



December 17<sup>th</sup>, 2020

JDE Project 20098

***Foxpark Development Corporation***

Mr. Carl Strand  
carl@smarthomesgq.com

**RE: Professional Engineering Services – Traffic Letter  
77 Fox Street, Town of Penetanguishene**

**JD Northcote Engineering Inc.** [JD Engineering] is pleased to submit the following traffic letter in support of the proposed residential development located at 77 Fox Street in the Town of Penetanguishene [Town], County of Simcoe.

**1.0 BACKGROUND**

The subject site is municipally known as 77 Fox Street, located on the east side of Fox Street between Sheridan Street and Yeo Street.

The proposed development is anticipated to consist of 56 multiple dwelling units and 74 parking spaces. The development is to occur in two phases; Phase 1 to include 16 units with 24 parking spaces and Phase 2 to include 40 units with 50 parking spaces.

It is our understanding that Phase 1 lands are currently zoned to permit the proposed development. Phase 2 will require a rezoning application and will proceed as the market demands. For the purpose of the study, we have considered the proposed development in its entirety, unless otherwise stated.

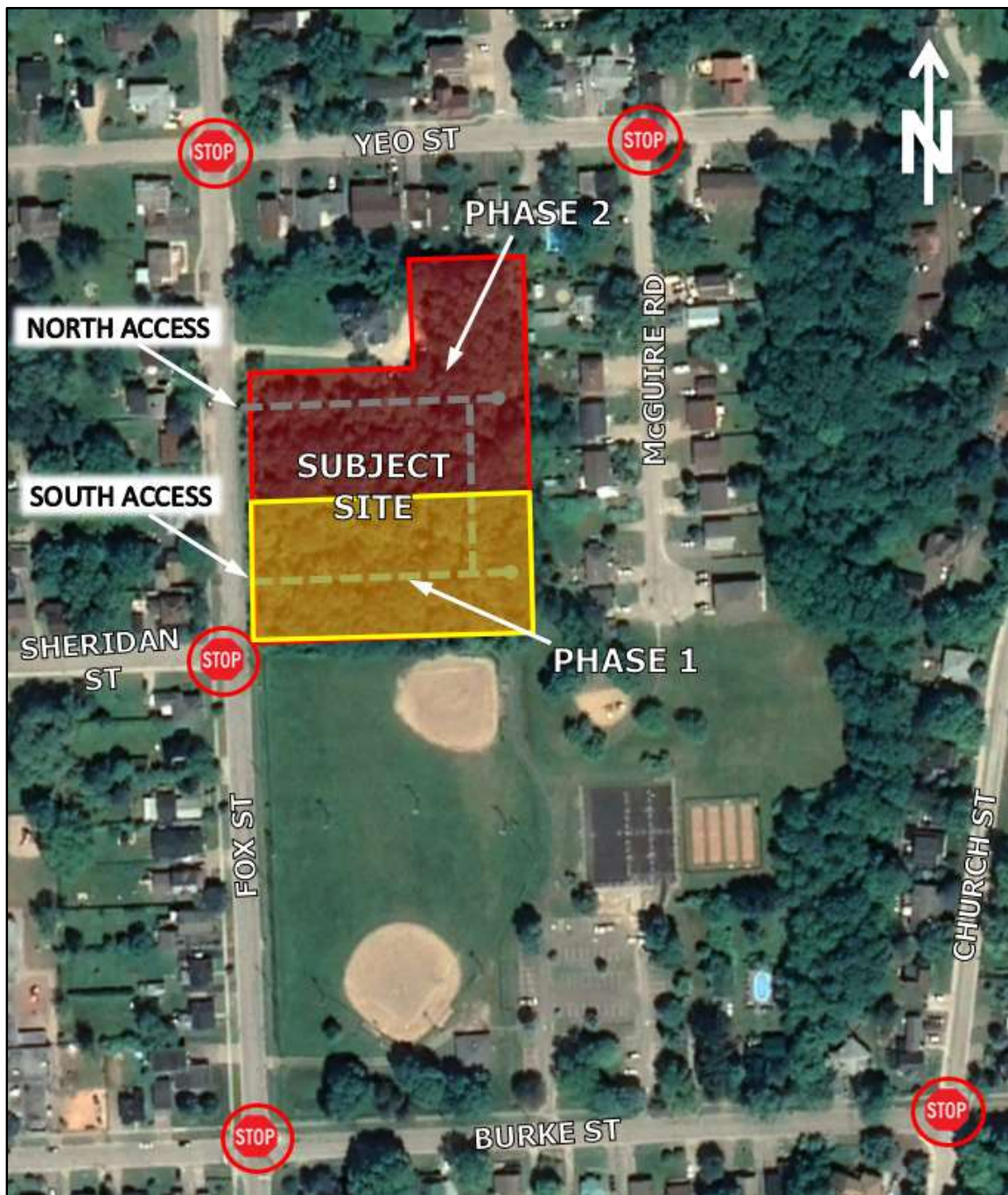
Access to the development is proposed via two full-movement driveways onto Fox Street, [North Access] and [South Access]. The proposed Site Plan by JFIVE Developments Ltd. is shown in the **Appendix**.

**Figure 1** illustrates the location of the subject site in relation to the surrounding area.



**JD Engineering**  
Phone: 705.725.4035  
Email: Info@JDEngineering.ca

Figure 1 – Proposed Site Location and Study Area



## 2.0 INFORMATION GATHERING

**Fox Street** is designated as a local road within the Town's Official Plan, with a two-lane rural cross-section through the study area. Fox Street provides one lane of travel per direction with sidewalk

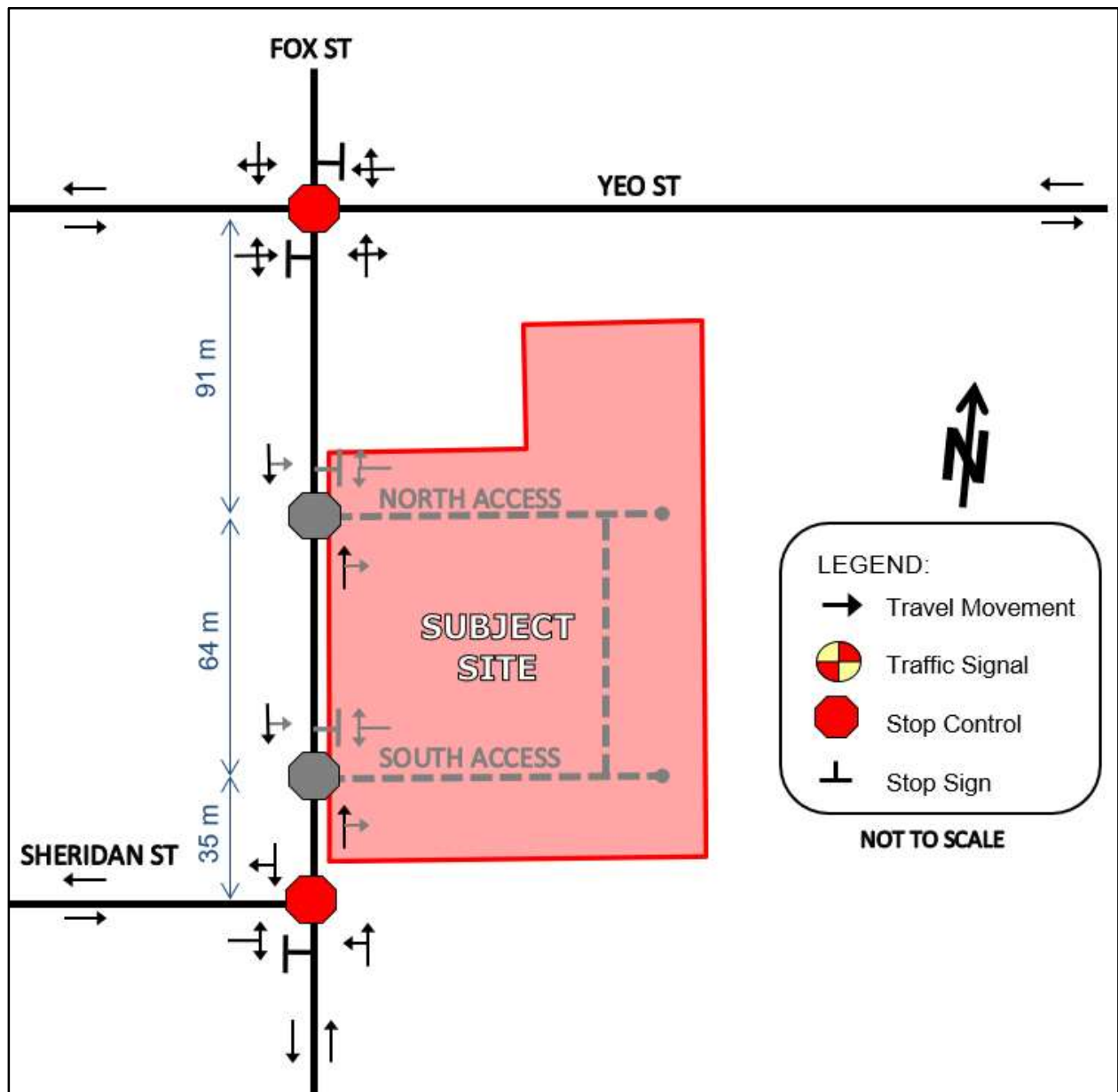
on the west side of the road. The unposted (assumed) speed limit on Fox Street is 50km/h. Fox Street is under the jurisdiction of the Town.

South of Sheridan Street, on-street parking is prohibited on the east side of the road. North of Sheridan Street, on-street parking is available within the grassed shoulder on the west side of the road.

As a local road, Fox Street has an assumed planning capacity of 400 vehicles per hour per lane (vphpl).

The existing intersection spacing and lane configuration within the study area is illustrated in **Figure 2**.

Figure 2 – Proposed Site Location and Study Area



### 3.0 TRANSIT ACCESS

Mid-Pen Transit currently provides daytime service in the study area. The Penetanguishene bus route travels between the Waypoint Centre in the Town's north end and Huronia Mall in the Town of Midland, providing connection opportunity to the Midland South and Midland North routes.

The route travels on a one-hour headway from 06:25 to 17:25 on weekdays and 08:25 to 16:25 on Saturday. No service is provided on Sundays. The closest transit stop is located at the intersection of Fox Street / Beck Boulevard, approximately 550 metres north of the subject site.

#### 4.0 TRAFFIC GENERATION

The traffic generation for the proposed development has been estimated based on the type of land use, development size and data provided in the Institute of Transportation Engineers [ITE] Trip generation Manual (10<sup>th</sup> Edition) [ITE Trip Generation Manual]. The following ITE land use has been applied to estimate the traffic for the proposed development:

- ITE land use 220 (Multifamily Housing (Low-Rise)) – General Urban/Suburban Setting

The estimated trip generation for the proposed development is illustrated below in **Table 1**.

**Table 1 – Estimated Traffic Generation of Proposed Development**

Land Use	Size	AM Peak Hour			PM Peak Hour		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Multifamily Housing (Low-Rise) ITE Land Use: 220	57 units	6	22	28	23	13	36

As shown, the proposed residential development is expected to generate 28 and 36 trips during the AM and PM peak hours, respectively.

#### 5.0 TRAFFIC ASSIGNMENT

For the purpose of this study, it has been assumed that all traffic generated by the proposed development will be new traffic and would not be in the study area if the development was not constructed. The distribution of traffic through the study area has been assumed based on the site’s location within the Town, and in relation to surrounding development and attractions.

**Table 2** summarizes the trip distribution for the proposed development.

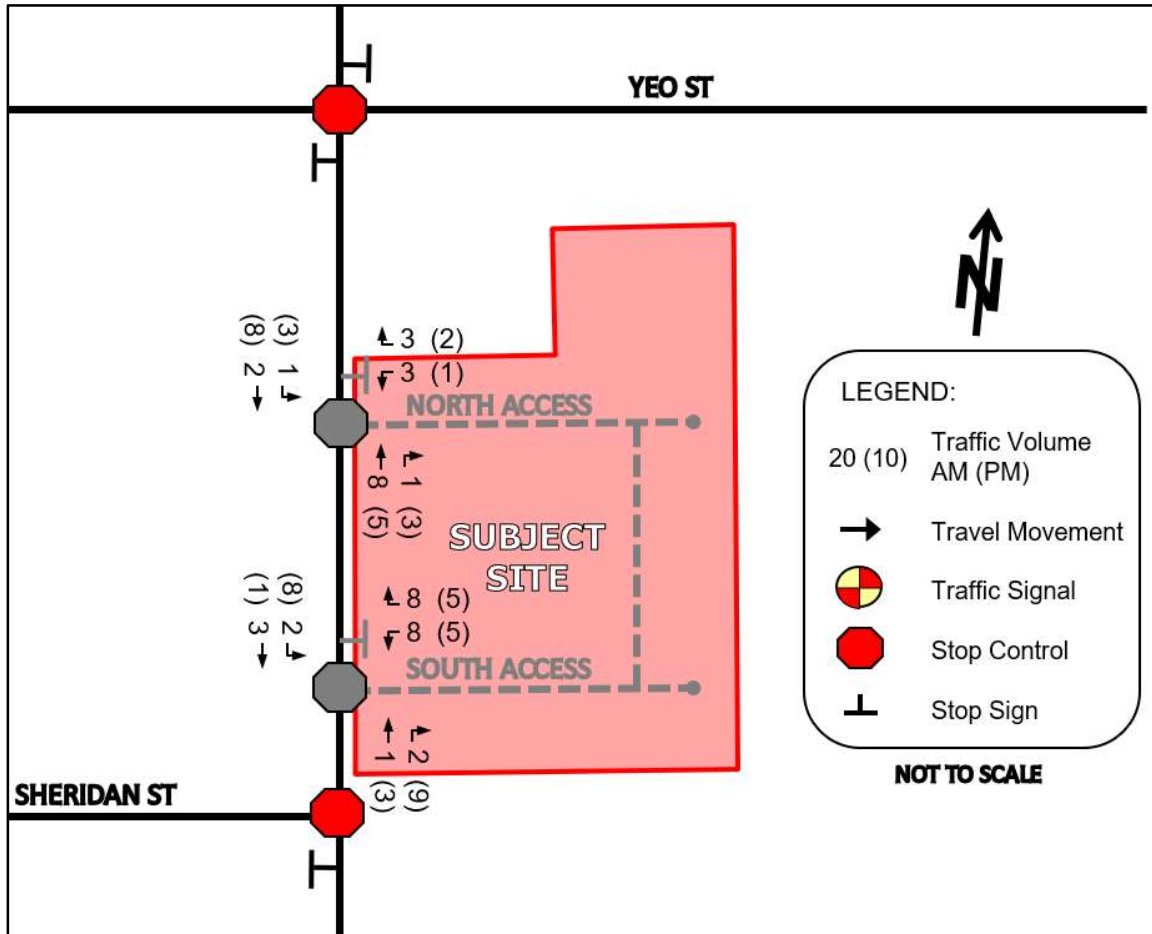
**Table 2 – Estimated Traffic Generation of Proposed Development**

Travel Direction (to/from)	Percent of Total Traffic Generation
North via Fox Street	30%
South via Fox Street	70%
<b>Total</b>	<b>100%</b>

Further distribution to the Site Access points have been based on the overall distribution in conjunction with the development’s internal layout and access configuration.

Figure 3 illustrates the traffic assignment for the proposed development.

Figure 3 – Traffic Assignment for Proposed Development



## 6.0 TRAFFIC OPERATIONS

Based on a site visit conducted by JD Engineering Staff on Thursday September 3, 2020, traffic volumes on Fox Street were noted to be low to moderate and below any level of operational concern.

In consideration of the minor volume of trips to be generated by the development, the proposed Site Access driveways are expected to provide acceptable operations with minimal delays operating under stop control for egress movements. As such, the development traffic will have negligible impact to the existing traffic operations in the study area road network.

The existing road network can accommodate the additional traffic generated by the proposed development.

## 7.0 SITE ACCESS & SITE CIRCULATION

As previously mentioned, the Site Access driveways will operate efficiently as full-movement accesses, with one-way stop control for egress movements. A single ingress and egress lane will provide the necessary capacity to facilitate the traffic generated by the proposed development.

As illustrated in **Figure 2**, the proposed spacing between the Site Accesses and the closest intersections (Yeo Street to the north and Sheridan Street to the South) is greater than the minimum driveway spacing requirements as per the TAC Guidelines – Figure 8.8.2 (Suggested Minimum Corner Clearances to Accesses or Public Lanes at Major Intersections) – 15 metres for unsignalized condition on a local road.

As per the *Town of Penetanguishene Land Development Engineering Policy* (April 2009), driveways are recommended to be designed in accordance with Ontario Provincial Standard Details [OPSD]. The proposed driveway widths of 7.0 metres satisfy the recommendations noted in OPSD 351.010 (Urban Residential Entrance) – 6.0 to 7.3 metres for two-way driveways.

As indicated in **Appendix**, the internal aisle widths will maintain a minimum clear width of 7.0 metres to serve two-way traffic and the manoeuvring of emergency vehicles. The temporary gravel cul-de-sac proposed within Phase 1 of development (illustrated in the **Appendix**) will meet the design requirements for an Offset Temporary Cul-De-Sac – Drawing No. 9, within the Town's Engineering Policy.

In consideration of the type and volume of vehicles accessing the site, the proposed access configuration and internal site layout is considered appropriate.

## 8.0 SIGHT DISTANCE

A review of the available sight distances for the proposed Site Access was completed as part of this analysis.

The sight distances were evaluated based on minimum sight distance requirements set out in the *TAC Guidelines*. With a posted speed of 50km/h a design speed of 60km/h (posted speed + 10km/h for lower speed roads) was utilized.

The available sight distance was identified through field observations. **Table 3** summarizes the sight distance analysis for the Site Access.

**Table 3 – Sight Distance Analysis**

Turning Movement Description	TAC Guidelines (60km/h design speed)	Available Sight Distance			
		North Access		South Access	
		North	South	North	South
Minimum Sight Stopping Distance	85m	134m	200m+	200m+	200m+
Minimum Intersection Sight Distance	130m				

As indicated, there are no issues with the sight distance available for the proposed Site Access.

**9.0 PARKING**

The Town's current *Zoning By-Law 2000-02* requires a provision of 1.5 spaces per multiple dwelling unit. It is noted that the Town is expected to be updating the Zoning By-law in the near future. As part of the update, it is anticipated that the requirement for a multiple dwelling unit will be reduced to 1.25 spaces.

As previously noted, Phase 1 of development will include 16 units and 24 parking spaces translating to 1.5 spaces per unit and satisfying the current Zoning By-law. Phase 2 will include 40 units and 50 parking spaces translating to 1.25 spaces per unit which is expected to meet the anticipated updated Zoning By-law parking requirements.

Overall, the development will provide 74 spaces for 56 units (1.32 spaces per unit). As such, the proposed parking supply is considered sufficient in context with the current and future requirements of the Town.

**10.0 CONCLUSION AND RECOMMENDATIONS**

This chapter summarizes the conclusions and recommendations from the study.

- 1) There are no issues with the proposed development driveway accesses onto Fox Street.
- 2) No additional infrastructure improvements are recommended within the study area as a result of the proposed development.
- 3) The proposed parking supply is considered sufficient in context with the current and future requirements of the Town and is appropriate for the intended use.



77 Fox Street  
Town of Penetanguishene

Traffic Letter

Date: 12/17/20  
Project No.: 20098

We trust that you find this proposal satisfies your requirements.

Yours truly,  
**JD Northcote Engineering Inc.**



John Northcote, P.Eng.  
President



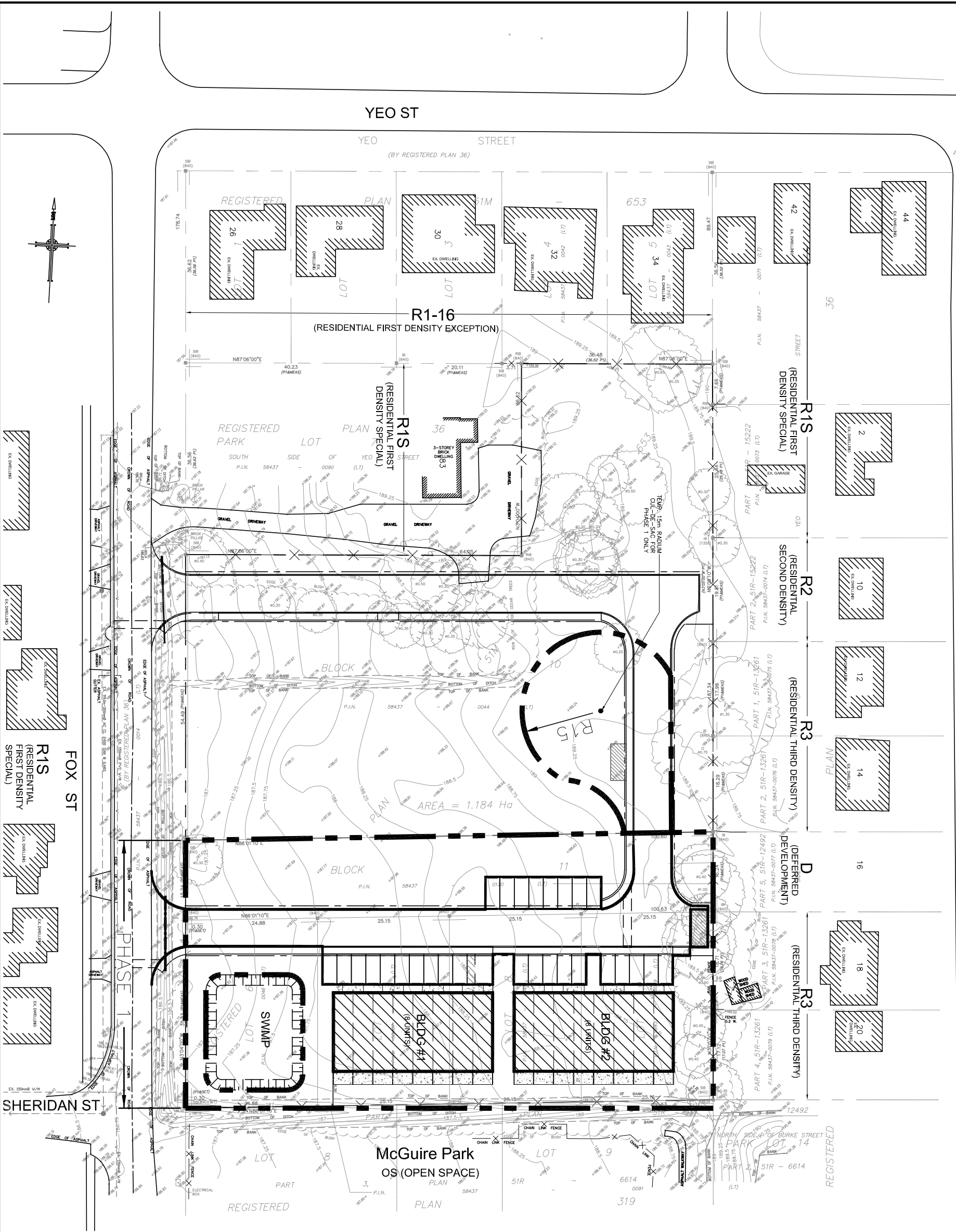
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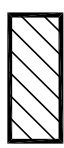
Date: 12/17/20  
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## APPENDIX

McGUIRE Rd



**LEGEND:**

-  PHASE 1 BOUNDARY
-  PROP. DRIVEWAY & PARKING LOTWORKS
-  PROP. BUILDINGS

ITEM	DESCRIPTION	DATE	BY	APPRVD
	FSR	NOV 20/20	J.F.	J.F.

SCHEDULE OF REVISIONS

**JFIVE DEVELOPMENTS LTD.**

1 Parker Crt., Barrie, On L4N 2A6  
 Cell: 705-794-0301 Email: john.foster@five@rogers.com

Sunshine Village  
 Foxpark Development Corporation  
 Penetanguishene, Ontario

SCALE:	1:750	FILE NO.	DWG. NO.
DATE:	NOV. 20, 2020	134	FIG. 2.1
DRAWN:	DORION DRAFTING & DESIGN		
DESIGNED:	J.F.		

**PHASE 1 BOUNDARY**

