DYLAN BLYE

AUTONOMOUS UMD

THE UNIVERSITY OF MARYLAND STRIVES TO TEACH AND SPREAD AWARENESS ABOUT THE IMPORTANCE OF SUSTAINABILITY. LOCATED ON THE EDGE OF CHAPEL FIELDS ON THE EAST END OF CAMPUS THE AUTONOMOUS BUILDING SERVES AS A CENTER THAT WILL FACILITATE BRINGING ATTENTION TO SUSTAINABILITY ON CAMPUS AND BEYOND. IN BIOLOGY, 'AUTONOMOUS' MEANS THAT AN ORGANISM EXISTS AND FUNCTIONS ON ITS OWN. A BUILDING THAT ACTS AS AN AUTONOMOUS ORGANISM DOES NOT NEED TO RELY ON EXTERNAL POWER & GAS GRIDS OR MUNICIPAL WATER TO FUNCTION IN ITS DAILY LIFE. AUTONOMOUS REDUCES ITS RELIANCE ON RESOURCES BY UTILIZING MULTIPLE SUSTAINABLE BUILDING STRATEGIES. ON THE CORNER OF ROUTE 1 & REGENTS DRIVE, THE SITE IS A SACRED PART OF UMD'S CAMPUS SERVING AS A GATEWAY TO STUDENTS AND THE PUBLIC ALIKE. AS A CAMPUS BUILDING, THE MASSING FOLLOWS THE EXISTING ORTHOGONAL CAMPUS GRID. THE SITE TAKES ON A LOT OF RUNOFF WATER FROM CAMPUS, THEREFORE PERVIOUS PAVEMENT AND MULTIPLE BIOSWALES ARE IMPLEMENTED INTO THE DESIGN OF THE SITE TO MITIGATE WATER FLOW ISSUES AND COLLECT WATER FOR USE IN THE BUILDING ITSELF. THE MAJORITY OF THE ENCLOSED SPACE EXISTS ON THE SECOND AND THIRD FLOOR WHICH ARE BRIDGED ACROSS THE PEDESTAL FORMS OF THE LOWER LEVEL, REDUCING THE BUILDING'S OVERALL FOOTPRINT. MULTIPLE SHADING SYSTEMS ARE USED TO CONTROL THE DAYLIGHTING AND ENERGY USE OF THE BUILDING THROUGHOUT THE CHANGING SEASONS. A GREEN ROOF ABOVE THE CLASSROOMS SUPPLEMENTS THE INTERIOR EXHIBITION SPACE AND PROVIDES INSULATION AND WATER RETENTION. ON THE ROOF IS AN ARRAY OF SOLAR PANELS THAT PROVIDE ENOUGH ENERGY FOR THE BUILDINGS EVERY-DAY ELECTRICITY CONSUMPTION AND EXCESS ENERGY CAN BE SENT TO SURROUNDING CAMPUS BUILDINGS. THE BUILDING AND PARKING AREA WERE DESIGNED AROUND LARGE EXISTING TREES ON THE SITE GOAL OF THE PROJECT IS TO BRING AWARENESS TO ENVIRONMENTAL PRESERVATION.







LONGITUDINAL SECTION 1/8" = 1'-0"





