

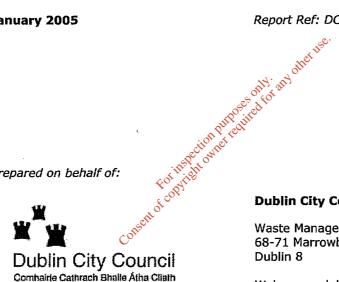
Environmental Impact Statement for Proposed Civic Amenity Facility at Labre Park, Ballyfermot, Dublin 10

Non Technical Summary, Main Report, **Appendices & Drawings**

January 2005

Report Ref: DC0125/FINAL

Prepared on behalf of:



Dublin City Council

Waste Management Services 68-71 Marrowbone Lane Dublin 8

Web: www.dublincity.ie

Prepared by:



Patel Tonra Ltd., Environmental Solutions,

Unit 1, IDA Industrial Estate, Balbriggan, Co Dublin

Tel: 01 802 0520 Fax: 01 802 0525

Web: www.pateltonra.com

NON-TECHNICAL SUMMARY

1.0 Introduction: Non-Technical Summary

1.1 General

- 1.1.1 This Environmental Impact Statement (EIS) has been prepared on behalf of Dublin City Council (DCC) for a proposed Civic Amenity Facility at Labre Park, Ballyfermot, Dublin 10.
- 1.1.2 The EIS has been prepared in accordance with:
 - The European Communities (Environmental Impact Assessment) Regulations 1989 to 2001
 - □ The Planning and Development Act 2000
 - Guidelines on Information to be contained in Environmental Impact Statements, published by the Environmental Protection Agency EPA, 2002'
 - 'Advice notes on Current Practice in the Preparation of Environmental Impact Statements' published by the EPA in 1999
- 1.1.3 The EIS has been prepared by a multidisciplinary team as follows:

Company	Sections of EIS
Patel Tonra Ltd.	Lead consultants and EIS Co-ordination, Project Description & Operations, Climate, Flora & Fauna, Air (part), interaction of all sections, Material Assets, Non-Fechnical Summary
J.B Barry & Partners	Human Beings & Traffic impacts
ANV Technology	Air (part) & Noise
Odour Monitoring C Ireland / Dr. Martin Hogan	Air (part)
AWN Consulting	Soils, Geology & Water
VCL Consulting	Engineering and Landscape Impacts
The Archaeology Company	Cultural Heritage

1.2 The Proposed Development

- 1.2.1 The proposed development is a Civic Amenity Facility. The site will cover an entire area of *ca.* 11,053m² and will include a number of distinct areas as follows:
 - General civic amenity and green waste deposit area ca. 4,412m²
 - Waste electrical and electronic equipment storage area ca. 435m²
 - Construction/demolition deposit area ca. 985m²
 - □ DCC Street Cleansing deposit area ca. 1,010m²
 - □ Remainder (entrance road and entrance area) ca. 4,211m²

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1.3 Legislative Requirement for EIS

- 1.3.1 The Planning and Development Regulations 2001 (Part 2 of Schedule 5) determines that an EIS is required for local authority developments including: "Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule".
- 1.3.2 It is anticipated that volumes of waste in excess of 25,000 tonnes will be deposited at the facility as per the table below and as such the submission of an EIS is being made to An Bord Pleanala.

Waste Type	Quantity Per Annum 6,000 tonnes	
CA Recyclables/ Household Bulky Waste		
Green Waste	10,000 tonnes	
Street cleansing Waste	10,000 tonnes	
C&D and Bulky Waste	6,000 tonnes	
Total tonnage	32,000 tonnes	
Waste electrical and electronic equipment	2,000 tonnes	

1.4 Contents of EIS

- 1.4.1 As per the European Communities (Environmental Impact Assessment)(Amendment) Regulations, 1999 the information contained in this EIS is as follows:
 - A description of the proposed development comprising information on the site, design and size of the proposed development.
 - A description of the measures envisaged in order to avoid, reduce and if possible, remedy significant adverse affects.
 - The data required to identify and assess the main effects which the proposed development is likely to have on the environment.
 - An outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects.
 - A description of the physical characteristics of the whole proposed development and the land-use requirements during the construction and operational phases.
 - A description of the main characteristic of the production processes, for instance the nature and quantity of the materials used.
 - An estimate, by type and quantity, of the expected residues and emissions (including water, air and soil pollution, noise, vibration, light, heat and radiation) resulting from the operation of the proposed development.

- A description of the aspects of the environment likely to be significantly affected by the proposed development, including in particular:
 - o Human Beings
 - o Flora and Fauna
 - o Soil
 - Water
 - a Air
 - o Climate factors
 - o Landscape
 - Material assets, including the architectural and archaeological heritage and cultural heritage
 - The inter-relationship between the above factors
- A description of the likely significant effects (including direct, indirect, secondary, cumulative, short, medium and long-term permanent and temporary, positive and negative) of the proposed development on the environment resulting from:
 - The existence of the proposed development;
 - o The use of natural resources;
 - o The emission of the pollutants, the creation of nuisances and the elimination of waste
- And a description of forecasting methods used to assess the effects on the environment.
- An indication of any difficulties (technical deficiencies of lack of know how) encountered by the developer in compiling the required information.

1.5 Background to the proposal

- 1.5.1 The vast bulk of household waste arising in Ireland is landfilled. However, E.U. and National Policy is that landfill should be the last resort after all other options for treatment and processing have been exhausted. It is broadly recognised that additional recycling facilities are required in the Dublin Region, in line with efforts to increase recycling and recovery rates and to establish a more sustainable alternative to landfill. The benefits of providing a new Civic Amenity Facility at Labre Park are:
 - It deals with waste in accordance with the recognised waste management hierarchy
 - It will exert a positive environmental impact
 - It is a specific recommendation of the Dublin Waste Management Plan to provide a number of civic amenity sites
 - It is in line with EU and National waste management policy and legislation
 - It provides an improvement in the recycling and deposition infrastructure in the South Central Dublin City area.

2.0 Site Description and Urban Context (Non-Technical Summary)

2.1 Site Location

- 2.1.1 The proposed site is owned in the majority by Dublin City Council while a portion of the south west corner is in private ownership. The site is located *ca.* 30 metres to the south of Labre Park, Ballyfermot, Dublin 12 in the south central area of Dublin City, *ca.* 2km south of Ballyfermot Village and *ca.* 10km south west of Dublin City Centre.
- 2.1.2 The proposed facility will be located in an area of suburban land which has not been used for a number of years and as a result has become waste ground used historically for unauthorised dumping of waste materials and the grazing of a small number of horses.

2.2 Site Context

2.2.1 The site does not contain any protected structures and is not located within a protected area, however it does to the south border on part of a Proposed Natural Heritage Area (PNHA), the Grand Canal. The lands to the east and west of the proposed site have been identified for development and to the north of the proposed site is Labre Park, which contains housing and trailer/temporary dwelling accommodation for the Travelling Community.

2.3 Existing Site Environment

- 2.3.1 The proposed site is located on waste ground south of Labre Park, Ballyfermot. The nearest existing residential dwellings are a number of social houses located in Labre Park proper, 40m north of the proposed site boundary. It is proposed that as part of the overall re-development of the area that a number of new houses will be constructed in Labre Park, on the southern side of the street.
- 2.3.2 The entire waste ground area has been segmented into three defined areas for development and the proposed CA site is one of these segments.

2.4 Other Site Details

2.4.1 A number of power lines traverse the area where the proposed site is to be located. Within the site boundary there will be two pylons supporting a 220Kv line and one supporting an 110Kv line. A memorial to commemorate the death of an individual found on the site exists inside the eastern boundary of the proposed site.

2.5 Planning and Zoning of land at Proposed Site

- 2.5.1 The current zoning for the land on which the proposed development is to be constructed is Z7. 'Civic and amenity/recycling centre' is listed as a permissible use for land with Z7 zoning.
- 2.5.2 The banks of the Grand Canal south of the site are zoned Z9 (out to ca. 10m from the bank). This designates land reserved for 'amenity/ open space lands'. The proposed site boundary will be at least 10m from the canal bank and therefore the site will not encroach onto the Z9 zoned land.

2.6 Alternative Sites Considered

- 2.6.1 In looking for a suitable site in this area to locate the proposed facility, Dublin City Council established some criteria for choosing a site as follows:
 - Already owned by the council
 - Not currently being utilised
 - Suitable size for proposed facility
 - Accessible by potential users
 - Poor potential for development
 - Potential for the proposed development to improve the site
- The Labre Park site was considered to meet each of the above criteria. In the past, waste has been illegally deposited on the site and fly tipping in the area is an ongoing problem. It is envisaged that some of the waste currently being 'flytipped' will be diverted to the proposed facility thus greatly enhancing the current environment. The site has limited development potential given the presence of two 220Kv and one 110Kv electricity power lines and pylons on the site and the presence of underground services. To ensure safety matters related to the pylons and power lines have been fully considered, the ESB and ESB International (ESBI) Engineering Ltd. have been consulted in relation to the proposed development.
- 2.6.3 Given the current un-managed and environmentally deleterious nature of the site along with its poor development potential, the proposed development is considered most appropriate. To leave the site in its current undeveloped condition would continue to propagate the current poor environmental practices and lead to further deterioration of the site environment.
- 2.6.4 Within the South Central Dublin city area, three other sites were considered as possible alternatives as follows:
 - Site 1: Cloverhill Road, Cherry Orchard, Dublin (GR O 077 330.5)
 - □ Site 2: Cloverhill Road, Cherry Orchard, Dublin (GR O 075 333)
 - Site 3: Bond Street, Dublin 8 (GR 140.5 336.5)
- 2.6.5 None were considered suitable for this development primarily because of size and/ or location relative to the centre of population which this facility is intended to serve.

3.0 Description of the Proposed Development (Non-Technical Summary)

3.1 Proposed Development

- 3.1.1 It is proposed that the site will have four main functions as follows:
 - Civic Amenity Facility
 - Deposit area/depot for Dublin City Council street cleansing vehicles
 - Storage area for waste electrical and electronic equipment
 - Construction and demolition rubble / bulky goods deposit area

3.2 Site Access and Traffic

- 3.2.1 There is currently no formal vehicular access point to the site. The proposed site access will be from Kylemore Park West.
- 3.2.2 The classes of vehicle using the proposed facility during operational hours will be, private vehicles belonging to staff and members of the public using the CA Facility, DCC street cleansing vehicles depositing Street Cleansing materials, service vehicles collecting all material deposited for removal and further processing.
- 3.2.3 On-site traffic will be controlled primarily by the design and layout of the site, along with signage, road markings, barriers and verbal instructions from staff.

3.4 Operation of the Civic Amenity (CA) Facility

- 3.4.1 The following materials will be deposited at the site:
- 3.4.2 Recyclables:
 - Green, brown and clear glass jars and bottles
 - Paper and cardboargs
 - Ferrous and non-Terrous metals (including beverage cans)
 - Plastics (PET, HDPE, plastic film)
 - Textiles and clothing
 - Batteries (car and domestic)
 - Fluorescent tubes (domestic)
 - Mobile phones and batteries

- 3.4.3 Civic Amenity/bulky waste is the type of waste that cannot be easily collected in the course of normal domestic collections because of size or composition or it is difficult to dispose of. This type of waste may include some recyclable elements, which can be bulked up for further treatment or otherwise disposed of safely. This type of waste includes:
 - Bulky waste typically furniture (brown goods), mattresses, carpets, timber products or household DIY waste.
 - DIY materials rubble/soil, timber, scrap metal
 - Household chemical waste (e.g. paint, bleach, batteries, fluorescent tubes
 - Waste oil
 - Waste electrical and electronic equipment
 - o Household electronic goods TV's, computers, screens, stereos
 - White goods refrigerators, freezers, washing machines etc.
- 3.4.4 Green Waste includes cuttings from trees, shrubs, hedges and grass.

Site Management and Servicing

3.4.5 To ensure correct segregation, materials will be collected in separate receptacles/ waste deposit areas. All waste deposited will be removed from the site for further processing. Typically these vehicles will visit the site outside normal operational hours and to minimise disruption to the operation of the site.

Dublin City Council Street Cleansing Deposit Area

3.4.6 This area will be used by Dublin City Council street cleansing vehicles for the deposit of waste collected in the area. The contents will be deposited to a compactor located in this area.

Waste Electrical and Electronic Equipment (WEEE) Storage Area

3.4.7 This area will be solely used for the bulk storage of waste electrical and electronic equipment before they are moved elsewhere for reprocessing.

Deposit Area for Construction & Demolition (C&D) and Bulky Wastes

3.4.8 This area within the site will be used by 8-10 members of the Travelling Community resident in Labre Park, who are legally engaged in the collection of C&D rubble and household bulky waste.

3.5 EPA Waste Licence

3.5.1 Dublin City Council will apply to the Environmental Protection Agency for a Waste Licence to operate the Labre Park facility. The licence will be applied for under the Third and Fourth Schedules of the Protection of the Environment Act, 2003 and any application to the Agency will be prepared in compliance with the Waste Management (Licensing) Regulations 2004.

4.0 Human Beings (Non-Technical Summary)

4.1 Introduction

- 4.1.1 Human Beings clearly comprise a pivotal element of the 'environment' and any potential impact on their status by the proposed Civic Amenity Facility must therefore be comprehensively assessed. The principal concern is to ensure that Human Beings do not experience significant unacceptable diminution in aspects of 'quality of life' as a consequence of both the construction and the operation of the proposed development. This section of the EIS has been prepared with a view to examining the impacts, which the proposed Scheme will have on:
 - Population
 - Employment
 - Amenities
 - Health and Safety
- 4.1.2 The impacts of other aspects of the development on Human Beings such as traffic, noise, air quality, odour and visual / landscape are dealt with separately in Sections 5, 6, 9 and 11 of this report.

4.2 Population

- 4.2.1 The construction of the Civic Amenity Facility in Labre Park will have no perceivable negative impact on the population structure or demography of residents in the area. The population in the environs of the development site will experience a slight level of temporary disturbance and inconvenience due to construction activity.
- 4.2.2 Impacts upon population and demography as a result of the construction of the facility in Labre Park will be positive. Labre Park has been subject to large-scale illegal dumping for many years. The new proposed facility should reduce the incidence of 'fly tipping' in the Labre Park vicinity, Ballyfermot and the Dublin Region by providing a convenient alternative.

4.3 Employment

- 4.3.1 The potential impacts associated with the proposed development in direct employment terms is largely confined to the construction phase of the project when the development of the new scheme will generate direct and indirect employment over the estimated 8-12 month construction period.
- 4.3.2 It is expected that 5-8 staff will be employed in the operation of the Civic Amenity Facility. In addition to this there will be plant operators and site managers. A number of new permanent jobs will be created as a direct result of the proposed development.

4.4 Amenities

- 4.4.1 During the construction phase, there will potentially be, increased vehicular traffic, a slight increase in noise, dirt and dust generation and the relocation of the community centre, which would affect the local amenities in the vicinity of the site. When fully operational there will be some increased noise, horses currently grazing in Labre Park will have to be relocated and traffic will increase. To mitigate against noise, a secure wall will be constructed on the northern boundary of the site to minimise any potential noise from the proposed facility.
- 4.4.2 From a positive point of view there will be managed waste disposal facility and this should result in a reduction of 'fly-tipping' in the area.

4.5 Health and Safety

4.5.1 This section of the EIS deals with the Health and Safety impacts which might arise from the construction and operation of the proposed facility.

ESB Power Lines

- 4.5.2 The site is traversed by two 110kV overhead power lines and one 220kV power line. There are also a number of pylons carrying these lines located on the proposed site. Ref. Drawing 24014-001.
- 4.5.3 To ensure safety matters related to the pylons and power lines have been fully considered, the ESB and ESB International (ESBI) Engineering Ltd. have been consulted in relation to the proposed development. Site layout drawings, details of the proposed facility operations and on site vehicle operating heights have been provided for review. Meetings have been held on site with Alan Brown (Lines Supervisor Inchicore) and Robert Arthur Consultant (ESBI), Stephen Court, 18/21 St. Stephen's Green. A meeting between ESBI, (Andrew O'Connell Consultant and Peadar de hOra Consultant), DCC and their main consultants (Patel Tonra Ltd.) was also held to review and clarify requirements related to the site.
- 4.5.4 In relation to electromagnetic radiation and its potential impact on human health, various studies have been conducted. These studies indicate that no health risks from power-frequency electric and magnetic fields, at levels to which people are exposed in the environment, have been established. The findings of some of these studies are summarised in a booklet published by the ESB entitled "Electric and Magnetic fields in the Environment".
- The Health and Safety Authority have been consulted (John Harrington at Health and Safety Authority Head Office 10 Hogan Place, Dublin 2) in relation to the location of the proposed facility under the high voltage power lines. This organisation holds the same position as the ESB in relation to the impact of electromagnetic radiation on human health. Comment was also made on the normal restrictions which would apply to the working height and safety consideration regarding machinery working under such conditions. They had no further comments to make nor did they request a meeting or to see any site drawings.
- 4.5.6 During the construction of the proposed Civic Amenity Facility, the following risks could be potential impacts on the health and safety of human beings:
 - Risk associated with the erection and installation of buildings and equipment
 - Risk associated with overhead power lines and pylons on site
 - Risk from chemical or biological substances e.g. paint, solvents, dust
 - Risks associated with construction traffic e.g. movement and operation of heavy-duty construction traffic, spillage of materials from spoil trucks
 - Risk associated with digging on site, Labre Park has been subject to unauthorised dumping for many years and may have the potential to contain some hazardous material in the soil.
- 4.5.7 The above risks will be addressed through implementation of all appropriate requirements of the Safety Health & Welfare at Work (Construction) Regulations 2001.

- 4.5.8 During the operation of the proposed facility, the following associated risks to health and safety of human beings would be introduced:
 - Overhead power lines
 - Pylons
 - Fire hazard
 - Handling Household Priority materials
 - Potential for the release of bioaerosols during the movement of green waste, this is covered in more detail in section 9 of the EIS.
- 4.5.9 A management system will be developed to ensure that impacts on health and safety during operation will be controlled. The management system will address:
 - Routine servicing
 - Safe working procedures
 - Emergency response
 - Equipment replacement
 - Monitoring programme
- 4.5.10 The Health and Safety Plan and Method Statements will include safety measures for working on a site with large ESB Pylons and overhead power lines. This will include regular safety audits, safety reporting and onsite occupational first aid facilities.
- 4.5.11 Green waste will be compacted in dedicated containers before being removed off site to minimise the potential of bioaccosol release.
- 4.5.12 As long as the measures outlined are implemented, the proposed development will have no impact on the health and safety of Human Beings in the area.

5.0 Traffic and Transportation (Non-Technical Summary)

- This section provides an assessment of the potential traffic impacts on the local road network for road users to and from the Proposed Civic Amenity Site at Labre Park. The study is based on the findings of site visits, traffic observations, on-site traffic counts, and consultation with the DCC Traffic Department and the site design team.
- The subject site is well serviced by the surrounding road network from all directions. Access to the site will be gained through an industrial park via Kylemore Park West. This road is connected at its northern end to Kylemore Park North and at its southern end to Kylemore Park South. Both of these roads connect directly to Kylemore Rd. at their eastern end and Kylemore Park North connects to Killeen Road. Kylemore Rd and Killeen Road are both two-way local distributor roads.
- 5.0.3 A traffic survey was carried out in the morning and evening peak at the following locations:
 - Killeen Road and Kylemore Park North
 - Kylemore Road and Kylemore Park North
 - Kylemore Road and Kylemore Park South
- It was established that traffic intensity on both distributor roads was greater in the morning peak hour but that traffic to and from the industrial park was greatest at the evening peak. The evening peak hour was therefore considered the critical peak. In representing the worst-case scenario for driver delay, the modelling exercise for traffic movements to and from the subject site was based on traffic flows recorded for the evening peak hour. Using the traffic count data and standard methodologies it was established that the existing road network is currently within capacity.
- 5.0.5 The construction stage of the proposed facility is expected to be in the order of 12 months. During construction, it is expected that a maximum of up to 15 trucks per day could be arriving at, and leaving the site and up to 20 cars could arrive in the morning and leave in the evening. The arrivals of trucks and vans to the site are expected to be evenly spread throughout the day.
- To determine the likely traffic generation associated with the proposed development when it is operational, a survey was undertaken of trip generation information for existing civic amenity and green waste deposit facilities in Dublin to produce an accurate expectation of traffic flows generated by the proposed facility for the evening peak hour.
- 5.0.7 Based on the desk study of similar sites, discussions with employees of Dublin City Council and site observations, expected traffic generation to the proposed Labre Park facility in the evening peak hour has been estimated. It is expected that movements in and out of the site will amount to approximately 50 private cars, 18 trucks, 5 street cleansing vehicles and 4 staff cars (out only).
- 5.0.8 Based on the surrounding road network and site observations, it is expected that 50% of traffic generated to the site will be from Killeen Road to the west and 50% of the traffic will be attracted from Kylemore Road to the east.
- 5.0.9 In order to determine the future operation of the junctions, a modelling exercise was carried out on each junction using projected traffic flows for 2014.

- **Dublin City Council**
 - 5.0.10 The results demonstrate that with the exception to the junction of Killeen Road and Kylemore Park North, the remaining junctions will continue to operate within capacity in the 2014 Design Year. The expected queuing and delays to motorists are all within acceptable limits.
 - The junction of Killeen Road and Kylemore Park North, following the development, is marginally over the industry norm with respect to Degree of Saturation. In this instance, this may be considered acceptable with improved lane delineation and road marking. Also, the traffic generation estimate is based on similar facilities operating on a 'free of charge' basis. The recent introduction (Oct 2004) of charges at some facilities has yielded a drop of 40% in patronage. As the facility at Labre Park will be charging from its inception, traffic generation is likely to be lower than estimated within this report, and therefore the junction is likely to operate well within acceptable levels of delay.
 - 5.0.12 In order to minimise the traffic impact resulting from the proposal a number of measures can be adopted including, the installation of adequate signage from the main road network to the site; marking two lanes on the approach to the stop lines on the minor junction arms and road markings for a right turn on the mainline. Traffic currently stacks in this manner and there is sufficient width for two lanes on the approaches to stop lines.
 - The main alternative access to the site would be to construct a new road link from the Labre Park residential access to the proposed site. This proposal would result in a greater environmental impact as it would result in higher traffic flows traversing the residential street and would most likely be unacceptable to the residents.

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6.0 Noise & Vibration (Non-Technical Summary)

- 6.0.1 The potential noise impacts during the construction phase and the operational phase of the proposed Civic Amenity (CA) Facility at Labre Park, Ballyfermot, are assessed in this section. During the construction phase, the potential noise impacts are associated with site preparation and surfacing. During the operational phase, the main potential for noise impact is due to traffic movements, and noise generated within the facility when materials are deposited in the various recycling bins and areas.
- 6.0.2 A baseline noise survey indicated that the existing noise environment at the Labre Park site is typical for an urban area exposed to distant traffic noise. The ambient noise level was approximately 52 dB(A) L_{Aeq} .
- 6.0.3 During the construction phase of the Civic Amenity Facility, the resulting noise levels will be comfortably within typical construction noise criteria, and minimal impact is anticipated.
- Taking account of EPA guideline limits, and assessment procedures of BS 4142, an assessment/design criterion of 53 dB(A) L_{Aeq} is considered appropriate for the operational phase of the proposed development.
- To ensure that noise impact is minimised during the operational phase it is recommended that a 3m high wall (noise barrier) be constructed along the northern boundary of the site. The calculated noise levels at the adjacent houses, and at the adjoining residential development lands are in the range 46 to 53 dB(A) L_{Aeq}. The resulting noise impact is considered slight.

7.0 Flora and Fauna (Non-Technical Summary)

- 7.0.1 The proposed development area is located in the proximity of an area that has been recommended to be a National Heritage Area i.e. the Grand Canal. However, the site and its immediate neighbouring habitats are not recorded as containing any EC Natural Habitat types or fauna of community or national interest as directed by Council Directive 92/43/EEC, 21 May 1992.
- 7.0.2 The proposed site area is generally flat with no distinct topographical features. The area is mainly ground used historically and at present for the disposal of waste materials and some minor grazing of horses. The site is bounded by the Grand Canal to the south, to the north by a drainage ditch (a section of the Galback Stream), with the east and west boundaries to be developed at a later stage but currently being similar in condition to the existing site. All vegetation areas examined are currently in a poor state, with overgrazing by horses and no land management measures in place, there is little flora species diversity at the site. There is evidence of vehicular movements on the site with remnants of burned out vehicles. Vehicular movements in the area have caused some compaction of the ground, restricting growth of sedges, rushes, herbs, and saplings.
- 7.0.3 Four habitat classifications were found as follows: Wet grassland, a Canal bank, a freshwater marsh and an open drainage ditch. These classifications are not advanced as definitive, however are currently the most representative. There are no hedgerows or mature trees existing on the site.
- 7.0.4 No direct sightings of mammals or evidence of mammals living on the site, e.g. burrows, were noted during the study. While the area could be used for foraging by some animals, given the existing site conditions it is extremely unlikely that any protected or vulnerable fauna are located in the proposed development site area.
- 7.0.5 There was no sign of any avi-faural breeding activity during the site walkover due to the time of year. It is likely that the habitat is used for foraging by some species.
- 7.0.6 The impact of the proposed development will be that the grassed area (ca. 0.84Ha) will be developed upon in its entirety leading to the destruction of existing vegetation and loss of habitat for fauna. Foul water drainage, from the proposed site offices, will be discharged to an existing public foul sewer in the area. This will not impact on the ecological environment.
- 7.0.7 Thus the impacts of the proposed operation on flora and fauna are likely to be insignificant.

8.0 Architectural, Archaeological & Cultural Heritage (Non-Technical Summary)

- 8.0.1 There are no recorded monuments listed in the Record of Monuments and Places (RMP) within the site. No visual impact on RMP sites, or protected structures was noted during field inspection. This field inspection found no new monuments or archaeological features. However medieval settlement has been a feature of the Ballyfermot area in general.
- A study of cartographic sources and aerial photographs illustrates the development of the area. None of the historic maps indicate any surface structures except a road approaching the sixth lock of the Grand Canal from the west and an open drain curving from W to E to SSE meeting the canal just to the east of the same lock. Some maps depict a disused sand pit. A study of aerial photographs held by the Geological Survey of Ireland revealed nothing of archaeological significance The Dublin Corporation 1:5,000 series of 1980 depicts the proposed development site as open ground with the same sand pit in place but the curving open drain infilled.
- 8.0.3 Known archaeological sites as recorded by the RMP for County Dublin lie a considerable distance away from the site of the proposed development for example approximately 1km to the NW lies the site of Ballyfermot Castle.
- 8.0.4 Potential impacts should be limited to the construction phase of the development. Groundworks and other site preparation works at the start of the construction phase have a high potential for impacting a memorial to a member of the local settled Travelling Community and potential buried archaeological remains. These remains may be associated with previously unrecorded archaeological features across the site.
- 8.0.5 The memorial will be removed and relocated, with appropriate access for visitors in consultation with the community. The possibility of the presence of archaeological remains in the development site cannot be dismissed. Therefore archaeological testing in the area that has not been disturbed by the sand pit should be carried out in addition to the impact assessment presented in this section to locate the nature and extent of any archaeological remains located within the development site. This would be agreed in advance with the Heritage and Planning Division of the Department of the Environment, Heritage and Local Government. Depending on the results it may be necessary to preserve any archaeological remains found in situ, or if this is not possible by record. These investigations should be carried out in advance of the main construction phase if possible. There will be no need for avoidance, remedial or reductive measures during operational phase of the development.
- 8.0.6 If the proposed archaeological testing programme is intensive enough to identify the nature and extent of archaeological features and objects to the satisfaction of the Heritage and Planning Division of the DoEHLG and the planning authority, any potential archaeological investigations in the field should be complete before the main contractor starts their construction programme. If this programme is not satisfactory for any reason, or there are unforeseen difficulties, the initial groundworks and site clearance works should be archaeologically monitored. Further archaeological investigations may be required on archaeological evidence found during monitoring.
- 8.0.7 There will be no need for avoidance, remedial or reductive measures or further monitoring during operational phase of the development.

9.0 Air (Non-Technical Summary)

- 9.0.1 The impact on air quality of the proposed Civic Amenity Facility at Labre Park was assessed.
- 9.0.2 Based on a review of published air quality data for the Dublin region, the existing environment in the vicinity of Labre Park is considered to be within air quality standards.
- 9.0.3 During the construction phase of the development, there is a slight potential for dust nuisance at nearby properties, associated with construction traffic. This can be controlled by standard mitigation measures, such as wheelwashes and covering loads of fine materials.
- 9.0.4 The modelling studies undertaken as part of the environmental impact assessment have shown that the predicted pollutant concentrations present at the proposed development site are not significant. The site is typical of an urban environment in terms of air quality. The proposed development will not result in a significant negative impact on air quality.
- 9.0.5 The potential for generation of dust from the Civic Amenity Facility is considered to be minimal. During construction, mitigation measures will control dust and mud impacts on the neighbourhood, while during the operational phase, good general housekeeping will ensure that dust generated due to spillages is minimised.
- 9.0.6 The potential of nuisance due to odours was assessed. Provided green waste materials, and road sweeping wastes are regularly removed from the site, there is negligible potential for any associated odours.
- 9.0.7 The proposed civic amenity site will not cause any significant bioaerosol, H₂S or odour impact if it is operated in accordance with the proposed operation plan and compacted green waste and deposit waste is removed off-site at regular intervals. All drains should be kept clean and free from debris.

10.0 Climate (Non-Technical Summary)

10.0.1 The climate at the proposed Labre Park site is anticipated to be typical of that experienced on the east coast of Ireland. It is not expected that the site will have any significant impact on the microclimate and local climate of the area.



11.0 Landscape and Visual Impact (Non-Technical Summary)

- 11.0.1 The subject site has been filled over time and is currently used extensively for 'flytipping' and disposal of vehicles. Some local residents keep horses and ponies on
 the lands but due to the nature of the fill in the site, grazing capacity would be
 very limited. Numerous large steel pylons supporting high voltage electrical power
 lines are also dominant within the site.
- 11.0.2 The subject site is within an area which has experienced extensive industrial activity over a considerable period of time with typical steel and concrete framed steel clad large buildings constructed around large collector roads. There are no notable buildings or structures that are visible from the site.
- 11.0.3 The site is essentially orientated towards the Grand Canal, where the most open views of the site are afforded. The site lies parallel to the canal, thus offering views of the site from the Canal and associated towpaths to the North. Views from the Kylemore Road are currently limited by a 1,8 m high wall over most of the length of the road adjacent to the site, in addition a reservation of land separates the road from the subject site and it is proposed to construct and industrial/Warehousing development on this reservation.
- 11.0.4 The greatest impact from the development will take place during the construction period, and is therefore a moderately short-term impact. Throughout the construction period, there will be an initial positive impact as the site is cleaned up followed by a moderate negative visual impact on the surrounding area, but only in the short-term. As construction progresses, the degree of visual impact will lessen as buildings and pavements are completed and a degree of screening of the remaining site activities is afforded by the boundary walls themselves.
- Once established, the newly developed site will have brought a significant change to the character of the site and the inchediate surroundings. The proposed development will integrate the site into the adjoining urban area and will prevent significant re-occurrence of the level of dumping which has occurred to date.

 Overall, the character of the site will be one of a modern, efficient facility.
- 11.0.6 Once construction has been completed, visual impact will reduce significantly as the development becomes an established part of the landscape. Buildings will be completed and the landscape works carried out as part of the development will quickly become established, beginning to soften the appearance of the built elements and gradually absorbing the development into the surrounding landscape.
- 11.0.7 The inclusion of trees and a planted boundary screen on both northern and southern boundaries will reduce any negative impact of the boundary wall from the canal view. The overall visual impact when compared to the existing site will be positive.

12.0 Soils and Geology (Non-Technical Summary)

- 12.0.1 The proposed site is located on a Calp limestone formation. A preliminary site investigation was carried out at the site, but bedrock was not encountered in any of 6 trial pits excavated across the site, which ranged in depth from 1.8 m to 2.1 m
- 12.0.2 The preliminary site investigation showed that the materials above the bedrock were comprised of boulder clay, which was found to be a very compacted, medium brown clay material with large sub-rounded to angular limestone clasts. Fill material was encountered during the trial pit investigations, which had been deposited on the underlying boulder clay. The site investigation showed topsoil of 30 80 cm overlying the fill material.
- 12.0.3 There was evidence that a range of materials have been deposited on the site and a mixture of waste materials was encountered beneath the top layer of soil, i.e. a minimum of 30 cm below ground level.
- The deposited material included clean C&D (Construction and Demolition) waste, predominantly clay material, with a few stones, plastic fragments, and tarmacadam, commercial waste, again primarily C&D waste, but which also contained bags of un-identified granular material, partially decomposed organic material, municipal solid waste, including plastic bottles, textiles, cardboard and paper.
- 12.0.5 Due to the proximity of the site to a number of industrial facilities and the finding of waste material during the site investigation of it is probable that there is some historical contamination of the soil environment at the site.
- 12.0.6 It is recommended, in light of the initial site investigation which recorded the presence of municipal solid waste and commercial waste, that a programme of soil sampling and analysis be undertaken at the site prior to development commencing, to determine the quality of the soil environment and the nature and concentration of any contaminants present. Should contaminant materials be found in significant concentrations, it is recommended that a site specific risk assessment, be conducted to determine whether the material poses a risk to users of the site and employees at the site. This assessment is known as a "fit for purpose" risk assessment.
- 12.0.7 Depending on the results from the monitoring and risk assessment, the design of any buildings or enclosed spaces on the site may have to incorporate landfill gas venting measures and any surface water collecting in excavations or groundwater pumped from excavations may require treatment prior to disposal.
- 12.0.8 Any excavated soil destined for on site reuse or off site reuse or disposal will be assessed by visual, olfactory and if necessary chemical analysis, prior to reuse or disposal, to determine whether it is contaminated material.
- 12.0.9 Should it be determined that any of the spoil excavated is contaminated, this will be dealt with appropriately as per the Waste Management Act of 1996 and associated Regulations.
- 12.0.10 When operational, in order to minimise emissions of fuel and contaminated runoff to the soil (and potentially the bedrock), interceptors and silt traps will be installed at appropriate distances along the access roads and at suitable points in car stopping areas.

NON-TECHNICAL SUMMARY

12.0.11 Any predicted impacts during the construction phase will be short term and temporary in nature. Provided appropriate measures are taken to avoid any soil contamination due to spillages there will be a negligible impact on the soil environment as a result of the operational phase of the development.

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13.0 Water (Non-Technical Summary)

- 13.0.1 There are two surface water systems that are in close proximity to the proposed site, the Grand Canal and the Camac River. A tributary of the Camac runs along the northern boundary of the site, this is known as the Galback Stream.
- 13.0.2 Regarding ground water, the aquifer on which the proposed site is located is classed as an aquifer of Low Importance, which is generally moderately productive in local zones only.
- 13.0.3 It is not envisaged that there will be any significant impacts on water resulting from the proposed development.
- During construction the accidental spillage of fuel or building chemicals could potentially impact the groundwater environment. Storage of such materials in bunded areas, designated areas for handling such materials/refuelling and the availability of spill kits, will minimise the risks of environmental impacts. During the construction stage of the project there will be minimal impact on the soils and geology environment.
- During operation there will be a long-term impact on the site as a result of the proposed development, due to the excavation of soil and by covering the majority of the site with hard-standing material. This will have a positive effect in protecting water sources in the proximity of the site.
- 13.0.6 At present there is continuous dumping or fly-tipping on the site, and abandoned vehicles. By developing the site and having organized waste collections and storage, with the correct procedures in place, the risk of potential contaminants entering the water environment is minimized.
- 13.0.7 In summary, with the appropriate mitigation measures in place, there will be a long-term positive impact on the water environment as a result of the operational phase of the development.

14.0 Material Assets (Non-Technical Summary)

- 14.0.1 The proposed facility will be located in an area of suburban land which has not been used for a number of years and as a result has become waste ground used historically for unauthorised dumping of waste materials and the grazing of small numbers of horses.
- In the past, waste has been illegally deposited on the site and fly tipping in the general area is an ongoing problem. It is envisaged that much of the waste currently being 'fly-tipped' will be diverted to the proposed facility thus greatly enhancing the current environment.
- 14.0.3 Given the current un-managed and environmentally deleterious nature of the site along with its poor development potential, the proposed development is considered most appropriate. To leave the site in its current undeveloped condition would continue to propagate the current poor environmental practices and lead to further deterioration of the site environment.
- 14.0.4 It will make the general area and the canal walkways safer / less threatening for local people / personnel on canal barges and will enhance the recreational and amenity value of the southern boundary.
- Overall the proposed development will have a positive contribution locally and will have no negative impacts on material assets.

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Prepared by: Patel Tonra Ltd.

15.0 Interactions (Non-Technical Summary)

- 15.0.1 The main interactions have been identified as follows:
 - Interaction between human beings, traffic, noise, air, landscape and water
 - Interaction between landscape, soils, water and flora/fauna
 - Interaction between soils and archaeology

15.1 Interaction 1

15.1.1 The main environmental interactions of the proposal effect the local human population either directly or indirectly, i.e. human beings are likely to be impacted, usually by significant negative impacts from traffic or noise, or by negative impacts on air quality, water quality or landscape. None of these negative impacts are associated with this development, however.

15.2 Interaction 2

The soil quality and the necessity to strip a certain volume of soil from the site may have impacts on groundwater, surface water and landscaping of the site, as well as potential impacts on flora and fauna. In the case of this development, no such impacts on wildlife are anticipated, as there are no habitats of any significance effected.

15.3 Interaction 3

15.3.1 In examining the structures of soils underneath the site, there is a potential of impacts on archaeology and heritage artefacts. Though the likelihood of this occurrence is very low, mitigation measures have been put in place to ensure that this will be addressed during excavations, prior to construction.

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