

Operational Waste Management Design and Plan for a Primary School



CHALLENGE

The key challenge was developing a compliant and practical waste strategy for a temporary school within a constrained site, while addressing local authority requirements, safeguarding users and ensuring the system could operate effectively during daily school activities.

SOLUTION

AWN developed a clear, evidence-based waste strategy using conservative waste modelling, detailed bin provision and a carefully designed waste storage area, ensuring compliance with local authority guidance and practical operation within a school setting.

RESULT

The completed Operational Waste Management Plan satisfied planning authority requirements, supported the grant of permission and delivered a practical, compliant waste strategy that promotes high recycling rates and effective day-to-day operation within the school.

INTRODUCTION

AWN Consulting Ltd was appointed by the Department of Education to prepare an Operational Waste Management Plan for a proposed temporary post-primary school at the former Irish Glass Bottle Social Club on Goatstown Road, Dublin 14. The development comprised a 15-classroom school, including Special Education Needs (SEN) units, associated staff and pupil facilities, external areas and a dedicated waste storage enclosure.

The Operational Waste Management Plan was prepared to support the planning application and to address a Request for Further Information issued by Dún Laoghaire–Rathdown County Council. The plan set out a clear and practical strategy for the segregation, storage and collection of waste during the operational phase of the school, ensuring compliance with national and regional waste legislation, local authority bye-laws and best practice guidance.

AWN's role included reviewing the proposed site layout, assessing expected waste streams, estimating waste arisings and developing a compliant waste storage and collection strategy that could be effectively implemented within a live school environment. The plan was designed to maximise reuse, recycling and recovery, while minimising nuisance, environmental risk and operational impacts on staff, students and neighbouring receptors. The project presented several challenges linked to the nature and location of the development. The school was proposed on a constrained site within an established residential area, requiring careful consideration of waste storage, collection routes and vehicle movements to avoid conflict with pedestrians, cyclists and local traffic. The project presented several

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As a temporary development, the waste strategy needed to be robust yet proportionate, ensuring full compliance with waste legislation and Dún Laoghaire–Rathdown County Council requirements, while remaining flexible enough to accommodate potential changes in occupancy and operational practices over the five-year permission period. Managing waste within a school environment also introduced specific challenges, including the segregation of waste by students and staff, limited opportunities for food waste collection, and the need to securely manage confidential waste and occasional hazardous materials.

In addition, the Waste Management Plan had to directly respond to a formal Request for Further Information from the planning authority, requiring clear evidence that adequate, secure and well-designed waste facilities had been fully integrated into the site layout without causing nuisance, odour, noise or vermin issues for neighbouring properties.

SOLUTION

AWN addressed these challenges by developing a detailed and site-specific Operational Waste Management Plan informed by best practice guidance, local authority requirements and practical experience of similar educational developments. A waste generation model was used to conservatively estimate likely waste arisings based on floor area, use and predicted occupancy, ensuring that the proposed waste infrastructure would remain sufficient over the lifetime of the development.

Clear waste streams were defined, including dry mixed recyclables, mixed non-recyclable waste, confidential paper and limited organic waste. AWN identified appropriate bin sizes, quantities and collection frequencies, and designed a secure, external waste storage area at ground level that was accessible for staff and waste contractors while remaining discreet and well separated from student areas.

The plan also set out clear procedures for waste segregation within classrooms and common areas, supported by area waste stations, signage and management responsibilities. Collection routes and vehicle movements were assessed to ensure safe access and adequate turning space, with collections scheduled outside school start and finish times. Additional guidance was provided for the management of specialist waste streams, ensuring full compliance with legislative and health and safety requirements.

RESULT

The completed Operational Waste Management Plan successfully demonstrated that suitable and sufficient waste facilities had been incorporated into the design of the proposed school, fully addressing the planning authority's Request for Further Information. The plan confirmed that waste could be safely stored, segregated and collected without causing nuisance or environmental risk, while aligning with national policy objectives and local authority bye-laws.

By adopting conservative waste estimates and a clear management framework, the strategy provided confidence that the waste infrastructure would remain effective throughout the operational life of the school. The emphasis on source segregation, clear signage and defined management responsibilities supports high recycling and recovery rates, reducing reliance on landfill and minimising waste management costs.

The project highlights AWN's ability to deliver proportionate, well-structured waste management solutions for educational developments, even where site constraints and operational sensitivities are present. The approach taken ensured planning compliance while delivering a practical system that can be readily implemented and managed by school staff and facilities management teams on a day-to-day basis.

ABOUT TRINITY CONSULTANTS

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