

Design Guidelines for School Site and Adjacent Lands Planning



**Halton Technical Stakeholders Sub-Committee
May 2011**



Acknowledgments

Halton District School Board would like to thank the following *Community Stakeholders* for their time, effort and contribution to the *Design Guidelines for School Site and Adjacent Lands Planning* document.

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A special thank-you is extended to the larger stakeholder group (City of Burlington, Town of Halton Hills, Town of Milton, Town of Oakville, The Region of Halton, Halton Catholic District School Board, Halton District School Board) for their support of and feedback on these *Guidelines*.

Glossary of Terms

Active Transportation: *Active Transportation* refers to any form of human-powered transportation (non-mechanized) – walking, cycling, using a wheelchair, in-line skating or skateboarding. There are many ways to engage in *Active Transportation*, whether it is walking to the bus stop or cycling to school or work.

Active Transportation includes many active modes and methods of travel such as:

- Walking/jogging/running
- Cycling
- In-line skating
- Skateboarding
- Wheelchairing

Public Health Agency of Canada <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/at-ta-eng.php>
Last visited February 24, 2011

Community: This component takes into consideration parkland; trail systems and neighbourhood block patterns. The main goal for this component is to assist in developing a *Community* that is connected, walk/bike-able, safe and visually appealing.

Linkages: Full *Community* connections that involve, pathways, sidewalks, bike routes, bridges, pedestrian overpasses etc.

Ontario Traffic Manual (OTM): The purpose of the *OTM* is to provide information and guidance for transportation practitioners to promote uniformity of treatment in the design, application and operation of *Traffic* control devices and systems across Ontario. The purpose of the *OTM* is to provide a set of guidelines consistent with the intent of the Highway *Traffic* Act and to provide a basis for road authorities to generate or update their own guidelines and standards.

Pavement Markings: Markings and delineations serve an advisory role or warning function, and do not have any legal force of their own. They may be used to compliment other traffic control devices enforceable under the Highway Traffic Act, its regulations, or a municipal by-law. Where pavement markings, delineators, and object markers are used, they must be uniform in design, positions and application so that road users can recognize and understand them immediately.

School Site: This component encompasses both the elementary and secondary *School Site*. The main goals for this component is to have *School Sites* that are accessible, facilitate active transport equipment (bike racks etc), and adhere to best practices for safety and design.

Traffic: This component concentrates strictly on the vehicle. The goal here is to increase safety through speed control, stopping/parking permissions and crossing guards.

Traffic Calming Devices: speed bumps, signage (school zone and reduced speed), speed pads, flashing lights, roundabouts, *Traffic circles, Pavement Markings*, etc.

Transit: This component concentrates on public *Transit* (busses), making recommendations on stop locations and amenities, such as shelters and benches.
Note on Public *Transit*: Public *Transit* is mentioned in this document since it can be an adjunct to student *Active Transportation* (walk/bike, to and from *Transit*).

Design Guidelines for School Site and Adjacent Lands Planning

The Guidelines

The *Design Guidelines for School Site and Adjacent Lands Planning (Guidelines)* were developed for the purpose of encouraging and supporting children and their families to choose *Active Transportation* to and from school. Their focus is on the design of schools and their adjacent communities.

The goals of these *Guidelines* are to:

- promote healthy communities
- promote physical activity
- increase personal safety
- increase *Community* awareness about active transport
- decrease vehicular *Traffic* congestion at the *School Site*
- address environmental issues

The objectives of these *Guidelines* are:

1. To ensure safe connectivity between the *School Site* and adjacent lands
2. To ensure school is central to the population it serves
3. To ensure *School Site* configuration is designed to maximize pedestrian and bicycle access
4. To ensure that roadways can accommodate cyclists
5. To ensure that *School Sites* can accommodate cyclists
6. To ensure public *Transit* supports and accommodates student travel to school

The *Guidelines* are to be utilized by the following stakeholders:

- Halton District School Board
- Halton Catholic District School Board
- City of Burlington
- Town of Oakville
- Town of Halton Hills
- Town of Milton
- Halton Region

It is intended that these stakeholders will use the *Guidelines* during the planning process for schools. The *Guidelines* are intended to highlight preferred approaches to the built form and access at the *School Site* and its surrounding

neighbourhood. The end goal being that the population will have the environment needed to make student *Active Transportation* an easy choice. The Technical Stakeholder Sub-Committee is aware and considerate of each Stakeholder's uniqueness due to various municipal planning policies and mandated practices. Because of this, the *Guidelines* are not intended to be prescriptive and should be utilized to the extent possible.

Background

The Active and Safe Routes to School Program is a provincial initiative that strives to create an environment that is conducive to, and supportive of, safe, walkable communities.

The goals of the Active and Safe Routes to School Program are as follows:

- To mitigate parent vehicular *Traffic* at the *School Site* (fewer parents driving)
- To improve air quality at the *School Site* (fewer car emissions)
- To create safe walking routes to school (proper infrastructure in place)
- To increase the physical activity levels of youth by having them walk, bike or wheel (roller-blades, skateboards, scooters) to school instead of arriving in their parents' car

HDSB and HCDSB support the use of *Active Transportation* to and from school. These *Guidelines* compliment the ASRTS program by encouraging enhancement of the built environment and augmentation of safety. This in turn, facilitates families and students to choose *Active Transportation* methods.

In 2009, after a successful one-year pilot project between the Halton Region Health Department (HRHD) and the Halton District School Board (HDSB), the HDSB Trustees unanimously voted to expand the Active and Safe Routes to School (ASRTS) program to 25 schools.

HDSB created a project management position via the secondment of a Halton Region Health Department staff. The HDSB project ran from September 1, 2009 to December 31, 2010. In January 2010, the HCDSB joined the project and implemented a pilot at some of their schools. A final report on the HDSB project is available at <http://www.hdsb.ca/Programs/Pages/ActiveandSafeRoutes.aspx>

In January 2010, HDSB formed a Technical Stakeholders Sub-Committee to guide the implementation of student *Active Transportation* best practices to *School Site* plans/development approvals and neighbourhood plan/development approvals.

The Technical Stakeholders Sub-Committee recommends the listed stakeholders review these guidelines every two years.

Design Guidelines for School Site and Adjacent Lands Planning

This section contains the *Guidelines* (Table 1). Included in this table are the following headings: Component: refers to the area the guideline affects; either the *Community* or the *School Site* itself, Objective: refers to the desired result of applying the *Guideline*, Guideline: the action to be taken, and Application Area: the relevant timing of the *Guideline(s)* application in the planning or review process. (See Appendix A, B, C, D & E for *Guidelines* examples)

Table 1: Design Guidelines for School Site and Adjacent Lands Planning

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
<i>Community</i> Parks, Trails Roads, School/ Park Blocks, Traffic	1.0 To ensure safe connectivity between the <i>School Site</i> and adjacent <i>Community</i>	1.1 Ensure there are connecting pathways that provide <i>Linkages</i> throughout the <i>Community</i>	X	X	X		
		1.2 Provide minimum three-meter wide pathways to the school		X	X	X	
		1.3 Ensure pathway materials are screening gravel or asphalt		X	X	X	
		1.4 Ensure pathways should not cross flood plains		X	X		
		1.5 Provide landscaping and amenity enhancements (benches, plantings etc.)				X	
		1.6 Provide lighting and low landscaping along pathways	X	X	X	X	

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
		1.7 Encourage 1.5 meter wide sidewalks on both sides of the road		X	X		
		1.8 Ensure pedestrians are separated from vehicular <i>Traffic</i>		X	X	X	
		1.9 Accommodate where possible, <i>Traffic Calming Devices</i> on adjacent roads	X	X	X		
		1.10 Ensure there are school and parkland connections	X	X	X	X	
		1.11 Create school park campuses	X	X	X		
		1.12 Install 40km school zones as per <i>OTM</i> guidelines for <i>School Sites</i>				X	
		1.13 Install school area signs per <i>OTM</i> guidelines for <i>School Sites</i>				X	
		1.14 Install <i>Pavement Markings</i> to convey required <i>Traffic</i> movements				X	

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
School Site Roads, Access	2.0 To ensure the school is central to the population it serves	2.1 Recognize the importance of grid-patterned road design	X	X	X		
		2.2 Avoid access from an arterial road (elementary)	X	X	X		
		2.3 Encourage <i>School Sites</i> to be situated on corner blocks	X	X	X	X	
School Site Access, Road, Traffic, Design	3.0 To ensure <i>School Site</i> configuration is designed to maximize pedestrian and bicycle access	3.1 Ensure alignment of school driveways with opposite streets			X	X	
		3.2 Ensure access to the school property from all four corners		X	X	X	
		3.3 Ensure pathways to school blacktop from all four corners			X	X	
		3.4 Ensure pathways on <i>School Site</i> run the length of the school, three meters wide, and connect the roadway sidewalk to the school blacktop			X	X	
		3.5 Ensure cyclists do not cross vehicular <i>Traffic</i> to reach the bike racks				X	
		3.6 Ensure school bus and vehicular <i>Traffic</i> are separated				X	

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
		3.7 Ensure site waste containers are located away from pedestrian and cyclist pathways				X	
		3.8 Ensure with <u>secondary School Sites</u> , there are multiple street frontages	X	X	X		
		3.9 Consider prohibiting stopping on the opposite side of the school 8 am-5 pm M-F Sept.1 - June 30 or no stopping anytime both sides of the street				X	
		3.10 Consider installing no stopping signs six meters either side of all the schools driveways				X	
		3.11 Consider prohibiting 'U-turns' at the front of school (signage)				X	
		3.12 Consider installing 'no stopping' anytime adjacent to the frontage				X	
		3.13 Consider the use of flashing 40 km hr signs during peak operating hours with schools on arterial roadways				X	

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
		3.14 Install, where crossing guards are in place, school crossing and school crossing ahead signs as per the <i>OTM</i> guidelines				X	
Community Roads, Access	4.0 To ensure that roadways can accommodate cyclists	4.1 Ensure well signed and marked bike routes			X	X	
		4.2 Seek ways to incorporate safe on-road bike routes			X	X	
		4.3 Provide sidewalks and bikeways along roads to access schools			X	X	
School Site Landscaping, Design	5.0 To ensure that School Sites can accommodate cyclists	5.1 Support bike rack placement outside of Principals office				X	
		5.2 Provide bike lockers and other active transport equipment lockers on <i>School sites</i> (scooters, skateboards)				X	
		5.3 Design Principal's office location: front of the school, corner office, large windows looking out onto the bike racks				X	X

Component	Objective	Guidelines	Application Area				
			Official Plan	Community Concept Plan (Secondary Plan)	Draft Subdivision Plan Approval	Site Plan	Building Design
		5.4 Support location of administrative office beside Principal's with large windows that look out onto bike racks				X	X
		5.5 Ensure the planting of low shrubbery outside administrative offices				X	
		5.6 Ensure bike pathways are separated from vehicular <i>Traffic</i>				X	
Community Access	6.0 To ensure public <i>Transit</i> supports and accommodates student travel to school	6.1 Support <i>Transit</i> stop located at <i>School Site</i> (secondary)			X	X	
		6.2 Encourage <i>Transit</i> to provide direct route to schools to avoid transfers (secondary)	Policy item for consideration				

Implementation of Guidelines

Table 1: *Design Guidelines for School Site and Adjacent Lands Planning* identifies the appropriate stages at which the *Guidelines* should be utilized.

The *Guidelines* should be considered and incorporated when:

- developing secondary and tertiary plans in Halton Region
- designating *School Sites*
- designing or redesigning (retrofitting) *School Sites* and before submitting *School Site* plans for approval
- reviewing planning applications from developers
- determining *Traffic* posted speed and parking regulations
- determining the placement of public *Transit* stops

Additional Information

For Additional information on the Active and Safe Routes to School Program or the Active and Safe Routes to School Projects see these links below.

America Walks: <http://americawalks.org/programs/srts/>

Green Communities Canada: <http://www.saferoutestoschool.ca/>

Halton Catholic District School Board:
<http://www.hcdsb.org/Community/Safe/Pages/default.aspx>

Halton District School Board:
<http://www.hdsb.ca/Programs/Pages/ActiveandSafeRoutes.aspx>

Public Health Agency of Canada:
<http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/at-ta-eng.php>

National Center for Safe Routes to School:
<http://www.saferoutesinfo.org/index.cfm>

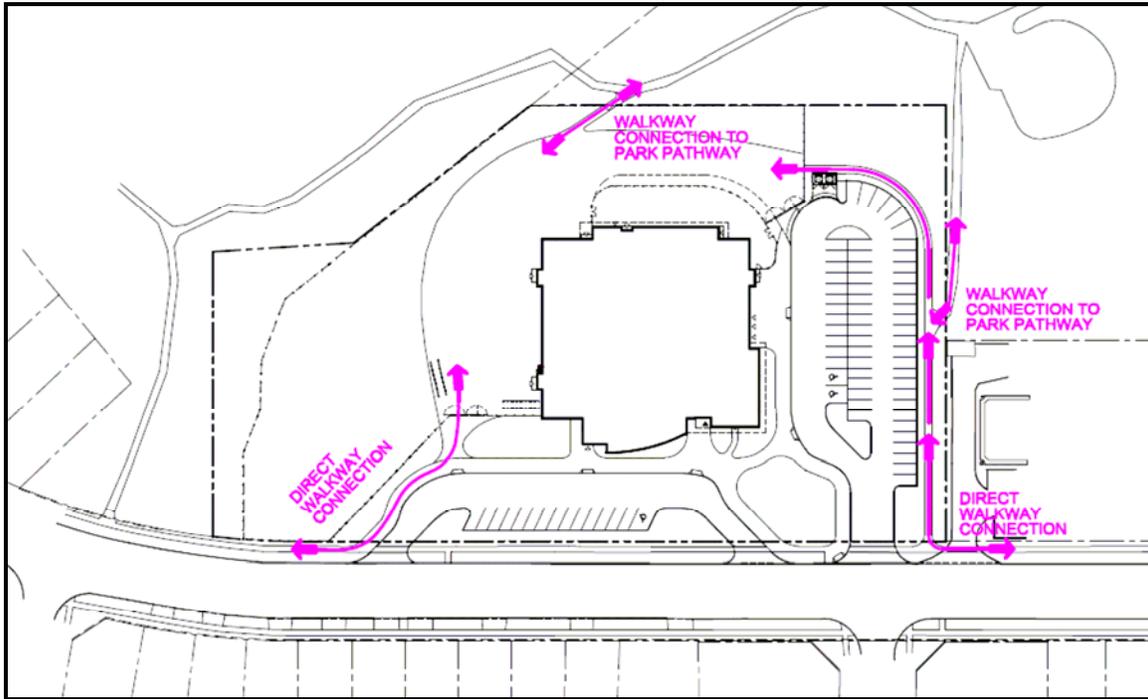
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<http://www.fccdr.usf.edu/upload/Projects/safeschool/safesc/CPTEDGuidlines.htm> Last visited February 2011

Appendices

- A: School Site Example
- B: School Site Example
- C: School Site Example
- D: School Site Example
- E: Traffic Example

APPENDIX A:

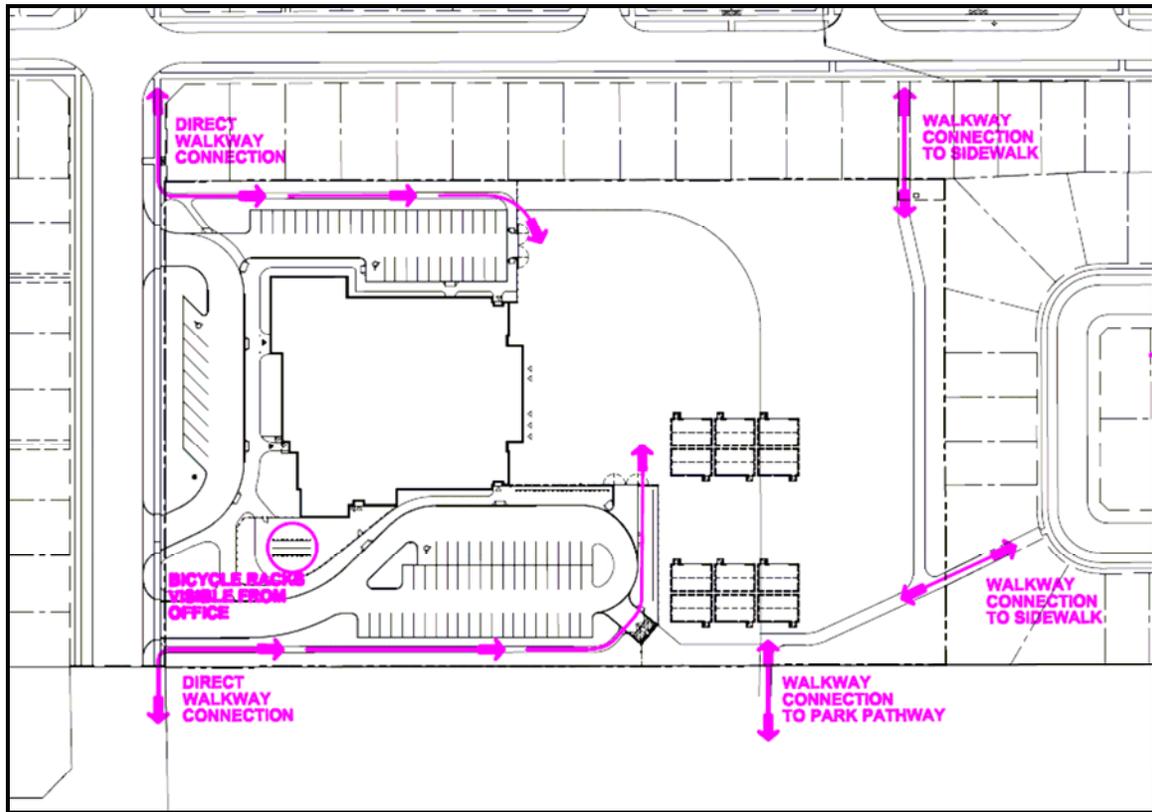


School Site: This site exhibits the following *Guidelines*

- 1.1 Ensure there are connecting pathways that provide *Linkages* throughout the *Community*
- 1.7 Encourage 1.5 meter wide sidewalks on both sides of the road
- 1.8 Ensure pedestrians are separated from vehicular *Traffic*
- 1.10 Ensure there are school and parkland connections
- 2.2 Avoid access from an arterial road (elementary)
- 3.1 Ensure alignment of school driveways with opposite streets
- 3.2 Ensure access to the school from all four corners
- 3.3 Ensure pathways to school blacktop from all four corners
- 3.4 Ensure pathways on *School Site* to run the length of the school, three meters wide and connect the roadway sidewalk to the school blacktop
- 3.5 Ensure cyclists do not cross vehicular *Traffic* to reach the bike racks
- 3.7 Ensure site waste containers are allocated away from pedestrian and cyclist pathways
- 4.3 Provide sidewalks and bikeways along roads to access schools
- 5.6 Ensure bike pathways are separated from vehicular traffic

Added Note: This school was designed with a fence opening at the right side (east) of the site to allow access to/from the neighbouring park pathway

APPENDIX B:

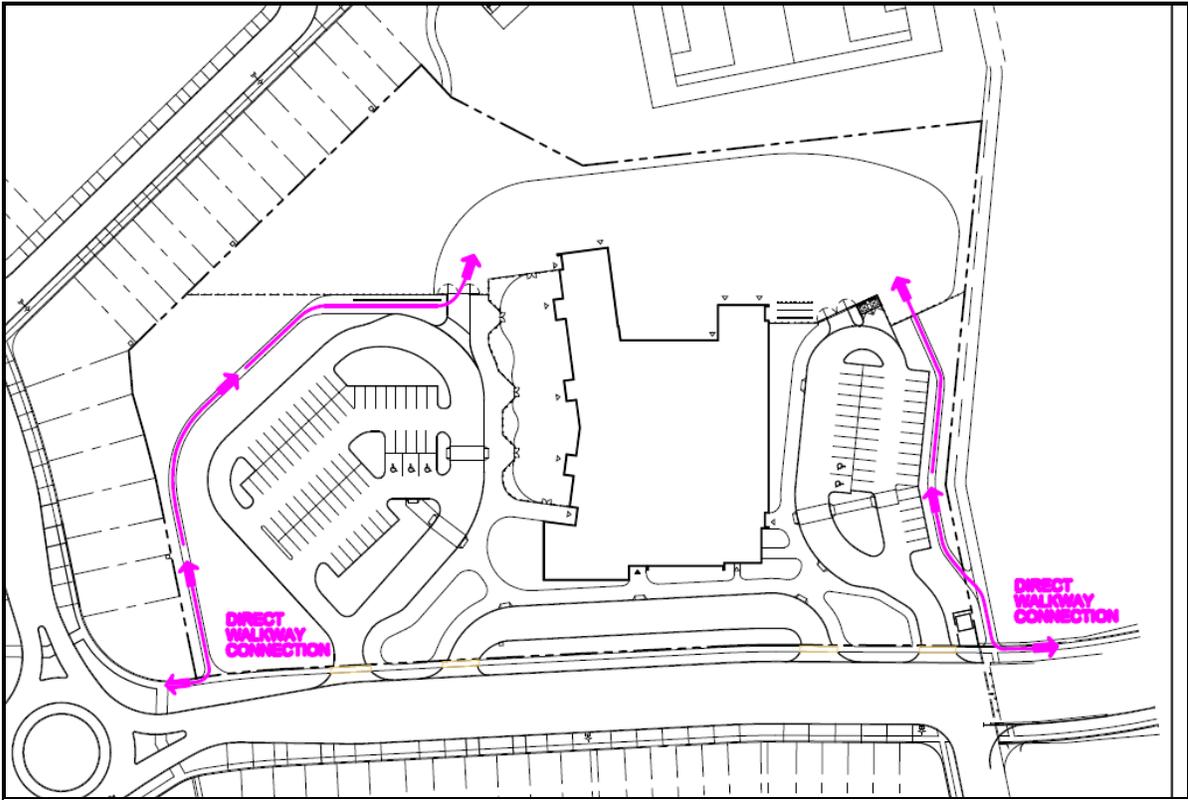


School Site: This site exhibits the following *Guidelines*

- 1.1 Ensure there are connecting pathways that provide *Linkages* throughout the *Community*
- 1.7 Encourage 1.5 meter wide sidewalks on both sides of the road
- 1.8 Ensure pedestrians are separated from vehicular *Traffic*
- 1.10 Ensure there are school and parkland connections
- 2.2 Avoid access from an arterial road (elementary)
- 3.2 Ensure access to the school from all four corners
- 3.3 Ensure pathways to school blacktop from all four corners
- 3.4 Ensure pathways on *School Site* to run the length of the school, three meters wide and connect the roadway sidewalk to the school blacktop
- 3.5 Ensure cyclists do not cross vehicular *Traffic* to reach the bike racks
- 3.6 Ensure School bus and vehicular *Traffic* are separated
- 4.3 Provide sidewalks and bikeways along roads to access schools
- 5.1 Support bike rack placement outside of Principal's office
- 5.3 Design Principal's office location: front of the school, corner office. Large windows looking out onto the bike racks
- 5.4 Support the location of the administrative office beside Principal's with large windows that look out onto bike racks

- 5.6 Ensure bike pathways are separated from vehicular traffic

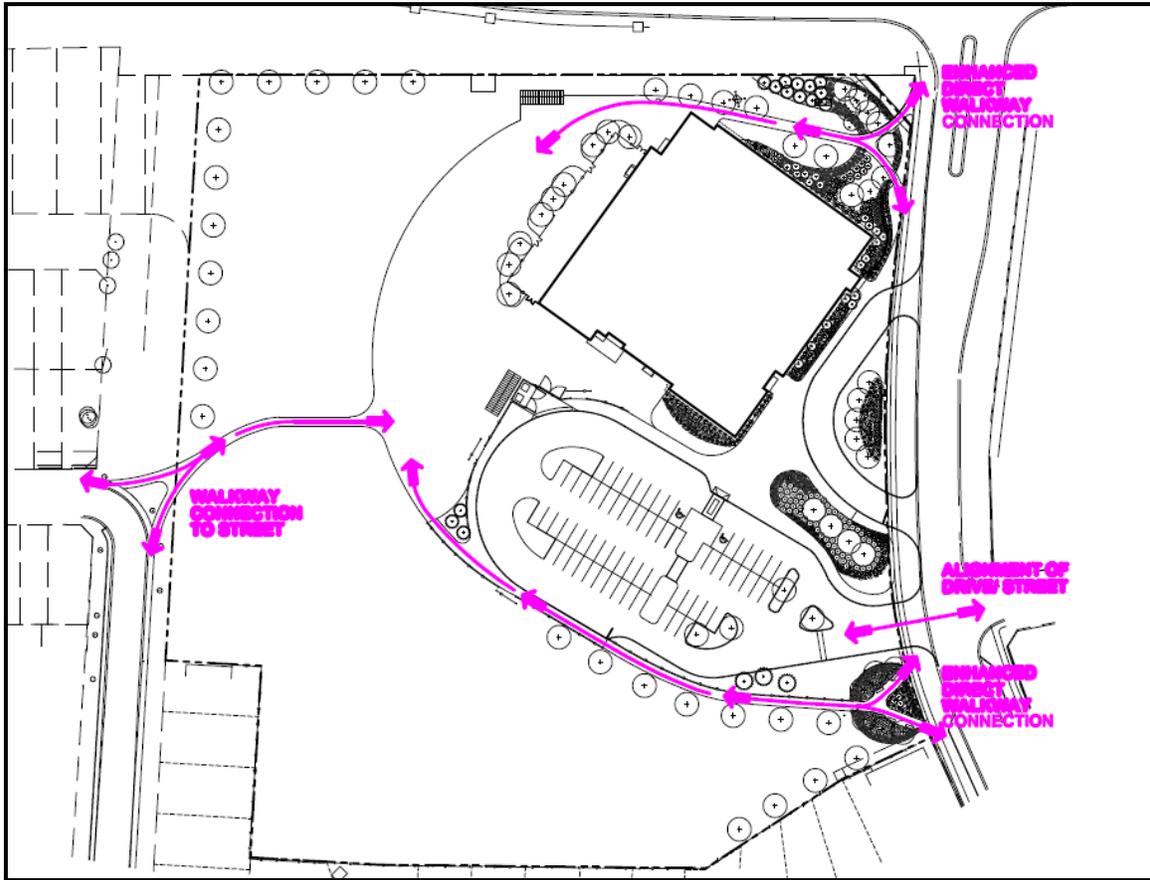
APPENDIX C:



School Site: This site exhibits the following *Guidelines*

- 1.7 Encourage 1.5 meter wide sidewalks on both sides of the road
- 1.8 Ensure pedestrians are separated from vehicular *Traffic*
- 1.9 Accommodate where possible, *Traffic Calming Devices* on adjacent roads
- 1.11 Create school park campuses
- 2.2 Avoid access from an arterial road (elementary)
- 2.3 Encourage *School Sites* to be situated on corner blocks
- 3.1 Ensure alignment of school driveways with opposite streets
- 3.4 Ensure pathways on *School Site* to run the length of the school, three meters wide and connect the roadway sidewalk to the school blacktop
- 3.5 Ensure cyclists do not cross vehicular *Traffic* to reach the bike racks
- 3.6 Ensure School bus and vehicular *Traffic* are separated
- 3.7 Ensure site waste containers are located away from pedestrian and cyclist pathways
- 4.3 Provide sidewalks and bikeways along roads to access schools
- 5.6 Ensure bike pathways are separated from vehicular traffic

APPENDIX D:

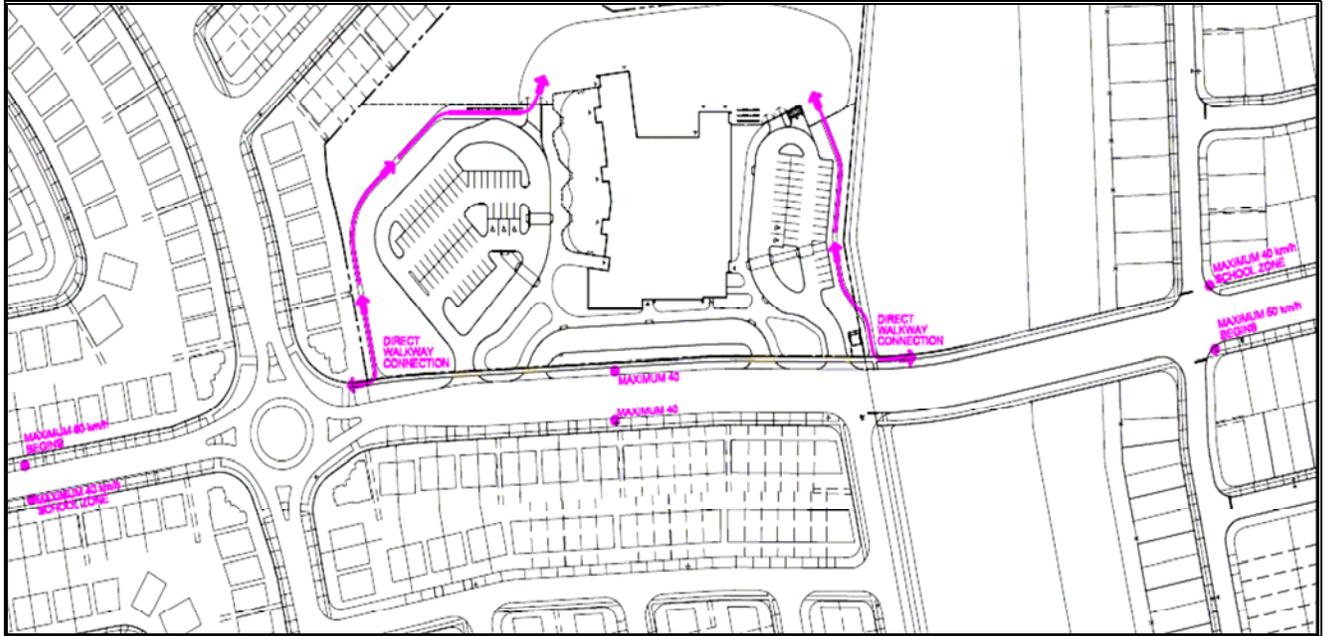


School Site: This site exhibits the following *Guidelines*

- 1.7 Encourage 1.5 meter wide sidewalks on both sides of the road
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- 3.5 Ensure cyclists do not cross vehicular *Traffic* to reach the bike racks
- 3.6 Ensure School bus and vehicular *Traffic* are separated
- 3.7 Ensure site waste containers are located away from pedestrian and cyclist pathways
- 4.3 Provide sidewalks and bikeways along roads to access schools
- 5.3 Design Principal's office location: front of the school, corner office, large windows looking out onto the bike racks
- 5.4 Support location of administrative offices beside Principals with large windows that look out onto bike racks
- 5.5 Ensure planting of low shrubbery outside administrative offices

- 5.6 Ensure bike pathways are separated from vehicular traffic

APPENDIX E: Traffic Examples



This site map exhibits the following traffic guidelines:

- 1.12 Install 40km schools zones as per OTM Regulations for *School Sites*
- 1.13 Install school area signs per *OTM* regulations for *School Sites*



Example of 1.12 40 Km sign in school zone and 1.13 school area sign