CITY OF OTTAWA

5650 MITCH OWENS ROAD TRANSPORTATION IMPACT ASSESSMENT

DRAFT FINAL REPORT

JUNE 10, 2022

DRAFT

wsp

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CITY OF OTTAWA

DRAFT

PROJECT NO.: OUR REF. NO. 20M-01221-00
DATE: JUNE 10, 2022

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1 SCREENING

This Transportation Impact Assessment (TIA) has been prepared to support the Site Plan Control Application and Zoning By-law Amendment for the development at 5650 Mitch Owens in Ottawa. The TIA follows the City of Ottawa guidelines which potentially includes five steps:

1 Screening
2 Scoping
3 Forecasting
4 Analysis
5 TIA Report

The Screening Step determines the need to continue with a TIA Study. The development is assessed against three triggers: trip generation, location, and safety to identify the next step of the study. If one or more of the triggers is satisfied, the Scoping Step must be completed. If none of the triggers are satisfied, the TIA is deemed complete. If one or more triggers are satisfied, specific TIA components are required to be carried out depending on the combination of triggers (**Table 1-1**) that have been satisfied.

The proposed development at 5650 Mitch Owens **satisfied the Safety trigger** indicating that, as part of Steps Two through Five of the TIA process, the Design Review and Network Impact components should be completed. For reference, the completed Screening Form is provided in **Appendix B**.

Table 1-1. Transportation Impact Assessment (TIA) Screening Triggers

	TIA TRIGGERS SATISFIED		
Next Step of the TIA Process	**Trip Generation**	**Location**	**Safety**
Design Review and Network Impact	**No**	**No**	**Yes**

2 SCOPING

2.1 SCREENING FORM

The completed Screening Form is provided in **Appendix B**.

2.2 DESCRIPTION OF PROPOSED DEVELOPMENT

This Transportation Impact Assessment (TIA) has been prepared in support of the Site Plan Control Application for the proposed development at 5650 Mitch Owens Road, which is the existing location of George Nelms Sports Park. The site currently consists of nine outdoor soccer fields and 241 parking spaces. The property is currently zoned as a Parks and Open Space Zone (O1) in the Rural Area (Area D). **Figure 2-1** illustrates the Study Area Context Plan.

The proposed development, a 510 m^2 clubhouse for the Ottawa South United Soccer Association (OSU), will be located about 100m south of the existing access point along Mitch Owens Road near the parking lot. There will be no new accesses or parking spaces developed for the clubhouse.

The development information, as stated in the draft site plan attached as **Appendix C**, states that the new clubhouse will be accessible via the existing parking lot and will not impede any of the existing soccer fields.

The facility will be built as a single phase with an estimated date of completion in 2023.

Figure 2-1. Area Context Plan

2.3 EXISTING CONDITIONS

2.3.1 ROADWAYS AND PEDESTRIAN / CYCLING FACILITIES

The one roadway that the TIA will consider is Mitch Owens Road, which is designated as a Full Loads truck route as identified on the Ottawa Rural Truck Routes map (March 2021) under the jurisdiction of the City of Ottawa. The road classification for City of Ottawa roadways is defined in the City of Ottawa Official Plan, 2013, Volume 1, Section 7, Annex 1 Road Classifications and Rights-of-Way.

Mitch Owens Road is a rural arterial road that runs in an east-west alignment with a posted speed limit of 80 km/h (exception of 60 km/h on school days). It has one traffic lane in each direction. The right-of-way adjacent to the existing access to the proposed development is 34 metres. Street parking is prohibited on both sides of the road.

The existing pedestrian and cycling facilities providing direct connections to the proposed development are shown in **Figure 2-2**. Mitch Owens Road is designated as a Spine Route as defined in the City of Ottawa Official Plan, 2013, Volume 1, Section 6, Schedule J Cycling, Multi-Use Pathways and Scenic Entry Routes (Rural). Along the south side of the road is a two-way multi-use pathway, and an on-street cycling lane are provided on the north side of the road.

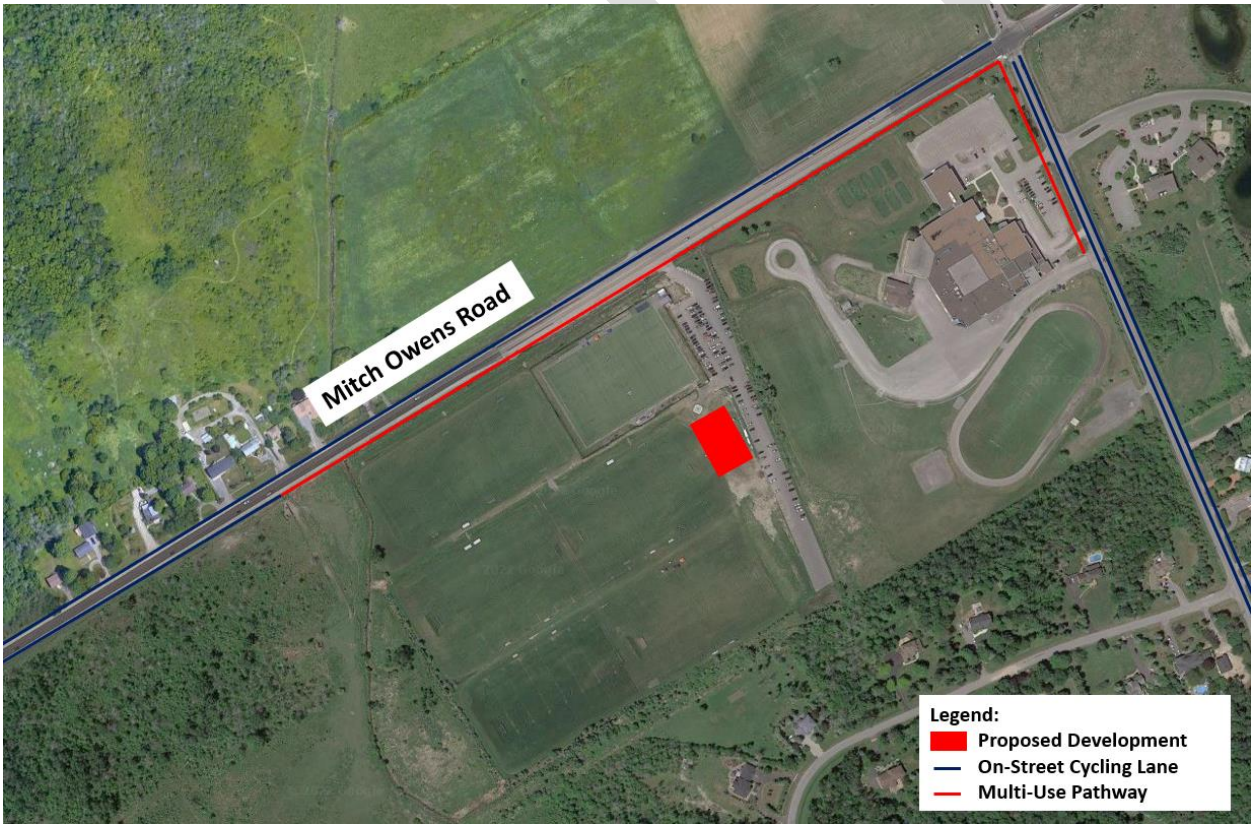


Figure 2-2: Bicycle and Pedestrian Facilities

2.3.2 INTERSECTIONS

The TIA will not consider any intersections in the study area given that the trip generation trigger was not met.

2.3.3 DRIVEWAYS

There is just one existing access to 5650 Mitch Owens Road. The access is 350m west of the Dozois Road/ Limebank Road/Mitch Owens Road.

2.3.4 TRANSIT FACILITIES

OC Transpo does not provide transit service within 2 km of the site. The nearest transit stops are to the west at the Bridge Street/Mitch Owens Road/River Road intersection. The stops service Route 299 from Manotick to Tunney's Pasture. Route 299 is a Connection Route that operates Monday to Friday during peak period. **Figure 2-3** highlights all OC Transpo bus routes on adjacent roadways in close proximity of the proposed development.

Figure 2-3: OC Transpo Bus Routes

2.3.5 AREA TRAFFIC MANAGEMENT MEASURES

The existing area traffic management measures identified adjacent to the proposed development site include:

- Auxiliary turning lanes for both eastbound and westbound traffic at the access point on Mitch Owens Road. Eastbound right turn lane (with taper) is 180 metres, while westbound left turn lane (with taper) is 190 metres
- Multi-use pathway on south side (nearest access point) on Mitch Owens Road
- Reduced speed (from 80 km/h to 60 km/h) on school days.

2.3.6 PEAK HOUR TRAVEL DEMANDS

The TRANS Committee was established to co-ordinate transportation planning efforts among various planning agencies located within the National Capital Region. The proposed development is located in the Rural Southeast TRANS District (360). The complete TRANS O-D Results (including a map of the district area) is provided in

Appendix D. The most recent Origin-Destination survey was completed by TRANS in the Fall of 2011. The TRANS trip data for this district is summarized in **Table 2-1.**

Table 2-1. Peak Hour Travel Demand by Mode

TRAVEL MODE	AM PEAK PERIOD (6:30 A.M. – 9:00 A.M.)			PM PEAK PERIOD (3:30 P.M. – 6:00 P.M.)		
	From District	To District	Within District	From District	To District	Within District
Auto-Driver	67%	69%	35%	64%	73%	43%
Auto-Passenger	14%	9%	12%	30%	17%	18%
Transit	6%	0%	0%	3%	5%	1%
Bicycle	0%	0%	0%	0%	0%	0%
Walk	0%	2%	9%	0%	0%	9%
Other	12%	21%	44%	3%	4%	29%
Total Vehicles	**5,960**	**1,170**	**1,550**	**1,830**	**6,110**	**1,530**

Source: 2011 TRANS Trip Generation Manual

The primary mode of transportation to the district is by vehicle with 81% of all trips being in a vehicle (driver and passenger in the AM peak period and 90% in the PM peak period. Meanwhile, transit and active transportation account for 0-6% and 0-9% of all commuter traffic, respectively.

2.3.7 FIVE-YEAR COLLISION HISTORY

Using the collision history from the City of Ottawa Open Data, WSP reviewed the number and types of collisions (January 1, 2015, through December 31, 2019) at the existing access point to the site. More recent and detailed five-year collision data will be requested from the City of Ottawa in support of a more thorough collision review. **Table 2-2** summarizes the five-year collision history on the boundary road.

Table 2-2. Five Year Collision History Summary

LOCATION	SUMMARY	TRENDS
Access Road: Mitch Owens Road and Access Point	Nine collisions over the five-year period None including cyclists or pedestrians.	-

The collision data provided account for all collisions between Spratt Road and Limebank Road along Mitch Owens Road. The total length of this stretch of Mitch Owens Road is over 2km, and thus the true number of collisions near the access point are likely much lower than the nine mentioned in **Table 2-2.**

2.4 PLANNED CONDITIONS

2.4.1 CHANGES TO THE STUDY AREA TRANSPORTATION NETWORK

Based on the City of Ottawa's Construction and Infrastructure projects, there are no major projects near the adjacent roads expected. Additionally, there are no proposed transit or active transportation improvements planned near the adjacent roads as part of the Transportation Master Plan (2013)

2.4.2 OTHER STUDY AREA DEVELOPMENTS

As indicated in the City of Ottawa's Development Application Search tool, there are no other developments near the study area that could influence it.

2.5 STUDY AREA

The limits for the Transportation Impact Assessment (TIA) study area are shown in **Figure 2-4**.

Figure 2-4: Study Area

2.6 TIME PERIOD

The time period identified for the traffic analysis are:

— Weekday Peak Hour: 4:30 p.m. to 5:30 p.m.

This is consistent with the peak hour identified in the turning movement counts that were collected at the Dozois Road/ Limebank Road/Mitch Owens Road intersection on July 7, 2006. WSP will request the most recent traffic counts from the same intersection if necessary (see Section 2.8).

2.7 HORIZON YEARS

The proposed facility is expected to be completed in one phase with a target build-out year of 2023. In accordance with the TIA Guidelines, the following horizons will be considered for analysis

- 2023, which represents the anticipated buildout horizon,
- 2028, which represents the buildout year plus five years.

Recall that the trip generation trigger was not satisfied and thus no analysis of the adjacent intersection is proposed.

2.8 EXEMPTIONS REVIEW

Based on the review of the development and network conditions, WSP is proposing that the Forecasting and Strategy sections be exempt from this Transportation Impact Assessment. From the Screening Form (see **Appendix B**) only the safety trigger was satisfied. However, as discussed through this Scoping Chapter, the roadway conditions, as they relate to safety, have implemented most of the necessary accommodations to improve conditions for all users.

Firstly, the existing roadway conditions are not expected to be altered much by the proposed development. The existing access along Mitch Owens Road will remain the only access point as there are no new access points being developed for the OSU clubhouse. Additionally, the through traffic volumes near the access point during peak hours is expected to be between 500-700 per direction (assuming a 2% annual growth from the traffic data at the Dozois Road/ Limebank Road/Mitch Owens Road intersection).

Furthermore, while the new clubhouse may generate some new trips, it is expected that many of the trips are already happening to the site and the existing nine soccer fields. Therefore, while there are expected to be approximately 20 new vehicle trips generated to the site during the PM peak hour, according to the ITE Trip Generation Manual, it is reasonable to presume that most of these trips are for members of the OSU that are already traveling to George Nelms Sports Park in its current condition.

With regards to roadway safety improvements, as mentioned in Section 2.3.5, auxiliary turning lanes for both eastbound and westbound movements have already been implemented to the existing access point. Therefore, turning and through vehicles along Mitch Owens Road near the access point for George Nelms Sports Park are separated, which should reduce the likelihood of a rear-end collision.

Additionally, there is already an existing multi-use-pathway on the south side of Mitch Owens Road. The pathway is separated from the roadway by a wide boulevard and fence. Consequently, safe access to the site via active transportation is already provided.

Therefore, since roadway conditions (volume and access) are not anticipated to be altered much, if at all, by the new development and that the most effective safety considerations have already been implemented, WSP believes that the Forecasting and Strategy reports qualify for an exemption from this Transportation Impact Assessment.

APPENDIX

A CIRCULATION COMMENT / RESPONSE

APPENDIX

B SCREENING FORM

City of Ottawa 2017 TIA Guidelines Screening Form

1. Description of Proposed Development

Municipal Address	5650 Mitch Owens Road
Description of Location	Adjacent to existing outdoor soccer field, 100m south of road access
Land Use Classification	Recreational
Development Size (units)	N/A
Development Size (m^2)	510
Number of Accesses and Locations	No vehicle accesses proposed (1 existing on Mitch Owens Road)
Phase of Development	1
Buildout Year	2023

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Land Use Type	Minimum Development Size
Single-family homes	40 units
Townhomes or apartments	90 units
Office	3,500 m^2
Industrial	5,000 m^2
Fast-food restaurant or coffee shop	100 m^2
Destination retail	1,000 m^2
Gas station or convenience market	75 m^2

** If the development has a land use type other than what is presented in the table above, estimates of person-trip generation may be made based on average trip generation characteristics represented in the current edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual.*

If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied.

Proposed development: 510 m2

ITE Land Use: 435 (Multipurpose Recreational Facility): <25 person trips during peak hour

3. Location Triggers

	Yes	No
Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit or Spine Bicycle Networks?		X
Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*		X

**DPA and TOD are identified in the City of Ottawa Official Plan (DPA in Section 2.5.1 and Schedules A and B; TOD in Annex 6). See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA).*

If any of the above questions were answered with 'Yes,' the Location Trigger is satisfied.

4. Safety Triggers

	Yes	No
Are posted speed limits on a boundary street are 80 km/hr or greater?	X	
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?		X
Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)?		X
Is the proposed driveway within auxiliary lanes of an intersection?		X
Does the proposed driveway make use of an existing median break that serves an existing site?		X
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?		X
Does the development include a drive-thru facility?		X

If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.

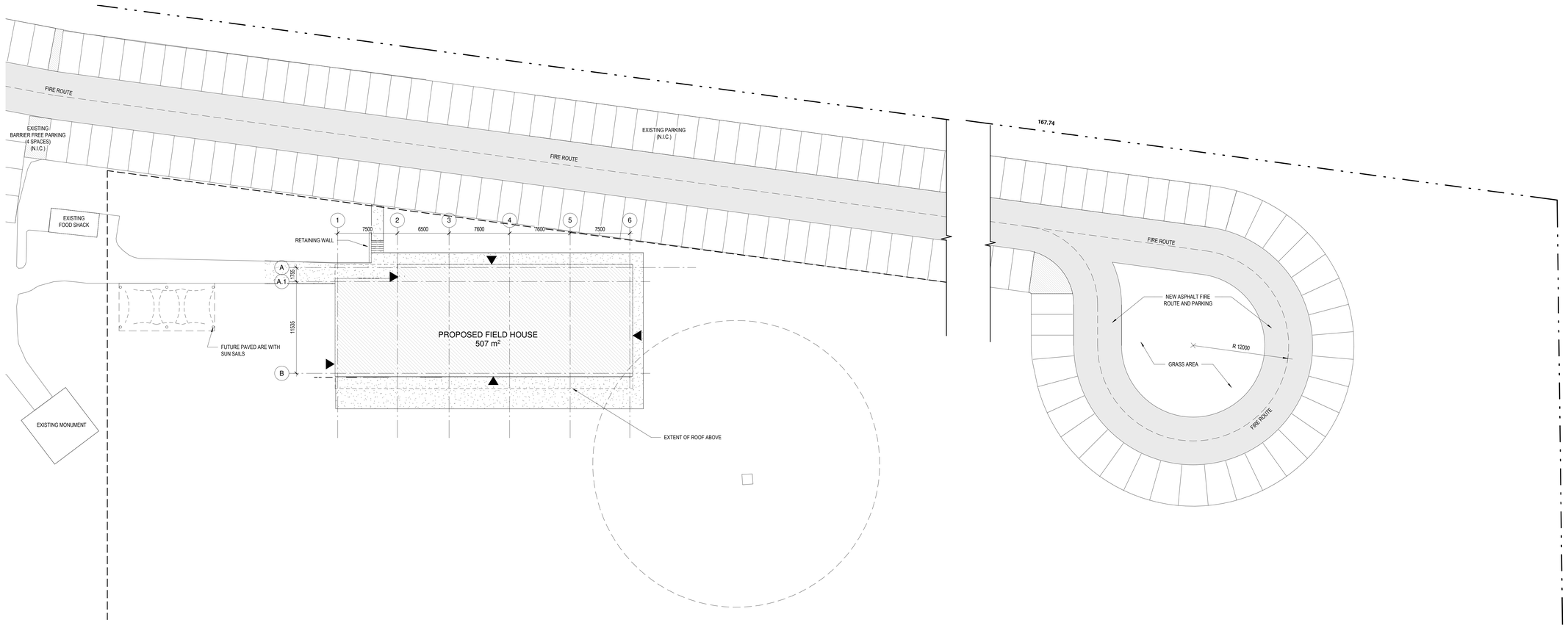
5. Summary

	Yes	No
Does the development satisfy the Trip Generation Trigger?		X
Does the development satisfy the Location Trigger?		X
Does the development satisfy the Safety Trigger?	X	

If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).

APPENDIX

C DRAFT SITE PLAN



1 / A100 ENLARGED SITE PLAN
Scale: 1 : 200

LEGEND

CONCRETE SIDEWALK

PROPERTY LINE

ARCHITECTURE 49
1000-150 ISABELLA STREET
OTTAWA,ONTARIO,CANADA K1S 1V7
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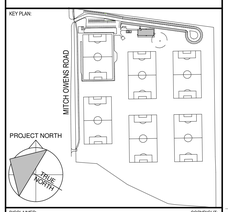
SEAL:

CLIENT:
OTTAWA SOUTH UNITED

CLIENT REF. #:

PROJECT:
OTTAWA SOUTH UNITED
FIELD HOUSE
5650 MITCH OWENS ROAD
OTTAWA, ONTARIO

KEY PLAN:



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SHEET #: OF

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REV #:
DATE OF: 2022-05-13

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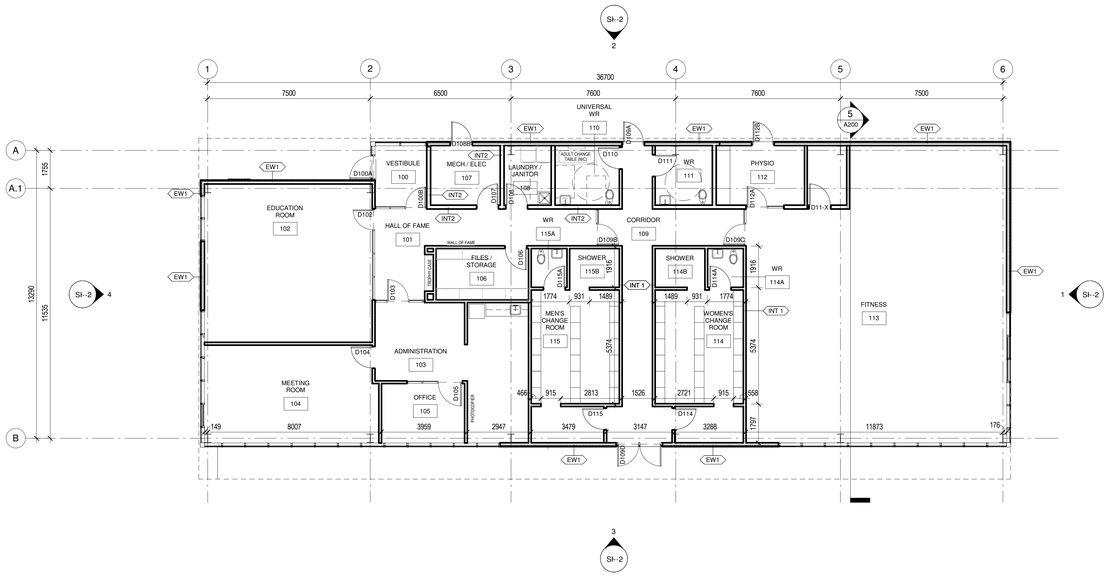

1 A200 GROUND FLOOR PLAN
Scale: 1 : 100

2 A200 REFLECTED CEILING PLAN
Scale: 1 : 100

GENERAL NOTES

- ALL STUD PARTITIONS ARE DIMENSIONED TO FACE OF STEEL STUD UNLESS NOTED OTHERWISE.
- ALL CONCRETE MASONRY PARTITIONS ARE DIMENSIONED TO FACE OF CONCRETE MASONRY, UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHER WISE NOTED.

ROOM AREA

NUMBER	NAME	AREA
000	OPTIONAL STORAGE	5 m²
100	VESTIBULE	7 m²
101	HALL OF FAME	24 m²
102	EDUCATION ROOM	57 m²
103	ADMINISTRATION	34 m²
104	MEETING ROOM	37 m²
105	OFFICE	11 m²
106	FILES / STORAGE	10 m²
107	MECH / ELEC	9 m²
108	LAUNDRY / JANITOR	6 m²
109	CORRIDOR	31 m²
110	UNIVERSAL WR	8 m²
111	WR	7 m²
112	PHYSIO	11 m²
113	FITNESS	152 m²
114	WOMEN'S CHANGE ROOM	27 m²
114A	WR	3 m²
114B	SHOWER	4 m²
115	MEN'S CHANGE ROOM	27 m²
115A	WR	3 m²
115B	SHOWER	4 m²

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CLIENT REF. #:

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OTTAWA SOUTH UNITED
FIELD HOUSE
5650 MITCH OWENS ROAD
OTTAWA, ONTARIO

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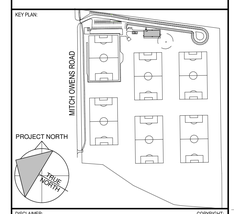

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SHEET #: OF
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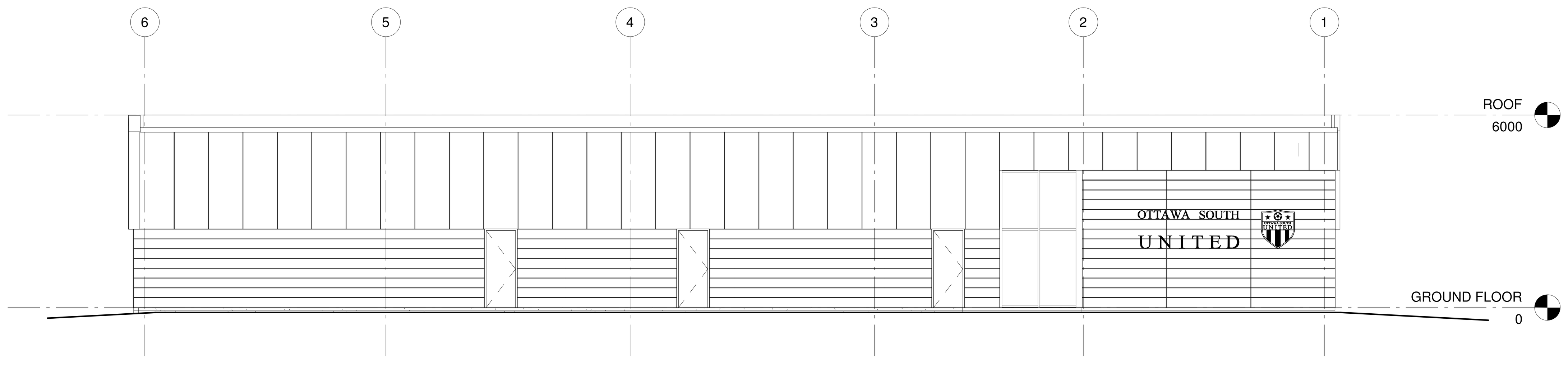

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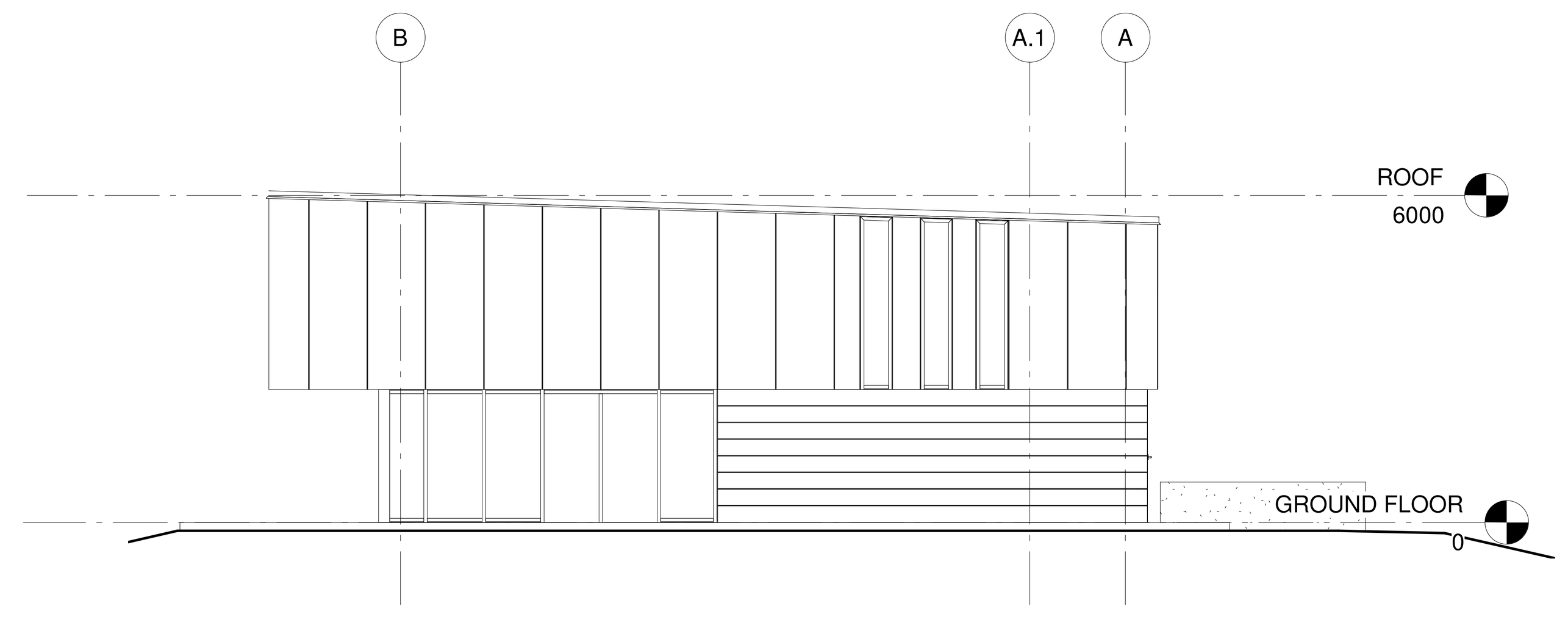

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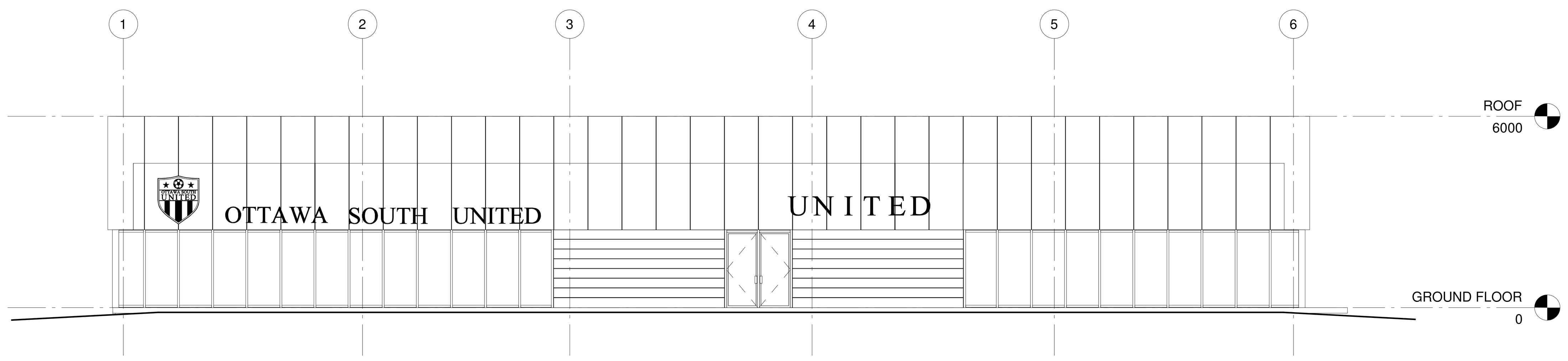

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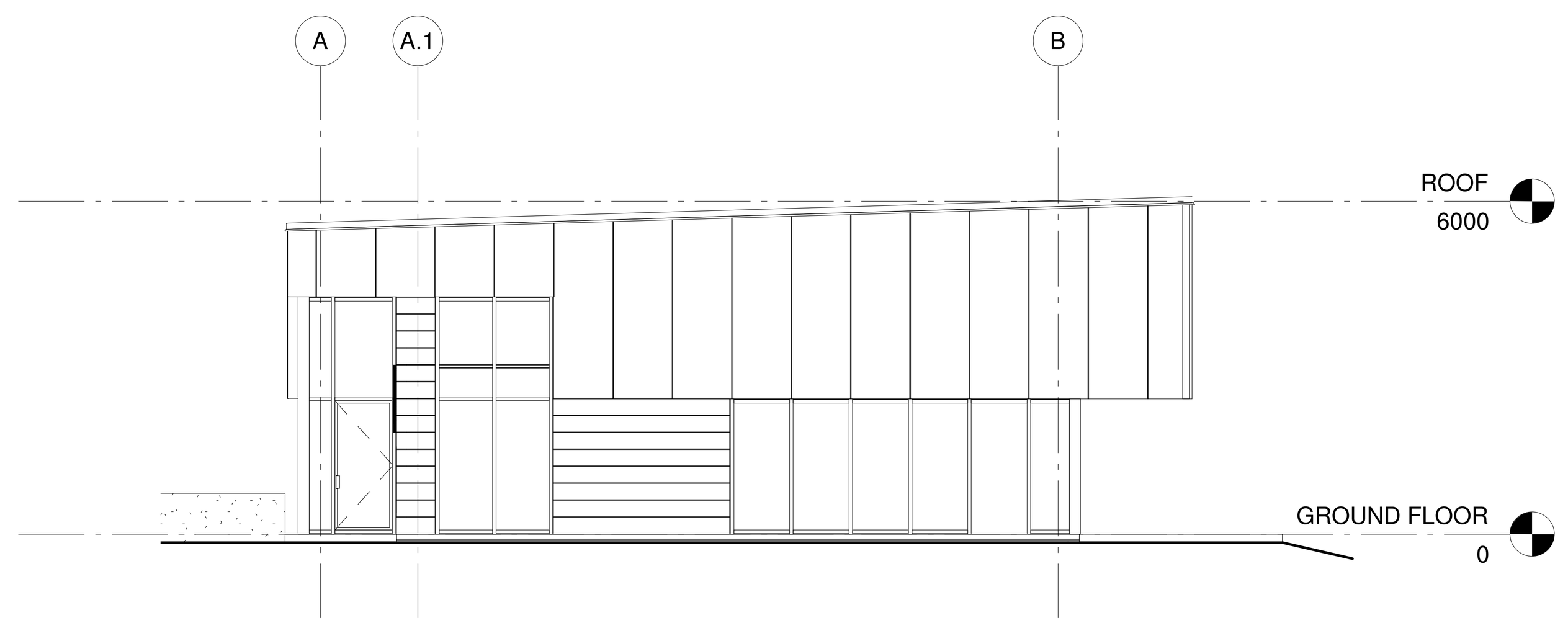

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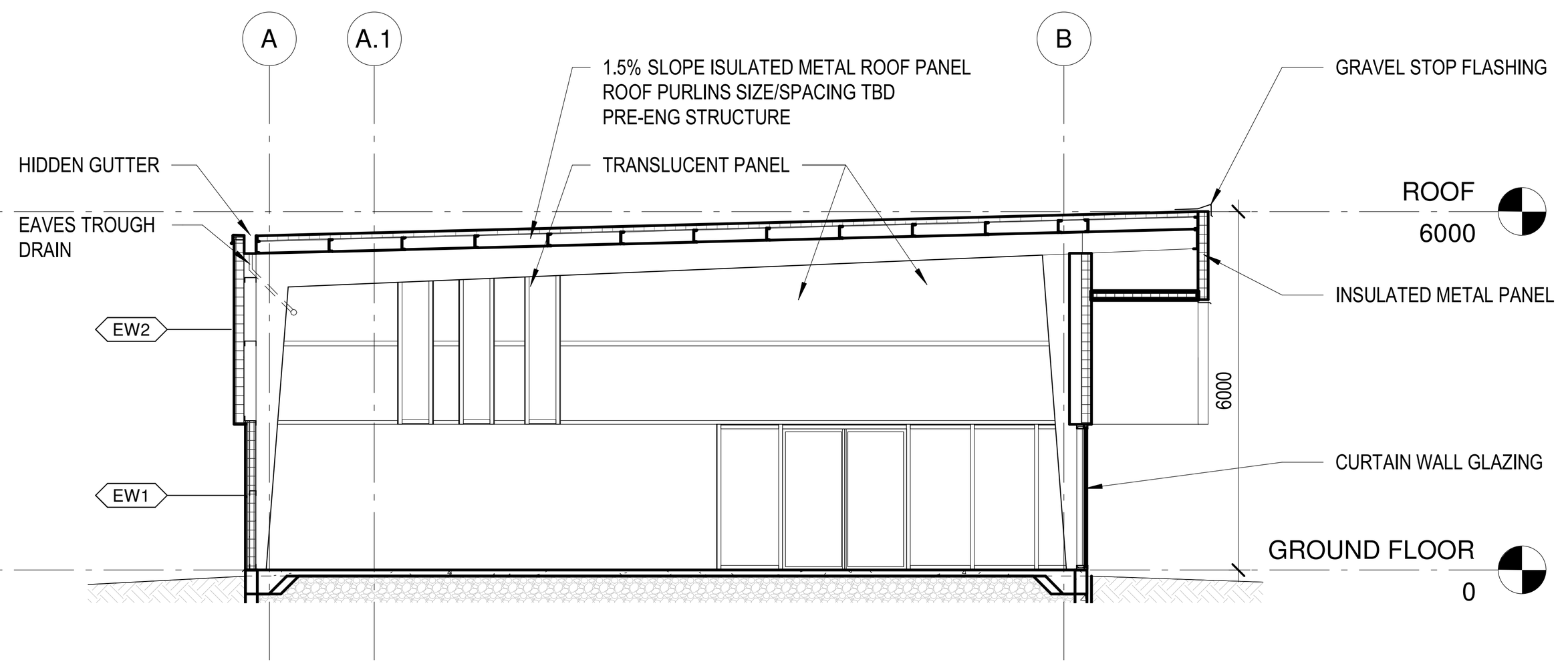

5 BUILDING SECTION
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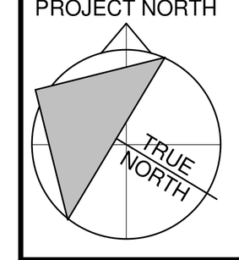
CLIENT:
OTTAWA SOUTH UNITED

CLIENT REF. #:

PROJECT:
OTTAWA SOUTH UNITED FIELD HOUSE
5650 MITCH OWENS ROAD
OTTAWA, ONTARIO

KEY PLAN:



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APPENDIX

D TRANS O-D SURVEY

Rural Southeast

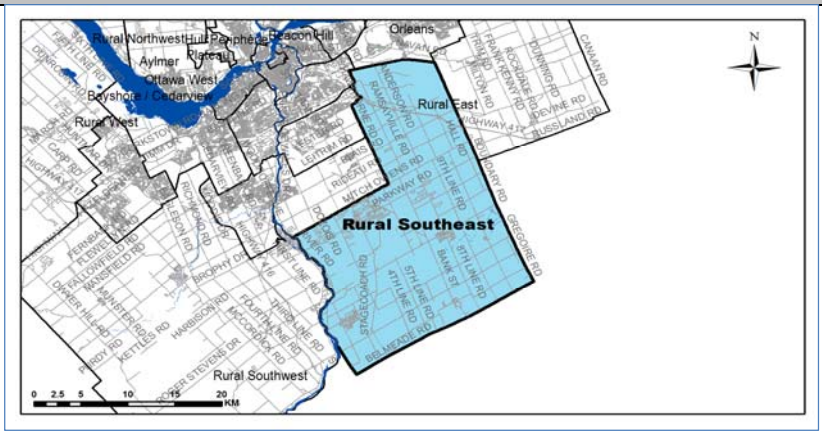
Demographic Characteristics

Population	26,840	Actively Travelled	21,350
Employed Population	13,620	Number of Vehicles	19,650
Households	9,320	Area (km^2)	508.6

Occupation Status (age 5+)	Male	Female	Total
Full Time Employed	6,760	5,460	12,230
Part Time Employed	310	1,080	1,390
Student	3,300	2,860	6,160
Retiree	2,000	2,150	4,150
Unemployed	230	190	420
Homemaker	10	610	630
Other	200	290	490
Total:	12,820	12,640	25,460

Traveller Characteristics	Male	Female	Total
Transit Pass Holders	590	700	1,290
Licensed Drivers	10,120	10,110	20,230
Telecommuters	10	80	100
Trips made by residents	32,130	35,050	67,170

Selected Indicators	
Daily Trips per Person (age 5+)	2.64
Vehicles per Person	0.73
Number of Persons per Household	2.88
Daily Trips per Household	7.21
Vehicles per Household	2.11
Workers per Household	1.46
Population Density (Pop/km2)	50

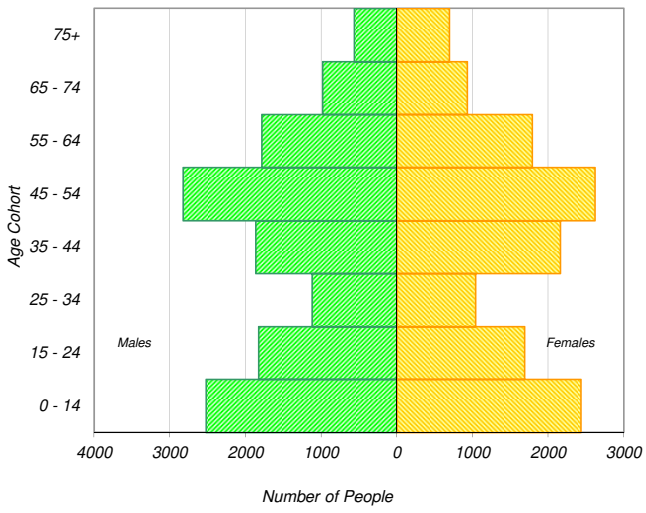


Household Size		
1 person	1,210	13%
2 persons	3,390	36%
3 persons	1,730	19%
4 persons	2,120	23%
5+ persons	880	9%
Total:	9,320	100%

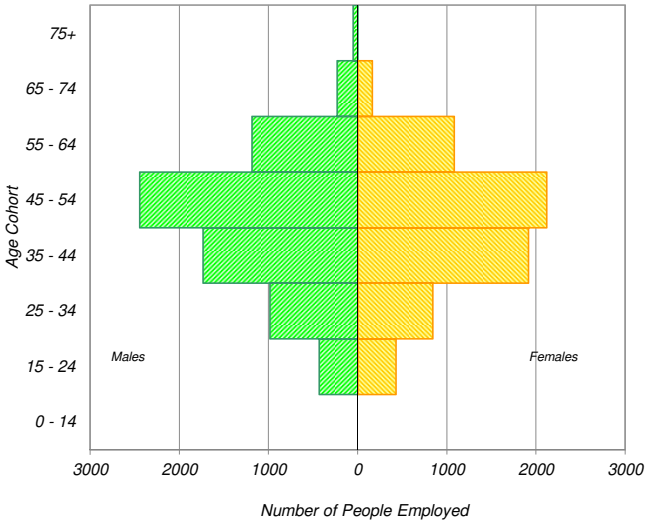
Households by Vehicle Availability		
0 vehicles	200	2%
1 vehicle	1,760	19%
2 vehicles	5,180	56%
3 vehicles	1,470	16%
4+ vehicles	710	8%
Total:	9,320	100%

Households by Dwelling Type		
Single-detached	9,020	97%
Semi-detached	70	1%
Townhouse	140	2%
Apartment/Condo	90	1%
Total:	9,320	100%

Population



Employed Population

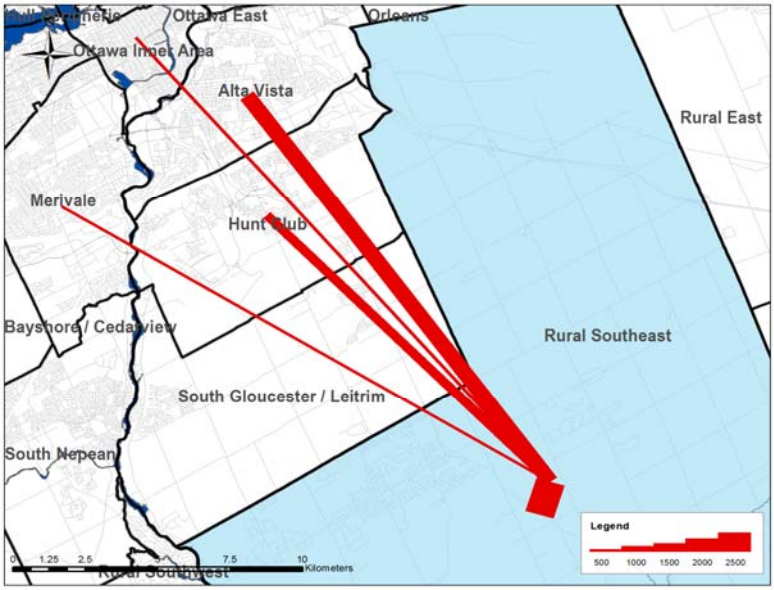


* In 2005 data was only collected for household members aged 11$^+$ therefore these results cannot be compared to the 2011 data.

Travel Patterns

Top Five Destinations of Trips from Rural Southeast

AM Peak Period



Summary of Trips to and from Rural Southeast

AM Peak Period (6:30 - 8:59) Districts	Destinations of Trips From District	% Total	Origins of Trips To District	% Total
Ottawa Centre	690	5%	20	0%
Ottawa Inner Area	830	6%	60	1%
Ottawa East	260	2%	40	1%
Beacon Hill	480	4%	10	0%
Alta Vista	1,550	12%	140	2%
Hunt Club	1,210	9%	190	3%
Merivale	960	7%	10	0%
Ottawa West	190	1%	50	1%
Bayshore / Cedarview	180	1%	40	1%
Orléans	290	2%	70	1%
Rural East	170	1%	30	0%
Rural Southeast	4,440	33%	4,440	73%
South Gloucester / Leitrim	570	4%	210	3%
South Nepean	580	4%	250	4%
Rural Southwest	520	4%	390	6%
Kanata / Stittsvile	260	2%	50	1%
Rural West	0	0%	20	0%
Île de Hull	110	1%	0	0%
Hull Périphérie	0	0%	30	0%
Plateau	0	0%	0	0%
Aylmer	0	0%	0	0%
Rural Northwest	0	0%	0	0%
Pointe Gatineau	0	0%	0	0%
Gatineau Est	0	0%	0	0%
Rural Northeast	0	0%	70	1%
Buckingham / Masson-Angers	0	0%	0	0%
Ontario Sub-Total:	13,180	99%	6,020	98%
Québec Sub-Total:	110	1%	100	2%
Total:	13,290	100%	6,120	100%

Trips by Trip Purpose

24 Hours	From District		To District		Within District	
Work or related	7,950	34%	1,470	6%	2,180	13%
School	2,360	10%	440	2%	2,570	16%
Shopping	2,600	11%	490	2%	620	4%
Leisure	2,230	9%	1,950	8%	1,270	8%
Medical	850	4%	300	1%	130	1%
Pick-up / drive passenger	2,180	9%	810	3%	1,170	7%
Return Home	3,780	16%	17,300	74%	7,300	45%
Other	1,580	7%	670	3%	1,110	7%
Total:	23,530	100%	23,430	100%	16,350	100%

AM Peak (06:30 - 08:59)	From District		To District		Within District	
Work or related	4,930	56%	710	42%	1,000	23%
School	1,870	21%	380	22%	2,280	51%
Shopping	270	3%	30	2%	30	1%
Leisure	140	2%	130	8%	130	3%
Medical	260	3%	20	1%	10	0%
Pick-up / drive passenger	800	9%	140	8%	380	9%
Return Home	160	2%	170	10%	230	5%
Other	440	5%	120	7%	370	8%
Total:	8,870	100%	1,700	100%	4,430	100%

PM Peak (15:30 - 17:59)	From District		To District		Within District	
Work or related	220	8%	60	1%	170	5%
School	50	2%	20	0%	0	0%
Shopping	450	16%	160	2%	110	3%
Leisure	530	19%	590	7%	240	7%
Medical	70	2%	70	1%	0	0%
Pick-up / drive passenger	390	14%	350	4%	210	6%
Return Home	830	29%	6,970	84%	2,670	75%
Other	320	11%	120	1%	150	4%
Total:	2,860	100%	8,340	100%	3,550	100%

Peak Period (%)	Total:	% of 24 Hours	Within District (%)
24 Hours	63,310		26%
AM Peak Period	15,000	24%	30%
PM Peak Period	14,750	23%	24%

Trips by Primary Travel Mode

24 Hours	From District		To District		Within District	
Auto Driver	16,890	72%	16,830	72%	7,750	47%
Auto Passenger	4,160	18%	4,250	18%	2,670	16%
Transit	970	4%	960	4%	40	0%
Bicycle	50	0%	20	0%	0	0%
Walk	30	0%	40	0%	1,630	10%
Other	1,460	6%	1,320	6%	4,260	26%
Total:	23,560	100%	23,420	100%	16,350	100%

AM Peak (06:30 - 08:59)	From District		To District		Within District	
Auto Driver	5,960	67%	1,170	69%	1,550	35%
Auto Passenger	1,270	14%	150	9%	530	12%
Transit	530	6%	0	0%	20	0%
Bicycle	20	0%	0	0%	0	0%
Walk	0	0%	30	2%	400	9%
Other	1,070	12%	350	21%	1,940	44%
Total:	8,850	100%	1,700	100%	4,440	100%

PM Peak (15:30 - 17:59)	From District		To District		Within District	
Auto Driver	1,830	64%	6,110	73%	1,530	43%
Auto Passenger	860	30%	1,450	17%	640	18%
Transit	90	3%	430	5%	20	1%
Bicycle	0	0%	0	0%	0	0%
Walk	0	0%	0	0%	310	9%
Other	100	3%	340	4%	1,040	29%
Total:	2,880	100%	8,330	100%	3,540	100%

Avg Vehicle Occupancy	From District	To District	Within District
24 Hours	1.25	1.25	1.34
AM Peak Period	1.21	1.13	1.34
PM Peak Period	1.47	1.24	1.42

Transit Modal Split	From District	To District	Within District
24 Hours	4%	4%	0%
AM Peak Period	7%	0%	1%
PM Peak Period	3%	5%	1%