



A&F have designed and are due to complete Two major educational academies in Scotland.

The sprinklers have been designed to provide Full protection throughout these two multi level occupancies. The systems have been designed to School Property protection standards.

Both are due to complete Spring – 09

Armadale, West Lothian



Completion Year: Active Project

West Lothian Council has awarded their £60m schools project to HDM Schools Solutions Limited. The project comprises the construction of two new build secondary schools, **Armadale Academy** and **Deans Community High School** and the Facilities Management contract for the schools.

Dawn Construction, Hochtief and Mackenzie Partnership established HDM School Solutions Ltd as a Special Purpose Company to deliver this project.

Armadale Academy is situated at the edge of the small town of Armadale, West Lothian. The existing school houses approximately 800 pupils, however to allow for the future expansion of residential developments on neighbouring sites, the new school will accommodate up to 1200 pupils,

The new academy is due for completion in the summer of 2009, with outdoor sports pitches and the car park being developed as Phase 2.

The new school is situated at the top of the site, and is very exposed to the elements. The design is a direct result of this and is formed around a tight courtyard, which provides a sheltered outdoor social space for the pupils. The courtyard is an extension of the main internal social and dining space in the heart of the building. A timber clad library projects into the courtyard at first floor level and is the main focal point of this space. Three wings of classroom accommodation, extending to 3 storeys, are wrapped around the courtyard increasing the sense of enclosure to the outside space. The main social space also acts as a buffer between the classrooms and the more noisy activities in the school such as the sports accommodation, assembly and music spaces.

The sports accommodation consists of a games hall, a gymnasium, dance and fitness studios and a 20m

swimming pool, as well as 3 outdoor grass pitches and an all weather synthetic pitch.

The new school sits at the rear of the site, at approximately 12m above street level. A series of tiered car parking blocks step up the site towards the school, however the impact of these is minimised by the integral design of the landscape. Further advantages of the site levels are taken with the addition of an outdoor viewing platform that hovers above the all weather pitch. The landscape design has been developed in conjunction with an ecologist to enhance the environmental impact and improve the setting for the development.

The sports facilities, both indoor and outdoor, are scheduled and designed for use outwith school hours by the local community.

During construction Phase, Dawn Construction has employed numerous processes to reduce the impact of construction operation on the surrounding environment.

Project Progress is compliant with Contract Programme

Armadale Academy	
BREEAM Rating and Score	55.31 (very good)
Basic Building Cost - £/m2	895.74
Services Cost - £/m2	377.89
External Works - £/m2	55.05
Gross Floor Area – m2	14474
Total Area of Site – hectares	5.9758
Area of Teaching Space – m2	5142
Area of Circulation – m2	2515
% Area of School Grounds to be used by Community	48
% Area of School Buildings to be used by Community	27
Predicted Electricity Consumption – kWh/m2	67
Predicted Fossil Fuel Consumption - kWh/m2	202
Predicted Renewable Energy Generation – kWh/m2	0
Predicted Water Use – m3/pupil/year	5.1
% Predicted Water Use to be Provided by Rainwater or Grey Water	0



DEANS COMMUNITY HIGH SCHOOL

Livingston



Completion Year: Active Project

Deans Community High School is located in the town of Livingston and the new school, which opens in the summer of 2009, will provide modern teaching accommodation for approximately 1100 pupils.

The school design responds directly to the site context, the school and the community requirements. The design is centred on the main social space that extends into the courtyard, and the hub of the building. This separates large volume and noisy teaching environments from the standard classroom block which rises to 3 storeys in places.

The school has a large community use, both during and out of school hours. The public have access to the sports facilities that include games halls, a 25m swimming pool with spectator seating, 3 outdoor grass pitches and an all weather pitch. In addition, there are theatre facilities with an audience capacity of approximately 350 people, community clubs, offices and meeting spaces, and an under 5's playgroup and crèche facility.

The new school is located closer to the main public highway than the exiting school, further enhancing its prominence as a community facility. The landscape design enhances the shape of the new school and introduces biodiversity into the landscape proposal which will enable the school in its outdoor curriculum.

During the construction phase Dawn Construction has employed numerous processes to reduce the impact of construction operations on the surrounding environment.

Deans Community High School	
BREEAM Rating and Score	56.31 (very good)
Basic Building Cost - £/m ²	844.37
Services Cost - £/m ²	367.85

External Works - £/m2	55.79
Gross Floor Area – m2	15454
Total Area of Site – hectares	6.3633
Area of Teaching Space – m2	4740.7
Area of Circulation – m2	2463
Area of Storage – m2	940.3
% Area of School Grounds to be used by Community	36
% Area of School Buildings to be used by Community	63
Predicted Electricity Consumption – kWh/m2	84
Predicted Fossil Fuel Consumption - kWh/m2	255
Predicted Renewable Energy Generation – kWh/m2	0
Predicted Water Use – m3/pupil/year	5.1
% Predicted Water Use to be Provided by Rainwater or Grey Water	0