

January 12, 2021

Town of Oakville c/o Syed Rizvi 1225 Trafalgar Road Oakville, ON L6H 0H3 By email: syed.rizvi@oakville.ca

# Re: Trinison Timsin Phase 2 – Neighbourhood 9/10/11 Transportation Impact Study Addendum – Comment Response

Dear Syed:

CGH Transportation has received the comments provided on the TIS Addendum for Trinison's Timsin Phase 2, dated July 25, 2021. The attached report has been updated to reflect those comments along with the minor changes to the draft plan.

The following comments have been received and our responses are included below each comment:

#### Sustainable Transportation

1. [Circ. 1] Staff requests a Pedestrian Circulation Plan outlining the proposed pedestrian and cycling infrastructure for the subdivision, as there are some major trail connections proposed within the town's North Oakville Trails Plan within the NHS.



**<u>Response</u>**: The attached report includes a Pedestrian Facilities Plan, including all proposed sidewalks and planned trail networks.

#### Oakville Transit

[Circ. 1] North Park Boulevard and Sixth Line are dedicated transit corridor. Bus stops on North Park Boulevard are located at Sixth Line and Sawmill Street. The distance between Sixth Line and Sawmill Street is 465m, as such, staff would recommend adding a bus stop at Thistlewood Gate to shorten the

Ref: 2020-35

distance between the two bus stops. Please include the type of bus stop to be proposed along North Park Boulevard.

**<u>Response</u>**: A conceptual stop location has been added to the Transit Facilities Plan. Through the detailed engineering submission, the stop type and exact stop location (i.e., near-side, far-side, etc.) will be determined.

Bus stops on Sixth Line are located on either side at North Park Boulevard/Threshing Mill Boulevard, and at Carniegie Drive. Please include all bus stop locations in all future plans and drawings.

**<u>Response</u>**: A conceptual stop location has been added to the Transit Facilities Plan. Through the detailed engineering submission, the stop type and exact stop location (i.e. near-side, far-side, etc.) will be determined.

Transportation Impact Assessment (TIA) Comments

1. [Circ.1] Transportation Services staff appreciates updated traffic memo by the CGH Consulting based on the revised unit count and land use plan for the Neighbourhood 9/10/11.

The transportation staff has no further comments on the revised plan.

#### Response: Noted.

Additionally, the unit count has increased by 1 unit, compared to previous versions, and this change has been carried through the updated report.

Yours truly,

Mark Crockford, P.Eng. **CGH Transportation Inc.** P: 905-251-4070 E: <u>Mark.Crockford@CGHTransportation.com</u>

Christopher Gordon, P.Eng. CGH Transportation Inc. P: 343-999-9117 E: Christopher.Gordon@CGHTransportation.com





# **Technical Memorandum**

To:	Syed Rizvi – Town of Oakville	Date:	2021-12-07
Cc:	Chris Matson – Matson McConnel Ltd. Zhengxuan Lai – CGH Transportation		
From:	Mark Crockford, P.Eng.	Project Number:	2020-35

### Re: Trinison Timsin Phase 2 – Neighbourhood 9/10/11 Transportation Impact Study Addendum

## 1 Introduction

To support several residential developments in the Neighbourhood 9/10/11 areas of North Oakville, a Transportation Impact Study (TIS) was prepared and finalized in late May 2020. This study used the initial concept plan for each development to develop a TIS that examined the overall impact of the subject developments on the transportation network. The Neighbourhood 9/10/11 TIS, referred to herein as the TIS, forms the basis for this memo. This addendum acts as a covering letter for the Neighbourhood 9/10/11 TIS.

This addendum has been prepared to support Phase 2 of Trinison's Timsin development and will examine the changes between the original concept plan considered in the TIS and the current plan that is being put forward. This includes examining the unit count and type, preparing an updated trip generation (using the same factors as those presented in the TIS), and, if significant changes to the trip generation are noted, providing updated Synchro results at key Study Area intersections.

## 2 Site Plan Comparison

The original concept plan considered in the TIS is included as Attachment 1. The updated plan, to be analyzed through this memo, is included as Attachment 2. Table 1 summarizes the unit count changes between the original concept and the updated plan.

Table 1: Land Use Statistic Comparison					
	Single Family Detached Housing LUC 210	Multifamily Housing (Low-Rise) LUC 220			
Original	29	18			
Updated	22	36			
Change	-7	18			
% Change	-24%	100%			

As shown above, the revised plan would reduce the single detached units by seven (24% of the total number of detached houses) and add 18 low-rise multifamily housing units. Due to the change in unit counts the trip generation has been examined to determine if the proposed changes would significantly change relative to the trip generation originally considered. The trip generation equations for the single family detached units, and low-rise multifamily units were used in the TIS as the rates produced using these equations were within the range of rates listed in the ITE Trip Generation Manual data statistics for each land use code. The trip generation factors used for each of the land uses are summarized in Table 2.

Table 2: ITE Trip Generation Factor				
	Single Family Detached (210)	Multifamily Housing (Low-Rise) LUC 220		
AM Peak	T = 0.71(X) + 4.8	$\ln(T) = 0.95 \ln(X) - 0.51$		
PM Peak	$\ln(T) = 0.96 \ln(X) + 0.20$	$\ln(T) = 0.89 \ln(X) - 0.02$		

Using the above trip generation rates the total vehicle trip generation for the site has been recalculated. The following tables document the impacts of the changes:

- Table 3 compares the original and revised trip generation of the Timsin Phase 2 site ٠
- Table 4 summarizes the changes to the overall TIS resulting from the Timsin Phase 2 site
- Table 5 presents all the changes to developments (as of the date of this memo) •

Compute	AM Peak Hour		PM Peak Hour			
Scenario	In	Out	Total	In	Out	Total
Original TIS	7	22	29	23	14	37
Updated	7	25	32	25	14	40
Difference	0	3	3	2	0	3
% Difference	0%	14%	10%	9%	0%	8%

#### Table 3: Vehicle Trip Generation Comparison – Timsin Phase 2 Site Only

#### Table 4: Vehicle Trip Generation – Original TIS Comparison

Seconaria		AM Peak Hour		PM Peak Hour		
Scenario	In	Out	Total	In	Out	Total
Original TIS	346	1090	1437	1184	703	1888
Updated	346	1093	1440	1186	703	1891
Difference	0	3	3	2	0	3
% Difference	0.00%	0.28%	0.21%	0.17%	0.00%	0.16%

Table 5: Vehicle Trip Generation - Updates Available to Date

Cooperie	AM Peak Hour		PM Peak Hour			
Scenario	In	Out	Total	In	Out	Total
Original TIS	346	1090	1437	1184	703	1888
ARGO Change	4	8	11	12	11	23
Digram Change	17	48	65	51	32	83
<b>Remington Change</b>	0	1	0	1	0	1
Star Oak Change	2	5	7	3	2	5
Timsin Ph 2 Change	0	3	3	2	0	3
Total Change	23	65	86	69	45	115
Total to Date	369	1155	1523	1253	748	2003
Overall Change % Difference	7%	6%	6%	6%	6%	6%

As shown above, the changes to the trip generation of the Timsin Phase 2 site, independent of the other developments, will result in a net increase of less than 15% in vehicle traffic. When the entire trip generation of all developments in the Neighbourhood 9/10/11 TIS is considered, the resulting changes to the trip generation will result in a net increase of less than 1% change in vehicle traffic. When considering all the changes to the area developments the changes result in a total increase in traffic of 6-7% over the original TIS. This is a relatively minor change, and the results of the original TIS are the nominally the same. Additionally, the changes to the subject development, Timsin Phase 2, would result in a very minor impact on traffic volumes (less than 1%), therefore no updated operational analysis is required.

Trinison Timsin Phase 2 – Neighbourhood 9/10/11 Transportation Impact Study Addendum Memo December 7, 2021 Page 3

# 3 Parking

Surface parking will be provided in accordance with the Town of Oakville Parking Zoning By-Law requirements for both the single detached residential, and townhouse units. Additionally, 38 parking spaces will be provided via on-street parking throughout the development. It was assumed that some on-street parking will be provided along Sixth Line, which is consistent with ongoing developments along Sixth Line to the north. The location and number of on-street parking stalls is subject to minor changes and will need to be refined as part of the detailed engineering submission once curb locations, utilities, and fire hydrants have been established. The proposed parking plan can be found in Attachment 3.

# 4 Site Specific Transportation Review

This memo has been prepared to address some site-specific considerations for Phase 2 of Trinison's Timsin development including Transit Facilities Plan, Road Cross-Sections, Pedestrian Circulation Plan, Cycling Facilities Plan, and Parking Provisions.

## 4.1 Transit Facilities Plan

A Transit Facilities Plan was created as part of the Neighbourhood 9/10/11 TIS. The Transit Facilities Plan has been recreated, focusing on Phase 2 of the Trinison's Timsin development. This plan is included in Drawing 001, Attachment 4. Per the Transit Facilities Plan, all of the residential units are within 400 metres of at least one proposed transit station.

## 4.2 Road Cross-sections

The proposed right-of-ways and cross-sections are illustrated in Drawing 002, Attachment 4. These cross-sections are proposed to be consistent with the North Oakville Urban Design and Open Space Guidelines. The cross-sections used in this plan from these guidelines have been included in Attachment 5.

## 4.3 Pedestrian Concept Plan

A pedestrian circulation plan has been created to illustrate the sidewalk locations. Sidewalk provisions are generally per the road cross-section. Drawing 003, Attachment 4, illustrates the sidewalk locations and key pedestrian crossing locations.

## 4.4 Cycling Facilities Plan

A Cycling Facilities Plan was created as part of the Neighbourhood 9/10/11 TIS. The Cycling Facilities Plan has been recreated, focusing on Phase 2 of the Trinison's Timsin development. This plan is included in Drawing 004, Attachment 4. Per the Cycling Facilities Plan, a signed route is provided along North Park Boulevard and a bicycle lane is provided along Sixth Line.

## 4.5 Turning Templates

As part of the updated site plan the connection between Lane A and Sixth Line has been removed to ensure that the proposed site plan aligns with the Sixth Line road classification. In place of this access, a connection between Lane A and Street A has been proposed to eliminate the dead end at the southern point of the laneway, facilitating the movement of emergency vehicles through Lane A. This connection has been reviewed using an HSU truck to ensure that an emergency vehicle can make safe maneuvers out of Lane A. Attachment 6 illustrates that the HSU vehicle turning path is accommodated by the proposed curbs at the connection of Lane A and Street A.

Trinison Timsin Phase 2 – Neighbourhood 9/10/11 Transportation Impact Study Addendum Memo December 7, 2021 Page 4

## 5 Conclusions

The proposed development concept has been refined since the original TIS was prepared. This addendum has verified that the changes to the unit counts and land uses will have no impact on the operational analysis and that the Neighbourhood 9/10/11 TIS remains valid.

This addendum has also addressed the site-specific issues including, parking, multi-modal transportation facilities, roadway cross-sections, and turning paths. Through the plans prepared as part of this work it has been shown that the proposed development will have adequate cycling, pedestrian, and transit facilities, and that the proposed right of ways are sufficient to support the appropriate cross-sections.

If you have any questions or comments, please do not hesitate to contact the undersigned.

Prepared By:



Mark Crockford, P. Eng. P: 905-251-4070 Mark.Crockford@CGHTransportation.com

Reviewed By:



Christopher Gordon, P. Eng. P: 343-999-9117 Christopher.Gordon@CGHTransportation.com

Original Concept Plan



#### REVISION TABLE

#### Date Revision Dec. 15 2014 Resubmission of Phase 2

April 20, 2015 Resubmission of Phase 2, Sixth Line widening revised

AREA TABLE	9544-6A-4dp April 20, 2015	Phase 2
Residential Singles & Semi's	Lots 1-38	1.544
Residential Reserve	Block 39	0.105
Natural Heritage System	Blocks 40-41	3.573
Road Widening	Block 42	0.187
Roads		0.815
Т	6.224 h	

# ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT

- This represents the applicant's entire holding o land in this vicinity.
- Residential singles, semi-detached, Natural Heritage System, road widening, lay-by lane, roads. D.
- H. Piped water to be provided.
- Clay loam soil.

0.381 0.311

0.123

0.815 ha

19

10 18

47 u

198 m

156 m 143 n

497 m

Sanitary & storm sewers to be provided.

#### OWNER'S AUTHORIZATION

l/we,	Timsin Holding Corp.
being the authorize submit a SEE C	registered owner(s) of the subject lands hereby Bousfields Inc. to prepare and draft plan of subdivision for approval. DRIGINIAL SUBMISSION
SEE C	Day Month Year Day Month Year DRIGINIAL SUBMISSION

EE	ORIGIÑÍAL	SUBMISSIC	ĴŇ	
				Signature

		orgi	
 Day	Month	Year	

#### SURVEYOR'S CERTIFICATE

I hereby certify that the boundaries of the land to be subdivided as shown on this plan, and their relationship to the adjacent land are accurately and correctly shown.

#### SEE ORIGINIAL SUBMISSION Signature

Dav Month Year



# 24T-05025 / O PHASE 2 **REVISED DRAFT PLAN OF SUBDIVISION**

PART OF LOT 16, CON.1 NORTH OF DUNDAS STREET (Geographic Township of Trafalgar) TOWN OF OAKVILLE **REGIONAL MUNICIPALITY OF HALTON** 



## **BOUSFIELDS**INC.

3 Church Street, Suite 200 Toronto, Ontario M5E 1M2 (416) 947-9744 Fax (416) 947-0781 e-mail drafting@bousfields.ca

:1000	April 20, 2015	9544-6a-4dp
le	Date	Drawing Number



	19m R.O.W.
	17m R.O.W.
TOWN OF MILTON	Lay-by Lane
h	Total
Highway 407	
	PROPOSED UNITS
7   4             N	13.72m Single Detached
	12.5m Single Detached
	7.8m Semi-Detached
	Total Units

#### LEGEND

Soundary of Subdivision

#### NOTES

ROADS

All dimensions are in metres. All area measurements are computer generated. All elevations refer to Geodetic Datum All existing buildings to be demolished

Updated Draft Plan



	REVISION TABLE		
Date	Revision		
Dec. 15 2014	Resubmission of Phase 2		
April 20, 2015	Pesubmission of Phase 2. Sixth Line widening re	avised	Residential Semi-Detached
Apiii 20, 2013			
Feb. 6, 2020	Relotting of North East Quadrant		Residential Reserve
Jan. 7, 2021	Lane A reconfiguration and relotting		Natural Heritage System
Nov. 2, 2021	Reconfiguration and relotting of RLTH		Road Widening
	<u> </u>		Roads
			Total
			ROADS
			19m R.O.W.
			17m R.O.W.
			7.5m Lane
			Total
			UNIT COUNT
			13.72m Single Detached
	-	4	12.5m Single Detached
		Highway 407	11.0m Single Detached
			7.8m Semi-Detached
	Highway 407		6.1m Lane Townhouse
	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Total Units
		Dundas Street E	LEGEND Boundary of Subdivision

Subject

Property

**KEY PLAN** 

All dimensions are in metres. All area measurements are computer generated. All elevations refer to Geodetic Datum. All existing buildings to be demolished.

		563 m	0.843 ha	
		186 m	0.164	
		158 m	0.316	OWNER'S AUTHORIZATION
		219 m	0.363	
				K. Sanitary & storm sewers to be provided.
			0.224 Ha	I. Clay loam soil.
			6.224 ha	H. Piped water to be provided.
			0.843	System, road widening, lay-by lane, roads.
	Block 39		0.207	D. Residential singles, semi-detached, Lane Towns, Natural Heritage
em	Blocks 37, 38		3.581	land in this vicinity.
	Blocks 34-36		0.043	C. This represents the applicant's entire holding of undeveloped
	Blocks 30-33		0.374	SECTION 51(17) OF THE PLANNING ACT
ached			0.306	ADDITIONAL INFORMATION REQUIRED UN
	Lots 1-29		0.870	

9544-6A-27dp November 9, 2021

А

В

С

S

Phase 2

22 58 u

# 164J/we,Timsin Holding Corp.343 haI/we,Timsin Holding Corp.being the registered owner(s) of the subject lands hereby<br/>authorizebeing the registered owner(s) of the subject lands hereby<br/>authorize13Bousfields Inc.to prepare and<br/>submit a draft plan of subdivision for approval.<br/>SEE ORIGINIAL SUBMISSION1SEE ORIGINIAL SUBMISSION1Day8SEE ORIGINIAL SUBMISSION14SEE ORIGINIAL SUBMISSION

SEE ORIGINIAL SUBMISSION				
		Signature		
Day	Month	Year		

# SURVEYOR'S CERTIFICATE

I hereby certify that the boundaries of the land to be subdivided as shown on this plan, and their relationship to the adjacent land are accurately and correctly shown.

Signature

# SEE ORIGINIAL SUBMISSION

Day Month Year



# 24T-05025 / O PHASE 2

REVISED DRAFT PLAN OF SUBDIVISION PART OF LOT 16, CON.1 NORTH OF DUNDAS STREET (Geographic Township of Trafalgar) TOWN OF OAKVILLE REGIONAL MUNICIPALITY OF HALTON



Parking Concept Plan



Transit Facilities Plan Road Cross-Section Plan Pedestrian Concept Plan Cycling Facilities Plan



	Natari		
		noles.	
	LEGEND.	)m Transit	
	400 \//c	ni indristi Nikina Distanc	
┼╾╶┤╴╶┼╾╴┟╶╶┼╾╸╷└╶	VVC	aiking Distanc	
	Pro	posed Transit	ŀ
	Sto	posed fidnsi	
	010	p Lood norr	
╲╴└╶ <del>╷╵╴</del> ┙┎╺┵┯╴┵┑┷			
$(\lambda_{ij}) = (\lambda_{ij}) (\lambda_{ij})$			
`\			
$\rightarrow$			
1 F.H			
$\langle \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$			
i i i			
	01 Issued or Re	view	BQ 2022-01-14
	REV: DESCRIPTION:		BY: DATE:
	STATUS:		
		CGH Transpor	tation
		628 Haines Road	
		Newmarket, ON L3Y 6V5	
		(905) 251-4070	
	Timsc	n Holding Corp	
	ARCHITECT:		
	SITE.		
	Timsin North Oakville		
	Transit Facilities		
	Concept Plan		
	scale at a3: NTS	DATE: DRAWN: 2022-01-14 BB	CHECKED: MC
	PROJECT NO:		REVISION:
	2020-35	001	





![](_page_16_Figure_0.jpeg)

Proposed Cross-Sections – North Oakville Urban Design and Open Space Guidelines

#### 5.2.3. Connector/Transit Corridor

Connector/Transit Corridors should be designed to serve relatively low volumes of intra-neighbourhood travel, accommodate local transit service and distribute traffic to and from Major and Minor Arterial/Transit Corridors and Avenue/ Transit Corridors.

The treatment of the boulevard will reflect adjacent land use and whether on-street parking is provided.

Specific technical details of the cross-section (i.e. plant material, soil type, engineering standards) will be determined through the appropriate design review process.

![](_page_18_Figure_4.jpeg)

Figure 5.5: Typical Connector/Transit Corridor section through the General Urban and Sub Urban Designation. Street tree height at maturity will vary according to species and the availability of optimum growing conditions (i.e. adequate water, sunlight, soil volume), the protection from compacted soils, salt spray, mechanical damage, pests, and maintenance programs. Please refer to tree babitat design guidelines found in Table 9 of Oakville's Urban Forest: Our Solution to Our Pollution (2006).

#### 5.2.4. Local Road

Local Roads will be designed to provide access to individual properties and serve internal residential neighbourhood, Core Area or Employment District travel demands. Local Roads will also connect individual properties to other Local Roads, Avenue/ Transit Corridors or Connector/Transit Corridors. Specific technical details of the cross-section (i.e. plant material, soil type, engineering standards) will be determined through the appropriate design review process.

The treatment of the boulevard will reflect adjacent land use and whether on-street parking is provided.

![](_page_19_Figure_4.jpeg)

Figure 5.6: Typical Local Road section through the General Urban and Sub Urban Designation. Street tree height at maturity will vary according to species and the availability of optimum growing conditions (i.e. adequate water, sunlight, soil volume), the protection from compacted soils, salt spray, mechanical damage, pests, and maintenance programs. Please refer to tree habitat design guidelines found in Table 9 of Oakville's Urban Forest: Our Solution to Our Pollution (2006).

#### 5.2.5. Laneways

Laneways provide rear access to individual properties and connect them to Local Roads, Avenue/Transit Corridors and Connector/Transit Corridors. Lanes are recommended where narrow lot frontages (i.e. townhouses) are proposed or to provide access to parking garages.

Specific technical details of the cross-section (i.e. plant material, soil type, engineering standards) will be determined through the appropriate design review process.

![](_page_20_Figure_3.jpeg)

Figure 5.7: Typical Residential Lane section through the General Urban and Sub Urban Designation.

Turning Template Drawings

![](_page_22_Figure_0.jpeg)

)			
	Notes:		
	11.50	,	
		1	
	0.80 8.40		
	meters		
	Width : 2.60 Track : 2.60 Lock to Lock Time 6.0		
	Steering Angle : 40.0		
$\sim$			
1			
	02 New Site Plan	BB 2021-12-07	
2	01 Issued for Review	BB 2021-10-12	
	REV: DESCRIPTION: STATUS:	BY: DATE:	
0			
	CGH Transpor	tation	
	628 Haines Road Newmarket, ON		
	L3Y 6V5 (905) 251-4070		
	CLIENT: Trinison Holding Corp		
0			
	ARCHITECT:		
		J	
	SITE: Timson Phase 2		
Ц	North Oakville		
	Turning Movement And	alysis	
	HSU Through Turn Circle scale at a3:   date:   drawn:		
	NTS 2021-12-07 BB PROJECT NO: DRAWING NO:	AL REVISION:	
	2020-30 001	02 )	
	· · ·		

![](_page_23_Figure_0.jpeg)

}		
	Notes:	)`
	15.10	-r
	4.00 6.30 <sup>*</sup>	
	width : 2.	ers
	Track : 2. Lock to Lock Time : 6. Steering Angle : 32	60 0 2.6
A		
$\langle \rangle$		
	02 New Site Plan	BB 2021-12-07
	01 Issued for Review	BB 2021-10-12
Q	REV: DESCRIPTION: STATUS:	BY: DATE:
0		$ \longrightarrow $
	CGH Transpor	tation
	Newmarket, ON	
	(905) 251-4070	
	CLIENT: Taineire and the latit	
U \	Irinison Holding Corp	)
Q	ARCHITECT	
	site: Timson Phase 2	
U X	North Oakville	
ζ )	Turning Movement An Fire Truck Through Turr	alysis Circle
	SCALE AT A3: DATE: DRAWN:   NTS 2021-12-07 BB	CHECKED: AL
	PROJECT NO: DRAWING NO:	REVISION:
		1 1 1 2

![](_page_24_Figure_0.jpeg)

		Notes:	
	ľ –	12.34	1
		.47 5.69	
	Sr	nowplow vehicle meters	
	Wia Tr Lo St	1th : 3.66 ack : 2.10 ck to Lock Time 6.0 eering Angle : 37,2	
		5 5	
$\langle \rangle$			
A			
<b>N</b>	02 New Site Pla 01 Issued for Re	an eview	BB 2021-12-07 BB 2021-10-12
Q	REV: DESCRIPTION: STATUS:		BY: DATE:
0			tation
		628 Haines Road	
4	U	L3Y 6V5 (905) 251-4070	
Ш	( Trinisc	on Holding Corp	
	ARCHITECT:		
	SITE: Timsc	on Phase 2	
Ц	North	Oakville	
	Turnir Snow	ng Movement An Plow Through Tu	alysis rn Circle
	SCALE AT A3: NTS	DATE: DRAWN: 2021-12-07 BB	CHECKED: AL
	2020-30	003	02
Contraction of the second seco			