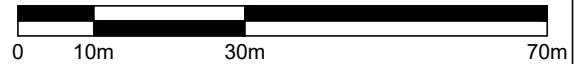


## Shadow Study

86 Thomas Street, Mississauga, Ontario

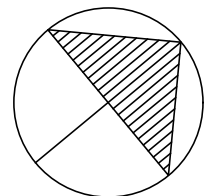
Scale: 1:1000



**WES SURDYKA**  
*architect inc*

3645 KEELE STREET, 2nd FLOOR, STE 108  
 TORONTO ONTARIO M3J 1M8  
 TEL (416) 630-2254 FAX (416) 630-5741  
 E-mail: surdykaarchitect@bellnet.ca

1/1 May 5, 2020



**86 THOMAS STREET**

SHADOW STUDY

May 6, 2020

Project Number 18-12

Written Analysis:

- ◆ Site latitude and longitude used:
  - ◆ Latitude: 43 degrees 35' 20" N
  - ◆ Longitude: 79 degrees 38' 40" W

From "Standards for Shadow Studies" City of Mississauga, June 2014.

- ◆ The astronomic north was determined from the Plan of Topographic Survey of Part of Lot 4, Concession 5, West of Hurontario Street, City of Mississauga, Regional Municipality of Peel by Donald H. Brown Surveying Ltd. Ontario Land Surveyor, completed on June 24, 2010 and revised on November 14, 2017.
- ◆ The origin/source of base plan is Site Plan, drawing A1.0 by us dated April 17, 2020.
- ◆ All criteria described on the "Standards for Shadow Studies" City of Mississauga, June 2014, have been satisfied on this project, except as noted below:

**Ensure adequate sunlight on the following:**

**3.1 Residential Private Outdoor Amenity Spaces**

The area of shadow impact on the existing residential private rear yards west of the proposed development are shown on diagrams RY1 to RY3

**3.2 Communal Outdoor Amenity Areas**

There are no communal outdoor amenity areas, such as children's play areas, tot lots or seniors outdoor amenity areas on this project or surrounding areas.

**3.3 Public Realm**

There is no incremental shade from the proposed development on the opposite boulevard of Thomas Street, including the full width of the sidewalk.

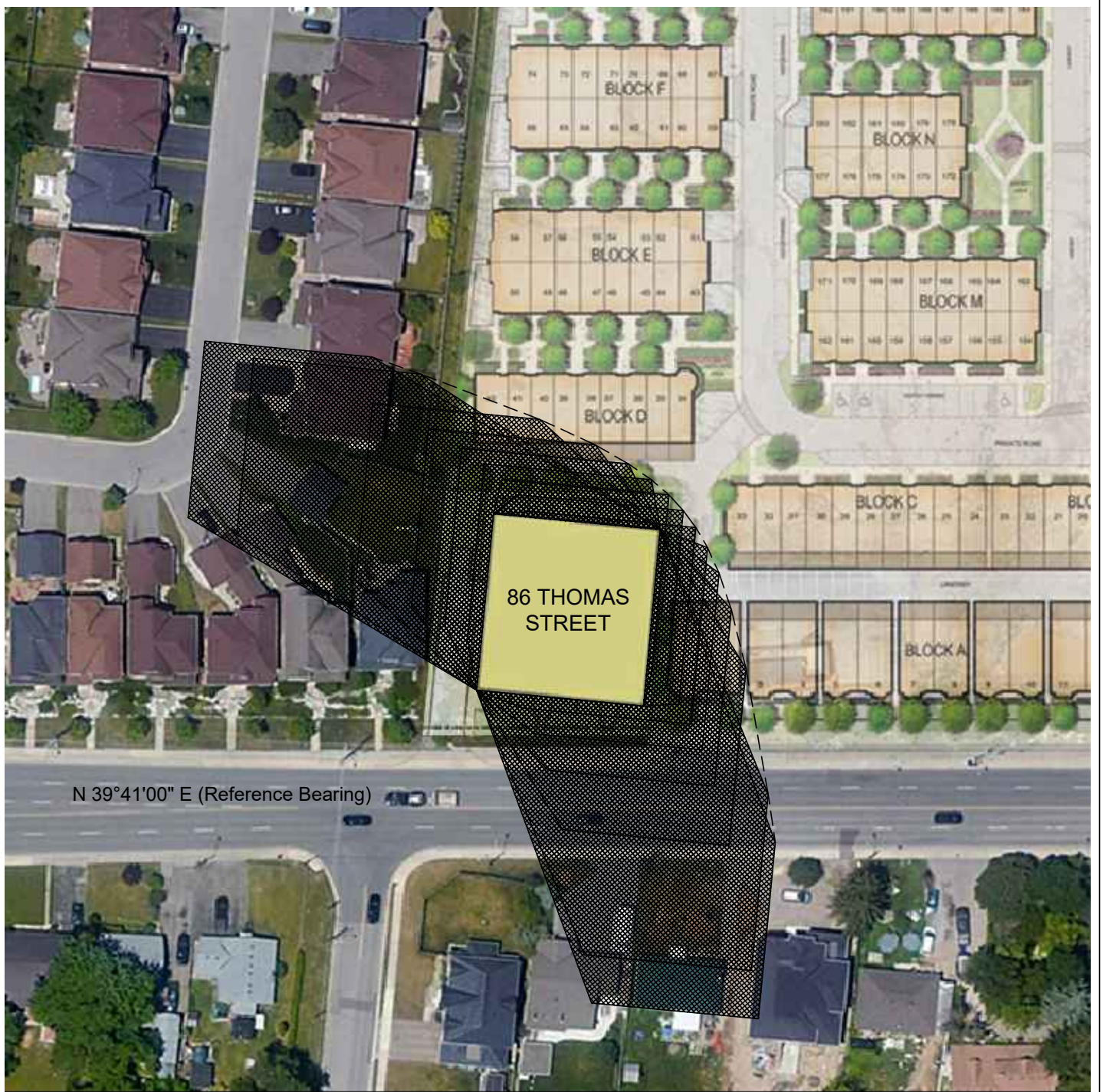
**3.4 Turf and flower gardens in Public Parks**

This development does not include a public park, nor there is one in the vicinity.

**3.5 Building Faces to allow for the possibility of using solar energy**

The area of shadow impact on the no impact zone of the proposed adjacent semi-detached dwellings east of the proposed development are shown n diagrams AR1 to AR7.





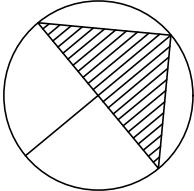
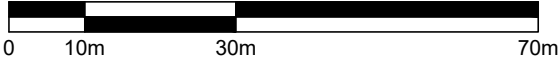
N 39°41'00" E (Reference Bearing)

86 THOMAS STREET

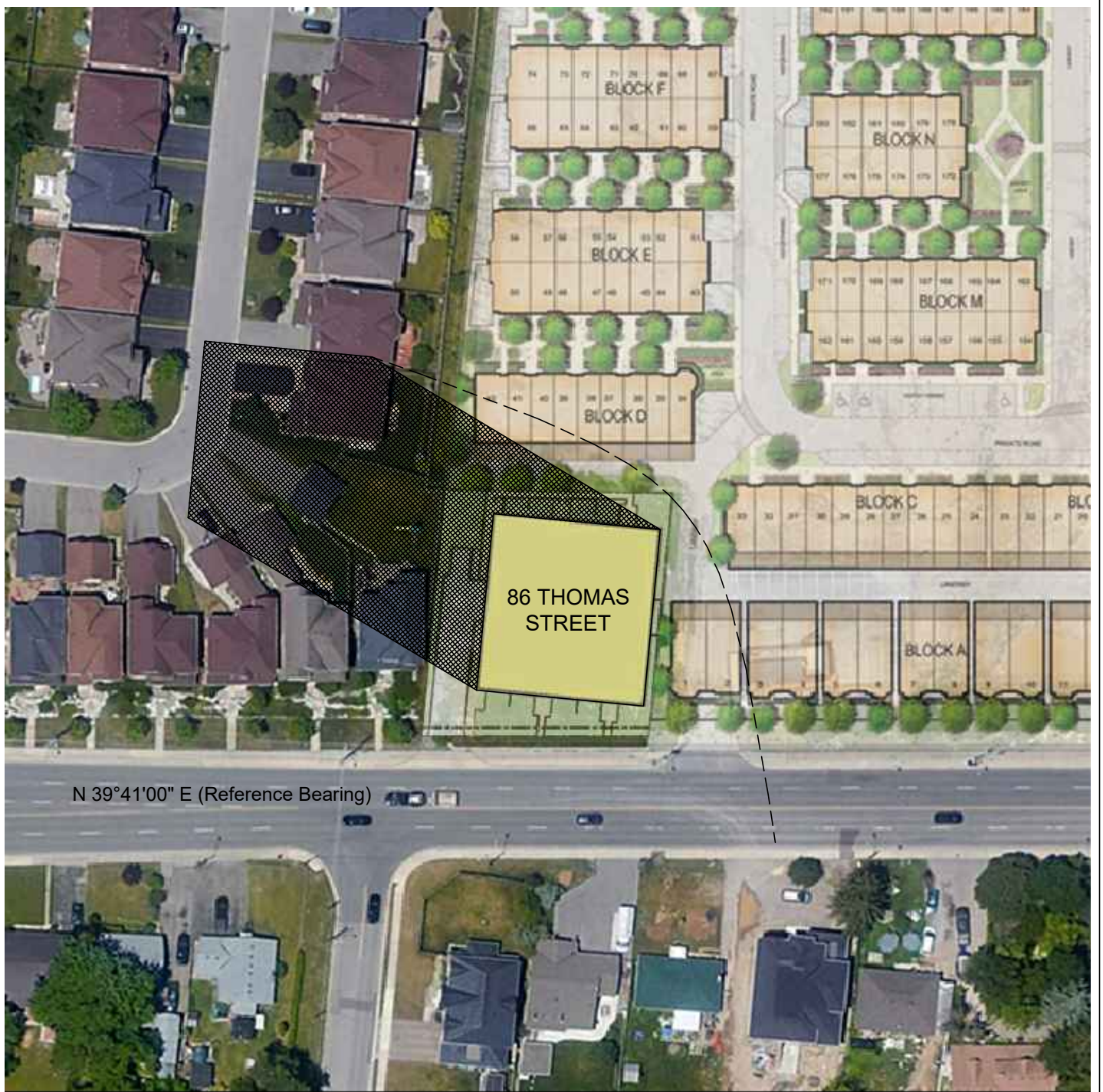
Shadow diagram

June 21 All hours

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

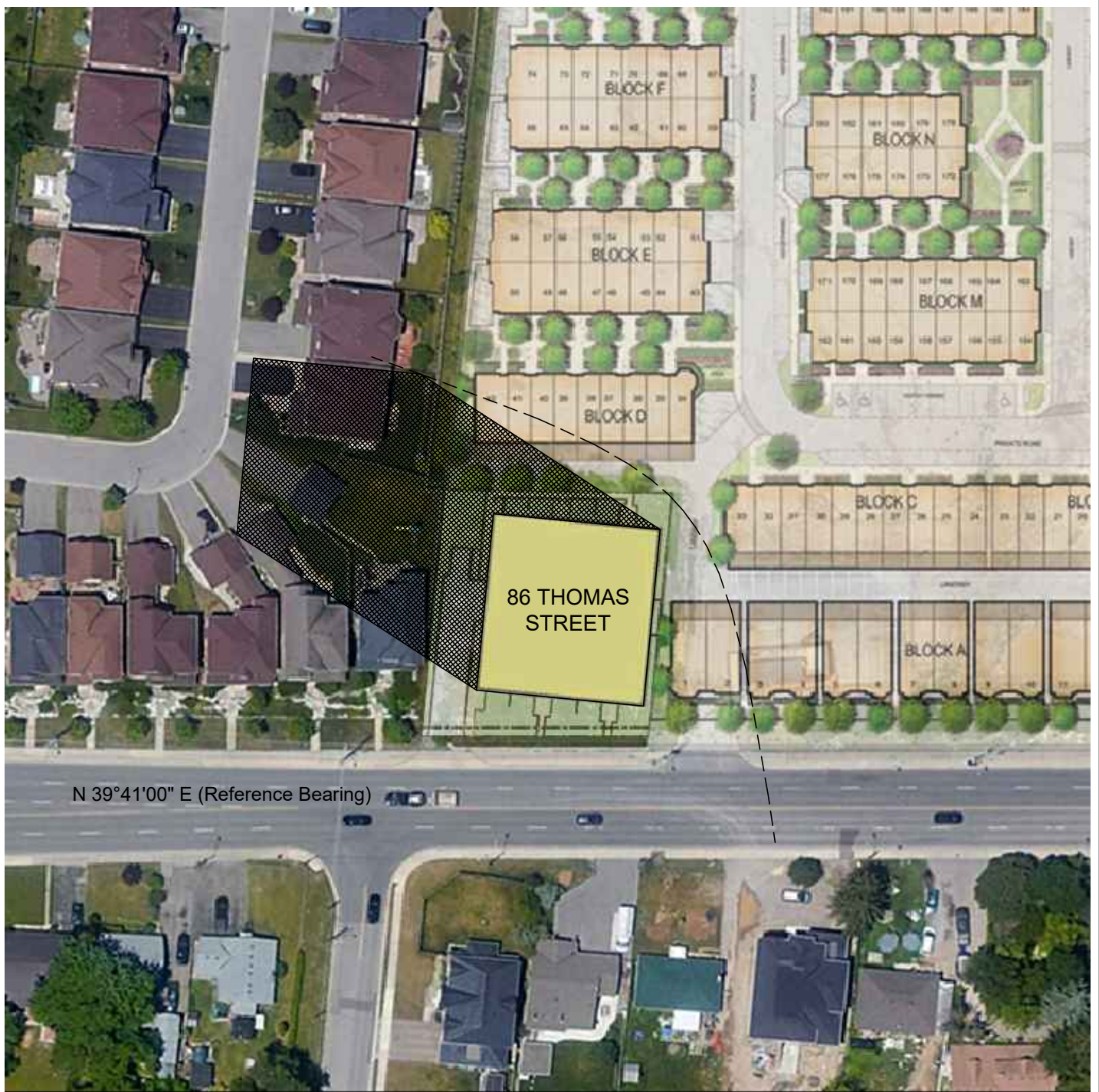
**Shadow diagram**

June 21 7:07 EDT  
 Rise + 1.5 hr.

Scale: 1:1000

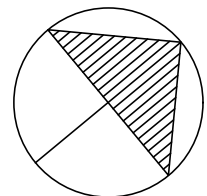




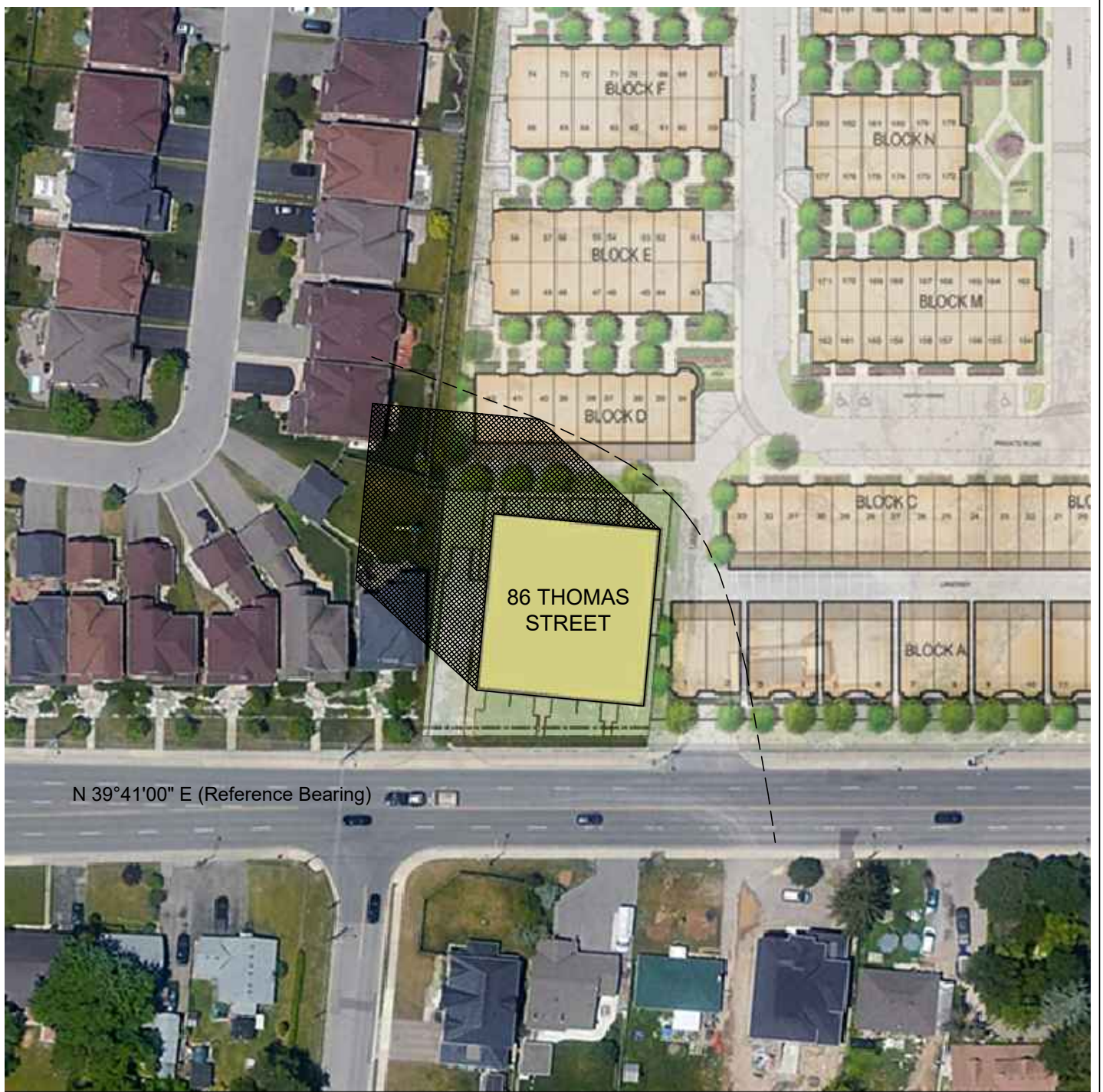


Shadow diagram

June 21 7:20 EDT  
SN - 6 hr.







N 39°41'00" E (Reference Bearing)

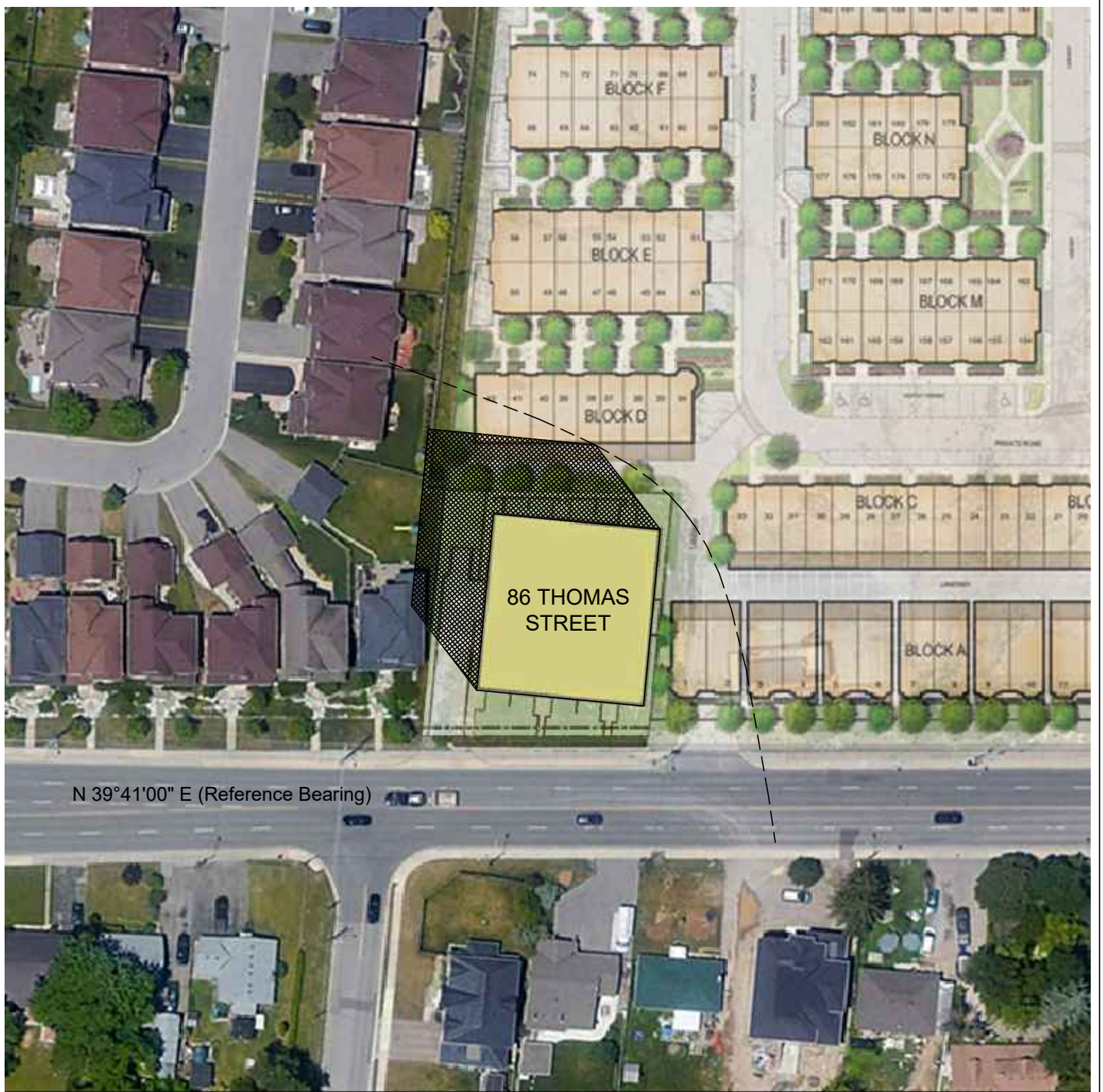
**Shadow diagram**

June 21 8:20 EDT  
SN - 5 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

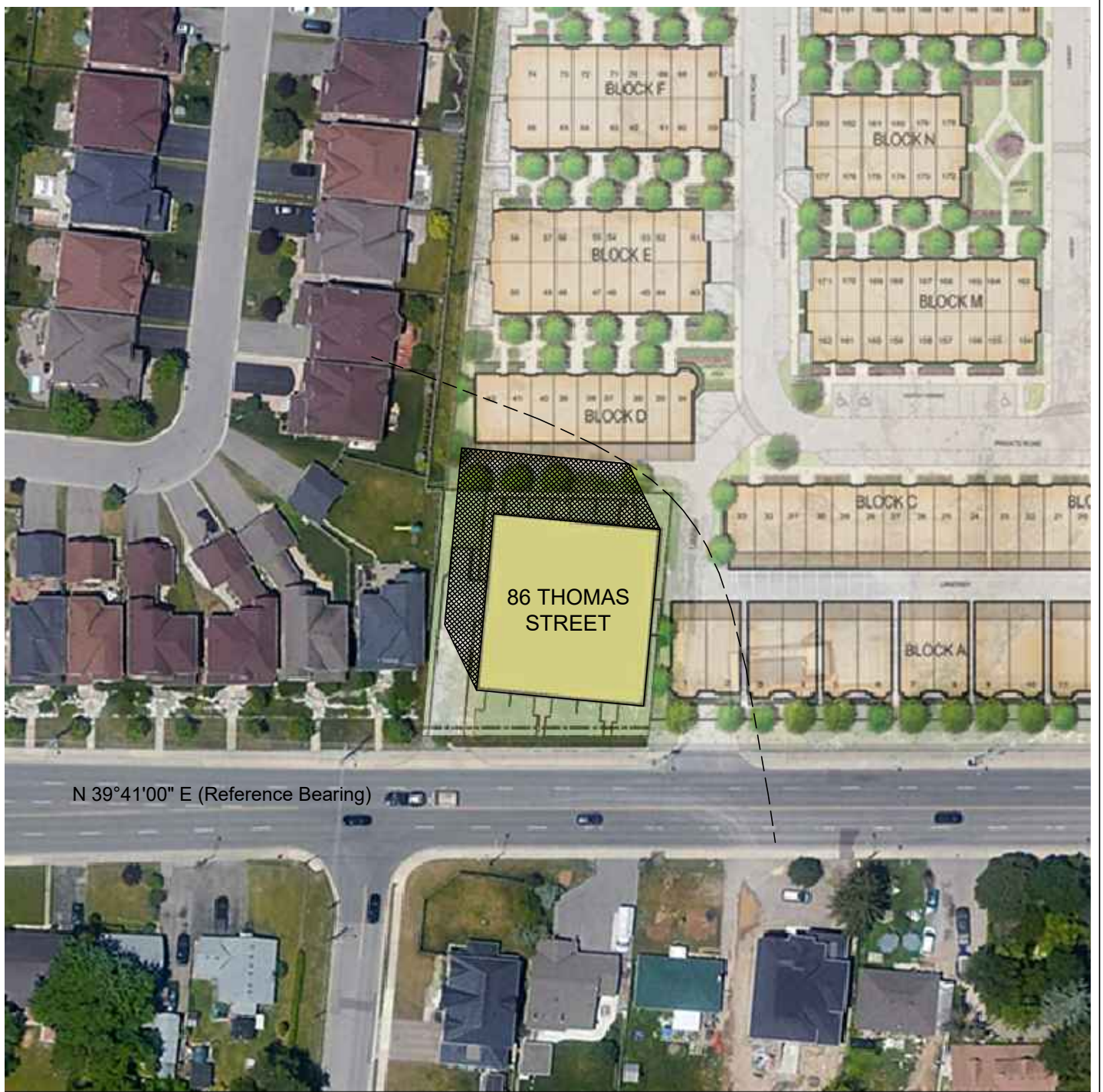
### Shadow diagram

June 21 9:20 EDT  
SN - 4 hr.

Scale: 1:1000





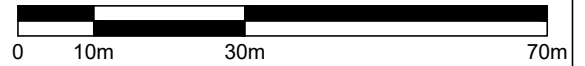


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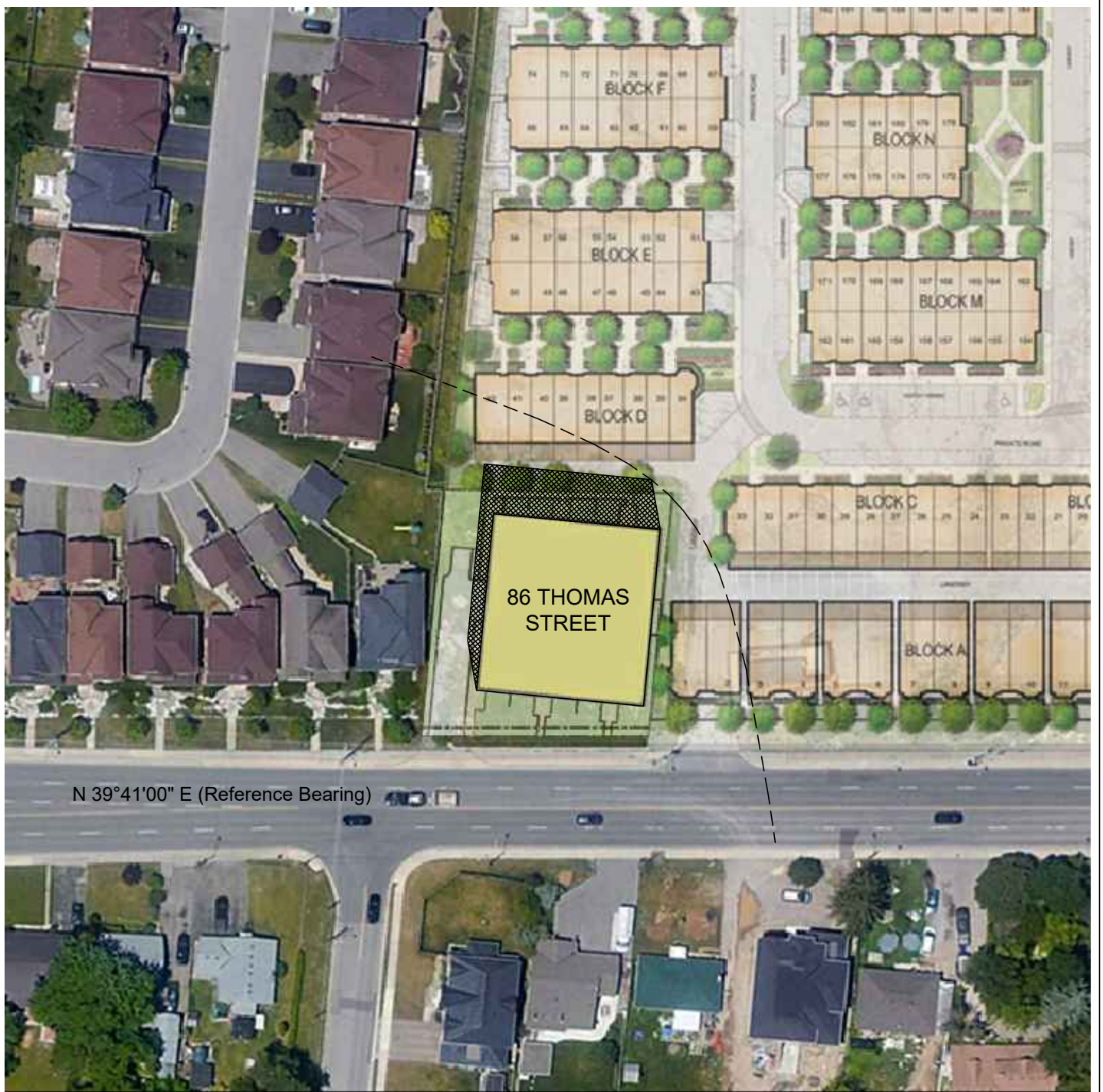
### Shadow diagram

June 21 10:20 EDT  
SN - 3 hr.

Scale: 1:1000



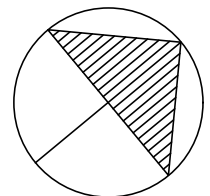
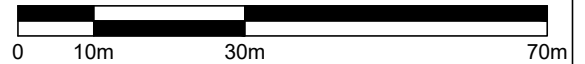




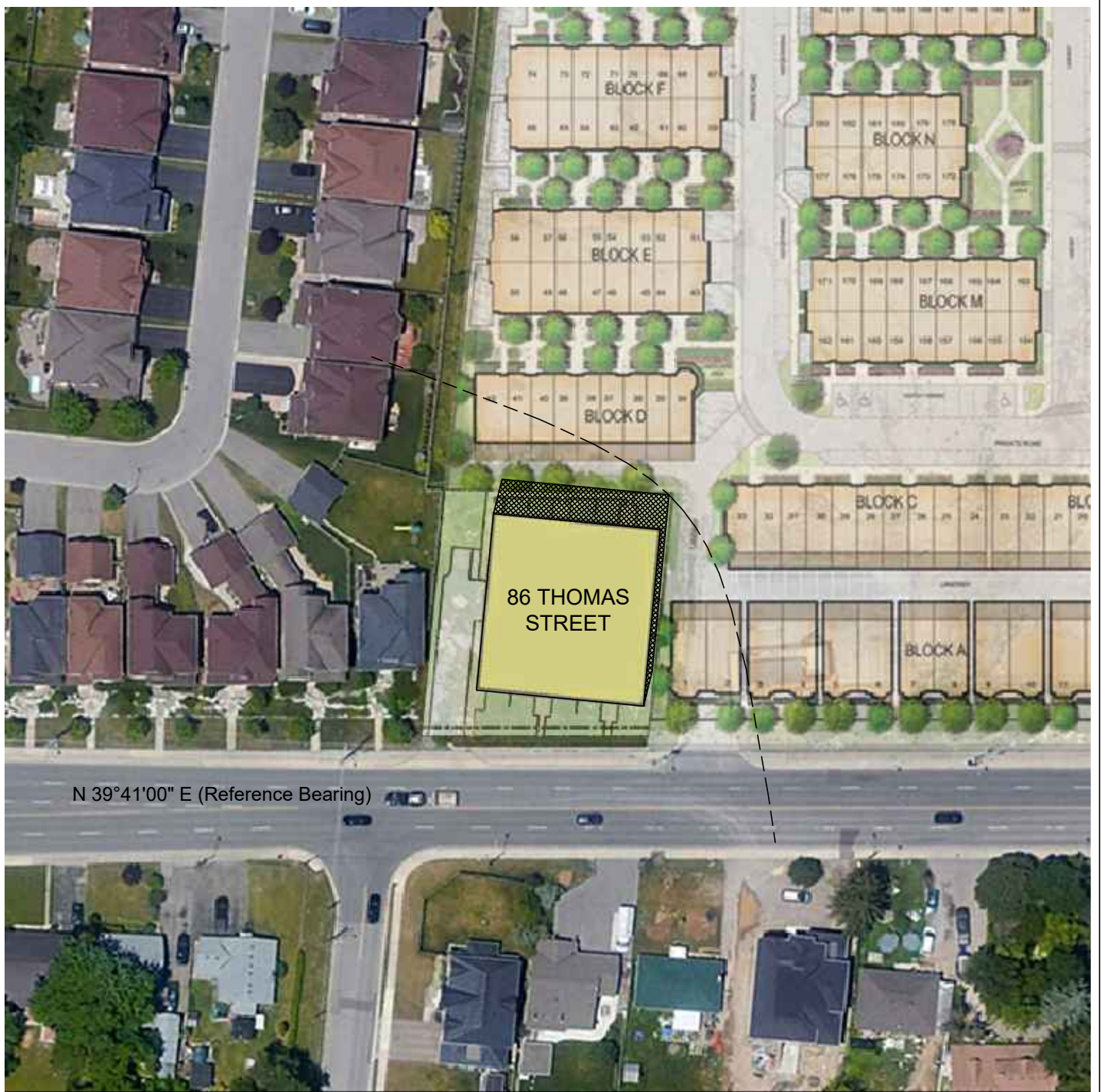
### Shadow diagram

June 21 11:20 EDT  
SN - 2 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

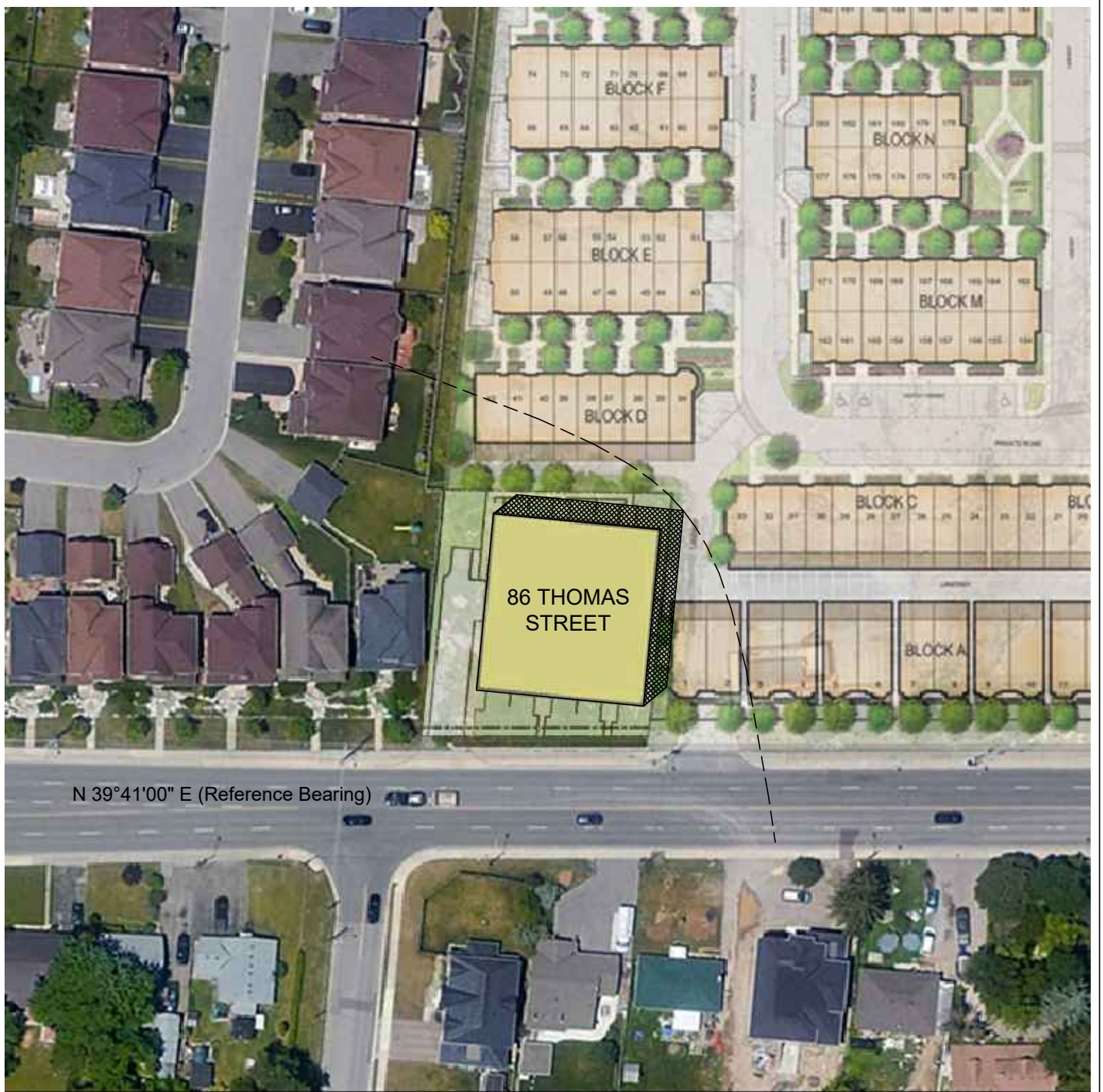
### Shadow diagram

June 21 12:20 EDT  
SN - 1 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

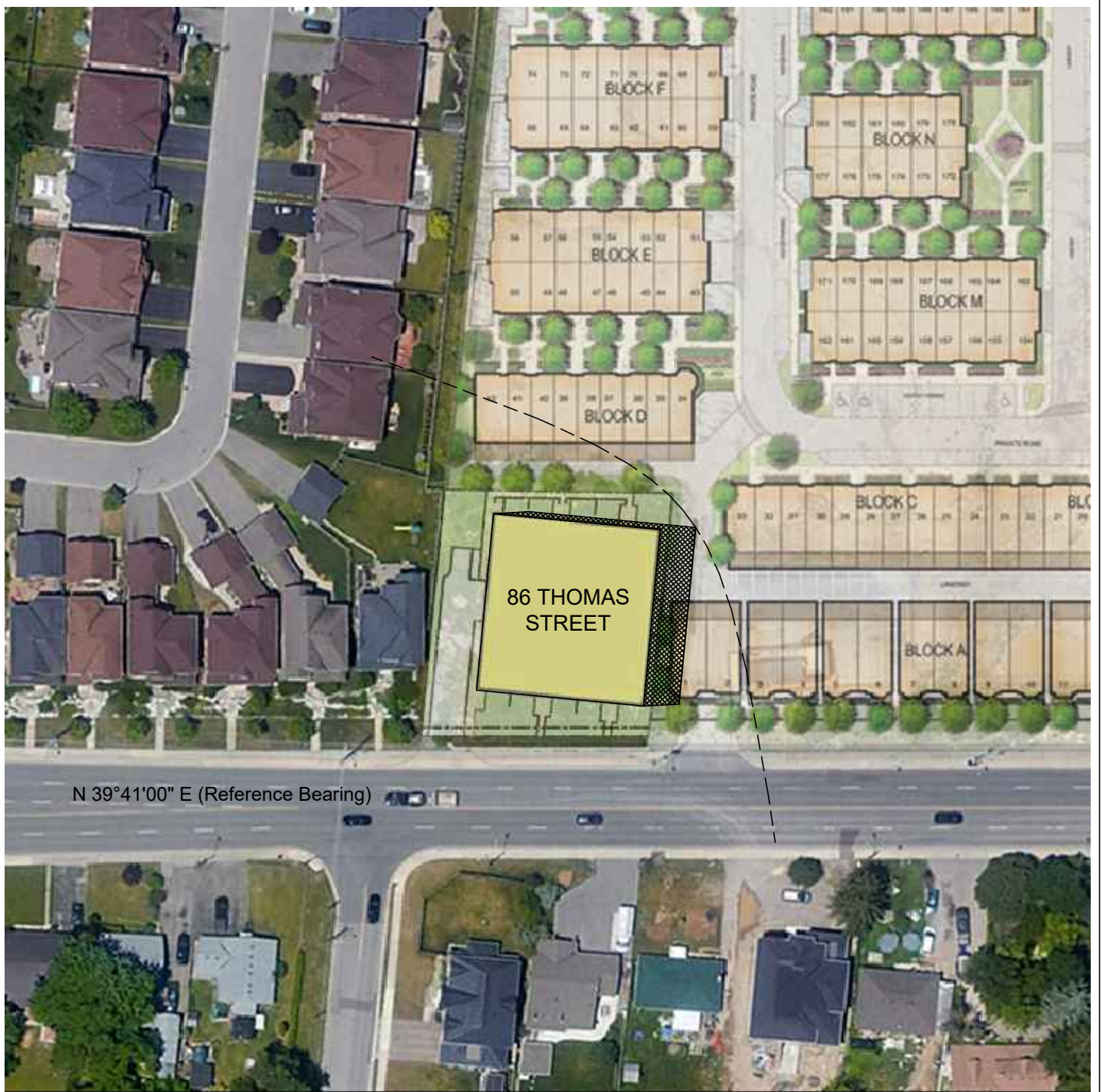
**Shadow diagram**

June 21 13:20 EDT  
Solar Noon (SN)

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

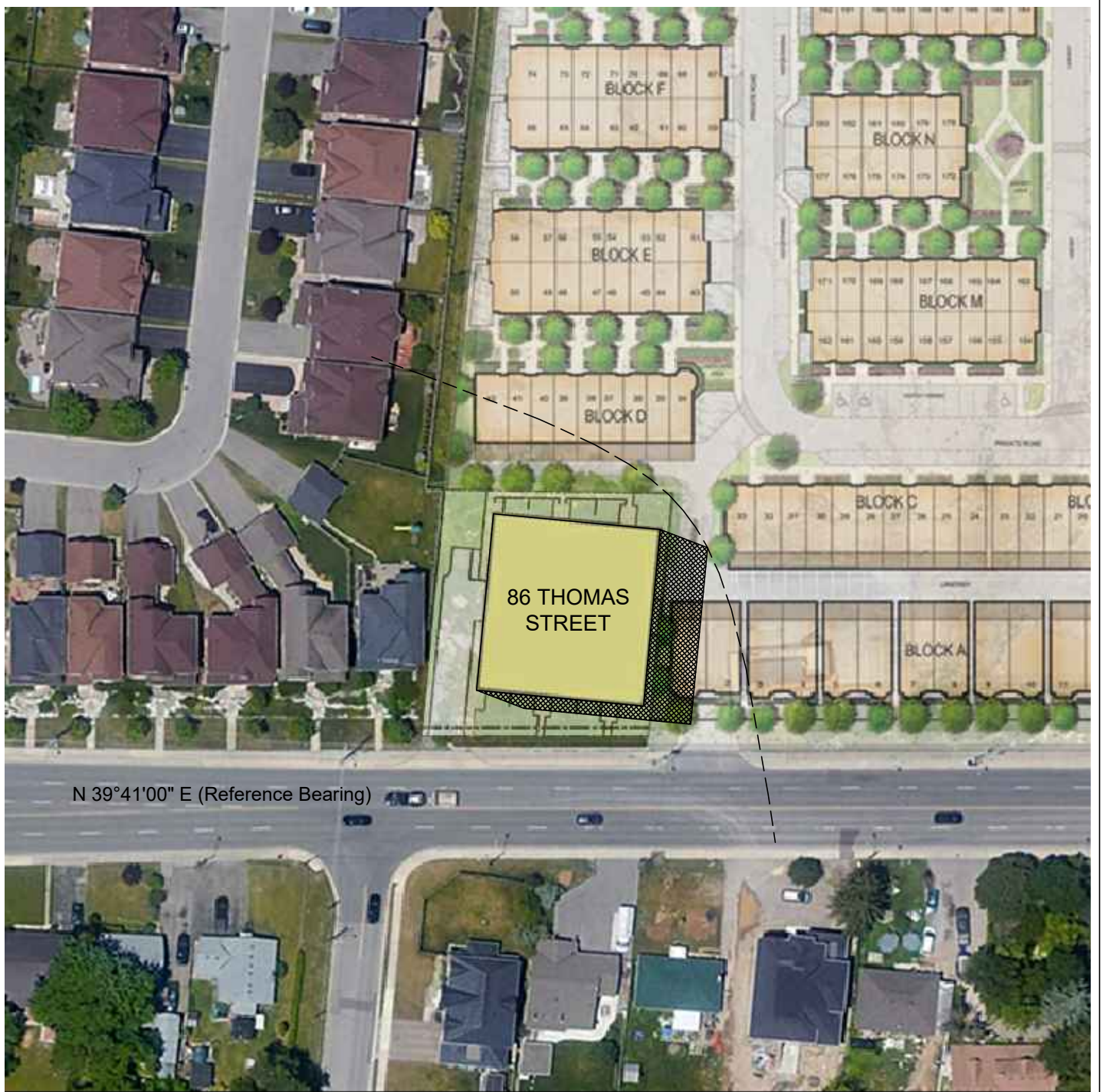
### Shadow diagram

June 21 14:20 EDT  
SN + 1 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

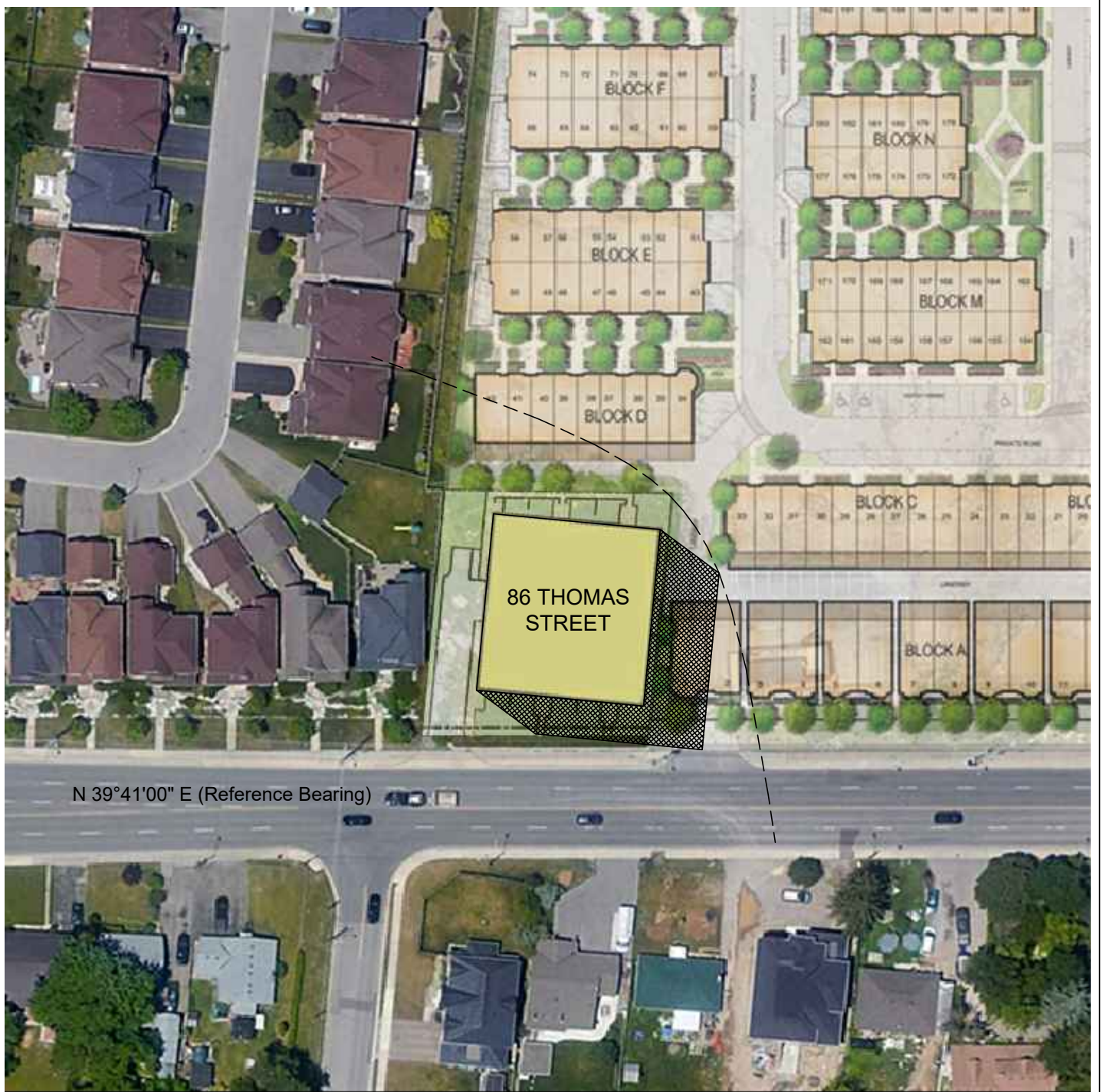
### Shadow diagram

June 21 15:20 EDT  
SN + 2 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

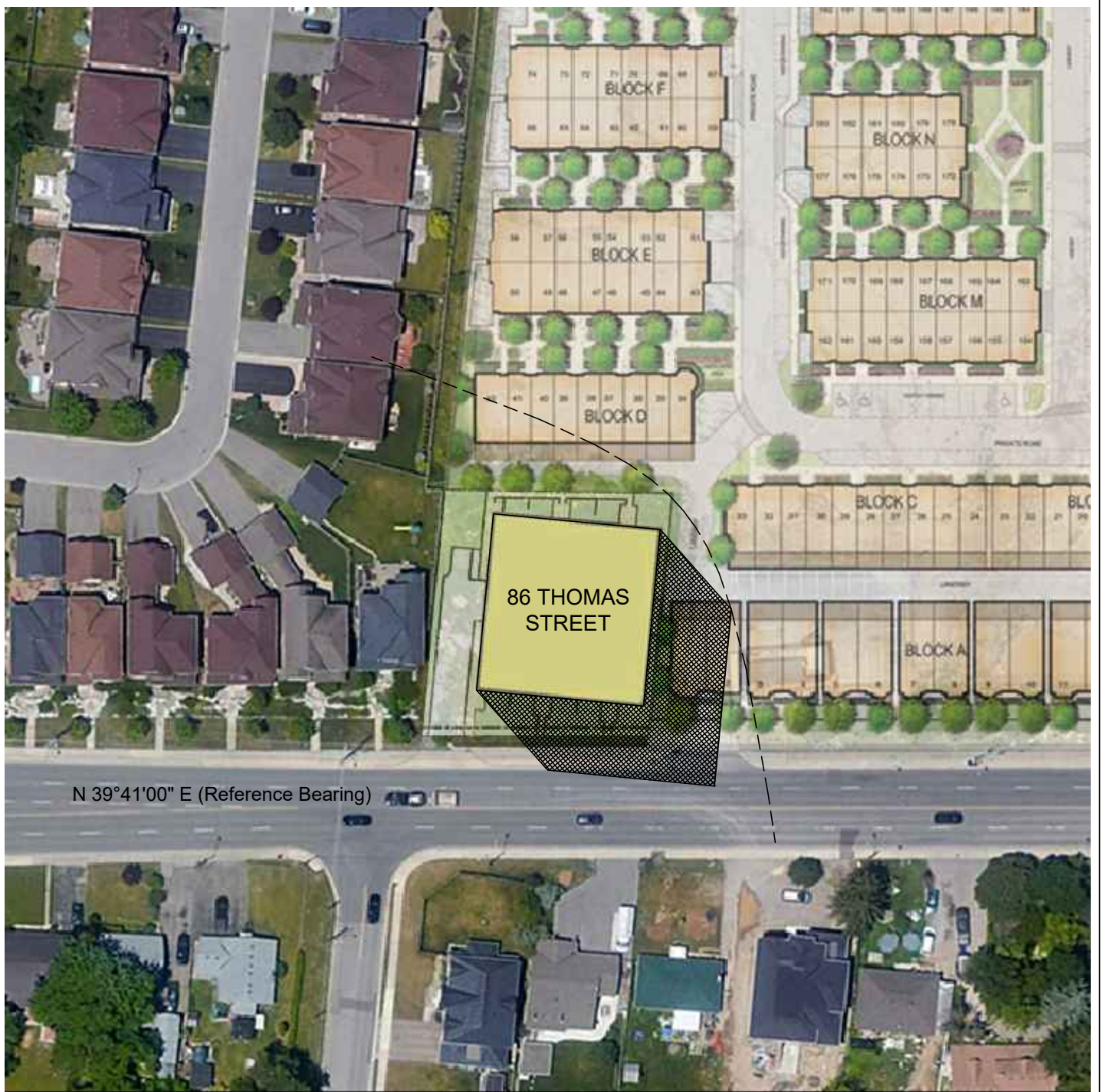
### Shadow diagram

June 21 16:20 EDT  
SN + 3 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

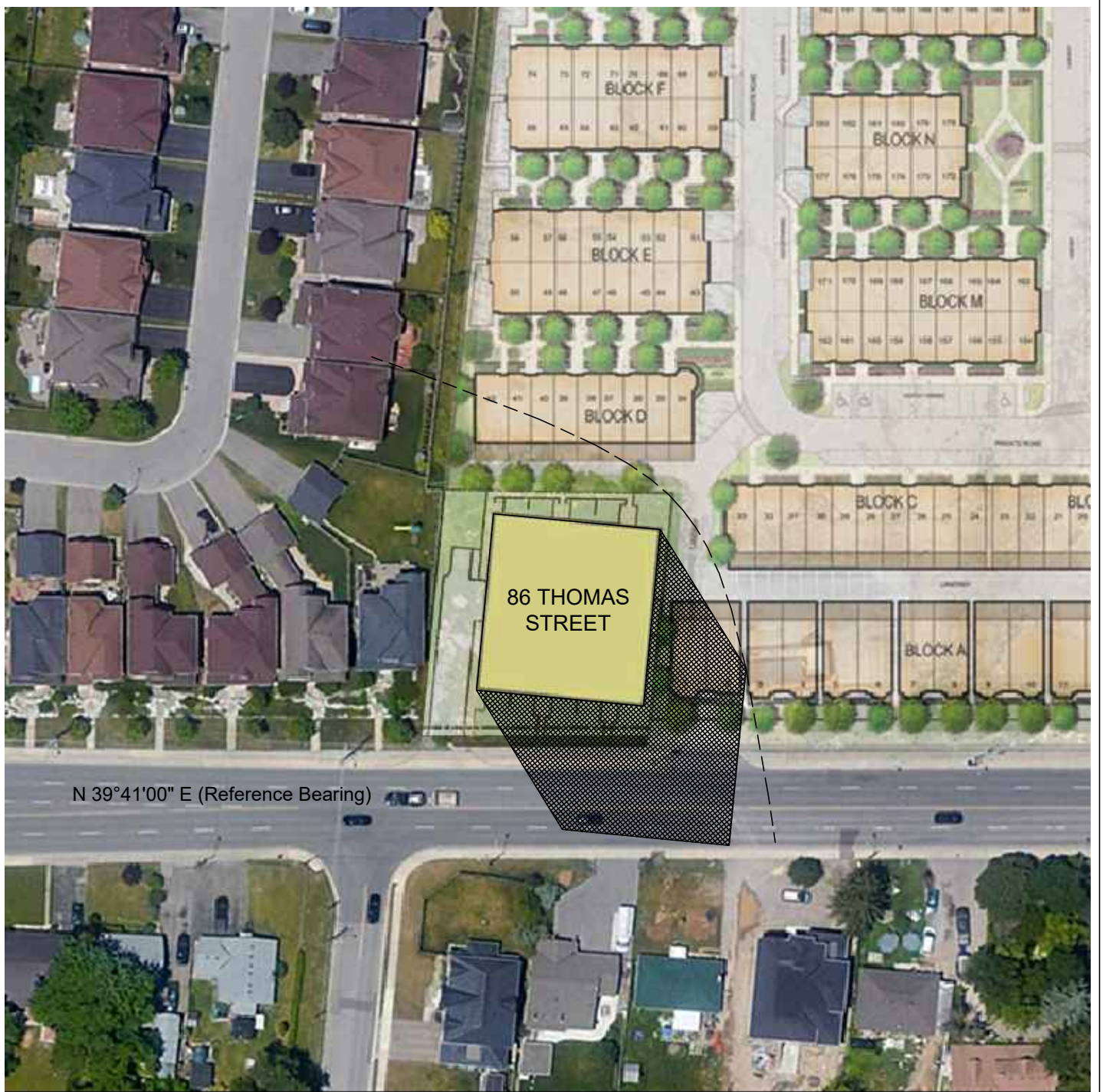
### Shadow diagram

June 21 17:20 EDT  
SN + 4 hr.

Scale: 1:1000





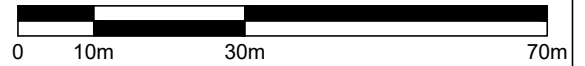


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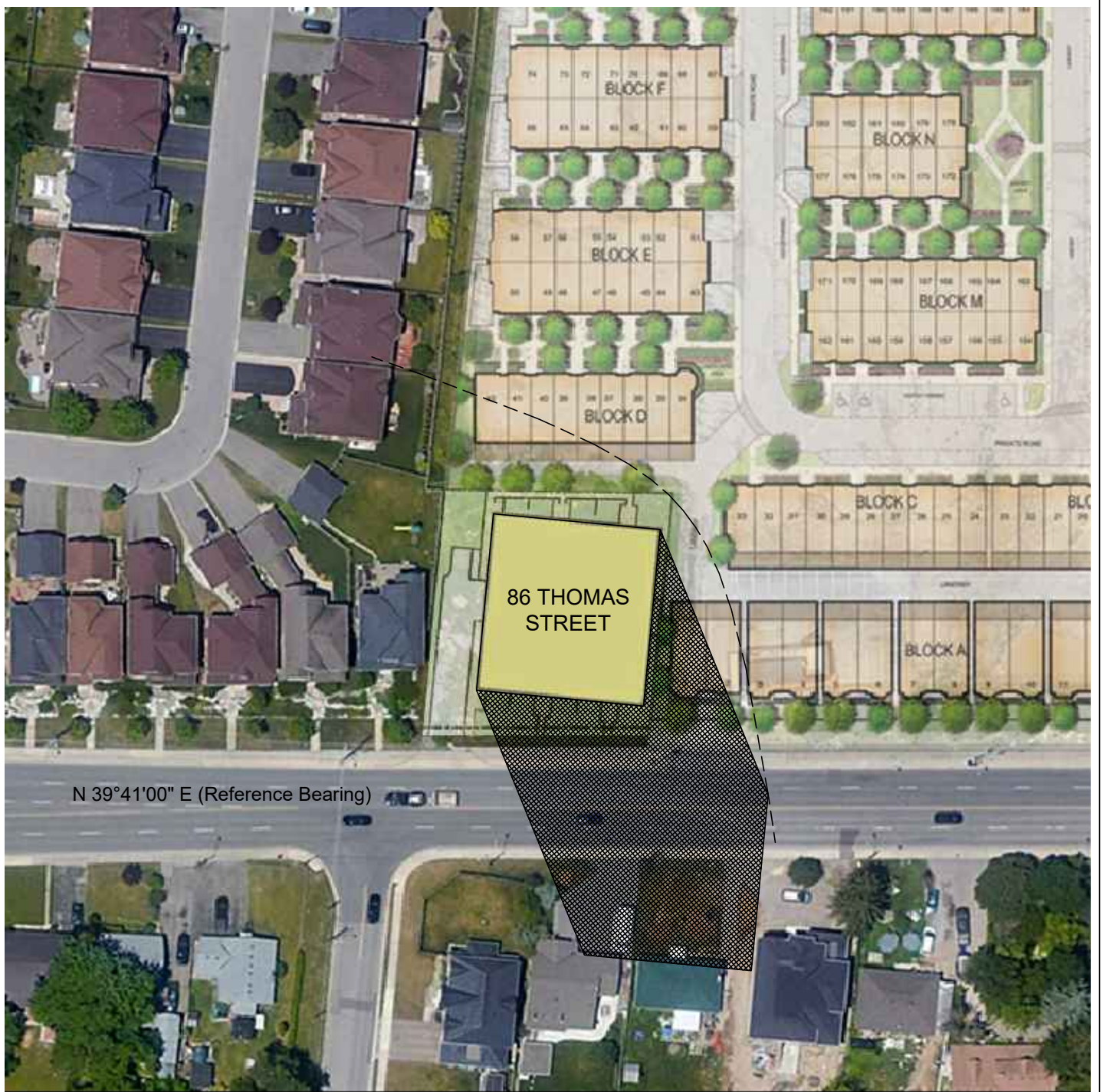
### Shadow diagram

June 21 18:20 EDT  
SN + 5 hr.

Scale: 1:1000



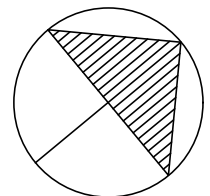
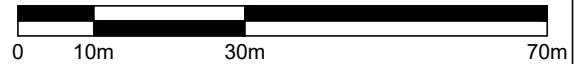




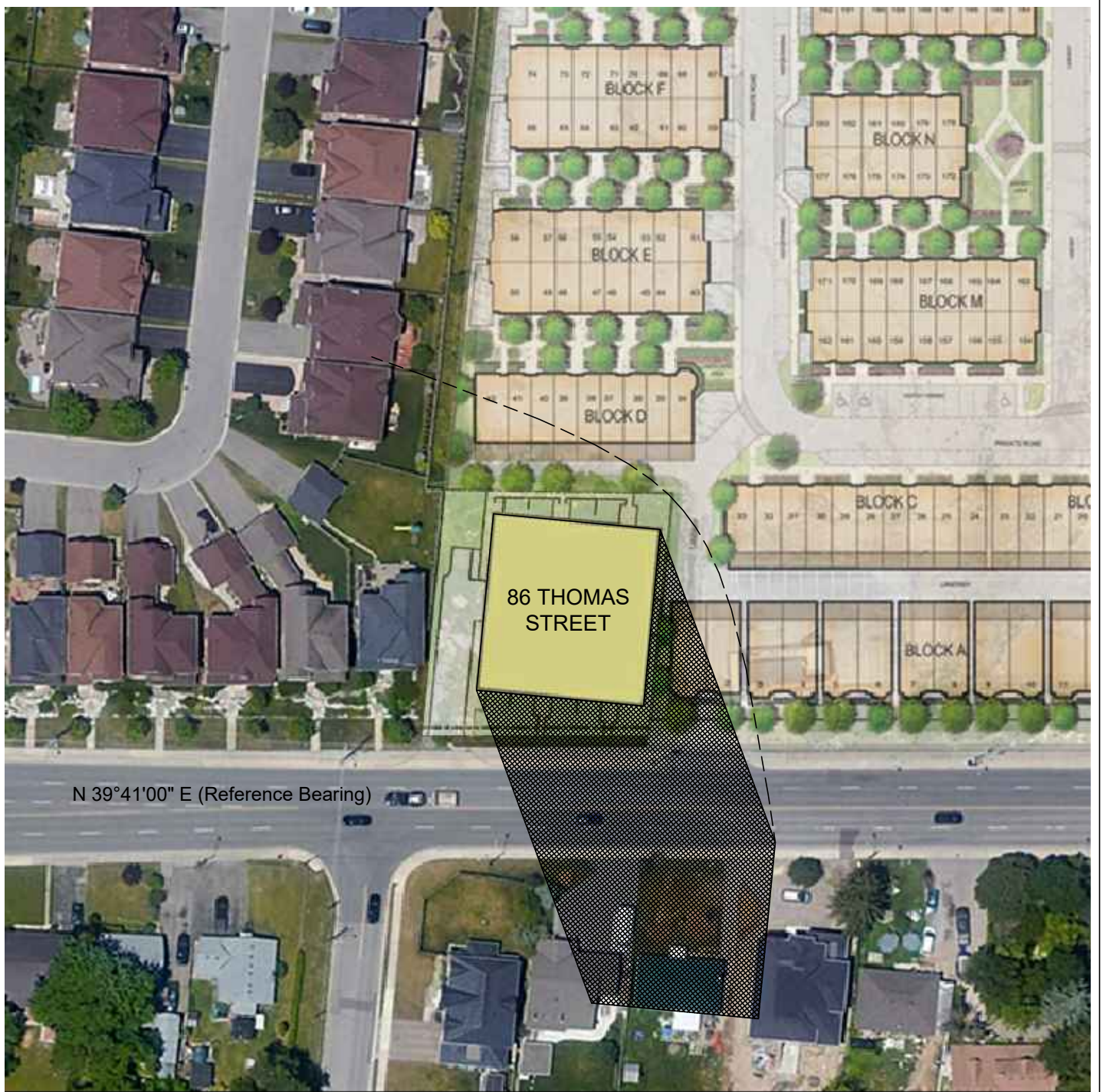
Shadow diagram

June 21 19:20 EDT  
 SN + 6 hr.

Scale: 1:1000



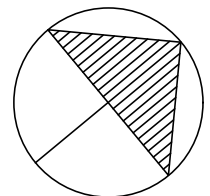
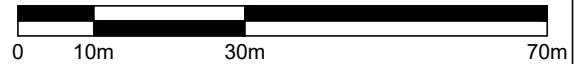




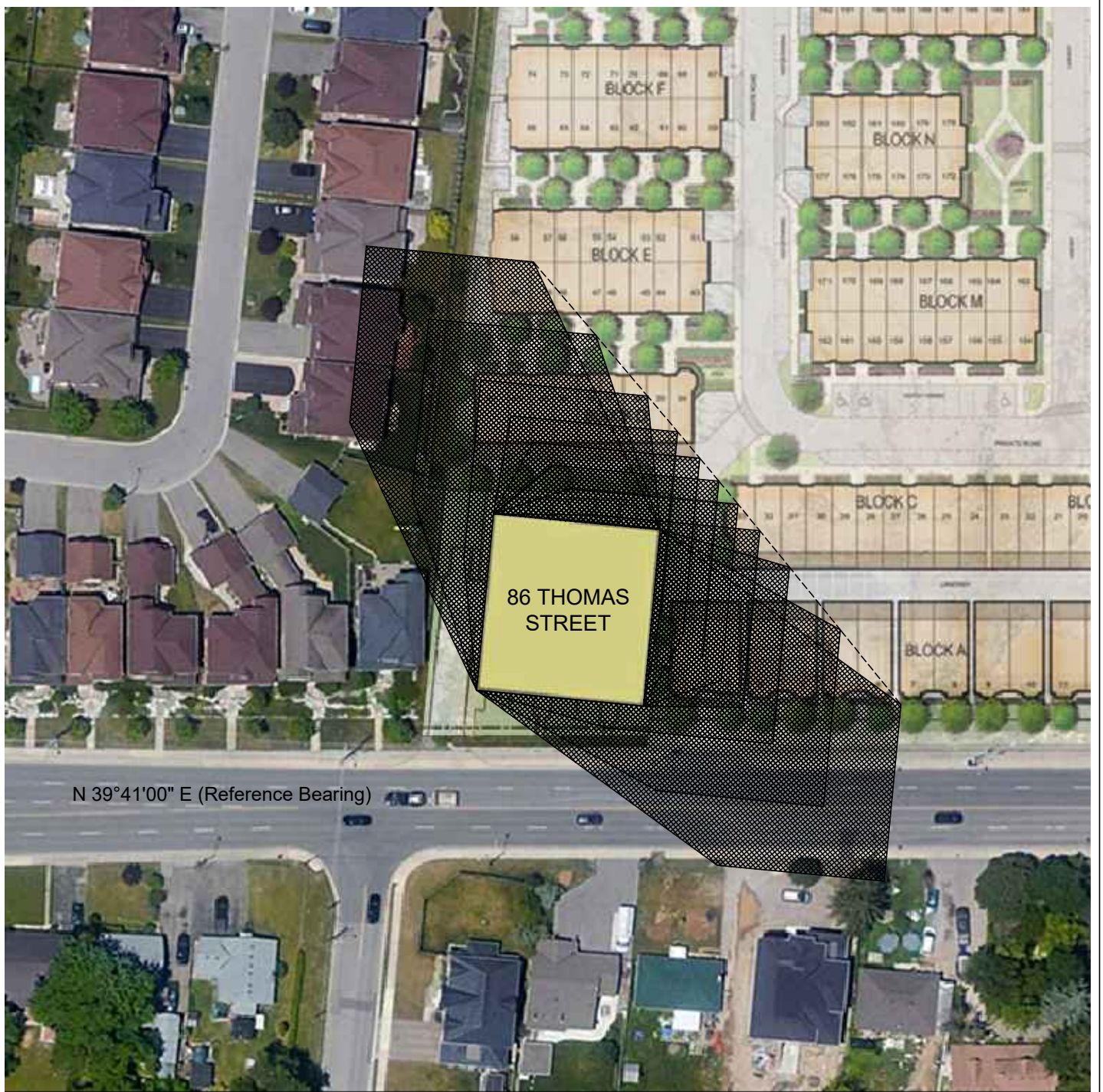
Shadow diagram

June 21 19:33 EDT  
 Set - 1.5 hr.

Scale: 1:1000





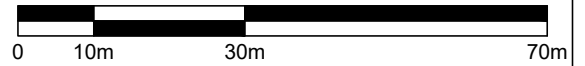


N 39°41'00" E (Reference Bearing)

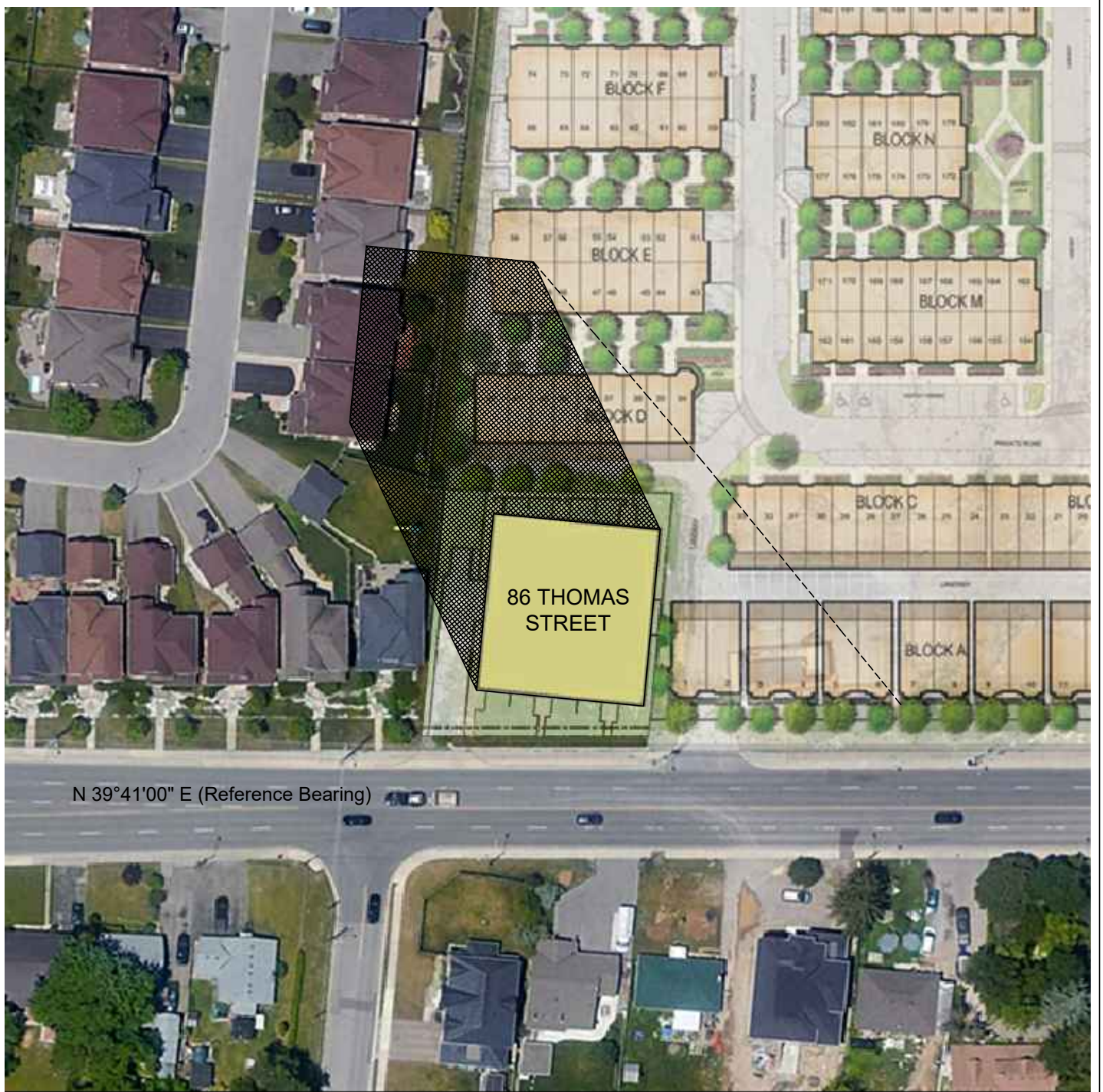
Shadow diagram

September 21 All hours

Scale: 1:1000

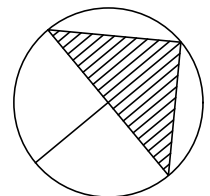




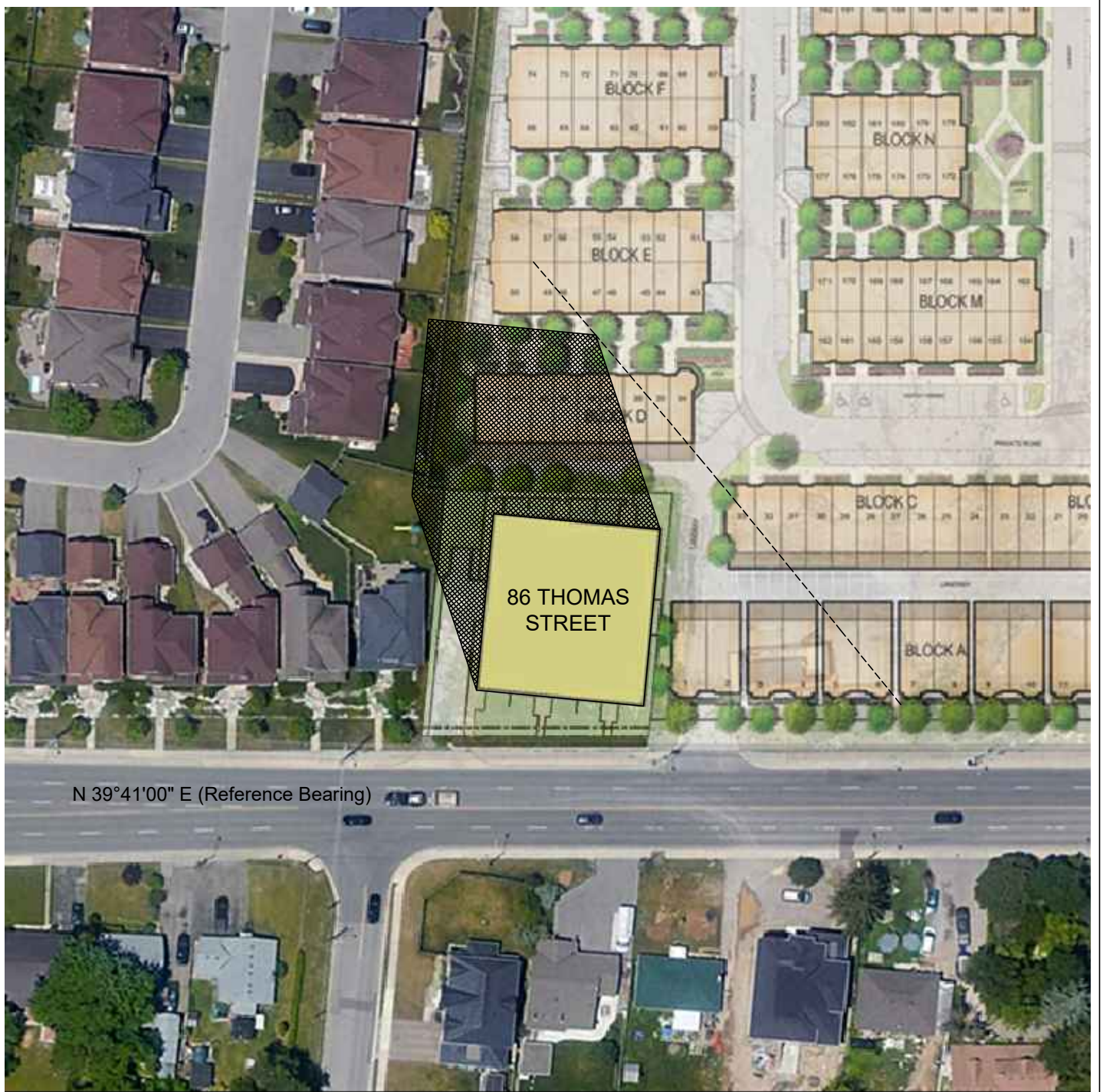


Shadow diagram

September 21 8:35 EDT  
 Rise + 1.5 hr.







N 39°41'00" E (Reference Bearing)

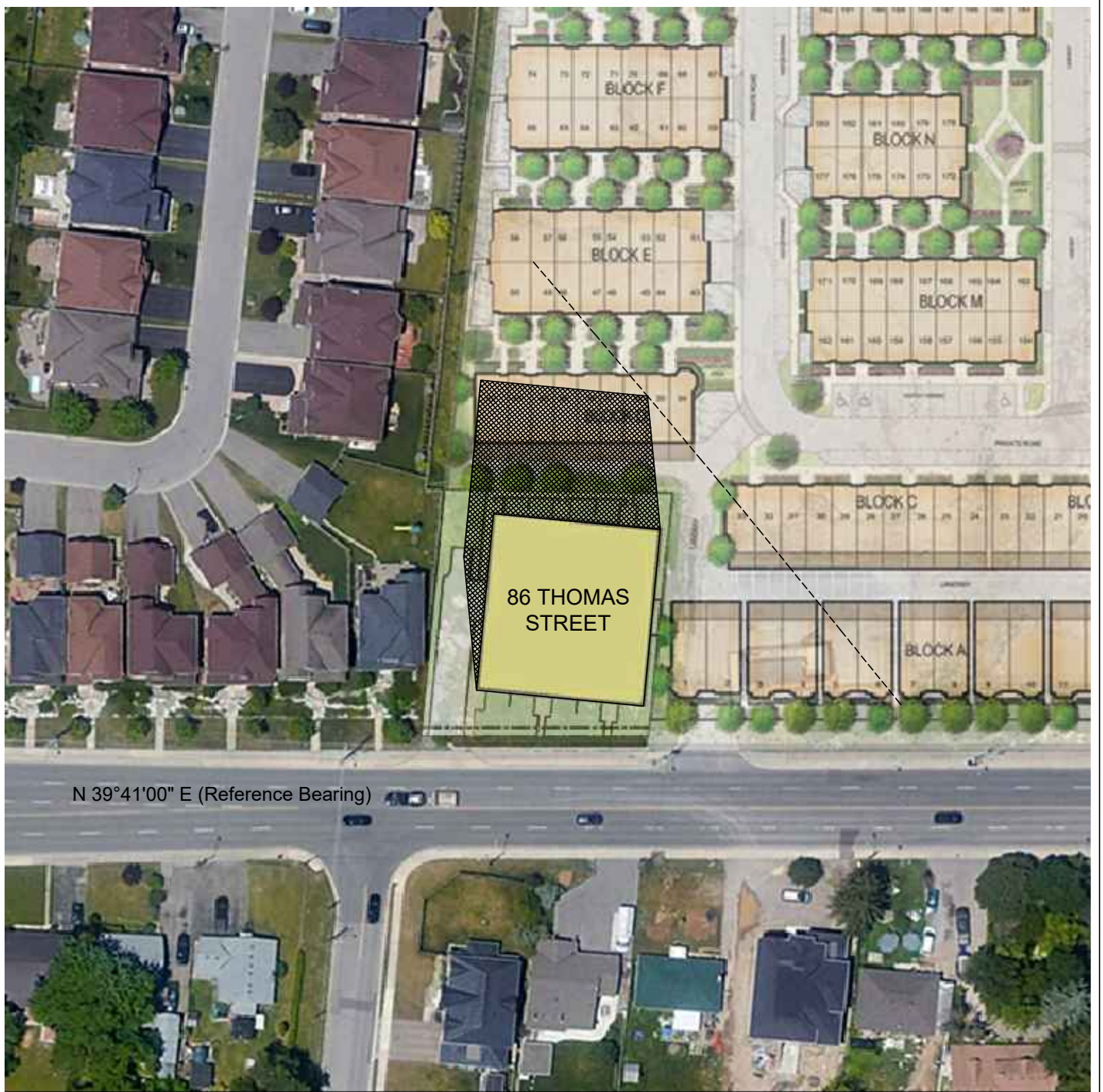
### Shadow diagram

September 21 9:12 EDT  
 SN - 4 hr.

Scale: 1:1000





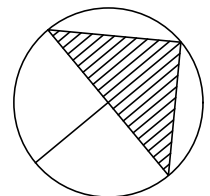


N 39°41'00" E (Reference Bearing)

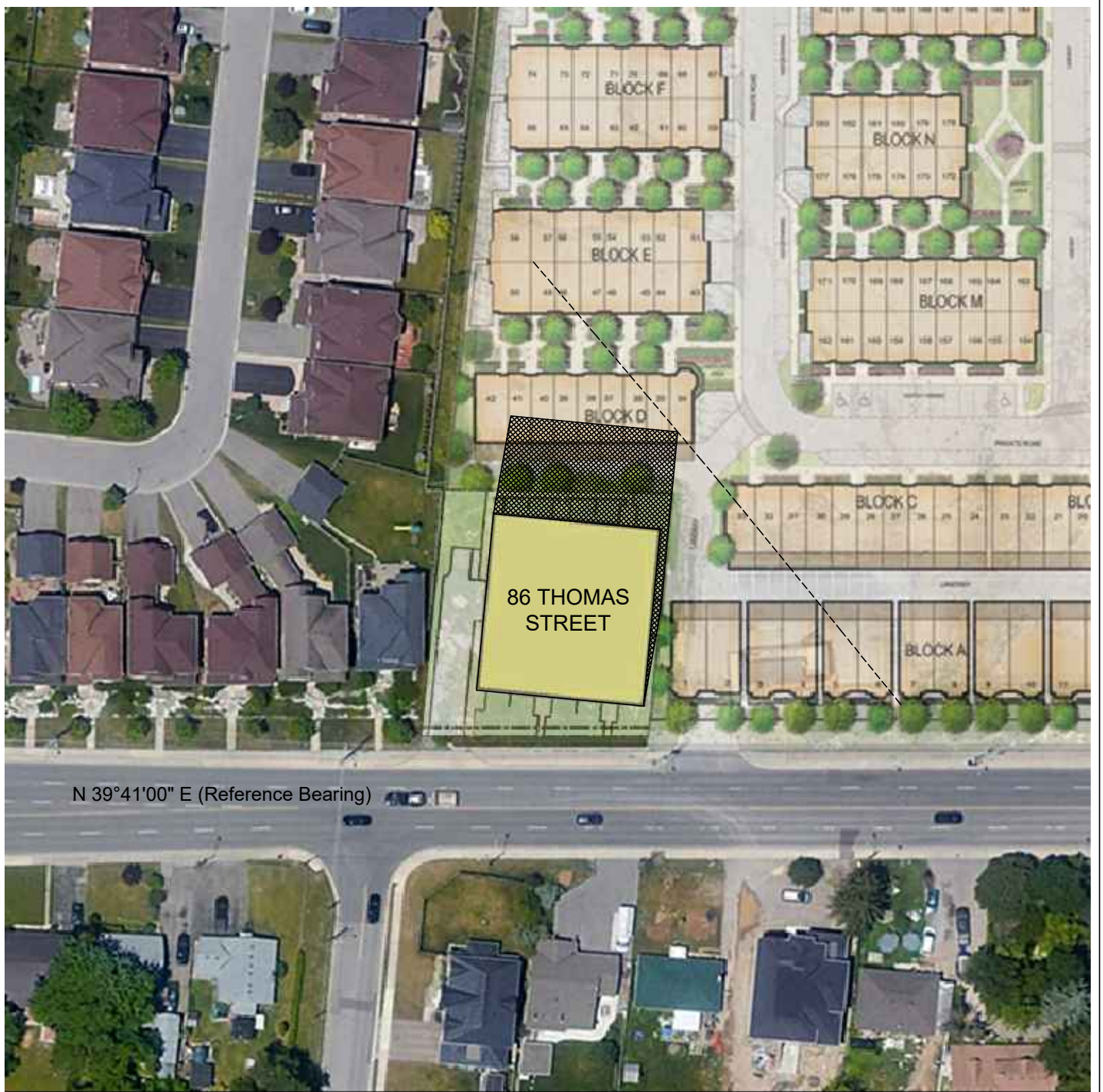
### Shadow diagram

September 21 10:12 EDT  
 SN - 3 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

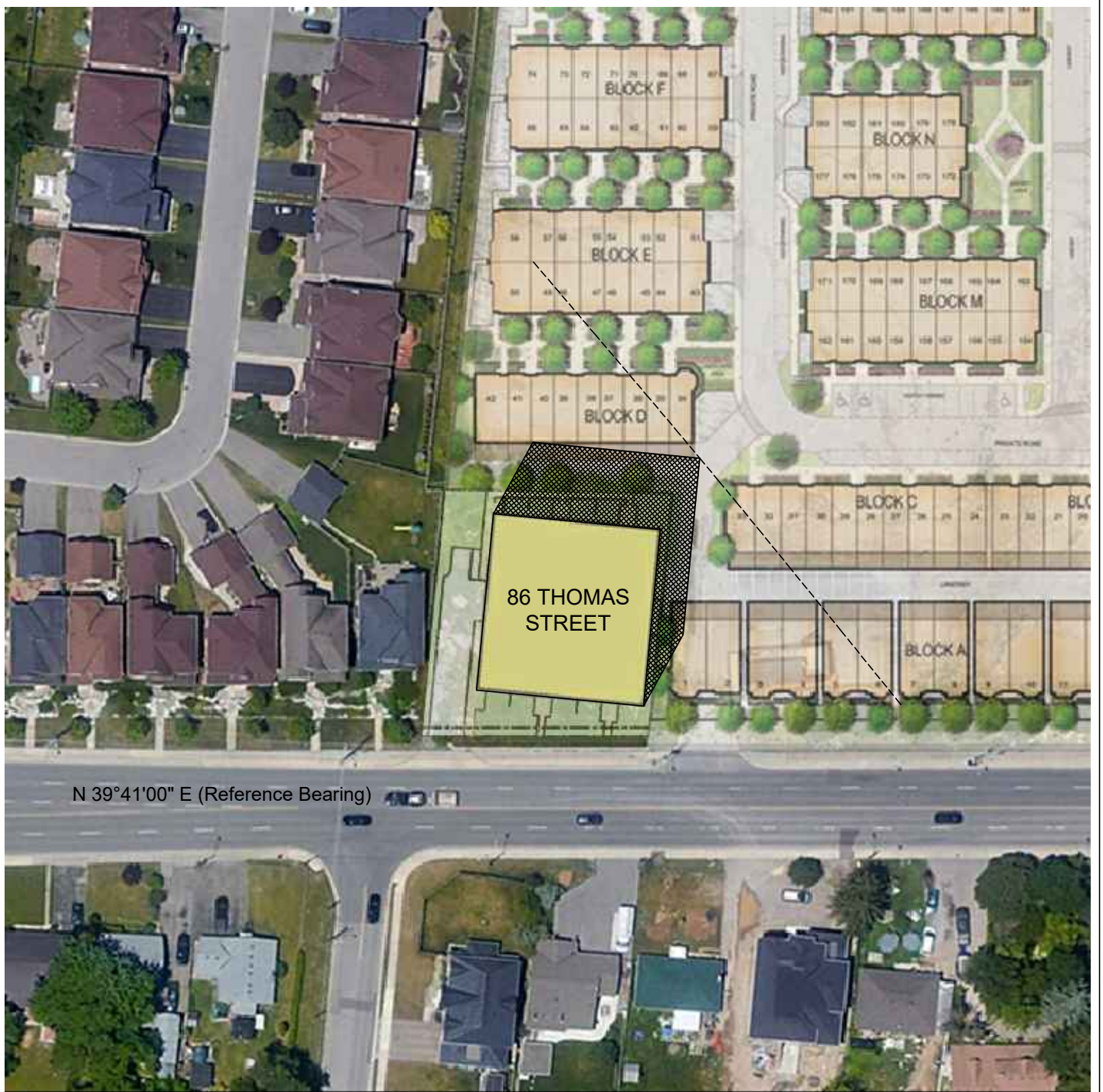
### Shadow diagram

September 21 11:12 EDT  
SN - 2 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

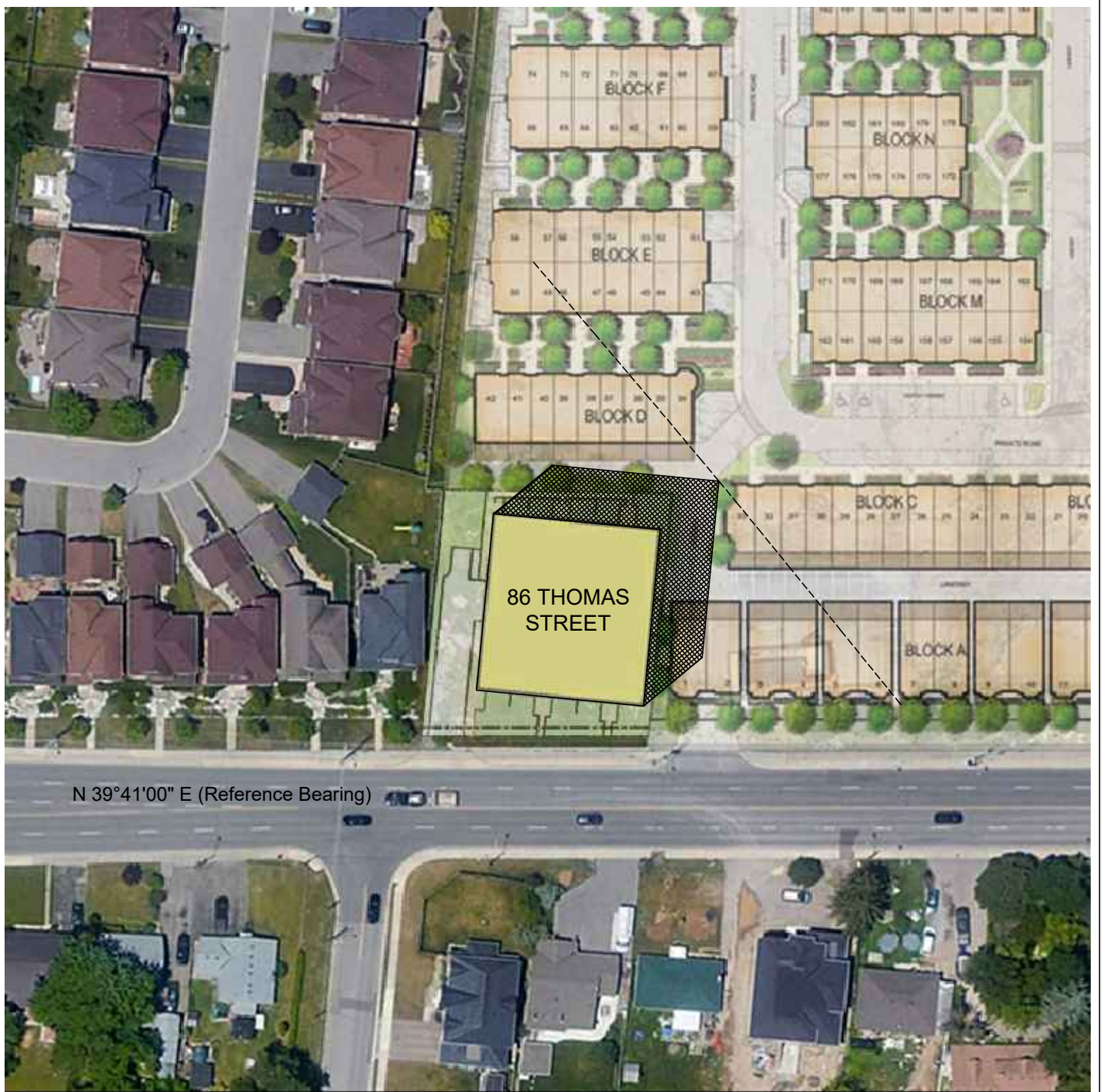
### Shadow diagram

September 21 12:12 EDT  
 SN - 1 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

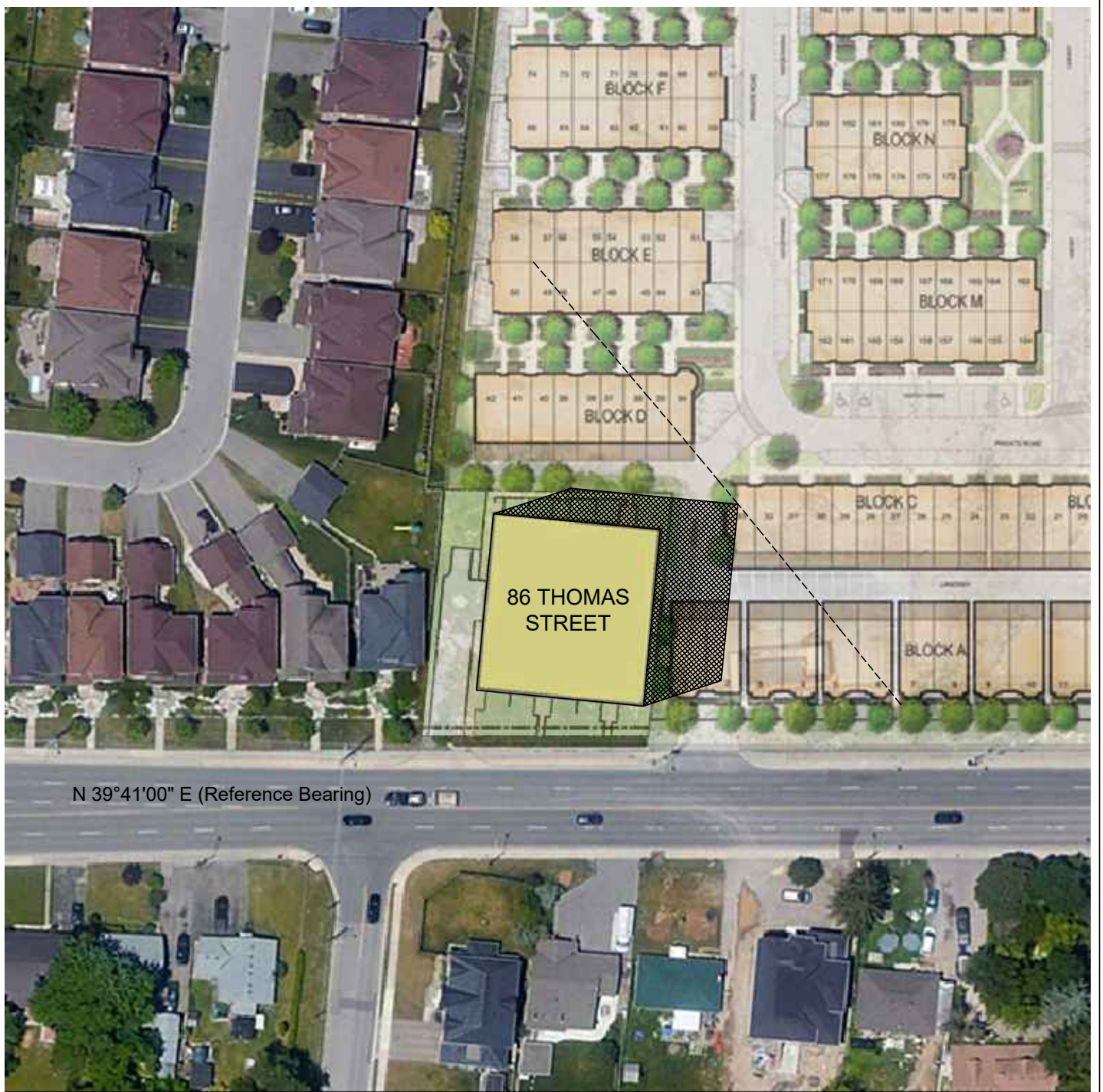
### Shadow diagram

September 21 13:12 EDT  
Solar Noon (SN)

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

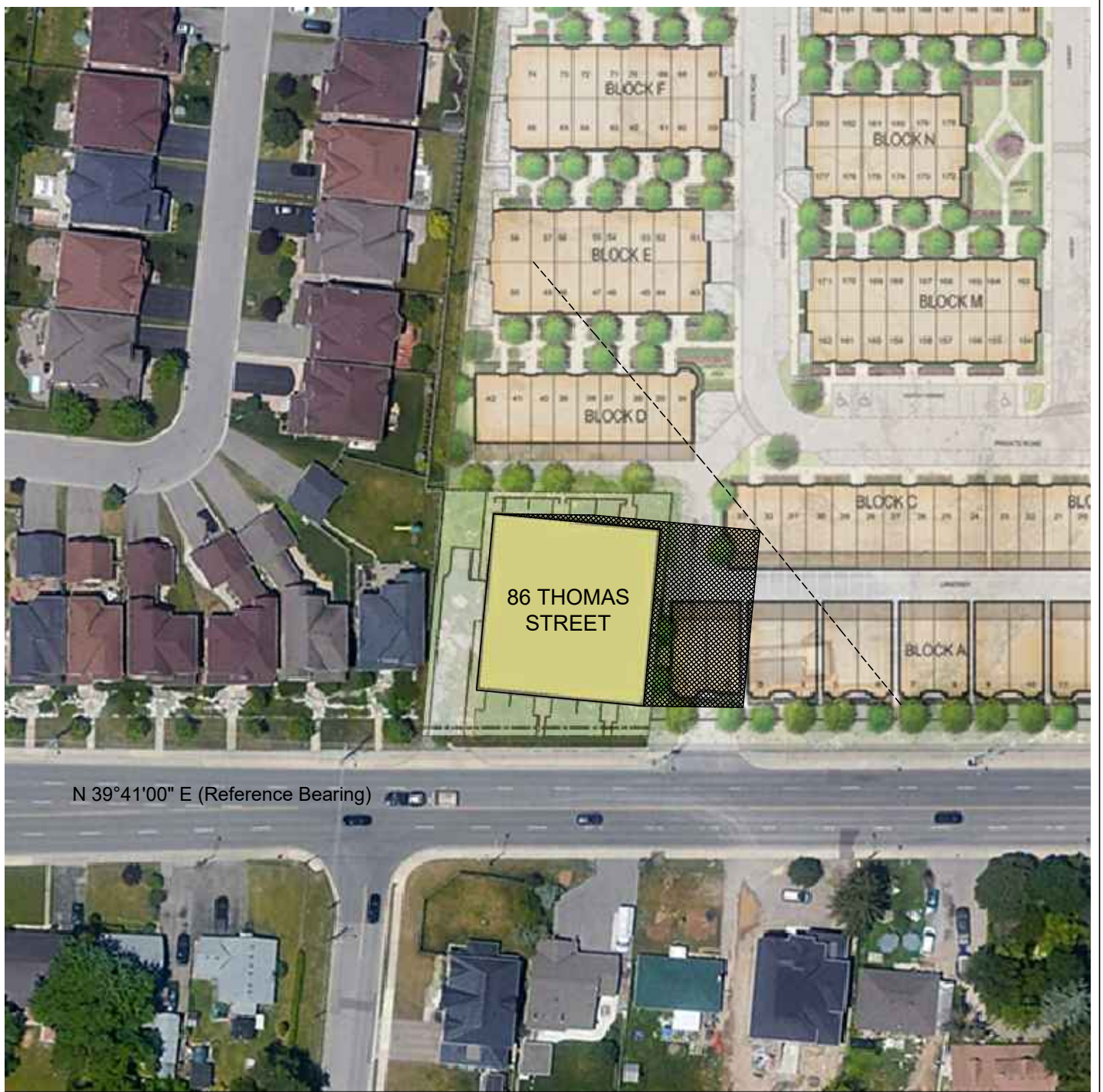
### Shadow diagram

September 21 14:12 EDT  
 SN + 1 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

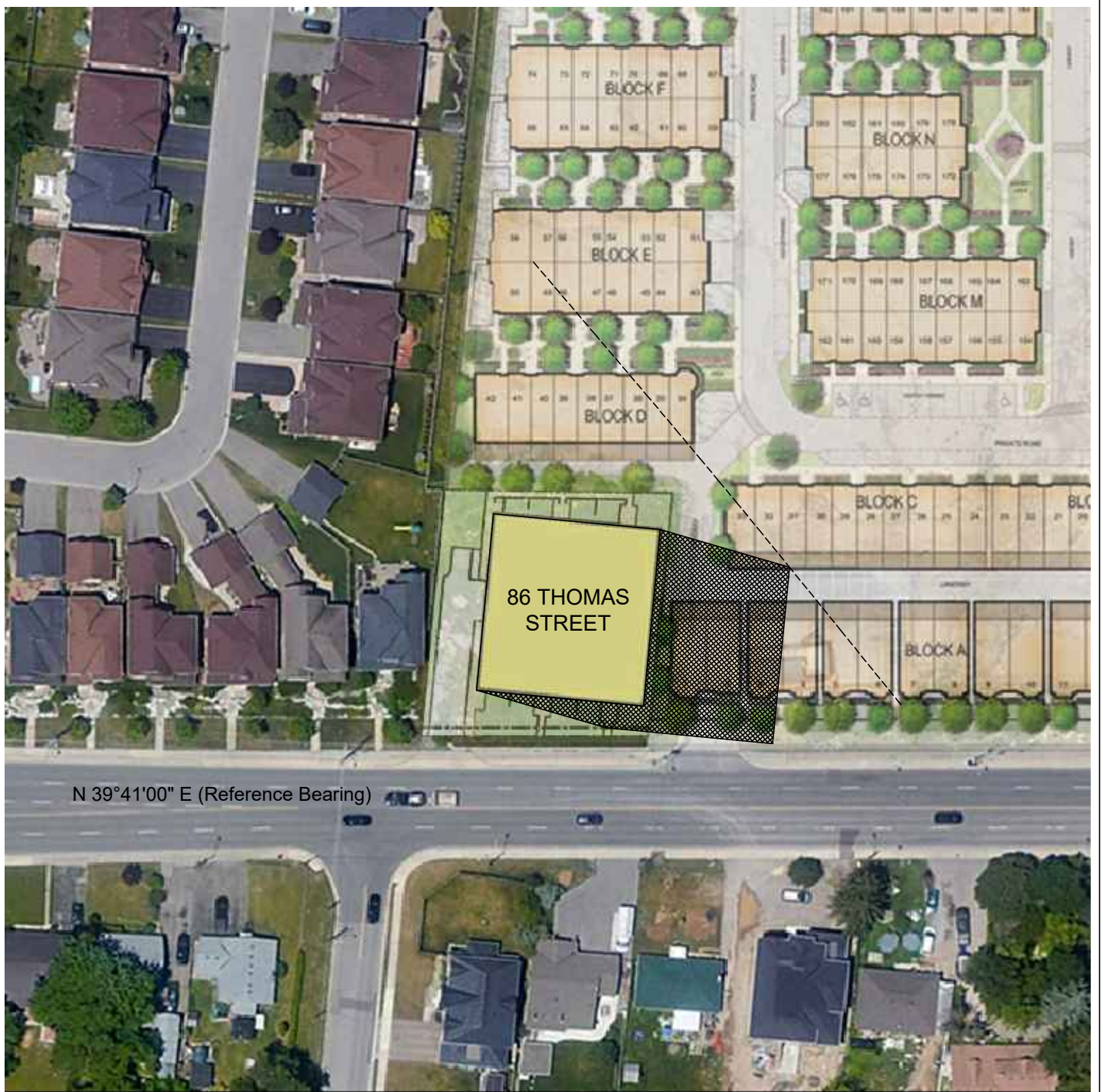
### Shadow diagram

September 21 15:12 EDT  
 SN + 2 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

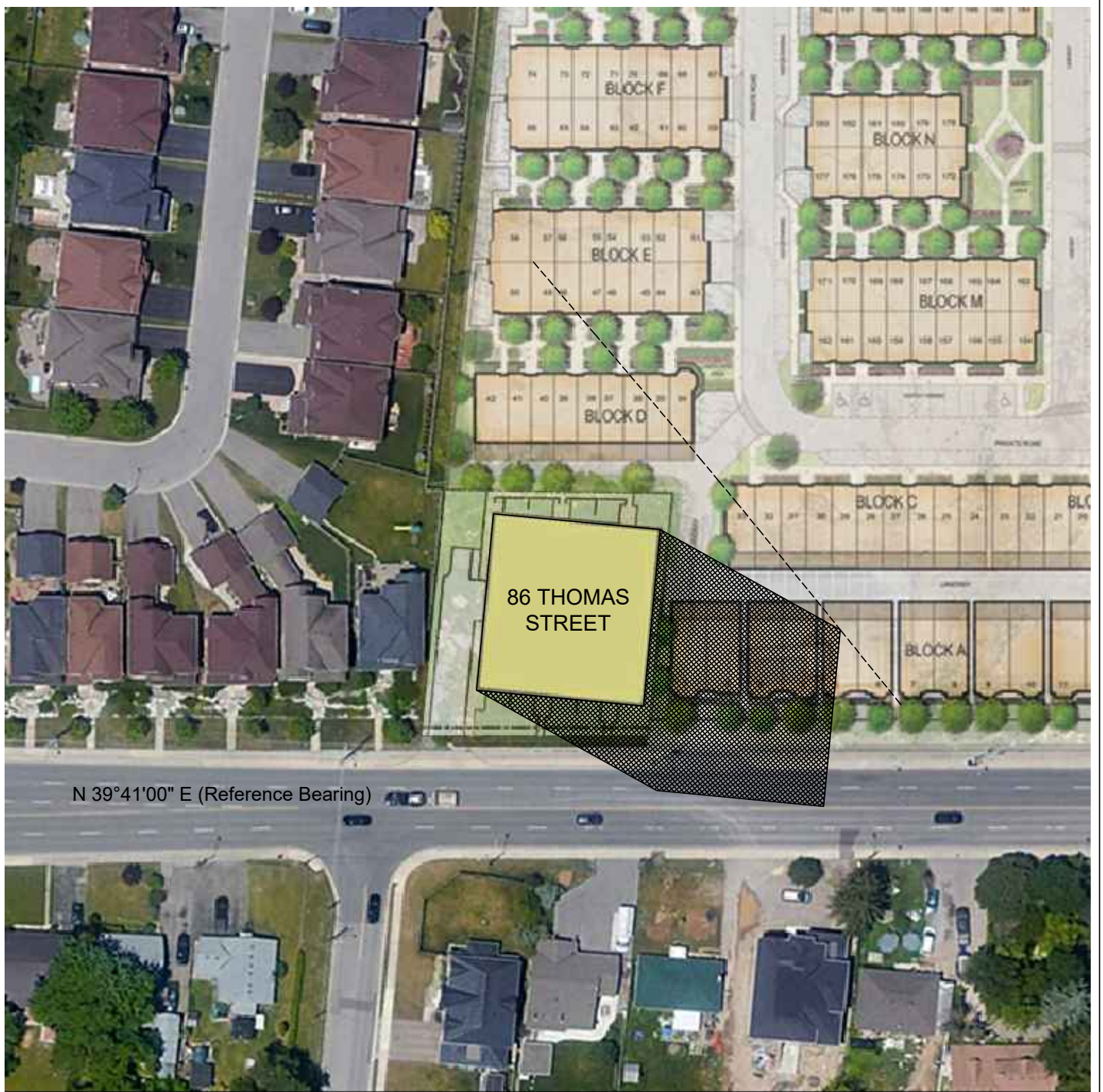
### Shadow diagram

September 21 16:12 EDT  
 SN + 3 hr.

Scale: 1:1000





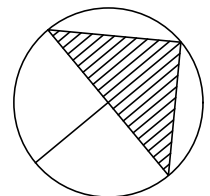


N 39°41'00" E (Reference Bearing)

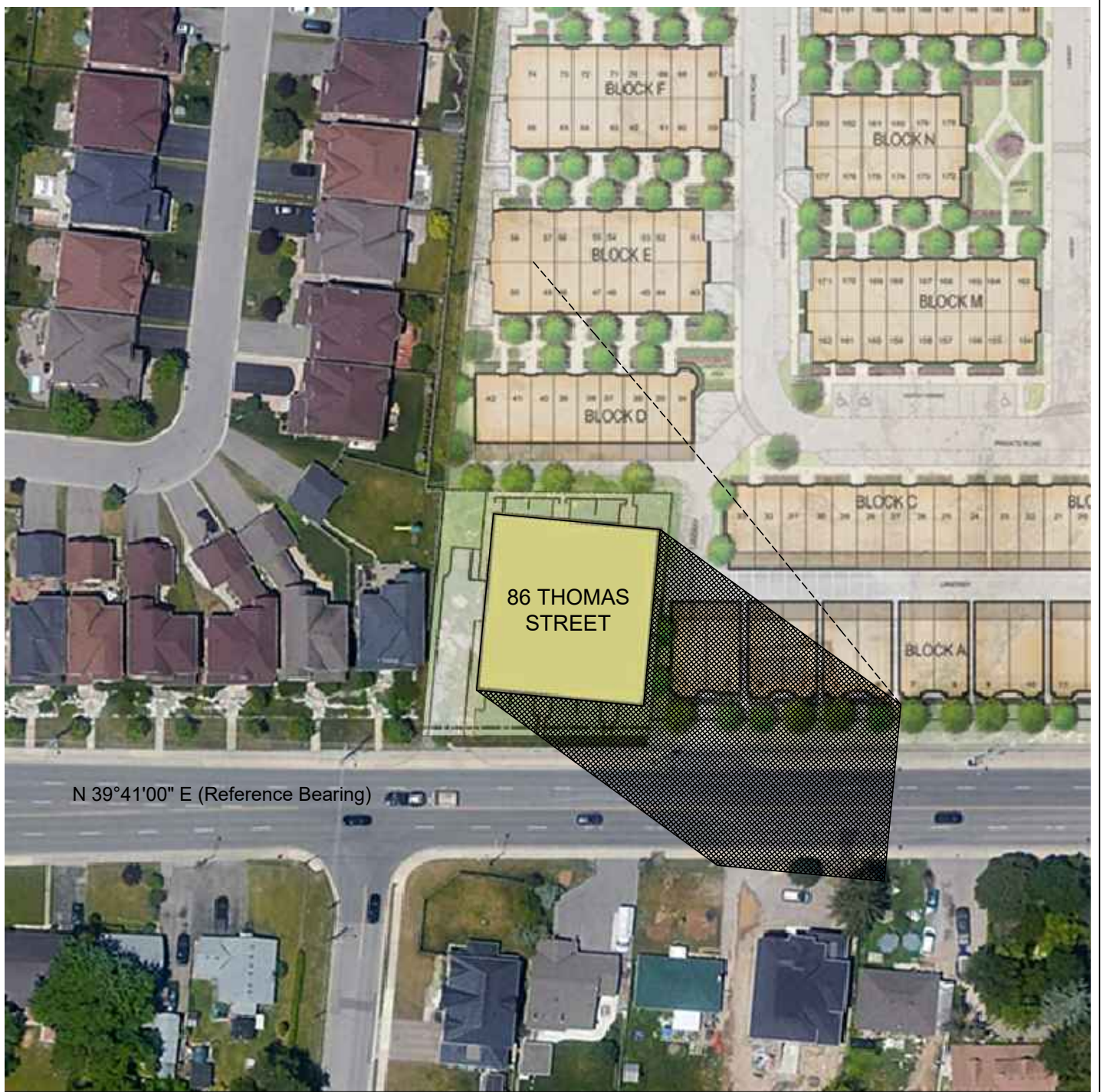
### Shadow diagram

September 21 17:12 EDT  
 SN + 4 hr.

Scale: 1:1000





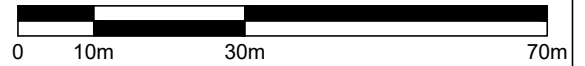


N 39°41'00" E (Reference Bearing)

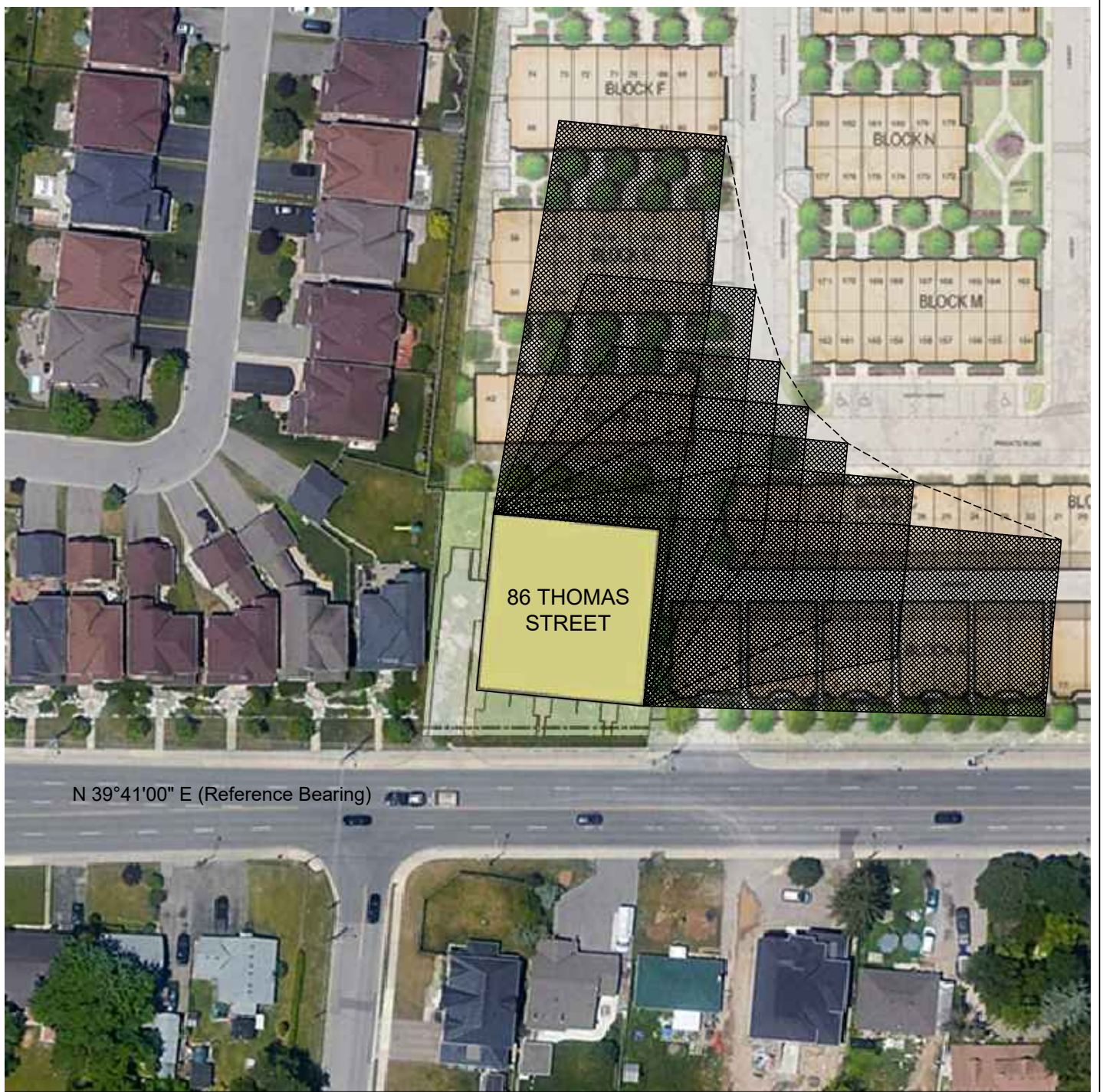
### Shadow diagram

September 21 17:48 EDT  
Set - 1.5 hr.

Scale: 1:1000



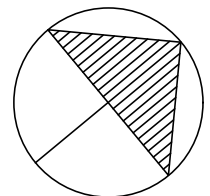
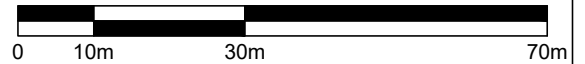




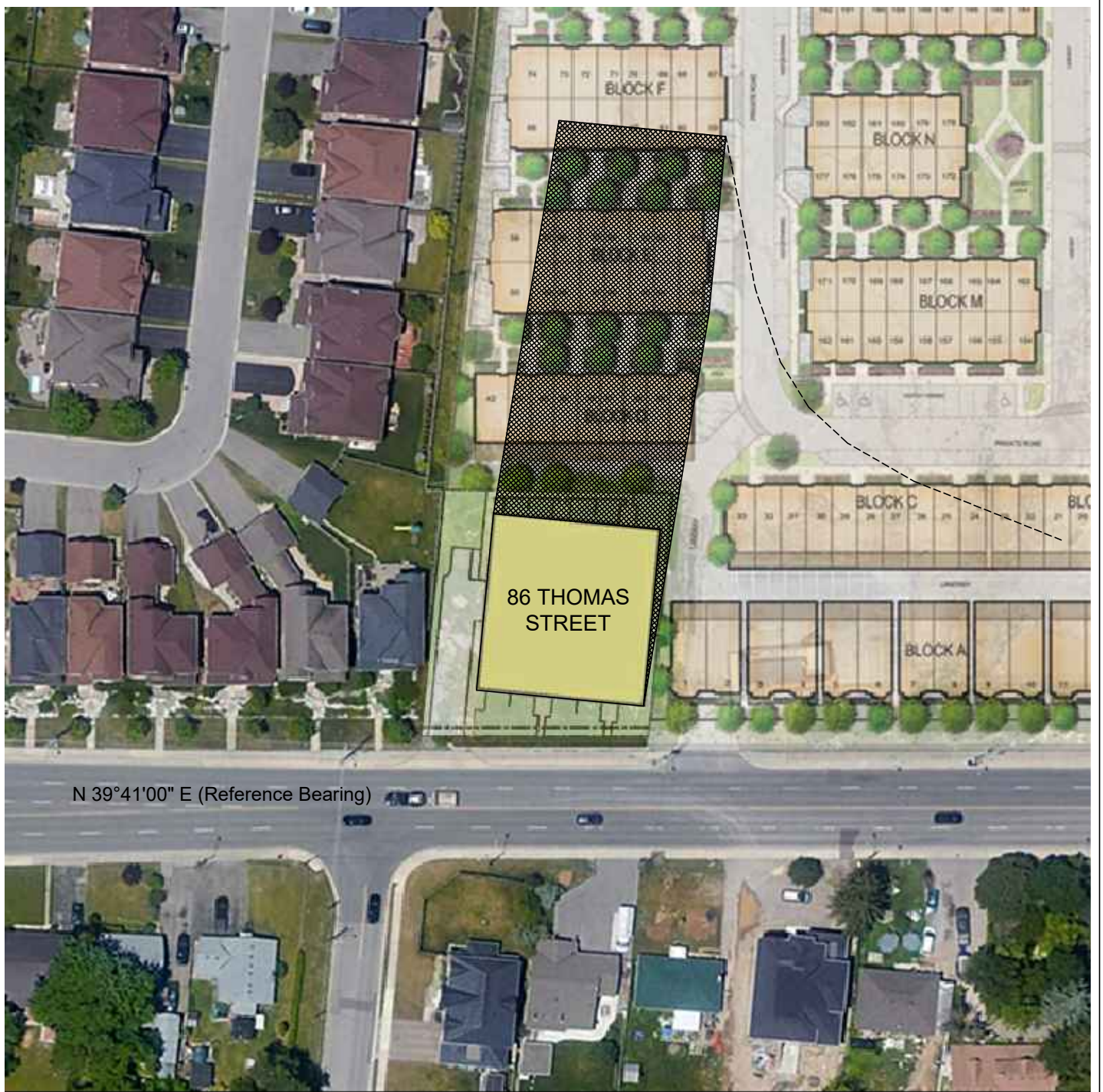
Shadow diagram

December 21 All hours

Scale: 1:1000





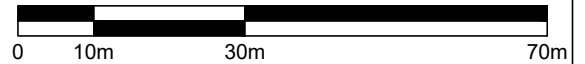


N 39°41'00" E (Reference Bearing)

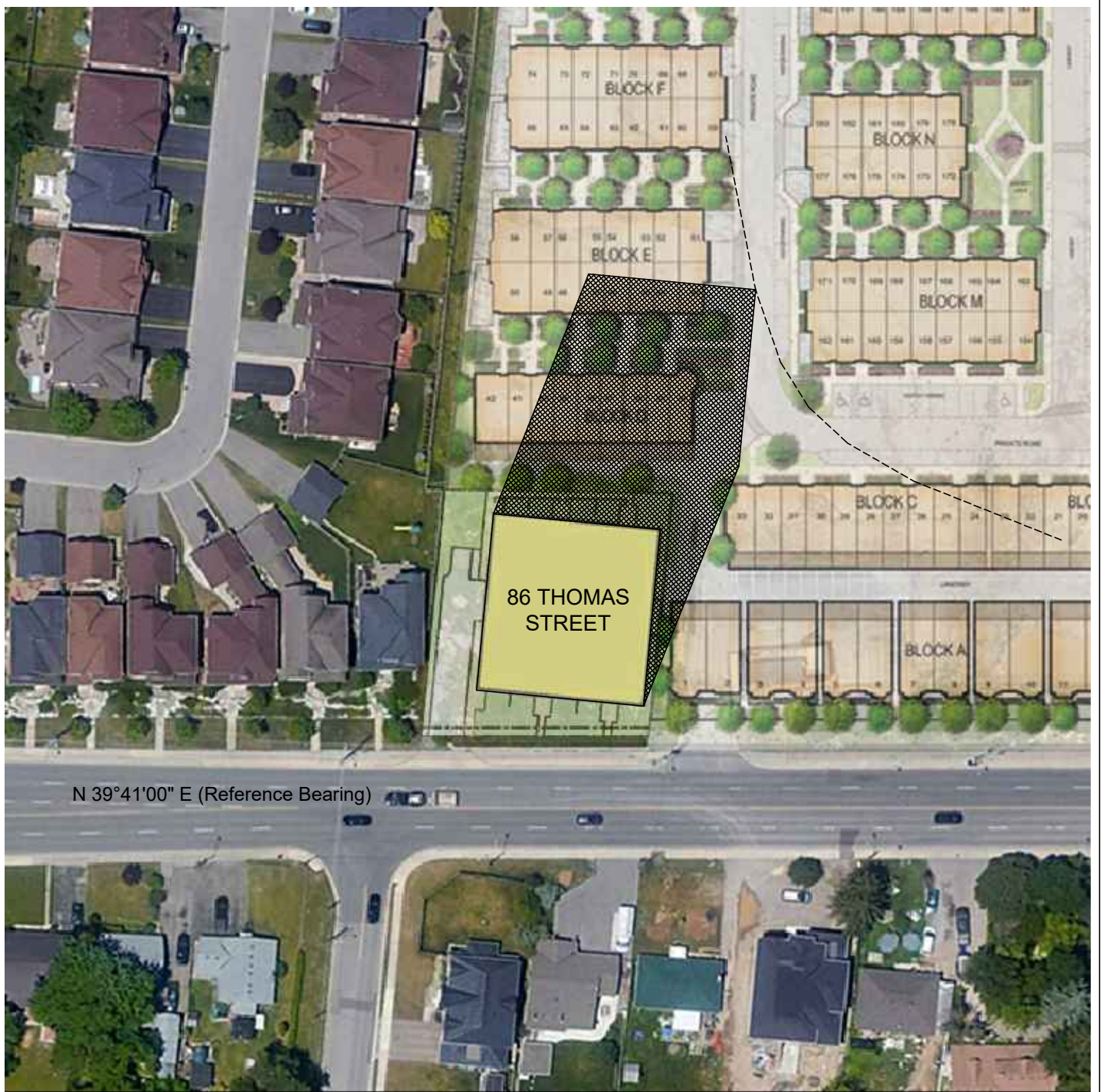
### Shadow diagram

December 21 9:19 EDT  
Rise + 1.5 hr.

Scale: 1:1000



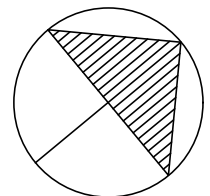
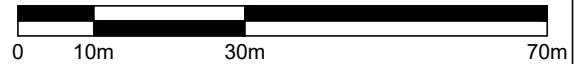




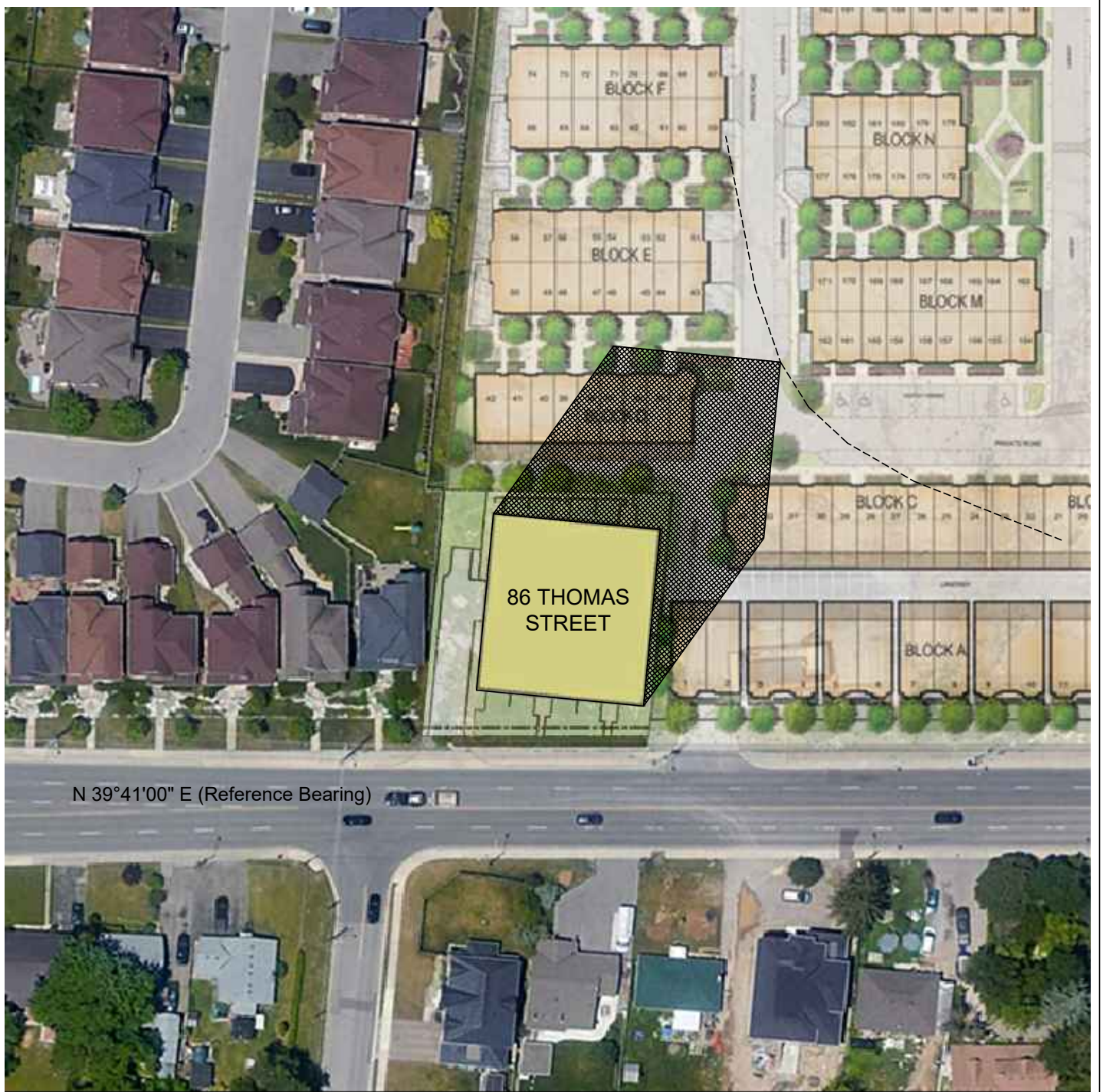
Shadow diagram

December 21 10:17 EDT  
SN - 2 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

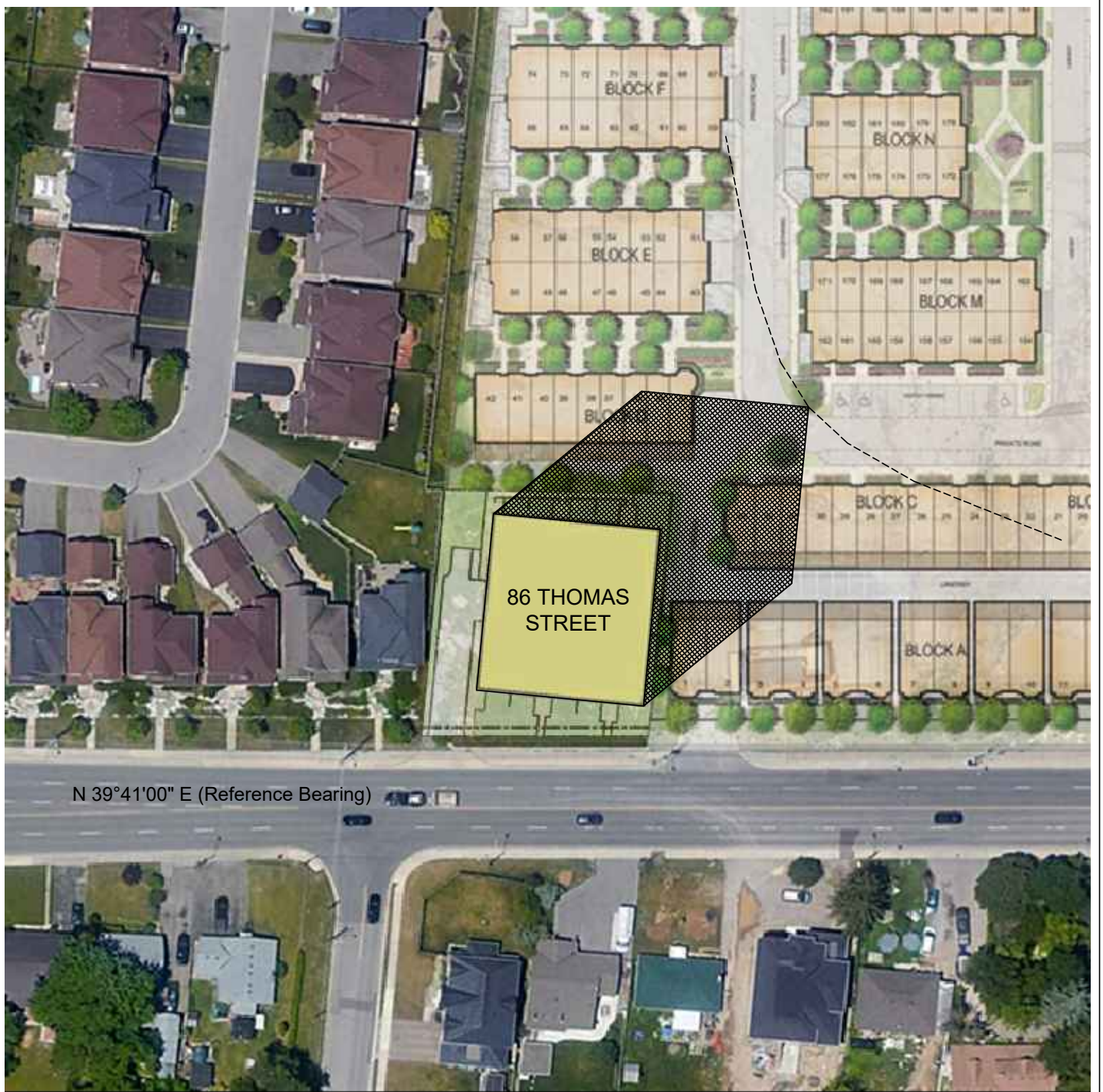
### Shadow diagram

December 21 11:17 EDT  
 SN - 1 hr.

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

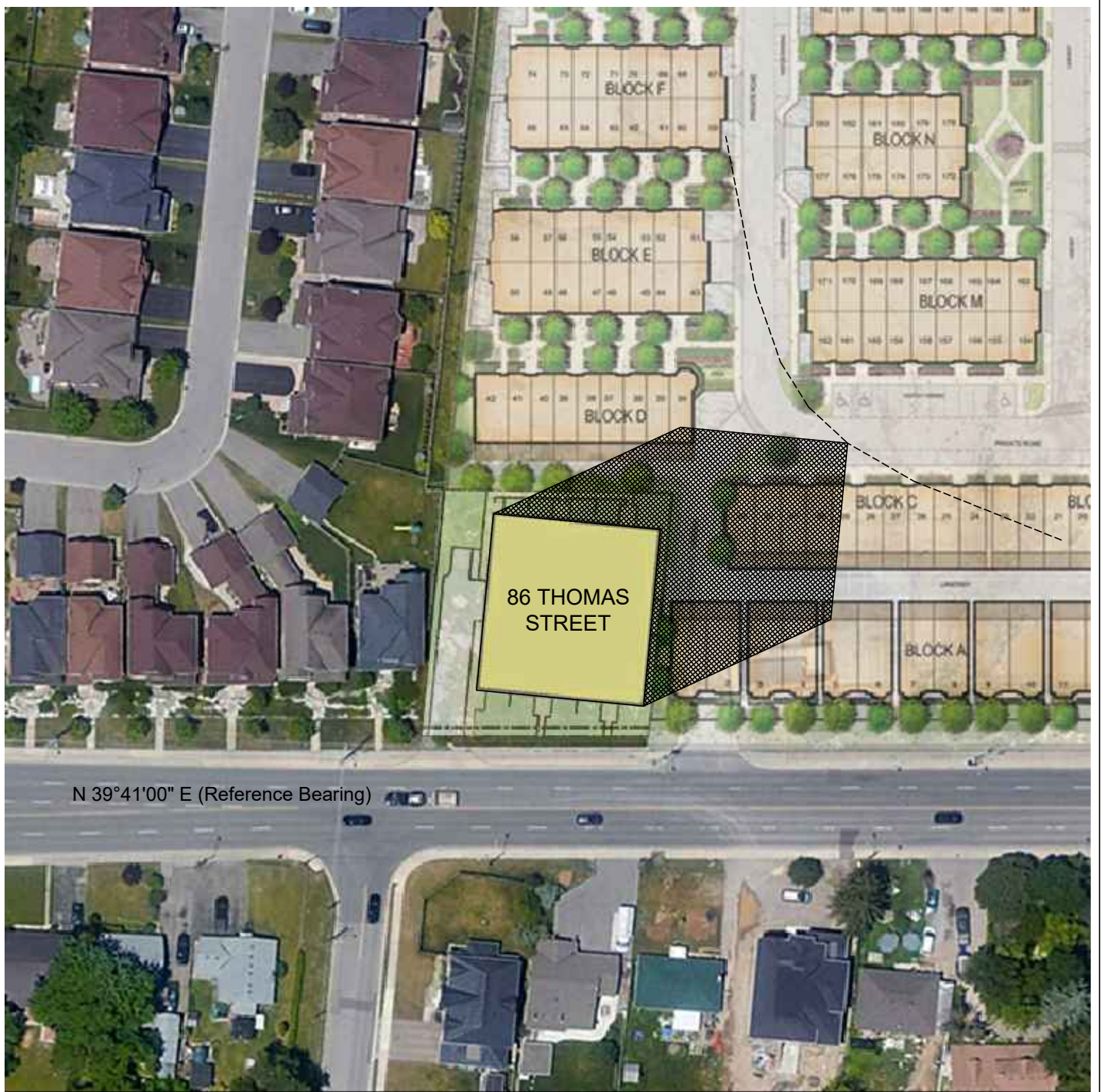
### Shadow diagram

December 21 12:17 EDT  
Solar Noon (SN)

Scale: 1:1000







N 39°41'00" E (Reference Bearing)

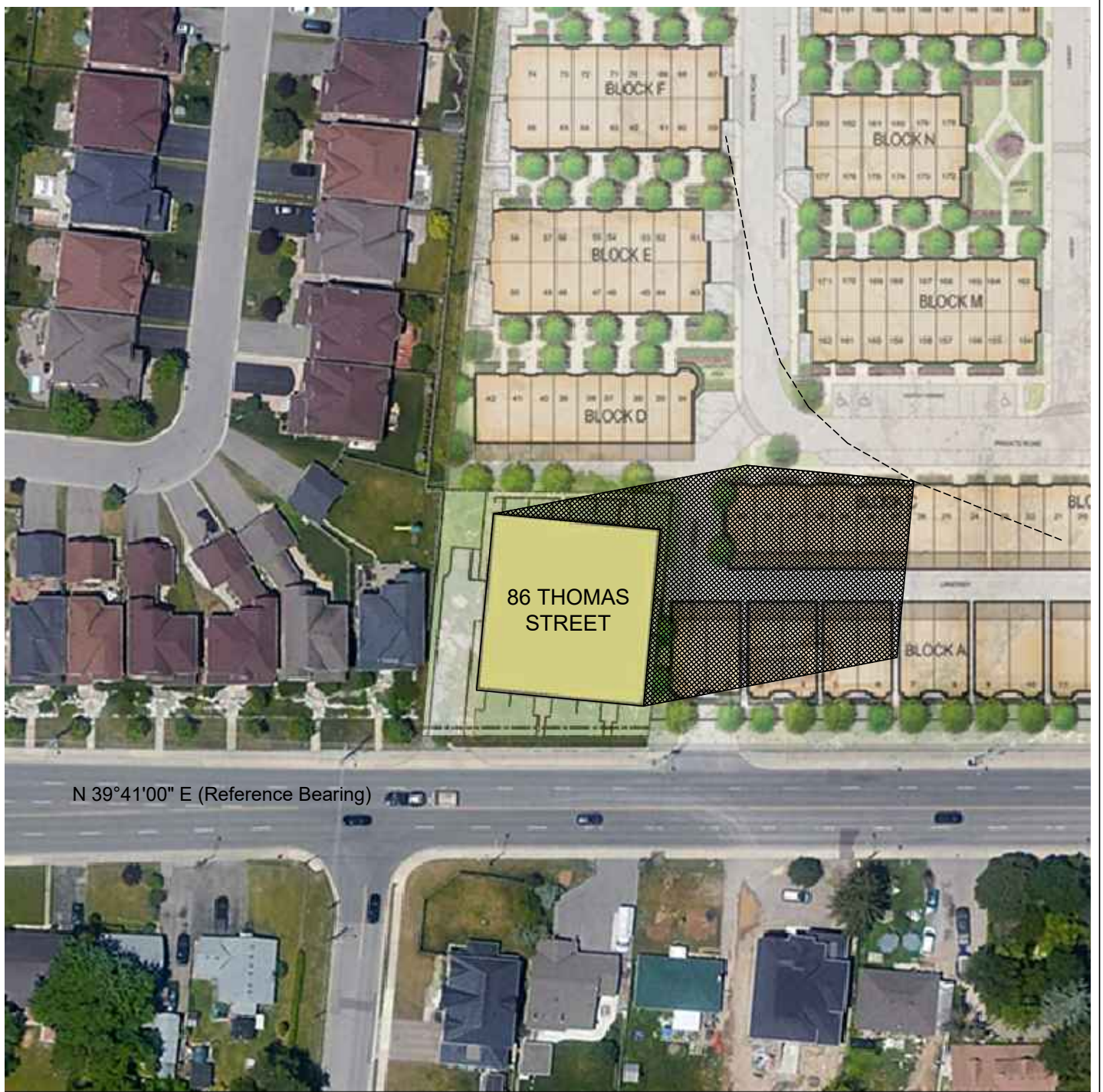
### Shadow diagram

December 21 13:17 EDT  
SN + 1 hr.

Scale: 1:1000





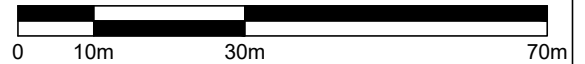


N 39°41'00" E (Reference Bearing)

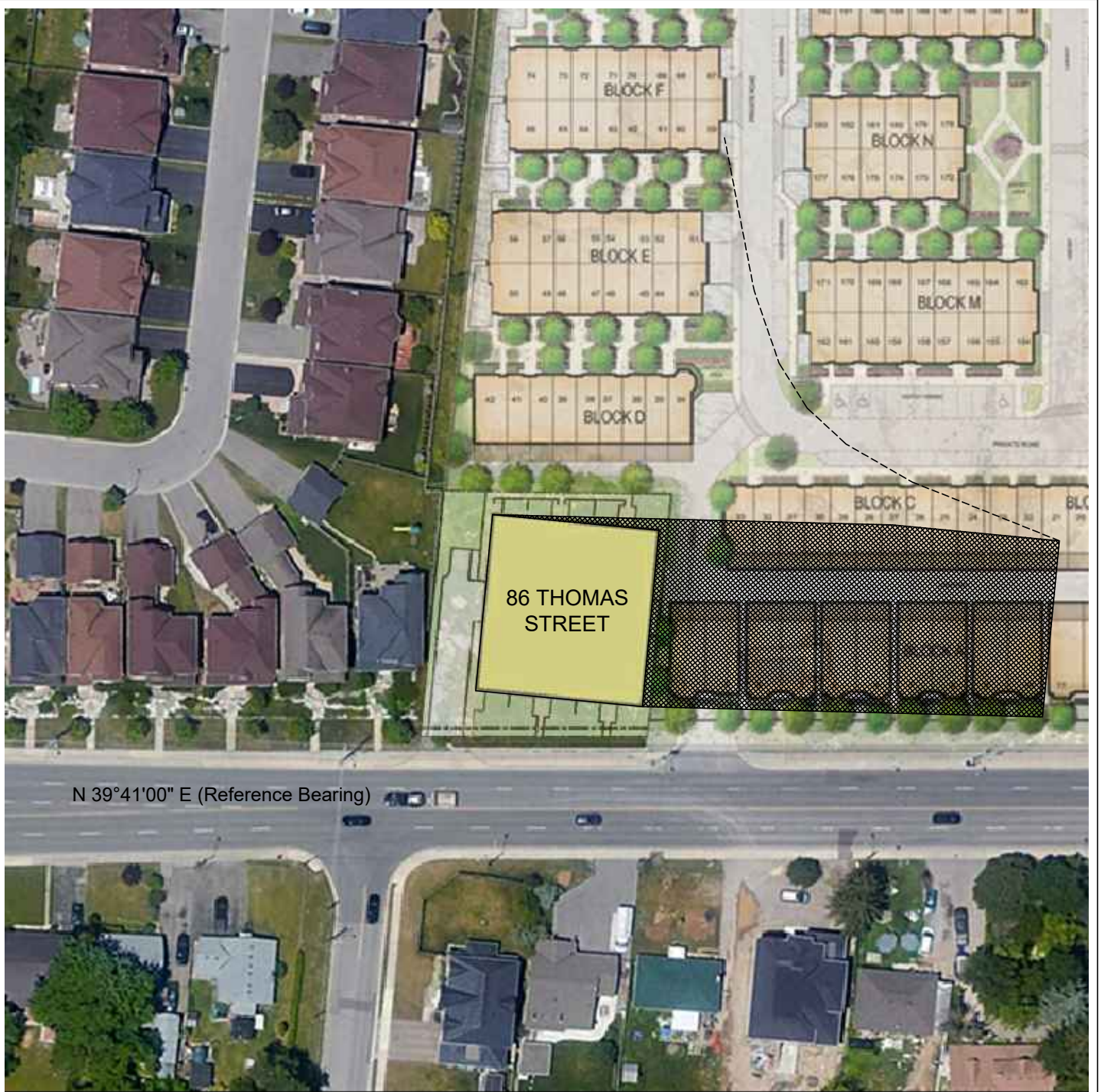
### Shadow diagram

December 21 14:17 EDT  
 SN + 2 hr.

Scale: 1:1000



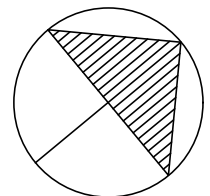
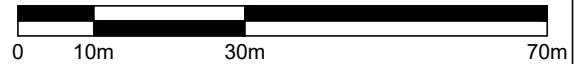




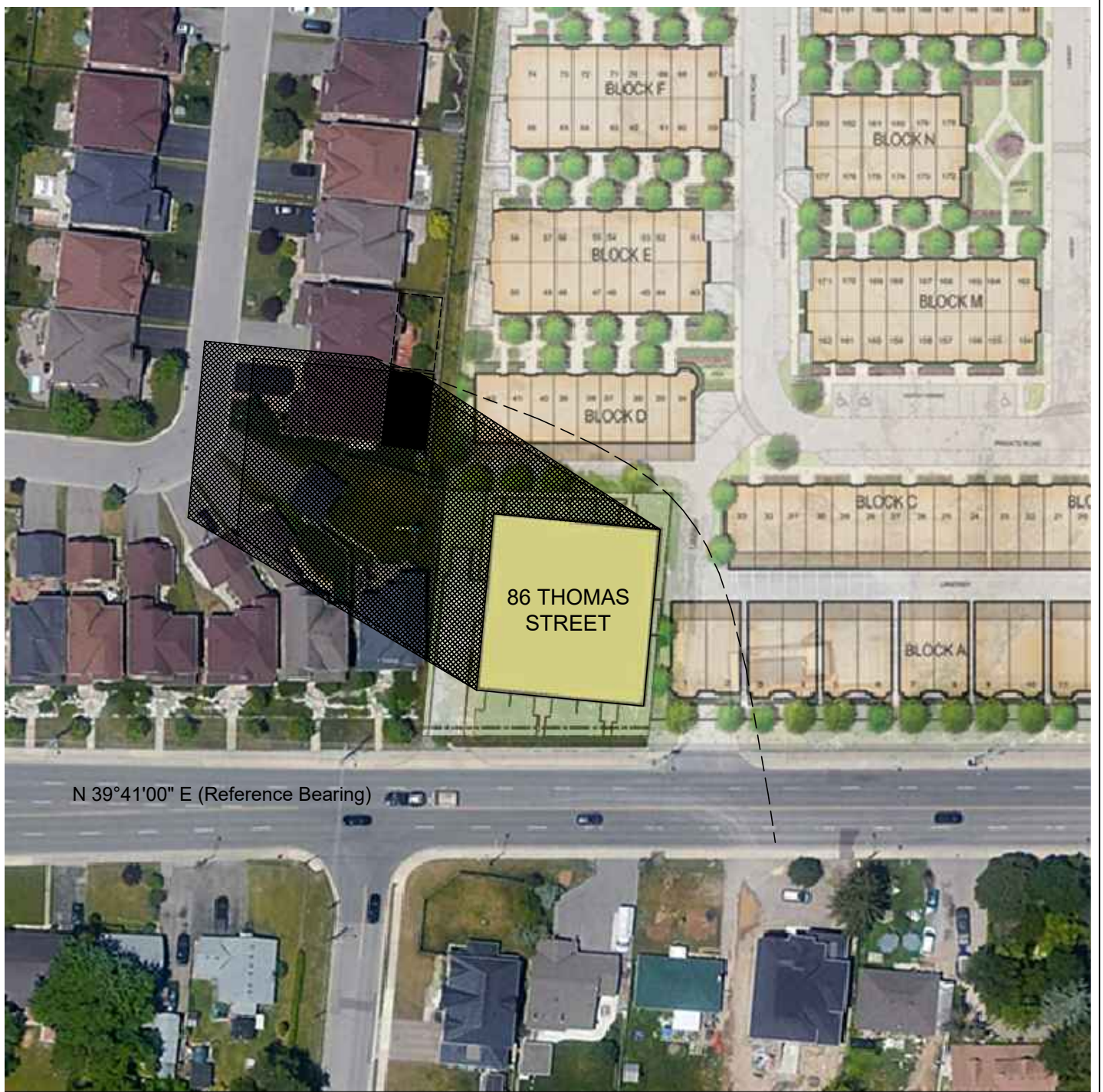
Shadow diagram

December 21 15:15 EDT  
 Set - 1.5 hr.

Scale: 1:1000





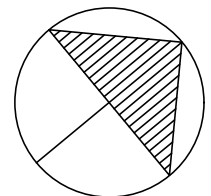


## Shadow Impact on Residential Private Outdoor Amenity Spaces

June 21 7:07 to 7:20 EDT

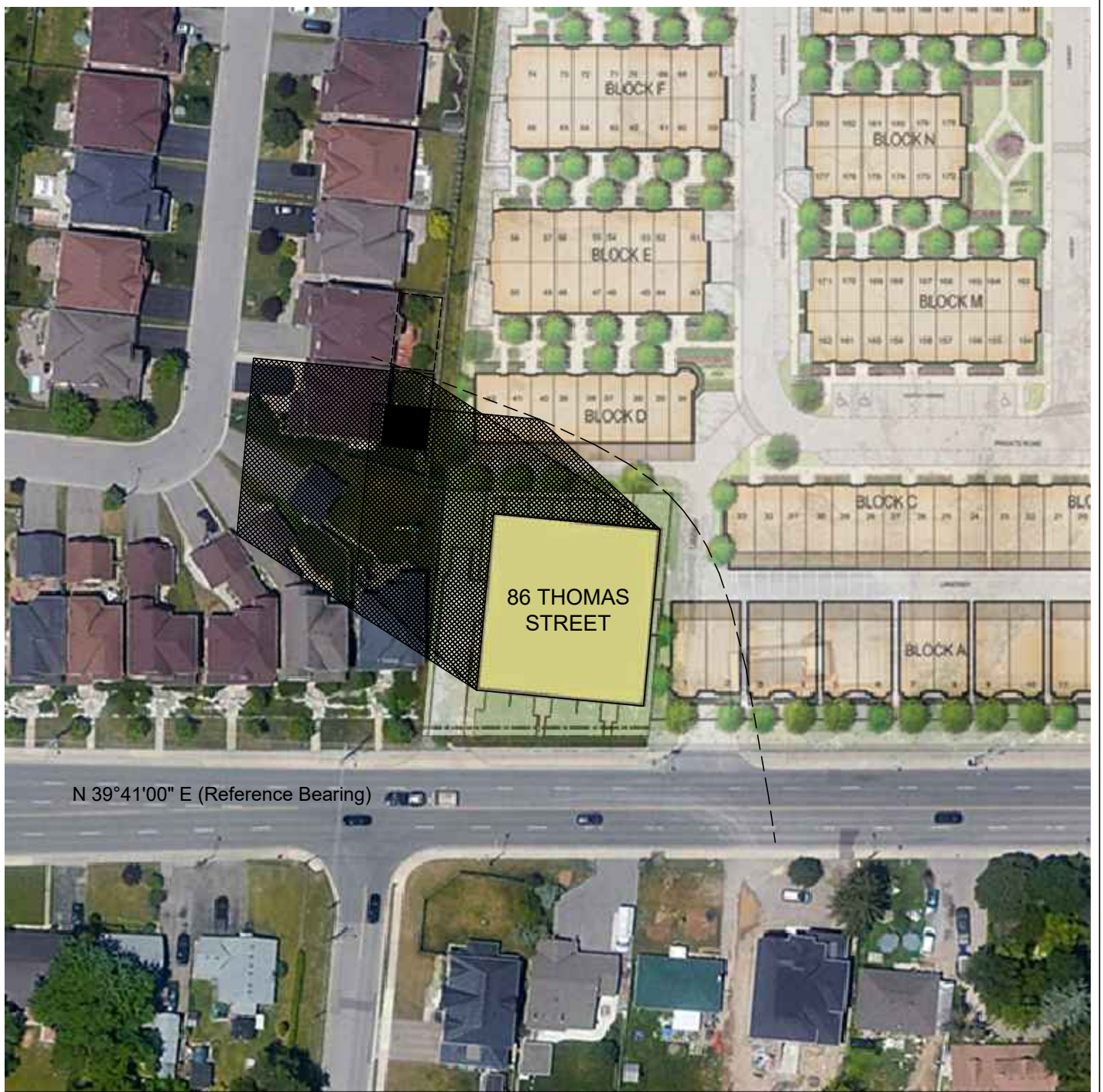
Private Rear Yard No Impact Zone Area shown has 13 minutes of shadow = 95.03 m<sup>2</sup>

Scale: 1:1000



RY1

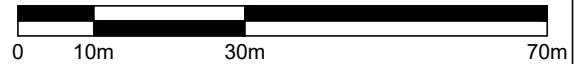




N 39°41'00" E (Reference Bearing)

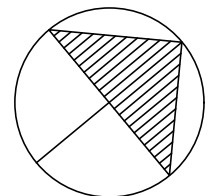
## Shadow Impact on Residential Private Outdoor Amenity Spaces

Scale: 1:1000



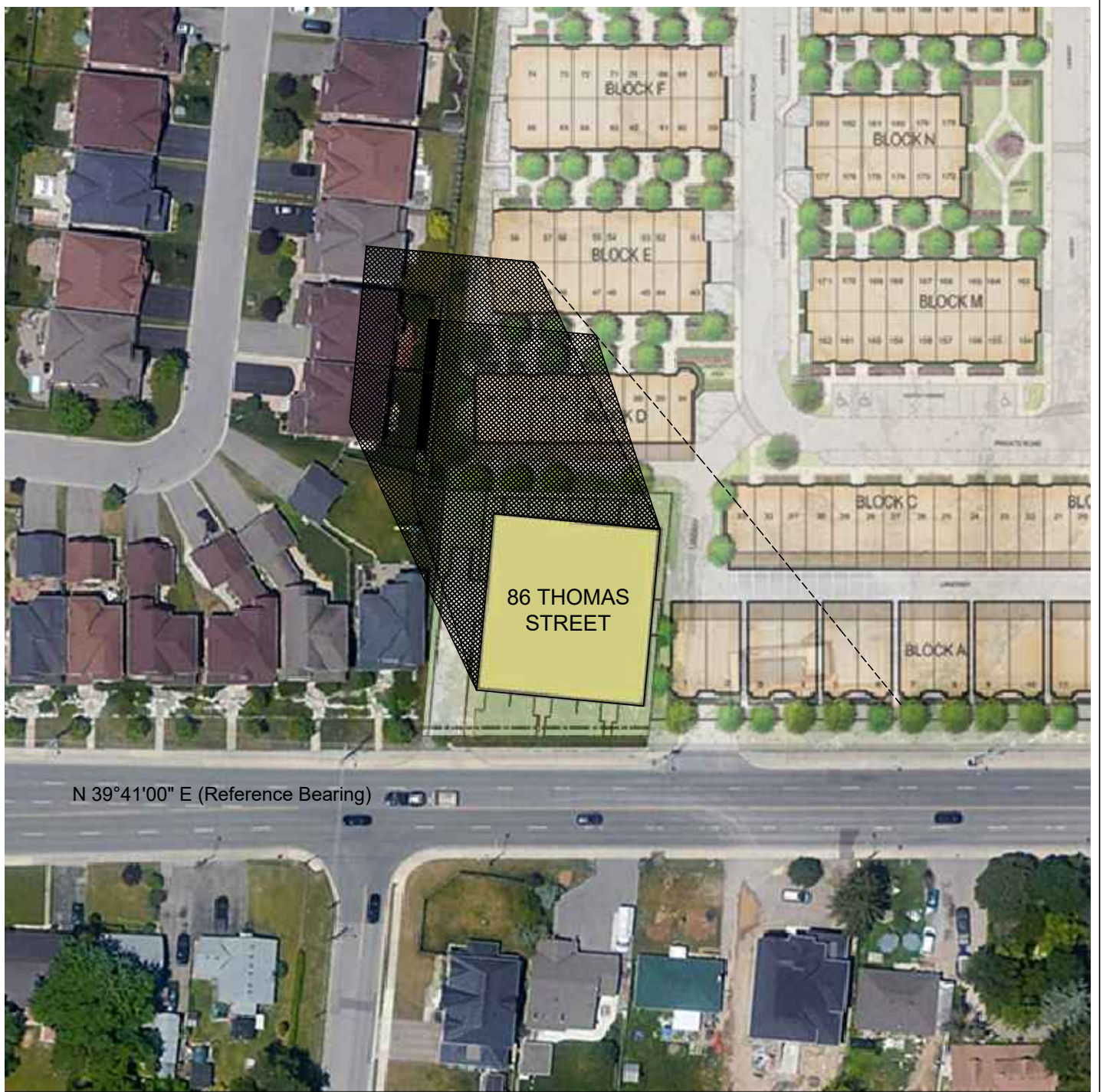
June 21 7:20 to 8:20 EDT

Private Rear Yard No Impact Zone Area shown has 1 hr. and 13 minutes of shadow = 52.53 m<sup>2</sup>



RY2





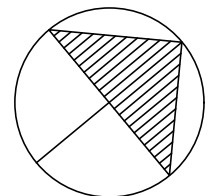
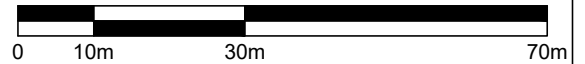
N 39°41'00" E (Reference Bearing)

## Shadow Impact on Residential Private Outdoor Amenity Spaces

Sept 21 8:35 to 9:12 EDT

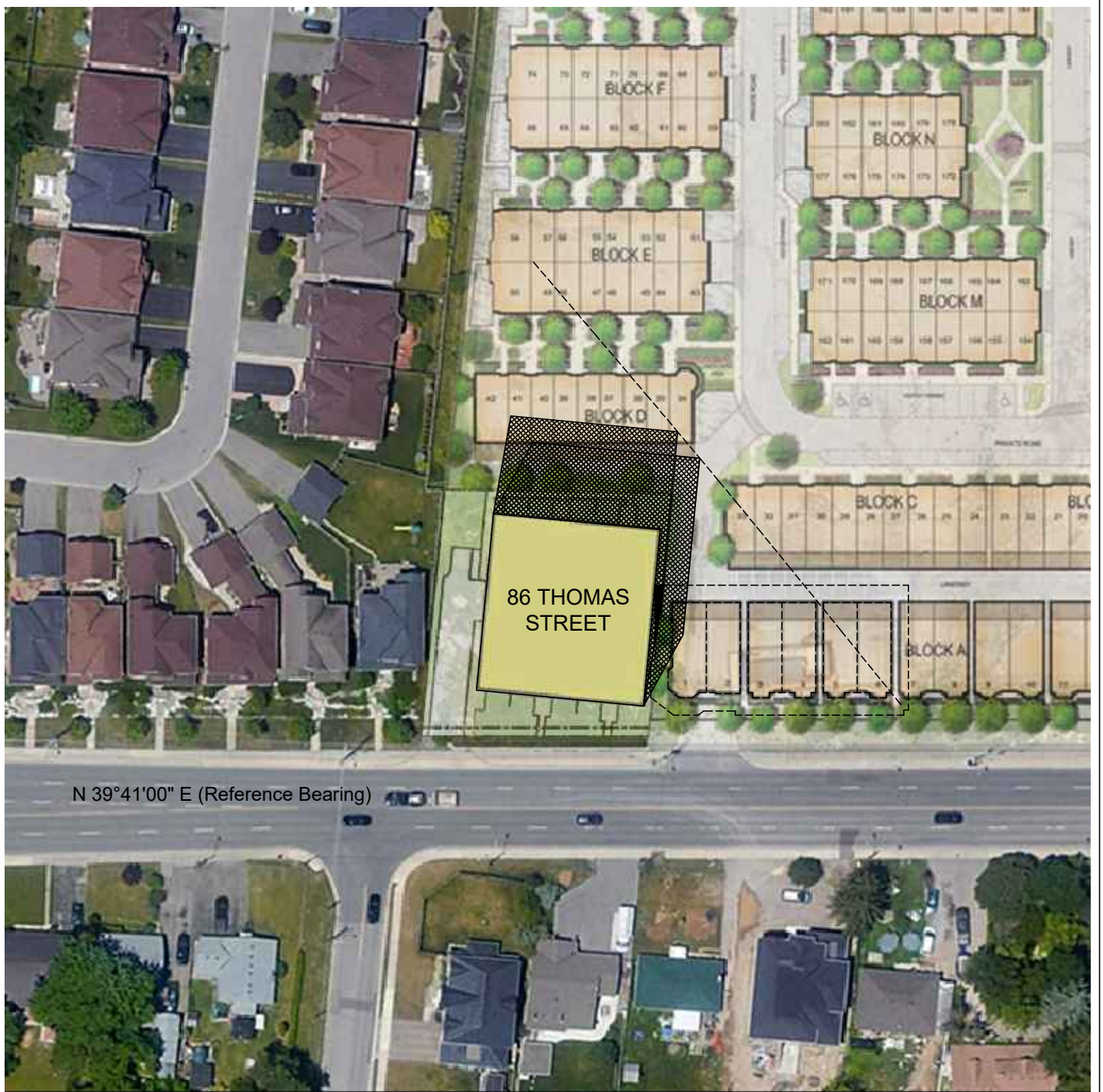
Private Rear Yard No Impact Zone Area shown has 37 minutes of shadow = 36.86 m<sup>2</sup>

Scale: 1:1000



RY3



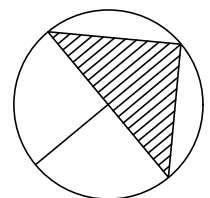
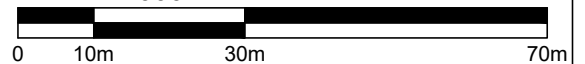


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 11:12 to 12:12 EDT

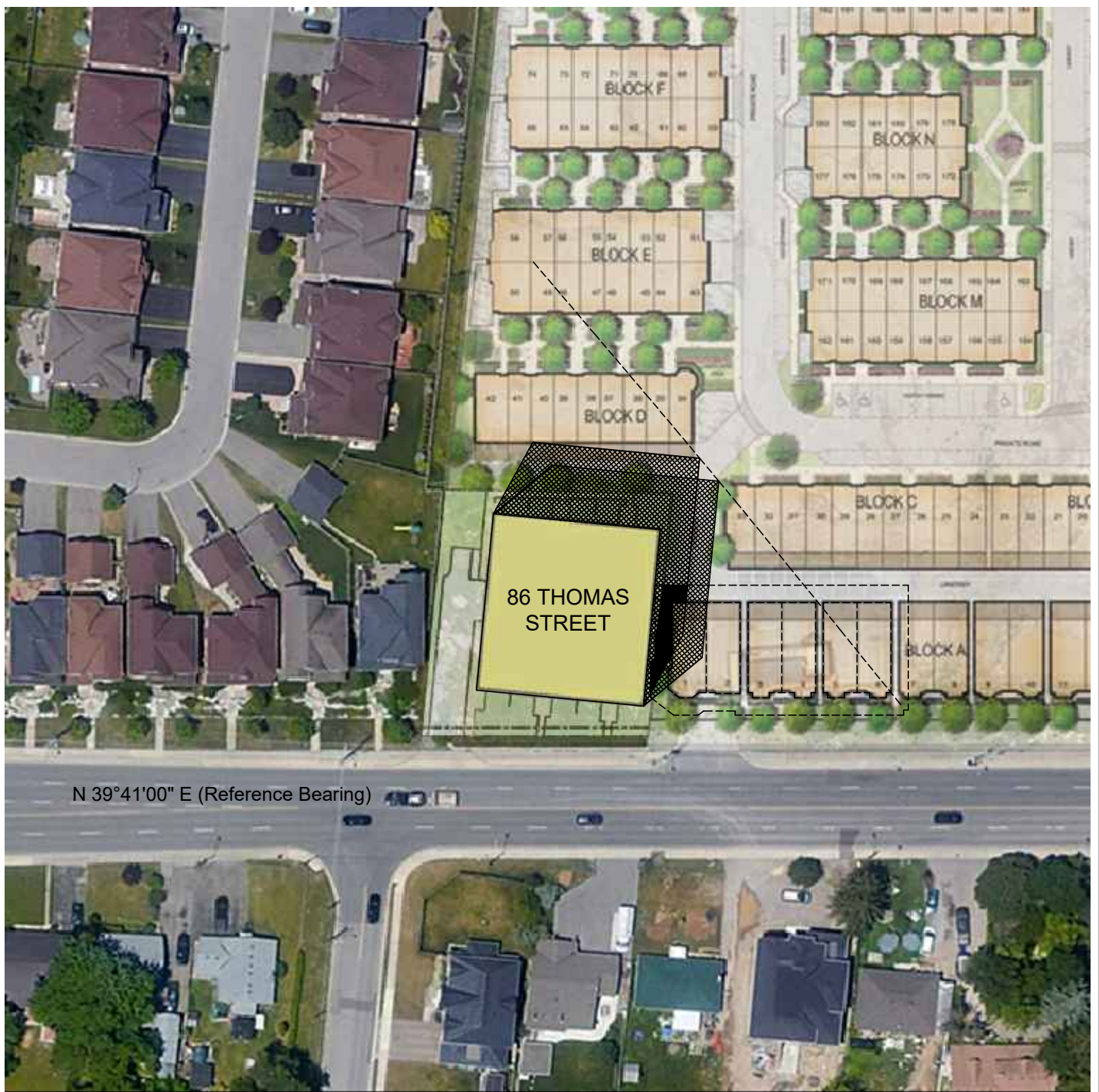
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 1 hr. of shadow = 7.70 m<sup>2</sup>

Scale: 1:1000



AR1



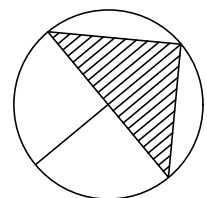
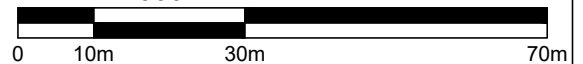


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 12:12 to 13:12 EDT

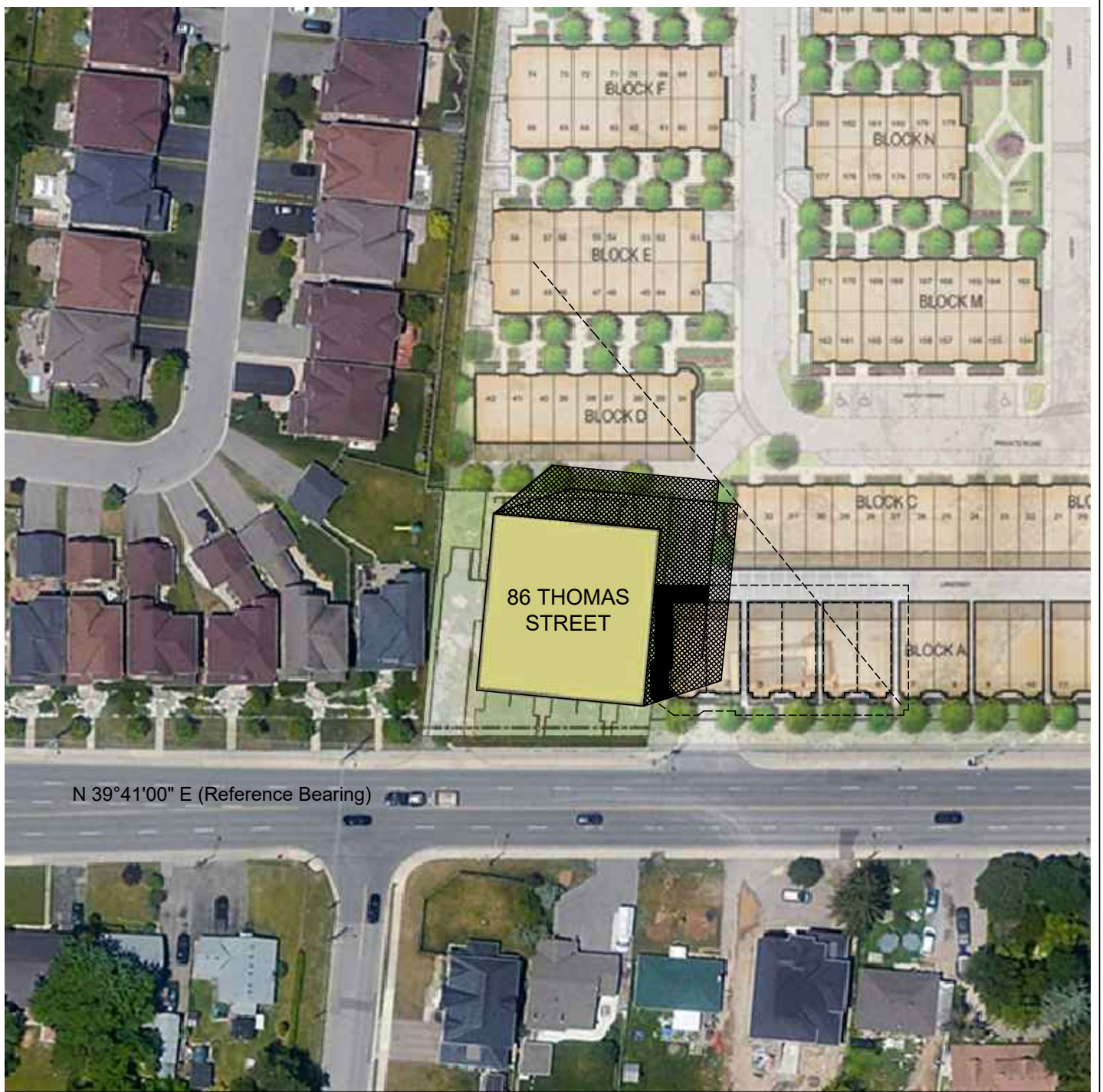
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 2 hrs. of shadow = 47.23 m<sup>2</sup>

Scale: 1:1000



AR2





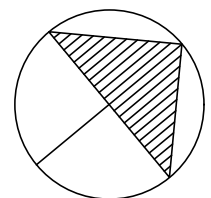
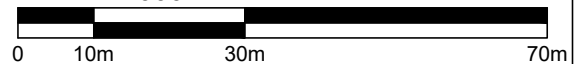
N 39°41'00" E (Reference Bearing)

## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 13:12 to 14:12 EDT

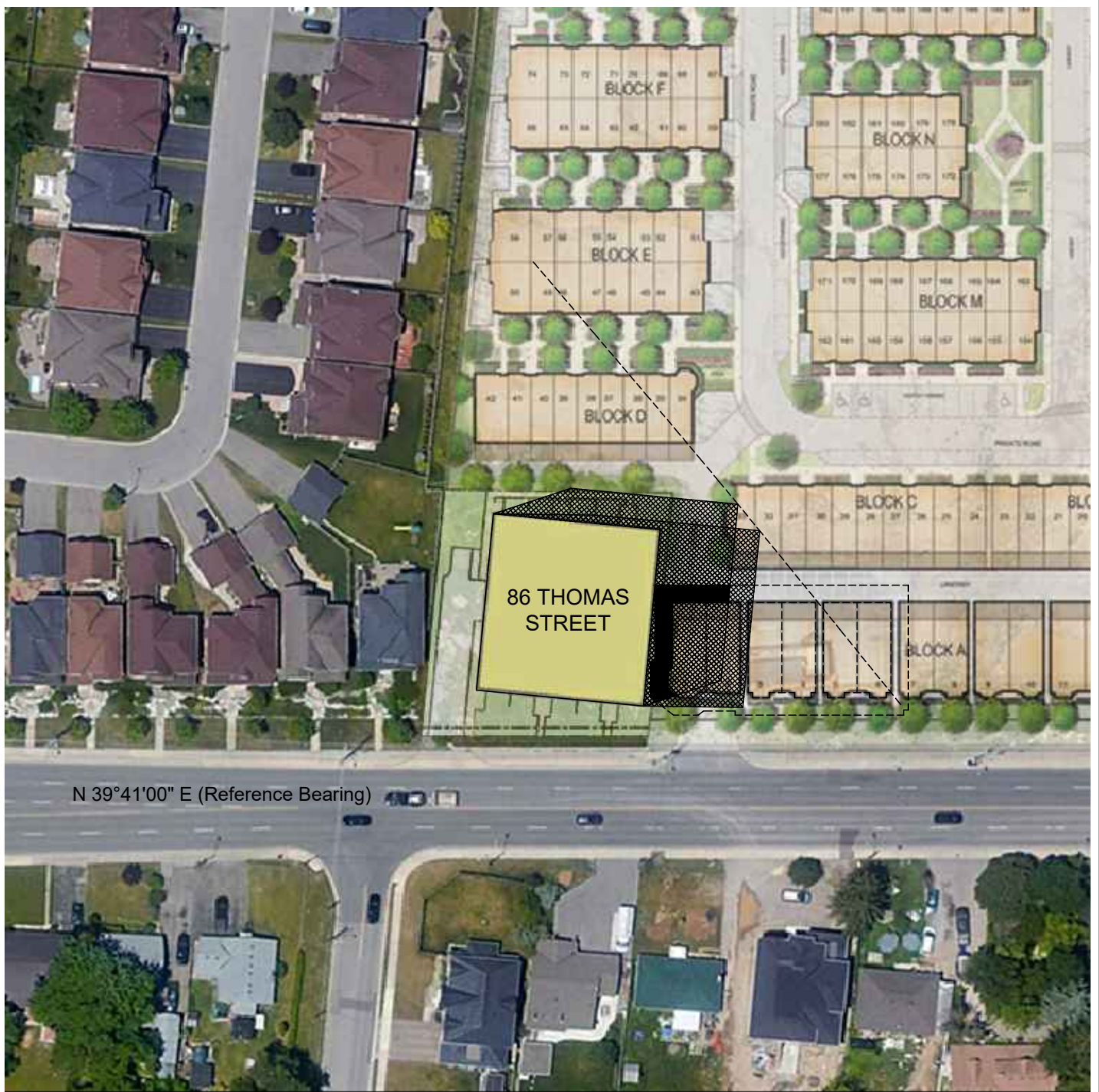
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 3 hrs. of shadow = 80.18 m<sup>2</sup>

Scale: 1:1000



AR3



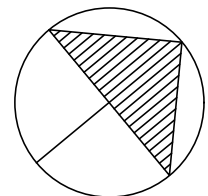
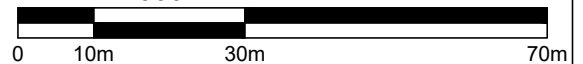


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 14:12 to 15:12 EDT

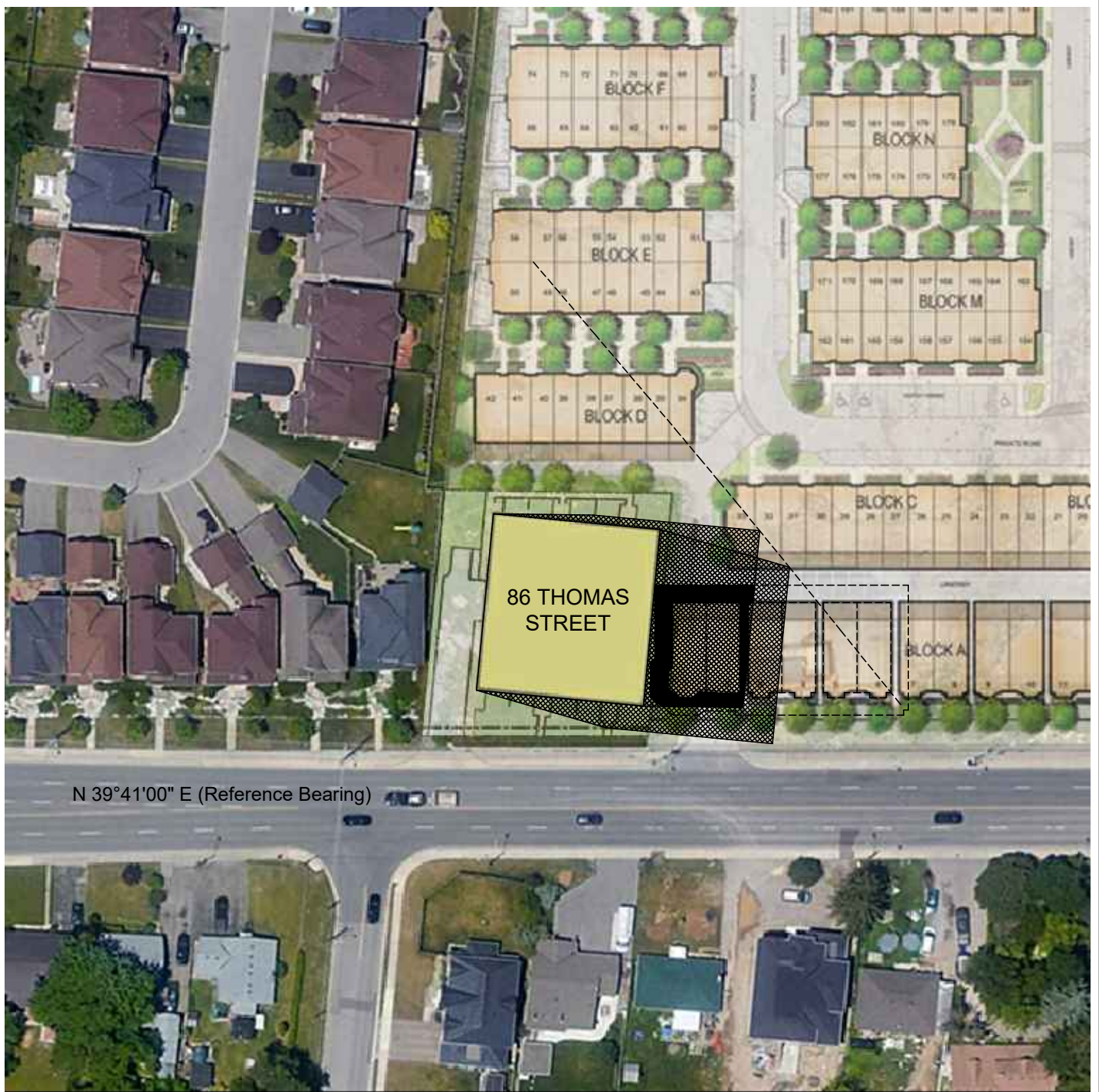
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 4 hrs. of shadow = 91.18 m<sup>2</sup>

Scale: 1:1000



AR4



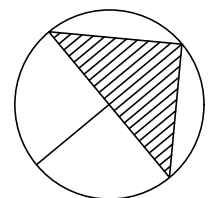
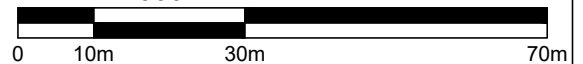


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 15:12 to 16:12 EDT

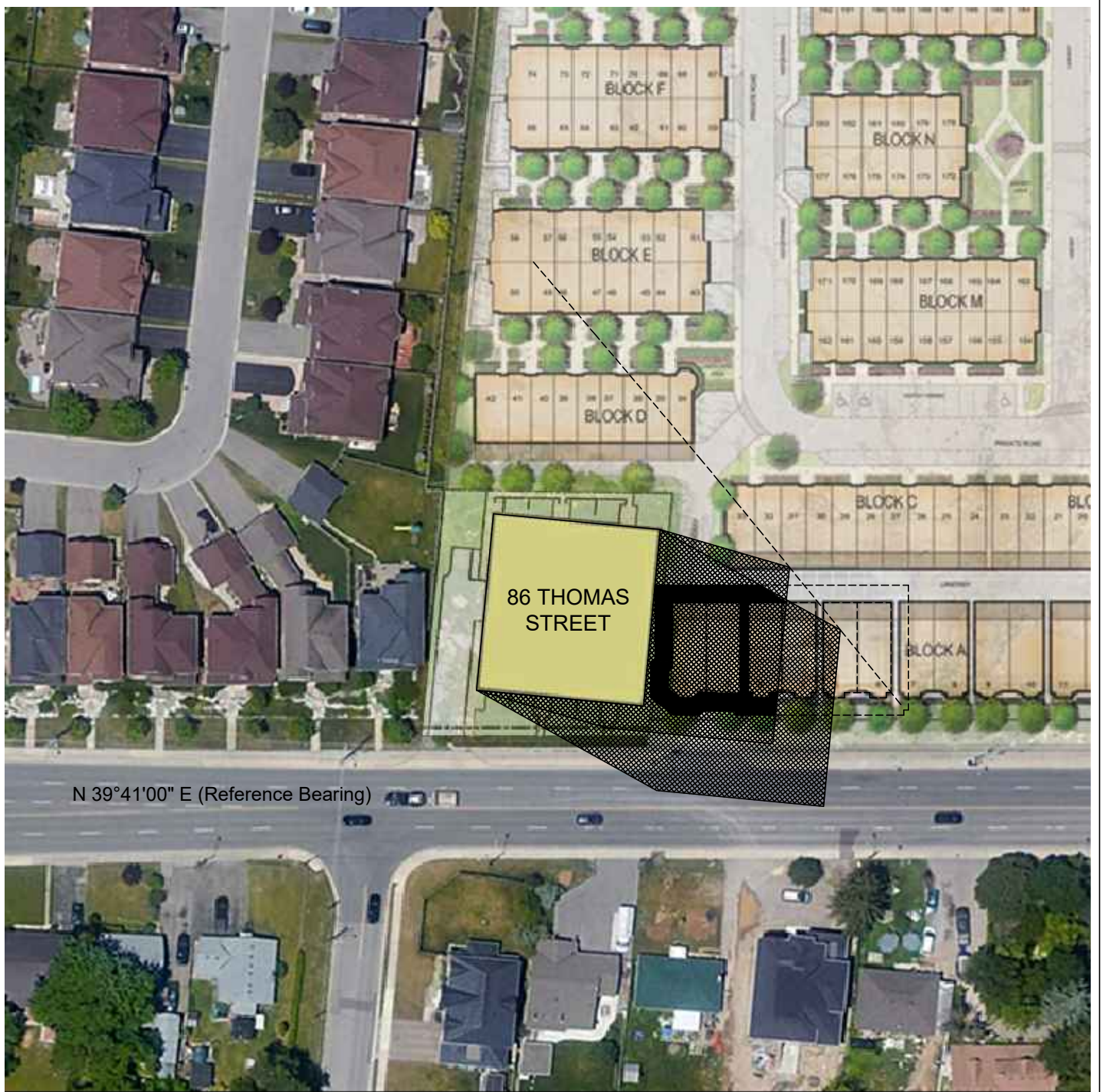
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 5 hrs. of shadow = 152.66 m<sup>2</sup>

Scale: 1:1000



AR5



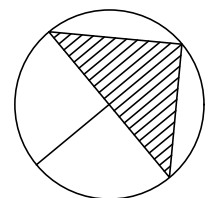
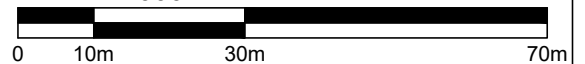


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 16:12 to 17:12 EDT

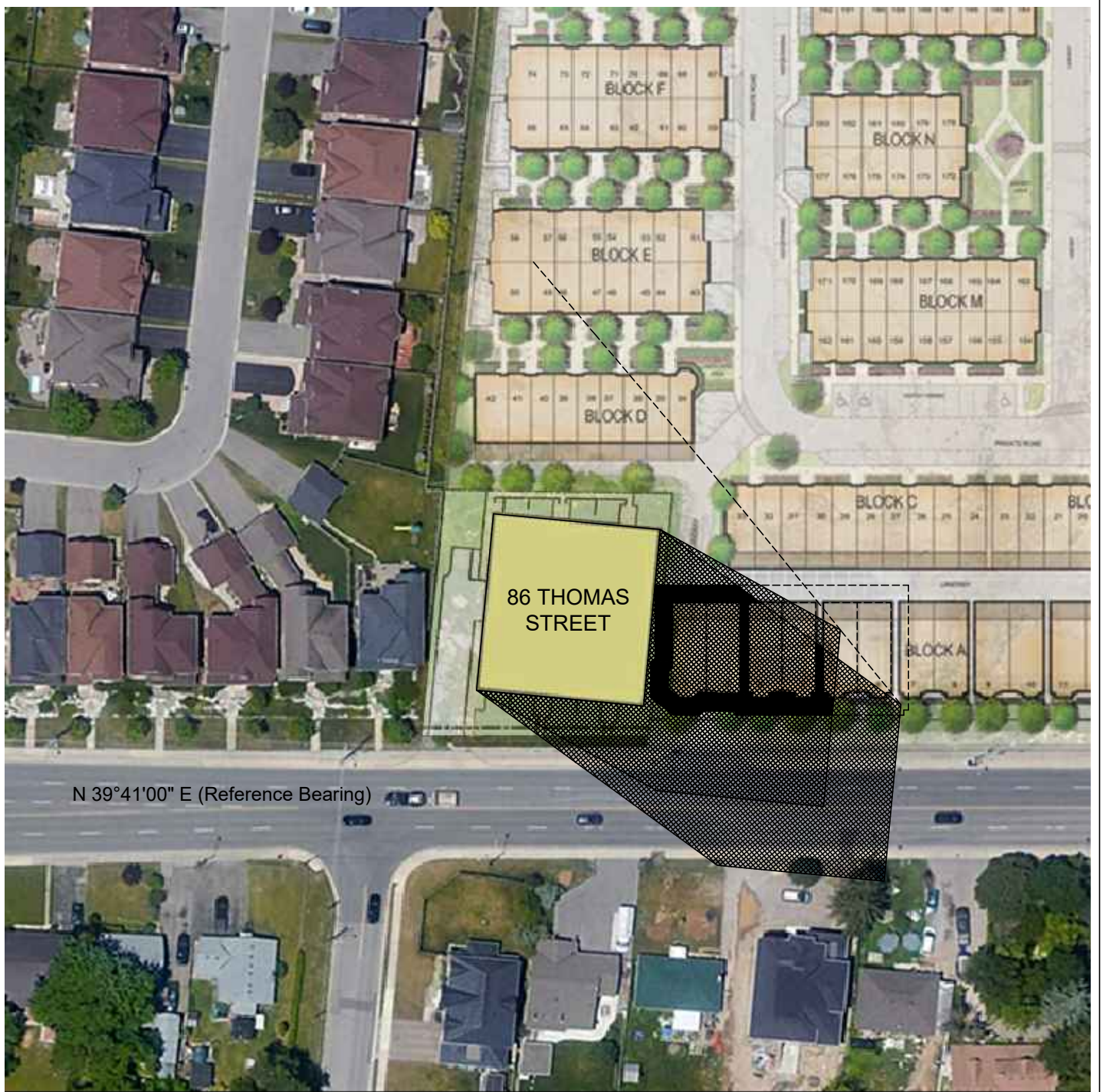
Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 6 hrs. of shadow = 198.67 m<sup>2</sup>

Scale: 1:1000



AR6



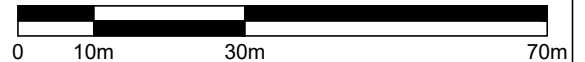


## Shadow Impact on Proposed Adjacent Semi-Detached Dwelling Roof

September 21 17:12 to 17:48 EDT

Proposed East Adjacent Semi-Detached Dwelling No Impact Zone Area shown has 6 hrs. and 36 min. of shadow = 230.98 m<sup>2</sup>

Scale: 1:1000



AR7