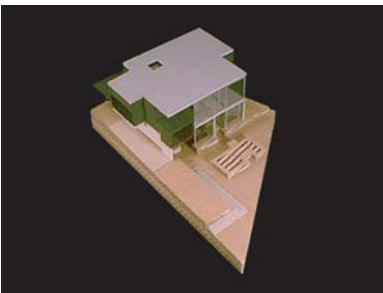
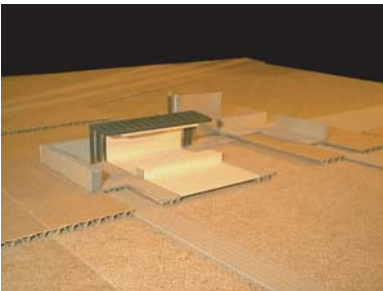


# ARCHITECTURE



## THE OBJECT

THE POCKET KNIFE IS KNOWN FOR ITS VERSATILITY WITH MULTIPLE USES AND ITS COMPACT DESIGN. YET THIS COMPACTNESS IS NEGATED WHILE THE KNIFE IS IN USE, AS IT MUST BE OPENED UP.

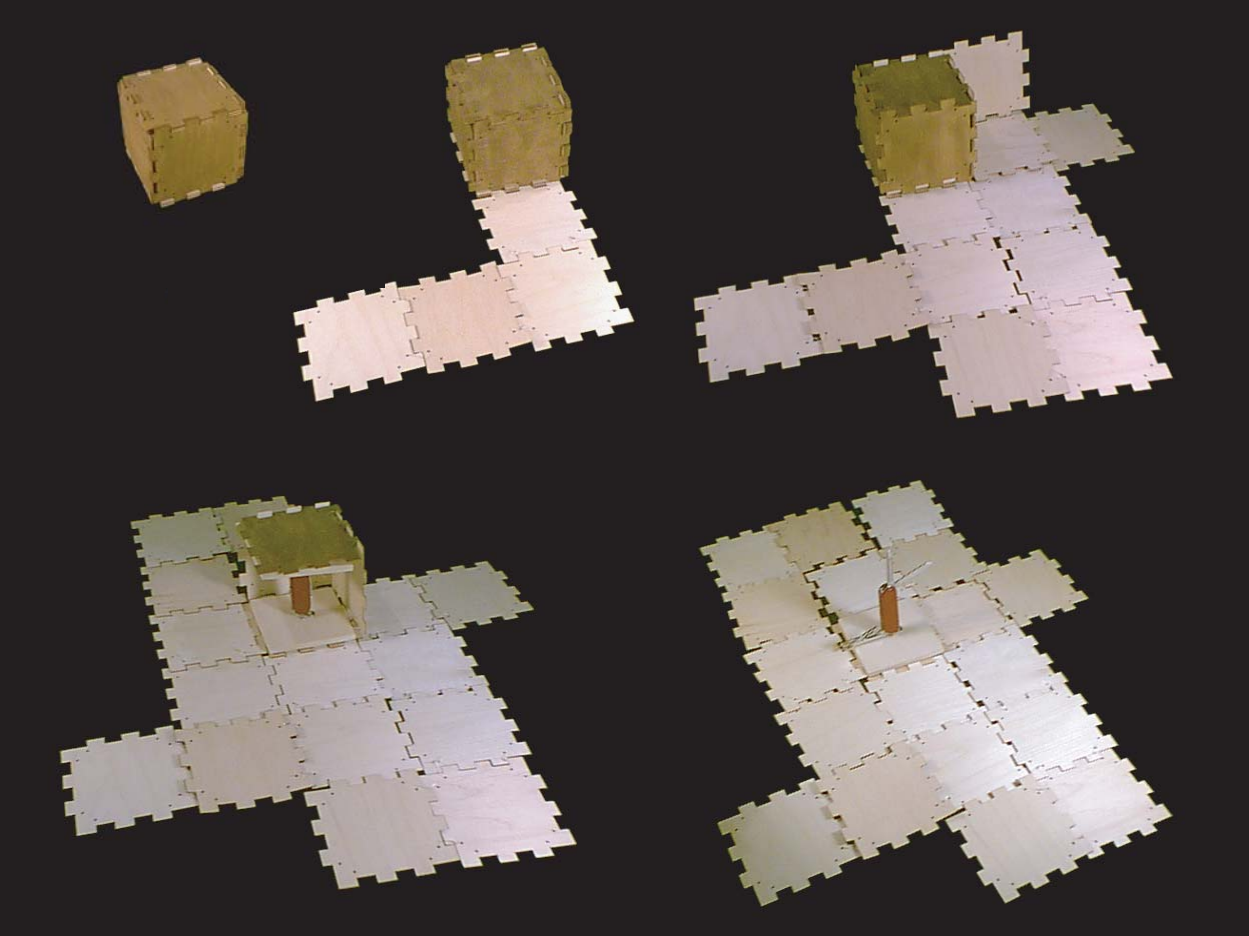
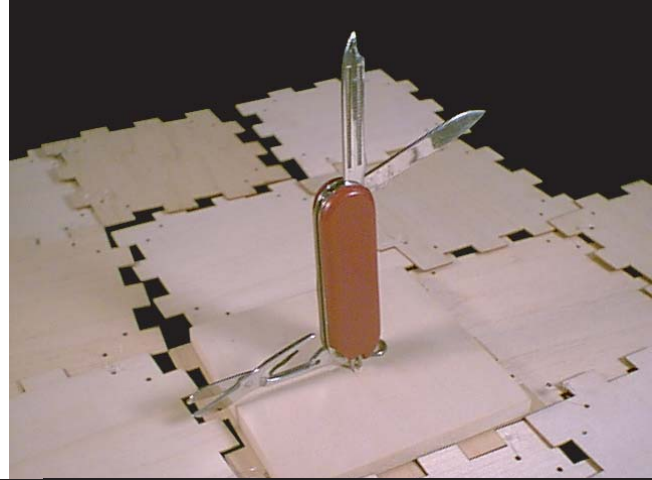
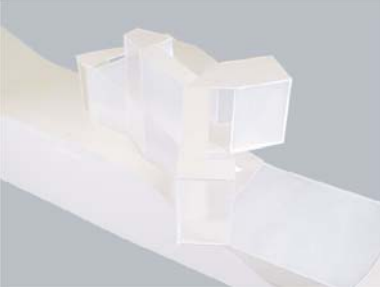
## CONCEPT

LIKE THE POCKET KNIFE, THE CONTAINER IS DESIGNED TO HAVE BOTH COMPACT AND EXPANDED CONDITIONS. THE CONTAINER IS VERSATILE IN THAT IT CAN BE FOLDED UP IN MULTIPLE WAYS, AND ALLOWS THE KNIFE AS WELL AS ITSELF TO HAVE DIFFERENT DEGREES OF EXPOSURE AND DISPLAY DURING THE UNFOLDING PROCESS.

# OBJECT CONTAINER

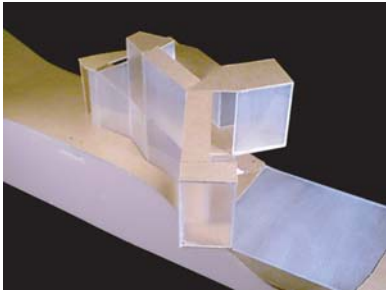
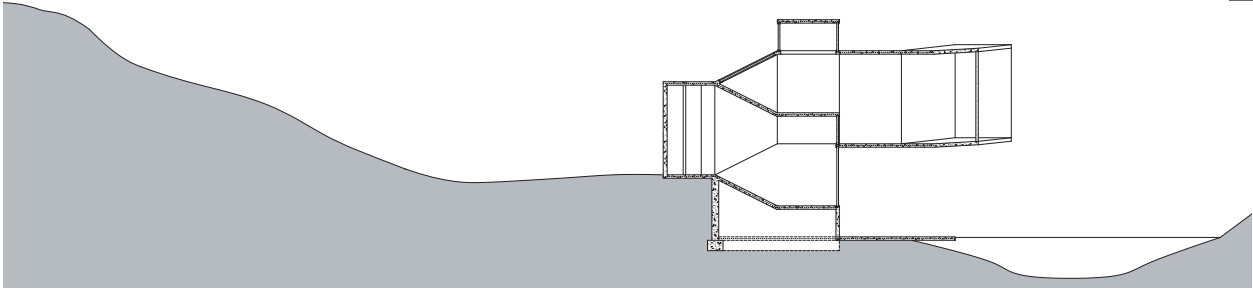
PROFESSOR: MICHAEL MEREDITH | UNIVERSITY OF MICHIGAN | FALL 2000

THIS PROJECT INVOLVED THE ANALYSIS OF A PERSONAL OBJECT WITH MOVEABLE PARTS AND ITS MAIN CHARACTERISTICS. USING THIS UNDERSTANDING OF THE OBJECT, WE WERE TO DESIGN A CONTAINER THAT WOULD RELATE TO THESE CHARACTERISTICS BY CONCEALING, DISPLAYING, TRANSPORTING, AND/OR AUGMENTING THE OBJECT'S USE.



## CONCEPT

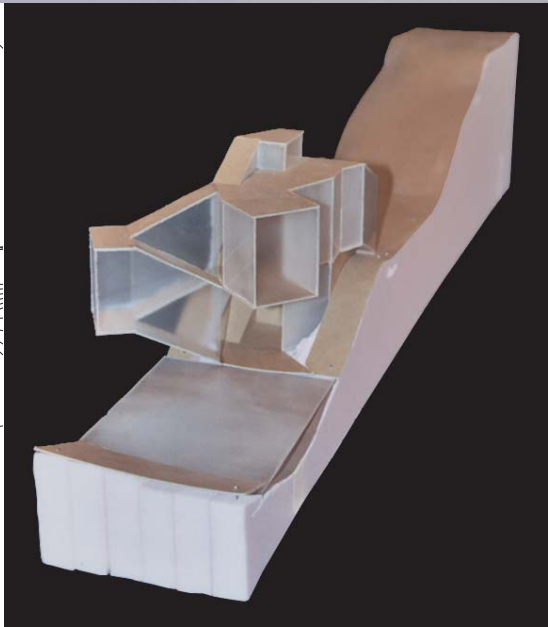
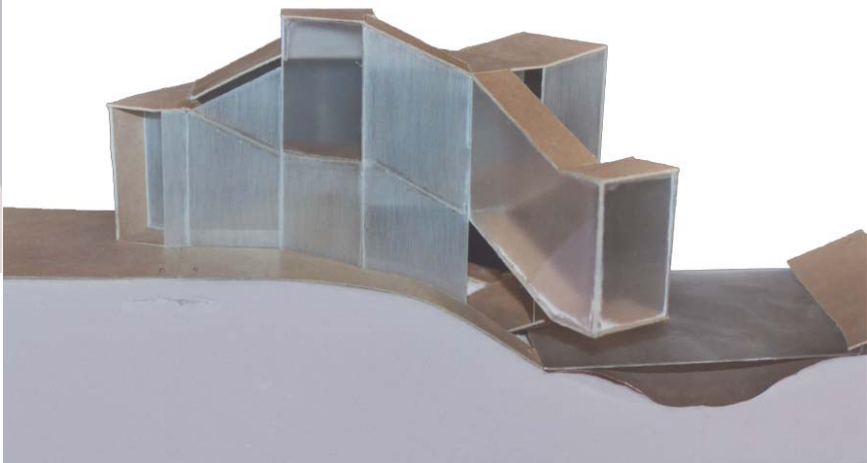
RELATING TO THE FLOW OF WATER ON THE SITE, THE DESIGN WAS BASED ON THE IDEA OF CONTINUITY OF MOTION. THERE ARE MULTIPLE PATHS OF MOVEMENT THROUGH THE PROJECT, WHICH ALSO ALLOW INHABITATION OF THE ROOF. YET BRIEF STOPPAGE POINTS ARE PLACED ALONG THIS PATH TO PROVIDE A MOMENT TO OBSERVE THE SURROUNDING ENVIRONMENT.



# WATERSTOP

PROFESSOR: MICHAEL MEREDITH | UNIVERSITY OF MICHIGAN | FALL 2000

THE ANALYSIS FOR THE SECOND PROJECT OF THE TERM INCREASED IN SCALE TO INVOLVE A SITE, WHICH IS ON A BANK OF THE AU SABLE RIVER IN GRAYLING, MICHIGAN. AFTER DOCUMENTING THE AREA, WE WERE TO DESIGN THE PROJECT TO RELATE TO THE SITE AND INCLUDE THE FOLLOWING PROGRAMS: CANOE WATER STOP, VERTICAL TRANSITION, VIEWING PLATFORM AND PROTECTIVE COVERING FOR A VISITOR OF THE RIVER.

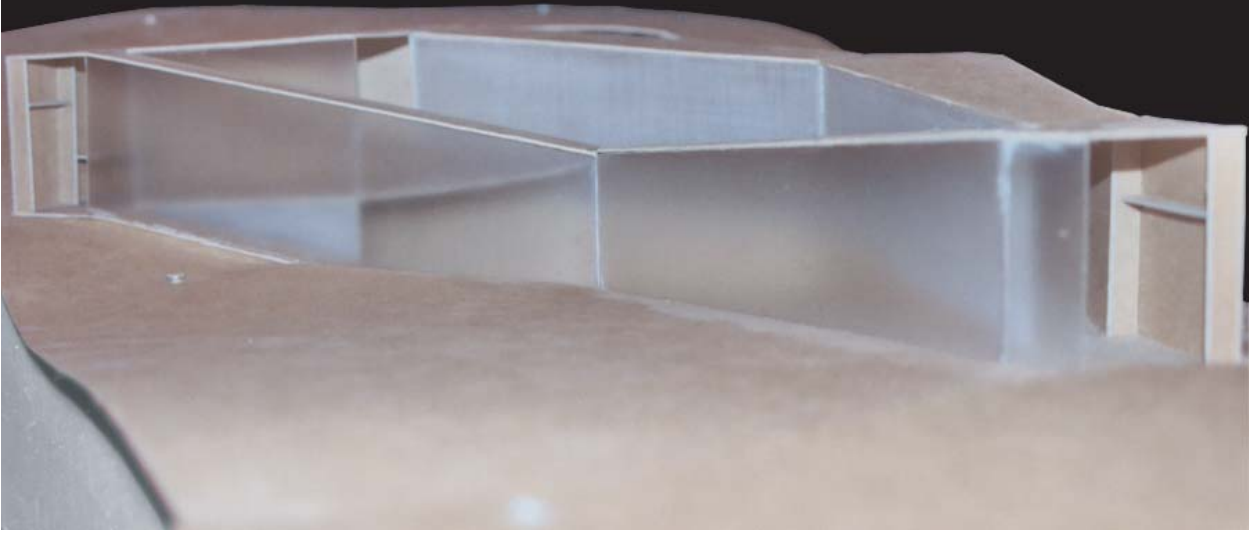


## ANALYSIS

TO PROPERLY DESIGN A FISHING RETREAT, RESEARCH WAS NEEDED TO BETTER UNDERSTAND THE LIFE OF AN ANGLER. I RESEARCHED THE TYPICAL DAILY COURSE OF EVENTS FOR AN ANGLER, AND DETERMINED THE SEQUENCE IN WHICH THE PROGRAMS ARE USED TO ORGANIZE THE DESIGN AROUND THE ANGLER'S NEEDS.

## CONCEPT

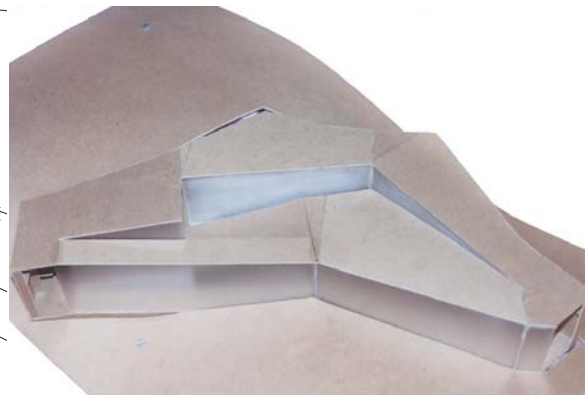
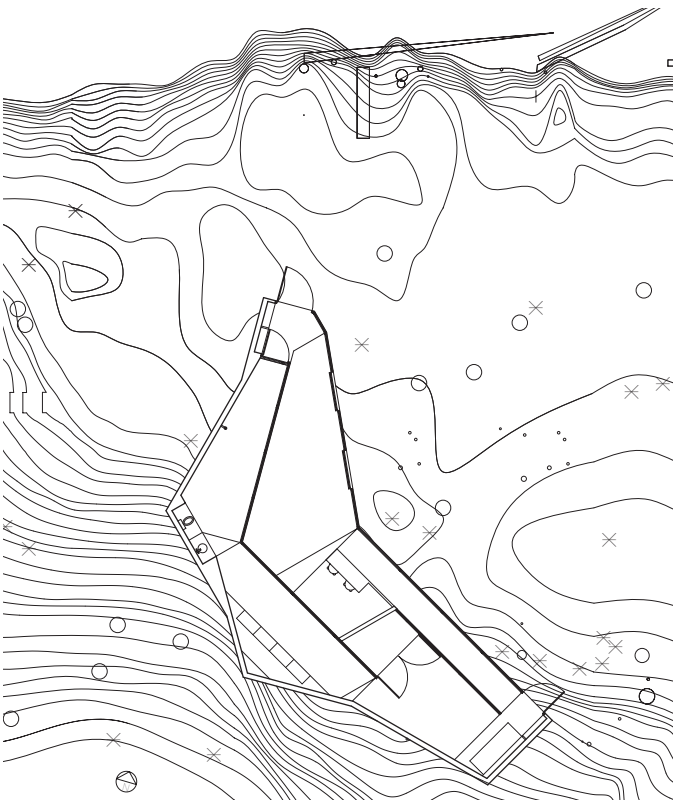
LIKE THE WATERSTOP, THE BASIS OF THIS PROJECT IS CONTINUITY. ALL OF THE GIVEN PROGRAMS ARE INTERCONNECTED WITH A CONTINUOUS MEANS OF CIRCULATION ACCORDING TO THE ANGLER'S ACTIVITIES. THE RETREAT IS SET BACK INTO THE SLOPE OF THE SITE TO ALLOW THE ROOF TO BECOME AN EXTENSION OF THE TERRAIN.



# ANGLER RETREAT

PROFESSOR: MICHAEL MEREDITH | UNIVERSITY OF MICHIGAN | FALL 2000

UTILIZING THE SAME SITE, THIS PROJECT BUILDS UPON THE PREVIOUS ONE, GROWING IN PROGRAMMATIC AND SPACIAL COMPLEXITY. THE PROJECT IS A RETREAT FOR THE "ANGLER OF THE YEAR" AND SHOULD PROVIDE A PLACE TO SLEEP, COOK, WORK, WASH, STORE, LIVE AND RELATE TO NATURE. IT IS MEANT TO BE USED ONLY SEASONALLY AND SHOULD BE DESIGNED TO ACCOMMODATE A MAXIMUM OF TWO ANGLERS.



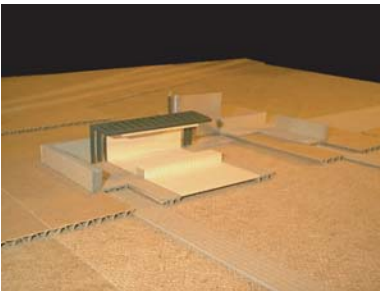
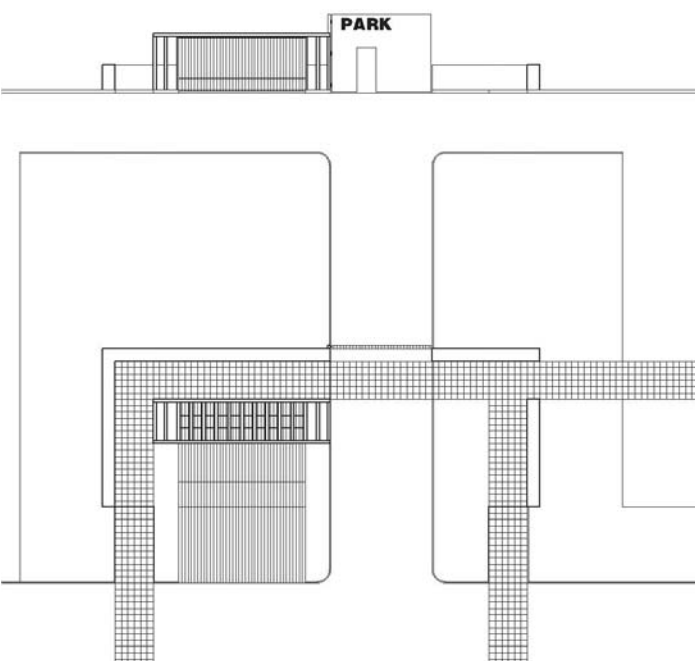
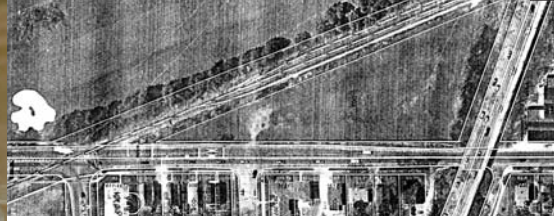
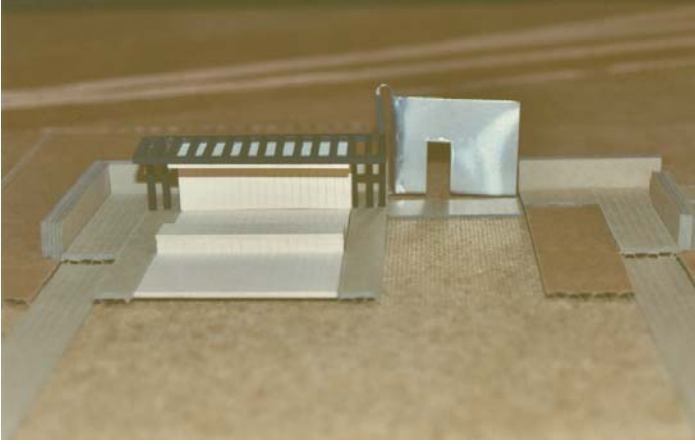
## SITE

THIS IRREGULARLY-SHAPED SITE, BOUNDED BY STATE STREET, STADIUM BOULEVARD AND A SET OF RAILROAD TRACKS, IS CURRENTLY USED AS A UNIVERSITY FOOTBALL PARKING LOT AND A SNOW PLOW DUMP SITE. THIS PROJECT ATTEMPTED TO MAINTAIN YET EXPAND UPON THESE UNIQUE PROGRAMS.

## CONCEPT

THE BUS DOCK ACTS AS A COLLECTION AGENT, WITH THE WOOD SURFACE FOLDING UP TO PROVIDE SEATING, SHELTER AND A PLACE TO ATTACH FLYERS AND ADS. THE GATE ALLOWS THE INTERVENTION TO BE DYNAMIC. CLOSED, THE SITE ACTS AS A NEIGHBORHOOD PARK. OPENED, THE "PARK" SIGN BECOMES VISIBLE TO THE STREET, INFORMING DRIVERS THAT PARKING IS AVAILABLE.

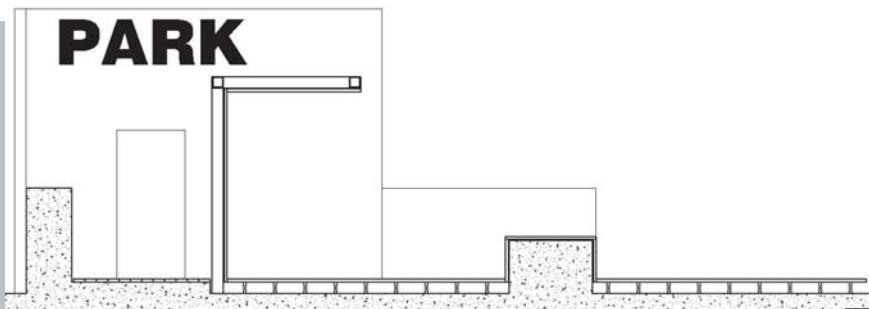




# STATE ST. BUS DOCK

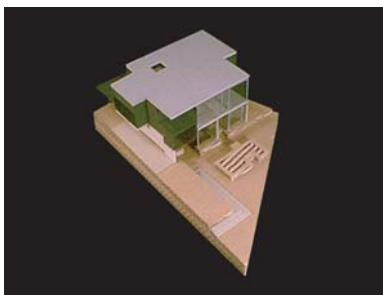
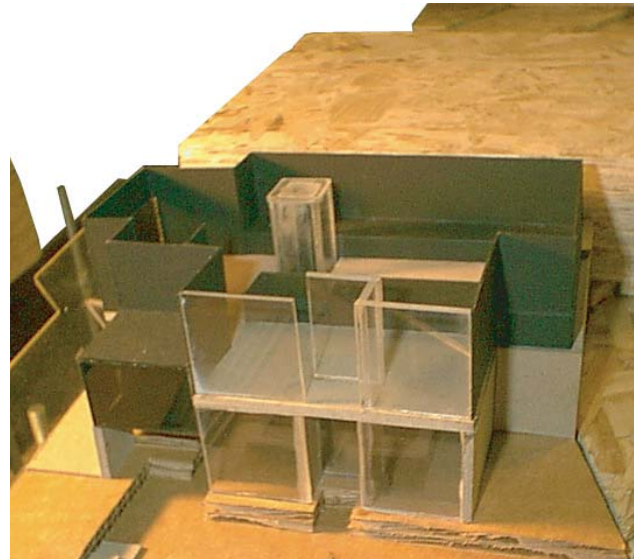
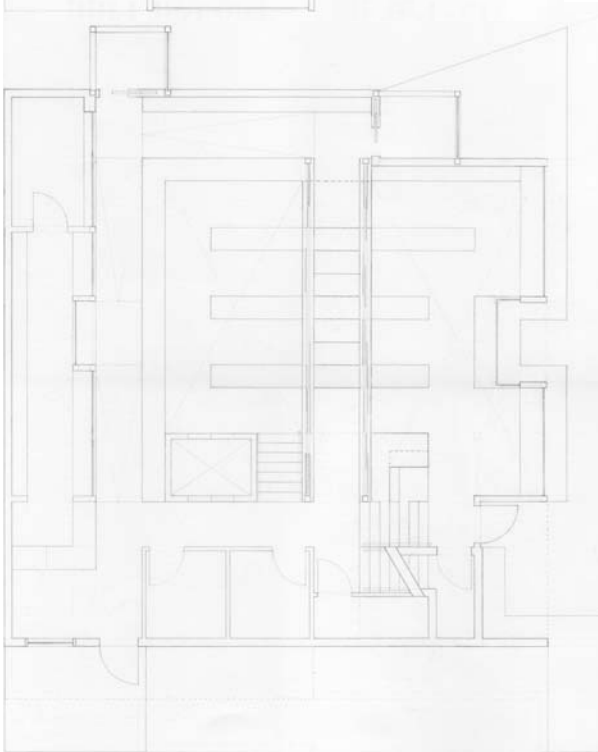
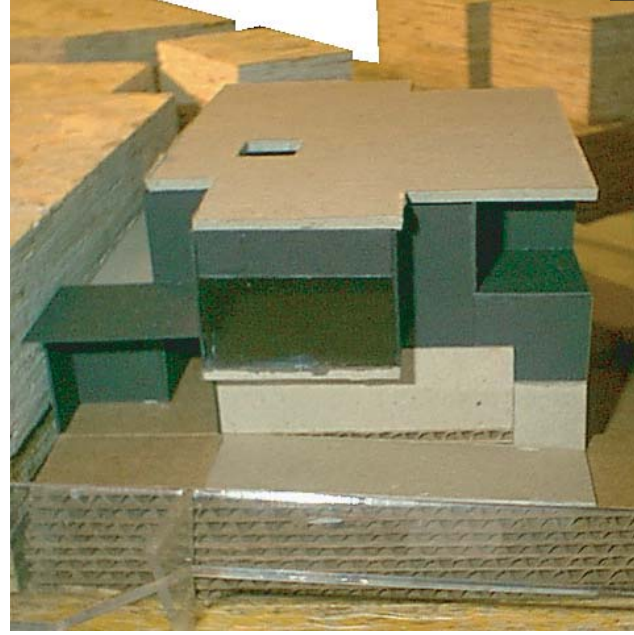
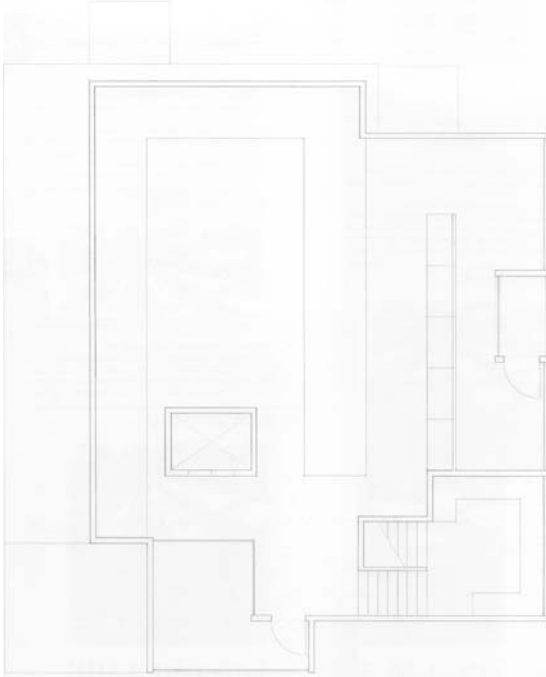
PROFESSOR: JOHN COMAZZI | UNIVERSITY OF MICHIGAN | WINTER 2001

THIS STUDIO BEGAN WITH AN IN-DEPTH GROUP ANALYSIS OF STATE STREET IN ANN ARBOR THROUGH VARIOUS LENSES. WITH THIS, WE WERE TO DESIGN AN INTERVENTION ON ONE OF FOUR SITES ALONG STATE STREET AND INCORPORATE THE KNOWLEDGE OF THE AREA. THE PROJECT REQUIRED THE DOCKING OF A UNIVERSITY OR CITY BUS, THE DISSEMINATION OF INFORMATION, AND AN URBAN LANDSCAPE APPROPRIATE FOR THE SITE.



## CONCEPT

THE DESIGN OF THIS PROJECT IS BASED UPON THE INTERACTION OF SEQUENCE AND COLLECTION. THE MAIN CIRCULATION PATH CUTS THROUGH THE SUNKEN AREA CONTAINING STACKS OF BOOKS. THE CEILING OF THIS PATH PROJECTS UP INTO THE SECOND FLOOR, CREATING SEATING FOR A GENERAL READING SPACE TO WHICH THE SEQUENCE OF MOVEMENT EVENTUALLY LEADS. ALSO, ALONG THIS PATH ARE PLACES FOR PEOPLE TO STOP AND USE, SUCH AS THE STAIR LANDING BECOMING A GROUP MEETING AREA.



# MEDIA STATION

PROFESSOR: JOHN COMAZZI | UNIVERSITY OF MICHIGAN | WINTER 2001

THIS PROJECT, ALSO LOCATED NEAR STATE STREET, CALLED FOR THE DESIGN OF A BRANCH LIBRARY TO SERVE THE CITY OF ANN ARBOR. THE COMPLEX PROGRAMMATIC NEEDS INCLUDED THE STORAGE OF TRADITIONAL PHYSICAL INFORMATION (BOOKS, MAGAZINES, NEWSPAPERS, ETC.) AND THE STORAGE OF DIGITAL INFORMATION (COMPUTERS, CDS, DVDS, ETC.), AS WELL AS AREAS FOR THE PUBLIC TO USE THEM.

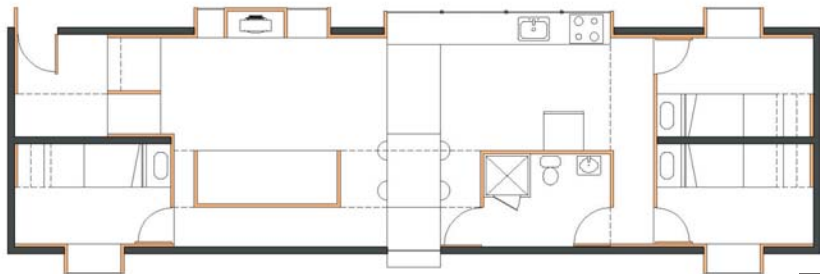
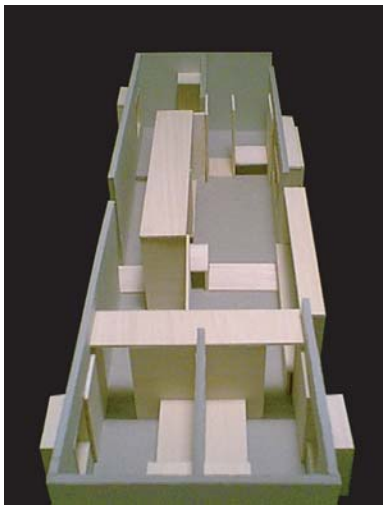
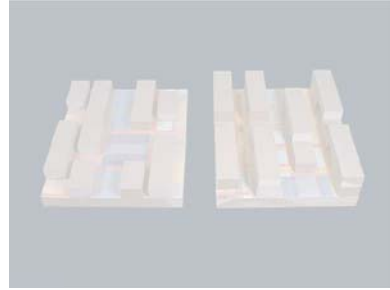
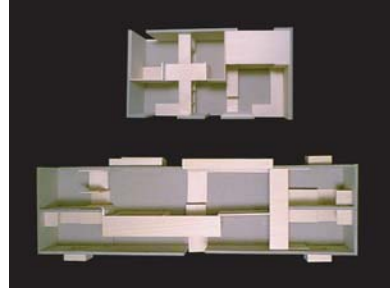
## CONCEPT

EACH UNIT IS COMPOSED OF TWO DESIGN ELEMENTS. THE FIRST IS THE EXTERIOR RECTANGULAR SHELL OF CONCRETE, WHICH MAKES UP THE VOLUME OF THE UNIT. THE SECOND IS THE INTERIOR WOODEN SURFACE, WHICH BENDS AND FOLDS WITHIN THE SHELL TO HOUSE ALL THE PROGRAMS NEEDED FOR THE INHABITANTS. THE MANIPULATION OF THIS WOODEN ELEMENT IS PRIMARILY CONTAINED WITHIN OR ALONG THE INSIDE OF THE SHELL, BUT AT TIMES, IT CAN BREAK THROUGH TO FORM FENESTRATION AS NECESSARY.

# HOUSING UNITS

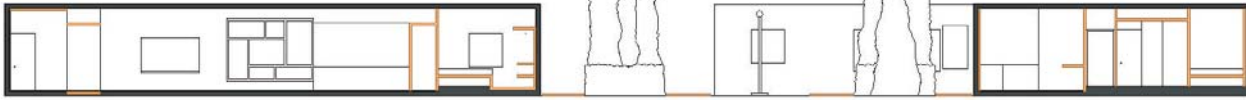
PROFESSOR: ANSELMO CANFORA | UNIVERSITY OF MICHIGAN | FALL 2001

FOR THE FIRST PROJECT IN THE HOUSING STUDIO, WE WERE TO DESIGN A PAIR OF DWELLING UNITS: A 600 SQ. FT. LIVE/WORK UNIT FOR ONE OCCUPANT, AND A 1200 SQ. FT. LIVING UNIT FOR THREE OCCUPANTS. RESTRICTIONS WERE PLACED ON THE DESIGNS, STATING THAT THE UNITS CAN BE NO MORE THAN 18' WIDE, THAT THEY MUST BE CONTAINED WITHIN A RECTANGULAR VOLUME, AND THAT FENESTRATION BE LIMITED TO ONLY 2 SIDES.



## CONCEPT

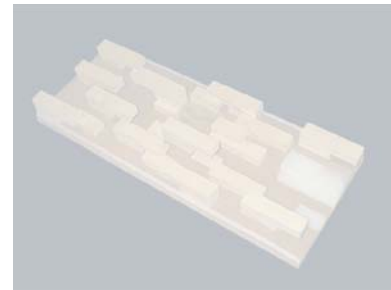
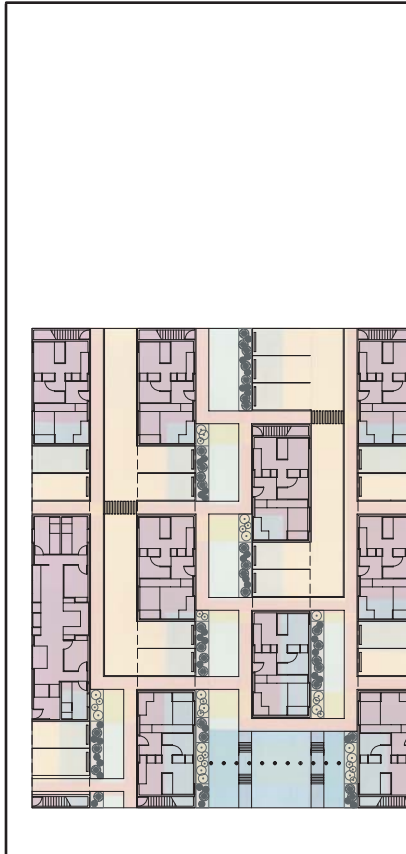
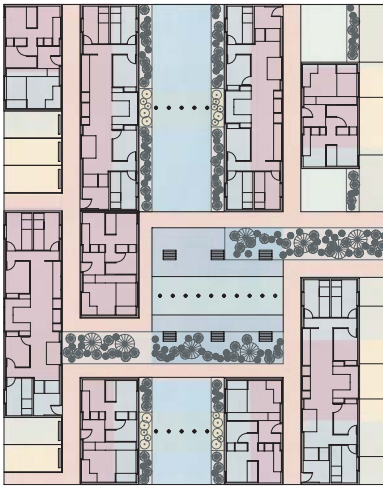
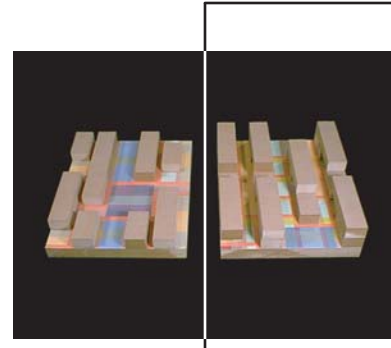
THE COLLAGE BECAME A METHOD OF ORGANIZING THE HOUSING UNIT AGGREGATIONS BY OVERLAPPING THE VARIOUS PROGRAMMATIC ELEMENTS ONTO THE SITE. THE FIRST SET OF ELEMENTS (SHELTER, ASPHALT AND WOOD) WERE MORE CONCRETE AND WOULD BE ALTERED DEPENDING ON WHICH OF THE MODIFYING ELEMENTS (COLLECTION, TEMPORALITY AND COMMUNAL) OVERLAPPED UPON THEM TO CREATE THE PROGRAMS NEEDED IN THE DEVELOPMENT.



# UNIT AGGREGATIONS

PROFESSOR: ANSELMO CANFORA | UNIVERSITY OF MICHIGAN | FALL 2001

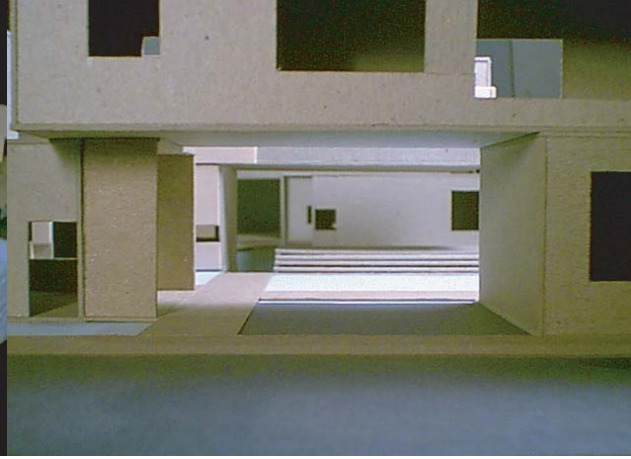
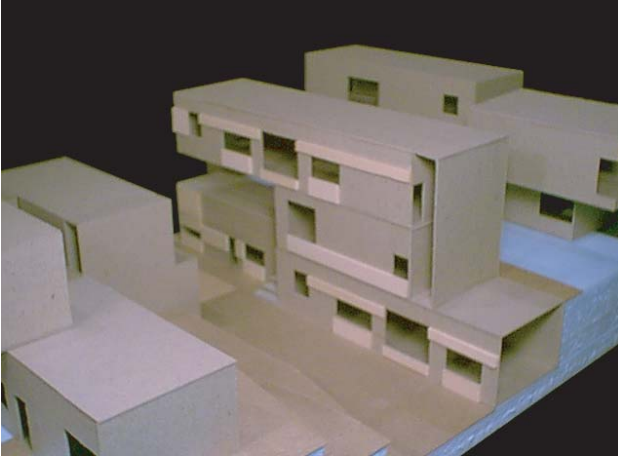
AFTER DESIGNING THE INDIVIDUAL UNITS, THE NEXT PHASE OF THE HOUSING STUDIO WAS TO CONSIDER HOW TO CONFIGURE MULTIPLE UNITS INTO A COHESIVE HOUSING DEVELOPMENT. THE SITE GIVEN WAS A GENERIC RECTANGULAR PLOT OF LAND IN A CITY BLOCK, ON WHICH WE WERE TO CREATE A LOW-DENSITY SCHEME, CONSISTING OF 9-10 UNITS AND A HIGH-DENSITY SCHEME, CONSISTING OF 17-20 UNITS.



## CONCEPT

THE NEED FOR SUPPLEMENTARY HOUSING PROGRAMS ALTERS THE ARRANGEMENT OF THE UNITS. INITIALLY ORGANIZED IN A REGULAR MATRIX, THE UNITS WERE SHIFTED SLIGHTLY TO CREATE "PINCHED" AREAS FOR CERTAIN HOUSING NECESSITIES, LIKE PARKING, ENTRY POINTS AND STAIRWAYS WITHIN THE SITE. CLUSTERING THE UNITS IN THIS MANNER ALSO CREATED MORE OPEN POCKETS OF SPACE FOR OTHER PROGRAMS TO ARISE, LIKE PICNIC AREAS, COMMUNAL VEGETABLE GARDENS AND A RAMP SYSTEM THAT DOUBLES AS ON OPEN-AIR PERFORMANCE THEATER.

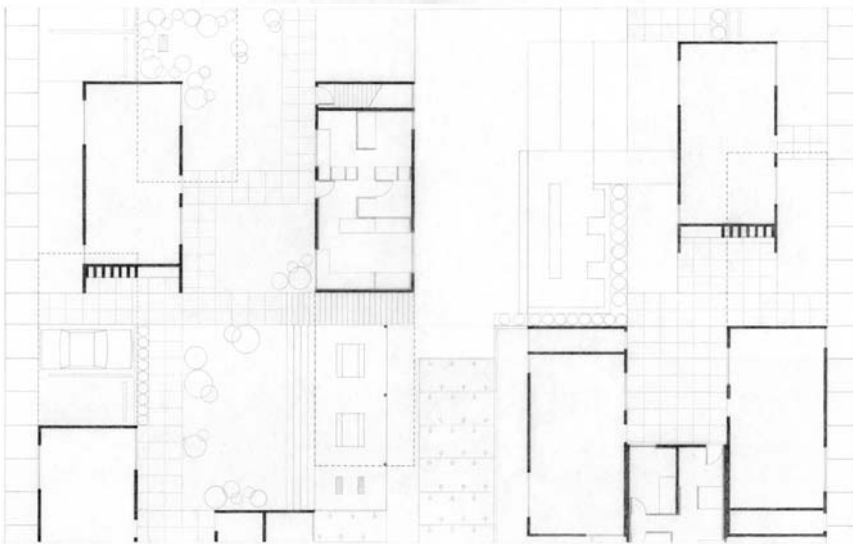
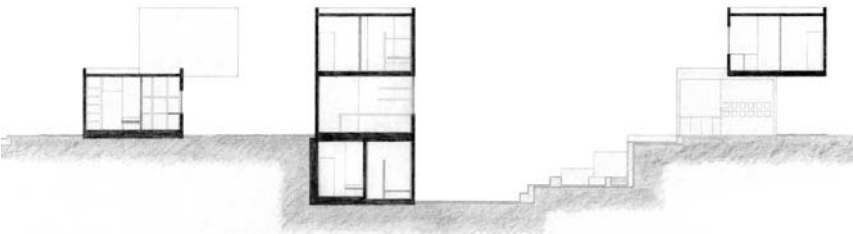




# HOUSING IN DETROIT

PROFESSOR: ANSELMO CANFORA | UNIVERSITY OF MICHIGAN | FALL 2001

THE FINAL HOUSING PROJECT MOVED THE STUDIO'S DESIGN EFFORTS TO DETROIT. THE SITE IS AN ABANDONDED STRETCH OF A SUNKEN RAILROAD LINE RUNNING ALONG SIDE LAFAYETTE TOWERS. DUE TO ITS LENGTH, THE SITE WAS DIVIDED BETWEEN THE STUDENTS INTO SMALLER SECTIONS, IN WHICH WE WERE TO ORGANIZE APPROXIMATELY 35 UNITS. YET, COORDINATION WAS REQUIRED FOR THE SITE TO ACT AS ONE HOUSING DEVELOPMENT.



## STUDY

WITH BUNGEE CORDS AND PLASTIC SHEETING, WE ATTEMPTED TO CREATE AN "OPERABLE SEAL" THAT CONFORMS TO THE BODY WHILE IN USE IN ORDER TO STOP THE COLD AIR FROM PASSING THROUGH.

## CONCEPT

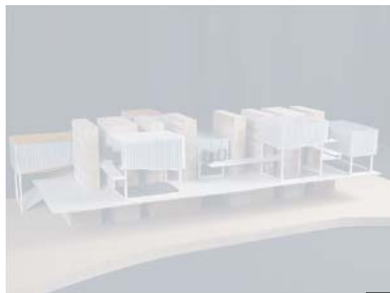
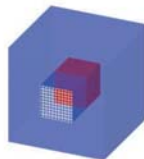
IDEAL THERMAL PROTECTION IS COMPLETE ISOLATION FROM THE EXTERNAL ENVIRONMENT. HOWEVER, INFILTRATION WILL OCCUR, DUE TO THE NEED FOR INHABITATION. THUS, MEDIATION IS REQUIRED TO CONTROL THIS HEAT LOSS. IT ACTS AS A FILTER SO THAT PEOPLE CAN ENTER WHILE NOT ALLOWING HEAT TO ESCAPE FROM THE INSIDE.



# THERMAL SHELTER

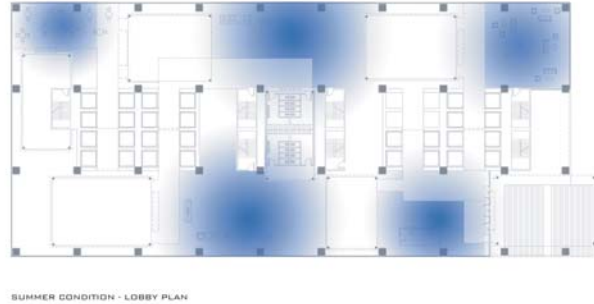
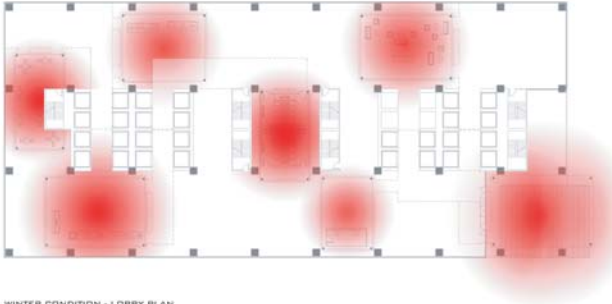
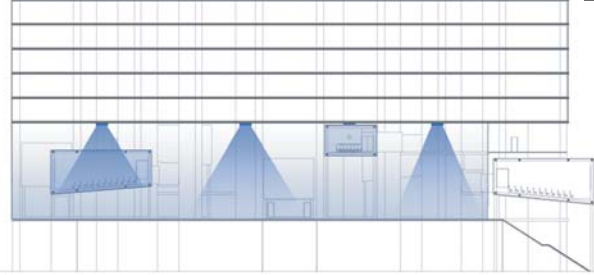
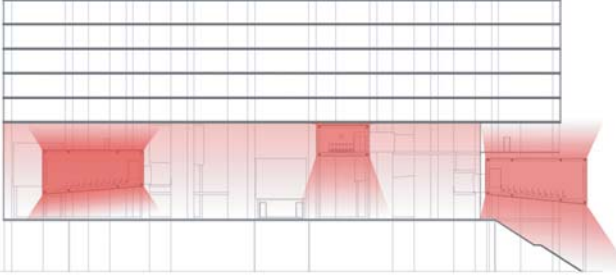
PROFESSOR: KARL DAUBMANN | UNIVERSITY OF MICHIGAN | WINTER 2002

THE FOCUS OF THIS STUDIO, ENTITLED "INSULATION," WAS THE STUDY OF THERMAL ISSUES AND HOW THEY CAN AFFECT AND CREATE SPACE. AFTER INITIAL RESEARCH ON INSULATION AND HEAT TRANSFER, THE STUDIO WAS TO USE THIS KNOWLEDGE TO DESIGN A SHELTER THAT WOULD PROTECT THE INHABITANT[S] FROM COLD WEATHER AND ALLOW THEM TO SURVIVE OVERNIGHT. THE PROJECT WAS JOINTLY DESIGNED WITH PETER MOERLAND.



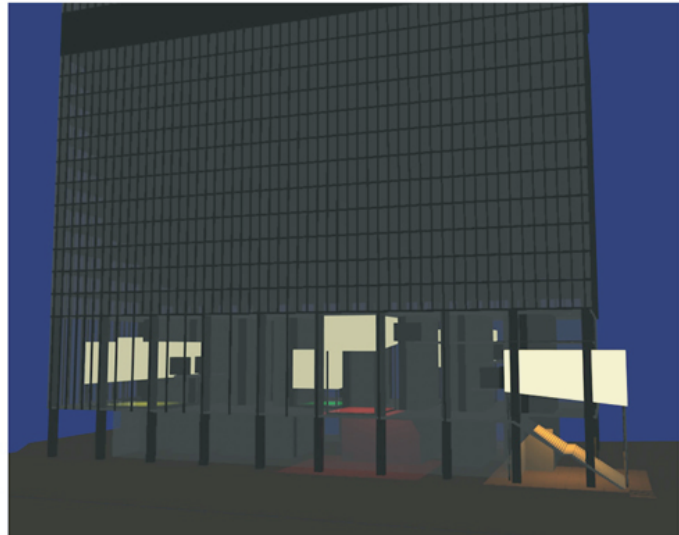
## CONCEPT

THIS PROJECT ATTEMPTED TO CREATE THE CONDITION OF "EXPOSED ISOLATION." THE MOVIE THEATERS ARE INDIVIDUAL OBJECTS SUSPENDED IN THE SPACE TO ISOLATE THEM FOR ACOUSTIC AND THERMAL REASONS, YET THEY ARE ALSO DESIGNED TO EMINATE HEAT AND LIGHT ACCORDING TO THE NUMBER OF OCCUPANTS IN ORDER TO EXPOSE THE INSIDE IN ADDITION TO HEATING THE SPACE. ALSO, THE LOBBY PROGRAMS ARE MOVABLE SO THAT THEY CAN BE PLACED UNDER THE HEAT-PRODUCING THEATERS IN THE WINTER AND IN THE COOLER AREAS BETWEEN THE THEATERS IN THE SUMMER.



WINTER CONDITION - LOBBY PLAN

SUMMER CONDITION - LOBBY PLAN



# MOVIE THEATER

PROFESSOR: KARL DAUBMANN | UNIVERSITY OF MICHIGAN | WINTER 2002

BECAUSE OF ITS RELATIONSHIP WITH THE ADVENT OF AIR-CONDITIONING IN BUILDINGS, THE MOVIE THEATER WAS CHOSEN AS THE BUILDING TYPE FOR THE CONTINUATION OF THIS THERMALLY BASED STUDIO. THE PROJECT CALLED FOR A MOVIE THEATER TO BE INSERTED INTO FLOORS 2 THROUGH 5 OF LUDWIG MIES VAN DER ROHE'S ONE IBM PLAZA BUILDING IN CHICAGO, WHILE CONSIDERING THERMAL ISSUES IN THE DESIGN.

