

**URBAN AND SUBURBAN SCHOOL SITE DESIGN  
FILE 15.117  
WARDS 1-5****Recommendation**

The Commissioner of Planning recommends:

1. THAT the draft report entitled "School Site Planning Workshop, City of Vaughan" Be Received;
2. THAT a copy of this report containing staff's comments on suburban and urban school site planning be forwarded to the York Region District School Board, Catholic District School Board, Region of York, the Ministries of Municipal Affairs and Housing, the Ministry of Education and Ministry of Infrastructure Ontario to be considered as part of future review of the Growth Plan and relevant legislation; and
3. THAT City staff continue to work toward the development of an Urban School prototype with a Public Sector stakeholder group, including but not limited to, York Region District School Board, Catholic District School Board, Region of York and the Province respecting the development of urban schools.

**Contribution to Sustainability**

The future development of urban schools in the City of Vaughan will support compact urban form, potentially mixed use development and the more efficient use of land as a resource.

**Economic Impact**

There is no economic impact resulting from this report. Preparation for the presentation and workshop began in 2011 and was funded through the 2011 Departmental Budget.

**Communications Plan**

All stakeholders including the Region of York, York Region District School Board, York Catholic District School Board, Vaughan Metropolitan Centre owners and the Province have been notified of the report being on the agenda of the November 14, 2013 Vaughan Metropolitan Centre Sub-Committee of Council Meeting.

**Purpose**

The purpose of this report is to provide Council with an update on the status of the January 2012 Suburban and Urban School Site Design and Buildings Workshop and the progress to date on addressing concerns raised by stakeholders on the issue of achieving urban schools in the City of Vaughan, particularly as it pertains to the Vaughan Metropolitan Centre.

**Background – Analysis and Options**

1. The City of Vaughan School Site Planning Workshop

In December of 2011, recognizing concerns raised by stakeholders on the Vaughan Metropolitan Centre Secondary Plan and Intensification Areas in Vaughan preparation began for a workshop, to be hosted by the City of Vaughan, respecting suburban and urban school site and building design. The genesis of the Workshop was to provide a forum for the discussion of issues

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surrounding school site design and to seek advice and input from the attending participants on opportunities to improve the process and methods used when selecting and designing school sites.

The City of Vaughan retained the services of a team of consultants headed by Montgomery Sisam Architects including: Victor Ford Associates – Landscape Architects, BA Consulting Group - traffic engineering and Swerhun- facilitation and decision support. The consulting group was responsible for the following duties:

- i. Conduct research on best practices for school site organization;
- ii. Design, prepare, and deliver a presentation on the topic of school site organization and design;
- iii. Facilitate the workshop; and,
- iv. Provide a written report including graphics, an executive summary and future actions/next steps

On January 20, 2013 Policy Planning hosted the resulting workshop. In order to facilitate a well-rounded discussion, which would address all the potential issues, the list of workshop participants was diverse with representation from the urban design, planning, and transportation engineering departments of a number of municipalities across Ontario including Hamilton, Toronto, Vaughan, Brampton, Windsor, Aurora, Whitby, Markham and Oakville.

Also in attendance were representatives from the various school boards including the York Region and Toronto District School Boards, the York and Toronto Catholic District School Boards, as well as other organizations such as Metrolinx.

## 2. The Presentation

Participants at the Workshop were asked to consider four major themes with respect to school site design: School and Community; Best Use of Site; Health and Safety; and Economy.

- i. School and Community: Four perspectives were discussed with respect to School and Community; 1) the best relationship between the programming components of a school and how they can be organized to provide benefit to the school and community; 2) how the public components of the school building programming can relate to and contribute to the community; 3) how can the exterior of the school building and site layout contribute to the public realm; and, 4) how can the image of the school building contribute to the neighbourhood and community as a source of municipal pride.
- ii. Best Use of Site: Three perspectives were discussed respecting the best use of land; 1) where should the school site be located in the community and how should the building be designed on the site to increase the amount of pedestrian traffic between the school and community; 2) where should the building be located on the site to minimize the vehicular traffic needed for the school to function; and, 3) how can the building and site be designed to provide the maximum amount of landscape open space.
- iii. Health and Safety: Three perspectives were considered respecting health and safety; 1) how to arrange sidewalks, driveways, drop-off/pick-up activities and building entrances to minimize the number of vehicle and pedestrian cross-overs and make it easy for pedestrians to access the site; 2) how to plan recreation activities away from parking and loading spaces; and, 3) how can the building be configured to maximize sight lines and physical connections between the open space of the school complex and public open space in order to provide the highest degree of safety and security.
- iv. Economy: Three perspectives were also considered with respect to the economics of school design; 1) How to obtain the best designs while still meeting the requirements of

stakeholders, while meeting the construction cost targets; 2) how to best design the building to manage on-going maintenance costs; and, 3) how can the building and site be designed to optimize best practices for sustainable design including a reduced footprint.

The workshop participants were then presented with four case studies of school site design. Two of which were considered traditional suburban designs and 2 case studies which were considered urban schools.

- i. Suburban School Sites: The two suburban sites used as case studies were more traditional in the proposed site layout requiring larger parcels of land for elementary school design. The case studies were focused on the Meadowvale Sheppard School in Toronto and the second being the Lincoln Alexander Public School in York Region.

With respect to the Toronto suburban school case study the issues surrounding vehicular and pedestrian access were key considerations. The school board wanted to use the street right-of-way for drop-off/pick-up in order to maximize the area of the site available for recreation and landscape. However, the City wanted to have all drop-off/pick-up contained on the school property in order to avoid neighbourhood complaints of traffic congestion and allow for easy snow clearing unencumbered by cars parked or idling in the street right-of-way.

The second example the Lincoln Alexander Public School in York Region is an example of a site layout which contains the vehicular drop-off/pick-up activities and the associated parking on the subject lands. This example was provided for discussion purposes as the consulting team presented a number of options to achieve the desired traffic accommodation while not requiring the building to be setback from the adjacent street. The options presented by the consulting team required the public right-of-way to be utilized for drop-off/pick-up.

It should be noted that it was the opinion of the consultant that when vehicular traffic can be accommodated in the street right-of-way, the relationship between the building and the street improves, the amount of land available for the programming of outdoor activities on site increases, and if done appropriately, traffic flow would not be disrupted.

- ii. Urban School Sites: The two urban school sites used as case studies were the York School, an independent school in Toronto and the School at Columbia University in New York City.

The Toronto urban school site, named The York School is located on Yonge Street in close proximity to St. Clair Avenue. The project can be considered a mixed use development as it was a conversion and addition to two adjoining office buildings. The building has prominent street frontage and is in close proximity to the public sidewalk along Yonge Street. The rear of the building which was previously used for parking is now outdoor open space. The new school is well serviced by public transit and did not require parking as the City of Toronto zoning does not require parking for staff or visitors.

Through the application review and public consultation process, discussion focused on the drop-off/pick-up activity potentially creating traffic congestion. The solution was to provide a turn-around within the rear lot of the school site that is converted to a play/recreation area during school hours between drop-off and pick-up times.

The second example of an urban school is the School at Columbia University in New York City, New York. The school at Columbia University occupies the second and third floor of a 12-storey mixed use commercial retail and residential building adjacent to the Columbia University Campus on the upper west side of Manhattan. The school is situated above the ground floor retail and below the residential floors. The school has a

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separate entrance and elevator and includes a full size gym/auditorium, classrooms, cafeteria and student and staff services. Two separate rooftop gardens are used as outdoor recreation areas. Similar to the Toronto example no visitor or staff parking has been provided.

The case studies were used to seek feedback from the participants at the Workshop on school site planning. Workshop participants were then placed in groups (with a representative from the various disciplines in each group) and asked to consider how to address the issues and opportunities related to the sites. Participants were asked to focus on the following questions while keeping in mind the relevant themes discussed earlier;

- i. From your experience with school site design, what works? What doesn't work, and why?
- ii. What suggestions or ideas do you have to address what doesn't work?
- iii. Based on your discussion, are there 3-5 criteria that you feel should drive site design? If so, what are they?
- iv. Do you have any other advice for the City of Vaughan as they move forward with their thinking about school site design? (e.g. Next Steps)

The outcomes of the workshop have been summarized in the report entitled, *School Site Planning Workshop – City of Vaughan*, which forms Attachment 1 to this report. Section 2.0 *Key Themes in the Feedback Received* details the breakout groups' responses to the posed questions.

### 3. Application of Urban School Site Model in the Vaughan Metropolitan Centre (VMC)

The Vaughan Metropolitan Centre Secondary Plan addresses the need and requirements for school uses. To support the development of the Vaughan Metropolitan Centre (VMC) to its full build out, both the York Region District School Board and the Catholic District School Board have identified the need for as many as 5 elementary schools. The ultimate number of schools will be determined based on the build out and the amount of residential development in the VMC and the resulting school age demographic. The Secondary Plan also states that the exact size, location and phasing of each school shall be determined in consultation with the school boards prior to any planning approvals. The size and configuration of each school site generally shall be consistent with the policies or requirements of the respective school boards. However, any changes from the current school board policies and requirements shall be permitted provided the necessary school boards agree. Policy 7.2.4 of the Vaughan Metropolitan Secondary Plan states the following;

"The site size, site layout and built form of schools shall be compatible with the planned form of development in the VMC. To ensure compatibility, the School Boards shall be encouraged to develop alternative standards for new schools in high density neighbourhoods, and the City shall collaborate with the School Boards and the Region of York to ensure the alternative standards are appropriate for the VMC."

This gives all agencies involved in the required process an opportunity to consider applying urban school site layout concepts to the development of school sites in the VMC.

In addition, Policy 7.2.4 states; "The standards should optimize the use of land by promoting multi-storey school buildings and minimizing parking and pick-up/drop-off areas." And Policy 7.2.5 provides that, "Arrangements between the School Boards and developers that result in relatively compact schools and the integration of school parking requirements in adjacent developments shall be encouraged."

In planning for a compact urban downtown area, the VMC Secondary Plan encourages an alternative paradigm to the current suburban model for school sites. Such an alternative approach reflects the concepts discussed at the Workshop with respect to school site design on urban sites.

#### 4. Obstacles to the Development of Urban Schools

Although examples of urban school site design exist, the concept of a purpose planned urban school is relatively new to the City of Vaughan in particular and York Region in general. Through on-going discussions with the York Region District School Board and the York Catholic District School Board, York Region and the representatives from the Province some of the noted obstacles are as follows:

- i. The Current School Development Funding Model: Through our research and discussions with both school boards it has come to our attention that there are two components to the funding model. Firstly, Education Development Charges (EDCs) are used to pay for the purchase of land only, and are not available to finance construction costs. The Education Act makes provision for school boards to pass by-laws to collect development charges to pay for land.

School construction is paid for by the Province of Ontario on a project by project basis. Funding for school construction is based on the number of pupils, a set area (square footage) per pupil and a set dollar cost per square foot. The Province's current funding model does not provide allocation for the construction of an urban school which contemplates factors such as underground parking, deviating from the standard 2-storey building type (for elementary schools) to a compact building design proposing more than 2-storeys as well as other premiums which may be associated with an urban school. The timing and availability of funds at the planning stage is also a limiting factor when dealing with proposals to integrate schools into mixed-use developments.

The school boards do not have a tax base, and in turn they cannot raise funds to address the additional costs. Changes to the funding model need to be addressed at the provincial level.

- ii. What exactly is an Urban School: All stakeholders need to agree on a clear definition and understanding of what components go into creating an Urban School. The Workshop mandate focused on the design, site layout and site circulation of both urban and suburban schools. But through discussions with the stakeholders, design and site plan issues are just one component which need to be considered. Other matters which should be considered in the discussion include funding, curriculum requirements and school programming.
- iii. Current Planning Tools Do Not Address the idea of Urban Schools: The school boards have noted that a different approach to how land is acquired may be necessary in areas such as the Urban Growth Centres, as defined by the Provincial Growth Plan, such as the VMC. The current method of acquiring land through the draft plan of subdivision process is not as efficient in Urban Growth Centres as it has been previously in other parts of the City. Much of the land holdings in the VMC desirable for school sites may not be developed by way of draft plan of subdivision as no public streets are being proposed.

#### 5. Next Steps

Based on the outcome of the Workshop it is clear that there are alternative models available that can be adapted to areas like the VMC. However, there is institutional caution that will need to be overcome. The City is currently facing resistance, by way of private Ontario Municipal Board appeals against the VMC plan over the school site sizes and locations. In exploring other

options, the school boards will have to be assured that they can still fulfill their respective mandates with smaller, more intensely developed sites.

As a follow-up, a conference call was convened by the City's Planning Commission with Provincial representatives from the Ministries of Municipal Affairs and Housing, the Ministry of Education and Ministry of Infrastructure, representatives of the York Region Public and Catholic School Boards and York Region to explore how the concept of Urban Schools can be advanced, especially as it applies to the Urban Growth Centres under the Growth Plan. The consensus was that further work should be undertaken in identifying and developing prototypes that may be applicable to the VMC. These discussions could include consideration of shared facilities between the School Boards, the City and York Region (e.g. Joint use of park and school yard facilities and shared buildings housing schools, libraries and community facilities). This work would also identify other institutional issues that may be problematic. If this approach is successful, it would be appropriate to undertake a pilot project to test the concept on a particular site, possibly in conjunction with an affected landowner.

The following next steps are recommended:

- i. Release of the School Site Planning Workshop Final Report: Subsequent to this meeting the *School Site Planning Workshop City of Vaughan Final Report* dated January 3, 2013 will be released to all the participants of the January 20<sup>th</sup>, 2013 Workshop.
- ii. Create a Forum for Dialogue: Staff at the will continue to meet with the public sector stakeholders, including the Region of York, the School Boards and the Province to further discussions respecting the issue of Urban Schools, with a view to problem solving and concept development at the government/school board level.
- iii. Holding a Government/School Board Workshop: Conduct a workshop focusing on the development of key principles and program elements that could be tested as a pilot project, possibly in the VMC.
- iv. Conduct Public Consultation and Undertake a Pilot Project: Engage the public and consider options for undertaking a Pilot Project.

### **Relationship to Vaughan Vision 2020/Strategic Plan**

The Workshop on Suburban and Urban School Site Design and Buildings is consistent with the priorities set by Council in the Vaughan Vision 20/20 Plan.

### **Regional Implications**

The Region of York has released a report titled *"Best Practices for Planning Centres and Corridors"* dated September 26, 2013 in which Section 2.6 "Community" also discusses the challenges and approaches to developing community facilities including school sites in dense urban environments. As stakeholders, representatives from the Region of York were in attendance at the Workshop and have also participated in more recent discussions with the City and stakeholder group at large.

### **Conclusion**

Staff has taken the information from the Suburban and Urban School Sites Workshop, conducted further research and initiated a forum for dialogue with the relevant stakeholders to begin the process of understanding the obstacles to developing urban schools, with the hope of resolving the obstacles and developing practical solutions that can be applied in areas like the VMC. Next steps include the release of the *School Site Planning Workshop City of Vaughan Final Report*, January 3, 2013 which is the last commitment made with respect to the Workshop. Moving forward staff intends to continue to meet with key stakeholders in the hopes of furthering

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discussions, which would ultimately allow the City to move forward with the development of school sites in the VMC creating the vision of a complete community as established through the VMC Secondary Plan.


**Attachments**

1. Draft School Site Planning Workshop City of Vaughan, dated January 3, 2013.

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Respectfully submitted,

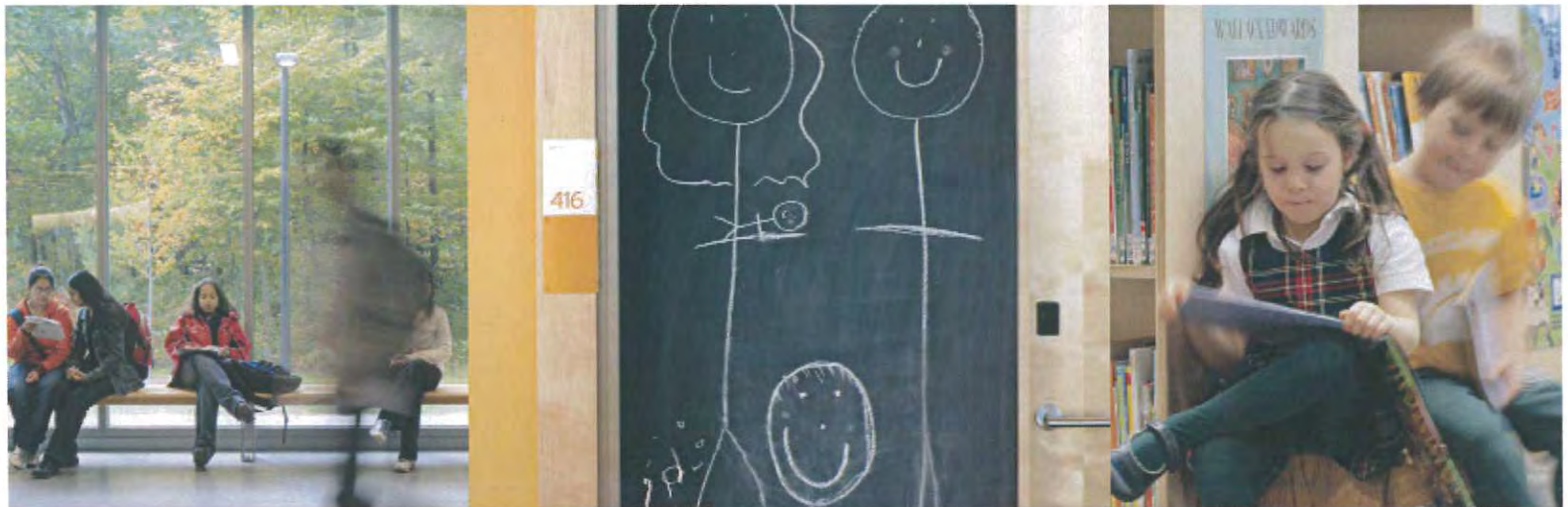
A handwritten signature in black ink, appearing to read 'John Mackenzie', with a horizontal line extending to the right.

JOHN MACKENZIE  
Commissioner of Planning

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ATTACHMENT 1



JANUARY 3, 2013  
FINAL REPORT

## School Site Planning Workshop City of Vaughan

DRAFT



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## 1.0 Executive Summary

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## City of Vaughan – School Site Planning Workshop

Vaughan City Hall  
Friday, January 20, 2012  
1:30 – 4:30 pm

The purpose of the workshop was to seek advice from the invited participants on opportunities to improve the processes and methods used when selecting and designing school sites.



The session began with a welcome and contextual overview of the topic as it related to the City of Vaughan's recent planning activities, presented by Diana Birchall, Director of Policy Planning, City of Vaughan. Nicole Swerhun, Independent Facilitator, then introduced the consultant team, consisting of: Robert Davies of Montgomery Sisam architects, Victor Ford of Victor Ford Associates Landscape Architects and Steve Krossey of BA Group. Each member of the consultant team gave a brief overview of the issues, opportunities and options for the design of urban and suburban school sites as they pertained to site design, architecture, landscape architecture and transportation.

The material was presented according to a 13 point perspective organized around **four major themes/lenses** – School and Community, Best Use of Site, Health and Safety, and Economy.

- **School and Community**

Four perspectives were discussed under this lens; 1) what is the best relationship between the various program components of a school building and how can they be organized to provide the best benefit to the school and community, 2) how can the public components of the school building program relate to and contribute to the surrounding community, 3) how can the exterior of the school building and the site help define and contribute to the public realm, and 4) how can the image and identity of the school building contribute to the neighbourhood and larger community as a source of school and municipal pride?

- **Best Use of Site**

Three perspectives were discussed under this lens; 1) where should the school site be located in the community and how should the building be designed on the site to increase the amount of pedestrian traffic between the school and community, 2) similarly, where should the site be located in the community and how should the building be located on the site to minimize the amount of vehicular traffic needed to allow the school to function as a school and community hub, and 3) how can the building and site be designed to provide the maximum amount of landscape open space, hard and soft, within the development?





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- **Health and Safety**

Three perspectives were discussed under this lens; 1) how to arrange sidewalks, driveways, drop-off and pick-up activities and building entrances to minimize the number of vehicle and pedestrian cross-over and make it easy for pedestrians to access the site, 2) how to plan recreation activities away from parking and loading spaces, and 3) how can the building be configured to maximize sight lines and physical connections between the open space of the school complex and public open space in order to provide the highest degree of safety and security?

- **Economy**

Three perspectives were discussed under this lens; 1) how to best design and plan the building to meet the requirements of all other perspectives while meeting the construction cost targets established by the Ministry of Education, 2) similarly how best to design the building to responsibly manage on-going maintenance costs, and 3) how can the building and site be designed to optimize best practice standards for sustainable design including reduced footprints.

Four case studies were presented, two representing suburban sites and two urban sites.

- **Suburban Sites**

Meadowvale Sheppard School, Toronto District School Board

This project was in the detailed design phase at the time of the workshop and presented an interesting example to review the aforementioned lenses. At the time the project was undergoing site plan review at the City of Toronto and the issues of vehicular and pedestrian access were forefront in the negotiation. Of particular interest was that the school board wanted to use the street right of way for drop off and pick activities in order to maximize the area of the site available for recreation and landscape open space while the city wanted to have all drop off and pick up activities contained within the school property in order to avoid neighbourhood complaints of traffic congestion and allow for easy snow clearing unencumbered by cars parked or idling in the street right of way.

Postscript: the project is currently under construction and a compromise solution was struck that will allow the drop off to occur in an area that will be used as an outdoor play area for kindergarten children while school is in session.

- **Suburban Sites**

Lincoln Alexander Public School, York Region District School Board

This recently completed school building was selected as an example of a design that contains all the activities of drop-off and pick-up as well as parking

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on the school property. For discussion purposes the consultant team posited and the workshop attendees explored a number of options to achieve the accommodation of traffic that didn't require the building to be setback from the adjacent streets. These options require the street right-of-way to be used to varying degrees for drop-off and pick-up. It is the consultant's opinion that; when vehicular traffic can be accommodated in the street right-of-way, the relationship between the building and street improves the amount of land available for outdoor activities on site are greater and if done appropriately need not disrupt traffic flow.

- **Urban Sites:**

The York School, Independent School, Toronto

Located on Yonge Street near the intersection of St.Clair, this project was a conversion and addition to two adjoining office buildings. The buildings are fronted adjacent to the sidewalk on Yonge Street, with rear yard open space – formerly the parking area. The new school is well serviced by public transit and consistent with City of Toronto parking standards there is no parking provided for either staff or visitors. During the public consultation phase there was a lot of discussion with the neighbourhood about how the activity of drop-off and pick-up may create traffic congestion. The solution was to provide a turn-around within the rear lot of the school property that is converted to a play/recreation area between the hours of pick-up and drop-off.

- **Urban Sites:**

The School at Columbia, Columbia University, New York City

The School at Columbia occupies the second and third floor of a 12 storey building at the upper west side of Manhattan adjacent to the campus of Columbia University. Intended primarily to teach children of faculty, the school sits above retail at grade and below residential apartments. The school has its own entrance and elevator core and includes a full size gymnasium/auditorium, classrooms, cafeteria and student and staff services. Two outdoor recreation areas are located at two separate roof gardens. No parking for either staff or visitors is provided.

These case studies were used to seek feedback on school site planning, including ideas on how to address the issues and/or opportunities related to the sample sites. **Focus questions** included:

1. In the context of school site planning, what works? What doesn't? Why? What are some suggestions to address methods that don't work?
2. Identify the top criteria to consider when planning school sites and provide any advice for the City of Vaughan for next steps.

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The 40 minute presentation was followed by two hours of round table workshop sessions. A spokesperson for each break-out group presented a summary of discussion from each group. There was of course some overlap and some unique points generated by each group.

Section 2.0 is a summary of findings.

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## 2.0 Key Themes in the Feedback Received



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## What WORKS WELL when designing school sites?

### 1. Connect the School to the Community

- Locate school sites centrally to promote their physical and functional prominence.
- Develop sight line connections to school sites in order to improve orientation for pedestrians and bicyclists.
- Locate buildings adjacent to the street with a strong landmark presence in the public realm.
- Provide a welcoming and prominent entry to the school building and site as well as sufficient pavement width for congregating students and parents.
- When a part of the school contains community space, (for example using the gymnasium as a community room) plan the building with the community space adjacent to the street with direct connections to the public sidewalk.
- Include space in both the building and open space of the school that fosters community activities.
- Build on smaller sites but also consider the need for future expansion.
- Give consideration to partnering with other government agencies and developers to encourage multi-use developments to increase building density, improve sustainability (for both building and site development) and improve social development.

### 2. Transportation and Parking

- Locate parking at the side or back of the school site where it is neither visible from the street nor blocking pedestrian access between the street and the building. Rear parking sites require good lighting and natural surveillance from adjacent properties safety issues.
- Promote alternative active modes of transportation and pick-up drop-off options by limiting curb cuts and driveways on sidewalks and providing amenities for pedestrians and bicyclists in the public realm.
- Devise ways to accommodate and permit bus loading and vehicle drop-off and pick-up within the street-right-of-way.
- Select a site with a relatively flat topography (where possible) to create efficiencies with hard surfacing options.
- Educate parents and Principals to embrace no-drive areas, walking school buses, or other Transportation Demand Management measures.



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- Provide sufficient crosswalks in close proximity to the school site to promote walking.
3. Connect to Adjacent Properties
    - Co-locate schools and libraries (when possible) to encourage pedestrian movement between these uses.
    - Co-locate schools and parks to maximize synergies of use and optimize land use.
  4. Sustainability / Weather
    - Design to allow ample light and natural ventilation into classrooms while planning an efficient building shape and structure.
    - Plan building on site to optimize winter and summer micro-climates – winter sun, summer breezes, summer shade and protection from winter winds.
    - Design buildings and site to best practice performance standards to minimize consumption of energy and emissions of green house gases and water consumption for irrigation.
  5. Green Space
    - Design green space to balance the needs of children and sustainability by using hardy, drought-tolerant plants and ground covers and resilient environmentally-friendly non-toxic building materials. Areas of heaviest traffic should use permeable pavers to allow for water absorption.
    - Incorporate hardy, steppable meadow plantings, wildflowers and butterfly and vegetable gardens to provide outdoor learning opportunities and to reflect the community culture.
  6. Site Lines and CPTED for Safety
    - Encourage overlook of the school site from the school building and adjacent buildings and properties and maintain sight lines and natural surveillance between the street and open spaces of the school where possible.
    - All sites should be assessed for conformity with CPTED guidelines (Contact the Safe City Coordinator in the Parks & Forestry Department for site assessments)
    - Provide adequate lighting of all pedestrian open spaces and circulation routes.

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## Aspects That Require Further Attention

### 1. Size of Lot and Building

- Overly large sites and/or overly large building footprints create an unwelcoming scale and less sustainable development.
- The site and building design needs to allow for future expansion and contraction as population trends change.
- Consider increased dialogue between local school boards and the Ministry of Education to revise current design standards, funding formula and guidelines to allow for flexibility in site selection and the consideration of multi-use developments between the Ministry, boards, other agencies and developers.

### 2. Site Lines and CPTED for Safety

- Design outdoor areas that are visible from the public realm of surrounding streets and parks and that avoid areas of entrapment.
- Enclose outdoor spaces/parking areas with visually permeable fencing.

### 3. Connect the School to the Community

- Integrate school sites with the community it serves and higher density nodal locations to promote transit-oriented development, where possible.

### 4. One-size-fits-all

- Avoid "cookie cutter" approaches to building design and site plans by encouraging design innovation that meets standards while promoting a distinct sense of place (eg. Kleinburg Public School).

### 5. Transportation

- Avoid sites that require or encourage vehicles to transport children to and from school. This can result in large parking and pick-up drop-off areas that act as a deterrent to the best practice of transit and pedestrian-oriented urban design.
- Locate schools in higher density areas, community or mobility hubs to promote transit and active transportation.

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## Key Criteria to Consider in the Site Planning Process and Related Suggestions

1. Safety is of paramount importance. Safety was discussed in a variety of contexts, from vehicular traffic to surveillance and site lines for students and staff and needs to be considered in all elements of the site plan. Suggestions to support a safe school site include:
  - Implementing CPTED principles and guidelines re: natural surveillance, natural access and natural territorial reinforcement.
  - Ensuring increased and consistent sight lines on the property, on all play and access space (front, sides and back);
  - Creating an emphasis on walk-ability and active transportation; and
  - Maximizing multiple access points and frontage when possible. To be clear on this point – multiple points of access to and from a school building are desired at the beginning and ending of the school day and at recess and lunch to allow the quickest and most efficient transfer of students in and out of the building as controlled by teachers on duty. Once school is in session however only one controlled access to the school is desired and this is preferred to be from a public street directly adjacent to the administration area of the school.
2. School programs and education should be top of mind. School sites should be designed to achieve the programmatic elements of the curriculum, including outdoor space for both recreation and related subjects. By focusing too heavily ingress/egress from school, it is easy to forget that the majority of the day is spent in the school. A focus needs to be kept on how to best use the space with students, in classrooms and using other school amenities.
3. The school as a community hub. There are opportunities to use site design to foster community building, resource sharing and collaboration. This includes making a space that is welcoming to parents and students, one that fosters mingling and social interactions. This can ultimately lead to sustainable behaviours, such as carpooling. Suggestions to support the development of the school as a community hub include:
  - Making the school visible and permeable to the community (the more visible entrances there are from the street the more welcoming the building, including proximity to street). Locate schools centrally in the community to promote its physical and functional prominence.



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- Creating easy access to shared community assets (i.e. accessibility and location of gymnasium).
  - Provide outdoor public spaces for congregation adjacent to internal community spaces (eg. gymnasium).
  - Promote evening programs that engage community use and create networks that enrich community life.
4. Maximize green space/Connection with School. This criterion came up frequently - the suggestion was broad-based, reflecting a strong interest in seeing all aspects of the site designed with maximum green space for active play and learning areas, recreation space, and natural play and learning spaces. Multiple entrances from the playground are strongly encouraged by the school, putting added emphasis on the strong relationship a school building has with the yard.
5. Parking and Access. While frequently discussed within the larger general topic of "Safety", many specific suggestions were made around how to best accommodate vehicular needs within the school site, including:
- Designing parking areas as flexible space, using permeable materials where possible, minimizing the amount of curbs and driveways that pedestrians have to cross.
  - Reducing the burden on the school to deal with cars (i.e. minimizing staff surveillance, maximizing alternative modes of drop-off using a combination of street and lay-bys).
  - Establish a clear separation between pedestrian and bicycle/vehicular/ loading areas to avoid conflicts.
  - Creating joint drop-off and pedestrian plans for schools in close range, as well as with community assets such as libraries.
6. Life-cycle of the School and Community. The importance of planning with future expansion and contraction in mind was raised frequently. Suggestions included:
- Designing for flexibility – buildings that are small, light and portable that could move throughout the city and region as needed;
  - Leasing out the school for a set number of years until the population changes; and
  - Creating schools around higher-density areas to reduce the effects of population shifts.
7. Provincial Funding Formula Encourages Sprawling Schools.

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### 3.0 Next Steps

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## Conclusions

The over-arching advice for school site-planning exercises was to improve collaboration between stakeholders – including developers, community players, representatives from school boards, municipal staff, transportation engineers, the Ministry of Education, Parks Departments, site and landscape architects, teachers and the school administration.

Several participants mentioned the impact that funding criteria and funding models have on site design, and as a result the ideas discussed at the workshop will likely be applied differently in different jurisdictions.

The meeting was wrapped up by thanking all participants for coming, and noted the rich and comprehensive nature of the discussion. The facilitation team committed to distributing the notes from the workshop for participant review.



2.23

## Appendix

2.24

City of Vaughan

Workshop on Suburban & Urban School Site Design & Building

Montgomery Sisam Architects | Victor Ford Associates | BA Consulting Group | SWERHUM

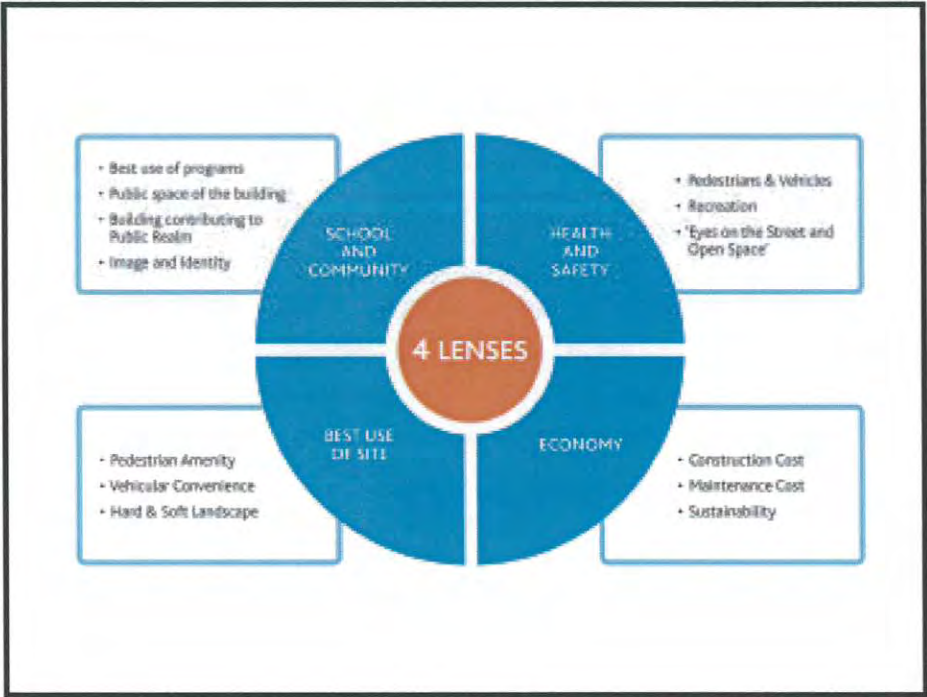
January 12, 2012

*It's*  
**COMPLICATED!?**





2.25



CASE STUDY  
SUBURBAN

Toronto District School Board  
**Meadowvale Sheppard Public School**

2.26

CASE STUDY - SUBURBAN

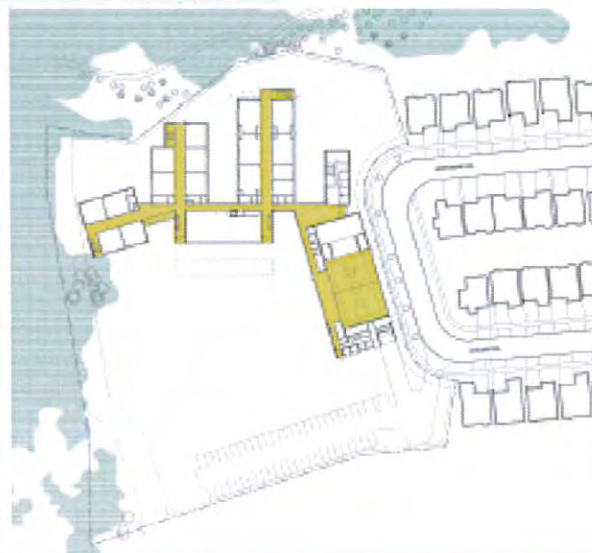


Toronto District School Board

Meadowvale Sheppard Public School

CASE STUDY - SUBURBAN

ARCHITECTURE



PREFERRED OPTION

- Building and entrance adjacent to sidewalk creating well defined street
- Parking at edge of site


Toronto District School Board

Meadowvale Sheppard Public School

2.27

CASE STUDY - SUBURBAN

ARCHITECTURE



**OPTION ONE**


- Building and entrance adjacent to sidewalk creating well defined street
- Compromise drop-off will relieve some traffic on street right-of-way

Toronto District School Board

Meadowvale Sheppard Public School

CASE STUDY - SUBURBAN

ARCHITECTURE



**OPTION TWO**

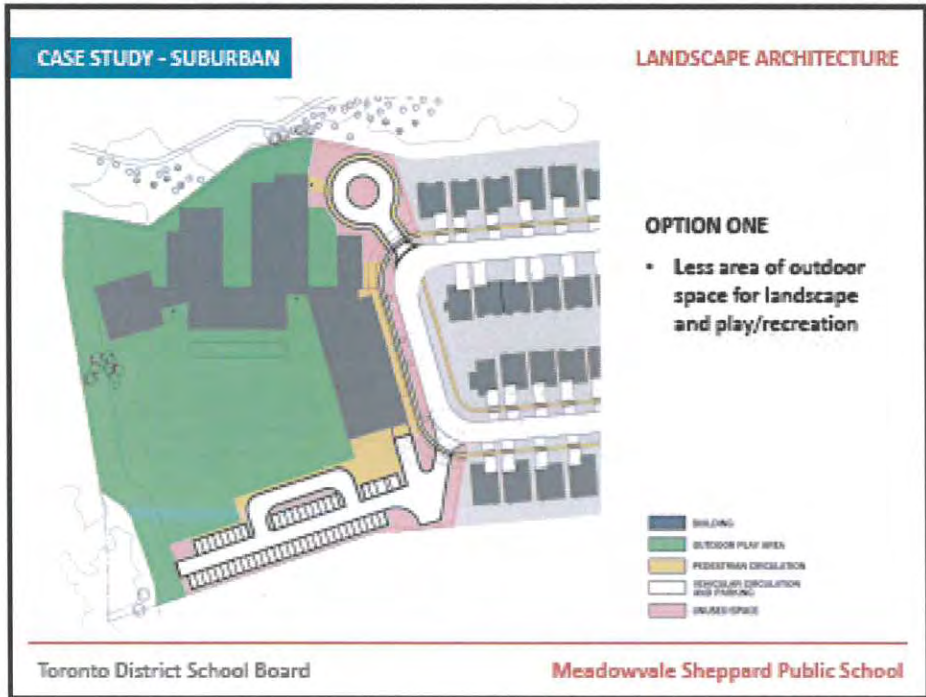
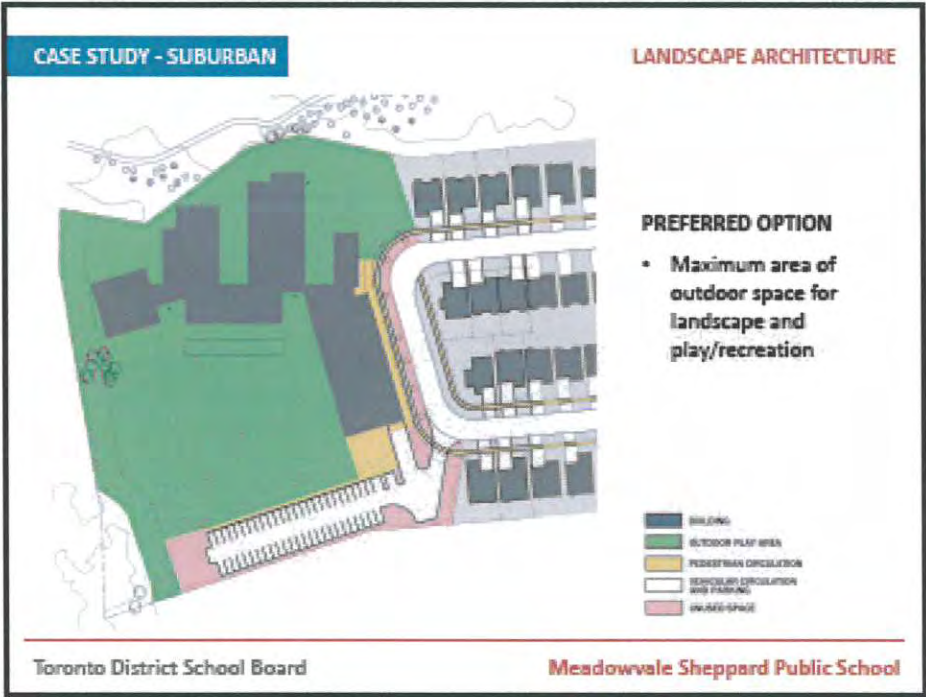
- Inferior relationship between building and street due to parking and traffic configuration

Toronto District School Board

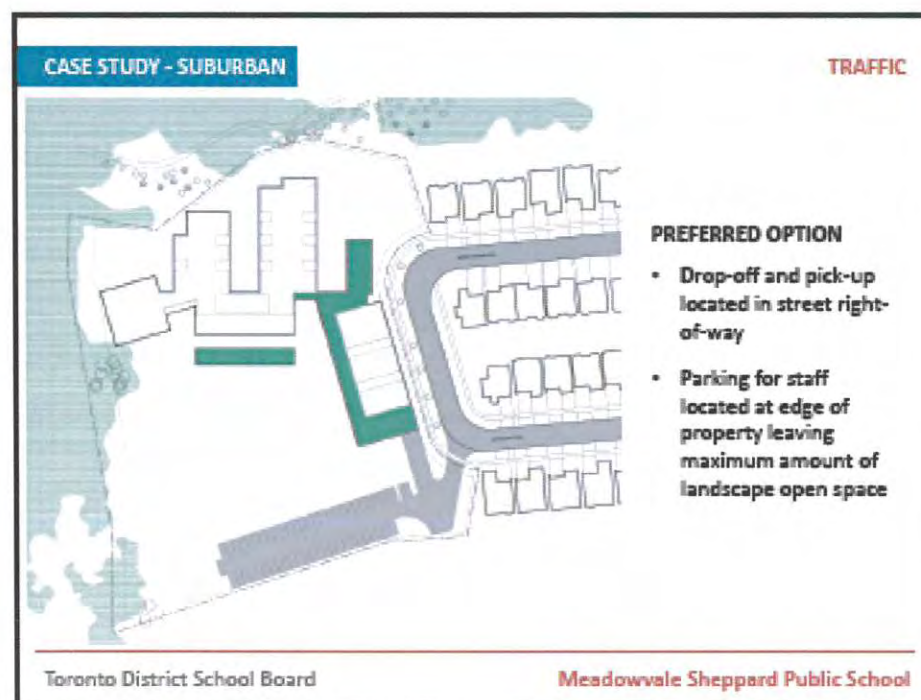
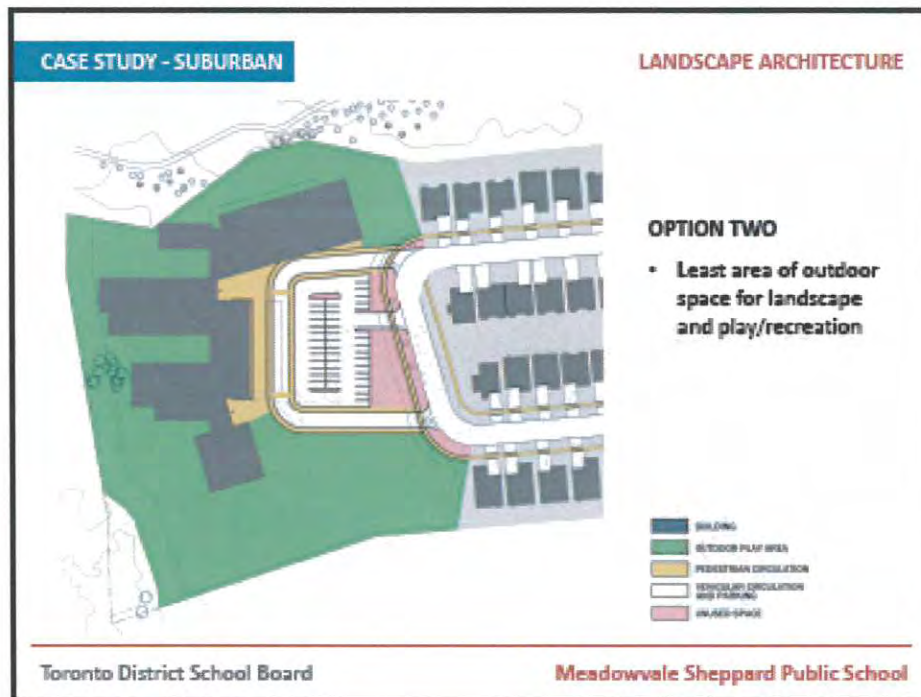
Meadowvale Sheppard Public School



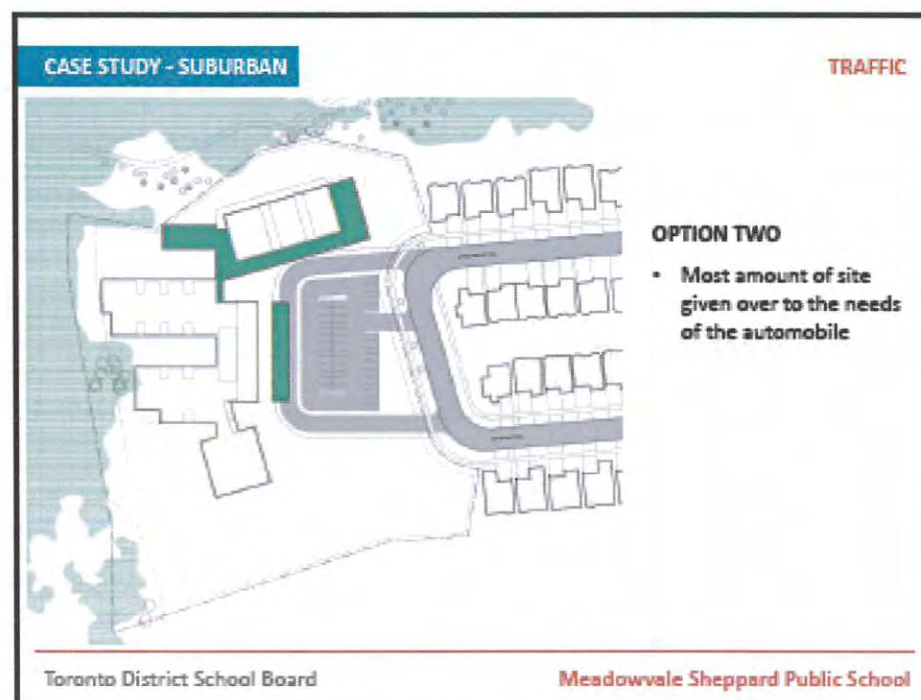
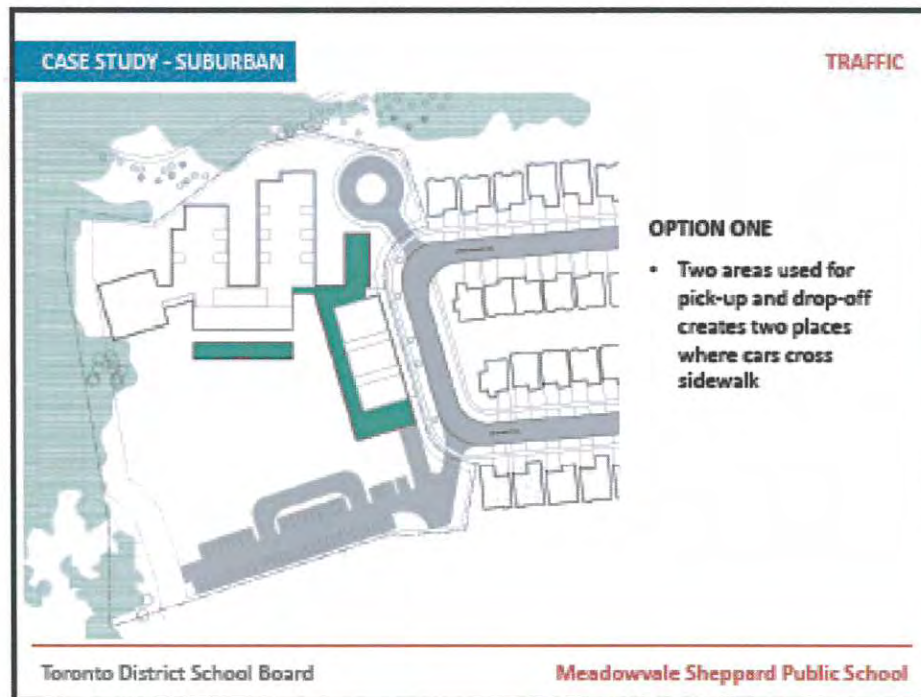
2.28



2.29



2.30



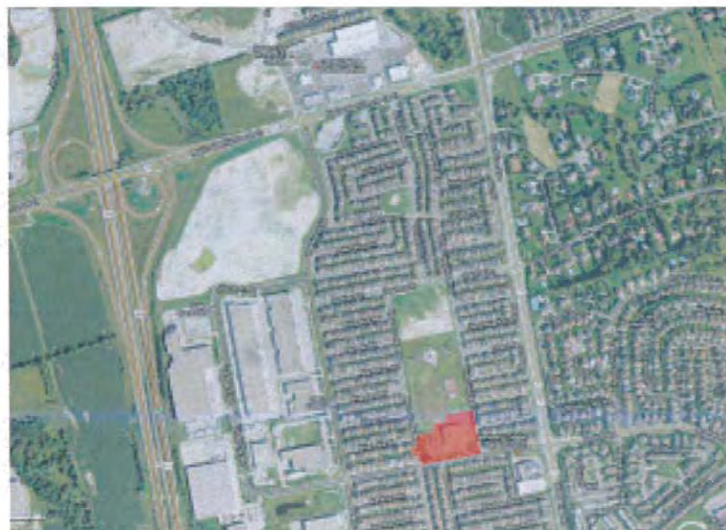


2-31

**CASE STUDY  
SUBURBAN**

York Region District School Board  
**Lincoln Alexander Public School**

**CASE STUDY - SUBURBAN**




York Region District School Board

**Lincoln Alexander Public School**

2.32

CASE STUDY - SUBURBAN

ARCHITECTURE



**AS BUILT**

- Note poor relationship between building and adjacent streets


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York Region District School Board

Lincoln Alexander Public School

CASE STUDY - SUBURBAN

ARCHITECTURE



**OPTION ONE**

- Front of building adjacent to sidewalk creating street wall
- Separate drive for drop-off

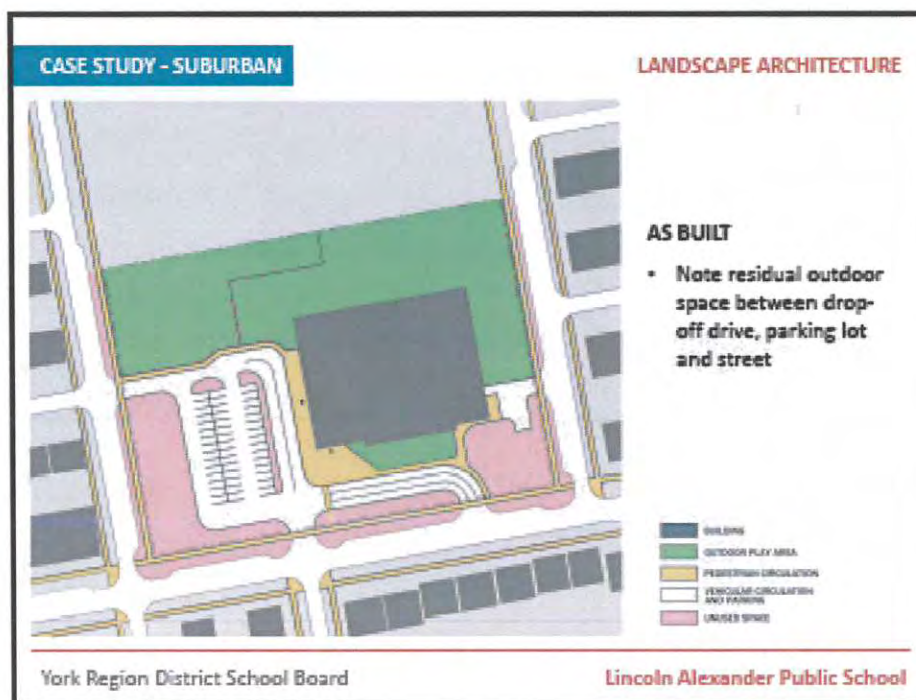
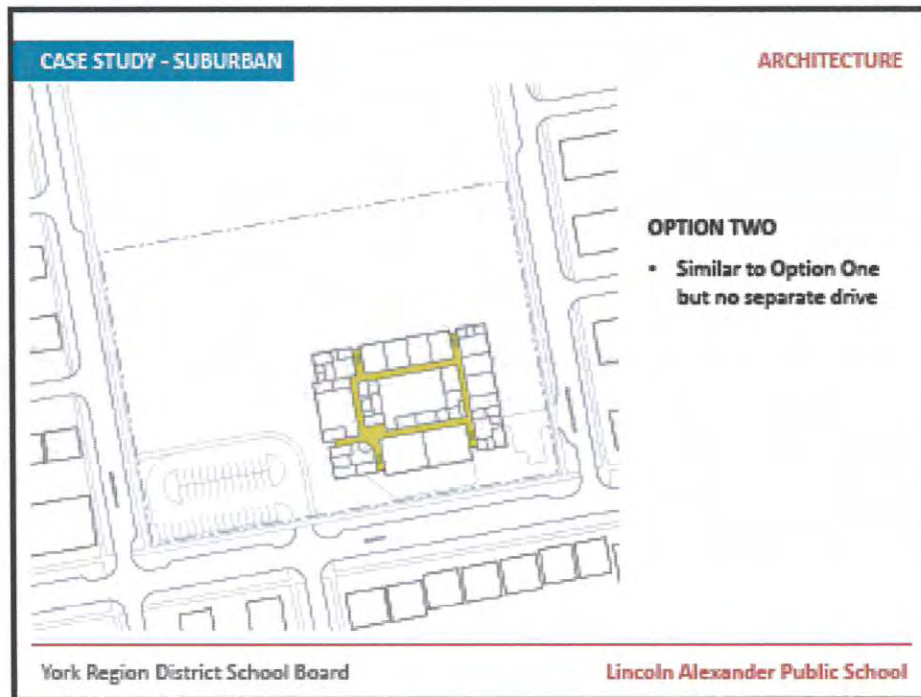
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York Region District School Board

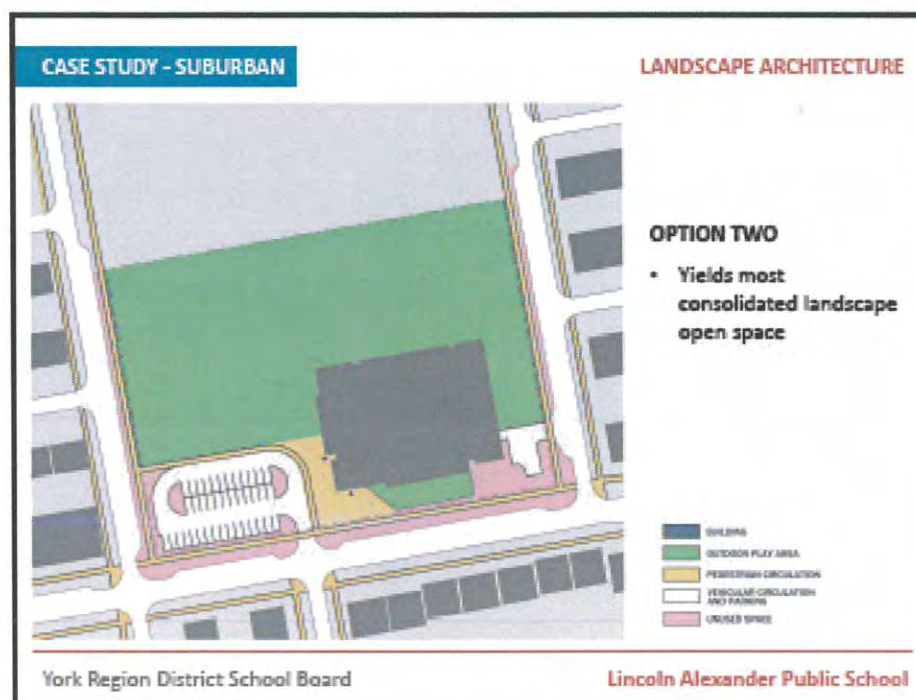
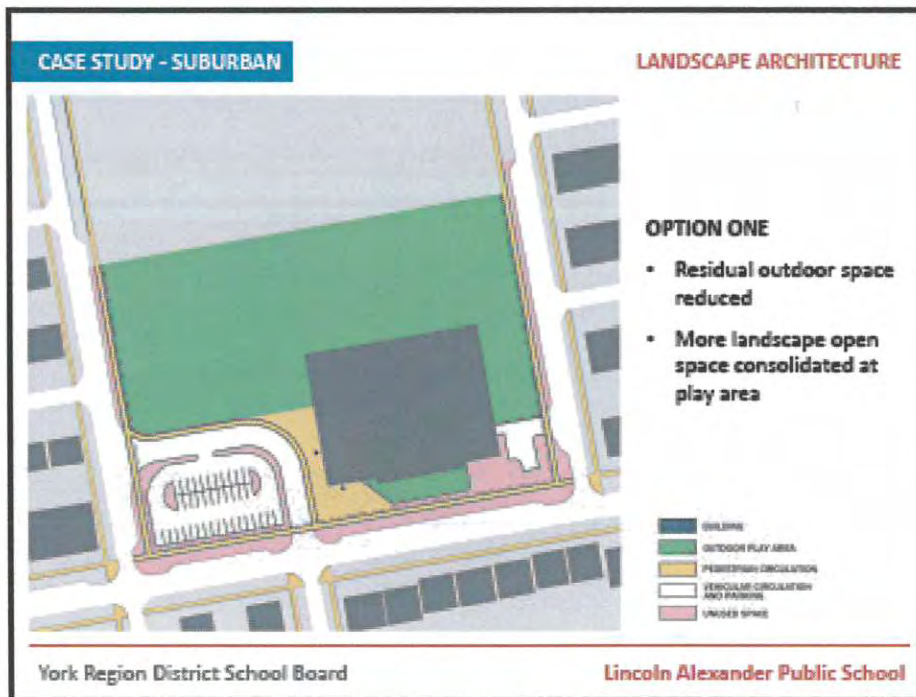
Lincoln Alexander Public School



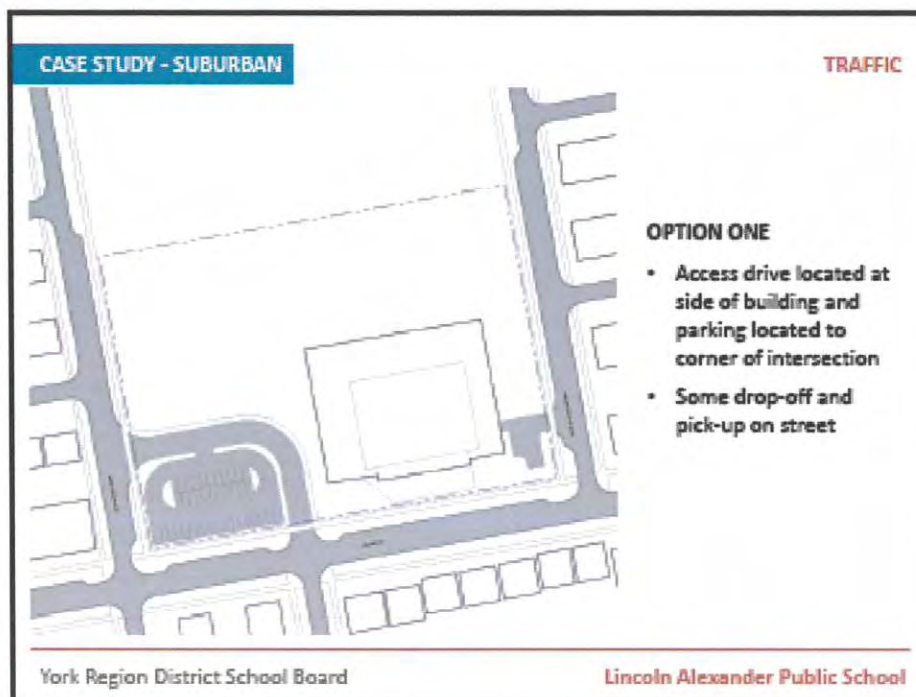
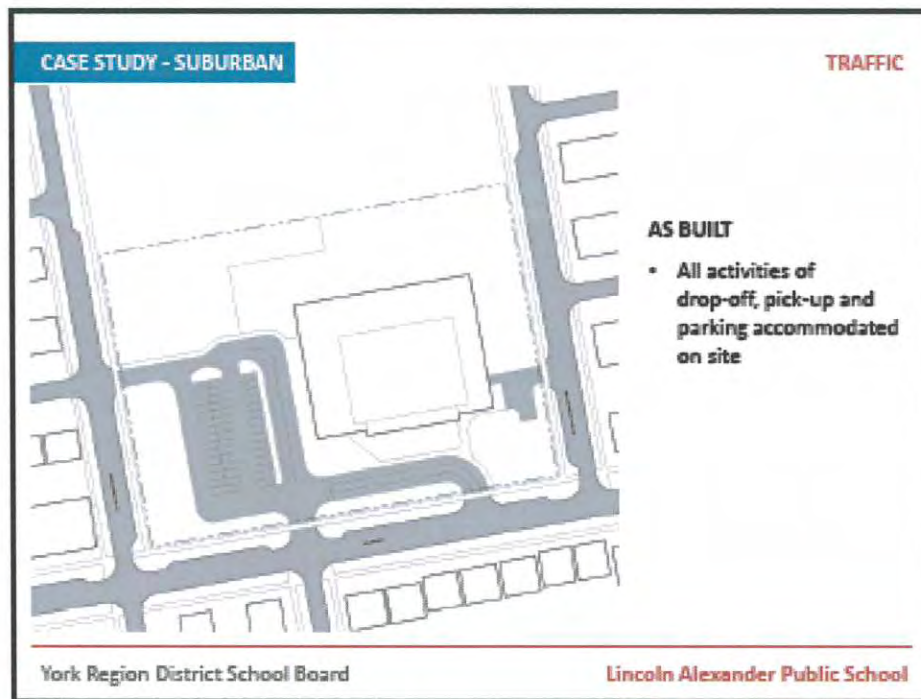
2.33



2.34



2.35






2.36

**CASE STUDY - SUBURBAN**

**TRAFFIC**



**OPTION TWO**

- Drop-off and pick-up occurs in drive aisles of parking lot
- Some drop-off and pick-up on street

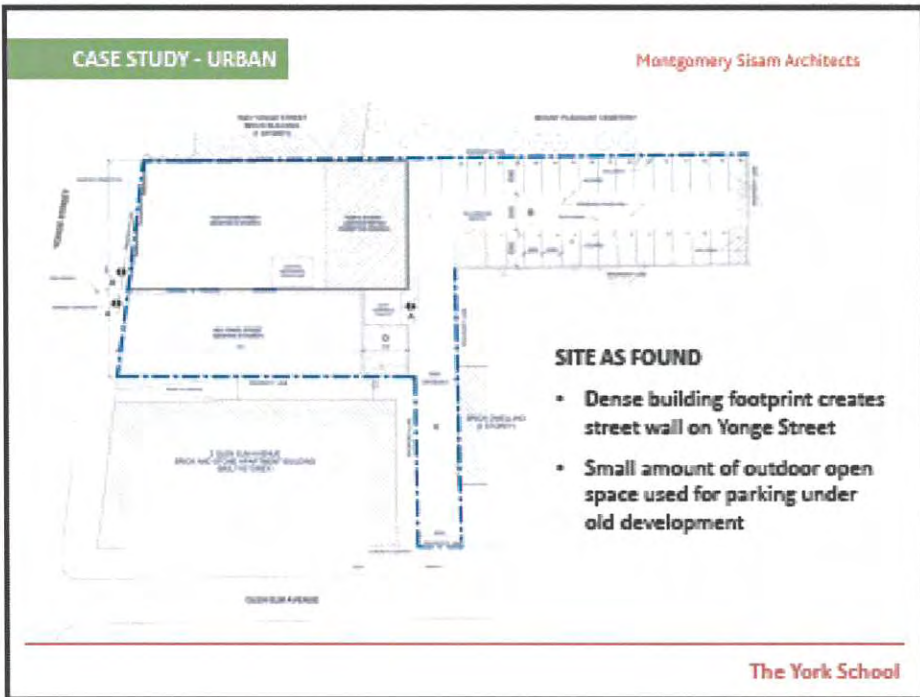
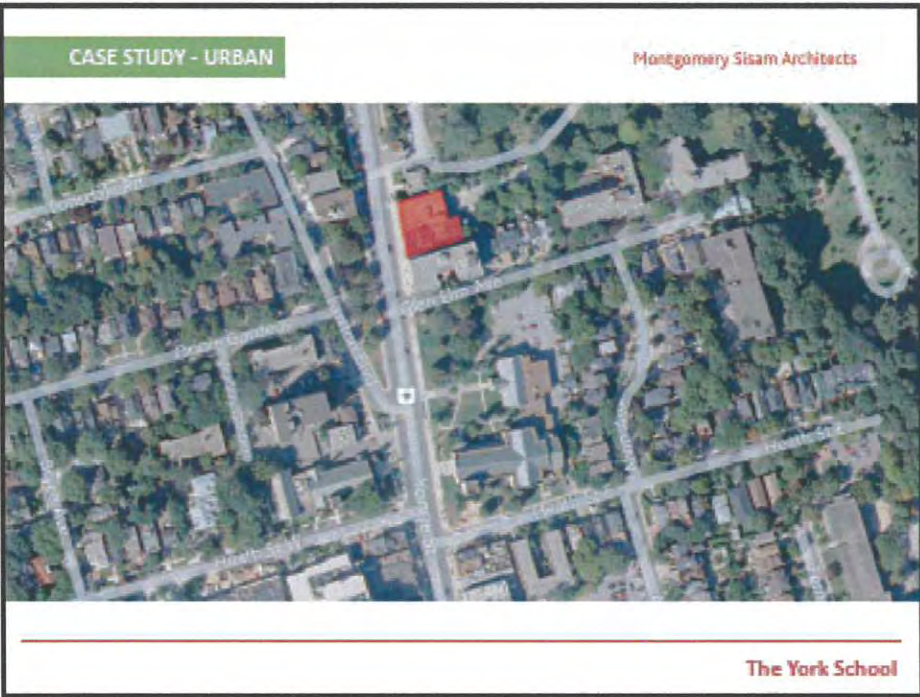
York Region District School Board

Lincoln Alexander Public School

**CASE STUDY  
URBAN**

**The York School – North Campus**

2.37



2.38

CASE STUDY - URBAN

Montgomery Sisam Architects



New landscape open space used by cars for drop-off and pick-up then gated and used by students for recreation.

The York School

CASE STUDY - URBAN

Montgomery Sisam Architects



A view of entrance at Yonge Street

The York School



2.39

CASE STUDY - URBAN

Montgomery Sisam Architects



View at rear showing children at play on surface also used for drop-off and pick-up

The York School

CASE STUDY - URBAN

Montgomery Sisam Architects



Hallway overlooking Yonge Street

The York School

2.40

CASE STUDY - URBAN

Montgomery Sisam Architects



The York School

CASE STUDY - URBAN

New gymnasium  
half underground with  
windows into  
outdoor play area



The York School



2.41

CASE STUDY - URBAN

Montgomery Sisam Architects



Dining hall over gymnasium

The York School

CASE STUDY  
URBAN

The School at Columbia University

2.42

CASE STUDY - URBAN



The School at Columbia University

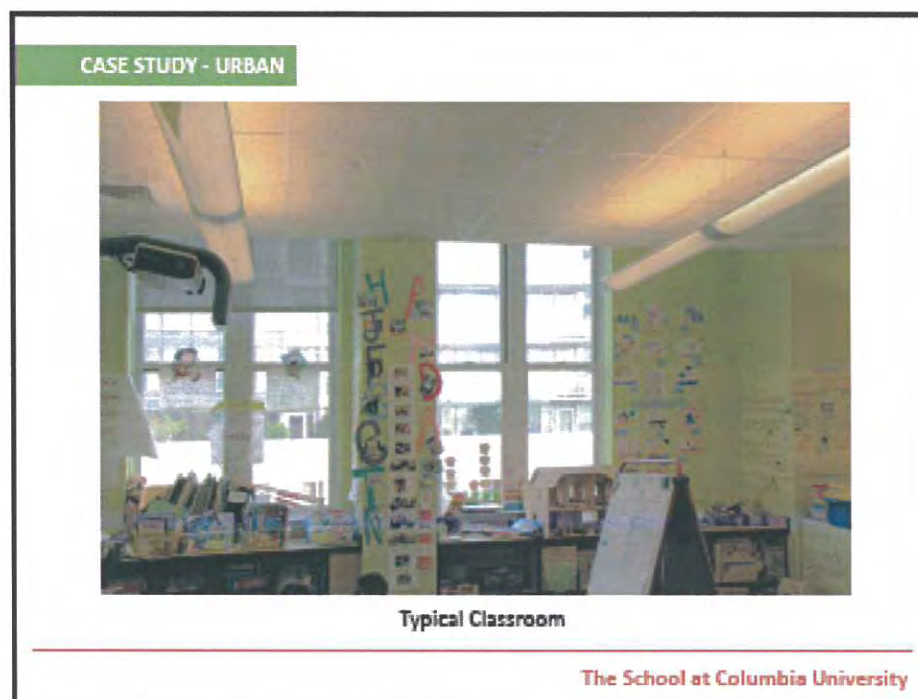
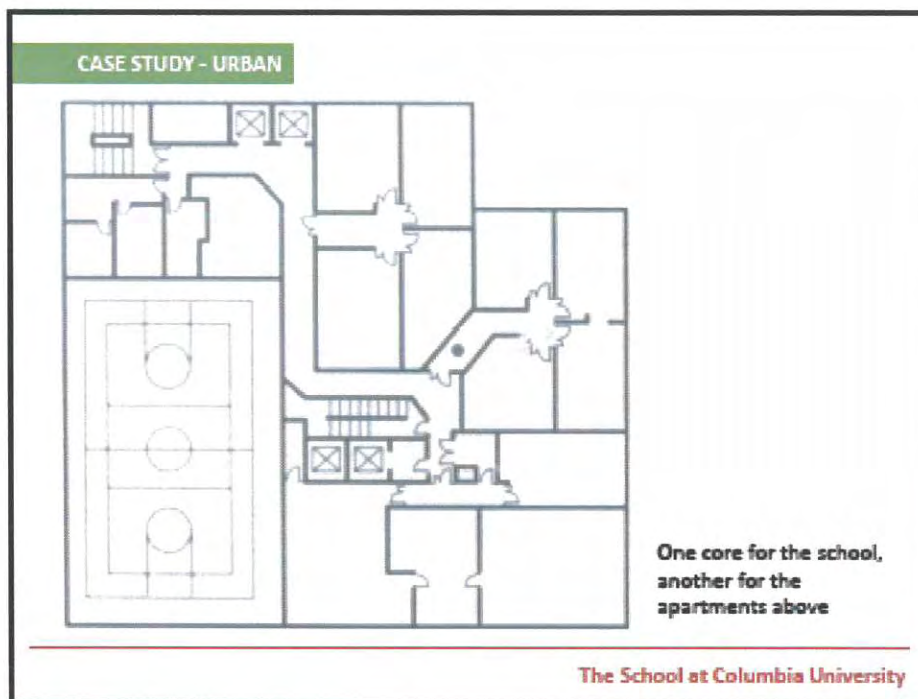
CASE STUDY - URBAN



The school occupies two floors of an apartment building in the Upper West Side of Manhattan. Note retail at grade

The School at Columbia University

2.43





2.44

CASE STUDY - URBAN



Gymnasium at level two and three

The School at Columbia University


CASE STUDY - URBAN



The School at Columbia University

2.45


CASE STUDY - URBAN



Cafeteria

The School at Columbia University

CASE STUDY - URBAN

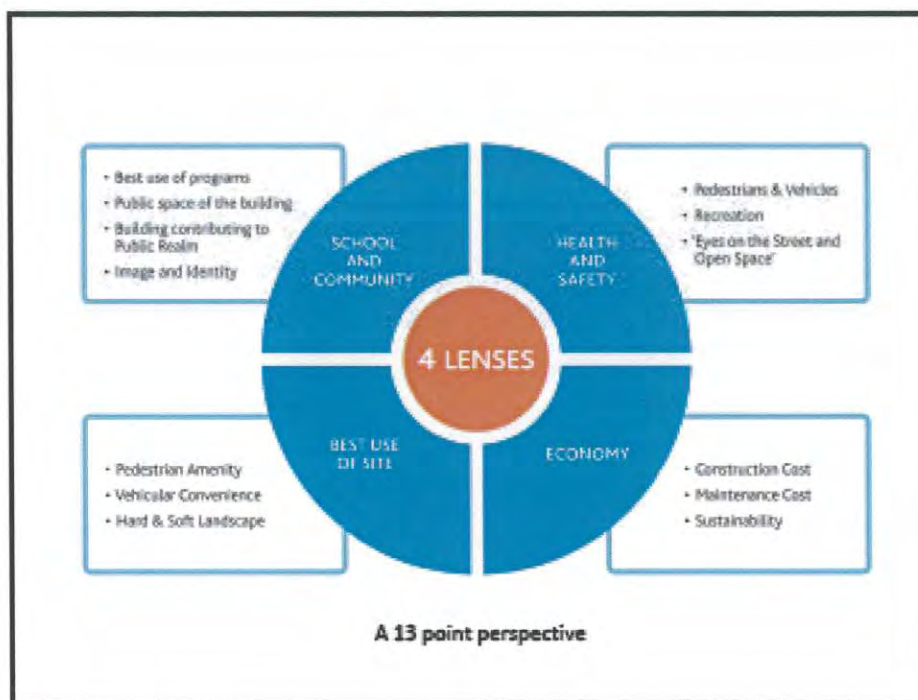


Outdoor play as one of two roof gardens

The School at Columbia University



2.46



### OTHER CONSIDERATIONS

- **Municipal Initiatives**  
Pedestrian Charters – Toronto Pedestrian Charter
- **Public Private Partnership Program**  
Active & Safe Routes to School – Green Communities Canada
- **School Programs**  
Active & Safe Routes to School – Halton District School Board  
"Walking Only" Schools – R.L. Robertson PS in Milton  
(Halton district School Board)

2.47



*Any questions?*

2.48

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