

COMPLETE STREET

2030 PALLETE SWATCH: "9TH AVENUE, NYC"



SPOFFARD AVENUE HAS ALREADY HAD AN ATTEMPT MADE TO MAKE IT GREEN BY ADDING A VEGETATED MEDIAN. I PROPOSE IT TO ALLOW MULTIPLE USES OF TRANSPORTATION SAFELY, WHILE MAINTAINING AN ECONDMICAL AND ENVIRONMENTALLY FRIENDLY ATMOSPHERE WITH MORE VEGETATION TO BUFFER THE EXTERNAL MANUFACTURING AND COMMERCIAL ZONES SURROUNDING THE RESIDENTIAL NEIGHBORHOOD.

DAYLIGHTING

2030 PALLETE SWATCH: "RIOLA PARRISH CHURCH"



MAXIMIZING THE INTERIOR NATURAL LIGHTING CONDITIONS OF A SPACE CAN BE ACHIEVED WITH SUFFICIENT GLAZING, TRANSPARENT, OR EVEN TRANSLUCENT MATERIALS ON A BUILDING USING CLERESTORIES, ROOF MONITORS, SKYLIGHTS ETC. AN ADVANTAGE TO TOP DAYLIGHTING CAN RESULT IN ACCESS TO THE ENTIRE SPACE WITH CONSISTENT DISTRIBUTION OF FILTERED DAYLIGHT AND LESS GLARE. THE COLORS AND FINISHINGS OF THE INTERIOR CAN HELP REFLECT LIGHT ALSO.

GREEN ROOF

2030 PALLETE SWATCH: "PHIPPS CONSERVATORY CENTER FOR SUSTAINABLE LANDSCAPES"



THE PURPOSE OF THIS STRATEGY IS TO PROVIDE MORE GREEN SPACE, BETTER INSULATION, WATER RETENTION, IMPROVE AIR QUALITY, AND REDUCE THE BUILDING'S ENERGY CONSUMPTION. DEPENDING ON WHICH PROGRAMMED SPACE THE ROOF COVERS WILL DETERMINE THE INTENSITY OF THE VEGETATION, I.E. ROOF OVER PRE-K GYM WILL BE LOW INTENSITY GROWTH FOR LITTLE MAINTENANCE, BUT GREAT NOISE CONTROL SO PEOPLE IN NEIGHBORING BUILDINGS AREN'T DISTRACTED.

GREEN WALL

2030 PALLETE SWATCH: "CAIXA FORUM, MADRID"



VEGETATIVE COOLING CAN BE ACHIEVED BY CONSTRUCTING A NATURAL WALL. JUST LIKE A GREEN ROOF, THIS VERTICAL SYSTEM IS A VERY SUCCESSFUL SHADING ELEMENT THAT FILTERS WATER PASSING THROUGH IT MAKING TEMPERATURES COOLER OUTSIDE, AND INSIDE LOWER. MOREOVER, THIS VISUALLY IMPACTS THE SITE AS BEING BIOPHILIC IN A WAY THAT MOST CITIES AREN'T ACCUSTOMED TO. NEIGHBORING BUILDINGS WILL APPRECIATE THE LACK OF REFLECTED SUNLIGHT AS THE LIVING WALL ABSORBS IT.

WATER CATCHMENT AND STORAGE

2030 PALLETE SWATCH: "ALDO LEOPOLD LEGACY CENTER"



THIS SYSTEM CAN BE COMBINED WITH THE GREEN ROOF(S) AND LANDSCAPING OF THE PROJECT. GRAYWATER AND IRRIGATION SYSTEMS ARE THE MAIN REASON FOR THIS STRATEGY, BUT STORMWATER RUNOFF WILL BE DRAMATICALLY DECREASED, AS WELL AS THE NEED FOR MUNICIPAL POTABLE WATER.

SHADING

2030 PALLETE SWATCH: "UNIVERSITY OF NEW MEXICO LAW SCHOOL"



IT IS CRITICAL THAT ENERGY EFFICIENT BUILDINGS HAVE SUITABLE SHADING ON THE FACADES THAT RECEIVE SIGNIFICANT RADIATION FROM THE SUN, BECAUSE IT HAS A DIRECT EFFECT ON THE THERMAL COMFORT OF OCCUPANTS INSIDE A SPACE PROVIDING AN IDEAL WORKING/LIVING/EDUCATIONAL ENVIRONMENT.

STACK VENTILATION

2030 PALLETE SWATCH: "BRITISH HIGH COMMISSION, SRI LANKA"



SIMPLY - WARM AIR RISES AND COOL AIR SINKS. THEREFORE, IF YOU LOCATE OPENINGS ON OPPOSITE SIDES OF A BUILDING, ONE LOW AND THE OTHER HIGH - YOU HAVE CREATED A "STACK EFFECT." THE WARM AND UNCOMFORTABLE AIR INSIDE WILL BE FORCED OUT DUE TO A CURRENT PRODUCED BY THE SUGTION OF THE COOL AIR COMING IN. EVEN IF THE TEMPERATURE DIFFERENCE FROM INSIDE TO OUTSIDE IS MINIMAL, THE VENTILATION BECOMES NATURAL AS THE AIR IS MOVING MAKING ONE FEEL COOLER.

SUSTAINABLE SITES

2030 PALLETE SWATCH: "MAYNARD AVE GREEN STREET"



THE EXISTING SITE IS ALMOST ABANDONED WITH HARDSCAPES COVERING MOST OF THE "DESIGN" AREA. IT WILL BECOME REGENERATED, EXPOSING ITS NATURAL SOIL AND STORMWATER WILL BE FILTERED BY NEW PERVIOUS HARDSCAPING ONLY WHERE CIRCULATION TAKES PLACE. THIS WILL BALANCE THE DEVELOPMENT IMPACTS AND RESTORE THE DISTURBED LANDSCAPE.

URBAN INFILL

2030 PALLETE SWATCH: "WHITEHORSE ST. APARTMENTS, LONDON"



THE EXISTING SITE IS CURRENTLY NOT BEING USED 100%. IT IS IN THE HEART OF THE SOUTH BRONX AT A MAJOR INTERSECTION WHERE COMMERCIAL AND RESIDENTIAL LAND USES CONFORM. TRANSFORMING THIS ZONE TO ACCOMMODATE SERVICES, PRODUCE FOOD, AND PROVIDE A HEALTHY LIVING AND WORKING ENVIRONMENT, MAKES IT AN EFFICIENT AND ESSENTIAL ORGAN TO THE DISTRICT'S INFRASTRUCTURE.

URBAN RETROFIT

2030 PALLETE SWATCH: "MCGALLON LIBRARY, TEXAS"



THE MOST EFFICIENT WAY TO PRODUCE SPACE IS TO REUSE AN EXISTING ONE. SO LONG AS THE BUILDING IS IN GOOD STRUCTURAL ORDER, AND THE COST TO RENOVATE IT IS CONVENIENT, THEN THERE SHOULD BE NO QUESTION OF KNOCKING IT DOWN. THE DESIGN CAN REVOLVE AROUND THE EXISTING ENVELOPE OR ELABORATED. FORTUNATELY, THE SITE HAS THE JUVENILE CENTER THAT CAN BE SALVAGED SOMEWHAT AND TRANSFORMED INTO A SUPERIOR SPACE.