Multi-Disciplined Contractor

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN.

BARRY WATERFONT

WEST POND DEVELOPMENT

CEMP CONTACT DETAILS

Incidents will be reported to all parties with a detailed report of the occurrence and the proposed corrective actions to prevent re-occurrences.

Consultees	Interest	Action required
Environment Agency	All environmental incidents	Call Hotline 0800 80 70 60
Associated British Ports	Contamination of/ spills into the dock	0870 609 6699
Dwr Cymru Welsh Water	Pumped Foul Rising Main	24 hour control room 01443 452660

Please also add details of who will keep these contact details and where it will be kept on site should also be highlighted

The information will be kept within the Health Safety & Environmental file on site

Revision F

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SECTION PAGE

1. INTRODUCTION

1.1 DESCRIPTION OF THE PROJECT

The construction of infrastructure works for the Barry Waterfront development for a consortium consisting of Barratt Home, Persimmon Homes and Taylor Wimpey.

1.2 PROJECT ORGANISATION AND RESPONSIBILITIES

Cuddy Civil Engineering is the principal contactors on the project. The Project Manager Mike Pinkerton has also been appointed as the Environmental Manager for the project.

1.2.1 Responsibilities of the Environmental Manager

The Environmental Manager will ensure the Construction Environmental Management Plan is developed, implemented and maintained in line with the Cuddy Group procedures. They will also:-

- Provide a point of contact for all environmental related matters relevant to the development.
- Implement the recommendations of the Ecological Mitigation Strategy 2010 and the Ecological Advice Note for the Enabling Works contract undertaken on the site in May 2011.
- Review and assess the environmental performance of all subcontractors.
- Undertake environmental audits of the project and site as work progresses and at key stages of the project.
- Assist in the identification of training needs.

1.2.2 Supply chain

Prior to sub-contract appointments being awarded the environmental constraints of the project are advised to the prospective sub-contractor for allowance within the scope of their works.

All staff have a responsibility for their own environmental performance and the impact that they have on Cuddy environmental performance.

Undertake all activities in accordance with the agreed procedures and working methods.

Know whom to contact regarding environmental matters.

Report any activity that has resulted, or has the potential to result, in an environmental incident.

Attend environmental training provided. Persons are to be nominated within the sub-contractor organisations to act as environmental representatives.

1.3 CEMP REVIEW AND UPDATING

The Construction Environmental Management Plan will be regularly reviewed and updated as the work progresses and the site develops. At periodic intervals the CEMP will be audited by our SHE Management team to ensure accuracy and compliance.

2. SCOPE AND BENEFITS OF A CEMP

2.1 PURPOSE OF THE CEMP

To minimise the impact of site-specific environmental aspects, controls such as work instructions and method statements shall be developed to ensure that all Contractors on site, in addition to site management, shall comply with relevant legal obligations, contractual requirements, planning conditions and the Cuddy Group Environmental Policy requirements.

To minimise the effects on the following: –

- Waste Management
- Traffic Movements
- Pollution Prevention
- Air quality
- Noise & Vibration
- Illumination / lighting
- Site parking

3. COMMUNICATION

3.1 MEETINGS

The planning and monitoring of the Environmental Management Plan will be reviewed as part of the monthly internal auditing process. This will ensure compliance with legislation and the recommendations of the various environmental surveys. Any findings or changes to site protocols will be relayed to the work force by a toolbox talk.

3.2 SUB-CONTRACTORS AND THE SUPPLY CHAIN

At first arrival on site all contractors and sub-contractors are provided with a site induction which outlines the environmental procedures for the site and the protocols to report an environmental incident, such as a fuel spillage, to the site management.

3.3 TRAINING

Within the Cuddy Group, all staff are trained on the company's environmental policy.

Toolbox talks which are given on the site on a regular basis will relate to relevant environmental issues as the work progresses.

3.4 ENVIRONMENTAL RECORDS

An Environmental diary will be maintained throughout the project and issued to the client at completion.

4. SITE REQUIREMENTS

4.1 INTRODUCTION

All staff

- Have a responsibility for their own environmental performance and the impact that they have on the Cuddy Group environmental performance.
- Undertake all activities in accordance with the agreed procedures and working methods.
- Know whom to contact regarding environmental matters.
- Report any activity that has resulted, or has the potential to result, in an environmental incident. The site is known to be contaminated with asbestos, therefore appropriate PPE, relevant training and face fit is required.

4.2 SITE SET-UP

The perimeter of the site is protected with Heras fencing which will be inspected daily to ensure public protection is maintained. Vehicle access is from Clive Road on Barry Island and pedestrian access is from the pedestrian link path between the Hood Road junction and the Clive Road steps. The site set up has been developed to provide off road car parking utilising existing areas of hard standing within the site boundary. Please refer to Appendix C for the full layout.

4.2.1 Pollution control and contingency plan

The area designated for concrete wash waters is in excess of 150m from the dock edge and will be formed with an impervious liner prior to any concrete being placed on site. Due to the nature of the works it is expected that the concrete deliveries will not exceed 2 loads per day at peak times.

Storage of site fuels will be in double bunded storage tanks placed on an impervious surface. Plant refuelling will take place over plant nappies and drip trays. Spill kits will be provided and tool box talks in the use of these will be given to all employees involved in the refuelling of the construction plant and generators. Where spill kits have been employed the spent absorbents will be collected by a licensed waste operator and removed to an appropriate licensed waste facility.

To minimise the impact of site-specific environmental aspects, controls such as work instructions and method statements shall be developed to ensure that all Contractors on site, in addition to site management, shall comply with relevant legal obligations, contractual requirements, planning conditions and Cuddy policy requirements.

5. EFFECTS

5.1 LANDSCAPE EFFECTS

Prior to works commencing bunds will be formed along the site boundary to prevent any site run off waters from entering the dock or any of the existing drainage around the perimeter of the site.

As work progresses falls will be formed across the site to take any surface water away from the working areas and allow it to drain to ground. No discharges of surface water will be made to the existing sewerage system or to the dock.

5.2 ECOLOGY EFFECTS

All works on site will be carried out in line with the recommendations of the Ecological Mitigation Strategy 2010 and the Ecological Advice Note for the Enabling Works contract undertaken on the site in May 2011.

Works are co-ordinated to take place within the time periods recommended within the Enabling Works Contract Ecological Advice Note. Within the West Pond area skylarks were observed. Works to remove vegetation will take place in the winter months outside the nesting season. No other species were recorded.

Japanese knotweed has been located in areas of the site and several areas off site along the boundary with the Heritage Railway. A survey was undertaken by Elcot Environmental in July 2012 and the recommendations have been implemented on site. Further monitoring and treatment will be carried out in line with the report.

5.3 WATER QUALITY EFFECTS

Pollution to the existing water courses form materials and plant into the water course can cause a detrimental effect on the wildlife and quality of the water and landscapes.

An area of contaminated groundwater was identified during the various site investigations on the site. A plan to remediate the area has been submitted to, and approved by Natural Resources Wales. The treated waters will be discharged to the foul sewerage system following the specialist contractor obtaining a discharge licence from DCWW. This water treatment is programmed for the second half of 2013.

Temporary bunds will be formed around the site perimeter to protect the dock and neighbouring areas from being contaminated with silt laden site run off.

All refuelling will be undertaken in designated areas with emergency drip trays available. No refuelling will be permitted within the excavations so as not to potentially

pollute the ground water. No plant will be permitted to refuel within the 10m of the water courses.

Channelling and land drainage systems shall be formed as work progresses to ensure the existing hydrological regime will not be affected. Where water is collecting on top of the existing capping layer the ash layer below will be exposed to allow surface water to enter the ground.

5.4 WASTE MANAGEMENT (DUTY OF CARE)

All waste operations will be carried out in accordance with the Site Waste Management plan. The plan will be updated and revised as the project evolves.

5.5 NUISANCE (INCLUDING NOISE, VIBRATION AND DUST)

5.5.1 Noise

Site hours will be 07.30 to 18.00Hrs, Monday to Friday and 07.30 to 13.00hrs on Saturdays. Noise will be regularly monitored at the site boundary and at various times of the day to ensure it does not cause a nuisance.

It is anticipated that there will be some breaking up of existing surfacing and redundant foundations. If required, any crushers will be sited so as to minimise increased noise levels at the site boundary.

The hours for noisy operations will be restricted from 08.00 – 17.00Hrs, Monday to Friday.

All plant and generators will be fitted with silencers where practical.

5.5.2 Vibration

Compaction on the site is partially to be carried out using a LandPac process. The system will be kept clear of the DCWW pumped rising sewer main which crosses the site and also at least 10m away from both the existing and new trunk gas and watermains crossing the site. In addition anti-vibration cut off trenches will be formed alongside the pumped rising sewer main to ensure its integrity. The rising main will be monitored at each collar location to ensure as work progresses the pipe remains within tolerance and does not suffer catastrophic deflection.

There is no requirement to undertake any piling works as part of this contract.

5.5.3 Dust

Dust from the plant and machinery will be monitored and as necessary controlled with water bowsers to supress the dust. Air monitoring will be carried out to manage the risk to the environment of asbestos particles. Plant leaving the construction site will be cleaned and inspected prior to removal to ensure no cross contamination of imported "clean" materials.

All arisings from the works are to be retained on site, and as the work progresses any foundations, slabs, manholes etc. which are grubbed up will be set aside for crushing at a later date. The crusher will be notified to the licencing authority in accordance with company procedures. Dust suppression will be maintained throughout the crushing operation.

Delivery vehicle wheels are to be washed off by the gateman using a pressure washer to prevent mud being tracked out of the site and onto the highway.

When surcharge materials are being imported to site a road sweeper will be retained on site to prevent mud from being tracked out of the site and onto the highway.

5.5.4 Site lighting

The existing street lighting between the Clive Road steps along Powell Duffryn Way will be maintained during the works.

Site illumination has been kept to a minimum and attached to the site offices and decontamination units. Security lighting has been directed away from properties and towards the ground to minimise light pollution.

Working hours will be reduced in the winter months as a safety precaution.

5.6 ARCHAEOLOGY

The site investigation reported that no archaeological sites have been identified.

The site will be managed in line with the report by Glamorgan-Gwent Archaeological Trust Ltd.

If unexpected finds are discovered during the development process then all works in the area will cease immediately.

The Project Manager shall advise the Local Planning Authority and the Group Technical Services Manager.

5.7 EXCAVATIONS

Where deep drainage activities are required to be undertaken below the water table level the pumped waters will be discharged to ground to filter back into the ground water.

All excavations will be fenced to prevent access

5.8 OIL AND STORAGE

Gas Oil for use in construction plant and generators will be stored in double bunded fuel tanks. These will be situated on impervious slabs in designated refuelling bays. The tanks will be sited no closer than 30m to the dock or any manholes, and where they can be used by both vehicles on the clean and dirty sides of the site without the need for vehicle cleaning i.e. against an internal fence.

All materials covered by the COSHH regulations will be kept in a designated locked storage area. The COSHH assessments and emergency procedures relating to all materials used on site are explained to the staff using these materials.

5.9 RE USE OF MATERIALS

The West Pond site has been designed with a negative cut and fill balance, and re-engineered to retain all of the arisings from the planned works.

Suitable site won materials will be crushed and re-used in the construction activities.

Following discussions with the Health and Safety Executive it has been agreed that borrow pits will be utilised to reduce the import of new surcharge materials.

6.0 CEMP CONTACT DETAILS

Incidents will be reported to all parties with a detailed report of the occurrence and the proposed corrective actions to prevent re-occurrences.

Consultees	Interest	Action required
Natural Resources Wales	All environmental incidents	Call Hotline 0800 80 70 60
Associated British Ports	Contamination of/ spills into the dock	
Dwr Cymru Welsh Water	Pumped Foul Rising Main	24 hour control room 01443 452660

Please also add details of who will keep these contact details and where it will be kept on site should also be highlighted

The information will be kept within the Health Safety & Environmental file on site.

Role	Organisation	Name	Address	Telephone no.	Mobile no.	e-mail address
Project Manager	Cuddy Civil Engineering	Mike Pinkerton	Site Office	07917 080 072	07917 080 072	m.pinkerton@cuddy-group.com

7. APPENDICIES

A. ENVIRONMENTAL POLICY STATEMENT

B. ENVIRONMENTAL ORGANISATION CHART

C. SITE SET-UP

D. SITE TRAFFIC MANAGEMENT PLAN

E. SITE WASTE MANAGEMENT PLAN

F. MATERIALS MANAGEMENT PLAN

G. PLANT DECONTAMINATION PROTOCOL

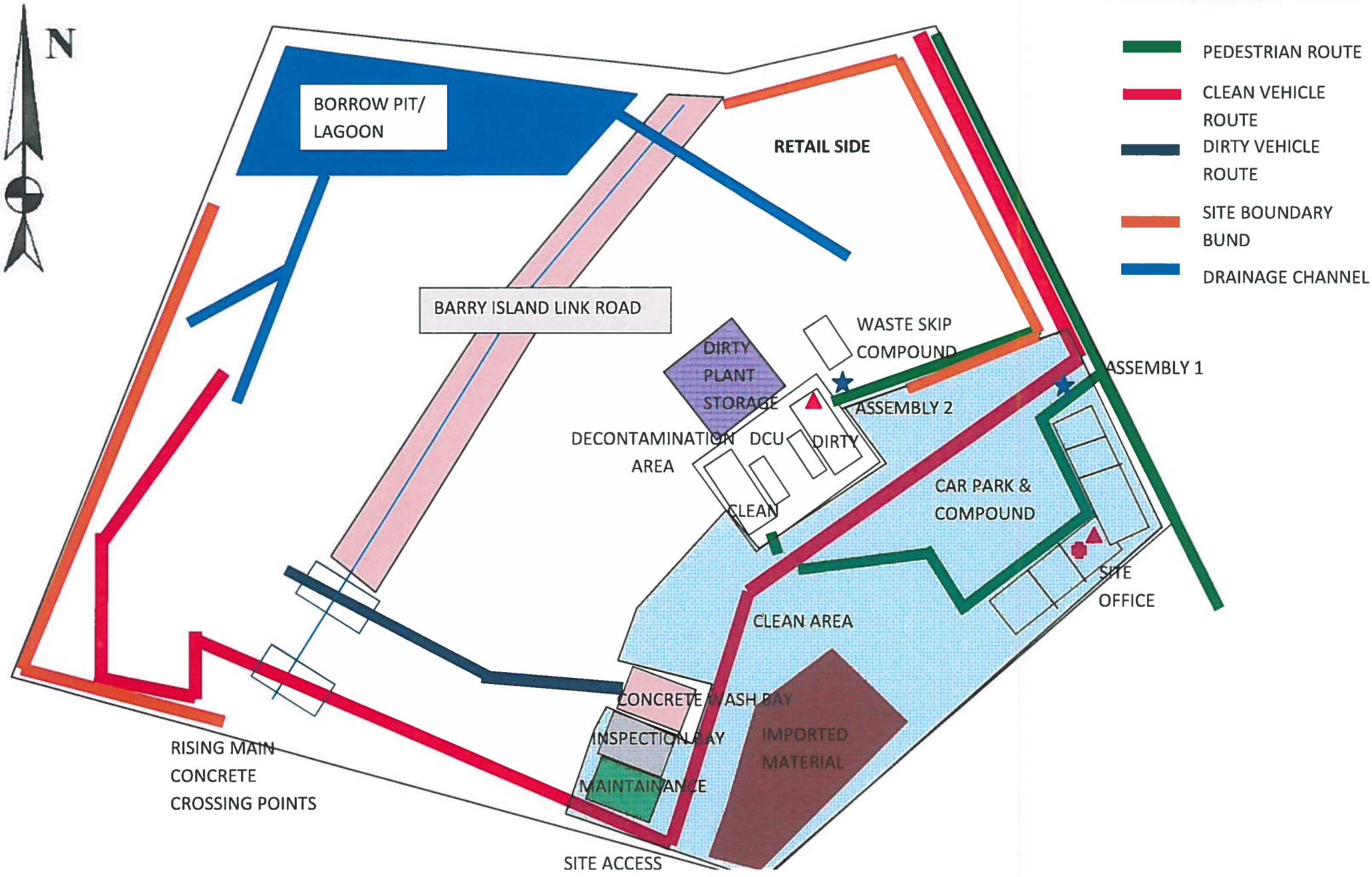
H. COSHH EMERGENCY SPILLAGE & FIRE PLAN

I. CONSTRUCTION PROGRAMME REVISION R

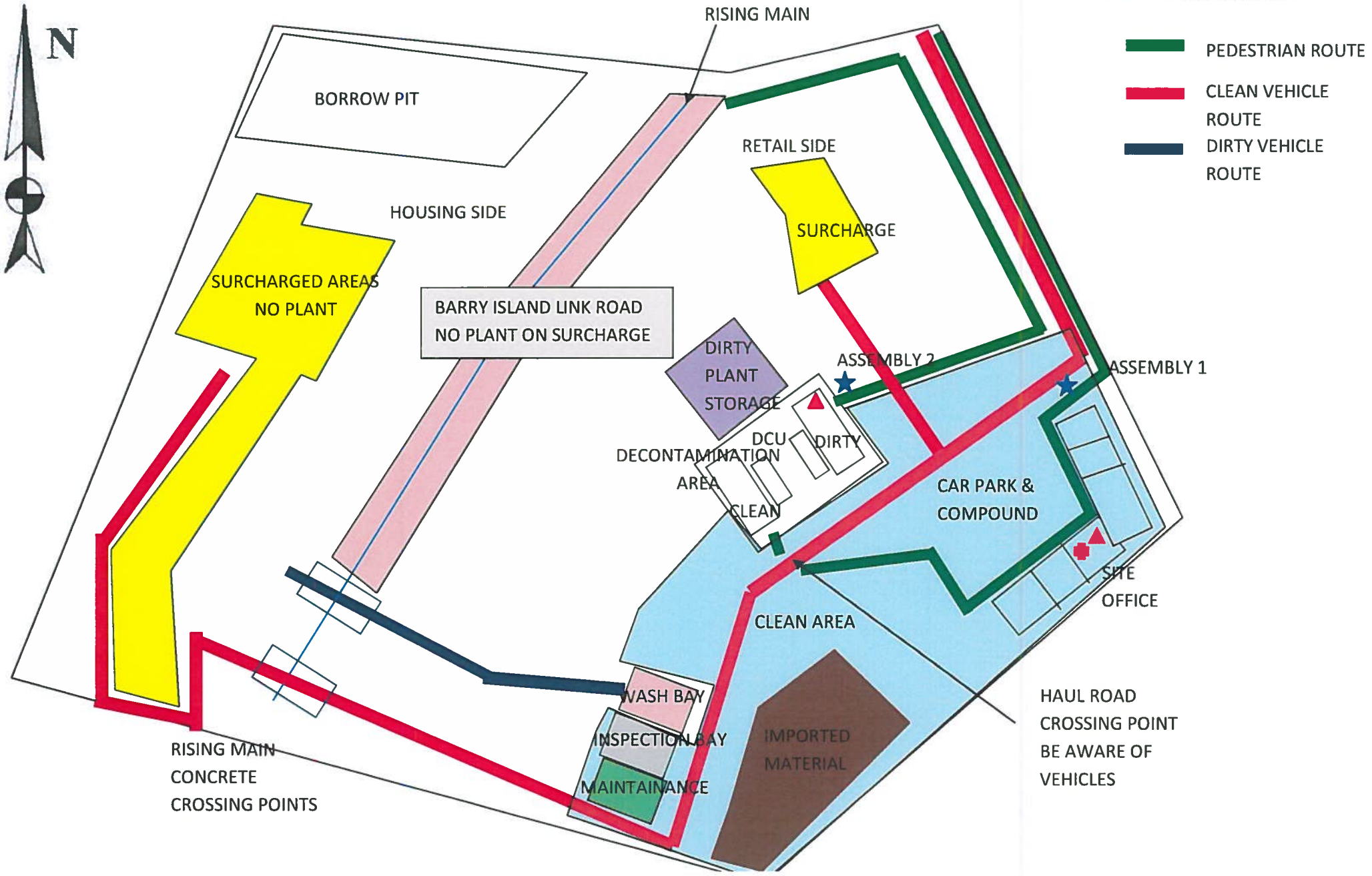
J. EMERGENCY ACTION PLAN

K. RAMS TURN AND COMPACT ASDA

BARRY WATERFRONT: SITE SETUP



BARRY WATERFRONT: SITE TRAFFIC MANAGEMENT PLAN
REVISION F



SITE WASTE MANAGEMENT PLAN

RESPONSIBILITY	
Client:	Consortium consisting of Persimmon, Taylor Wimpey & Barratt Homes
Principal contractor:	Cuddy Group
Person who drafted the plan:	Mike Pinkerton
Notes / amendments:	

CONSTRUCTION PROJECT	
Location (address and postcode ifappropriate):	Barry Waterfront
Estimated project cost:	£10,000,000
Notes / amendments:	Revised 25.Feb.2013 to account for revised levels to keep 100% spoil and arisings on site

MATERIALS RESOURCE EFFICIENCY

Describe here any methods adopted during the conception, design and specification phase to reduce the amount of waste arising.

Method	**Resource saving (quantify if possible)**
Amending site levels to retain 100% of spoil and arisings on site	80,000m³
Using "borrow pit material as surcharge in the housing section	34,000m³
Bringing capping material to site early to use as surcharge in the retail areas	23,000m³
Moving surcharge around site to reduce quantity of material	200,000m³ Total 267,000m³ aggregate/ subsoil.

WASTE MANAGEMENT

Declaration

The client and principal contractor will take all reasonable steps to ensure that:

a. All waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991; and

b. Materials will be handled efficiently and waste managed appropriately.

Signed: Client on behalf of the Barry Waterfront Consortium	Signed: Principal contractor
John Wilson, Persimmon Special Projects Wales (A Division of Persimmon Homes Ltd)	Mike Pinkerton
Date: 1st May 2013	Date: 25.February.2013

TYPES OF WASTE ARISING

Material	Quantity (m^3)							
	Re-used on site	Re-used off site	Recycled for useon site	Recycled for use off site	Sent to a recycling facility	Sent to WML exempt site	Disposal to landfill	WTN complete?
Estimates								
Inert								
Soils/ rock	80,000							
Non hazardous								
Concrete			5,000					
Fencing				150				
Asphalt			928					
Other					50			
Hazardous								
Asbestos							20	
Totals (in m^3 / T)								
Performance score as %								
SWMP target %								
Actual								
Inert								
Non hazardous								
Hazardous								
Totals (in m^3 / T)								
Difference between estimates and actual								

WASTE RECORDS

Date removed	Waste type	Identity of the person removing the waste	Site waste is being taken to and whether licensed or exempt	Waste carrier and registration number*	Confirmation of delivery*	Weight (tonnes)
10.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2731	20kg
11.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2730	20kg
13.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2729	20kg
18.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2728	20kg
20.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2727	20kg
24.07.12	17.06.01	Cuddy	Cuddy	Cuddy	EXR001/C2726	20kg
11.02.12	17.09.04	Cuddy	Bryn Pica	CB/YE5436KA	220584	1.6T
03.04.13	17.09.04	Cuddy	Bryn Pica	CB/YE5436KA	218210	1.6T

WASTE RECORDS

Date removed	Waste type	Identity of the person removing the waste	Site waste is being taken to and whether licensed or exempt	Waste carrier and registration number*	Confirmation of delivery*	Weight (tonnes)

WASTE RECORDS

Date removed	Waste type	Identity of the person removing the waste	Site waste is being taken to and whether licensed or exempt	Waste carrier and registration number*	Confirmation of delivery*	Weight (tonnes)

*Evidence of waste carrier registration and waste transfer or hazardous waste consignment notes for each removal of waste should be provided either as part of the plan or filed and cross referenced

POST CONSTRUCTION

(Within three months of the work being completed)

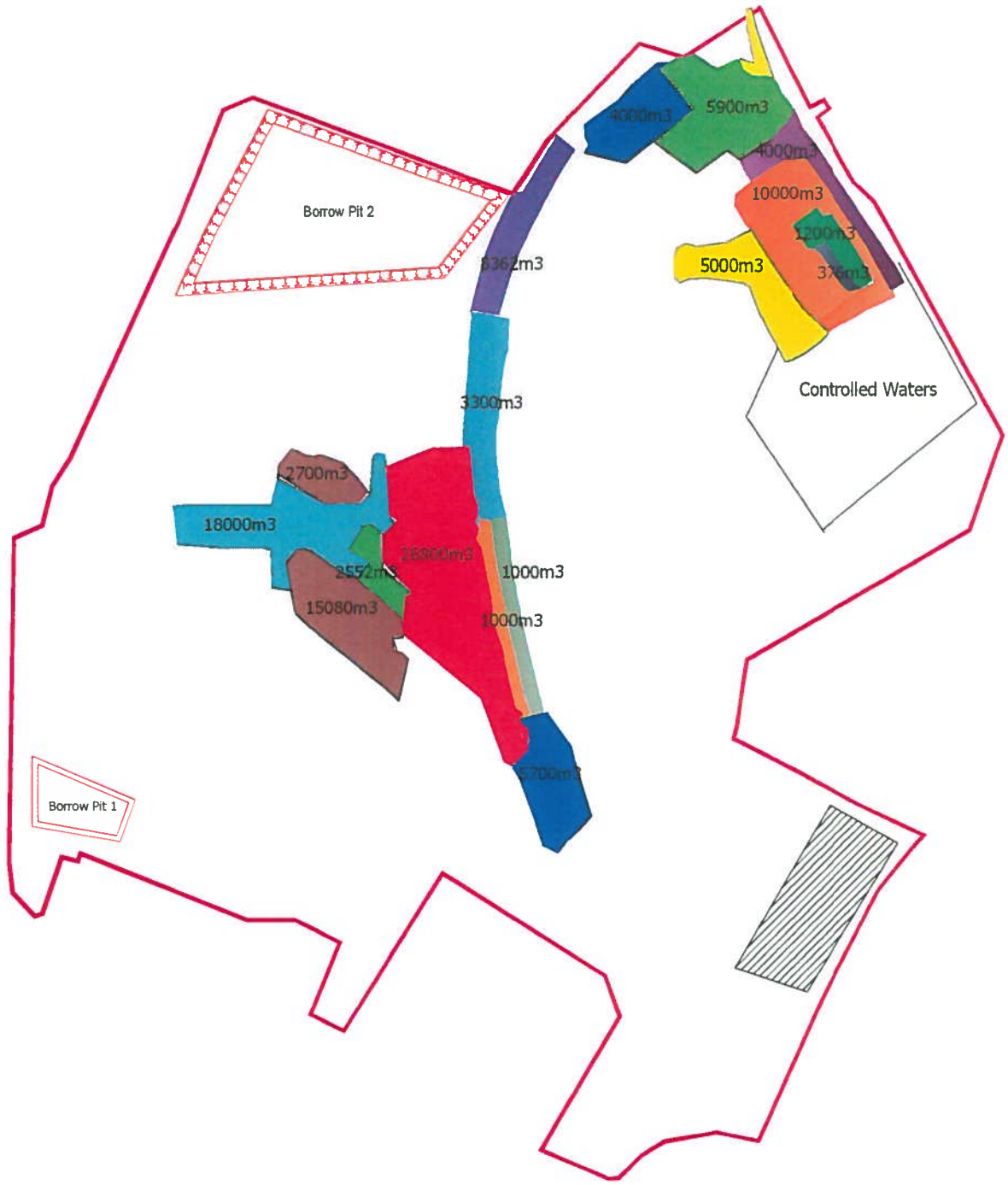
Confirmation

This plan has been monitored on a regular basis to ensure that work is progressing according to the plan and has been updated to record details of the actual waste management actions and waste transfers that have taken place

Signature:

ISSUE	DETAILS
Explanation of any deviation from planned arrangements	
Waste forecasts - exceeded	
Waste forecasts – not met	
Cost savings achieved	

Title: Material Management Plan



- Ewenny Stone
- Borrow Pit 1 & 2 Material
- 6F2 Clean Stone
- Clean Stone / Scalpings
- Celsa
- Parc Derwyn Subsoil
- Rhydfelin Crushed
- Clean Stockpile Area
- Llandarcy Recycled
- Hendy Recycled
- Leadbitter Crushed
- Barry Docks Recycled

Date:	Drawn By:
29/01/2014	MW

CUDDY GROUP

ASM Compliance	Form:	SS/12/01
	Issue No.:	1
	Issued By:	SS
	Issued On:	15/02/12
Job ref: **A0212/012** **Protocol for vehicle Decontamination**	Page:	1 of 10
	Document:	A0212/012C/Rev 7

1. Project details

Site: Barry Waterfront

Client: Cuddy /Persimmon

Contact: Cuddy Mike Pinkerton 07917 080072 persimmon John Wilson-01443 445370

ASM Contact: Jon Trimble 07739 457936

Nature of works: Cleaning off contaminated plant

Duration:

No of personnel 1 Asbestos operatives 1 asbestos consultant, 1 plant operator

2. Preamble

The site is split into clean and dirty areas. The dirty areas are contained within signed fencing. The clean areas where material is brought into site and dirty area where plant passes through areas of known contamination. Plant that has been on known contaminated land will be contained within the Dirty areas. No plant to move from dirty to clean areas without being de- contaminated

3. Information review

The plant has been taken on site in areas of known asbestos contamination

4. Hazard Assessment – Asbestos

Although asbestos is a hazardous material, it can only pose a risk to health if the asbestos fibres become airborne and are then inhaled. Inhalation of asbestos fibres can cause chronic respiratory disease such as lung cancer, asbestosis and mesothelioma. Asbestos fibres, or dust containing it, may be released by weathering, erosion or disturbance, for example by vehicle movements, ground works or construction.

Harm may be caused by direct exposure to airborne fibres, or by secondary exposure caused by a failure to prevent the spread of asbestos. As the potential outcomes are severe, the tasks must be carried out in such a way as to prevent, or minimise, exposure to asbestos and to prevent the spread of asbestos.

Release of fibres tends to be reduced when the asbestos is present in the form of manufactured articles, such as asbestos cement sheets or pipes, or if the site is wet, poorly drained or covered by fine grained material which prevents fibres escaping to the atmosphere.

Who might be harmed?

Workers cleaning machine

Plant driver.

General public.

5. Control Measures

5.1 Compliance and Monitoring

A competent asbestos specialist from ASM Compliance will be on-site full time to ensure compliance of all relevant works. Responsibilities will include the following

- Liaise with site manager to co-ordinate all information re: asbestos including further air monitoring requirements
- Site-specific asbestos awareness training/inductions
- Review RA/MS prior to works commencing to ensure that asbestos risks are considered and suitably controlled
- Oversee implementation of control measures and works as they are carried out
- Inspect excavated soil for obvious signs of contamination and remove any suspect materials for testing/disposal.
- Provide general advice, respond to any queries, incidents, etc
- Provide assistance and guidance with decontamination of plant & tools
- Waste management

5.2 Information, Instruction & Training

A site-specific asbestos awareness training/induction session will be attended by any operative who is to be active in the work area. Content will include general information about asbestos – what is it, why was it used, why and how it causes harm, etc; and site-specific asbestos issues – what is the problem and how is it being managed.

Results from previous days air monitoring will be displayed in the office with copies of the decontamination procedures and this document.

5.3 Prevention of airborne fibres at source

The addition of water is an effective method of reducing airborne fibre concentrations. Initial cleaning of tracks to be done utilising water spray and taken off with a shovel further cleaning will then be undertaken with a jet wash for it to be possible to thoroughly clean machine

5.4 Preventing the spread of asbestos

Entry and exit of asbestos operatives into the dirty area will be via a site hygiene unit. Site operatives will be given appropriate instruction in effective decontamination. Decontamination procedures are displayed in the unit and canteen.

Waste, including waste towels, coveralls, cleaning materials, etc will in approved waste bags and removed regularly to Cuddy's licensed waste transfer station in Llandarcy.

Plant will be washed down in a designated area between the clean and dirty areas prior to plant leaving the dirty area. To consist of cleaning bay on concrete road an inspection area where plant will be inspected by ASM representative and a clean maintenance area on laid stone .

Cleaning bay set Up

6. PPE/RPE

PPE/RPE will be used to complement other control measures and provide a final protection against both exposure and preventing the spread of asbestos. All operatives will be face-fitted for a suitable P3 half- mask to be worn during operation.

Operatives will be issued with type 5 coveralls to prevent contamination of underlying clothing. Blue coveralls will be worn inside the dirty area, white for transiting to and from the work area. Suitable footwear and gloves; eg. rubber boots and gloves, which can be washed down prior to leaving the dirty area.

7. Monitoring / Testing

Air monitoring. A regime of reassurance air testing will take place to ensure control methods are working

8. Safe Work Procedure

Prior to works:

RAMS to be updated to included control measures outlined herein. Departures to be authorised and recorded by ASM competent specialist.

Dirty area to be segregated by physical barriers displaying appropriate signs and notices to prevent unauthorised access.

All site operatives to:

attend site-specific asbestos awareness training

be face-fitted for a suitable P3 respirator

receive specific instruction on decontamination procedures

be issued with and use the following PPE/RPE

- Suitable orinasal respirator (as determined by face-fitting) with P3 filter
- type 5 coveralls – Blue for use in work area / WHITE for clean areas
- safety boots without laces (easier to decontaminate)
- rubber gloves

During works:

Works to be authorised and checked by on-site ASM asbestos specialist

In decontamination area all personnel in area including plant operator will wear appropriate PPE as above

Initially the heavy soil / material to be taken off with shovels the material should be wetted as the operation is taking place using a fine mist spray to avoid disturbing any potential asbestos material. Once this is complete the plant will be further cleaned with the use of a jet wash it should be ensured that the underside of the tracks are also cleaned and inspected

Work will be stop work immediately if severe asbestos contamination identified or elevated fibre levels detected by air monitoring. Review validity of control measures prior to recommencing work

Following works:

Decontamination of personnel as per documented decontamination procedure.

Plant will be inspected by ASM representative before being released off site.
Waste materials from cleaning will be classed as asbestos contaminated

Following works:

Decontamination of personnel as per full documented decontamination procedure.

Plant will be inspected by ASM representative before being released off site.
Waste materials from cleaning will be classed as asbestos contaminated

Supplies for works

- Low power spray for dust suppression at source while taking off bulk material with shovels
- Pressure washer for further cleaning
- Decontamination unit (power & water supply, water filters, air filters, shower gel, disposable towels, wet wipes)
- Type 5 coveralls – blue for inside work area / White for clean area
- Half-mask P3 respirators – make/model as determined by "face-fitting"

(mostly Sundstrom SR 100). Replacement pre-filters & filters

- Bootwash /hose at decontamination unit
- Asbestos waste sacks – clear - & tape to seal

9. Review of assessment

This document will be reviewed and amended as necessary should information become available or events transpire that may invalidate the appropriateness of its contents. Amendments may be handwritten and initialled until the updated document is reissued

Information that may invoke a review include further quantitative soil analysis results, air monitoring results, feedback from site operatives or other interested parties during works.

Review and amendments are the responsibility of the ASM specialist who will refer improvements to the site manager for approval.

10. Document update history

Updated By	Sections updated, description	Date
JT	All, initial completion	17/07/2012
JT	2. No plant to be taken out of dirty area until bay set up. 5,5.1,5.2,5.4, 6, 8	17/09/2012
JT	2. no plant to be taken out taken out, 5.4 Change to Vehicle bay, 8 Use of jet wash.	3/10/2012
JT	2. No plant to be taken out of dirty area until bay enlarged . 5,5.1,5.2,5.4, 6, 8	10/10/2012
JT	2. 5,5.1,5.2,5.4,6,8	21/11/2012
JT	5.4,8	10/12/2012

11. Comments etc

Detail below actions taken/required for works to go ahead, where variations in the scope of works are required name the client representative who agreed the variations (continue on back of sheets if required).

12. Names, signature of operatives (& date)

I have read and understand the information contained within this Method Statement/Risk Assessment for works to be carried out.

Name	Signature	Date

CUDDY GROUP

COSHH emergency spillage & fire plan

Substance	Gas	Liquid	Solid	Spill	Fire
Argon	✓			1	2
Butane	✓			1	2
Dissolved acetylene	✓			1	2
Foam filler	✓			1	2
Oxygen	✓			1	2
Propane	✓			1	2
Sprayable paint	✓			1	2
Sprayable adhesive	✓			1	2
Antifreeze		✓		3	4
Asphalt materials		✓		3	4
Automatic transmission oil		✓		3	4
Aquetard formwork retarder		✓		3	4
Bitumen emulsion		✓		3	4
Brake fluid		✓		3	4
Chemcure		✓		3	4
Chemlease		✓		3	4
Diesel		✓		3	4
Oil (engine/gear/hydraulic)		✓		3	4
ET – 10/150 protective sealer coating		✓		3	4
Lokfix P25 resin		✓		3	4
Paint		✓		3	4
Petrol		✓		3	4
PVA sealer		✓		3	4
Sika water stop		✓		3	4
Swarfega duck oil		✓		3	4
TARSOL		✓		3	4
Thinners		✓		3	4
Turpentine		✓		3	4
Lime or hydrated lime			✓	5	6
Cement/concrete			✓	5	6
Five star grout Sp			✓	5	6
Grease			✓	5	6
Rohan whole wheat bait (rat poison)			✓	5	6
Asbestos			✓	7	7

1. Procedure for spillage/accidental release of any gas you may encounter, namely

Argon	**Butane**
Dissolved acetylene	**Foam filler**
Oxygen	**Propane**
Sprayable paint	**Sprayable adhesive**

1. Evacuate area and barrier off to prevent re-entry.
2. Eliminate ignition source, e.g. no smoking; do not operate light switches or unprotected electrical equipment, do not create sparks.
3. Ensure adequate ventilation, force ventilation if necessary.
4. **ONLY PEOPLE WHO HAVE BEEN TRAINED AND ARE DEEMED COMPETENT** are to wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
5. Only if it is safe to do so try to stop release.
6. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.
7. Absorb spillage with non combustible material e.g. sand, sawdust, earth or purpose made absorbent granules.
8. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly
9. Clean any stains with detergent not solvents

2. Procedure for fire involving any gas you may encounter, namely:

Argon	**Butane**
Dissolved acetylene	**Foam filler**
Oxygen	**Propane**
Sprayable paint	**Sprayable adhesive**

1. All known extinguishers can be used
2. Test extinguisher before pointing at fire (as per training), **ENSURE WATER JET IS NOT USED**, water spray may be used.
3. Exposure to fire may cause containers to rupture/explode
4. Inform fire brigade
5. If possible and only if it is safe to do so, stop flow of product
6. Continue water spray from a protected position until container stays cool
7. If possible and only if it is safe to do so, move container away or cool from a protected position
8. Spontaneous/explosive re-ignition may occur
9. Extinguish any other fire
10. Do not extinguish a leaking gas flame unless absolutely necessary
11. The resulting slurry should then be treated as a liquid spill **(see procedure 3 for spillage/accidental release of any liquid you may encounter)**
12. In confined space **ONLY PEOPLE WHO HAVE BEEN TRAINED AND ARE DEEMED COMPETENT** are to use self-contained breathing apparatus.
13. RPE should be worn as fires will produce thick black smoke and hazardous products such as hydrogen chloride/fluoride, carbon monoxide, carbon dioxide and oxides of nitrogen.

3. Procedure for spillage/accidental release of any liquid you may encounter, namely:

Antifreeze
Asphalt materials
Automatic transmission oil
Aquetard formwork retarder
Bitumen emulsion
Brake fluid
Chemcure
Chemlease
Diesel oil
Oil (engine/gear/hydraulic)
ET – 10/150 protective sealer
Lokfix P25 resin coating
Paint
Petrol, PVA sealer
Sika water stop
Swarfega duck oil
TARSOL
Thinners
Turpentine

1. Avoid skin contact; wear impervious heat resistant gloves, which protect the wrist. Safety goggles/visor if risk from splattering, overalls, heat resistant safety boots.
2. Suitable respiratory protection if vapours/fires are present
3. Evacuate area and barrier off to prevent re-entry.
4. Eliminate ignition source, e.g. no smoking; do not operate light switches or unprotected electrical equipment, do not create sparks.
5. Ensure adequate ventilation, force ventilation if necessary.
6. **ONLY PEOPLE WHO HAVE BEEN TRAINED AND ARE DEEMED COMPETENT** are to wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
7. Only if it is safe to do so try to stop release.
8. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous.
9. Absorb spillage with non combustible material e.g. sand, sawdust, earth or purpose made absorbent granules.
10. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly
11. Clean any stains with detergent not solvents

4. Procedure for fire involving any liquid you may encounter, namely:

Antifreeze
Asphalt materials
Automatic transmission oil
Aquetard formwork retarder
Bitumen emulsion
Brake fluid
Chemcure
Chemlease
Diesel oil
Oil (engine/gear/hydraulic
ET – 10/150 protective sealer
Lokfix P25 resin coating
Paint
Petrol, PVA sealer
Sika water stop
Swarfega duck oil
TARSOL
Thinners
Turpentine

Small fire - Use CO_2, dry powder, alcohol resistant foam, sand, earth or water fog.

Large fire - Use alcohol resistant foam or water fog.

1. WATER IS **NOT** TO BE USED ON **BITUMEN; WATER JET IS NOT TO BE USED AT ALL.**
2. All other known extinguishers, including water spray, can be used
3. Test extinguisher before pointing at fire, as per training, **WATER JET IS NOT TO BE USED**, water spray may be used.
4. Exposure to fire may cause containers to rupture/explode
5. Inform fire brigade
6. If possible and only if it is safe to do so, stop flow of product
7. Continue water spray from a protected position until container stays cool
8. If possible and only if it is safe to do so , move container away or cool from a protected position
9. Spontaneous/explosive re-ignition may occur
10. Extinguish any other fire
11. The resulting slurry should then be treated as a liquid spill **(see procedure 3 for spillage/accidental release of any liquid you may encounter)**
12. Do not extinguish a leaking gas flame unless absolutely necessary
13. In confined space **ONLY PEOPLE WHO HAVE BEEN TRAINED AND ARE DEEMED COMPETENT** are to use self contained breathing apparatus.
14. RPE should be worn as fires will produce thick black smoke and hazardous products such as hydrogen chloride/fluoride, carbon monoxide, carbon dioxide and oxides of nitrogen.

5. Procedure for spillage/accidental release of any solid you may encounter, namely:

Lime or hydrated lime
Five star grout Sp
Rohan whole wheat bait (rat poison)
Cement/concrete
Grease

LIME/HYDRATED LIME

1. **<u>REACTIVITY</u> - REACTS EXOTHERMICALLY WITH WATER, FORMING CALCIUM HYDROXIDE. WET HYDRATED LIME CAN CAUSE ALKALI BURNS IF IN DIRECT CONTACT WITH SKIN**
2. Avoid breathing dust, wear suitable RPE to protect against dust and sweep up and place in suitable containers for reclamation or disposal
3. Avoid contact with skin, eyes and clothing.
4. Evacuate area and barrier off to prevent re-entry.
5. Prevent large quantities from contacting vegetation or domestic and natural water sources.
6. Absorb spillage with non combustible material e.g. sand, sawdust, earth or purpose made absorbent granules
7. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly

ALL OTHER SOLIDS

1. Avoid skin contact wear impervious heat resistant gloves, which protect the wrist. Safety goggles/visor if risk from splattering, overalls, heat resistant safety boots.
2. Suitable respiratory protection if dusts/fires are present
3. Evacuate area and barrier off to prevent re-entry.
4. Recover spillage in dry state if possible. Water mist may be used to minimise generation of airborne dusts, the resulting slurry should then be treated as a liquid spill **(see procedure 3 for spillage/accidental release of any liquid you may encounter)**
5. Prevent large quantities from contacting vegetation or domestic and natural water sources.
6. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous
7. Absorb spillage with non combustible material e.g. sand, sawdust, earth or purpose made absorbent granules.
8. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly
9. Clean any stains with detergent not solvents

6. Procedure for fire involving any solid you may encounter, namely:

Lime or hydrated lime
Five star grout Sp
Rohan whole wheat bait (rat poison)
Cement/concrete
Grease

Small fire - Dry powder, alcohol resistant foam, sand, earth or water fog.

Large fire - Use alcohol resistant foam or water fog.

CALCIUM OXIDE/HYDROXIDE

1. **REACTIVITY - REACTS EXOTHERMICALLY WITH WATER, FORMING CALCIUM HYDROXIDE. WET HYDRATED LIME CAN CAUSE ALKALI BURNS IF IN DIRECT CONTACT WITH SKIN**
2. Avoid breathing dust, wear suitable RPE to protect against dust and sweep up and place in suitable containers for reclamation or disposal
3. Avoid contact with skin, eyes and clothing.
4. Evacuate area and barrier off to prevent re-entry.
5. Prevent large quantities from contacting vegetation or domestic and natural water sources.
6. Use any extinguisher except **WATER** on as reaction may produce enough heat to ignite combustible material
7. Calcium oxide is an explosion hazard when wet and confined.
8. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly

ALL OTHER SOLIDS

1. WATER IS **NOT** TO BE USED ON **BITUMEN, WATER JET IS NOT TO BE USED AT ALL**
2. Avoid skin contact wear impervious heat resistant gloves, which protect the wrist. Safety goggles/visor if risk from splattering, overalls, heat resistant safety boots.
3. RPE should be worn as fires will produce thick black smoke and hazardous products such as hydrogen chloride/fluoride, carbon monoxide, carbon dioxide and oxides of nitrogen. Also protects if dusts are present.
4. Evacuate area and barrier off to prevent re-entry.
5. Dry powder, alcohol resistant foam, water spray mist or foam should be used to fight fires
6. Test extinguisher before tackling the fire, as per training, **WATER JET IS NOT TO BE USED**, water spray may be used.
7. Water mist may be used to minimise generation of airborne dusts, the resulting slurry from fire fighting/dust suppression should be treated as a liquid spill **(see procedure 3 for spillage/accidental release of any liquid you may encounter)**
8. Exposure to fire may cause containers to rupture/explode
9. Inform fire brigade

10. If possible and only if it is safe to do so, stop flow of product
11. Continue water spray from a protected position until container stays cool
12. If possible and only if it is safe to do so , move container away or cool from a protected position
13. In confined space **ONLY PEOPLE WHO HAVE BEEN TRAINED AND ARE DEEMED COMPETENT** are to use self-contained breathing apparatus
14. Prevent large quantities from contacting vegetation or domestic and natural water sources.
15. Prevent from entering sewers, drains, basements and work pits, or any place where its accumulation can be dangerous
16. Absorb spillage with non combustible material e.g. sand, sawdust, earth or purpose made absorbent granules.
17. Store spillage waste in a sealed metal container, mark with hazard and dispose of correctly
18. Clean any stains with detergent not solvents

7. Procedure for spillage/accidental release of any asbestos you may encounter

In the event of an emergency situation arising, full consultation will take place with the emergency services.

1. Injury

In the event of an accident requiring an injured person to be removed from the area, the following procedures should apply:

The victim comes first, the risk to his health is immediate and obvious, other considerations are secondary.

Call a first aider and send someone to call the emergency services.

As far as practicable, operatives should vacuum clean the victim and themselves and the immediate vicinity.

Respirators and boots should be sponged.

If breathing has ceased, respirators will have to be removed in order to apply mouth to mouth resuscitation.

If the victim can be moved, remove him from the working area. If necessary, slit and reseal the enclosure.

Once outside the enclosure cut off contaminated clothing and bag as waste.

Direct and assist the emergency services so as to ensure the quickest possible attention to the victim

When the victim is in competent hands, completely decontaminate all equipment and personnel and the immediate area.

2. Tent rupture

I Immediately cease work within the enclosure

II Operatives wearing full protective equipment will make all necessary repairs.

III Short duration air tests will be taken to immediately determine if there has been any liberation of asbestos fibres.

IV Should air tests prove that asbestos is present, and then fully protected operatives will clean the area until air tests indicate a clearance.

3. Damaged disposal bags

I Should a disposal bag be damaged in transit to the disposal skip then:

II Immediately barrier off the area of spillage.

III Spray area with PVA emulsion

IV Operatives wearing full face respirators and protective equipment and using type H vacuum plant will clear up all the spillage

V Re-spray the area with PVA emulsion.

4. Failure of respiratory equipment

I As with injury and fire, the risk must be put into perspective. A short term exposure to even quite high levels of asbestos will not necessarily lead to ill effects later in life.

II In the event of a loss of power to the respirator the operative must make their way directly to the airlock and exit the enclosure.

III Follow full transit and decontamination procedures.

IV Breathing may become more difficult and laboured, so it is important not to panic.

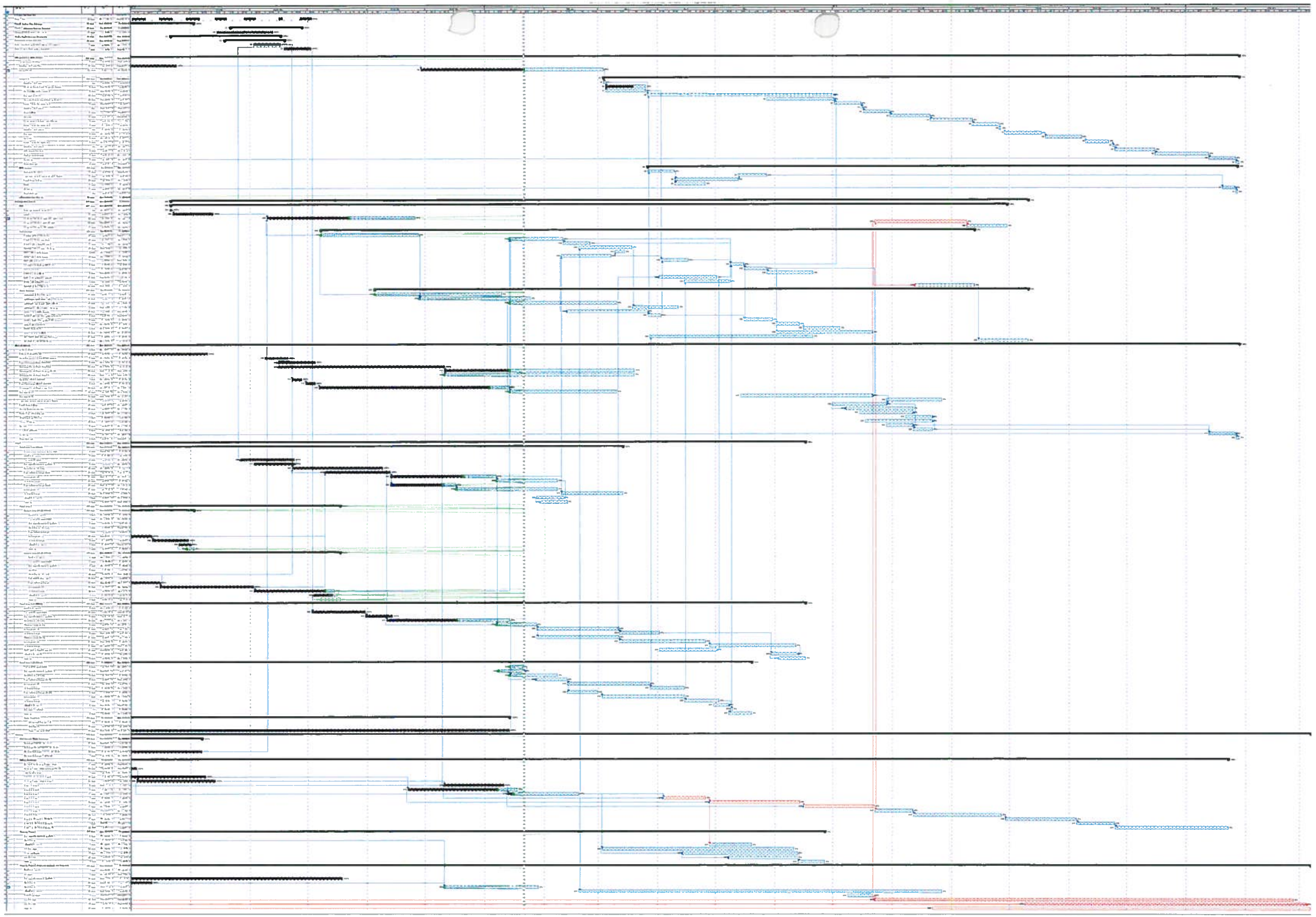
5. IN THE EVENT OF A FIRE IN AN ENCLOSURE

I Within large tents, 2 fire extinguishers will be positioned in the airlock.

II Smaller tents will have 1 fire extinguisher positioned in the airlock.

III In the case of a fire alert the operatives within the tent will immediately evacuate the enclosure and proceed to the hygiene unit.

IV Operatives external to the enclosure will move to the nearest assembly point.



BARRY WATERFRONT

Emergency Action Plan

Mar 2013

Revision D

Project No. C2123

Prepared by J Mears

Issue Date Aug 2012

Revised by M Pinkerton

Date April 2013

Barry Waterfront Cardiff

1.1 Project Description

The Cuddy Group have been awarded the construction scheme for the development of the Barry Waterfront project which includes remediation, highway construction infrastructure work. Work will proceed June 2012.

1.2 Summary

The Cuddy Group has developed an Emergency Action Plan for the Barry Waterfront Project.

As outlined in this EAP, the risks underlying the plan are developed to handle those "what if" conditions.

1.3 Risks

Asbestos

Water

Fire/ explosion

Rising main fracture/ explosion

Unexploded bombs

Trench collapse

Environmental Incidents

1.4 Signage

Signage will be posted at various locations around the site of the dangers. Muster points within the "dirty areas" and "clean areas" will be clearly marked and shown on the current revision of the Traffic Management Plan.

1.5 Emergency Procedures

Emergency procedures will be highlighted at the Site Induction for all staff. Any changes will be relayed to the staff and sub-contractors in the form of a toolbox talk

Asbestos

If asbestos is located, the asbestos consultants will be notified to confirm. The employer's representative will be notified for instructions and actions to be taken and are covered in the Asbestos Plan of Work which is read by all people employed on the site.

Fire, Unexploded Bombs, Collapse

In the event of an emergency such as a fire, discovery of a unexploded bomb or a collapse the site horn will be sounded 2 times. At this signal all staff and sub-contractors will make their way to the assembly point at the entrance of the main car park for the site compound. If relevant emergency services are required, these will be contacted by either the site foreman or Engineer.. The emergency procedure will stay in place until all staff have been notified by the site supervisors that it is safe to return to work.

If the emergency services are required to enter the site, masks will be provided, and the vehicles washed down as they depart the site in accordance with the Vehicle Decontamination Protocol.

Rising Main

Emergency procedures for damage to the rising main are as follows. Immediately contact the 24 hour control room 01443 452660 who will in turn contact the collar replacement contractor. The area is to be fenced off and pumps assembled to over pump into the nearest CSO manhole. No access is permitted until the main pressure has been lowered to reduce the flow and head. No man access within 10m is permitted.

Water

ABP (Tel: 0870 609 6699) should be advised if any contaminated run off from the site enters the dock.

The Environment Agency are to be informed of all environmental incidents by calling the Hotline Number 0800 80 70 60

1.6 Emergency contact info

The site supervisors will make the calls –

Fire	0800 169 1234
Police	01446 734451
DCWW	24 hour control room 01443 452660
	and Ian Williams 07721918881
Environment Agency Hotline	0800 80 70 60
ABP	0870 609 6699

1.7 Training and testing

This Emergency action plan will be briefed to all via the means of a tool box talk

1.8 24 hour Emergency contact numbers

Mike Pinkerton	Project Manager	07917 080 072
Meyrick Williams	Geotechnical Engineer	07880 641 368
Thomas Ace	General Foreman	07904 609 935

JOB METHOD STATEMENT

Number: C2123

Site: Barry Waterfront

Project phase: Turn and Compact ASDA Retail Area

Version no.	Date	Drafted by	Signed by	Checked by	Signed by
C	11.Feb.2012	MP			

JOB METHOD STATEMENT

1. Contractor company	2. Site where work is to be done
Cuddy Group	Barry Waterfront

3. Exact location of work:	4. Order number:
ASDA retail site	2123

5. Exact description of work to be undertaken:
Turning and compacting to a depth of 1.0m below formation for the ASDA retail area.

6a. Anticipated start date:	6b. Anticipated end date:	7. Duration of work
Feb 2013	Jan 2014	12 months

8a. Access and egress: (To and from the normal place of work. This **MUST** be specific as all other areas become prohibited)
Access and egress to be maintained by Cuddy Group

8b. Assembly point: (Indicate egress to and location of the assembly point in the event of an emergency and means of raising the alarm)
Site car park as per Cuddy site induction.

9. Number of employees	10. Emergency telephone number (24 hours):
30	Mike Pinkerton 07917 080072

11. Public and employers liability insurance:
Photocopies of current Public and Employers Liability insurance certificates must be attached to this Job Method Statement

12. Equipment: (Valid certificates (where applicable) must be supplied with any equipment to be used)	
a. To be used:	**b. Safety precautions required:**
360° Excavator	Machine to be certified and in good working order. Machine to be operated by a competent person.
Air monitoring equipment	Must be in good state of repair, regularly inspected and maintained. Must be certified.
Compaction plant 213 roller	Machine to be certified and in good working order. Plant to have all the relevant certification and health and safety features Machine must comply with current compaction requirements. Machine to be operated by a competent person with the required CPCS certification. Daily plant checks to be carried out by the operator. Weekly plant checks to be carried out by appointed person All plant to have an up to date 12 monthly thorough inspection
Dumpers	Machine to be certified and in good working order. Machine to be operated by a competent person.
CAT Scanner	Machine to be certified and in good working order. Machine to be operated by a competent person. Fire extinguisher present in cab Weekly Plant checks required

13. Personal protective and respiratory protective equipment (PPE & RPE) to be used:		
a. Type	**b. Make and model:**	**c. To protect against:**
Hard Hat	Centurion EN397	Head injuries from falling objects
High Visibility Waistcoats / Jackets	EN 471	Vehicular Movement at ground level
Safety Gloves	Click 2000	Cuts / Abrasions with hands
Safety Boots / Steel Toe Wellingtons	EN 345	Bruising or crushing of feet
Coveralls	Type 5/6 protective Coveralls suits	Asbestos contamination

Disposable masks (P3)	As determined at "face fit"	Asbestos contamination
Half mask	Sundstrom SR100	Asbestos contamination

14. Hazardous substances to be used:

a. Hazardous substance:	b. Risk to health?	c. Controls required:
N/A		

15. Subcontractors to be used: (all must be Cuddy approved and have their own job method statements)

ASM Asbestos consultants
Cuddy Environmental

16. Technical content of the job:

Five separate areas within the ASDA retail area are required to be turned and compacted to a depth of 1m below formation for the retail phase of the works. Services have been identified in this area and will be identified prior to the start of each area.

Each area in turn is to be fenced off to create enclosed work areas for the turn and compact operation and signed ensuring its safe and well guarded from unnecessary access.

The plant involved in this operation are 20T excavators and 213 roller AND 9T dumper. The area is to be tuned and compacted to a new depth of 1m thick in 250mm compacted layers with 5-6 passes or as otherwise instructed All machine operators are to be suitably qualified and hold CPCS cards as a minimum. Banks man will be supervising the plant at all times for the safety of site personnel and general public.

17. Safety risk assessment of the work to be done. What/who are the:

a. Hazards	b. Risk to people	c. Controls to be used:
Ground contamination	Cuddy operatives and others	Vigilance must be kept at all times whilst excavating for any visible discolouration within the ground and any distinctive smell. Upon discovering a suspect material all works must stop, the supervisor notified, and the area fenced off until further investigation has taken place.

Asbestos contaminated soils	Cuddy operatives and others	All works to be carried out in accordance with ASM Ground Disturbance Protocol DocumentA0212/012A/Rev 5 & ASM Protocol for segregation / prevention of spread of asbestos and decontamination from dirty area A0212/012B/Rev 3 Regular air monitoring will be carried out to establish exposures to site personnel and surrounding areas. A competent asbestos specialist to be on site full time to provide advice on managing the risks from asbestos.
People / injury on site	Cuddy Operatives, Plant Operatives and Others.	All trenches / works to be fenced with pedestrian or Heras fencing and edge protection to trench. All manoeuvres around excavations are to be controlled by banksmen. When out of hours, precautions must be taken to prevent people from falling into excavations. All excavations must be fenced off, backfilled or securely covered. If members of the general public come onto site, stop all works and escort them to the nearest site exit via the safe pedestrian route.
Underground Services	Cuddy Operatives	Before starting the excavation, look for obvious signs of underground services, e.g. valve covers or patching of the road surface. Permit to dig following examination of service drawings (must be in place) and SIC to manage risk. Use CAT to trace any services. Mark the ground accordingly. When digging close to services, hand tools e.g. pick or fork must not be used as they can cut the services. Spades or shovels only to be used. Hand dug trials to be done within 1m of services.

		The supervisor of the excavation must have the service plans and know how to use them. No lone working. No work to be carried out around the rising main if a leak has been detected, DCWW must be contacted at once, the area cordoned off and DCWW repair the line. Work can only be carried to the area of the rising main once this RAMS has been approved, or comments and instruction are given by DCWW.
Access / Egress	Cuddy Operatives and Others	All site access to be in accordance with ASM Protocol for segregation / prevention of spread of asbestos and decontamination from dirty area A0212/012B/Rev 3 At the site induction all operatives will be made aware of the segregation footpath provided. It is positioned from the site compound running adjacent to the tarmac one way system and safely leading the workforce to their zone of work. The provision of a good standard of access/ egress is also important. A one way system is provided for plant movements, which will be explained at the site induction. A traffic management plan will be available and pinned up in the canteen and in the site office illustrating relevant routes. At the site entrance an operative will be present manning the gate, ensuring no general public can enter the site and also controlling the delivery of materials. Also, a responsibility of this operative is to carry out a routine fence check, where if any areas are damaged it will be repaired accordingly.

Excavations	Cuddy Operatives and Others	All excavations to be fence prior to start of digging. Gates to be secured when no one is in attendance and at the end of each shift. Vehicle stop blocks to be used to prevent plant from entering the excavation accidentally.
Fumes	Cuddy Operatives	Consideration to be given to the potential presence of fumes which can cause asphyxiation and/or poisoning. An assessment must be carried out before work starts to identify the risk of toxic gas, oxygen deficiency and fire or explosion. The atmosphere must be tested before entry into the manhole and suitable ventilation equipment to be available when working in areas of poor ventilation.
Plant / Vehicle Movements	Cuddy Operatives and Others	Vehicle routes should be carefully planned so that plant does not have to approach close to the edge of an excavation. These routes need to be clearly marked with baulks of timber and/or fencing and run in accordance with the TM plan which will be advised at the site induction. No movement of plant between "clean" and "dirty" area Any plant moving from "dirty" area to be decontaminated in accordance with ASM Vehicle Decontamination A0212/012C/Rev 7. Concrete apron to be constructed to minimise the risk of damage to the RM.
Vehicle/plant Defects	Cuddy Operatives	Drivers must carry out a daily inspection and record any defects in the vehicle defect report book.
Vehicle contamination	Cuddy operatives and all	All vehicles and plant leaving the site shall be inspected and cleaned in accordance with ASM Vehicle Decontamination Protocol A0212/012C/Rev 7.

Explosion of rising main	Cuddy operatives / other	Safe working practices to be adhered to, including the pressure of the main being reduced whilst working close or adjacent to the line. Notification to DCWW to be made prior to all works starting within the area for approved DCWW to repair the main. Pumps on standby to over pump the rising main to an agreed location provided by DCWW whilst the main is leaking.
Overturn of Lorry/plant	Cuddy operatives, lorry drivers & others	Tipping operations should be carried out on ground that is level and stable. The vehicle should remain level if it is moved forward during tipping. At sites that are not level and stable the site manager/supervisor will need to ensure that tipping faces are suitable and safe for vehicles used in tipping operations, for example by ensuring that the faces are compacted, and that there are no significant side slopes. Before tipping operations start, the driver may need to check that the load is evenly distributed across the vehicle. This is particularly important where the load may have slipped sideways or too far forward, risking overloading of the tipper gear. If the vehicle begins to topple over, the driver should brace him/herself against the back of the driver's seat and hold firmly onto the steering wheel. The driver should never try to jump out of a lorry that is falling over.

18. Environmental risk assessment of work to be done. What are the:		
a. Hazards?	**b. Risk to the environment?**	**Controls to be used?**
Fuel spillage	Fuel Spillage	Double bunded storage tanks & spillage kits to be in place. Concrete wagons to wash out in designated areas.
Explosion of rising main	Spillage	If the main explodes, the area is to be cordoned off and fenced. Ensure none of the sewerage goes into the watercourse
Sewerage	Leakages	To be repaired immediately and relevant PPE worn
Asbestos	Contamination	Air monitoring No breaking ground wherever possible PPE and protocol in accordance with ASM Ground Disturbance Protocol Document A0212/012A/Rev 5 to be followed. Training to be provided and face fit.
Dust	Contamination	All works are subject to constant dust monitoring. When conditions are dry and there is a chance that dust will be generated a tractor and bowser will be used to spray water over the site. The running of vehicles on the site haul roads will be minimised where possible.

19. Lifting operations

a.	Is there a lifting operation involved?	Y		N		**If no go straight to section 20**

20. Safety content of the job:

(using ALL the controls listed in 8, 12, 13, 14, 15, 16, 17, 18 & 19 describe clearly, step by step, how you are going to complete the work)

Cuddy Personnel engaged in this work shall have completed the following and hold a valid CSCS card;

- Cuddy Site Induction.
- Copies of operatives training records are available and kept in the site office for inspection, along with all relevant COSHH, HAV assessments.

- For daily/weekly safety inspection carried out by the Cuddy GF please see Cuddy site safety file.
- Signed up to and understood the specific RAMS.
- Relevant PPE.
- All testing is to carried out as per the legal agreement
- Specific mask fit testing
- Asbestos training

Works undertaken shall comply with the Site Safety Rules for Contractors.

All persons engaged in this work shall be competent and have had the necessary training to undertake the work, with all training records available for inspection.

Prior to commencement, Cuddy are to be in possession of all relevant information, namely:

- Information relating to ground conditions.
- Service Plans.
- Permit to work
- Permit to dig and SIC by Cuddy – Copy to be kept with Machine operator.
- Line and level of RM and pressure
- Clear understanding of the risks identified for working with Asbestos.

All vehicular movements to be agreed between nominated Cuddy operative and Client representative. Where required, Cuddy will provide banksmen to control the working area. No vehicles from the "clean" area can enter the "dirty" area of the site, this is highlighted at inductions.

Representative background and personal Air monitoring will be undertaken whilst works are in progress with results being notified to site to ensure it is safe to work

All Cuddy employees are to complete the singing in and out book daily within the Cuddy designated area.

All Cuddy employees to wear appropriate PPE whilst on site and follow the decontamination procedures for access to and from the site. Works to be carried out in accordance with ASM Ground Disturbance Protocol Document A0212/012A/Rev 5 & ASM Protocol for segregation / prevention of spread of asbestos and decontamination from dirty area A0212/012B/Rev 3

Refuelling of plant will be as follows , -
Refuelling will only take place in designated areas located away from the dock and drainage gullies. The fuel bowser will be located adjacent to the clean/ dirty area demarcation fence where refuelling can be undertaken without the unnecessary cleaning down of the item of plant. Where possible drip trays/ plant nappies will be positioned prior to refuelling

Any plant that must leave the dirty area must be cleaned in accordance with ASM Vehicle Decontamination Protocol A0212/012C/Rev 7

All washing points and fuelling areas will be clearly marked on Site Traffic Management Plan Rev E.

Crossing points are to be constructed with 200mm structural concrete with 2 layers included of mesh thus transferring the loads horizontally outside of the 12m protection zone and causing no immediate point loadings onto the rising main.

All operatives will be CPCS trained.
All plant will have thorough examination certification.
All lifting equipment will be certified

All operations described as to be carried out under strict guidelines for safe working around Asbestos which

will entail training, relevant PPE and decontamination for all parties as laid out in the ASM protocols. It is recommended that breaks are staggered to reduce the numbers at decontamination units (keeping?).

TURNING AND COMPACTING

1. Turning and Compacting
All works to be in accordance with the ASM Ground Disturbance Protocol Document A0212/012A/Rev 5. If visible asbestos contamination is discovered all works will stop and Cuddy Environmental's works to remove the contamination will be followed in their Plan of Works. Where turned material is placed, there will be a further inspection of the surface for any visible asbestos contamination.

2. Plant Management.
Signs clearly identifying the clean and dirty areas of the site will direct the plant to their specific segregated haul roads depending if they are working in the clean or dirty areas in accordance with the Site Traffic Management Plan. Plant drivers will be fully briefed for their specific duties for the day. They will know whether they are classed as clean or dirty and where they can drive on the site. When the surcharge is being transferred and tipped onto the surcharge area a banksman will direct the plant.

3. Banksmen.
This role will be undertaken by Cuddy Environmental working to their Asbestos Plan of Work Rev. 5 in accordance with the ASM Ground Disturbance Protocol Document A0212/012A/Rev 5.

4. Plant Operators.
Where plant operators are able to operate their machines within enclosed cabs, with windows and air vents closed they can work within the Asbestos Control measures 2Breaking ground Non-asbestos Trained operatives.

ECOLOGICAL

All works have been planned in accordance with the environmental mitigation surveys. Any fuel leaks or discovery of additional contamination will be advised to the Project Manager who will notify the necessary parties concerned. Refer to the Emergency Plan.

EMERGENCY ACCESS

For access for the emergency services, they will be briefed and accompanied to site where PPE will be provided. The vehicles will then be washed on departing the contaminated area in the designated wash bay in accordance with ASM Vehicle Decontamination Protocol A0212/012C/Rev 7

Following Works

Decontamination of personnel in accordance with ASM Protocol for segregation / prevention of spread of asbestos and decontamination from dirty area A0212/012B/Rev 3

Decontamination of plant and tools. Any plant and equipment leaving the work area will be cleaned down in the designated wash bay in accordance with the ASM Vehicle Decontamination Protocol A0212/012C/Rev 7

Quick hitch - Bucket Changing

Please note that all quick hitch bucket changes need to be changed in the designated bucket change zone. No buckets are to be changed outside of this area or until they read and understood the quick hitch risk assessment and has been briefed and has signed up to a specific TBT.

21. Contractor signature: (Contractor MUST print name, sign and date the job method statement)		
Print name:	Signature:	Date: