

MEMORANDUM

To: Abid Khutliwala, *Habiba Investments, LLC*

From: John D. Walker, P.E., PTOE, *Kimley-Horn and Associates*
Harrison D. Forder, P.E., *Kimley-Horn and Associates*

Date: February 22, 2023

RE: ***Tim Horton's – 10805 State Bridge Road – City of Johns Creek, Georgia
Queue Analysis***

Kimley-Horn is pleased to provide this memorandum regarding a queueing analysis for the proposed *Tim Horton's* site located at 10805 State Bridge Road in the City of Johns Creek, Georgia. The site is located north of State Bridge Road and west of Abberley Lane. Access is proposed to be provided via a full-movement driveway along Abberley Lane and a connection to the adjacent retail parcel. The site is proposed to consist of a Tim Horton's branded drive-through coffee shop (888 SF) with stacking for 29 cars on site. The site is currently zoned as C-1 and is proposed to remain zoned as C-1, however the project must go through the rezoning process (case RZ-22-0010) with the City of Johns Creek as the site plan has changed since the C-1 zoning was approved in 2015. A trip generation memo under separate cover has been prepared by *Earth Design Engineering* summarizing the trip generation potential of the site.

Through the rezoning process, there have been concerns from neighbors about traffic from the proposed *Tim Horton's* development impeding traffic along Abberley Lane. Abberley Lane is a private roadway serving the Abberley Township gated residential community. An access easement guarantees access to Abberley Lane from the retail parcels along State Bridge Road. To determine if the potential queues for the development would block Abberley Lane, a queueing study has been performed. This memo documents the results of the queueing study.

SITE OBSERVATIONS

Site visits were conducted at two locations during the morning peak period on Thursday, February 16, 2023, while Fulton County School were in session. The morning peak period represents the highest volume of cars exiting the residential development and also the highest volume of cars visiting the coffee shops.

Abberley Lane Observations

The intersection of State Bridge Road at Abberley Lane was observed in order to determine if queues from the traffic signal currently extend past the driveway for the proposed *Tim Horton's* development. The *Tim Horton's* driveway is located approximately 120 feet from the stop bar along Abberley Lane. Approximately 5 cars can queue up along Abberley Lane before the driveway is blocked.

The site visit along Abberley Lane occurred during the AM peak period, from 7:00-9:00 AM. During that time, the longest observed queue was 3 vehicles in the left-turn lane, which occurred around 7:30 AM. This queue cleared during the next signal cycle. No queues were observed to extend past the proposed *Tim Horton's* driveway during the entire observation period. Notes from the Abberley Lane site observations are illustrated below on **Figure 1**.

Three school buses were observed during the AM peak hour. Two buses stopped in the right-turn lane along State Bridge Road to pick-up students, while one bus turned into Abberley Lane and picked up students along Abberley Lane. The bus stop locations are illustrated on **Figure 1**.



Figure 1: Abberley Lane Site Observations

Starbucks Observations

The Starbucks located at 4180 Old Milton Parkway (approximately 1.5 miles west of the proposed *Tim Horton's*) was observed to document the operations of a comparable coffee shop in the area, as no *Tim Horton's* currently exist in the metro Atlanta area. The Starbucks is located along the eastern edge of Parkview Lane, which is a private roadway serving a gated residential community. School buses pick-up in the right-turn lane along Old Milton Parkway.

The site visit at Starbucks occurred during the AM peak period, from 6:30-9:15 AM. During that time, the longest observed drive-through queue was 12 vehicles, which occurred around 8:00 AM. After entering the queue, it took about 7 minutes for the last car in line to be served and exit the drive-through. **Table 1** below summarizes the longest drive-through queue during each 15-minute interval.

Time	Number of Cars
6:30 AM	6
6:45 AM	4
7:00 AM	3
7:15 AM	7
7:30 AM	4
7:45 AM	11
8:00 AM	12
8:15 AM	8
8:30 AM	9
8:45 AM	9
9:00 AM	6

As shown in **Table 1**, the peak drive-through queues for the Starbucks occurred between 7:45 AM and 9:00 AM. Based on the proposed site plan submitted to the City of Johns Creek, the proposed *Tim Horton's* site has on-site stacking for 29 cars in a dual-lane drive-through with one service station. This storage could accommodate more than double the number of vehicles which currently utilize the Starbucks drive-through. Based on this, the proposed *Tim Horton's* site will be able to accommodate the morning peak site traffic, without the drive-through queue spilling back onto Abberley Lane, assuming that *Tim Horton's* has a similar processing time as the Starbucks. The Starbucks site observations are illustrated in **Figure 2**.

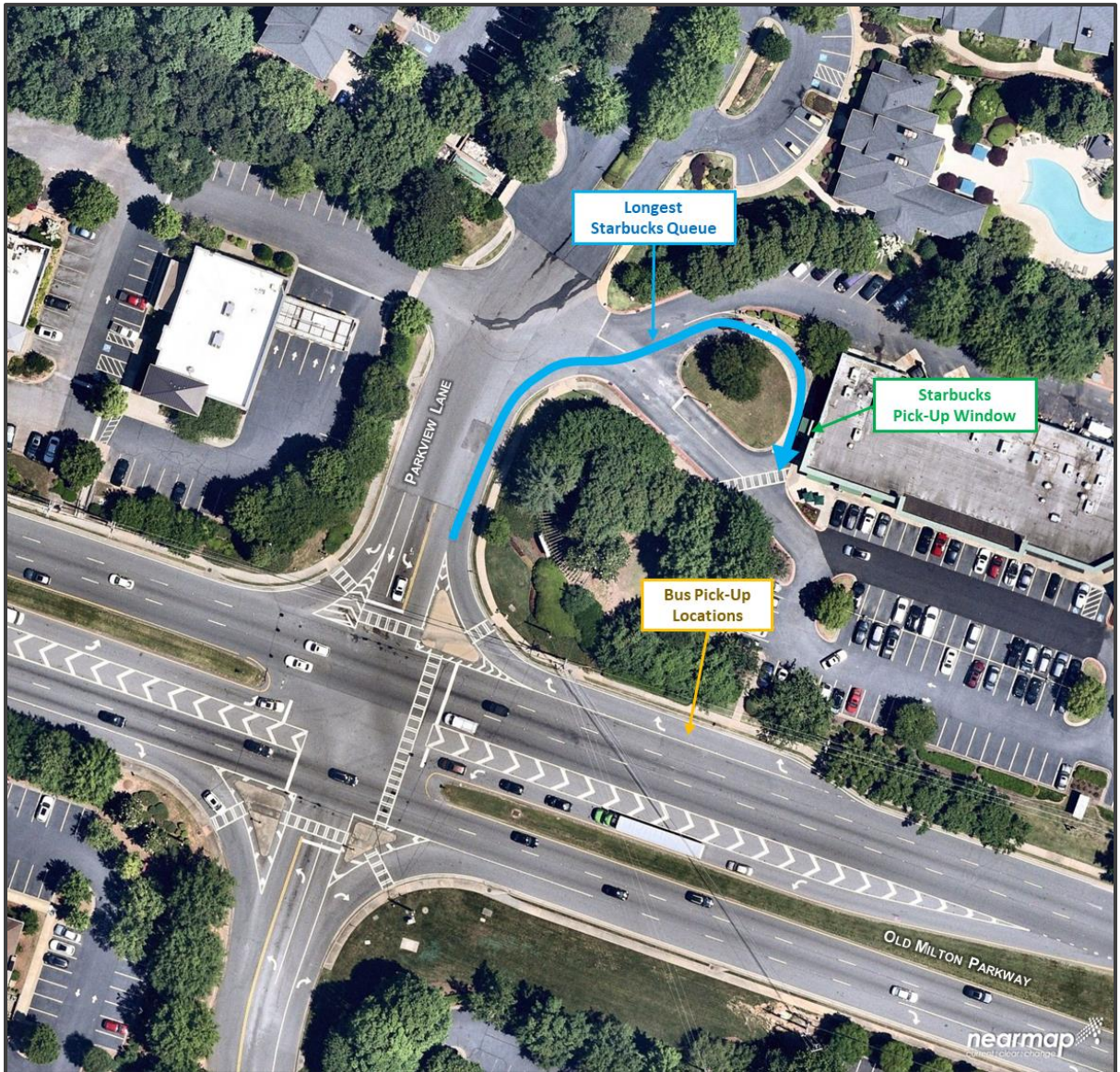


Figure 2: Starbucks Site Observations

SUMMARY

The proposed *Tim Horton's* site, located at 10805 State Bridge Road in the City of Johns Creek, Georgia, is a proposed drive-through only coffee shop with on-site stacking for 29 cars. The site is currently zoned as C-1 and is proposed to remain zoned as C-1, however the project must go through the rezoning process (case RZ-22-0010) with the City of Johns Creek as the site plan has changed since the C-1 zoning was approved in 2015. Concerns from neighbors have been raised about traffic and traffic queueing from the proposed *Tim Horton's* site impeding existing traffic on Abberley Lane.

Site observations were conducted during the AM peak hour to document the existing operations of Abberley Lane, and a similar Starbucks location approximately 1.5 miles west of the site. Based on the site observations, the proposed *Tim Horton's* site is expected to accommodate drive-through queues on-site without causing traffic to block Abberley Lane. The longest drive-through queue observed at the Starbucks was 12 vehicles, and the proposed *Tim Horton's* site can accommodate stacking for 29 cars on-site (more than double the maximum Starbucks queue). Additionally, the longest queue observed at the signal on Abberley Lane was 3 vehicles, which does not block the proposed *Tim Horton's* driveway.

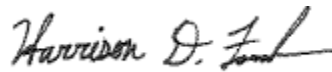
We hope this information is helpful. If you have any questions concerning this letter or need additional information, please do not hesitate to contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



John D. Walker, P.E., PTOE
Senior Vice President/Senior Associate

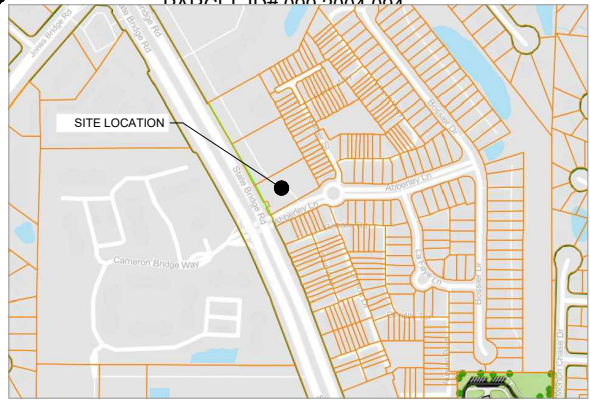


Harrison D. Forder, P.E.
Project Engineer

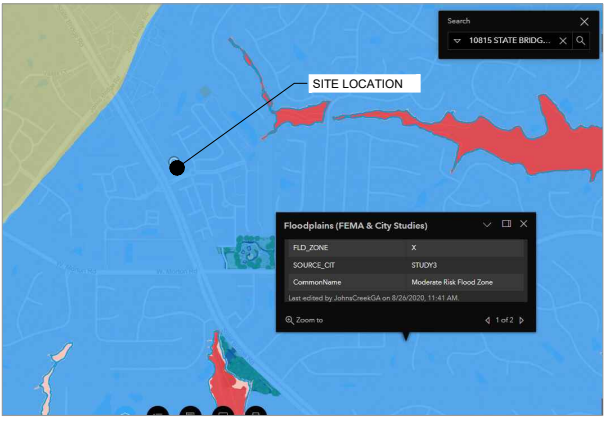
Attachments:

- Rezoning Site Plan

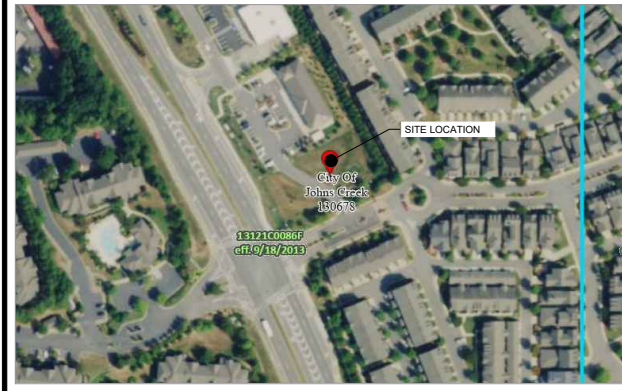
RECEIVED
MAR 13 2023
RZ-22-0010
PLANNING & ZONING



--VICINITY MAP-- NTS



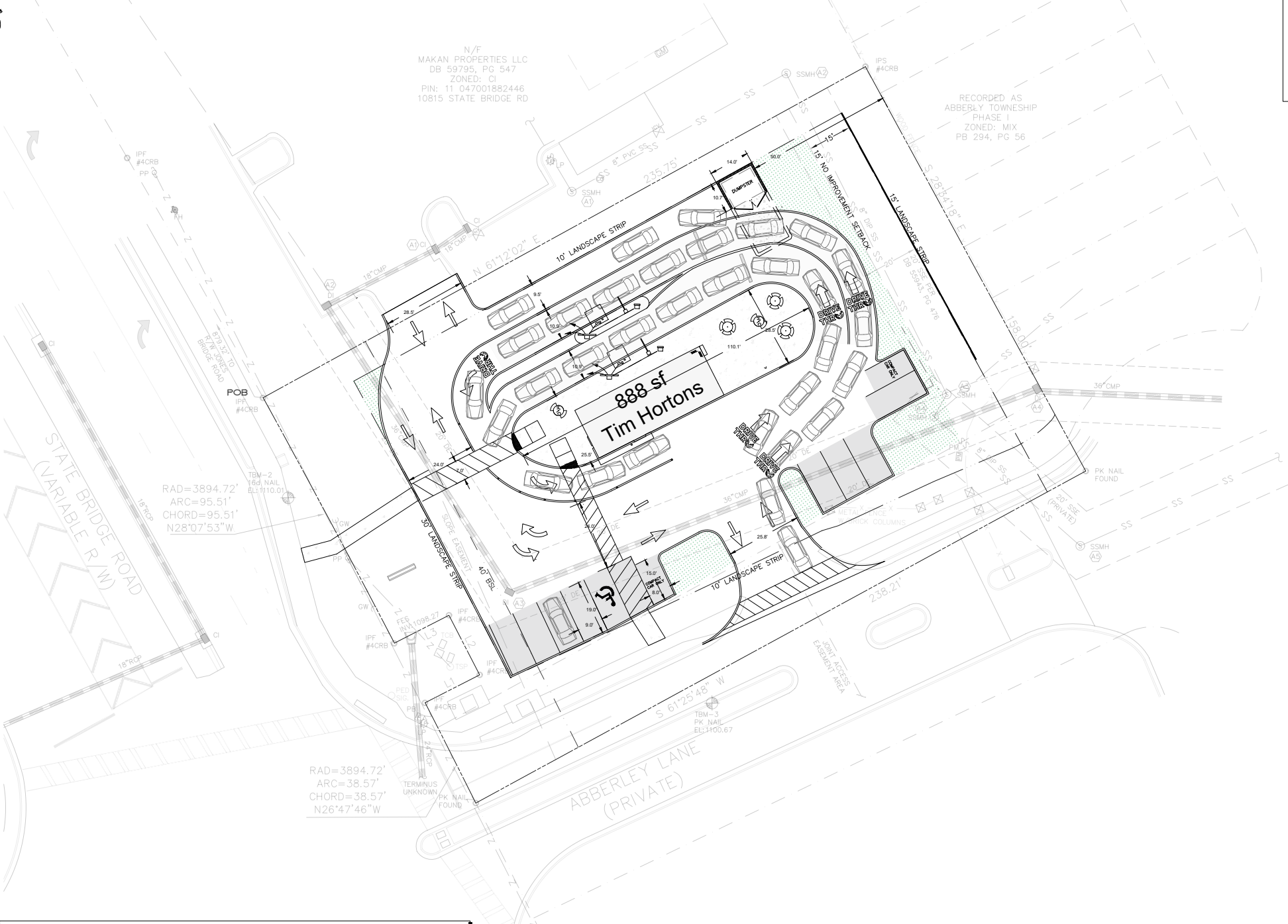
-- JOHN'S CREEK FLOOD MAP--



--FEMA FIRM MAP-- NTS

STORMWATER AGREEMENT

ACCORDING TO THE REPORT TITLED, "STORMWATER MANAGEMENT REPORT FOR NORTH BRIDGES SHOPPING CENTER (POND#2)", LAST REVISED SEPTEMBER 9, 2014 AND THE ADDENDUM TO SAID REPORT TITLED, "POST-CONSTRUCTION STORMWATER MANAGEMENT REPORT FOR NORTH BRIDGES SHOPPING CENTER (POND#2)", LAST REVISED NOVEMBER 20, 2014, PREPARED BY BLUE LANDWORKS, STORMWATER MANAGEMENT MEASURES INCLUDING DETENTION AND WATER QUALITY, ARE PROVIDED FOR THIS TRACT BY A POND.

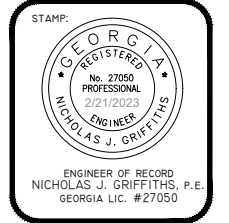


EXISTING LEGEND:

IPS	IRON PIN SET	HC	BUILDING SETBACK LINE
IPF	IRON PIN FOUND	HC	HANDI-CAP
OT	OPEN TOP PIN	CMF	BOLLARD
RB	REINFORCING BAR	SSMH	CONCRETE MONUMENT FOUND
CRB	CAPPED RE-BAR	MHT	OVERHEAD UTILITY LINE(S)
CL	CENTERLINE	DMCB	SANITARY SEWER MAN HOLE
R/W	RIGHT-OF-WAY	JB	CATCH BASIN
LLL	LAND LOT LINE	DI	JUNCTION BOX
L	LINE	HW	DROP INLET
R	RADIUS	CMP	HEAD WALL
CONC	CONCRETE	CPP	CORRUGATED METAL PIPE
C	CURVE	RCP	CORRUGATED PLASTIC PIPE
PP	POWER POLE	SSE	REINFORCED CONCRETE PIPE
GV	GAS VALVE	SSC	SANITARY SEWER EASEMENT
GM	GAS METER	FH	FIRE HYDRANT
LP	LAMP POLE	DE	DRAINAGE EASEMENT
SS	SANITARY SEWER	WV	WATER VALVE
FC	FENCE CORNER	PV	POST INDICATOR VALVE
AE	EASEMENT	WM	WATER METER
PROP	PROPOSED	CO C/O	SANITARY SEWER CLEANOUT
AC	AIR-CONDITIONER	POB	POINT OF BEGINNING
GA	GA POWER MANHOLE	POC	POINT OF COMMENCEMENT
PB	POWER BOX	NTS	NOT TO SCALE
CATV	CABLE TELEVISION JUNCTION BOX	SWC	SINGLE WING CATCH BASIN
TE	TELEPHONE JUNCTION BOX	UE	UTILITY EASEMENT
APP	ABANDONED POWER POLE	PM	POWER METER
SI	SIGN	CLF	CHAIN-LINK FENCE
		CTW	CROSS-TIE WALL
		HCS	HANDI-CAP SIGN
		OP	TRAFFIC LIGHT STRAIN

LINE TABLE

LINE	LENGTH	BEARING
L1	21.00	N62°52'22"E
L2	23.00	N27°14'47"W
L3	21.00	S62°52'22"W



No.	Revision/Issue	Date

Project Number: Issue Date: 2/1/2023
 Drawn By: Checked By: NJG

EARTH DESIGN ENGINEERING, LLC
 844 180th AVE EAST
 REDINGTON SHORES, FL 33708
 PHONE: (678) 435-5871
 EMAIL: EARTHDESIGNENGINEERING@GMAIL.COM

Project Name and Address
TIM HORTONS
 10805 STATE BRIDGE RD
 JOHNS CREEK, GA 30022
 FULTON COUNTY, GA
 ABID KHULIWALA
 4788 JONESBORO ROAD
 UNION CITY, GA 30291
 PHONE: (770) 546-4660
 EMAIL: abidk@sirestaurantgroup.com

Sheet Name
SITE PLAN
 Sheet Number **1-3**

SANITARY SEWER NOTE:
 SANITARY SEWER SYSTEM FOR THE DEVELOPMENT SHALL BE PUBLIC

WATER NOTE:
 WATER SYSTEM FOR THE DEVELOPMENT SHALL BE PUBLIC

ZONING:
 CURRENT ZONING: ZONING: C-1 COMMUNITY BUSINESS DISTRICT (RZ-15-006)
 PROPOSED ZONING: ZONING: C-1 COMMUNITY BUSINESS DISTRICT
 ADJOINING PROPERTY ZONING: 10905 JONES BRIDGE RD (C-1); 4899 HUDSON SQUARE (MIXED USE)

ACREAGE:
 TOTAL: 0.84 ACRES
 BUILDABLE: 0.45 ACRES (54% OF TOTAL ACREAGE)
 UNBUILDABLE: 0.39 ACRES (46% OF TOTAL ACREAGE)

POSTED SPEED LIMITS:
 STATE BRIDGE ROAD: 45 MPH
 ABBERLEY LANE: 15 MPH

SETBACKS:
 FRONT: 40 FEET
 SIDE: NONE
 REAR: NONE

LANDSCAPE STRIP/BUFFER:
 FRONT: 30 FEET
 SIDE: 10 FEET
 REAR: 15 FEET LANDSCAPE STRIP PLUS 15 FEET NO IMPROVEMENT SETBACK (CRZ-15-006 CONDITION 3)

PARKING CALCULATIONS:
 RESTAURANT MINIMUM PARKING REQUIRED EQUALS 1 SPACE PER 100 SQ FT = 9
 REQUIRED PARKING: 9 SPACES
 PARKING PROVIDED: 11 SPACES

STATE WATER NOTE:
 THERE ARE NO STATE WATERS LOCATED ON-SITE.

WETLANDS NOTE:
 BASED UPON FIELD INSPECTION AND OBSERVATIONS OF THE PROPERTY, AND SUPPORTED BY THE NATIONAL WETLANDS INVENTORY MAPPING, PRODUCED BY THE U.S. DEPARTMENT OF THE INTERIOR/ FISH AND WILDLIFE SERVICE, THERE ARE NOT WETLANDS CONTAINED WITHIN THE PROJECT LIMITS OF THIS SITE.

CAUTION
 THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

