



PERMIT

WREXHAM CONSTRUCTION SERVICES



WORKING PLAN for Waste Management Activities

at

LLAY DEPOT, MINERS ROAD LLAY, WREXHAM

(Ref: 1/02 - January 2002)



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AGREED

9/5/2002



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1. Outline of site usage

a) Status of site Operator

- The operator of the site will be Wrexham Construction Services (WCS).
- WCS are the Direct Service Organisation of the Transportation & Engineering Department of Wrexham County Borough Council.
- WCS has no independent legal status (outside the Council).
- WCS has no role in relation to any Statutory waste collection or waste disposal functions that are performed by the council.
- The application is being made by Wrexham Construction Services on behalf of the County Borough Council. The County Borough Council are the owners of the site, and would also be the body to which the licence would be issued.

b) Site Description

- The site is situated on Miners Road, Llay, Wrexham. The Grid reference is SJ3256.
- The site covers an area of approximately 1.5 hectares (see plan).
- This plan is concerned with the use of the site for processing waste construction materials in order to produce re-usable products. This is in accordance with Agenda 21; it is WCS's aim to re-use and re-cycle as much construction waste as possible.
- The processing that will take place is described in para. e) below.
- However; the site is also a storage depot for materials used in other Wrexham Construction Services operations. The site will therefore be used for the storage of materials that are not waste (and are not related to the Waste Management Licence).

c) Planning Permission

The planning authority have confirmed (in writing) that the use category of the site covers the processes that are the subject of this application.

d) Hours of operation

- No waste processing will take place on Sundays or Bank/public holidays or during the hours of darkness. Waste Processing will take place between 7.30 & 18.00 hrs Monday to Friday
7.30 & 13.00 hrs Saturday

e) Waste Materials to be processed

The waste materials that will be brought to the site are as follows:

U.K. Waste Classification System Ref.	Description	Details/ Typical source	Max. Tonnage on site
21.00.00	Inert Materials	<ul style="list-style-type: none"> • Excavated clean stones • Excavated subsoils (clay) 	4000T
22.01.00	Naturally occurring rocks and soils <i>(uncontaminated but containing organic matter)</i>	<ul style="list-style-type: none"> • Excavated topsoils 	2000T
22.02.00	Construction / demolition waste <i>(uncontaminated but containing asphalt, bitumen and/or coated roadstone)</i>	<ul style="list-style-type: none"> • Excavated road pavements / demolished structures • Mixed waste from 'streetworks' operations 	4000T
TOTAL:			10,000 T

f) Assessment of risks to the environment

- Our assessment of the risks associated with the waste materials to be taken to the site indicates that there will be no significant risk of pollution or hazards to the environment.
- This conclusion is reached for the following reasons:
 - a) The site will be operated as a non-commercial operation. I.e. it is a Council Depot, that will accept only Council waste. There will therefore be total control over the nature of the waste that arrives at the site.
 - b) The only bio-degradable material taken to the site will be non-contaminated naturally occurring topsoil. Although this waste does contain organic matter; it is not hazardous to the environment.
 - c) The only 'active waste' taken to the site will be broken highway pavements (bound roadstones). Although this waste does have a bituminous content; the product is (by its very nature) designed to be non-volatile.
This product will come from 2 sources:
 - 'Worn out' road layers which are even less volatile than new macadams because they are weathered/highly oxidised.
 - 'streetworks waste' (classification 22.02.03) e.g. from trench works, where the bituminous content is a very low proportion of the total volume (typically <1%).
 - c) The remainder of the waste will be inert, and therefore non-hazardous.
- For the above reasons; positive containment is not proposed on the site and natural drainage will be allowed to occur.

g) Processing methods

- Construction waste is to be brought to the Depot and stockpiled until such time as it can be processed (by use of mobile plant) in order to produce re-usable products (e.g. roadstones etc.).
 - The plant used to process waste will be
 - a) a mobile screening device (see sheet LL04)
 - b) a mobile crushing device (see sheet LL02)
 - Waste materials delivered to the site will be categorised in one of two ways
 - a) waste designated as not requiring to be screened prior to crushing
 - b) waste designated as requiring pre-screening
- These two waste 'products' will be stored in separate stockpiles ('A' & 'B').

- Waste processing will be as follows:

WCS Stockpile Category	Waste Product Description	Waste Processing to be undertaken
A	No screening required	<ul style="list-style-type: none"> • Material delivered to mobile crusher via hydraulic loader/excavator. • Mobile crusher will produce re-useable products (roadstones etc.)
B	Pre-screening required	<ul style="list-style-type: none"> • Material delivered to mobile screening device via hydraulic loader/excavator. • Mobile screen will extract material suitable for inclusion in stockpile 'A' above • Mobile screen will extract any topsoil present in the waste (for re-use)

- The mobile screen may also be used to extract specific gradings of stone from the crushed material (i.e. after crushing)

2. Development for waste handling

a) Site Security

- the boundary along the public highway is secured by palisade fencing.
- A lockable gate is provided at the entrance to the site
- Other boundaries will be marked by post & wire fencing (this will not be security fencing).
- The site is protected from unauthorised vehicular access by the landscaping bunds. These will prevent fly-tipping by denying vehicular access from adjacent plots that are currently vacant. When the vacant plots are taken up; it is likely that the owners would wish to erect security fencing for their own reasons.

b) Site identification board

A bi-lingual sign will be erected adjacent to the entrance to the site. The sign will contain the following information:

- It will identify WCBC as the owner of the site
- It will give a contact address and telephone numbers for WCS
- This will include a 24hr emergency number
- It will show any Environment Agency contact numbers that may be specified (by the EA)



c) Drainage system

- The foul sewer system on the site will be connected into the main public sewer network.
- A french drain has been laid along the southern edge of the site in order to deal with ponding. The drain feeds into three soakaway manholes/catchpits.
- Positive drainage is not proposed for the main waste handling areas (see 1f).

d) Plant

- WCS are registered as Licenced Carriers of Waste.
- Waste processing activities will be undertaken by mobile plant that carries all of the necessary local authority licences (see LL02 & LL04).
- The transportation of waste between stockpiles and the mobile plant will be achieved via use of a hydraulic excavator/loading shovel. This will be hired-in as necessary.
- The frequency with which the plant is brought to site will be determined by the quantities of material that are present in the stockpiles and that are programmed to arrive



e) Other equipment

- Waste processing areas will not be illuminated, because no waste processing will take place during the hours of darkness
- None of the products to be stored in the depot are flammable.
- Fuel will not be stockpiled/stored in the depot.
- The only fire fighting equipment to be provided will therefore be within the office/garage building, where 2 No. CO2 extinguishers will be provided.

3. Operational Control

a) Management structure

- The person with overall responsibility for the site will be the General Manager of WCS

b) Day to day operational control

- The person who will be responsible for the effective day to day management of the site will be the WCS Works Co-ordinator (Mr.D.Brett), who has been registered with WAMITAB under the transitional provisions in the Waste Management Regulations 1996 (Regulation 4).
- The Works Co-ordinator will inspect the site on each day that any waste processing activities are being undertaken. These processes will not be programmed for days when Mr.Brett is absent from work.
- Should any emergencies occur whilst Mr.Brett is unavailable; they will be dealt with by the Works Manager and/or the General Manager.

c) Manning of the site

- A WCS operative will be present whenever any waste processing is taking place at the site (the 'receiver' of the waste).
- A minimum of two operatives will be present on site whenever any crushing or screening operations are taking place.

d) Site Records

- All records will be retained on site throughout the duration of site operations and will be available at all reasonable times for inspection.
- Records will be kept of the quantities of waste that are processed through the site and these statistics will be forwarded to the Environment Agency at the required intervals.
- The 'receiver' will record waste quantities via one of 2 methods:
 - If the driver is in possession of a weighbridge ticket - this will be used
 - If the driver does not have a weighbridge ticket - an estimate of the load will be made based upon the plated carrying capacity of the wagon.

e) Control of waste Delivery

- The site will be operated as a non-commercial operation. I.e. it is a Council Depot.
- There will therefore be full control over the nature of the waste that arrives at the Depot, because there is full control over the production of the waste (on work sites). All WCS operatives have been instructed to segregate their waste at source and checks are made to make sure that this is happening.
- Any instances of unauthorised materials being delivered will be recorded and investigated and if any persons are shown to have broken the rules; appropriate action will be taken against them in order to prevent repetition.

f) Checking of Waste

- In addition to the controls described above; the Receiver will undertake visual checks on all of the construction waste that is delivered to the site. These checks will be sufficiently thorough to establish that no inappropriate materials have been brought to the site (in error).
- The receiver will check before material is tipped, and after material is tipped.
- If the Receiver has any doubts before material is tipped; he will instruct the driver not to tip. He will then contact the Works Co-ordinator or the Works Manager to obtain further instructions.
- If the Receiver has any doubts after the material is tipped; the provisions of 3g) below will apply.

Operational Control cont....

g) Removal of Unauthorised Waste

- Any instances of unauthorised or inappropriate materials being brought to the site will be logged and reported to the Works Manager
 - If the operative on site considers that any materials brought to the site may be hazardous he will contact the Works Co-ordinator (or the Works Manager) immediately. This will include any materials such as empty packages/containers (e.g. empty bitumen emulsion containers). The Works manager or Works Co-ordinator will then organise the appropriate actions, including the measures specified in para.e) above.
 - Any negligible quantities of non-hazardous materials that are brought to the site in error will be removed from stockpiles and placed in a skip that will be retained on site for that purpose. These materials are expected to comprise isolated pieces of wood (that may have been used in construction processes) and/or isolated plastic items such as individual broken traffic cones etc. (that are sometimes loaded in error). If amounts of these materials are found to be higher than 'negligible', this fact will be logged and reported in the same way as hazardous materials.

h) Health, Safety & Welfare arrangements

- All work activities will be undertaken in accordance with Health & Safety law, including the Health & Safety at Work Act 1974, and the Management of Health & Safety at Work Regulations 1992.
 - WCS will assess the risks associated with its operations, and will actively manage those risks, through safe systems of work. This includes risks to WCS's employees; subcontractors, and members of the public.
 - Sufficient resources will be provided to ensure that WCS's policies & procedures operate effectively. These resources will include providing information, training and adequate supervision.
 - WCS will audit all persons who work on their sites (including any subcontractors) to ensure that they are competent to undertake the duties that are asked of them.
 - WCS will monitor the management of safety on the site and take action whenever deficiencies are found. All accidents will be properly recorded and analysed.
 - A depot store/office will be constructed in order to provide toilet and washing, and mess facilities. Temporary arrangements will be put in place until such time as mains services are available.

i) Complaints

- A register of complaints will be kept on site. All complaints will be reported to the Works Manager who will investigate the circumstances and ensure that the necessary corrective measures are taken.
- A prompt response will be made to the complainant and a record, including copies of all correspondence and telephone file notes, will be made in the complaints register held on site.
- Wrexham County Borough Council (Environmental Protection Department) will be advised, in writing within one week, of any dust complaint received together with details of the findings of the Investigation and any corrective measures which have been taken.
- To enable prompt action to be taken in the event of an airborne dust emission, contact numbers will be displayed on site (see 2b)).

4. Environmental Controls

a) Visual intrusion

- an approved scheme for boundary bunds and planting will be executed to the satisfaction of the planning authority.

b) Dust control measures

- Control measures will be based upon the Secretary of State's Guidance PG3/16(96) (Mobile Crushing and Screen Processes).
- Airborne dust emissions will be controlled by the adoption of good working practices coupled with effective site management.
- The best available techniques (not entailing excessive cost) will be used to achieve the objective of minimising or rendering harmless any releases.
- Daily records will be kept on site by the Depot operative. They will include:
 - Daily weather conditions.
 - Visible dust occurrences.
 - Actions taken to reduce visible dust.
 - Action taken.
- The primary (potential) dust source will be: i) on site haulage.
- Other potential dust sources include:
 - ii) Excavation, loading & tipping operations
 - iii) External road haulage.
 - iv) Wind blow.
 - v) Recycling operations/plant maintenance
- Each of the above sources are dealt with in turn (below):

i) Site Haulage

- During each working day, haul routes will be graded to maintain a firm even surface.
- Any spillages that occur will be cleaned as necessary to minimise the collection of fine material.
- During dry conditions, haul routes and other working areas will be watered to maintain a damp running surface. This will be done using a tractor and bowser which will be permanently on site.
- Other measures which will be adopted to minimise dust from haulage include:
 - a) location of main haul routes away from the site boundaries,
 - b) engineered alignments to avoid steep gradients and sharp turns,
 - c) setting a site speed limit of 5 mph,
 - d) even loading of site transport to minimise spillages, and
 - e) the adoption of designated haul routes to avoid disturbance of unprepared surfaces,
 - f) provision of a tarmac surface to some haul routes.

ii) Excavation, Loading and Tipping Operations

- The excavation sequence will be designed to shield the working faces from the prevailing wind direction.
- Loading and tipping heights will be minimised to avoid unnecessary fragmentation and uncontrolled dust emissions.

iii) Road Haulage

- The wheels and chassis of all heavy goods vehicles leaving the site will be checked by the site operator for mud and dust. The vehicles will be washed down as necessary, to ensure that track-out and loose material is not carried out on to the public highway.
- A road sweeper with internal water system will be used to clean debris from carriageway as required.

4b. Environmental Controls - Dust control measures (cont...)

iv) Wind Blow

- No material will be stockpiled higher than 3 metres.
- No single particle sized material less than 3 mm will be stored on site.
- Material containing particles of 3mm and below will be MOT type material or well Graded '75mm down' products produced from the crusher.
- The stockpiles will be monitored and in dry conditions will be kept damp.

v) Recycling Operations and Plant Maintenance

- All plant operated for recycling purposes will be Authorised/Licensed in accordance with the appropriate and the existence of valid certificates for the machinery will be checked by WCS staff prior to its use.
- The plant will be properly maintained to ensure that it operates at optimum efficiency.
- All plant will be operated in accordance with the manufacturers recommendations
- Any malfunction or breakdown leading to abnormal emissions will be dealt with promptly and operations will be adjusted or suspended until normal working can be restored. All such malfunctions will be recorded in the site logbook.



c) Noise Control

- the noise emitted from the site will not exceed 63 dB(A) as measured as 1 hour LAeq at the boundary of the site.

d) Road cleanliness

- The condition of the public highway will be monitored, and if any significant deposits from the site will be removed by the use of a mechanical roadsweeper, with on board washing facilities.

e) Odours & Leachate

- See item 1f. There is a negligible risk of odours or harmful leachate developing. The site will be monitored and any suspected problems relating to the above factors will be notified to the Works Manager for further investigation and/or specialist treatment. Monitoring will include periodic inspection of the ditches and catchpits along the site boundary.



f) Vermin & Birds

- No bio-degradable materials will be taken to the site (other than topsoil).
- There is therefore a low risk of problems being caused by the above factors.
- Any suspected problems relating to the above factors will be notified to the Works Manager for further investigation and/or specialist treatment.

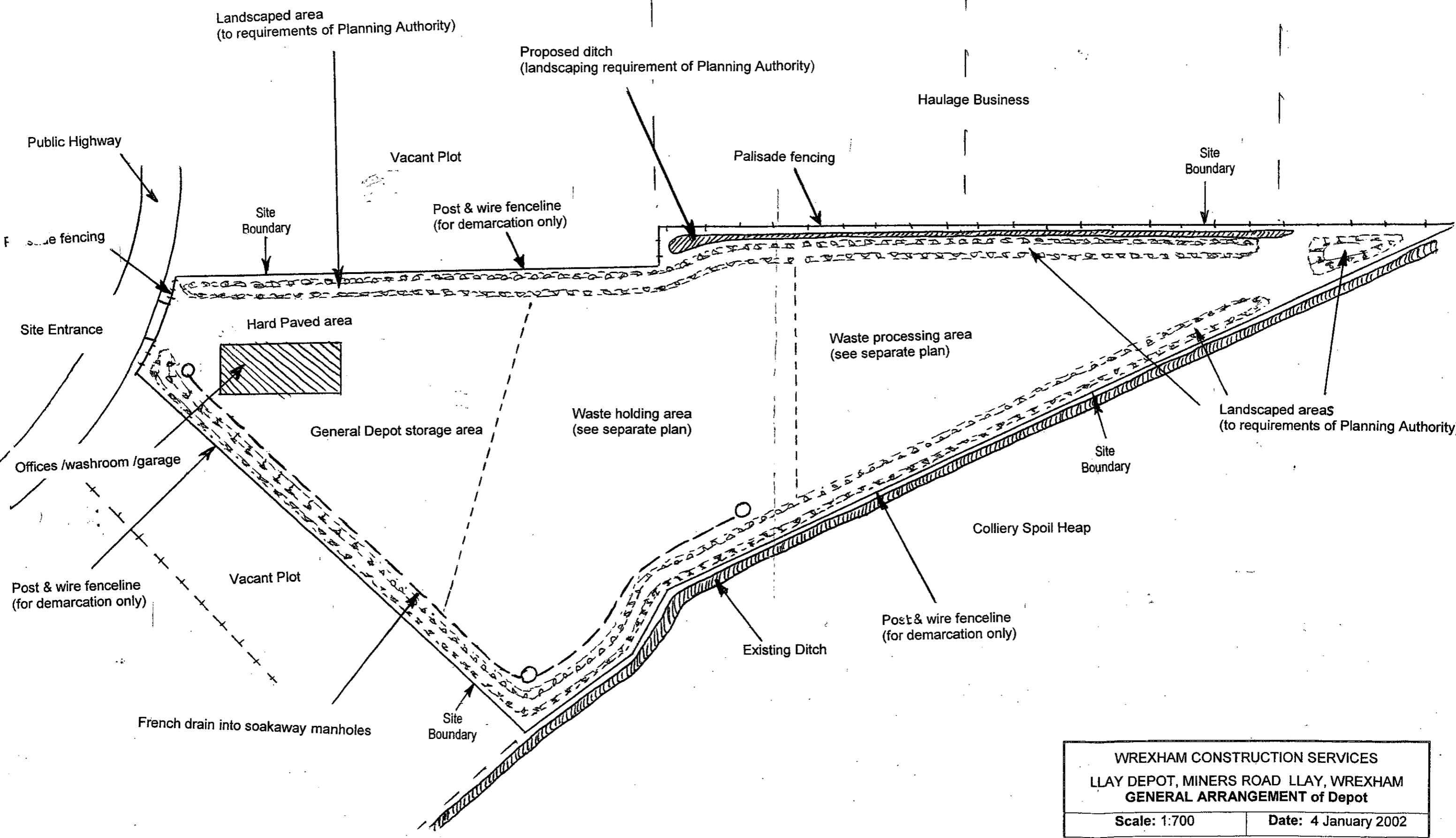
g) Weeds & Litter

- Any noxious weeds that emerge on the site will be treated by WCS operatives who are trained and certified in the use of Pesticides. Specialist advice will be sought if necessary.
- Paper and plastic products are not permitted to be brought to the site. The risk of problems due to litter is therefore low. The site operative will collect any wind borne litter that may gather on the site and collect it in refuse sacks. These will either be retained in the office 'dustbin' for collection by the Local Authority, or taken to a registered Waste Transfer station for disposal.

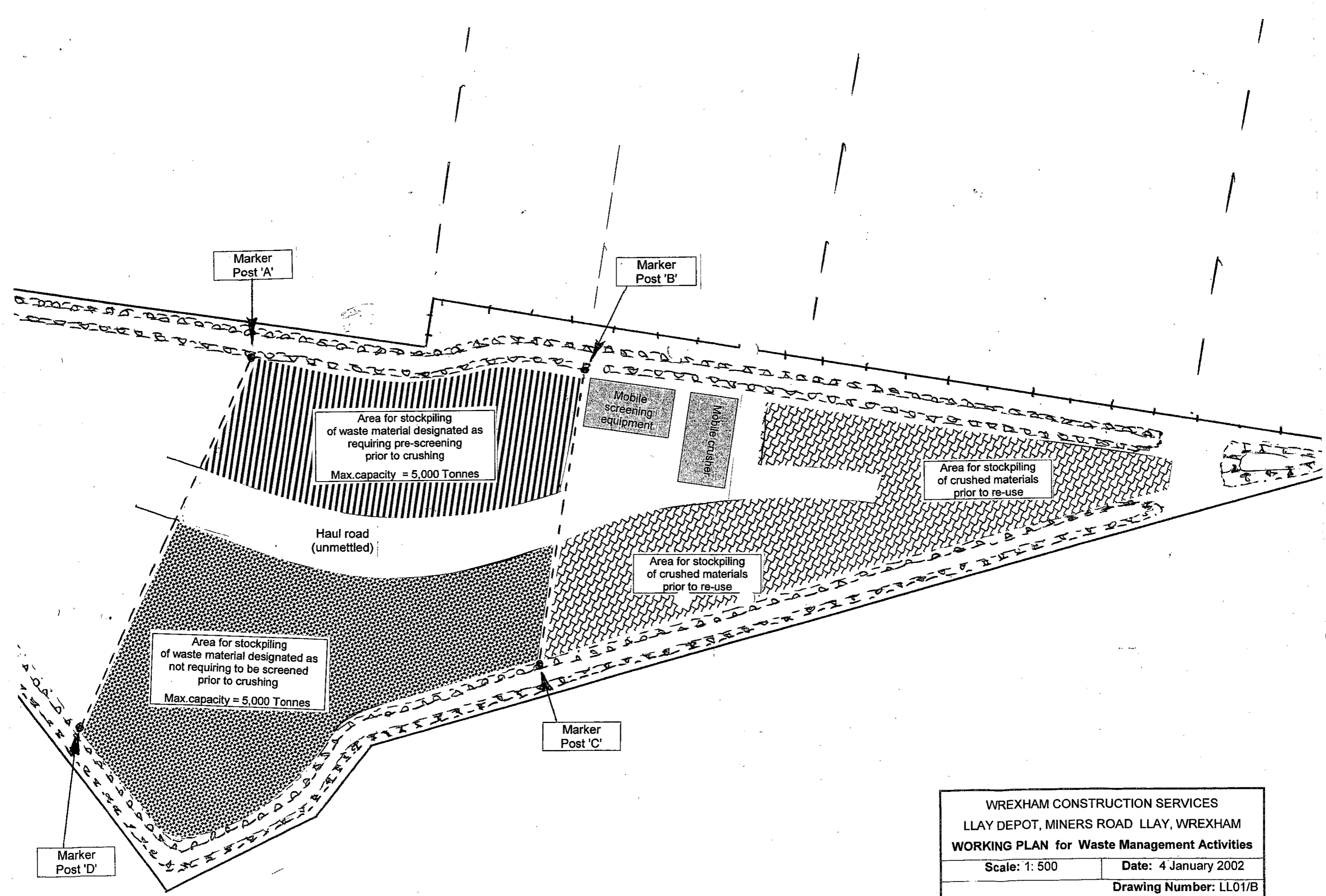
h) Remedial Measures

- Nuisance monitoring will continually take place by the Depot operative.
- Immediate action will be taken to rectify any nuisance that is caused. This actions may include:
 - Cessation or reduction of regrading, crushing, hauling, excavation, or movement of materials giving rise to dust emissions.
 - Further watering of internal haul roads and stockpiles.
- Any remedial actions will continue until such time as the nuisance is no longer evident at the site boundary.

General Manager
Wrexham Construction Services
8 January 2002



WREXHAM CONSTRUCTION SERVICES LLAY DEPOT, MINERS ROAD LLAY, WREXHAM GENERAL ARRANGEMENT of Depot	
Scale: 1:700	Date: 4 January 2002
Drawing Number: LL01/A	



Marker Post 'A'

Marker Post 'B'

Area for stockpiling of waste material designated as requiring pre-screening prior to crushing
Max.capacity = 5,000 Tonnes

Mobile screening equipment

Mobile crusher

Area for stockpiling of crushed materials prior to re-use

Haul road (unmettled)

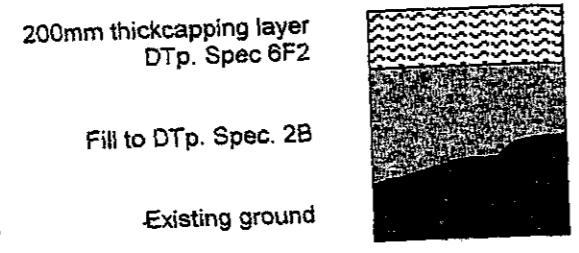
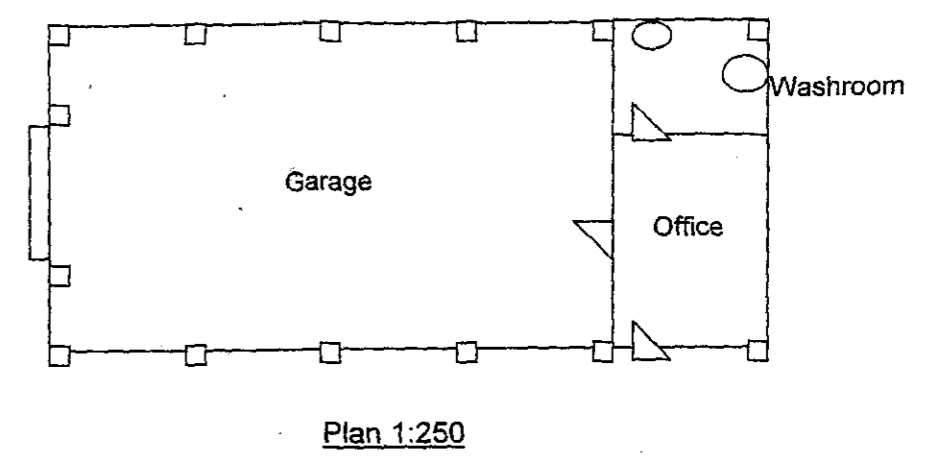
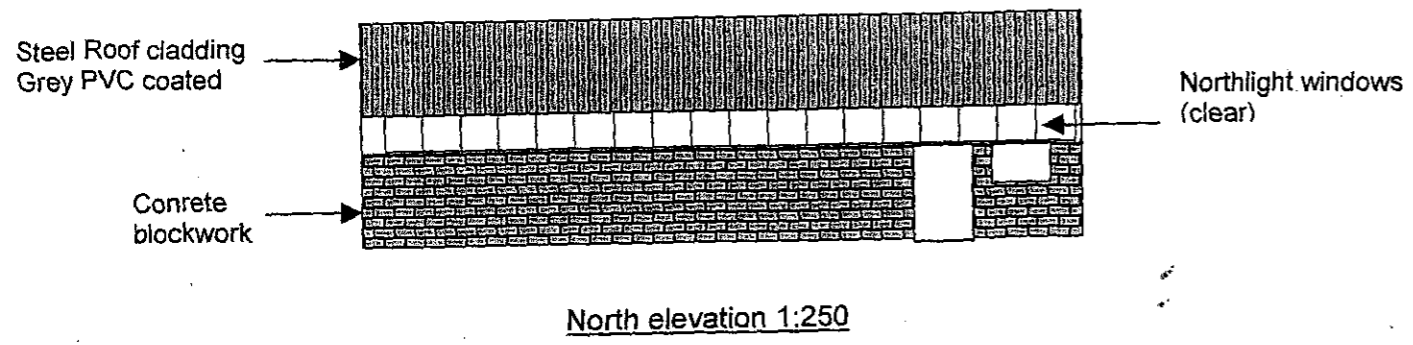
Area for stockpiling of crushed materials prior to re-use

Area for stockpiling of waste material designated as not requiring to be screened prior to crushing
Max.capacity = 5,000 Tonnes

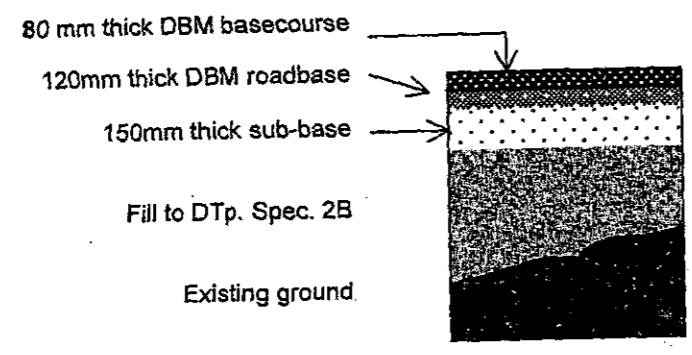
Marker Post 'C'

Marker Post 'D'

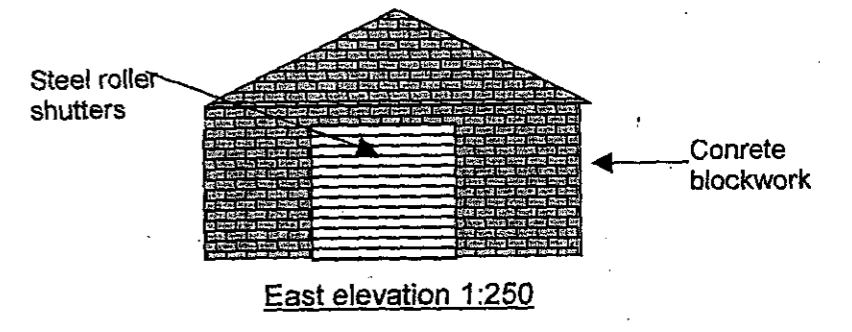
<p>WREXHAM CONSTRUCTION SERVICES LLAY DEPOT, MINERS ROAD LLAY, WREXHAM WORKING PLAN for Waste Management Activities</p>	
<p>Scale: 1: 500</p>	<p>Date: 4 January 2002</p>
<p>Drawing Number: LL01/B</p>	



Typical cross section - hardstanding areas



Typical cross section - paved roadways

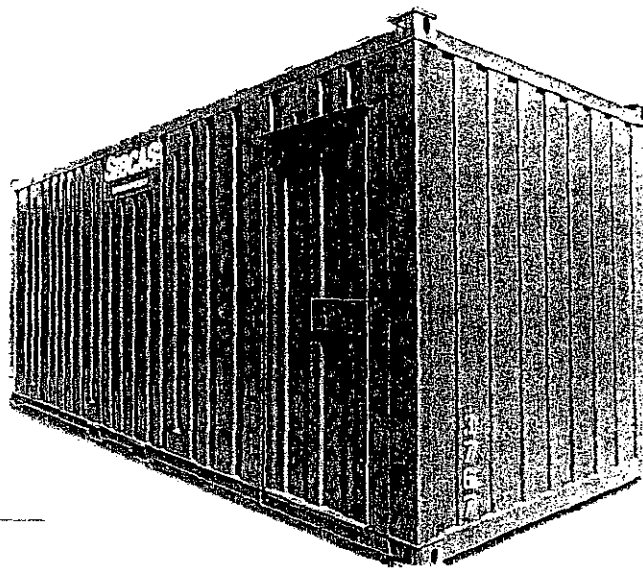


WREXHAM CONSTRUCTION SERVICES			
LLAY DEPOT			
Buildings & Roadways			
Scale	As shown	Drawing No.	LL02

UNICON RANGE

Although they are primarily chosen to provide robust on-site storage facilities, our Unicon range incorporates Variants and 50/50's and can easily be adapted to offer comfortable office and mess facilities. In fact, depending on your specific needs, these units can be easily modified to offer combined accommodation. Whilst they are not intended specifically for high security areas, the fact that they are made of solid steel may assist in deterring passing vandals.

All our Unicon range of units are 8' wide, available in lengths of 10', 20', 21', 30', 40' and Unicon Variants and 50/50's feature Color gas and electric fittings.



Typical mobile Container unit (20' long)

Specification

Engine 340Hp (254 Kw)
 Moteur 340Hp (254 Kw)
 Motor 340Hp (254 Kw)
 Motor 340Hp (254 Kw)

Stepped Grizzly Standard
 Grizzly de pas standard
 Grizzly de peldaños Estandar
 Normales Stufenvorsieb

Fully Hydraulically Driven
 Complètement entraîné hydrauliquement
 Completamente accionado hidráulicamente
 Wird völlig hydraulisch angetrieben

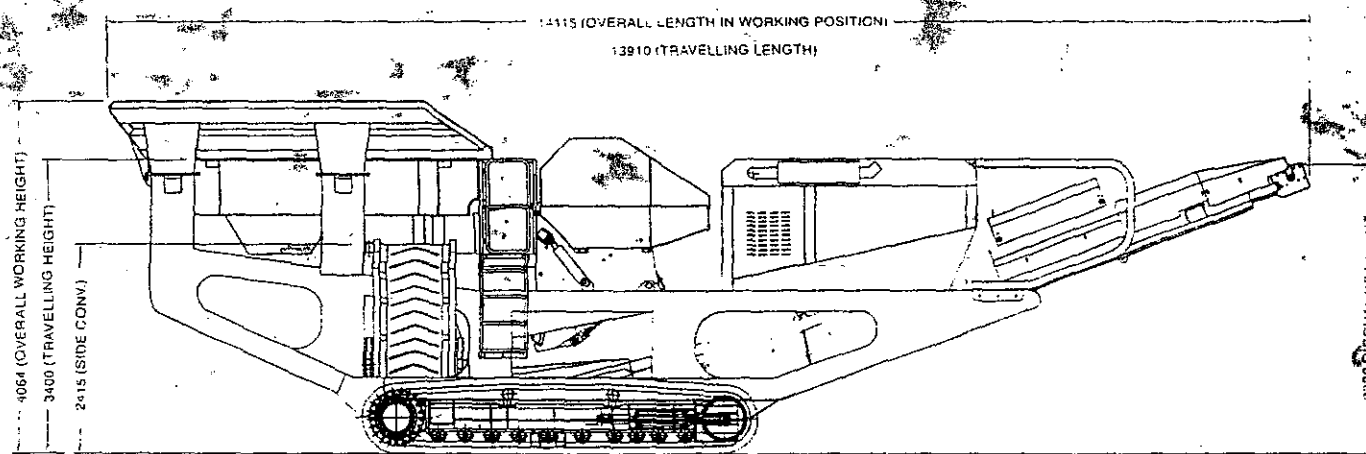
Dust Suppression Standard
 Suppression de poussière standard
 Supresión de polvo Estandar
 Standard Staubunterdrückung

Jaw Size 1100 x 700
 Dimensions de la mâchoire 1100 x 700
 Tamaño de la mandíbula 1100 x 700
 Backengröße 1100 x 700

Side Belt Standard
 Courroie latérale standard
 Cinta lateral Estandar
 Standard Seitenband

Fully Radio Controlled
 Entièrement télécommandé
 Completamente teledirigido
 Komplet ferngesteuert

Hydraulic Legs Standard
 Pieds de parade hydrauliques standard
 Pies hidráulicos Estandar
 Standard Hydraulstützer



Specification for Mobile recycling unit

WREXHAM CONSTRUCTION SERVICES			
LLAY DEPOT			
Mobile equipment			
Scale	N.T.S.	Drawing No.	LL03

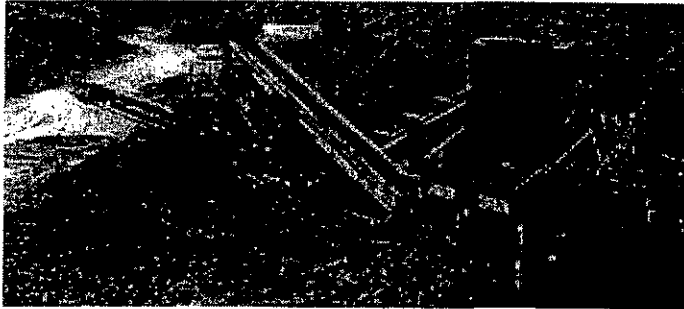
Mobile Screening Equipment

- Equipment to be used is a three-way screen as manufactured by
- Powerscreen International Ltd.
- Coalisland Road
- Dungannon
- Northern Ireland
- BT71 4DR

(or similar approved).

The actual machine used would have a valid Local Authority licence, a copy of which would be obtained by WCS prior to its use.

TURBO CHIEFTAIN 1800 TRACK



Standard Features:

- .16' x 5' Patented four bearing "free floating" screenbox eliminating the need for fine-tuning.
- .Radio Controlled Tipping Grid.
- .4 section, side tension top deck.
- .2 section, end tension bottom deck.
- .Screen Walkway and Access Ladder.
- .Hydraulic Screen Angle Adjustment.
- .Hydraulic Screen Tensioning.
- .Pendant Track Control.
- .All belts heavy-duty.
- .Engine Protection Shut Down System.
- .Patented hydraulic folding side conveyors.

Options:

- .Vibrating Grid.
- .Punch Plate Screen on Vibrating Grid.
- .Finger screens on vibrating grid
- .4" or 6" Grid Aperture.
- .Heavy Duty Mesh.

WREXHAM CONSTRUCTION SERVICES	
LLAY DEPOT, MINERS ROAD LLAY,	
WREXHAM SCREENING EQUIPMENT	
Scale: n.t.s	Date: 4 January 2002
Drawing Number: LL04	