

14 December 2023

City of Guelph Planning Services  
1 Carden Street  
Guelph, ON  
N1H 3 A1

**Re: 1 Clair Rd E Sun Shadow Summary Letter**

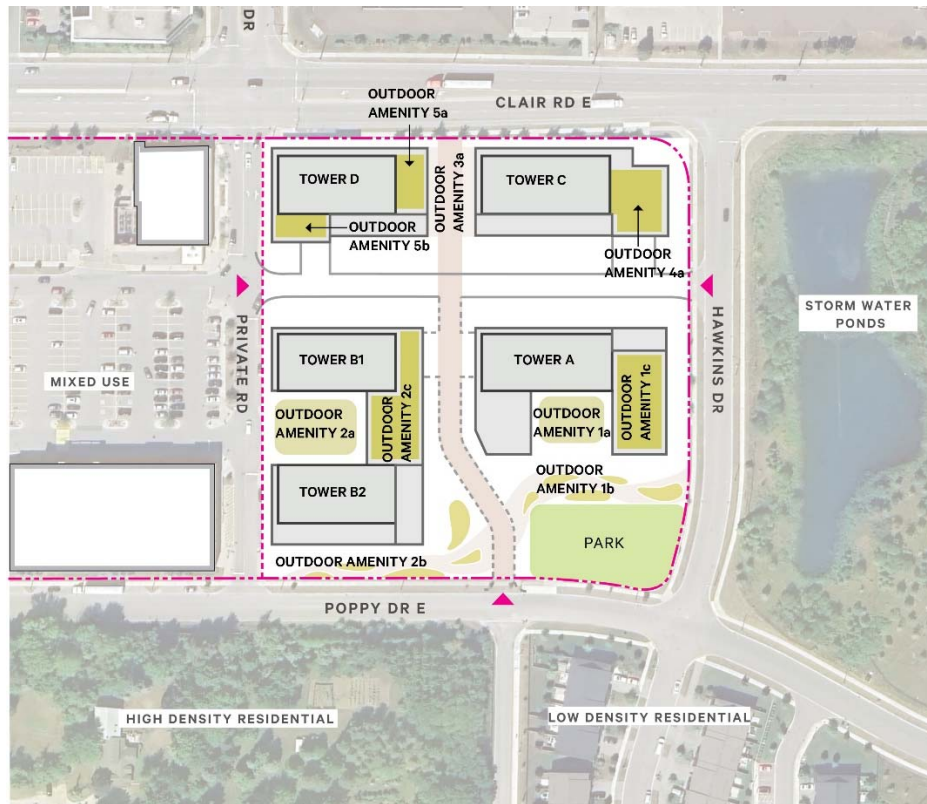
## Project Description

The proposed development is located within Pergola Commons at 105, Clair Rd E. It includes a total of 4 mixed-use buildings which will be phased as follows.

Phase 01 – Tower A (14 stories)

Phase 02- Towers B1 (14 stories) and B2 (10 stories)

Phase 03 – Towers C (14 stories) and D (14 stories)



Source of Base Mapping for Shadow Study ( Sheets A501-A504) Revit 3d modeling with location data and coordinates as indicated in the survey.



## Shadow impact Criteria

### 1. Residential Amenity Spaces

Shadows from proposed developments should not last for more than one hour per day on areas such as yards, decks, and (rooftop) patios and pools on April 21, June 21, and September 21

<b>APRIL 21<sup>ST</sup> (Test Time : 8AM TO 6 PM – 11 hours)</b>	<b>Hours of Shadowing*</b>
Outdoor Amenity <b>1a</b> at Ground Level	5 hours
Outdoor Amenity <b>1b</b> at Ground Level	4 hours
Outdoor Amenity <b>1c</b> at Level 7	4 hours
Outdoor Amenity <b>2a</b> at Ground Level	6 hours
Outdoor Amenity <b>2b</b> at Ground Level	4 hours
Outdoor Amenity <b>2c</b> at Level 7	4 hours
Outdoor Amenity <b>3a</b> at Ground Level	7 hours
Outdoor Amenity <b>4a</b> at Level 7	6 hours
Outdoor Amenity <b>5a</b> at Level 7	7 hours
Outdoor Amenity <b>5b</b> at Level 7	4 hours



<b>JUNE 21<sup>ST</sup> (Test Time : 8AM TO 7 PM – 12 hours)</b>	<b>Hours of Shadowing*</b>
Outdoor Amenity <b>1a</b> at Ground Level	6 hours
Outdoor Amenity <b>1b</b> at Ground Level	4 hours
Outdoor Amenity <b>1c</b> at Level 7	5 hours
Outdoor Amenity <b>2a</b> at Ground Level	7 hours
Outdoor Amenity <b>2b</b> at Ground Level	5 hours
Outdoor Amenity <b>2c</b> at Level 7	5 hours
Outdoor Amenity <b>3a</b> at Ground Level	6 hours
Outdoor Amenity <b>4a</b> at Level 7	5 hours
Outdoor Amenity <b>5a</b> at Level 7	6 hours
Outdoor Amenity <b>5b</b> at Level 7	5 hours

\* if more than 50% of the amenity area is in shadow



<b>SEPT 21<sup>ST</sup> (Test Time : 9AM TO 5 PM – 9 hours)</b>	<b>Hours of Shadowing*</b>
Outdoor Amenity <b>1a</b> at Ground Level	5 hours
Outdoor Amenity <b>1b</b> at Ground Level	3 hours
Outdoor Amenity <b>1c</b> at Level 7	3 hours
Outdoor Amenity <b>2a</b> at Ground Level	3 hours
Outdoor Amenity <b>2b</b> at Ground Level	2 hours
Outdoor Amenity <b>2c</b> at Level 7	3 hours
Outdoor Amenity <b>3a</b> at Ground Level	6 hours
Outdoor Amenity <b>4a</b> at Level 7	5 hours
Outdoor Amenity <b>5a</b> at Level 7	7 hours
Outdoor Amenity <b>5b</b> at Level 7	3 hours

### **Project Impact**

The amenity areas are shaded for approximately half of the exposure time on the test dates. Various amenities are strategically located across the site, ensuring convenient access from the towers. Since these amenities are shared, residents can access those with minimal shadow impact at any given time.



## 2.Children’s Play Spaces

Incremental shadows from proposed developments should allow for a balance of sun and shade on the above places on each of the following dates between the hours of 10:00 a.m. and 2:00 p.m. On an average basis during this period, at least half of the area must be in the sun (e.g. full sun half the time, or 50 percent sun coverage all the time). April 21, June 21, September 21, and December 21 (applicable to schoolyards, tot-lots and play areas only)

### PARK

Test Dates	Hours of Shadowing*
April 21 <sup>st</sup> – 10 am to 2 pm (4 hours)	0 hours
June 21 <sup>st</sup> – 10 am to 2 pm (4 hours)	0 hours
September 21 <sup>st</sup> – 10 am to 2 pm (4 hours)	0 hours
December 21 <sup>st</sup> – 10 am to 2 pm (4 hours)	0 hours

### Project Impact

The park has access to direct sunlight on all test dates between 10 am and 2 pm.

## 3.Public Realm (Sidewalks & Open spaces)

Developments should be designed to provide full sunlight to the opposite sidewalk in mixed-use, commercial, employment and high-density residential areas with pedestrian traffic on September 21 • for at least four full hours total including the two-hour period between 12 and 2 p.m., plus any two additional one-hour periods between either 9 and 11 a.m. or 3 and 5 p.m.

Streets	Hours of full Sunlight on Sept 21
Sidewalk along Poppy Dr E	7 hours (9 pm to 3pm)
Sidewalk along Clair Rd E	4 hours (2 pm to 5pm)
Sidewalk along Farley Dr. Ext	9 hours (9 am to 5 pm)
Storm water Pond trails	5 hours (9 am to 1 pm)

### **Project Impact**


Sidewalk along Clair Rd E is impacted by shadows between 12 and 2 pm.

### **4.Community Gardens**

There are no community gardens in the vicinity of the proposed development

### **5.Cultural Heritage Resources**

There are no historic buildings or landmarks impacted by the proposed development.



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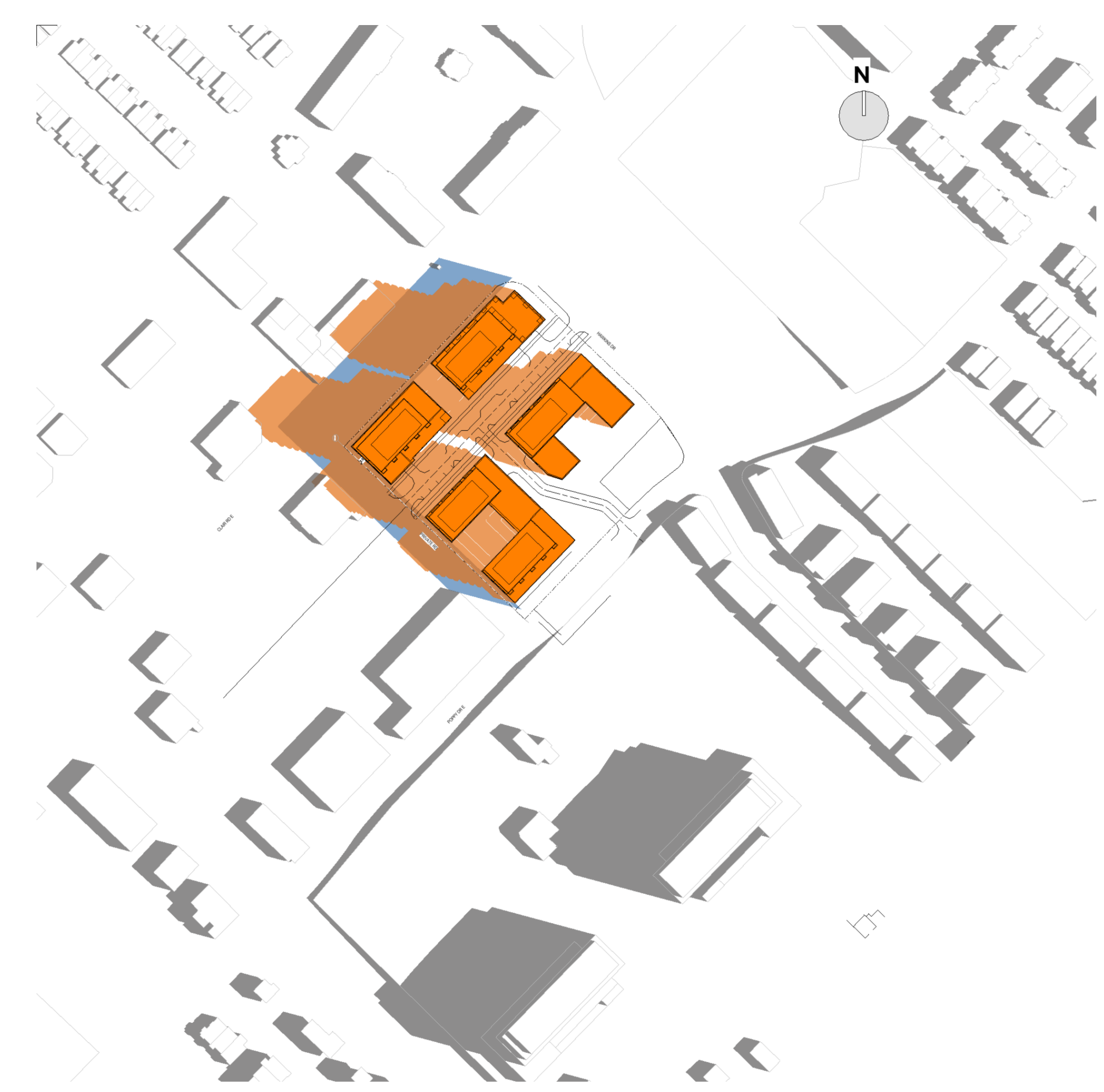
Sony Rai  
Principal, SvN Architects + Planners

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NO.	DATE	REVISION / ISSUANCE
1	231215	Issued For ZBA Pre-Submission

NOTES

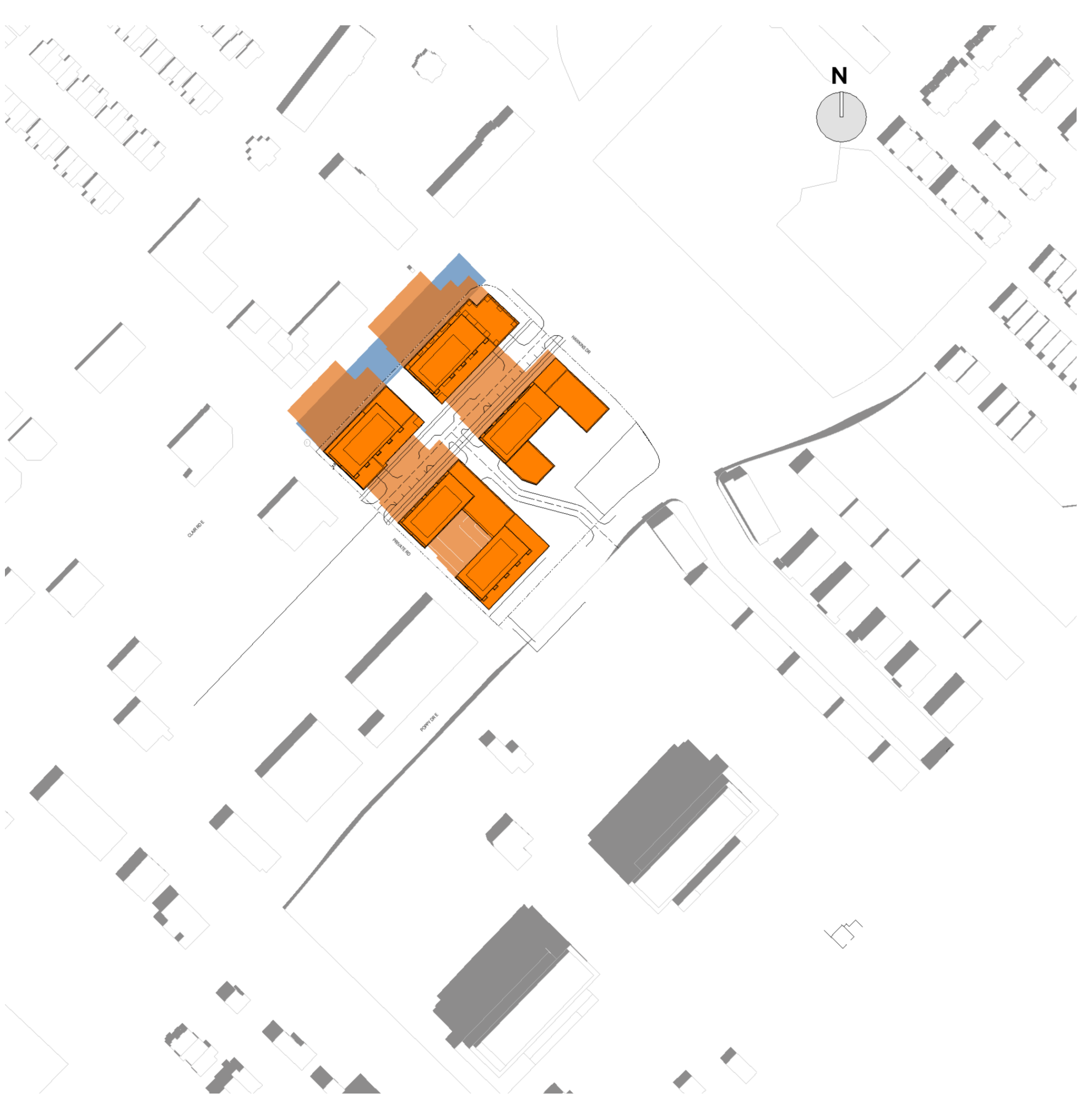
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- AS-OF-RIGHT SHADOWS
- EXISTING SHADOWS



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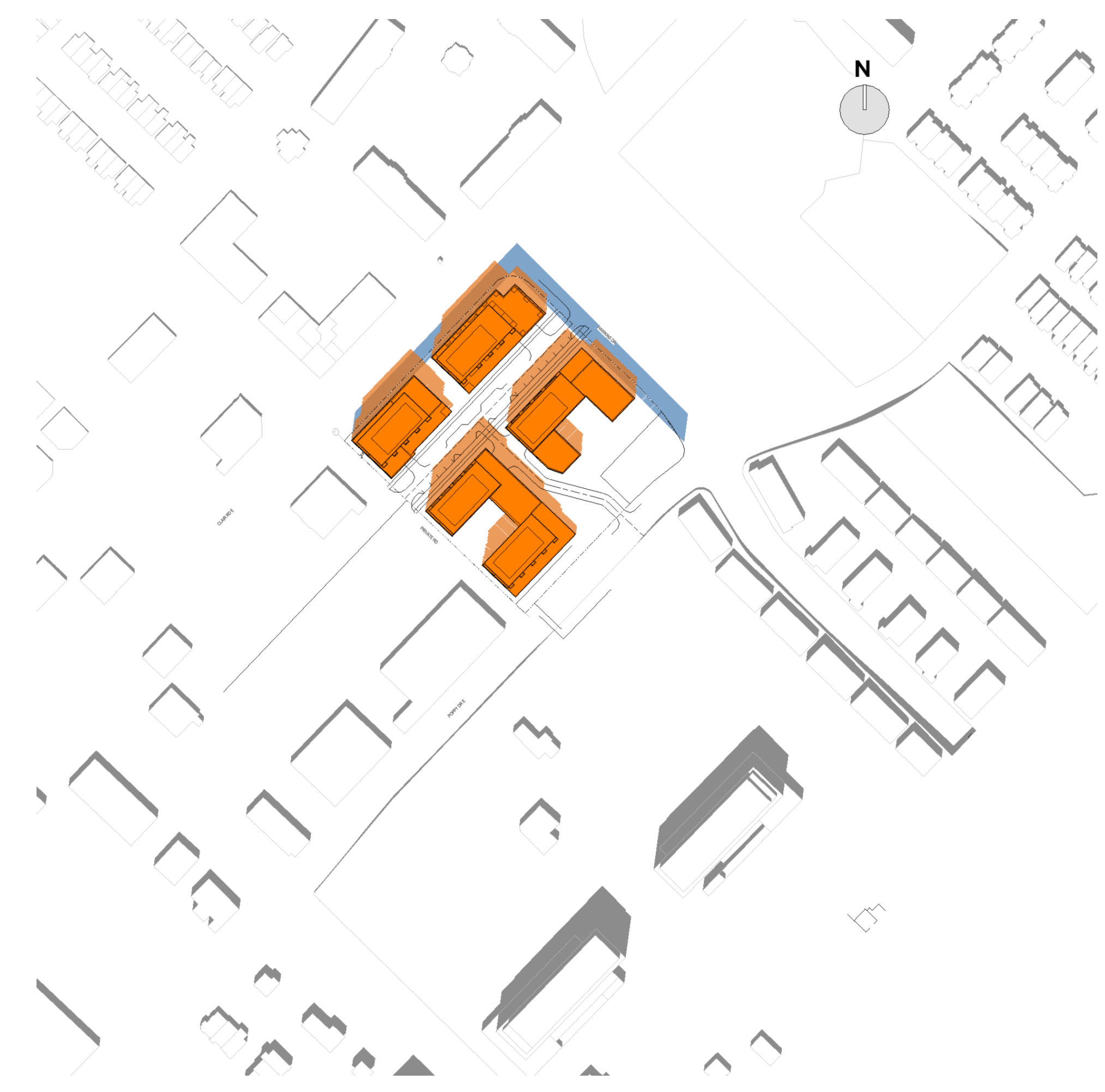
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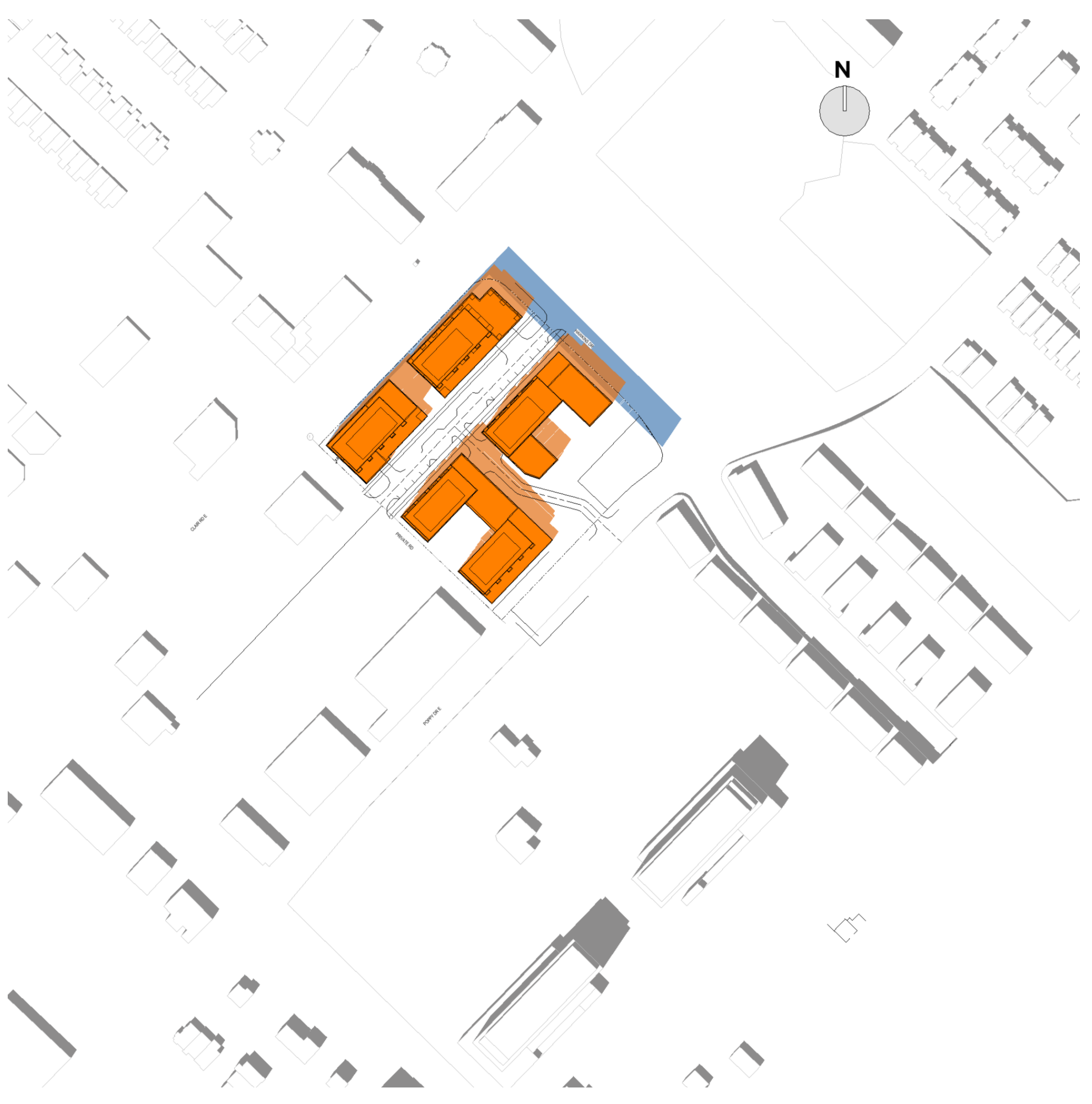
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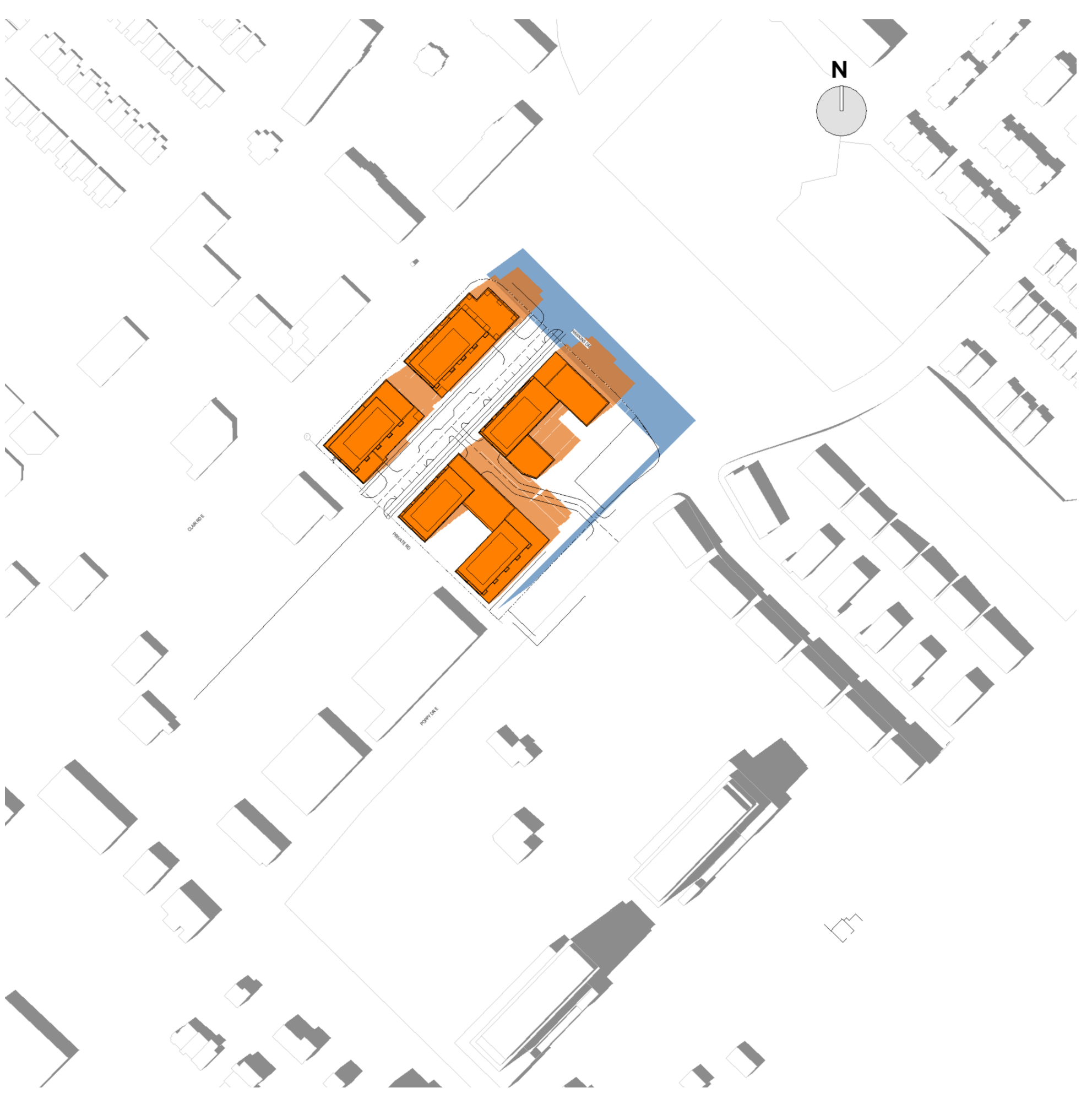
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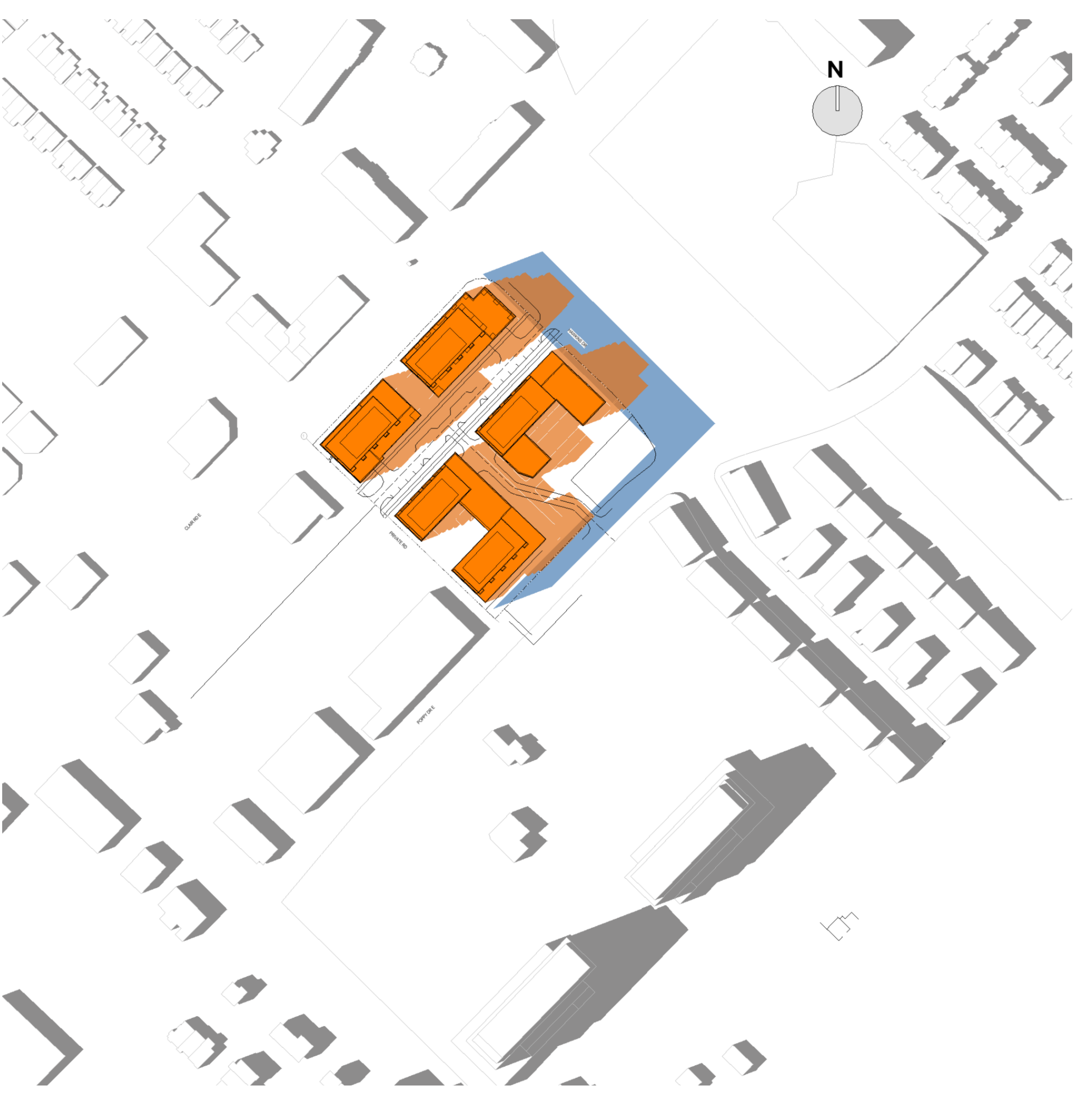
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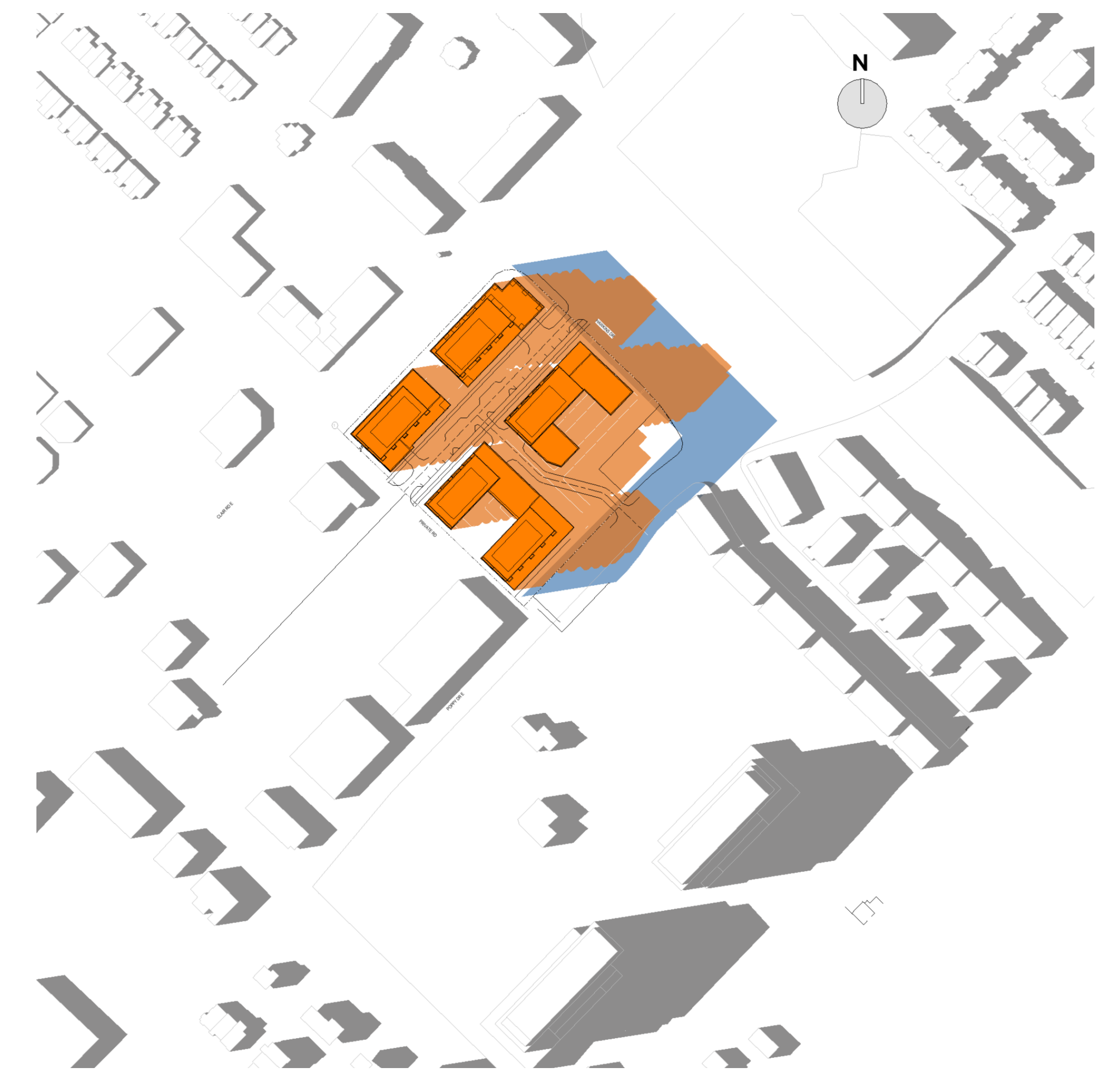
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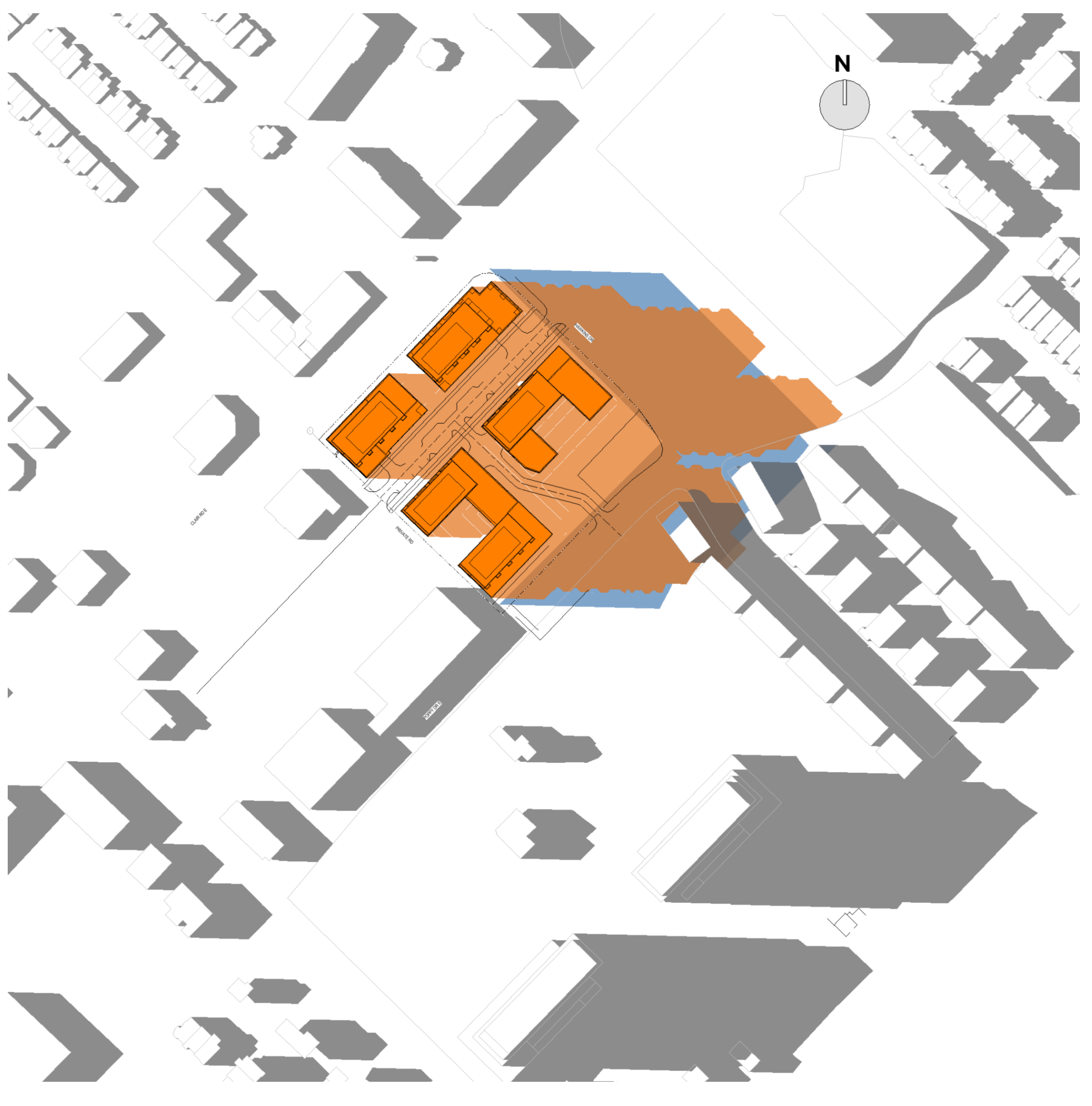
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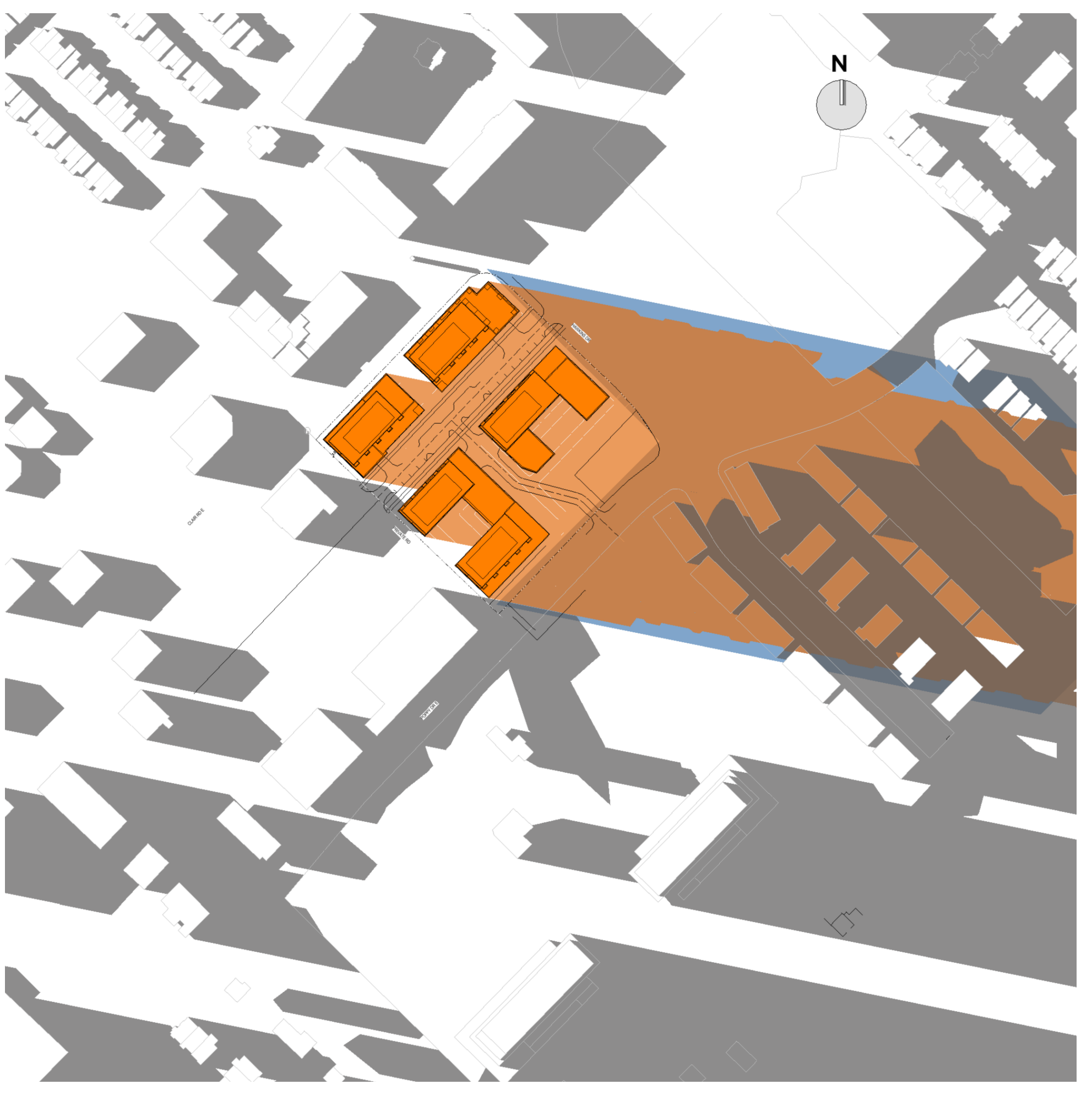
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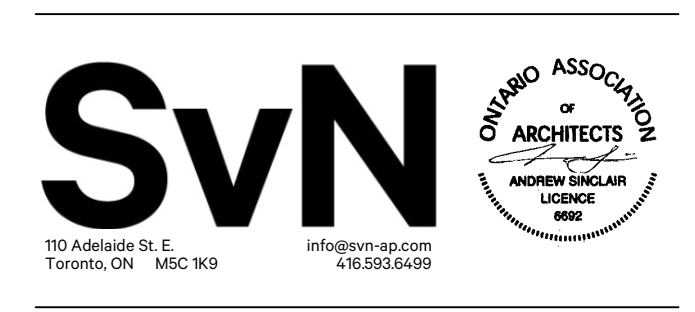
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11 APRIL 21ST - 6 PM  
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SHADOW STUDY - APRIL 21

PROJECT	SCALE	DRAWN	AUTHOR
DATE	CHECKED	CHECKER	CHECKER

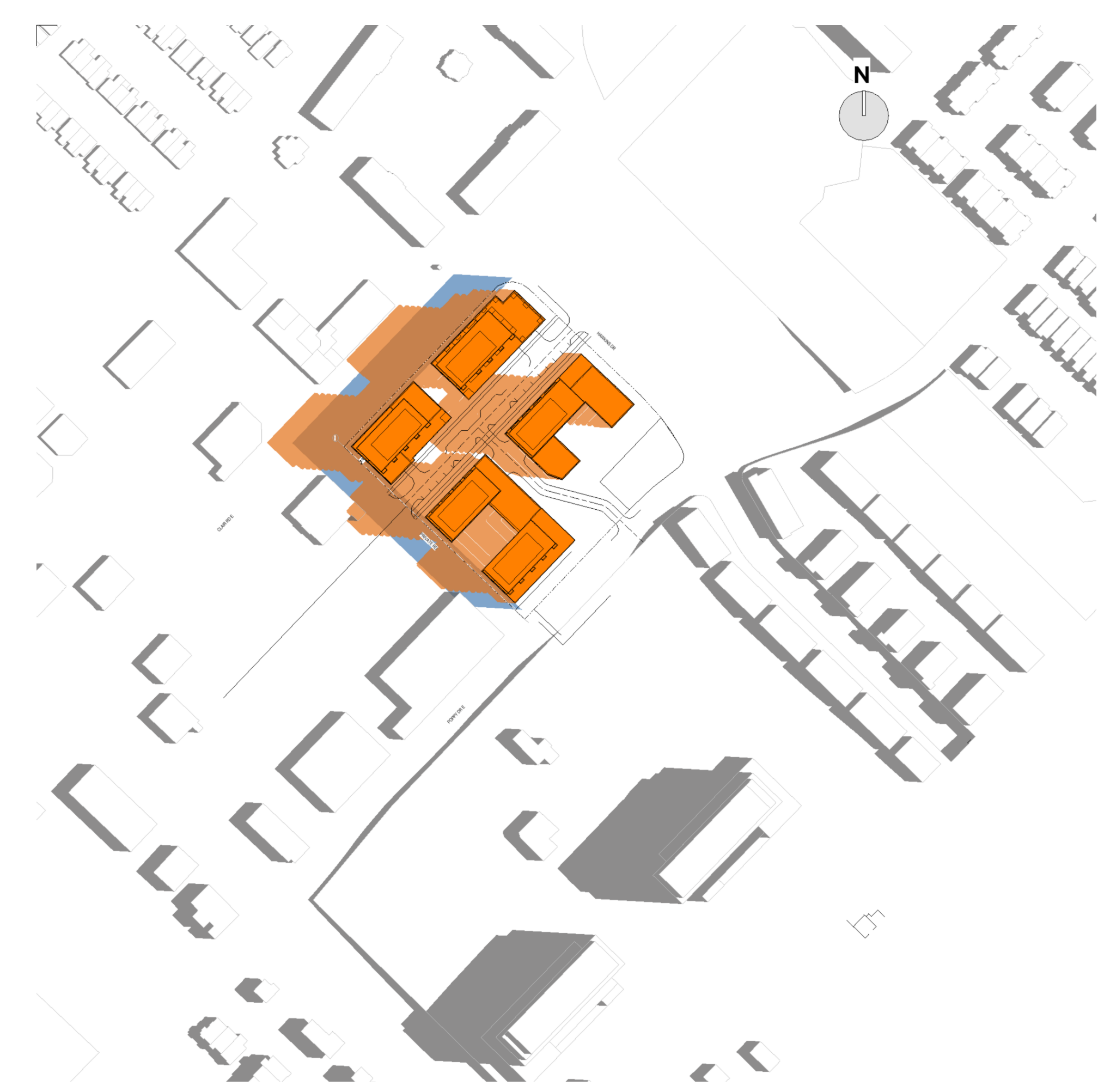
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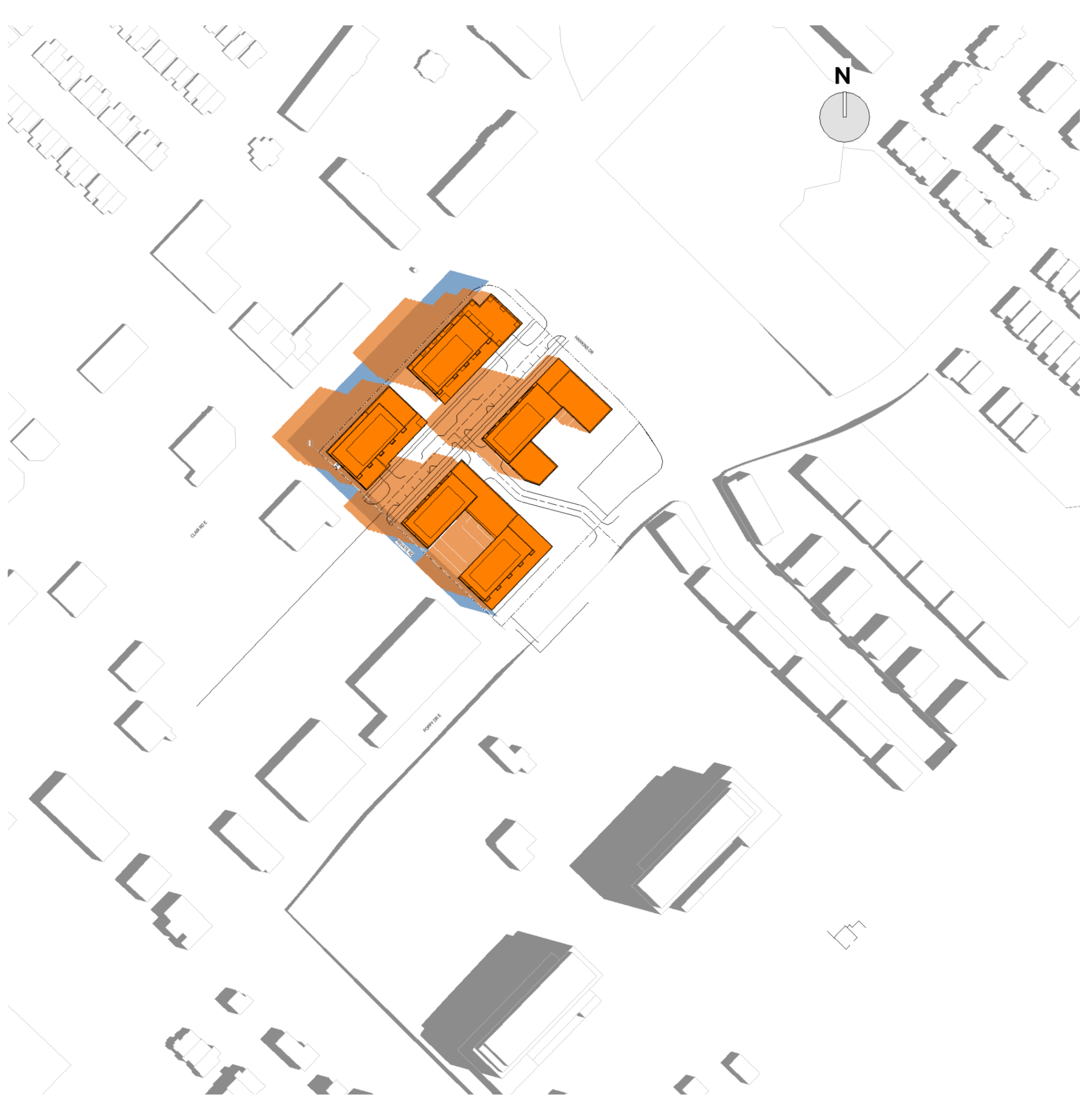
NO.	DATE	REVISION / ISSUANCE
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- AS-OF-RIGHT SHADOWS
- EXISTING SHADOWS



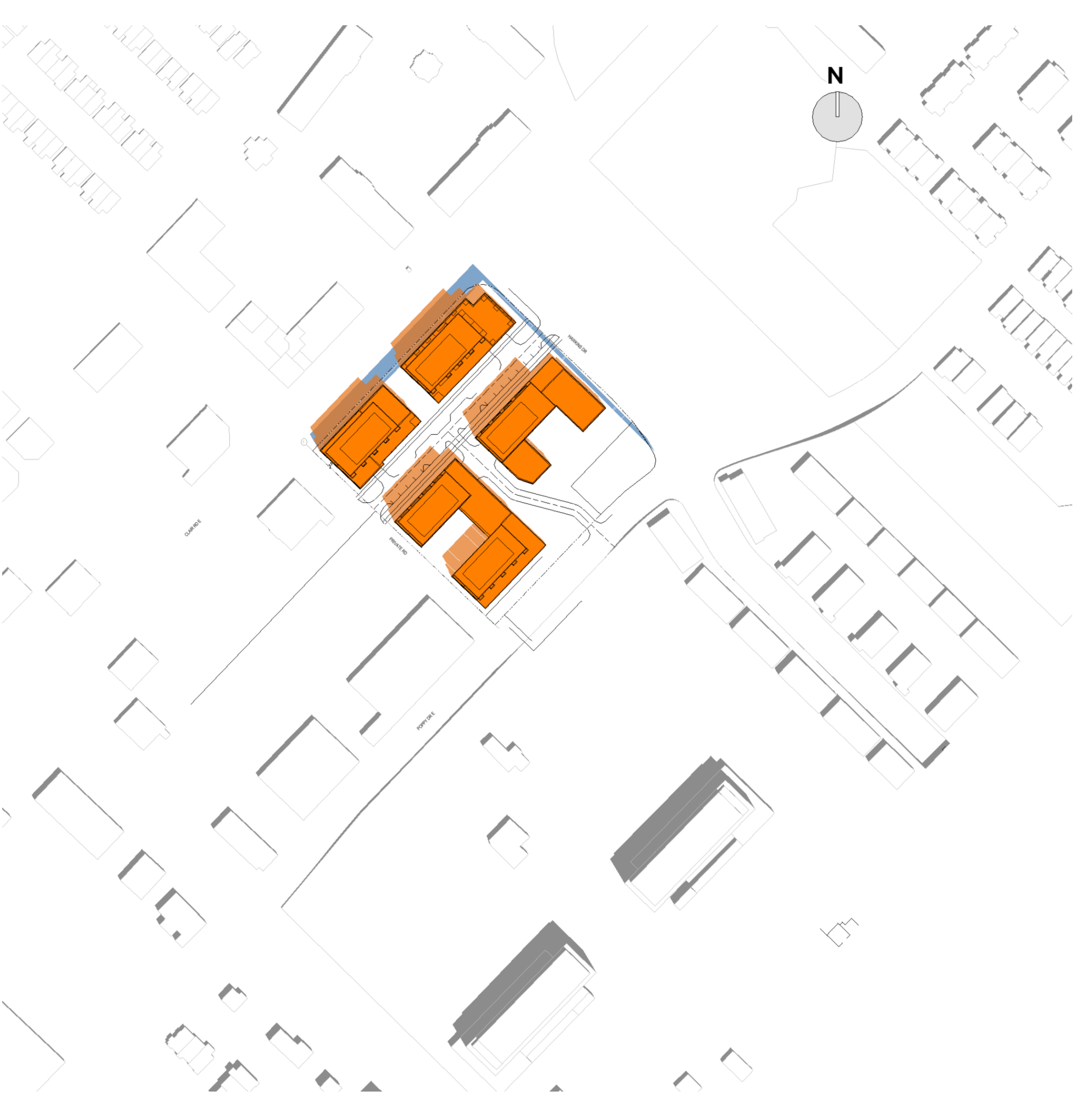
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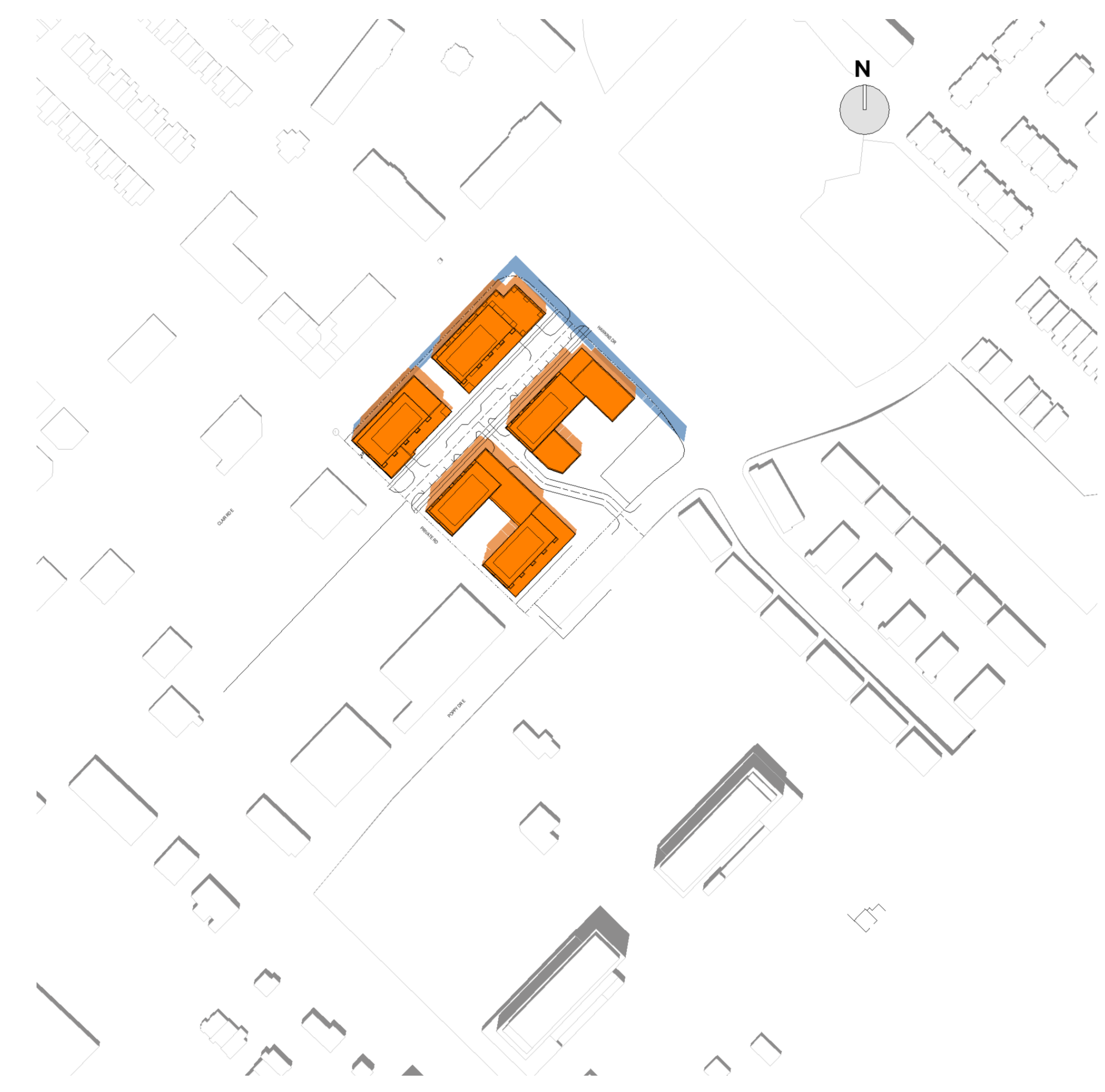
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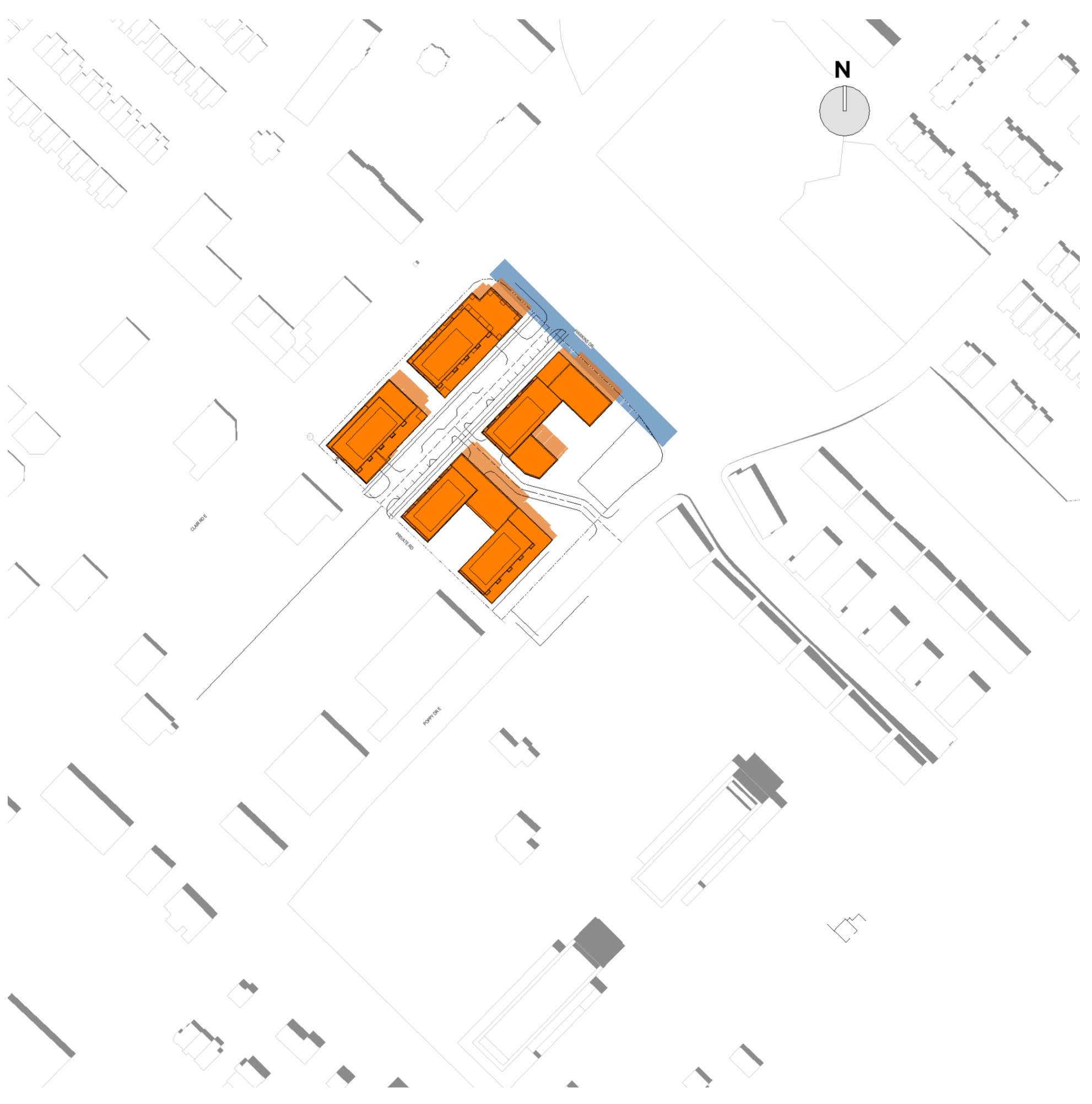
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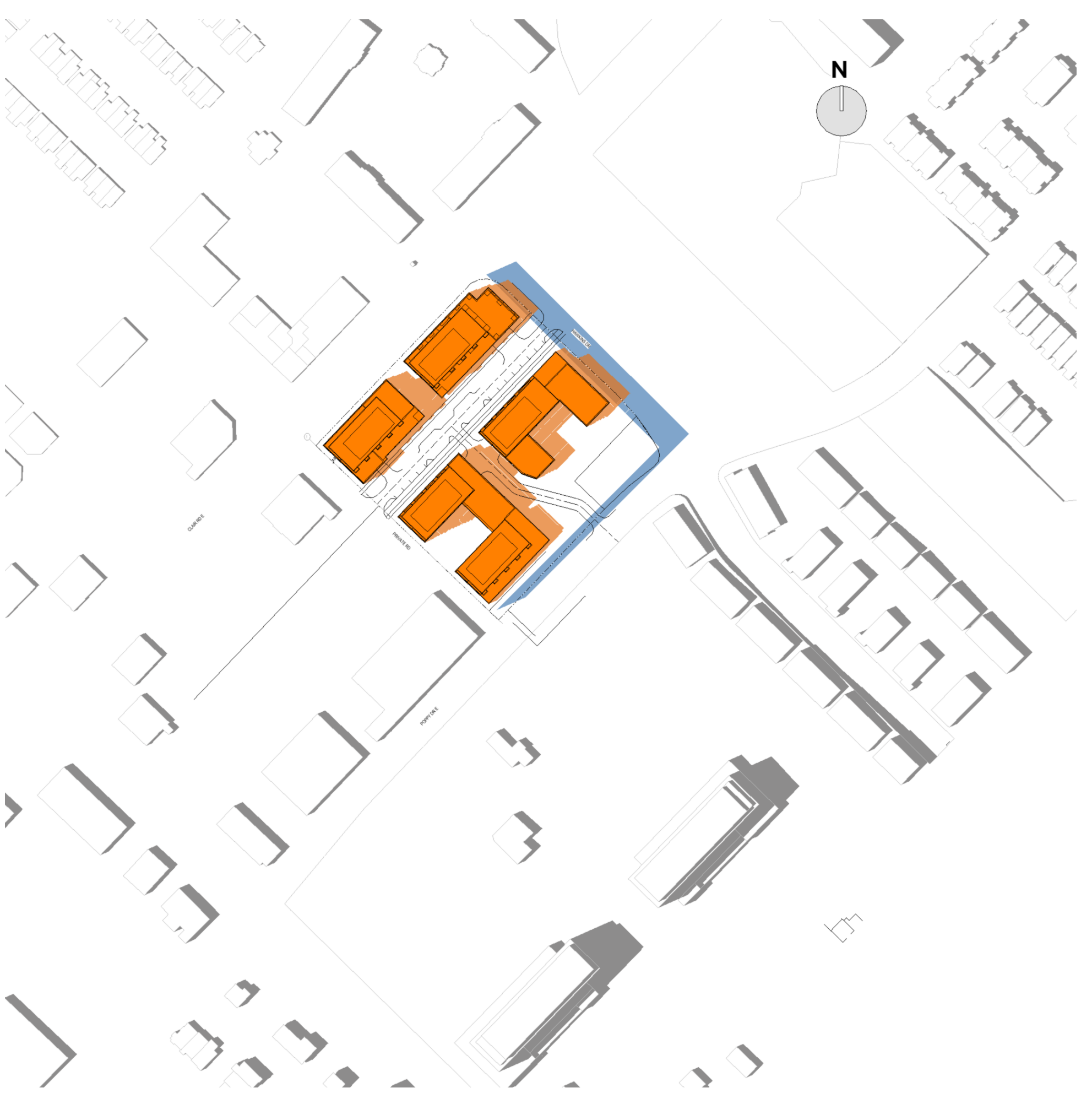
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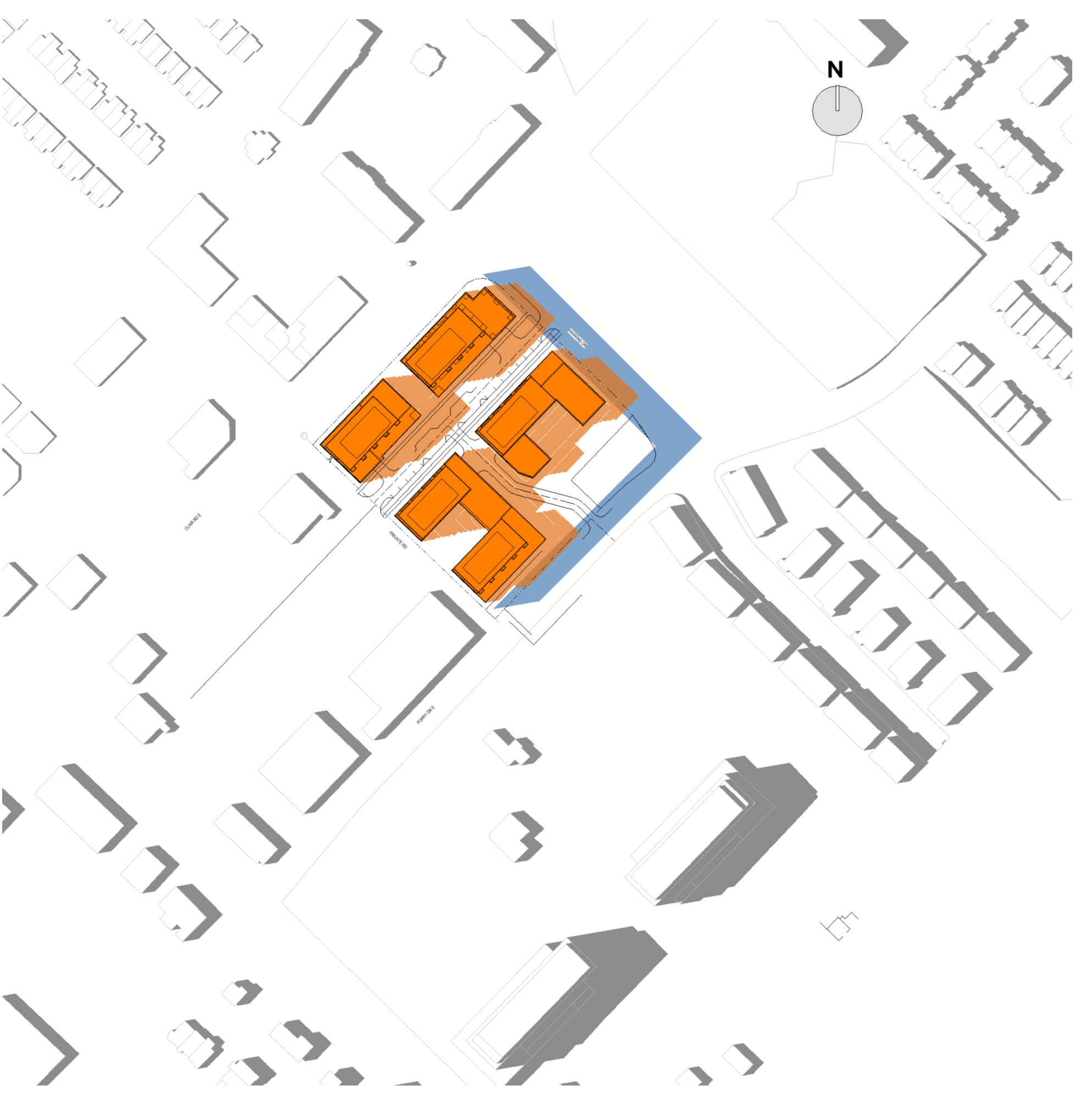
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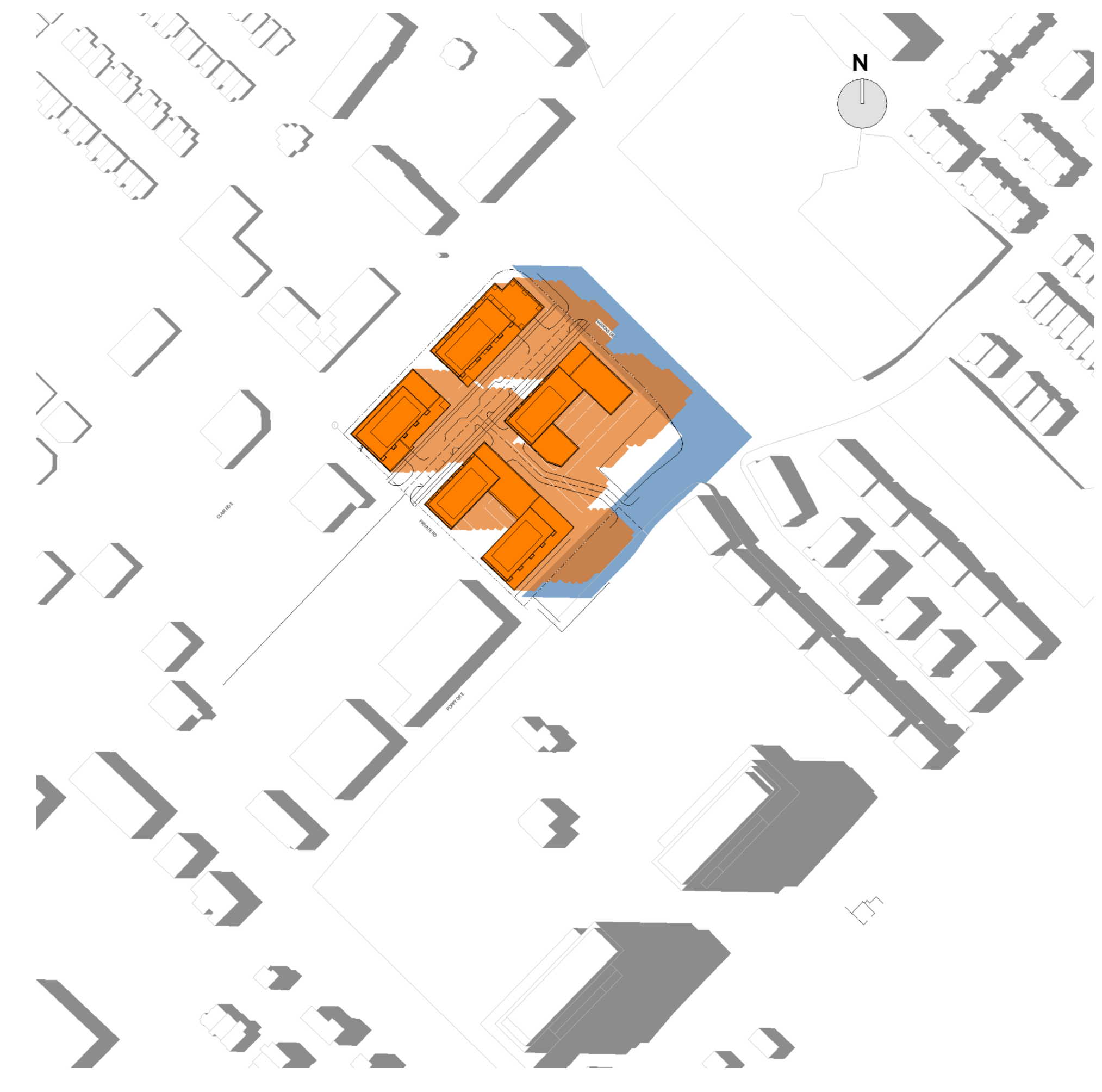
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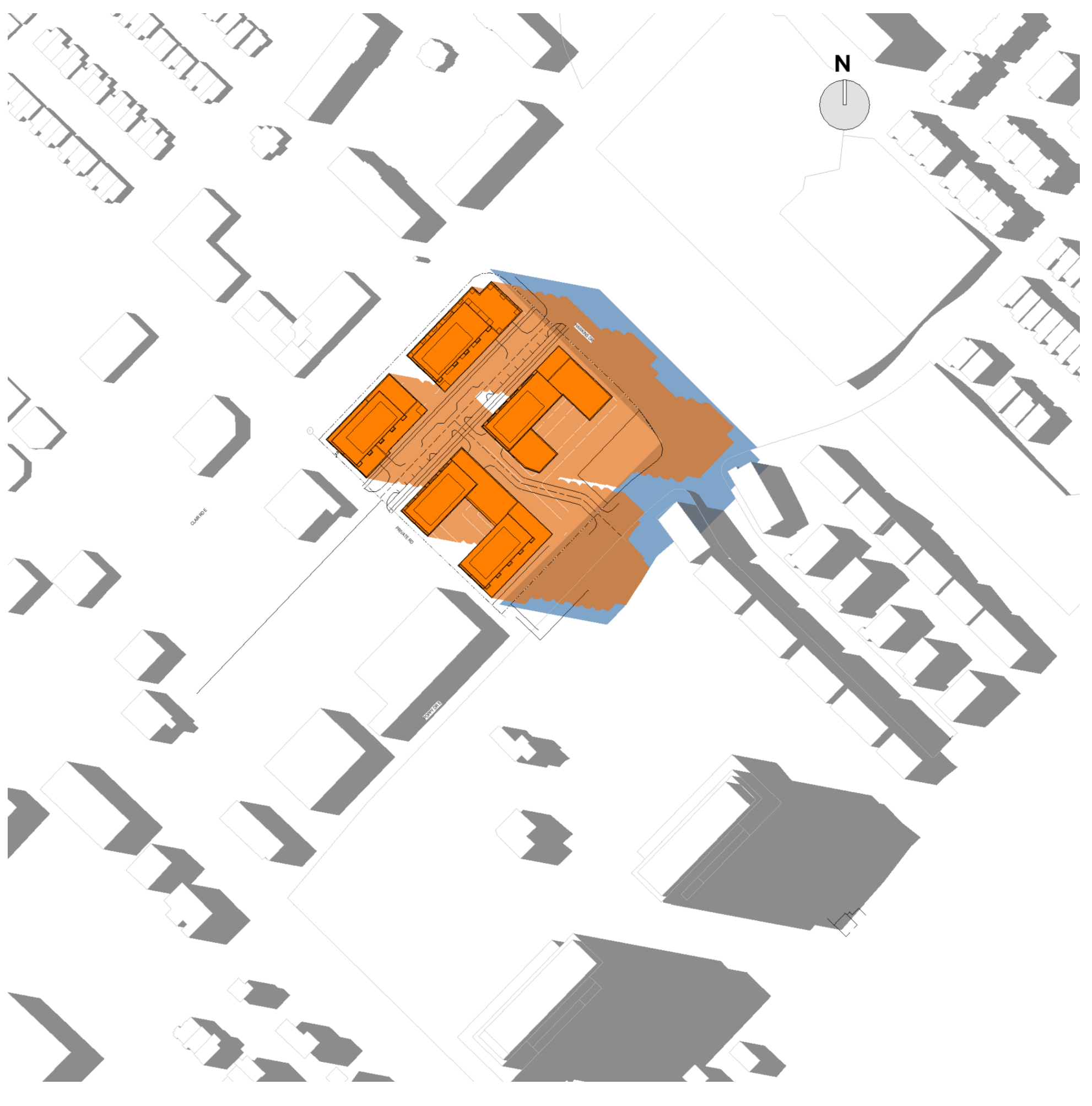
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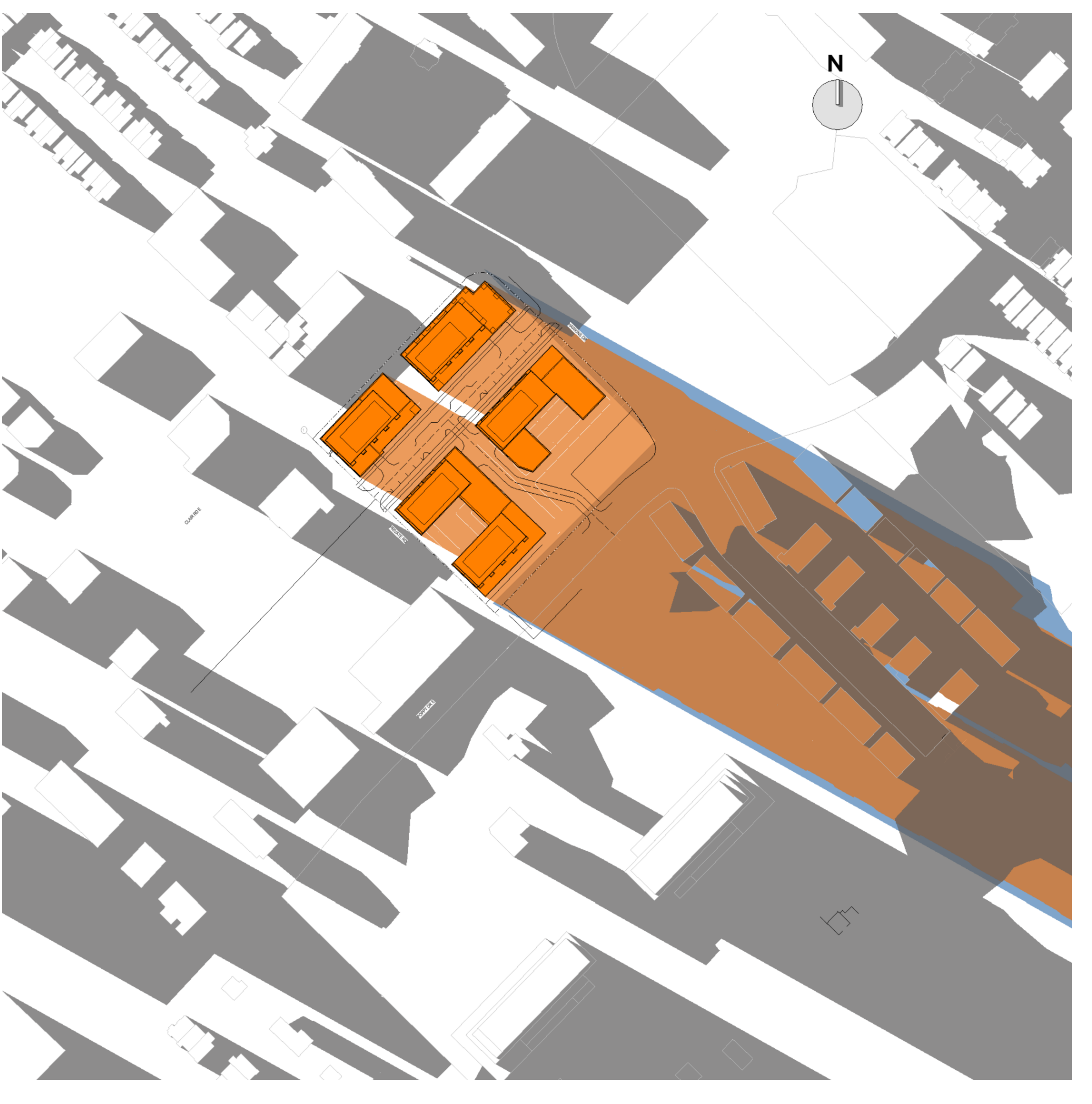
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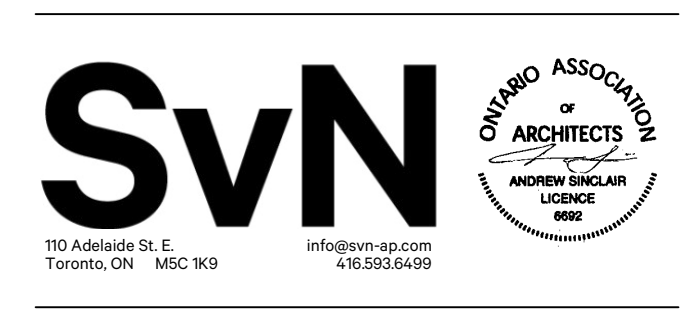
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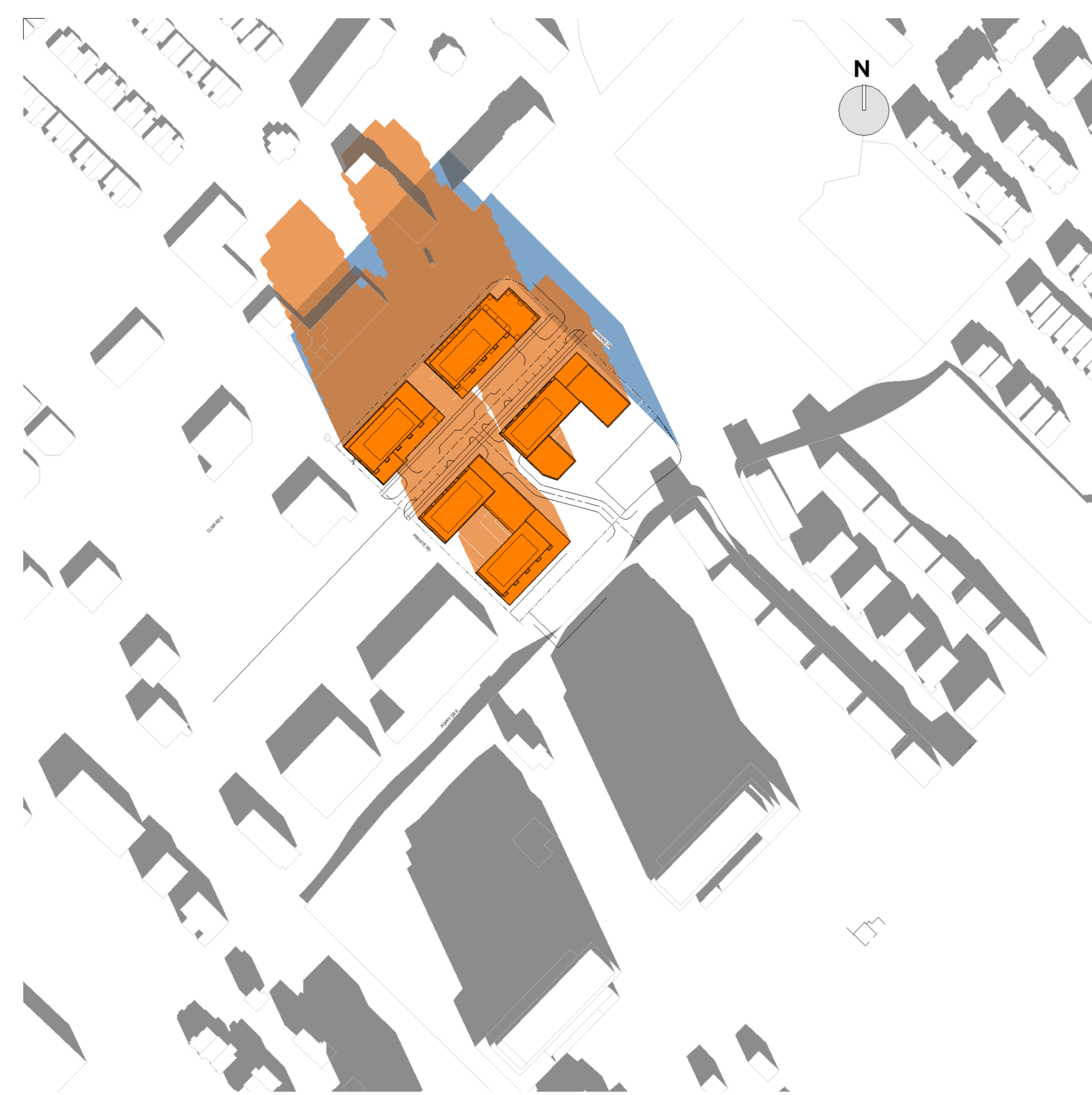
SHADOW STUDY - JUNE 21

PROJECT	SCALE	DRAWN	AUTHOR
DATE	CHECKED	CHECKER	CHECKER

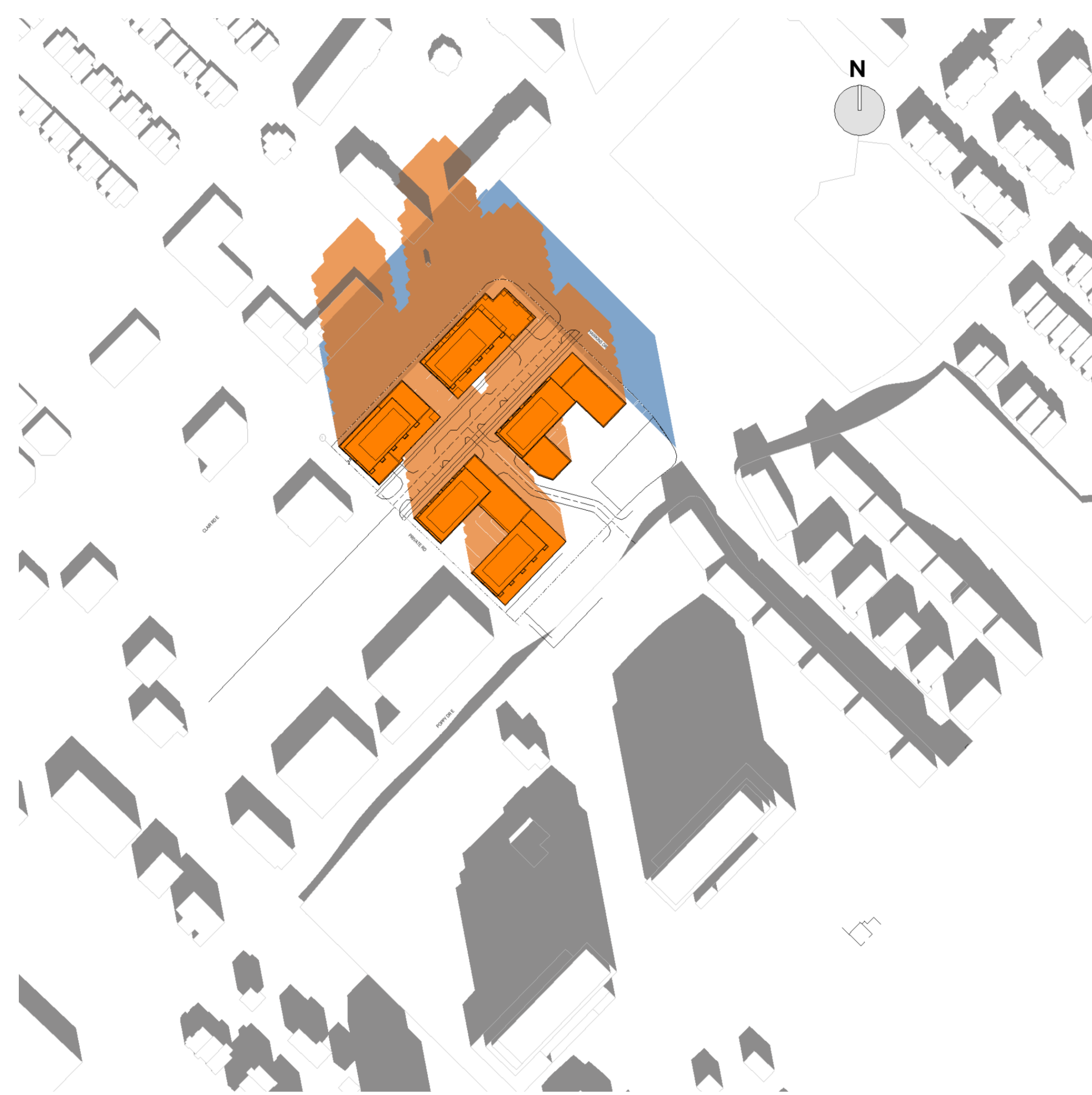
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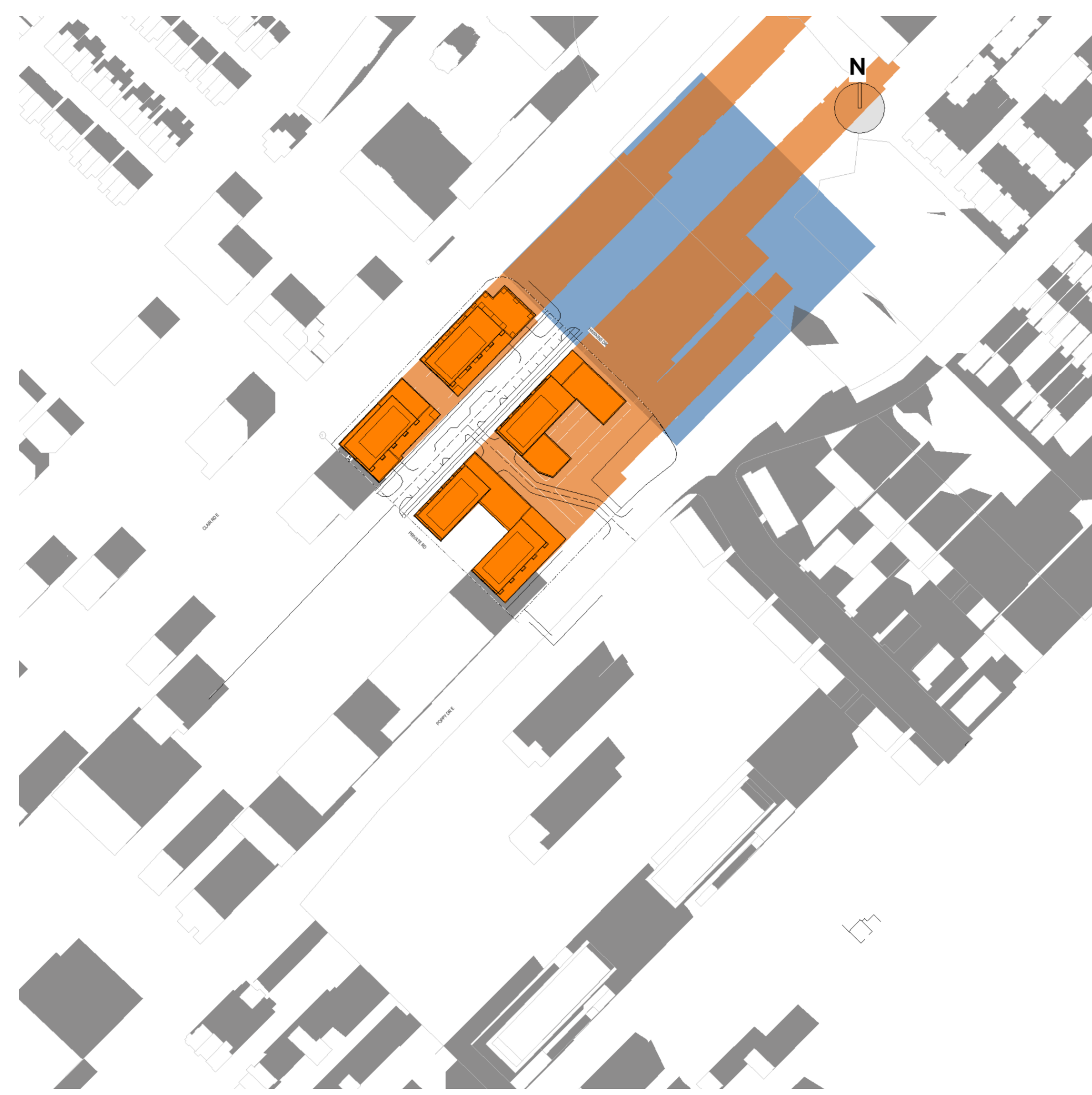
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SHADOW STUDY - DECEMBER 21

PROJECT	1:200	DRAWN	Author
SCALE		CHECKED	Checker
DATE	12/04/23		

A 504