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METHOD STATEMENT RISK ASSESSMENT (RAMS) COVER SHEET

ARRANGEMENTS	
Author: Iain Hoodless	**(Signature)**
Document reference number:	SMS_C924_01
Location:	Dinting Lane, Glossop, SK13 7GA
Work scope:	Site Set Up & Road Entrance
Client contract No:	

DOCUMENT REVIEW & AUTHORISATION				
ORGANISATION NAME	**APPROVAL**			
	CONTRACTS MANAGER	**SITE MANAGER**	**FOREMAN**	**DATE**
WESTSHIELD	Scott Mc Gowan	Stuart Hobson	TBC	15.09.17
Does this document identify high risk activities (refer to attached risk assessments)				Yes / ~~No~~
Does the work scope include temporary works				~~Yes~~ / No
Does the work scope require specialist technical knowledge				~~Yes~~ / No

DISTRIBUTION				
ORGANISATION NAME	**NAME**	**POSITION**	**SIGNATURE**	**DATE**
WESTSHIELD	S. Jones	QS		15.09.17
FOOTHOLD	Iain Hoodless	CM		15.09.17
FOOTHOLD	Stuart Hobson	SM		15.09.17

Revision Record		
Revision	**Date**	**Comments / Changes**
0	15.09.17	Initial RAMS for site set up and entrance works
Field Change Notices		

Contents

1. Purpose and scope of works

This Method Statement covers all works associated with the preparation of a compound area and site strip to the proposed site entrance road at the Foothold Development off Dinting Lane, Glossop

2. Programme and constraints

Duration of works		
Anticipated start date: 02.10.17	**Anticipated finish date:** TBC	**Duration:** TBC
Working Hours		
Weekday	**Start time:** 08.00	**Finish time:** 17.00
Weekend	**Saturday:** 08.00-13.00	**Sunday:** No working allowed
Constraints		
Noise: Driving plant – ear protection to be worn when driving the roller.		
Dust / mud: Dust from aggregates.		
Archaeology: A Written Scheme of Investigation [WSI] is in place		
High voltage overhead lines: Overhead cables at site entrance including BT		
Other (specify): Railway Line to the bottom of the site with public access to the footbridge		

3. Surveys and Engineering

Type of survey	Document Reference
Refer to all contract documents	
Ground Investigation / Service drawings	WML
Contract Drawings	WML / HPA/ SCP

4. Permits and Permissions

Work permits						
Permit to dig: Yes				Electrical work: No		
Working under/adjacent BT overhead lines: Yes at entrance				Confined Space Permit: No		
Temporary Works Permits						
Permit to load: No		Permit to strike: No				
Permissions required to carry out the works						
PCW (Tick applicable)	Permit to Work	✓	Access		Transfer	
Others: N/A.						

5. Resources

No's	Labour / Trades requirements
1	Supervisor
1	Engineer
1	Operative
2	Machine Operator
2	Subcontractor working for Westshield
0	Trainee/apprentices
	Plant and Equipment
1	Tracked excavator
V	Stone wagons
1	Dumper
1	Roller
V	Heras
1	Shredder
1	Chainsaw
V	Engineering equipment
	Materials
	6F2
	MOT
	Tarmac
	Diesel
	Timber materials

PPE

Mandatory:

- Gloves
- Hard hat
- Safety footwear
- High visibility vest/jacket

Additional when required:

- Safety glasses/goggles
- Ear defenders

Training / Competency

Position	Requirements
Site Manager / Site Engineer	CSCS, SMSTS
Supervisory Staff / Foreman	CSCS
General Operative	CSCS (General Operative)
Plant Operator	CPCS

6. Communication

Prior to commencing on works	
Sub Contract pre-start safety meeting	Records required
On-site safety induction (by Foothold Construction) and Westshield	Records required
On site - competency checks prior to commencing work / QA systems	Records required

Routine communication processes	
Work crews briefed on RAMS documentation	Sign off required
Applicable Toolbox talks (Safety / Environmental / Quality)	Records / sign off required
Contractor safety / progress meetings	Meeting minutes
Workplace safety committee meetings	Meeting minutes
Emergencies	
Emergency response actions identified and communicated	Records required
Accident and incident / Near Miss procedures explained	Records required
Task specific communication processes	
Follow instruction at all times from the site manager / supervisor relating to all excavation works.	Site Inspection required

7. Supervision and Responsibilities

Supervisory Role	Responsibilities
Site Agent / Manager	Execution of the contract and liaison with the Client
Site Foreman	Supervises all gangs and controls labour, plant and materials on site.

8. Health Impacts

Identified Impact	Applicable (y)	Identified Impact	Applicable (y)
Silica (Silicosis)		Hand arm vibration (HAVS)	y
Asbestos (Asbestosis)		Dust / Vapours / Fumes	y
Noise (Deafness)	✓	Chemicals	
Weils disease (Leptospirosis)		Dermatitis	y
COSHH Impacts			
Substances or materials		**COSHH assessment required**	
Diesel		On site	
Hydraulic Oil		On site	
Dust from aggregates		On site	

9. Quality Control

Name of Site Manager	Telephone Number
Stuart Hobson	07967 752 294
Name of Site Foreman	**Telephone Number**
	07973 402 146
Name of Contract Manager	**Telephone Number**
Scott Mc Gowan	07973 561 660
Name of Person Monitoring Safety	**Telephone Number**
[Company Safety Representative]	07973 561 660
Darren Mc Hugh Safety Advisor	
Nancy Clarkson [Administrator]	0161 682 6222
Name of Client Contact	**Telephone Number**
Foothold Construction	07980 685141

References
Westshield Limited Health & Safety Policy Westshield SMS system Westshield Limited Quality Management ISO 9001:2001 document Westshield Limited Environmental Management ISO 14001:2004 Westshield Limited Health & Safety Management ISO 18001:2004 OHSAS Westshield RAMS Project Quality Plan Project Site Waste Management Plan
Site Access Notes and Special Arrangements:
Dinting Lane, Glossop, SK13 7GA. All deliveries must be suitably banked into site with a designated banksman.
Site Storage Facilities
All Tools and equipment etc. will be stored in a site secured container within the designated compound area at the end of each worked day or when not in use.
Waste removal Arrangements
Care will be taken to dispose of waste in accordance with good environmental practices highlighted within the project's Environmental Management and Waste Management Plan. When necessary, waste skips will be sited in a safe area and removed from site by competent contractors to a licensed tip / premises.
Security Arrangements
The site is securely fenced off and monitored by Westshield. The working area will be securely fenced off with Herras fencing at the end of every shift with suitable safety signage displayed around the perimeter. Perimeter site fencing and/or gates are to remain closed and locked throughout the working day in order to prevent the general public and unauthorised persons accessing site. Larger items of plant must be left secure and trapped in where possible.
Procedures to follow should the method statement require alteration
All amendments will be issued to the Westshield Site Manager and persons monitoring safety. Any major changes will be discussed with relevant parties *prior* to any changes being implemented.
Special Emergency Procedures
N/A

10. Environmental Impacts

Environmental Impact
The following potential environmental impacts have been identified for this scope of works: • Fuel and hydraulic oil spillages

11. Methodology and sequence of works

Sequence of Works
Pre Start • Operatives will be briefed on the (RAMS) prior to works starting. • Supervisor will check to ensure personnel have required PPE for these tasks. • All safety checks on plant to have been carried out prior to work commencing. • A material lay down area & spoil areas shall be agreed with the Foothold site manager. • The Westshield site engineer/manager shall study the service plans & a permit to dig issued prior to digging including a CAT scan of the work area. • A survey of the existing ground level pre-cut & fill is to be taken by the Westshield engineer. **Installation of Site Entrance Road** • The Westshield engineer will set out the extent of the frontage along the access route to the site, the existing access will be used to access the site until the new road has been fully constructed. • The tree and hedge removal and pruning as per the tree protection plan on drawing reference CW7647-P-TP-1from Cheshire Woodlands. [Specialist subcontractor RAMS] • Tree protection works as per the drawing noted above inclusive of Type 1 and Type 2 works. [Specialist sub-contractors RAMS]. • The excavator shall then strip the topsoil from the road entrance and load directly into a dumper to be stored in the agreed location • The excavator shall then strip the subsoil from the road entrance and load directly into a dumper to be stored in the agreed location. At this point the Westshield engineer shall take a level survey to be agreed with Foothold. • CBR tests shall then be taken on the formation to determine the road construction build up. These test results shall be sent to the Structural Engineer [WML] for local authority approval on capping/sub base depths and construction build up. • The Westshield engineer will profile the road entrance setting the profiles at FRL+1m and brief the working gang on the traveller to be used to ensure that the correct dig depth and top of capping level is achieved as per the WML specification agreed with the council. This will ensure the entrance road is utilised later within the final road construction. • The 6F2 capping material will be tipped into place using a designated banksman and a machine will commence grading through the stone to the correct levels. • The 6F2 will be compacted at a minimum of 200mm deep using a 120 ride on roller with the correct number of passes as per the HAUC specification. • The

- Westshield engineer shall take a level survey once the capping is installed. The capping is to be set allowing for the final road construction as the WML drawings.
- The existing entrance will have planned down and be tied in as per the WML/SCP Drawings in preparation for the final tarmac top coat.

12. Emergency Procedures

Hospital (A & E)	
Stepping Hill Hospital, Poplar Grove, Hazel Grove, Stockport, Cheshire, SK2 7JE	Tel: 0161 483 1010

All accidents must be reported immediately to the Supervisor and logged in the accident book.

Emergency Contact Numbers	
Emergency / Police / Fire / Ambulance	999
First Aid Appointed Persons on site	Stuart Hobson:
First Aid Equipment	Site office
Environment Agency	0845 80 70 60
In case of damage to any of the services listed below, use the numbers listed to report the damage:	
BT (Open Reach)	0800 023 2023
Electricity	0800 195 4141
National Grid	0800 111 999
Water	0845 746 2200

13. Appendices

N/A

14. Risk Assessments

RISK ASSESSMENTS	
1. Compactors 2. Site Housekeeping 3. Fire 4. HAVs 5. Excavators 6. Dumpers 7. Concrete & Cement 8. Abrasive Wheels 9. Manual Handling 10. Hand Tools	

Quantitative Risk Assessment Ratings

Severity of the Accident (S)	
Multiple death	10
Single death	8
Major injury, Disabling Illness, Major damage	6
Lost time injury, Illness, Damage	4
Minor injury, Minor damage	2
Delay only	1

Likelihood of an Accident Occurring (L)	
Certain or Imminent	10
Very likely	8
Likely	6
May happen	4
Unlikely	2
Very unlikely	1

Severity /Likelihood Matrix (Risk Rating)

Likelihood						
	Multiple death	Single death	Major injury	Lost time injury	Major injury	Delay
Certain	100	80	60	40	20	10
Very likely	80	64	48	32	16	8
Likely	60	48	36	24	12	6
May happen	40	32	24	16	8	4
Unlikely	20	16	12	8	4	2
Very unlikely	10	8	6	4	2	1

1. Hazards with risk ratings that appear in the grey shaded area can be considered as trivial
2. Hazards with risk ratings that appear in the green shaded area can be considered as adequately controlled
3. Hazards with risk ratings that appear in the amber shaded area must be examined against current standards to arrive at an adequacy decision
4. Hazards with risk ratings that appear in the red shaded area must be reviewed for additional controls to be introduced

Control measures and best practice

Where the word **must** is used, the required control measure is a clear statutory requirement and will often be used when the control measure calls for information, instruction and/or training to be provided. Where the word **should** is used, the required control measure is based upon industry or published HSE guidance.

Key to Residual result:

T= Trivial A= Adequate control N= Not adequately controlled U= Further Information required

Compactors Assessment

Assessment Number: 1a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Use of hand held tampers and compactors to compact and level patch repairs or other areas not accessible to road rollers. Operators may be subject to excessive vibration. Risk of chronic or acute vascular, neurological or muscular damage.	All site staff	6	6	36	• Referral **must** be made to assessment 25 regarding control of vibration. • Staff must be instructed that compactor engines **must** be started when the machine is positioned on the surface to be compacted only. Engines **must** not be started on cooled materials, concrete surfaces or flagged areas etc. • Where practicable, compactor handles **should** be fitted with suitable vibration absorbent covers. In addition, handle mountings **should** be fitted with suitable rubber mountings to help absorb vibration. • When purchasing Westshield equipment, due consideration **should** be given to the selection of semi-automatic compactors operable via remote control without the requirement for an operator to come into contact with the vibrating machine handle. • Compactors **should** be subject to a weekly inspection and a daily user inspection. Visual daily and weekly inspection points **should** include: ▪ Handle fixings and rubber fixing bushes ▪ Fixed guards protecting drive belts etc ▪ Fixed guards protecting rotating machine parts ▪ Valves and pipes for fuel leaks	A
Use of petrol driven compactors. Risk of fire and explosion.	All site staff General public	8	2	16	• The amount of petrol stored on site **should** be kept to as low a level as practicable Where practicable, petrol containers **must** be stored within a locked and well-ventilated compound or cage and suitable 'Warning – LPG – No Naked Flames' warnings signs **must** be displayed. Storage of flammable substances **must** be in accordance with instructions within COSHH assessments and suppliers' Material Safety Data Sheets. Where practicable, petrol containers **should** not be stored within Company vehicles. • Refuelling of equipment **should** take place in a safe area away from flames or naked lights. Where practicable a safe distance away from pavers, sprayers or blow torches of 6 metres **should** be maintained.	A

Site Housekeeping Assessment

Assessment Number: 2a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Storage of large diameter sewer pipes. Pipes may be fall over if stored upright or incorrectly stacked. Weight of pipes may compromise trench or excavation safety.	All site staff	8	4	32	• Where practicable all large pipes **should**, be laid out along the line of trenches or excavations. All pipes **should** be suitably wedged to prevent rolling. Where it is not practicable to string out the pipes they **should** be stacked as may be within the manufacturer's instructions. Pipes **should not** be laid out within *at least* 3 metres of a trench or excavation face.	A
Storage of building materials, equipment or other items. Risk of slips, trips and falls. Risk of blocking access routes for emergency fire services.	All site staff	6	2	12	• Wherever practicable, building materials **should** be delivered to site on a 'just in time' basis to avoid congestion. • The Westshield project specific risk assessment **should** identify suitable storage and delivery areas.	A

Site Housekeeping Assessment

Assessment Number: 2b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Inappropriate disposal of food waste. Poor housekeeping within welfare facilities. Risk of attracting vermin and subsequent Weil's disease or similar biological hazard induced illness.	All site staff	6	4	24	• Site staff **must** be provided with instruction regarding the hazards of vermin encroachment and the importance of proper waste disposal. • Waste bins **should** be sufficient in numbers and have suitable tight fitting lids and be emptied regularly. • Waste bags **should not** be allowed to accumulate outside site cabins etc. and **should** be disposed of immediately in waste skips. • Waste skips **should** be emptied on at least a weekly basis if containing food waste or similar. • Welfare cabins **should** be swept on a regular basis and surfaces where food is prepared or stored **should** be periodically cleaned with a suitable disinfectant cleaner. • A person **should** be appointed and sufficient time and resources allocated so that site welfare facilities are cleaned and tidied on at least a weekly basis. Waste bins **should** be disinfected on a regular basis.	A
Inappropriate disposal of site general waste. Risk of slips, trips and falls. Risk of arson attack.	All site staff	4	4	16	• Waste bags, boxes, broken pallets, building materials, wrappings, off-cuts or other general site waste **should not** be allowed to accumulate in pedestrian walkways or traffic routes etc. and should be disposed of in waste skips. Westshield employees and Contractors **must** be instructed that waste materials created as a result of their work undertaking must be disposed off at the end of each working shift. • Waste skips **should** be emptied when full. • Referral **must** be made to assessments 2 regarding security.	A

Fire Assessment

Assessment Number: 3a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Fire risks include: • The use and storage of LPG. • The use and storage of fuels. • Waste materials. • Electrical appliances. • Gas supply. • Smoking. • Arson.	All site staff Clients General public	6	4	24	The following are minimum control measures: • The amounts of LPG such as propane, petrol or diesel fuel stored on site **should** be kept to as low a level as is practicable LPG **must** be stored within a locked and well-ventilated compound or cage and suitable 'Warning – LPG – No Naked Flames' warnings signs **must** be displayed. Storage of flammable substances **must** be in accordance with instructions within COSHH assessments and suppliers' material safety data sheets. • Staff **must** be provided with instruction regarding fire hazards and prevention.	A – U

Recommended Extinguishers	Location	Comments & Best Practice
6 kg dry powder (See below)	Within main site	Dry Powder fire extinguishers are suitable for fighting: • Class A fires involving wood, paper and cardboard. • Class B fires involving flammable liquids such as petrol or oil. • Class C fires involving LPG and flammable gases and fires involving electricity. **NB**: It is not recommended that Class C fires be attacked unless specialist training has been provided.

* Guidelines only. Numbers of extinguishers to be determined by Westshield.

Fire Extinguisher Inspection & Maintenance

All fire extinguishers must be examined and maintained on a yearly basis by a competent person and be subject to a discharge test as appropriate in accordance with **BS 5306: Part 3.** Suitable records should be kept of inspection and discharge dates.

In addition, the following visual inspections should be performed on a monthly basis:

- That the extinguisher tamper seals remain undisturbed
- That the stored pressure is correct (where applicable) and there are no obvious defects
- That access to the extinguishers is not restricted in any way

Fire Assessment

Assessment Number: 3b

Fire Extinguisher Information, Instruction & Training

All Westshield employees must be provided with suitable and sufficient training and instruction in the correct use of fire extinguishers and fire safety in general to comply with the requirements of the **Regulatory Reform (Fire Safety) Order 2005.**

Fire Emergency Procedures

All site staff **must** be provided with suitable and sufficient instruction and training regarding emergency procedures.

The Westshield fire plan should identify:

1) A safe fire assembly point

2) The names of authorised persons who have received training regarding the correct use of fire extinguishers*

3) The procedures to be followed in the event of an emergency

4) The procedure for calling the fire brigade

5) The name(s) of the person whose duty it is to liase with the fire brigade

6) Where deep excavations are taking place, the emergency contact details for the gas supply company

Points 1) 3) & 4) **must** be included within fire action plan information signs to be affixed in the site cabins or other prominent places.

* Where individuals are not formally appointed, it is inferred all persons with access to extinguishers are appointed.

Hand Arm Vibration Assessment

Assessment Number: 4a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Use of percussive equipment such as concrete breakers, chipping hammers or hammer drills etc. Use of vibrating equipment such as compactors, pokers or levelling equipment etc. Use of rotating equipment such as radial saws or grinders etc. Possible use of percussive impact equipment. Risk of chronic or acute vascular, neurological or muscular damage.	All site staff	6	6	36	The **Control of Vibration at Work Regulations 2005 5 [1]** state: *An employer … … shall make a suitable and sufficient risk assessment of the risk created by that work …* … (vibration related tasks) The risk assessment **must** take into account the limit values, action values and transitional periods identified within **Regulation 4**. • Westshield equipment liable to place employees at risk **should** be identified and assessed to ascertain the level of risk in relation to the daily exposure action value of 2.5 m/s^2. The risk assessment **must** take into account: ▪ The vibration level of the machine ▪ The material upon which it is being used. ▪ The exposure time ▪ The physical characteristics of the operator ▪ Any relevant environmental conditions • A suitable system of identifying hazardous tools or equipment and relating safe operating times **must** be implemented and relayed to the exposed persons. This *may* include the provision of colour-coded adhesive equipment labels with maximum usage information. • To ensure compliance with **Regulation 8**, employees **must** be provided with suitable and sufficient information, instruction and training regarding the risk to health, the symptoms to recognise and the required control measures. All employees **must** be issued with and refer to the Westshield information booklets for safe use of vibrating equipment.	A

Hand Arm Vibration Assessment

Assessment Number: 4b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Use of percussive equipment such as concrete breakers, chipping hammers or hammer drills etc. Use of vibrating equipment such as compactors, pokers or levelling equipment etc. Use of rotating equipment such as radial saws or grinders etc. Possible use of percussive impact equipment. Risk of chronic or acute vascular, neurological or muscular damage.	All site staff	6	6	36	• To ensure compliance with **Regulation 7**, employees identified within the risk assessment as being at risk **must** be provided with suitable and sufficient health surveillance to be carried out by a competent person. Health surveillance for employees **must** be completely confidential with the written results of the surveillance being secured stored within the Westshield head office. Where health surveillance identifies a person as being at particular risk, where symptoms are recognised or where damage has already occurred, all steps **must** be take to immediately eliminate the risk to that person. • Within a legitimate hierarchy of control, final referral **must** be made to assessment 3 regarding PPE. **NB** All Sub-contractors employed by Westshield **must** adequately demonstrate the measures being taken to comply with the Regulations. Pre-Construction Information and Construction Phase Plans **must** contain suitable and sufficient information regarding the requirements to comply with the Regulations. Where compliance cannot be adequately demonstrated, all control measures detailed above **must** apply where a Contractor is employed on a Westshield site.	A

Excavators Assessment

Assessment Number: 5a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Faulty equipment. Failure of hydraulic systems, brakes, lights, mechanical or structural parts may result in plant failure. Risk to driver or other persons during excavation, lifting or movement of materials.	Vehicle driver All site staff	8	4	32	The **Provision and Use of Work Equipment Regulations 1998** require work equipment be subject to formal, recorded inspection performed at suitable intervals. The **Lifting Operations and Lifting Equipment Regulations 1998** require lifting equipment be subject to a thorough examination by a competent person at least every 6 months. In addition: • Excavators **should** be subject to a recorded weekly and a daily user inspection. • Where excavators may be expected to lift a weight above 1 tonne, such as a large diameter sewer pipe or a large protective trench box, suitable non-return check valves or a 'Prolec' lifting safety system **should** be fitted inline the hydraulic lifting system.	A - U
General movement and use of excavators within the site. Risk of severe or fatal injuries involving pedestrians.	All site staff	8	6	48	• Referral **must** be made to assessment 5 regarding site traffic. • Machine operators **must** be instructed that ALL cab covers be removed during daily use. • Excavators **should** be fitted with suitable side-view mirrors and rear-view reversing cameras or mirrors to allow the driver 360 ° vision. • Mirrors and any visibility aids **should** be subject to a formal, recorded weekly inspection and a daily user inspection. • Excavators **should** travel from one work area to another, where practicable, with their bucket positioned where it minimises the restriction of the operator's forward view.	A

Excavators Assessment

Assessment Number: 5b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Excavators reversing into ditches or excavations or overturning on severe inclines. The risk of an excavator overturning may increase dependent upon soil content, ground type, proximity to rivers, streams or lakes or weather conditions. Risk of driver being flung from vehicle. Additional risk of surcharging adjacent to excavations. Additional risk of ground collapse where mine workings or ground voids may exist.	Vehicle driver	8	4	32	• Referral **must** be made to assessment 9 regarding ground conditions. • The Westshield project risk assessment **should** determine the necessity of fixing suitable barriers or anchored stop blocks around excavations or within inclines to prevent excavation edges failing or vehicles slipping on slopes. **NB** The Westshield project risk assessment **must** be reviewed on a regular basis to take into account weather and ground conditions particularly on inclines. • Excavations not currently being worked upon **must** be adequately signposted and all operators **must** be informed of the hazard. Where necessary, traffic routes **should** be clearly identified and suitable barriers installed at a safe distance from the excavation. The safe distance for barriers **should** be determined by risk assessment and take into account ground and weather conditions and excavation support in use. The **Provision and Use of Work Equipment Regulations 1998** require plant equipment be fitted with restraining seat belts, and, where there is a foreseeable risk of the vehicle overturning, drivers must wear the seat belt. • The requirement for excavator operators to wear seat belts, and if so, in which location **should** be stipulated within the Westshield project risk assessment. The project risk assessment **should** examine inclines upon which an excavator may be operating, the proximity to ground voids, sudden changes in levels and weather and ground conditions which may cause an excavator to slide.	A - U

Excavators Assessment

Assessment Number: 5c

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
General use of excavators. Risk of injury to persons working within excavations or pedestrians.	All site staff	8	6	48	• During excavation work on a congested site, a competent signaller **should** be provided to direct the excavator's operation and any pedestrian movement. The signaller and the excavator operator **must** be provided with suitable training regarding the required method of communication and in particular the range of hand signals to be used. • Ground-workers **must** be instructed to vacate the trench or excavation whenever pipe bedding or pipes are being delivered into the trench. • To minimise possible pinch and crush points the excavator operator and signaller **should** ensure a minimum distance of 0.5 metres is maintained between any part of the excavator, and particularly the ballast weight and the nearest obstruction. The signaller and the excavator operator **must** be provided with suitable information and training regarding the general hazards involved with the use of excavators and the required control measures.	A
General use of excavators. Excavator buckets may become detached due to hydraulic or mechanical failure or driver carelessness. Risk of severe or fatal injuries involving ground-workers.	All site staff	8	6	48	The particular manufacturer's method of preventing buckets becoming detached **must** be maintained. This may be via a non-return valve 'quick-hitch' system, a mechanical swinging pendulum or a fixed safety pin. • Excavators **should** be subject to a recorded weekly and a daily user inspection to check for hydraulic system leaks or seizure of swinging pendulums etc. • Where bucket security depends upon the use of a safety pin and to ensure continual use, pins **should** be attached to the boom of the excavator with suitable welded chains.	A

Excavators Assessment

Assessment Number: 5d

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Working close to overhead power cables. Striking electricity cables with jibs or excavator buckets etc. Risk of electrocution and severe burns.	Vehicle driver	8	4	32	• The Westshield project risk assessment **should** identify precise distances for the erection of barriers etc. to prevent excavators and other vehicles coming into contact with overhead power cables. Risk assessment **should** take into account the requirements of **HSG (6).** Early consultation **should** take place with the power supply representative to establish safe working distances. The following are guidelines only: • Where cables are mounted on wooden poles, the ground level barrier **should** be at least 9 metres away from the line plus the length of the jib or boom. • Where cables are mounted on metal poles, the ground level barrier **should** be at least 15 metres away from the line plus the length of the jib or boom. • 'Beware – Overhead Cables' warning safety signage **must** be affixed in the areas around the overhead electrical cables.	A - U
Parking of excavators. Risk of pedestrians striking bucket. Unauthorised access to or start-up of vehicles.	All site staff Trespassers Children	8	6	48	• Referral **must** be made to assessment 2 regarding security. • When not in use, excavators **should** be parked with buckets lowered to the ground. • At the end of the working shift, at break times and whenever unattended, keys **should** be removed from excavators. • At the end of the working shift, and where fitted, cab covers **should** be fitted and secured on excavators.	A

Site Dumpers Assessment

Assessment Number: 6a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Faulty equipment. Failure of hydraulic systems or mechanical components. Risk to driver during movement of materials.	Vehicle driver All site staff	8	4	32	The **Provision and Use of Work Equipment Regulations 1998** require work equipment be subject to formal, recorded inspection performed at suitable intervals. • Dumpers **should** be subject to recorded weekly and daily user inspection.	A - U
Dumpers reversing into ditches or excavations or overturning on severe inclines. The risk of a dumper overturning may increase dependent upon soil content, ground type or weather conditions. Risk of driver being flung from vehicle or crushed.	Vehicle driver	8	4	32	• The Westshield project risk assessment **should** determine the necessity of fixing suitable barriers or anchored stop blocks around excavations or within inclines to prevent excavation edges failing or vehicles slipping on slopes. **NB** The Westshield project risk assessment **must** be reviewed on a regular basis to take into account weather and ground conditions particularly on inclines. • Excavations not currently being worked upon **must** be adequately signposted and all operators **must** be informed of the hazard. Where necessary, traffic routes **should** be clearly identified and suitable barriers installed at a safe distance from an excavation. The safe distance for barriers **should** take into account ground and weather conditions and the type of excavation support in use. The **Provision and Use of Work Equipment Regulations 1998** require plant equipment be fitted with restraining seat belts, and, where there is a foreseeable risk of the vehicle overturning, drivers must wear the seat belt. • The requirement for dumper operators to wear seat belts, and if so, in which location **should** be stipulated within the Westshield project risk assessment. Where a project risk assessment does not take place, dumper operators **must** be instructed that the wearing of seat belts is mandatory.	A - U

Site Dumpers Assessment

Assessment Number: 6b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
General misuse of dumpers.	Vehicle driver All site staff	8	6	48	• Dumpers **must** be operated by competent, certificated drivers only. The Westshield project risk assessment **should** identify particular areas or work tasks which should not be accessed or undertaken by inexperienced dumper operators. These may include: • Working adjacent to waterways • Working adjacent to deep excavations • Working on specified inclines • Working where there is heavy site traffic present • Travelling on the public highway • Moving large or bulky loads which may obscure visibility	A
Unauthorised access to or start-up of vehicles.	Trespassers Children	8	6	48	• Referral **must** be made to assessment 2 regarding security.	A

Concrete & Cement Assessment

Assessment Number: 7a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Concrete delivery vehicles entering, travelling within or exiting the site. Risk of severe or fatal injuries involving pedestrians.	All site staff General public	8	6	48	• Referral **must** be made to assessment 5 regarding site traffic. • Where applicable when concrete delivery is taking place, non-involved staff who may be at risk **must** be informed to keep out of the working area whenever *possible*.	A
Use of concrete mixers. Risk of kick-back injuries with hand-start diesel mixers. Risk of clothing snagging on damaged mixer rims caused by beating after dry mixes. Risk of electrocution involved with 240 volt mixers. **NB** The use of 240 volt powered mixers is expected to be minimal within civil engineering works.	Operator	8	6	48	• The use of 240 volt equipment **should** be avoided. Where this is not practicable, equipment **should** be used with a residual current device (RCD). Referral **must** be made to assessment 23 regarding power tools. • Operators **must** be instructed in the correct method of gripping when hand-starting diesel mixers with the thumb wrapped around the handle in the same direction as the fingers. • Mixers **should** be placed on a regular inspection schedule to identify damage, particularly around the rim. • Mixers **should** be placed in a safe area away from main pedestrian routes.	A
Manual handling during the moving and levelling of concrete. Risk of acute or chronic musculoskeletal injuries.	All site staff	6	4	24	• Where practicable, concrete **should** be pumped to its location. • Where concrete is to be delivered within wheelbarrows etc. affected staff **must** be provided with suitable and sufficient training regarding the hazards involved with manual handling and the required correct lifting techniques. Access and egress routes **should** be kept clear during movement of concrete with wheelbarrows. • Where practicable, suitable levelling equipment **should** be used to avoid stretching with heavy tooling. Ie: by use of long handled aluminium floats and screeders etc.	A

Concrete & Cement Assessment

Assessment Number: 7b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Result
Skin or eye contact through direct and indirect contact with concrete and cement. Risk of dermatitis, severe burns and eye damage.	Ground workers	6	6	36	• Every practicable effort **should** be made to prevent concrete or cement coming into direct, or worse, indirect contact with the skin. • Impervious gloves and suitable eye goggles **must** be worn. Wellington boots with safety mid-soles **must** be worn. Wellington boots **should** be long enough to ensure concrete does not splash over the top of the boot. When working within concrete pours, waterproof trousers **must** be worn over the top of boots (never tucked in) to prevent spillages entering the boot. Referral **must** be made to assessment 3 regarding PPE. • Workers **must** be instructed not to kneel down in wet concrete. • Spillages on the skin **should** immediately be washed off with clean water. The use of a suitable skin-care cream is recommended. • Ground-workers **must** receive regular information and instruction regarding the dangers and control measures associated with concrete and cement.	A
Unauthorised access to site during drying of concrete. Risk of drowning in deep pours.	Trespassers Children	8	4	32	• Referral **must** be made to assessment 2 regarding security. • Working area **must** be adequately fenced at the end of the working shift. • Suitable warning signs **must** be fixed in position. • Where applicable, the Client **must** be informed of the dangers. • The Westshield project specific risk assessment **should** consider the need for constant supervision until the concrete has hardened.	U

Abrasive Wheels Assessment (PPE)

Assessment Number: 8a

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Abrasive wheels bursting or becoming insecure during operation. Risk of severe impact injuries caused by ejected particles, sparks or wheels bursting. * The risk to members of the public may exist during work outside the main site boundary such as when creating access points within roads etc.	Operator All site staff * General public	6	6	36	**<u>General PPE to be used in conjunction with task specific PPE:</u>** **Safety helmet to EN 397** **Rigger gauntlet gloves to BS EN 388: 1994** • Prior to initial use, a competent person **should** check that the machine speed does not exceed the maximum permissible speed of the wheel to be fitted. • Competent persons only **should** fit cutting or grinding wheels. • Equipment **should** be subject to a weekly, recorded inspection. • Daily user checks **should** be carried out by operators to check for damage to the machine casing, for fuel leaks within LPG powered equipment and that the cutting wheel is secure. Identified damage **should** result in the equipment being taken out of use for repair and reported to the Westshield Site Manager or other responsible person. • **Equipment users must wear suitable eye protection: Face visor (impact resistant) EN 166 Anti-mist** Referral **must** be made to assessment 3 regarding PPE. • * When working outside the main site boundary and/or where members of the public may be at risk, suitable measures for protection **must** be taken.	
Production of large quantities of dust. Risk of inhalation of silica, brick or concrete dust. Risk of acute or chronic respiratory conditions.	Operator All site staff *General public	6	4	24	• **Operators must wear suitable particle facemask if dry cutting. Dust mask to EN 149:2001 FFP2. Ensure face fit suitable (facial hair may limit the protection)** Referral **must** be made to assessment 3 regarding PPE. • Where practicable, abrasive wheel equipment **should** be selected with integral dust suppression or collection, or local exhaust ventilation. • * When working outside the main site boundary and/or where members of the public may be at risk, suitable measures for protection **must** be taken.	

Abrasive Wheels Assessment (PPE)

Assessment Number: 8b

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Excessive noise levels. Risk of acute or chronic noise induced hearing loss. * The risk to members of the public may exist during work outside the main site boundary such as when creating access points within roads etc.	Operator All site staff * General public	6	4	24	• **Suitable hearing protection must be made available for all staff and information must be given regarding the first (80 dB) and second action levels (85 dB).** • **Ear plugs to EN 352-2 (SNR 28-34dB)** • **Ear defenders to EN 352-3** Where noise levels reach the second action level, the following control measures **must** be implemented: ▪ Hearing protection **must** be worn ▪ Access into the working area **must** be restricted as far as is practicable ▪ 'Hearing Protection Zone' mandatory safety signage **must** be displayed (This may not be reasonably practicable within short-term works) Referral **must** be made to assessment 3 regarding PPE. • Where practicable, work **should** take place away from other site staff. Suitable control measures **should** be implemented to keep members of the public at a safe distance.	
Cutting at ground level of bricks, blocks or expansion joints etc. Risk of injuries to feet.	Operator	6	6	36	• **Equipment users must wear suitable foot protection. Safety footwear to EN 345 or EN ISO 20345** Referral **must** be made to assessment 3 regarding PPE.	
Prolonged use of equipment. Risk of chronic circulatory ailments such as vibration white finger.	Operator	6	6	36	• Operators **should** be made aware of and refer to the Westshield information booklets for safe use of vibrating equipment. • Referral **must** be made to assessment 25 regarding hand arm vibration (HAV).	

Manual Handling

Assessment Number: 9a

ACTIVITY	HAZARD	HARM	RISK RATING	CONTROLS / ACTIONS TO BE TAKEN	RISK RATING AFTER CONTROLS	ACTION BY
Lifting Light Awkward Loads	Uneven, Slippery or Unstable Floor.	Slips, Trips and Falls	6	Ensure good housekeeping. Make sure you can see over the load. If carrying a great distance then take short rest.	3	Foreman /Operatives
Lifting Light Awkward Loads	Difficult to grasp, unstable or unpredictable load were contents are likely to shift.	Sprains / Strains	4	When lifting an awkward load do not over stretch. Find the centre of balance and keep the load as close to the body as possible. Always wear hand protection and steel toe-cap boots. If it is too awkward get someone to assist you. Train personnel in manual handling.	2	Operatives
Lifting materials of irregular shape / size	Holding or manipulating loads away from the trunk. Unsatisfactory body movement or posture. Unpredictable movement of loads.	Sprains / Strains	4	Ensure the load is not too heavy, if it is bulky or unwieldy ask someone to assist you. Ensure correct balance of load. Wear the correct PPE Train personnel in manual handling.	2	Foreman / Operatives
Placement of kerbs , block paving, flagstones etc- including repairs, single replacements or multiple sections	Manual handling	Muscoskeletal disorders, sprains, strains	9	**Mechanical means are mandatory** Consider lighter materials Consider alternative solutions (design consultation) Basic Occ health monitoring to be undertaken	6	HSE Dept Site Agent Estimators
General	Task Load Environment Person	Slips, Trips & Falls Sprains / Strains Cuts Contusion	4	Train personnel in manual handling. Wear the correct PPE. Avoid stooping, lifting high or low, pushing or pulling, bending or twisting. Avoid lifting loads if they are bulky or unwieldy, hot or cold, sharp or abrasive, heavy or unstable. Consider the environment - hot or cold, windy or dusty, are there steps, slopes or uneven surfaces, are obstructions in the way. Consider the person carrying out the task, is there need for unusual strength, is there age a problem, do they suffer from any medical condition.	2	Foreman / Operatives

Manual Handling

Assessment Number: 9b

FACTORS WHICH AN EMPLOYER MUST TAKE INTO CONSIDERATION AND QUESTIONS HE MUST CONSIDER, WHEN MAKING AN ASSESSMENT OF MANUAL HANDLING OPERATIONS.

1. The Tasks	Do they involve:	Holding or manipulating loads at a distance from the trunk? **Unsatisfactory body movements or posture especially;** a. Twisting the trunk? b. Stooping? c. Reaching upwards? Excessive movement of loads, especially; a. excessive lifting distance? b. Excessive lowering distance? c. Excessive carrying distance? Excessive pushing or pulling? risk of sudden movement? Frequent physical effort? Prolonged physical effort? Insufficient rest periods Insufficient recovery periods? a high rate of work imposed by a process?
2. The Loads	Are they	Heavy? Bulky or unwieldy? **Difficult to grasp?** Unstable, or with contents likely to shift? sharp, hot, or otherwise potentially damaging?
3. The working environment	Are there	**Space constraints preventing good posture?** Uneven, slippery or unstable floors? **Variations in level of floors or work surfaces?** Extremes in temperature or humidity? **Conditions causing ventilation problems or gusts of wind?** poor lighting conditions?
4. Individual Capability	Does the job:	Require unusual strength, height? create a hazard to those who might reasonably be considered to be pregnant or have a health problem? Require special information or training for its safe performance?
5. Other Factors	Is movement or posture	Hindered by personal protective equipment or by clothing?

Hand Tools Assessment

Assessment Number: 10

Identified Hazard	Persons in danger	S 1-10	L 1-10	RR 1-100	Control Measures & Best Practice	Residual Risk
Use of hammers, chisels, saws or any other tools that are struck or have sharp or cutting edges. Risk of eye injuries, cuts or lacerations.	All site staff Children	6	4	24	The **Provision and Use of Work Equipment Regulations 1998 (5[1])** require that all tools and equipment be suitable for the work purpose and be adequately maintained. • Tools or equipment provided by Westshield, Contractors or privately owned items **must** be suitable for the task and be of sufficient quality and condition. • Site staff **must** be provided with instruction that any defective hand tool must be replaced or repaired or be reported to a responsible person. • Hammers, chisels or any tools that are struck **should** not be allowed to mushroom where metal splinters could be ejected. Heads **should** be properly dressed on an abrasive grinding wheel or with a suitable file. • Hammers **should** not be used with loose heads or damaged shafts. • When using any hand tools requiring being struck or when using a hammer where the work-piece may eject particles, suitable eye protection **must** be worn.	A
Unauthorised access to tools or equipment. Risk of eye injuries, cuts or lacerations.	General public Trespassers Children	6	4	24	• Extreme caution **should** be taken when working near to a site boundary and where members of the public may be passing by etc. • All tools **should** be securely stored away at the end of the working shift.	A

15. Sign Off Sheet

Candidate's Name	Candidate's Signature	Company	Date