

Norwalk Smart School

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Beauty is nothing without brains.

We took this to heart when designing the next generation school building. We married beauty with intelligence, by making every detail in our building purposeful. Indoor courtyards and the stunning Business District, combine with panoramic lakeside views to bring a modern, stunning experience on the inside. The Exterior is no exception. 600 acres of greenspace on Lake Colchester combine with the LED illuminated wall of glass and metal, and the white sloping tensile membrane roof to become the jewel of Norwalk.

It sends a beacon as though it is a lighthouse for learning.



Excelling in Efficiency

Roofing Revolutionized

Norwalk Smart School's roofing system uses PTFE Fiberglass, which is credit card thin and allows through natural light, lowering energy cost, and boosting student test scores by 2-26%

Panoramic Glass Exterior Walls

The School's exterior walls is a complete wall of windows. This allows more natural light into the building, accomplishing as was stated above with natural light

E-Tintable Windows

All exterior glass in Norwalk Smart School is electronically tintable. This allows the building to keep in heat in the winter, and keep out heat in the summer, lowering energy costs.

Smart Lighting

Sensors in our classrooms detect motion and natural light to conserve energy.



Sustainability

From the little things to the big ideas, we wanted Norwalk Smart School to be Eco-Friendly.

LEED Certified

Norwalk Smart School would be LEED Certified due to the efficiency of the building and its eco-friendly building materials.

The Materials Make the Building

We made it a priority to build with eco-friendly materials. We use materials such as recycled steel, shipping containers and tires, and long lasting materials such as PTFE coated Fiberglass. We also went above and beyond, making sure most of our building materials come from within a 500 mile radius of the building site, which would allow us LEED Platinum Certification.



Sustainability

Shipping Container Usage

We recycled shipping containers for the majority of interior rooms in Norwalk Smart School, which are also cheaper to build than traditional rooms.

Geothermal Heating and Cooling

We took advantage of the efficiency of geothermal. By putting the system in for heating and cooling, Norwalk Smart School saves money on energy costs.

Wind Energy

An onsite wind farm produces clean, renewable energy for Norwalk Smart School.

Rotating Doors

These doors prevent drafts and are energy efficient because the doors are never technically all the way open.



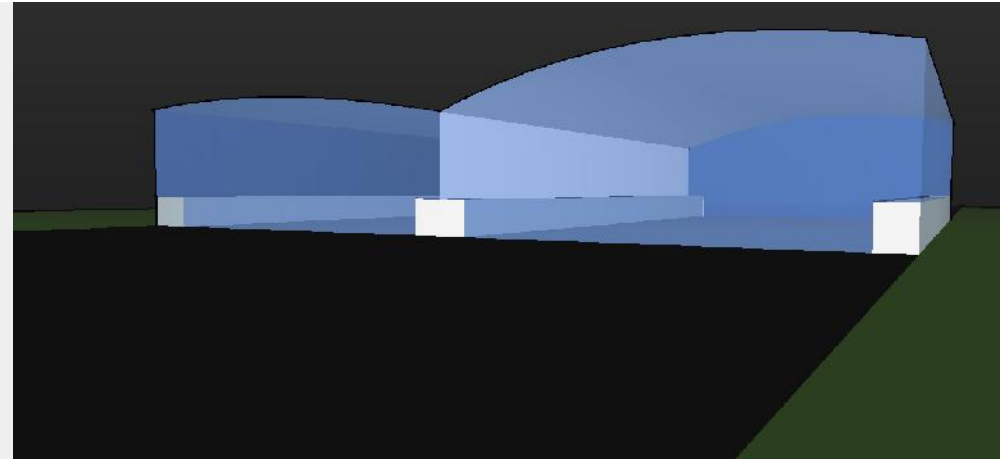
Exterior Design

The Beauty of Intelligent Design

Norwalk Smart School was designed to make better use of natural light. We accomplished this by using materials that allow light through them. The swooping roof allows natural light through, and the exterior glass walls do so to, and then they together at night release light out into the sky, a glimmering jewel on the horizon of Norwalk.

Surrounded by Green

Norwalk Smart School is surrounded by over 600 acres of greenspace. This includes community parks, amphitheatres, athletic complexes, and community gardens.



Interior Design

Modern Design Bathed in Light

Natural light pours into the interior of Norwalk Smart School. This combines with glossy whites, metallic greys, wood accents, and panoramic lake views to bring you a beautiful experience from the interior.

Outside from Within

Norwalk Smart Schools interior aims to feel like a small town. Roads connect recycled shipping container classrooms, businesses, and indoor green spaces between each other at comfortable room temperature, to make you feel as though you are enjoying the outdoors.



The Classroom Redesigned

We believe that the classroom should not be defined by walls. So when we set out to design the learning environment at Norwalk Smart School, we redesigned the classroom. Our version, the L-Zone, is a group of shipping containers forming an array of rooms which houses a department. With this as the new classroom, the learning goes beyond the room, as we are able to utilize former wasted hall space, because classes are able to be held in the “halls” as well.

This is the new classroom.



Learning Environment

A paperless school

The need for paper would be filled by personal student and staff tablets, as Smart School is built around technology.

More College Credits Offered

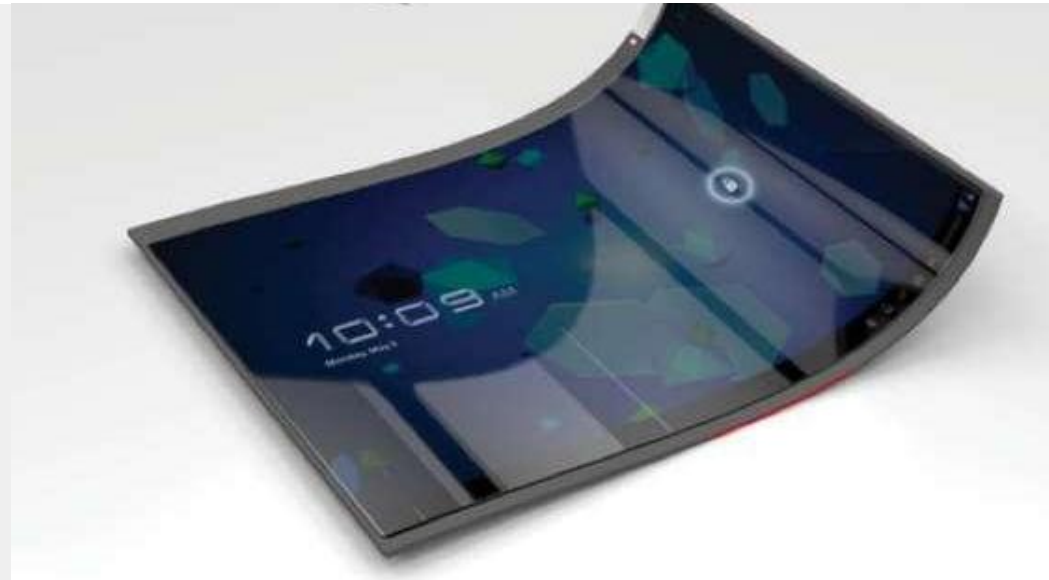
Norwalk Smart School would offer onsite college level classes, allowing students to learn at the next level.

Real-life experience

Students would apply for onsite advanced internships at Smart School's Business District.

Mentoring

Smart School would work with volunteers who would mentor students that are looking to work in that field.



A New System

When we designed Norwalk Smart Schools learning curriculum, we noticed a flaw in the current grade system. It does not allow for personalization based on the student's knowledge of a topic. Our tier tests can be taken at anytime during the school year, and you can move up to the next if you know the information and pass the test.

The tiers are all designed to give students the real life experience in their area.



Tier System

Tier 1

L-Zone Based Learning

In this stage the student can look around at areas or topics they would like to choose. Once they do, they acquire basic background information, as well as participate in required core classes.

Tier 2

L-Zone and Hands on Experience

Once the student has chosen a career path they now learn intermediate techniques and knowledge. The students still participate in required core classes.

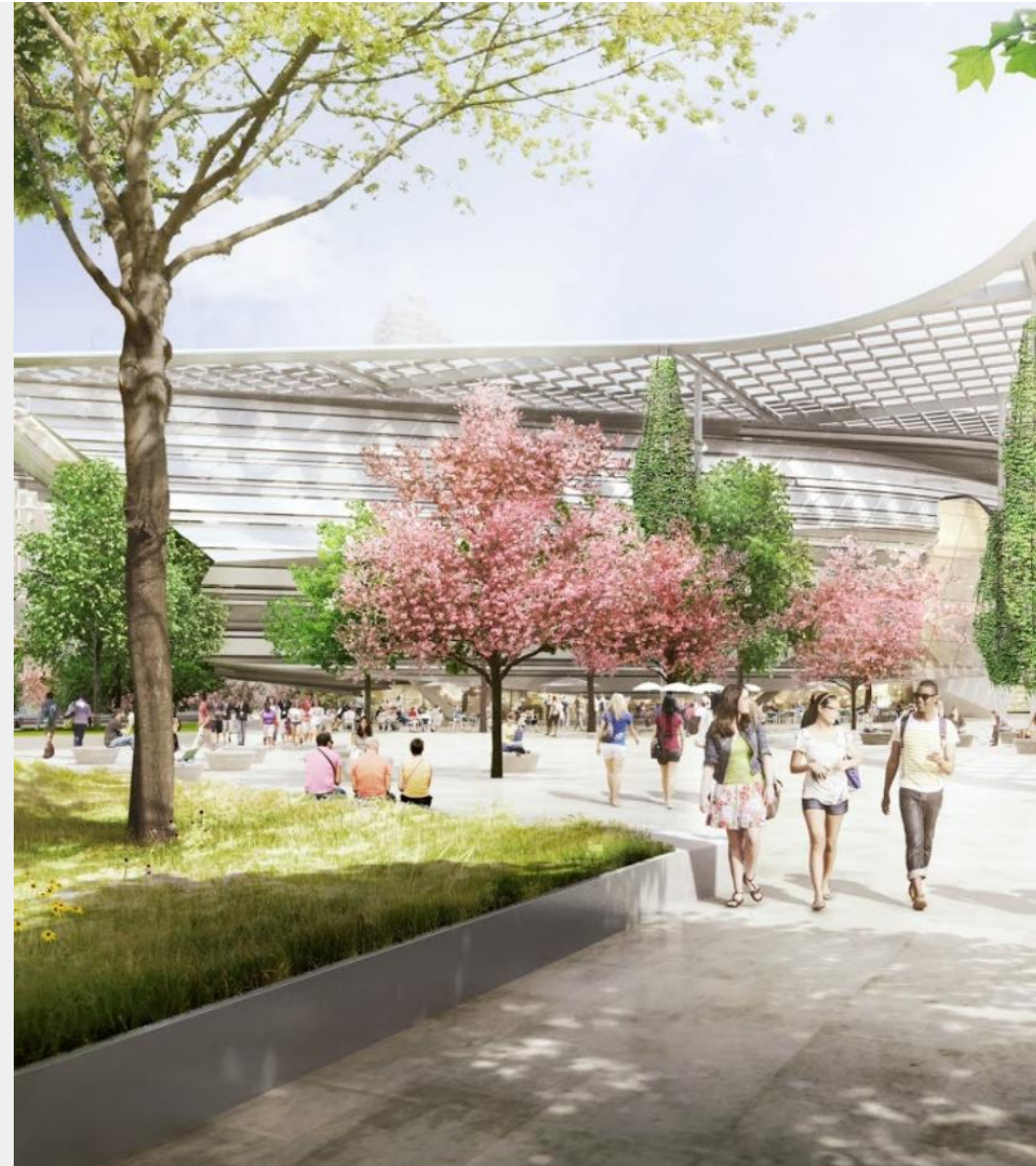
Tier 3

Advanced Experience

In this stage students acquire experience through Advanced internships in Norwalk Business District Businesses, or at business in Des Moines. They can still participate in Core Classes if needed.

Community Environment

Norwalk Smart School isn't just a place for school kids, its a gathering place for the community. From town athletic complexes, or the community business district, to adult after school classes, the **Norwalk Smart School is for people of all ages from the community and beyond.**



Norwalk Business District

The Norwalk Business District will be a small business mall, inside Norwalk Smart School where students can learn by applying for advanced internships, and the economy can thrive. On top of bringing extra business to the Norwalk Community, students will be able to learn about careers they may be interested in here, as well as use their skills in a real world situation, at local family owned businesses.



Proposed Businesses

Preschool/daycare

Art Retail

Mechanics shop/garage

Restaurant/Cafe

Law Firm/Courtroom

Local Architecture and Engineering Firm

Local DMV and other machine (plane) simulation, as well as Drivers Education Classes.

Grocery/Produce store

Local Marketing Firm

Clothing Retailer

Tech and Service Retailer

Other Businesses can come into the Business District

Community Environment

Healthy Living Center

A clinic and gym dedicated to educating people to live healthy.

Outdoor Park

Over 600 acres of greenspace open to the public from sunrise to sunset.

Gathering Center

Our school would be used for groups to meet.

Wind Energy

We give extra energy produced by our wind turbines back to the city government.

Adult Classes

Night Time classes can be held at the school to further educate the public.



Athletic Center

Indoor Football/Soccer Field

Field with seating for 12,000 an OLED curved scoreboard, Multi level press box, School TV Broadcast room, and an artificial Field Tech turf field. Ticketing for events would be 100% digital, and underground weight rooms, locker rooms, and equipment storage would be available, as well as coaching offices.

Basketball, Wrestling, Hockey, Training, and Swimming Complex

Seating for 9000, Includes standard OLED scoreboards, press boxes and a broad casting room. PE classes will be held in this area as well.

Aquatic Center

Aquatic center with Olympic sized pool, and diving area. OLED Screens and standard seating.

Food Court

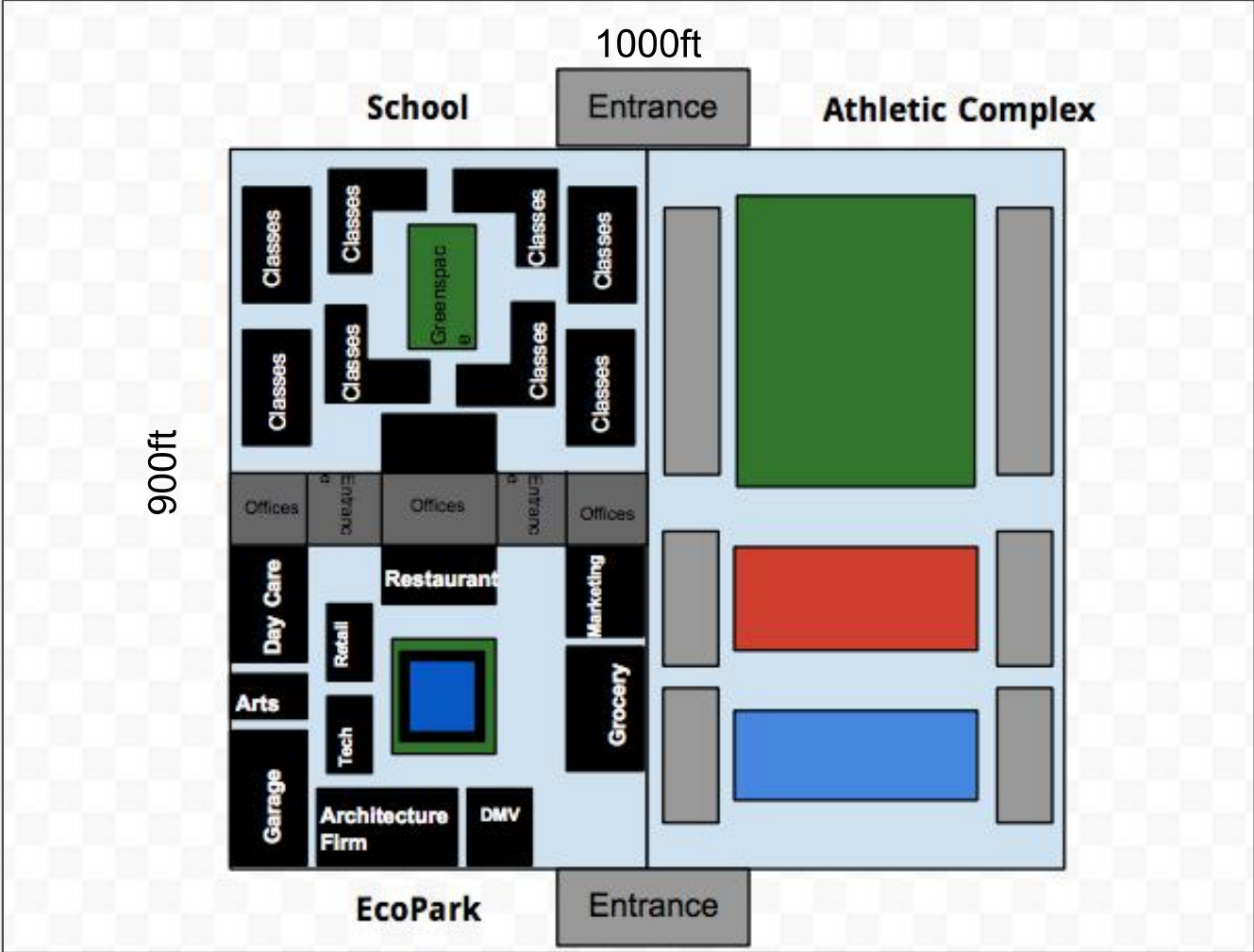
All share a centralized food court.



Proposed Site



School Layout



School Renderings

