

November 21, 2019

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 a minor collector road that 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 **Error! Not a valid bookmark self-reference..** The site plan is shown in Appendix A.

Figure 1 Site Location



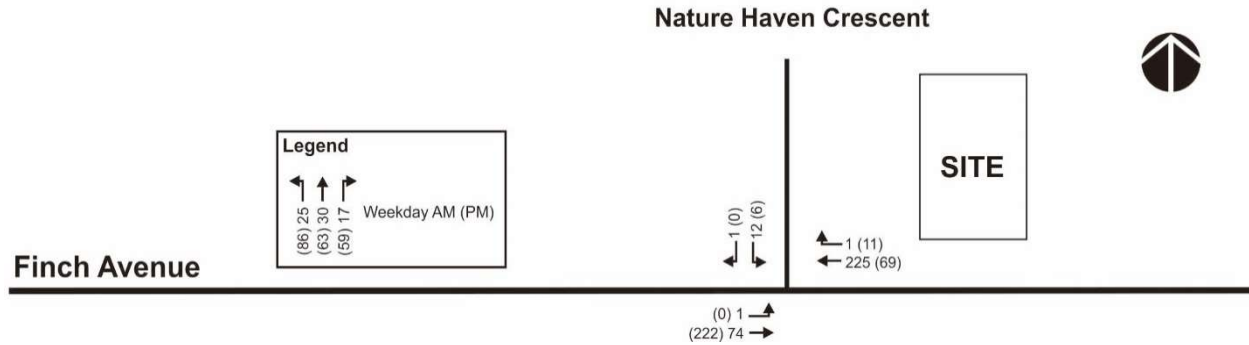
2.0 EXISTING TRAFFIC VOLUMES

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.

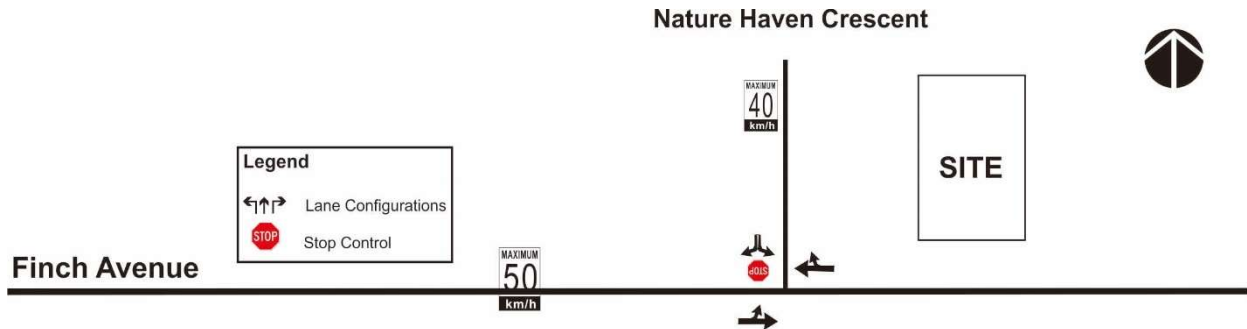
Figure 2 Existing Peak Hour Traffic Volumes



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 | A (<0.01) | 0.1 | - | - |
| | SBLR | B (0.02) | 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 queue for southbound movement is less than one vehicle.

3.1 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 *Sight 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 |
| 110 | 220 | 229.4 | 230 |
| 120 | 250 | 250.2 | 255 |
| 130 | 285 | 271.1 | 275 |

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

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 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.

Yours truly,

CGE TRANSPORTATION CONSULTING



Casey Ge, P.Eng.
President

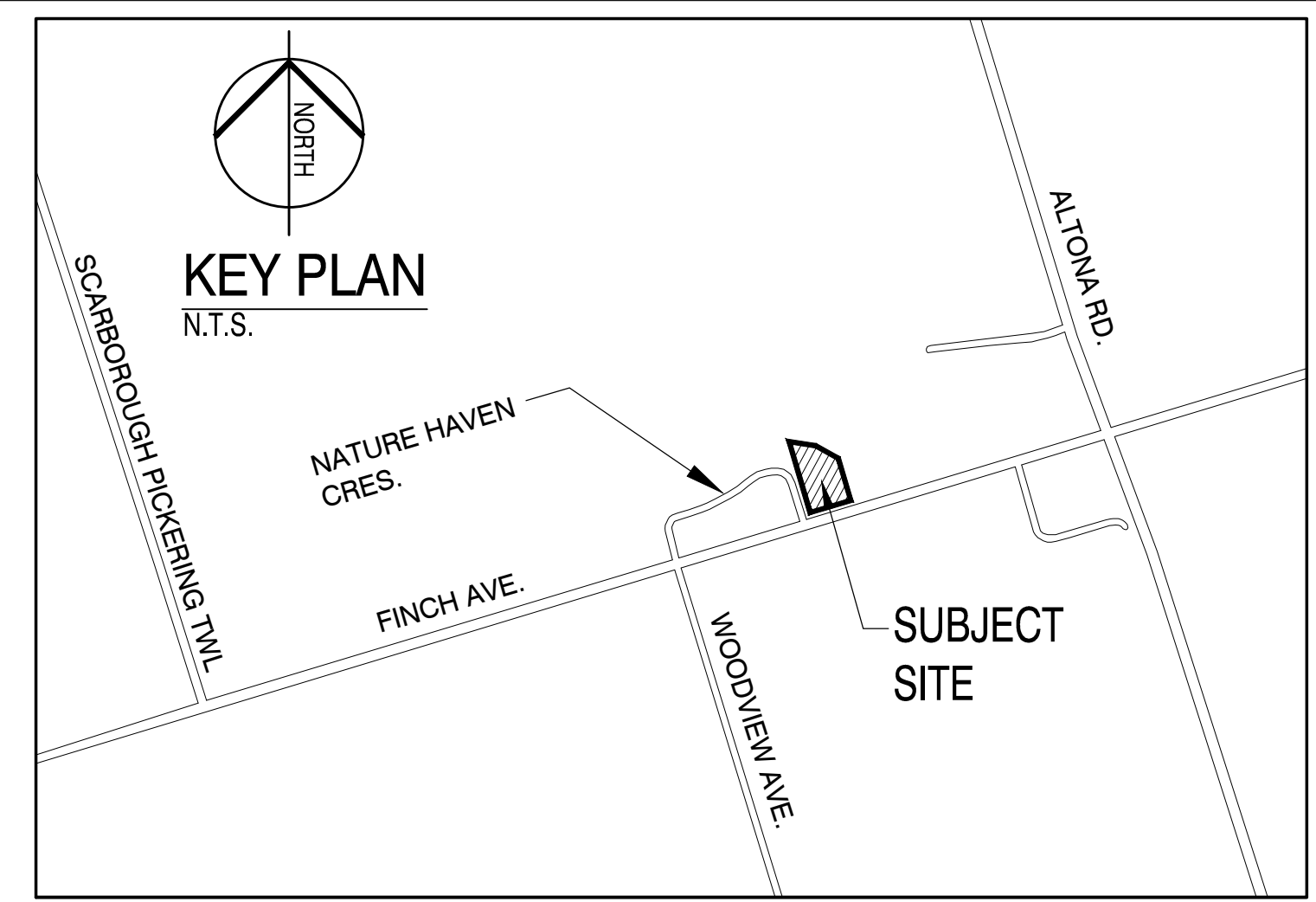
Appendix A: Site Plan

Appendix B: Turning Movement Counts (Raw Data)

Appendix C: Synchro Outputs

Appendix A

Site Plan



LEGEND

- STORM CONNECTION
- SANITARY CONNECTION
- HYDRO CONNECTION
- WATER 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 MAN-HOLE
- 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
- F.F.L.R. FINISHED FLOOR ELEVATION
- T/WALL FIN. BASEMENT FLOOR SLAB
- U/FTG. UNDERSIDE FOOTING ELEVATION
- TPZ FENCE
- PROPERTY LINE

OVERALL SITE STATISTICS

| | |
|--------------------------------------------------------------|-------------------------------------------|
| ROAD WIDENING | 515.22 |
| BLOCK 1 | 21.30 |
| NET LOT AREA (MINUS ROAD WIDENING & BLOCK 1 AREA) | 4584.79 |
| TOTAL AREA : | 5121.31m² |
| RESIDENTIAL ZONE: | BASED ON "S3-7 ZONE" |
| TOTAL UNITS | 8 SINGLE DETACHED (2 STOREY UNITS) |
| <small>(MAX U.F.H. 0.46379 ha / 8 = 17.25)</small> | |

| LOT No. | MODEL TYPE | LOT AREA (m ²) | LOT FRONTAGE (m) | BUILDING HEIGHT (m) 9.0m MAX. | UNIT G.F.A. (m ²) | COVERAGE W/ PORCH (m ²) 38% MAX. | COVERAGE PERCENTAGE % | LANDSCAPE AREA (m ²) | LANDSCAPE PERCENTAGE % |
|---------------|------------|------------------------------|------------------|-------------------------------|-------------------------------|----------------------------------------------|---------------------------|----------------------------------|--------------------------|
| 1 | MODEL-A | 495.32 | 15.20 | 9.00 | 000.0 | 188.22 | 38.00 | 000.0 | 0.00 |
| 2 | MODEL-A | 495.15 | 15.20 | 9.00 | 000.0 | 188.16 | 38.00 | 000.0 | 0.00 |
| 3 | MODEL-C | 467.26 | 14.39 | 9.00 | 000.0 | 177.55 | 38.00 | 000.0 | 0.00 |
| 4 | MODEL-A | 493.50 | 16.45 | 9.00 | 000.0 | 187.53 | 38.00 | 000.0 | 0.00 |
| 5 | MODEL-B | 707.69 | 15.29 | 9.00 | 000.0 | 268.92 | 38.00 | 000.0 | 0.00 |
| 6 | MODEL-D | 556.20 | 14.46 | 9.00 | 000.0 | 193.55 | 34.80 | 000.0 | 0.00 |
| 7 | MODEL-D | 556.75 | 13.92 | 9.00 | 000.0 | 211.56 | 38.00 | 000.0 | 0.00 |
| 8 | MODEL-B | 813.20 | 13.97 | 9.00 | 000.0 | 309.01 | 38.00 | 000.0 | 0.00 |
| TOTAL: | | 3215.12 m² | 90.99 m | 9.00 m | 0.00 m² | 1203.93 m² | 37.5 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

METRES

BENCHMARK

ELEVATIONS ARE GEOODETIC AND REFERRED TO CITY OF PICKERING B.M. NO. 1-090, ELEVATION = 140.989 M

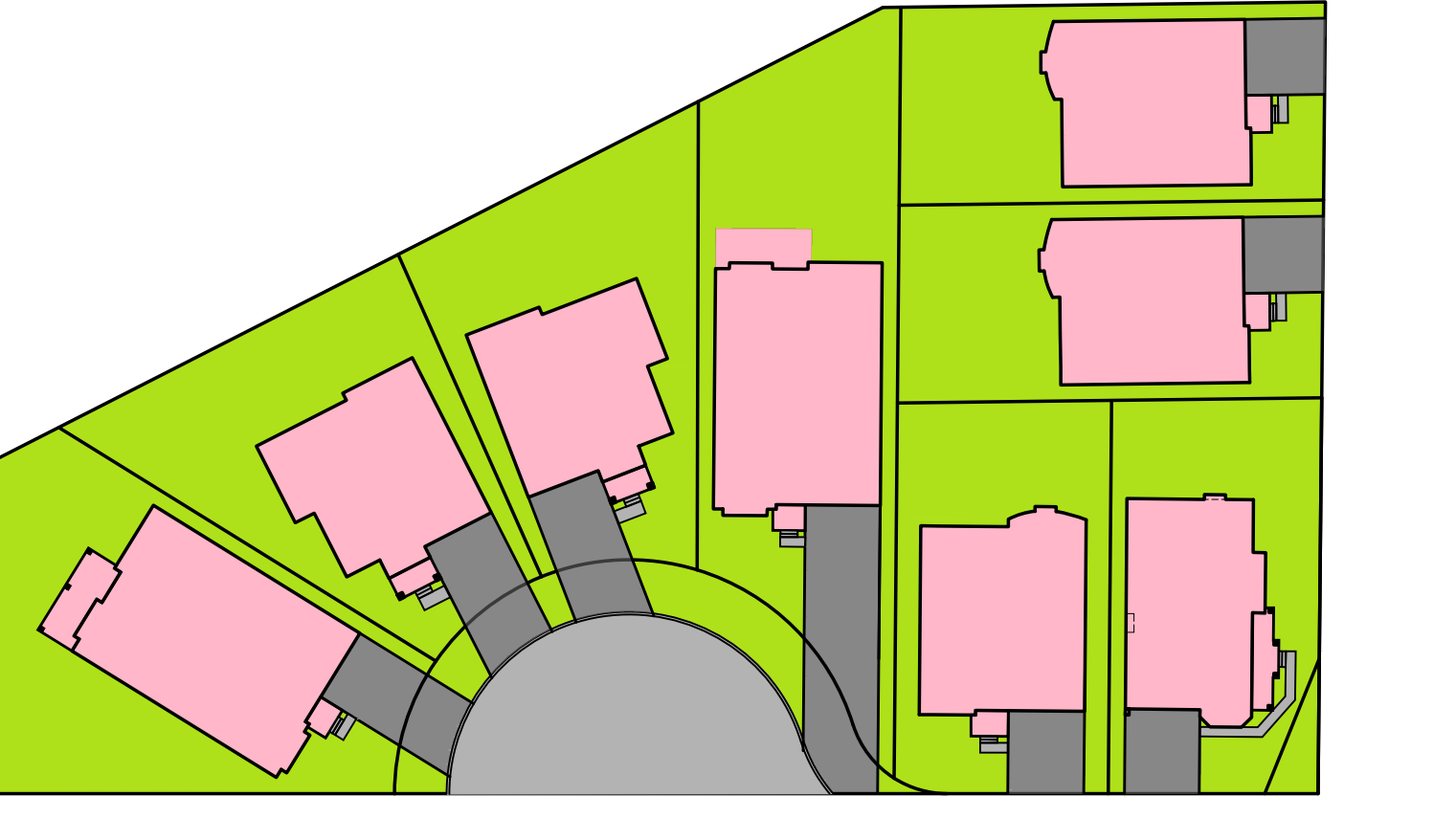
NOTES:

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, ONT. 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.

230 Finch Ave-Nature Haven Cres.

GROSS SITE AREA: 5121.31 m² / 1.265 Ac / 0.512 Ha

| | |
|-----------------------------------------------------|-----------------------------------------------------------|
| LANDSCAPED AREA / OPEN SPACE: | Approx. 2689.57 m ² ± =52.5% (GROSS SITE AREA) |
| BUILDING AREA: | Approx. 1645.41 m ² ± =32.1% (GROSS SITE AREA) |
| DRIVEWAY AREA: | Approx. 450.53 m ² ± = 8.8% (GROSS SITE AREA) |
| HARD SURFACE AREA: (Parking, Roadway & Walkways) | Approx. 335.80 m ² ± = 6.6% (GROSS SITE AREA) |



PRELIMINARY
NOT TO BE USED FOR CONSTRUCTION

| | |
|------|-----------------------------------------------------------|
| 18 | |
| 17 | |
| 16 | |
| 15 | |
| 14 | |
| 13 | |
| 12 | |
| 11 | |
| 10 | |
| 9 | |
| 8 | |
| 7 | |
| 6 | |
| 5 | |
| 4 | |
| 3 | REV LOT CONFIGURATION & ISSUED TO CLIENT FOR REVIEW |
| 2 | SEPT. 21, 2021 |
| 1 | MAY 04, 2021 |
| | ADDED ADDITIONAL AREA STATS & ISSUED TO CLIENT FOR REVIEW |
| | DEC. 18, 2020 |
| | ISSUED TO CLIENT FOR REVIEW |
| No.: | DATE: WORK DESCRIPTION: |

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

CONTEXT SITE PLAN
(C O L O U R)
230 Finch Ave-Nature Haven Cres.
(PICKERING)

| | |
|-----------|-------|
| TYPE | SP |
| SCALE: | 1:250 |
| PROJ. No. | 20-XX |
| No. | A-01 |



Appendix B


Turning Movement Counts (Raw Data)

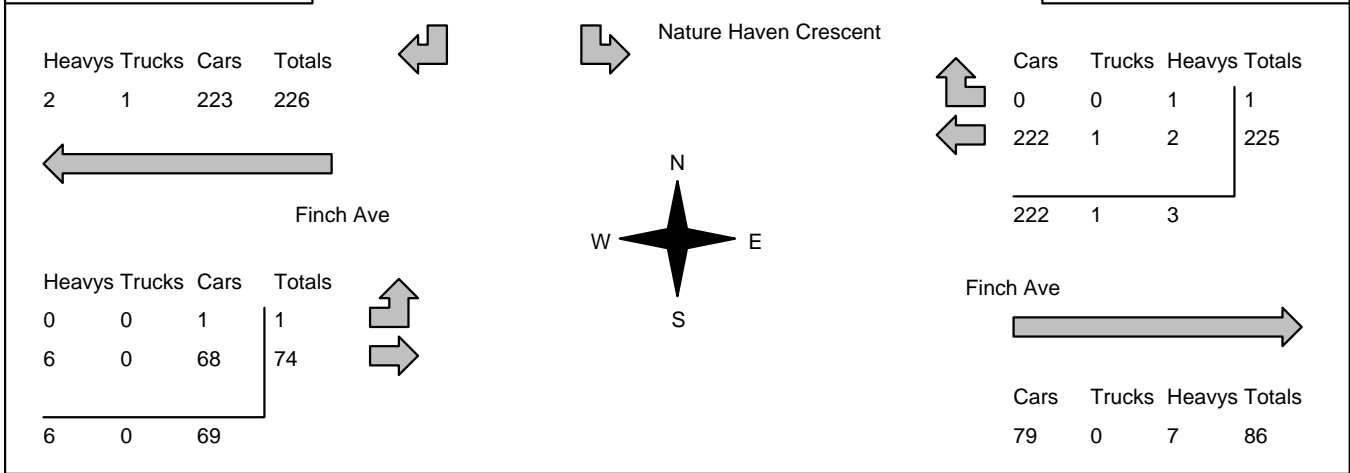
Accu-Traffic Inc.

| | | |
|-----------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|
| 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: \boxtimes | <table style="border-collapse: collapse; margin: auto;"> <tr><td>Heavys</td><td>0</td><td>1</td><td>1</td></tr> <tr><td>Trucks</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Cars</td><td>1</td><td>11</td><td>12</td></tr> <tr><td>Totals</td><td>1</td><td>12</td><td></td></tr> </table> | Heavys | 0 | 1 | 1 | Trucks | 0 | 0 | 0 | Cars | 1 | 11 | 12 | Totals | 1 | 12 | |  <table style="border-collapse: collapse; margin: auto;"> <tr><td>Heavys</td><td>1</td></tr> <tr><td>Trucks</td><td>0</td></tr> <tr><td>Cars</td><td>1</td></tr> <tr><td>Totals</td><td>2</td></tr> </table> | Heavys | 1 | Trucks | 0 | Cars | 1 | Totals | 2 | East Leg Total: 312 East Entering: 226 East Peds: 0 Peds Cross: \boxtimes |
| Heavys | 0 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| Trucks | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 1 | 11 | 12 | | | | | | | | | | | | | | | | | | | | | | | | |
| Totals | 1 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heavys | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trucks | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Totals | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | |
|-------------------------------------------------------------------------------------|--|
| Peds Cross: \boxtimes West Peds: 0 West Entering: 75 West Leg Total: 301 | |
|-------------------------------------------------------------------------------------|--|


Comments

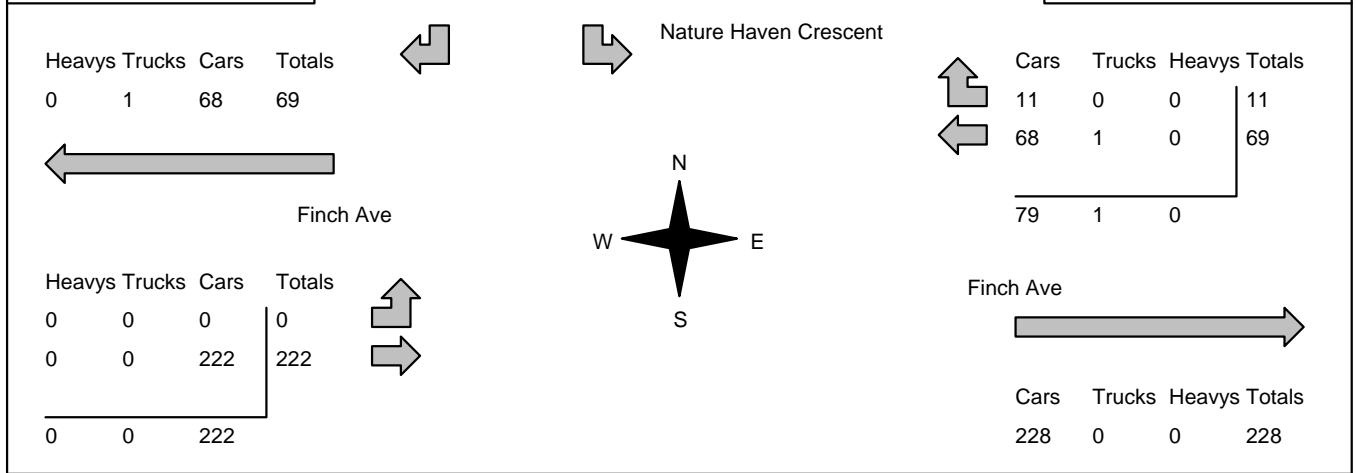
Accu-Traffic Inc.

| | | |
|-------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------|
| 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: \times | <table style="margin: auto;"> <tr><td>Heavys</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Trucks</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>Cars</td><td>0</td><td>6</td><td>6</td></tr> <tr><td>Totals</td><td>0</td><td>6</td><td></td></tr> </table> | Heavys | 0 | 0 | 0 | Trucks | 0 | 0 | 0 | Cars | 0 | 6 | 6 | Totals | 0 | 6 | |  <table style="margin: auto;"> <tr><td>Heavys</td><td>0</td></tr> <tr><td>Trucks</td><td>0</td></tr> <tr><td>Cars</td><td>11</td></tr> <tr><td>Totals</td><td>11</td></tr> </table> | Heavys | 0 | Trucks | 0 | Cars | 11 | Totals | 11 | East Leg Total: 308 East Entering: 80 East Peds: 0 Peds Cross: \times |
| Heavys | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Trucks | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 0 | 6 | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| Totals | 0 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Heavys | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Trucks | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Totals | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | |
|-----------------------------------------------------------------------------------|--|
| Peds Cross: \times West Peds: 2 West Entering: 222 West Leg Total: 291 | |
|-----------------------------------------------------------------------------------|--|

Comments

Accu-Traffic Inc.

Total Count Diagram

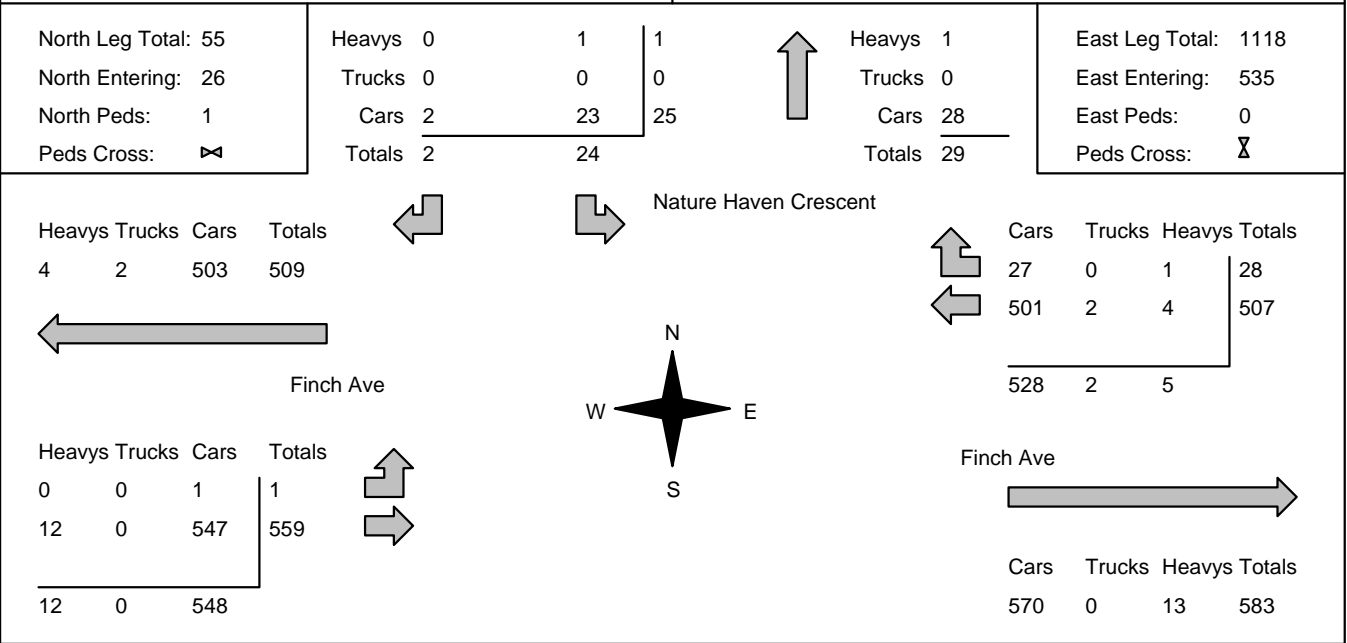
Municipality: Pickering
Site #: 1918600001
Intersection: Finch Ave & Nature Haven Crescen
TFR File #: 1
Count date: 14-Nov-19

Weather conditions:

Person counted:
Person prepared:
Person checked:

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

Major Road: Finch Ave runs W/E



Peds Cross: \times
 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 | | | | | | North/South Total Approaches | South Approach Totals | | | | | |
|------------------------------------------------------------|---------------------------------|------|-------|----------------|---------------|------------------------------------|-----------------------|---------------------------------|------|-------|----------------|---------------|
| Hour Ending | Includes Cars, Trucks, & Heavys | | | | Total Peds | | Hour Ending | Includes Cars, Trucks, & Heavys | | | | Total Peds |
| | Left | Thru | Right | Grand Total | | | | Left | Thru | Right | Grand Total | |
| 7:00:00 | 0 | 0 | 0 | 0 | 0 | 0 | 7:00:00 | 0 | 0 | 0 | 0 | 0 |
| 8:00:00 | 5 | 0 | 1 | 6 | 0 | 6 | 8:00:00 | 0 | 0 | 0 | 0 | 0 |
| 9:00:00 | 9 | 0 | 0 | 9 | 1 | 9 | 9:00:00 | 0 | 0 | 0 | 0 | 0 |
| 16:00:00 | 0 | 0 | 0 | 0 | 0 | 0 | 16:00:00 | 0 | 0 | 0 | 0 | 0 |
| 17:00:00 | 4 | 0 | 1 | 5 | 0 | 5 | 17:00:00 | 0 | 0 | 0 | 0 | 0 |
| 18:00:00 | 6 | 0 | 0 | 6 | 0 | 6 | 18:00:00 | 0 | 0 | 0 | 0 | 0 |
| Totals: | 24 | 0 | 2 | 26 | 1 | 26 | S Totals: | 0 | 0 | 0 | 0 | 0 |
| East Approach Totals | | | | | | East/West Total Approaches | West Approach Totals | | | | | |
| Hour Ending | Includes Cars, Trucks, & Heavys | | | | Total Peds | | Hour Ending | Includes Cars, Trucks, & Heavys | | | | Total Peds |
| | Left | Thru | Right | Grand Total | | | | Left | Thru | Right | Grand Total | |
| 7:00:00 | 0 | 0 | 0 | 0 | 0 | 0 | 7:00:00 | 0 | 0 | 0 | 0 | 0 |
| 8:00:00 | 0 | 195 | 1 | 196 | 0 | 261 | 8:00:00 | 1 | 64 | 0 | 65 | 0 |
| 9:00:00 | 0 | 173 | 2 | 175 | 0 | 261 | 9:00:00 | 0 | 86 | 0 | 86 | 3 |
| 16:00:00 | 0 | 0 | 0 | 0 | 0 | 0 | 16:00:00 | 0 | 0 | 0 | 0 | 0 |
| 17:00:00 | 0 | 73 | 11 | 84 | 0 | 285 | 17:00:00 | 0 | 201 | 0 | 201 | 2 |
| 18:00:00 | 0 | 66 | 14 | 80 | 0 | 288 | 18:00:00 | 0 | 208 | 0 | 208 | 0 |
| Totals: | 0 | 507 | 28 | 535 | 0 | 1095 | 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 | | | |

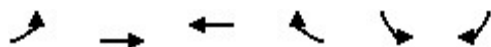
Appendix C

Synchro Outputs

HCM Unsignalized Intersection Capacity Analysis

3: Finch Avenue & Nature Haven Crescent

2019-11-20



| 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 |

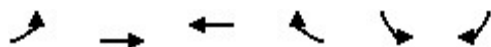
| Direction, Lane # | EB 1 | WB 1 | SB 1 |
|-----------------------|------|------|------|
| Volume Total | 82 | 246 | 14 |
| Volume Left | 1 | 0 | 13 |
| Volume Right | 0 | 1 | 1 |
| cSH | 1320 | 1700 | 674 |
| Volume to Capacity | 0.00 | 0.14 | 0.02 |
| Queue Length 95th (m) | 0.0 | 0.0 | 0.5 |
| Control 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 |
| Analysis Period (min) | | 15 | A |

HCM Unsignalized Intersection Capacity Analysis

3: Finch Avenue & Nature Haven Crescent

2019-11-20



| 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 | |