Annex: Timisoara – Urban Drawings Drawings v



# Catalyst Layers



Figure 1 Transport Layer

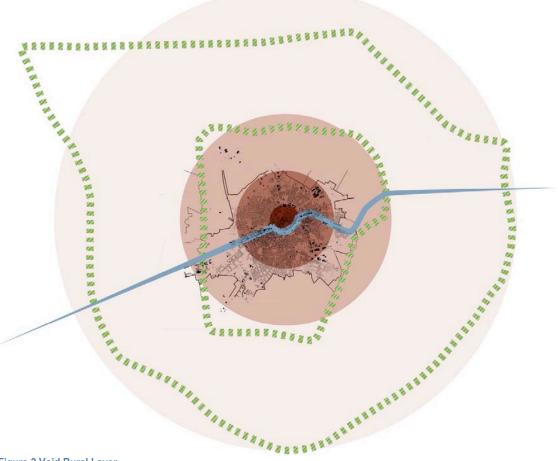


Figure 2 Void Rural Layer

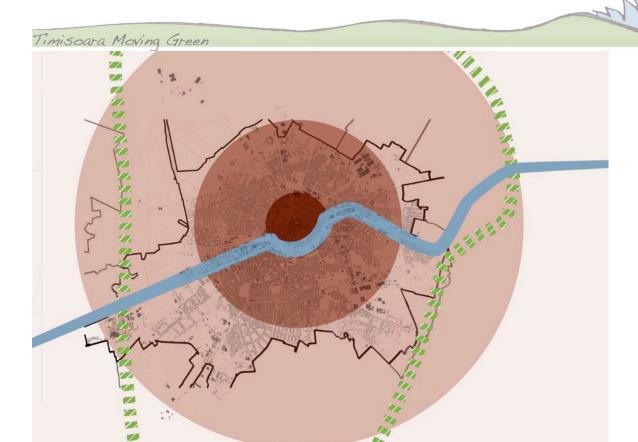


Figure 3 Void City Layer Scale



Figure 4 Functionality



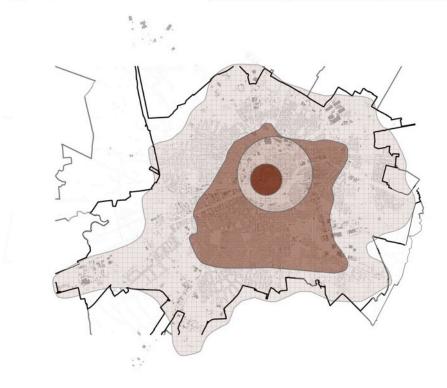


Figure 5 Volume Layer

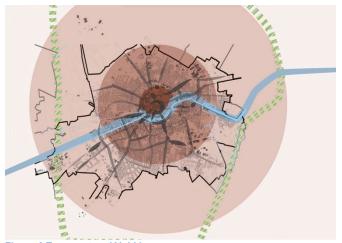


Figure 6 Transport and Void Layers





Figure 7 Transport and Functionality Layers Annex I – Urban Development Drawings





Figure 8 Transport and Volume Layers

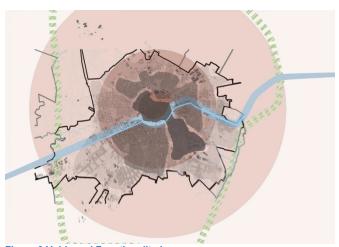
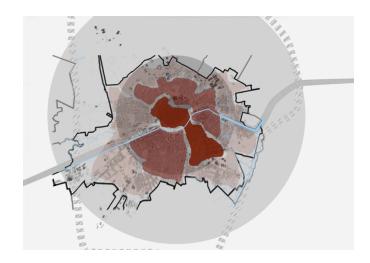


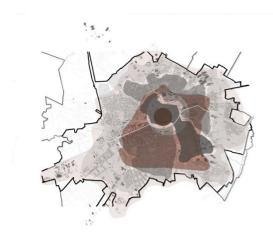
Figure 9 Voids and Functionality Layers



Figure 10 Functionality and Volume Layers







Timisoara Moving Green
Intermediate – Defining the Intermediate area.



Figure 11 Historical Areas



**Figure 12 Train Station** 



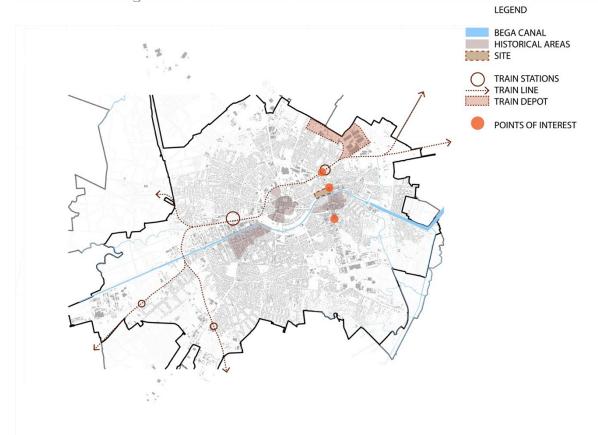


Figure 13 Initial Points of Interest



**Figure 14 Main Traffic Roads** 



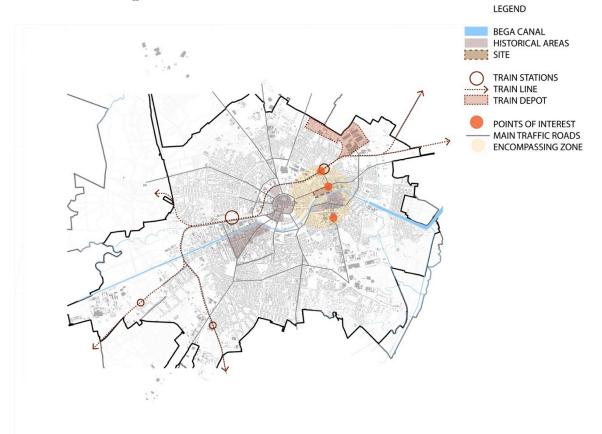


Figure 15 Encompassing Zone (Initial points)

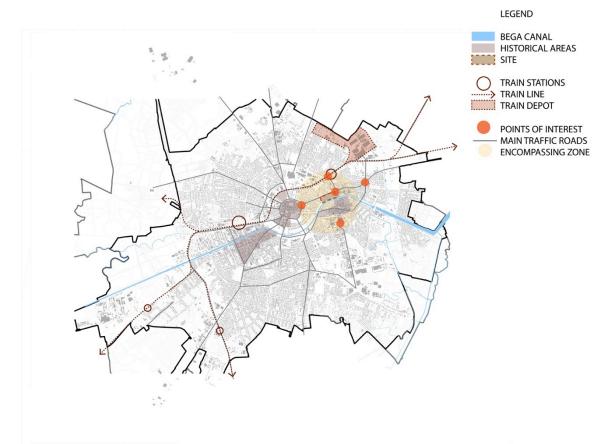


Figure 16 Encompassing Zone (secondary points)



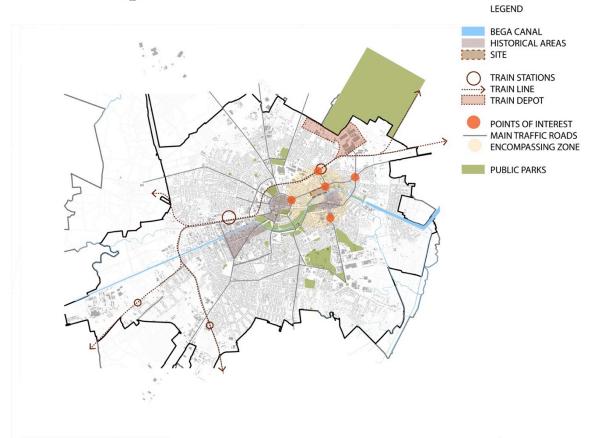


Figure 17

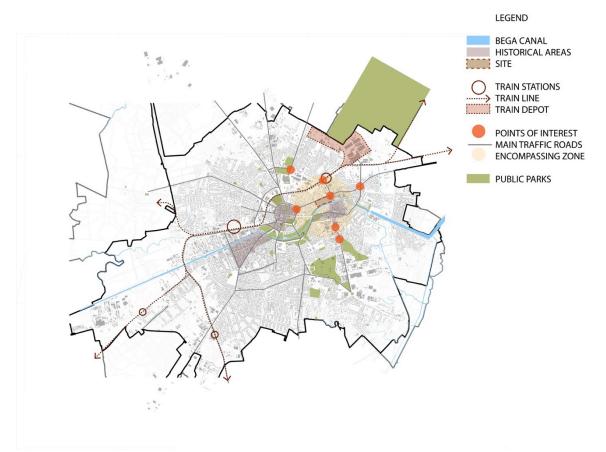


Figure 18 Public parks



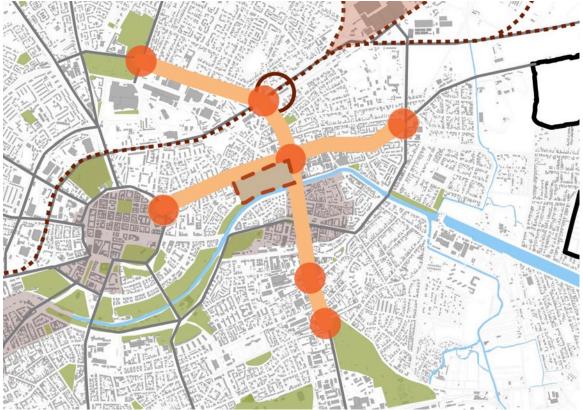


Figure 19 Neighborhood Zone

Global – Proposal 1

### Propsoal 1

Ring Roads

Ring 1 – bicycles & pedestrian Ring 2 & 3 – domestic & public transport

Ring 4 – heavy traffic



Figure 20 Ring Roads



**Figure 21 Main Connections** 





Figure 22 Train Station - City

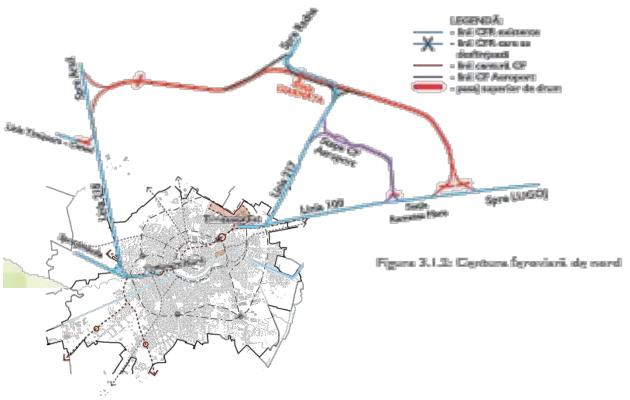


Figure 23 Train Station plus extension



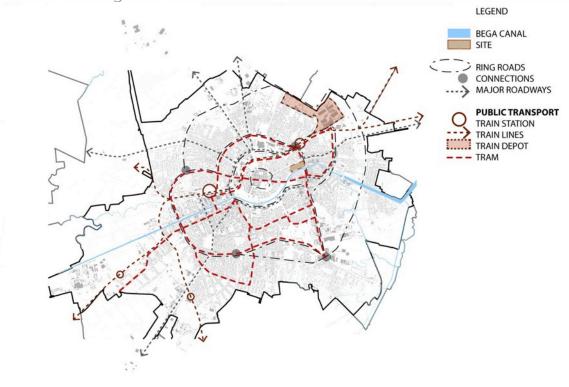


Figure 24 Tram

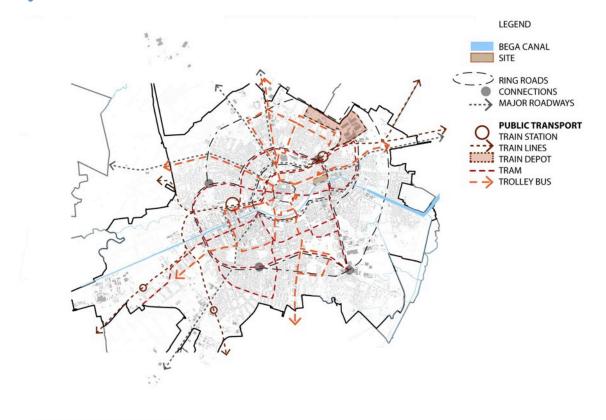


Figure 25 Trolley Bus



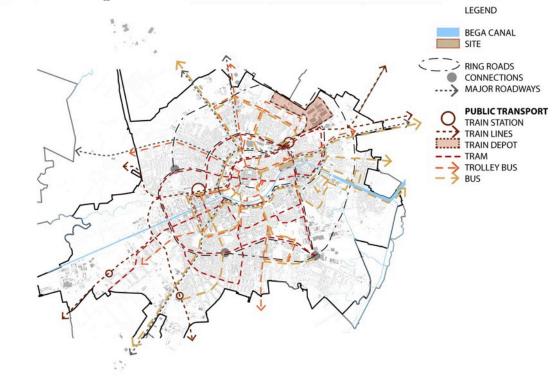


Figure 26 Bus

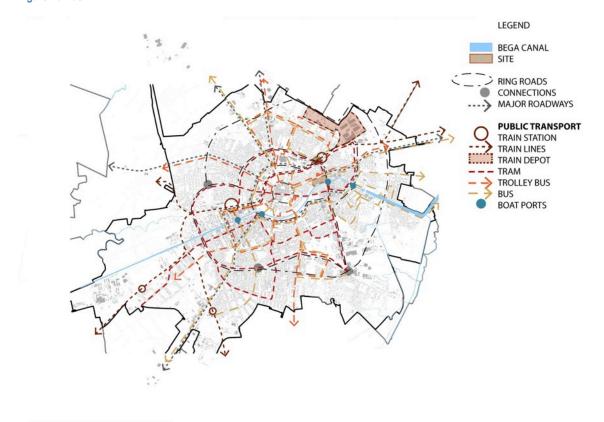


Figure 27 Boat Ports



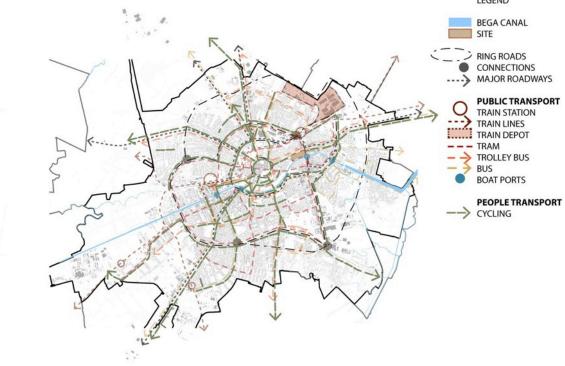
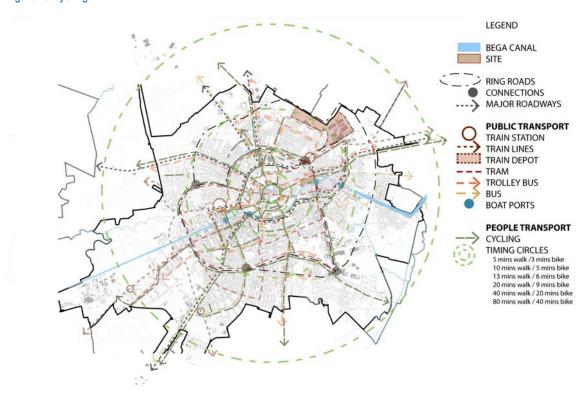


Figure 28 Cycling

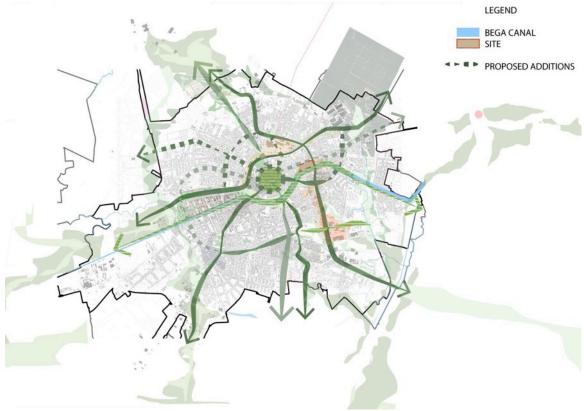


**Figure 29 Walking Circles** 





Figure 30 Weighted Traffic Proposal 1



**Figure 31 Proposed Green Network Additions** 

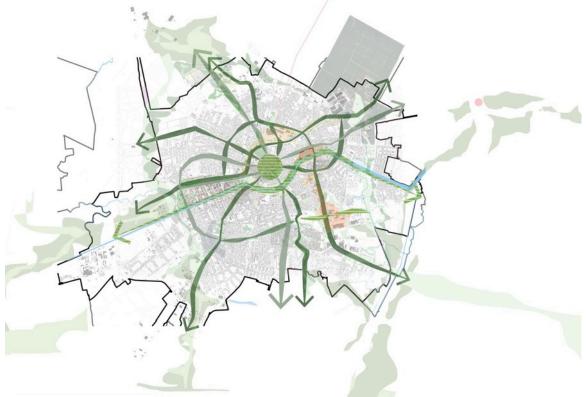


Figure 32 Proposed Green Network



# Interchange Points – Proposal 1

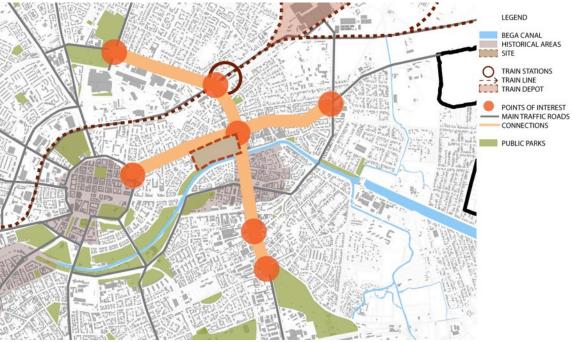


Figure 33 Initial 7 Points

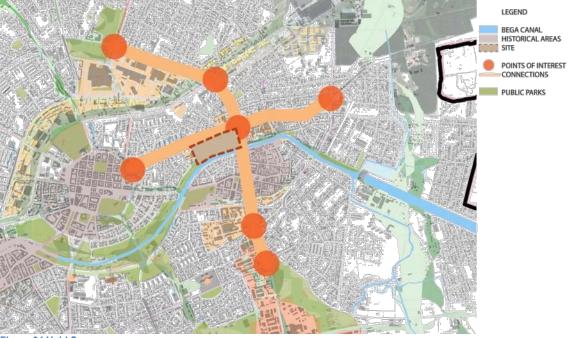
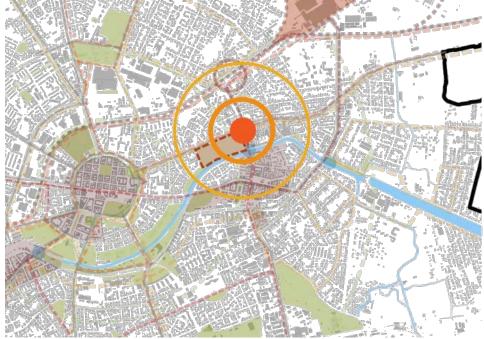


Figure 34 Void Summary





**Figure 35 Transport Summary** 



**Figure 36 First Point** 

#### INTERCHANGE POINTS 1 POINT - SITE TRANSPORT MODES 5mins

Walking

- Cycling
- Bus
- Trolley bus
- Tram
- Boat

TRANSPORT MODES 10min -Train









**Figure 38 Third Point** 

#### INTERCHANGE POINTS 2 POINT - train station 'Gara Est' TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Tram
- Train

#### TRANSPORT MODES >5mins

- -1 Point
- Trolley bus

#### TRANSPORT MODES >10min

- Boat

#### INTERCHANGE POINTS 3 POINT - EDGE OF FABRIC TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Tram

#### TRANSPORT MODES > 10 mins

- 1 Point
  - Boat
  - Trolley

#### TRANSPORT MODES >20mins

- 1 Point
- Train

#### NOTE

The edge of fabric is not a landmark Is there a possible better site??





# INTERCHANGE POINTS 4 POINT – EDGE OF INNER CITY TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Tram
- Trolley

#### TRANSPORT MODES > 10 mins

- 3 Points
- Train
- Boat

**Figure 39 Fourth Point** 



Figure 40 Fifth Point

#### INTERCHANGE POINTS 5 POINT – TRAFFIC JUNCTION TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Tram
- Trolley

#### TRANSPORT MODES > 10mins

- 2 Points
- Train
- Boat

#### TRANSPORT MODES > 20mins

- 2 Points





Figure 41 Sixth Point

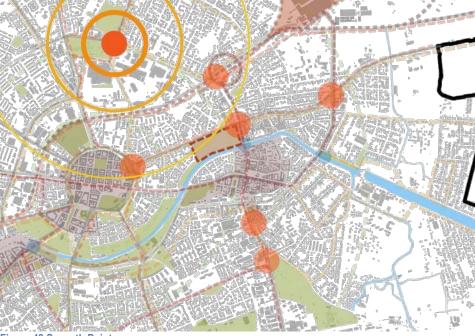


Figure 42 Seventh Point

#### INTERCHANGE POINTS 6 POINT – TRAFFIC JUNCTION With car park and green area

#### TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Tram

#### TRANSPORT MODES > 10 mins

- 1 Point

#### Trolley

Boat

#### TRANSPORT MODES > 20mins

- 4 Points
- Train

#### INTERCHANGE POINTS 7 POINT – TRAFFIC JUNCTION With green area

#### TRANSPORT MODES 5mins

- Walking
- Cycling
- Bus
- Trolley

#### TRANSPORT MODES > 10 mins

- 2 Points
- Train
- Tram

#### TRANSPORT MODES > 20mins

- 4 Points
- Boat



Figure 43 Review of First Point



- REVIEW 1 POINT - SITE

#### **TRANSPORT MODES 5mins**

- Walking
- Cycling
- Bus
- Trolley bus
- Tram
- Boat
- 1 Point

#### TRANSPORT MODES > 10min

#### - Train

- 3 Points
- TRANSPORT MODES
  - >20min
- 2 Points



Figure 44 Point Summary

# INTERCHANGE POINTS - SUMMARY

#### TRANSPORT MODES 5mins

- Walking
- Cycling
- At least 2 modes of PT

#### TRANSPORT MODES > 10 mins

- At least 1 Point
- Another 2 modes of PT
- TRANSPORT MODES >20mins
- Additional Points





**Figure 45 Weighted Summary** 



Figure 46 Weighted Summary



**Figure 47 Interchange Points** 

#### INTERCHANGE POINTS

- PROPOSED INTERCHANGE POINTS PROPOSED INTERMEDIATE AREA

#### **GLOBAL PROPOSAL 2**



Figure 48 Ring Roads



**Figure 49 Train Station** 

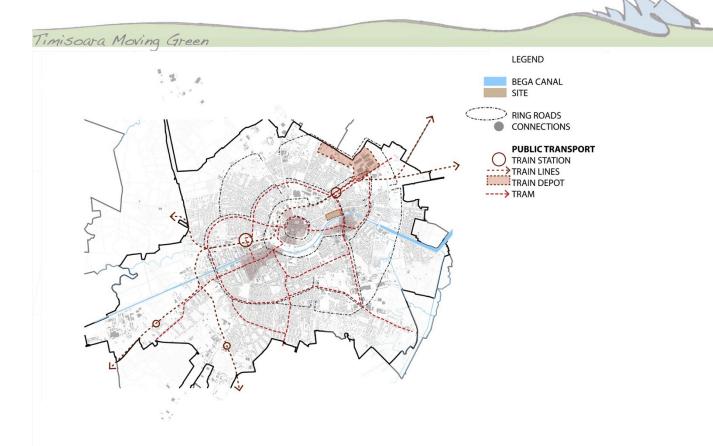


Figure 50 Tram

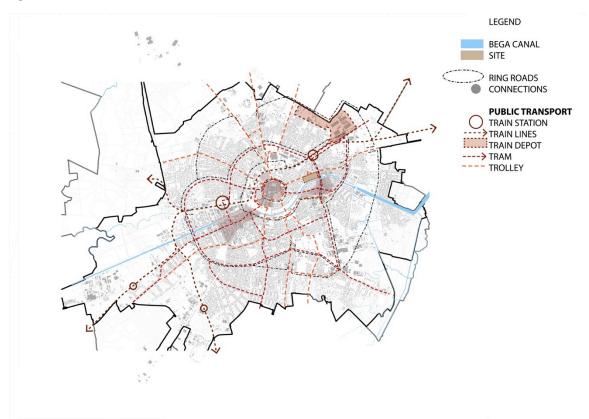


Figure 51 Trolley

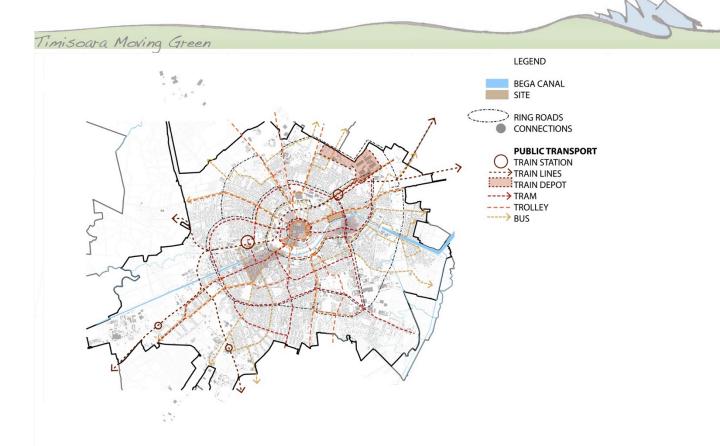


Figure 52 Bus

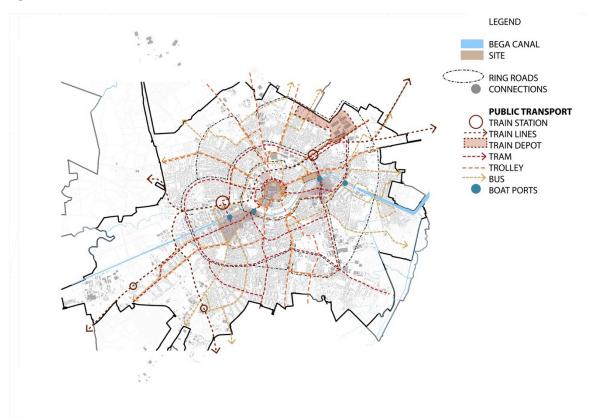


Figure 53 Boat Ports

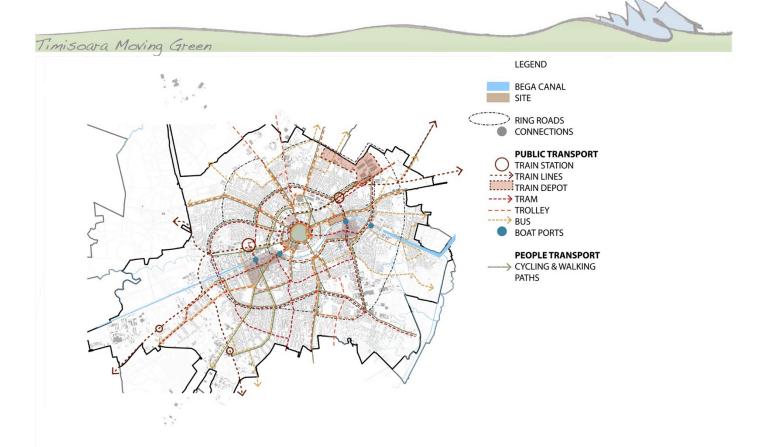


Figure 54 Cycling and Walking Paths



Figure 55 Weighted Traffic Proposal 2

# - Electronic and the second se

LEGEND

TRAIN STATIONS
TRAIN LINE
TRAIN DEPOT
TRAM LINE

BEGA CANAL HISTORICAL AREAS SITE PUBLIC PARKS

# Interchange Points – Proposal 2

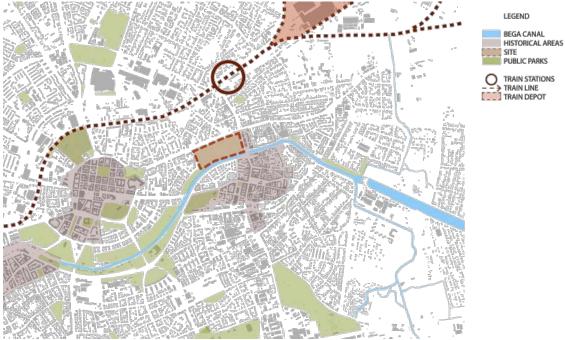


Figure 56 Train Station

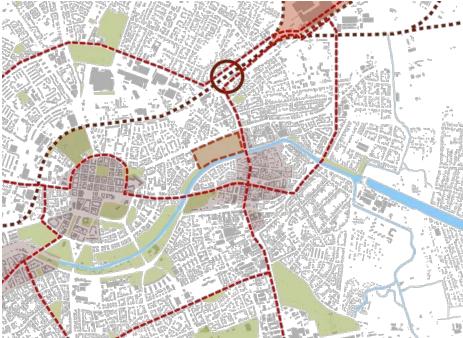
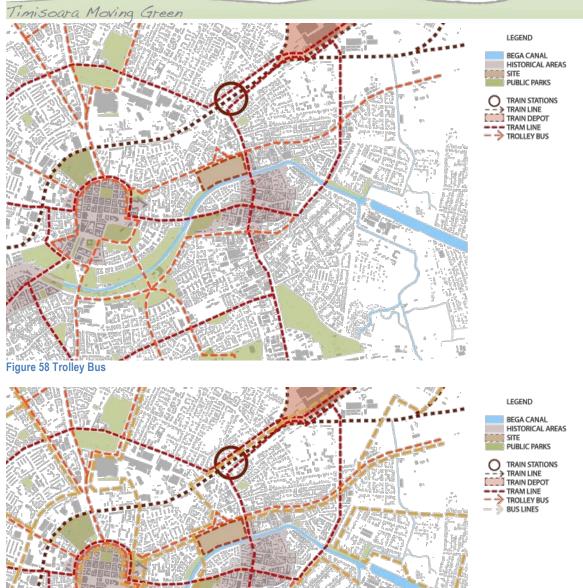


Figure 57 Tram Station







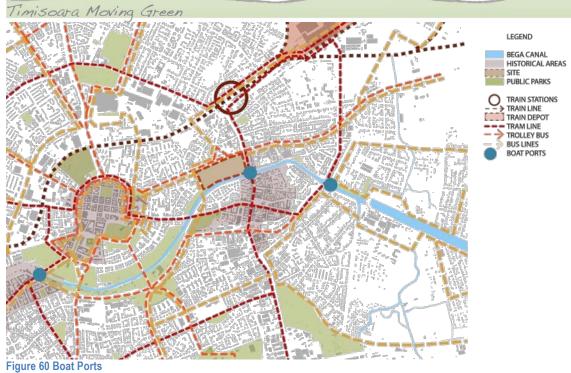
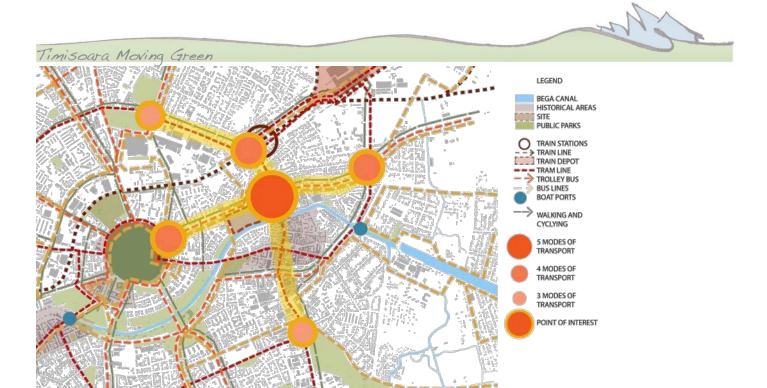




Figure 61 Cycling and Walking





Global – Proposal 3

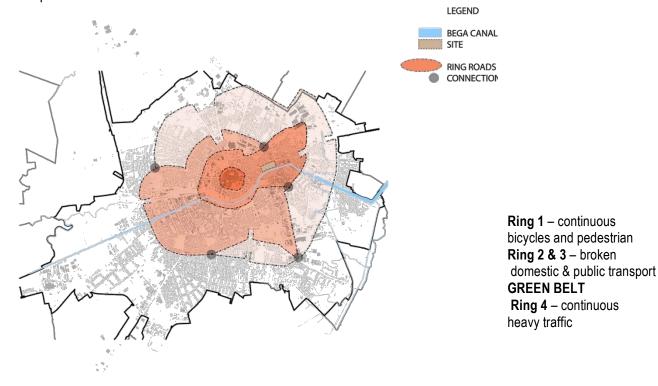


Figure 63 - Global Proposal 3

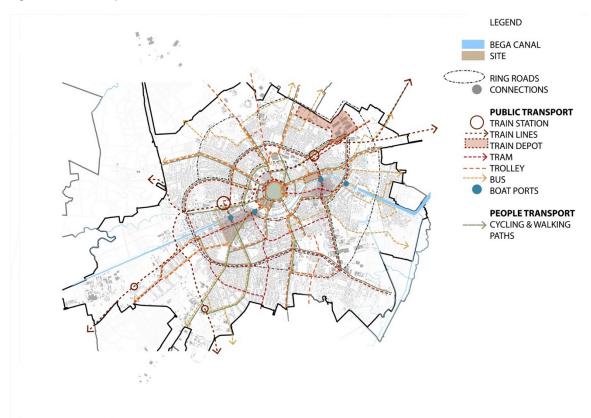


Figure 64 Global Proposal 2



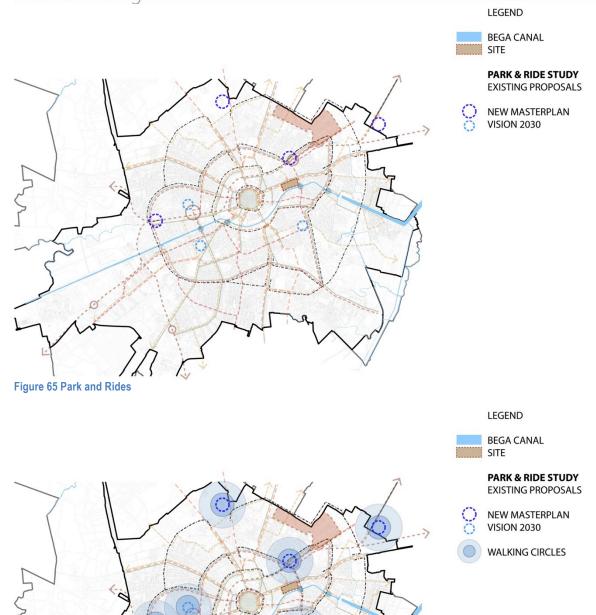


Figure 66 Park and Rides with walking circles



LEGEND

STAGE 1 STAGE 2

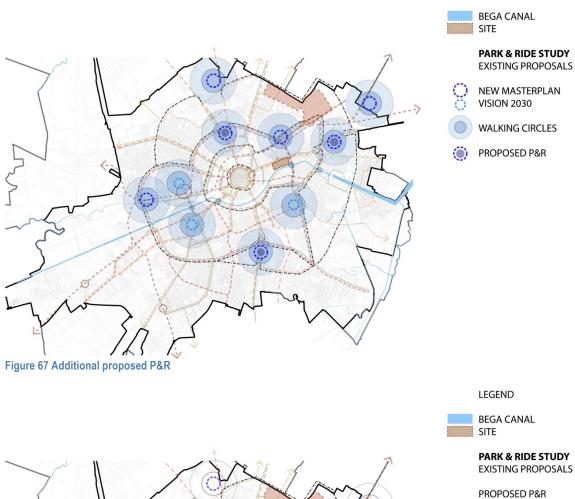




Figure 68 Park and Rides (Stage 1 & 2)



#### Moving Green Development – Transportation Implementation

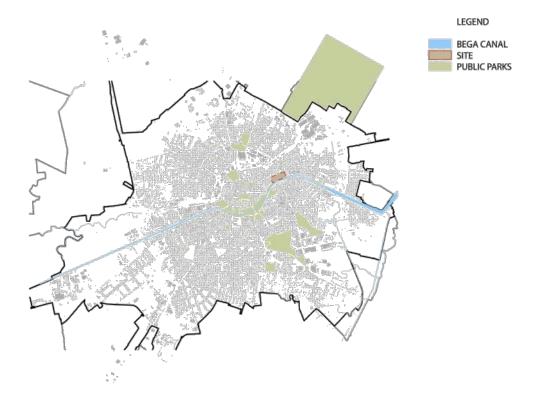


Figure 69 Proposed Parks

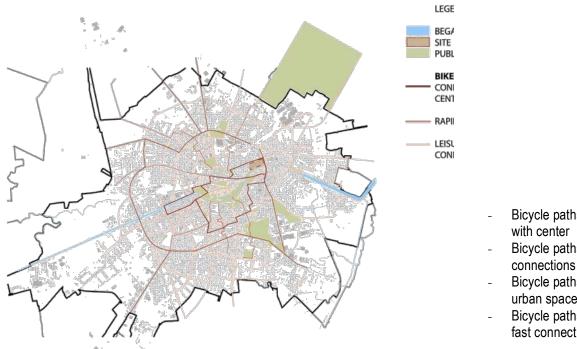


Figure 70 Bicycle Paths

- Bicycle paths: connection with center
- Bicycle paths: rapid
- Bicycle paths: tourism and urban spaces
- Bicycle paths: leisure and fast connectivity



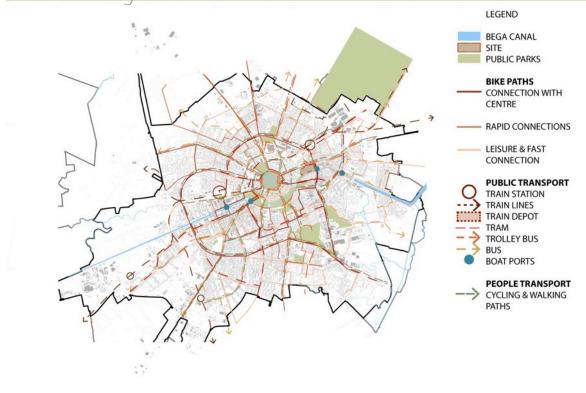


Figure 71 Public Transport

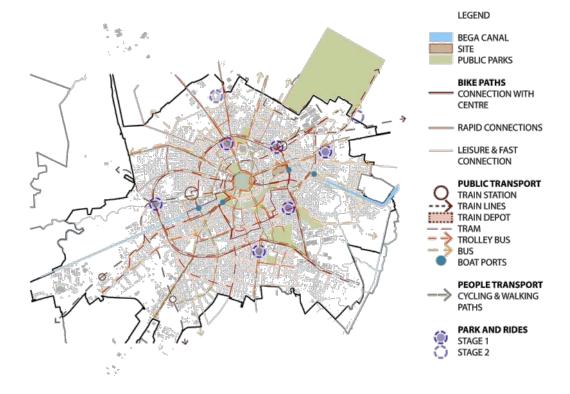


Figure 72 Park and Rides



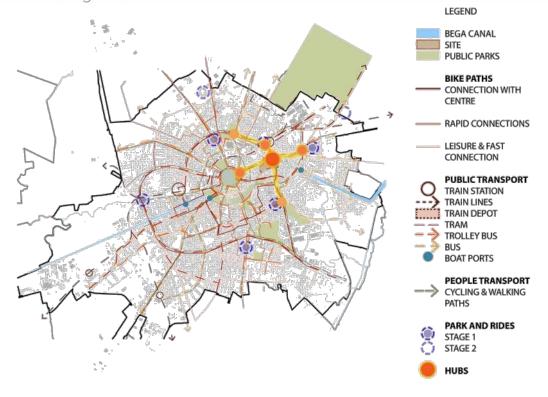
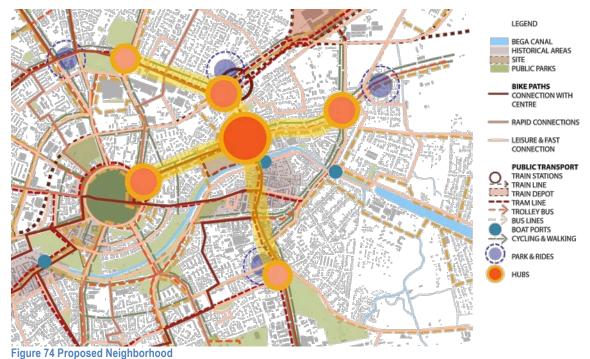


Figure 73 Proposed Hubs



. .ga. o . . . . op oooa . . o .g. .ao . . . o a



Timisoara Moving Green

Moving Green Development – Functionality



Figure 75 Green Network Summary

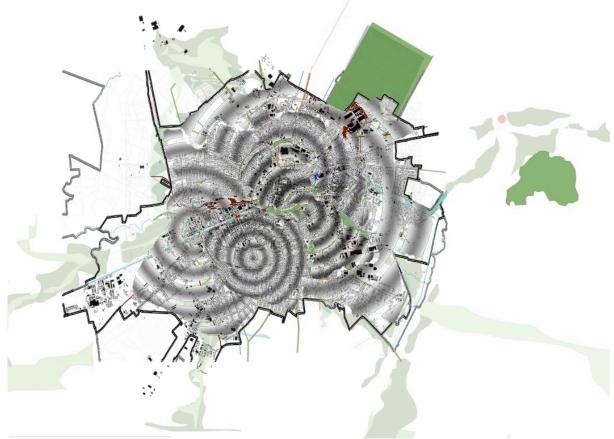


Figure 76 Functionality Summary



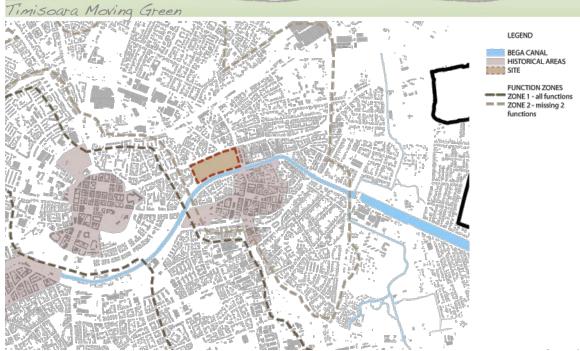


Figure 77 Functional Zones



Figure 78 Public Parks





Figure 79 Cemeteries

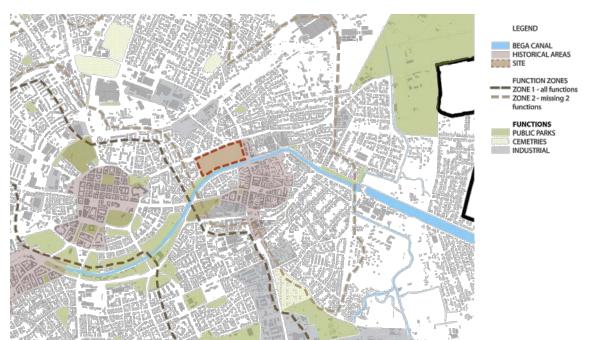


Figure 80 Industrial Areas





Figure 81 Sports Areas

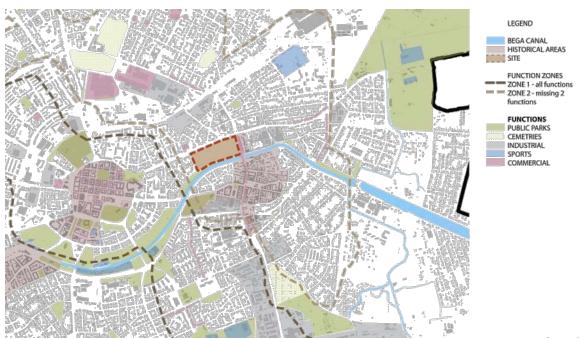


Figure 82 Commercials Areas



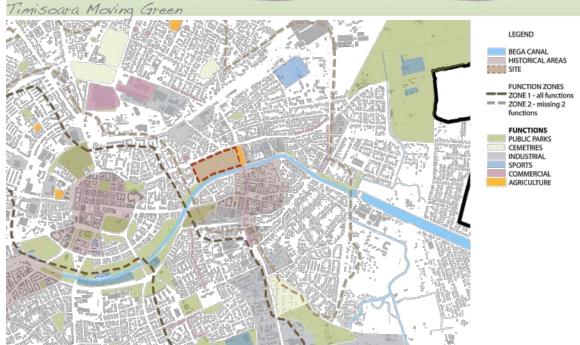


Figure 83 Agriculture Areas

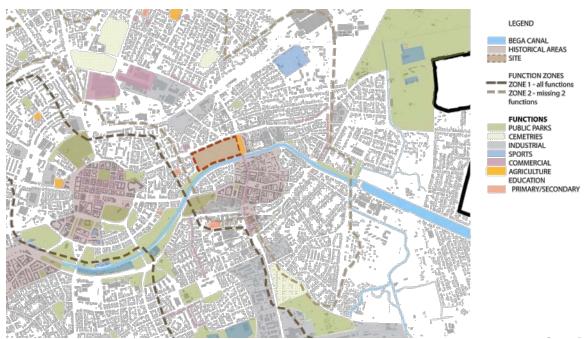


Figure 84 Educational Areas – PRIMARY/SECONDARY





Figure 85 Educational Areas - UNIVERSITY

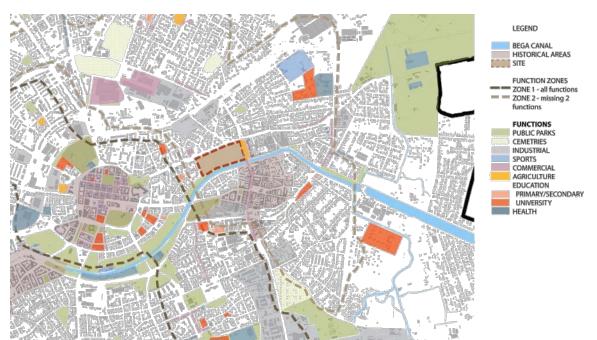


Figure 86 Health





Figure 87 Religious Areas

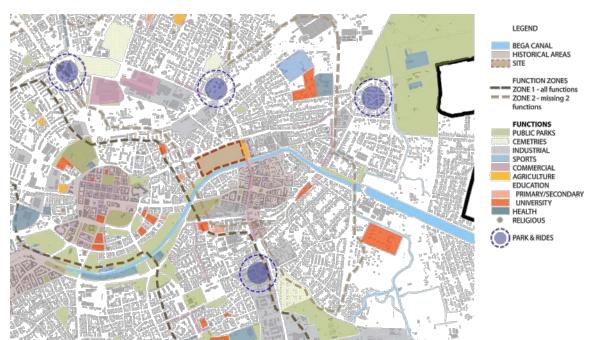
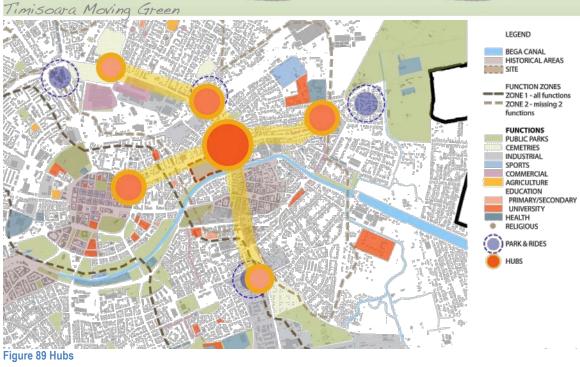


Figure 88 Park & Rides







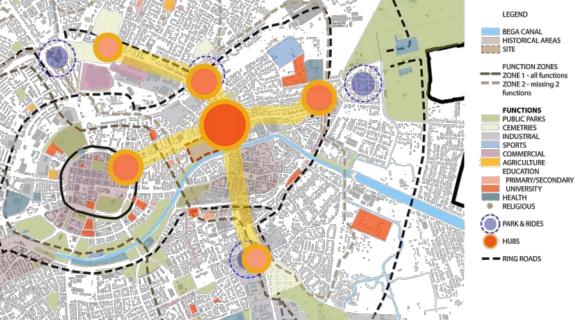


Figure 90 – With Ring Roads





Figure 91 Walking Zones with 10mins walking radius



Figure 92 With Additional walking/cycling paths





Figure 93 Sports Zones with 10mins walking radius



Figure 94 With Additional walking/cycling paths

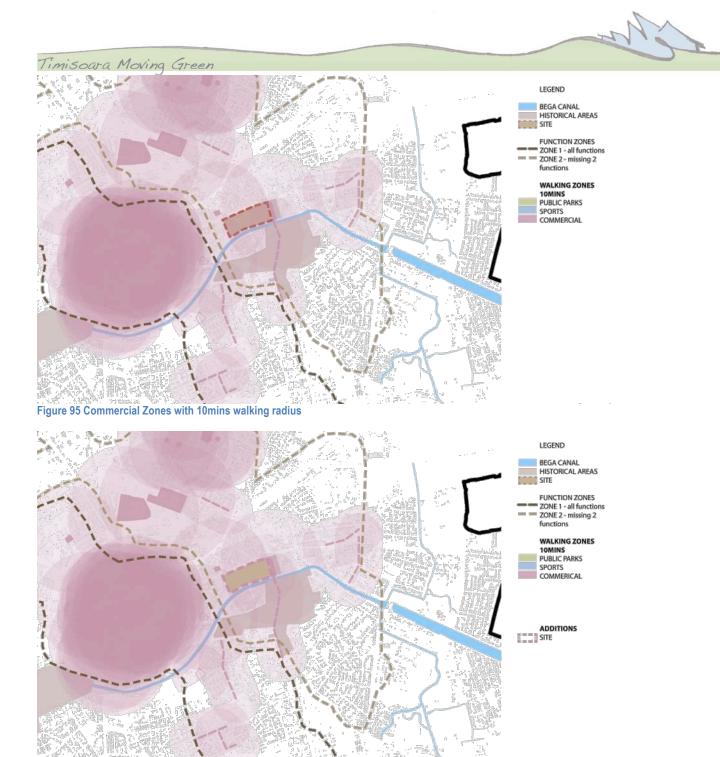


Figure 96 With Additional commercial Area



Annex I - Urban Development Drawings

Figure 98 With Additional agricultural Area

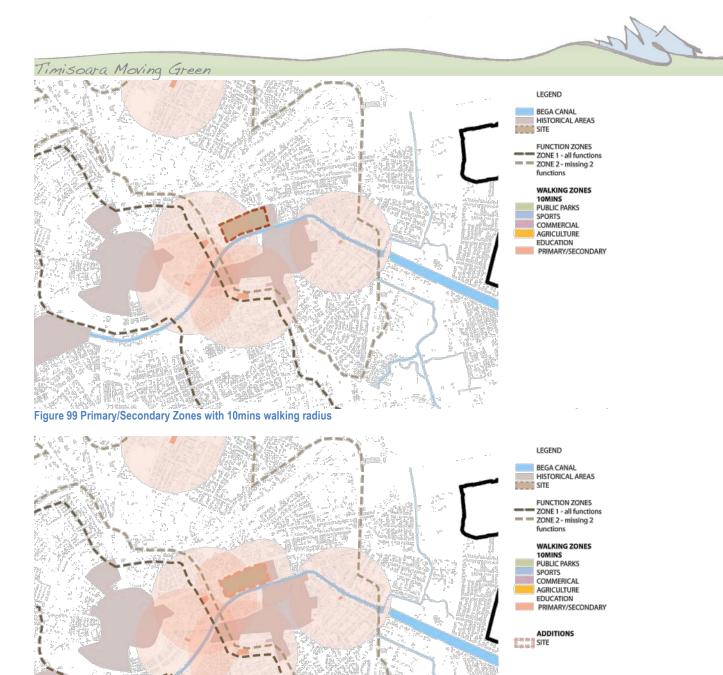


Figure 100 With Additional Primary/Secondary Area



Figure 102 With Additional Culture Area



Figure 103 Functionality Summary

# - Chr

### Masterplan - Intermediate

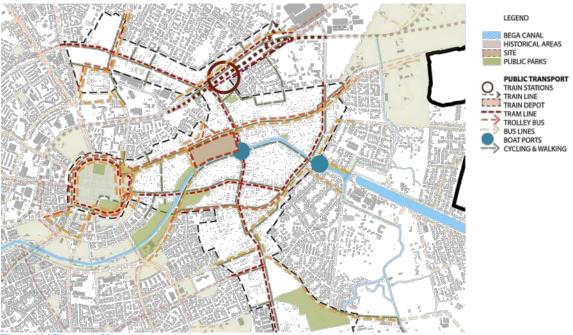


Figure 104 Transport Masterplan

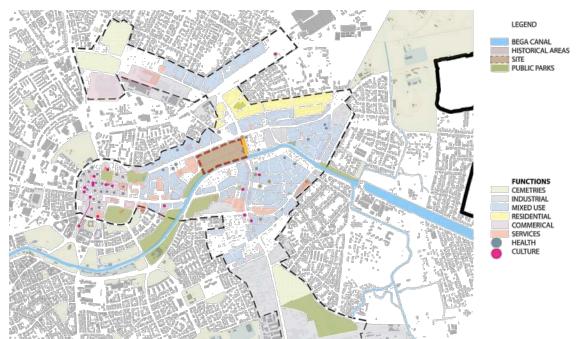


Figure 105 Functionality Masterplan

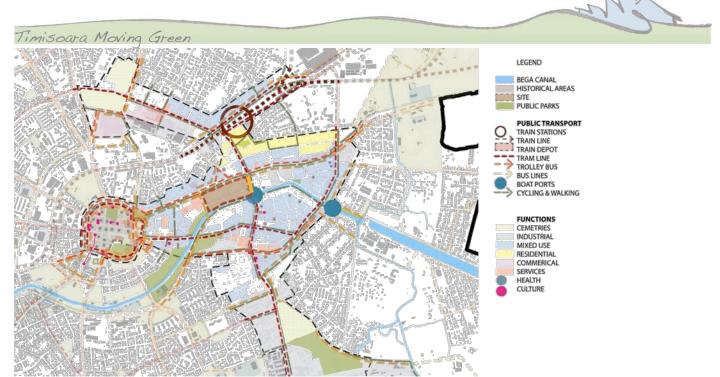


Figure 106 Neighborhood Masterplan



## Timisoara Moving Green

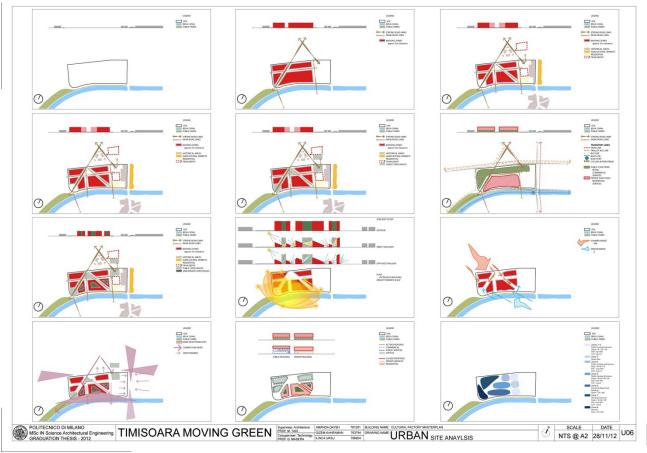


Figure 107 Site Analysis



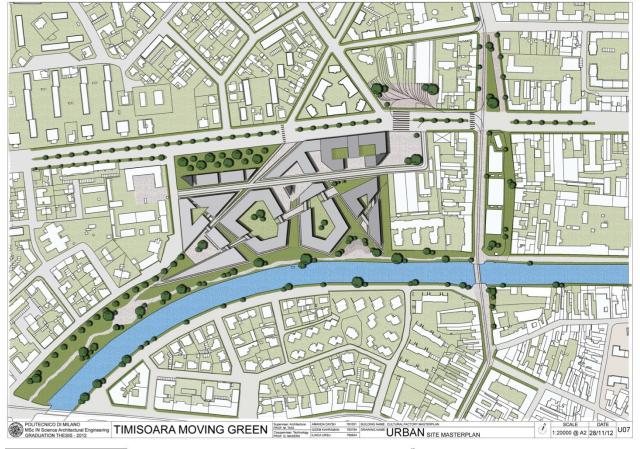


Figure 108 Site Masterplan

# - Chr

#### Masterplan Analysis

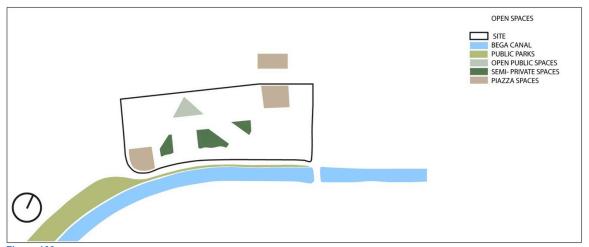


Figure 109

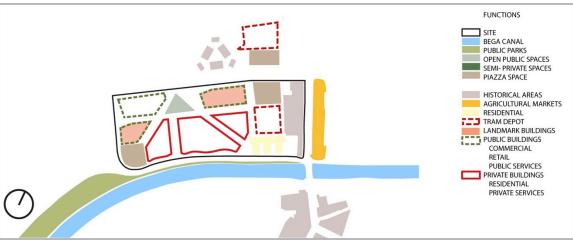


Figure 110

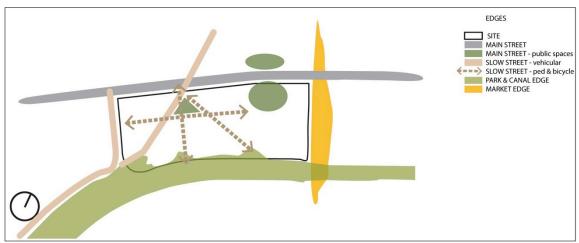


Figure 111



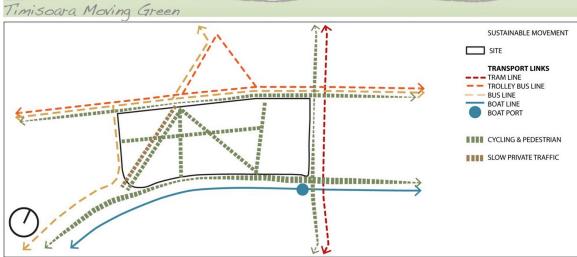


Figure 112

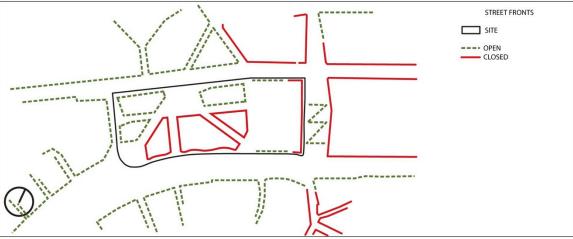


Figure 113

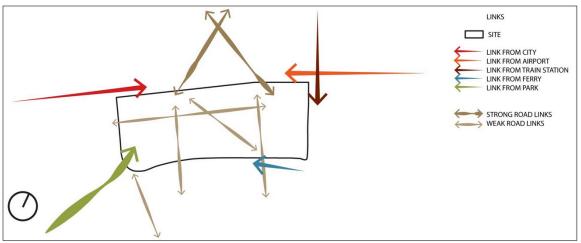


Figure 114

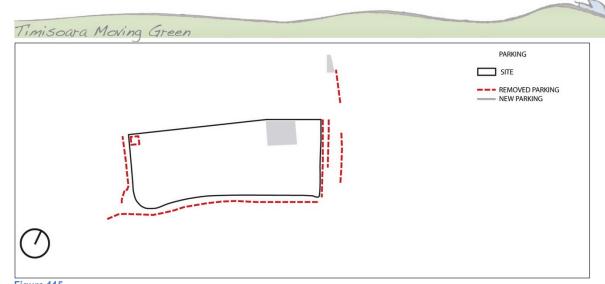


Figure 115

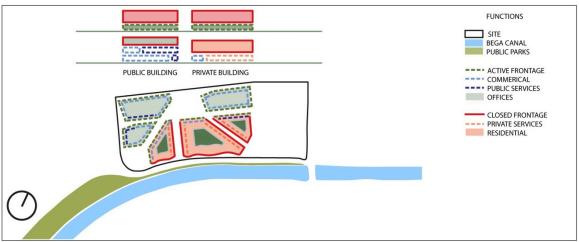
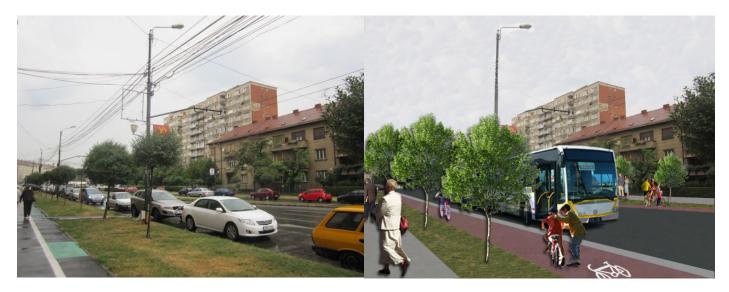


Figure 116

# Timisoara Moving Green Urban Perspectives











# **DRAWING LIST**

URBAN	DRAWINGS	

U01	MASTERPLAN CITY SCALE	NTS
U02	CITY TRAFFIC SECTIONS SHEET 1	NTS
U03	CITY TRAFFIC SECTIONS SHEET 2	NTS
U04	CITY TRAFFIC SECTIONS SHEET 3	NTS
U05	MASTERPLAN NEIGHBORHOOD SCALE	NTS
U06	SITE ANALYSIS	NTS
U07	MASTERPLAN SITE SCALE	1:200000 @ A2

# **ARCHITECTURAL DRAWINGS**

SKETCHES		
ASK01	CONCEPT APPROACH	NTS
ASK02	FUNCTIONALITY PLANS & SECTIONS	NTS
(SURROUN	DING MASTERPLAN BUILDINGS)	
ASK03	BUILDINGS SHEET 1	NTS
ASK04	BUILDINGS SHEET 2	NTS
ASK05	BUILDINGS SHEET 3	NTS
ASK06	BUILDINGS SHEET 4	NTS
ASK07	BUILDINGS SHEET 5	NTS
ASK08	BUILDINGS SHEET 6	NTS
ASK09	BUILDINGS SHEET 7	NTS
ASK10	BUILDINGS SHEET 8	NTS
ASK11	BUILDINGS SHEET 9	NTS

### TECHNOLOGY DRAWINGS

TECHNOL	OGY DRAWINGS		STRUC	TURAL DRAWINGS
SKETCHES			STRUCTU	JRAL PLANS (S00 SERIES)
TSK1	LIGHTING REQUIREMENTS PLANS	NTS	<b>S</b> 01	GROUND FLOOR PLAN
TSK2	SOUND REQUIREMENTS PLANS	NTS	S02	FIRST FLOOR PLAN
TSK3	AIR REQUIREMENTS PLANS	NTS	S03	ROOF PLAN
TSK4	SERVICES LAYOUTS	NTS		
TSK5	FINISHES LAYOUTS	NTS		
BUILDING PL	ANS (T00 SERIES)			
T01	GROUND FLOOR PLAN SHEET 1	1:100@	DA2	
T02	GROUND FLOOR PLAN SHEET 2	1:100@	DA2	
T03	GROUND FLOOR PLAN SHEET 3	1:100@	0A2	
T04	FIRST FLOOR PLAN SHEET 1	1:100@	DA2	
T05	FIRST FLOOR PLAN SHEET 2	1:100@	DA2	

DOILDIN	STEARS (100 SERIES)	
T01	GROUND FLOOR PLAN SHEET 1	1:100@A2
T02	GROUND FLOOR PLAN SHEET 2	1:100@A2
T03	GROUND FLOOR PLAN SHEET 3	1:100@A2
T04	FIRST FLOOR PLAN SHEET 1	1:100@A2
T05	FIRST FLOOR PLAN SHEET 2	1:100@A2
T06	FIRST FLOOR PLAN SHEET 3	1:100@A2

WALL DETAILS (EXTERNAL) W01, W02

WALL DETAILS (EXTERNAL) W03, W04

FLOOR DETAILS: F01, F02, F03, F04

FLOOR DETAILS: F05, F06, F07, F08

FLOOR DETAILS F09, F10, F11

1:10@A4

1:10@A4

1:10@A4

1:10@A4

1;!0@A4

### MASTER PLAN (A00 SERIES)

III TO I LITTI LIT	11 (7100 SEITHES)				
A01	GROUND FLOOR PLAN	1:500@A2	BUILDING SE	ECTIONS (T10 SERIES)	
A02	FIRST FLOOR PLAN	1:500@A2	T11	SECTION 1 - DOUBLE SKIN FACADE	1:20@A2
A03	SECOND FLOOR PLAN	1:500@A2	T12	SECTION 2 - SECTION AA	1:20@A2
A04	THIRD FLOOR PLAN	1:500@A2	T13	SECTION 3 - SECTION BB	1:20@ A2
A05	ROOF PLAN	1:500@A2	T14	SECTION 4 - SECTION DD	1:20@A2

## LIBRARY PLANS (A10 SERIES)

A11	GROUND FLOOR PLAN	1:250@A2	T21	DETAILS SHEET 1- EXTERNAL WALL	1:10@A2
A12	FIRST FLOOR PLAN	1:250@A2	T22	DETAILS SHEET 2 - INTERNAL WALL & FLOOR	1:10@A2
A13	ROOF PLAN	1:250@A2	T23	DETAILS SHEET 3 - FLOOR / NODES 1, 2 & 3	1:10@A2

**DETAILS (T20 SERIES)** 

A13	ROOF PLAN	1:250@A2 T23	DETAILS SHEET 3 - FLOOR / NODES 1, 2 & 3	1:10@A2
LIBRARY E	ELEVATIONS (A20 SERIES)	DET	AILS FOR REPORT (D SERIES)	

1:250@A2

D01

D02

D07

D08

D09

# LIE

A21

**ELEVATIONS** 

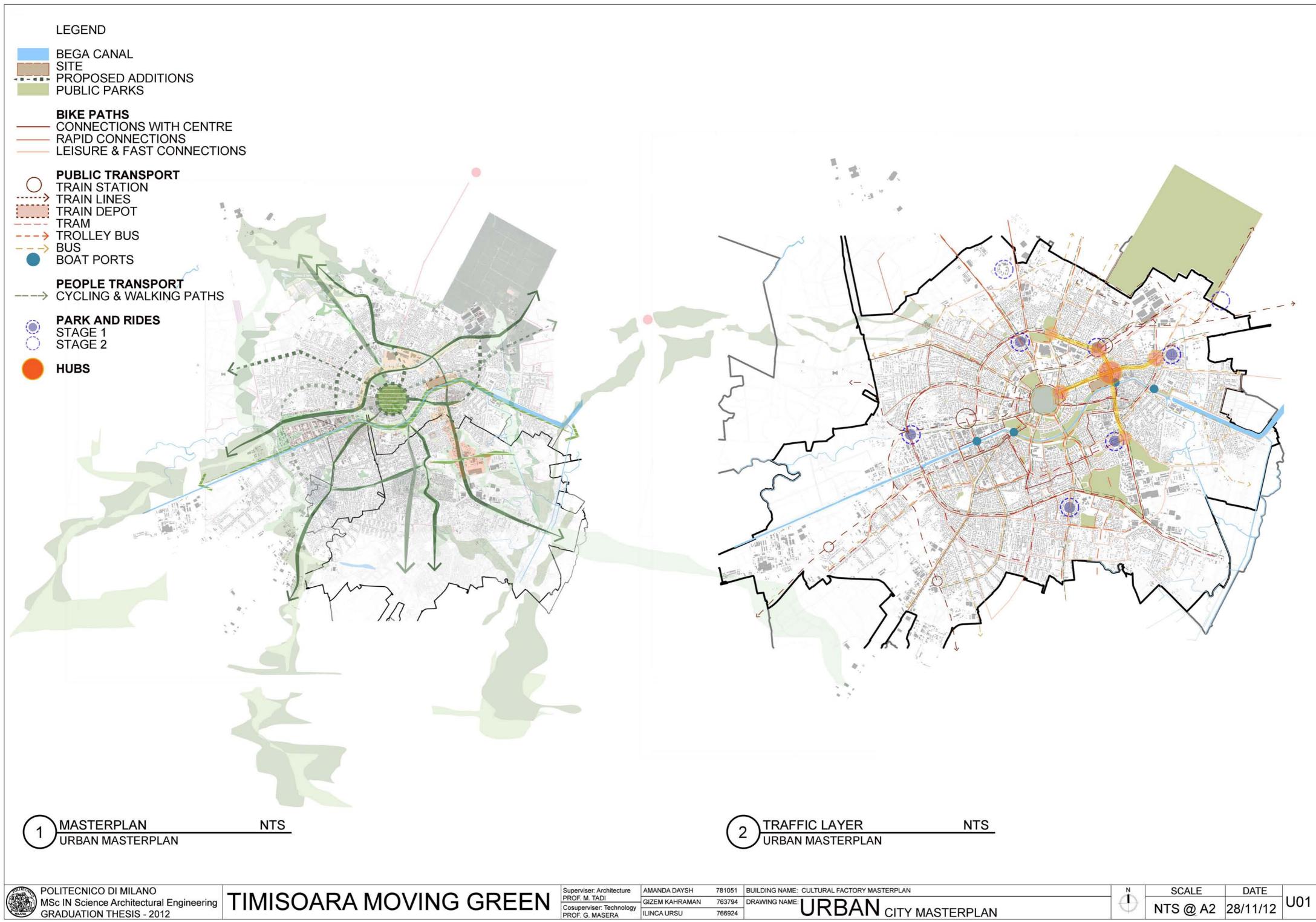
LIBRARY S	SECTIONS (30 SERIES)		D03	WALL DETAILS (EXTERNAL) W05, W06	1:10@A4
A31	SECTIONS	1:250@A2	D04	WALL DETAILS (EXTERNAL) W07	1:10@A4
			D05	WALL DETAILS (INTERNAL) W10,W11,W12	1:10@A4
			D06	WALL DETAILS (INTERNAL) W13,W14	1:10@A4

1:500 @A2

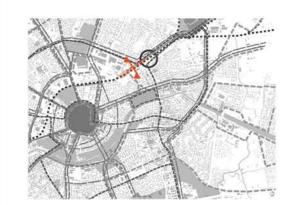
1:500 @ A2

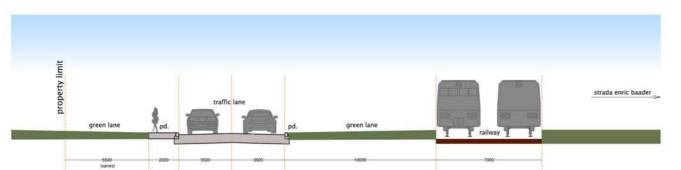
1:500 @A2

SCALE



POLITECNICO DI MILANO
MSc IN Science Architectural Engineering
GRADUATION THESIS - 2012





SECTION 1A / Corner Strada Aristide Demetriade & Strada Enric Baader **EXISTING SITUATION** 

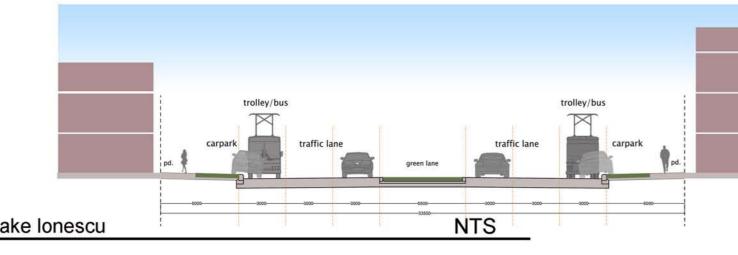


NTS

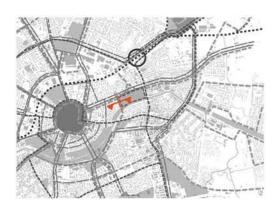
SECTION 1B / Strada Aristide Demetriade

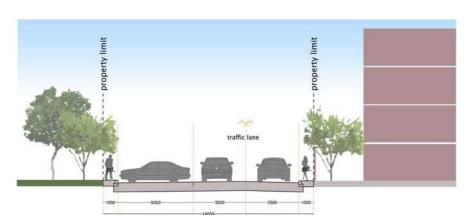
**EXISTING SITUATION** 





SECTION 2/ Bulevardul Take Ionescu **EXISTING SITUATION** 





SECTION 3/ Strada Academician Dimitrie Gusti **EXISTING SITUATION** 

NTS

#### STAGE 1:

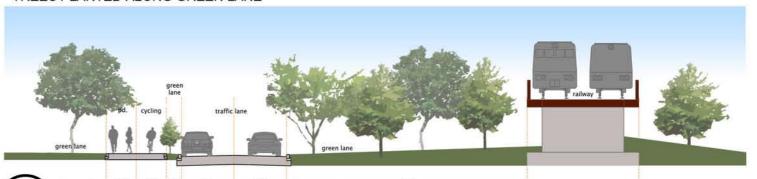
- WIDEN PEDESTRAIN PATHS TO INTRODUCTE CYCLING LANES
- TREES PLANTED ALONG GREEN LANE



SECTION 1A / Corner Strada Aristide Demetriade & Strada Enric Baader PROPOSED SITUATION

#### STAGE 1:

- WIDEN PEDESTRAIN PATHS TO INTRODUCTE CYCLING LANES
- TREES PLANTED ALONG GREEN LANE

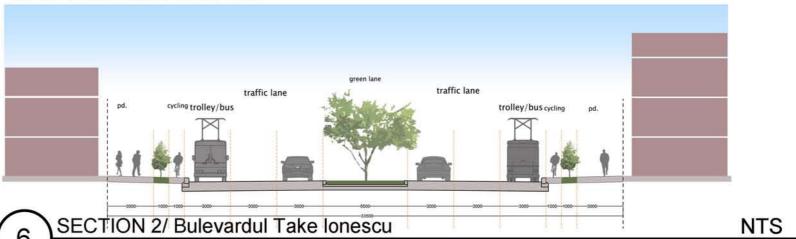


SECTION 1B / Strada Aristide Demetriade PROPOSED SITUATION

NTS

#### STAGE 1:

- REMOVE CARPARKS = 532m/5m = 106/3 = 35x2 cars approx.
- INTRODUCTE CYCLING LANES
- TREES PLANTED ALONG GREEN LANE



PROPOSED SITUATION

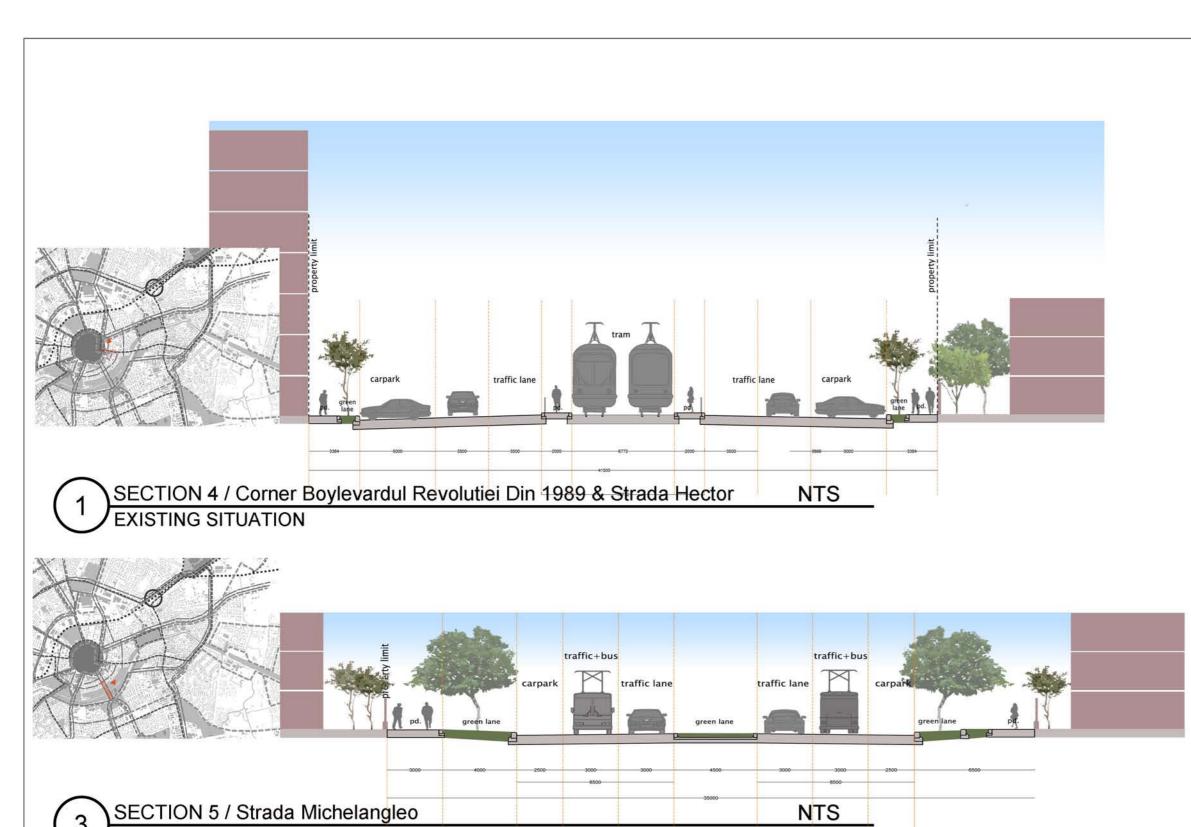
#### STAGE 1:

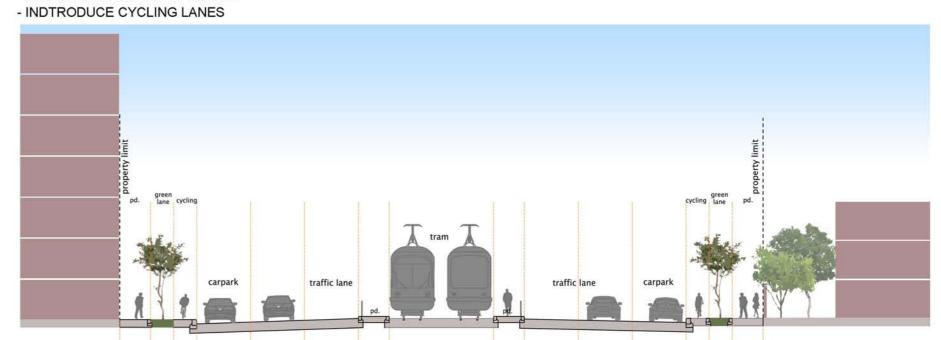
- REMOVE CARPARKS = (41m/3m = 13)(190m 41m = 149/5 = 30/2 = 15) [13+15] x 2 = 56 cars approx
- WIDEN PEDESTRIAN PATHS
- INTRODUCTE CYCLING LANES
- TREES PLANTED ALONG GREEN LANE



SECTION 3/ Strada Academician Dimitrie Gusti PROPOSED SITUATION

NTS





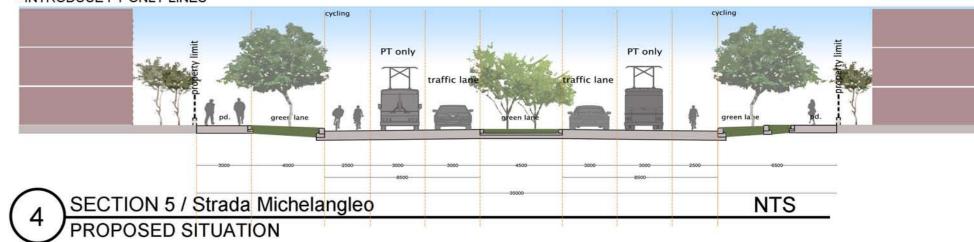
SECTION 4 / Corner Boylevardul Revolutiei Din 1989 & Strada Hector PROPOSED SITUATION

#### STAGE 1:

STAGE 1:

- INTRODUCE PARALLEL PARKING

- REMOVE CARPARKING / ONE LANE OF CARS
- INDTRODUCE CYCLING LANES
- INTRODUCE PT ONLY LINES



NTS

STAGE 1:

- REMOVE CARPARKING = 353m /5 = 70/2x2 = 70 cars approx.
- INDTRODUCE CYCLING LANES
- WIDEN PEDETRIAN PATHS



SECTION 6 / Spalinl Protopop Meletie Draghici PROPOSED SITUATION

SECTION 7 / Bulevardul Eroilor de la Tisa NTS

**EXISTING SITUATION** STAGE 1: - REMOVE CARPARKING IN TRAFFIC LANES INTRODUCE CYCLING LANES INTRODUCE GREEN SPACES

SECTION 7 / Bulevardul Eroilor de la Tisa PROPOSED SITUATION

NTS

POLITECNICO DI MILANO MSc IN Science Architectural Engineering GRADUATION THESIS - 2012

SECTION 6 / Spalinl Protopop Meletie Draghici EXISTING SITUATION

TIMISOARA MOVING GREEN

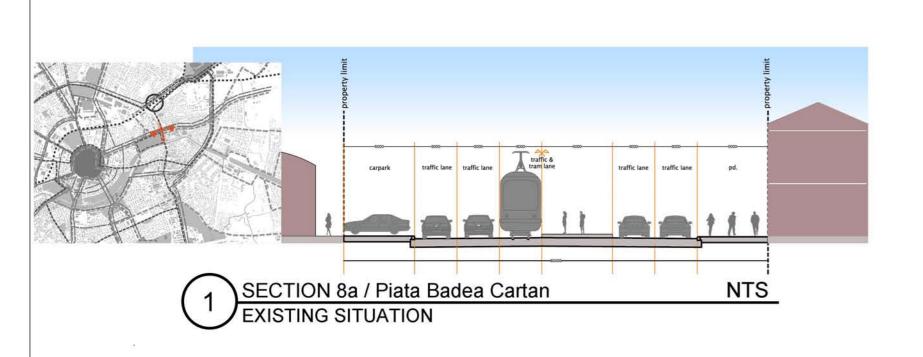
763794 DRAWING NAME:

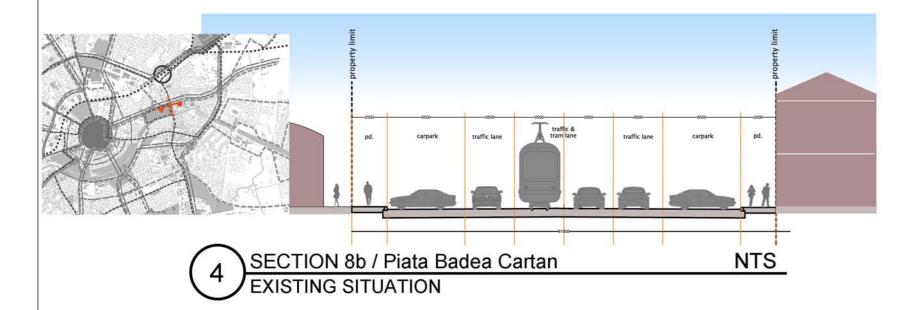
781051 BUILDING NAME: CULTURAL FACTORY MASTERPLAN URBAN CITY TRAFFIC SECTIONS SHEET 2

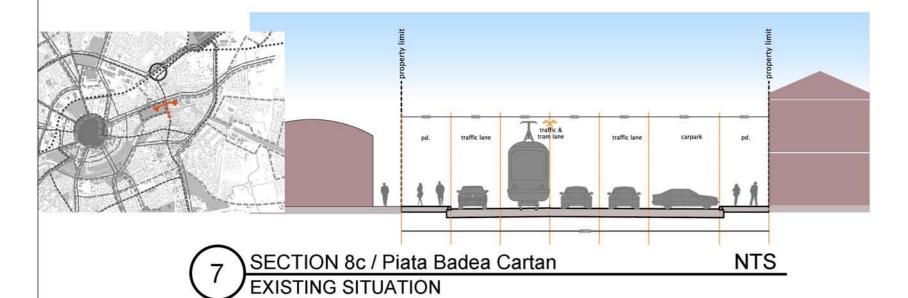
NTS

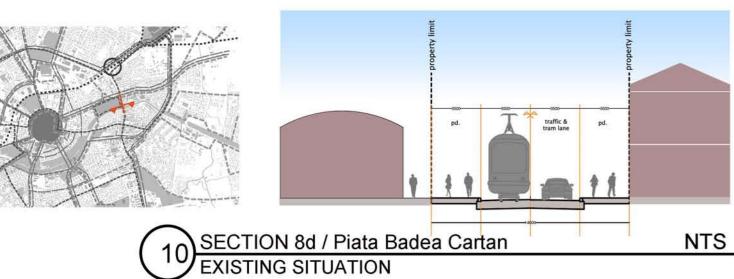
**SCALE** DATE NTS @ A2 | 28/11/12 | U03

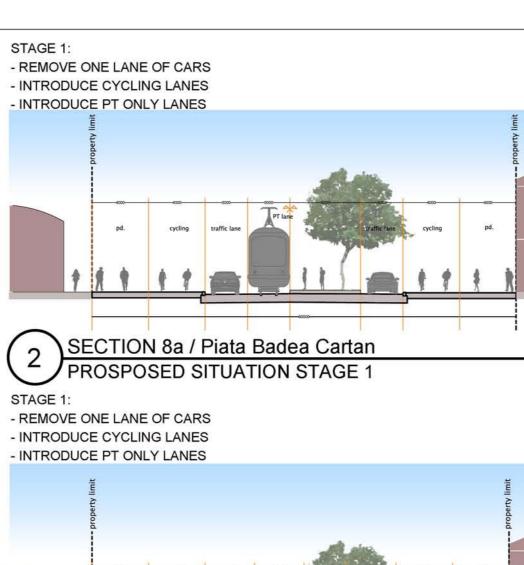
NTS

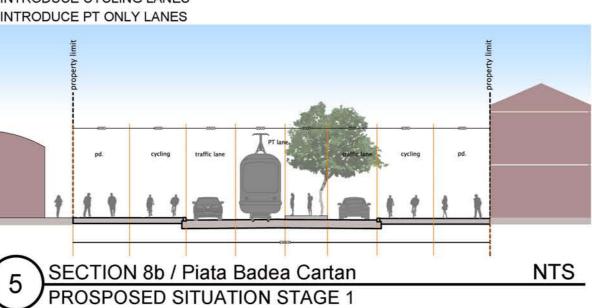












STAGE 1:

- REMOVE ONE LANE OF CARS

- INTRODUCE CYCLING LANES - INTRODUCE PT ONLY LANES

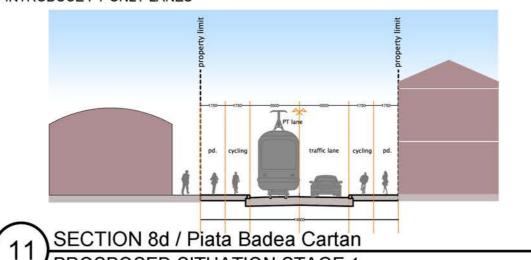
SECTION 8c / Piata Badea Cartan NTS PROSPOSED SITUATION STAGE 1

STAGE 1:

- REMOVE ONE LANE OF CARS

- INTRODUCE CYCLING LANES

- INTRODUCE PT ONLY LANES



NTS

STAGE 2: - REMOVE ALL CARS

- WIDEN CYCLING LANES



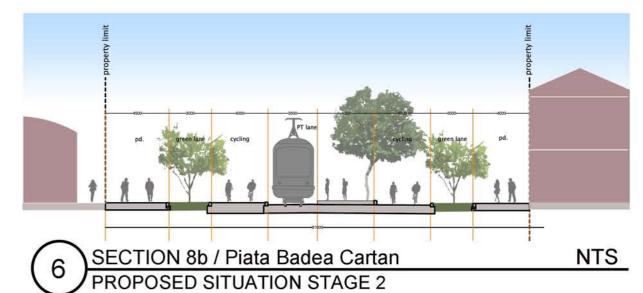
SECTION 8a / Piata Badea Cartan PROPOSED SITUATION STAGE 2

STAGE 2:

NTS

- REMOVE ALL CARS

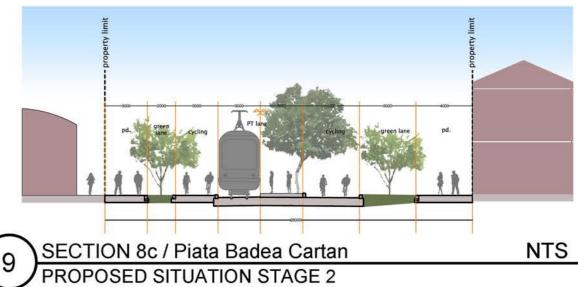
- WIDEN CYCLING LANES



STAGE 2:

- REMOVE ALL CARS

- WIDEN CYCLING LANES



STAGE 2:

- REMOVE ALL CARS - WIDEN CYCLING LANES



SECTION 8d / Piata Badea Cartan PROPOSED SITUATION STAGE 2

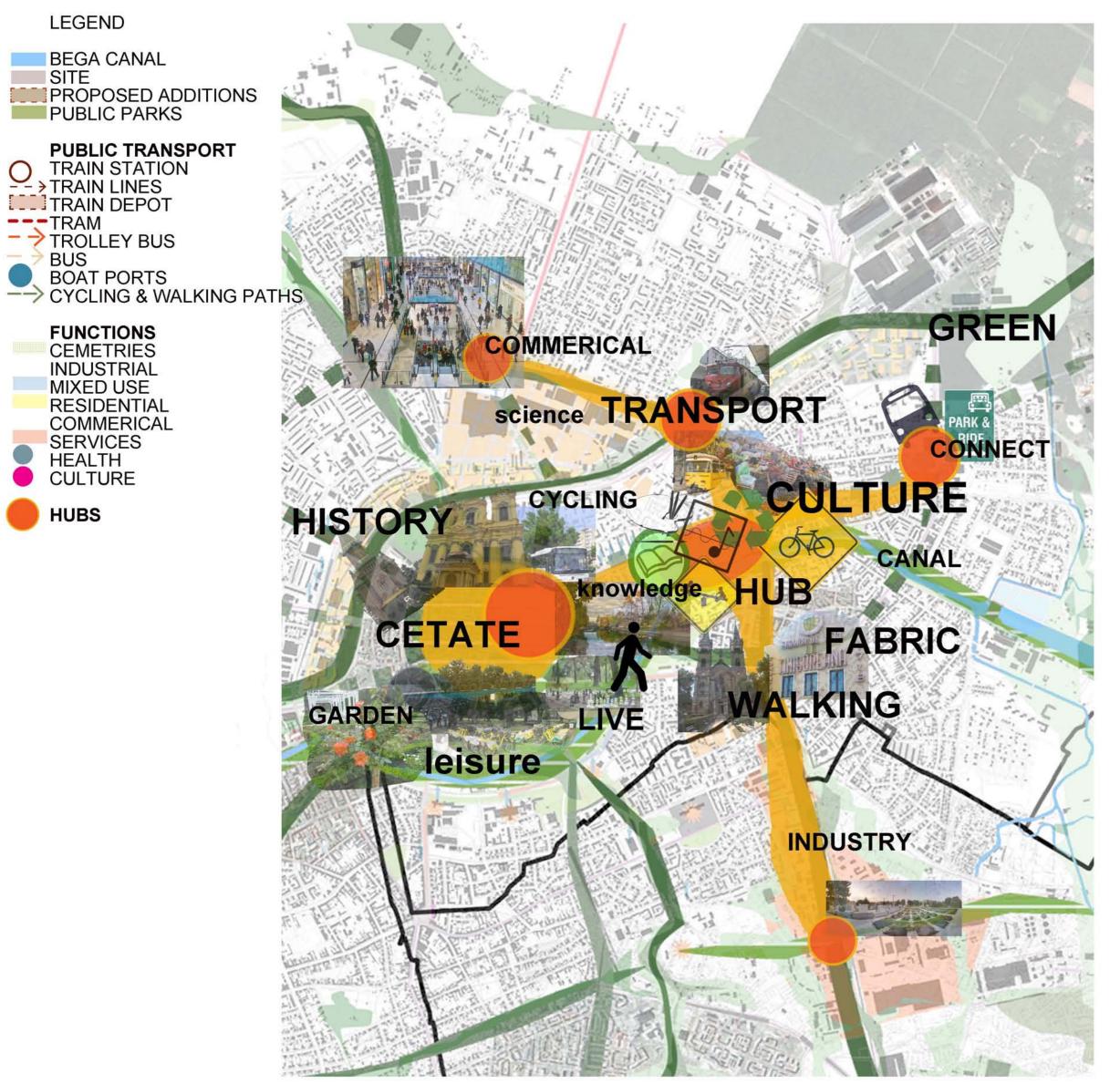
NTS

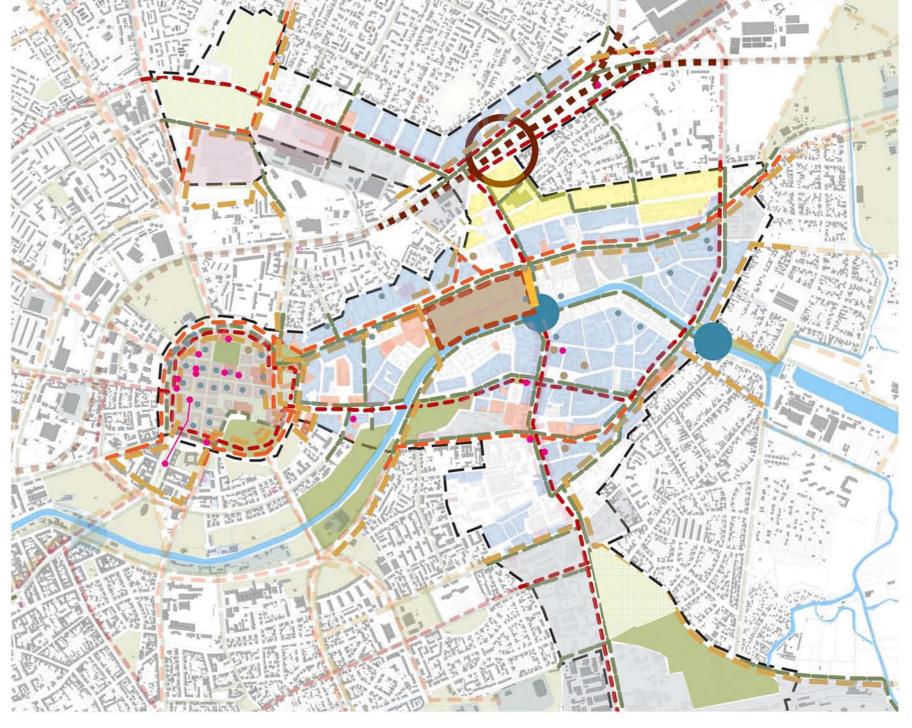
POLITECNICO DI MILANO MSc IN Science Architectural Engineering GRADUATION THESIS - 2012

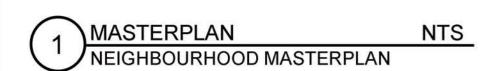
BUILDING NAME: CULTURAL FACTORY MASTERPLAN GIZEM KAHRAMAN 763794 DRAWING NAME:

URBAN CITY TRAFFIC SECTIONS SHEET 3

NTS @ A2 28/11/12 U04









**LEGEND** 

SITE

**BEGA CANAL** 

TRAIN STATION
TRAIN LINES
TRAIN DEPOT

TRAM
TROLLEY BUS

**FUNCTIONS** 

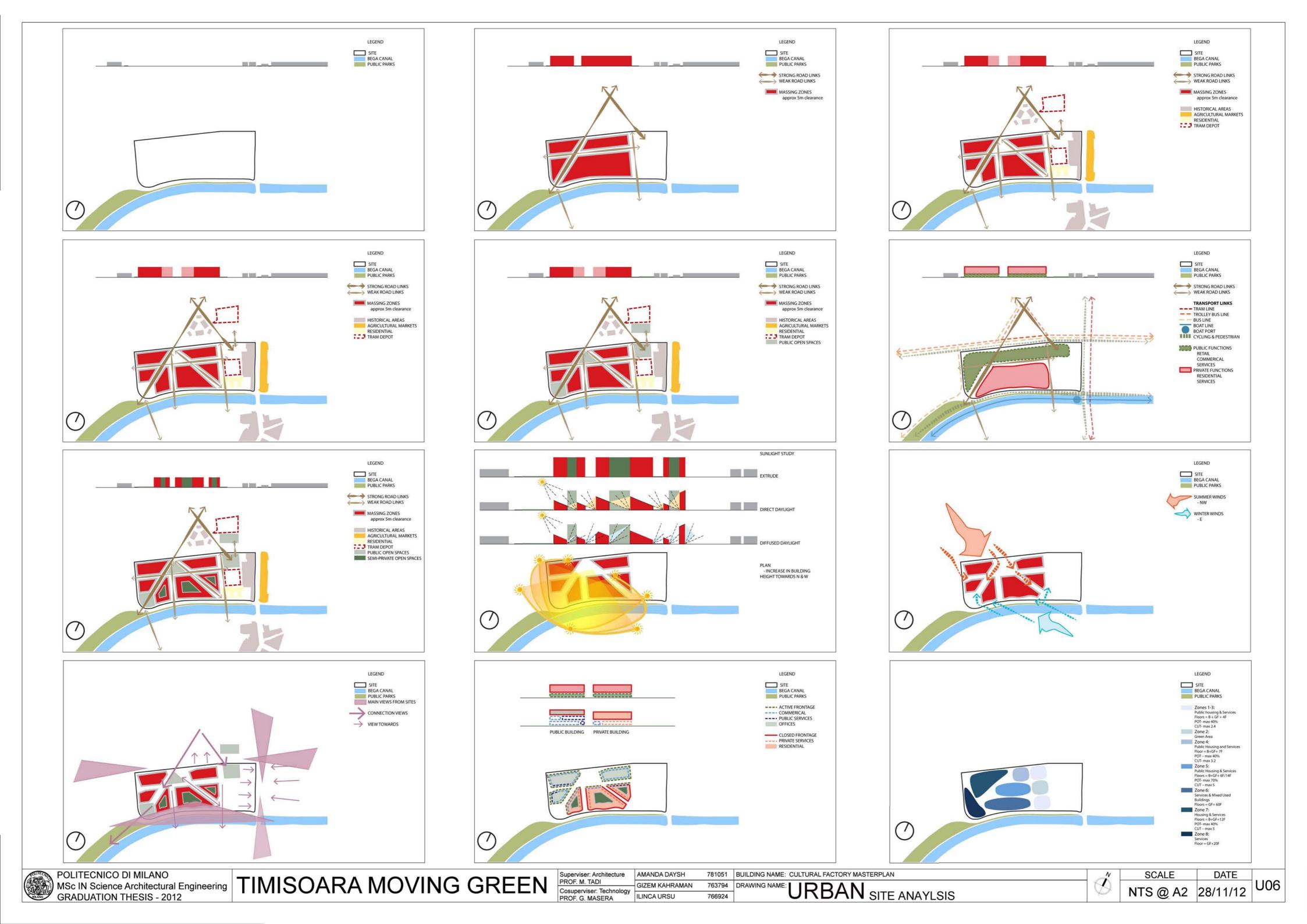
CEMETRIES

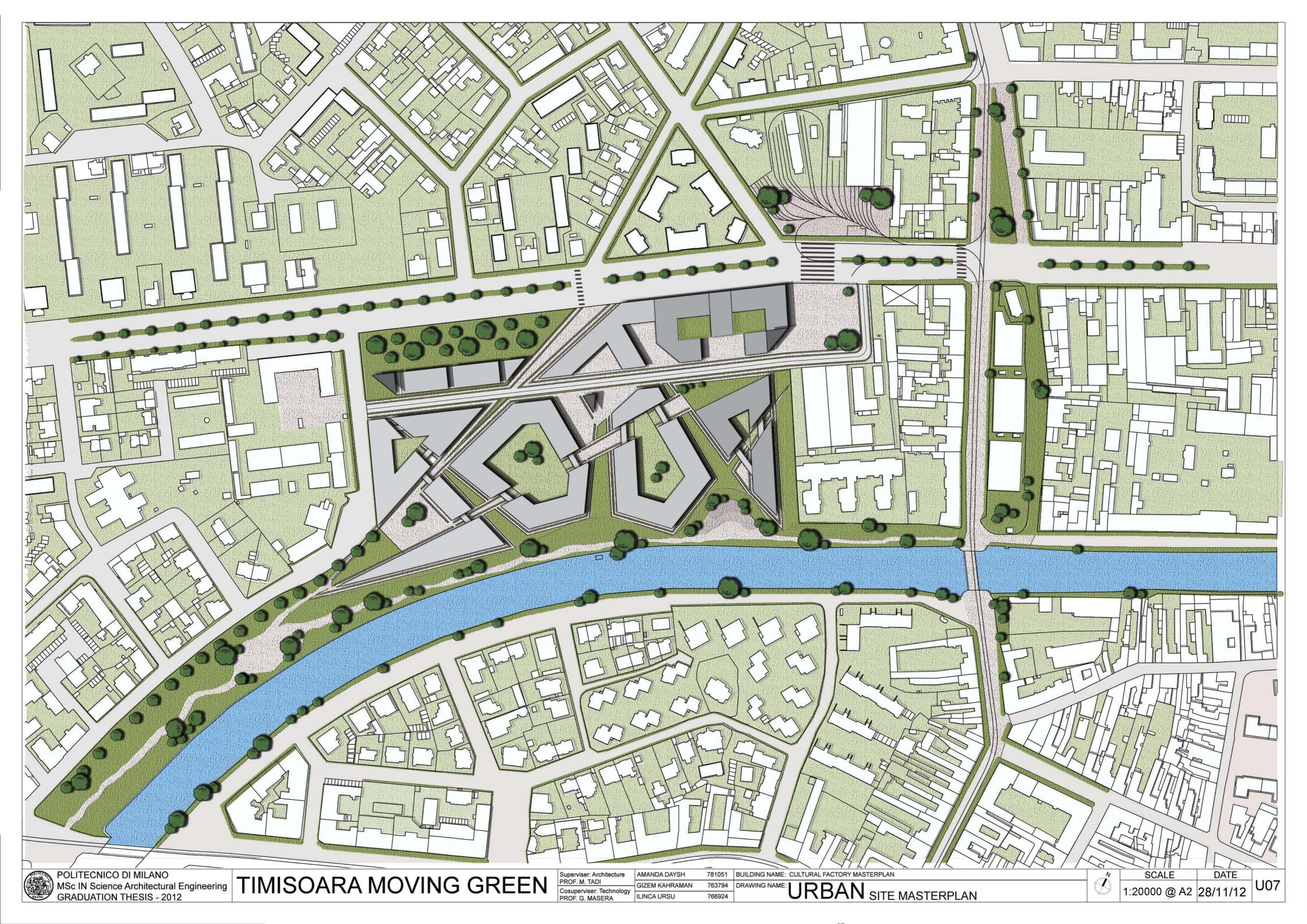
INDUSTRIAL MIXED USE RESIDENTIAL

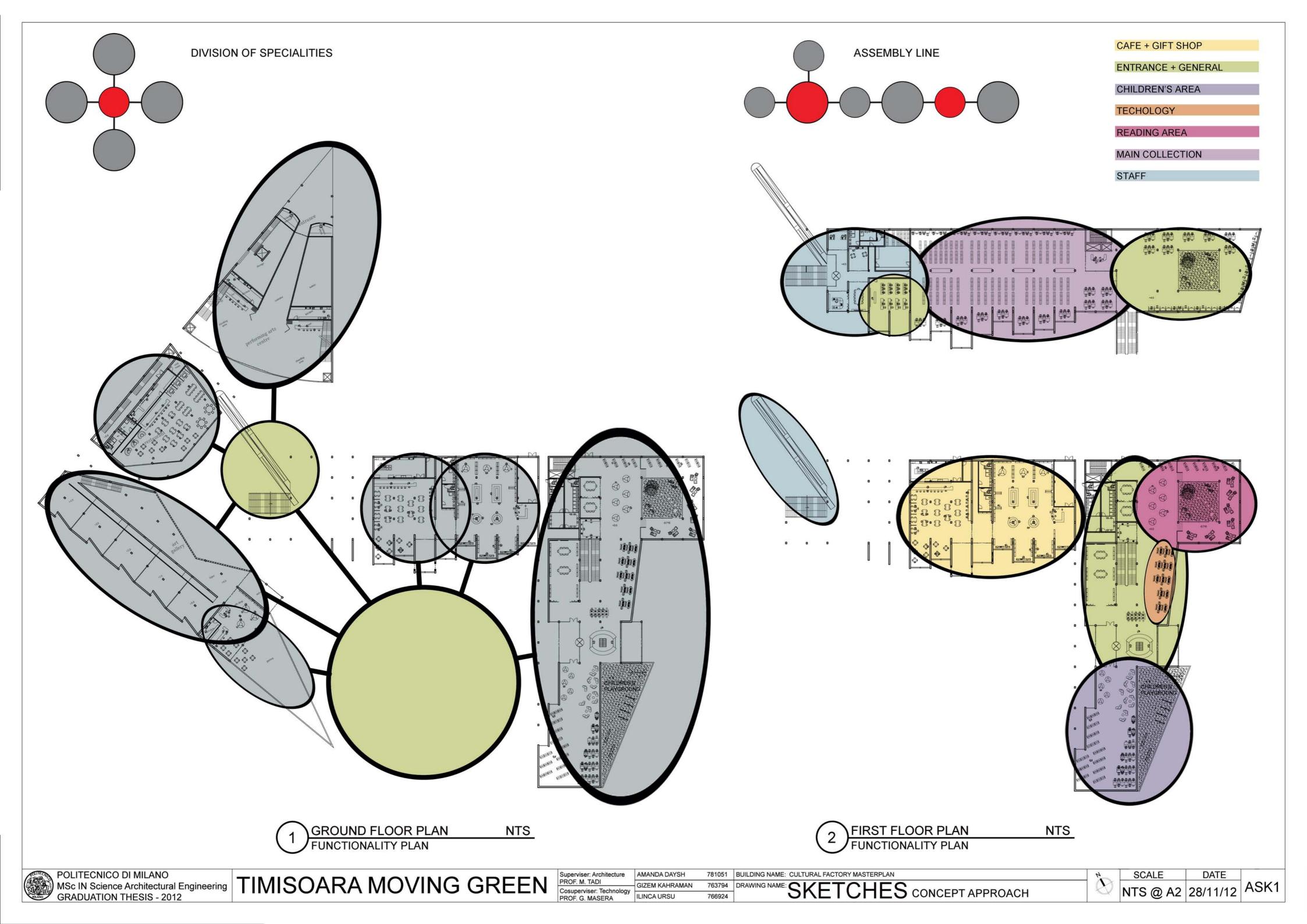
COMMERICAL SERVICES HEALTH CULTURE

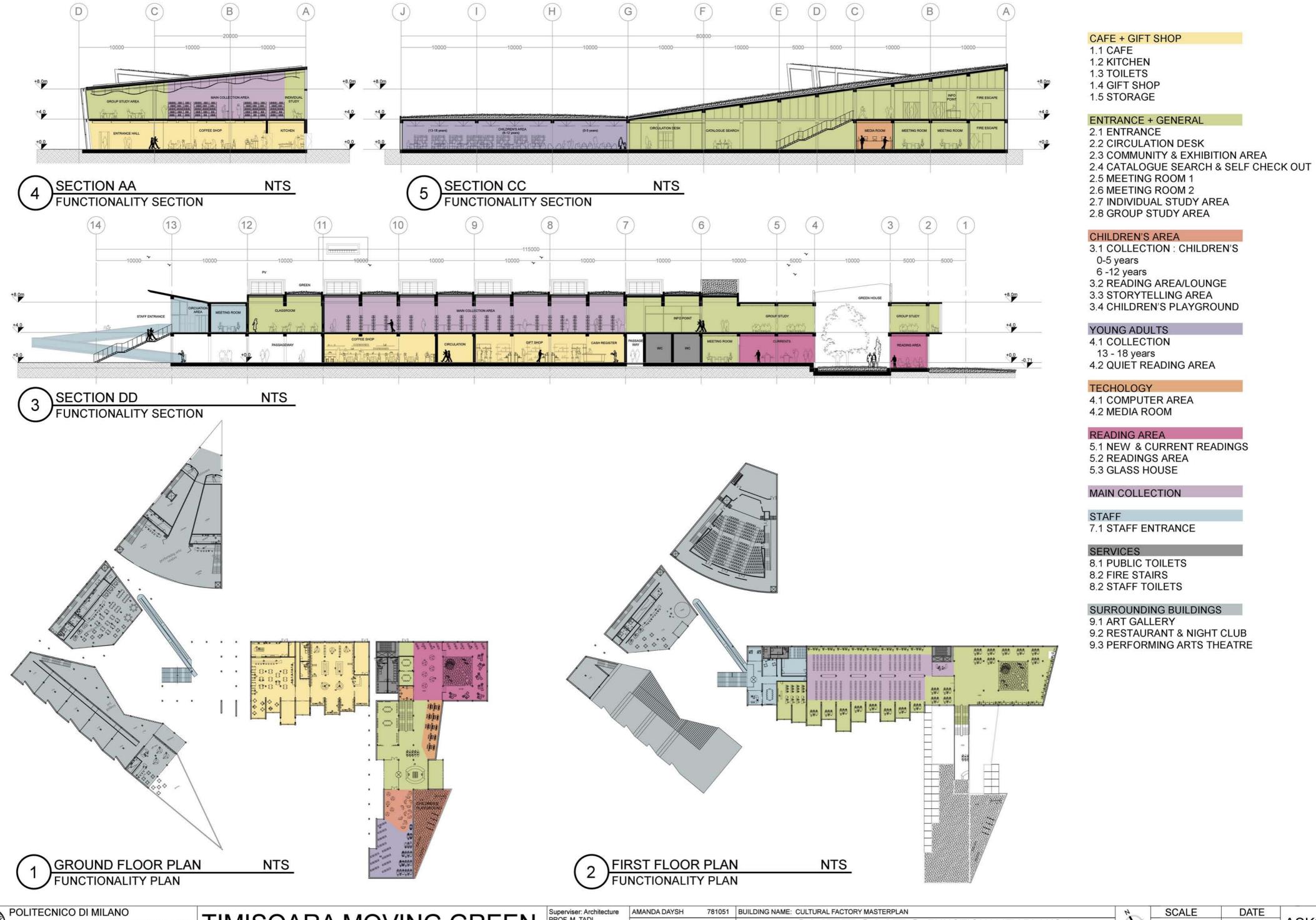
**HUBS** 

**PUBLIC TRANSPORT** 



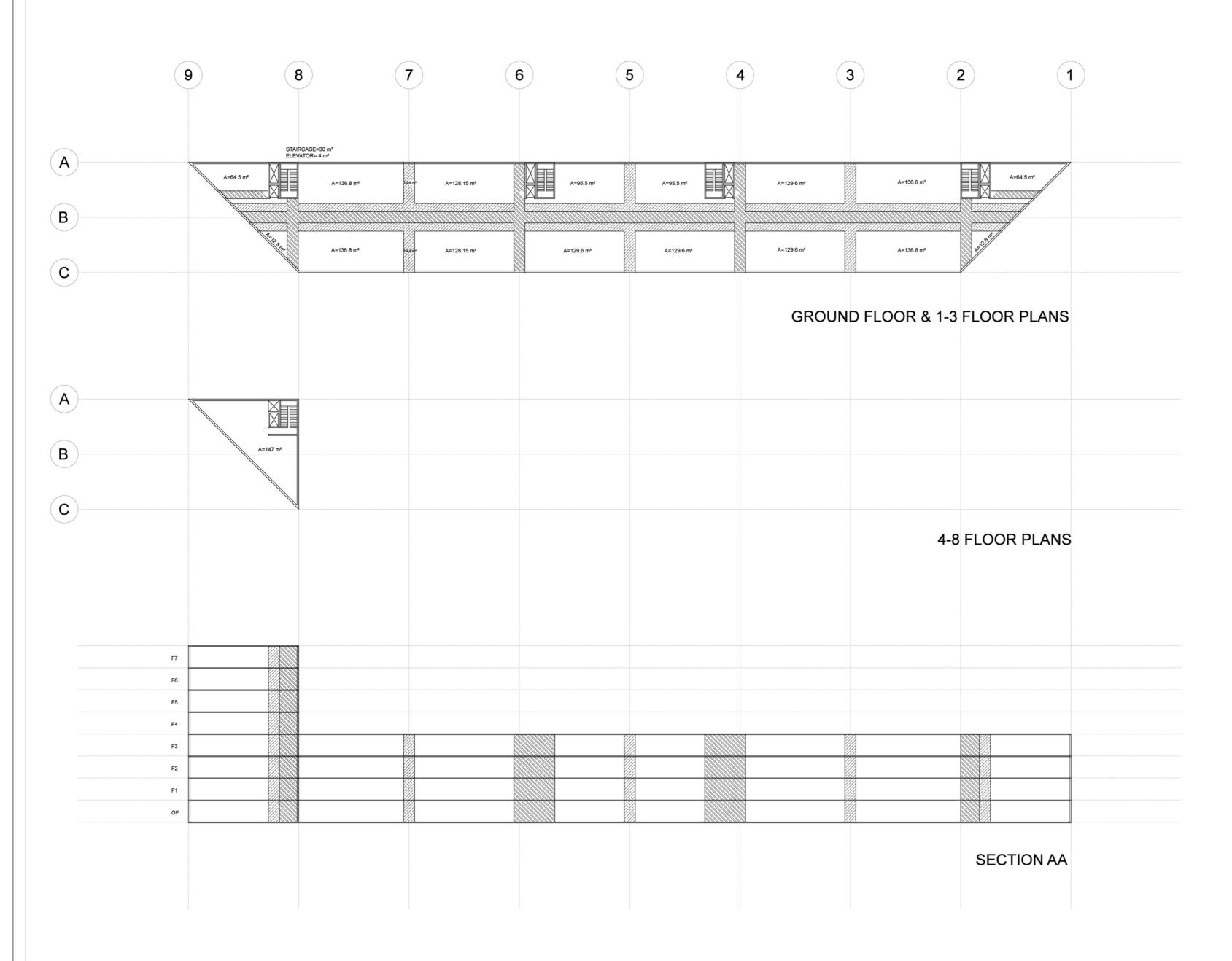






763794





### FLOOR GROUND/ FLOOR 1:

FUNCTION: RETAIL / SHOPPING CENTRE
TOTAL AREA: 2800 m²
- FIRE EGRESS: 509 m²
- GENERAL CIRCULATION: 519.84 m²
- SERVICES: 166.7 m²
USABLE SPACE: 1501.3 m² (-external walls)
TOTAL OCCUPANCY: 375 people (retail: 4m²/person)

F L O O R 2 / 3 :

F U N C T I O N : O F F I C E S

T O T A L A R E A : 2 8 0 0 m ²

- F I R E E G R E S S : 5 0 9 m ²

- G E N E R A L C I R C U L A T I O N : 5 1 9 . 8 4 m²

- S E R V I C E S : 1 6 6 . 7 m ²

USABLE SPACE: 1501.3 m² (-external walls)

TOTAL OCCUPANCY: 150 people (offices: 10m²/person)

F L O O R 4 / 7 :

F U N C T I O N : O F F I C E S

T O T A L A R E A : 2 0 1 m ²

- F I R E E G R E S S : 2 2 m ²

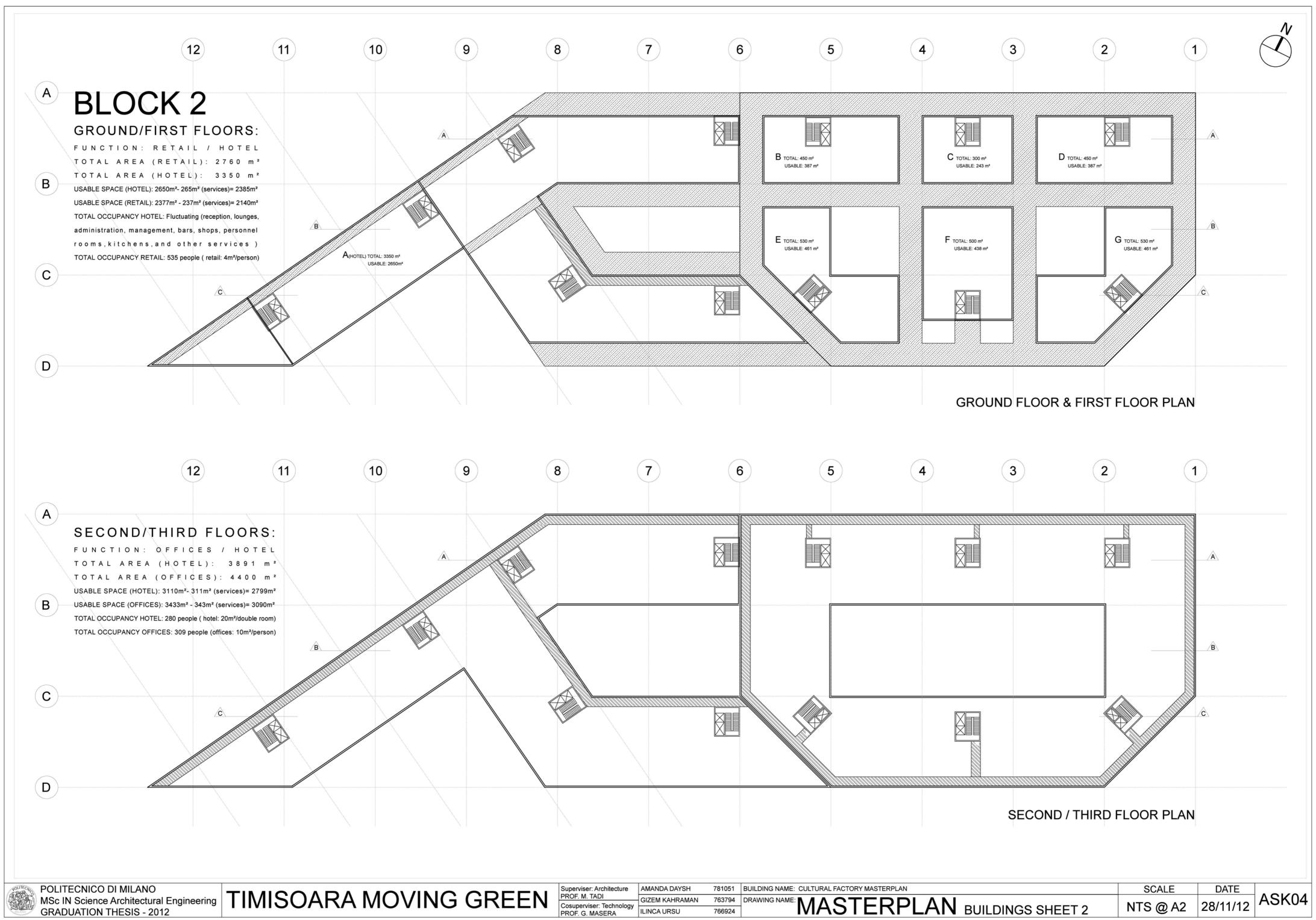
- G E N E R A L C I R C U L A T I O N : 4 m²

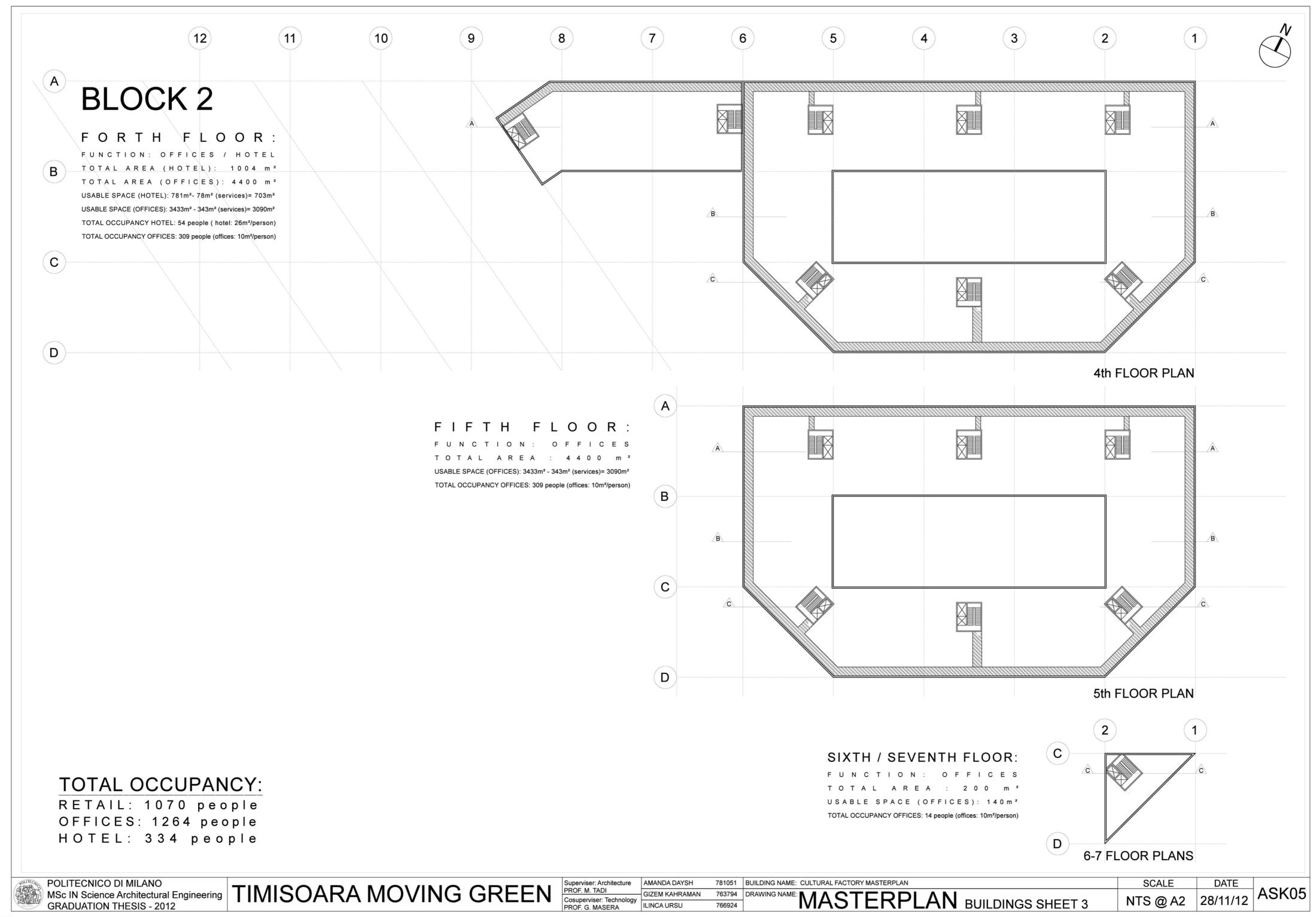
USABLE SPACE: 147 m² (-external walls)

TOTAL OCCUPANCY: 14 people (offices: 10m²/person)

### TOTAL OCCUPANCY:

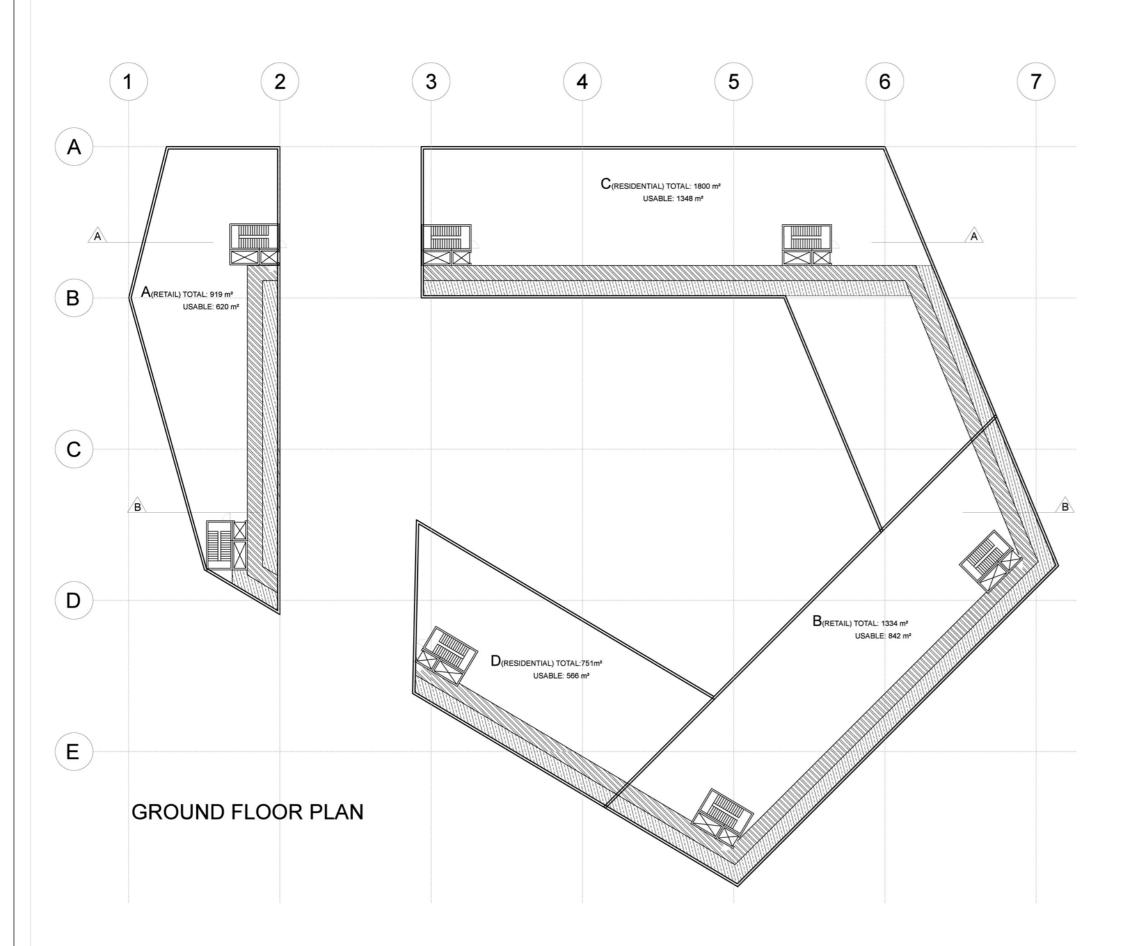
RETAIL: 750 people OFFICES: 356 people

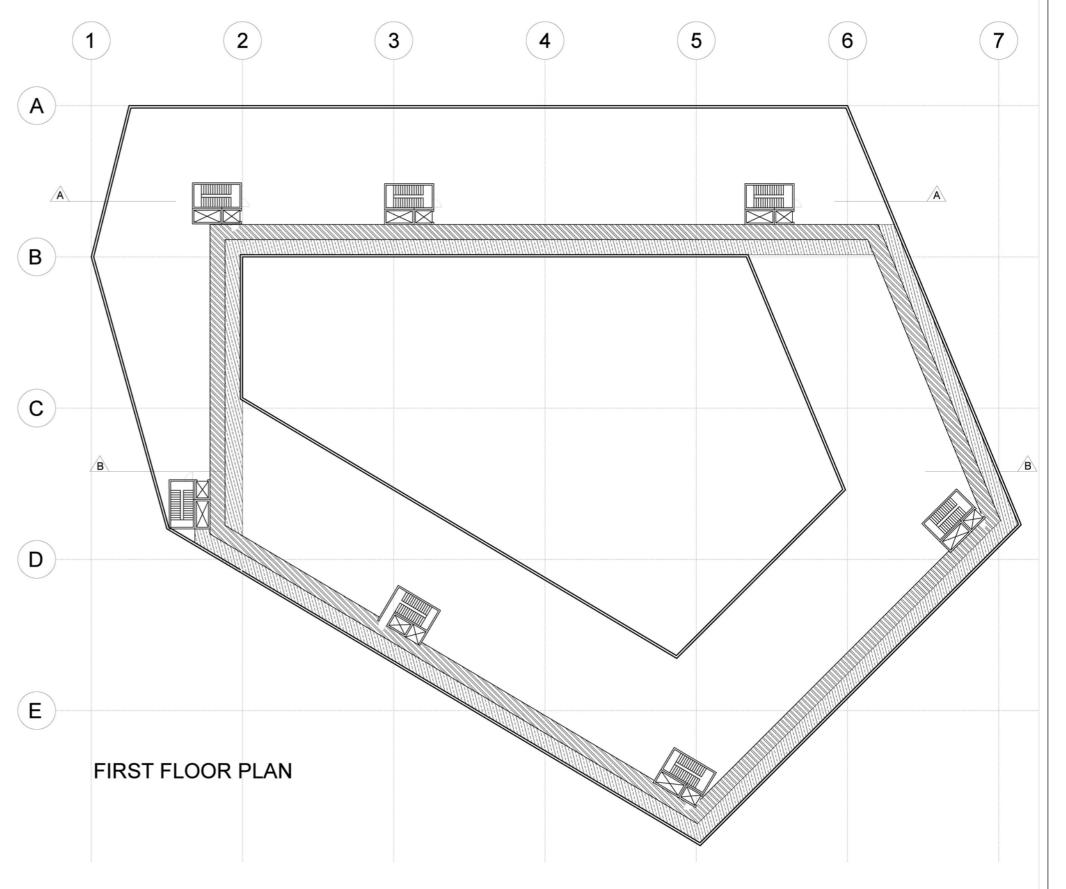




# BLOCK 2 9 7 12 11 10 8 6 5 4 3 2 **SECTION AA SECTION BB** SECTION CC POLITECNICO DI MILANO TIMISOARA MOVING GREEN Superviser: Architecture PROF. M. TADI Consuperviser: Technology SCALE 781051 BUILDING NAME: CULTURAL FACTORY MASTERPLAN AMANDA DAYSH 28/11/12 ASK06 MSc IN Science Architectural Engineering GRADUATION THESIS - 2012 763794 DRAWING NAME: MASTERPLAN BUILDINGS SHEET 4 GIZEM KAHRAMAN NTS @ A2



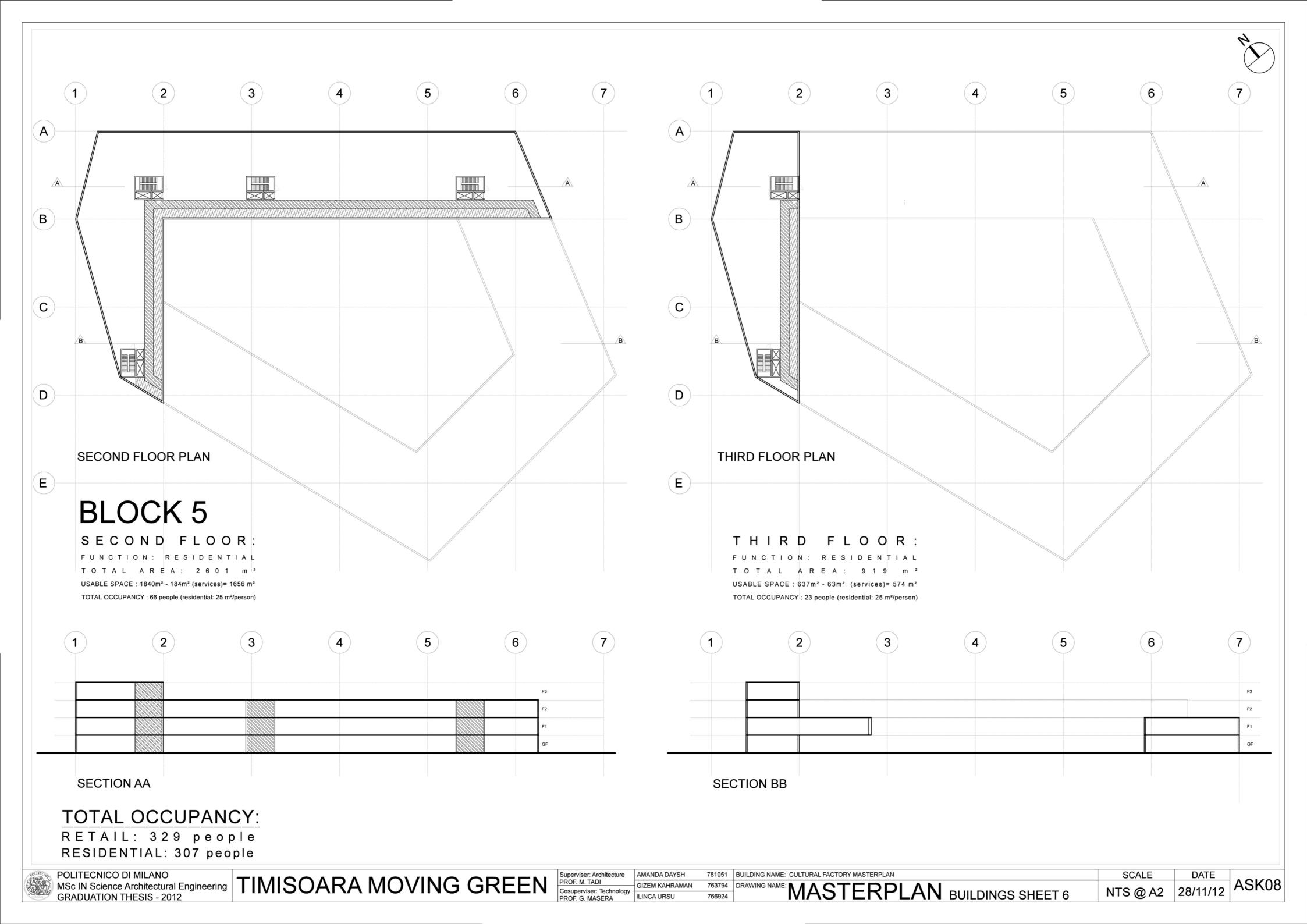


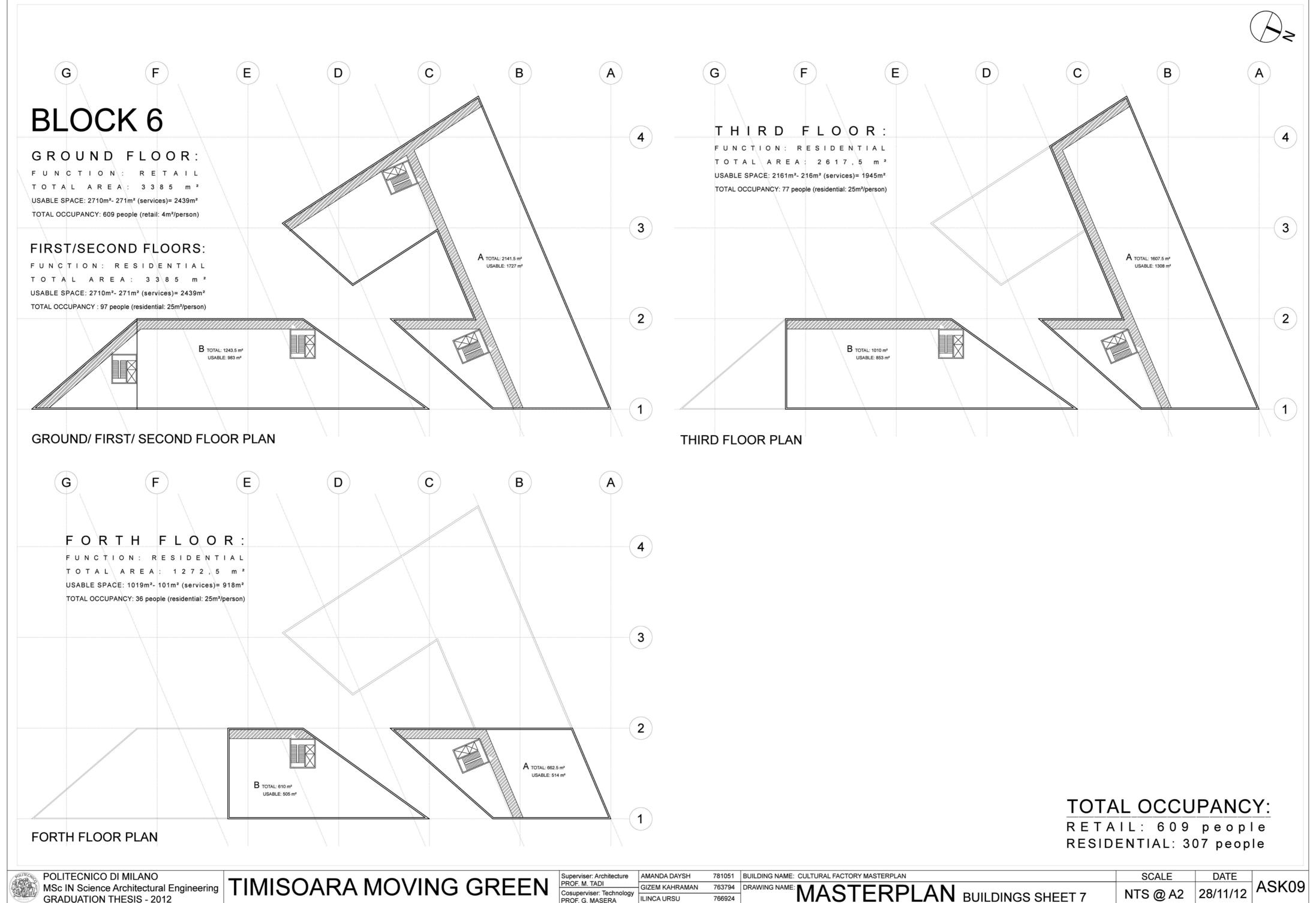


GROUND FLOOR:

FUNCTION: RETAIL / RESIDENTIAL TOTAL AREA (RETAIL): 2253 m² TOTAL AREA (RESIDENTIAL): 2551 m<sup>2</sup> USABLE SPACE (RETAIL): 1462m²- 146m² (services)= 1316m² USABLE SPACE (RESIDENTIAL): 21002 - 210m2 (services)= 1890m2 TOTAL OCCUPANCY RETAIL: 329 people (retail: 4m²/person) TOTAL OCCUPANCY RESIDENTIAL: 75 people (residential: 25m²/person)

USABLE SPACE: 3990m² - 399m² (services)= 3591 m² TOTAL OCCUPANCY: 143 people (residential: 25 m²/person)





MSc IN Science Architectural Engineering **GRADUATION THESIS - 2012** 

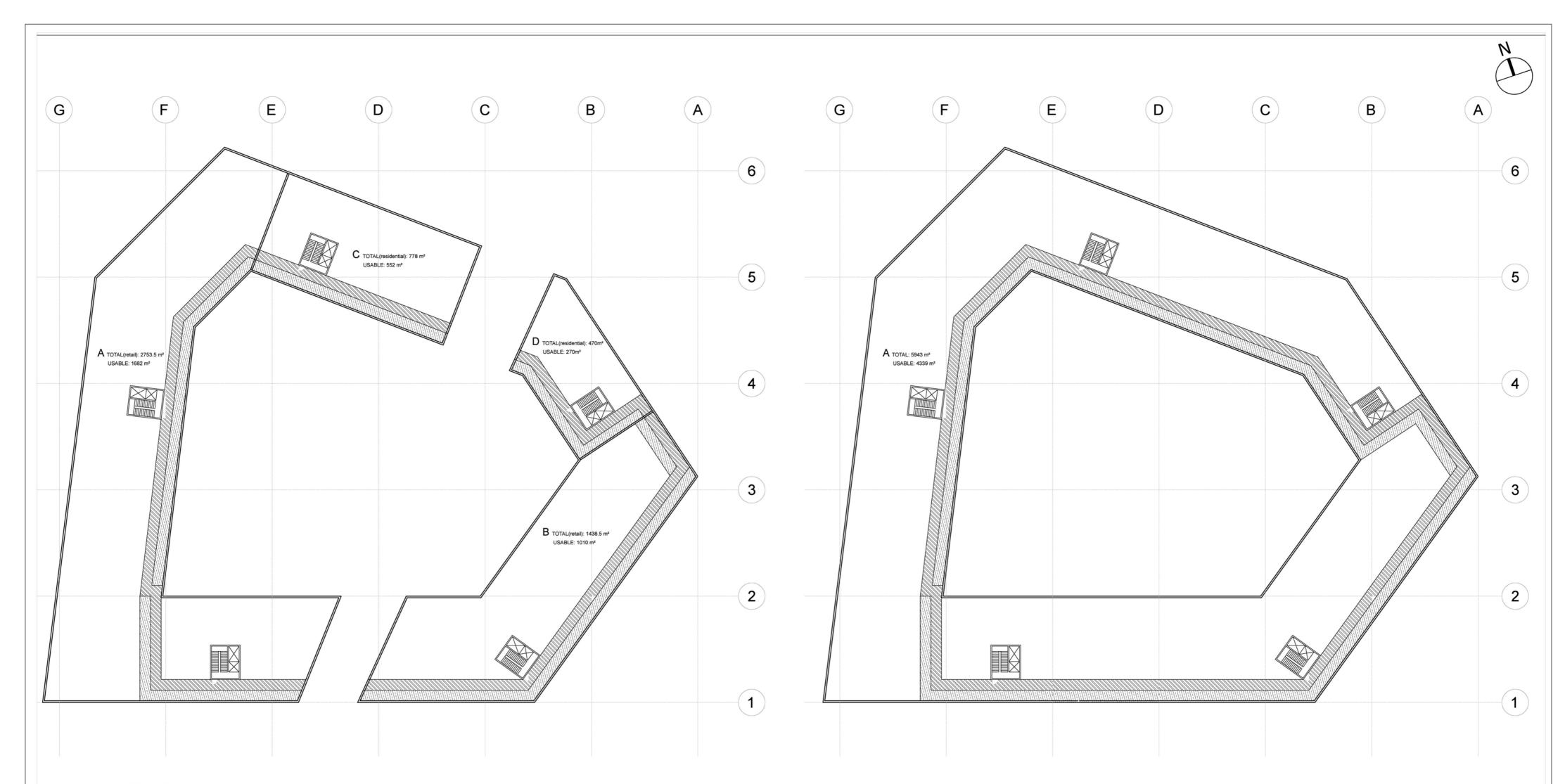
TIMISOARA MOVING GREEN

GIZEM KAHRAMAN

763794
766924

DRAWING NAME: MASTERPLAN BUILDINGS SHEET 7

NTS @ A2



GROUND FLOOR:

FUNCTION: RETAIL / RESIDENTIAL

TOTAL AREA (RETAIL): 4192 m<sup>2</sup>

TOTAL AREA (RESIDENTIAL): 1248 m<sup>2</sup>

USABLE SPACE (RETAIL): 2692m<sup>2</sup>- 269m<sup>2</sup> (services)= 2423m<sup>2</sup>

USABLE SPACE (RESIDENTIAL): 822 m<sup>2</sup> - 82m<sup>2</sup> (services)= 740m<sup>2</sup>

TOTAL OCCUPANCY RETAIL: 605 people (retail: 4m<sup>2</sup>/person)

TOTAL OCCUPANCY RESIDENTIAL: 29 people (residential: 25m<sup>2</sup>/person)

### FIRST FLOOR:

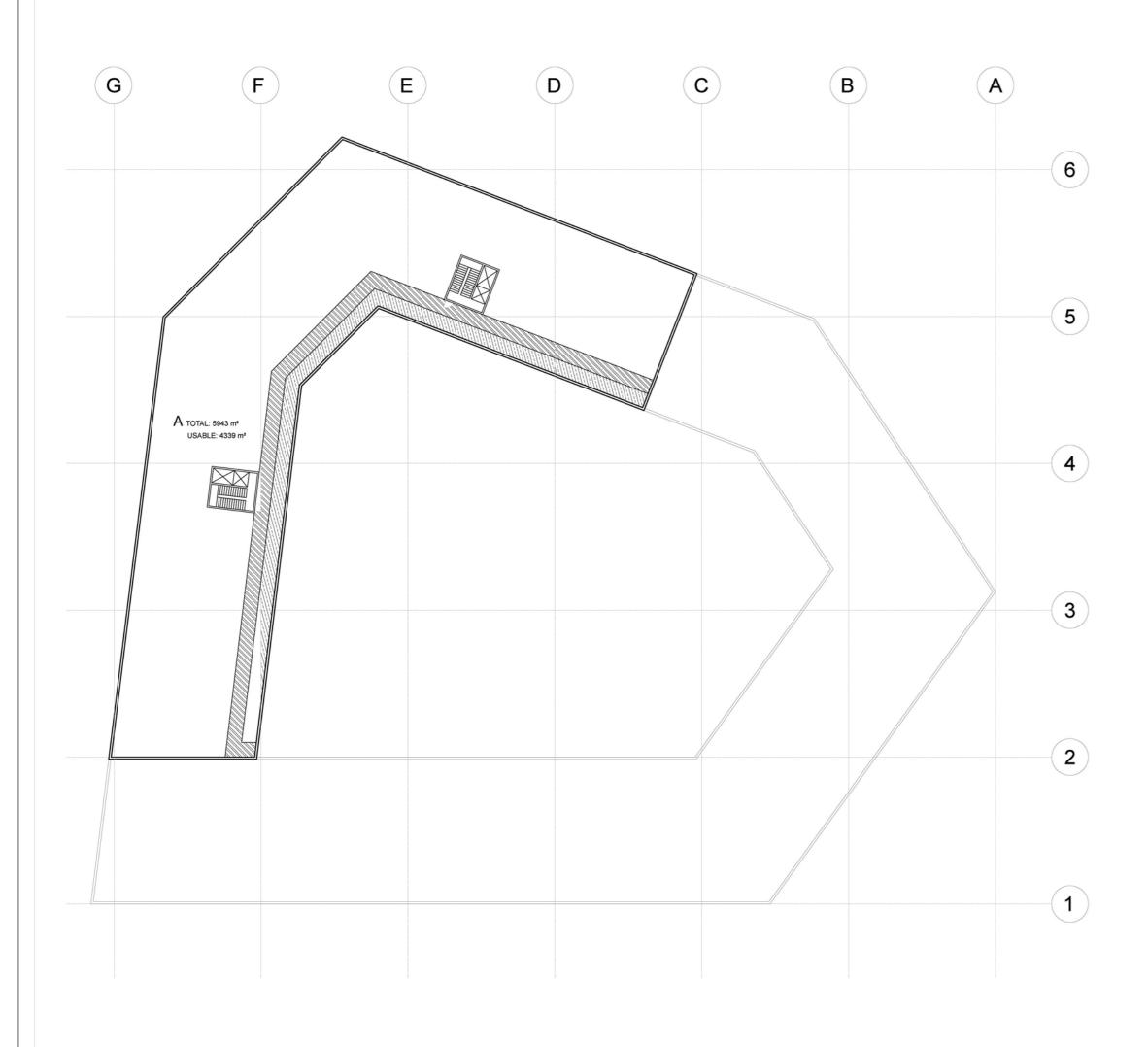
F U N C T I O N : R E S I D E N T I A L

T O T A L A R E A : 5 9 4 3 m <sup>2</sup>

USABLE SPACE: 4339 m<sup>2</sup> - 433m<sup>2</sup> (services)= 3906 m<sup>2</sup>

TOTAL OCCUPANCY: 156 people (residential: 25m<sup>2</sup>/person)





SECOND FLOOR:

F U N C T I O N : R E S I D E N T I A L

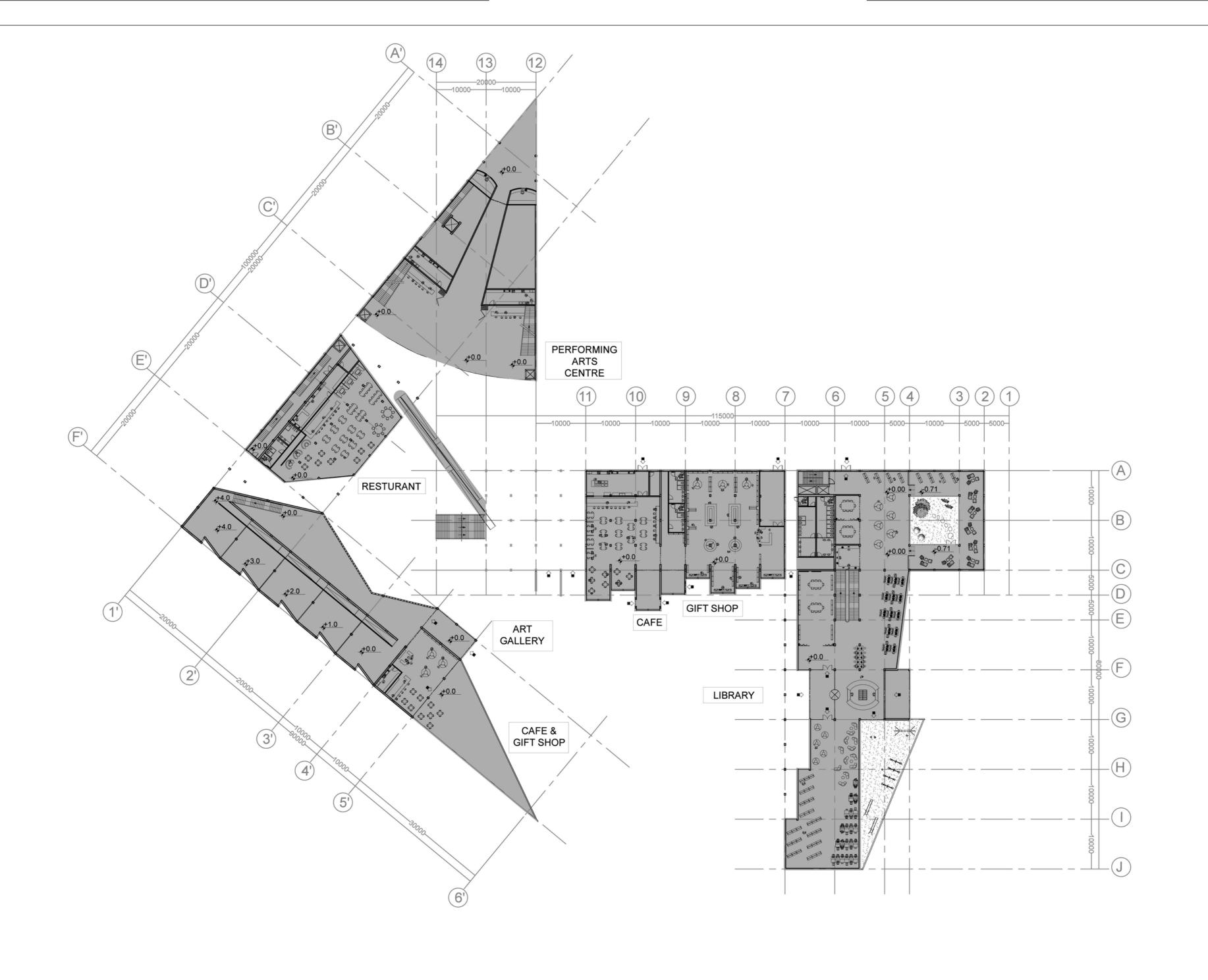
T O T A L A R E A : 2 5 1 4 m <sup>2</sup>

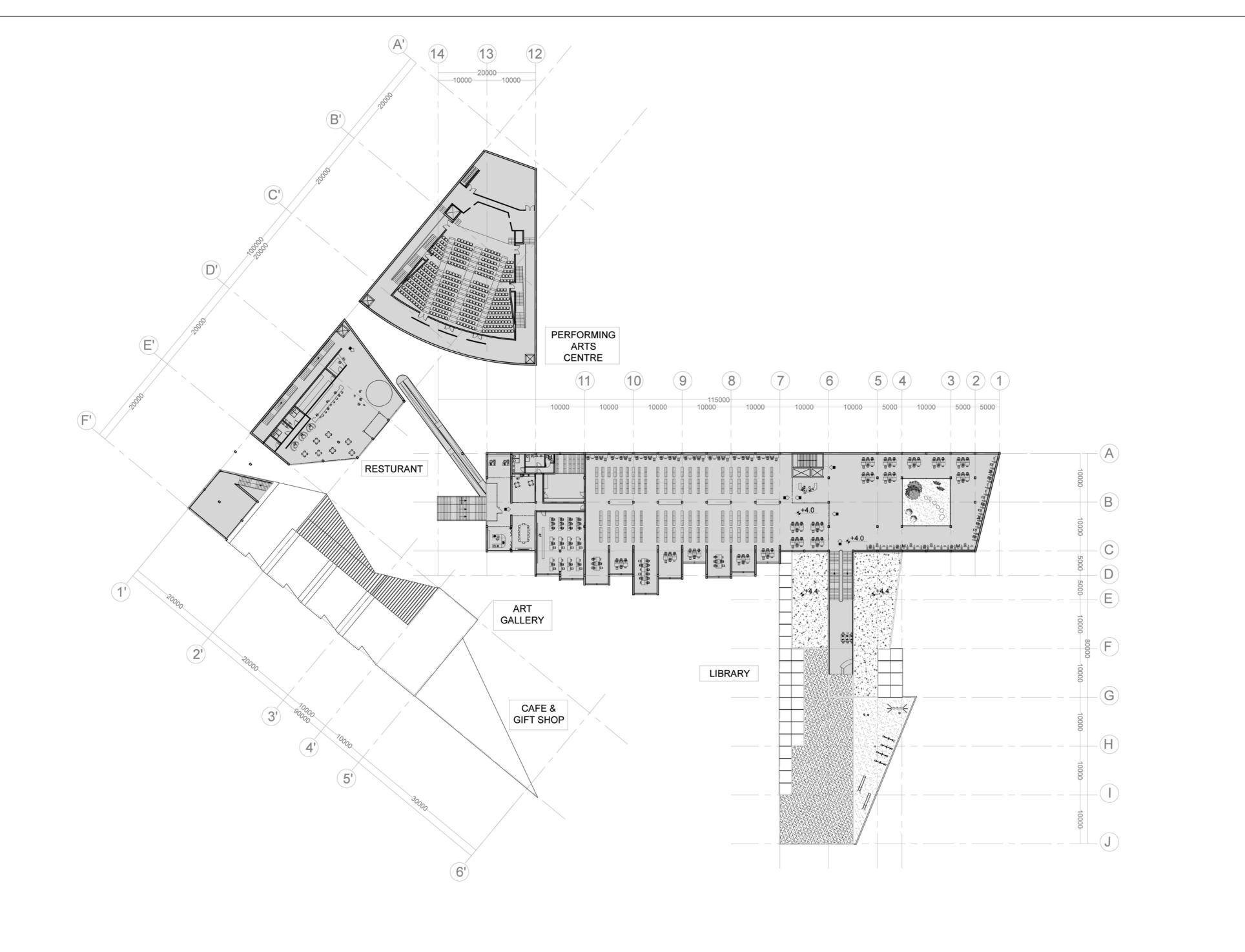
USABLE SPACE: 1917 m<sup>2</sup> -191m<sup>2</sup> (services)= 1726 m<sup>2</sup>

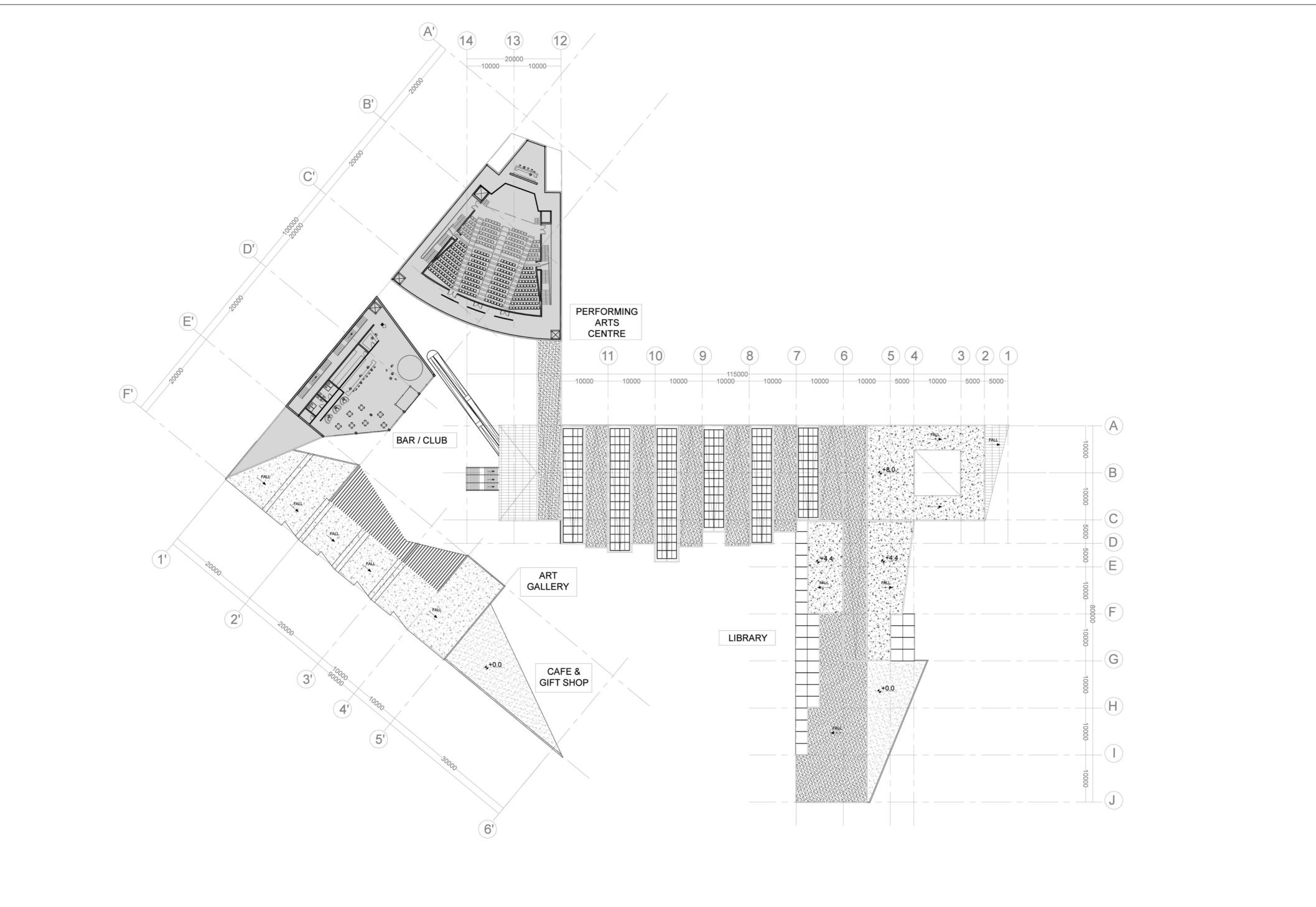
TOTAL OCCUPANCY: 69 people (residential: 25m<sup>2</sup>/person)

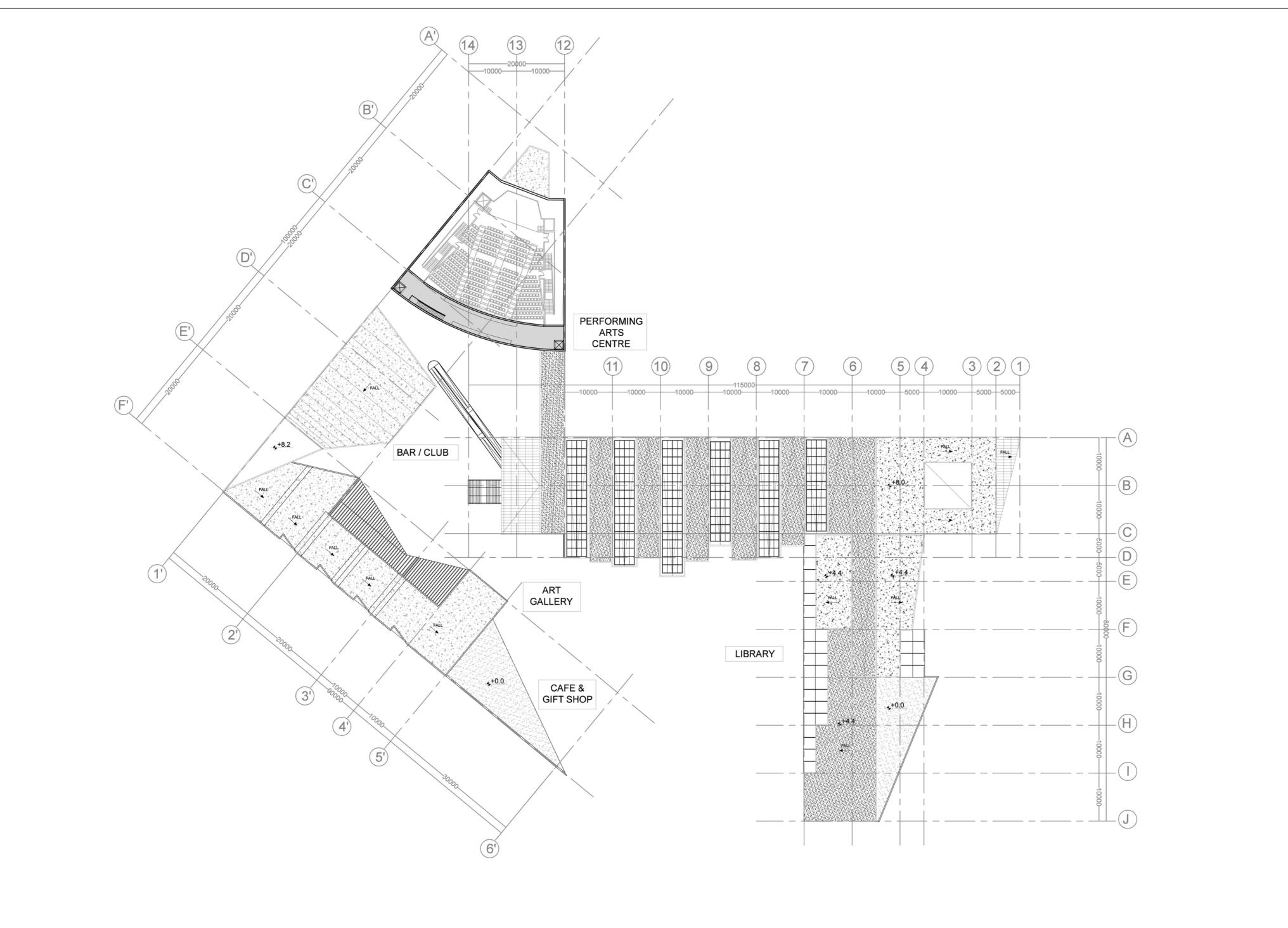
## TOTAL OCCUPANCY:

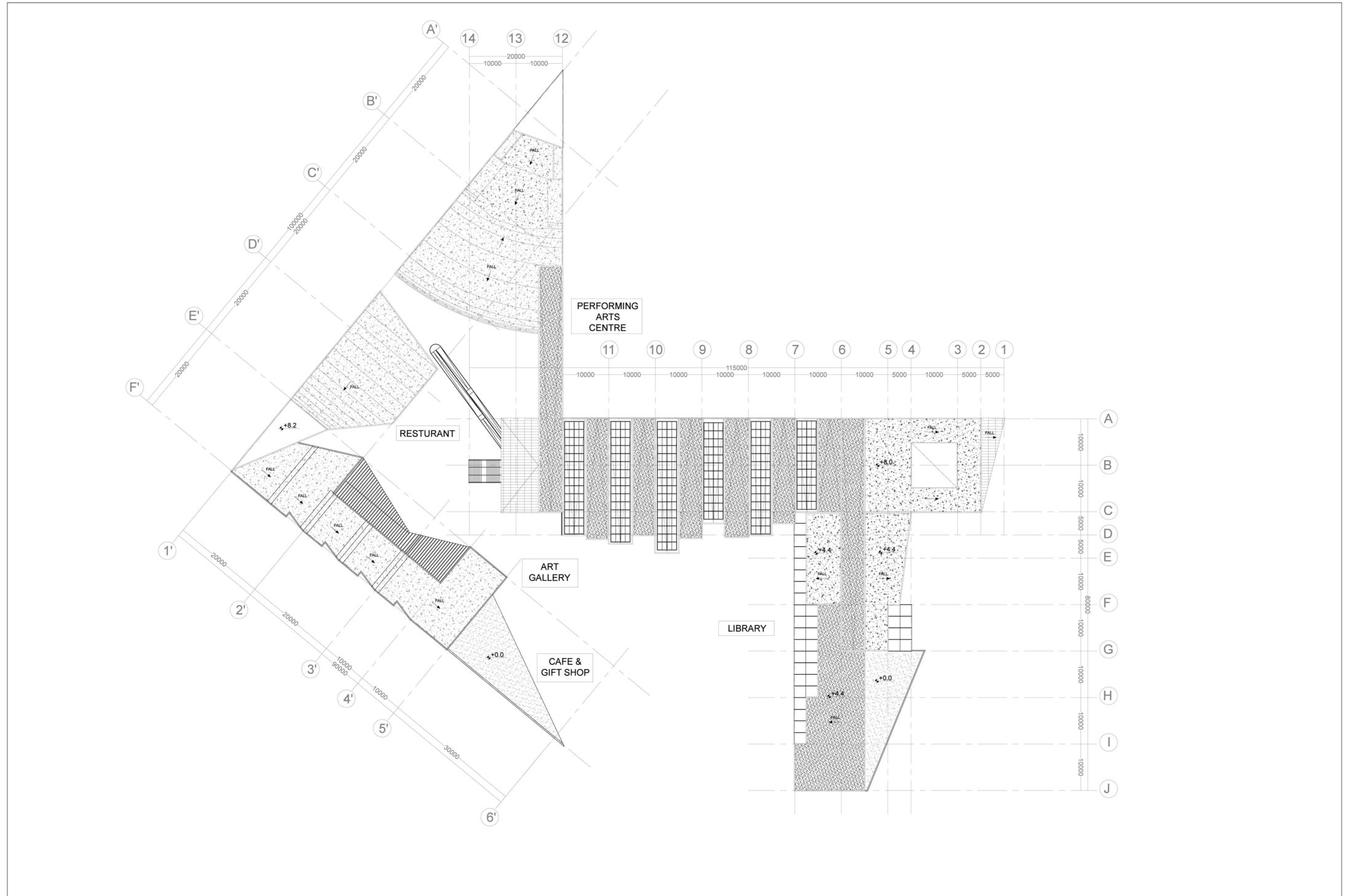
RETAIL: 605 people RESIDENTIAL: 254 people



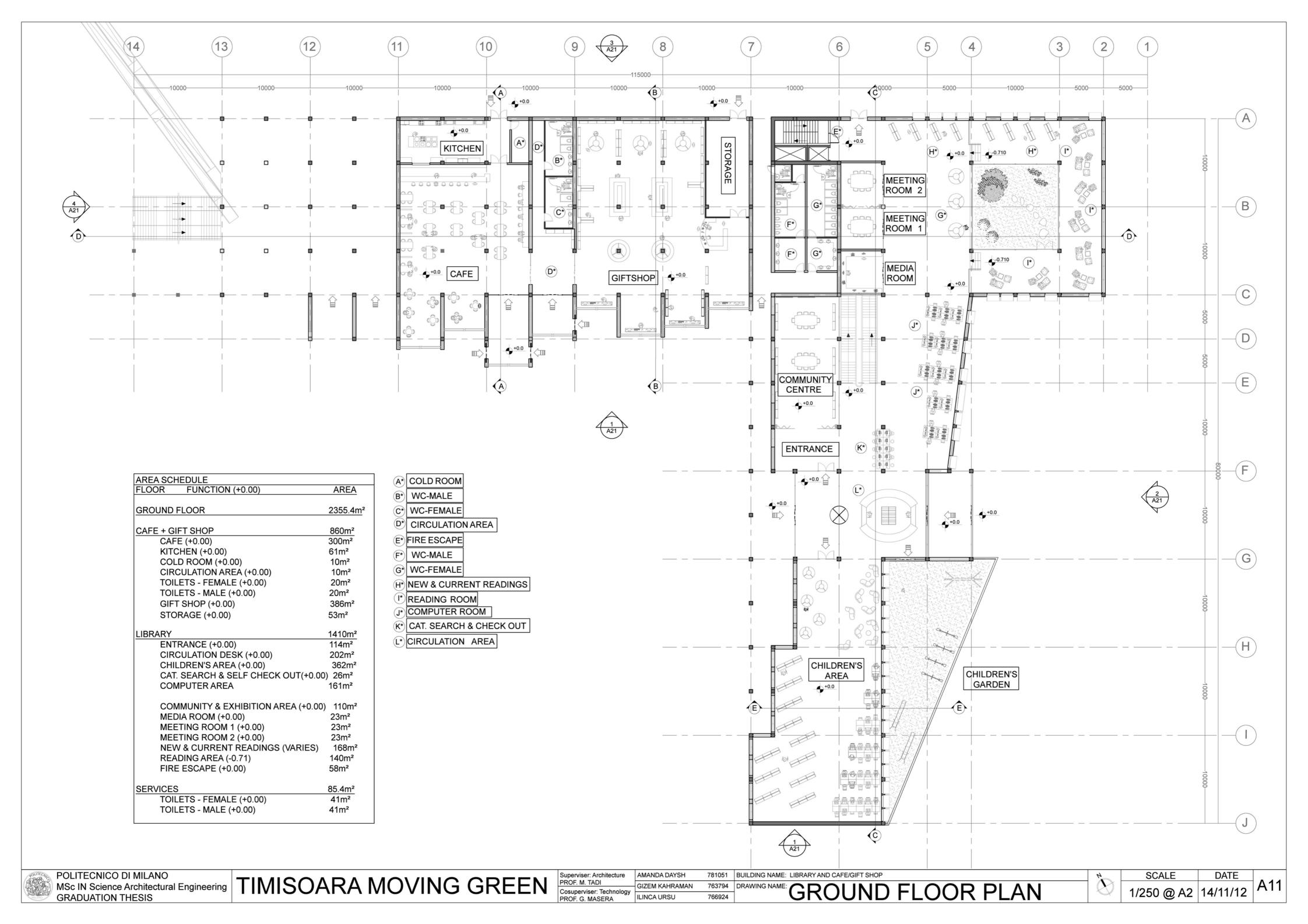


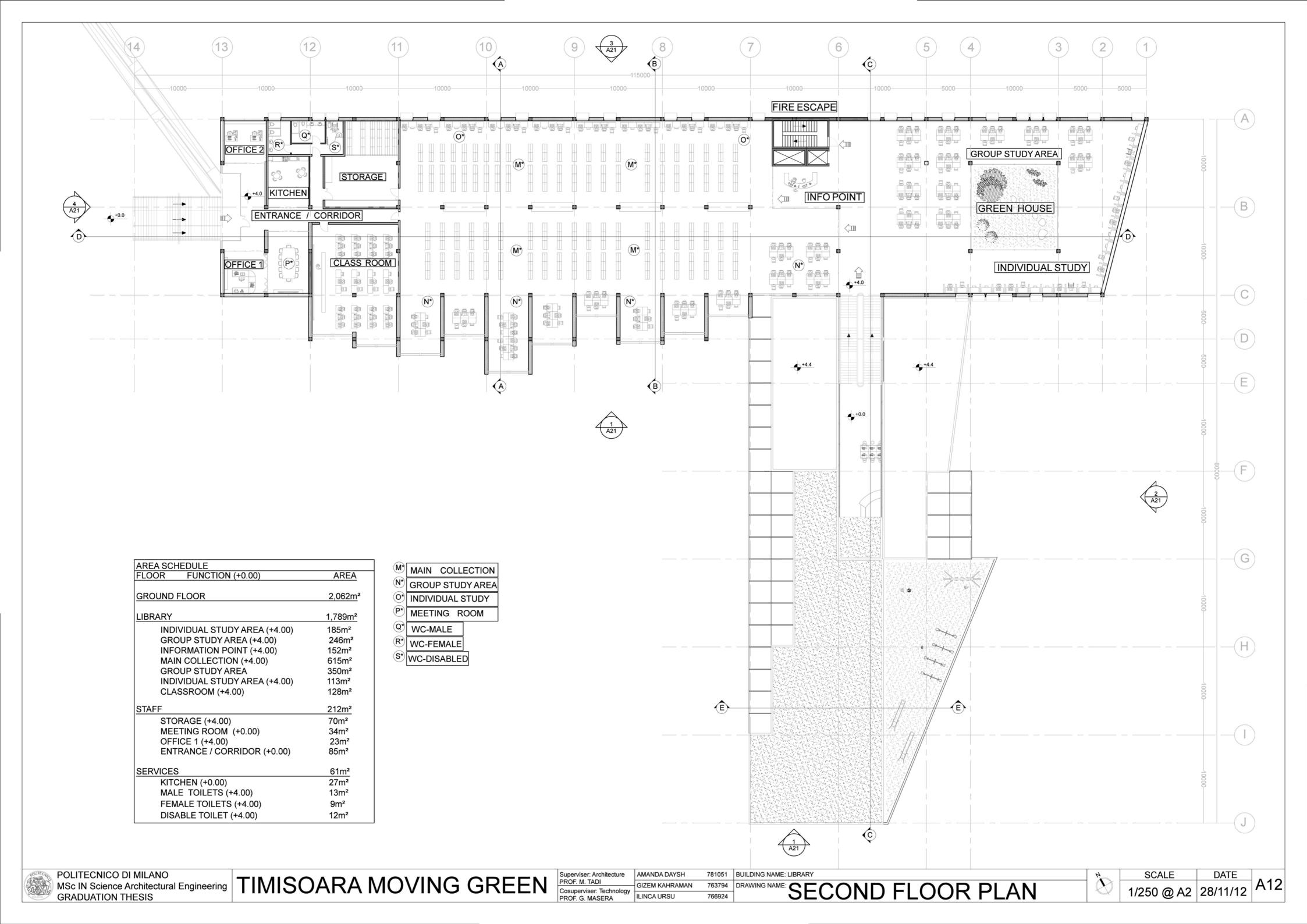


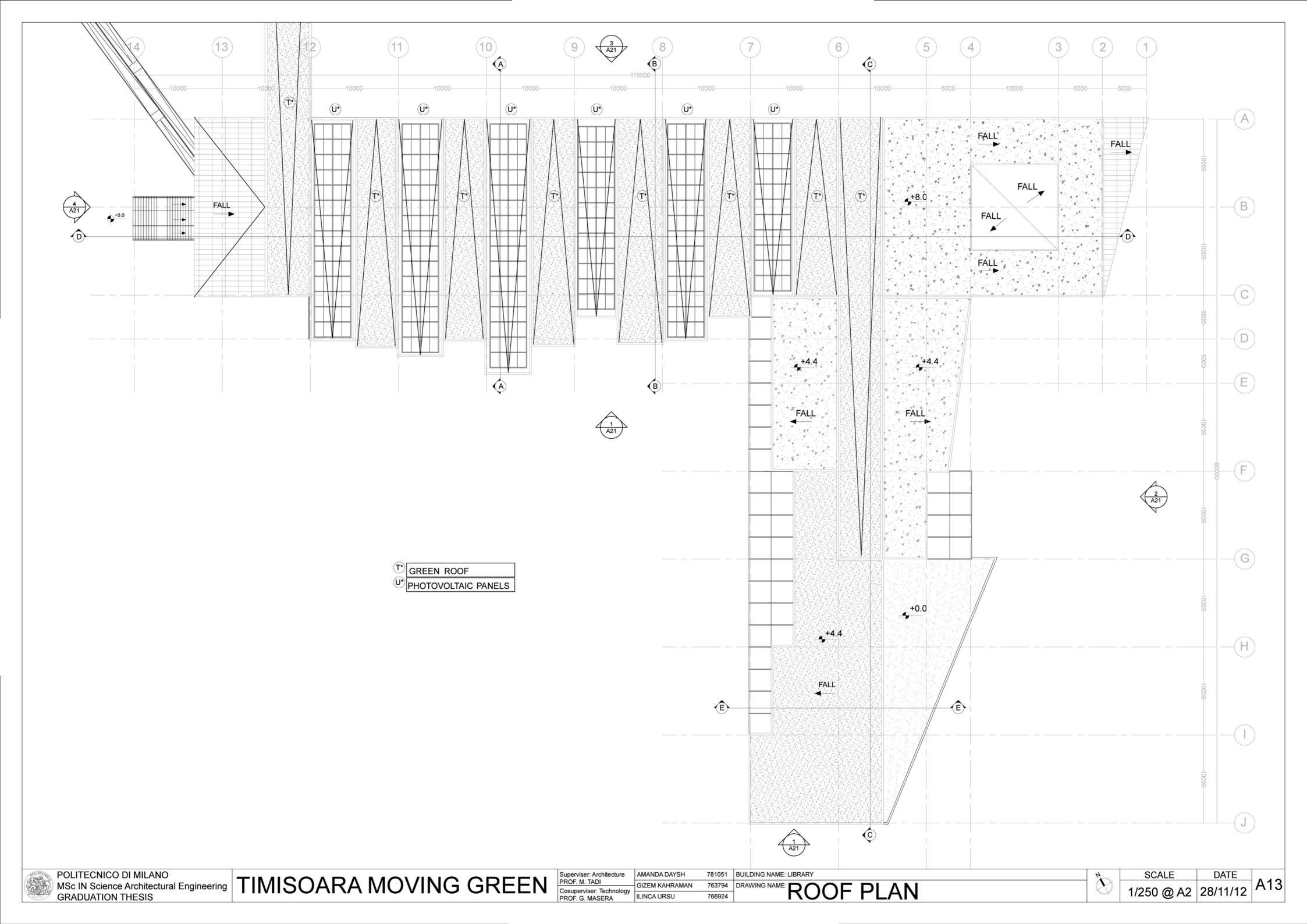




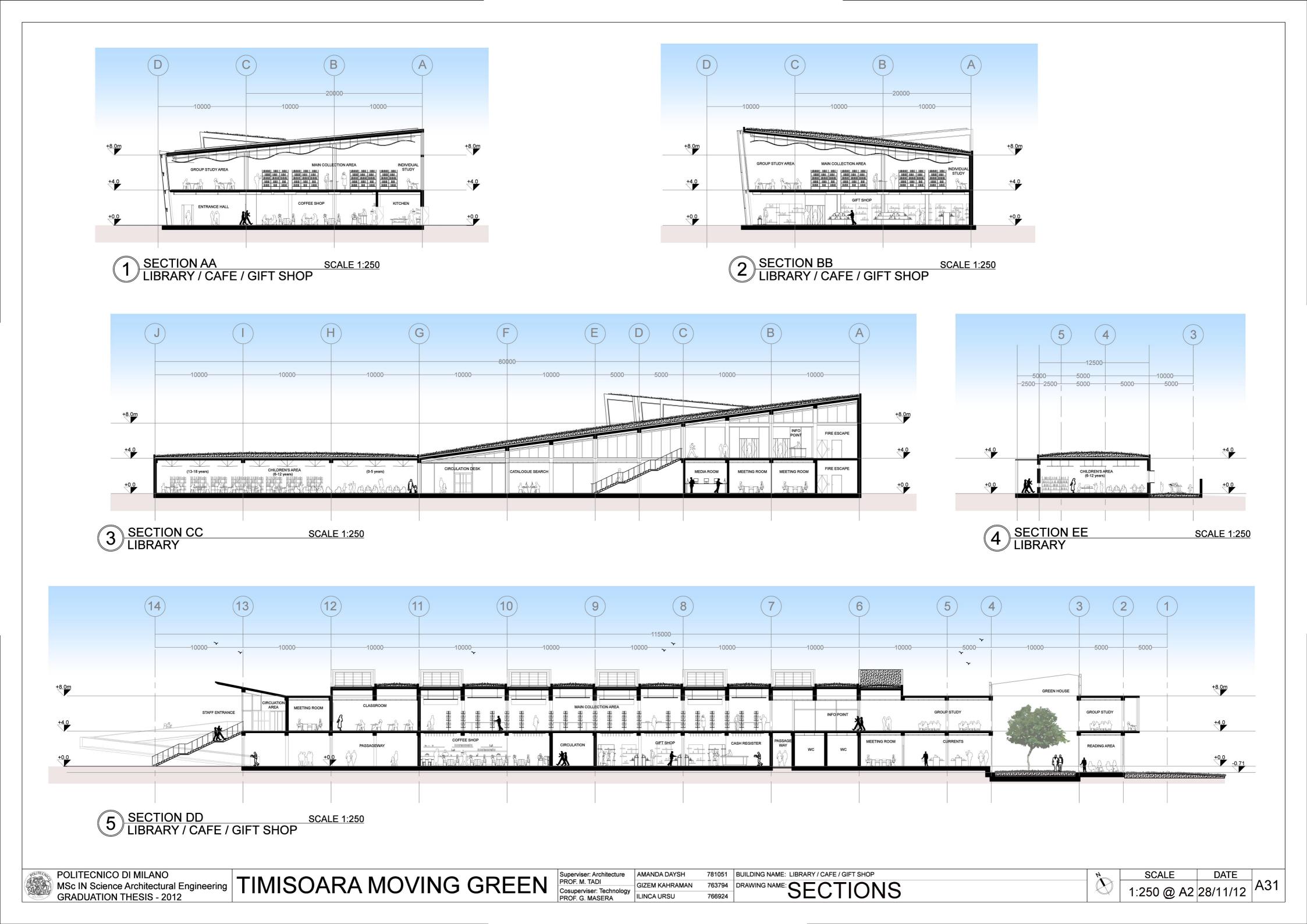
























400 - 500 LUX

#### **MEETING ROOMS**

250-400 LUX

### COMPUTER/ MEDIA AREA

150-300 LUX

### GIFT SHOP/ EXHIBITON AREA

100-300 LUX

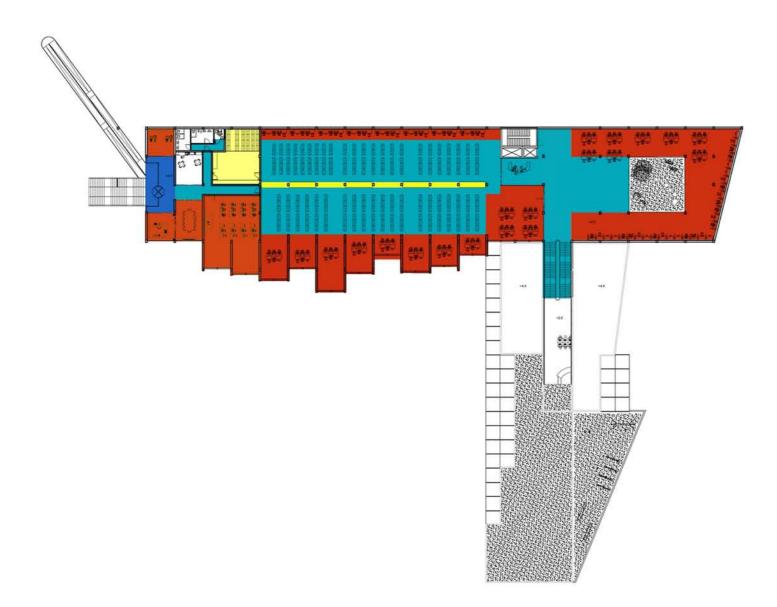
#### STORAGE

150-200 LUX

#### **OPEN SHELVES / CIRCULATION**

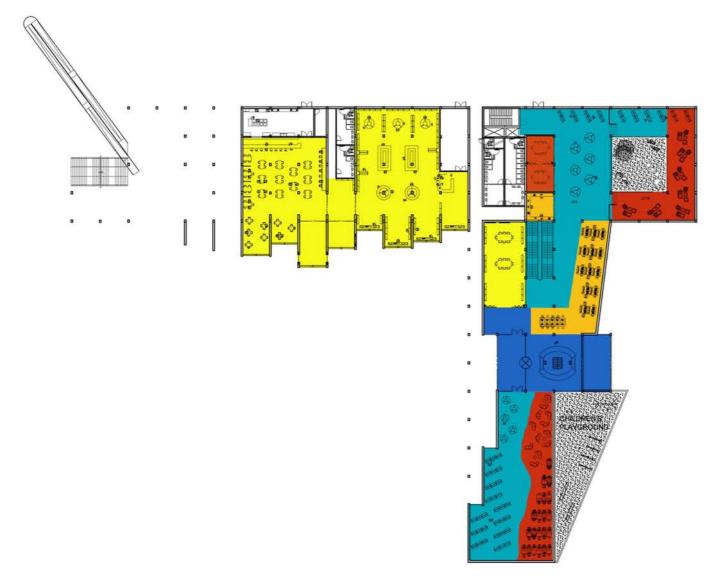
100-200 LUX

100-150 LUX



FIRST FLOOR PLAN
LIGHTING REQUIREMENTS

NTS



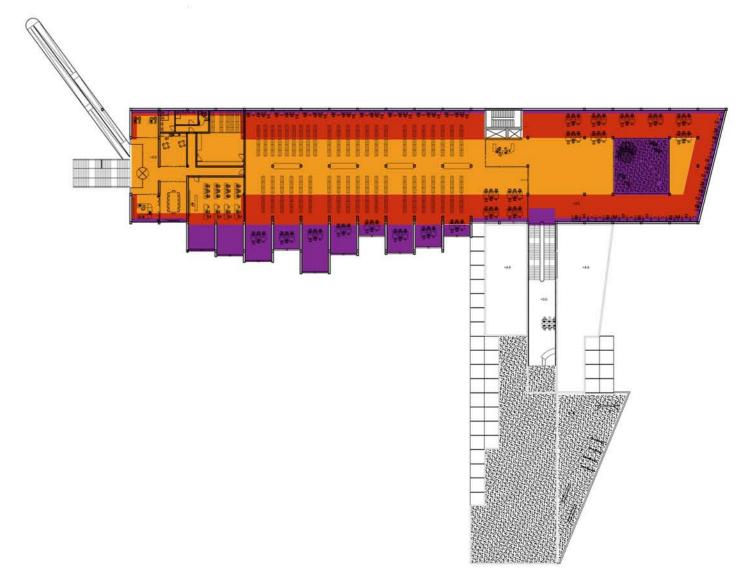
GROUND FLOOR PLAN
LIGHTING REQQUIREMENTS

> 500 LUX

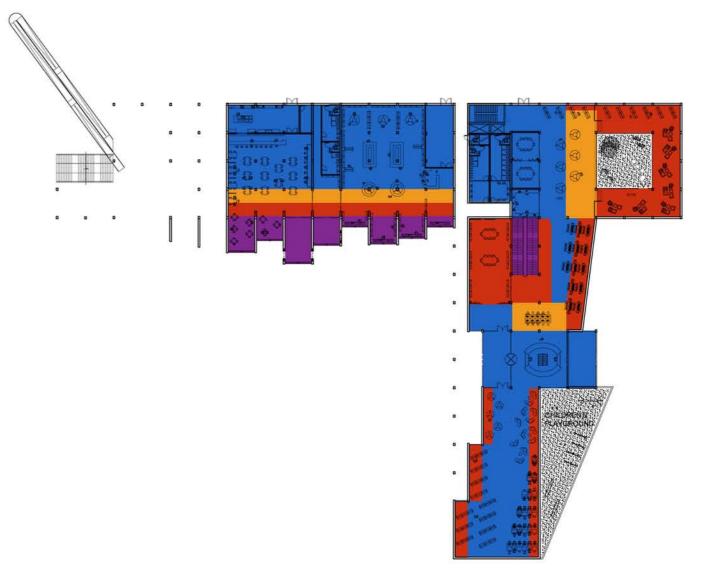
500 LUX

300 LUX

<100 LUX



FIRST FLOOR PLAN NTS ACHIEVED NATURAL LIGHTING



GROUND FLOOR PLAN
ACHIEVED NATURAL LIGHTING NTS

NTS

#### READING / STUDY AREA

T60 = 1 sec35 - 45dB

#### OFFICE / MEETING ROOMS

T= 1.5 sec 50 - 60 dB

#### **COMMON AREAS**

T60 = 1 sec 50 dB

#### SOILD ENVELOPE

#### GLAZED ENVELOPE

POSSIBLE SOUND SOURCES

N.B

For the envelope the: attenuation solid 45dB glazed 50dB

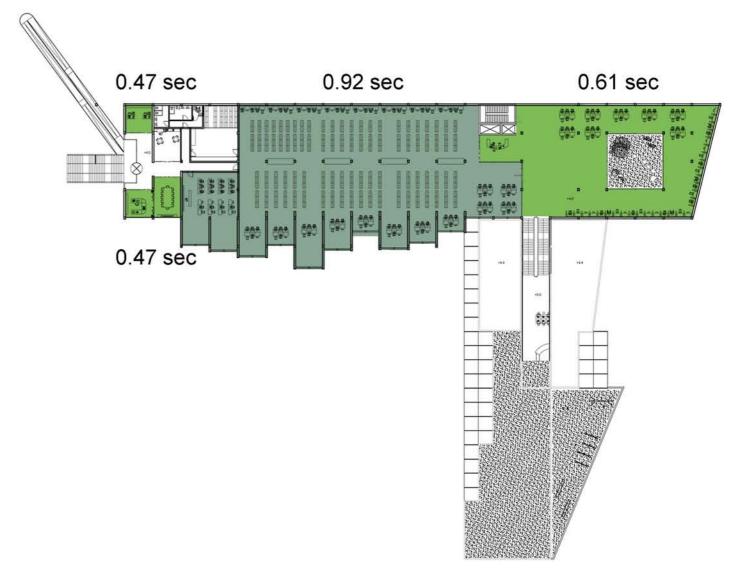


FIRST FLOOR PLAN NTS SOUND REQUIREMENTS PLAN

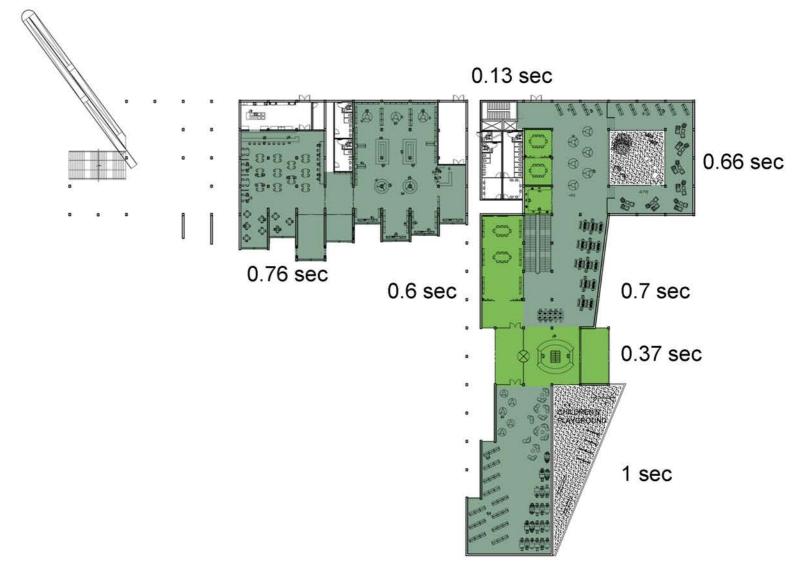


GROUND FLOOR PLAN
SOUND REQUIREMENTS PLAN NTS 0.7 < T > 1 sec

0.4 < T > 0.7 sec



FIRST FLOOR PLAN NTS ACHIEVED SOUND LEVELS PLAN



GROUND FLOOR PLAN
ACHIEVED SOUND LEVELS PLAN NTS

#### CAFE / GATHERING/ EXHBITION

- T summer: 21°C - T winter: 20°C - Humidity: 50 +- 5% RH

- Infiltration: 0.5 ac/hour Ventilation

- fresh air: 8 l/s/person - air change: 1 ac/ hour

#### STUDY / READING AREA

- T summer: 26°C - T winter: 20°C

- Humidity: 50 +- 5% RH - Infiltration: 0.5 ac/hour

Ventilation

- fresh air: 8 l/s/person - air change: 4-6 ac/ hour

#### OFFICE / MEETING AREA

- T summer: 24°C - T winter: 22°C

- Humidity: 35 +- 40% RH - Infiltration: 0.4 ac/hour

Ventilation

- fresh air: 8-12 l/s/person - air change: 4-6 ac/ hour

#### COMPUTER AREA

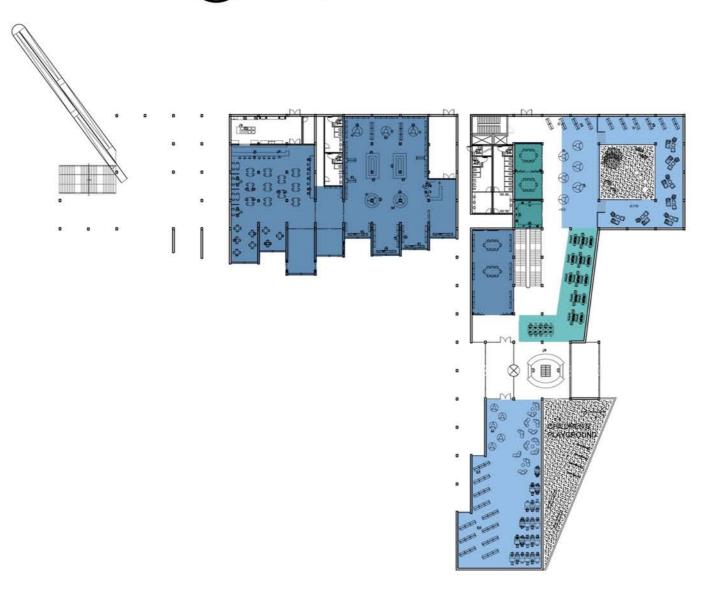
- T summer: 21°C - T winter: 20°C - Humidity: 50 +- 5% RH - Infiltration: 1 ac/hour

Ventilation

- fresh air: 8 l/s/person - air change: 6-10 ac/ hour

FIRST FLOOR PLAN AIR REQUIREMENTS

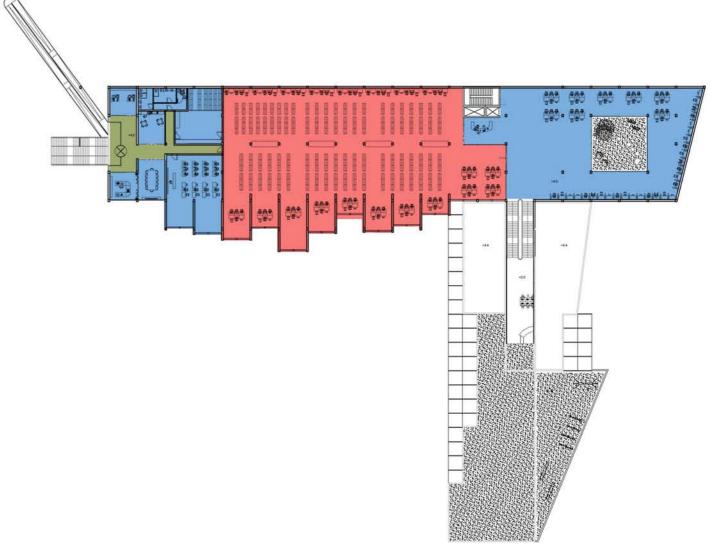
NTS



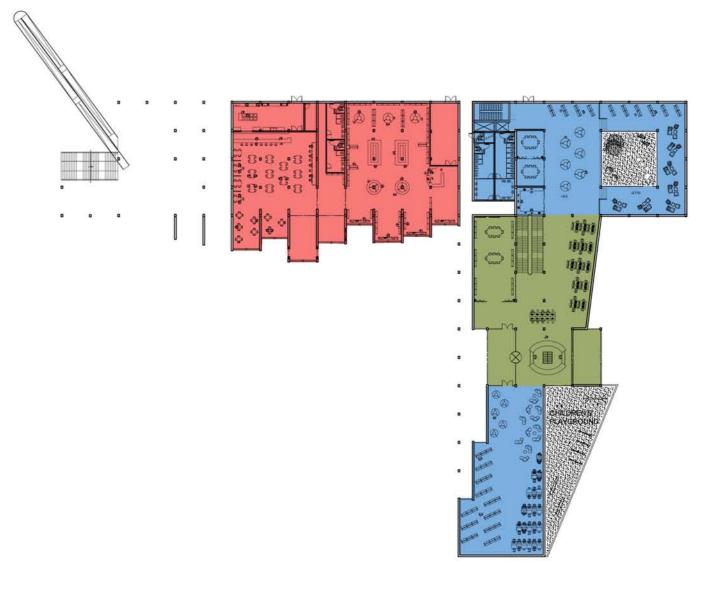
GROUND FLOOR PLAN
AIR REQUIREMENTS NTS MIXED MODE

NATURAL VENTILATION

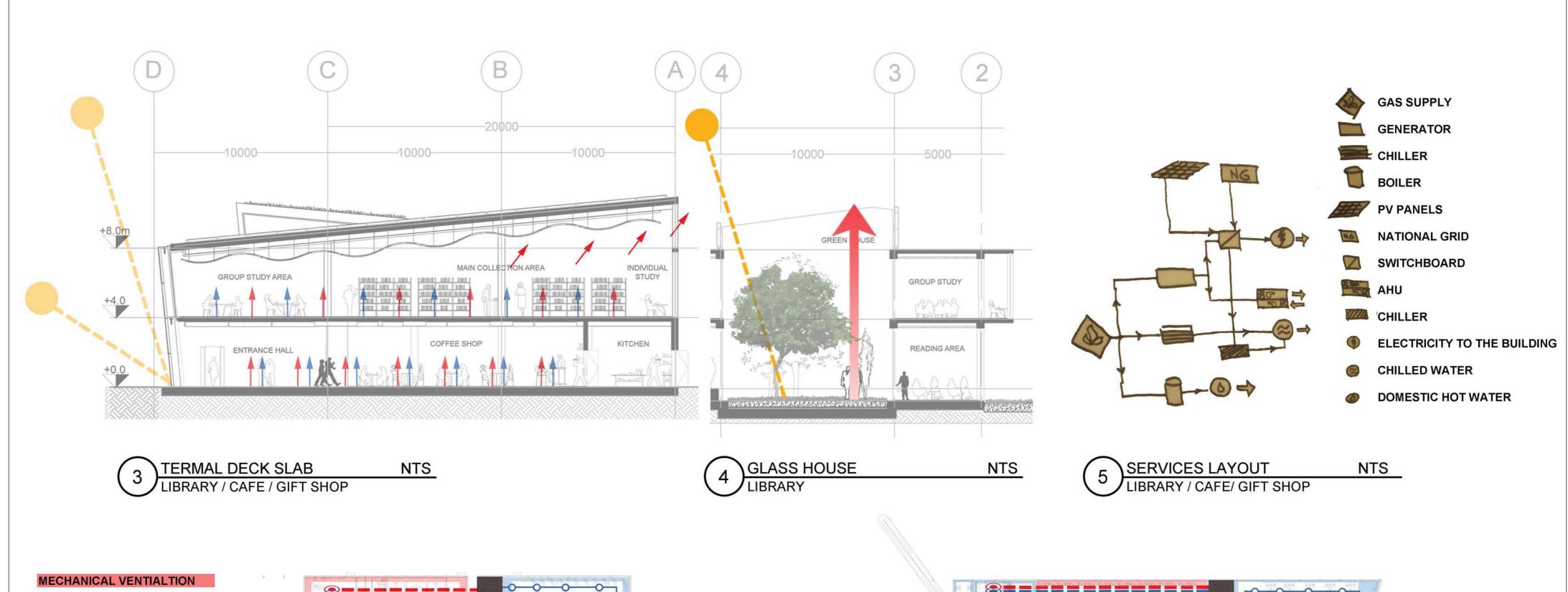
MECHANICAL VENTILATION

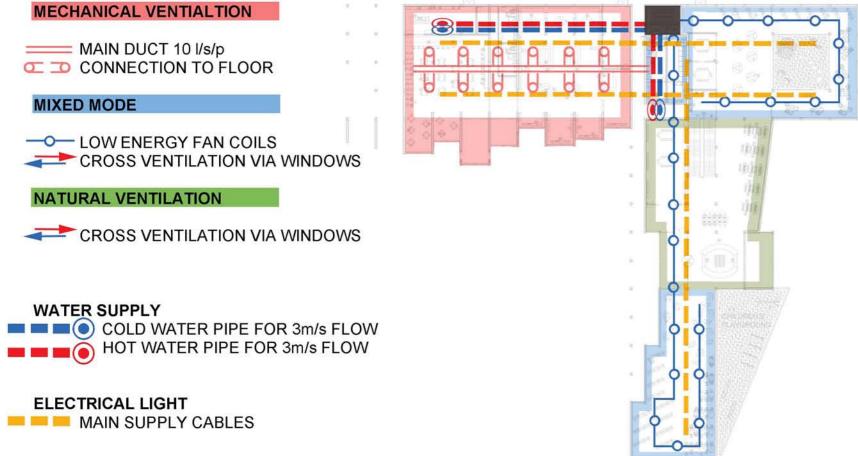


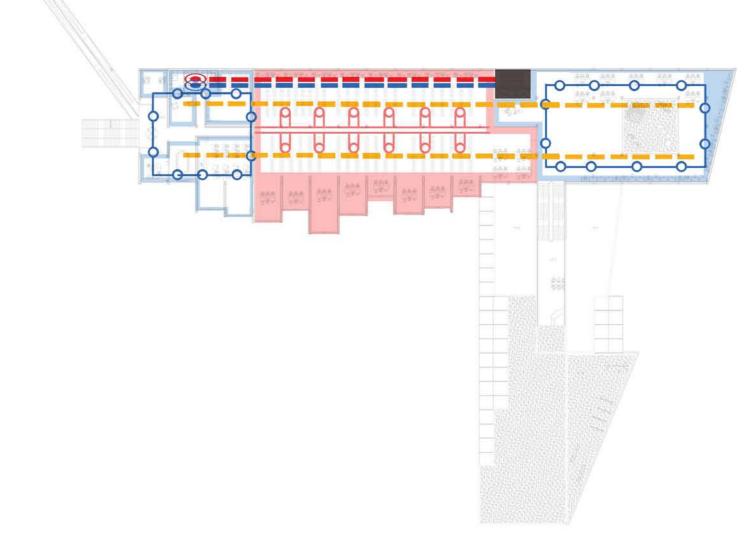




GROUND FLOOR PLAN
VENTILATION PROPOSAL PLAN NTS





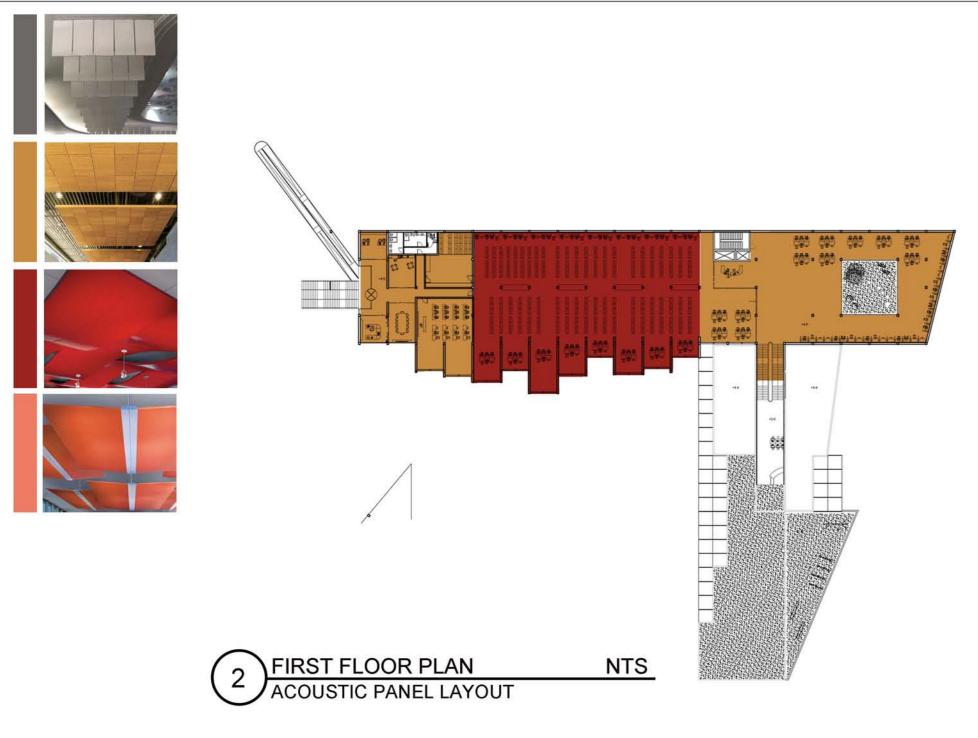


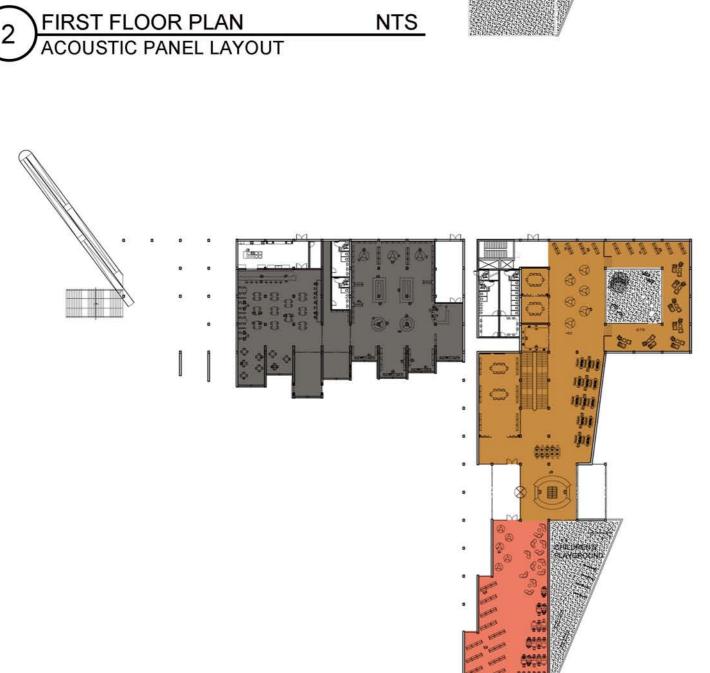
FIRST FLOOR PLAN SERVICES LAYOUT

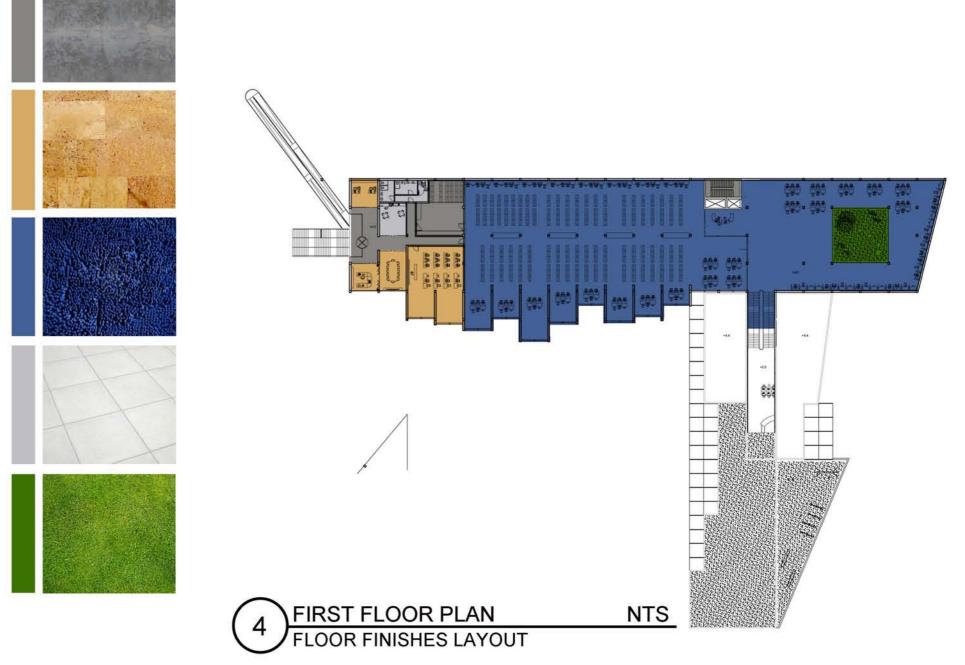
NTS

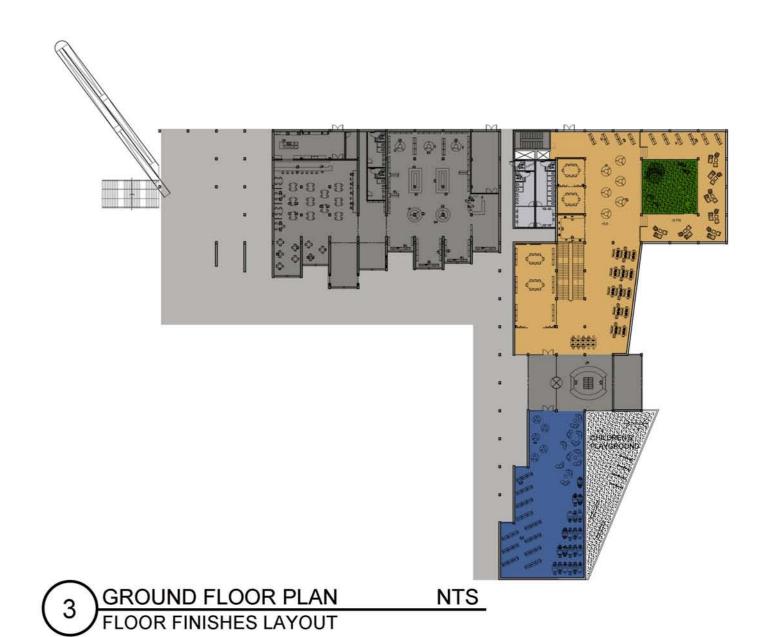
GROUND FLOOR PLAN
SERVICES LAYOUT

NTS









NTS

GROUND FLOOR PLAN
ACOUSTIC PANEL LAYOUT

