Demolition Zone

1.1 Existing Site

The structures onsite to be demolished consist of;

- the former 'Kop' terrace understood to be constructed in the 1930's, which over recent years has become disused.
- A small 'cabin' type building to the rear of the Kop stand.

The boundaries of the site are mostly fenced with an existing 2.4m high plywood fencing, with secure gating to the entrance off Crispin Lane.



Pitch side view of the Kop stand terrace

1.2 Scope of Works

The demolition works generally comprise, but are not limited to, the following;

- Utility disconnection o Tree felling / vegetation removal
- Asbestos removal
- Soft stripping
- Demolition of all structures down to existing floor slab level.
- Removal of ground floor slabs, foundations and drainage within the building footprint
- The existing floodlights, substations and the Pitch Irrigation Water Tank is to be retained for use during the construction noted above

Hours of work for activities which would be audible at the site boundary will be limited to:

Monday to Friday 08:00am – 06:00pm

Saturday 08:00am – 13:00pm

1.3 Site Restrictions

- The Works will be fully coordinated with Wrexham Football Club (WAFC) and their football fixture list, to avoid the demolition operations having any adverse impact on crowd movement during home games.
- The site will be secured and fully inspected well in advance of any home games

1.4 SITE Establishment

Temporary welfare facilities will be provided on site, generally in the form of 'portacabin' type units. These facilities will be in accordance with the CDM requirements and commensurate with number of trained personnel on site, and will generally consist of;

Welfare Facilities:

1 x Canteen
1 x WC/Drying Room
1x Changing Room
1 x Office

It is intended that the welfare and office units will be sited within the existing building site indicated by the architectural demolition drawing WRX-AFL-Z4-ZZ-DR-A-00102 – Demolition Plan.

The welfare facilities will be maintained clean and in good order by the workforce. Electricity will be provided typically by means of a generator. The water and drainage connections will potentially be provided via an existing site services, in agreement with WAFC. The existing site is already surrounded by a secure 2.4m plywood fence and will be maintained around the compound where required. New 2.4m plywood fence hoarding will be erected and secured where there are any gaps in the fencing particularly on pitch side.

1.5 Liaison

The demolition contractors site manager, or his deputy, will carry out the role of liaison manager for the project and his contact details will be prominently displayed on the perimeter fencing. He will be the first point of call regarding any issues with the day to day running of the project at site level i.e. if access is required by third parties etc.

1.6 SHE Inductions

All staff and operatives working on the site will be formally inducted prior to commencing work on site. Visitors to the site will be inducted, or escorted by a member of staff at all times when on site.

1.7 Personal Protective Equipment (PPE)

All personnel working on site will be required to wear a hard hat, safety boots, hi-viz jacket/vest, gloves and eye protection as a minimum requirement. All operatives carrying out hot cutting will also wear flame retardant coveralls, gauntlets and appropriate eye protection.

1.8 Access & Egress

Vehicle access to the site will utilise the gated entrance off Crispin Lane (See site plan). All access and egress will via Mold Road. Egress from Crispin Lane onto Mold Road will be right turn only.

External of the site suitable signage will be placed either side of the main entrance warning other road users and pedestrians of the Site entrance. All vehicle movements on and off site will be controlled by a Traffic Marshal.

Pedestrian access to the site will be kept separate from vehicle access.

Vehicle and pedestrian routes internal of the site will be kept separate and demarcated using barriers and signage.

HGV's must turn on their flashing warning lights when approaching the site entrance off Mold Road, their flashing lights must remain on during all movements (to, from and onsite) until they exit the Site.

HGV's will drive into and out of site in a forward gear. All vehicle movements on and off site will be carried out under the instruction of a Traffic Marshall.

When not in use the vehicle access gates will be kept closed and locked to prevent unauthorised access.

The surrounding roads and footpaths will be regularly inspected and, when required, cleaned by a road sweeper. Roads and footpaths will remain open and unobstructed at all times.

The site-specific traffic management plan will be explained to all operatives as part of their site induction. The traffic management plan will be displayed in the site welfare cabins.

1.9 Resources

It is anticipated that the below resources will be required; All operatives will hold the relevant competence cards/certification required (CCDO, CSCS, CPCS, SMSTS etc). All operatives will have undergone Asbestos Awareness training. All plant and equipment will have relevant certification to work on site.

1.10 Site Permits

- The following Site Permits are required to be issued by the Site Manager / Supervisor;
- Permit to Demolish
- Permit to Dig
- Hot Works Permit
- Permit to lift
- Permit to Alter, Load, Unload, or Strike Temporary Works

1.11 General Control Measures

- Danger areas to be fenced off to stop unauthorised access, lay down areas to be free from obstructions.
- Adequate spill response equipment to be in place before works begin.
- Care will be taken to ensure that a secure site boundary fence and appropriate warning signage is in place throughout the demolition works.
- Good Communication is essential – Daily Pre-start Briefing Sessions will be carried out by the Site Manager (including any sub-contractors) to discuss the day's proposed activities. This liaison will aid in the smooth running of the project and help to highlight any potential problems that could otherwise occur.
- Two-way radios will be utilised for communication and emergency. Machine drivers and management will be in radio communication to stop works in the event of any emergency.
- Service drawings and historical data will be checked, for underground voids within the vicinity of the demolition area

1.12 Method Statement

1.12.1 - Asbestos Removal

An asbestos demolition survey was commissioned by Wrexham AFC LTD and carried out on the 09th of December 2021: and carried out by bradley Environmental - Report Ref J230340

The removal of the Asbestos Containing Material's (ACMs) positively identified and quantified in the above survey will be planned, managed, controlled and carried out in full compliance with the Control of Asbestos Regulations 2012, NFDC Industry Guidance for Non – Licensed work with asbestos containing materials within a demolition or refurbishment environment, other current / relevant Health and Safety Legislation and CBL's Stand Procedures for Asbestos Abatement Works.

Task Specific Risks;

Asbestos Exposure – Manual Removal

Asbestos Exposure – Mechanical Removal

Discovery of Suspected Hazardous Substances

Manual Handling

Hand Arm Vibration Syndrome (HAVS)

Disposal of Waste Materials

1.12.2 - Soft Strip

The removal of all fixtures & fittings, furniture, carpet tiles, false ceilings, timber, services, cables, light fittings, insulation / lining boards within the structures to allow for the demolition.

In all manual lifting operations, regard is to be noted with reference to The Manual Handling Regulations. i.e. team lifts, use of lifting equipment/mechanical means rather than men where practicable.

Skips will be placed as close as possible to the area of works and fenced off during the works. o During soft stripping, to minimise Manual Handling, Drop Zones will be formed and the arisings will be dropped down to ground floor level, where a 360° excavator will segregate into various waste skips.

- All debris will be removed on a regular basis to the collection points for disposal, thus creating a clean, safe working area and maintaining good housekeeping procedures.
- Disposal transit routes are to be reduced to minimise the requirement for Manual Handling.
- This method is to be read in conjunction with the asbestos surveys. Known areas of Asbestos (not removed prior to soft stripping) will be highlighted to the operatives and 'sprayed' red. There is a possibility that unknown ACM may be uncovered during the soft stripping process. Should such an incident occur, the demolition contractor will secure the suspect material and its location, as far as is reasonably practicable, and inform the client and arrange the necessary sampling and testing of the material.

All operatives will have undergone Asbestos Awareness training.

Suitable hand PPE to be worn to protect from injury during all manual handling operations.

1.12.3 - Soft Stripping of all doors, frames, windows, architraves, skirtings and boxings

- Doors may be fire resistant and may be required to be moved with support from a suitable trolley, whilst work in the removal from frames is carried out.
- There is potentially brittle glass within some of the doors. This can be taped over and removed by remote methods (i.e. scaffold tube used to break out the glass) prior to removing the door. Full gauntlets and visors are to be worn when handling glass. Glass will then be cleared up and placed into the skip.
- Doors and frames to be removed to the outside of the building for disposal to skips. o Soft stripping of doors, frames, architraves, cable ducts and skirting's is to be carried out using hand tools or 110v Reciprocating Saw.
- Frames are to be removed using crow/nail bars and reciprocating saws for the removal of steel fixings.
- Timbers and glass to be removed directly to skips to prevent injury from cuts, nails etc o Any protruding sharp edges, nails etc will be knocked flush with the adjacent structure or removed to avoid puncture wounds.

1.12.4 Soft Stripping of all Cables and Services

- Soft stripping of service cabling and steelwork is to be carried out using hand tools, 110v Reciprocating Saw
- Cables are to be cut at each end of the sections to be removed prior to removal of fixings or support trays.
- Clips and small brackets are to be removed using crow/nail bars and reciprocating saws will be used for the removal of steel fixings and main supports, as access dictates.
- Cable trays and steelwork runs are to be dismantled in such a manner as to allow heavy or long lengths to be progressively lowered to floor level, without the need to over reach.

1.12.5 Waste Electrical and Electronic Equipment (WEEE)

- WEEE Items (such as monitors, microwaves, fridges, computers, light fittings etc will be removed from the structure by hand, segregated and palletised. These pallets will then be shrink wrapped and an inventory recorded for each pallet. This will then be stored in a secure location awaiting disposal as necessary.

1.12.6 Fluorescent Light Fittings

- Light fittings will be removed for segregation and disposal of the primary contaminant components -Mercury contained within Fluorescent tubes and potential PCB materials within starter capacitors.
- These will be removed by hand prior to demolition wearing the site standard PPE and placed into the disposal 'coffins'

Task Specific Risks

- Internal Strip Out of Buildings
- Manual Handling
- Downloading Debris – Chutes etc
- Use of Portable Electrical Equipment
- Hand Arm Vibration Syndrome (HAVS)
- Disposal of Waste Materials
- Work Creating Dust
- Working at Height
- Use of Mobile Towers
- Occupational Diseases
- Discovery of Suspected Hazardous Substances
- Hypodermic Needles

1.12.7 Demolition Sequence

Demolition works will be carried out working from North to South using standard mechanical 360 excavator demolition techniques.

Demolition will begin with the gable end on the northern façade and progress bay by bay working south of both bays of the building working south.

Once the demolition has progress 50% of the way through the structure then additional plant will be utilised to begin lifting the slabs and foundations with a view to early hand over of the northern section of the site, while works are progressing and completing on the south

1.12.8 Substructure Demolition

Prior to any works commencing the following procedures will have been implemented and completed:

- Services drawings inspected
- Area (and surrounding perimeter) to be CAT Scanned
- Any identified services to be marked up with spray paint
- Permit to Dig issued

Once a significant amount of ground bearing slab has been exposed, machines fitted with impact hammers and buckets will begin to remove the slab and foundations. Machine fitted with impact hammer will begin by puncturing the slab and foundations to break them up to moveable sections. Machine fitted with a bucket will then lift and stockpile sections ready for further processing. Machines fitted with pulverisers will process arisings further to separate concrete from reinforcing bar, and load away respective materials. All excavations will be backfilled progressively after foundation removal; the area will be graded to surrounding site contours, and the footprint tracked in by machine, leaving a flat site.

Task Specific Risks

- Self-Propelled Plant Operation
- Self-Propelled Plant Set Up & Maintenance
- Use of Quick Hitches
- Disposal of Waste Materials
- Changing Attachments on Plant
- Noisy Machinery & Processes
- Work Creating Dust
- Storage of Fuels & Other Flammable Liquids
- Discovery of Suspected Hazardous Substances

1.12.9 Crushing

Site-won hard inert arisings will be crushed on site to produce aggregate for re-use. Works will commence loading the Crusher using a 360o Excavator. Concrete/hardcore will be loaded into the hopper which is hydraulically fed into the crusher. The crushed material falls onto the conveyor where any reinforcement bar or other ferrous metal is removed by a hydraulic belt magnet fitted above the main conveyor. The crusher then discharges crushed aggregate and metal into two separate stockpiles. Metal will be periodically loaded away into metal bins, and aggregate will be regularly cleared and stockpiled in the client's desired location(s). Aggregate stockpiles will be formed with a suitable angle of repose to ensure they remain stable.

The Crusher is fitted with a dust suppression system, whereby water is sprayed onto the discharge conveyor to minimise dust. The area will be left clean and tidy on completion.

Task Specific Risks

- Self-Propelled Plant Operation
- Self-Propelled Plant Set Up & Maintenance
- Use of Quick Hitches
- Noisy Machinery & Processes
- Crushing of Concrete or Hardcore
- Work Creating Dust
- Storage of Fuels & Other Flammable Liquids
- Discovery of Suspected Hazardous Substances

1.12.10 Dust and Noise Control Measures

Throughout the demolition process noise, dust, and vibration will be kept to a minimum; this will be achieved in various ways as detailed below.

- Use of correct plant for specific tasks ensuring plant is fully maintained. Machines now generally fitted with Euro6 engines.
- Leaving part of external elevation of particular buildings intact to act as a visual and acoustic screen.
- Using 'quietest' method when both demolishing structures i.e. using grab or pulveriser rather than impact breakers.
- When removing ground floor slabs and foundations, structures will be lifted by bucket attachment whenever possible, in-lieu of using impact breakers.
- Using proprietary dust suppression equipment, such as DustBoss DB60 or Dehaco DE75 Dust Fighter.
- Water hoses will also be rigged into the high-reach machine, the water is then pumped up the arm of the machine and sprayed directly onto the attachment as demolition is undertaken.

1.13.1 Noise Control

Due to the nature of the works, it is inevitable that noise will be generated. All necessary measures will be taken to keep noise levels and the exposure of all persons, to the absolute possible minimum, which where practicable will not exceed permitted exposure levels. All endeavours will be made to reduce the impact of noise caused by the works.

Demolition works will be carried out utilising a fleet of modern plant incorporating best practices for noise emissions. Modern hydraulic breakers (city type) will be used where appropriate, these have been specially designed with reduced noise emissions for use in city environments. In addition, wherever practicable hydraulic concrete crackers will be used to demolish concrete instead of hydraulic breakers.

Noise will also be kept to a minimum by ensuring all plant on the project is serviced in compliance with the manufacturer's specifications.

We shall also follow the code of practice "Noise Control on Construction and Demolition Sites". Copies of the appropriate regulations and guidance notes will be kept on the site. Any necessary personal protective equipment will be acquired and provided as required.

The Site Manager will ensure that supplies of ear defenders or other hearing protection is made available where it is not possible to reduce the noise level to a safe limit. On issue to operatives and others, the Site Manager will give instruction via a toolbox talk to the operatives on their use and maintenance. Employees will ensure that any equipment supplied for the protection of hearing is properly used and maintained.

1.13.2 Dust Control

Good working practices will be employed to cause as little noise/dust disturbance to others. Dust emissions resulting from the works are kept to a minimum by adopting some of the following control methods:

The use of modern plant fitted with a powered water suppression system that delivers a fine water spray at the face of the tool during demolition activities.

Dust will be suppressed by damping down at source using a fine water spray (Dust Bosses – purpose-built state of the art machines that spray a fine water mist in a selected direction to suit the prevailing conditions).

Whilst crushing utilising a modern crusher incorporating a dust suppression system that produces a fine water spray over the arisings during crushing, together with modern plant fitted with powered water suppression systems and a Dust Boss.

As far as possible, the site layout will be designed to ensure that storage of potentially dusty materials is remote.

Wagons will be sheeted over when leaving the site.

Affected roadways will be swept as required. To confirm the effectiveness of the above control's nuisance dust will be monitored throughout the project.

1.14 Waste

All general waste and demolition arisings will be removed as the demolition works progress and will not be accumulated on site. All arisings removed from site will be accompanied by the relevant waste transfer documentation.

All hazardous materials and their containers to be regularly disposed of offsite to a licensed waste facility approved by a Waste Regulation Authority and in accordance with relevant regulations.

All reasonable precautions will be taken to protect the site, works and general surrounding areas and environments.

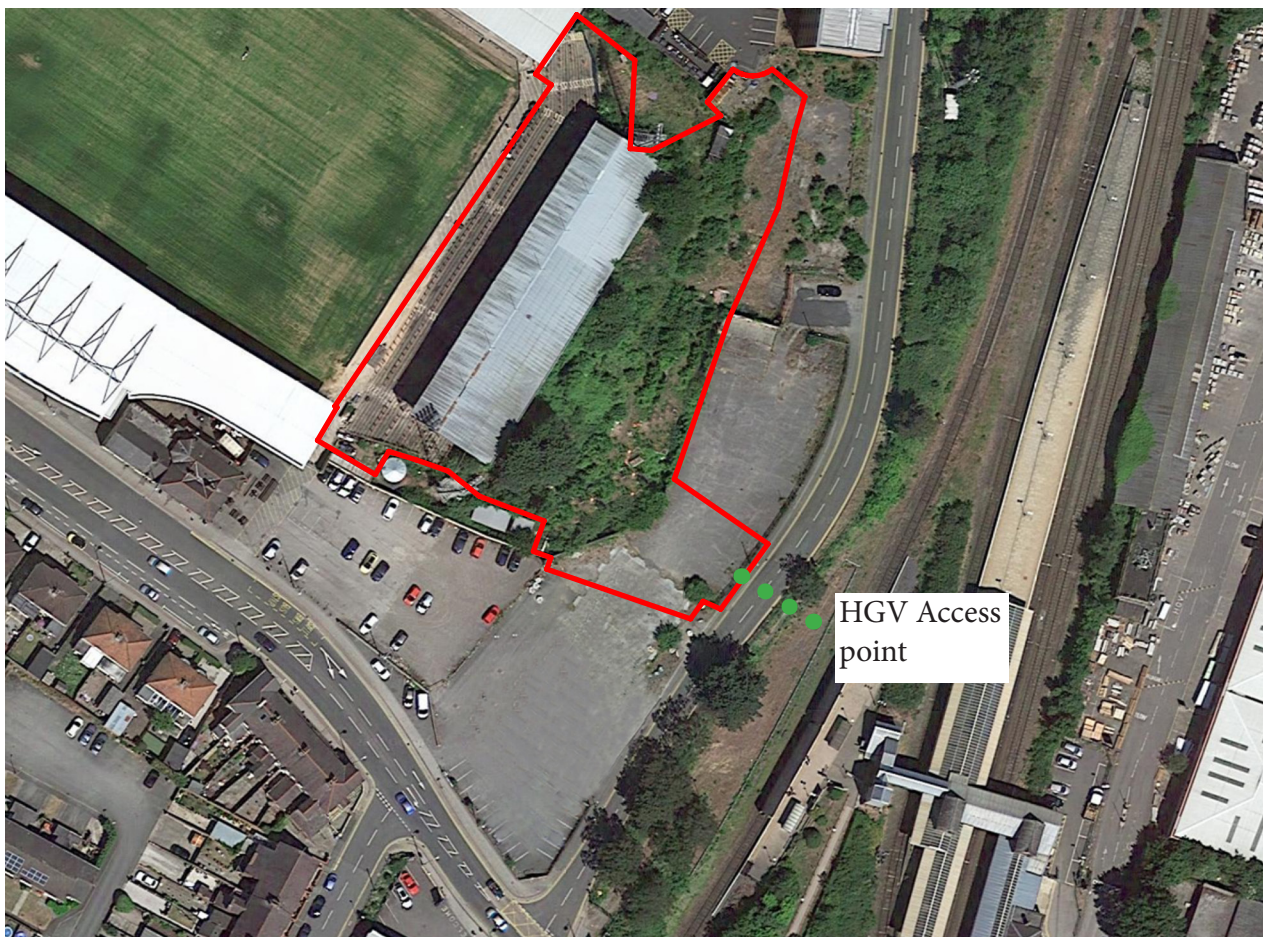
All Asbestos present on the site or found during work will be removed under current legislative requirements, (Control of Asbestos Regulations).

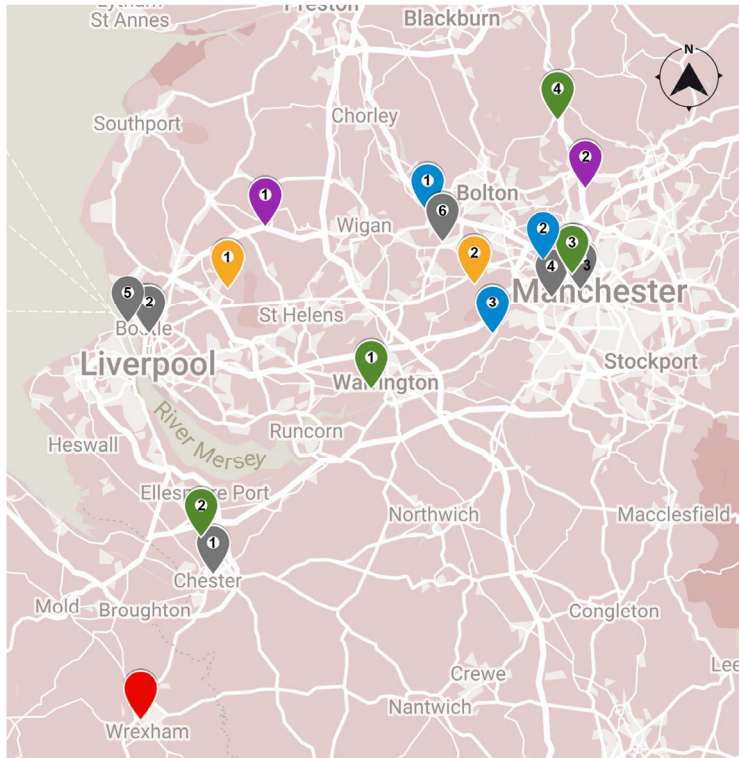
1.15 Vehicle Movement

The concrete/hardcore arisings will be crushed and retained on site for reuse.

It is anticipated that there will be approximately 900-1000 No vehicular movements of spoil to remove from site. This will be in the form of 50-60 lorry movements per day. The spoil being removed to a licenced waste transfer station.

Scrap steel work from the stand would be taken to either EMR or Norton's in Liverpool for recycling.





Waste Sites Map

 KOP Redevelopment Site

 Mixed Demolition Waste
 1. 3 C Waste, Chester (ZP3698CY)
 2. Cheshire Waste Skip Hire, Chester (YP3494FF)
 3. Salford Skip Hire (53529)
 4. ISM Waste & Recycling, Ramsbottom (53695)

 Scrap Metal
 1. City Metals, Chester (WEX206230)
 2. EMR, Liverpool (53453)
 3. EMR, Salford (50065)
 4. S Norton, Trafford Park (XP3792CT)
 5. S Norton, Liverpool (53454)
 6. KAS Metals, Atherton (WEX244360)

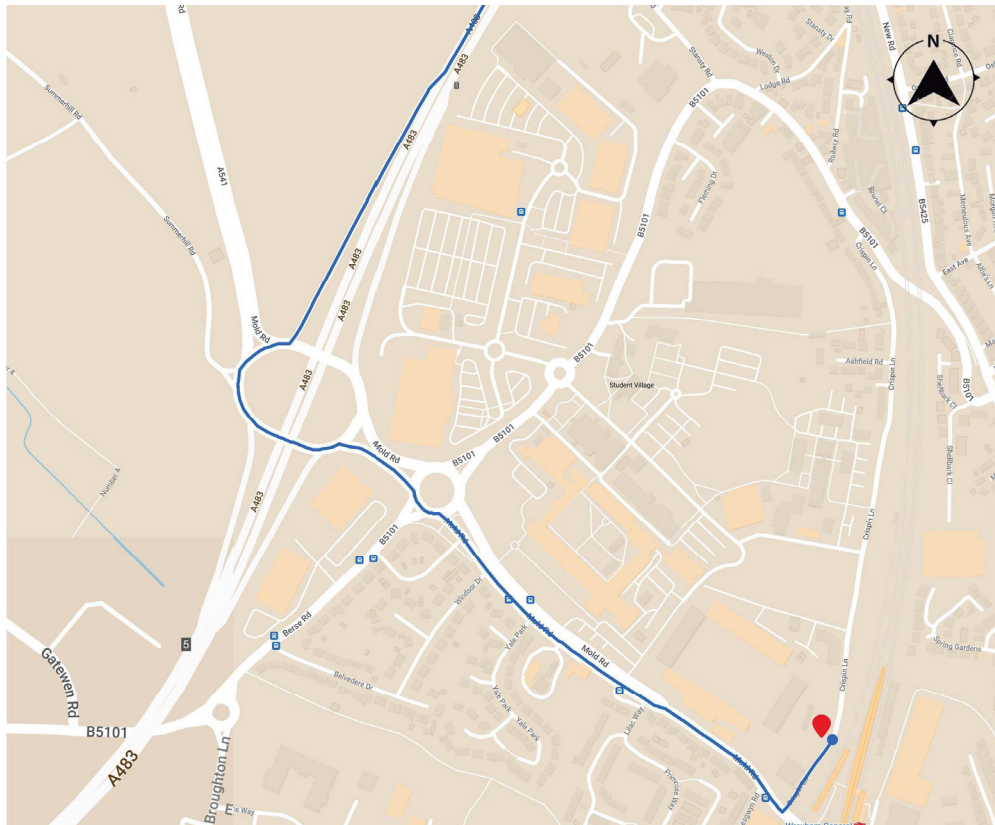
 Wood
 1. Oldham Brothers, Liverpool (WEX12821)
 2. Boden & Davies, Astley (50263)

 Brick & Concrete
 1. Forshaw Demolition, Westthroughton (FB3006XW)
 2. John O'Shea & Sons, Salford (50093)
 3. Frank O'Gara & Sons, Irlam (50075)

 Asbestos
 1. Whittemoss Landfill, Skelmersdale (DP3034YR)
 2. Viridor, Pilsworth, Bury (BS79511B)

1.16 Removal of waste from site and vehicle routes

Above is a map showing the sites where the demolition material from site will be taken to, below is a map demonstrating that the vehicles will exit site and travel along Mold Road to join the A483 and travel north to the various sites.



 KOP Redevelopment Site

 Wagons Route

