

**SELECTED WORKS**  
2009 - 2016

# **ORSON SEDMINA**

**Master of Architecture Portfolio**

Department of Architectural Science  
Ryerson University  
BArchSci 2015  
University of Toronto  
BA Honours 2007

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M5T 2G6

**Ryerson University**  
**Yeates School of Graduate Studies**

**Statement of Authorship**

Program

Architecture -MArch



This form must be included as Page 2 of the applicant's professional Dossier/Portfolio/Sample of Work.  
Portfolios/Dossiers which do not contain this form will not be reviewed

I, Orson Sedmina, hereby certify that the work  
submitted in my dossier /portfolio/sample of work for review is entirely of my own hand, or, where produced  
in collaboration with others, has been clearly identified as such

Signed: \_\_\_\_\_

Dated: \_\_\_\_\_

JANUARY 2<sup>ND</sup>, 2016

**RYERSON  
UNIVERSITY**

Graduate Admissions and Recruitment  
350 Victoria St, Toronto, ON, M5B 2K3  
www.ryerson.ca/graduate | gradadmit@ryerson.ca | Tel: 416-979-5150 | Fax: 416-979-5153

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📷 instagram.com/pen\_devil/  
📘 facebook.com/orson.sedmina  
🐦 twitter.com/pen\_devil



2008 - 2011  
&  
2013 - 2015

## EDUCATION

### BACHELOR OF ARCHITECTURAL SCIENCE

Department of Architectural Science  
Ryerson University

#### *Architectural Design Specialization*

Communications Studio I & II / Design Studio I & II / Integration Studio I & II / Option Studio I & II  
The Natural Context / The Built Context / The Built World / Structures I, II & III / Sustainable Practices  
Ideas, Technology & Precedents I, II & III / Digital Architectural Modelling / Site Development & Planning  
Envelope Systems / Bodily Comfort Systems / Tectonics & Materiality / Light & Sound in Architecture  
The Building Project / The Construction Project / Project Economics / Collaborative Exercise I, II, III, & IV  
Documentation & the Construction Contract / Principles of Detailing / Heritage Conservation Theory  
Landscape Design, Theory & Application / The Small Building / How Buildings Work / Architectural Writing



2001 - 2007

### HONOURS BACHELOR OF ARTS

Department of Geography & Fine Art History  
The University of Toronto

#### *Majors*

Social, Economic and Urban Geography (Urban Planning)  
Fine Art History (Architectural History Specialization)

#### *Minor*

Sociology



1996 - 2001

### ONTARIO SECONDARY SCHOOL DIPLOMA

North Toronto Collegiate Institute

Ontario Scholar 1998-99, Recipient H.G. Hall Scholarship Award for *Excellence in Violin Performance* 1997

## EXPERIENCE

HARIRI PONTARINI  
ARCHITECTS

### HARIRI PONTARINI ARCHITECTS

Junior Architectural Designer

2015 - 2016

Preparation of 3D models, conceptual and presentation renders and diagrams for schematic, re-zoning, design development, and site planning approval phases. Completion of drawing sets, permit drawings, statistical analysis for City of Toronto Green Building\Tall Building\Zoning guidelines, diagrams, studies, and renders for a variety of projects in the Greater Toronto Area including:

1 Eglinton East, Bretton Place towers, Bayview Villiage Expansion, 1910 Yonge Street,  
475 Yonge Street RFP, and The Diamond Cottage

Other miscellaneous responsibilities include site documentation, detail drawing and specifications development, precedence and research analysis, client and consultant correspondence, and presentation preparation.



### PROG DESIGN INC

Owner / Operator

2015  
2014  
2013

2013

Hospitality / Entertainment Industry architectural visualization, graphic design services

The Food Dudes Restaurant Group  
49 Spadina Avenue design proposal  
775 Dundas Street West design proposal  
Rasa Restaurant and Bar (opened summer 2014)  
Muzik Beach - The Veuve Bar - Design / Construction Documents

### RESOURCE CENTRE ASSISTANT

Department of Architectural Science  
Ryerson University

2009 - 2010

Student and faculty OMB / Zoning / Material Reference / Precedents research assistance  
Archival duties, various writing tasked for the administration / department



# CURRICULUM VITAE

## COMPETITIONS

2010

### **AECOM URBAN SOS TRANSFORMATIONS**

Extracurricular entrant *The Favela Self Initiative*

2009

### **eVolo SKYSCRAPER COMPETITION**

Collaborative Exercise II entrant *Urban Iceberg: Denying the Antecedent*

## PUBLICATIONS

### **325 MAGAZINE**

Yearly Undergraduate Review Publication

Dept. of Architectural Science, Ryerson University

Editor-in-Chief

Print editor / Contributor

2010 - 2011

2009 - 2010

### **THE UNOFFICIAL RYERSON ARCHITECTURE BLOG (URAB)**

Department-sponsored architecture student life / oped / blog

Administrator / Principle contributor / Writer

2010 - 2011

## ACHIEVEMENTS

### **SELECTIONS: DEPARTMENT ACCREDITATION & ARCHIVE**

Design Studio III - *The Artist's Studio: Gros Morne Arts Centre*

Design Studio IV - *Avant Areopagus Arts School: Reagent Park*

Collaborative Exercise II - *Urban Iceberg: Denying the Antecedent*

2010

2010

2010

### **325 MAGAZINE**

Selected Works - *Urban Iceberg & Grad|Light House*

2009 - 2010

### **SELECTION: END OF YEAR SHOW**

Department of Architectural Science, Ryerson University

Selected Works - Option Studio II - *Market MoCCA: future space studio*

2015

## EXTRA CURRICULAR

### **AIAS FORUM 2010**

Ryerson University

Social Events Coordinator

2009 - 2010

### **VARSITY BLUES MEN'S FOOTBALL**

The University of Toronto

Middle Linebacker / Long Snapper / Special Teams

2001 - 2004

## EXTRA CURRICULAR

### **AIAS FORUM 2010**

Ryerson University

Social Events Coordinator

2009 - 2010

### **VARSITY BLUES MEN'S FOOTBALL**

The University of Toronto

Middle Linebacker / Long Snapper / Special Teams

2001 - 2004

## TECHNICAL EXPERTISE

### **SOFTWARE**

#### Proficient

Autodesk 2015 - AutoCAD Architecture

AutoDesSys -

FormZ 3D 7.0 / Bonzai 3D / RenderZone

Trimble - Sketchup 2015

V-Ray - 3D Rendering

Kerkythea - 3D Rendering

Adobe Creative Cloud -

InDesign / Photoshop / Illustrator / LightRoom

#### Working Knowledge

Autodesk 2015 - Revit Architecture

McNeel - Rhino 3D 5.0

Grasshopper - 3D for Rhino

#### Fabrication

Lasercutting / 3D Printing

CNC Milling / Woodworking

Vacuum Form

#### Traditional Media

Graphite Drafting

Pen & Ink

Pastels & Charcoal

Watercolour



# 1 EGLINTON EAST

Hariri Pontarini Architects  
65+ storey mixed-use development  
Toronto, Ontario, Canada

HARIRI PONTARINI  
ARCHITECTS

One of the first projects I was involved with at HPA, my various tasks on this project have included: schematic design, re-zoning processes, design development, and client / consultant correspondence. In particular I produced re-zoning submission drawing and presentation sets, public meeting presentations, shadow and programme studies, and statistical sets.

This project is ongoing (but on public record) and has not gone to SPA as yet, however I am excited to be able to see this development through so many steps in the development process.

AutoCAD 2012/15, Rhino 3D, Sketchup 2014/15, Adobe CS5



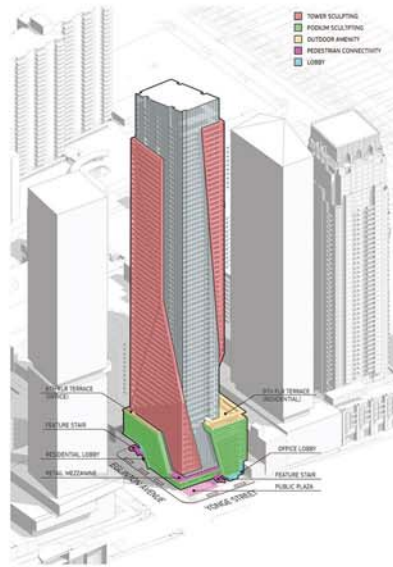
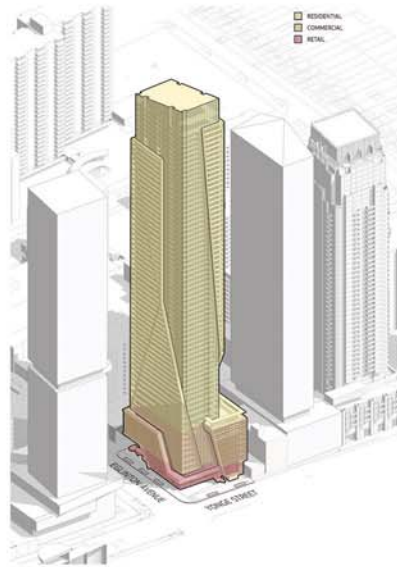
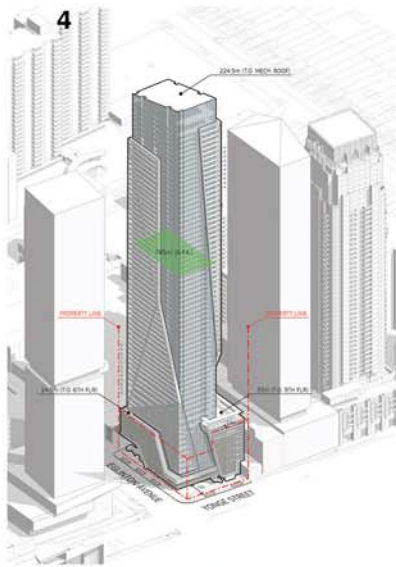
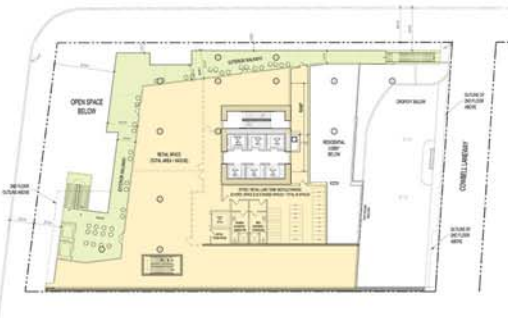
1 (above) & 2 (opposite) - rendered views 2013 (not within work)

3 (right) - selected plans from re-zoning set 2015

Site plan / Grade plan / Mezzanine plan

4 (below) - selected axonometric studies from public meeting 2015

Design Parameters / Use & Occupancy / Building Form & Resultant Features





# RESIDENTIAL TOWER + AMENITIES PAVILION

Hariri Pontarini Architects

26+ storey residential tower & shared amenities pavilion  
Toronto, Ontario, Canada

As part of the residential tower neighborhood intensification program instituted by the City of Toronto, this tower and accompanying amenities pavilion has been well recieved by both developers and the city.

While the aim is to bring increased density to mid-century tower neighbourhood (typified by apartment towers surrounded by large expanses of green areas), the addition of a shared amenities pavilion that retains the green areas while providing increased services to the adjacent buildings is a novel approach, and one that I was most involved in to develop.

AutoCAD 2012/15

Revit Architecture 2015

Rhino 3D

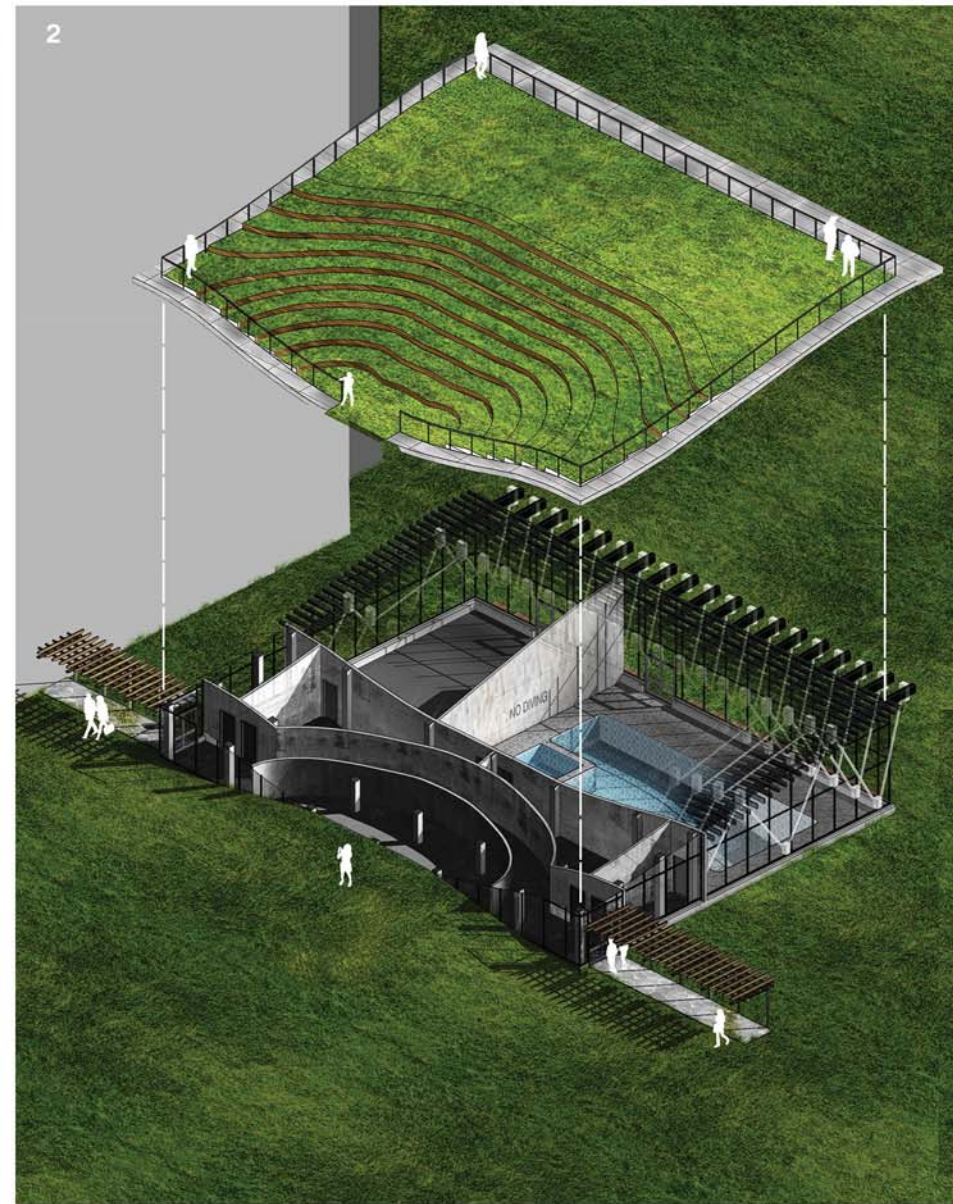
FormZ

Adobe CS5

- 1 (right) - rendered view of the residential tower for schematic design set 2015
- 2 (opposite) - rendered exploded axonometric diagram of the amenities pavilion for schematic design set 2015
- 3 (below) - elevations of the amenities pavilion for schematic design set 2015  
East Elevation / South Elevation / North Elevation



1



2



3

EAST ELEVATION

SOUTH ELEVATION

WEST ELEVATION  
BREITON PLACE  
AMENITY PAVILION



# DIAMOND COTTAGE

Hariri Pontarini Architects  
Family Dwelling  
Ontario, Canada

HARIRI PONTARINI  
ARCHITECTS

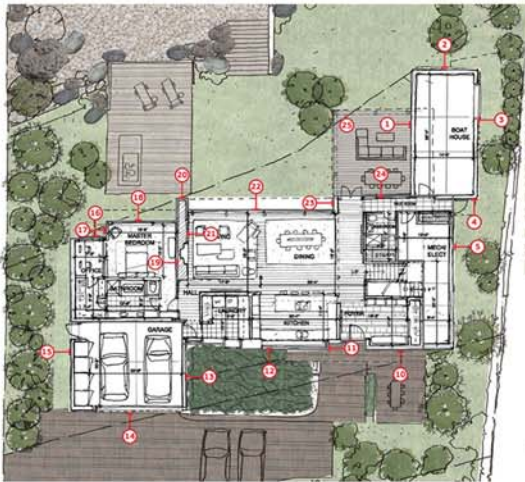
This single family cottage is the first project that I have been tasked with entirely on my own, with little guidance from the founding partner David Pontarini. The client is the CEO of a prominent development company in Canada, and has been receptive to design concepts and iterations. Simple programmatic requirements were given, intended for year-round use by quickly growing family on the banks of Georgian Bay.

Input from the specification writer, construction documents team, and interiors team helped develop this project to a point where a preliminary costing take off was produced.

AutoCAD 2015, Sketchup 2014/15, VRay  
Adobe CS5, Hand Drafting

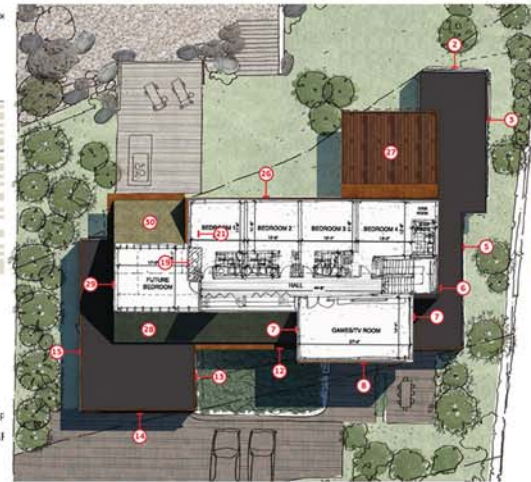


- 1 (top) - rendered view from costing take-off set 2015
- 2 (center) - selected key plans from costing take-off set 2015  
Grade plan / 2<sup>nd</sup> Floor plan / Roof plan
- 3 (bottom) - selected rendered key elevations  
from costing take-off set 2015  
South West elevation / North East elevation



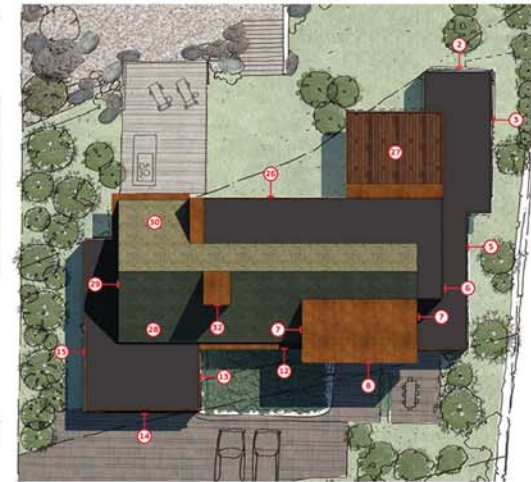
Exterior Surfaces Key	Exterior Surfaces Key
1. Cedar Shingles	1. Cedar Shingles
2. Prefinished Copper Trim	2. Prefinished Copper Trim
3. Rubble Stone Wall	3. Rubble Stone Wall
4. Stained Cedar	4. Stained Cedar
5. Stained Cedar Wall with Copper Trim Poke-out	5. Stained Cedar Wall with Copper Trim Poke-out
6. Prefinished Copper Trim	6. Prefinished Copper Trim
7. Rubble Stone Wall	7. Rubble Stone Wall

GROUND FLOOR  
HARIRI PONTARINI  
ARCHITECTS



Exterior Surfaces Key	Exterior Surfaces Key
1. Cedar Shingles	1. Cedar Shingles
2. Prefinished Copper Trim	2. Prefinished Copper Trim
3. Rubble Stone Wall	3. Rubble Stone Wall
4. Stained Cedar	4. Stained Cedar
5. Stained Cedar Wall with Copper Trim Poke-out	5. Stained Cedar Wall with Copper Trim Poke-out
6. Prefinished Copper Trim	6. Prefinished Copper Trim
7. Rubble Stone Wall	7. Rubble Stone Wall

SECOND FLOOR PLAN  
HARIRI PONTARINI  
ARCHITECTS



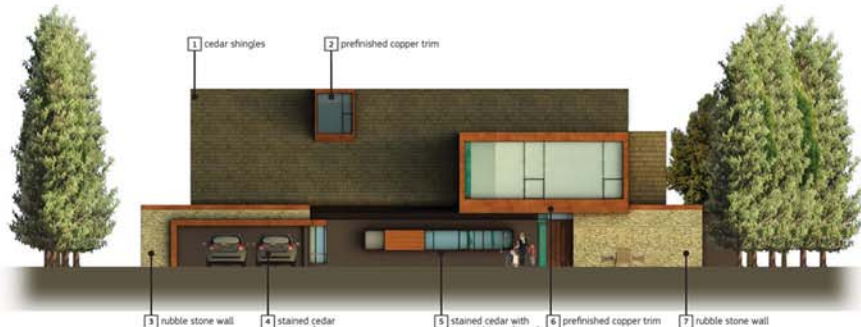
Exterior Surfaces Key	Exterior Surfaces Key
1. Cedar Shingles	1. Cedar Shingles
2. Prefinished Copper Trim	2. Prefinished Copper Trim
3. Rubble Stone Wall	3. Rubble Stone Wall
4. Stained Cedar	4. Stained Cedar
5. Stained Cedar Wall with Copper Trim Poke-out	5. Stained Cedar Wall with Copper Trim Poke-out
6. Prefinished Copper Trim	6. Prefinished Copper Trim
7. Rubble Stone Wall	7. Rubble Stone Wall

ROOF PLAN  
HARIRI PONTARINI  
ARCHITECTS

2

1. Cedar Shingles
2. Prefinished Copper Trim
3. Rubble Stone Wall
4. Stained Cedar
5. Stained Cedar Wall with Copper Trim Poke-out
6. Prefinished Copper Trim
7. Rubble Stone Wall

1. Cedar Shingles
2. Rubble Stone Wall
3. Projecting Deck with Copper Surround and Copper Soffit (wood ipe alternate)
4. Projecting Dormer Oversized Window with Copper Surround / Sill / Opaque / Soffit
5. Large Span Oversized Curtain Wall (alternate price for reduced curtain wall, glazing partition TBD)



1. cedar shingles
2. prefinished copper trim
3. rubble stone wall
4. stained cedar garage door
5. stained cedar with copper trim poke-out
6. prefinished copper trim
7. rubble stone wall

SOUTH WEST ELEVATION  
NTS



1. cedar shingles
2. rubble stone wall
3. projecting deck with copper surround and copper soffit (wood ipe alternate)
4. projecting dormer oversized window with copper surround / sill / opaque / soffit
5. large span oversized curtain wall (alternate price for reduced curtain wall, glazing partition TBD)

NORTH EAST ELEVATION  
NTS

3



# RASA BAR & RESTAURANT

prog design + typeD design

196 Robert Street & Harbord Street  
Toronto, Ontario, Canada

Opened Sept 2014



Launching the company specifically for this project, with two other project proposals completed since, PROG Design melds my prior experience in the hospitality industry with my vocation for architectural design.

Working with an experienced industrial designer, a contractor, an engineer, and the client catering and restaurant services company, the project brief was simply to imagine a dynamite explosion within a mine that reveals a subterranean restaurant with mine-like furnishings and fixtures. Rarely do initial design renders so closely resemble the finished product, which is a particular point of pride in this case.

*FormZ, RenderZone, Vray, AutoCAD 2014, Photoshop*

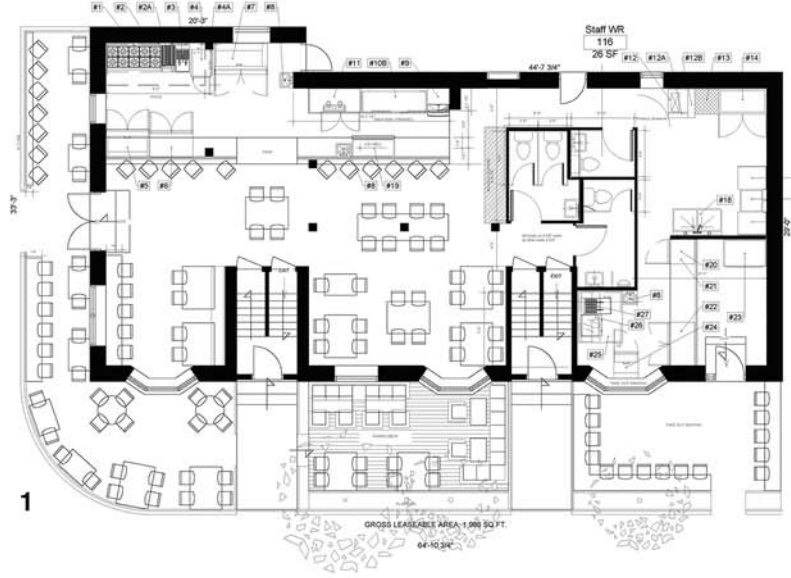
1 (top) - appliance and occupancy plan for permit set 2013

2 (center) - selected renders from design set 2013

Exterior patio and furnishing / Dining room / Bar and back-bar

3 (bottom) - selected photographs of after opening 2014

Entrance portico / Dining room / Bar and back - bar



2



3





## MARKET MoCCA

*futurespace studio +  
the museum of contemporary canadian art*

Academic year 4

ARC820 Option Studio II

Professor John Cirka

208 Augusta Ave. Toronto ON

The object of this studio was to locate and create a viable space for the recently uprooted Museum of Contemporary Canadian Art, while engaging in an architectural dialogue with issues of temporality and the dissipative experience of time.

Through an intensive study of current philosophical and empirical sources, how one experiences time through the mediums of space, distance, and form led to the formulation of a design methodology. This was then applied to the art museum typology, and framed into the vernacular and socio-economic milieu of Toronto's Kensington Market where a large property had recently been vacated.

Experiencing art is, at base, a physical and temporal act. It was found that each moment, or now, is cognitively registered over a 4.2 second span. Taking into account average walking speed, this implies that an experience of now covers a distance of 5 meters. This is taken as the basis for form manipulation, as well as a framing tool for specific moments. Added to this is the concept of time dilation due to gravity over a distance, whereby it is now possible to measure a slight time difference over only one meter. Dilation of form is used to evoke this principle.

FormZ, RenderZone, SketchUp, AutoCAD Architecture 2014

Adobe Photoshop / InDesign

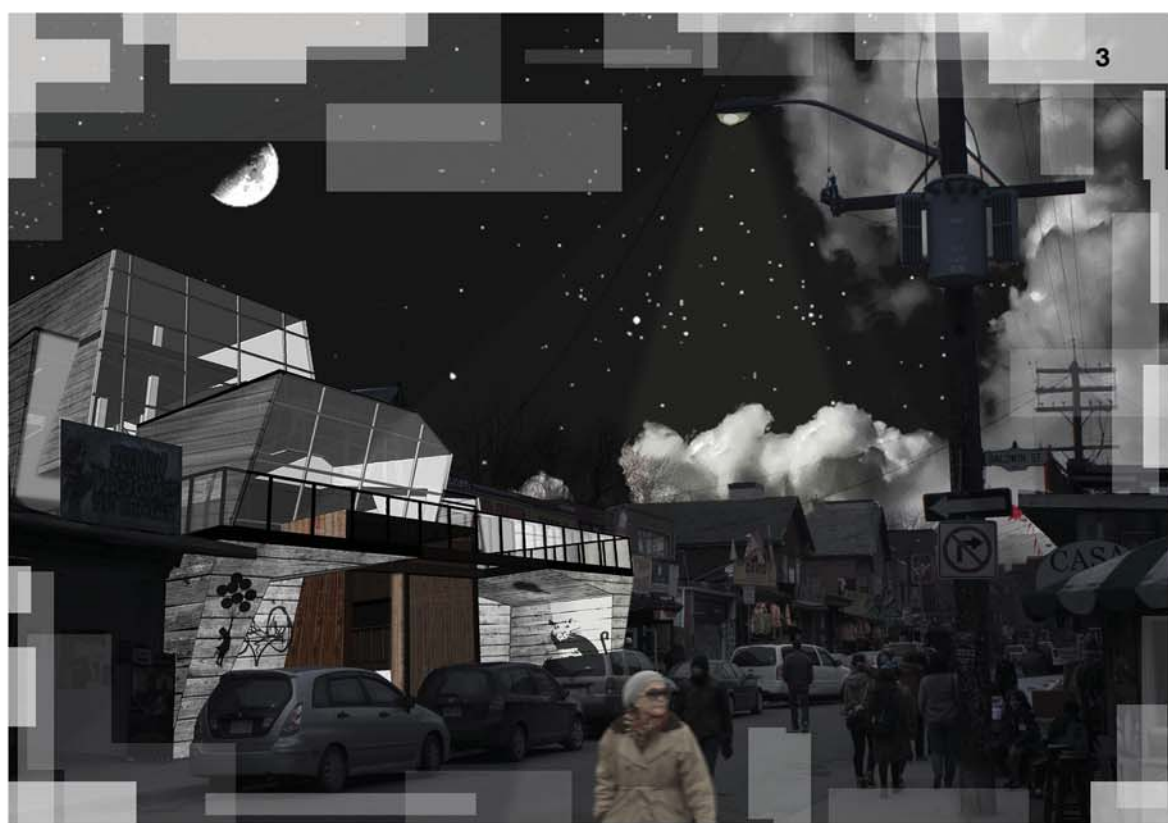
- 1 (left) Site plan, Toronto's Kensington Market
- 2 (center) Rendered view of the East elevation from the NE
- 3 (top right) Rendered view of the East elevation from the SE
- 4 (bottom right) Rendered view of the West elevation

**mocca**

**museum of  
contemporary  
canadian art**









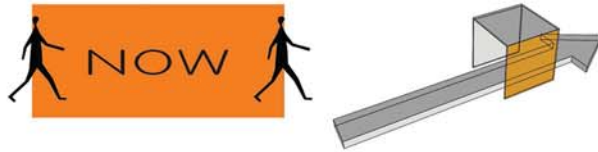
## DESIGN METHODOLOGY

Now lasts on average between 2 and 3 seconds.

Researchers suggest that this window is the "subjective present".

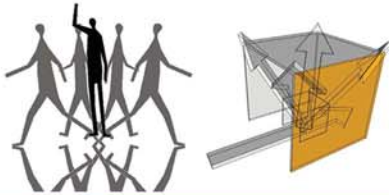
"How your brain creates now" *New Scientist* 2015

The average walking speed of a human is 5km/h or approx 1.4m/s. Therefore each glimpse of our subjective present is, on average, experienced over 4.2M



"Time condemns us to change. We would rather not change, but we have no choice. Change does not happen in a sequentially linear way, but simultaneously, in many directions at once. Each thing is growing and decaying at the same time, only at different rates. Change is not defined in a sequence of succeeding frames, but in a matrix of frames that each occupy the same space and moment."

Lebbeus Woods



We observed time dilation from relative speeds of less than 10 meters per second by comparing two optical atomic clocks connected by a 75-meter length of optical fiber. We can now also detect time dilation due to a change in height near Earth's surface of less than 1 meter. This technique may be extended to the field of geodesy, with applications in geophysics and hydrology as well as in space-based tests of fundamental physics.

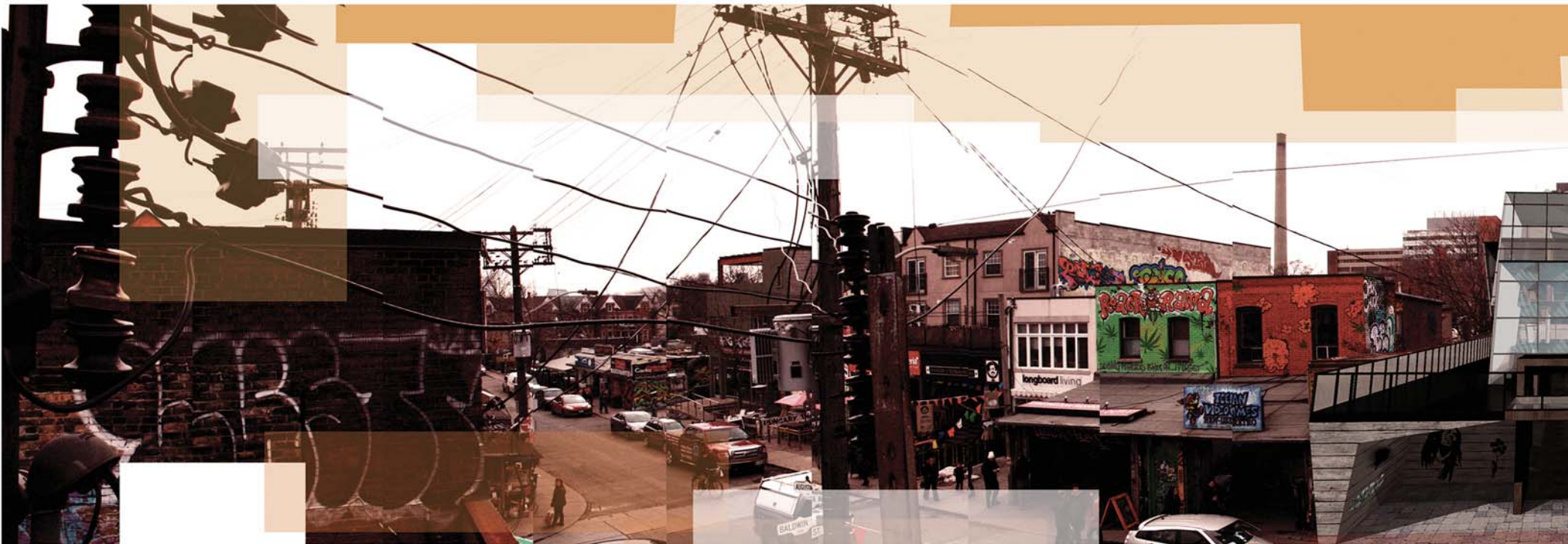
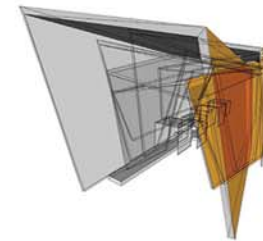
"Optical Clocks and Relativity" *Science*, Vol. 329 No. 5999 PP. 1630-1633



The task of the architect is to set in motion, in a particular direction, a chain of events he cannot control.

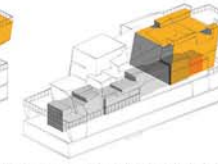
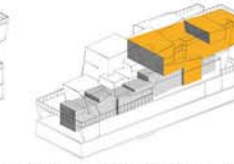
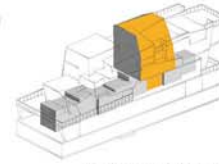
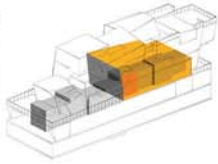
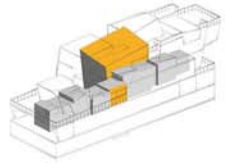
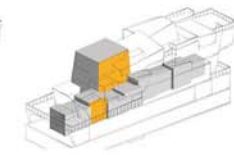
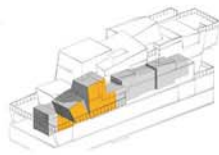
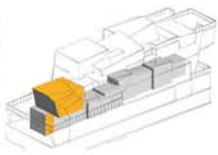
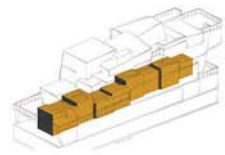
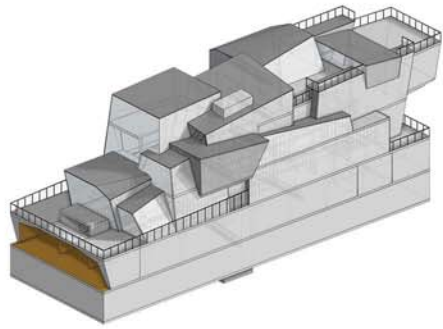
Transformation. Transmutation. Transfiguration.

Lebbeus Woods

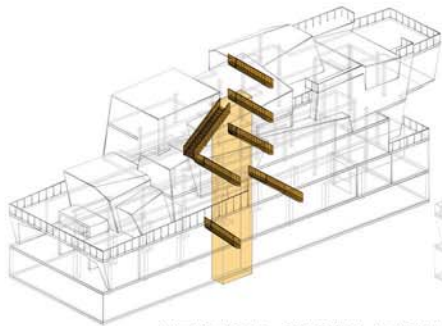
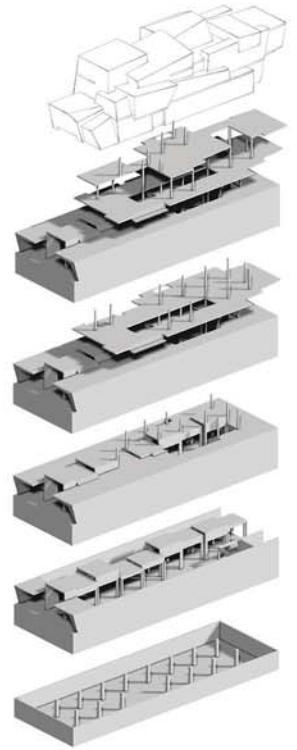




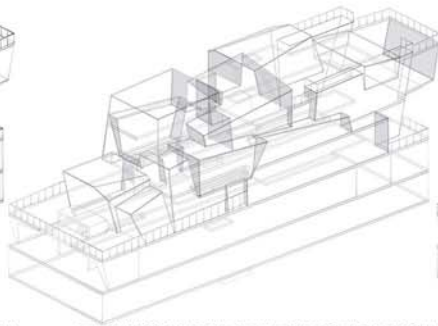
## AXONOMETRIC STUDIES



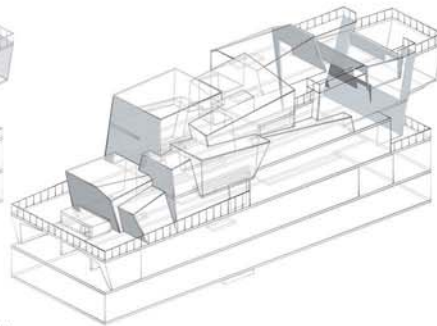
FORM / TEMPORAL / EXPERIENTIAL MANIPULATION



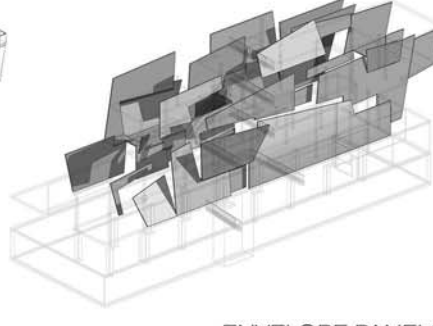
VERTICAL CIRCULATION



TRANSPARENT FENESTRATION

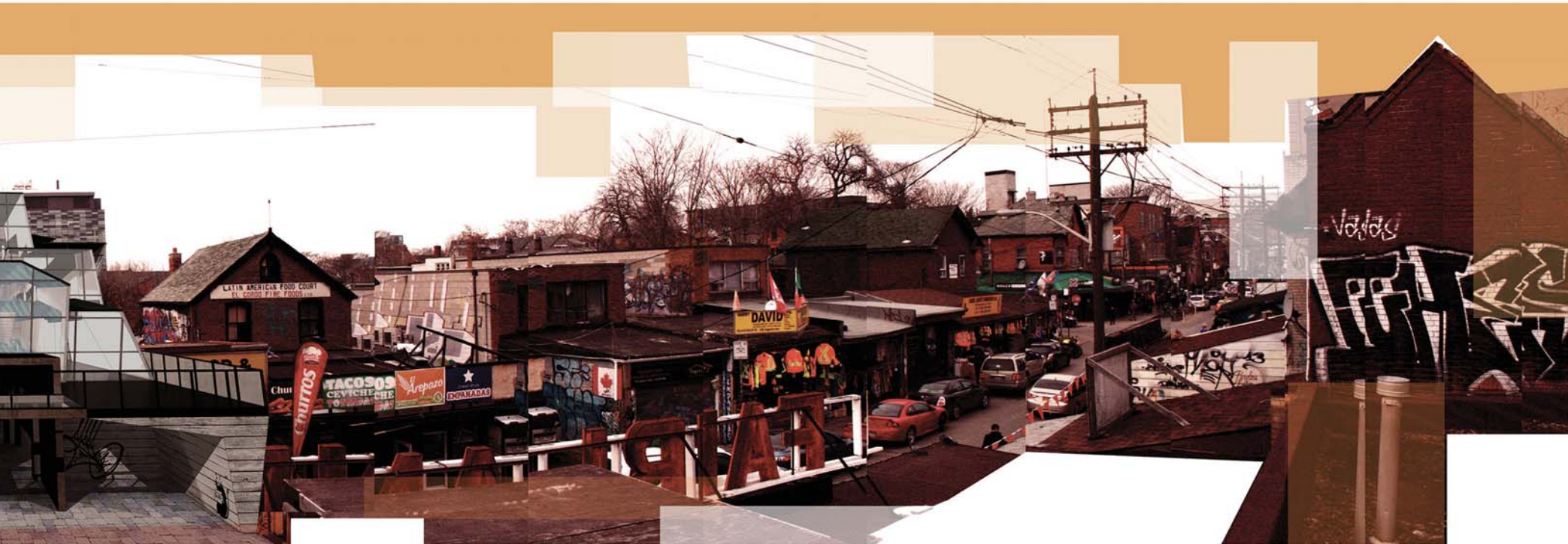


FRITTERED FENESTRATION



ENVELOPE PANELS

STRUCTURAL SYSTEM







NORTH ELEVATION

SOUTH ELEVATION



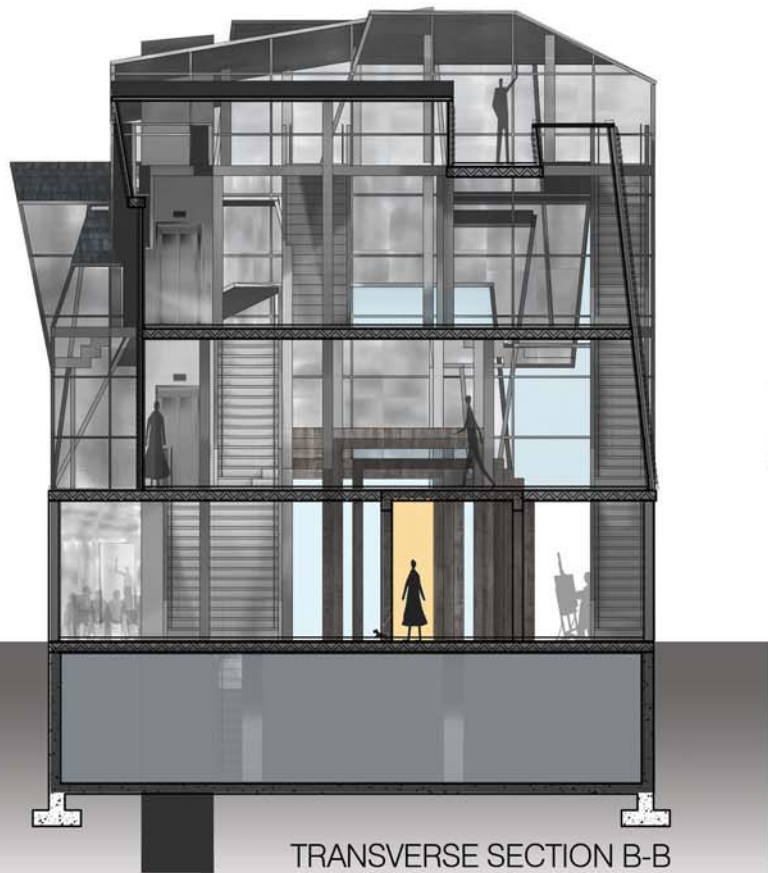
LONGITUDINAL SECTION A-A



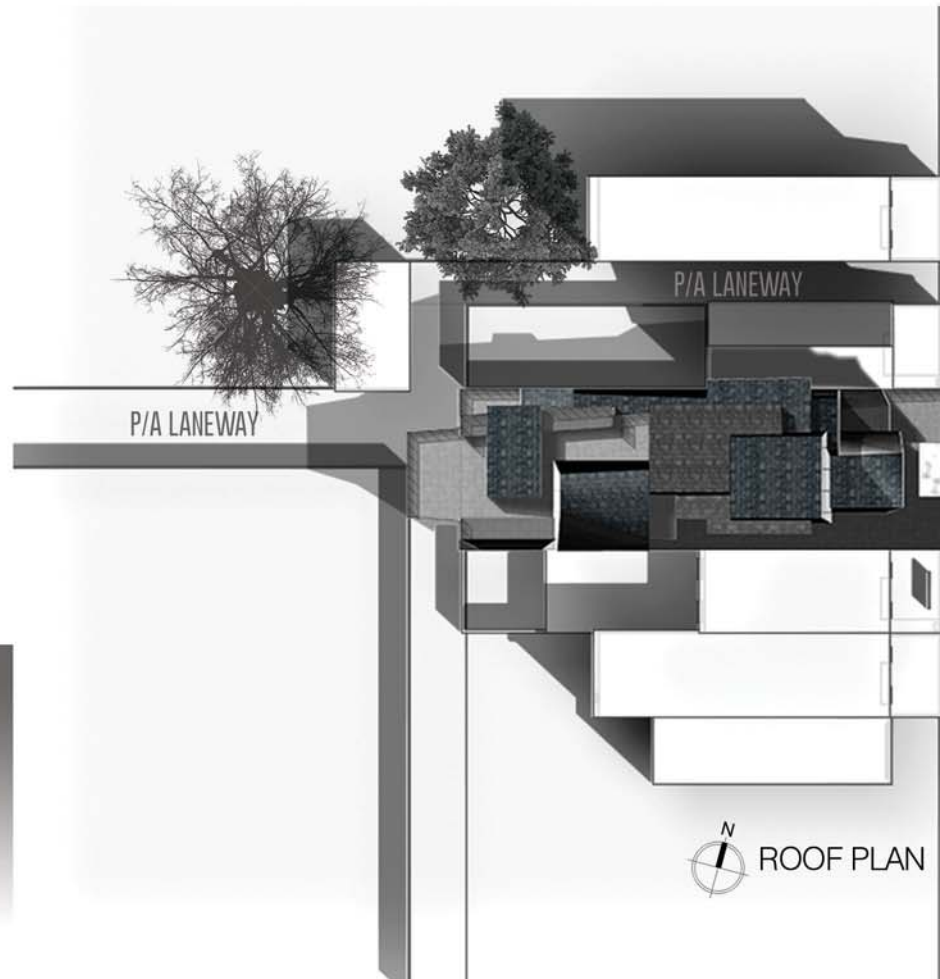
EAST ELEVATION



WEST ELEVATION

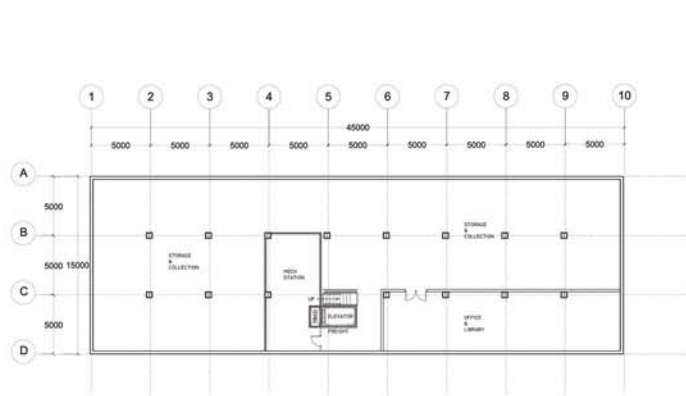


TRANSVERSE SECTION B-B



ROOF PLAN





SUB FLOOR PLAN



GROUND FLOOR PLAN



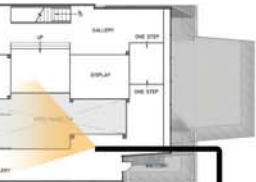
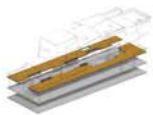
GRADE VIEW FROM THE EAST



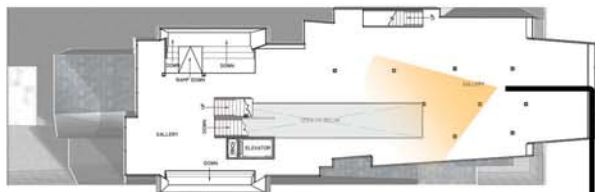
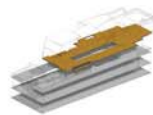
2<sup>ND</sup> FLOOR VIEW TO THE EAST



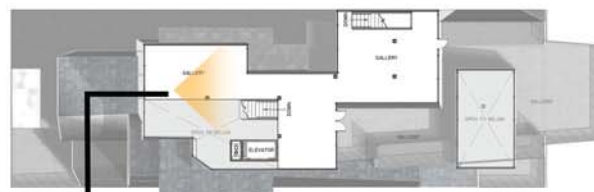
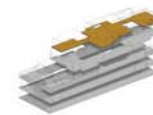




2<sup>ND</sup> FLOOR PLAN



3<sup>RD</sup> FLOOR PLAN



4<sup>TH</sup> FLOOR PLAN



2<sup>ND</sup> FLOOR VIEW TO THE EAST



3<sup>RD</sup> FLOOR VIEW TO THE EAST



4<sup>TH</sup> FLOOR VIEW TO THE WEST

EVERYTHING IS PAST  
studio

## EVERYTHING IS PAST

*futurespace + grasping time*

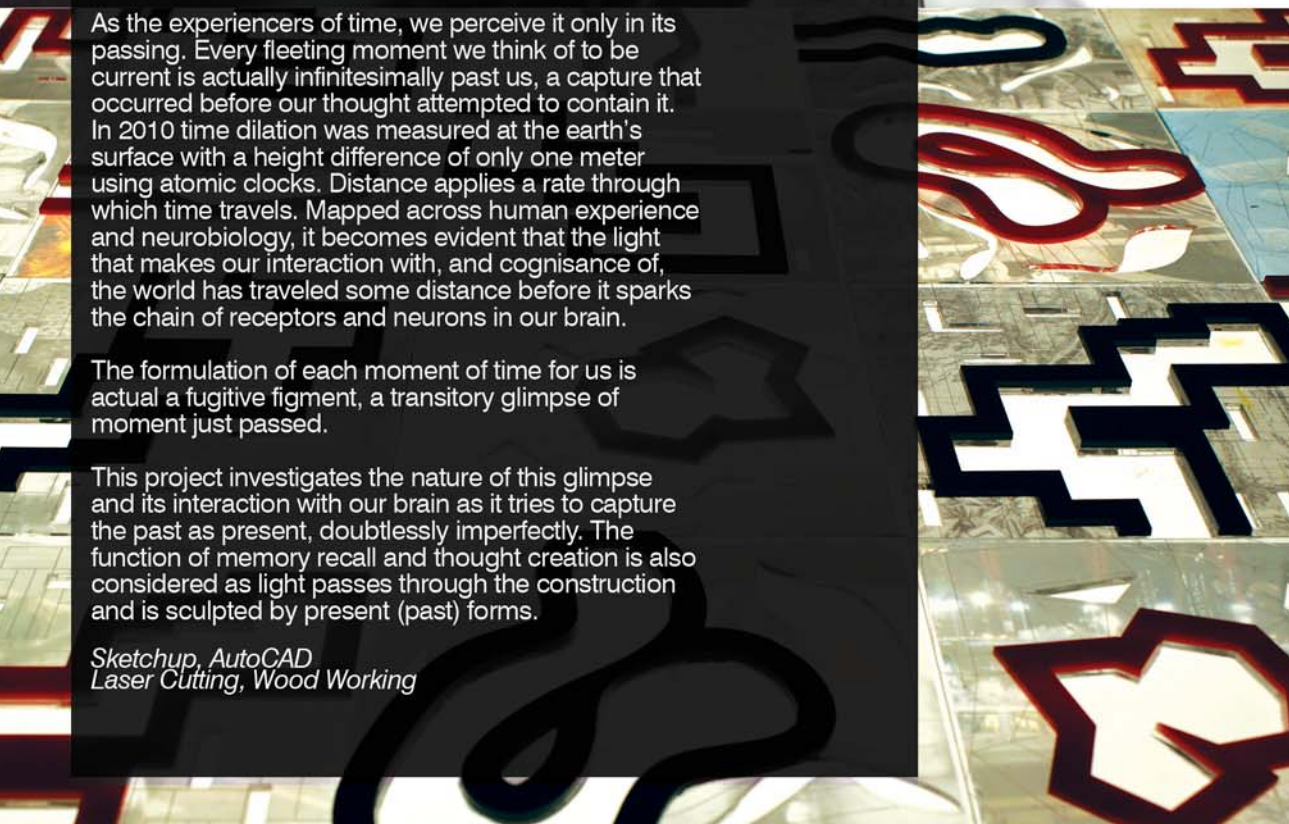
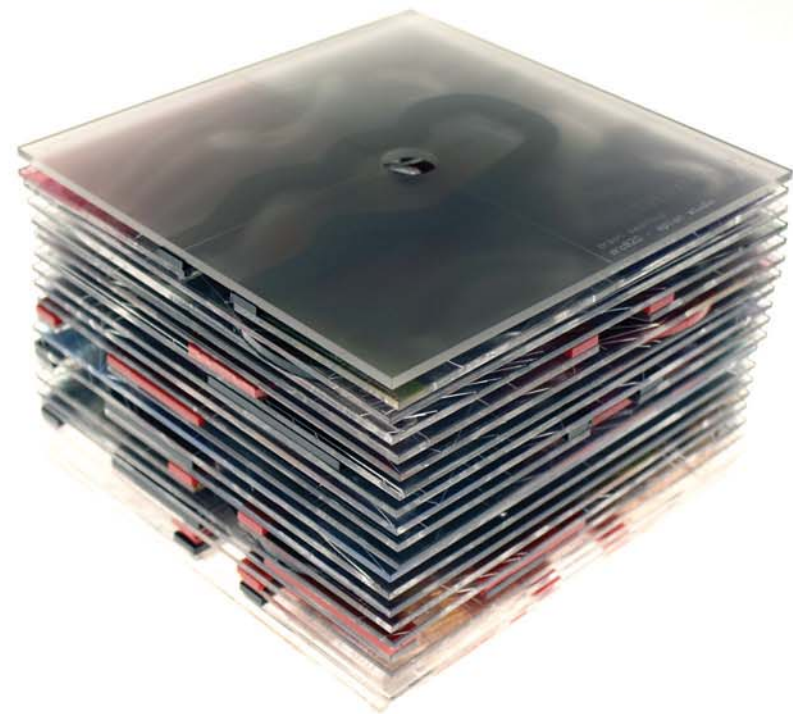
Academic year 4  
ARC820 Option Studio II  
Professor John Cirka

As the experiencers of time, we perceive it only in its passing. Every fleeting moment we think of to be current is actually infinitesimally past us, a capture that occurred before our thought attempted to contain it. In 2010 time dilation was measured at the earth's surface with a height difference of only one meter using atomic clocks. Distance applies a rate through which time travels. Mapped across human experience and neurobiology, it becomes evident that the light that makes our interaction with, and cognisance of, the world has traveled some distance before it sparks the chain of receptors and neurons in our brain.

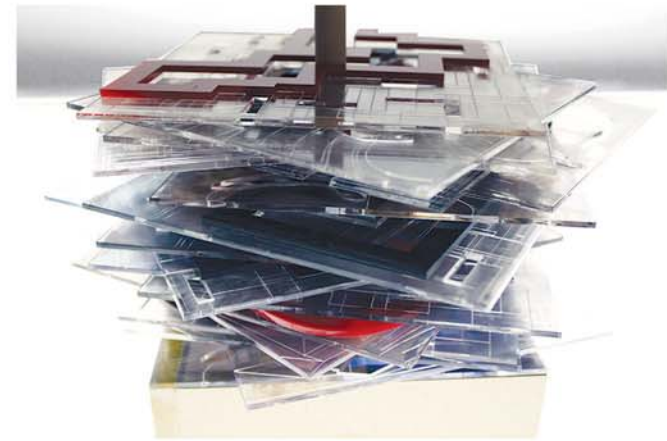
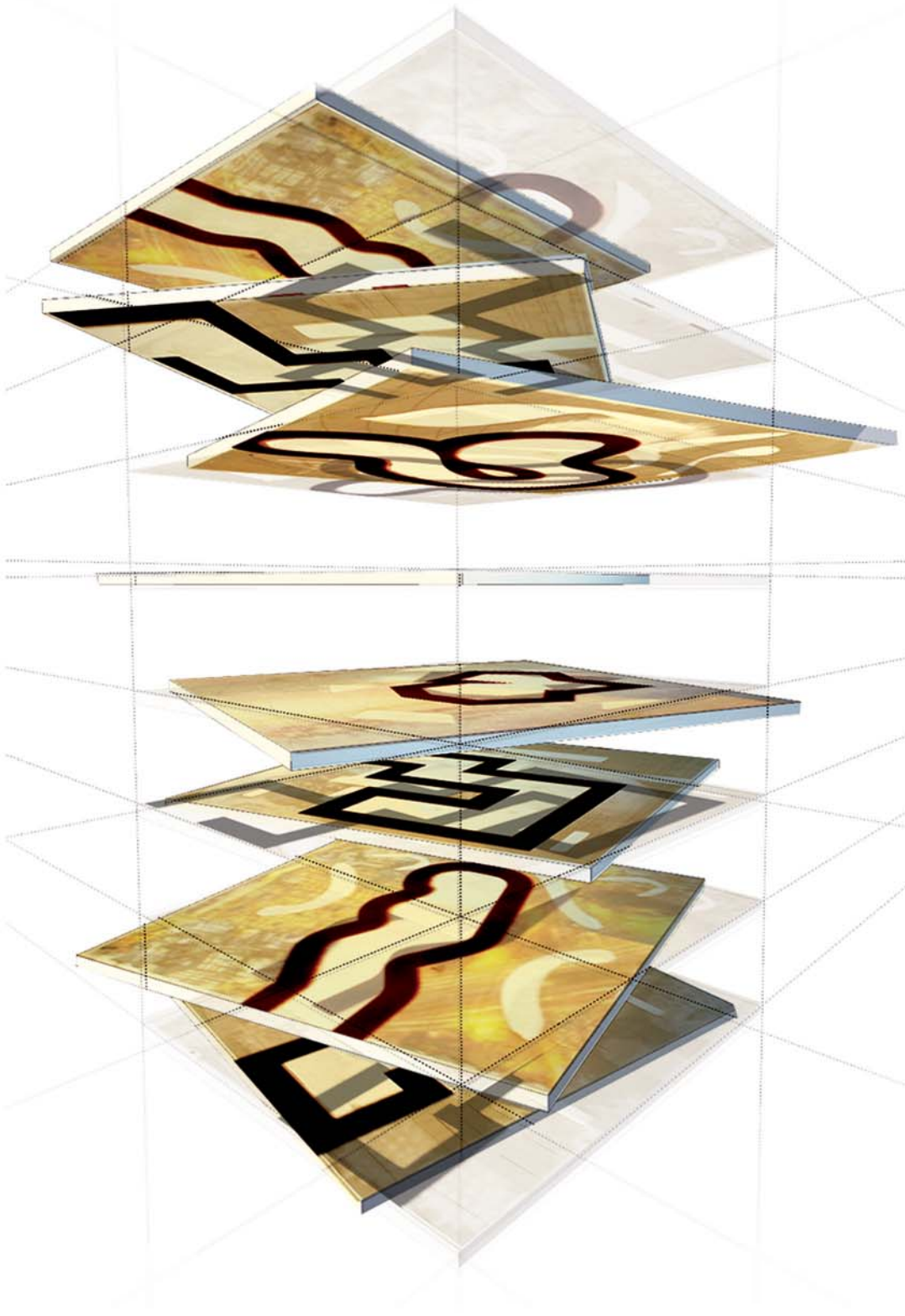
The formulation of each moment of time for us is actual a fugitive figment, a transitory glimpse of moment just passed.

This project investigates the nature of this glimpse and its interaction with our brain as it tries to capture the past as present, doubtlessly imperfectly. The function of memory recall and thought creation is also considered as light passes through the construction and is sculpted by present (past) forms.

*Sketchup, AutoCAD  
Laser Cutting, Wood Working*









# AMORPHOUS AGENCY

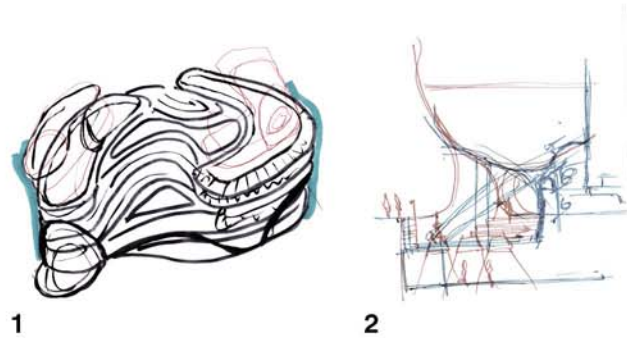
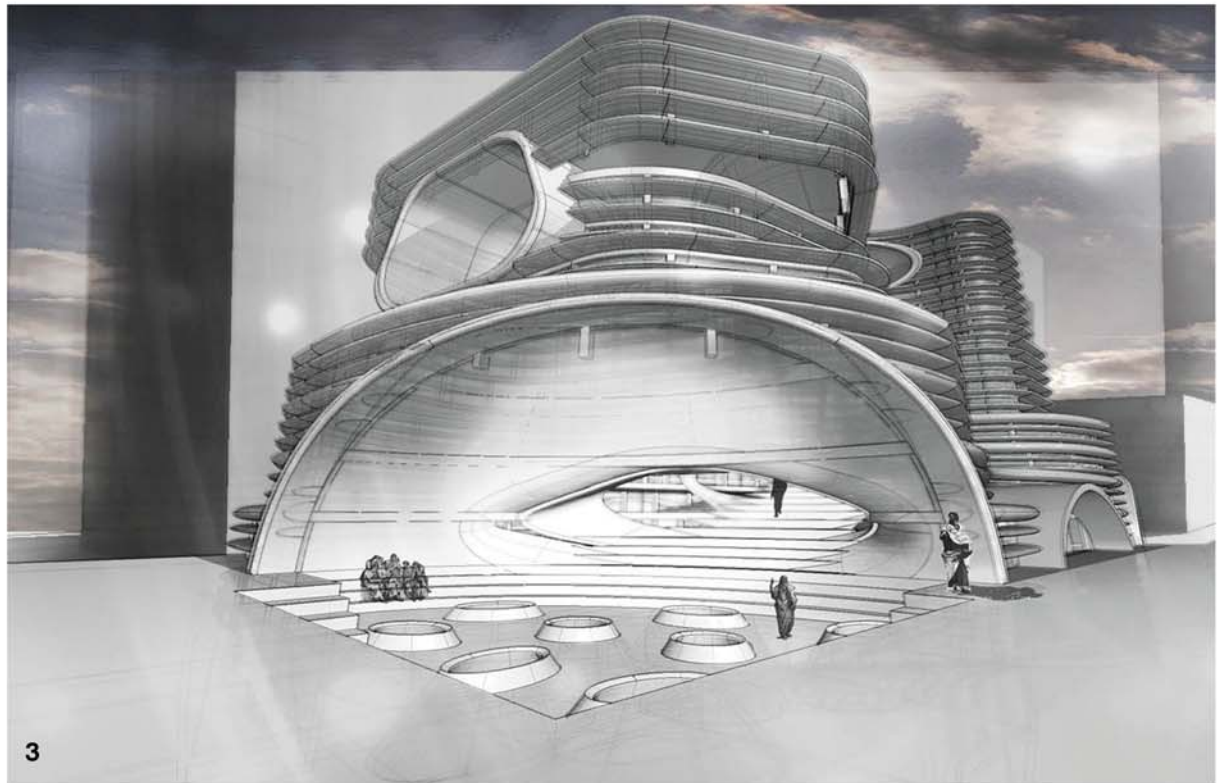
*civic architecture +  
monument & governance for the 21<sup>st</sup> century*

Academic Year 4  
ARC720 Option Studio I  
Professor George Kapelos

'Politics is not a game'. We hear it all the time. Real consequential decisions about quantitative and personal actions and services are made every day in municipal government, but most of us only take what we really need to know about government, what meets our needs and that's all.

This project aims to harness the dark matter that lies between the lay person, the everyday Joe, and the authoritarian or the service provider. It seeks to, through movement and form, force these two seemingly polar opposites together to create a symbiotic government that takes the best from each world, and acts upon its shared experience with great agency.

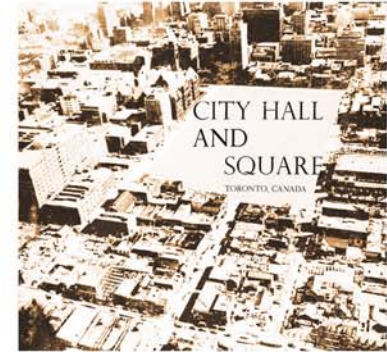
*FormZ, RenderZone, SketchUp, AutoCAD  
Photoshop, Illustrator, InDesign  
Hand Rendering: Graphite & Ink  
Laser Cutting, Wood Working*



- 1 (left top) entry and council chamber study
- 2 (left bottom) amorphous sketch study
- 3 (top right) rendered view from the NE at Queen & Bay
- 4 (bottom right) rendered elevations East / North / West elevations



photo of original competition model



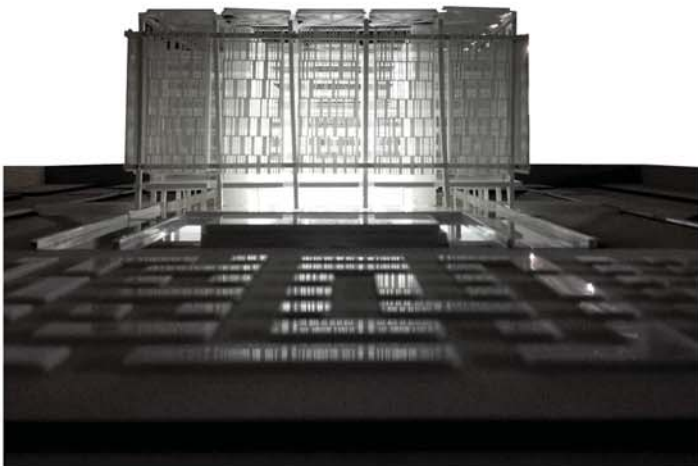
## AMORPHOUS AGENCY

*civic architecture +  
city hall & square competition*

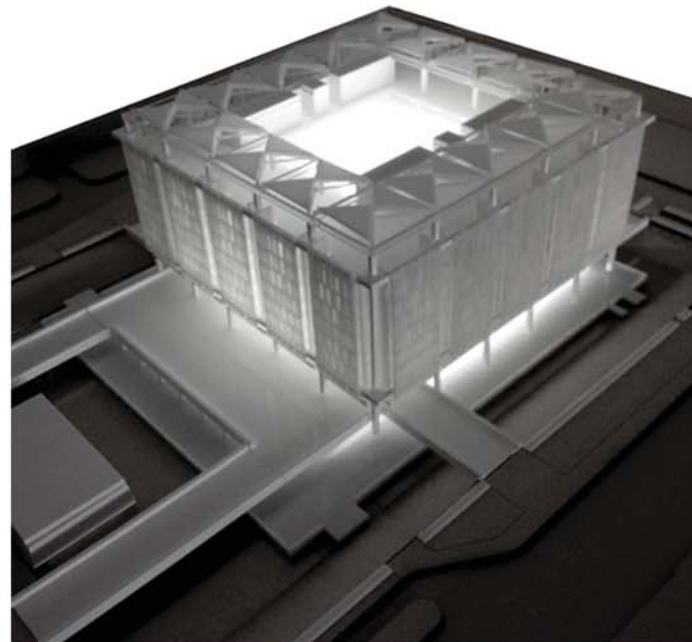
Academic Year 4  
ARC720 Option Studio I  
Professor George Kapelos

The international competition for Toronto's new City Hall entitled 'City Hall and Square' held in 1958 was the animus for an introductory portion of the term's studio course. Students were tasked, in teams of two, with recreating one of the finalist entires from the competition.

Through the study and almost biological dissection of the catalogued submission documents, a rich understanding of governance typology was uncovered. Novel and intricate programmatic, spatial, and structural planning and articulation was examined and recreated through the construction of a detailed scale model, which has since been featured in an exhibition celebrating the original competition.



student constructed replica model 1 : 400  
featured in *Shaping Canadian Modernity Exhibition (2015)*  
Ryerson University Department of Architectural Science  
Paul H. Cocker Gallery





## USE IT OR LOSE IT

*adaptive reuse +  
the small building*

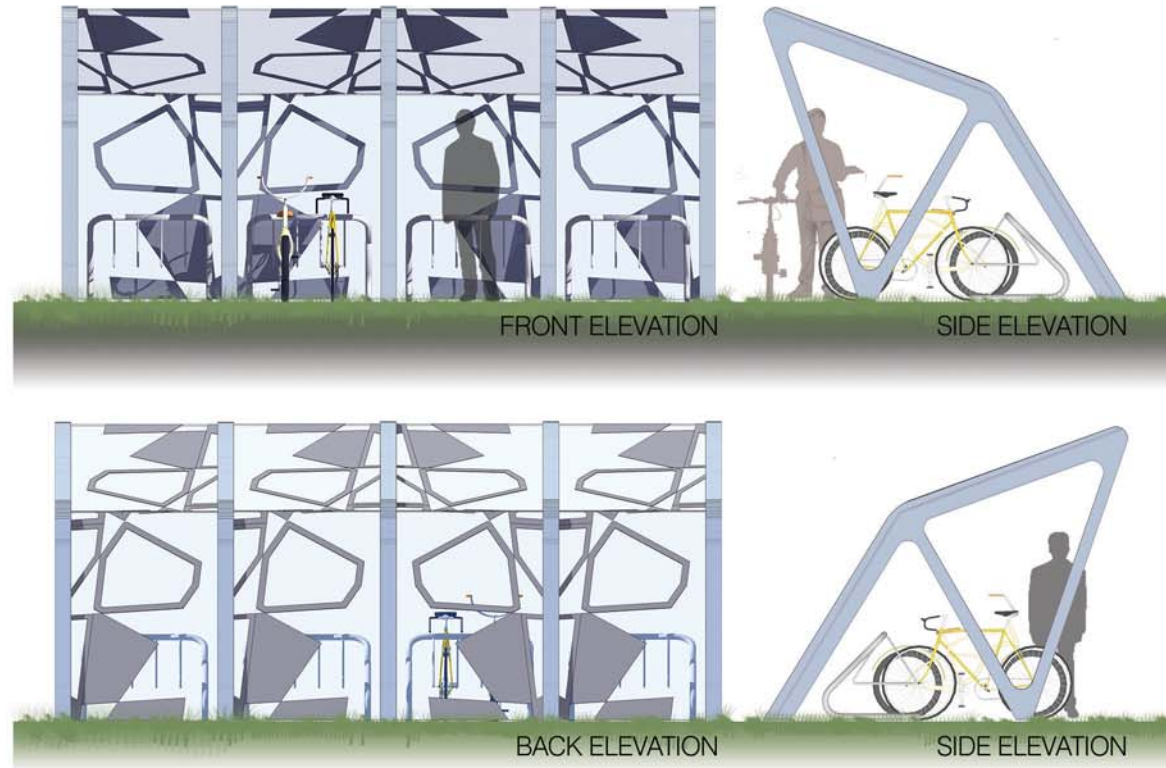
Academic year 4  
ASC856 The Small Building  
Professor Barush Zone  
325 Church Street, Toronto ON

A curtain wall mock-up for the Ryerson University Student Learning Centre building designed by SNOHETTA had been erected on the lawn south of the RU Architecture Science building. With the actual building nearing completion the student was tasked to reuse the building components of the mock-up, or else 'lose it' to demolition.

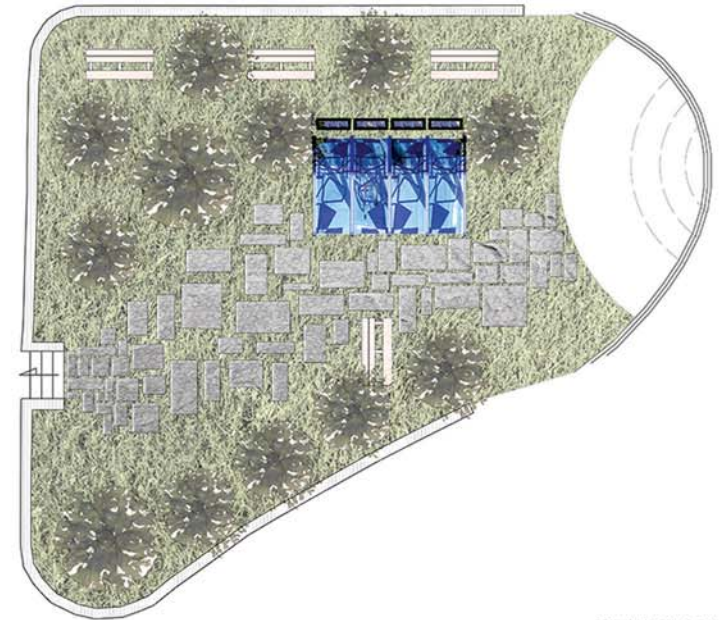
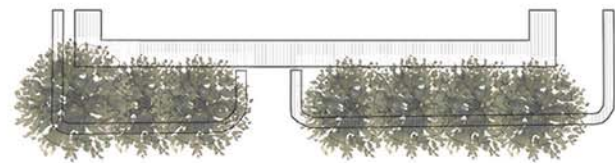
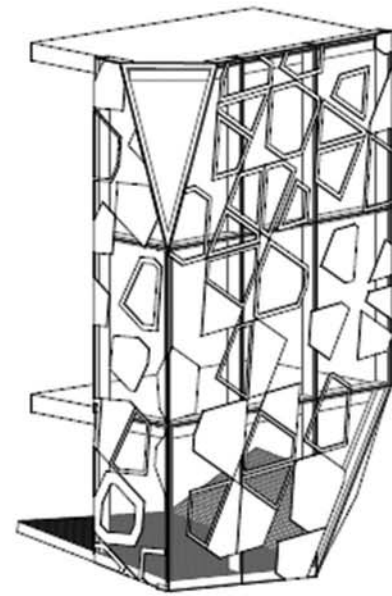
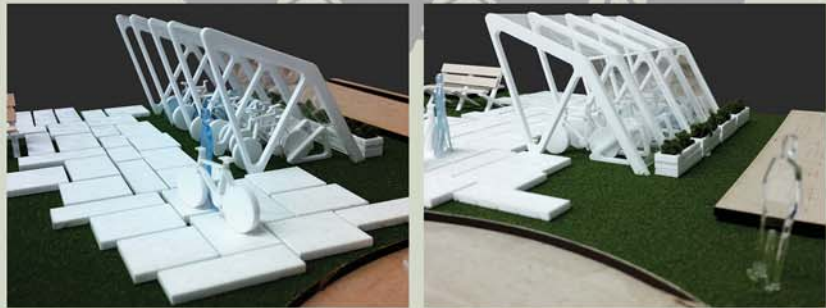
Designing something that adds both aesthetic and functional value to an urban campus while reusing materials that would otherwise be discarded was the essence of the project brief.

While more prevalent in Asian and Northern European countries, the covered bicycle rack is now appearing more frequently in Canada, especially in denser creative neighborhoods and cities. This proposal endeavours to retask the patterned glass panels and steel members as a shelter and water shedding structure.

*FormZ, RenderZone, AutoCAD  
Photoshop, InDesign  
Laser Cutting, Wood Working*









## TRADITIONAL YET PROGRESSIVE

*the toronto museum project*

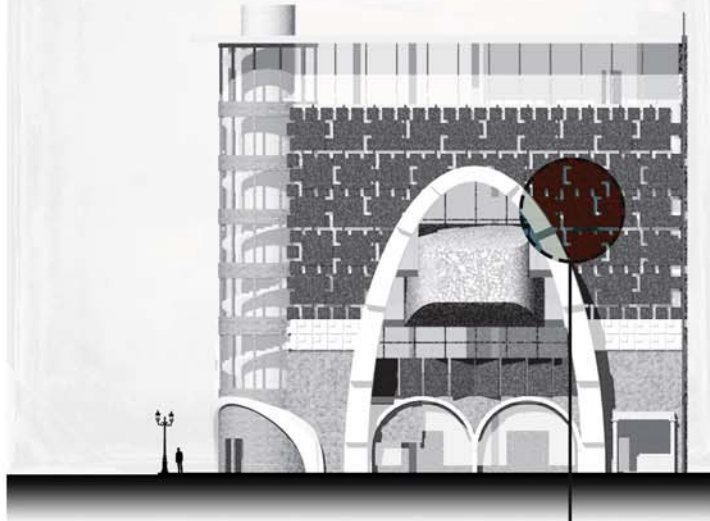
Academic year 3

ARC620 Integration Studio II

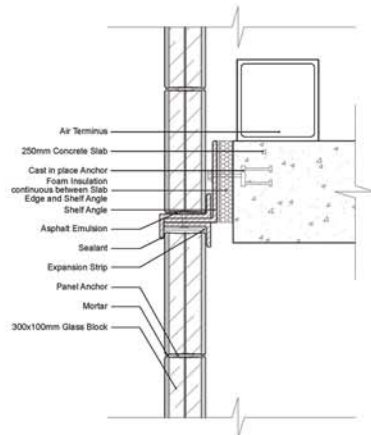
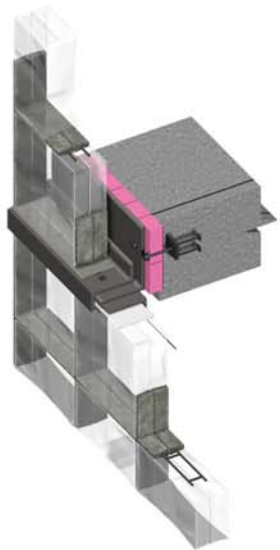
ASC623 Principles of Detailing

Professor Arthur Wigglesworth (both courses)

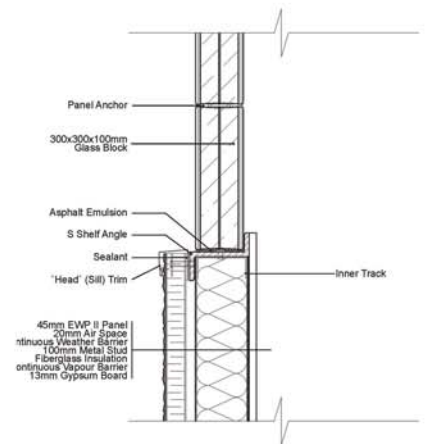
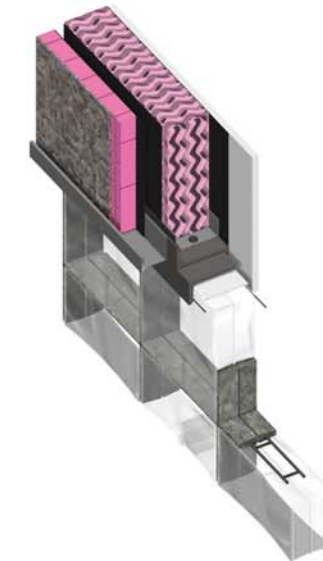
Church & Front Street, Toronto ON



DETAILED AREA



1A - Glass Block to Slab Edge Section Detail



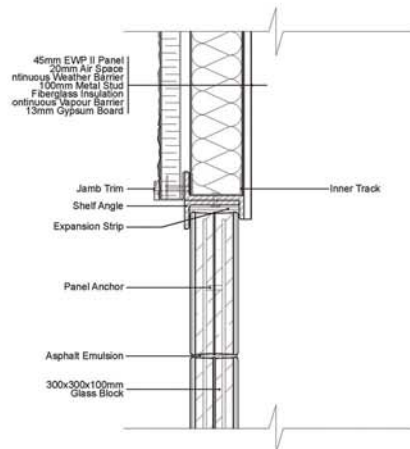
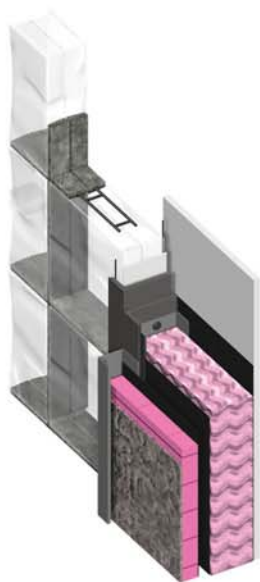
2A - GB to IMWP "Head" Section Detail

The design of a new archival Toronto Museum in the heart of the thoroughly studied and historically rich St. Lawrence Market was tasked to the students. Through interdependent course work incorporating detailing, light & sound in architecture, and project economics, a schematic design proposal was undertaken as a continued component over the course of an entire academic year. This project is representative of the work done in the two terms of the 'Integration Studio' year.

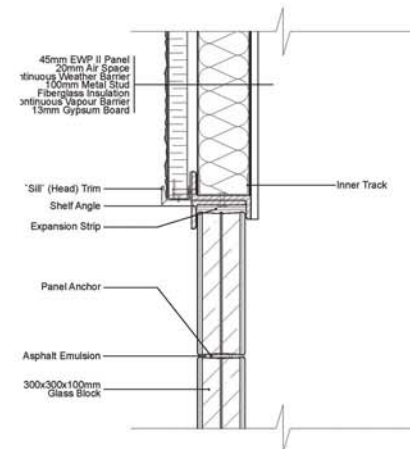
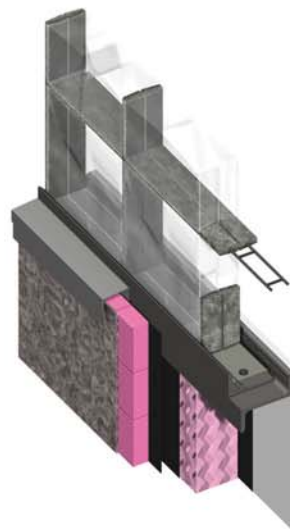
As a linked project to the Integration Studio courses, the major project in the Principles of Detailing course was intended to closely analyze an intricately designed intersection detail of the scheme. This intersection connects a structural feature with two different types of envelope panelling.



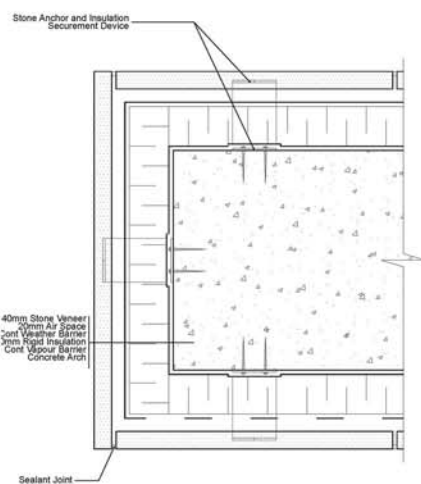
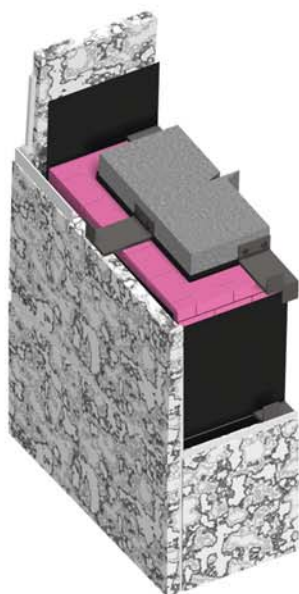




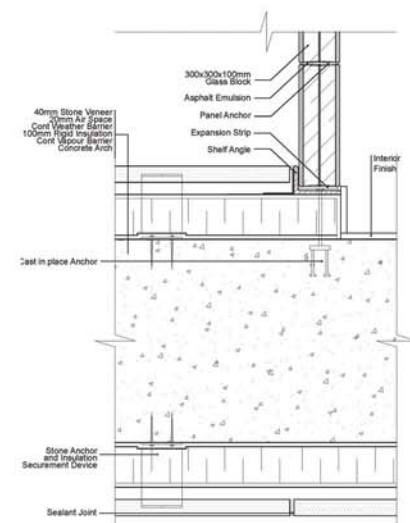
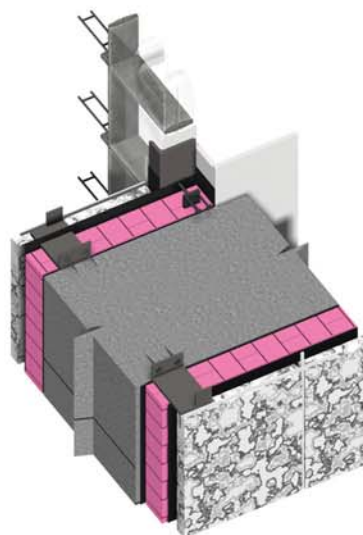
3A - GB to IMWP Jamb Plan Detail



4A - GB to IMWP 'Sill' Plan Detail



5A - Stone Veneer to Concrete Backup Arch Plan Detail



5A - Stone Veneer to Concrete Backup Arch Plan Detail



# TORONTO MUSEUM PROJECT

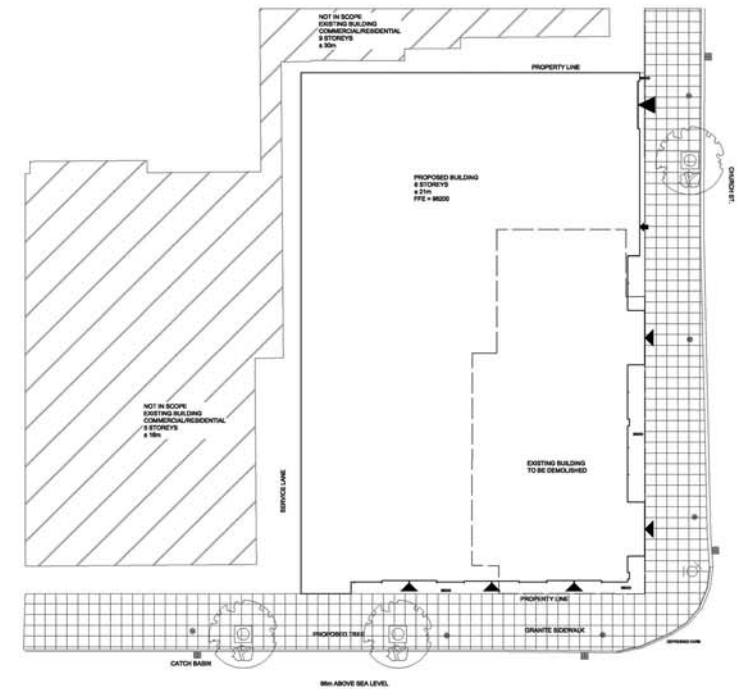
construction documents

Academic Year 3  
ASC622 Documentation and the  
Construction Contract  
Professor Baruch Zone  
Church & Front Street, Toronto ON

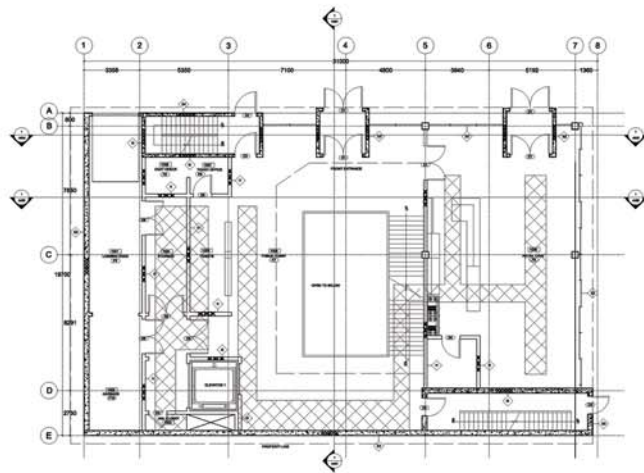
Completed as a group project, one student's scheme was selected to be extended into a full construction document set.

Throughout this project the production and coordination of the document set, along with a large portion of the actual drawing output, was completed by the student, under strict deadline constraints.

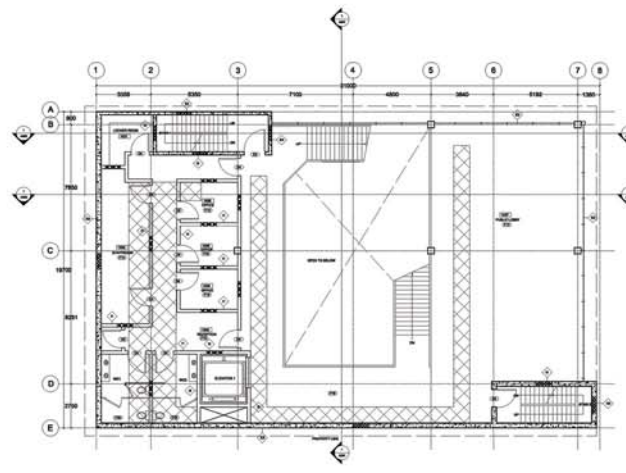
Sketchup, Vray  
Revit Architecture, AutoCAD  
Photoshop, InDesign



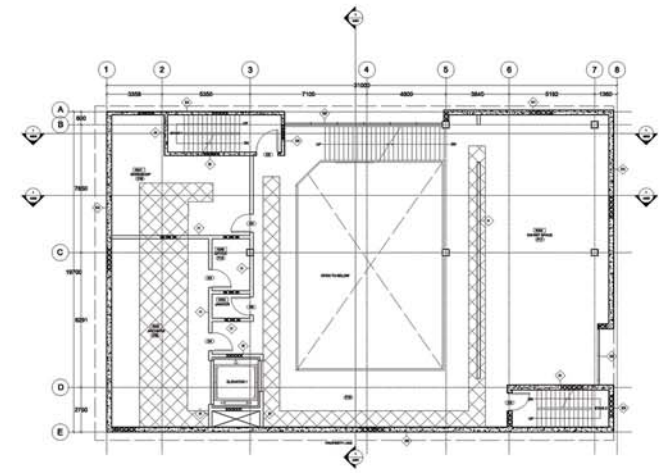
SITE PLAN



GRADE PLAN

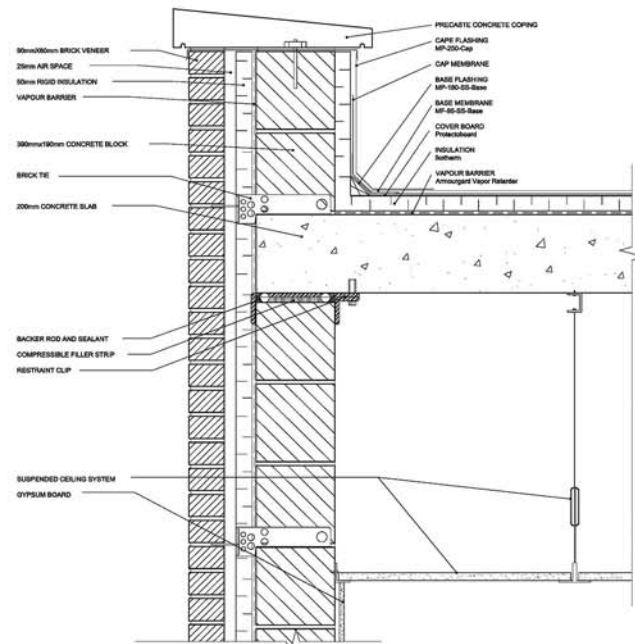


2ND FLOOR PLAN

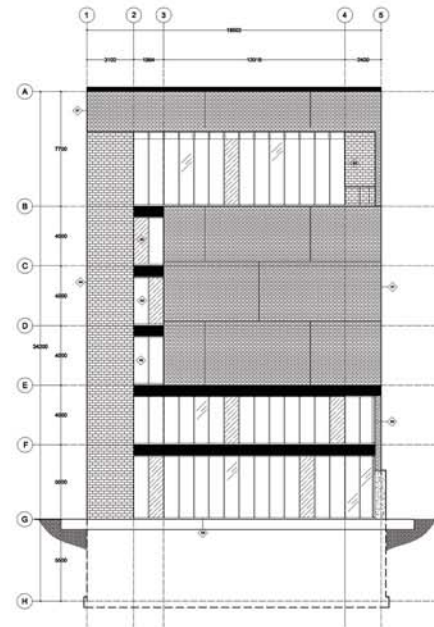


3RD FLOOR PLAN

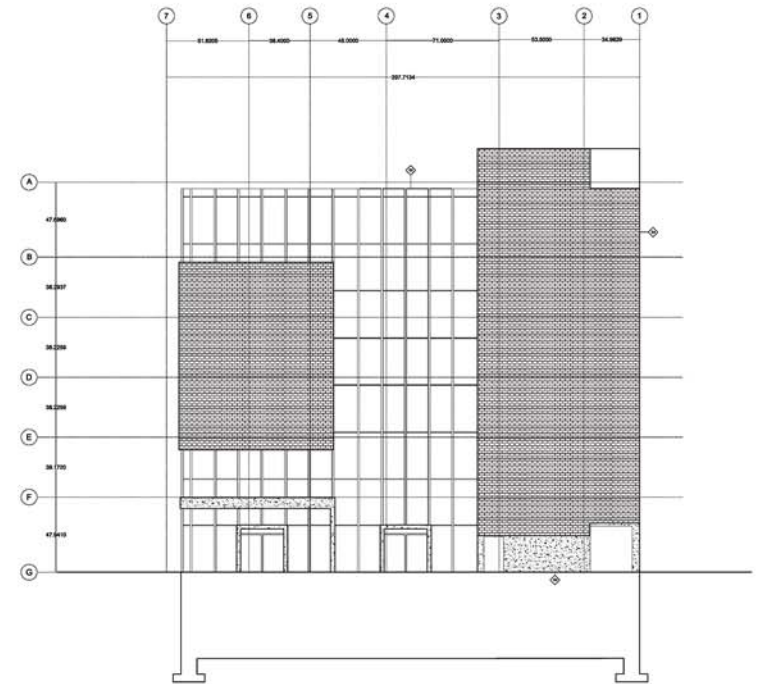




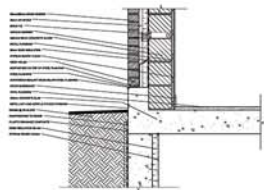
ROOF MEMBRANE & PARAPET



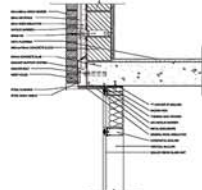
SOUTH ELEVATION



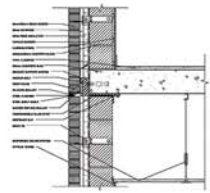
EAST ELEVATION



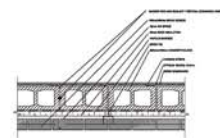
2 Cavity Wall Condition at the Grade  
A502 Scale 1:10



3 Intersection of Different Cladding materials  
(Brick Veneer and Curtain wall)  
A502 Scale 1:10

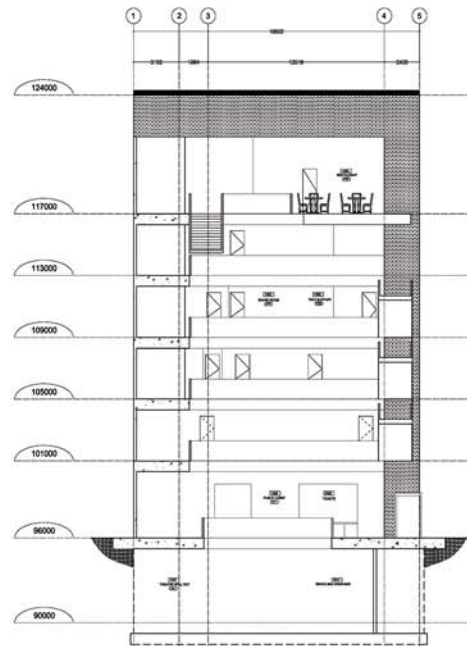


1 Cavity Wall Condition at the Slab Edge  
A502 Scale 1:10

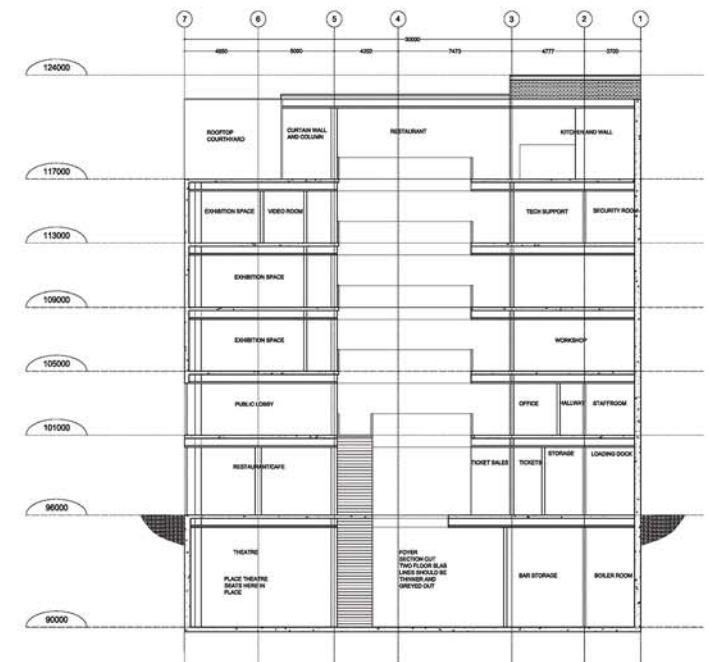


1 Cavity Wall Plan Detail  
A502 Scale 1:10

WINDOW / WALL DETAILS



TRANSVERSE SECTION



LONGITUDINAL SECTION



## GEOMETERS STUDIO

*a mathematician's studio +  
tectonics & materiality*

Academic year 3  
ASC621 Tectonics and Materiality  
Professor John Cirka

The design of a studio for a mathematician of advanced geometry that overlooks a Toronto ravine was tasked to the student with very specific programmatic and volumetric restrictions, thus encouraging a study of tectonic and materiality

*FormZ, AutoCAD  
Photoshop, InDesign  
3D Printed Model, Wood Working*

1



2







- 1 (top left) - photographed 3D printed model
- 2 (bottom left) - rendered elevations  
South / North / East / West Elevation
- 3 (top right) - perspective renders



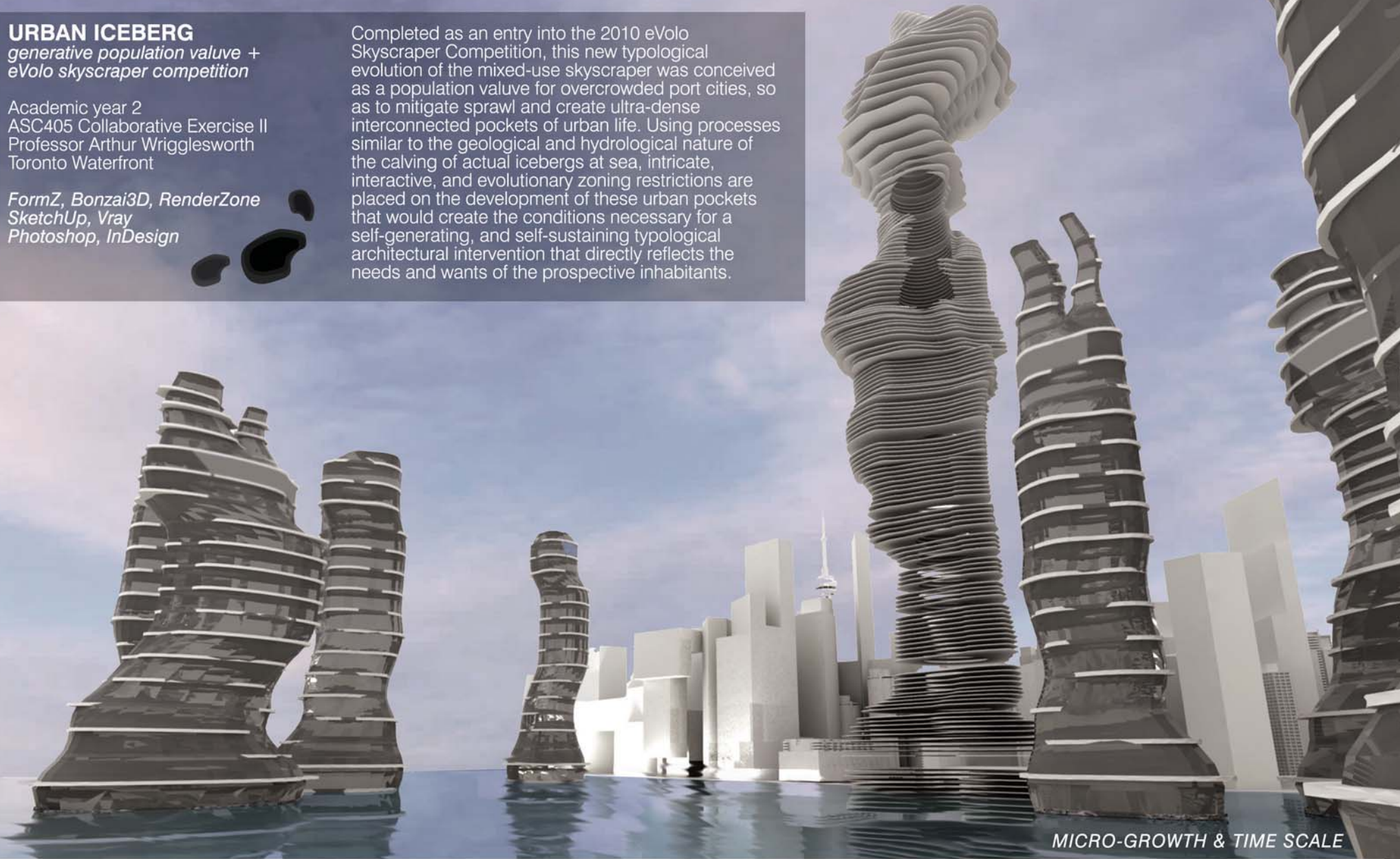
## URBAN ICEBERG

*generative population value +  
eVolo skyscraper competition*

Academic year 2  
ASC405 Collaborative Exercise II  
Professor Arthur Wigglesworth  
Toronto Waterfront

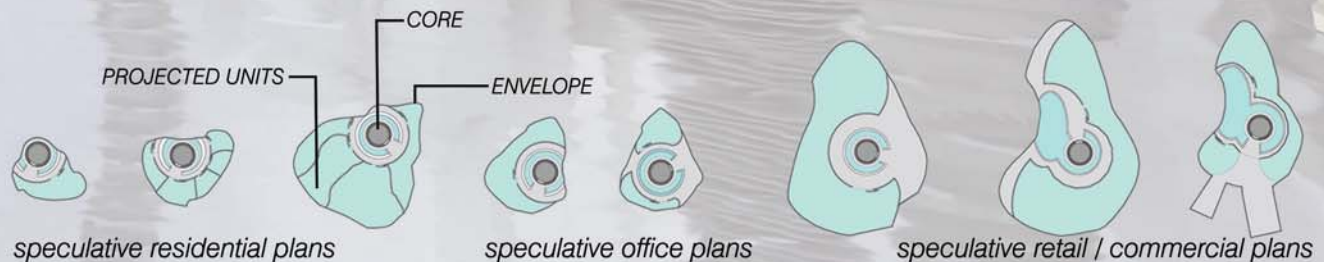
*FormZ, Bonzai3D, RenderZone  
SketchUp, Vray  
Photoshop, InDesign*

Completed as an entry into the 2010 eVolo Skyscraper Competition, this new typological evolution of the mixed-use skyscraper was conceived as a population value for overcrowded port cities, so as to mitigate sprawl and create ultra-dense interconnected pockets of urban life. Using processes similar to the geological and hydrological nature of the calving of actual icebergs at sea, intricate, interactive, and evolutionary zoning restrictions are placed on the development of these urban pockets that would create the conditions necessary for a self-generating, and self-sustaining typological architectural intervention that directly reflects the needs and wants of the prospective inhabitants.



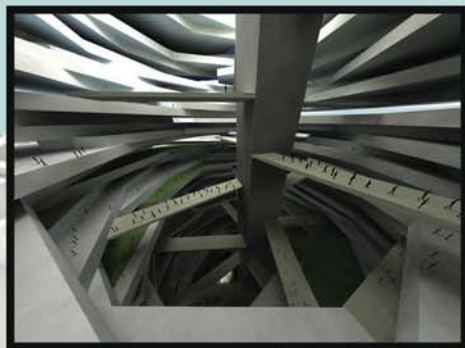
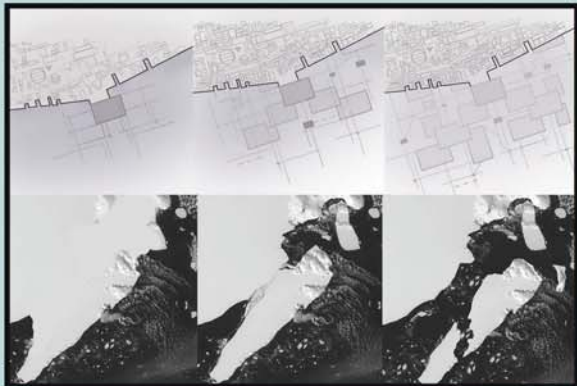
MICRO-GROWTH & TIME SCALE

Informed by the creation and lifecycle of actual icebergs, inherent in the growth of these autonomous population offshoots would be a regulation concerning the critical mass of the tower itself (height, population, density) that would stipulate when that particular 'iceberg' would cease growing and calve new versions of itself into the harbour. Again, infrastructural demand and linkages would be precursors to such nodal growths, each with aggressive and comprehensive integration with other existing nodes and the landmass with which it must relate.



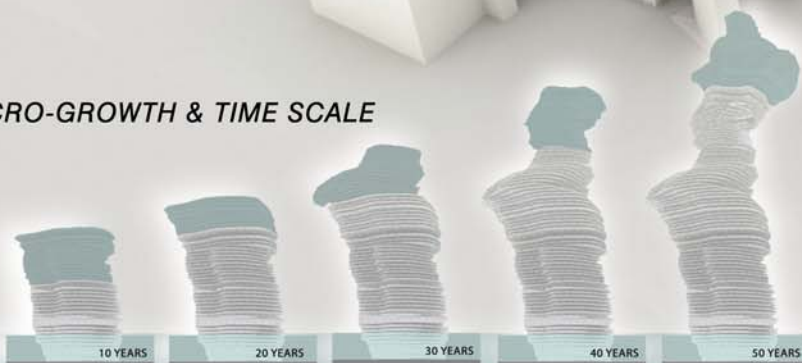


## POPULATION VALVE GROWTH



VIEW OF THE CORE

## MACRO-GROWTH & TIME SCALE



On the micro-scale, generation of form would occur as residents fabricated their plotted units to fit their desires and affix them to the structure, resulting in an exterior form that reflects the socio-economic individualism of each resident while conforming to the logarithmic function of zoning regulations: relationships would be generated relating each layer of growth to the one before and after, as well as between units on the horizontal plane.



LONGITUDINAL SECTION



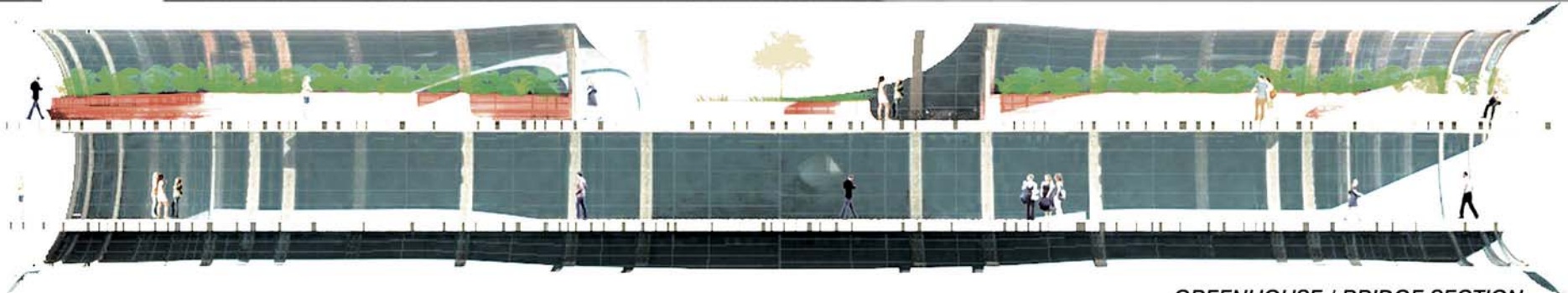
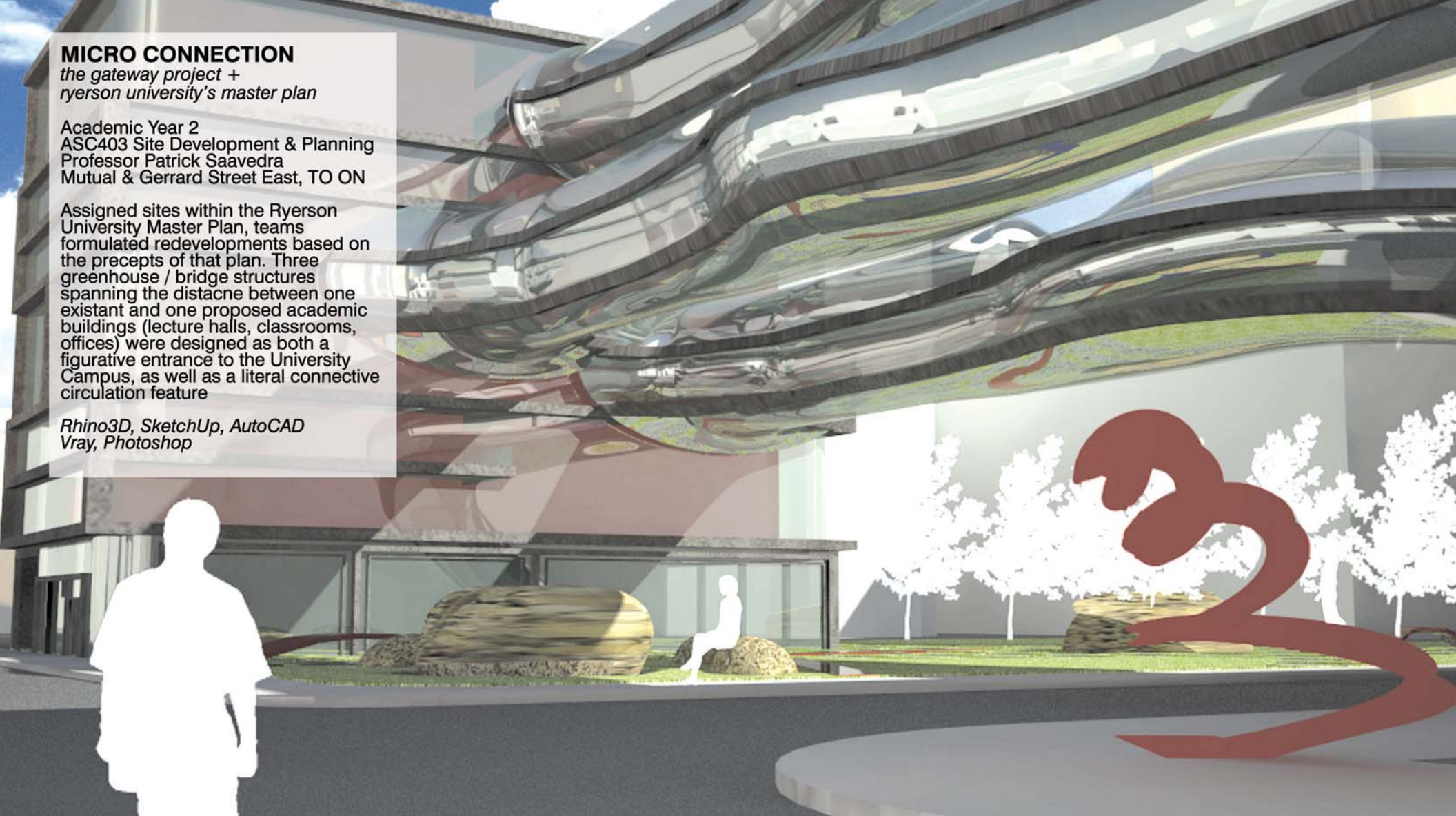
## MICRO CONNECTION

*the gateway project +  
ryerson university's master plan*

Academic Year 2  
ASC403 Site Development & Planning  
Professor Patrick Saavedra  
Mutual & Gerrard Street East, TO ON

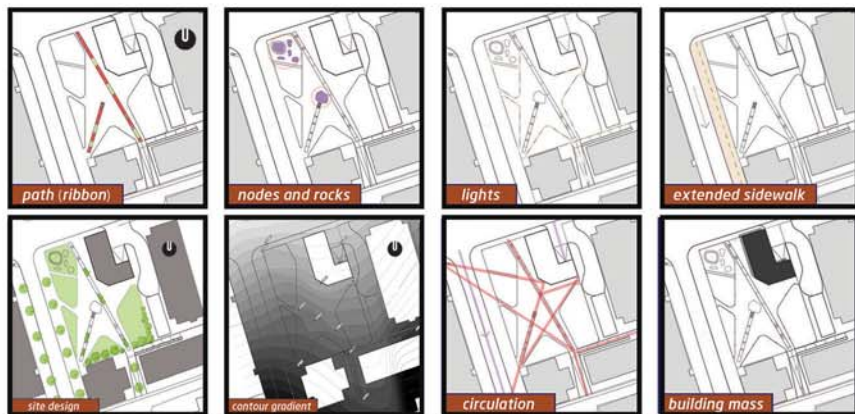
Assigned sites within the Ryerson University Master Plan, teams formulated redevelopments based on the precepts of that plan. Three greenhouse / bridge structures spanning the distance between one existant and one proposed academic buildings (lecture halls, classrooms, offices) were designed as both a figurative entrance to the University Campus, as well as a literal connective circulation feature

*Rhino3D, SketchUp, AutoCAD  
Vray, Photoshop*

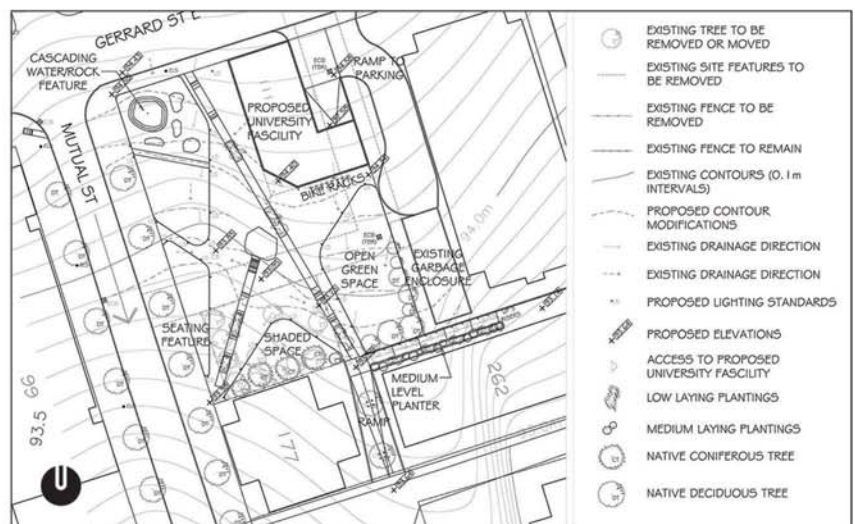


GREENHOUSE / BRIDGE SECTION



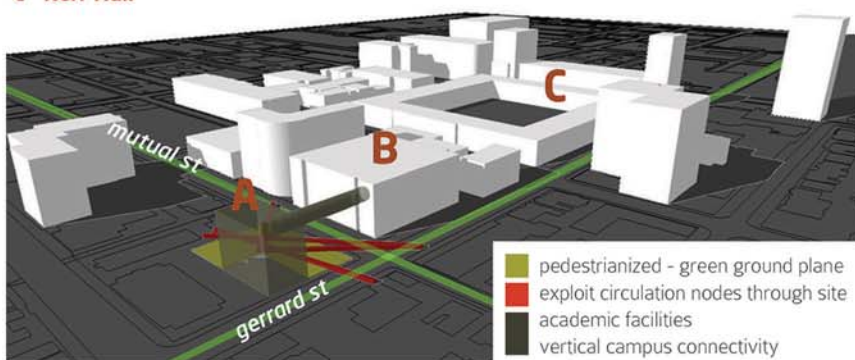


# SITE STUDIES

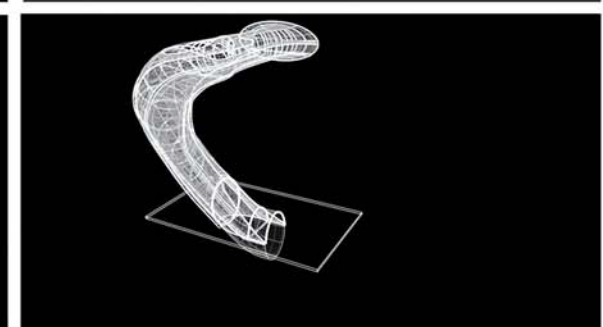
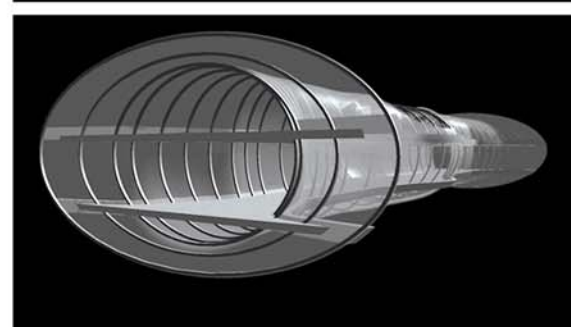
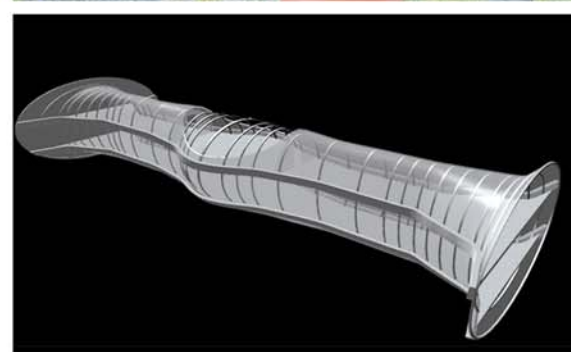
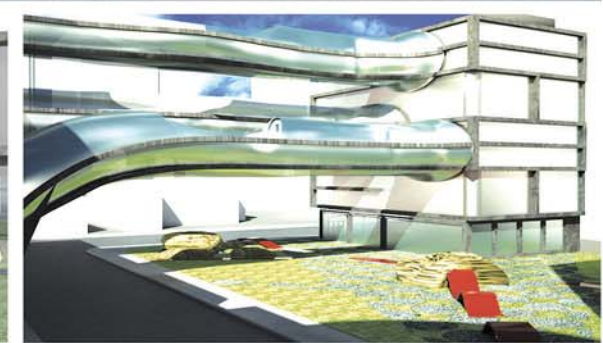
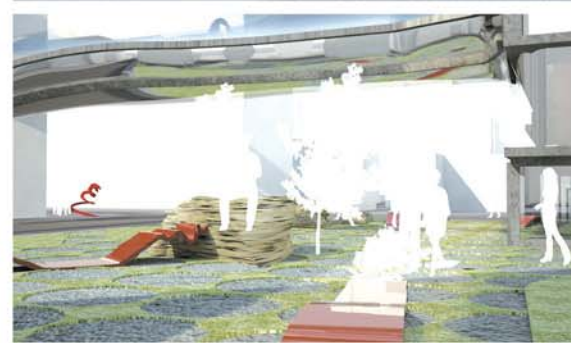
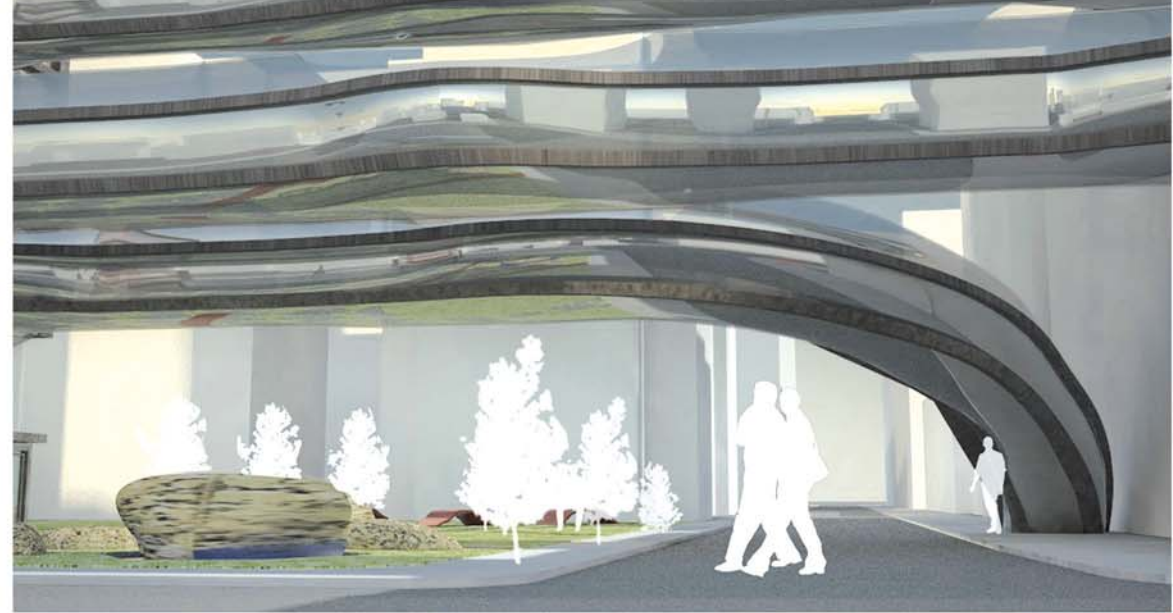


# SITE PLAN

- A 111 Gerrard St - Original Design Schematic
- B Erin Palin Hall
- C Kerr Hall



# MASTER PLAN CONTEXT / PROPOSAL





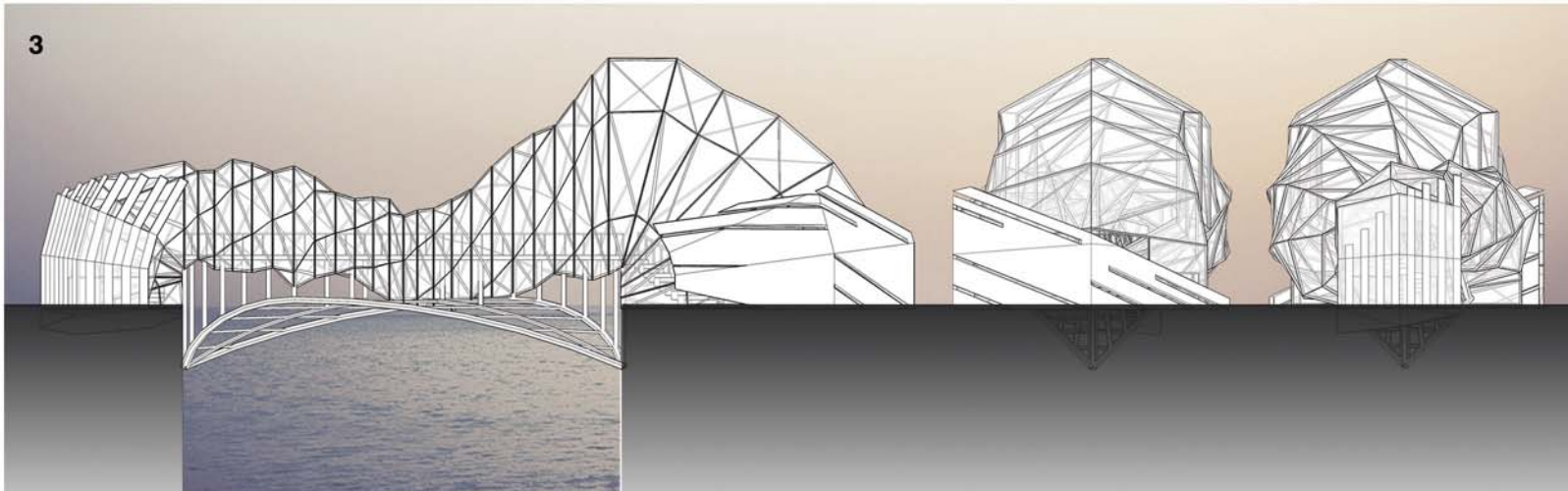
1



2



3



## THE ARTIST'S STUDIO

*gros morne national park +  
elemental inspiration*

Academic Year 2

ASC301 Design Studio

Professor Olena Kobets-Singkh

An artist's studio is to be built within the rugged and sublime grounds of Gros Morne National Park in Newfoundland, Canada. As a starting point for inspiration the students were to choose one of the 'elements of nature', in this case air, to be reflected through form, techtonics, and materiality.

A number of sites were also offered. The one chosen reflects the sublime and rugged nature of the national park, as well as the intersection between wind, water, and geology.

Finally, design consideration was given to atomospheric phenomena, as iterated through a serpentine and rotated geometry.

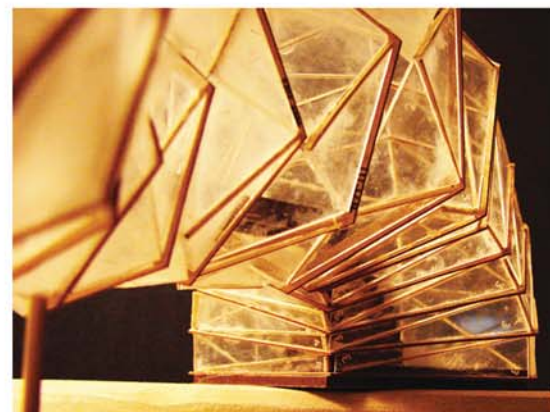
*SketchUp, AutoCad*

*Photoshop, Hand Drafting & Rendering*

*Laser Cutting MDF & Acrylic*

- 1 (top left) - perspective rendered view from the North
- 2 (middle left) - perspective rendered view from the SW
- 3 (bottom left) - elevation drawings  
North / West / East elevation
- 4 (opposite) - physical model  
scale 1 : 250





# ORSON SEDMINA

## Master of Architecture Portfolio

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