

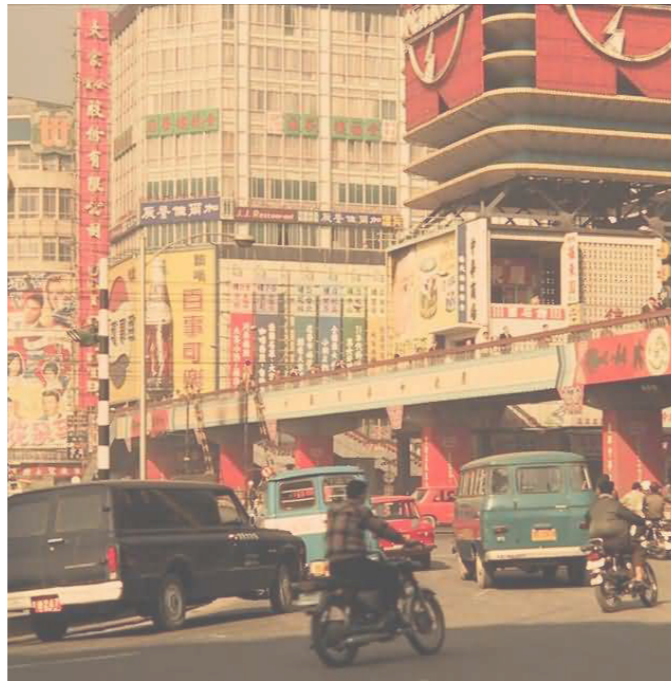


URBAN STITCH

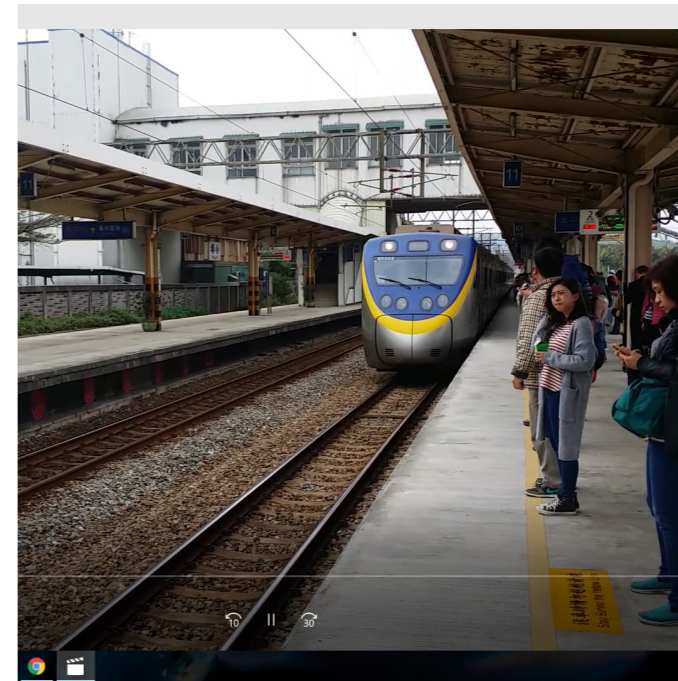
TRANSPORTATION INFRASTRUCTURE
RENEWAL PROJECT AS OPPORTUNITY
OF URBAN REGENERATION



New transportation infrastructure system



Lead to prosperity



Becomes daily life



Technology improvement



Urban problem



Public strife

storyboard of introduction video

CURRENT:



FLAWED
IMPLEMENTATION
PROCESS



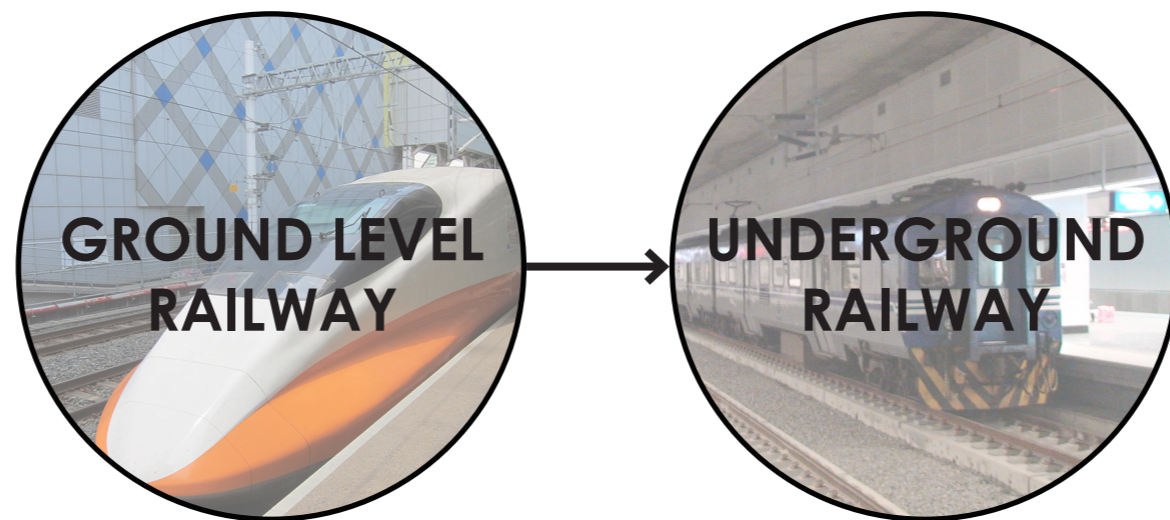
IDEAL:

INTEGRATE



TRIGGER








How to elevate TRA Taoyuan Project into an opportunity to integrate and trigger desired urban regeneration actions of its located urban environment?

What are the existing and possible urban problems that are (potentially) related to the implementation of TRA Taoyuan Project?

**EXISTING URBAN
PROBLEMS OF TAIWAN
THAT ARE INDUCED BY
EXISTING RAILWAY**

**PREDICTIONS OF POSSIBLE
PROBLEMS THAT WILL BE
ENCOUNTERED DURING
THE IMPLEMENTATION OF
TRA TAOYUAN PROJECT**

What are the existing and possible urban problems that are (potentially) related to the implementation of TRA Taoyuan Project?



**EXISTING URBAN
PROBLEMS OF TAIWAN
THAT ARE INDUCED BY
EXISTING RAILWAY**

1A	車次 Train No.	開往 Destination	時間 Dep. Time	備註 Remarks
月台 Plat.	2544	新竹 Hsinchu	18:12	
備註 Remarks	520	BT 20	18:35	
	18:00	Hsinchu		

B側
SIDE B
8

A側
SIDE A
8

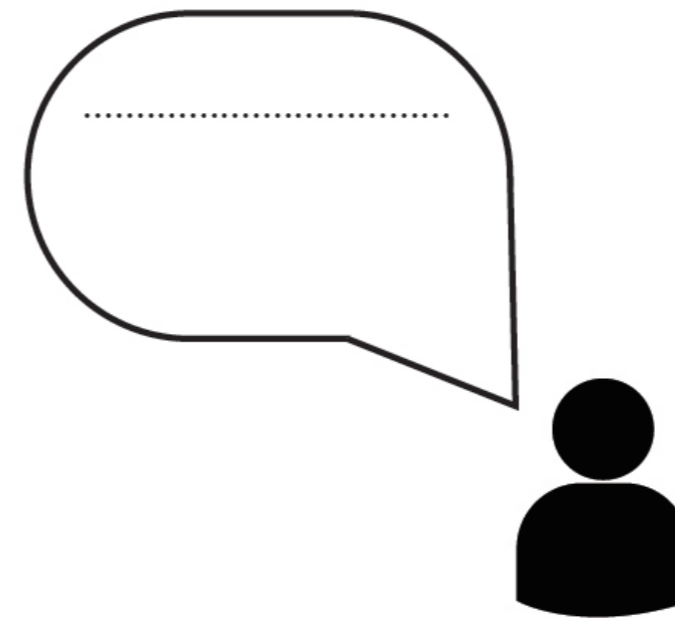
EM534

DAEWOO









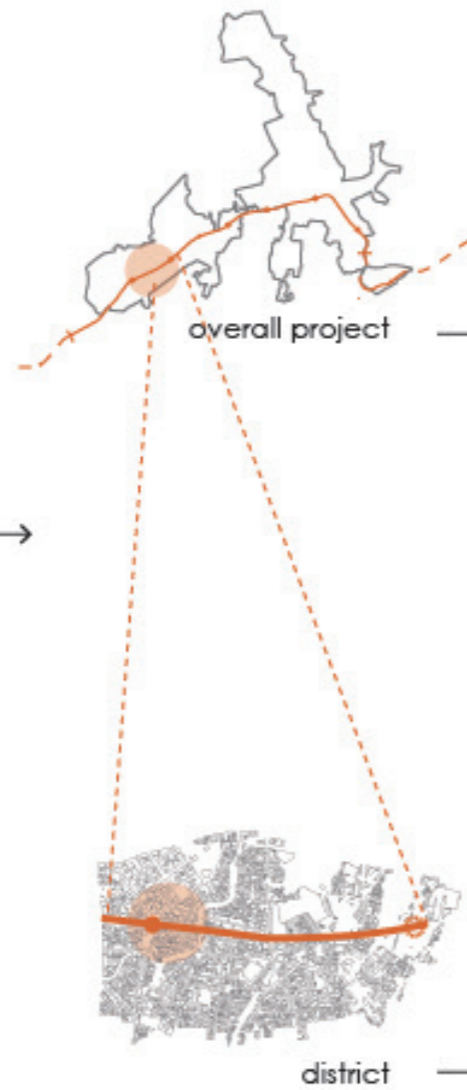
CHARACTER STUDIES

SCALAR APPROACH

RESEARCH

CONCLUSIONS

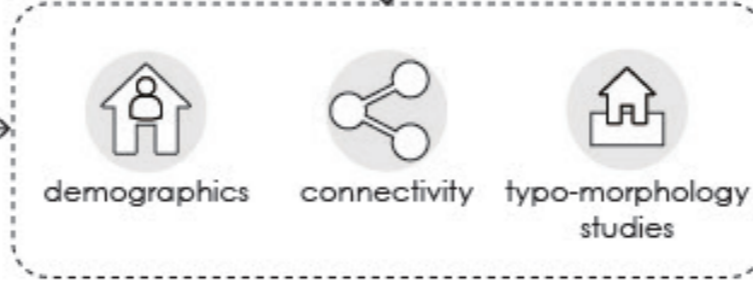
- infrastructural city
- industrial city
- immigrant city
- identity-less city



municipal character



site character

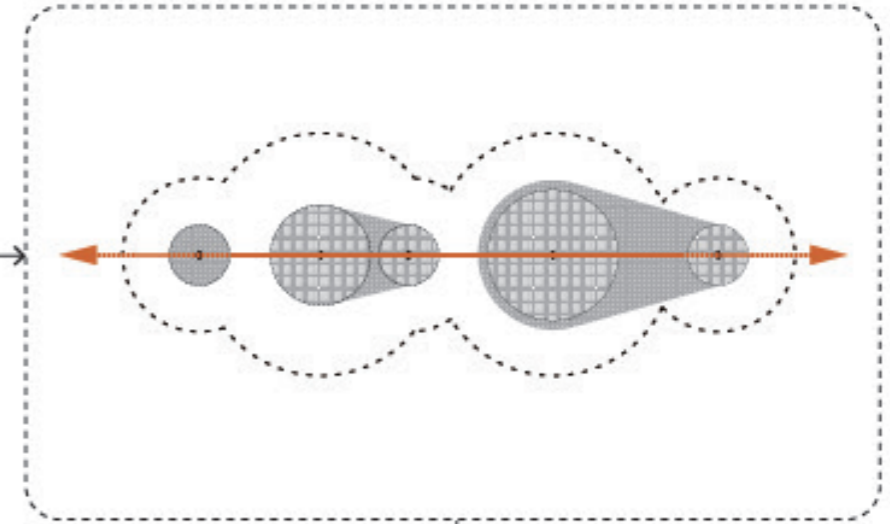


criteria on segmentation approach



site work

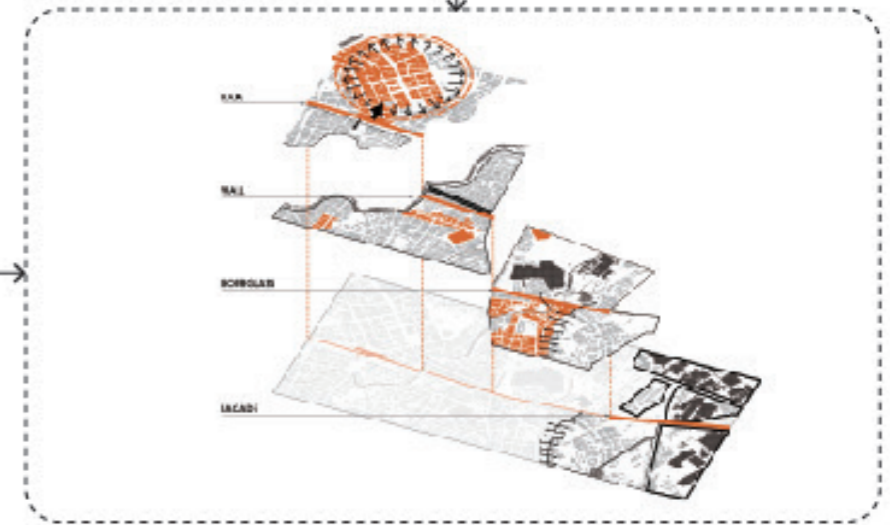
conclusion I



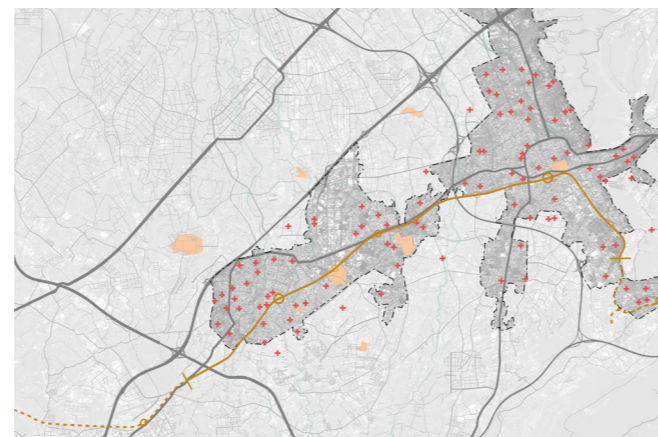
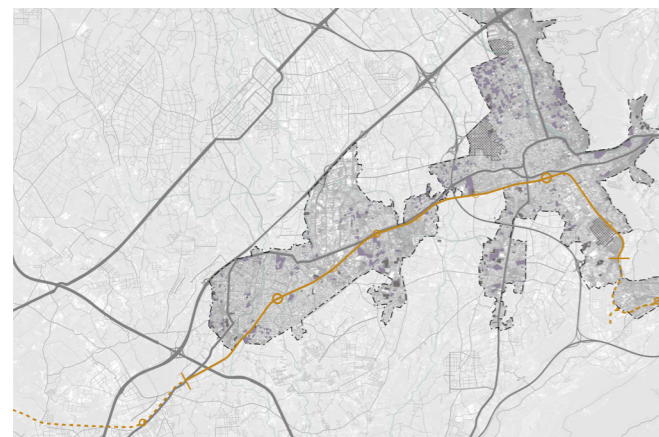
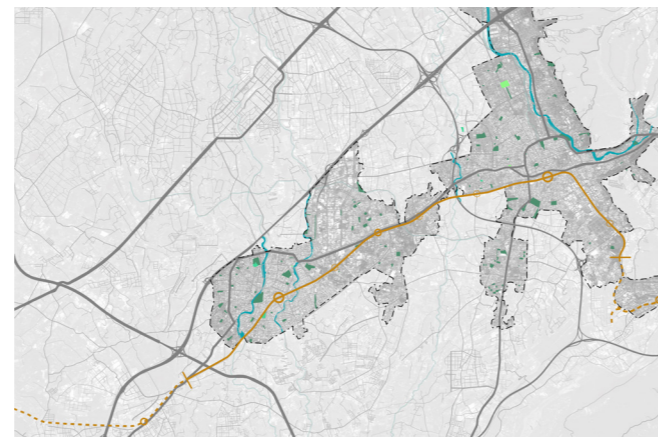
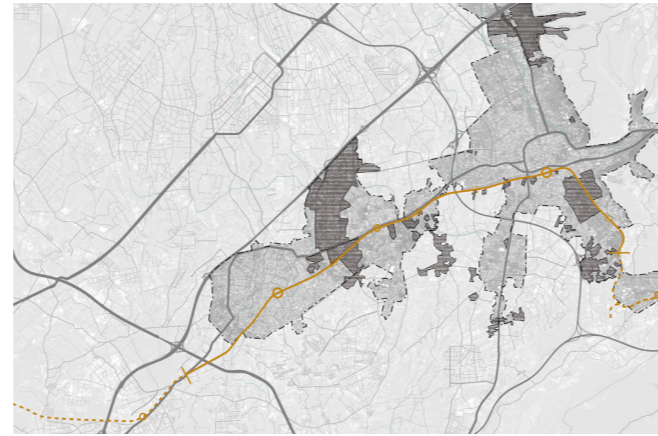
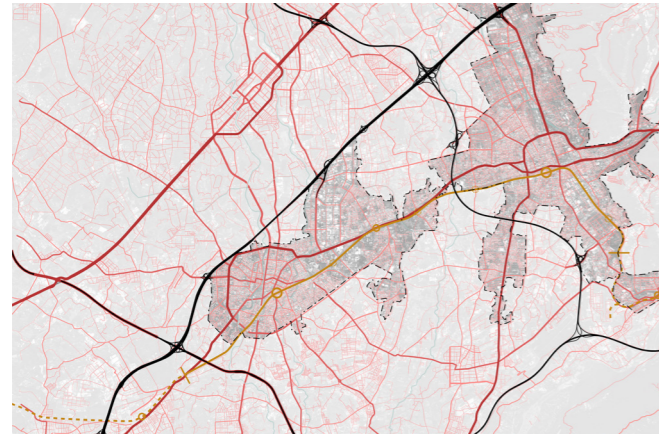
conclusion II



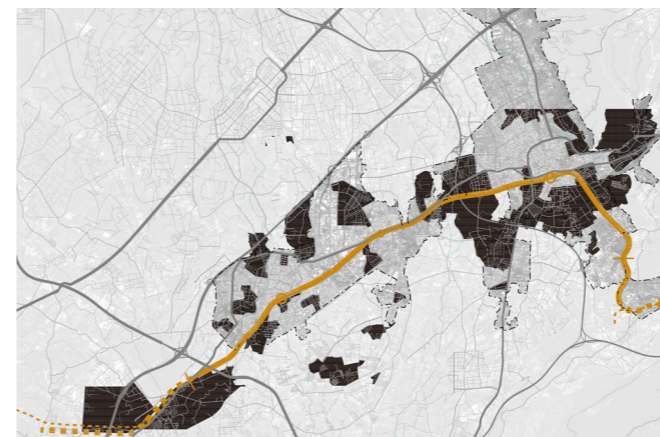
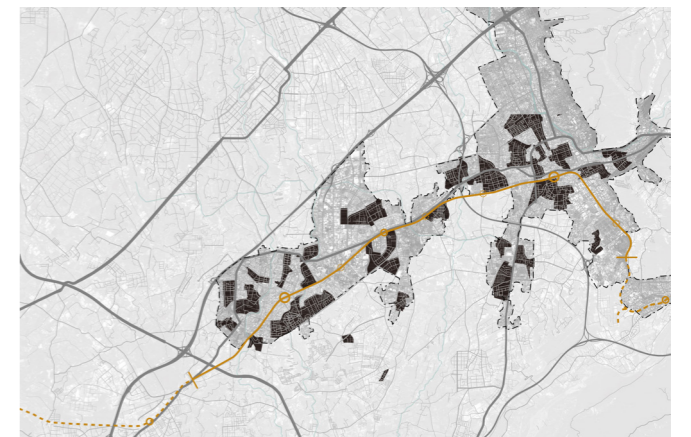
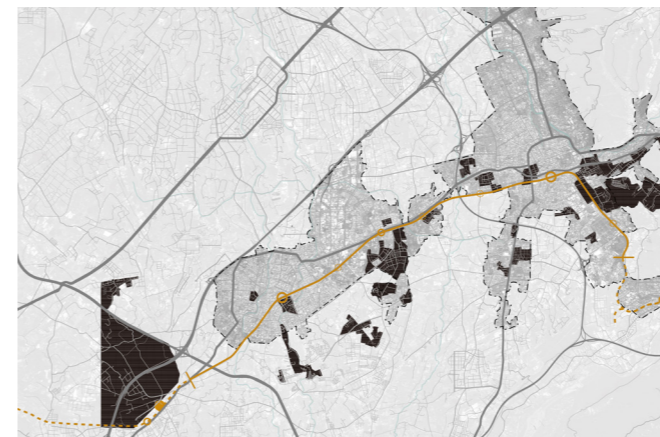
thematizing segments



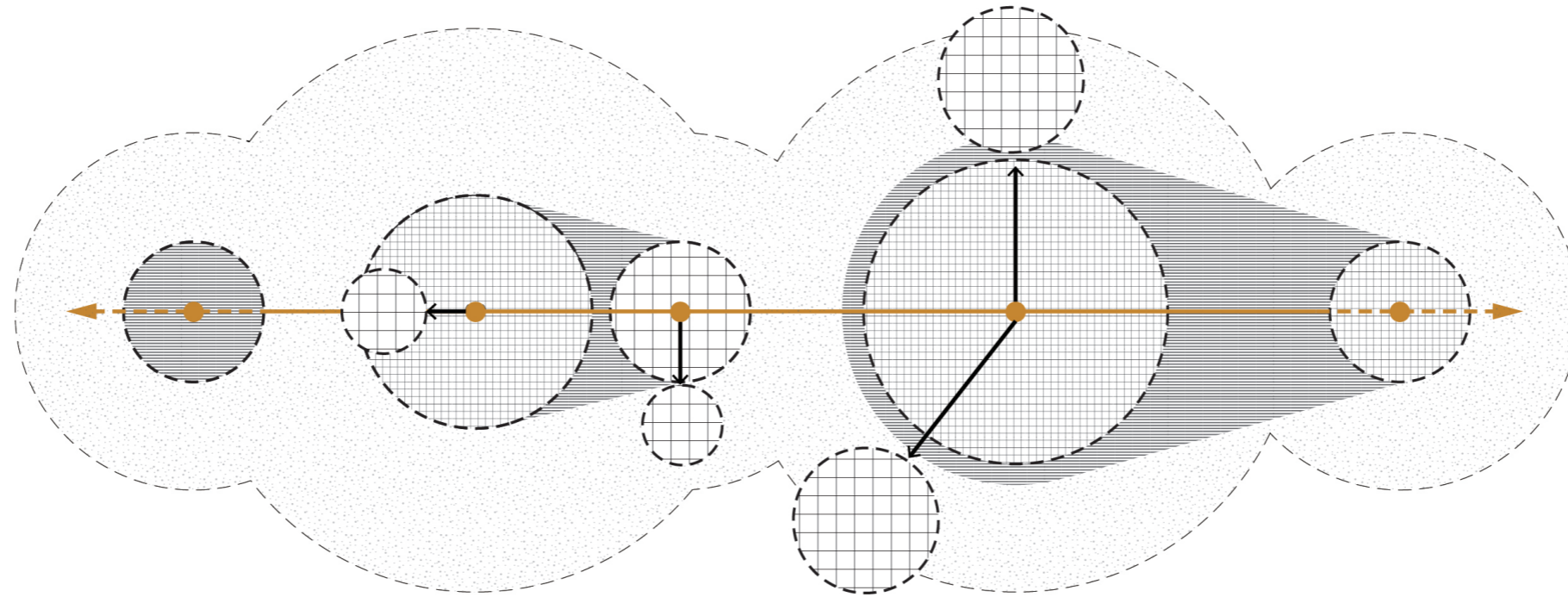
SPATIAL DISTRIBUTION OF VARIOUS MUNICIPAL CHARACTERISTICS



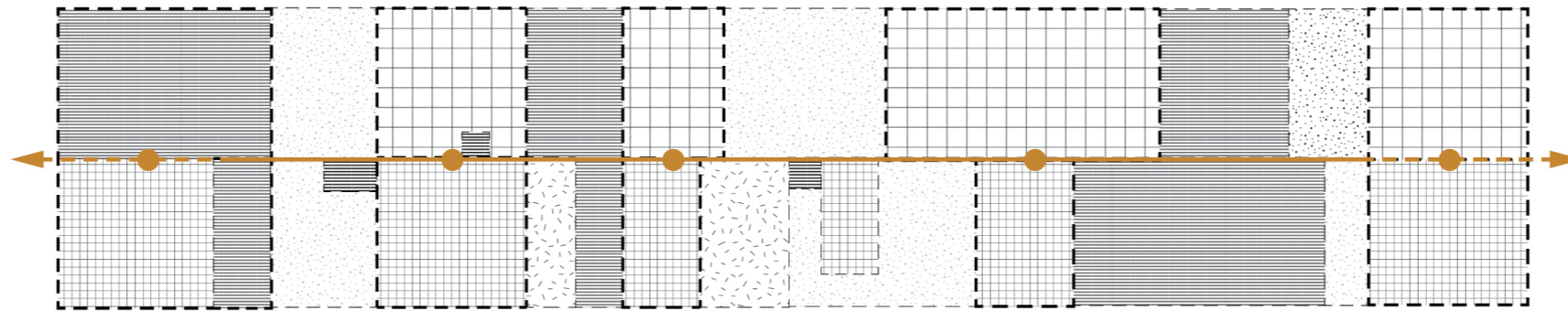
SPATIAL AND DEMOGRAPHICS CHARACTERISTICS ALONG TRA TAOYUAN PROJECT



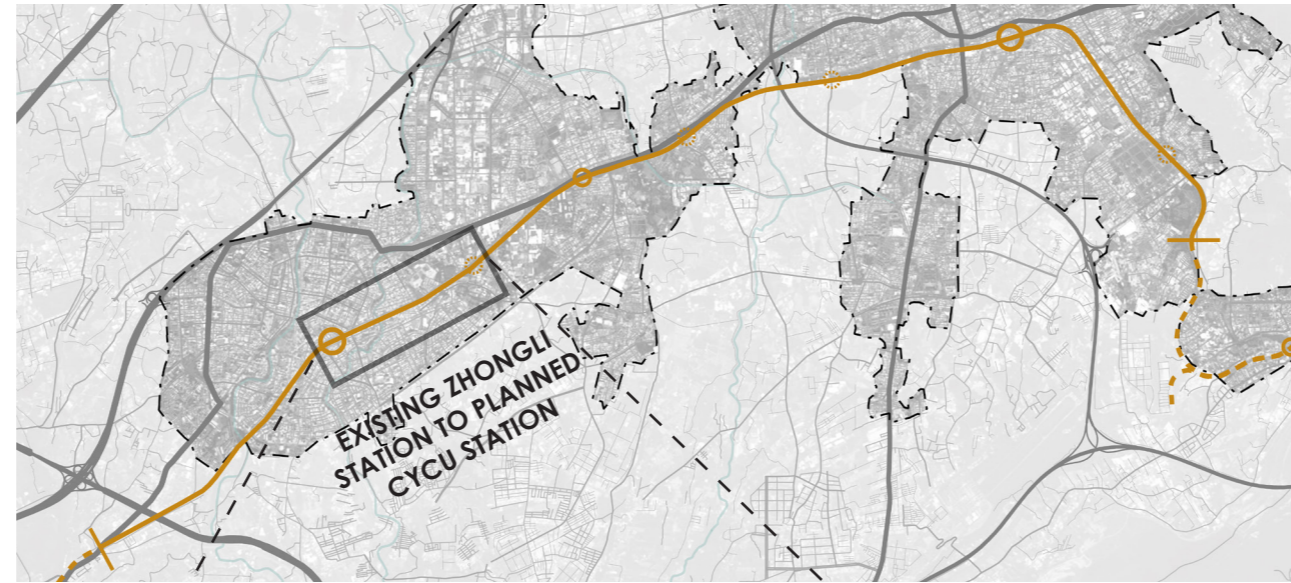
VIDEO ON DESCRIBING PRINCIPLE OF URBAN PROBLEM

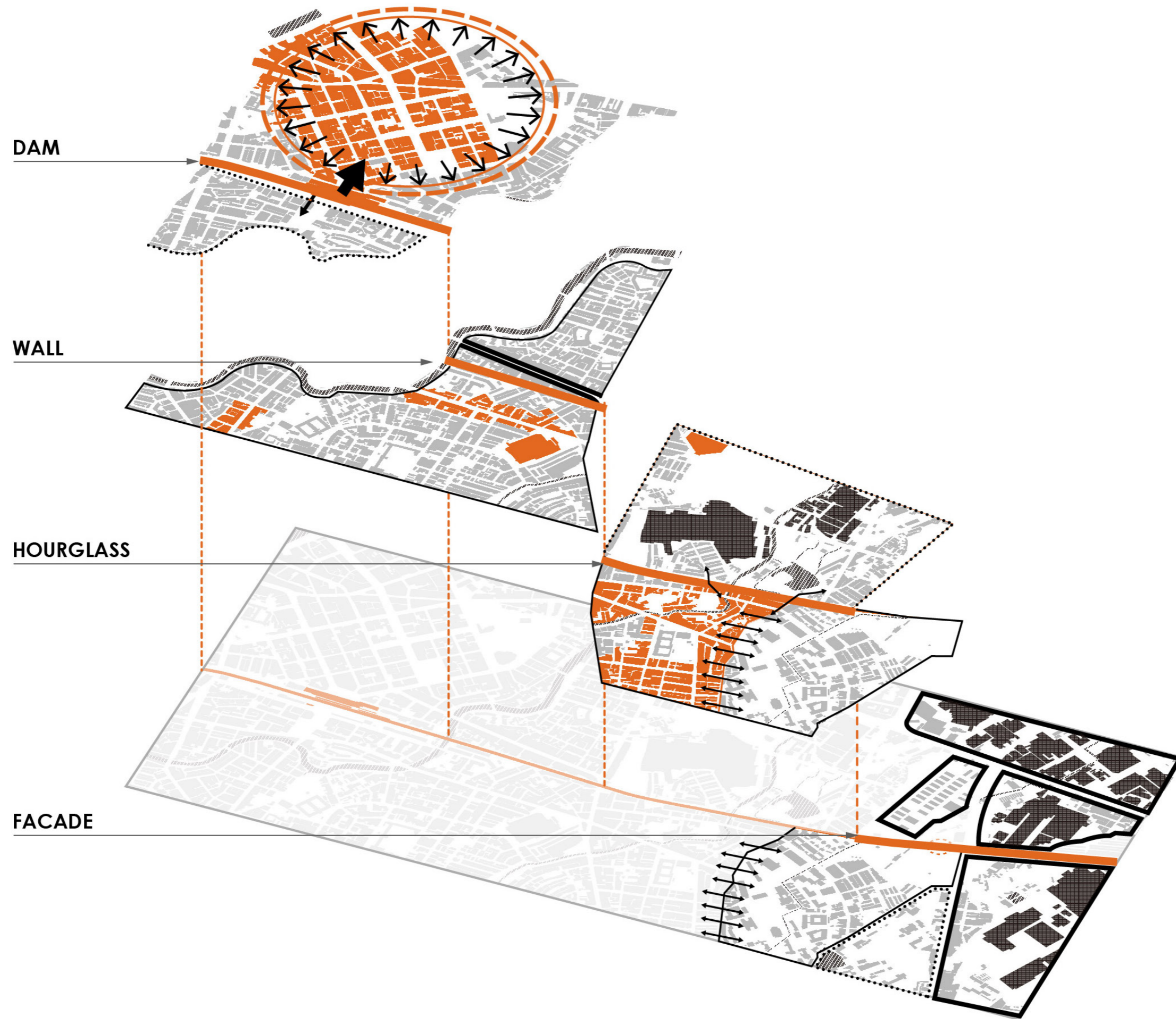


VIDEO ON DESCRIBING PRINCIPLE OF URBAN PROBLEM



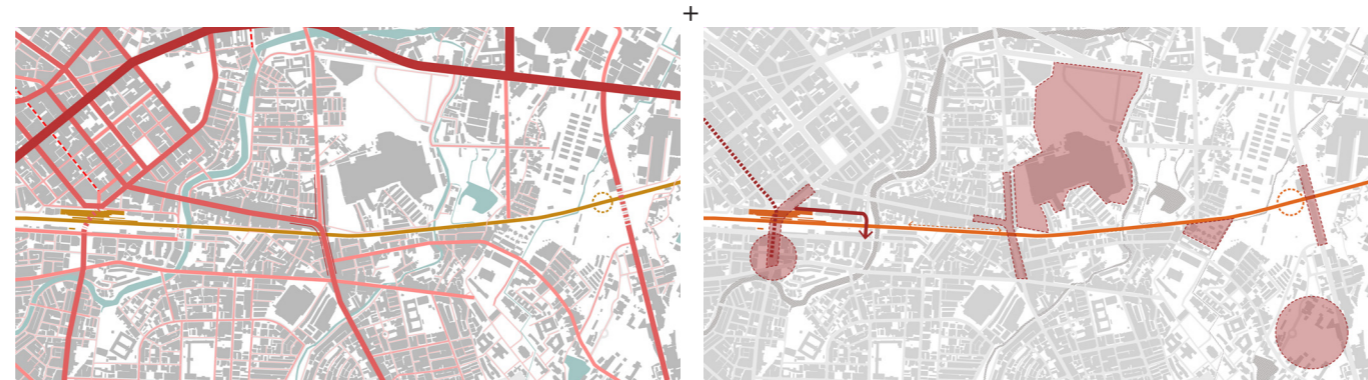
**MINICIPAL
CHARACTER**







TYPO-MORPHOLOGY STUDIES



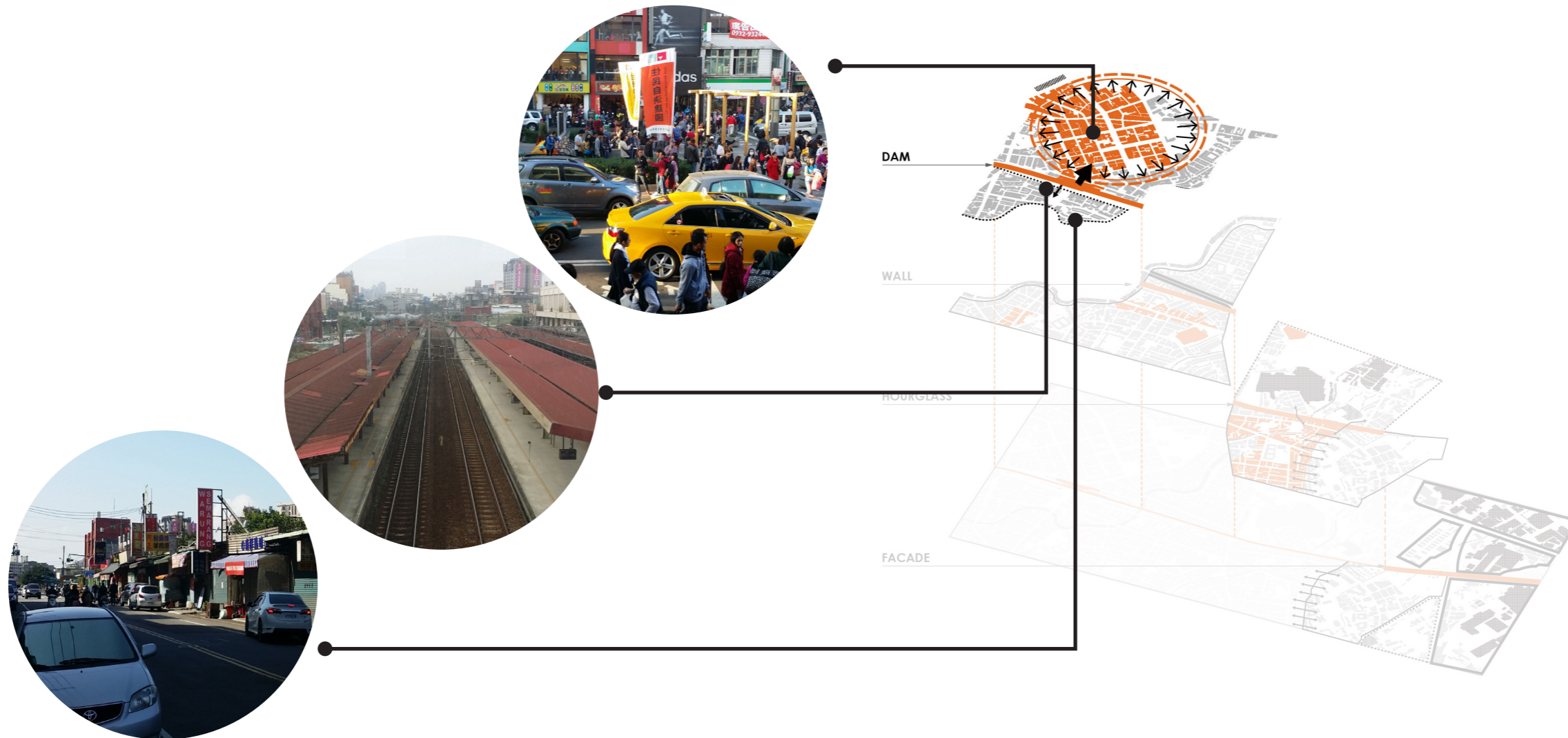
EXISTING AND POTENTIAL INFRASTRUCTURAL PROJECTS



ACTOR ANALYSIS

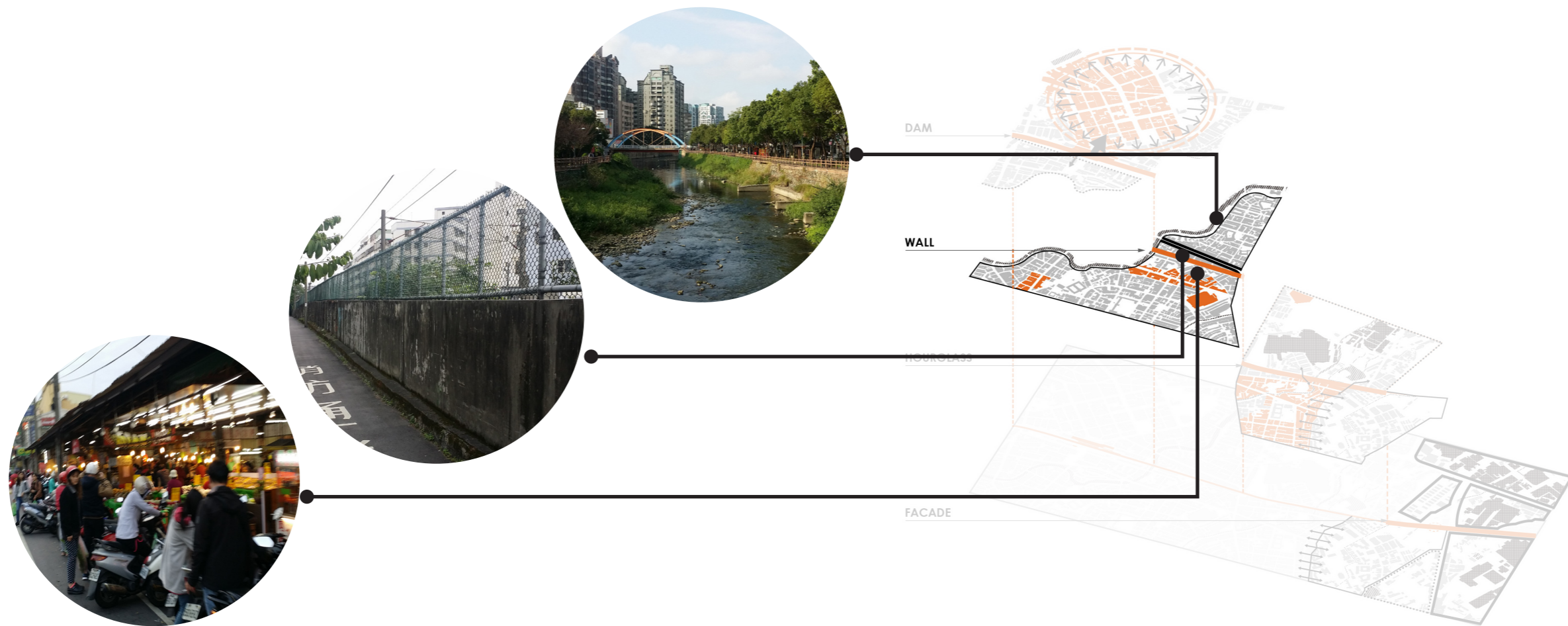


SITE WORK & OBSERVATION



RAILWAY AS "DAM" - ZHONGLI DISTRICT CENTRE

Overdensified urban environment at front station | Neglected back station



RAILWAY AS "WALL" - RESIDENTIAL COMMUNITIES

Well established communities without accessibility to each other | TRA project as increasing accessibility or gentrification?



RAILWAY AS "HOURGLASS" - VIBRANT COMMUNITY vs. UNDERUSED INDUSTRIAL LANDSCAPE

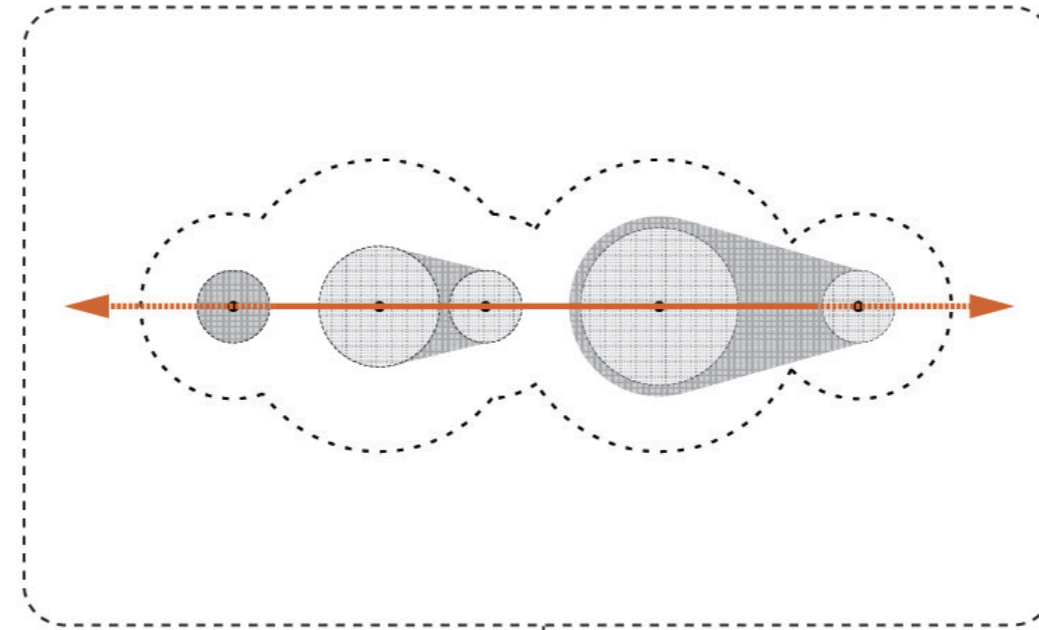
Massive underused industrial open space becomes unsafe space | Commercial influence cannot permeate due to inaccessibility



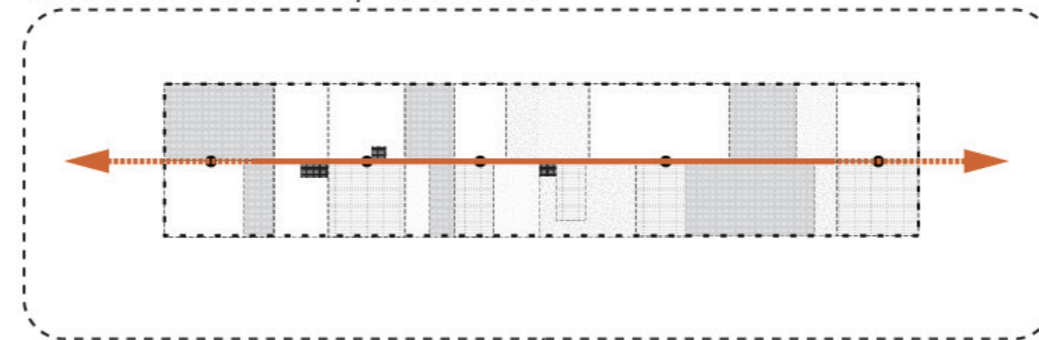
RAILWAY AS "FACADE" - CYCU CAMPUS vs. INDUSTRIAL ZONE

Opening of new CYCU Station | Difficulty to be implemented due to "confidential" programs

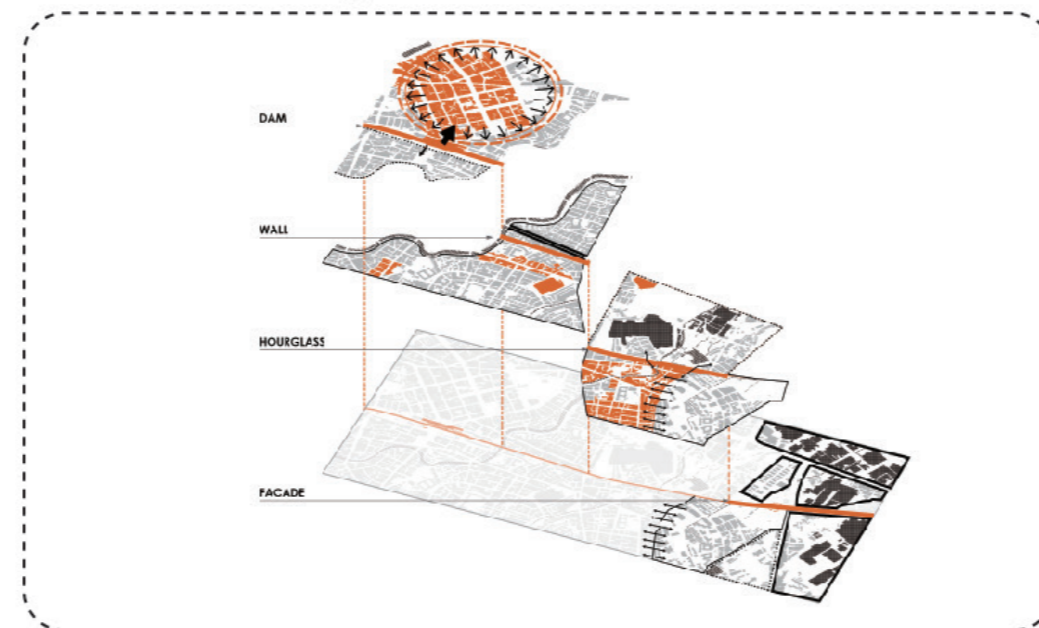
conclusion I: structure of city




conclusion II: railway as barrier



thematization of segments



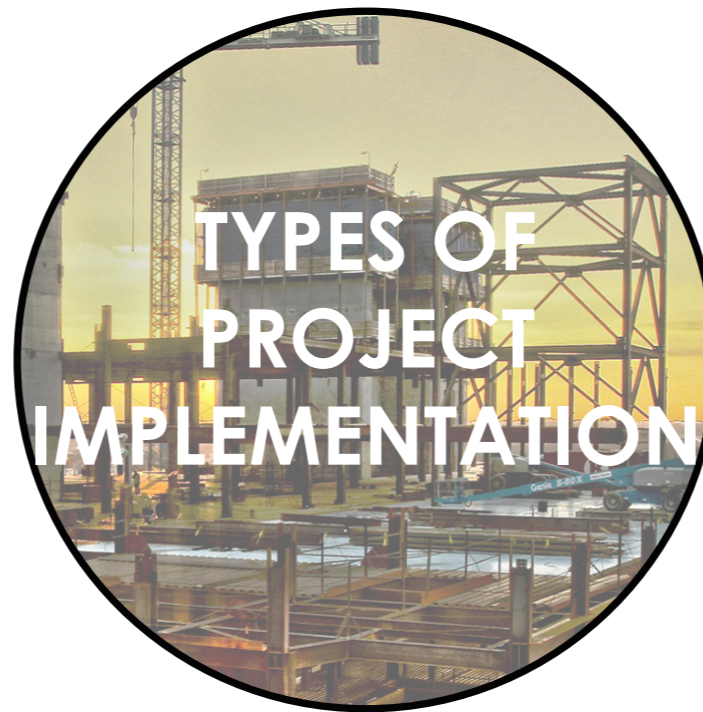
What are the existing and possible urban problems that are (potentially) related to the implementation of TRA Taoyuan Project?

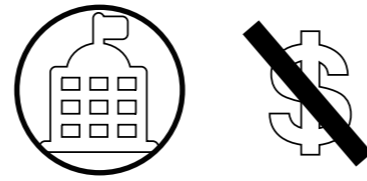


**PREDICTIONS OF POSSIBLE
PROBLEMS THAT WILL BE
ENCOUNTERED DURING
THE IMPLEMENTATION OF
TRA TAOYUAN PROJECT**

RESEARCH OBJECT: IMPLEMENTATION
VULNERABILITIES DUE TO SOCIAL/
ECONOMIC/POLITICAL INTERFERENCE

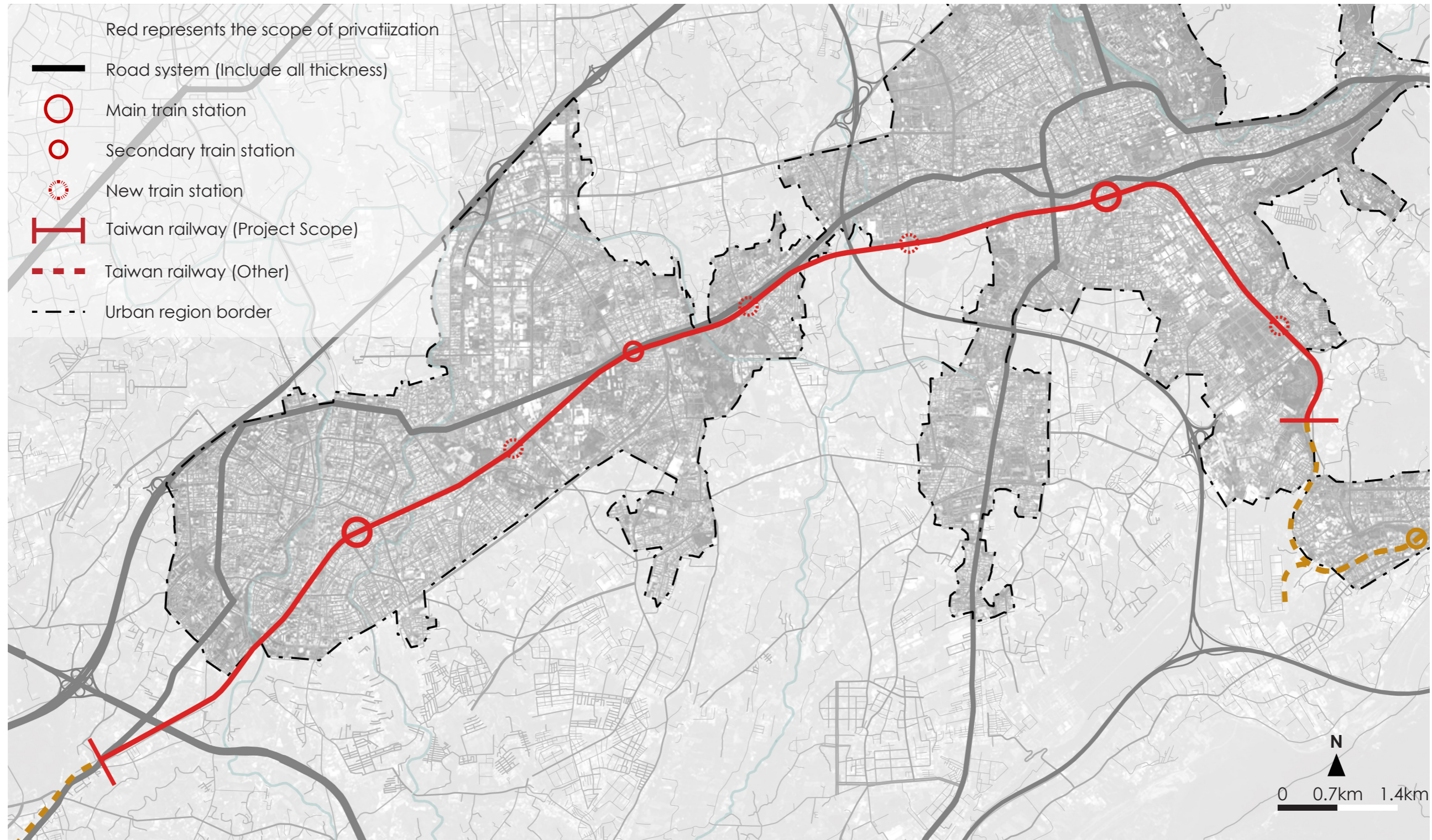
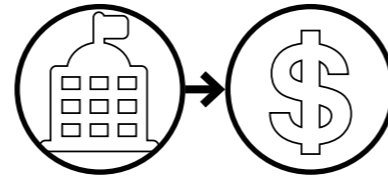
CRITERIA ON SELECTION OF THEORIES





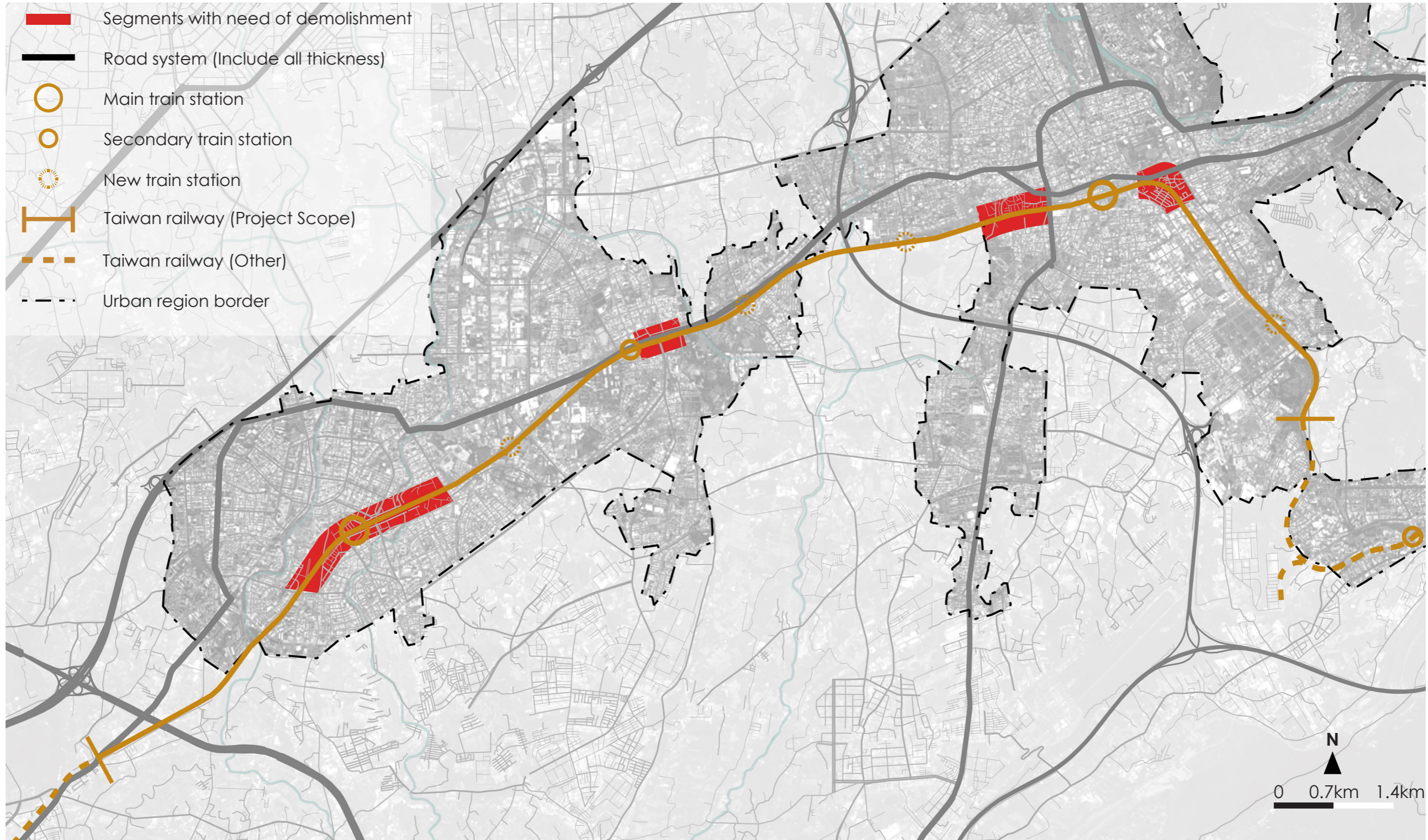
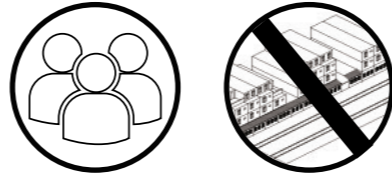
SCENARIO I

REDUCTION OF PROJECT SCOPE DUE TO FISCAL PRESSURE



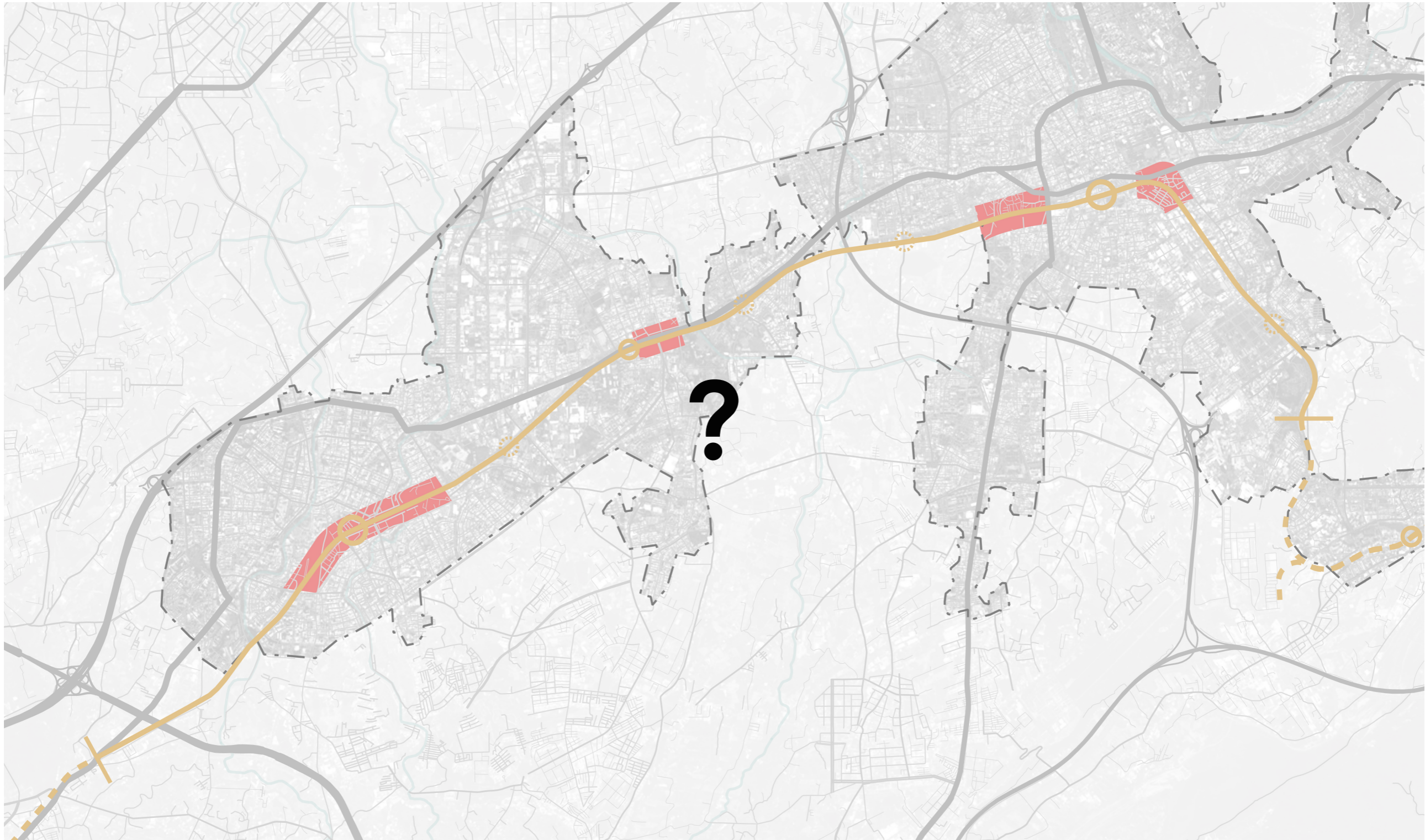
SCENARIO II

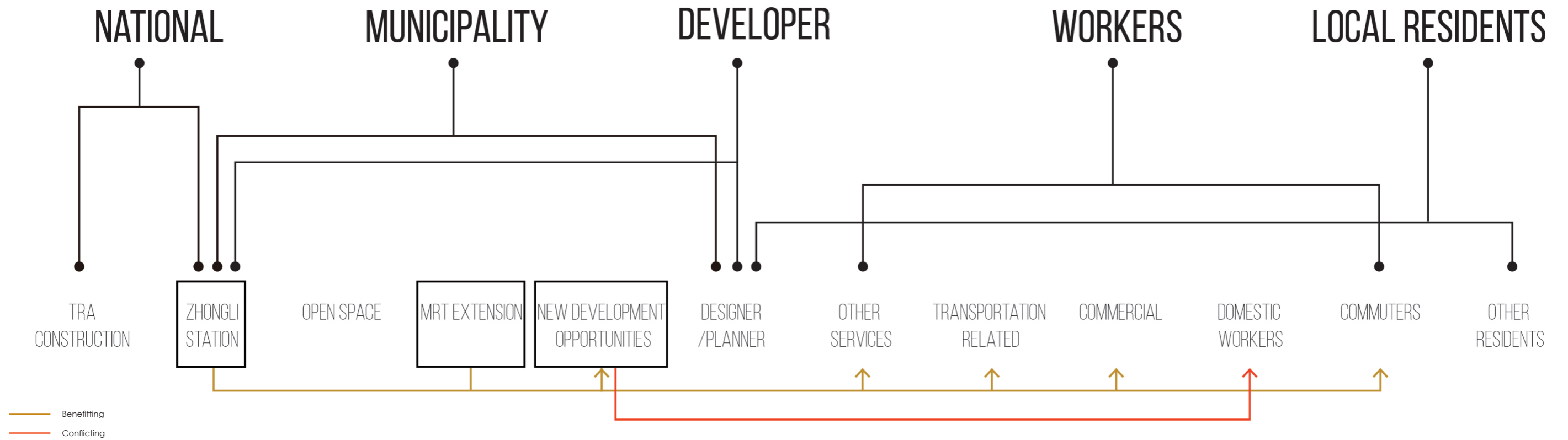
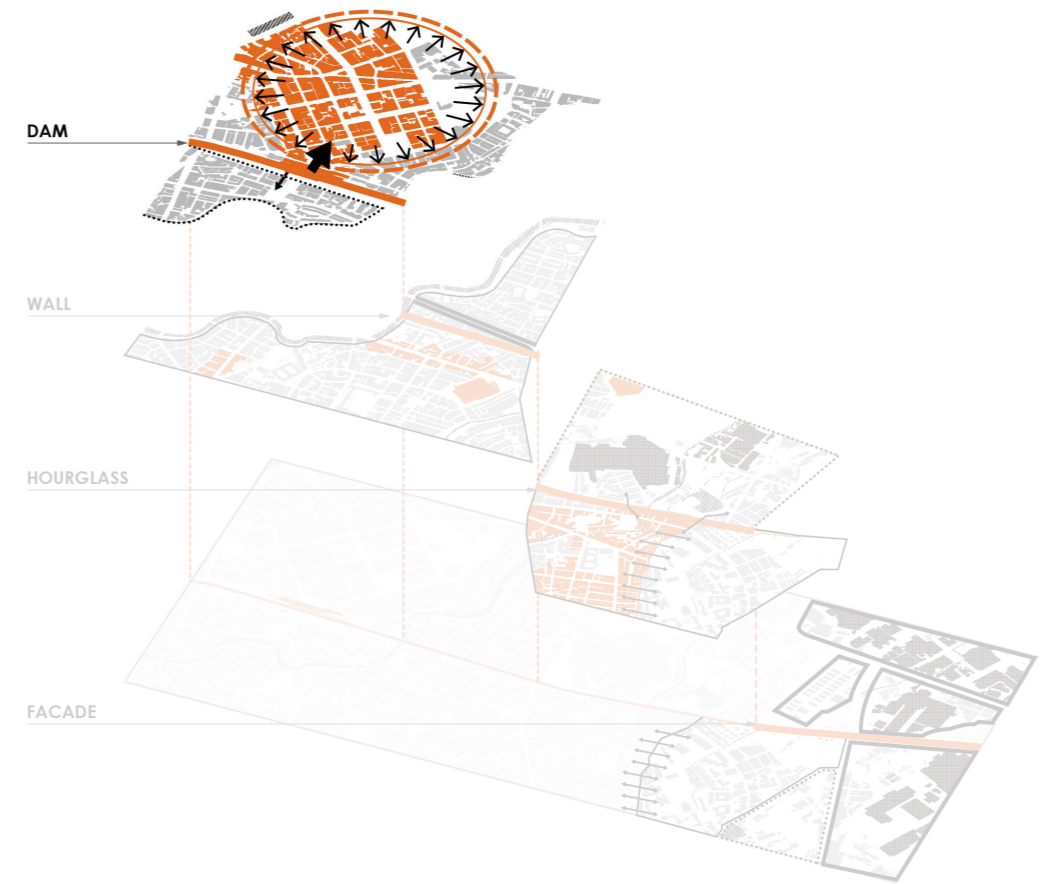
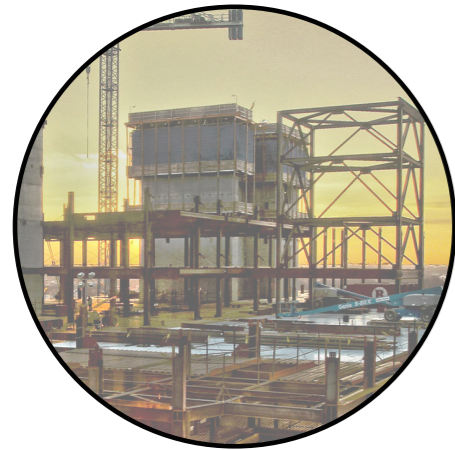
PRIVATIZATION AND COMMERCIALIZATION OF PUBLIC SERVICES + POTENTIAL GENTRIFICATION

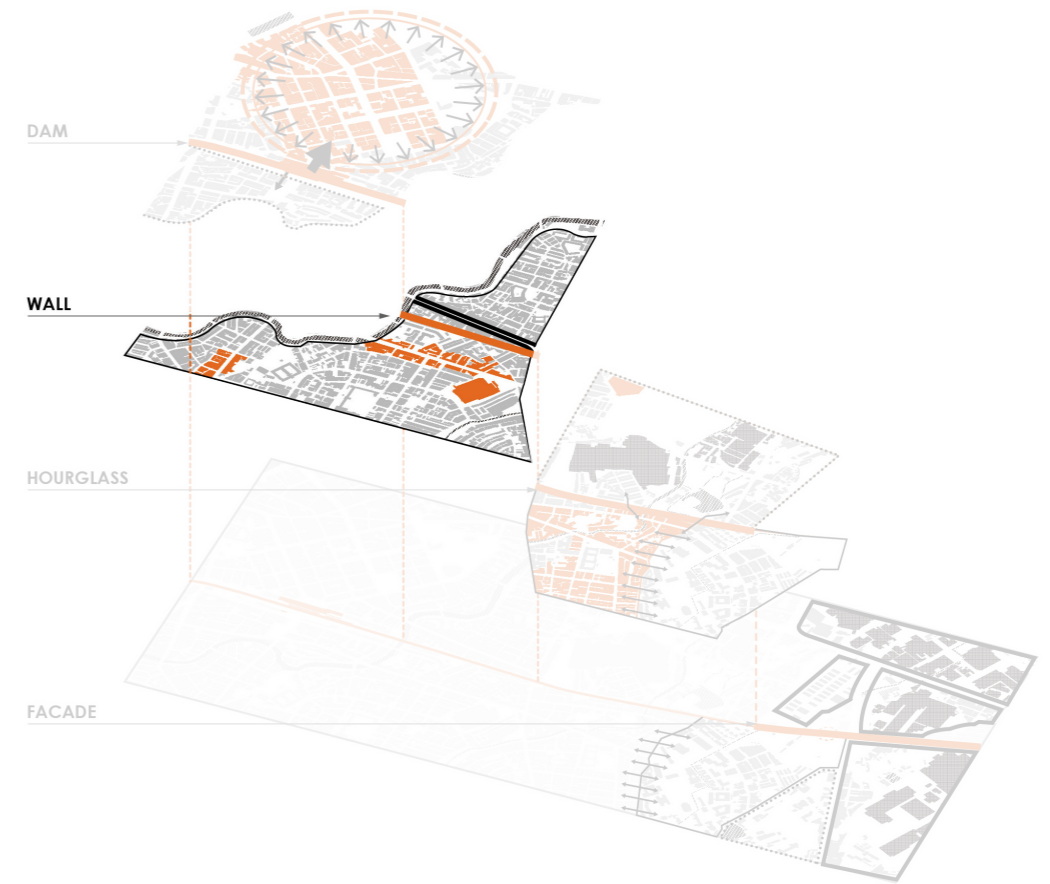
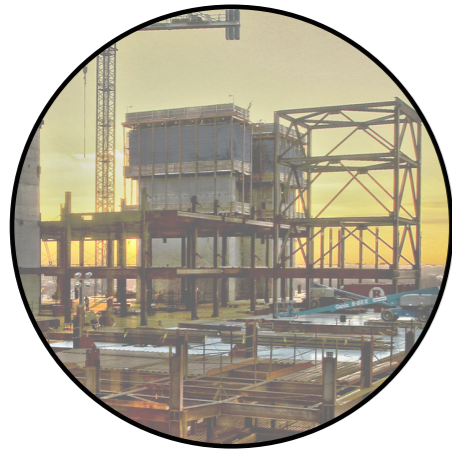


SCENARIO III

POTENTIAL SEGMENTS THAT COULD TRIGGER CONFLICT WITH LOCAL DWELLER







NATIONAL

MUNICIPALITY

WORKERS

LOCAL RESIDENTS

TRA
CONSTRUCTION

OPEN SPACE

NEW DEVELOPMENT
OPPORTUNITIES

DESIGNER
/PLANNER

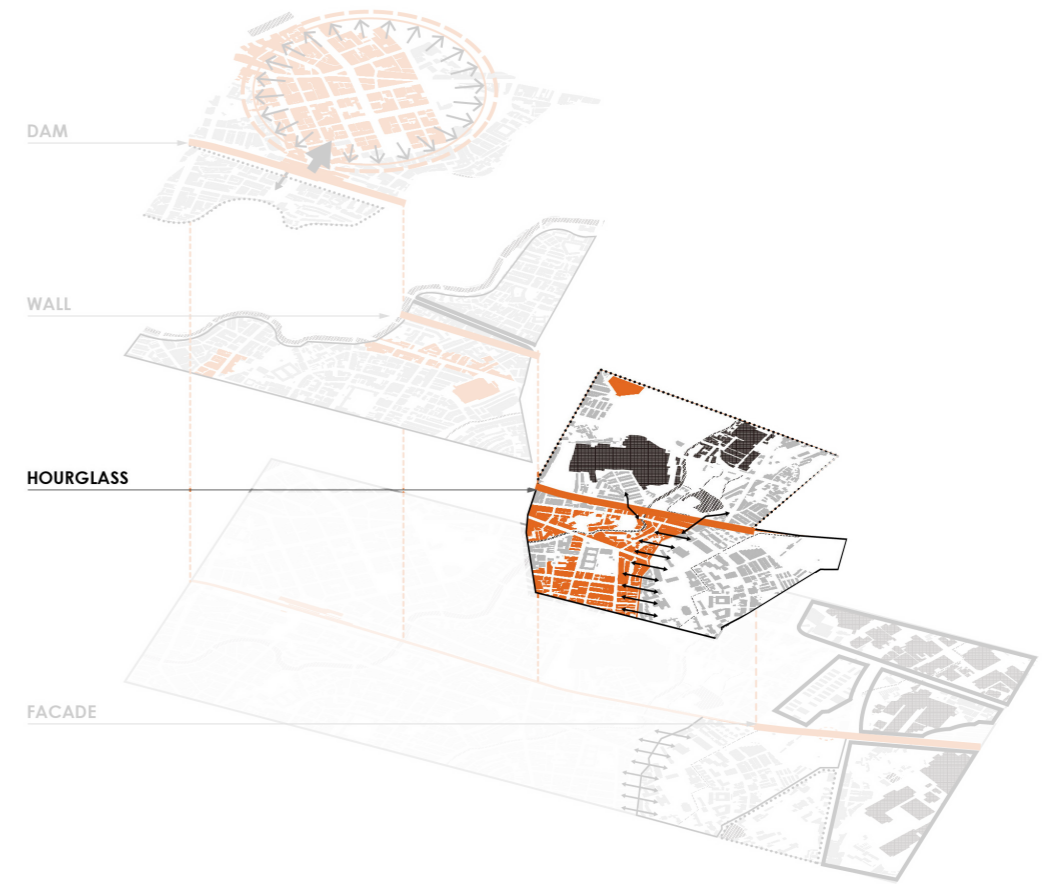
OTHER
SERVICES

COMMERCIAL

OTHER
RESIDENTS

Benefiting
Conflicting





NATIONAL

MUNICIPALITY

DEVELOPERS PRIVATE INDUSTRIES

WORKERS

LOCAL RESIDENTS

TRA
CONSTRUCTION

OPEN SPACE

HOUSING

NEW DEVELOPMENT
OPPORTUNITIES

DESIGNER
/PLANNER

STAYING

MOVING

OTHER
SERVICES

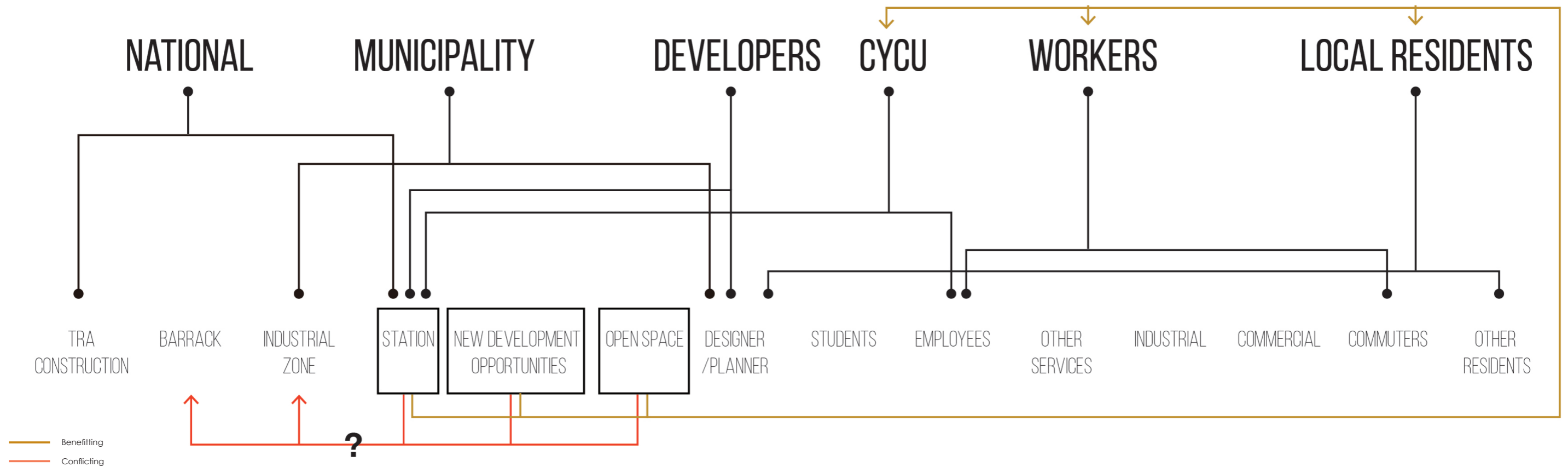
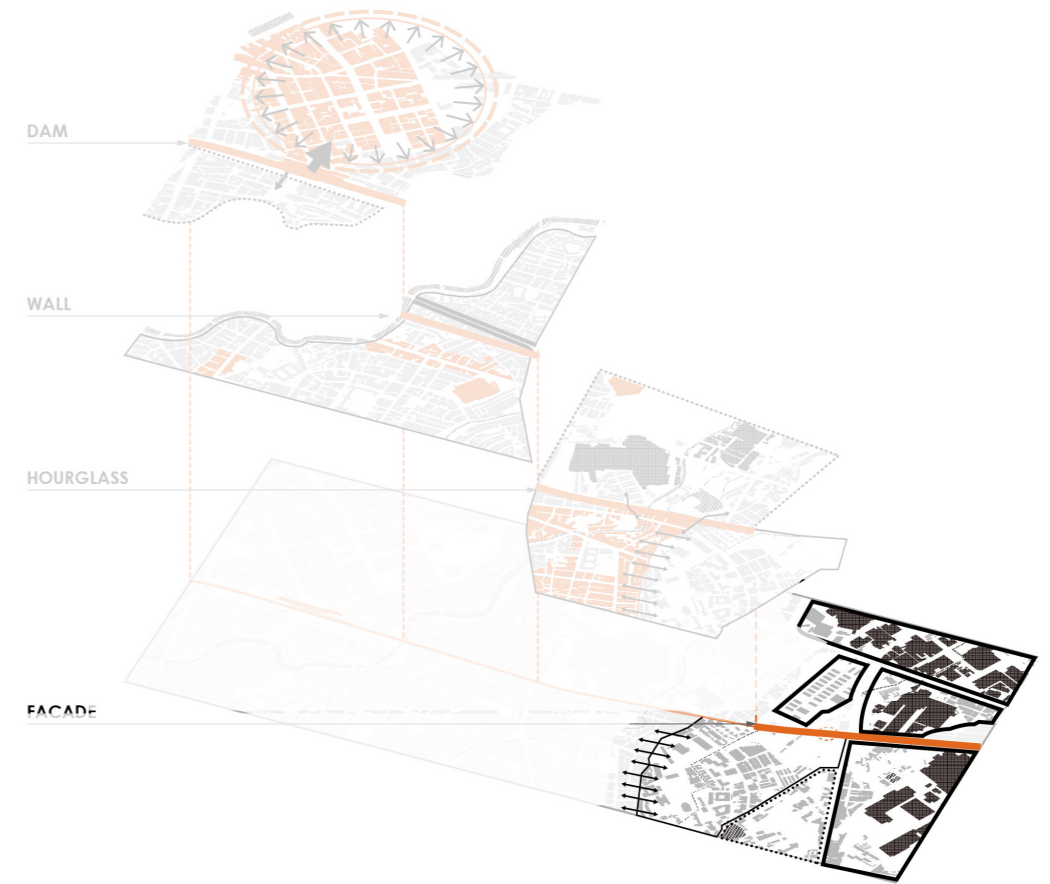
INDUSTRIAL

COMMERCIAL

OTHER
RESIDENTS

Benefiting
Conflicting





CURRENT:



GOAL:

ALLEVIATE

RECONNECT

SPATIAL

ECONOMIC

SOCIAL



OVERDENSIFIED BUILT ENVIRONMENT WITH UNSATISFACTORY QUALITY

UNBALANCED RESOURCING

ACTOR CONFLICT

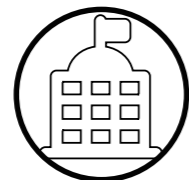
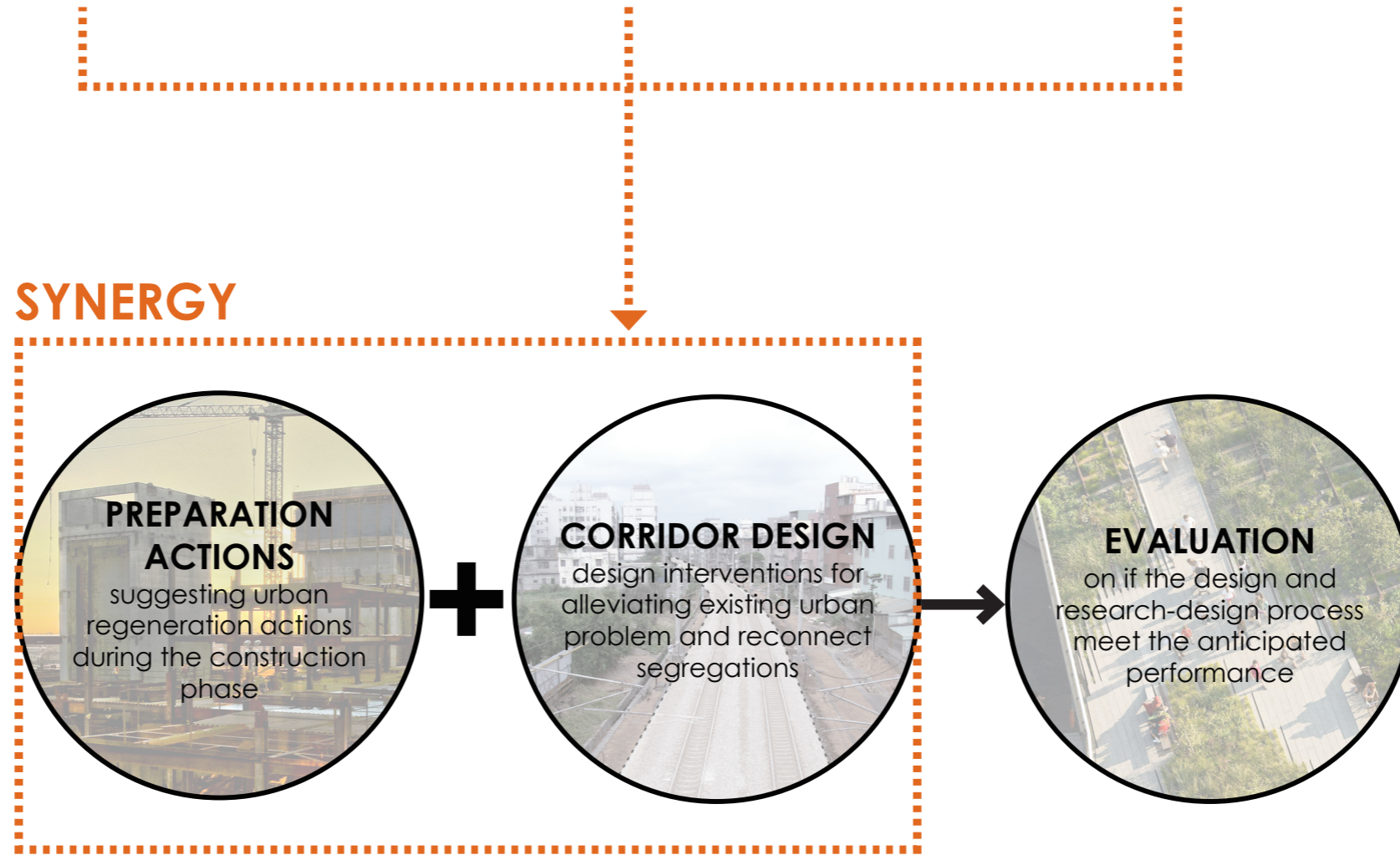


?

RETURN PEDESTRIAN CONNECTIONS

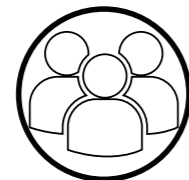
CONNECT WITH OTHER URBAN PROJECTS

CITY'S IDENTITY & BELONGINGNESS



top down

construction of top down transportation infrastructure project as trigger point of urban regeneration actions



bottom up

utilizing bottom up urban regeneration actions to mitigate impacts from construction

top down transportation infrastructure project as opportunity to contain all actors

initiate design from the smallest "segment" scale

adaptation of design-research process into innovative approach/regulation

engaging all actors in every stage of decision making

THEORIES FOR OPEN SPACE AS CONTAINER FOR ALL THE ACTORS



EVERYDAY PUBLIC SPACE

(Yucesoy)



CREATING SPATIAL CONDITION

(Carmona, 2010)



INCLUSIVENESS OF OPEN SPACE

(Holland, Clark, Katz, and Peace, 2007)



THIRD PLACE THEORY

(Oldenburg, 2001)



URBAN ACUPUNCTURE

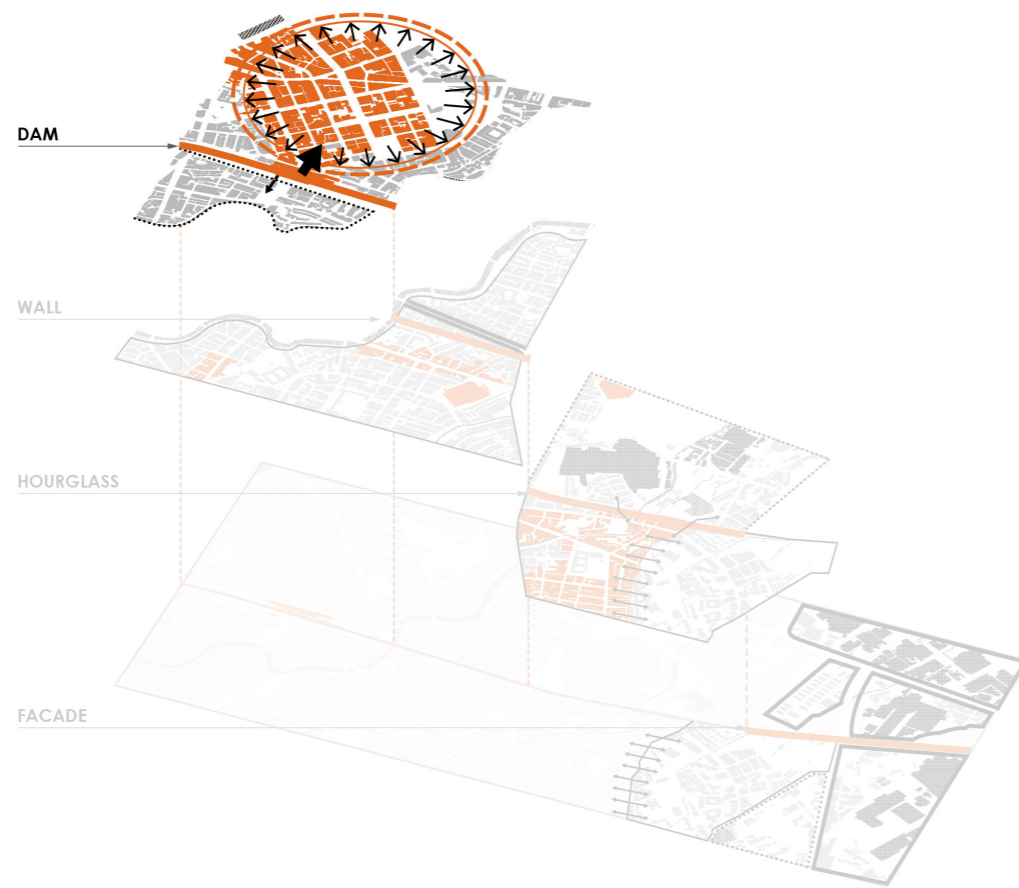
(Kaye, 2011)(Harrison, 2013)

How to apply test design that meets the integrative approach of TRA Taoyuan Project?



**SELECTION AND ANALYSIS
OF TEST DESIGN SITE**

**DESIGN INTERVENTIONS
AND APPLICATIONS**



TEST DESIGN SITE: ZHONGLI STATION AND ADJACENT NEIGHBORHOOD

廣告出租
0932-932447

中平路

台灣獨立

三兄弟

起司

das

Self-determination for Taiwan
封閉自來戲園

封閉自來戲園

行人請走行人穿
請勿任意穿越
桃園市政府





上中興大飯店
Welcome to
CHUNGSI HOTEL

100

ICC

吉
吉
吉

HT HOTEL







34-39坪
市中心樓連宅
中壢新站200米
468-8868

岩里島
MOTEL
459-8989

鴻興駕
原車原場地考照

非典牙醫診所

換屋.幸福
1988
700
#御天下
426-9988

新站
廣場
386
458-3788

廣興水果
廣興水果

K5-6587

賓士
HOTEL
前方 150m
Hotels offer
Philippines channel
Indonesian channel
全館 Wi-Fi

金站
GOLD STATION
傳統小吃

金站
GOLD STATION
傳統小吃

千好
千好
中港點心
08-4582410

千好
千好
中港點心

金寶
中港點心分店

阿正
魚肉煉

127053

127053

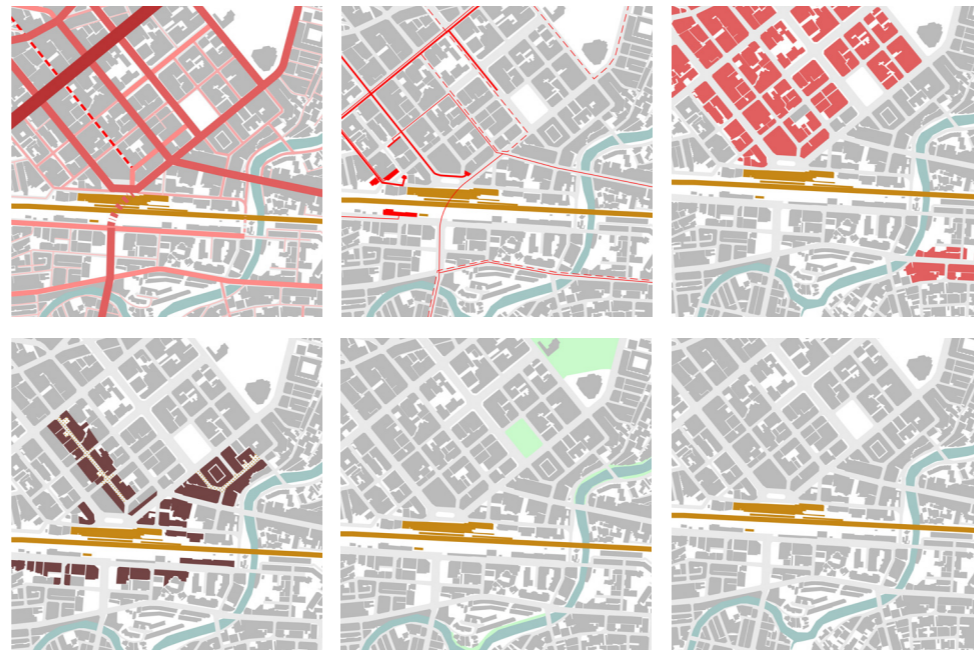
銀行路 工商局

何具
仔豆腐
歡迎光臨

Heineken

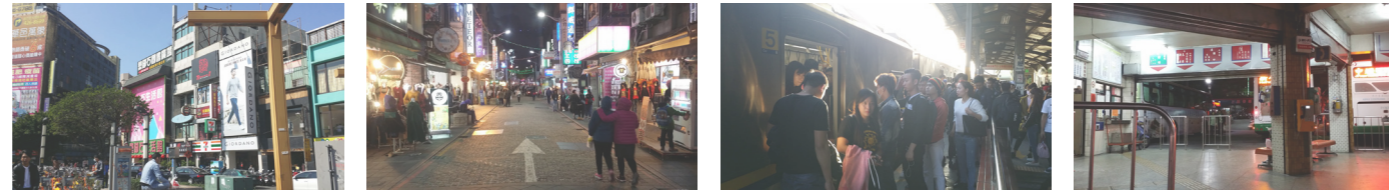
888

1547255



DESK ANALYSIS

+

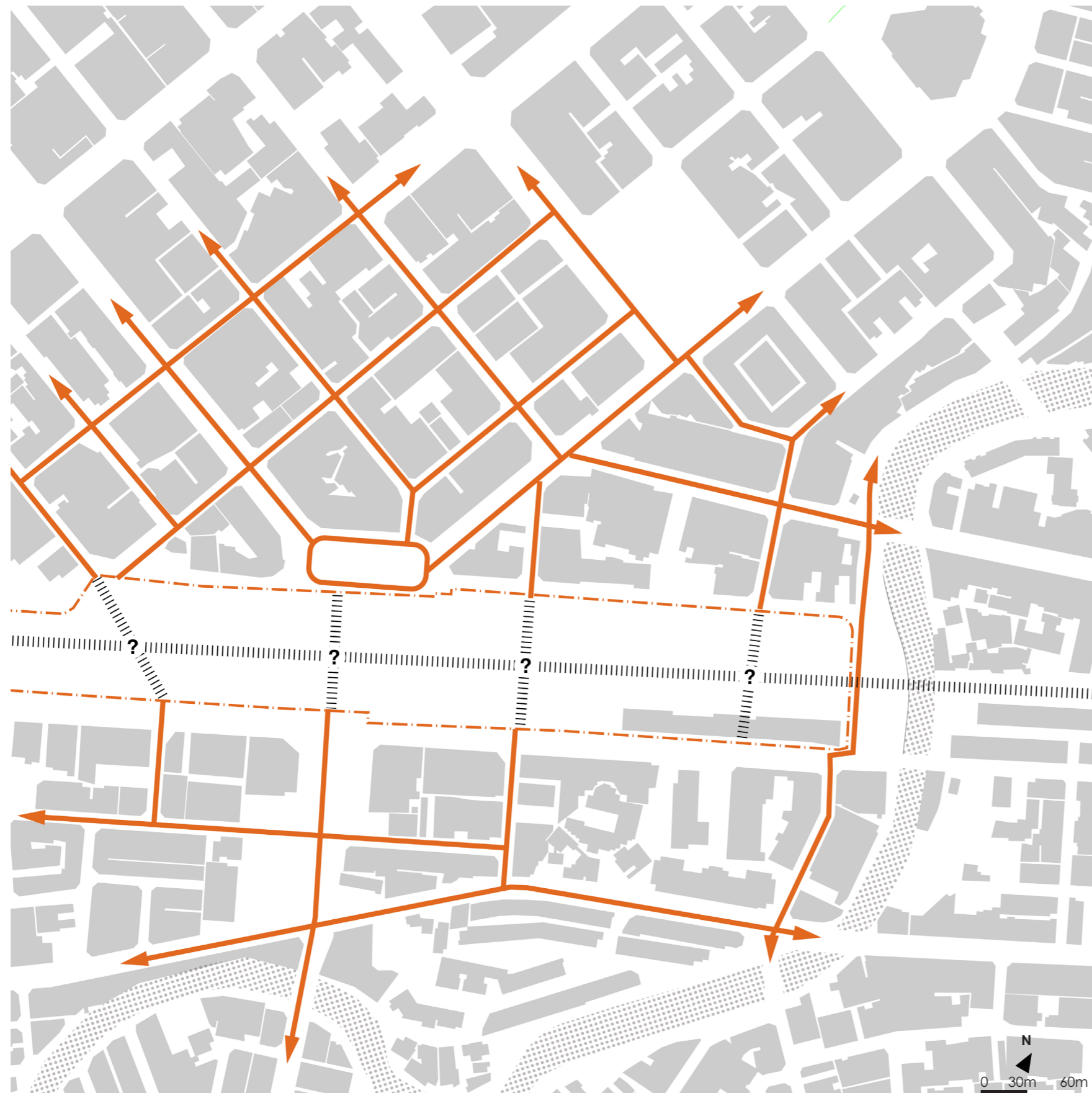


SITE WORK & OBSERVATION

+

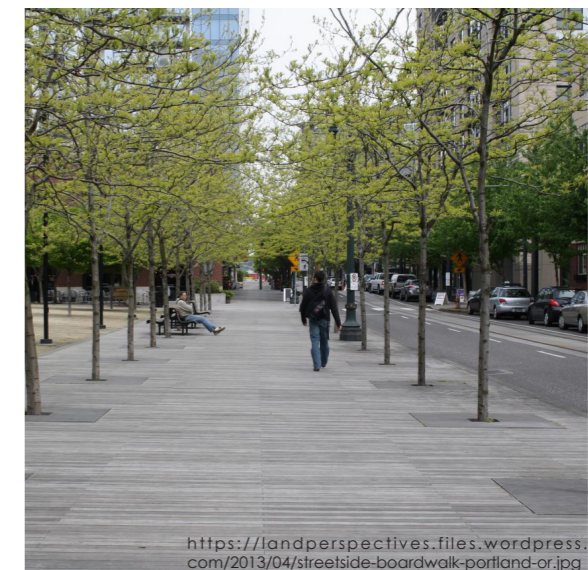


SWOT ANALYSIS

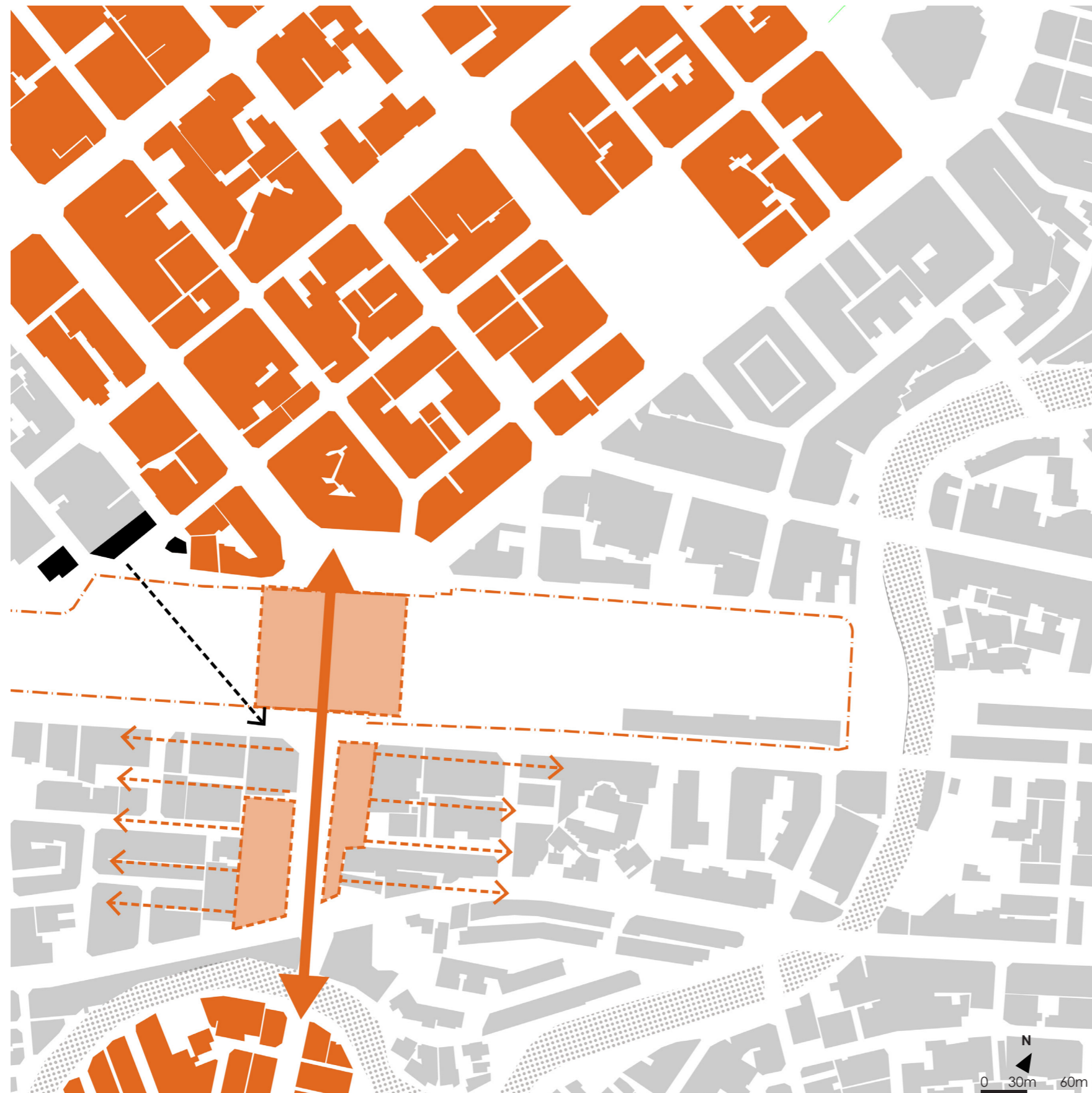


DESIGN BRIEF: SPATIAL

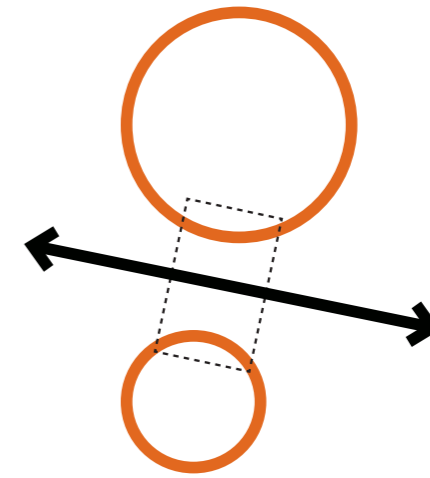
Reconnect pedestrian connectivity between front/back station via open space.
 Improve pedestrian accessibility of urban dwellers along the project.



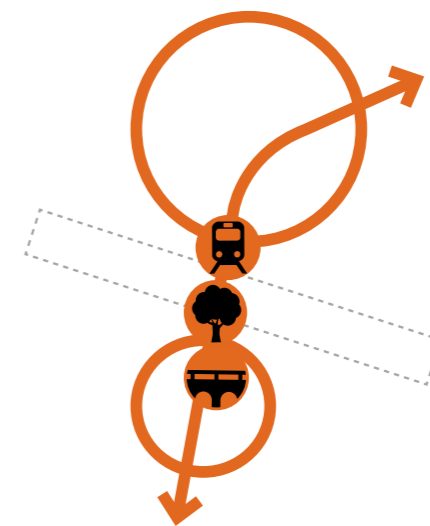
- TRA Taoyuan Project Site
- ← Existing connectivity
- Potential connectivity after construction of TRA Taoyuan Project



Before:
Separated by railway, unused spaces, and lack of pedestrian facilities at back station



After:
Improve connectivity by utilizing main road and introducing new programs



- - - TRA Taoyuan Project Site
- Commercial district
- Transportation facilities

DESIGN BRIEF: ECONOMIC

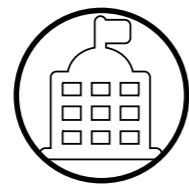
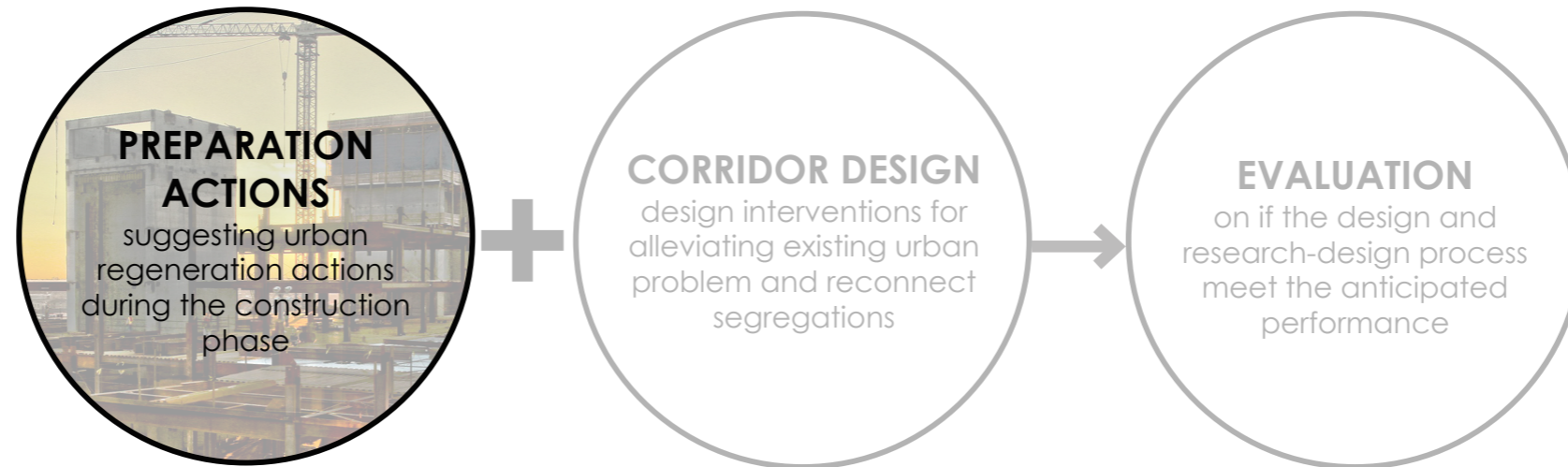
Improving back station's lack of resource by introducing new programs + connecting with other commercial districts
Alleviating stress of front station by redistributing existing facilities.



- - - TRA Taoyuan Project Site
- Commercial District
- Bus Terminals
- Commercial Activity for Immigrant Workers
- \$ Commercial
- 🌐 Immigrant Workers
- 🚌 Commuters
- 🏠 Local Residents

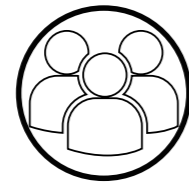
DESIGN BRIEF: SOCIAL

Include multiple users in the using and making of open space, especially immigrant workers
 Connect urban dwellers with their city by placemaking



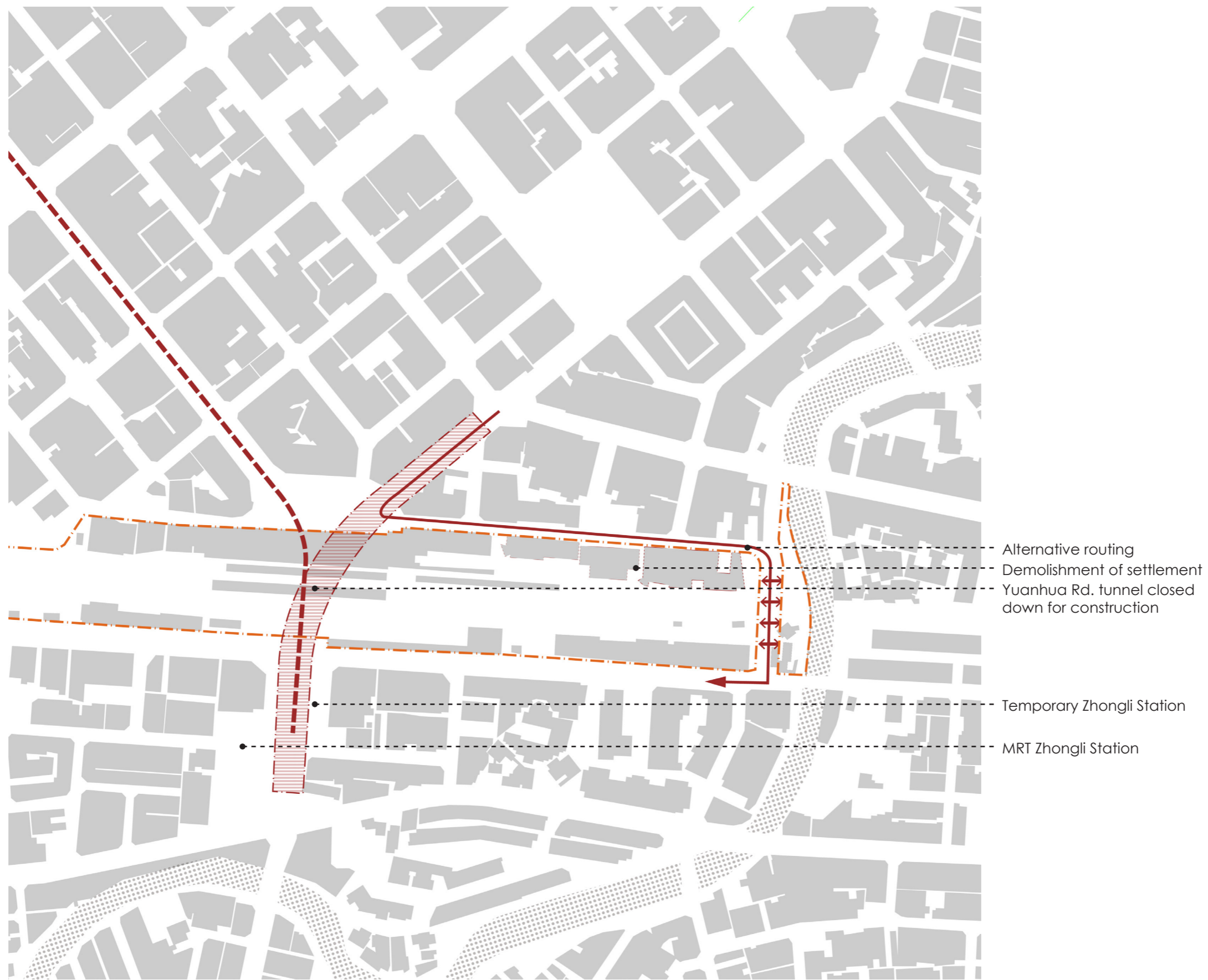
top down

construction of top down transportation infrastructure project as trigger point of urban regeneration actions



bottom up

utilizing bottom up urban regeneration actions to mitigate impacts from construction



EXPECTED URBAN PROJECTS



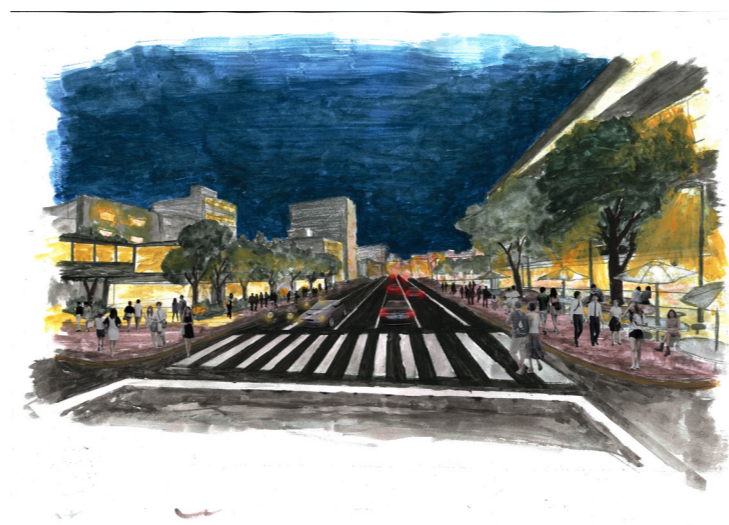
STOP MOTION VIDEO



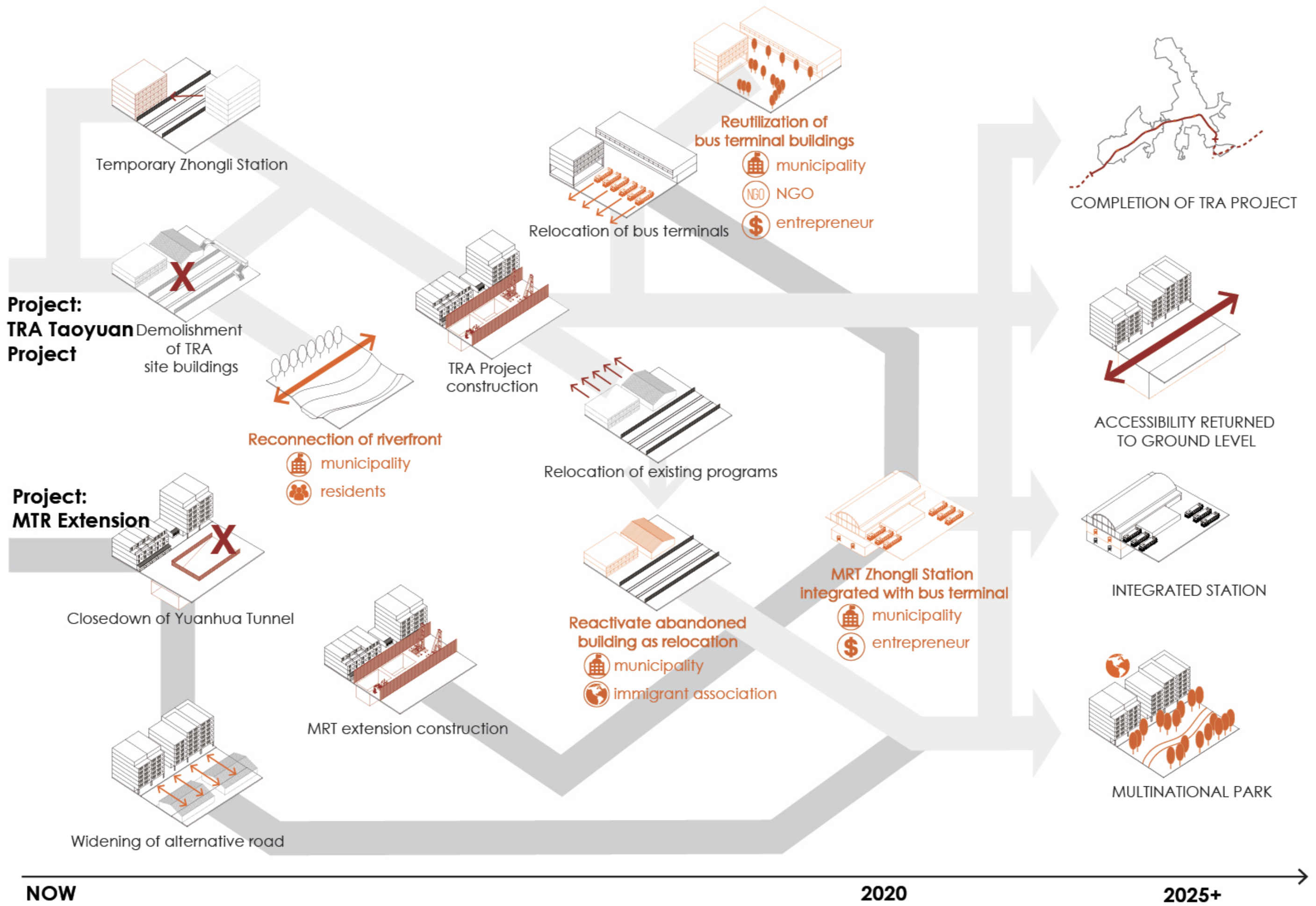
STOP MOTION VIDEO



STOP MOTION VIDEO



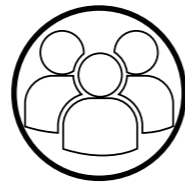
STOP MOTION VIDEO





top down

top down transportation infrastructure project as opportunity to contain all actors



bottom up

initiate design from the smallest "segment" scale

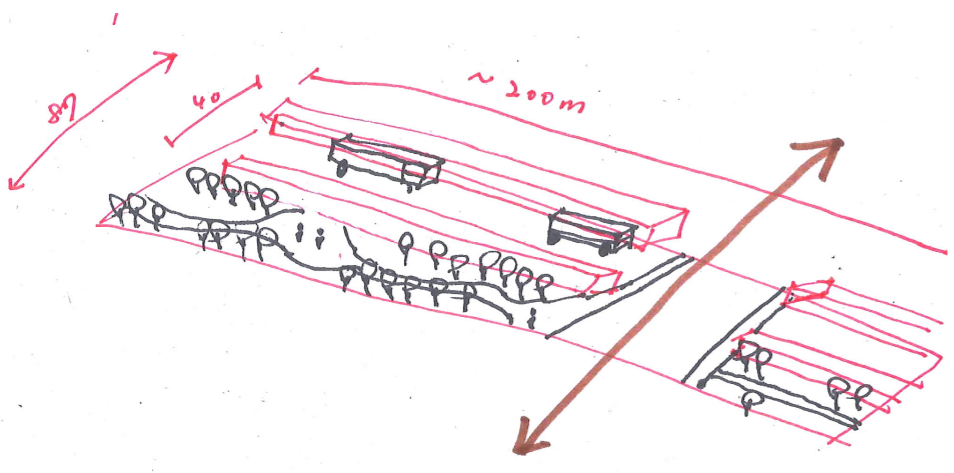


EVERYDAY PUBLIC SPACE

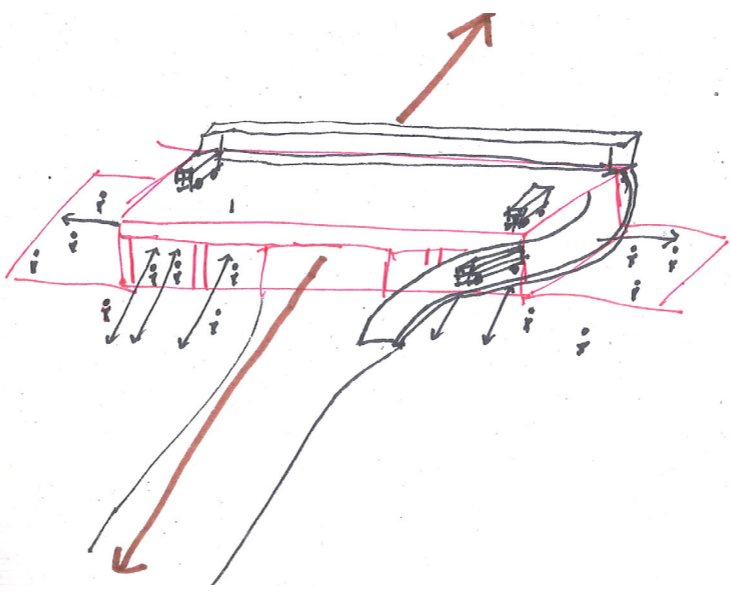
(Yucesoy)

<https://upload.wikimedia.org/wikipedia/commons/6/65/20150805%E5%8F%B0%E5%8C%97%E8%BD%89%E9%81%8B%E7%AB%99%E5%94%AE%E7%A5%A6%E5%8D%80.jpg>

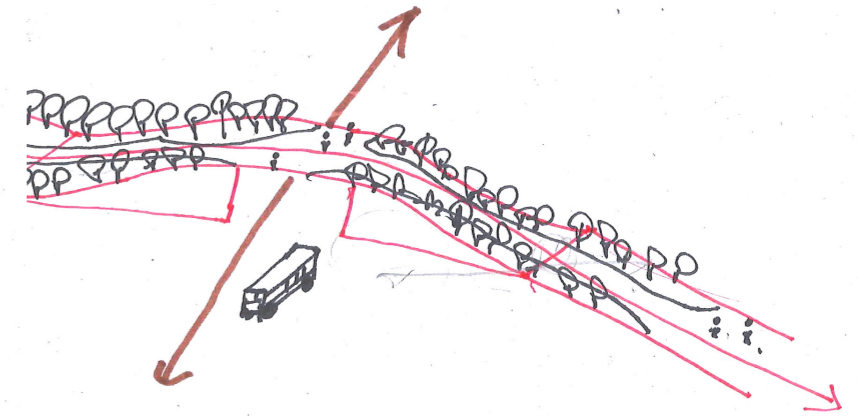
Option 1: Conventional



Option 2: Vertical



Option 3: Connectivity



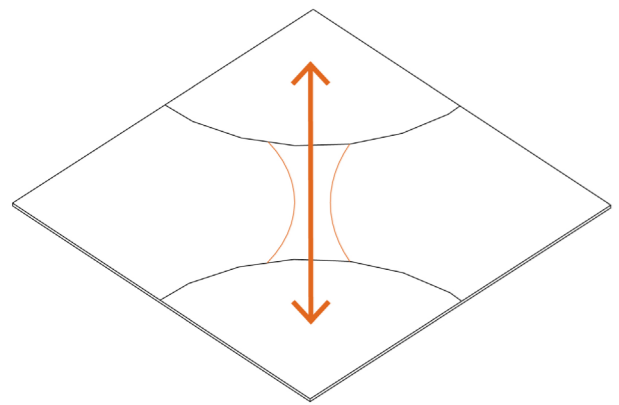
+ a section

BUS TERMINAL TYPOLOGIES

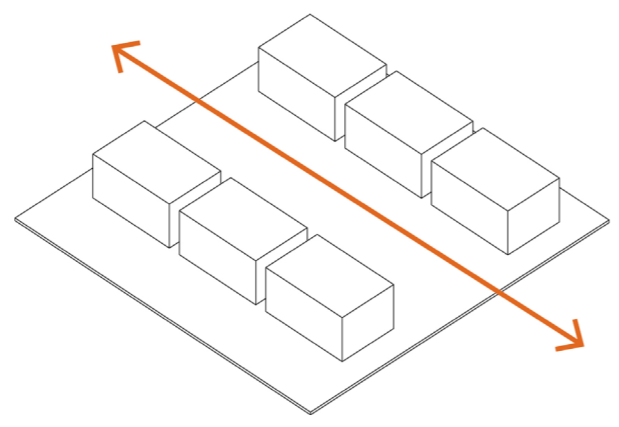


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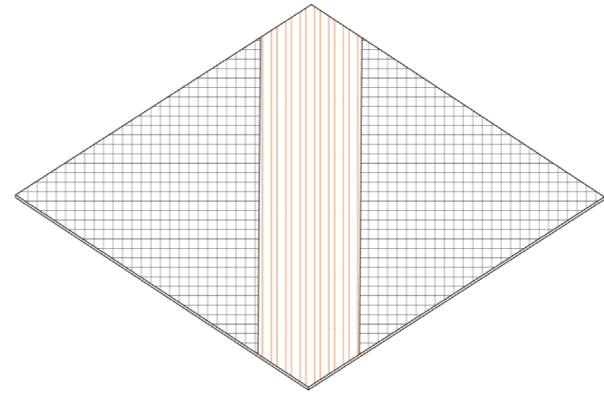
Direction Guiding



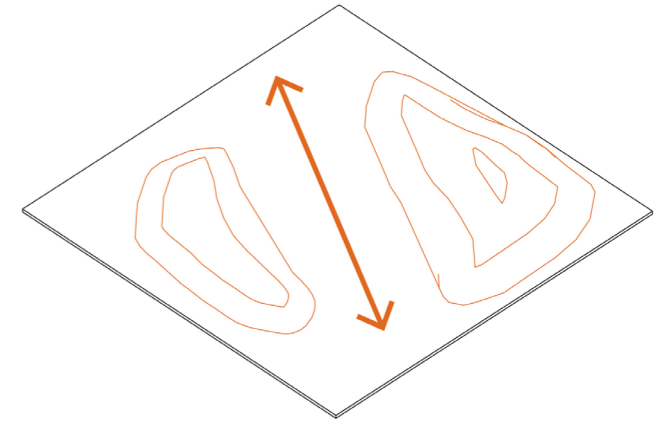
Form of Open Space



Structure

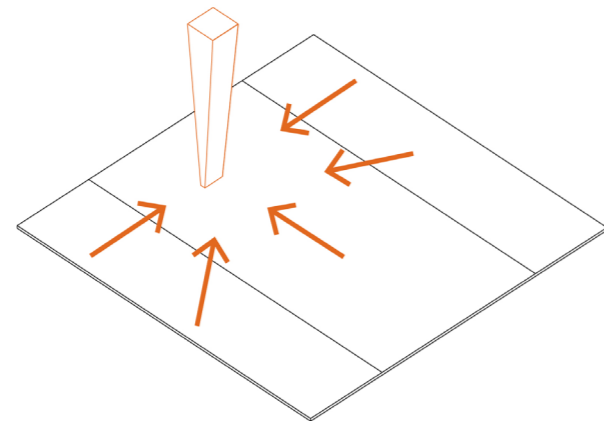


Differentiate Pavings

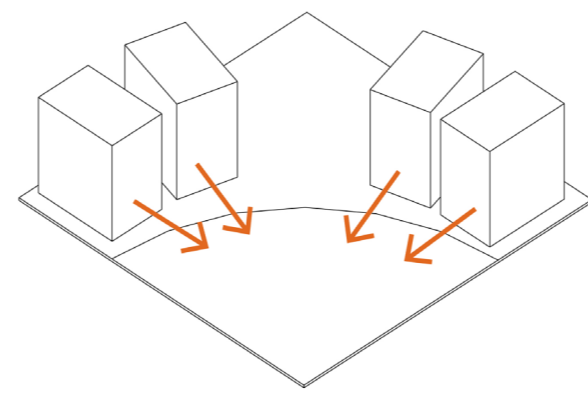


Landform

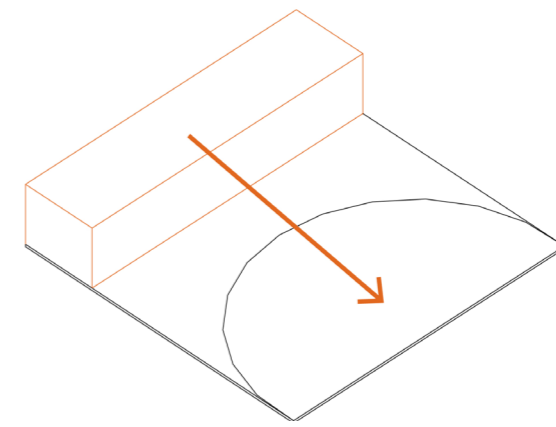
Gathering Space



Monument as Focal Point

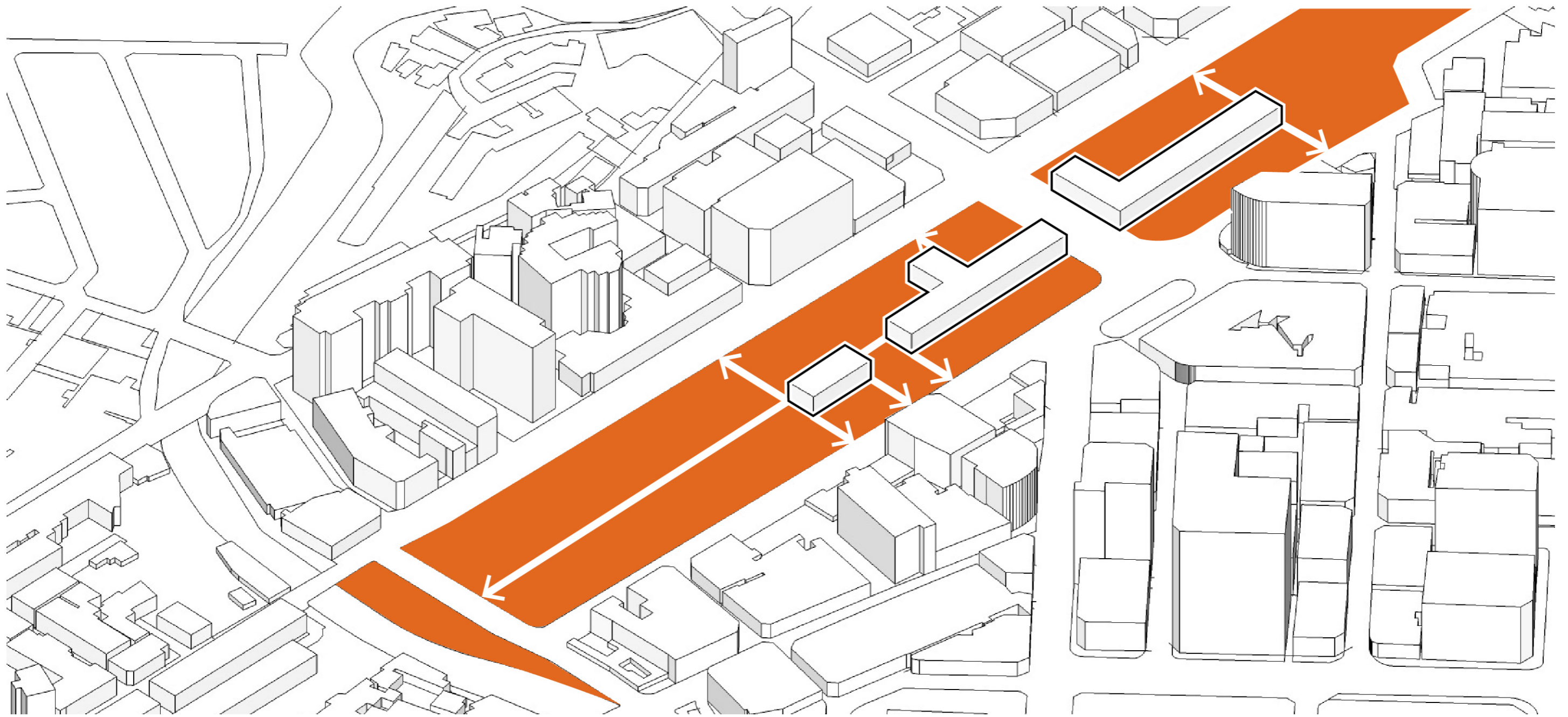


Open Space as Focal Point

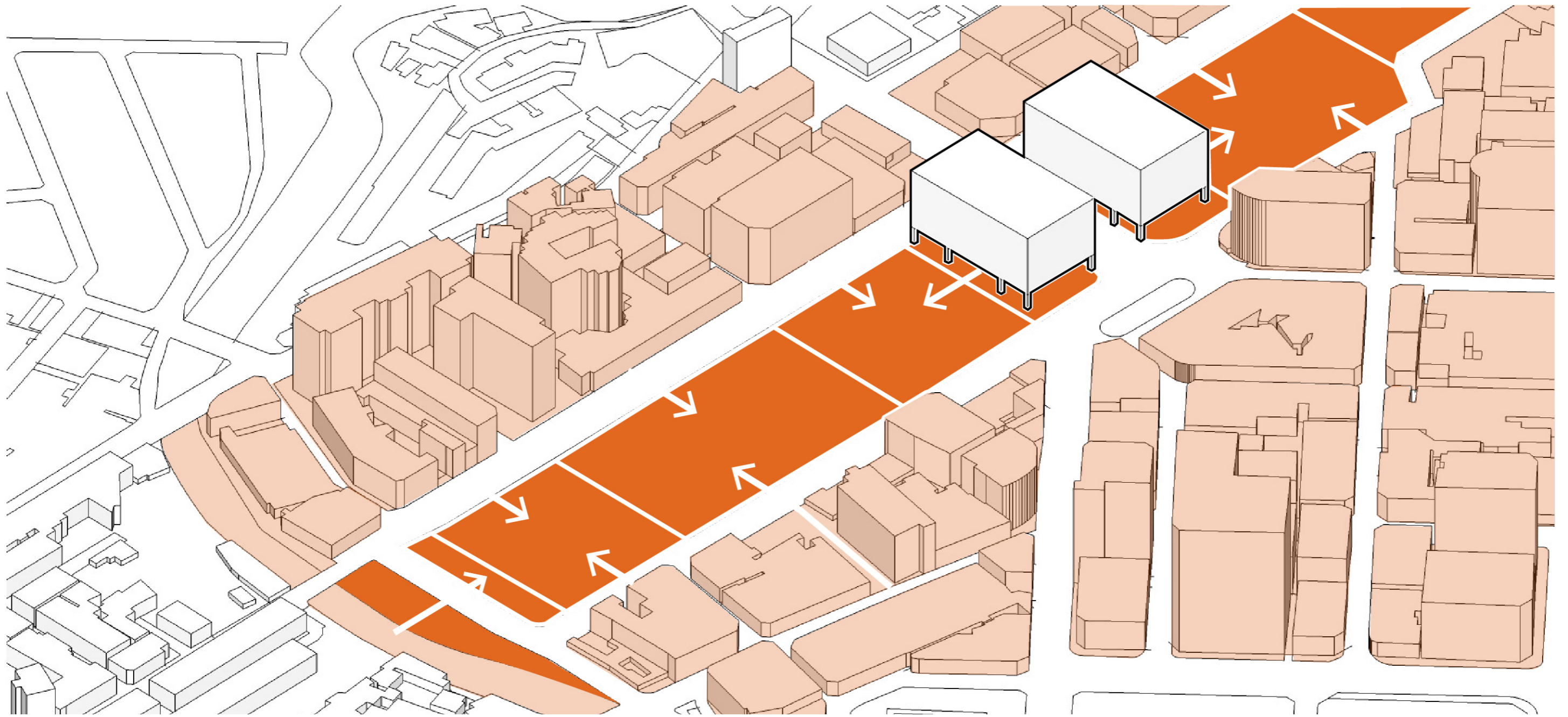


Height Difference as Viewpoint

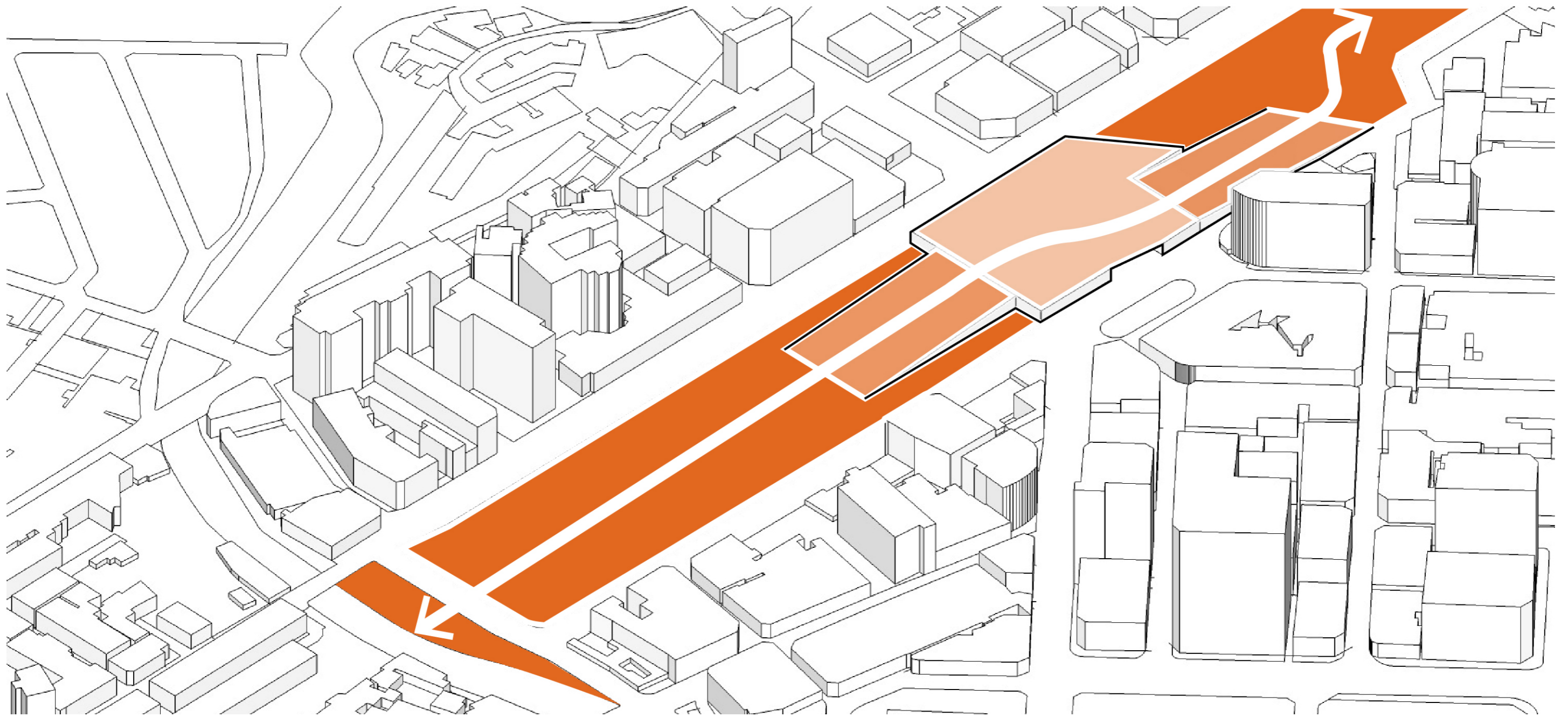
CREATION SPACE FOR DESIRED ACTIONS



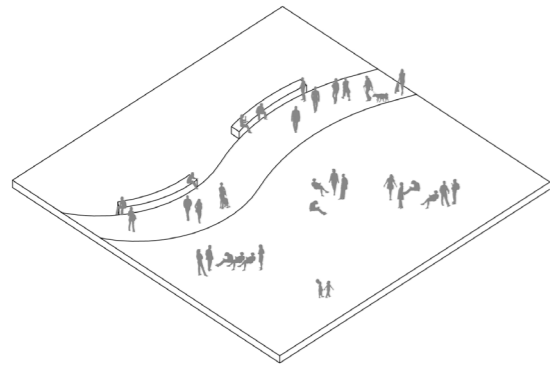
PROTOTYPE OF OPTION I: Mosaic Patterns



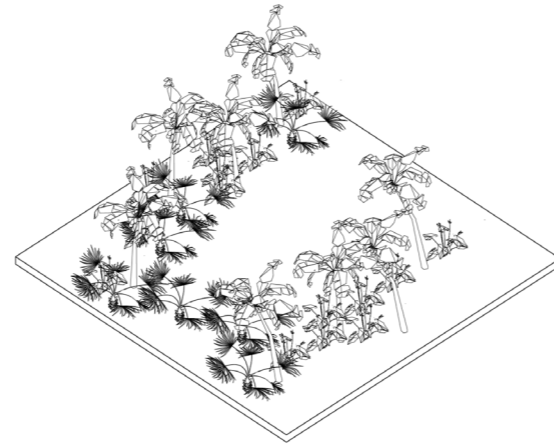
PROTOTYPE OF OPTION II: Micro-segments



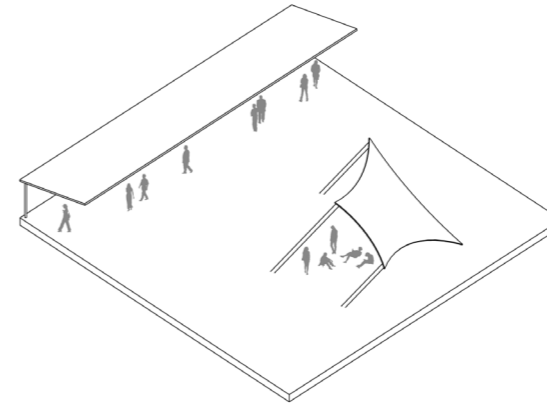
PROTOTYPE OF OPTION III: Urban Topography



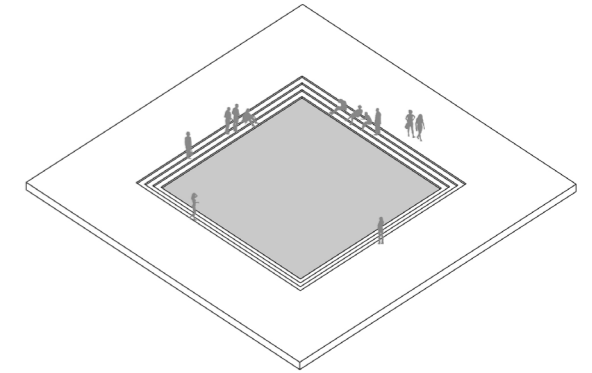
Providing Various Open Space Experience



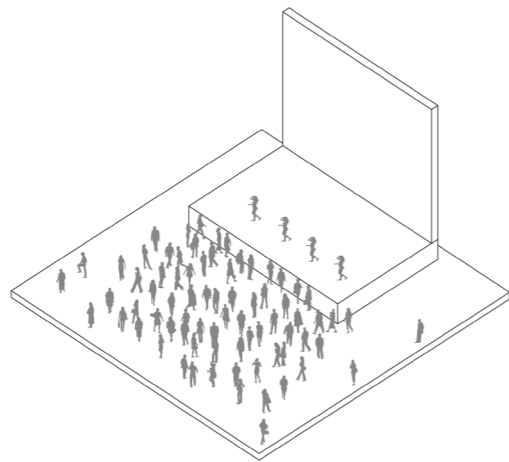
Plant Species to Form Nostalgia



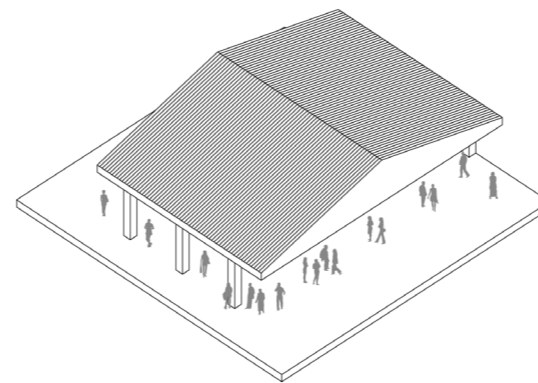
Shading Structures



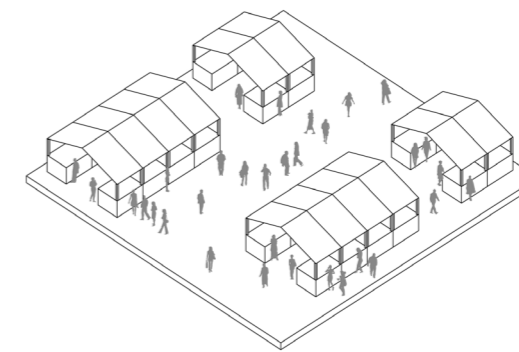
Water Feature



Event Space



Renovation of Abandoned House

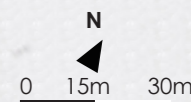


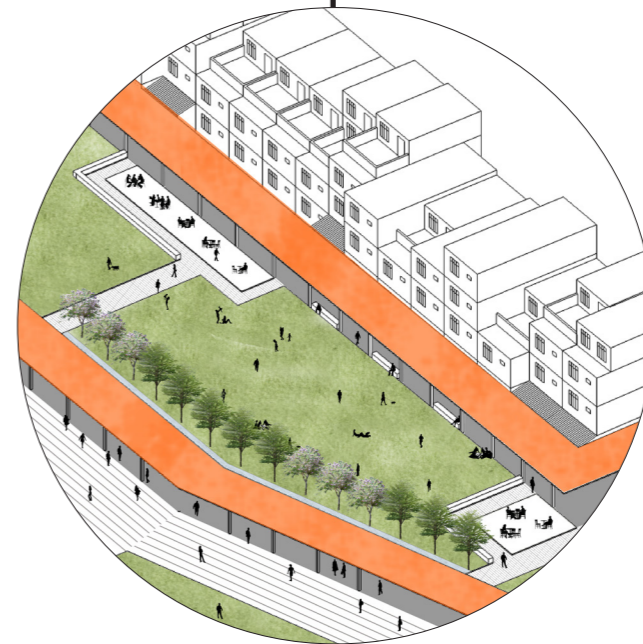
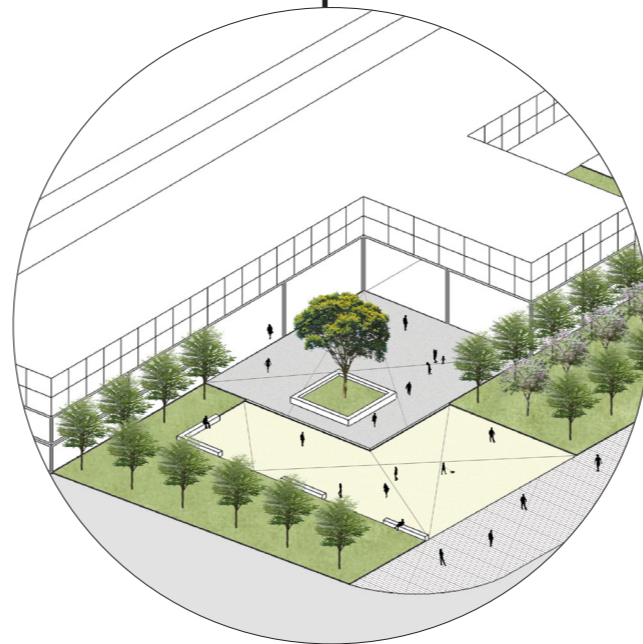
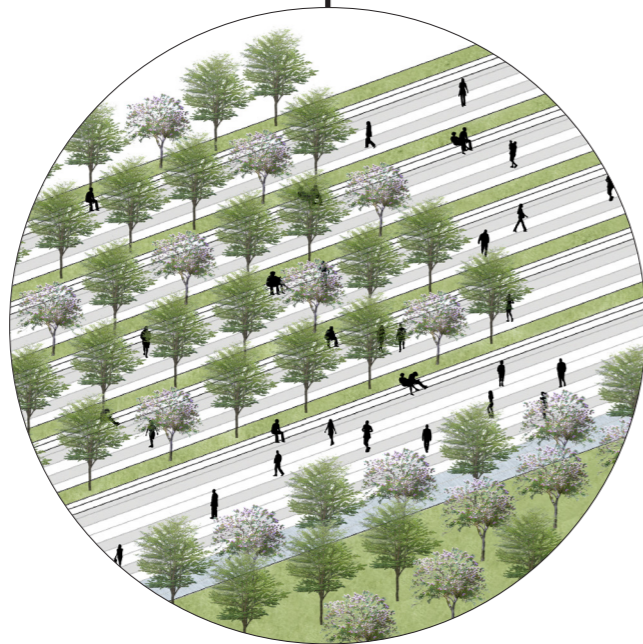
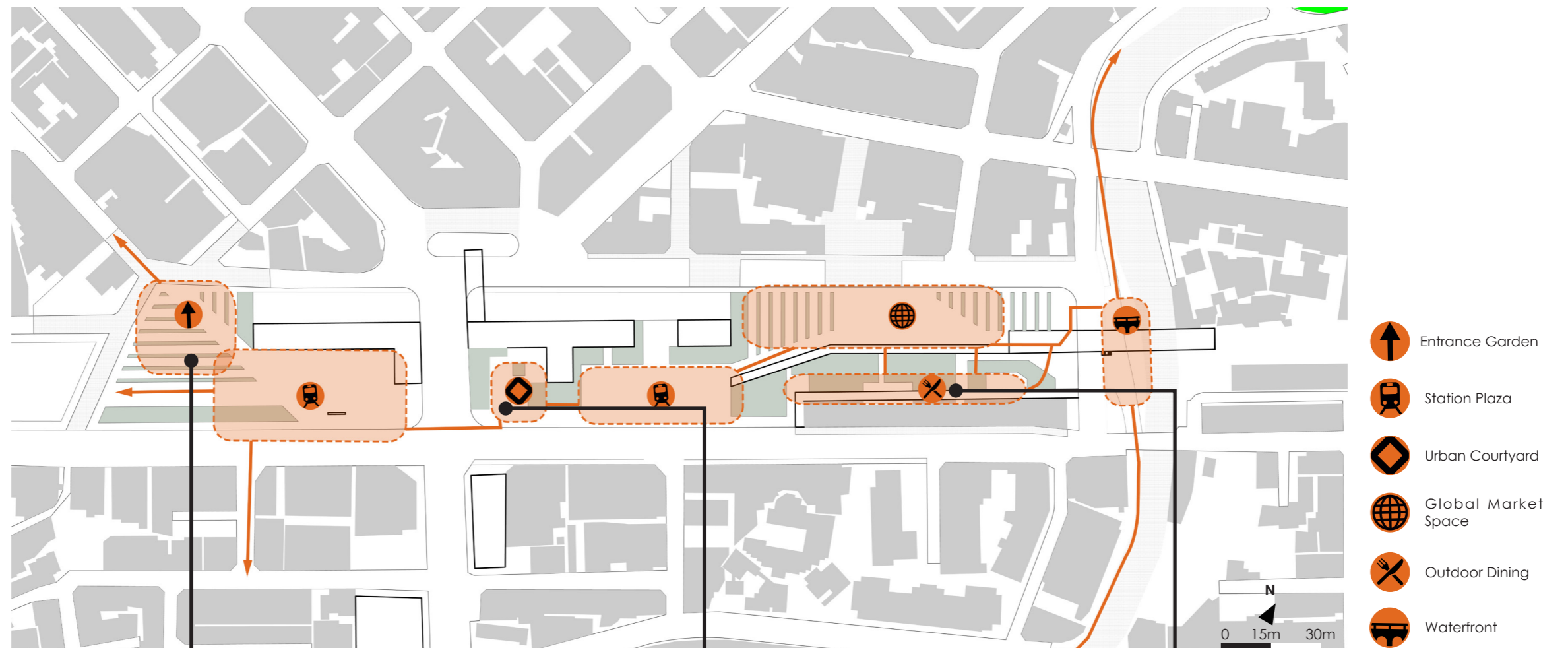
Self-organized Open Market

OTHER DESIGN INTERVENTIONS



OPTION I: Mosaic Patterns

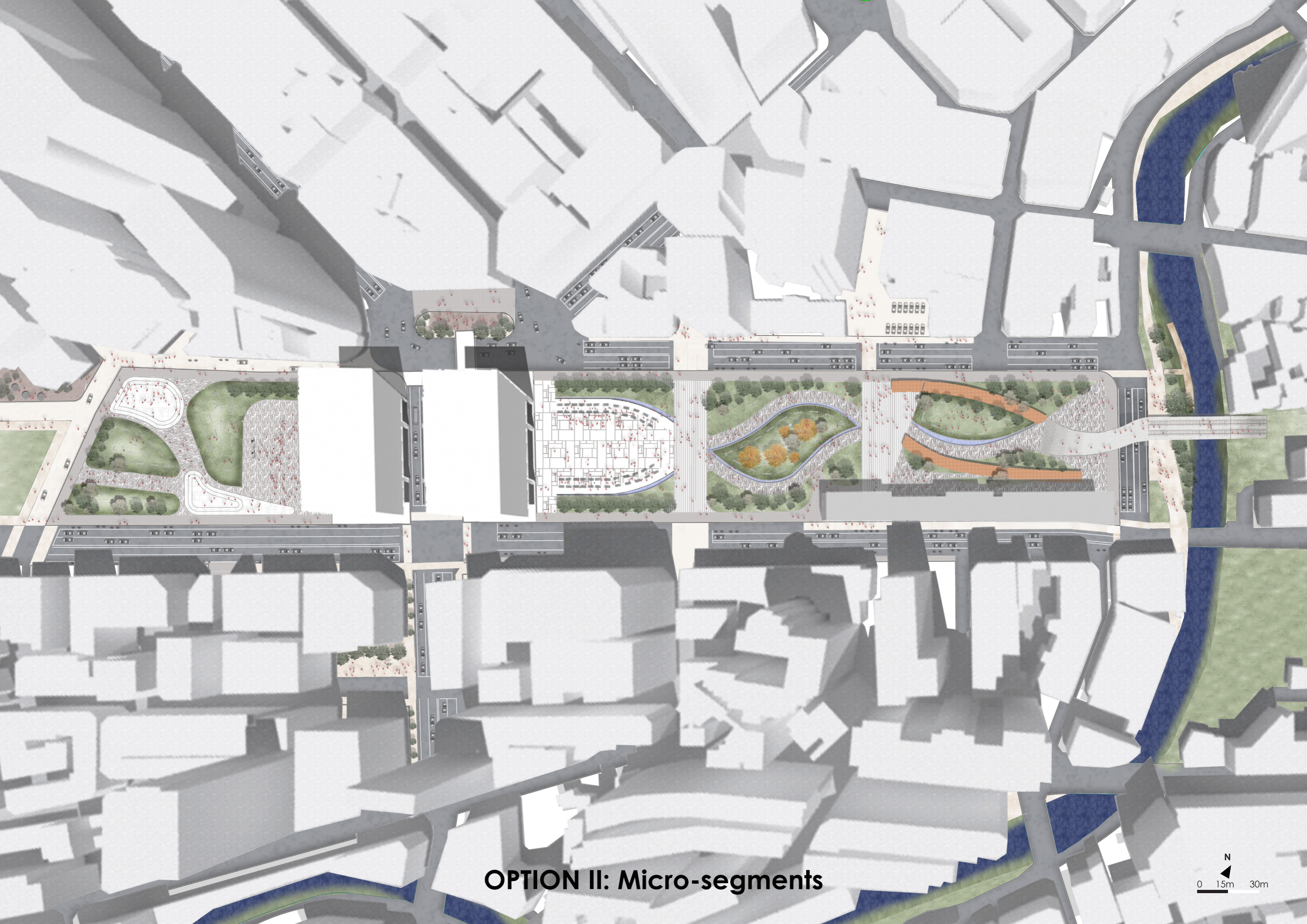




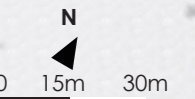
OPEN SPACE PROGRAM OF OPTION I: Mosaic Patterns

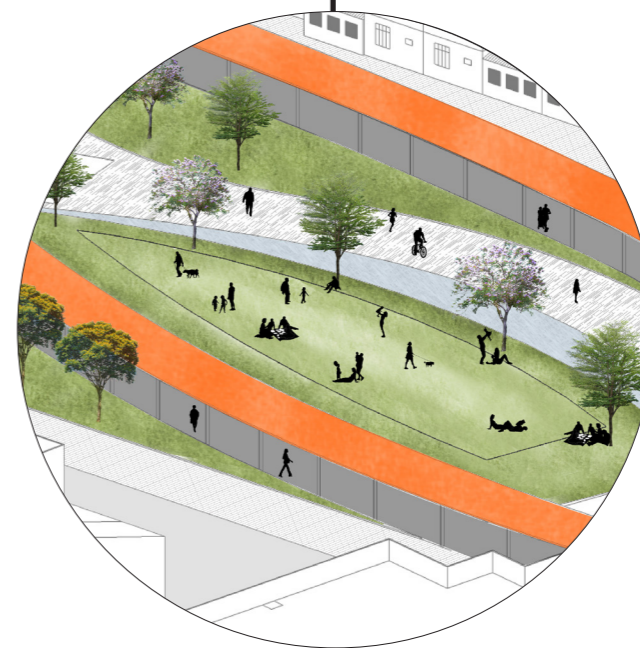
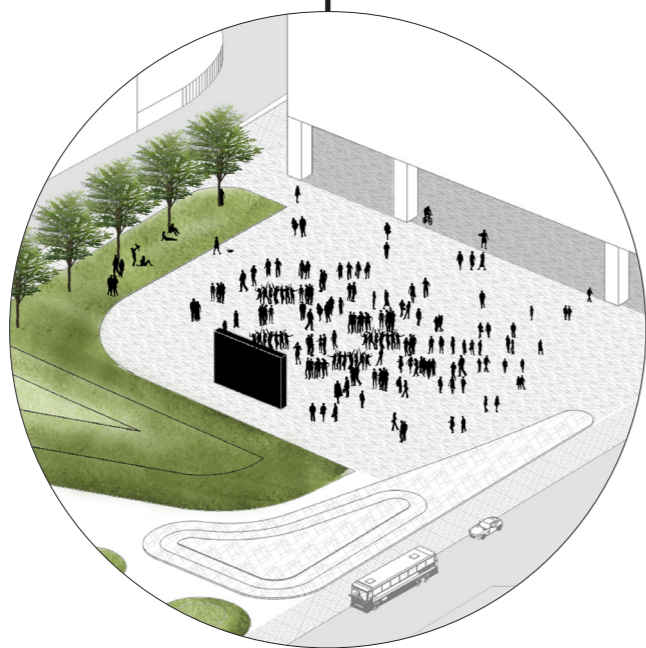


ATMOSPHERE OF OPTION I: Mosaic Patterns



OPTION II: Micro-segments





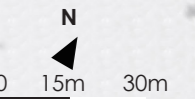
OPEN SPACE PROGRAM OF OPTION II: Micro-segments

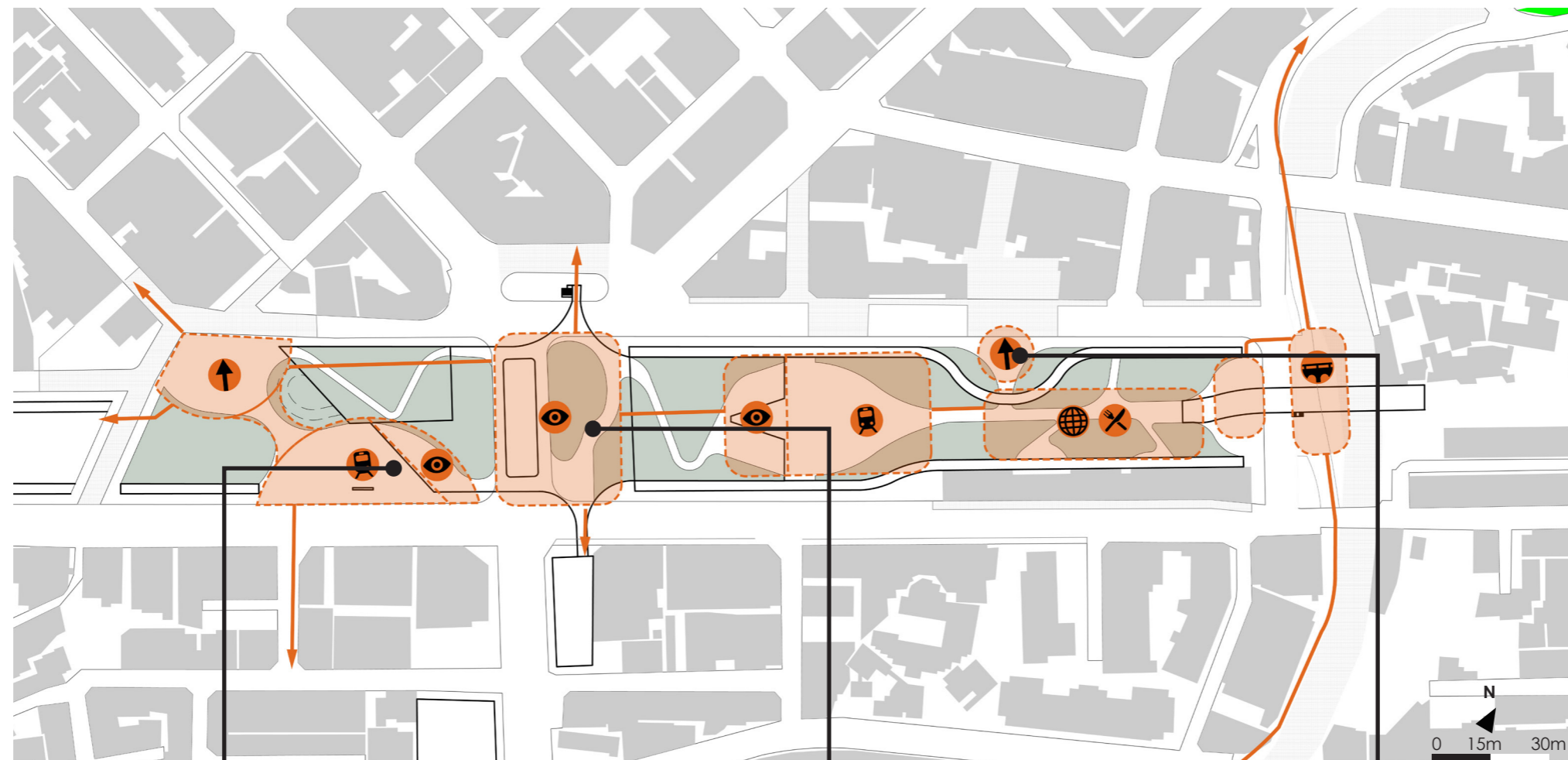




ATMOSPHERE OF OPTION II: Micro-segments

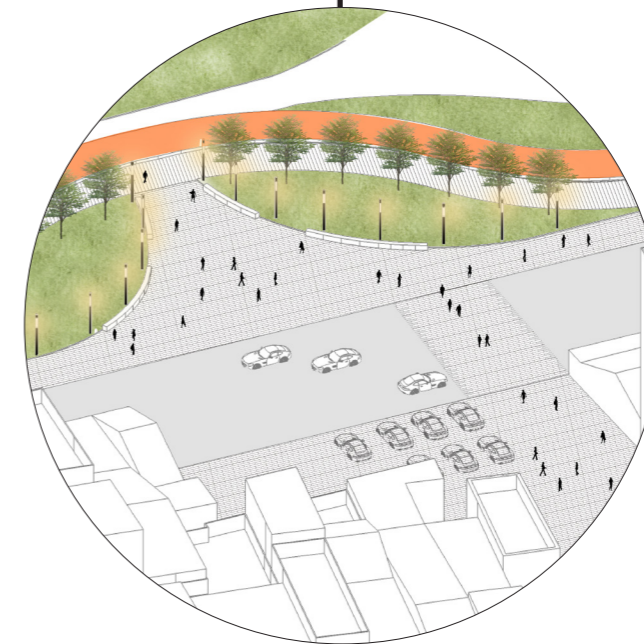
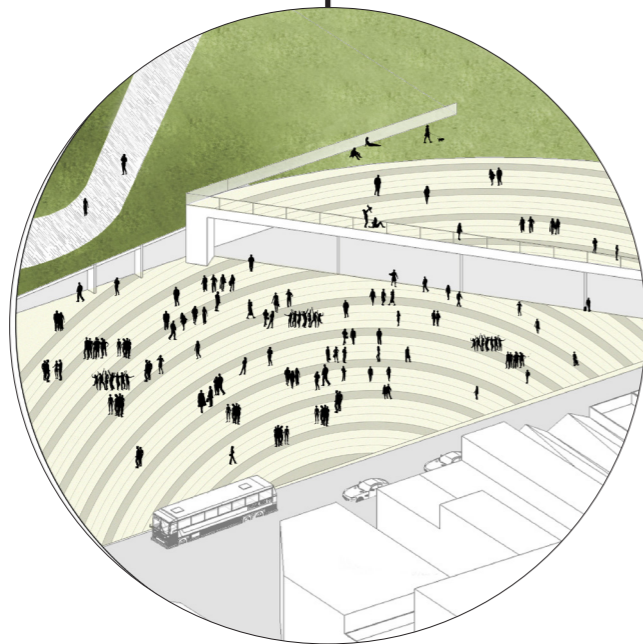


OPTION III: Urban Topography





-  Entrance Garden
-  Station Plaza
-  Topographic Viewpoint
-  Global Market Space
-  Outdoor Dining
-  Waterfront



OPEN SPACE PROGRAM OF OPTION II: Micro-segments
OPEN SPACE PROGRAM OF OPTION III: Urban Topography

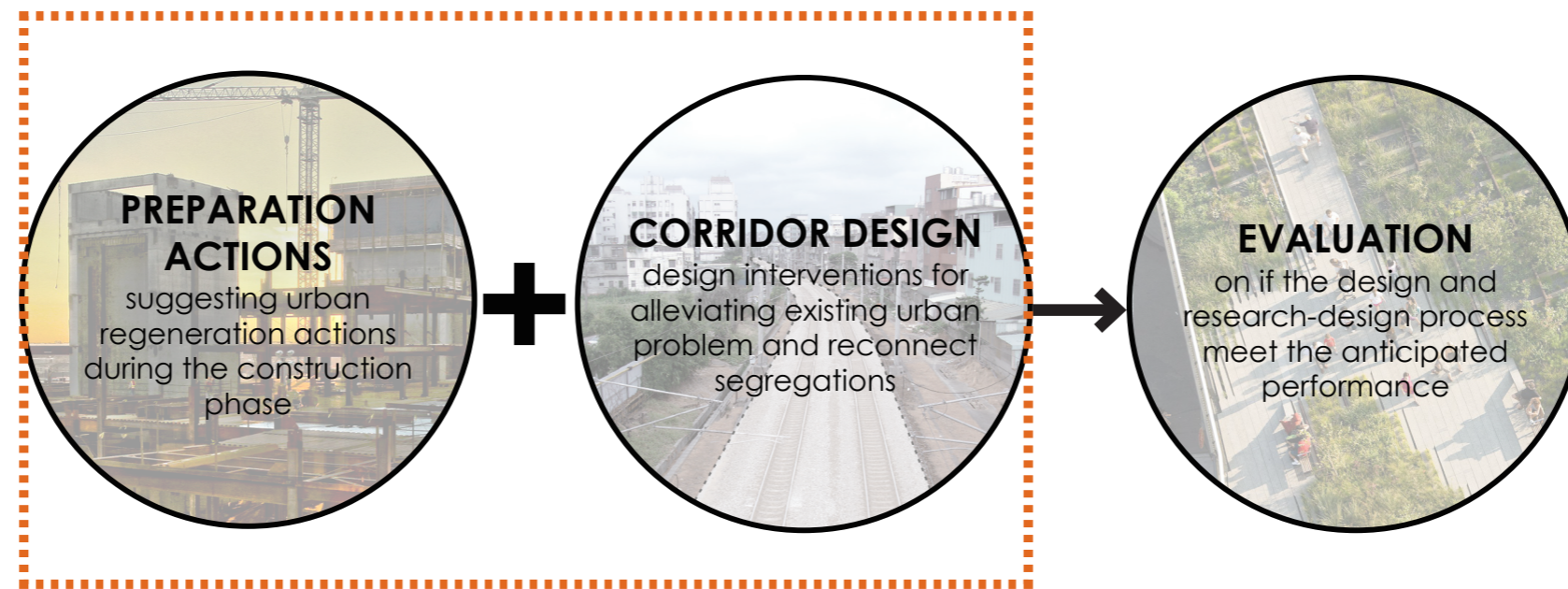


ATMOSPHERE OF OPTION III: Urban Topography

EVALUATION & REFLECTION

What could be learned and reflected from the research objective?

SYNERGY

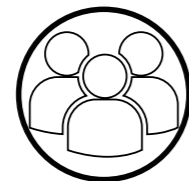


top down

construction of top down transportation infrastructure project as trigger point of urban regeneration actions

top down transportation infrastructure project as opportunity to contain all actors

adaptation of design-research process into innovative approach/regulation



bottom up

utilizing bottom up urban regeneration actions to mitigate impacts from construction

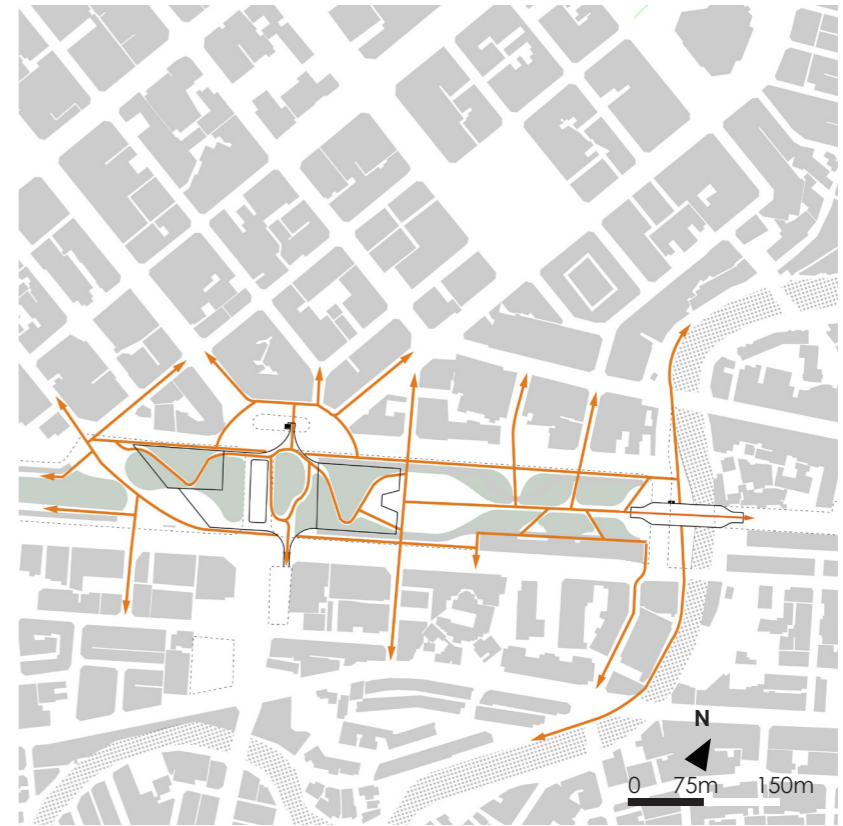
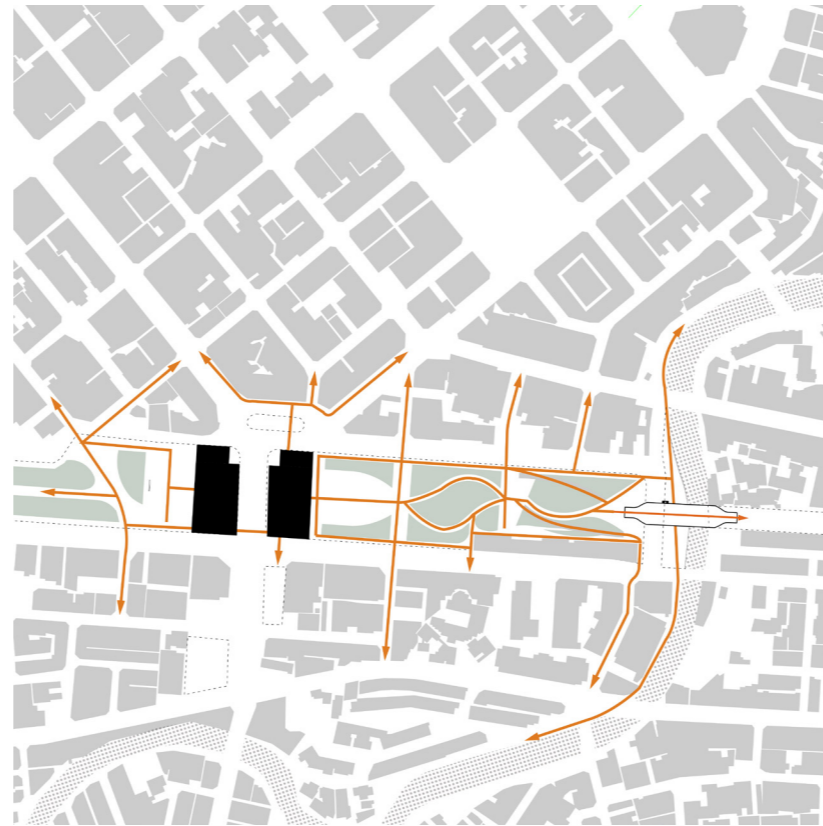
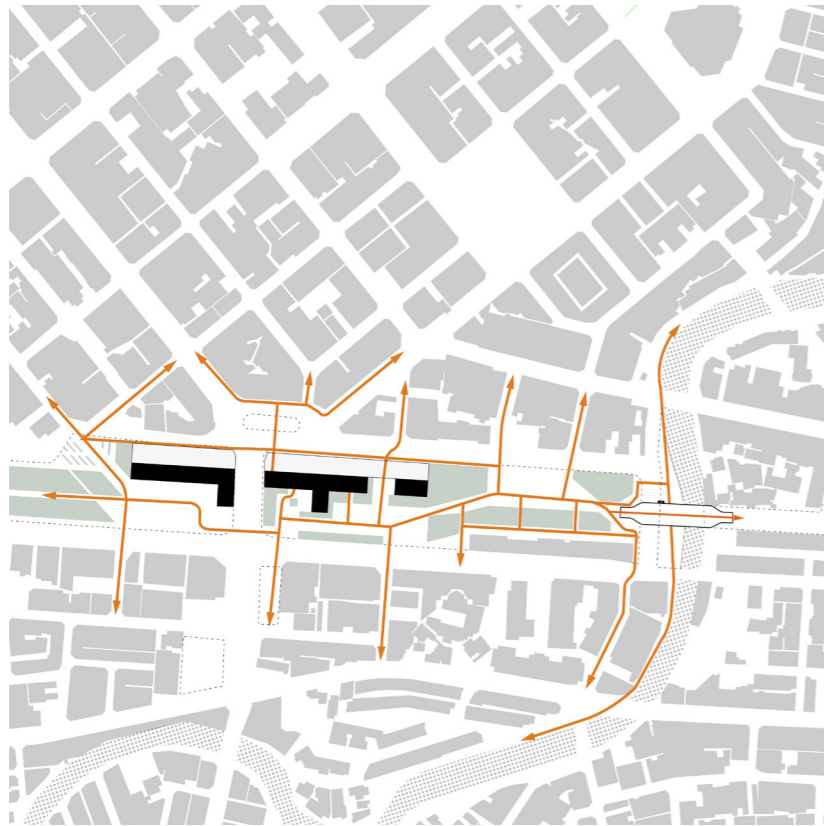
initiate design from the smallest "segment" scale

engaging all actors in every stage of decision making



GOAL: SPATIAL

1. Reconnect pedestrian connectivity between front/back station via open space.
2. Improve pedestrian accessibility of urban dwellers along the project.



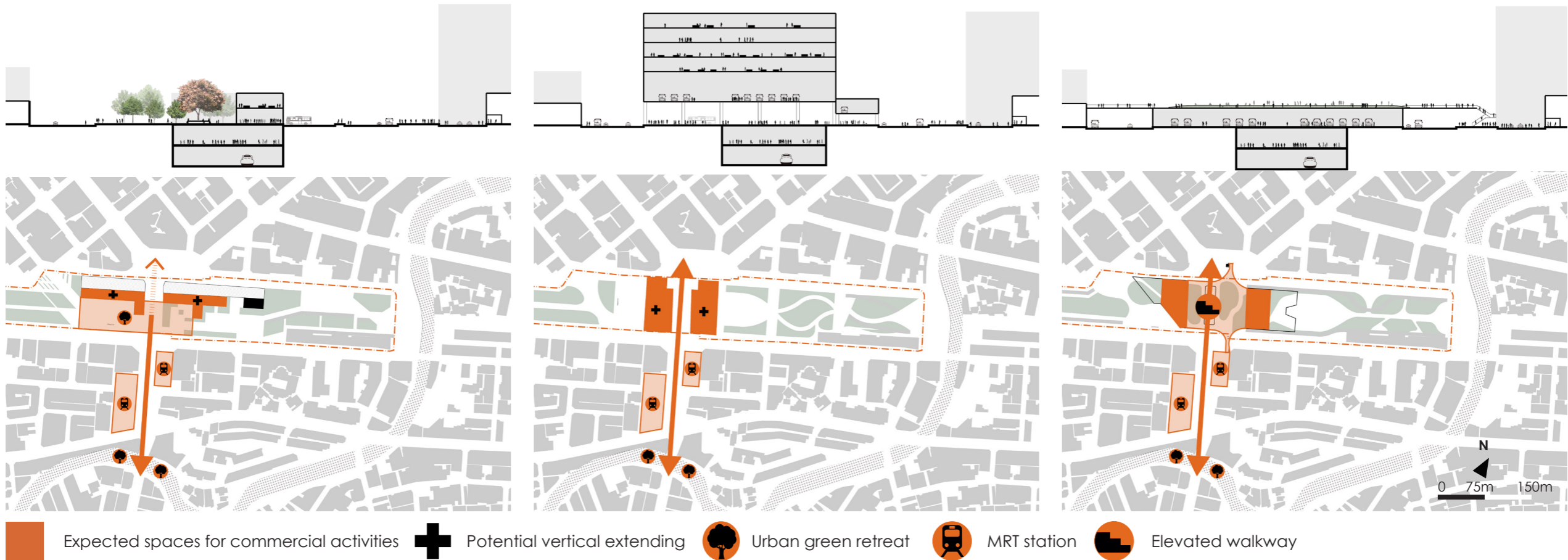
← Proposed Pedestrian Connectivity

EVALUATION OF TEST DESIGNS: SPATIAL GOAL

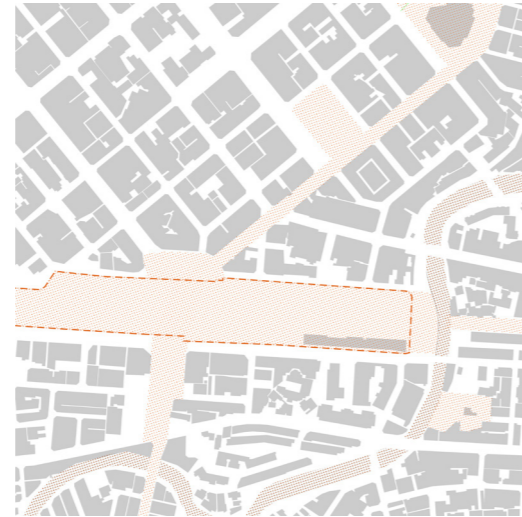


GOAL: ECONOMIC

1. Improving back station's lack of resource by introducing new programs
2. Alleviating stress of front station by introducing different urban experiences + connecting with other commercial districts



EVALUATION OF TEST DESIGNS: ECONOMIC GOAL

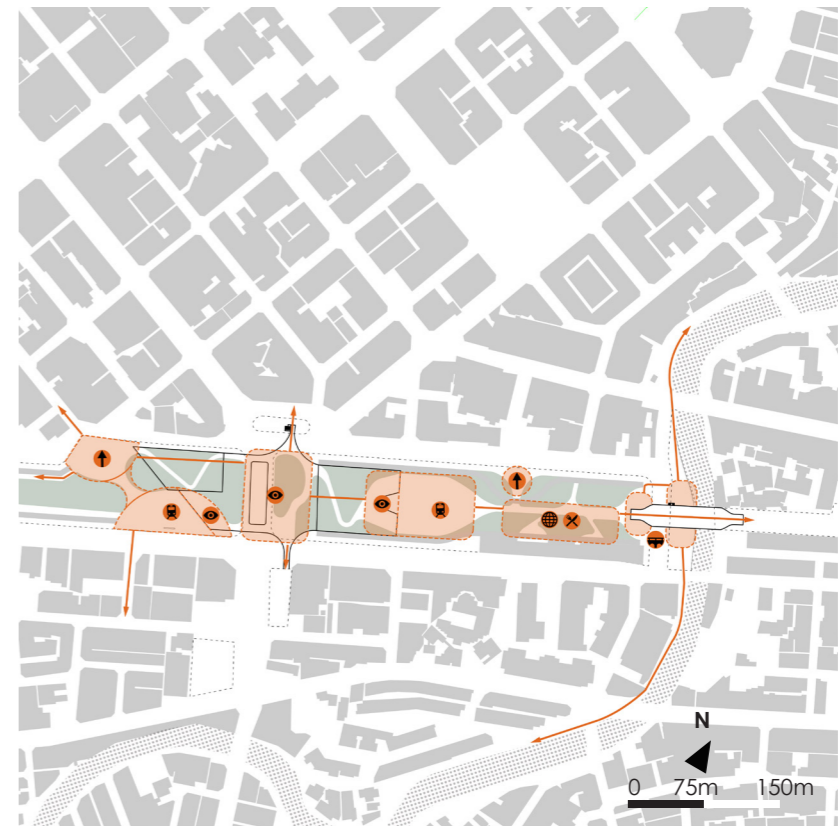
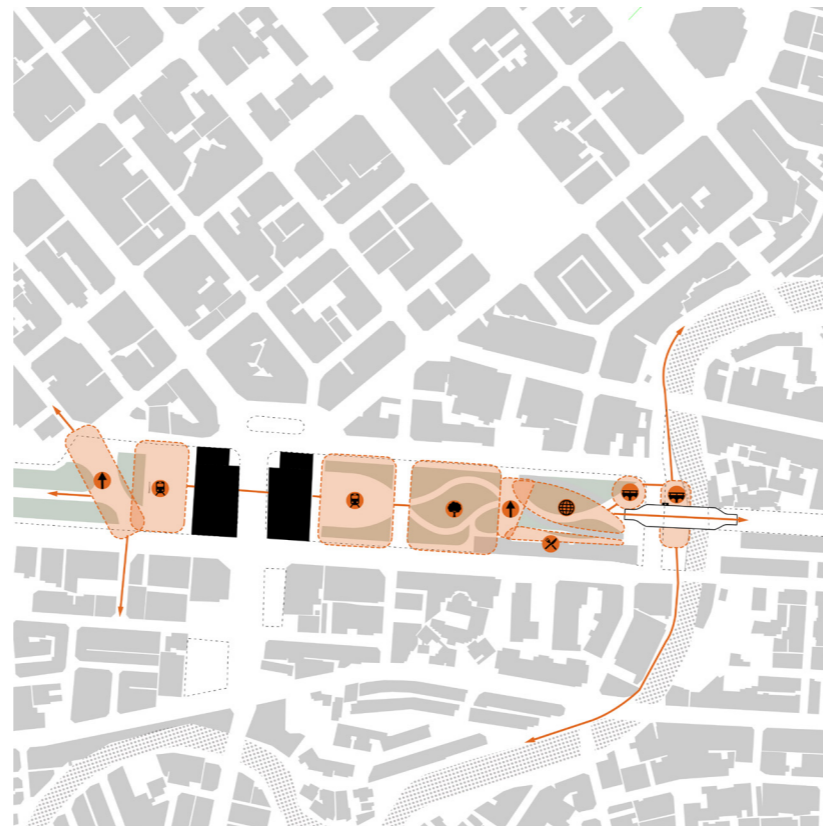
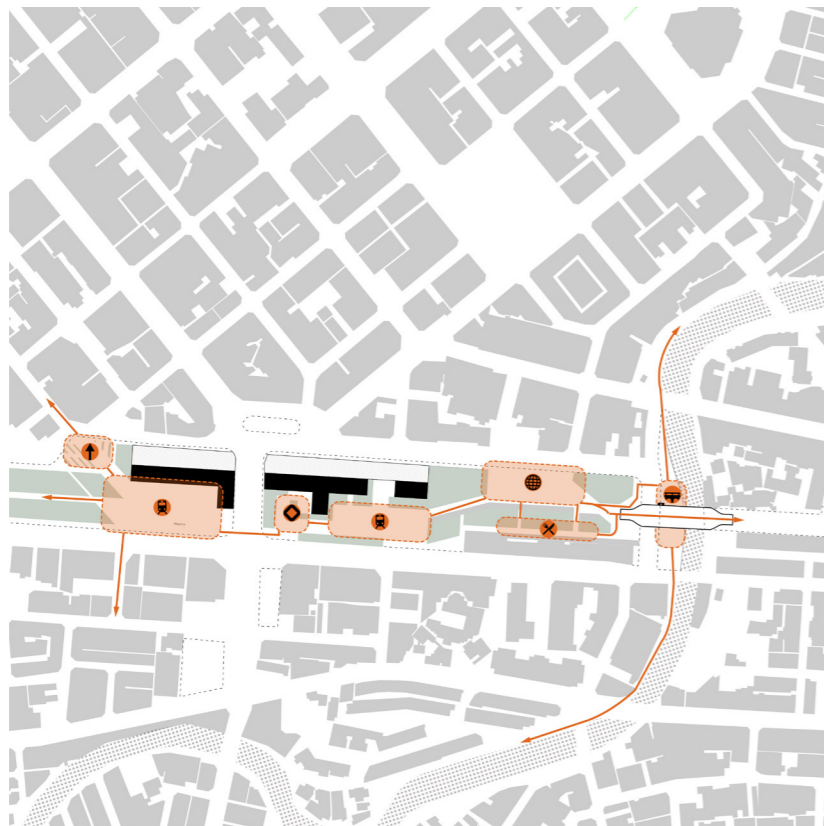


GOAL: SOCIAL

1. Include multiple users in the using and making of open space, especially immigrant workers
2. Connect urban dwellers with their city by placemaking

GOAL: ENVIRONMENTAL

1. Relieve urban stress from density built environment and further provide diverse urban landscape experiences
2. Connect with existing open space assets and further serve as guide to them



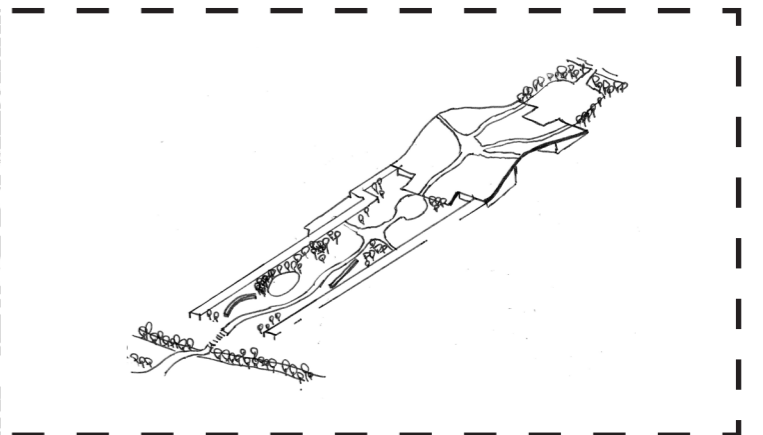
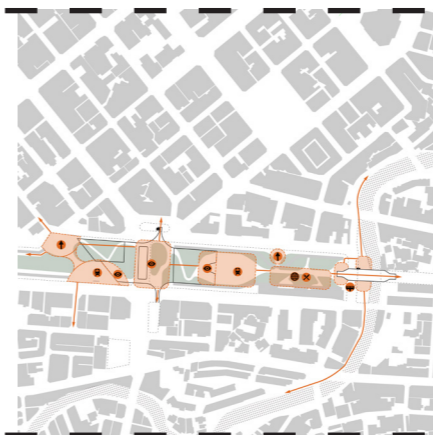
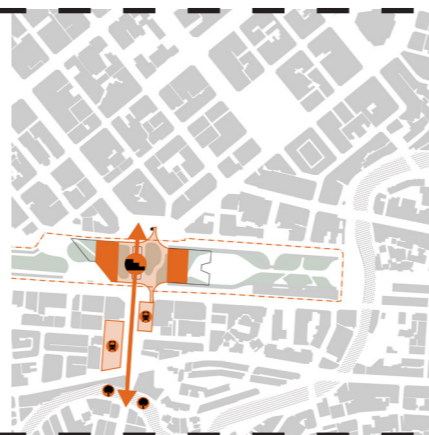
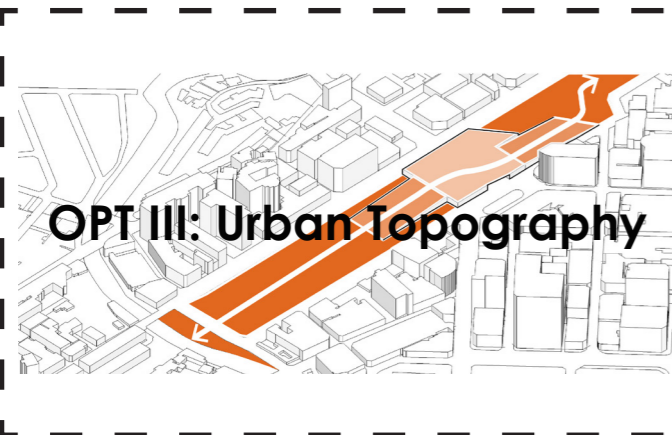
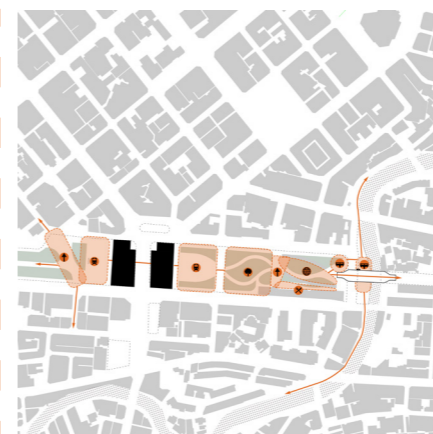
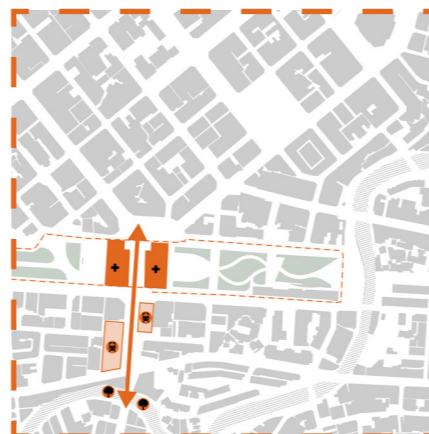
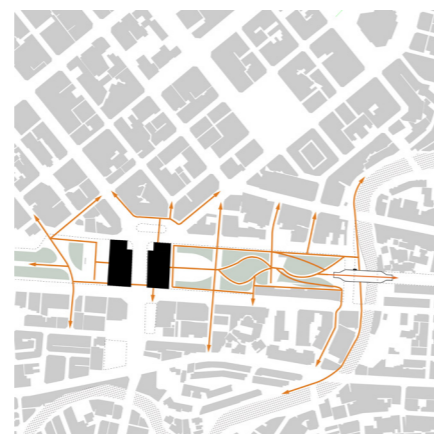
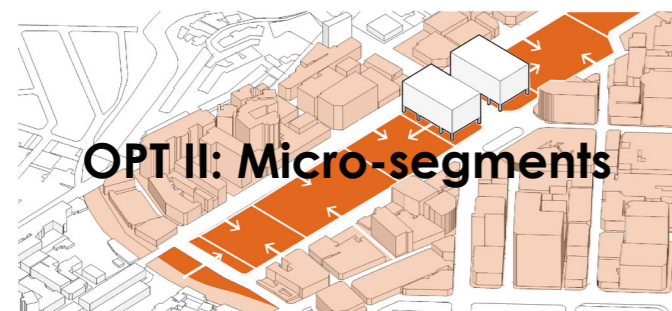
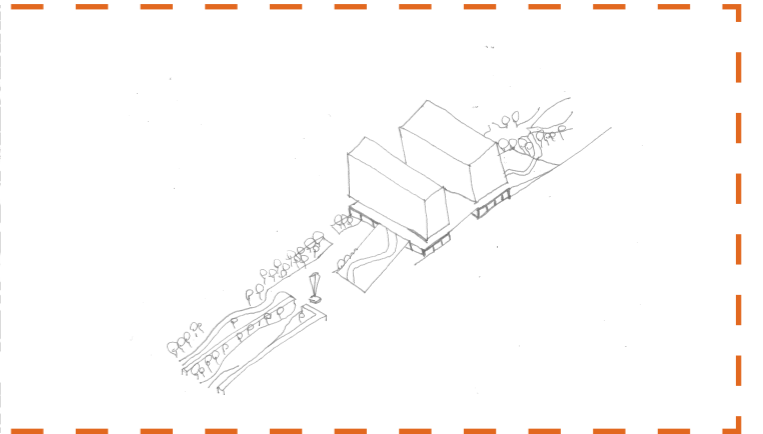
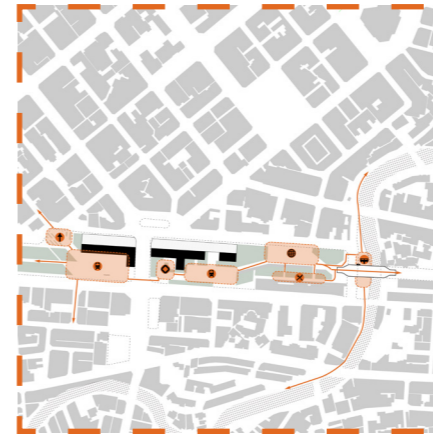
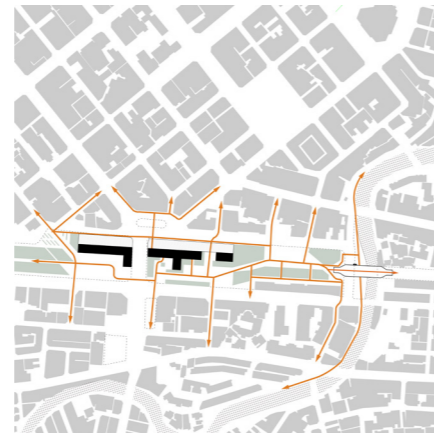
EVALUATION OF TEST DESIGNS: ECONOMIC GOAL

SOCIAL
+

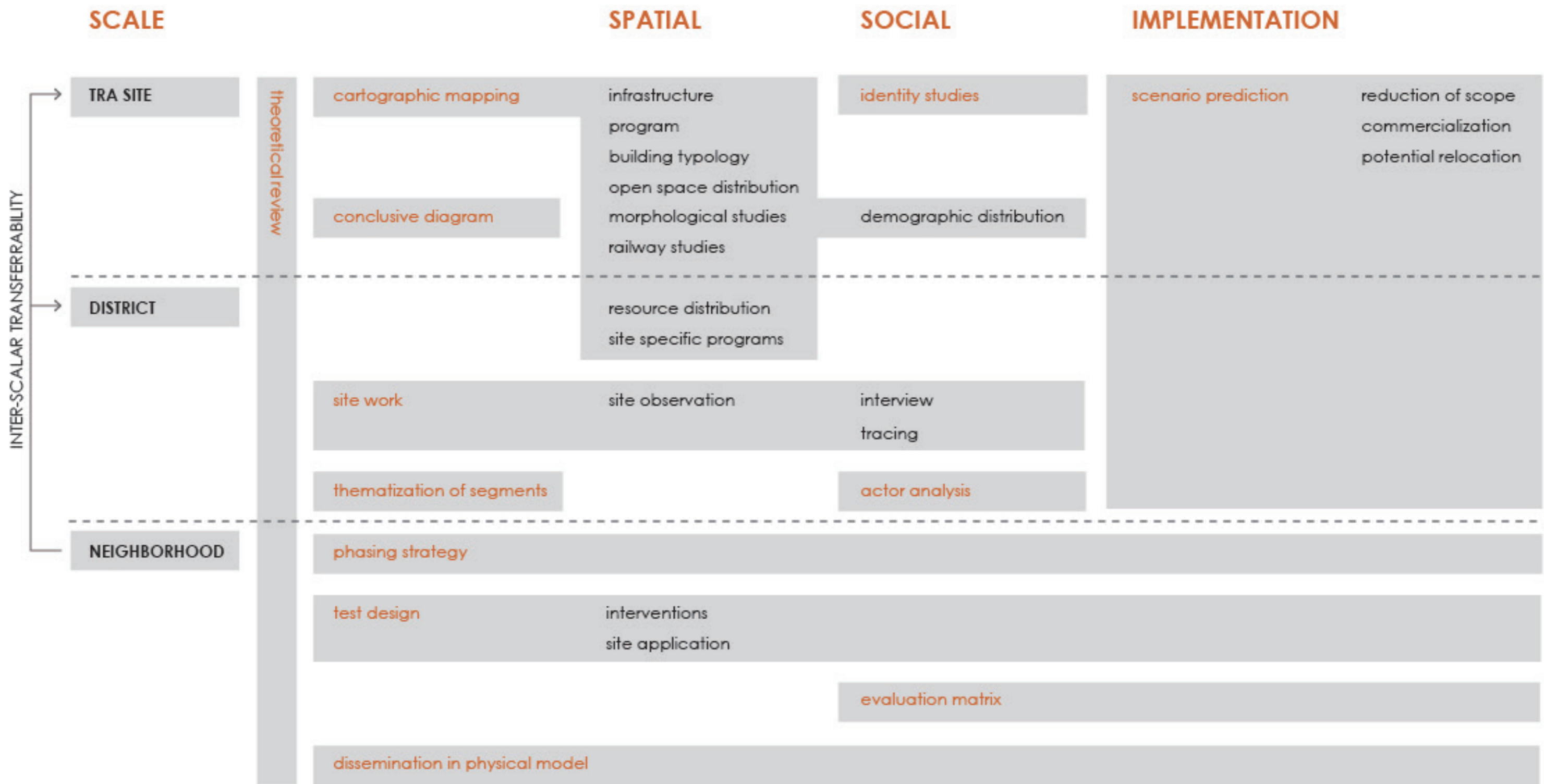
SPATIAL

ECONOMIC

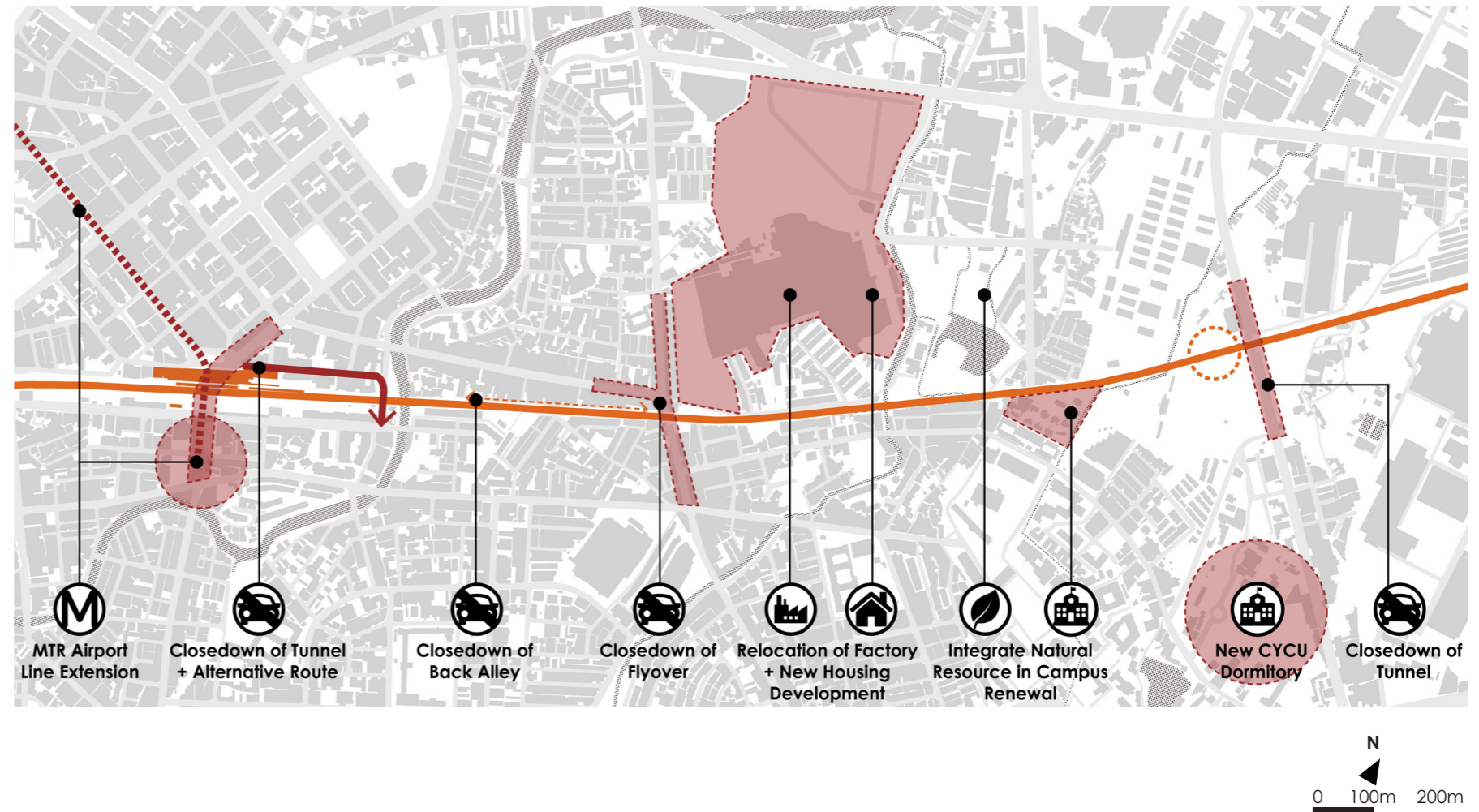
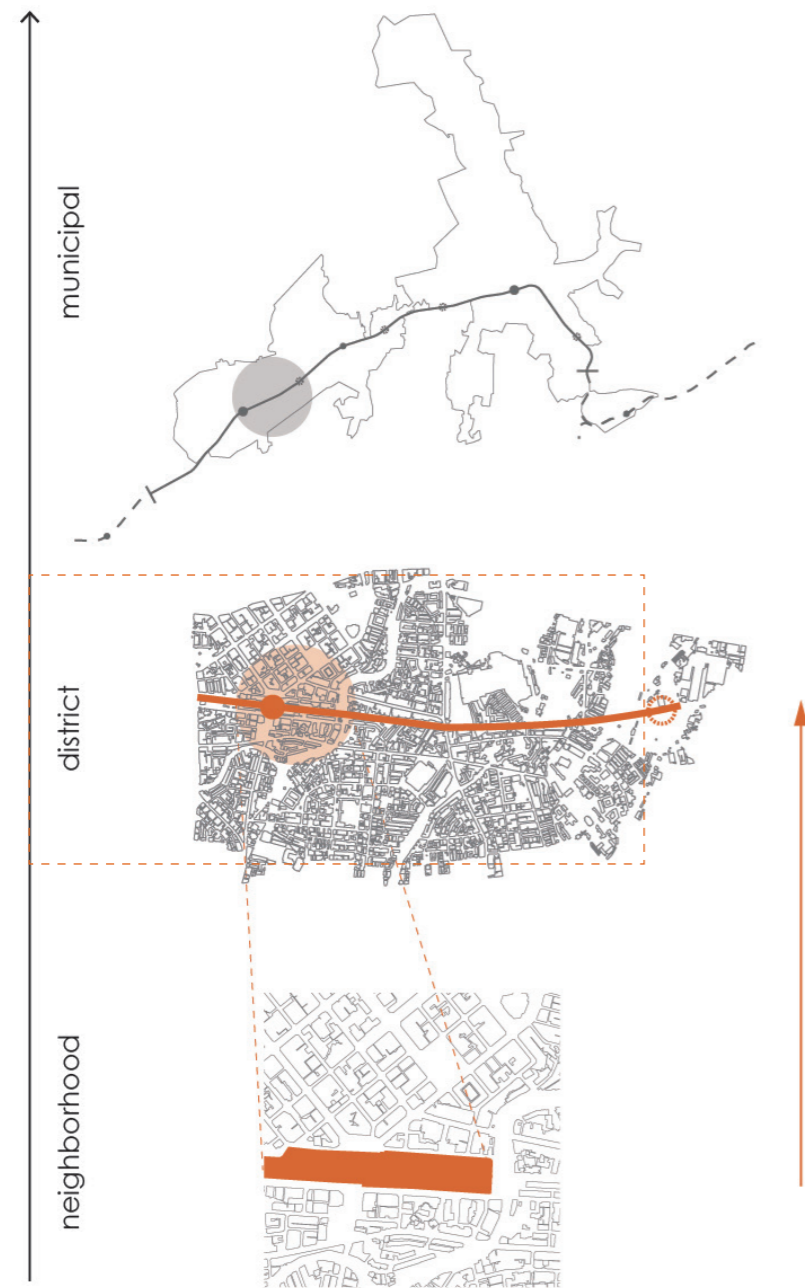
ENVIRONMENT



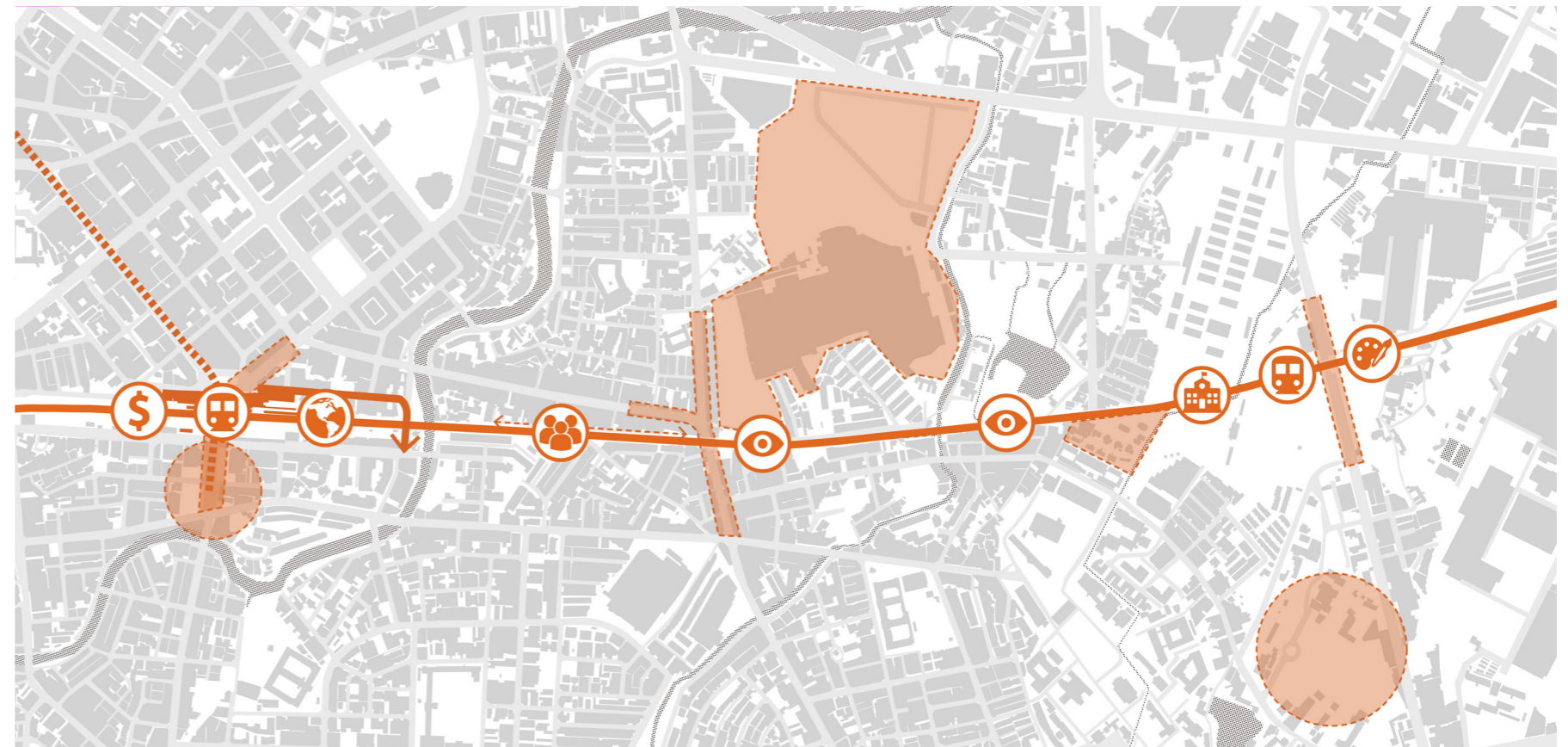
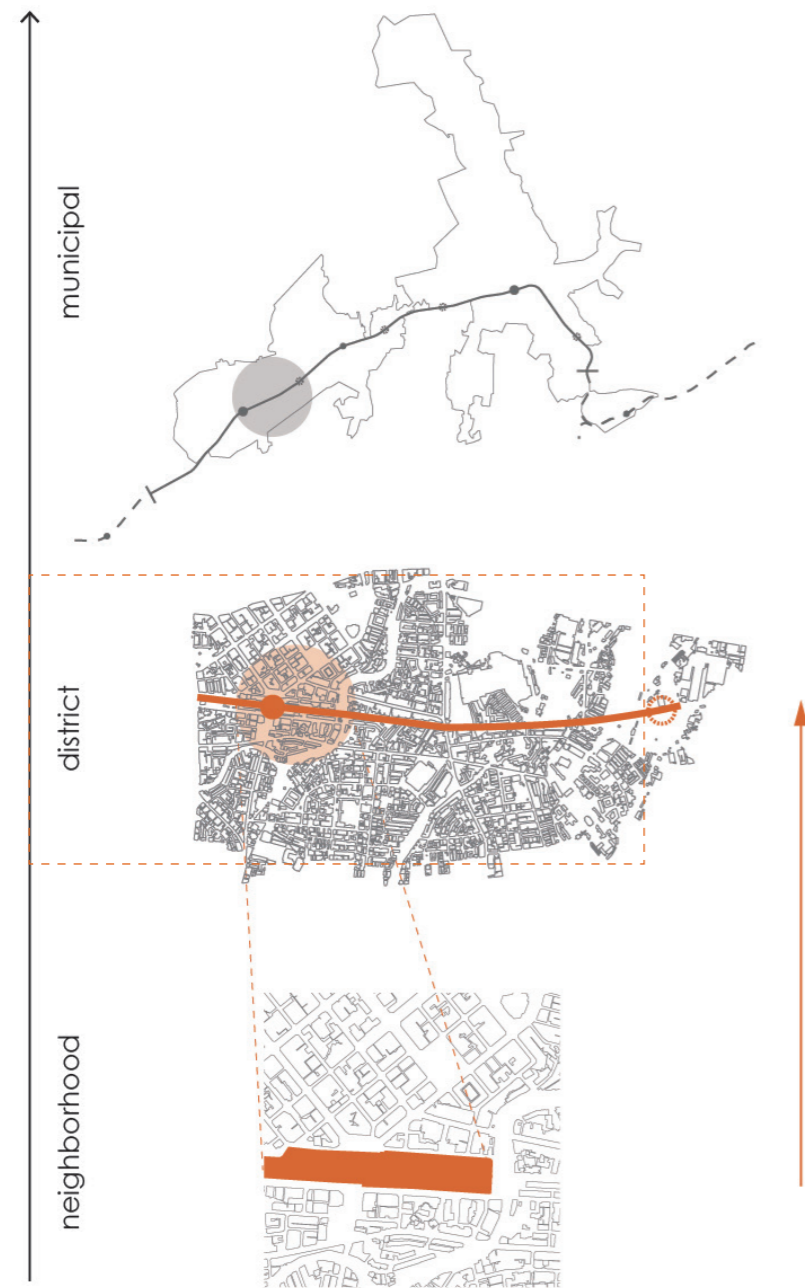
EVALUATION OF TEST DESIGNS: EVALUATION MATRIX










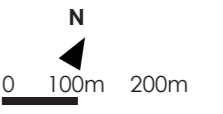
HOW PHASING STRATEGY, DESIGN PROCESS AND EVALUATION COULD BE DUPLICATED AND CONDUCT TO OTHER SEGMENTS



EXAMINING TRANSFERRABILITY OF METHODOLOGY

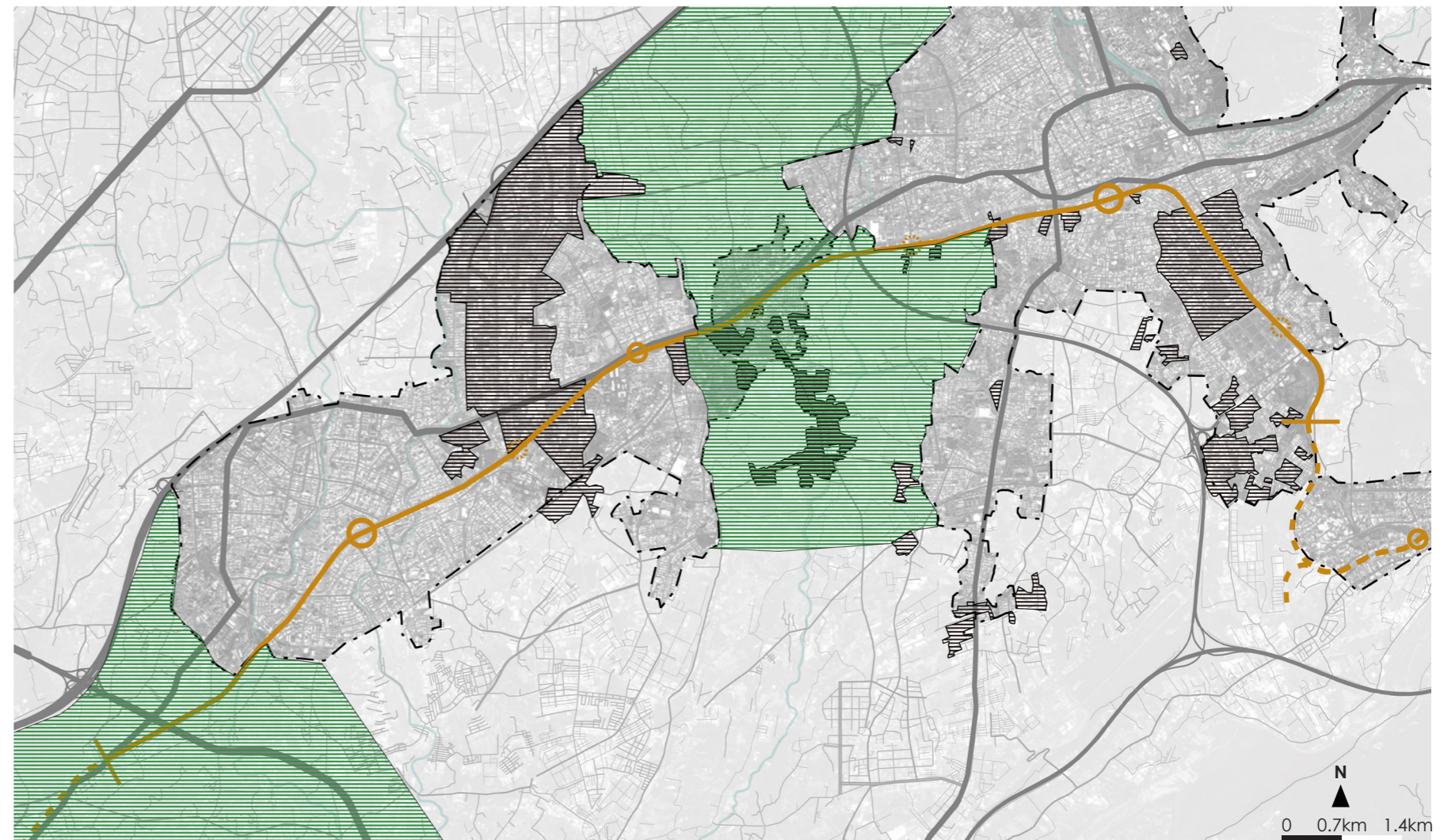
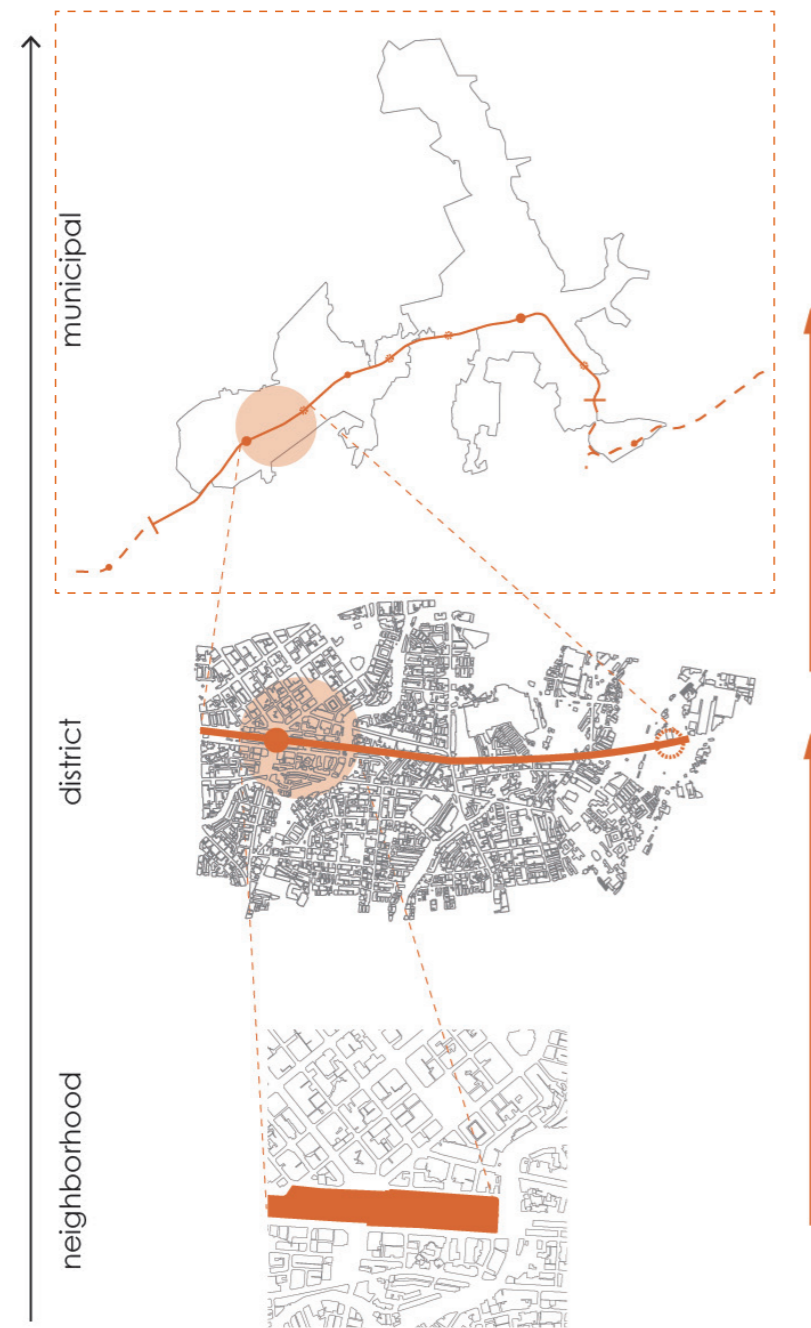


-  **Commercial Axis**
-  **Community Garden**
-  **University Boulevard**
-  **Transportation Node**
-  **Urban View Corridor**
-  **Creative Base**
-  **Global Garden**



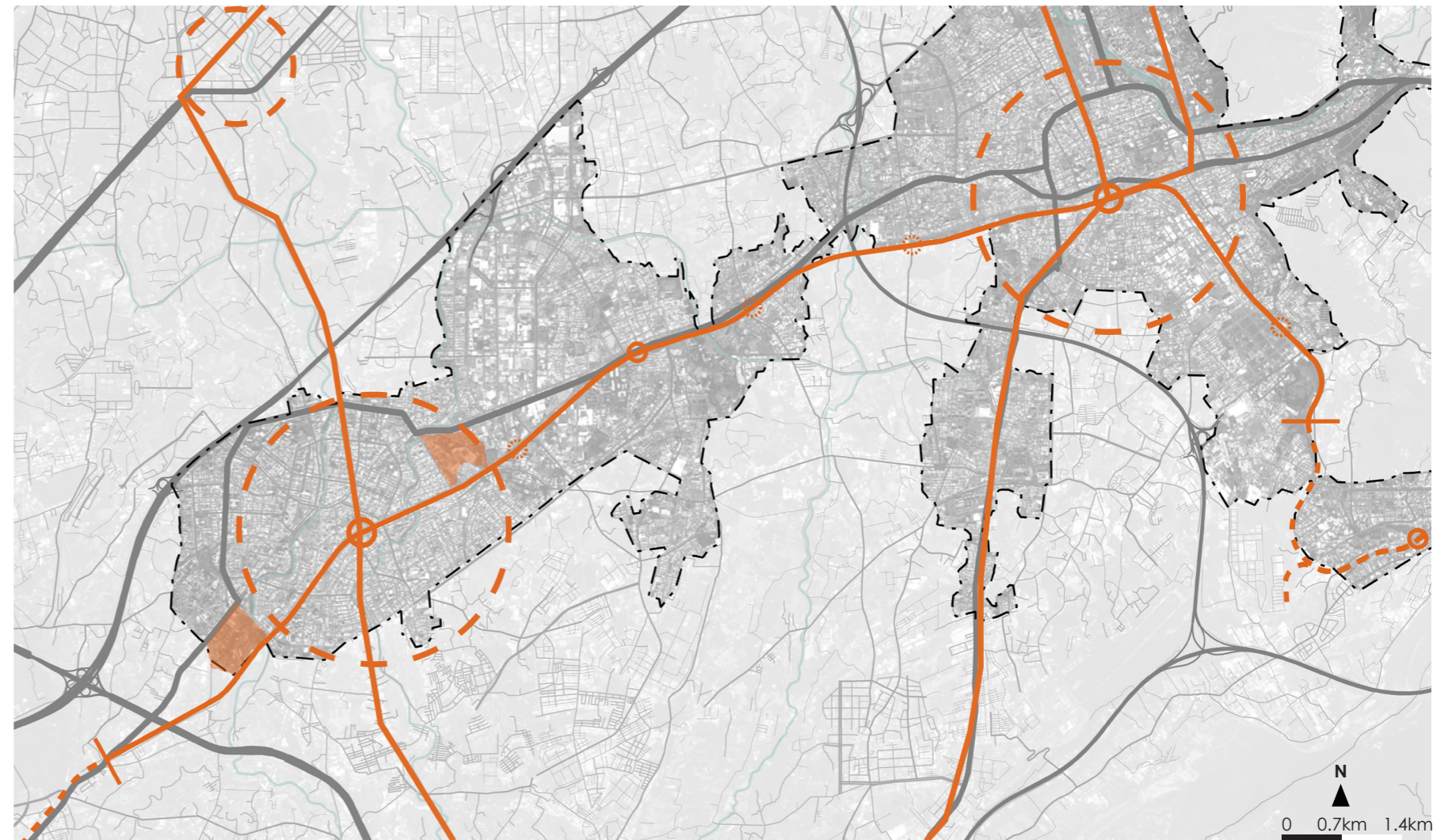
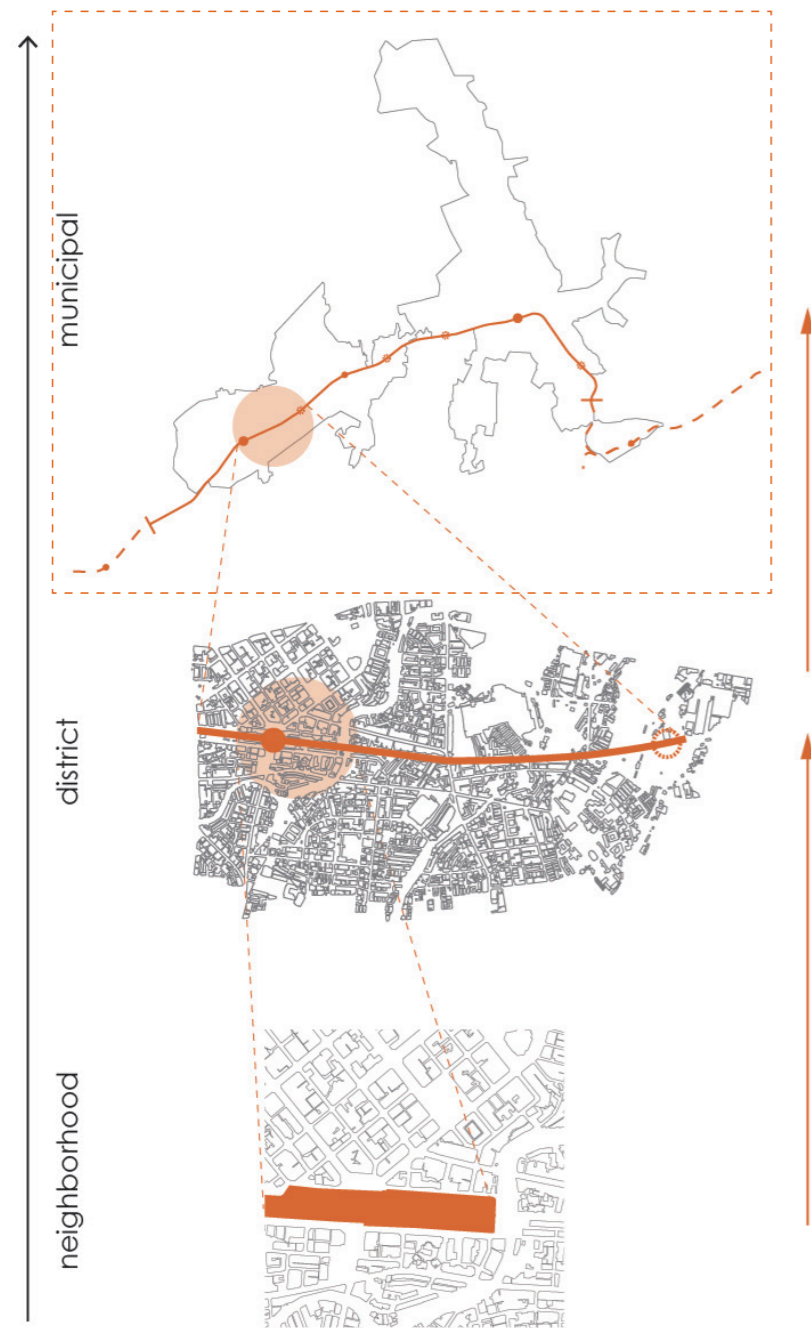
EXAMINING TRANSFERRABILITY OF METHODOLOGY

HOW THEMATIZATION/SEGMENT APPROACH COULD TRANSFORM FROM METHOD OF UNDERSTANDING OF SITE TO A METHOD OF APPROACHING THE DESIGN IN BIG SCALE



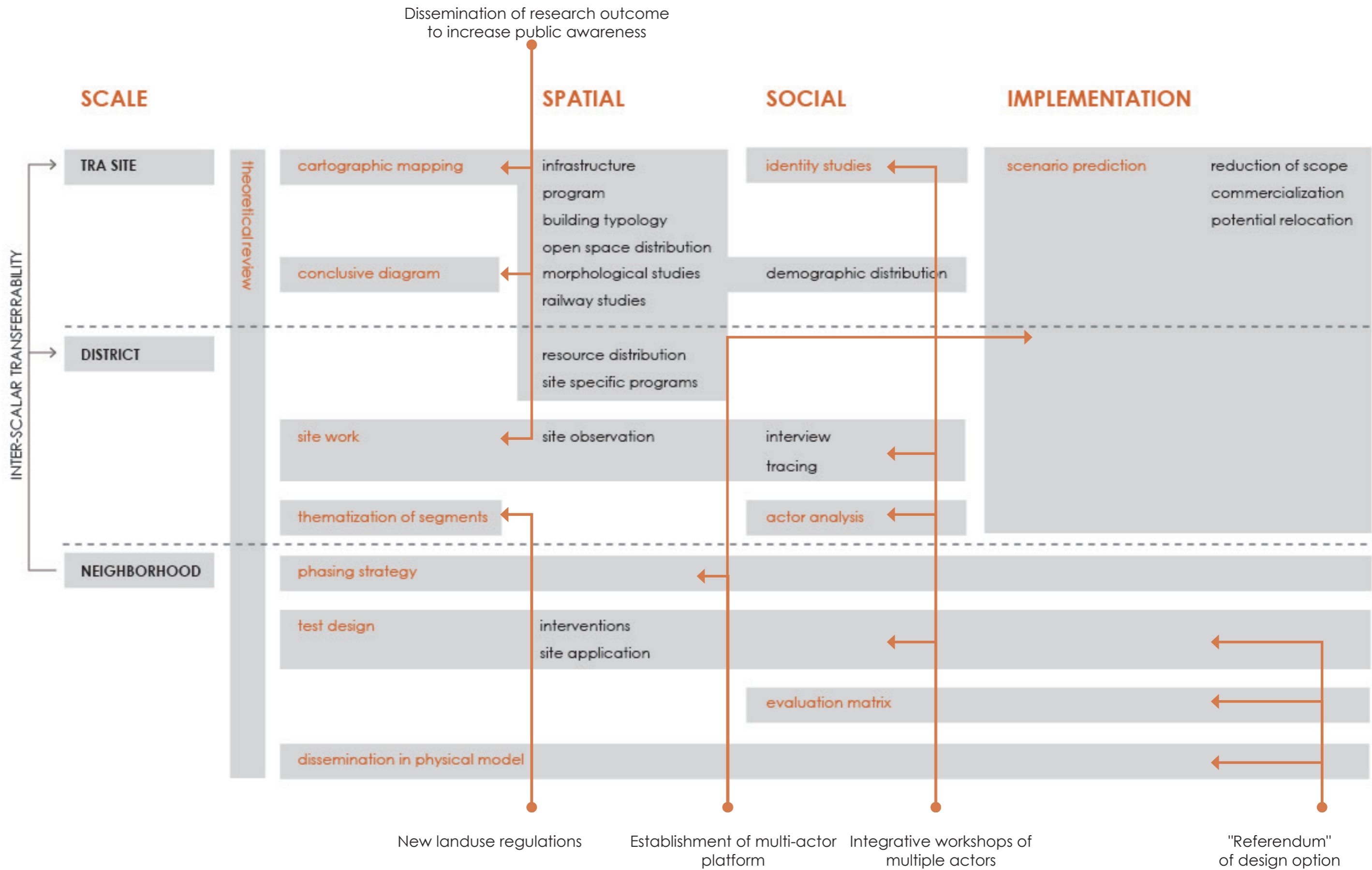
MORPHOLOGY MAP

EXAMINING TRANSFERRABILITY OF METHODOLOGY



NEW PROJECTS + EXISTING INFRASTRUCTURE

EXAMINING TRANSFERRABILITY OF METHODOLOGY





**THANKS FOR
ATTENDING MY
PRESENTATION**