Attachment D.1

D.1.a Site Security

Access to the application site can only be gained via an access road leading from the existing N24 Waterford to Limerick national primary route. All vehicular traffic accessing the site must first proceed to the site office where a record sheet is completed and then is directed to its tipping area.

Aside from the access road to the existing facility, the entire site boundary is closed off by post and wire fences or an outlining ditch and 2No. agricultural field gates, the locations of which are shown on Figure 2.1.

All agricultural gates will remain padlocked for the duration of the site restoration activities and will only be opened occasionally under supervision for machine access.

The only vehicles accessing the site at the present time are heavy good vehicles (HGV’s) carrying inert soil for backfilling or construction and demolition waste for recycling.

Inert materials are accepted at the site between 08.00 hours and 18.00hours each weekday and 08.00hours to 14.00hours on Saturday. No materials are accepted at any other time.

D.1.b Site Roads

All trucks delivering inert waste to this site will be confined within the Applicant’s landholding. Trucks will initially travel over a paved road surface on to the site before travelling over a network of unpaved internal roads to get to the active restoration area or the recycling area. Existing paved and unpaved haul roads across the application site are indicated on the existing site layout drawing in Fig 1.1

Provision for employee and visitor car parking is currently provided on a paved area adjacent to the site office, where all visitors must report to.

D.1.c Hardstanding Areas

A temporary hardstanding area constructed of secondary aggregate is provided in the centre of the application site for the recovery of inert construction and demolition waste imported to site and for separation and storage (in skips) of any separated non-inert construction and demolition wastes inadvertently mixed with it, most likely to comprise metal, timber, PVC pipes, plastic etc. This hardstanding area also provides for the storage of plant, equipment and materials.

At the present time, the hardstanding area is not sealed and any rain falling over this area either percolates downwards into the underlying soils or runs-off over the existing ground surface toward the run-off collection drain. It is envisaged that the eastern side of the existing recovery area will in future be sealed by a 100mm thick reinforced concrete slab over 150mm of granular sub-base and used as a waste inspection and quarantine area.
It is envisaged that the eastern side of the existing recovery area will in future be sealed by a 100mm thick reinforced concrete slab over 150mm of granular sub-base and used as a timber recovery and green waste handling area.

D.1.d Plant

Mobile Plant equipment is to be used in the recovery process on site. A bulldozer will be used to grade and level the soil in the recovery of the land. In the recovery of the construction and demolition waste material a number of pieces of plant are to be used. A mechanical excavator will load a screener, which in turn will feed a concrete crusher. A wheel loader will load the material for re-use on site or for off site usage. A shredder will be use to reduce the size of the timber and green waste. Also tractor and water bowser/mechanical sweeper will be used when required by site conditions.

D.1.e Weighbridge

In order to track and record the amount of material entering the application site, it is proposed to install a weighbridge along the internal access road in front of the site office. Secondary aggregate exported off-site and any non-inert construction and demolition waste dispatched to other licensed waste disposal or recovery facilities will also be weighed. Records of waste and secondary aggregate tonnages will be maintained for waste auditing purposes.

D.1.f Wheel wash

In order to prevent transport of soil on public roads, a wheel wash facility has been installed close to the site entrance, as shown on the site layout in Figure 1.1 All egressing site traffic will be required to pass through the wheel wash. Also paved roads on site are cleaned with on site mechanical road sweeper.

D.1.g Laboratory Facilities

Laboratory testing of dust equipment is carried out off-site by NVM Ltd Ireland, Unit 13, Boyne business park, Drogheda, Co. Louth. There are no laboratory facilities on site. There are currently no other requirements for laboratory testing at present.
D.1.h Fuel and Oil Storage

It is not intended to provide bunded fuel storage tanks at the application site. Fuel for plant and equipment undertaking the site restoration works and/or the construction and demolition waste recovery activity will be delivered each day by a local fuel supplier. Re-fuelling of the plant will take place on the hard standing area only. No fuel will be stored on the site.

A small bunded tank for waste oils will be provided on the concrete slab at the waste quarantine area. This tank will be emptied at intervals by a licensed waste contractor and disposed off-site at a suitably licensed waste facility.

No re-fuelling of HGV trucks will take place on site. Oil and lubricant changes for wheeled or tracked plant will be undertaken on-site at the existing hardstanding area.

Plant maintained on site principally comprises mechanical excavators and/or bulldozers, mobile crushing and screening plant. Both tracked and wheeled plant will be serviced as necessary at the hardstanding area or, if necessary, on the concrete slab at the waste quarantine area.

D.1.i Waste Quarantine Areas

The waste inspection and quarantine area will be sealed by a 100mm thick reinforced concrete slab over 150mm of granular sub-base and bunded to a design storm volume. Any suspect or unacceptable waste identified in this area will be placed in covered skips in order to minimize potential contamination of surface water run-off.

D.1.j Waste Inspection Areas

Visual inspection, in-situ monitoring and testing of imported waste materials will be undertaken by the Applicant’s site staff as inert waste materials are end-tipped at the active restoration area. Should there be any concern about the nature of the waste being end-tipped it will be re-loaded onto the truck and re-directed to the waste inspection and quarantine area for closer examination and inspection. Detailed records of all such inspections will be kept.

Should inspections or testing at the waste inspection area identify any non-inert material which cannot be accepted and used for restoration of this site, it will be segregated and temporarily stockpiled (at the quarantine area) and covered, pending removal off-site by permitted waste collectors to a suitably licensed permitted waste disposal or recovery facility.
D.1.k Traffic Control

All traffic to and from the application site will enter and leave via the existing entrance which currently fronts onto N24 Waterford to Limerick National Primary route. Within the next six months this route will be downgraded to a secondary local route. From here the traffic can follow this to the then re-routed N24.

Internally within the application site, warning notices, direction signs and speed restriction signs will be established along paved and/or unpaved roads leading to and from the active restoration areas and the construction and demolition waste recycling area. All HGV traffic egressing the application site will be required to pass through a temporary wheelwash facility and weighbridge at the end of the paved internal road, shown on Figure 1.1. (See attached report in planning submission on Traffic and road safety Appendix 1)

D.1.l Sewerage and Surface Water Drainage Infrastructure

A welfare cabin is provided on site with toilet, canteen and an area for drying equipment. Sewerage is discharged to tank at rear of the toilet and is emptied by Licensed waste collector and transferred to a collection tanker for disposal off-site at an approved waste water treatment facility.

With the exception of the sealed concrete slab at the waste inspection and quarantine area, it is not intended to provide any site drainage infrastructure to collect and remove surface water runoff at the application site. During the infilling of the restoration site, surface water will be allowed to run over the existing ground surface to collect in surface ponds and discharge to groundwater. Some rainfall may also percolate downwards through the backfilled soil to the underlying groundwater table. The temporary waste inspection and quarantine area will be sealed by a 100mm thick reinforced concrete slab over 150mm of granular sub-base and bunded to a design storm volume. Any surface water running over the surface of the concrete slab will be directed toward buried storage tanks with double skin protection located on the eastern side of the hardstanding area, as shown on Figure 1.1. Surface water will only be collected in the buried tanks when suspect waste consignments are stored at the quarantine facility.

At all other times, surface water run-off from the sealed slab will either percolate directly through the ground to the underlying groundwater table or will be directed over the existing ground surface to ponds in low lying areas, at which point it is effectively discharged to groundwater. Should it be necessary to prevent high concentrations of suspended solids entering existing groundwater ponds, intermediate temporary surface water ponds will be constructed to hold runoff and encourage settling out of suspended solids prior to discharge to groundwater ponds at a lower level.
Any wastewater collected in the buried tanks will be emptied by licensed waste collectors and transferred to a collection tanker for disposal off-site at an approved waste water treatment facility.

**D.1.m Site Services**

Electric power, lighting and heating will be provided to the temporary site office near the entrance to the application site.

Key personnel overseeing site backfilling and recovery operations at the application site will be contactable by mobile phone. Permanent telephone, fax and email facilities are all provided at the temporary site office.

Given the lack of combustible waste materials at this site, it is considered highly unlikely that a fire will break out during backfilling and recovery operations. Fire extinguishers will be kept at the site office to deal with any localized small scale fires which might occur. Additional fire-fighting capacity will be provided by storing water in a mobile bowser at the hardstanding area.

No buried services are understood to occur across the application site.

Overhead electricity distribution cables traverse the Eastern corner of the application site, as indicated on Figure 1.1. There are no health and safety implications in implementing phased restoration of the application site due to the cables being not within the restoration area.

**D.1.n Plant Sheds and Equipment Compounds**

Plant and equipment used in the backfilling and/or recovery activities will be stored on the temporary hardstanding area in the centre of the application site. Given the limited access into the site, it is not considered necessary to provide a security fence around this area to create a secure compound.

No workshops will be provided on site. The applicant has a mobile workshop at its disposal. Any plant or equipment which requires specialist repair or overhaul will be removed off-site if required.

Small items of mobile or hand-held plant and equipment will be stored in closed metal containers at the hardstanding area.

**D.1.o Site Accommodation**

There is currently site accommodation in the form of a temporary on site welfare cabin which provides changing facilities, hand washing, cooking facilities and toilet. All site
administration and management functions are based at a separate temporary site office cabin.

D.1.p Waste Recovery Infrastructure

Inert construction and demolition waste imported to site will be recycled at the hardstanding area in the centre of the site, refer to Figure 1.1. Any metal waste will be separated and placed in a skip pending removal off site to a licensed recovery facility. Any other non-inert waste (Plastic pipes, plastic etc.) will also be separated off and placed in a skip pending removal off-site by permitted waste collectors to a licensed disposal or recovery facility.

Construction and demolition waste will be recycled by passing it through a mobile crushing plant in order to create a particulate, granular fill which may be used to construct hardstanding areas or temporary haul roads.

Timber and green waste will be passed through a shredder to reduce size and will be screened into fractions on a concreted area to the Eastern side of the site Figure 1.1. The green waste will be composted and used to assist in the land restoration process and the timber will be re-used in Agricultural bedding or to assist in the composting process.
Attachment D.2

Inert construction and demolition waste imported to site will be recycled at the hardstanding area in the centre of the site, refer to Figure 1.1. Any metal waste will be separated and placed in a skip pending removal off site to a licensed recovery facility. Any other non-inert waste (timber, plastic etc.) will also be separated off and placed in a skip pending removal off-site by permitted waste collectors to a licensed disposal or recovery facility.

Construction and demolition waste will be recycled by passing it through a mobile crushing plant in order to create a particulate, granular fill which may be used to construct hardstanding areas or temporary haul roads.

Timber and green waste will be passed through a shredder and stockpiled on a concrete slab see Fig 1.1. And the resulting compost will be used in conjunction with soil in the restoration of each phase to agricultural land.

Restoration and recovery activities

The backfilling of the existing void with inert soils and stone is deemed to constitute inert waste recovery for the purposes of land improvement or restoration. The proposed restoration scheme provides for direct use of the imported soil and stone, without further processing.

Backfilling/Restoration Schedule

Backfilling of the application site will proceed in several phases and on completion, will merge into the surrounding pastoral landscape. A summary of the proposed phasing and the final ground level contours are shown in Figure 1.4.

It is envisaged that the western side of the site will continue to be Backfilled in a western direction up to the landholding boundary. (As there is separate Quarried sections it is easier to mark each phase as shown in Figure 1.4. This is deemed to constitute Phase 1 and Phase 2 of the project.

Thereafter, backfilling of the Northern section of the site will commence and covers three more phases. This will be filled in a north westerly Direction.

On completion of each restoration phase, a cover layer of subsoil and topsoil will be placed and graded across the backfilled soil. This will be planted in Grass in order to promote stability and minimize soil erosion and dust generation.