CONSULTANT'S REPORT

1. Describe the part(s) of the building for which the proposed project is required. Include, if applicable, details of number of rooms affected and the gross floor area of the building or portion of the building affected.

Approx. area of entire school in sq. m
3360m2 approx. – 1980's original block
3593m2 – 2008 Block – N/A
2015 block – N/A
Approx. area of where works are proposed in sq. m – 3360m2 approx

Enniscorthy Community College is a mixed secondary school, located in Enniscorthy , Co Wexford. The building consists of three blocks - the original block constructed in the 1980's and adjoining 2008 block, with the separate SEN Boro Suite completed in 2015. There are also a number of prefabs on site. This application relates to proposed works in the original 1980's block only.

A survey was carried out at the school to review the electrical services installations systems proper, specifically the existing general lighting installation. The survey was carried out on 29 May 2025, and involved a detailed walk-through of the building, both internally and externally, including a focused inspection of the electrical services installations. This detailed examination of the installed services systems was crucial to understand their current operational status, efficiency, and potential for upgrade or modification.

This specific application primarily focuses on Category 3 Climate Action and Electrical Works, addressing the entire 2683m² of the existing school building as outlined in this report. The insights gained from the survey will directly inform the proposed climate action initiatives and electrical upgrades, aiming to enhance the school's energy efficiency and overall environmental performance.

2. Provide a full explanation of the nature and extent of the defect(s) with supporting photographs, and floor plans (or site plan of school) with affected area highlighted. (See circular for more information)

From our survey the existing electrical installation is generally in poor condition with cabling suspended on ceilings and clipped to walls and some instances left hanging. Some instances cabling is within a shared trunking. The fire alarm system has gone through some recent upgrades. It is also noted that the existing general lighting is in very poor condition with T8/T5 fluorescent installed throughout and CFL fittings installed in the canteen areas. Required lighting levels not being maintained or light fittings having to be replaced due to the removal of florescent tubes.

The majority of the existing electrical installation throughout the school building is between 30-40 years old failing to comply with I.S. 10101:2020+AC1:2020 National Rules for Electrical Installations and in some instances has far exceeded its life span. As a result, it is proposed to decommission and replace the majority of the existing electrical lighting installations throughout the school building, excluding the life safety systems which have been addressed. The proposed new electrical installation that will be installed will be in compliance with current standards.

Main Electrical Distribution Board:
The existing MDB is in good condition, fit for purpose and can be retained.

Electrical Supply & Distribution:
Final circuit cabling to general electrical items such as sockets, spurs, devices, etc. is 30+ years and is generally unprotected throughout, clipped to walls laid in ceiling, in shared trunking or exposed. It is therefore proposed to replace the existing wiring throughout the school building. The general services installation is typical of a building of its age where the extensive use of socket outlets to power computer equipment would not have envisaged at the time of its original installation. There is evidence of overloading of electrical circuits with the use of adapters and extension leads throughout, as there is not enough sockets for appliances. The old accessory outlets, e.g. sockets, switches, are in degrading physical repair and it is quite likely that their integrity has been compromised over the years, which is unsurprising given their age. They are now beyond their useful and safe working life. This is a potential fire hazard and both life and building safety could be compromised.

'CIBSE (Chartered Institute of Building Services Engineers) Guide M: Maintenance Engineering and Management' advises a life expectancy of 20 years for final circuit wiring and outlets.

It is proposed to replace the existing power distribution & general services installation throughout the school building and install new main and sub electrical power distribution & general services installation in line with current Department of Education Technical Guidelines and current standards/regulations. This shall include all circuit wiring, cable containment, new socket outlets, etc. (excluding main & sub distribution boards)

Lighting and Lighting Controls for the Building:

Daylighting was generally poor. Lighting consists of 58 W T8s (95%) in classrooms and the gym, which are outdated and inefficient. A number of fittings are either damaged or not working. In the front car park, there are approx. 10 no. Metal Halide lights which use substantially more electricity than modern alternatives. The school has been experiencing numerous issues with poor lux levels, and lighting controls throughout the buildings. There are a number of issues with existing switching with no dimming facility. Switching is currently faulty or flickering within the classrooms. A section of the school was recently upgraded with new LED fittings. These are to be retained.

The existing wiring is approximately 30+ years old. The majority of the existing electrical wiring for the lighting services in the buildings are the old. All luminaires are controlled via manual switching, there is no form of lighting control installed, which is required in order to meet with current guidelines TGD002 & TGD030.

'CIBSE (Chartered Institute of Building Services Engineers) Guide M: Maintenance Engineering and Management' advises a life expectancy of 20 years for internal lighting installations.

It is proposed to replace the existing lighting system throughout the buildings with energy-efficient fittings and also install lighting controls as per current DEY Technical Guidelines. This shall include supplying and installing all new light fittings, lighting controls, circuit wiring, control cabling, cable containment, etc.

The associated wiring will be upgraded to meet current standards for insulation, cable sizing and earthing to ensure compliance on installation with I.S. 10101 and reducing the likelihood of future faults related to the wiring itself. This minimises call-backs and maintenance issues. This will also allow for full modernisation of the lighting with new controllers, smart lighting, code compliance and reducing energy consumption designed in accordance with the requirements of SDG-02-04 guidelines, SDG-02-07 Part L compliance and Energy conservation M&E services design note 2020 01 June 2020.

Additional LED amenity lighting will be necessary as part of the works. Time Clocks and Photocell and PIR Control will also be incorporated for external lighting.

Grid Ceiling Replacement

The existing ceilings are a combination of plasterboard and old grid ceiling type throughput. The grid ceiling is in extremely poor condition with a number of tiles missing, deteriorating, water damaged throughout the school. The recommendation is to replace the grid ceiling within the areas affected additional access panels maybe required to cater for the access requirements as the works will require removal and reinstatement, and existing not adequate.

Attic Insulation

The school in on the Regional Fabric Upgrade Pilot (RFUP) Pathfinder Programme no upgrade required.

Cavity Wall Insulation

The school in on the RFUP Pathfinder Programme no upgrade required.

Bike Rack

N/A

E.V. Charging Provision

There is no provision for EV Charging at the school.

The recommendation is to provide for a local mini pillar for one no. proposed dual EVC point, and connection for future expansion. The charge point equipment will be specified as 7.2 kW and internally configured to deliver at 3.6 kW. This strategy will assist in maintaining reduced running costs and can significantly reduce the requirement for additional

import capacity. The dynamic power load management system will be designed to ensure that the charging system will not cause exceedances of the agreed Maximum Import Capacity (MIC), thus eliminating the need to significant increase of the MIC.

3. When was the affected part(s) of the building last replaced and/or remedial works carried out? Where applicable, a description of previous remedial works should be included.

Since construction, the school has not undergone any major expansion or refurbishment works. The school is on the SE Biomass Pathfinder and the RFUP Pathfinder Programmes.

No major works to the general electrical / lighting installations have taken place within the existing school since construction.

4. What evidence is there of an effective maintenance program for the affected area(s)?

The school carries out maintenance as and when required.

5a. Please indicate below by ticking the box(es) relevant to your project if including a climate action element of works in the proposed project:

Attic Insulation	**NO**
Cavity Wall Insulation	**NO**
Bike Rack	**YES**
Air Tightness works	**NO**
LED lighting	**YES**
Heat Pumps	**NO**
Electric Vehicle (EV) charging provision	**YES**

All proposed projects should be fully itemised as follows: -

Area of Building	**3,360.00**	
Wall Area	**1,967.00**	
		Quantity
1.0	**Insurances & Preliminaries Allowance for c.8% of overall costs (site management/insurances/H&S/paperwork etc)**	**Element**
2.0	**Lighting Upgrade (Energy)**	
	Light Fittings Supply General Purpose Fitting	1.00
	General Wiring Installation	1.00
	Emergency Lighting Inverted Fittings	1.00
	External Lighting Building only	12.00
	External Lighting	10.00

3.0	**School Rewiring (Non Energy)**	
	Sub Main Cabling	3.00
	General Services Installation	1.00
	Wiring Associated with Mechanical Installation	1.00
	Cable Tray and Trunking	1.00
4.0	**EV Charger (Energy)**	
	EV Charger Supply	1.00
	Costs for installation Commissioning and Certification	1.00
5.0	**Bike Rack (Energy)**	
	Bike Rack Supply	1.00
	Bike Rack Installation	1.00
6.0	**Builders Work (Energy)**	
	Associated Builders work (8Euro/Sqm) - forming of opes, ceiling tile replacement in required areas, reinstatement making good, base for EVC	1.00

All proposed Climate action aspects of projects should be fully itemised as follows: -

Area of Building	**3,360.00**	
Wall Area	**1,967.00**	
		Quantity
1.0	**Insurances & Preliminaries Allowance for c.8% of overall costs (site management/insurances/H&S/paperwork etc)**	**Element**
2.0	**Lighting Upgrade (Energy)**	
	Light Fittings Supply General Purpose Fitting	1.00
	General Wiring Installation	1.00
	Emergency Lighting Inverted Fittings	1.00
	External Lighting Building only	12.00
	External Lighting	10.00
4.0	**EV Charger (Energy)**	
	EV Charger Supply	1.00

	Costs for installation Commissioning and Certification	1.00
5.0	**Bike Rack (Energy)**	
	Bike Rack Supply	1.00
	Bike Rack Installation	1.00
6.0	**Builders Work (Energy)**	
	Associated Builders work (8Euro/Sqm) - forming of opes, ceiling tile replacement in required areas, reinstatement making good, base for EVC	1.00

SURVEY PHOTOGRAPHS











