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Mr. Bruce Harper,
Licensing Unit,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
Headquarters, PO Box 3000
Johnstown Castle Estate, Co. Wexford

21 May 2009
08 5071 90301.L02/V.1

**WASTE LICENCE APPLICATION (W0267-01)
HI-VOLT IRELAND LIMITED**

Dear Mr. Harper,

We are acting under the instruction of our client Hi-Volt Ireland Limited (Hi-Volt). Further to the notice received (dated 1st April 2009), please see below.

Question:

Please confirm that no water is required for facility processes.

Please clarify plans for the management of storm water (including roof water) onsite. Including in your response a time schedule for completion of any works necessary.

Response:

We can confirm that the proposed facility will **not** require any water for the facility process.

Please see the attached revised attachments E.2 and E.4, outlining the Storm Water Management Plan and the associated revised Drawing WLA-04, Rev B. The Non-Technical Summary has also been updated to reflect these changes and a schedule for the completion of proposed works for the storm water management has been included.

Please contact the undersigned if you have any questions.

Yours sincerely,

GOLDER ASSOCIATES IRELAND LIMITED

Bridín Mulhall

Bridín Mulhall MSc. AIEMA
Project Manager

Attachments: Revised Attachments E.2 and E.4, Non-Technical Summary, Proposed Schedule of Works and Drawing WLA-04, Rev B

cc: Mr. Richard Gleeson, Hi-Volt Ireland Limited

BM/bm

E.2 EMISSIONS TO SURFACE WATER

There is no direct discharge to surface water from the Facility.

All storm water (including run-off from building roofs) will be directed into the oil/water separator via a storm water attenuation tank. Storm water calculations for the site are based on a rainfall intensity of 15 mm/hr as per the “Environment Agency Pollution Prevention Guide No. 3 (PPG3)” and recommendations for the “Greater Dublin Strategic Drainage Study 2005”. From these the volume required for the storm water attenuation tank is 10 m³. The existing and proposed additional surface water drains are shown on drawing WLA-04 Rev B. Storm Water management is described in E.4.b.

All storm water runoff will be collected and directed to the oil/water separator already installed within the landscaped area adjacent to the Facility entrance. Once the water has passed through the separator it is discharged to a soakaway area.

TABLE E.2(i)A: EMISSIONS TO SURFACE WATERS

Emission Point:

Emission Point Ref. N ^o :	
Source of Emission:	
Location :	
Grid Ref. (10 digit, 5E,5N):	
Name of receiving waters:	
Flow rate in receiving waters:	
Available waste assimilative capacity:	

* Office of Public Works monitoring point downstream of Facility, accessed EPA website 4/02/09

Emission Details:

(i) Volume to be emitted – Unknown			
Normal/day (estimated)	NOT APPLICABLE		
Maximum rate/hour			

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	_____ min/hr _____ hr/day _____ day/yr
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TABLE E.2(ii): EMISSIONS TO SURFACE WATERS - Characteristics of the emission

Emission point reference number : _____

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
NOT APPLICABLE									

E.4 EMISSIONS TO GROUNDWATER

It is envisaged that there will be no discernible discharge of List I substances and no cumulative concentration of non-List I contaminants in the groundwater at the Site beyond their respective Drinking Water Standards. Indirect groundwater emissions will be by means of soak holes.

E.4.a Percolations Areas

There is no wastewater discharge to on-site treatment and therefore this is not applicable.

E.4.b Storm Water

All storm water (including run-off from building roofs) will be directed into the oil/water separator via a storm water attenuation tank. Storm water calculations for the site are based on a rainfall intensity of 15 mm/hr as per the "Environment Agency Pollution Prevention Guide No. 3 (PPG3)" and recommendations for the "Greater Dublin Strategic Drainage Study 2005". Runoff calculations are shown overleaf. From these the volume required for the attenuation tank is 10 m³. The existing and proposed additional surface water drains are shown on drawing WLA-04 Rev B. The following drainage pattern is envisaged:

- Storm water from Area A will drain into the existing Drain A. The existing roof runoff is collected and directed into Drain A;
- Storm water from Area B, Area E and Area F will drain into proposed Drain C. This will be collected by the proposed storm water tank and directed into the oil/water separator; and
- Run-off from yard area (west of to Area C) as shown on Drawing WLA-04, Rev B, will be collected in a new sump from where it is pumped to the storm water tank ahead of the oil interceptor. The existing drain in this area is proposed to be sealed. Run-off from site entrance is captured in surface water drain B (Drawing WLA-04, Rev B), it is proposed to pump this water to the storm water tank. Both proposed pumps will be level controlled.

E.4.c Soakaways

As described in E.4.b above, all storm water runoff will be collected and directed to the oil/water separator already installed within the landscaped area adjacent to the Facility entrance. Once the water has passed through the separator it is discharged to a soakaway area. The point of discharge from the oil/water separator can be considered an emission and is labelled as SA01.

In accordance with Pl. Ref. no. 07511854, the soakaway has been design to accept surface water from an area up to 8,000 sq metres (BRE, Digest 365). The current hardsurface covers an area of 2,640 m², the existing combined building roof area of 1,571 m² and the proposed additional hardsurface area will be 3,270 m². This gives a total area of 7,481 m².

E.4.c Discharges to Wells

No other direct discharges to groundwater are anticipated at this time.

TABLE E.4(i): EMISSIONS TO GROUNDWATER

Emission Point or Area:

Emission Point/Area Ref. N ^o :	SA01
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	Soakaway
Location :	Landscaped area adjacent to the entrance of the Facility
Grid Ref. (10 digit, 5E,5N):	218978 , 161235
Elevation of discharge: (relative to Ordnance Datum)	Ca. 115mAOD
Aquifer classification for receiving groundwater body:	Locally important aquifer, productive in local zones only
Groundwater vulnerability assessment (including vulnerability rating):	High to low only an interim study has taken place
Identity and proximity of groundwater sources at risk (wells, springs, etc):	Nearest GSI designated source protection area is ca.3km south of the Facility
Identity and proximity of surface water bodies at risk:	River Drish is located approximately 10m from the eastern boundary of the Facility

Emission Details:

(i) Volume to be emitted: The emission will consist of surface water run-off from IWPA with the volume emitted being weather dependent			
Normal/day		Maximum/day	
Maximum rate/hour	Not known, dependant on weather conditions		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	Not known, dependant on weather conditions
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SUBJECT		Hi Volt, Ballyduff				Co. Tipperary	
		Storm water Calculations					
Proj. No.	8507190301	Made by	CJP	Date	April 27th 09		
Ref.		Checked		Sheet	1 of 1		
		Reviewed					

Storm Water Attenuation Tank Size Calculation

rainfall 822 mm
 evapo 459 mm
 net 363 mm
 30 year average figures for Kilkenny 1961-1990
 30 av. mm/month

Winter Period Rainfall (Met Eireann)
 monthly average 83.4 mm
 evapotranspiration 5.4 mm (Oct,Nov,Dec,Jan)
 net precipitation **78.0** av. mm/month

Kilkenny	Rainfall	P.Evap
Oct	84.9	16.8
Nov	73.9	3.3
Dec	88.6	-0.90
Jan	86.3	2.4
total	333.7	21.6

Storm Rainfall
 100 year duration for Kilkenny 38.7 mm in 60 minutes
 Rainfall intensity 15.0 mm/hr (Environment Agency Pollution Prevention Guide No.3)
 (Design flow minimum)

Catchments

	Volumetric run-off coef.	Rainfall intensity	Volume of water	Flow Rate
m ²	C	mm/hr	m ³ /hr	m ³ /s
Current Hardstand	0.85	15.0	33.7	0.0094
Proposed Hardstand	0.85	15.0	41.7	0.0116
Building Roofs	1	15.0	23.6	0.0065
TOTALS			99	0.0275

Storm water Attenuation Tank volume

Retention time 6 minutes (Environment Agency Pollution Prevention Guide No.3)
 Volume 9.89 m³
 volume required **10** m³

Existing Storm Water Storage
 dia 1.8 m
 depth 3 m
 vol 7.6 m³

Volumetric Run-off C_v 0.7 (Category -"Asphalt")

A.1 APPLICANT DETAILS

A Waste Licence Application (WLA) has been prepared to comply with the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). As required by Article 12 (1) (u) of the Waste Management (Licensing) Regulations, No. 395 of 2004, a Non-Technical Summary is provided below, which contains information on the matters specified in Paragraphs (a) to (t) of Sub-Article 12(1).

A.1.a Name and Address of Applicant

This section relates to Article 12(1)(a)

The applicant is:
Hi-Volt Ireland Limited
Ballyduff,
Thurles,
Co. Tipperary
(0504) 45510

A.1.b Name of Planning Authority

This section relates to Article 12(1)(b):

North Tipperary County Council,
Planning Section,
Civic Offices, Limerick Road,
Nenagh, Co. Tipperary

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A.1.c Name of Sanitary Authority

This section relates to Article 12(1)(c)

There are no direct discharges to the sewerage system.

A.1.d Location and Address of the Facility

This section relates to Article 12(1)(d)

The address of the facility is: Hi-Volt Ireland Limited, Ballyduff, Thurles, Co. Tipperary in the townlands of Shanballyduff and Piercetown, Thurles, Co. Tipperary (National Grid Reference E618917, N661237). (Figure A.1).

A.1.e Nature of the Facility

This section relates to Article 12(1)(e)

The nature of the development is to accept waste batteries, waste oil, waste oil filters, waste tyres, contaminated soil and other garage waste onto the Facility for storage pending removal for recovery off-site. The total quantity of the proposed waste recovery is 21,000 tonnes per annum.

A.1.f Classes of Activity

This section relates to Article 12(1)(f)

In accordance with the Fourth Schedules of the Waste Management Acts, 1996 to 2008 the following classes of activity will be carried out on the site, as listed in the newspaper and site notices:

Fourth Schedule (Waste Recovery Activities)

Other activities to be carried out at the site, as specified in the Fourth Schedule to the Waste Management Acts, 1996 to 2007 are as follows:-

“2. Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).”

“3. Recycling or reclamation of metals and metal compounds.”

“4. Recycling or reclamation of other inorganic materials.”

“13. Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.”

A.1.g Quantity and Nature of Wastes to be treated, recovered or disposed

This section relates to Article 12(1)(g)

The following waste is proposed to be recovered at the facility (per annum):

- Waste batteries (5,000 tonnes/annum) for storage at the facility and export for recover. These batteries will be stored in the appropriate sealed containers on entry to the facility, stored in said containers at the facility and exported off-site in these containers;

- 2,000 tonnes of waste oil per annum. This oil will be stored in bunded oil tanks (four in total, each 25,000 litres), bulked up and exported in ISO container tanks (IMO 0) holding up to 24,000 litres;
- 500 tonnes oil filters per year. These filters will be shredded and emptied of all oil, before being exported off-site for recovery;
- 500 tonnes of contaminated soil;
- 1,000 tonnes of general garage waste including rags, filters, clutch plates and brake drums/disks pads, metals; and drummed flammable liquids, will be accepted and stored at the facility and removed for recovery off-site; and
- 12,000 tonnes of waste tyres.

A.1.h Raw and Ancillary Materials, Substances, Preparations, Fuels and Energy

This section relates to Article 12(1)(h)

The Facility will use diesel fuel, lubrication oil, electricity and water during the day to day operation.

Diesel: The annual fuel consumption at the Facility is understood to be ca. 60,000 litres. This fuel is used for on-Site plant as well as Facility trucks. Two bunded tanks (3,000 litres and 1,300 litres) are used to store the fuel on-Site.

Electricity: Electricity consumption at the Facility is understood to be in the order of <€1000/annum. Based on standing charges of €20.50/two months and €0.1640/kWh, approximately 5,500kWh of electricity are required by the Facility/annum.

Water: Water supply for the Facility is provided from two boreholes on-Site. GW-01 is located adjacent to the office in the south-central area of the Site and GW-02 is situated in the north-eastern corner of the Site. GW-02 supplies water for the northern end of the Site (i.e. cleaning). There is no mains water supply to the Facility.

Product: Waste accepted at the plant will be consist of waste types as stated in Attachment H.1, batteries, waste oil, oil filters, garage waste, tyres and contaminated soils. These components will be separated out and sent to an appropriate Facility off-Site for re-use, recovery or disposal with an emphasis being placed on re-use or recovery.

A.1.i Plant; Methods; Process; Abatement, Recovery and Treatment Systems; and Operating Procedures

This section relates to Article 12(1)(i)

Plant

Equipment at the facility will comprise two forklifts, a shredder and baler.

Methods, Processes & Recovery

All wastes will be accepted via the existing Site entrance. Upon arrival, all delivery vehicles shall be directed to the Facility check-in office and weighbridge where the arrival of each load will be recorded. All documentation accompanying the waste and the waste carrier will be inspected, and the nature of the waste will be confirmed by the Weighbridge Operator/Check in Person. A waste transfer note containing the details of the load delivery time, date, tonnage, and carrier's details will be produced at the weighbridge. There will be no water required for the process of waste at the facility.

Abatement and Treatment Systems

Any surface water run-off originating from the bunded waste quarantine area, bunded fuel storage areas and concrete hardstand will be directed via silt settling tank followed by a Class 1 Full retention oil/water separator to a soakaway area.

Operating Procedures will include:

- waste handling and processing;
- waste acceptance, segregation and removal of unsuitable wastes; and
- removal of unsuitable wastes at the Facility.

A.1.j Information relating to Section 40(4) of the Waste Management Acts 1996 to 2008

This section relates to Article 12(1)(j)

The information contained within the Waste Licence Application form and its attachments demonstrates that the proposed facility meets the above requirements of the Act.

A.1.k Source, Location, Nature, Composition, Quantity, Level and Rate of Emissions from the waste management activities and period or periods during which emission will be made

This section relates to Article 12(1)(k)

Air

Waste handling has a direct effect to the pollution/nuisance potential of a facility. Potential particulate emissions could occur from the waste separation procedures in Area D and C (Figure A.2). The sorting of general garage (wastes rags, oil filters, clutch plates, brake drums/disks pads and metals) in Areas C and D could arise in dust and fumes from the oil content. These buildings will be fitted with appropriate ventilation and occupational mitigation, dust masks will be worn inside the buildings. No point source emissions are envisaged.

Noise

Currently, the main plant associated with the facility are two forklifts, one operating in one of the storage buildings and the other moving around the yard and in buildings. Both forklifts are equipped with reversing alarms for safety reasons. However, these are adjusted so as avoid elevated tonal noises being generated while being loud enough to warn people in close proximity. The potential noise impacts as a result of the expansion of waste streams to be accepted at the Facility, is the use of a shredder and baler for the garage waste (oil filters and waste rags). Both these will be operated indoors and noise abatement can be implemented within these buildings.

Sewers

There will be no emissions to sewer.

Surface Water

There is no direct discharge to surface water from the Facility.

Storm Water

All storm water (including run-off from building roofs) will be directed into the oil interceptor via a storm water attenuation tank. Storm water calculations for the site are based on a rainfall intensity of 15 mm/hr as per the "Environment Agency Pollution Prevention Guide No. 3 (PPG3)" and recommendations for the "Greater Dublin Strategic Drainage Study 2005". From the calculations, the volume required for the attenuation tank is 10 m³. The existing and proposed additional surface water drains are shown on drawing WLA-04 Rev B.

Groundwater

It is envisaged that there will be no discernible discharge of List I substances and no cumulative concentration of non-List I contaminants in the groundwater at the Site beyond their respective Drinking Water Standards. Indirect groundwater emissions will be by means of soak away holes.

A.1.1 Assessment of Effects of any existing and proposed emissions on the environment including any environmental medium other than that into which the emissions are to be made and proposed measures to prevent or eliminated or where that is not practicable to limit or abate such emissions

This section relates to Article 12(1)(I)

Air

The Facility will be operated to Best Practice and a cleaning and maintenance schedule will form part of the site operations to reduce dust emissions.

Noise

The potential noise impacts as a result of the expansion of waste streams to be accepted at the Facility, is the use of a shredder and baler for the garage waste (oil filters and waste rags). Both these will be operated indoors and noise abatement can be implemented within the building.

Sewers

There will be no emissions to sewer.

Storm Water

All storm water (including run-off from building roofs) will be directed into the oil/water separator via a storm water attenuation tank.

Surface Water

There will be no direct surface water discharge.

Groundwater

Surface water run-off from the hardstanding areas of the Facility will be directed via a silt settling tank to a Class 1 full retention oil/water separator before discharging into a soak away. It is not envisaged that the discharge will contain elevated levels of contaminants which would have a harmful or significant effect on receiving waters.

A.1.m Monitoring and Sampling Points and Monitoring Plan for Emissions and the Environment

This section relates to Article 12(1)(m)

Potential emissions from the Site will include noise and groundwater emissions as shown on Figure A2.

It is proposed that monitoring be carried out in accordance with the conditions of the Waste Licence. Qualified persons will carry out all environmental monitoring and any laboratory analysis that is required will be carried out at an approved laboratory.

A.1.n Arrangements for the Prevention, Minimisation and Recovery of Waste arising from the waste management activities concerned

This section relates to Article 12(1)(n)

Waste accepted may contain residual amounts of unwanted wastes, these will be segregated out and placed in skips for storage. It is the intention of the Applicant to send these to an off-site facility where they can be disposed of recovered or recycled for further use where possible.

A.1.o Arrangements for off-site Treatment or Disposal of solid or liquid wastes

This section relates to Article 12(1)(o)

The Applicant will appoint all relevant contractors on granting of Planning Permission and a Waste Licence. This will include appropriately licensed contractors for the collection of

segregated material for off-site recovery or disposal, and waste from canteen and office buildings. All contractors collecting wastes will be approved by North Tipperary County Council under a relevant waste collection permit.

A.1.p Existing or Proposed Measures, including Emergency procedures to prevent unauthorised or unexpected emissions and minimise the impact on the environment of any such emissions

This section relates to Article 12(1)(p)

Unauthorised/unexpected emissions may involve: dust discharge into air, polluted run-off into surface water and groundwater and emissions from plant. On-site personnel will deal with emergencies that may arise during normal operating hours. A phone number will be established if emergencies arise outside normal operating hours. Measures that will be adopted at the Facility to prevent unexpected emissions will include bunding of waste and fuel storage areas to prevent spillage of liquid into soils and subsequently into groundwater. Spillage kits will be placed around the facility to deal with accidental spillages that may arise from operating plant during the processing of material at the Facility. All staff will be trained on how to use the spillage kits. If an emission or spillage occurs at the Facility the relevant authorities will be notified if needed depending on the seriousness of the emission or spillage.

A.1.q Proposed measures for the closure, restoration remediation or aftercare of the facility after the cessation of the waste management activities

This section relates to Article 12(1)(q)

The lifetime of the proposed facility cannot be defined as it will depend on market forces. However in the event of cessation of the activity the following decommissioning plan is proposed:

- A review of the types of activities to be carried out at the proposed Facility, including waste handling and recovery operations;
- Identification of potential hazards, including an evaluation of the waste products; and
- Identification of all items of plant and other materials, including buildings that may be decommissioned, rendered safe or removed from the Facility for disposal or recovery in the event of closure of the Facility.

A.1.r Financial Provisions

This section relates to Article 12(1)(r)

The licensee will comply with any of the requirements of the Agency requested under Section 53 of the Waste Management Act 1996. The requirements of Section 53A of the Waste Management Act 1996 (as inserted by Section 43 of the Protection of the Environment Act, 2003), refer to the operation of a Landfill and are therefore not applicable to this application.

A.1.s Applicability of Seveso II directive to the proposed waste management activities

This section relates to Article 12(1)(s)

This section is not applicable to this particular Application, as the proposed activities are not for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) apply. Also, there are no Seveso sites located near the Application Site.

A.1.t Control of Discharge of List I and List II substances to Groundwater

This section relates to Article 12(1)(t)

It is envisaged that there will be no discernible discharge of List I and List II substances and no cumulative concentration of non-List I contaminants in the groundwater at the Site beyond their respective Drinking Water Standards.

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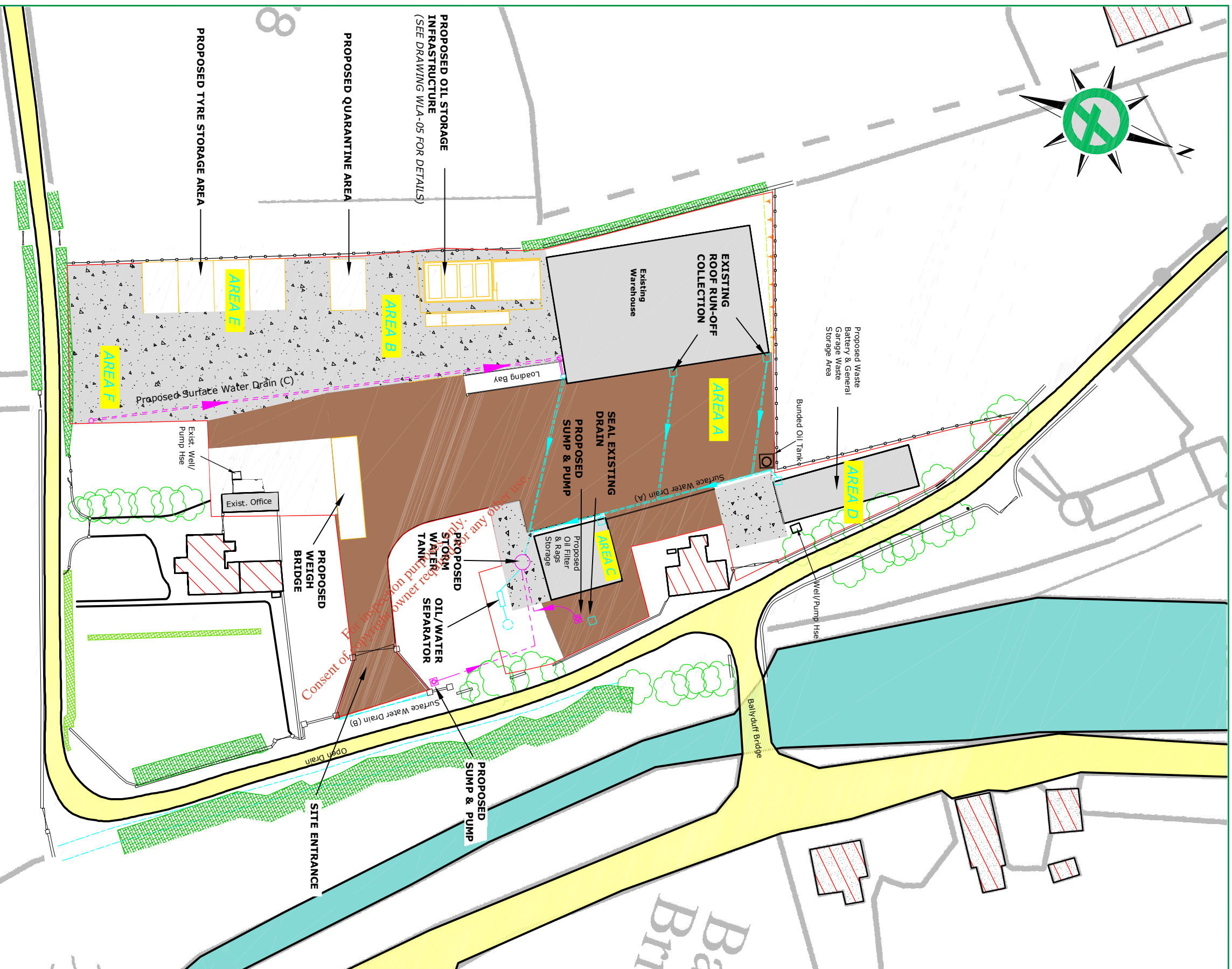
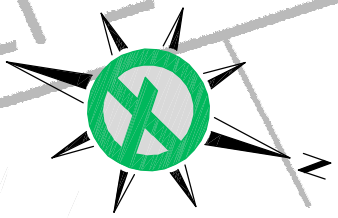


SUBJECT		Hi Volt, Ballyduff			Co. Tipperary
		Time Schedule for Water Management Works			
Proj. No.	8507190301	Made by	CJP	Date	
Ref.		Checked		Sheet	
		Reviewed			

Estimated weeks from receipt of tenders/prices

Item	Description	1	2	3	4	5	6	7
1	Appoint Contractor							
3	Order Storm Water Attenuator							
5	Lay new surface water drains							
6	Construct Manholes							
9	Install Storm Water Tank							
11	Commision							

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LEGEND

- Application site boundary
- Post and rail fence
- Gateway
- Deciduous Tree Drawn to Size
- Hedge/line
- Ditch/line
- Wall
- Building
- Facility Buildings
- Existing Handstanding
- Proposed Handstanding
- River/Drish
- Local Roads
- Existing Drain/channel and typical manhole
- Proposed Drain/channel and typical manhole
- Existing Roof Run-off Collection

NOTE

1. PROPOSED INFRASTRUCTURE SHOWN IN ORANGE COLOR, EVERYTHING ELSE IS EXISTING.
2. CONCRETE LAID TO FALLS

Client: **HI-VOLT IRELAND LTD.** Title: **FACILITY LAYOUT PLAN (Existing and Proposed Infrastructure)**

Location: **BALLYDUFF (TOWNLAND SHANBALLYDUFF AND PIERCETOWN), THURLES, CO. TIPPERARY**

Project: **WASTE LICENCE APPLICATION**

Issue to	Date	Version	Created by	Project number
ISSUE TO EPA	FEB. '09	A	POB	08507190301
ISSUE TO EPA	MAY '09	B	Checked by CJP	Scale 1:800 A3
			Reviewed by BM	

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1:5000
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Figure
WLA-04