KAVANAGH BURKE
CONSULTING ENGINEERS

Planning Department,
South Dublin County Council,
County Hall,
Town Centre,
Tallaght,
Dublin 24.

14th April 2022

Re: Response to Additional Information Request for Planning Application Reg. Ref. SD21A/0305

Applicant: Electrical Waste Management Ltd.

Dear Sir/Madam,

Please find enclosed the response documents and drawings in relation to your Additional Information Request dated 12th January 2022 to proposed alterations to development at Tay Lane, Greenogue, Rathcoole, Co Dublin.
The individual items are addressed as follows:

Item 1:
The applicant is requested to provide the following information to ensure the proposed development has an acceptable visual impact:

- ***roof plan indicating the extent of all canopies***
- ***plans / elevations for proposed bollards***
- ***plans / elevations for proposed fence***
- ***site layout plan, clearly indicating the location of the proposed fence***
- ***photomontages indicating the proposal as approved and following the installation of the fence (where it would be visible outside the site).***

Response:
Please refer to enclosed revised drawings and documents for review of the Local Authority, as follows:

- drawing ref D1541 – GA-A-A06 – Roof plan PL3 for extend of all canopies proposed;
- drawing ref D1541 – D2A – Site plan with Proposed fence PL3 for location and elevation of the proposed fence;
- document ref. Visual Appraisal and Photomontages complied by JBA Consulting Engineers indication fence proposal.

Please note, the applicant has decided the bollards proposed for building protection will not be needed therefore this alteration is omitted in this Additional Information submission.

Refer to drawings ref D1541 - D2 Site plan PL3 and as listed above for details.

Item 2:
The applicant is requested to clarify the reason for reducing the car parking and provide a rationale for the same.

Response:
29 no. car parking spaces, as per granted permission reg ref SD19A/0065, are reduced due to the office/staff facilities floor plan extension (display area and storage). The applicant's actual requirement for car parking is shown at table of areas at proposed drawing ref D1541 D2 PL3, resulting in 18 car parking spaces. The applicant also opted to increase no. of bicycle parking, therefore this submission contains 30 no bicycle parking spaces (granted permission contained 21 no). It is also possible to reach the proposed site (offices and light industrial unit) by using a public transport, the bus stop is located near Greenogue roundabout, resulting in 350m distance to the office entrance.

Item 3:
(i) The proposed surface water attenuation for catchment area 1 of 175m3 is undersized by approximately 40% for 1 in 100 year storm event. The applicant is requested to submit a revised drawing showing an increased surface water attenuation for catchment area 1 by 40% (current volume 175m3) for a 1 in 100 year storm event.
(ii) The applicant is requested to substantially increase SUDS proposals for the development and introduce green infrastructural elements to the overall design to help mitigate its impact.

Response:
Please refer to enclosed drawing ref D1541 – D3 Drainage and Watermain Layout PL3 and Drainage Report showing the revised increased attenuation storage of 230m^3 for catchment no 2.

Due to the industrial nature of the proposed development, the yard surfacing for HGV access and marshalling is concrete. An area of porous asphalt is provided to the car park area where traffic loads are light.
Runoff from the hardstanding areas will be collected by trapped road gullies and rainwater goods throughout the development and directed to an on-site surface water attenuation facility. This facility will attenuate the 1 in 30 year storm event plus allow sufficient additional volume to attenuate the 1 in 100 year 6 hour event. The restricted discharge from site will be limited by a proprietary flow control device. The flowrate through this device will be set to the specific limit calculated as per SuDS guidance and shown at Drainage Report enclosed for a review of the Local Authority.
The attenuation facility proposed is "Stormtech" or equivalent. This proprietary system consists of thermoplastic arches backfilled in specified stone and wrapped in a pervious geotextile. Prior to entering

the system, the surface water runoff will pass through a proprietary silt trap and petrol interceptor to ensure debris, silt particles and hydrocarbons are removed. Subsequently the surface runoff enters the attenuation facility through an "isolator row" whereby a row of void forming thermoplastic arches are wrapped in a pervious geotextile which provides a second level of suspended solid removal prior to the water entering the greater attenuation area.
These water quality control measures can be cleaned out by suction hose/tanker if required from standard maintenance inspections. In the case of the isolator row, the chamber is backwashed with a proprietary power jet wash and its water removed by suction hose/tanker.
Water quantity control is provided downstream of the attenuation facility by providing the above-mentioned flow control device.

In considering the above surface water management solution we considered all SuDS devices and given the industrial nature of the proposed operations on this site, the above solution of underground surface water attenuation was decided on.
Facilities provided for the handling of WEEE products and waste metal require robust industrial structures coupled with hard wearing durable large yard areas. Consideration was given to SuDS devices which incorporate infiltration at source however we have opted for a solution that ensures managed filtration prior to any infiltration to ground or discharge from site. In such an industrial environment, items such as swales, detention or attenuation ponds, infiltration trenches and other open devices were deemed unsuitable due to possible pollution risks to the groundwater. The management of runoff from the general concrete yard where HGV's traverse and park, is dealt with by providing trapped gullies, silt traps, petrol interceptors, and the aforementioned surface water attenuation facility incorporating the "isolator row". Runoff from these areas can contain silts and hydrocarbons therefore direct discharge to infiltration devices have been avoided.

Suds devices included and others not included are as follows with reasoning:

- Water butts – provided on site at source/rain water pipes.
- Greywater re-use – not provided as water usage is minimal. There is no trade water usage within the industrial process of WEEE & waste metal handling.
- Infiltration trenches, infiltration basins, swales, bioretention areas – not provided as risk of pollution to direct infiltration devices would exist. The subject proposal incorporates infiltration through the base of the underground surface water attenuation system which is downstream of trapped gullies, proprietary silt trap and petrol interceptor and integrated "isolator row" within the attenuation system. The infiltration proposed within the attenuation facility caters for the first 5mm of rainfall on site as per SuDS guidance.
- Permeable Paving – provided to the pollution low risk car park area to the front of the main building. This permeable surfacing will be provided by placing open textured macadam or asphalt as opposed to paving setts. Possible flash runoff from this area is allowed for in the on-site surface water attenuation system.
- Retention ponds, detention basins, stormwater wetlands – not provided due to the relatively small size of the site and the required building footprint and associated yard area. Such open water holding devices lend themselves to larger developments where a number of sites share such a

facility. For the subject site, sterilising a percentage of the site to such a surface device would require additional lands to be attained which impacts on the viability of the project. Such land is not available to the Applicant.

In summary, the proposed surface water management solution for the subject site provides both runoff quality and quantity control. Quality control is provided by ensuring all surface water runoff is dealt with on site as described earlier in this document with reference to the specified attenuation system with in-built "isolator row", proprietary silt traps & petrol interceptors. Quantity control is also provided through the surface water attenuation system coupled with the downstream flow control device.

Item 4:

In the interests of clarity, the applicant is requested to submit a clear breakdown of previously granted office space and proposed office space, stating an overall total of office space now proposed for the site.

Response:

The office gross internal area as per previously granted planning permission reg. ref SD19A/0065 is 383m^2 as per table below:

TABLE OF GROSS INTERNAL FLOOR AREAS & USES AS PER GRANTED PERMISSION REG. REF. SD19A/0065:

	LIGHT INDUSTRIAL UNIT	ANCILLARY WC FACILITIES (1 no. STOREY)	ANCILLARY OFFICE / STAFF FACILITIES (2 no. FLOORS)	ANCILLARY WORKSHOP (LIGHT IND. UNIT)	ESB SUBSTATION	TOTAL
FLOOR AREA TOTAL	3,305 m^2 35,575 sq.ft.	114 m^2 1,227 sq.ft.	383 m^2 4,123sq.ft.	574 m^2 6,179 sq.ft.	15 m^2 161sq.ft.	4,391 m^2 47,265 sq.ft.

Subject of planning permission reg ref SD21A/0305 proposed office gross internal area is 513 m^2 resulting in addition and change of use of following areas, as per planning alterations list:

- provision of extended display area at ground floor (46 m^2)
- provision of extended open plan office at first floor (20 m^2)
- change of use of 64m^2 of light industrial unit to office/staff facilities i.e. to stairs (31 m^2) and single storey cleaners store (33 m^2)

Therefore, the proposed office floor area is:

383 m^2 + 46 m^2 + 20 m^2 + 64 m^2 = 513 m^2

The revised table of areas is shown below.

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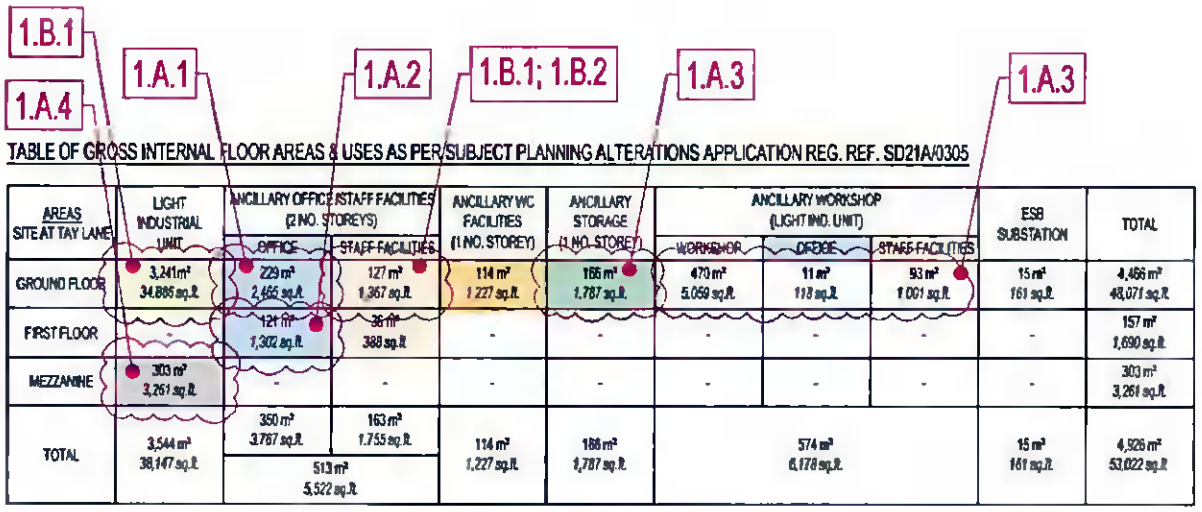

TABLE OF GROSS INTERNAL FLOOR AREAS & USES AS PER SUBJECT PLANNING ALTERATIONS APPLICATION REG. REF. SD21A/0305

AREAS SITE AT TAY LANE	LIGHT INDUSTRIAL UNIT	ANCILLARY OFFICE/STAFF FACILITIES (2 NO. STOREYS)		ANCILLARY WC FACILITIES (1 NO. STOREY)	ANCILLARY STORAGE (1 NO. STORE)	ANCILLARY WORKSHOP (LIGHT IND. UNIT)			ESB SUBSTATION	TOTAL
		OFFICE	STAFF FACILITIES			WORKSHOP	CREDE	STAFF FACILITIES		
GROUND FLOOR	3,241m² 34,886 sq.ft.	229 m² 2,465 sq.ft.	127 m² 1,367 sq.ft.	114 m² 1,227 sq.ft.	165 m² 1,787 sq.ft.	470 m² 5,059 sq.ft.	11 m² 118 sq.ft.	93 m² 1,001 sq.ft.	15 m² 161 sq.ft.	4,466 m² 48,071 sq.ft.
FIRST FLOOR	-	121 m² 1,302 sq.ft.	36 m² 388 sq.ft.	-	-	-	-	-	-	157 m² 1,690 sq.ft.
MEZZANINE	303 m² 3,261 sq.ft.	-	-	-	-	-	-	-	-	303 m² 3,261 sq.ft.
TOTAL	3,544 m² 38,147 sq.ft.	350 m² 3,767 sq.ft.	163 m² 1,755 sq.ft.	114 m² 1,227 sq.ft.	165 m² 1,787 sq.ft.	574 m² 6,178 sq.ft.			15 m² 161 sq.ft.	4,926 m² 53,022 sq.ft.
		513 m² 5,522 sq.ft.								

Please refer to enclosed drawings ref D1541 – GA-A-A01 PL3 and D1541 – GA-A-A02 PL3 for details.

Item 5:
The applicant is requested, in the interests of clarity, to submit a revised site plan:
(i) Without the swept path analysis included, and
(ii) Clearly representing all proposed development/modifications in plan form, in accordance with Article 23(1) of the Planning and Development Regulations, 2001, as amended.

Response:
Please find enclosed revised drawing ref. D1541 – D2 – Site plan PL3 for review of the Local Authority.

I trust the above is in order and look forward to your future correspondence.

Yours sincerely,

Elena Dragoje
BSc.(Eng.) M.I.E.I.
Kavanagh Burke Consulting Engineers