August 1, 2023

Highglen Homes Limited
10148 Warden Avenue
Markham, ON L6C 1N3

Attention: Mr. John Perciasepe

Re: Traffic Opinion Letter
Proposed Residential Development
Finch Avenue & Nature Haven Crescent
City of Pickering, Durham Region

1.0 INTRODUCTION

CGE Transportation Consulting is pleased to provide this traffic opinion letter in support of eight (8) single family residential lots, located at the northeast corner of Finch Avenue and Nature Haven Crescent (east intersection), in the City of Pickering.

Due to the small scale of the proposed development (8 residential lots), we have prepared a traffic opinion letter instead of a full comprehensive transportation study. The traffic opinion letter will analyze the existing traffic conditions at the key intersection and comment on whether the proposed development has any impacts to the surrounding road network.

The subject site is located to the immediate east of a small residential subdivision that has 38 single family lots. The proposed eight houses will add to this community and make up for a total of 46 lots.

All of these houses in this subdivision access Finch Avenue via Nature Haven Crescent at two intersections. Both intersections are unsignalized.

Finch Avenue is an Arterial-C road west of Altona Road and Arterial Road B east of Altona Road. It has two east-west travel lanes in the vicinity of the study area. It is under the jurisdictional control of the City of Pickering and has a speed limit of 50 km/hour. Nature Haven Crescent is a two-lane local road with 40 km/hour speed limit and is also under the City of Pickering jurisdictional control.

The subject site location is illustrated in Figure 1. The site plan is shown in Appendix A. large day light triangles are provided on both sides of Nature Haven Crescent, looking at Finch Avenue.

Figure 1 Site Location

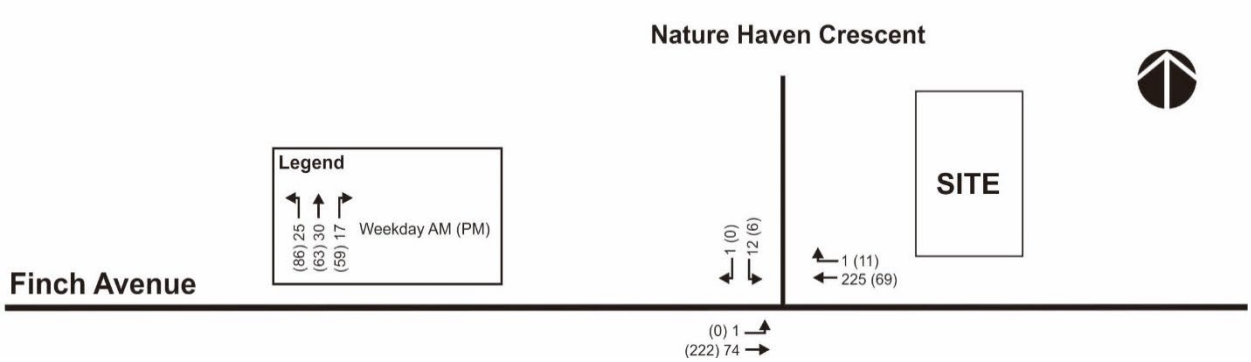
2.0 EXISTING TRAFFIC VOLUMES

Traffic data was undertaken by Accu-Traffic on Thursday November 14, 2019 from 7-9am and 4-6pm. The date and time were chosen to reflect the residential nature of the development.

As expected, the subject site is a minor traffic generator with negligible number of vehicles travelling through the site accesses during the weekday peak hours.

The peak hour traffic volumes are shown in Figure 2. The raw data for the turning movement counts are shown in Appendix B.

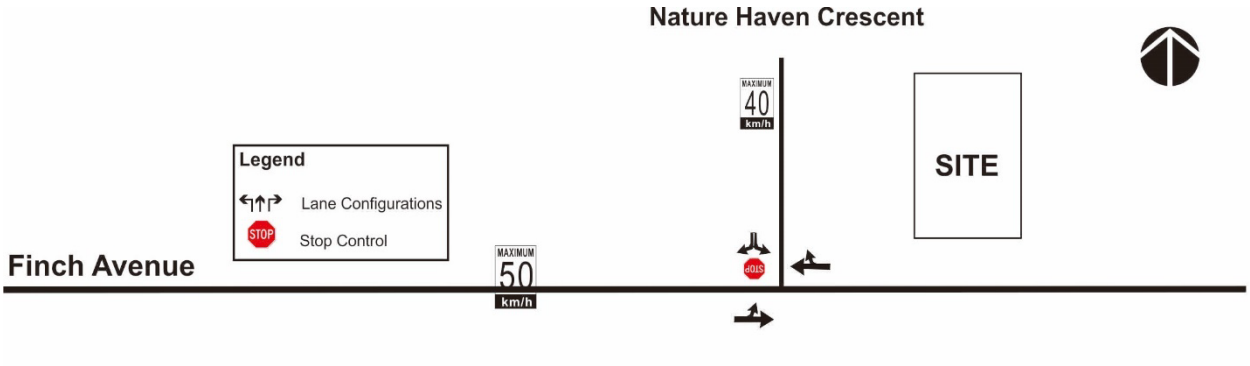
Figure 2 Existing Peak Hour Traffic Volumes



There is one outbound lane and one inbound lane on Nature Haven Crescent. It meets Finch Avenue at an unsignalized T-intersection. This section of Finch Avenue is flat horizontally and vertically and there are adequate sight line distances in both eastbound and westbound direction on Finch Avenue.

The existing lane configuration and traffic control is shown in Figure 3.

Figure 3 Existing Lane Configuration & Traffic Control



3.0 OPERATION ANALYSIS

Intersection capacity analyses contained in this study were undertaken using the Synchro software (Version 8.0), which is based on the methodologies and procedures outlined in the Highway Capacity Manual (HCM) 2000 published by the Transportation Research Board.

Table 1 summarizes the analysis results for the proposed site access, detailed Synchro calculations are provided in Appendix C.

Table 1 Intersection Analysis Summary

Intersection	Movements	Weekday AM Peak Hour		Weekday PM Peak Hour	
		LOS (v/c)	Delay (s)	LOS (v/c)	Delay (s)
Finch Avenue & Nature Haven Crescent (Stop Control T-intersection)	EBLT SBLR	A (<0.01) B (0.02)	0.1 10.5	- B (0.01)	- 10.4

The Finch Avenue and Nature Haven Crescent intersection operates with excellent delays and sufficient capacity (v/c ratio of 0.02 or better). The queen for southbound movement is less than one vehicle.

3.1 SITE TRIP GENERATION

The projection of new additional traffic volumes generated by the development proposal is estimated based on the *Trip Generation Manual, 11th Edition,* published by the Institute of Transportation Engineers (ITE) for “Single Family Detached Housing” (LUC 210).

Table 2 summarizes the total site trip generation for the proposed development.

Table 2 Site Trip Generation

Land Use		Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Residential (8 units)	Trips	2	5	7	6	3	9
	Rates	0.25	0.63	0.88	0.75	0.38	1.13

Based on the foregoing, the development proposal is anticipated to generate 7 two-way trips during the weekday morning peak hour and 9 two-way trips during the afternoon peak hour.

There is ample capacity at the Finch Avenue and Nature Haven Crescent intersection to accommodate these trips. The trip generation graph is shown in Appendix D.

3.2 AUTOTURN ANALYSIS

Garbage and fire truck maneuvering diagram was prepared using the AutoTURN software for the individual residential lot and is provided in Appendix E.

MSUTAC truck template is used to indicate the garbage and fire truck. The snow plow truck is much smaller than the garbage truck and can therefore access the development as well.

3.3 SIGHT LINE DISTANCES

The posted speed on Finch Avenue is 50 km/hour and the design speed is assumed to be 60 km/hour to be conservative. As per the June 2017 TAC Guideline Chapter 9, Page 68, Table 9.9.4 Design Intersection S*ight Distance – Case B1, Left Turn From Stop,* The stopping sight distance for this design speed is 85 meters. The intersection sight distance for passenger cars exiting the access and make left turns is 130 meters.

Table 9.9.4: Design Intersection Sight Distance – Case B1, Left Turn From Stop

Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	41.7	45
30	35	62.6	65
40	50	83.4	85
50	65	104.3	105
60	85	125.1	130
70	105	146.0	150
80	130	166.8	170
90	160	187.7	190
100	185	208.5	210

Finch Avenue is flat both horizontally and vertically for this section of the roadway. There are no obstructions in both directions, therefore adequate sight distances are available in both eastbound and westbound direction.

4.0 CONCLUSIONS

The key findings are summarized below:

- The traffic generated from the proposed development is minor and will not cause significant impact to the surround road network.
- Six residential lots have driveways via Nature Haven Crescent while two lots connects to Finch Avenue directly.
- The proposed development will generate 7 two-way trips in the morning and 9 two-way trips in the afternoon peak hour.
- It is determined that a standard municipal garbage truck can access the proposed residential units for curbside pick up.
- The existing traffic operations at the Finch Avenue and Nature Haven Crescent intersection is excellent with no queuing issues in all movements during the weekday peak analysis periods.
- There are adequate sight distances in both eastbound and westbound approaches along Finch Avenue.

- Fire truck, garbage truck and snow plow truck can access the proposed development in a cab forward manner.

Yours truly,

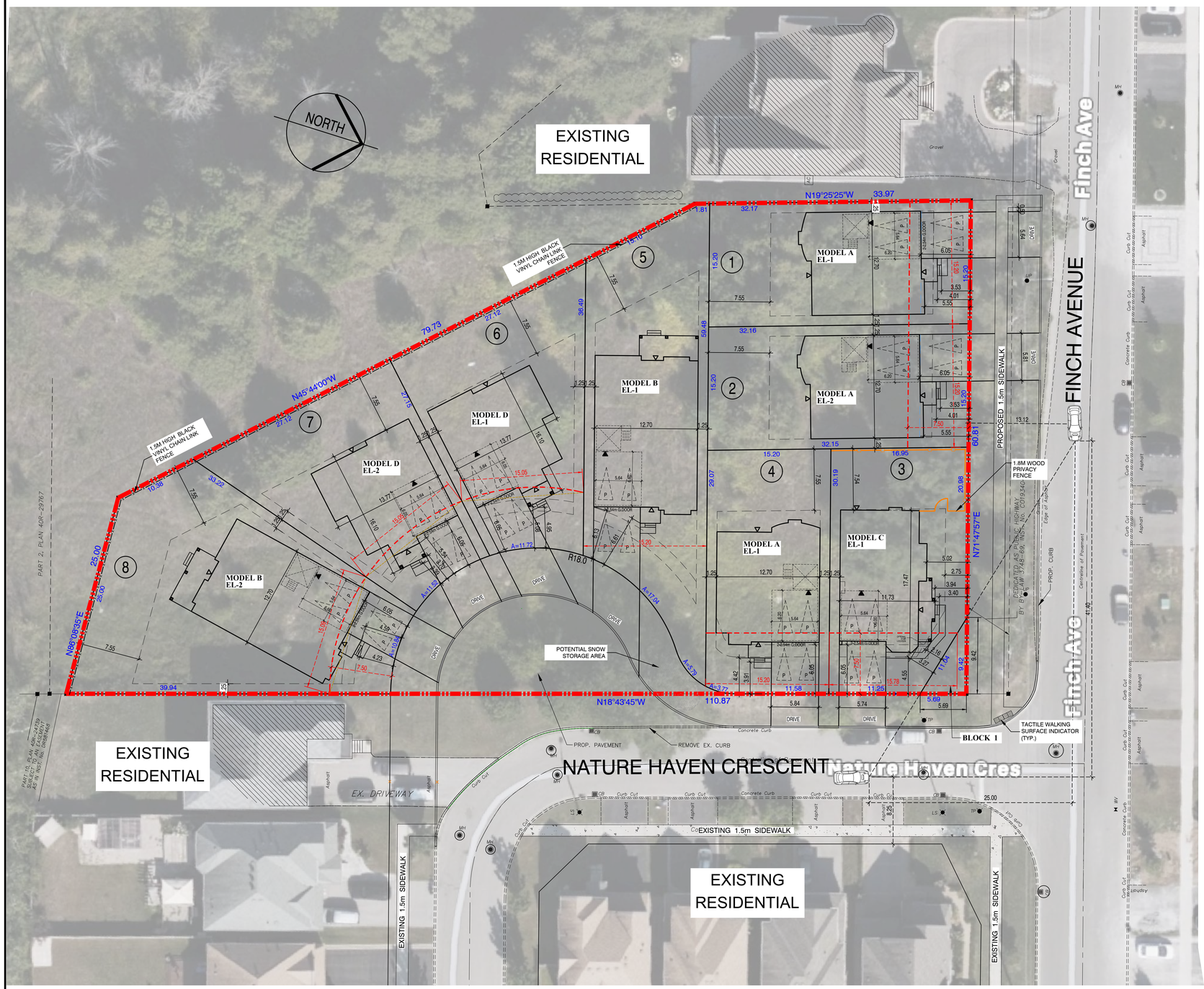
CGE TRANSPORTATION CONSULTING

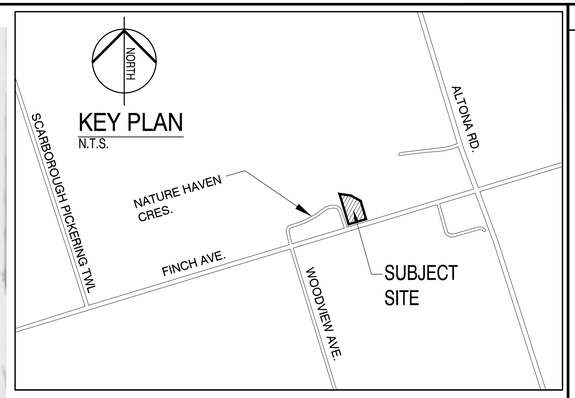
Casey Ge, P.Eng.
President

Appendix A: Site Plan
Appendix B: Turning Movement Counts (Raw Data)
Appendix C: Synchro Outputs
Appendix D: Trip Generation Graph
Appendix E: AutoTURN Diagram – MSUTAC

Appendix A

Site Plan





OVERALL SITE STATISTICS

ROAD WIDENING	515.18
BLOCK 1	26.77
NET LOT AREA *(MINUS ROAD WIDENING & BLOCK 1 AREA)*	4579.36
TOTAL AREA :	**5121.31m2**
RESIDENTIAL ZONE:	**BASED ON "S3- 7 ZONE"**
TOTAL UNITS	8 SINGLE DETACHED

(MAX U.P.H. 0.46379 ha / 8 = 17.25)

LOT No.	MODEL TYPE	LOT AREA (m²)	LOT FRONTAGE (m)	BUILDING HEIGHT (m) 9.0m MAX.	UNIT G.F.A. (m²)	COVERAGE W/ PORCH (m²) 38% MAX.	COVERAGE PERCENTAGE %	LANDSCAPE AREA (m²)	LANDSCAPE PERCENTAGE %
1	MODEL-A	488.78	15.20	9.00	000.0	185.72	38.00	000.0	0.00
2	MODEL-A	488.78	15.20	9.00	000.0	185.72	38.00	000.0	0.00
3	MODEL-C	486.36	15.80	9.00	000.0	184.81	38.00	000.0	0.00
4	MODEL-A	456.32	15.20	9.00	000.0	173.40	38.00	000.0	0.00
5	MODEL-B	711.63	15.05	9.00	000.0	270.41	38.00	000.0	0.00
6	MODEL-D	570.96	15.05	9.00	000.0	216.96	38.00	000.0	0.00
7	MODEL-D	539.49	15.05	9.00	000.0	205.00	38.00	000.0	0.00
8	MODEL-B	837.28	15.09	9.00	000.0	318.16	38.00	000.0	0.00
TOTAL:		**3202.83 m2**	**91.50 m**	**9.00 m**	**0.00 m2**	**1217.02 m2**	**38.0 m2**	**0.00 m2**	**0.0 m2**

PARKING	PROVIDED	REQUIRED
8 LOTS WITH 2 SPACES IN GARAGE AND 2 SPACES IN DRIVEWAY	32 SPACES	16 SPACES
TOTAL	**32 SPACES**	**16 SPACES**

NOTE:

PART OF LOT 33
CONCESSION 2
GEOGRAPHIC TOWNSHIP OF PICKERING
CITY OF PICKERING
REGIONAL MUNICIPALITY OF DURHAM

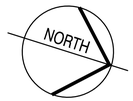
SCALE 1 : 250

10 5 0 10

METRES

BENCHMARK

ELEVATIONS ARE GEODETIC AND REFERRED TO CITY OF PICKERING B.M. NO. 1-090, ELEVATION = 140.969 M



NOTES:

LEGAL SURVEY INFORMATION AND LOT DIMENSIONS SHOWN ON THIS PLAN ARE TAKEN FROM A PLAN PREPARED BY: **ERTL SURVEYORS ONTARIO LAND SURVEYORS WWW.ES-OLS.COM 1234 REID STREET, UNIT 10, RICHMOND HILL L4B 1C1 TELEPHONE (905) 731-7834 FAX (905)731-7852 EMAIL INFO@ES-OLS.COM**
DATED: FEB. 23 2018 WHICH MAY NOT BE FINAL AND ARE NOT GUARANTEED. THE FINAL REGISTERED PLAN OF SUBDIVISION SHALL BE REFERRED TO FOR CONFIRMATION OF THE DATA.

LEGEND

- STORM CONNECTION
- SANITARY CONNECTION
- WATER CONNECTION
- HYDRO CONNECTION
- DOUBLE CATCH BASIN
- CATCH BASIN
- STREET LIGHT
- HYDRANT
- TRANSFORMER
- CABLE TV PEDESTAL
- BELL PEDESTAL
- ENTRANCE DOOR LOCATION
- GARAGE DOOR LOCATION
- COMMUNITY MAILBOX
- ENGINEERED FILL LOT
- VALVE AND CHAMBER
- SANITARY MANHOLE
- STORM MANHOLE
- AIR-CONDITIONING UNIT
- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED SWALE GRADE
- ESTABLISHED GRADE
- DOWNSPOUT LOCATION
- SUMP PUMP
- PROPOSED BERM
- SWALE DIRECTION
- HYDRO METER
- GAS METER
- MUNICIPAL ADDRESS
- FINISHED FLOOR ELEVATION
- TOP OF FOUNDATION WALL
- FIN. BASEMENT FLOOR SLAB
- UNDERSIDE FOOTING ELEVATION
- TPZ FENCE
- PROPERTY BOUNDRY
- PRECAST CONCRETE UNIT PAVERS
- PRECAST CONCRETE PATIO SLABS
- CHAINLINK FENCE
- WOOD PRIVACY FENCE / SCREEN
- SNOW STORAGE AREA

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE BEFORE COMMENCING WORK. ANY DISCREPANCIES SHALL BE REPORTED TO JARDIN DESIGN GROUP INC. PRIOR TO COMMENCEMENT OF WORK.

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AS CONSTRUCTED INVERTS MUST BE VERIFIED PRIOR TO POURING FOOTINGS.

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PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

No.	DATE:	WORK DESCRIPTION:
18		
17		
16		
15		
14		
13		
12		
11		
10		
9		
8		
7		
6		
5		
4		
3	JULY 20, 2023	REVISED AS PER CLIENTS COMMENTS & ISSUED TO CLIENT FOR REVIEW.
2	MAR. 30, 2023	REVISED AS PER CITY COMMENTS & ISSUED TO CLIENT FOR REVIEW.
1	DEC. 18, 2020	ISSUED TO CLIENT FOR REVIEW.

jardin
DESIGN GROUP INC
64 JARDIN DR. SUITE 3A
VAUGHAN ONT. L4K 3P3
TEL: 905 660-3377 FAX: 905 660-3713
EMAIL: info@jardindesign.ca

The undersigned has reviewed and takes responsibility for this design and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer

QUALIFICATION INFORMATION

Walter Botter — NAME — SIGNATURE — *21031* BCIN

REGISTRATION INFORMATION

jardin design group inc. — FIRM NAME — *27763* BCIN

CONTEXT SITE PLAN

230 Finch Ave-Nature Haven Cres.
(PICKERING)

BILD

TYPE: SP

SCALE: 1:250

PROJ. No.: 20-XX

No.: A-01

DRAWN BY: DRAWING NAME:

Appendix B

Turning Movement Counts (Raw Data)

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Pickering
Site #: 1918600001
Intersection: Finch Ave & Nature Haven Crescen
TFR File #: 1
Count date: 14-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Finch Ave runs W/E

North Leg Total: 15
North Entering: 13
North Peds: 1
Peds Cross: ⋈

Heavys	0	1	1
Trucks	0	0	0
Cars	1	11	12
Totals	1	12	

Heavys	1
Trucks	0
Cars	1
Totals	2

East Leg Total: 312
East Entering: 226
East Peds: 0
Peds Cross: ⧖

Nature Haven Crescent

Heavys	Trucks	Cars	Totals
2	1	223	226

Cars	Trucks	Heavys	Totals
0	0	1	1
222	1	2	225
222	1	3	

Finch Ave

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	1	1
6	0	68	74
6	0	69	

Finch Ave

Cars	Trucks	Heavys	Totals
79	0	7	86

Peds Cross: ⧖
West Peds: 0
West Entering: 75
West Leg Total: 301

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Pickering
Site #: 1918600001
Intersection: Finch Ave & Nature Haven Crescen
TFR File #: 1
Count date: 14-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Finch Ave runs W/E

North Leg Total: 17
North Entering: 6
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0
Trucks	0	0	0
Cars	0	6	6
Totals	0	6	

Heavys	0
Trucks	0
Cars	11
Totals	11

East Leg Total: 308
East Entering: 80
East Peds: 0
Peds Cross: ⧖

Nature Haven Crescent

Heavys	Trucks	Cars	Totals
0	1	68	69

Finch Ave

Heavys	Trucks	Cars	Totals
0	0	0	0
0	0	222	222
0	0	222	

Cars	Trucks	Heavys	Totals
11	0	0	11
68	1	0	69
79	1	0	

N
W E
S

Finch Ave

Cars	Trucks	Heavys	Totals
228	0	0	228

Peds Cross: ⧖
West Peds: 2
West Entering: 222
West Leg Total: 291

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

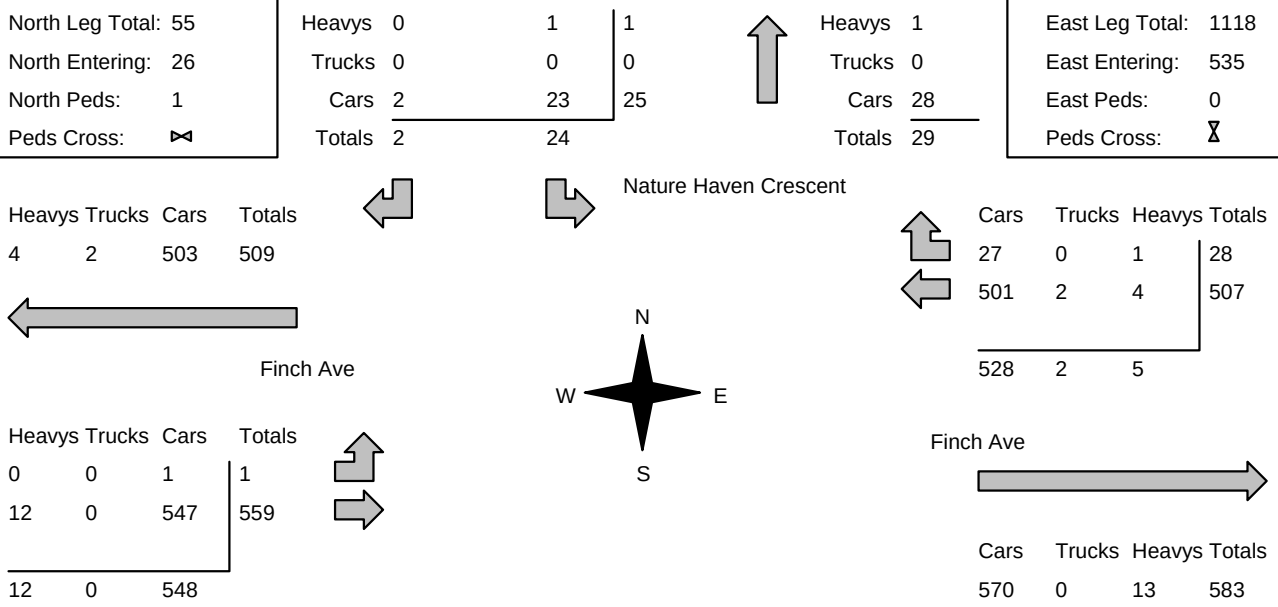
Municipality: Pickering
Site #: 1918600001
Intersection: Finch Ave & Nature Haven Crescen
TFR File #: 1
Count date: 14-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Non-Signalized Intersection ****

Major Road: Finch Ave runs W/E



Peds Cross: ⧖
West Peds: 5
West Entering: 560
West Leg Total: 1069

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Finch Ave & Nature Haven Cresce | **Count Date:** 14-Nov-19 | **Municipality:** Pickering

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*5*	*0*	*1*	*6*	*0*
9:00:00	*9*	*0*	*0*	*9*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*4*	*0*	*1*	*5*	*0*
18:00:00	*6*	*0*	*0*	*6*	*0*
Totals:	24	0	2	26	1

North/South Total Approaches: 26

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*
9:00:00	*0*	*0*	*0*	*0*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*
18:00:00	*0*	*0*	*0*	*0*	*0*
S Totals:	0	0	0	0	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*195*	*1*	*196*	*0*
9:00:00	*0*	*173*	*2*	*175*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*73*	*11*	*84*	*0*
18:00:00	*0*	*66*	*14*	*80*	*0*
Totals:	0	507	28	535	0

East/West Total Approaches: 1095

West Approach Totals

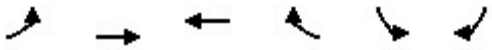
Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*64*	*0*	*65*	*0*
9:00:00	*0*	*86*	*0*	*86*	*3*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*201*	*0*	*201*	*2*
18:00:00	*0*	*208*	*0*	*208*	*0*
W Totals:	1	559	0	560	5

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*5*	*12*	*0*	*6*	*6*	*0*	*0*

Appendix C

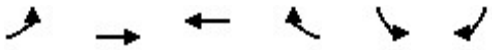
Synchro Outputs



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	1	74	225	1	12	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	80	245	1	13	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	246				328	245
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	246				328	245
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				98	100
cM capacity (veh/h)	1320				666	794

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	82	246	14
Volume Left	1	0	13
Volume Right	0	1	1
cSH	1320	1700	674
Volume to Capacity	0.00	0.14	0.02
Queue Length 95th (m)	0.0	0.0	0.5
Control Delay (s)	0.1	0.0	10.5
Lane LOS	A		B
Approach Delay (s)	0.1	0.0	10.5
Approach LOS			B

Intersection Summary			
Average Delay		0.5	
Intersection Capacity Utilization		21.9%	ICU Level of Service A
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	222	69	11	6	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	241	75	12	7	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	87				322	81
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	87				322	81
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1509				671	979

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	241	87	7
Volume Left	0	0	7
Volume Right	0	12	0
cSH	1509	1700	671
Volume to Capacity	0.00	0.05	0.01
Queue Length 95th (m)	0.0	0.0	0.2
Control Delay (s)	0.0	0.0	10.4
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.4
Approach LOS			B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	21.7%	ICU Level of Service	A
Analysis Period (min)	15		

Appendix D

Trip Generation Graph

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

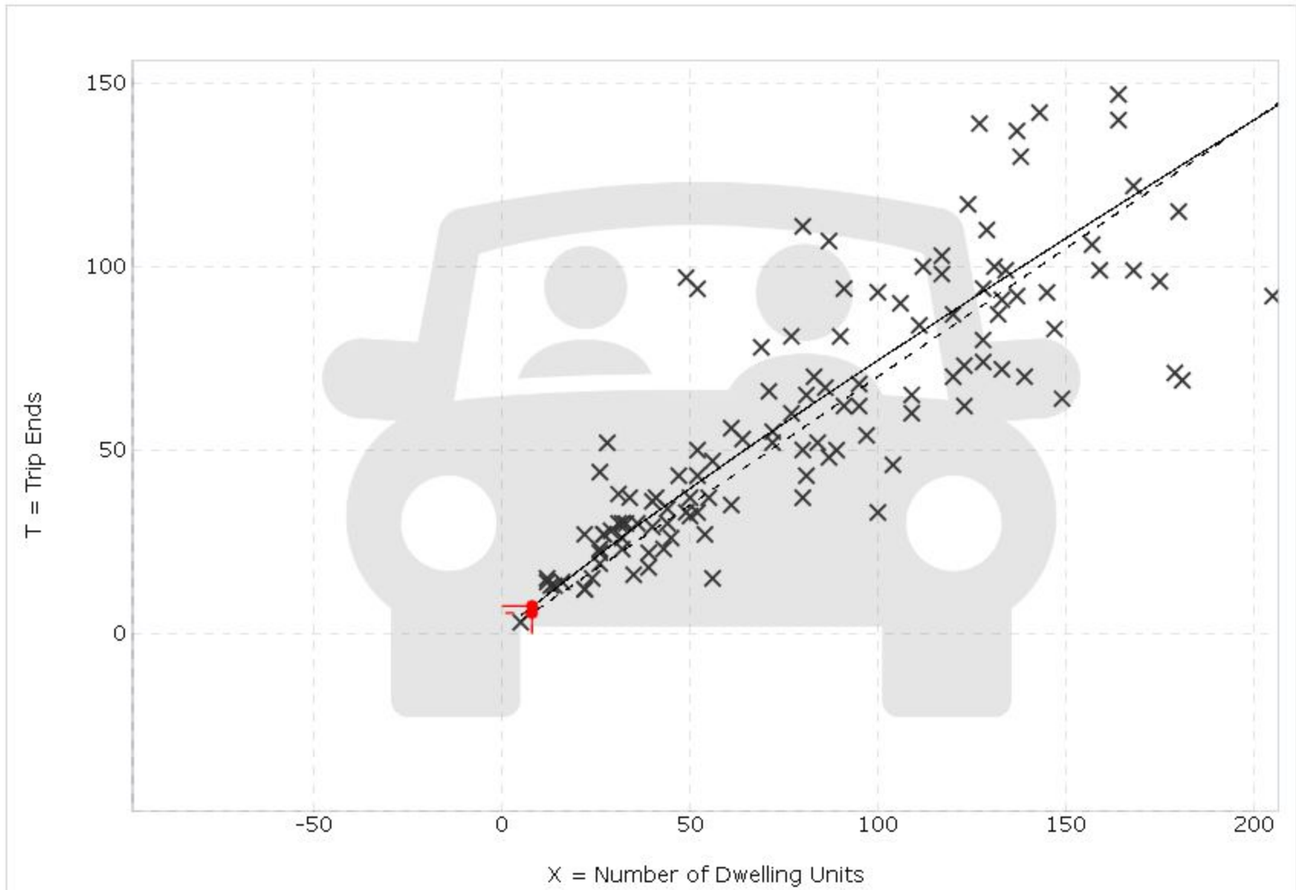
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic, C

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
8 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click f
Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
192

Avg. Num. of Dwelling Units:
226

Average Rate:
0.70

Range of Rates:
0.27 - 2.27

Standard Deviation:
0.24

Fitted Curve Equation:
Ln(T) = 0.91 Ln(X) + 0.12

R^2:
0.90

Directional Distribution:
25% entering, 75% exiting

Calculated Trip Ends:
Average Rate: 6 (Total), 1 (Entry), 5 (Exit)
Fitted Curve: 7 (Total), 2 (Entry), 5 (Exit)

Graph Look Up

Query | Filter

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:
210

LAND USE GROUP:
(200-299) Residential

LAND USE :
210 - Single-Family Detached Housing

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

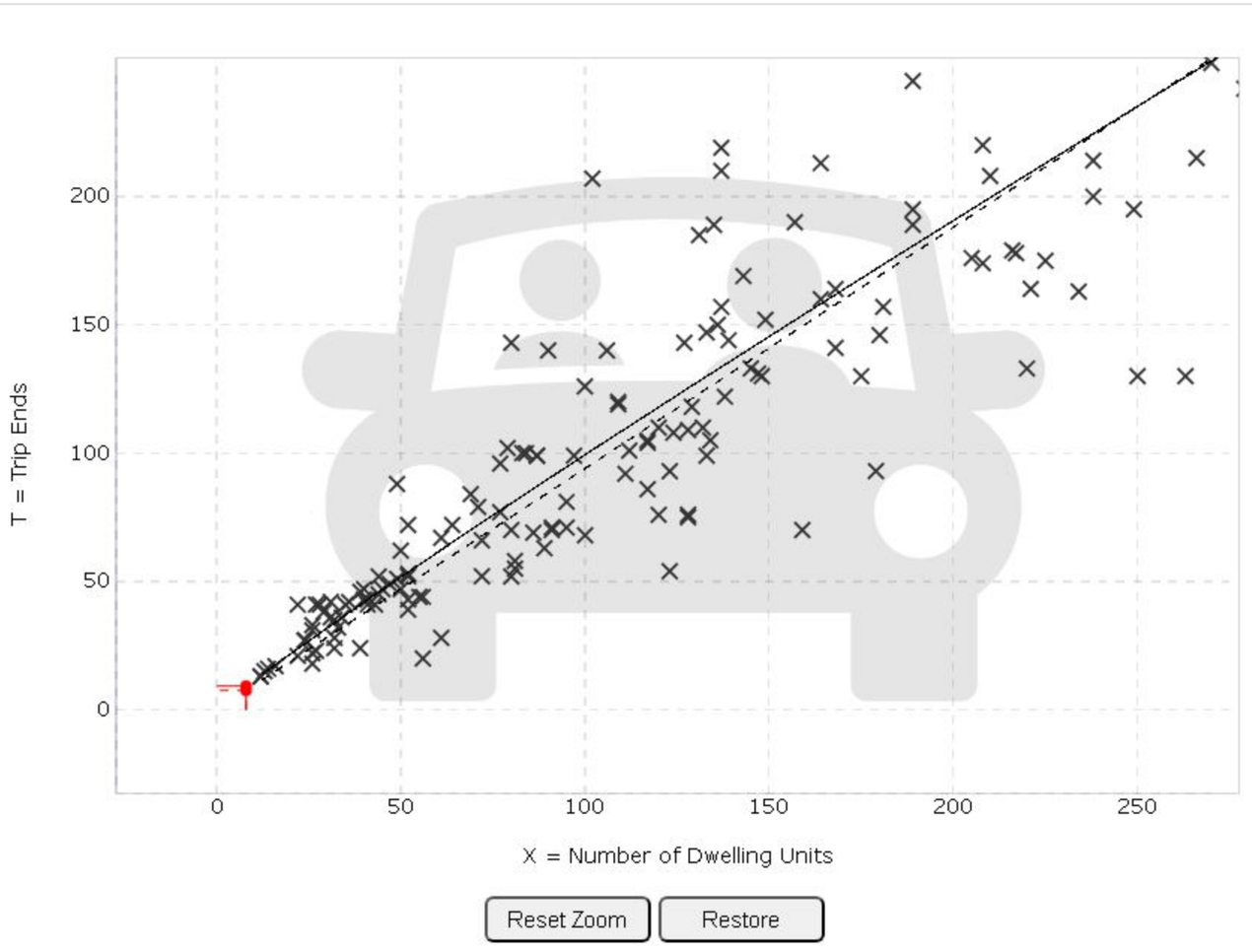
INDEPENDENT VARIABLE (IV):
Dwelling Units

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic, C

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:
8 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click
Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
208

Avg. Num. of Dwelling Units:
248

Average Rate:
0.94

Range of Rates:
0.35 - 2.98

Standard Deviation:
0.31

Fitted Curve Equation:
Ln(T) = 0.94 Ln(X) + 0.27

R^2:
0.92

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 8 (Total), 5 (Entry), 3 (Exit)
Fitted Curve: 9 (Total), 6 (Entry), 3 (Exit)

Appendix E

AutoTURN Diagram


NORTH
EXISTING
RESIDENTIAL
N19°25'25"W
33.97
1.81
32.17
15.10
1.5M HIGH BLACK
VINYL CHAIN LINK
FENCE
5
1
15.20
7.55
36.49
6
27.12
79.73
N45°44'00"W
27.12
7
27.15
1.5M HIGH BLACK
VINYL CHAIN LINK
FENCE
10.38
33.22
8
25.00
25.00
N86°08'35"E
7.55
39.94
MODEL A
EL-1
MODEL A
EL-2
MODEL B
EL-1
MODEL D
EL-1
MODEL D
EL-2
MODEL B
EL-2
MODEL A
EL-1
MODEL C
EL-1
2.54m G.DOOR
DRIVE
A=11.72
A=11.52
A=17.04
A=10.84
A=5.79
A=3.77
R18.0
5.20
POTENTIAL SNOW
STORAGE AREA
N18°43'45"W
110.87
59.48
32.16
32.15
15.20
16.95
29.07
30.19
7.54
20.98
60.81
N71°47'57"E
PROPOSED 1.5m SIDEWALK
FINCH AVENUE
1.8M WOOD
PRIVACY
FENCE
13.12
7.50
PROP. CURB
Centreline of Pavement
DEDICATED AS PUBLIC HIGHWAY
BY BYLAW 3748-69, INST. No. CO19340
Edge of Asphalt
Gravel
MH
UP
CB
TP
LS
MSU
TAC-1999 (CA)
Concrete Curb
Curb Cut
Asphalt
EX. 250mmø D.I. WM
41.40
PROP. PAVEMENT
REMOVE EX. CURB
NATURE HAVEN CRESCENT
EXISTING
RESIDENTIAL
EX. DRIVEWAY
EX. 16.4m-200mmø
PVC SAN @ 0.31%
EX. 150mmø PVC WM
EXISTING 1.5m SIDEWALK
EX. HYD
EXISTING
RESIDENTIAL
10.00
0.80
6.50
MSU meters
Width : 2.60
Track : 2.60
Lock to Lock Time : 6.0
Steering Angle : 40.1