

## New School Openings St. Patrick Catholic Elementary School

Version: 1.0 Revision Date: May 28, 2025

| Version | Date         | Author | Comment / Change |  |
|---------|--------------|--------|------------------|--|
| 1.0     | May 28, 2025 | SH     | Final            |  |
|         |              |        |                  |  |
|         |              |        |                  |  |
|         |              |        |                  |  |

### **Table of Contents**

| School Profile                             | 3 |
|--|---|
| Site Plan Status                           | 3 |
| Road Status and Characteristics            | 3 |
| Transportation Safety Features and Signage | 4 |
| Speed Limit                                | 4 |
| School Bus Loading Area                    | 4 |
| Signage - Frontage to Adjacent Roadways    | 4 |
| Signage - Internal Parking Area            | 5 |
| Walkshed and Boundary Analysis             | 6 |
| Crossing Guard Studies                     | 7 |
| Active Transportation Improvements         | 8 |
| Bylaw enforcement                          | 8 |
| Communication Plan                         | 8 |
| Monitoring and Long-Term Studies           | 8 |
|  |   |

## Figures

| re 1: Walkshed6 |
|-----------------|
|-----------------|

#### Tables

| Table 1: Adjacent Roadway Characteristics | . 3 |
|---|-----|
| Table 2: Exposure Index Study Summary     | . 7 |

## Appendices

Appendix A: Site Plan

Appendix B: Recommended Signs and Approximate Locations

#### **School Profile**

St. Patrick Catholic Elementary School (the School) is a new elementary school, under construction at 1201 River Road. The School is bound by River Road East to the east, Kinzie Avenue to the south, and Burgetz Avenue to the southwest. A newly constructed park is located on the west of the site. The School is operated by the Waterloo Catholic District School Board (WCDSB).

A one-way southbound school bus drop off is proposed on the west side of the site with access to River Road East. Access to and from the parking area and student drop-off area on the south side of the site is by a one-way inbound access from Kinzie Avenue and a one-way outbound access to Burgetz Avenue.

Bell times are 9:10 a.m. and 3:40 p.m.

A Transportation Impact Study (TIS) was prepared for the school in November 2023. The TIS did not recommend any off-site road improvements to accommodate future traffic volumes.

#### Site Plan Status

The Site Plan has been approved. **Appendix A** includes the approved Site Plan provided to City staff.

#### **Road Status and Characteristics**

All roads fronting the site are assumed by the City of Kitchener.

**Table 1** summarizes the characteristics of the adjacent roadways within 50 metres of the School property.

| Road        | Sidewalks  | AADT<br>(VPD) <sup>1</sup> | Intersection Control <sup>2</sup>         | Posted Speed         | Collision<br>History <sup>3</sup> |
|-------------|------------|----------------------------|---|----------------------|-----------------------------------|
| River Rd    | Both sides | 8800                       | TS at Kinzie Ave                          | 60 km/h              | 1                                 |
| Kinzie Ave  | Both sides | 3500                       | TWSC on Burgetz Ave<br>AWSC at Thaler Ave | 40 km/h              | 0                                 |
| Thaler Ave  | Both sides | 1200                       | TWSC on Burgetz Ave                       | 40 km/h              | 1                                 |
| Burgetz Ave | Both sides | 200                        | -   | 40 km/h<br>(assumed) | 0                                 |

| Table 1: | Adjacent | Roadway | / Characteristics |
|----------|----------|---------|-------------------|
|----------|----------|---------|-------------------|

Note 1: AADT = Average Annual Daily Traffic, VPD = Vehicles Per Day Note 2: TS = Traffic Signal, AWSC = All-Way Stop Control, TWSC = Two-Way Stop Control Note 3: Collision Data Gathered Within 3 Years

Under existing conditions, there is no signage prohibiting parking or stopping along the School's frontage to the abutting roadways.

#### **Transportation Safety Features and Signage**

The approved Site Plan, dated 23.12.05, was reviewed and is included in **Appendix A**.

The School Bus Loading Area is located on the easterly side of the building with access to River Road. The loading area can accommodate approximately 5 buses in a single line, or 10 buses if parked in a second line. No parking spaces or drop-off areas for passenger vehicles are located within this area.

There is a drop-off area for passenger vehicles located on the south side of the building, which can be accessed from Kinzie Avenue. Counter-clockwise circulation is encouraged along the outside of the parking area, which passengers exit directly into the drop-off area.

It is noted that the recommended signage within the City's right-of-way will be the responsibility of the City, and all other signage will be the responsibility of the WCDSB.

#### Speed Limit

The existing speed limit on River Road is 60 km/h and 40 km/h on all other abutting roadways.

To improve pedestrian safety, it is recommended to lower the speed limit on River Road to 40 km/h and to lower the speed limits on Kinzie Avenue and Burgetz Avenue to 30 km/h within 150 metres of the School's frontage as noted in Section XIV.2 of Traffic By-law 2019-113. "School Zone" tab signs should be installed, to identify the extents of the School Zone. New signage will be required at all locations where changes to the existing speed limit are proposed and are the responsibility of the City.

#### School Bus Loading Area

The school bus loading area will have one-way signage indicating southbound circulation through the loading area. Signs indicating "No Parking – Fire Route" and "School Bus Loading Zone" are proposed on the north and south sides of the area.

No signage was proposed on the Site Plan at the entrance from River Road that identifies the area is to be used exclusively as a School Bus Loading Area and/or Fire Route. "Do Not Enter" signs will face easterly at the outbound only access to River Road.

It is recommended to install signage at the inbound entrance identifying that only school buses are permitted to use the access. The WCDSB has confirmed that signage will be updated based on this recommendation.

Appendix B illustrates the recommended signs and their approximate locations.

#### Signage - Frontage to Adjacent Roadways

The Site Plan does not identify signage to restrict vehicle stopping or parking along the site's frontage to adjacent roadways.

As noted as general provisions in Traffic By-law 2019-113, Section V.8.a.iii permits Rb-55 (No Stopping) signs on the roads abutting a school, and Section V.8.a.v permits Rb-56 (No Stopping with Time Restrictions) signs on the opposite side of the roadway abutting the school's property.

It is recommended that Rb-55 (No Stopping) signs are installed along all roads abutting the school's frontage and Rb-56 (No Stopping with Time Restrictions) signs are installed on the opposite side of abutting roads. On River Road, the No Stopping southern limits should be the north side of the existing Grand River Transit (GRT) bus stop.

All Rb-55 and Rb-56 signs should be installed in accordance with Ontario Traffic Manual (OTM) Book 5, which identifies a maximum spacing of 50 metres. All Rb-56 signs should note the time restriction as 8:00 AM to 4:30 PM, as noted in Section V.8.b.iii of Traffic By-law 2019-113.

All sign changes that are within a City of Kitchener right-of-way will require an update to "Schedule 4 – No Stopping" in the Uniform Traffic Bylaw, via a staff report to City Council.

**Appendix B** illustrates the recommended signs and their approximate locations.

#### Signage - Internal Parking Area

One-way signage will identify the route along the northern and eastern perimeter of the parking area to access the Drop Off Area. Proposed signage in the Drop Off Area indicates "No Parking – Drop Off Area Only".

One "Do Not Enter" sign will face westerly at the outbound only access to Burgetz Avenue.

To further reinforce the one-way nature of the site access and the lay-by area, it is recommended to install signs at the following locations:

- 1. Entrance to Kinzie Avenue
  - a. Rb-19 (Do Not Enter) sign facing northwards.
  - b. Rb-21 (One-Way) sign parallel to the flow of traffic.
- 2. Exit to Burgetz Avenue
  - a. An additional Rb-19 (Do Not Enter) sign facing westerly, so there is an Rb-19 on both sides of the exit.
  - b. Rb-21 (One-Way) sign parallel to the flow of traffic.

The WCDSB has noted that the on-site signage will be updated based on this recommendation.

**Appendix B** illustrates the recommended signs and their approximate locations.

### Walkshed and Boundary Analysis

**Figure 1** illustrates the proposed walkshed and the estimated number of students in each walkshed for the School as provided by WCDSB staff on January 29, 2025.

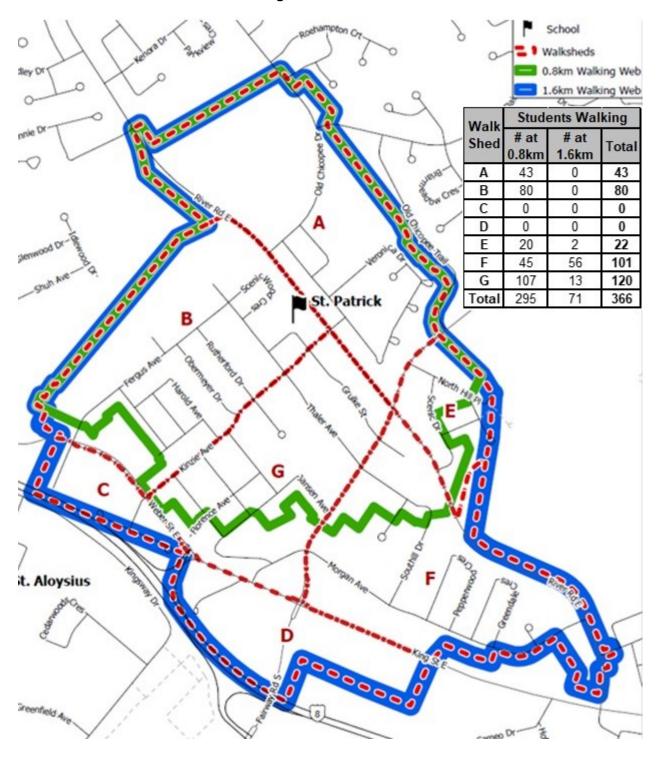


Figure 1: Walkshed

#### **Crossing Guard Studies**

The Ontario Traffic Council (OTC) provides guidance in the School Crossing Guard Guide (2023) (OTC SCGG) on when to assign a crossing guard at a location. Based on the type of traffic control at the crossing locations, the Exposure Index methodology, as noted in the OTC SCGG, was used to assess the need for crossing guards. As noted in the OTC SCGG, a minimum threshold of 40 crossing students withing 25 minutes before the bell time and 5 minutes after the bell time, and vice versa for the afternoon bell times, is needed to satisfy the crossing guard warrant.

To estimate the potential need for crossing guards within each of the walksheds in **Figure 1**, City staff further estimated the location of expected student population based on approximate existing population densities. It is noted that as the location of the student population within each walkshed was estimated by City staff, only potential ranges of the number of students at crossings could be provided due to the size of the potential walksheds and as the specific location of student populations could not be confirmed. For purposes of this study, River Road is aligned east/west.

**Table 2** summarizes the results of the Exposure Index study using the estimated potential range of students that may use the noted road crossings. For the warrant to be met, the product of the number of conflicting movements multiplied by the number of students must exceed the index threshold. At the time of this study, the 85<sup>th</sup> percentile threshold product is approximately 4,200.

| Intersection                 | Intersection<br>Leg | Data<br>Collection<br>Date<br>(Y/M/D) | Estimated<br>Number of<br>Students<br>Crossing | Existing<br>Number of<br>Conflicting<br>Movements | Product                 | Warrant<br>Met? |
|------------------------------|---------------------|---------------------------------------|--|---|-------------------------|-----------------|
| Kinzie Ave and<br>River Rd   | South               | 2023-03-07                            | 118 - 153                                      | AM: 78<br>PM: 96                                  | AM: 9,200<br>PM: 11,350 | Yes             |
| Kinzie Ave and<br>Thaler Ave | North               | 2025-04-03                            | 90 - 125                                       | AM: 104<br>PM: 186                                | AM: 9,350<br>PM: 16,750 | Yes             |
| River Rd and<br>Fairway Rd   | South               | 2022-10-04                            | 108 – 123                                      | AM: 72<br>PM: 105                                 | AM: 7,800<br>PM: 11,350 | Yes             |

 Table 2: Exposure Index Study Summary

Based on the results of the Exposure Index study, crossing guards are warranted at the three locations noted in **Table 2**. However, it is noted that these locations should be monitored in the future, as student travel patterns may not follow estimated trends, and the estimated range of crossing students assumes that no students within the walkshed are driven to school. It is also noted that traffic volumes near the school are expected to increase upon build-out of the School. While these locations are warranted, it is recommended to commence an updated exposure index within the first year of operation to identify the optimum locations of crossing guards.

If additional crossing guards are warranted, an update to "Schedule 20 – School Crossings" in the Uniform Traffic By-law will be required, via a staff report to City Council.

To facilitate additional assisted crossing opportunities for students, the existing warranted crossing location of Fairway Road and Morgan Avenue serving Howard Robertson Public School will have the guard's shift times adjusted to accommodate and include the bell times for St. Patrick Catholic Elementary school.

#### **Active Transportation Improvements**

Based on the City's Cycling and Trails Master Plan (CTMP), boulevard multi-use trails are planned to be installed on both sides of River Road near the School in the next 4-6 years.

#### **Bylaw Enforcement**

The City's bylaw enforcement team will add St. Patrick to its school enforcement routes. No Parking and No Stopping areas in the School Zone have:

- A zero-tolerance ticketing policy
- An increased ticket cost

#### **Communication Plan**

To reduce the concentration of vehicular traffic near the School, Student Transportation Services of Waterloo Region (STSWR) will identify preferred "Drive to 5" locations, to identify alternative locations within a 5-minute walk to the school that students can be dropped off by passenger vehicles.

STSWR will provide pamphlets and messaging to schools in August and advise schools to share them at startup, and throughout the school year, that note the No Parking and No Stopping areas in the School Zone have:

- A zero-tolerance ticketing policy where no warnings may be provided to offending drivers
- An increased ticket cost

City staff will include messaging related to the new school in its "back to school" media release in early September.

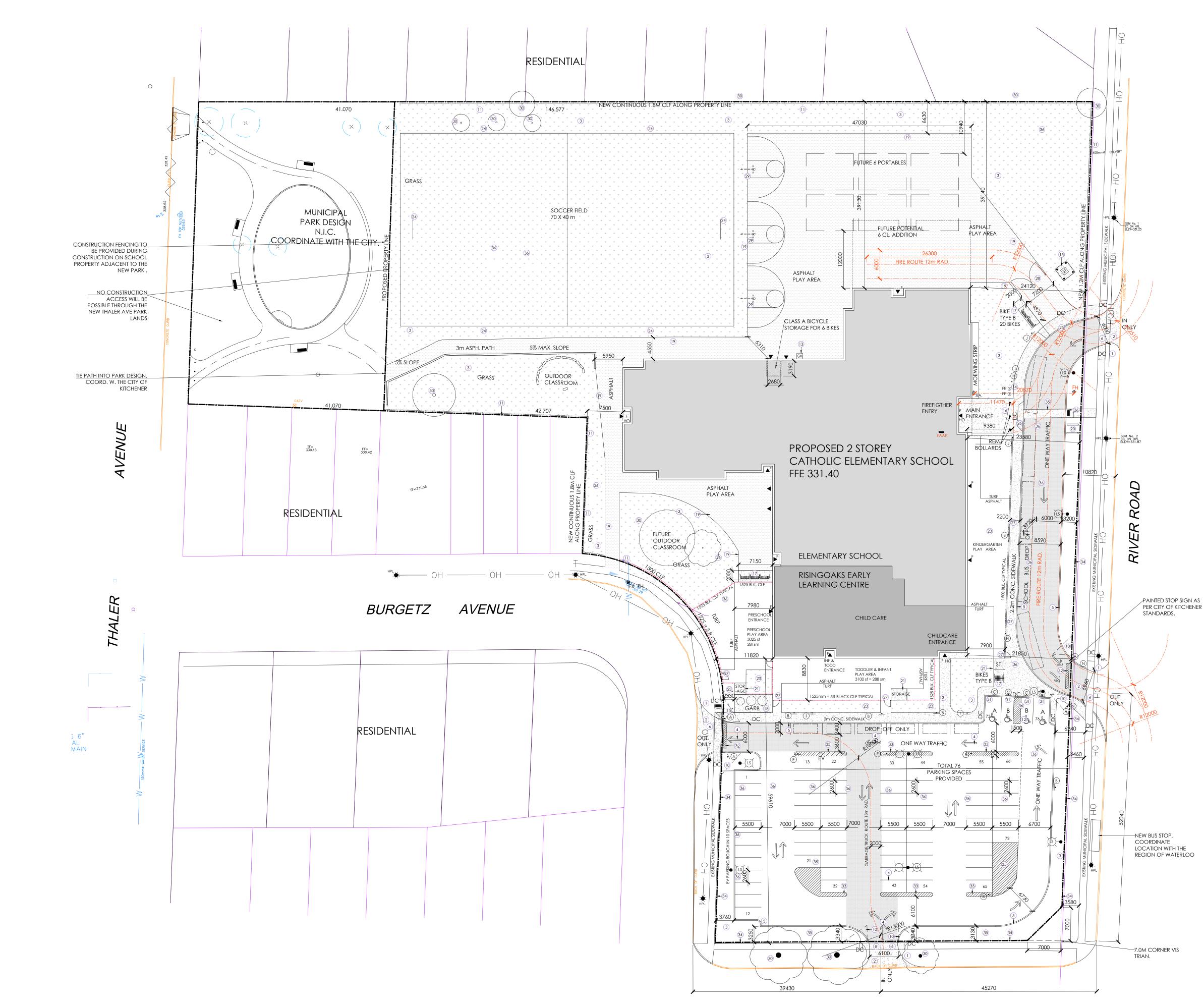
#### **Monitoring and Long-Term Studies**

It is recommended that in the first year of School operation, the City monitors the interaction between vehicles and students near the School and monitors the volumes of students crossing to determine if crossing guard(s) are warranted. The monitoring should be repeated in the third or fourth year of School operation to help drivers and students develop safe, long-term habits.

## **Appendix A: Site Plan**

## Appendix B: Recommended Signs and Approximate

### Locations



SURVEY LEGEND. REFER TO SURVEY FOR ALL SYMBOLS.

| GUY WIRE (  |      | FIRE HYDRANT            | 👸 FH   |
|---|------|-------------------------|--------|
| UTILITY POLE UP   |      | WATER VALVE             | WV     |
| HYDRO POLE HP   |      | CATCHBASIN              | (≣) СВ |
| HP WITH LIGHT HPL   | /    | MANHOLE                 | О мн   |
| LIGHT STANDARD LS   | }    | BELL PEDESTAL           | 🛛 BELL |
| GATE SIGN   |      | TV PEDESTAL             | 🛛 CATV |
| SANITARY SEWER -<br>WATERMAIN -<br>STORM SEWER -<br>FENCELINE -<br>OVERHEAD HYDRO -<br>UNDERGROUND HYDRO -<br>DITCH/SWALE -<br>CENTRELINE OF ROAD - | <br> | SAN<br>STM<br>XOH<br>VH |        |
|   |      |                         |        |

KINZIE AVENUE

## **DRK**

**LL NOTIFY THE MUNICIPALITY, ARCHITECT &** T 48 HOURS PRIOR TO COMMENCING

OLE LINES, CONDUITS, WATER MAINS, SEWERS, **ND STRUCTURES ARE NOT NECESSARILY SHOWN** AWINGS, AND WHERE SHOWN, THE SITION OF SUCH UTILITIES AND STRUCTURES IS **NTRACTOR TO VERIFY EXISTING CONDITIONS.** 

**COUND UTILITIES WITHIN THE LIMITS OF** BE LOCATED, MARKED AND PROTECTED. D OR DISTURBED DURING CONSTRUCTION REPLACED TO THE SATISFACTION OF THE ITD A OTOD'C EVDENICE

## HATCH ID MARKER LEGEND

|  | NEW PTD. ROAD MARKINGS        |  |  |  |
|--|-------------------------------|--|--|--|
|  | NEW AREA CONC. SIDEWALK / PAD |  |  |  |
|  | NEW BUILDING (ELEM. SCHOOL)   |  |  |  |
|  | NEW BUILDING (CHILDCARE)      |  |  |  |



IEW BUILDING (CHILDCARE)

AREA OF NEW HEAVY DUTY ASPHALT (HD)

AREA OF NEW LIGHT DUTY ASPHALT (LD)

PROPOSED NEW SOD

NOTE: COORD. W/ EX. SITE SURVEY DWG. FOR THEIR LEGEND & OBJECT DEPICTION NOTATIONS PROVIDED FOR REFERENCE ONLY.

#### DISCLAIMER: ALL EXISTING SITE INFORMATION WAS PROVIDED BY VAN HARTEN SURVEYING INC. DATED NOVEMBER 25, 2022 AS PER FILE: M:\Geographic(KW)\Kitchener\589\acad\TOPO LOT 4 (WCDSBFS) (31896-22) (UTM2010).dwg REFERENCE NOTE: FOR OTHER SITE CONDITIONS, EX. TO REMAIN OR NEW TO BE PROVIDED, THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SITE GRADING PLAN PREPARED BY WESTX INC.

SITE SERVICING PLAN PREPARED BY WESTX INC. ELECTRICAL SITE PLAN ) PREPARED BY DEI CONSULTING ENG., LANDSCAPE PLAN PREPARED BY GSP GROUP LIGHTING NOTE

LIGHTING MUST BE DIRECTED ON SITE AND MUST NOT SPILL OVER TO ADJACENT PROPERTIES OR STREETS. PROVIDE "HOUSE SHIELDS" WHERE NEEDED, TO COMPLETELY ELIMINATE GLARE TO ADJACENT PROPERTIES BENCHMARK ELEVATIONS ARE GEODETIC AND

OBTAINED FROM TOPOGRAPHIC FILE PROVIDED BY VAN HARTEN SURVEYING INC. DATED NOVEMBER 25, 2022 AS PER FILE: M:\Geographic(KW)\Kitchener\589\acad\TOPO LOT 4 (WCDSBFS) (31896-22) (UTM2010).dwg

|   | REFERENCED NOTES:  |  |
|---|--|--|
| 1 | GENERAL CONTRACTOR TO COORDINATE ALL WORK WITHIN THE BOULEVARD<br>SHALL BE DONE UNDER THIS CONTRACT INCLUDING DRIVEWAY ACCESSES, |  |

- SIDEWALK & RELATED WORK. GENERAL CONTRACTOR TO EXECUTE WORK TO DRIVEWAY ENTRANCE TO STANDARDS OF THE MUNICIPALITY. REFER TO ENTRANCE PERMIT REQUIREMENTS. INSTALLATION OF NEW SITE ACCESS VEHICLE ENTRANCE TO BE AS PER CITY'S REQUIREMENTS
- 3 COORD. WITH LANDSCAPE DRAWINGS FOR ALL PLANTING BEDS, TREE PLANTINGS, LANDSCAPE FEATURES & SODDED AREAS
- PROVIDE PAINTED PARKING MARKINGS PARKING STALLS100mm WIDE WHITE, HANDICAP SYMBOLS, CROSS HATCHING & TRAFFIC ARROWS MARKINGS ON TOP OF FINISHED ASPHALT LAYER. ALL PAVEMENT MARKINGS TO BE AS PER THE STANDARDS OF ONTARIO TRAFFIC MANUAL.
- CONCRETE BARRIER CURBS UNLESS OTHERWISE NOTED (COORD. W/ OPSD-600.080, OPSD 310.020 & MUNICIPAL STANDARD DETAILS
- NEW MUNICIPAL CONCRETE WALKWAY C/W REINF. CONC. ACROSS VEHICLE ENTRANCES. CONCRETE PATTERN. SEE DETAIL ON DWG. A1.2

(7) RESERVED

- (8) PROPOSED LOCATION OF CONSTRUCTION ACCESS C/W MUD MAT
- PROVIDE MIN. 150mm TOPSOIL & SOD IN ALL AREAS OF EXISTING ROAD BOULEVARD WHERE DISTURBED BY NEW WORK.
- 👝 A 3m X 4.5m VISIBILITY TRIANGLE MUST BE MAINTAINED (REMAIN CLEAR) AT BOTH SIDES OF ALL INTERSECTION OF VEHICULAR TRAFFIC ACCESS ROADS / DRIVEWAYS. THE MAX. HEIGHT OF ANY OBJECT OR MATURE VEGETATION WITHIN THE VISIBILITY TRIANGLE IS NOT TO EXCEED 0.6m ABOVE THE CENTRELINE OF THE CORRESPONDING ADJACENT STREET. REFER TO CITY OF KITCHENER STANDARDS.
- $^{1}$  1800 high perimeter chain link fence. Refer to OPSD 972.130 ACCESSIBLE AISLE WITH MIN. WIDTH OF 1.5 SHARED BY ACCESSIBLE PARKING SPACES AS PER MUNICIPAL BY-LAW
- (13) GAS METER ENCLOSURE REFER TO DETAIL A1.2
- (14) PROVIDE TWO FLAG POLES SEE DETAIL ON DWG A1.2
- (15) TRANSFORMER ON CONC. PAD TO SUIT C/W 4 BOLLARDS
- (16) CONC. FILLED GALV. STEEL BOLLARD REFER TO DETAILS ON DWG A1.2.
- 🕞 BICYCLE RACKS (TOTAL CAPACITY OF APPROXIMATELY 60 BIKES) MODEL BRL  $^{\prime\prime}$  4 loop as manufactured by gymnasium and health equipment Ltd.
- 18 3 -DEEP WELL GARBAGE AND RECYCLING BINS ON CONCRETE PAD - 2X 5 CUBIC METRE -1 X 915mm DIA. SIZE BINS - REFER TO SPECS
- (19) ASPHALT /TURF DETAIL SEE DETAIL ON DWG A1.2
- FOUNDATION FOR ILLUMINATED SCHOOL SIGN APPROXIMATELY 1.8m HIGH x 2.4m LONG & PROPOSED LOCATION FOR PROJECT SIGN. SIGN PERMIT TO BE BY SIGN CONTRACTOR. REFER TO WCDSB STANDARD
- PROVIDE 3m X 3m x 100mm REINFORCED CONCRETE SLAB ON COMPACTED GRANULAR BASE. FOR PRECAST CONC. SHED. WHICH IS NIC FINAL LOCATION TO BE CONFIRMED PRIOR TO PLACEMENT OF SLAB.
- (22) ASPHALT SPEED BUMP. REFER TO DETAIL ON DWG A1.2
- PLAYGROUND EQUIPMENT (INCLUDING DESIGN AND SPECS) NOT IN <sup>23</sup> CONTRACT. COORD. WITH LANDSCAPE DWGS FOR GROUND SURFACING IN FENCED PLAY AREAS.
- (24) 2 REGULATION & 4 MINI SOCCER GOAL POSTS REFER TO DETAIL ON DWG A1.2
- (25) SEMI MOUNTABLE CURB PER OPSD
- (26) NEW SLOPED BARRIER-FREE ACCESS COORD W/ DETAILS ON DWGS A1.2 AND A1.3) PROVIDE TACKTILE WARNING SURFACES
- (27) 1220mm WIDTH CHAIN LINK GATE GALV. STEEL. PROVIDE CHILD LOCK ONLY AT GATES LOCATED IN PRESCHOOL, TODDLER AND INFANT PLAY AREA
- (28) SECURITY GATE: PROVIDE 6000mm MIN WIDTH SECURITY GATE GALV. STEEL LOCKABLE, C/W 1 REMOVABLE BOLLARD.
- (29) OUTDOOR BASKETBALL STANDARD & KEY REFER TO DWG A1.2
- 30 PRESERVE EXISTING TREE
- (31) BARRIER-FREE PARKING SPACES AND ACCESS AISLE FLUSH WITH CURB.
- (32) PAINTED STOP BAR ACROSS ENTIRE WIDTH OF ACCESS. PAINTED 60CM WIDE IN COLOUR WHITE .
- (33) PARKING END AISLE TREATMENTS BE IN POURED CONCRETE INSIDE CURB. REFER TO KITCHENER URBAN DESIGN MANUAL
- (34) NO FENCE ALONG PROPERTY LINE WHERE INDICATED
- (35) SNOW STORAGE
- (36) TREE TO BE REMOVED. COORDINATE W. LANDSCAPE PLAN

## GENERAL NOTES:

- THE "LIMITS OF CONSTRUCTION" SHALL BE ASSUMED TO BE THE PROPERTY LINE UNLESS OTHERWISE NOTED
- FIRE ACCESS ROUTE TO BE POSTED AND DESIGNATED UNDER MUNICIPAL BY-LAW (FIRE ACCESS ROUTE TO BE MIN. 6 m WIDE WITH A MIN. 12 m CENTRELINE TURNING RADIUS AND MAX. 6% SLOPE)
- COORD. W/ CIVIL, MECH. & ELEC. SITE PLANS FOR ALL EXISTING & NEW LOCATIONS OF SERVICES & ENTRY OF SERVICES INTO THE BUILDING ENVELOPE. (ALL CIVIL MECH., ELECT. & LANDSCAPE INFO INDICATED ON ARCHITECTURAL SITE DWG. A1.1 IS FOR GENERAL REFERENCE & COORD. ONLY)
- REFER TO AND COORD. W/ SITE GRADING PLAN FOR PROPOSED FINAL FINISH GRADE ELEV.'S & DRAINAGE SLOPES
- TYP. DRIVEWAY & PARKING LOT CONC. CURBS AS INDICATED ON DRAWING. COORD. W/ CIVIL DRAWINGS, OPSD DETAILS & SPEC'S. FOR TYPICAL CURB TYPES
- SITE DIMENSIONS ARE TYPICALLY DIMENSIONED TO FACE OF CURB THE SUB-GRADE SOILS EXPOSED AFTER EXCAVATION SHALL BE INSPECTED AND CERTIFIED BY A QUALIFIED REGISTERED PROFESSIONAL SOILS ENGINEER AND A

COPY OF THE REPORT SHALL BE FORWARDED TO THE MUNICIPALITY

- ALL FILL PLACED ON THE SITE SHALL BE COMPACTED TO A MINIMUM OF 98-100% STANDARD PROCTOR DENSITY. A SUFFICIENT NUMBER OF TESTS SHALL BE TAKEN AT VARIOUS LEVELS SATISFACTORY TO THE DIRECTOR OF ENGINEERING. TEST RESULTS SHALL BE SENT TO THE MUNICIPALITY WITH A LETTER, SIGNED AND STAMPED BY THE SOILS ENGINEER, STATING THAT A SUFFICIENT NUMBER OF TESTS HAVE BEEN TAKEN AND THE MINIMUM DEGREE OF COMPACTION HAS BEEN REACHED
- APPROVAL OF THIS DRAWING IS FOR MATERIAL ACCEPTABILITY AND COMPLIANCE WITH MUNICIPAL AND PROVINCIAL SPECIFICATIONS AND STANDARDS ONLY. APPROVAL AND INSPECTION BY THE MUNICIPALITY OF THE WORKS DOES NOT CERTIFY THE LINE AND GRADE OF THE WORKS AND IT IS THE OWNER'S RESPONSIBILITY TO HAVE THEIR ENGINEER CERTIFY THIS ACCORDINGLY
- SILTATION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO WORKS COMMENCING ON THE SITE AND SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION, TO THE SATISFACTION OF THE CITY OF KITCHENER. (COORD. W/ OPSD DETAILS)
- PROJECT SIGN TO BE ERECTED @ BEGINNING OF PROJECT, LOCATION TO BE COORDINATED WITH ARCHITECT ON SITE. (DETAILS 2, 3 & 4 ON A1.2)
- PROVIDE ASPHALT AS INDICATED DWG 12/A1.2 AND GEOTECHNICAL REPORT
- FOR PAVEMENT STRUCTURE RECOMMENDATION CONTRACTOR IS RESPONSIBLE FOR PLANTINGS, SOD, WATERING, FERTILIZING &
- MAINTENANCE UNTIL SUBSTANTIAL PERFORMANCE IS ACHIEVED. THE WARRANTY PERIOD WILL COMMENCE UPON SUBSTANTIAL PERFORMANCE OF THIS WORK REMOVE ANY EXISTING CURB CUTS & DRIVEWAY ACCESS & REINSTATE
- BARRIER CURB & NEW TOPSOIL & SOD. SITE SIGNAGE LEGEND:
- (A) STOP SIGN
- (B) ONE WAY
- C) BARRIER-FREE PARKING
- FIRE ROUTE STATING <sup>/</sup> 'FIRE ROUTE TO BE POSTED AND DESIGNATED UNDER MUNICIPAL BY-LAW' (E) NO RIGHT TURN
- (F) NO LEFT TURN
- (G) DO NOT ENTER LEFT TURN ONLY
- H) SCHOOL BUS LOADING ZONE NO PARKING - DROP OFF AREA ONLY
- J) NO PARKING FIRE ROUTE
- K) VISITOR PARKING
- ) SPEED HUMP SIGN
- (M) PEDESTRIAN CROSSING (N) DO NOT ENTER
- NOTE: 1. CONFIRM LOCATIONS & CONTENT OF ALL SIGNAGE W/ THE OWNER & MUNICIPALITY PRIOR TO FABRICATION & ERECTION. PROPOSED SITE SIGNAGE TO COMPLY W/ SIGNAGE BY-LAWS.
- 2. ALL SIGNS TO BE LOCATED NOT TO CREATE A HAZARD ON WALKWAYS AND BE CENTERED ON POSTS TYP.

# DEVELOPMENT DETAILS:

- 50 THALER AVENUE PROPERTY KITCHENER, ONTARIO **DISCRIPTION:** PER BYLAW PROVIDED ZONING 2019-051 INS-1 - NEIGHB. INST. LOT AREA 18,731 sq m COVERAGE 55% MAX 19.65% MIN. FRONT YARD 20.26m 6 m MIN. INTERIOR SIDE YARD 3 m 39.4m MIN. EXTERIOR SIDE YARD 57.38 6 m MIN. REAR YARD 7.5 m 9.5m 9.3m **BUILDING HEIGHT** 14 m OBC BUILDING AREA FIRST FLOOR AREA 3680 sq m GROSS BUILDING AREA TOTAL BUILDING AREA 5426 sq m
- HARD SURFACE AREA (ASPHALT+ CONCRETE) = 7,800 sq m LANDSCAPE AREA = 7,257 sq m

#### PARKING REQUIREMENTS MIN, SIZE OF PER BYLAW

| MIN. SIZE OF<br>PARKING STALLS        | PER BYLAW   | PROVIDED  |
|---------------------------------------|---|---|
| PERPENDICULAR                         | 2.6 X 5.5m  | 2.6 x 5.5m  |
| ACCESSIBLE<br>PARKING SPACES          | TYPE A 3.4 X 5.5m<br>TYPE B 2.6 X 5.5m  | 2 X TYPE A 3.4 X 5.5m<br>2 X TYPE B 2.6 X 5.5m  |
| OFF STREET<br>PARKING<br>REQUIREMENTS | ELEM. SCHOOL:<br>1 SPACE PER 100 m2 GSA<br>+PORTABLES OR FUTURE<br>ADDITION<br>CHILD CARE:<br>1 SPACE PER 30 m2 GFA | ELEM. SCHOOL = $5289m2$<br>PARKING # = $\frac{5289}{100}$ =52.9<br>PORTABLES $480m2/100$ = $4.8$ = 5<br>TOTAL REQUIRED =<br>52.9+4.8= $57.7$ = <b>58</b><br>CHILD CARE:<br>647m2 /30 = $22$ SPACES<br>TOTAL REQ'D. <b>58+22=75 SPACES</b><br>76 PARKING SPACES<br>PROVIDED INCLUDING 4 BF<br>SPACES |
| BICYCLE PARKING                       | SCHOOL:<br>CLASS A 1/1000m2 GFA<br>CLASS B 1/100m2<br>CHILDCARE:<br>CLASS A 1/500m2                                 | SCHOOL REQ'D:<br>CLASS A 4.8 / CLASS B 48<br>CHILDCARE REQ'D.<br>CLASS A 667/500 = 1.3<br>PROVIDED CLASS A = 6<br>CLASS B = APPROX = 60   |
|                                       |   |   |

- TYPE OF DEVELOPMENT BUILDING
- CLASSIFICATION OBC CLASSIFICATION - 3.2.2.24 UP TO 6 STOREYS, ANY AREA SPRINKLERED

GROUP A, DIV. 2

# SITE PLAN LEGEND:

| ▲ <sub>F</sub>  | ENTRANCE / EXIT @ GRADE FLUSH<br>W/ INT. FIN. FLOOR  |  |  |  |  |
|-----------------|--|--|--|--|--|
| ▲ <sub>HO</sub> | ENTRANCE / EXIT - W/ BARRIER FREE<br>DOOR OPERATOR<br>(COORD. W/ ELEC. DWG.'S)   |  |  |  |  |
|                 | PROPERTY LINES / BOUNDARY  |  |  |  |  |
|                 | BY-LAW SET BACKS   |  |  |  |  |
|                 | CHAIN LINK FENCE (CLF)<br>TYP. 1800mm HIGH UNLESS NOTED OTHERWISE (COORD. W/ OPSD<br>DETAILS OPSD-972.132, 972.130, 972.102, 972.101)<br>NOTE: WHERE EX. FENCES ARE SHOWN THEY SHALL REMAIN ON<br>ADJACENT LANDS UNLESS OTHERWISE NOTED  |  |  |  |  |
| G.              | PTD. WHEELCHAIR SIGN ON ASPHALT  |  |  |  |  |
|                 | DENOTES EX. PAINTED DIRECTIONAL ARROWS<br>ON ASPHALT PAVEMENT  |  |  |  |  |
| • BOL.          | BOLLARD - REFER TO SITE ON DWG A1.2  |  |  |  |  |
|                 | BICYCLE RACK - REFER TO SPECS  |  |  |  |  |
| oo              | PROPOSED PROJECT SIGN W/ DETAILS ON DWG A1.2)  |  |  |  |  |
| <u>•</u>        | TRAFFIC SIGNAGE (COORD. W/ SIGNAGE SCH.)   |  |  |  |  |
| ⊙ FP            | FLAG POLE (COORD. W/ DETAILS ON DWG A1.2)  |  |  |  |  |
| FC              | FLUSH CURB - CONCRETE SIDEWALK TO BE FLUSH WITH ASPHALT -<br>COORD W/ OPSD-310.030 ) SEE DETAILS ON DWG A1.3<br>ASPHALT WITHIN THE BARRIER FREE PARKING SPACES SHOULD BE<br>RAMPED FLUSH WITH THE ADJACENT CURB  |  |  |  |  |
|                 | -<br>- DROPPED CURB<br>(COORD. W/ OPSD-310.030) SEE DETAILS ON DWG A1.3  |  |  |  |  |
|                 | A 3m X 4.5m VISIBILITY TRIANGLE MUST BE MAINTAINED (REMAIN<br>CLEAR) AT BOTH SIDES OF ALL INTERSECTION OF VEHICULAR TRAFFIC<br>ACCESS ROADS / DRIVEWAYS. THE MAX. HEIGHT OF ANY OBJECT<br>OR MATURE VEGETATION WITHIN THE VISIBILITY TRIANGLE IS NOT TO<br>EXCEED 0.6m ABOVE THE CENTRELINE OF THE CORRESPONDING<br>ADJACENT STREET. |  |  |  |  |
|                 | CATCH BASIN<br>CATCH BASIN - MAN HOLE  |  |  |  |  |
| CB/MH           |  |  |  |  |  |
| MH              | MAN HOLE   |  |  |  |  |
| FH              |  |  |  |  |  |
| st⊗ SIA.        | PROPOSED SIAMESE /FIRE DEPARTMENT<br>CONNECTION  |  |  |  |  |
| ● (LS)          | LIGHT STD. (COORD. W/ ELEC. SITE PLAN)   |  |  |  |  |
| TR              | HYDRO VAULT/TRANSFORMER ON CONC. PAD   |  |  |  |  |

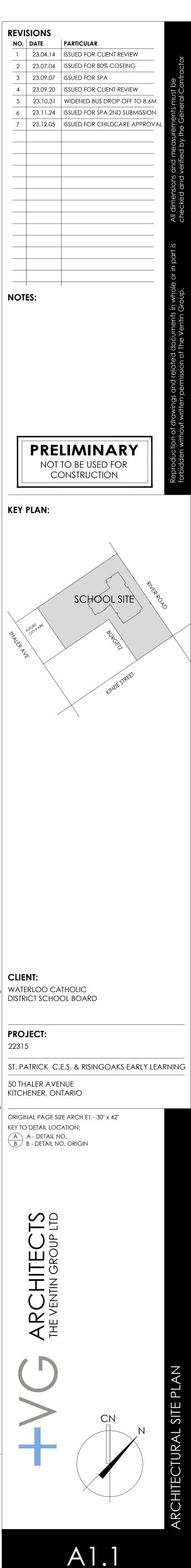
(COORD. W/ ELEC. SITE PLAN) GAS METER LOCATION REFER TO DWG A1.2 FOR ENCLOSURE DETAIL ASPHALT SPEED BUMP REFER TO DETAIL ON DWG A1.2

## **GENERAL NOTES - MUNICIPAL**

TR

- ALL WORK INVOLVED IN THE CONSTRUCTION, RELOCATION, REPAIR OF MUNICIPAL SERVICES FOR THE PROPOSED DEVELOPMENT SHALL BE TO THE SATISFACTION OF THE MUNICIPALITY.
- STREET EXCAVATION PERMITS ARE REQUIRED FOR ANY WORK IN MUNICIPAL
- CONTRACTOR IS RESPONSIBLE FOR ALL SERVICING, UTILITIES, AND COSTS.
- STORM WATER DRAINAGE MUST NOT HAVE A NEGATIVE IMPACT ON ADJACENT
- FIRE ROUTE SIGNS AND 3-WAY FIRE HYDRANTS SHALL BE ESTABLISHED TO THE
- CONTRACTOR. ALL DRIVEWAYS FROM PROPERTY LINES FOR THE FIRST 7.5 M SHALL BE WITHIN 5% MAXIMUM GRADE, THEREAFTER, ALL DRIVEWAYS SHALL BE WITHIN 10% MAXIMUM
- PAVEMENT MARKINGS AND SIGNAGE ARE TO BE IMPLEMENTED AS PER THE
- UNLESS OTHERWISE NOTED ALL ASPHALT AREAS TO BE DEFINED WITH 0.15M HIGH POURED CONCRETE CURBING
- THE MUNICIPAL APPROVAL OF THIS SITE PLAN DOES NOT EXEMPT THE CONTRACTOR FROM THE REQUIREMENTS TO OBTAIN THE VARIOUS PERMITS/APPROVALS NORMALLY REQUIRED TO COMPLETE A CONSTRUCTION PROJECT, SUCH AS, BUT NOT LIMITED TO THE FOLLOWING:
- ROAD CUT PERMITS AGREEMENTS
- **RELOCATION OF SERVICES** APPROACH APPROVAL PERMITS

- RIGHT OF WAY BY ANY CONTRACTOR.
- PROPERTIES.
- SATISFACTION OF THE FIRE DEPARTMENT AND AT THE EXPENSE OF THE
- grades.
- PAVEMENT MARKING AND SIGNAGE / TRAFFIC CONTROL PLAN BY GHD.
- - SEWER AND WATER PERMITS



DRAWN BY : EB

CHECKED BY : KC

