APPENDIX A | SHADOW STUDY INTRODUCTION & MITIGATION STRATEGIES

SHADOW STUDY INTRODUCTION

The City of Burlington Shadow Study Guidelines and Terms of Reference were prepared by Brook McIlroy Planning and Urban Design and were enacted in June of 2020. This shadow study has been completed in compliance with these guidelines for the OPA-ZBA application of the proposed development at 2020 Lakeshore Road.

DESIGN STRATEGIES FOR MITIGATION

2020 Lakeshore Road utilizes slender floor plates and a tapered profile to minimize consistent shadows over the adjacent context. The North-South orientation reduces the potential shadow cover during peak daylight hours. The open-air atrium provides light to the intersection of Lakeshore Road and John Street. The 42m distance between the east and west towers allows more light to reach the surrounding context. By minimizing the height of the podium to 5 storeys, the base of 2020 Lakeshore Road has a decreased shadow impact on the adjacent areas.



APPENDIX A | SHADOW IMPACT CRITERIA RESULTS & ANALYSIS

SHADOW IMPACT CRITERIA

Spencer Smith Park

Through analysing the Sun Access Factors (SAF) for the applicable areas, the spaces maintain access to direct sunlight on an above-average basis. For the adjacent Spencer Smith Park, the access to direct sunlight between 9AM and 6PM on March 21st retains a SAF of 0.96. On September 21st between 9AM and 6PM, the SAF is 0.94. The SAF on December 21st between 11AM and 3PM is one, meaning no net shadows are cast on the park. Between 10AM and 2PM on the Fall Equinox, the park receives a zero net shadow area. Similarly, on the Spring Equinox, the park gets a zero net shadow area between 10AM and 3PM. Therefore, this proposal meets the criteria stipulated in section 4.4 of the Shadow Study Guidelines for Parks and Open Spaces, which require a SAF of 0.5 on each of these three test dates.

When considering the shadow impacts on Spencer Smith Park under the criteria for Key Civic and Cultural Spaces in section 4.2 of the Shadow Study Guidelines, the proposed development does not meet the requirements, which require no new net shadows on both March 21st and September 21st between 10AM and 4PM. On March 21st at 4PM, the proposed development casts a mere 72.2 square meters of shadow at the southeast corner of the building as seen on page 29 of this document. On September 21st, the proposed development casts 7.85 square meters of shadow on the park at 3PM, while at 4PM it casts 90.93 square meters of shadow, as seen on pages 12 and 13 of this document. These values are minimal and not much greater than the existing shadows cast by the Waterfront Hotel at those times on those days of the year. Therefore, it can be concluded that the shadows that do not meet the Shadow Impact Criteria will have little impact.

Spencer Smith Park	DATE	TIME OF DAY	SHADED AREA (m2)	EXPOSED AREA (m2)	SUN ACCESS FACTOR (SAF)
Total Park Area (m2):	March 21st	9:00	289.52	16,248	Total Average Per Hour:
16,538		10:00	0	16,538	158,914 / 10
		11:00	0	16,538	15,891
		12:00	0	16,538	
		13:00	0	16,538	SAF:
		14:00	0	16,538	15,991 / 16,538 m2
		15:00	0	16,538	0.96
		16:00	72.2	16,466	
		17:00	645.34	15,893	
		18:00	5458.19	11,080	
			Total:	158,914	
	September 21st	9:00	100.1	16,438	Total Average Per Hour:
		10:00	0	16,538	154,673 / 10
		11:00	0	16,538	15,467
		12:00	0	16,538	
		13:00	0	16,538	SAF:
		14:00	0	16,538	15,467 / 16,538 m2
		15:00	7.85	16,530	0.94
		16:00	90.93	16,447	
		17:00	1056.81	15,481	
		18:00	9449.97	7,088	
			Total:	154,673	
	December 21st	11:00	0	16,538	Total Average Per Hour:
		12:00	0	16,538	82,690 / 5
		13:00	0	16,538	16,538
		14:00	0	16,538	
		15:00	0	16,538	SAF:
			Total:	82,690	16,538/16,538
					1

APPENDIX A | SHADOW IMPACT CRITERIA RESULTS & ANALYSIS

SHADOW IMPACT CRITERIA

The North Sidewalk of Lakeshore Road

The sidewalk on the north side of Lakeshore Road is the sidewalk of the adjacent right-of-way that has been analysed to comply with the section 4.6 criteria of the Shadow Study Guidelines for the Public Realm and Sidewalks. For this sidewalk, the SAF on March 21st is 0.5. Notably, at 3PM on the Spring Equinox, the sidewalk adjacent to the proposal on the north side of Lakeshore Road receives no net shadow impacts. Moreover, this proposal meets the criteria, which requires a SAF of 0.5 on this test date.

Lakeshore Road North Sidewalk	DATE	TIME OF DAY	SHADED AREA (m2)	EXPOSED AREA (m2)	SUN ACCESS FACTOR (SAF)
Total Sidewalk Area (m2):	March 21st	9:00	195.21	147	Total Average Per Hour:
342.29		10:00	204.65	137.64	1,712 / 10
		11:00	158.59	183.7	171.16
		12:00	85.38	256.91	
		13:00	152.02	190.27	SAF:
		14:00	67.93	274.36	171.16 / 342.29
		15:00	0	342.29	0.50
		16:00	162.91	179.38	
		17:00	342.29	0	
		18:00	342.29	0	
			Total:	1,712	

APPENDIX A | SHADOW IMPACT CRITERIA RESULTS & ANALYSIS

SHADOW IMPACT CRITERIA

The East Sidewalk of Elizabeth Street

The sidewalk on the east side of Elizabeth Street is the second sidewalk of the adjacent right-of-way that has been analysed to comply with the section 4.6 criteria of the Shadow Study Guidelines for the Public Realm and Sidewalks. For this sidewalk, the SAF on March 21st is 0.5. Between the hours of 10 AM and 11 AM on the Spring Equinox, this sidewalk receives no new net shadows. Therefore, this proposal meets the criteria, which requires a SAF of 0.5 on this test date.

Elizabeth Street East Sidewalk	DATE	TIME OF DAY	SHADED AREA (m2)	EXPOSED AREA (m2)	SUN ACCESS FACTOR (SAF)
Total Sidewalk Area (m2):	March 21st	9:00	217.77	51	Total Average Per Hour:
268.46		10:00	0	268.46	1,334 / 10
		11:00	0	268.46	133.40
		12:00	11.46	257	
		13:00	76.15	192.31	SAF:
		14:00	160.65	107.81	133.40 / 268.46
		15:00	268.46	0	0.50
		16:00	211.59	56.87	
		17:00	178.35	90.11	
		18:00	226.21	42.25	
			Total:	1,334	

APPENDIX A | SHADOW IMPACT CRITERIA RESULTS & ANALYSIS

SHADOW IMPACT CRITERIA

Private Outdoor Amenity Space

For the proposed private amenity spaces, between 9AM and 6PM on March 21st, the area retains a 0.5 SAF meeting the criteria outlined in section 4.3 of the Shadow Study Guidelines for Private Outdoor Amenity Spaces. During the Fall Equinox, as noted between the hours of 9AM and 4PM on September 21st, the adjacent park receives a zero net shadow area. On the Spring Equinox, the private amenity space receives no net shadows from 9AM to 10AM. Consequently, this study demonstrates compliance with the Shadow Impact Criteria as described in the guidelines.

Private Outdoor Amenity Space	DATE	TIME OF DAY	SHADED AREA (m2)	EXPOSED AREA (m2)	SUN ACCESS FACTOR (SAF)
Total Park Area (m2):	March 21st	9:00	0	1,062	Total Average Per Hour:
1,061.91		10:00	0	1,062	6,095 / 10
		11:00	61.01	1,001	610
		12:00	162.73	899	
		13:00	394.28	668	SAF:
		14:00	382.7	679	610 / 1,061.91
		15:00	567.58	494	0.57
		16:00	831.72	230	
		17:00	1061.91	0	
		18:00	1061.91	0	
			Total:	6,095	

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



SEPTEMBER 21 - 9AM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 10AM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 11AM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 12PM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



SEPTEMBER 21 - 1PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
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- NEW SHADOWS CAST ON ROOF SURFACES
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- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 2PM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 3PM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

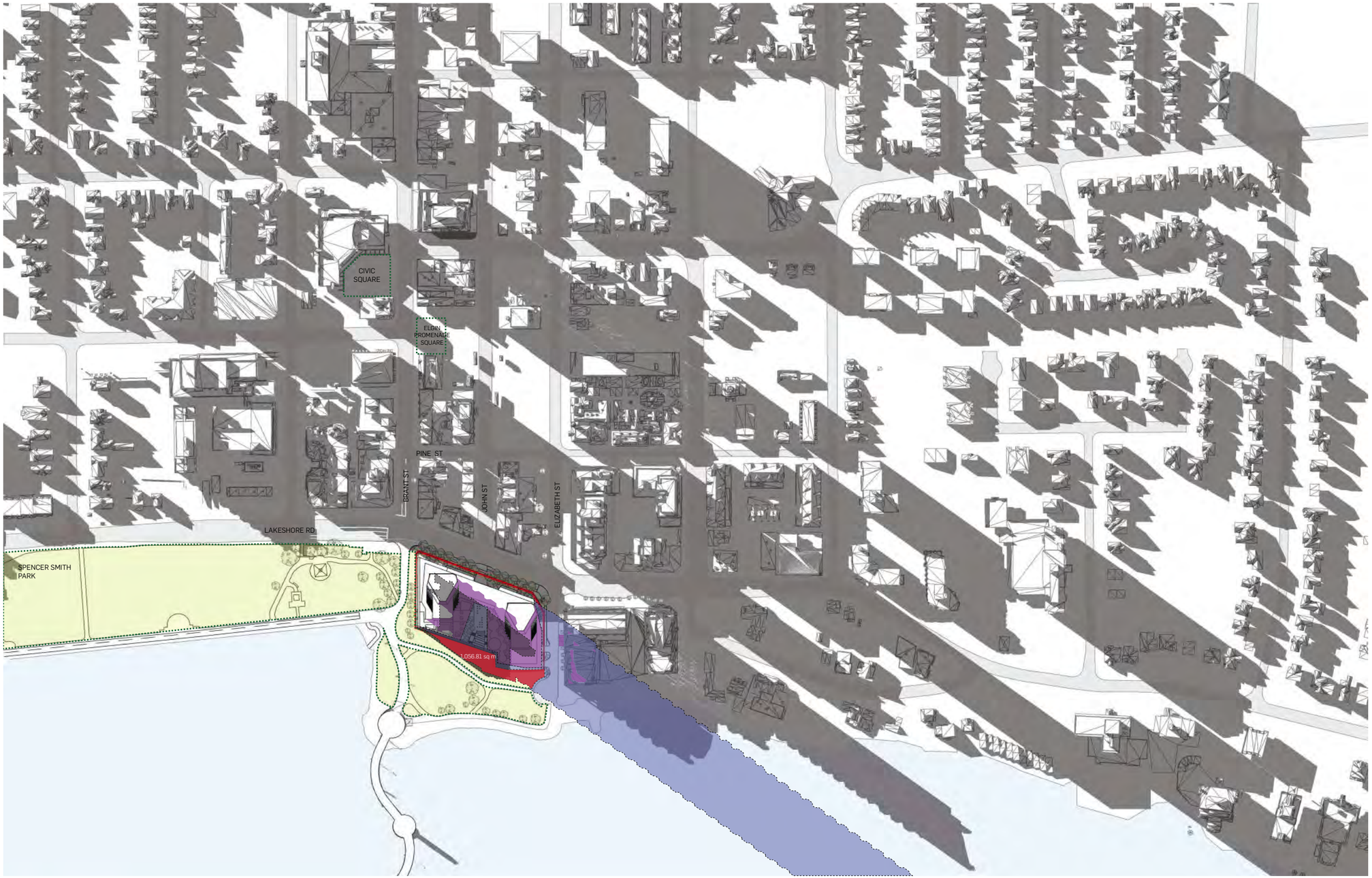
25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 4PM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

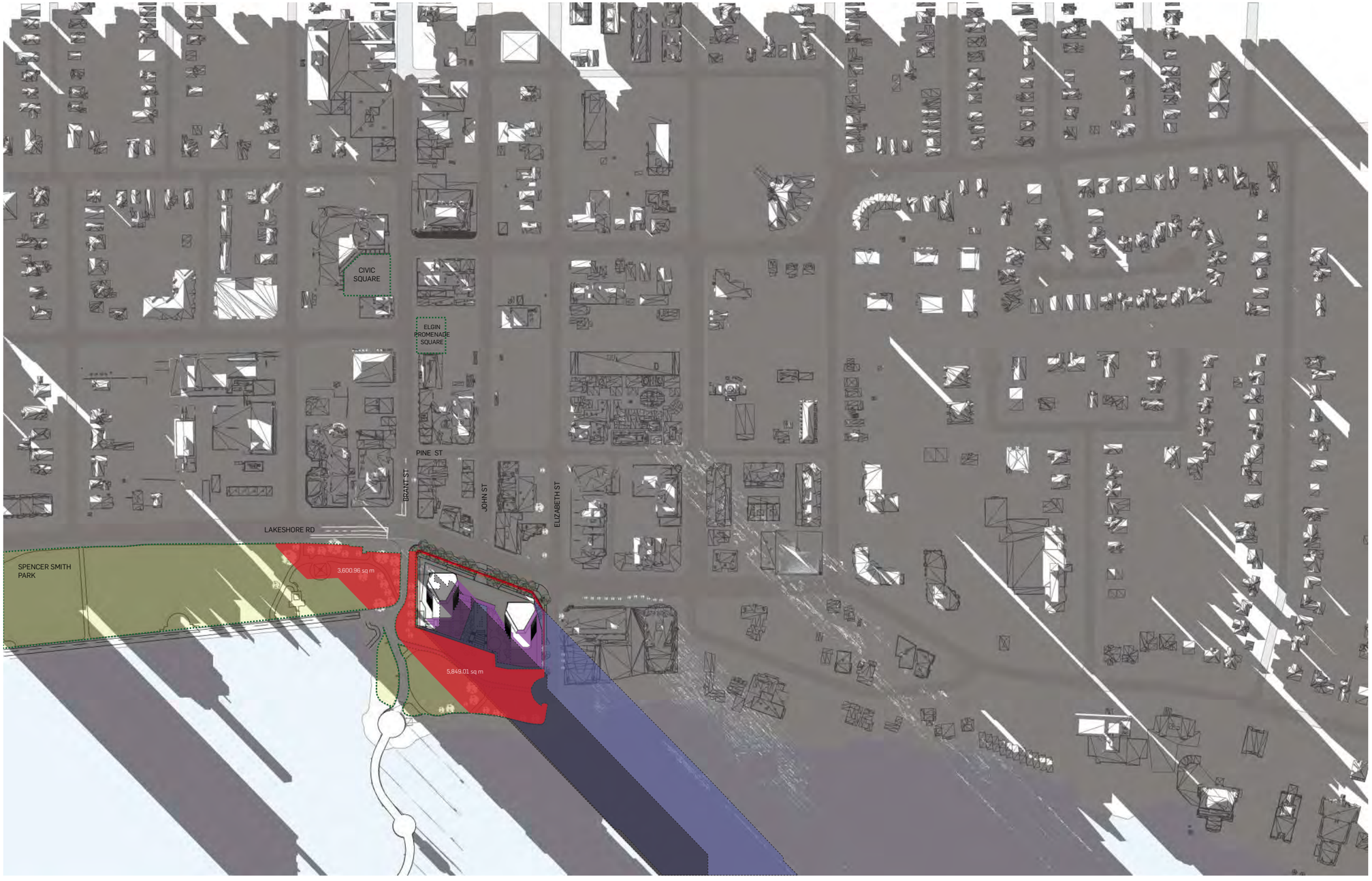
25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 5PM

APPENDIX A | SHADOW ANALYSIS: SEPTEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

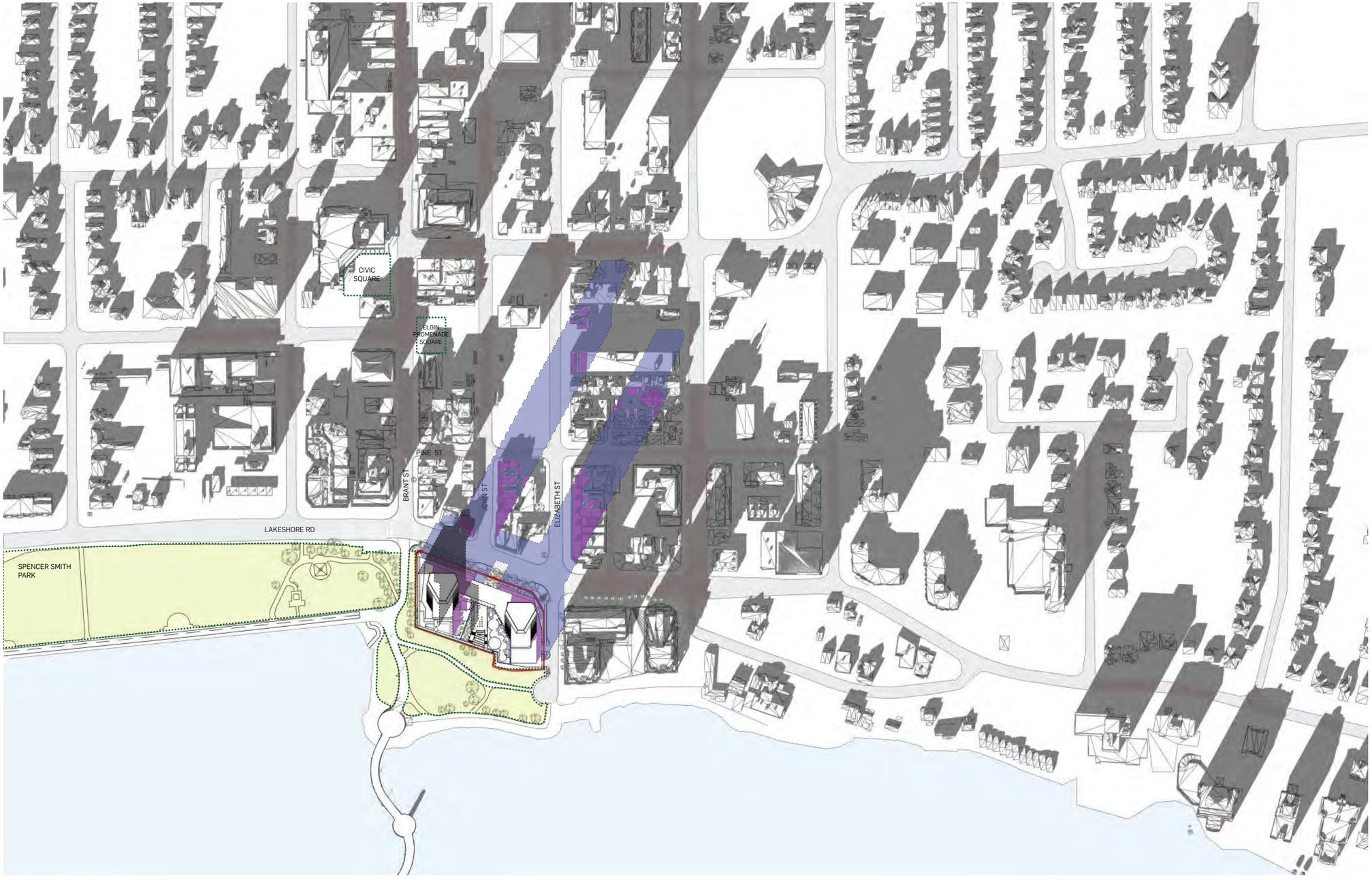
25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

SEPTEMBER 21 - 6PM

APPENDIX A | SUN SHADOW ANALYSIS: DECEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- EXISTING SHADOWS CAST ON GROUND SURFACES
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- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

DECEMBER 21 - 11AM

APPENDIX A | SUN SHADOW ANALYSIS: DECEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
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- TOTAL OPPOSITE BOULEVARD AREA

DECEMBER 21 - 12PM

APPENDIX A | SUN SHADOW ANALYSIS: DECEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

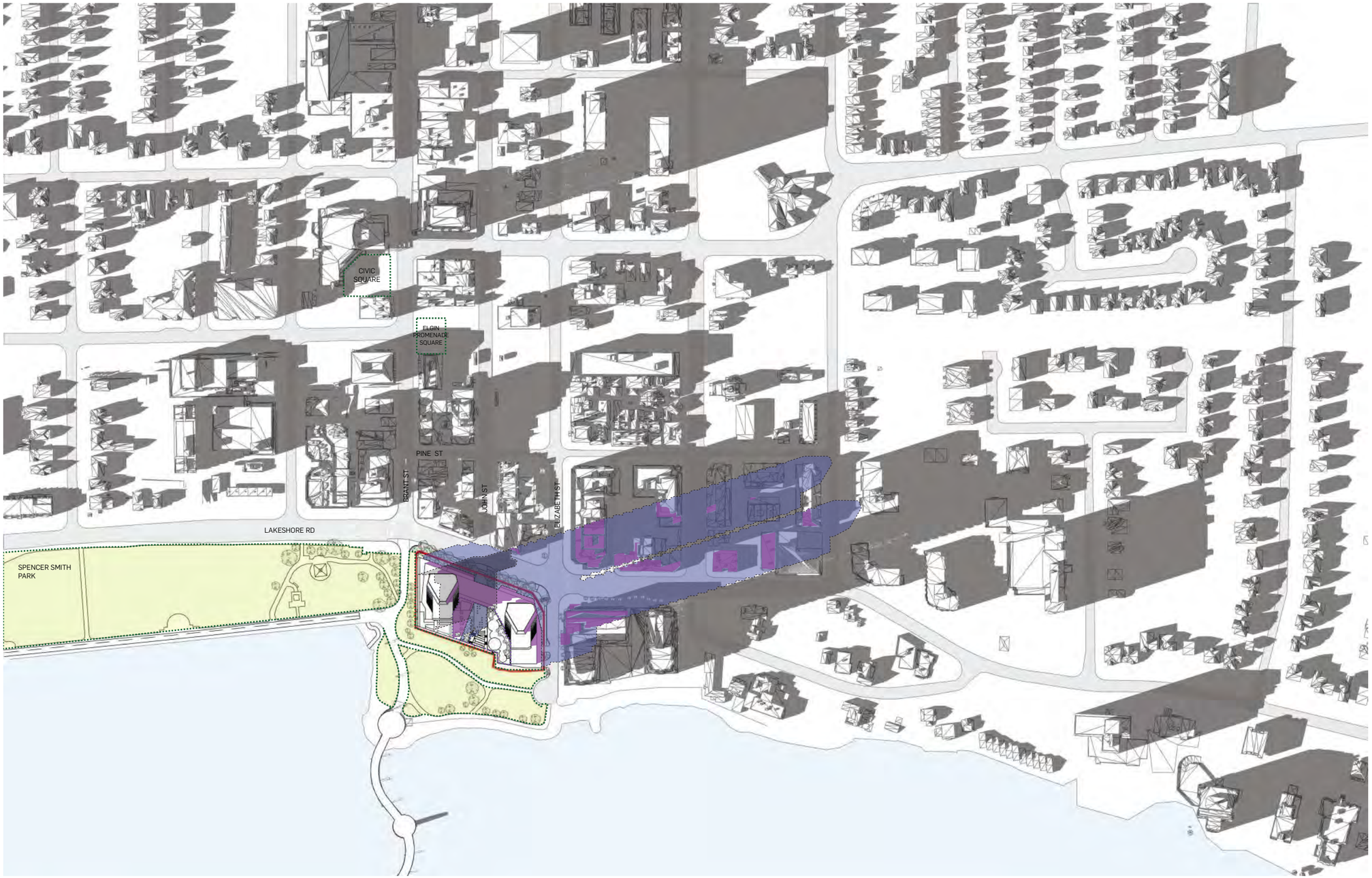
25m 150m

LEGEND

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DECEMBER 21 - 1PM

APPENDIX A | SUN SHADOW ANALYSIS: DECEMBER



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

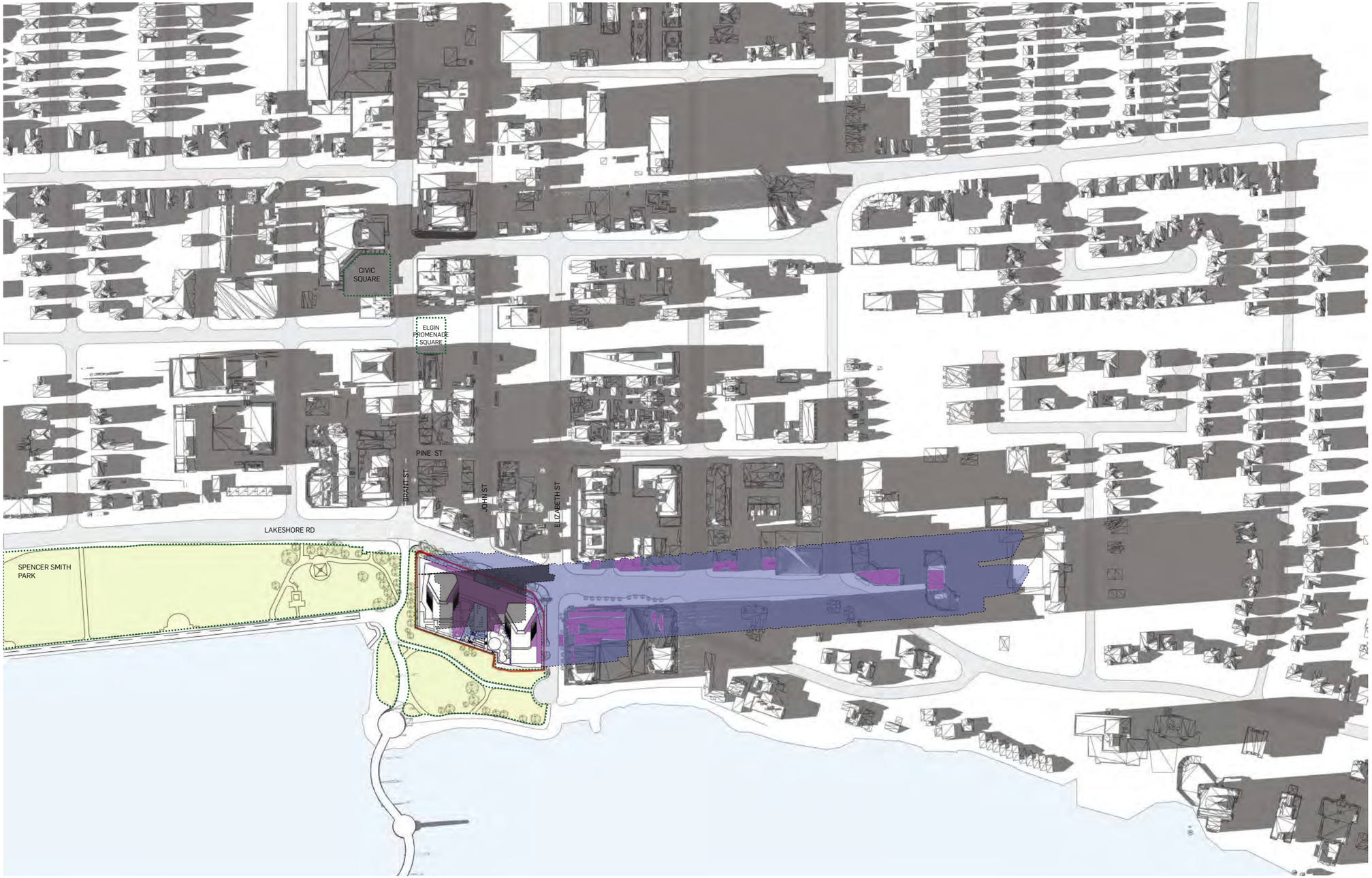
25m 150m

LEGEND

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- TOTAL OPPOSITE BOULEVARD AREA

DECEMBER 21 - 2PM

APPENDIX A | SUN SHADOW ANALYSIS: DECEMBER



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
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- TOTAL OPPOSITE BOULEVARD AREA

DECEMBER 21 - 3PM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500 25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- EXISTING SHADOWS CAST ON GROUND SURFACES
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- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

MARCH 21 - 9AM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



MARCH 21 - 10AM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



MARCH 21- 11AM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500 25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- TOTAL OPPOSITE BOULEVARD AREA

MARCH 21 - 12PM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



MARCH 21- 1PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
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- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- EXISTING SHADOWS CAST ON GROUND SURFACES
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- TOTAL OPPOSITE BOULEVARD AREA

MARCH 21- 2PM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

MARCH 21 - 3PM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

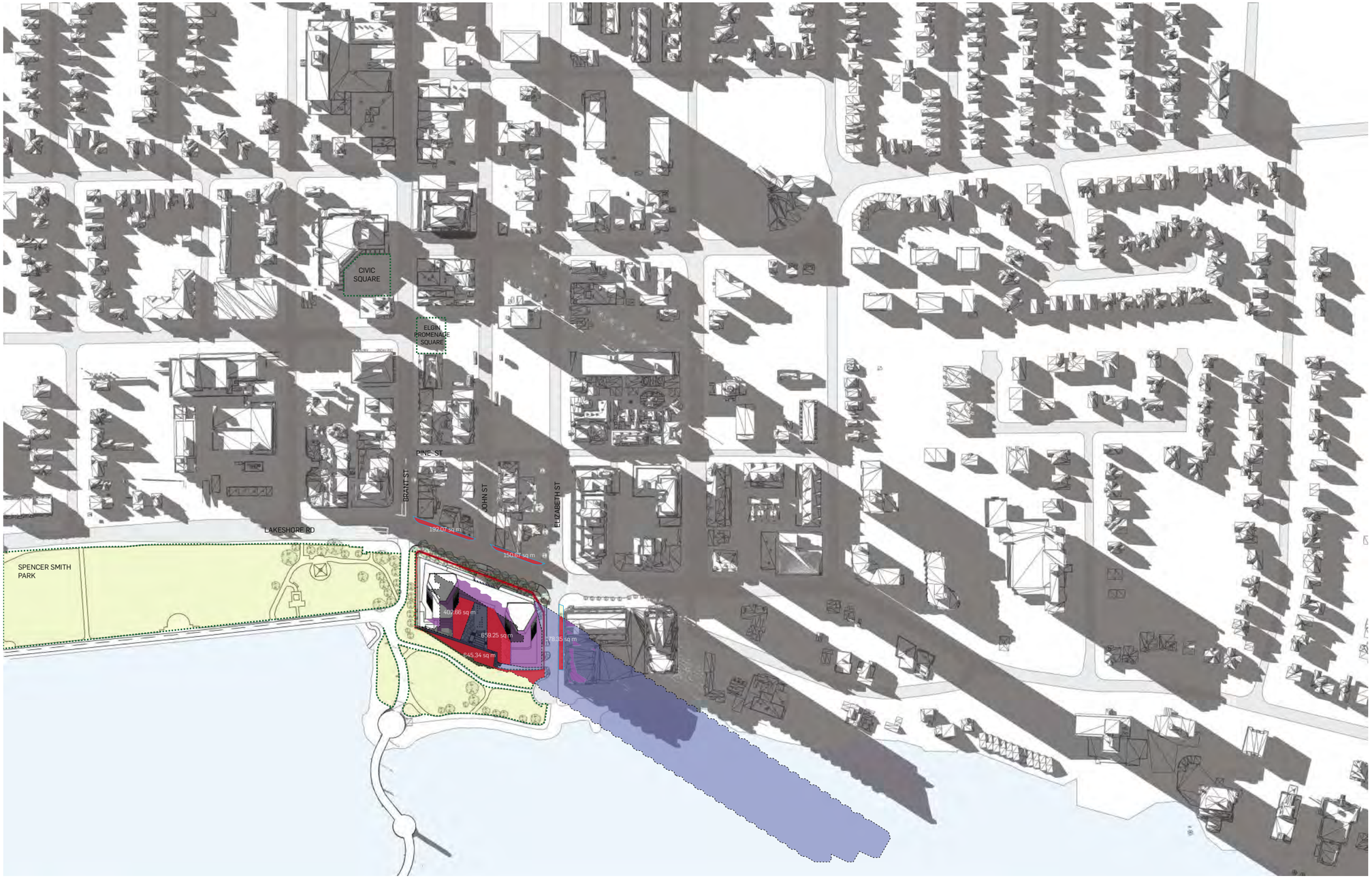
25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
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- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

MARCH 21- 4PM

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



MARCH 21 - 5PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

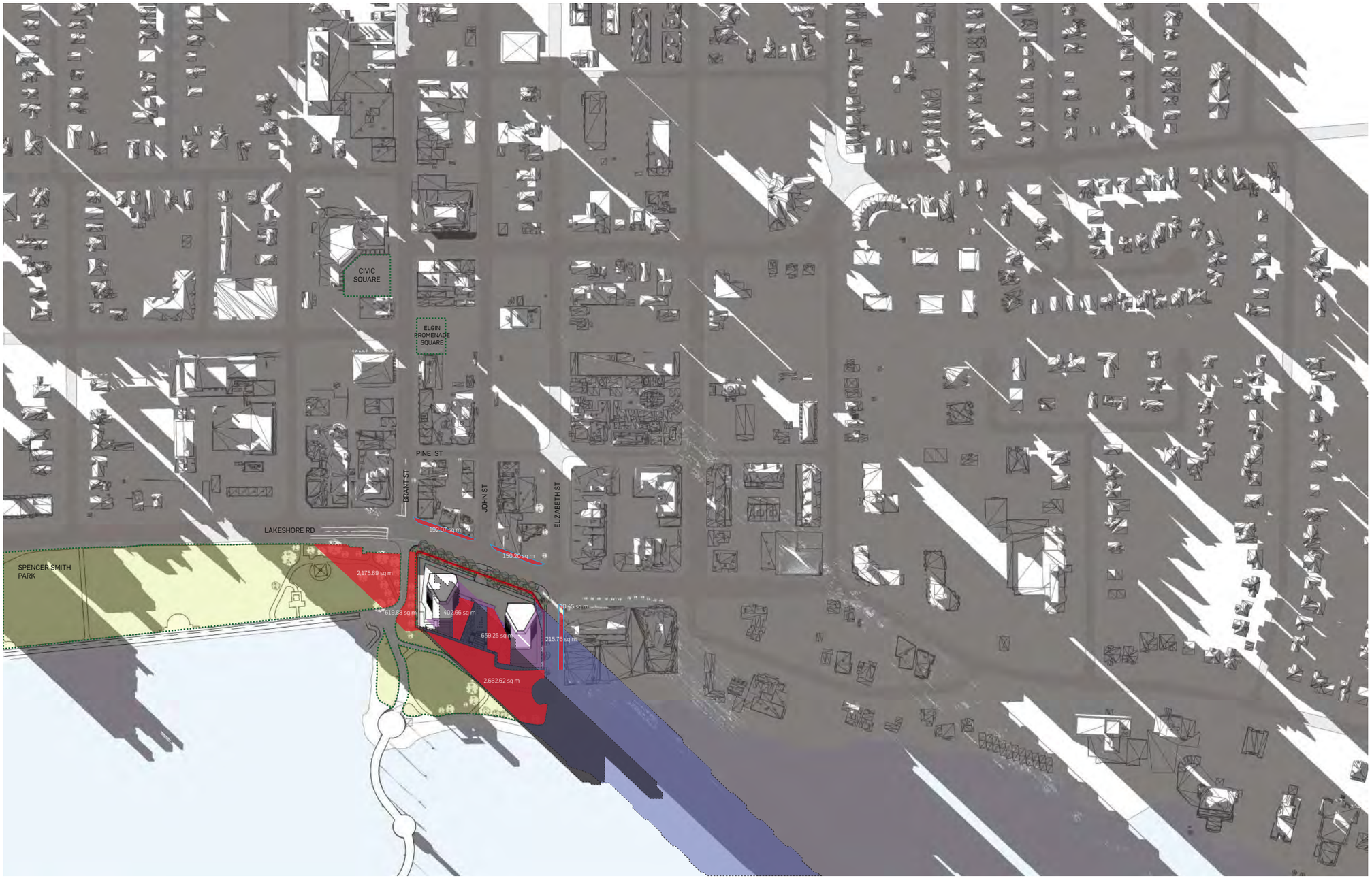
1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SUN SHADOW ANALYSIS: MARCH



MARCH 21 - 6PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 8AM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 9AM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 10AM

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 11AM

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION
2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 12PM

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 1PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 2PM

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 3PM

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 4PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 5PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

Vrancor GROUP NEUF BOUSFIELDS INC. PLANNING & URBAN DESIGN adesso design inc. landscape architecture

APPENDIX A | SHADOW ANALYSIS: JUNE



JUNE 21 - 6PM

LOCATION

2020 Lakeshore Road, Burlington, Ontario

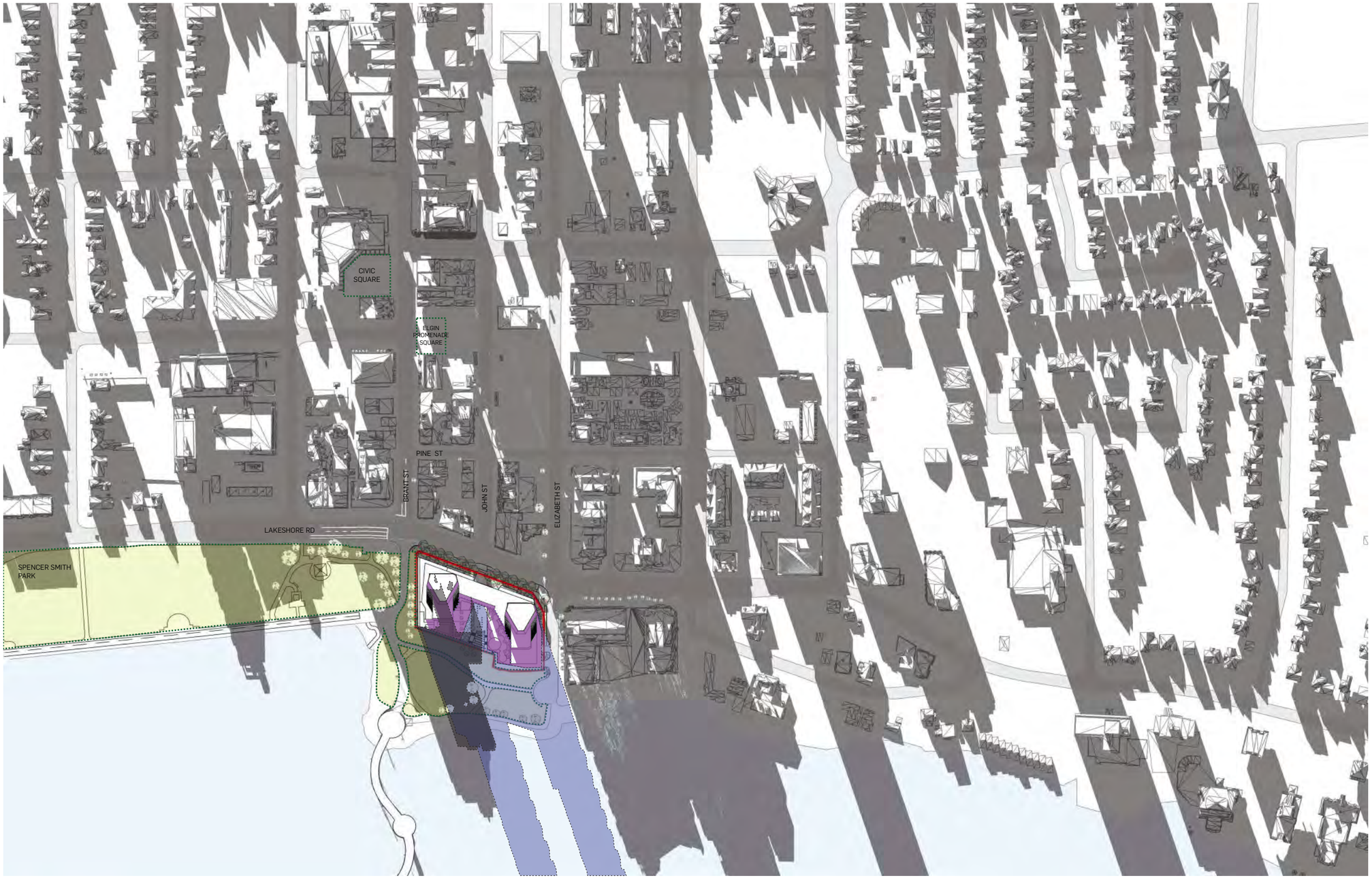
1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

APPENDIX A | SHADOW ANALYSIS: JUNE



LOCATION

2020 Lakeshore Road, Burlington, Ontario

1:3500

25m 150m

LEGEND

- SITE BOUNDARY
- OPEN SPACE
- PRIVATE OUTDOOR AMENITY AREA
- ADJACENT RESIDENTIAL AMENITY SPACE TOTAL AREA
- NEW SHADOWS CAST ON ROOF SURFACES
- NEW SHADOWS CAST ON GROUND SURFACES
- EXISTING SHADOWS CAST ON GROUND SURFACES
- AREA EXPOSED TO SUNSHINE
- AREA IN SHADOW (INCLUDING EXISTING AND PROPOSED SHADOWS)
- TOTAL OPPOSITE BOULEVARD AREA

JUNE 21 - 7PM