

TABLE OF CONTENTS		Page
SECTION 1.0 INTRODUCTION		3
1.1	Why the Design Standard Review Was Developed	3
1.2	The Initiation of the Design Standards Review	6
1.2.1	The Design Standards Review: A Collaborative Process	7
1.2.1.1	Committee Meetings	7
1.2.1.2	Department Interviews	7
1.2.1.3	New Community Development Bus Tour	8
1.2.1.4	City of Vaughan Neighbourhoods Tour	10
1.2.1.5	Municipal Standards Review	12
1.2.1.6	Stakeholders and Development Industry Workshop	12
1.2.1.7	Council Working Session	12
1.2.1.8	Development Community Meetings	14
SECTION 2.0 GUIDING PRINCIPLES FOR RESIDENTIAL DESIGN STANDARDS 15		
2.1	A Vision for the City of Vaughan	15
2.1.1	General Objectives	16
2.1.2	Attractive Street Character	18
2.1.3	House Lot Design	18
SECTION 3.0 DESIGN STANDARDS RECOMMENDATIONS		19
3.1	Design Standard Issues	19
3.2	Public Right-of-Way	20
3.2.1	Relationship Between Public and Private Realm	20
3.2.2	Street Tree Locations	22
3.2.3	Minimum Frontages on Culs-de-sac and Angle Bends	23
3.2.4	Rear Lanes	26
3.2.5	Above Grade Utility Locations	26
3.2.6	On-Street Parking	28
3.2.7	Community Entrance Feature Locations	28
3.2.8	Community Mailboxes	31
3.2.9	Stormwater Management Ponds	32
3.3	Lot Design Standards (Private Right-of-Way)	34

3.3.1	Balanced Lot and House Design	34
3.3.2	Zoning Recommendations: Single Detached, Semi-detached and Townhouses	37
3.3.2.1	Minimum Front Yard Setbacks	37
3.3.2.2	Fencing on flankage Lots	40
3.3.2.3	Minimum Interior Side Yard Setbacks	40
3.3.2.4	Minimum Exterior Side Yard Setbacks	42
3.3.2.5	Minimum Rear Yard Setbacks	42
3.3.2.6	Garage Dimensions and Projections	43
3.3.2.7	Minimum Lot Depth	43
3.3.2.8	Maximum Building Height	43
3.4	General Residential Recommendations	46
3.4.1	Wide-shallow Lots	46
3.4.2	Semi-Detached Lots	46
3.4.3	Townhouse Lots	47
3.4.3.1	Townhouses (garage facing public street)	47
3.4.3.2	Rear Lane Townhouses	49
3.4.4	Corner Lots	49
3.4.5	Parking: Minimizing the Presence of Garages and Driveways	51
3.4.6	Attached Garages	53
3.4.7	Driveways and Tandem Parking	53
3.4.8	Lot Grading and Drainage	55
3.4.9	Permitted Yard Encroachments	55
3.5	Design Standards Implementation	56
3.5.1	Coordination Between Departments	56
3.5.2	Revisions to the Zoning By-law	56

1.0 INTRODUCTION

The Design Standard Review is intended to guide the standards for the future design and construction of residential communities in the City of Vaughan. The Design Standards Review Study was initiated in response to Council resolution on September 11, 2000 regarding issues relating to residential building activity since the approval of OPA 400. The issues identified relate predominantly to small lot residential including single detached, semi-detached and townhouse residential building forms. The Design Standards Review examines elements within the public and private rights-of-way and the interface between the two.

1.1 Why the Design Standard Review Was Developed

A significant amount of development in the City of Vaughan will continue to be in the form of new residential development. The quality of these new areas will have a profound impact on the character of the City. This impact is not only related to the quality of new neighbourhood design, but the manner in which residential subdivisions 'fit into' their surrounding context including urban areas, open space and rural landscapes.

City of Vaughan has been committed to an ongoing improvement of community and neighbourhood design through standards developed for the public realm including streets and open space areas and for the private realm including built form and site design. The policies adopted in OPA 400 (1994), the revisions to Bylaw 1-88 (August 25, 1997) and the amendments to the Urban Design Guidelines of OPA 400 have contributed to the development of many highly desirable new residential communities in the City. A significant amount of these new communities contain smaller lots in keeping with a desire to maximize the use of land and reduce the cost of housing and associated services.

As the objectives of more compact residential form have been applied in conjunction reduced zoning standards, generally a larger house in proportion to the lot has been permitted. The application of reduced zoning standards within the public and private right-of-way has created concerns about the future of residential development when applied to small lot development (generally 12.0 metres and less). **(Figures 1 & 2)**

The Design Standards Review process identified the following primary issues:

- Proportion of dwelling to lot size
- Lot drainage
- Front, side and rear yard encroachments: front porches, steps, decks, and utilities
- Above grade utility locations
- Boulevard and sidewalk locations
- Parking treatments including garage and driveway design
- Stormwater management pond design

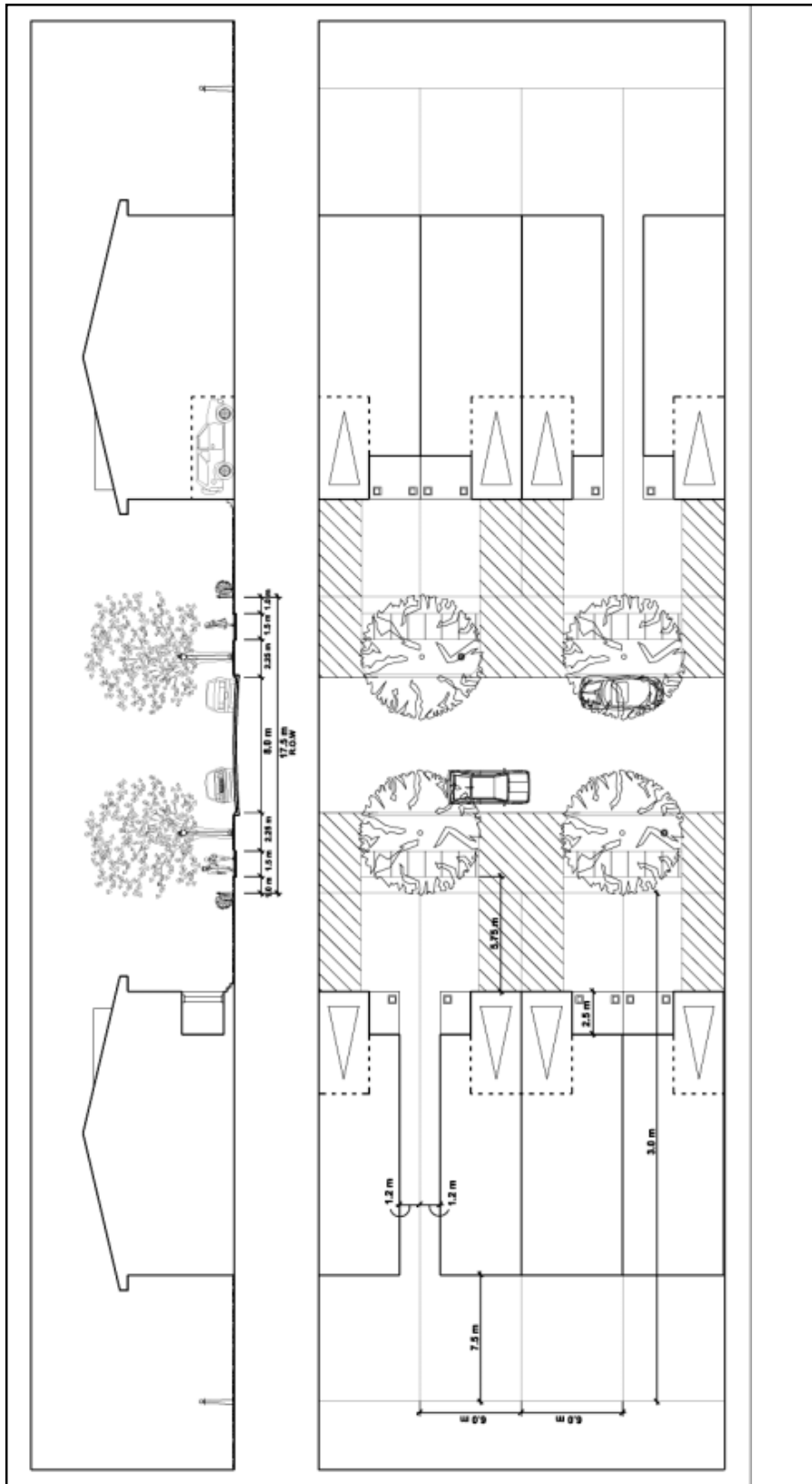


Figure 1 Current standards: too much house on the lot, garage and driveway dominated ont yards

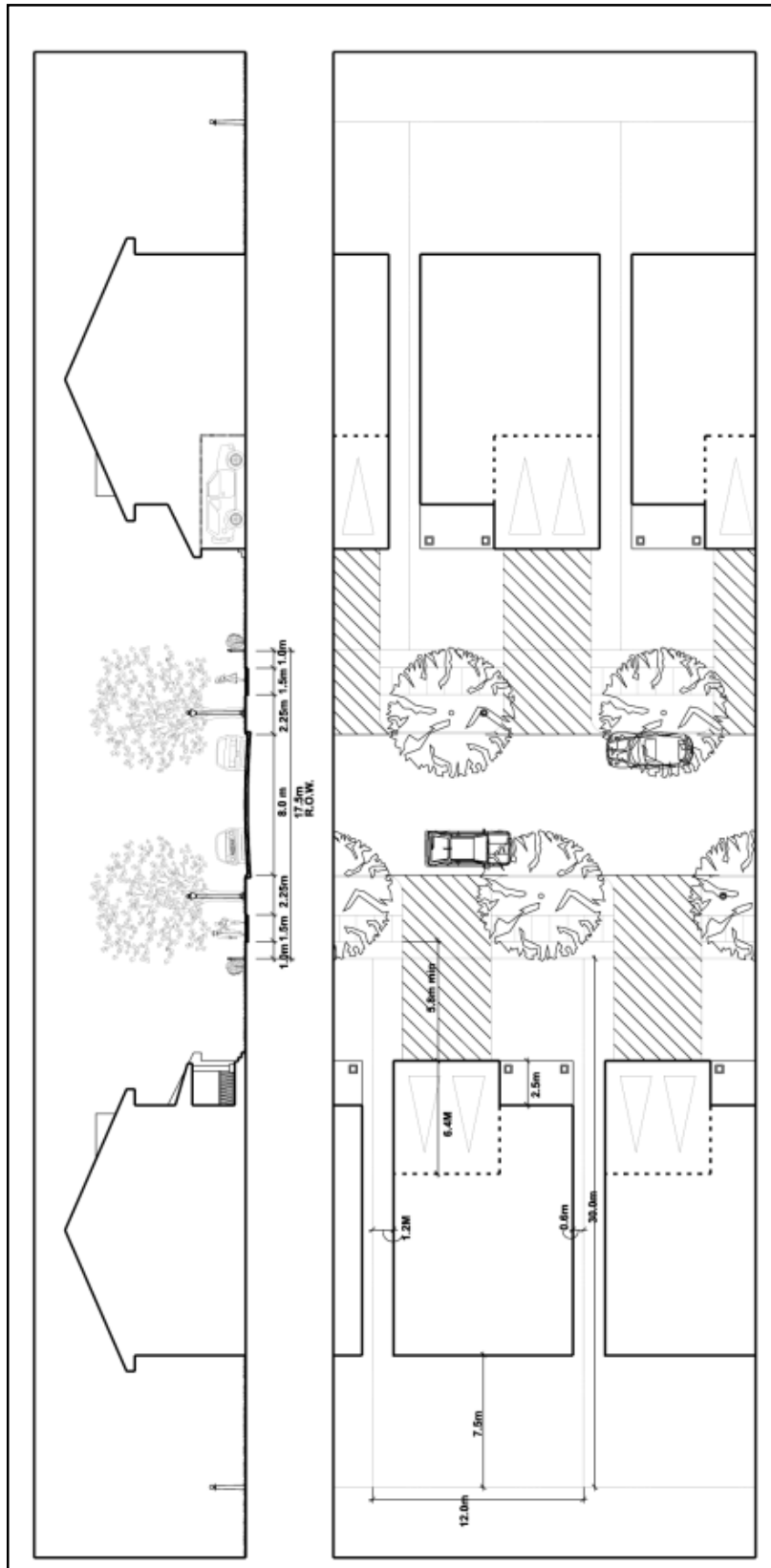


Figure 2 Wide shallow lot

1.2 The Initiation of the Design Standards Review

In response to the evolving issues regarding recent residential development, Council adopted the City of Vaughan Design Standards Review Study, OPA 400/600 Terms of Reference on October 10, 2000. The City retained Brook McIlroy Inc. and Totten Sims Hubicki Associates to undertake the urban design and engineering components of the Study and to work with the Design Standards Review Committee comprised of senior management members of the Community Planning, Urban Design, Growth Management, Engineering, Building Standards, Forestry, Legal Services and Fire Departments. The objectives the Study were identified to:

- Enhance quality of life and overall residential design aesthetics, while minimizing operational requirements;
- Review the City's current urban design guidelines, road right-of-way standards, operational procedures and policies and make recommendations for changes as appropriate;
- Obtain input from the public and stakeholders, special interest groups and the development and building industry;
- Integrate the design solutions of each department/discipline into a comprehensive set of "corporate" design standards;
- Have regard for operational procedures and requirements such as snow clearance, garbage removal, site services and boulevard and tree maintenance.
- Have regard for the public safety and coordinating design standards of CPTED (Crime Prevention Through Environmental Design) principles;
- Have regard for accessibility issues.

Decisions to revise existing standards have evolved throughout the process of the study and through committee, public and stakeholder input. At the outset of the Design Standards Review a list of design standard issues was compiled. The topics listed for review included:

Right-of-way Design Standards (Public Realm)

- Boulevard and sidewalk design
- Tree locations
- Above and below grade utility locations
- On-street parking
- Community feature locations
- Entrance feature locations
- Greenway Designs
- Community Mailboxes
- Stormwater management design

Lot Design Standards (Private Realm)

- Minimum building setbacks including location of porches, air conditioners and meters.
- Wide shallow lot designs
- Townhouses units permitted in a row
- Corner lot designs
- Garage and driveway dimensions and locations
- Lot grading and drainage

Design Standards Implementation

- Coordination between departments
- Purchaser's information (e.g. sales pavilions)
- Urban Design Guidelines and Zoning Regulations
- Block Plan and Site Plan Approval Process

1.2.1 The Design Standards Review: A Collaborative Process

1.2.1.1 Committee Meetings

Regular committee meetings were held with the Commissioner of Planning and Urban Design and Committee representatives comprised of Department Directors and Managers from the Community Planning, Urban Design, Engineering, Building Standards, Growth Management, Forestry, Fire and Legal Services Departments. The Committee and sub-groups of the Committee met on a regular (often weekly) basis to collectively discuss the issues and propose recommendations for standards improvement. Based on the comprehensive list of residential design issues, a Design Standards List was formulated to create a working document that could be used as a tool for input and discussion throughout the design standards review process. The Design Issues and Standards List continued to be a valuable source of input during the public consultation process.

1.2.1.2 Department Interviews

Within the first month of the Standards Review, individual interviews were held with department representatives to discuss the topics outlined in the Design Issues and Design Standards List.

1.2.1.3 New Community Development Bus Tour

Following the department interviews, a half-day bus tour was organized for members of the Standards Review Committee to visit a series of new residential communities in the Town of Markham and the Town of Oakville.

(Photos 1 & 2) Representatives of the Town of Markham conducted tours of the Cornell and Legacy communities, and a representative of the Town of Oakville conducted a tour of Morrison Common and Oak Park (Uptown Core), including the first residential phases of development. These new communities contained elements of residential and community design that served as valuable points of comparison to the City of Vaughan. The key issues discussed during the bus tour included.



Photo 1: Morrison Common Townhouses facing the Village Green



Photo 2: Legacy, Markham: single family corner lot

Variety of built form: The variety of housing forms were considered to be a positive aspect of the community, in contrast to community examples where the same dwelling type is repeated consistently with only minor variations in roof lines or elevation details.

Pedestrian oriented streets: The lane based neighbourhoods resulted in more pedestrian oriented streetscapes where a stronger connection between the front of the house and the public sidewalk was provided through front porches, highly landscaped front yards, and house forms that orient principal rooms to the street. **(Photo 4)**

Front Yard Garages: Where garages were attached to the house in the front yard, the preferred relationship was when the garage was recessed behind the front wall of the house. **(Photo 5)**

Landscape treatments: Streets consistently lined with street trees were considered to contribute to a strong sense of quality to the overall image of the street.

Rear Laneways: Concern for lane-based communities was generally expressed with respect to emergency access, maintenance, cost, and servicing and safety issues. **(Photo 6)**

Stormwater Management: The stormwater management pond at the Legacy community in Markham was seen as a positive example of how ponds can be integrated into communities and neighbourhoods. The pond at Legacy has a significant amount of direct frontage through a single loaded road on the perimeter of the pond. The variety of pond edge conditions allows for overlook opportunities on the steeper embankments and direct pond access where the pond slope is gradual and shallow. A walking/recreational trail is included along the top of the pond embankment, and fronts directly on to the pond.

1.2.1.4 City of Vaughan Neighbourhoods Tour

Several tours of recently constructed neighbourhoods in the City of Vaughan were visited including Block 17, Block 32 West, Block 39 and the Woodbridge Expansion Area. The tour provided the opportunity to examine the residential community issues within a series of recently built and occupied communities. The following images illustrate some of the issues that would be reviewed during the Design Standards Review process. **(Photos 7-9)** A series of additional images illustrate the positive image of many of the City's new residential communities. **(Photos 10- 12)**



Photo 3: Morrison Common, Oakville: Front porches and tree-lined sidewalks contribute to a strong relationship between the street and house.



Photo 4: The Orchard, Burlington. A strong relationship between the house and garage is recessed behind the front wall of the house.



Photo 5: Access, safety and maintenance issues



Photo 6: The design standards address the placement of the garage, driveway and above-grade utilities.



Photo 7: Encroachment into minimum standard side yards. Visibility of above-grade utilities.



Photo 8: Small rear yards limiting drainage and amenities (ie. decking, landscaping)

1.2.1.5 Municipal Standards Review

A review of the following Municipalities regarding current design standards was undertaken.

- Richmond Hill
- Markham
- Mississauga
- Oakville
- Kitchener
- Niagara-on-the-Lake

The common issues identified throughout the municipal review included:

- The visual dominance of the street-facing garage due to the projection of the garage and its proportion to the principle building façade.
- The lack of habitable living space at the front of dwellings.
- The dominance of driveways within the front yard and at the street edge, minimizing opportunities to landscape the front yard, plant street trees, locate above grade utilities and street furniture and provide on-street parking.
- Laneways and their problems relating to emergency access, personal safety, adequacy of width, servicing and maintenance.
- Stormwater Management Ponds as community amenity areas and issues related to public use, access, safety and maintenance.

1.2.1.6 Stakeholders and Development Industry Workshop

A workshop for community stakeholders and members of the development industry was held on December 5th, 2000 to provide an opportunity for comment and input into the direction of the Design Standards Review.

(Figures 3 & 4) Following a presentation by the consultant, a workshop was held in which groups of approximately ten people answered a questionnaire and participated in a design exercise. The design exercise included residential plans of single, semi-detached and townhouse dwellings. The participants were asked to identify design issues and comment on any deficiencies in the residential layouts.

1.2.1.7 Council Working Session

A Council Working session was held on January 30th to present the current direction of the Design Standards Review and to obtain input and direction from Council. Council supported the general direction of the Design Standards Review. Council recommended that the Committee and consultants continue work on developing and refining the Design Standards recommendations. Council further recommended that the use of laneways and wide shallow lot development should not be permitted unless deemed necessary under specific circumstances.

Photo 9: City of Vaughan. Well designed corner houses contribute to the overall impression of the street and neighbourhood.



Photo 10: City of Vaughan. A variety of house forms with attached garages facing the street can create an attractive streetscape image.



Photo 11: City of Vaughan. Where the house proportion is well balanced with the garage, opportunities to plant street trees and landscape the front yard are increased.



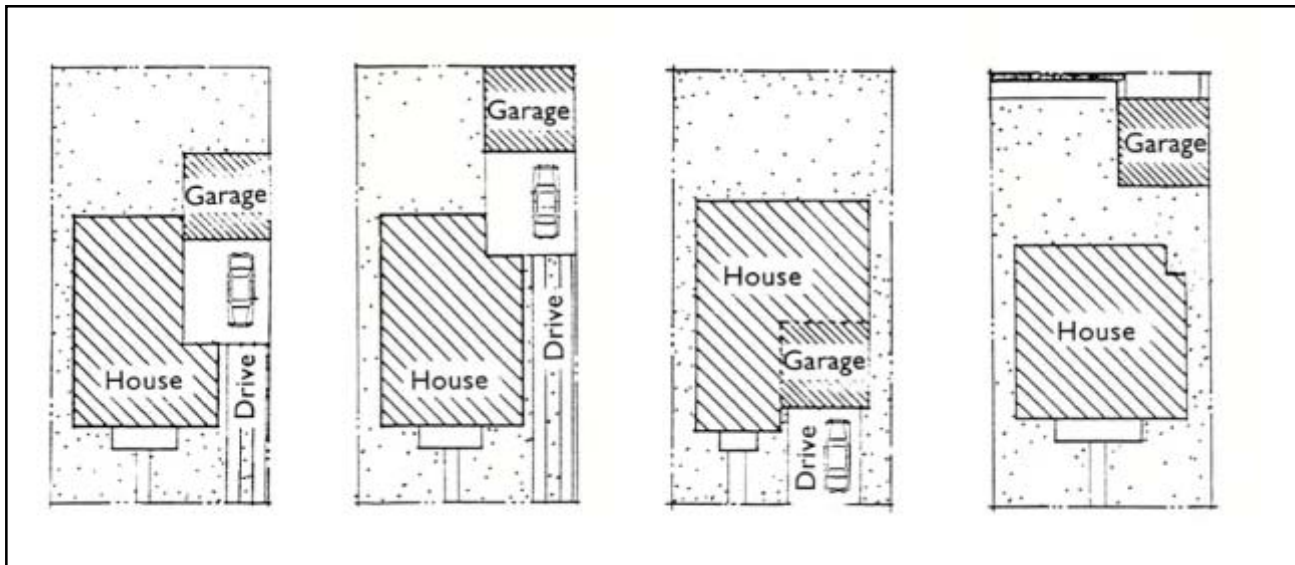


Figure 3: House and garage relationships, plan

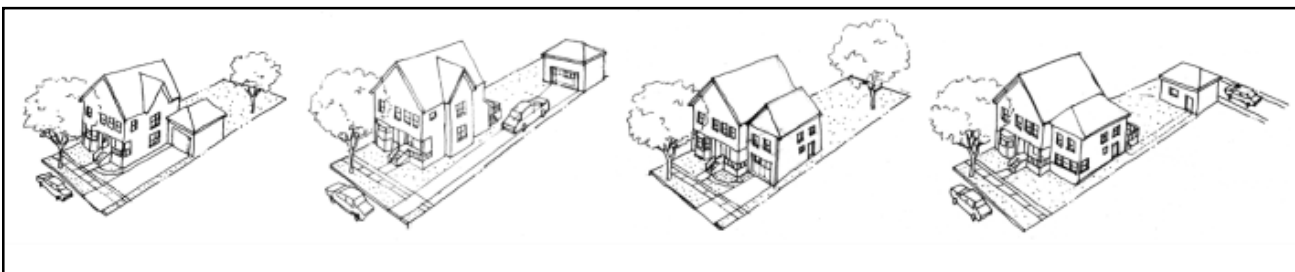


Figure 4: House and garage relationships, axonometric

1.3.1.8 Development Community Meetings

A recommendation was put forward by Council in March, 2001 to extend the Design Standards Review process to include members of the Development community and their representatives in discussions relating to the Draft Table A Zoning Recommendations and the design recommendations contained in the Draft Design Standards Review document, May 22, 2001. These series of approximately five meetings provided the opportunity for detailed discussion and consideration of development community concerns.

2.0 GUIDING PRINCIPLES FOR RESIDENTIAL DESIGN STANDARDS

2.1 A Vision for the City of Vaughan

Establish a Community Framework Plan

This standards review has developed the design parameters that can collectively shape a community framework plan for future development. In order to visualize the potential of the overall community vision, the creation of a community framework plan (or master plan) typically illustrates those development projects that are currently being considered, as well as future developments and places them within the overall context of creating a significant new community area. The Community Framework Plan provides a coordinated illustration of the major elements of the community including buildings, streetscapes, walkways, parkland, open space and natural features. The Framework Plan is not a fixed or finalized plan, but it serves as both an illustration of design principles and an important point of reference for the ongoing evaluation of development proposals.

The guiding principles for the recommended design standards include:

a) Variety of Architectural Expression

The City of Vaughan has a variety of residential, commercial and public use building types and architectural expressions within each type. The result is a rich and varied building fabric that has evolved over the City's history. To ensure an interesting building fabric with diverse residential opportunities, a variety of architectural expressions and a mixture of building types are recommended. **(Photo 13)**

b) High Quality and Consistency

Buildings must demonstrate a high quality of architectural design appropriately applied to its context. **(Photos 14 & 15)**

c) Human Scale and Safety

The design and location of residential building elements including porches, entrances, windows and building projections should be scaled and detailed to support the comfort and safety of pedestrian activity between the public and private realm.

The recommendations for residential design are based on the following design objectives.

2.1.1 General Objectives

- a) Wherever possible, maximize public access and visibility to stream corridors, parks, stormwater management ponds, woodlots and other open space areas. For example, parks should have at least two street frontages to provide access and visibility of the entire area. This can be achieved through reasonable proportions of single loaded road and direct frontage by adjacent housing. **(Photos 13 & 14)** The effect of back lotting privatizes the public enjoyment of these scenic community amenity areas.



Photo 12: A variety of house forms and styles contributes to a memorable impression of the neighbourhood



Photo 13: Housing that is connected to neighbourhood parks and open space helps to create a sense of neighbourhood enclaves.



Photo 14: The garage and house can coexist through appropriate transitions of scale



Photo 15: Legacy, Markham. Housing front onto a single loaded road adjacent to a woodlot

- b) At an arterial or open space edge where a feature road such as a cul-de-sac or open crescent is used, the buildings on the flanking lots should front onto the street as well as the edge condition, including entry and porch treatments.
- c) Access to parking and/or garages should generally be from the street, and only where required from a rear lane.
- d) A variety of dwelling types and front yard building setbacks should be integrated within neighbourhood blocks to contribute to a diverse and distinct neighbourhood image. A minimum setback of 4.5 metres will provide for a variety of treatments including front porches and bay windows in the building street wall.
- e) A sub-neighbourhood area may be distinguished by a dominant housing type, provided there is some intermixing of dwelling types and a variety of visible building elements and materials within each block.

- f) Higher density housing should be generally placed along arterial, collector or other primary roads, as well as around open spaces and at the end of blocks.
- g) Front porches or covered entrances are strongly encouraged as a transitional area between the principle dwelling and the front yard to provide both visual interest to the building and opportunity for informal social activity contributing to casual surveillance and safety on the street. Encroachments into the front yard setback should encourage the provision of porches.
- h) Rear yard porches or decks are encouraged in the rear yard provided that the encroachment of these elements allow for a reasonable rear yard amenity area (approximately 50 square metres). Trellises and canopies should be used to provide privacy between dwellings and weather protection.
- i) Dwellings on corner and flankage lots, gateways and at the terminus of streets should employ building elements and designs that emphasize their visibility and potential role as feature or orienting structures within the community.

2.1.2 Attractive Street Character

- a) A variety of street and block configurations to contribute to a sense of orientation and place.
- b) Residential design in which lot sizes, house types, building types, materials and colours contribute to visual interest and variety within a block, in contrast to subdivisions where the same house type is repeated for an entire block.
- c) A variety of setbacks that contributes to the character and visual interest of the streetscape.
- d) Above grade services that are located with the least physical disturbance and visibility within the public realm.
- e) Streets that are consistently lined with street trees on both sides. Tree monocultures with respect to potential disease should be considered in the consistent use of one species.
- f) Community entrance features including walls and elements within central street medians that through their design and location signify their role as significant community elements.
- g) The predominant use of a modified street grid system, minimizing the use of culs-de-sac to areas where circumstances such as topography or the desire to preserve natural features warrants their use.
- h) The use of laneways where their use benefits the design of the community, its streets and the provision of parking on private property.

2.1.3 House and Lot Design

- a) A strong public face that encourages actively lived-in areas of the house accentuated by front entrances, front steps, porches and windows and a variety of rooflines. Active use of principle rooms and areas within the front yard facing the street will assist in neighbourhood safety through increased surveillance opportunities of the street.

- b) Garages and driveways that are subordinate to the house and lot design. In contrast to houses where the garage is placed forward of the front wall of the house, and is often the widest element of the front façade, the garage should be set back from the front wall and be scaled to provide a balance between the proportion of the garage to the overall width of the house. Similarly the driveway should not dominate the front yard.
- c) Dual frontage on corner lots that give expression to the two street frontages through the use of wrap around sunrooms and front porches, projecting bay windows and side entrances.
- d) Privacy fencing where it is used to screen the backyard facing the side street, is minimized in length.

3.0 DESIGN STANDARDS RECOMMENDATIONS

The following section and Table A (page 21) outlines the current standard issues for which the Design Standard Recommendations have been made. The Design Standards Recommendations focus on the creation of high quality, integrated residential neighbourhoods that focus on creating a high quality of house and streetscape design.

The Design Standards Recommendations are intended to provide:

- direction for the revision of residential zoning standards;
- design direction for the City's Urban Design guidelines and other standards related to residential site design and building recommendations;
- design parameters for the private and public sector in preparing development options;
- City staff with a framework for reviewing development applications.

3.1 Design Standard Issues

The following lists the current design standard issues for which design standards have been recommended.

Streetscape Design Standards (Public Realm)

- Boulevard and Sidewalk Design
- Street Tree Locations
- Minimum Frontage on Culs-de-Sac and Angle Bends
- Rear Lanes
- Above and Below Grade Utility Locations
- On-Street Parking
- Community Entrance Feature Locations
- Greenway Designs
- Community Mailboxes
- Stormwater Management Ponds

Lot Design Standards (Private Realm)

- Minimum building setbacks including location of porches, air conditioners and meters
- Wide shallow lot designs
- Townhouses units permitted in a row
- Corner lot designs
- Garage and driveway dimensions and locations
- Lot grading and drainage

Design Standards Implementation

- Coordination between departments
- Urban Design Guidelines and Zoning Regulations
- Block Plan and Site Plan Approval Process

3.2 Public Right-of-Way

Streets, walkways, greenways, parks, open space and stormwater management ponds are the primary components of the public realm. The role of the public realm is to support transportation, pedestrian and service requirements within an enriched public realm that connects the community as a whole and neighbourhoods within it together.

The street network is the principal interface between built form and the public realm. As the infrastructure most used by residents and visitors, streets play a dominant role in determining the character of the neighbourhood.

3.2.1 Relationships Between the Public and Private Realm

Current Standard Issues:

- Reduced development standards that permit double car garages on small lots result in multiple curb cuts for driveways creating consistent interruptions to the public sidewalk and to the street edge. The cumulative image of the street is dominated by the image of driveways and minimal landscaping. **(Photo 15)**
- Street trees placed between the curb and the sidewalks are less likely to survive the effects of snow loading and salts.
- Central street medians designed for primary streets including arterial and collector roads are too narrow for planting and irrigation systems.

Standard Recommendations: (refer to City of Vaughan, Sidewalk Location Policy)

- a) Reduce the amount of driveway permitted to cross the public-right-of-way, thereby improving the pedestrian realm by creating a better balance between landscaped area and the public sidewalk.

No	TABLE A October, 2001 Zone Provisions Re: Single, Semi-detached, and Townhouse Dwellings	By-law 1-88, Schedule "A" (metres)	By-law 1-88, Schedule "A1" (metres)	Proposed Standard (metres)
1	<p>Minimum Front Yard Setback</p> <ul style="list-style-type: none"> - From property line to front face of 2 car garage where driveway crosses sidewalk. - From property line to front face of 2 car garage where driveway doesn't cross sidewalk. - From property line to front face of 1 car garage* where driveway crosses sidewalk. - From property line to front face of 1 car garage* where driveway doesn't cross sidewalk. <p>* Lots less than 11.0 metres requiring min. 2 parking spaces on the lot.</p> <p>Minimum Front Yard Setback</p> <ul style="list-style-type: none"> -on a lot accessed by a driveway -on a lot accessed by a lane -on a lot with a front porch (permits porch and steps front yard encroachment of 3.0m max., of which the max. porch depth is 2.5m) 	<p>6.4</p> <p>6.4</p> <p>-</p> <p>-</p> <p>4.5-15.0</p> <p>4.5-15.0</p> <p>4.5-15.0</p>	<p>5.8</p> <p>5.0</p> <p>-</p> <p>-</p> <p>3.0</p> <p>3.0</p> <p>3.0</p>	<p>6.0</p> <p>6.0</p> <p>6.0</p> <p>6.0</p> <p>4.5</p> <p>4.5</p> <p>4.5</p>
2	<p>Minimum Interior Side Yard Setback</p> <ul style="list-style-type: none"> - attached garage/Less than 12.0 m lot and greater than 9.0 m - attached garage/ More than 12.0 m lot - attached garage/ 9.0 m lot and less - garage located in the rear yard accessed by a driveway - abutting a non-residential use (including a walkway, Greenway, buffer blocks and SWM ponds) 	<p>1.2 –1.5 and 0.3</p> <p>1.2 –4.5 and 0.3</p> <p>-</p> <p>4.5</p> <p>-</p>	<p>1.2 and 0.6</p> <p>1.2 and 0.6</p> <p>1.2 and 0.6</p> <p>2.75 and 0.6</p> <p>2.75 and 1.2</p>	<p>1.2 and 1.2</p> <p>1.2 and 1.2</p> <p>1.2 and 0.6</p> <p>3.5 and 1.2</p> <p>3.5 and 1.2</p>
3	<p>Minimum Exterior Side Yard Setback</p> <ul style="list-style-type: none"> - with a side yard porch - adjacent to a rear lane - adjacent to a site triangle - site triangle abutting an entrance feature (including a max. 1.5 metre encroachment) 	<p>4.5-9.0</p> <p>-</p> <p>-</p> <p>-</p>	<p>3.0</p> <p>2.4</p> <p>0.6</p> <p>0.6</p>	<p>4.5</p> <p>3.0</p> <p>1.2</p> <p>3.0</p>
4	<p>Minimum Rear Yard</p> <ul style="list-style-type: none"> -on lot accessed by a driveway -on a lot accessed by a lane -on a wide shallow lot 	<p>7.5</p> <p>7.5</p> <p>7.5</p>	<p>7.5</p> <p>13</p> <p>6.0</p>	<p>7.5</p> <p>15.0</p> <p>7.5</p>
5	<p>Interior Garage Dimensions</p> <ul style="list-style-type: none"> - less than 11.0m lots - 11.0 to 11.5 m lots - 11.6 to 11.9 m lots - 12.0 m lots and greater <p>Maximum Garage Projection</p> <ul style="list-style-type: none"> - from front wall of dwelling where there is no front porch - from front wall of dwelling where there is a front porch 	<p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>	<p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>	<p>Min. 3.0 wide by 6.0</p> <p>Min. 3.0 wide by 6.0</p> <p>Max. 4.5 wide</p> <p>Min. 3.0 wide by 6.0</p> <p>Max. 5.0 wide</p> <p>Min. 5.5 wide by 6.0</p> <p>Max. 1.0</p> <p>Max. 2.0</p>
6	<p>Minimum Lot Depth</p>	<p>-</p>	<p>23.5</p>	<p>27.0</p>
7	<p>Maximum Building Height</p>	<p>9.5-11.0</p>	<p>9.5-11.0</p>	<p>11.0</p>

TABLE A

- b) See the City of Vaughan Sidewalk Location Policy for the required location of sidewalks relative to the number of dwellings per street.
- c) As per the City's standard locate street trees 1.25 metre from the property line within the 2.75 metre landscape strip between the sidewalk and the property line.
- d) Planted central street medians should be a minimum of 4.0 metres in width to permit trees and other planting to be planted within the median.
- e) The City's current standard regulates that a 1.5 metre sidewalk shall be placed 2.75 metres from the property line, leaving 1.25 metres between the sidewalk and the curb. **(Figure 5)**
- f) See Section 3.2.5 regarding the placement of utilities.

3.2.3 Street Tree Locations

Current Standard Issues:

- There are reduced opportunities for street tree planning and landscaping within the boulevard. **(Photo 16)**



Photo 16: Consistent curb cuts at the street edge limit landscaping opportunities and the collective image of the street.

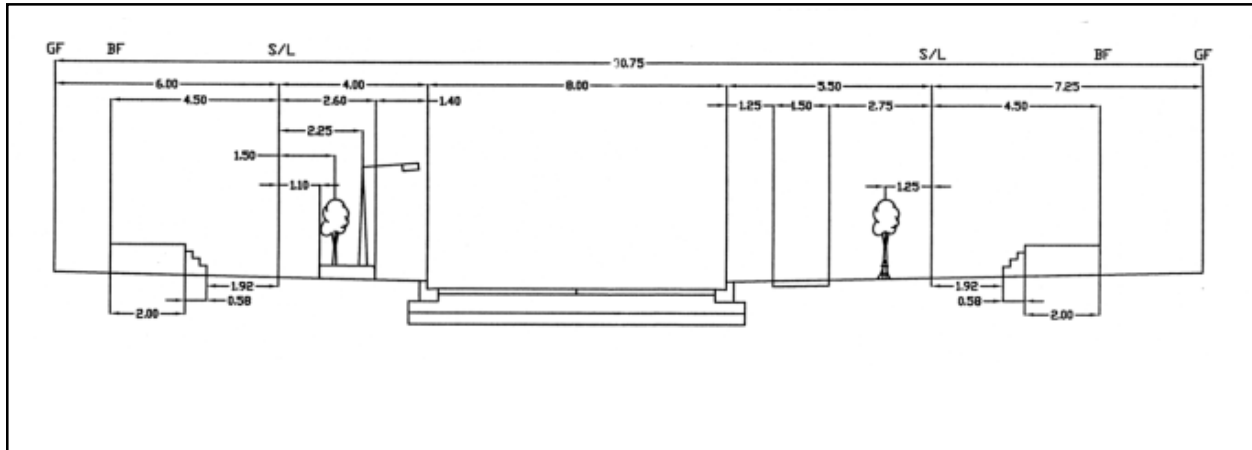


Figure 5: Recommended design standard with City-proposed setbacks, Draft 05-04-2001

Standard Recommendations:

- a) Street trees shall be placed in the 2.75 metre boulevard strip between the property line and the sidewalk.
- b) As a general objective, plant street trees at a ratio of one for each property and two for each flankage lot. **(Figure 6)**
- c) Species selection should avoid the creation of a streetscape monoculture.
- d) Consideration should be given to the selection of trees that area of a shade tree variety, however, there may be exceptions for ornamental or functional reasons.

3.2.3 Minimum Frontages on Culs-de-sac and Angle Bends

Current Standard Issues:

- Lot frontages on culs-de-sac and angle bends that permit double car garages and driveway access from the street create a sub-standard street edge condition, including tapered driveways with little or no space on either side of the driveway for snow storage or landscaping.

Standard Recommendations

General:

- a) The width of driveways at the curb edge should ensure no tapering of driveways is required, and that adequate snow storage is available between properties.

- b) Street tree planting should be accommodated within the public right-of-way.
- c) Limit the use of culs-de-sac to locations where through street conditions are not appropriate.
- d) Limit the length of culs-de-sac streets to aid in their access and egress, particularly where no other links to an adjacent street is provided.

Specific Recommendations (Figures 7 & 8):

- a) Lot frontages on culs-de-sac and angle bends must be a minimum of 13.5 metres (44 feet) measured 6.4 metres back of the property line where 6.0 metre wide (double-car garage) driveways apply.
- b) Generally lot sizes and their corresponding curb frontages must be increased to allow for straight and non-tapered driveways for all culs-de-sac and inside corner lots. The recommended increases are directly dependant upon the width of the garages/driveways that are provided. Single car garages with 3.0 wide driveways must provide 4.0 metres of

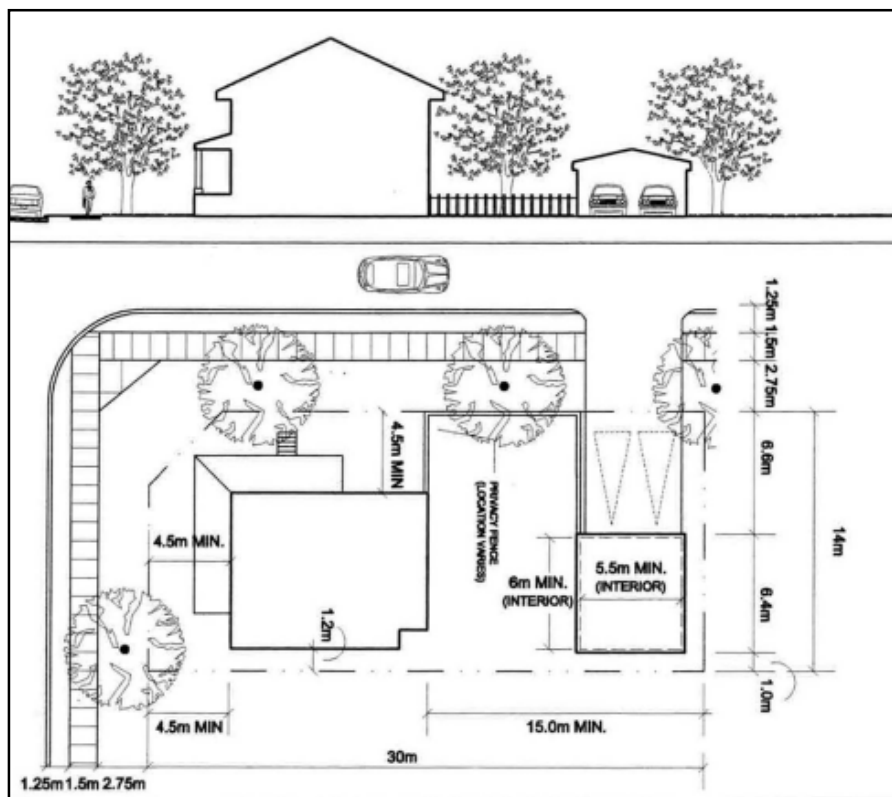


Figure 6: Plant one tree for each lot and two trees within the exterior side yard of flankage lots

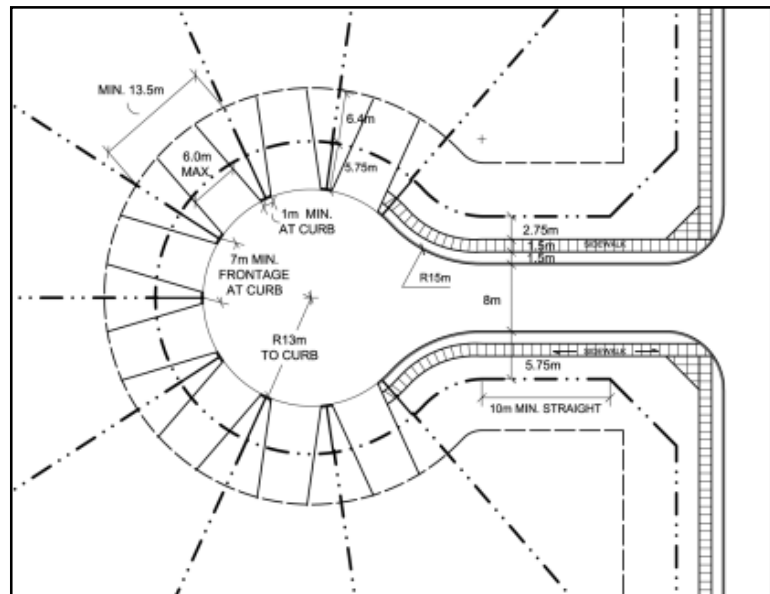


Figure 7: Minimum frontage at cul-de-sacs

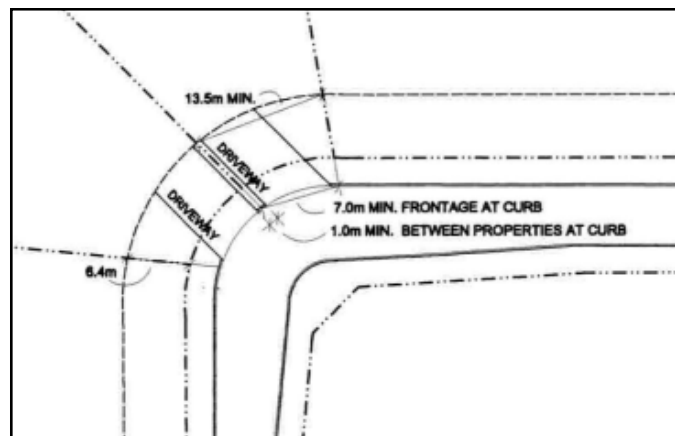


Figure 8: Minimum frontage at angle road

curb frontage per lot. Whereas double car garages/driveways 6.0 metres wide must provide 7.0 metres of curb frontage.

- c) A minimum 1.0 metre wide area for snow storage and boulevard treatments at the street edge shall be provided.
- d) Refer to City's Engineering Department for minimum culs-de-sac dimensions. Consideration should be given to enlarging culs-de-sac where opportunities exist. Where culs-de-sacs are larger than the City's standard, a central landscaped circle should be considered as a neighbourhood feature and to lessen the effect of enlarging the paved area of the road.
- e) Where appropriate adjacent to public use (e.g. schools, parks) or transit facilities, pedestrian walkways with a minimum right-of-way width of 3.5

metres shall be located at the end of the cul-de-sac to provide connections to adjacent streets and open space areas. Walkways should be well lit and maintain clear site lines to increase surveillance and safety opportunities.

3.2.4 Rear Lanes

Current Standard Issues:

- A variety of standards have been used for rear lane access.
- Council has directed that the use of rear lanes be minimized, and that any rear lane developments be subject to Council approval.

Standard Recommendations

General:

- a) Locate rear lanes to provide access to housing fronting on to arterial, major collector roads and primary community streets where housing shall not have driveway access and should provide positive frontage on to these streets.
- b) Locate rear lanes to allow housing to front on to parks or open space conditions to provide an overview of the area. **(Photo 17)**

Specific:

- a) Rear lanes shall provide a minimum lane right-of-way of 8 metres. **(Figure 9)**
- b) Travel pavement width should be 6.0 metres, providing a setback of 1.0 metre from the travel lane to the garage face. This 1.0 metre is intended to accommodate snow clearance.
- c) On one side of any garage in a rear lane, a minimum side yard setback of 3.0 metres for semis and 3.0 metres for singles shall be provided to allow for visual connections from the lane to the rear of the house, and to promote safer laneway conditions.
- d) On semis and singles, the side-yard beside the garage may also be used as an additional driveway parking space.
- e) Rear lane garages associated with townhouses require no side yard setback, however, a minimum 3.0 metre setback must be provided between a maximum of 6 townhouse garages constructed in a row to provide access for emergency services or others.

3.2.5 Above Grade Utility Locations

Current Standard Issues:

- The negative visual and physical impact of above grade services including hydro, telephone and cable boxes.
- Streets that have smaller lots require a greater number of above grade utilities.
- The location of above grade services reduces opportunities to plant street trees.



Photo 17: Morrison Common, Oakville. Lanes allow townhouses to front onto the park

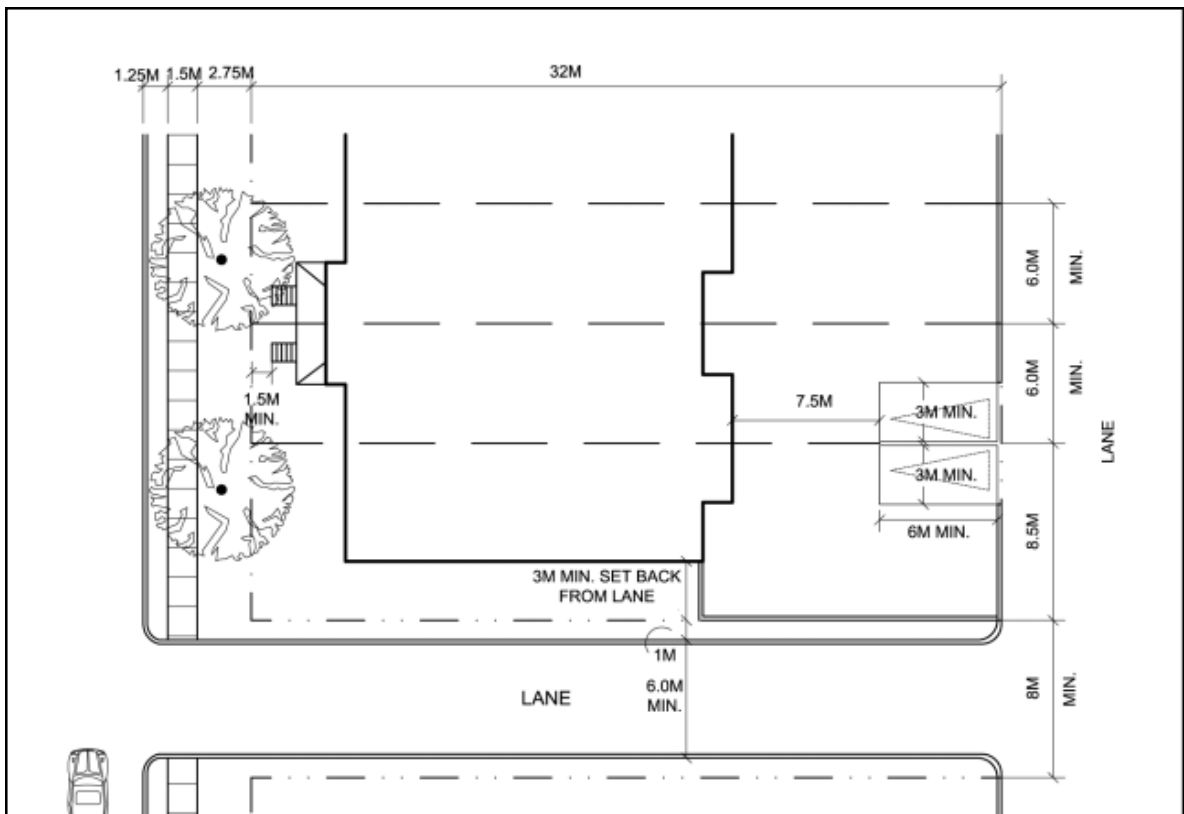


Figure 9: End lot adjacent to a lane

Standard Recommendations:

- a) The general location of all utilities should be addressed at the Block Plan stage for new communities.
- b) Staff should examine the opportunity for grouping utilities in single locations above grade (e.g. the flankage yard of the public right-of-way) or underground. Such locations should be guided by the location and primacy of streets, storm water management facilities, parks and major open space systems.
- c) Staff should continue to work with the utility companies to examine ways to determine and improve the interface of the utilities within new communities.

3.2.6 On-Street Parking*Current Standard Issues:*

- Residents are generally not in favor of on-street parking.
- Small lot design with multiple double car driveways at the street edge creates sub-standard street parking conditions. **(Figure 10)**
- Should on-street parking be permitted as an option to resident parking?

Standard Recommendations:

- a) Driveways on lots less than 12.0 metres should be paired.
- b) Permit on-street parking to reduce the number of cars required to park on the lot with respect to all lot sizes.

3.2.7 Community Entrance Feature Locations*Current Standard Issues:*

- Community features are located on private property and are often located too close to private dwellings. **(Photo 18)**
- The responsibility of repair and ongoing maintenance of entrance features is the responsibility of the landowner.
- An excessive number of entrance features are required within neighbourhoods at local road intersections, in addition to major community entrance features at arterial and collector roads.

Standard Recommendations:

- a) Community entrance features shall be located within the municipal reserve of the public right-of-way. The reserve block shall be dimensioned to fit the entrance feature. **(Figure 11)**
- b) Setbacks between the entrance feature and a private dwelling must be a minimum of 3.0 metres. A front or wrap-around front porch may encroach into the 3.0 metre setback a maximum of 1.5 metres, leaving a 1.5 metre no encroachment zone.
- c) The entrance feature shall not project into the daylight triangle.

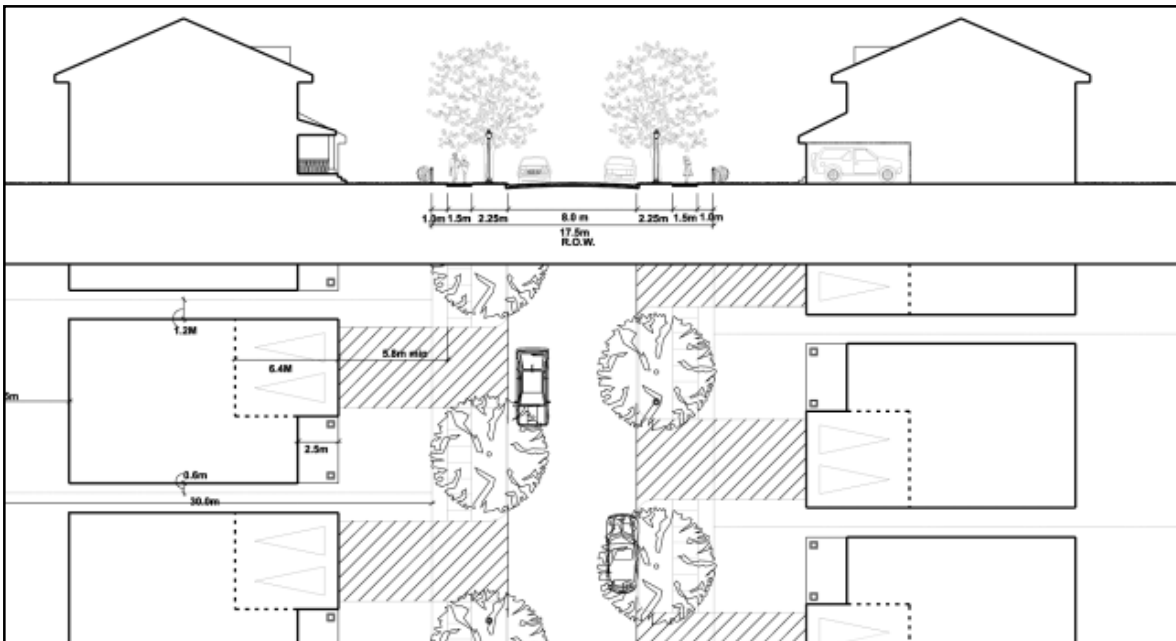


Figure 10: Current standards limit street parking and front yard landscaping opportunities



Photo 18: Current standards require community entrance features to be located on private property

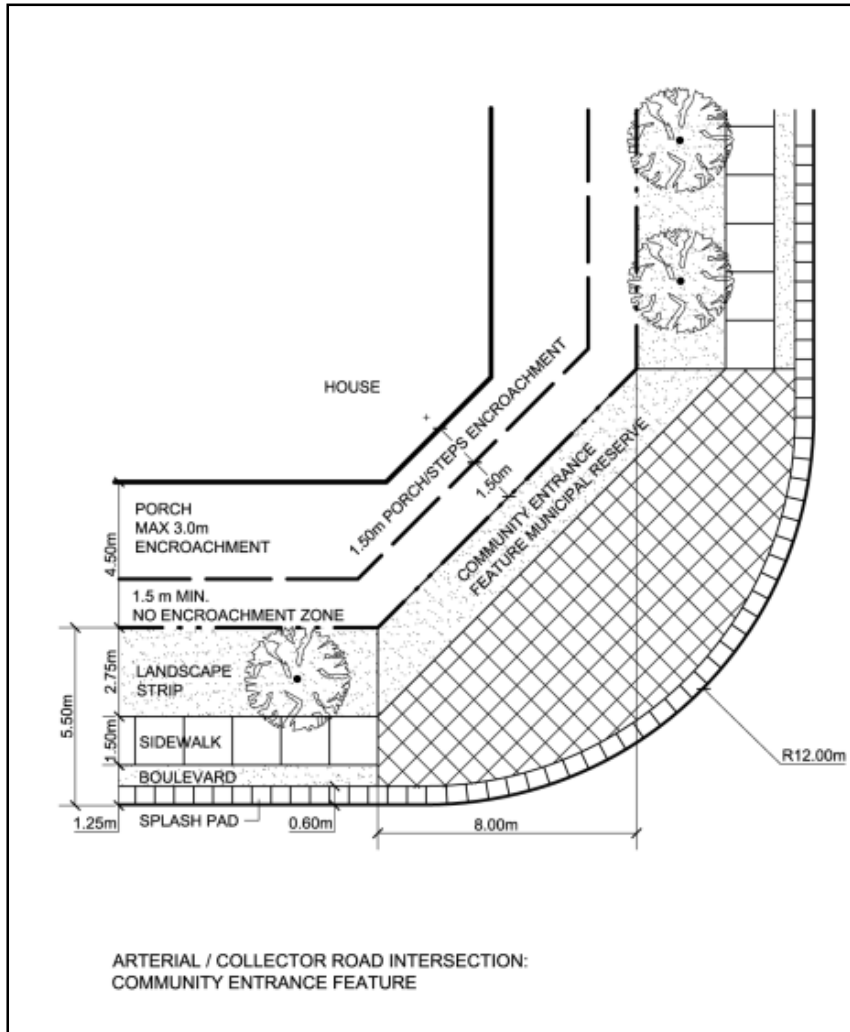


Figure 11: Arterial/Collector Road Intersection: Recommended standard for community entrance feature location

- d) While the developer may fund the capital cost of the entrance feature, the ongoing cost of maintenance and repair shall be the responsibility of the City.
- e) Limit the number of entrance features required to major entrance feature locations at arterial and collector roads.

3.2.8 Community Mailboxes

Current Standard Issues:

- Community Mailboxes lack coordination in their location and design.

Standard Recommendations:

- a) The general location of community mailboxes should be addressed at the Block Plan stage for new communities.
- b) Staff should continue to work with the utilities to examine ways to determine an improved interface of the utilities within the new urban communities.
- c) Staff should work with Canada Post and the development community towards enhanced locations and design of community mailboxes throughout the City. **(Photo 19)**



Photo 19: Co-ordinate designs for community mailboxes

3.2.9 Stormwater Management Ponds

Standard Issues:

- Stormwater management ponds are recognized as valuable community amenities.
- Public safety and the City's liability is an issue particularly where school sites abut.
- Additional concerns include public access, maintenance costs and the attraction of nuisance species (geese, rodents).

Standard Recommendations:

Stormwater management facilities should have public access and be integrated as positive and safe amenities within the community and open space system. Consideration should be given to consolidating ponds or limiting the number of ponds required in order to reduce the ongoing costs of maintenance by the City. The objective of creating a few well-designed community ponds will assist in greater concentration of use as well as provide a public focus and connections between surrounding communities.

The following recommendations refer to tableland stormwater management ponds.

General

- a) Stormwater Management Ponds (SWM) should be integrated as community amenities to optimize their use as a component of the publicly accessible open space network.
- b) SWM ponds should be limited in number to serve a significant community area and thereby optimize their use. **(Photo 20)**
- c) SWM ponds should have as much public exposure as possible. As a general objective, not more than 50 % of a SWM perimeter should be bounded by the rear or side yards of adjacent houses, however the exact proportion should be determined on a case-by-case basis.
- d) Of the total linear perimeter distance of a SWM that is adjacent to a new development area, a substantial portion of the perimeter (a minimum of 50% is generally recommended) should be bounded by a public road right-of-way, public park, or combination of publicly owned and accessible lands. **(Photo 21)**
- e) The design of ponds should avoid fencing requirements to promote public access and surveillance opportunities.
- f) Safe access to the perimeter of ponds should be examined on a site-by-site basis through a combination of pond edge treatments. Shallow slopes should be considered for direct access areas and overlooks with railings or densely planted areas should be applied where direct access is not appropriate.



Photo 20: Legacy, Markham. Stormwater management ponds as a community amenity



Photo 21: Brooklin, Whitby. Stormwater management pond as a significant community feature. A single loaded road gives direct public access and allows houses to front on to the pond.

- g) A hierarchy of design treatments should be developed to address the various conditions of pond design and locations. (e.g. on-line ponds vs. table land ponds).
- h) The City should establish a corporate policy for the review of all existing and proposed SWM facilities.

3.3 LOT DESIGN STANDARDS (PRIVATE RIGHT-OF-WAY)

3.3.1 Balance and Variety of Lot and House Design

The following standards issues and recommendations should be read in conjunction with the zone provisions set out in *Table A* (Page 21) and the accompanying guidelines drawings.

Current Standard Issues:

- Homeowner's expectations are not being met due to the general decrease in lot sizes and disproportionate house forms in relation to insufficient setbacks. **(Photo 22)**
- Front, side and rear yard setbacks are too tight in relation to house size. Small lots with minimum setback standards are being built with too much house on the lot. As the lot size decreases, the house size is generally not reduced in proportion to the lot.
- A lack of precision in construction creates encroachments within minimum standards and results in front porches too close to the street edge or sidewalk, small rear yards with poor drainage and no room for decks or storage sheds. Minimum side yards often include encroachments such as side entrances, meters and air-conditioners and impede access to the rear yard. **(Photo 23)**
- The increased permitted yard encroachments for the new developments have further increased the size of the dwelling in proportion to the lot.
- Setbacks at corner lots between the dwelling and daylight triangles are too small.
- Corner lot houses are built too close to daylight triangles where entrance features and privacy fencing is located.
- A lack of variety in house form and size within a block.

Standard Recommendations

General:

The City's zoning by-laws should be amended to increase minimum lot sizes and minimum yard requirements to produce a more functional residential design. There is generally a need to increase the minimum amenity areas for both the front and rear yards and to provide for better side yard access.



Photo 23: Encroachments into minimum sideyards prevents reasonable passage between houses and limits drainage



Photo 23: Encroachments into minimum sideyards prevents reasonable passage between houses and limits drainage

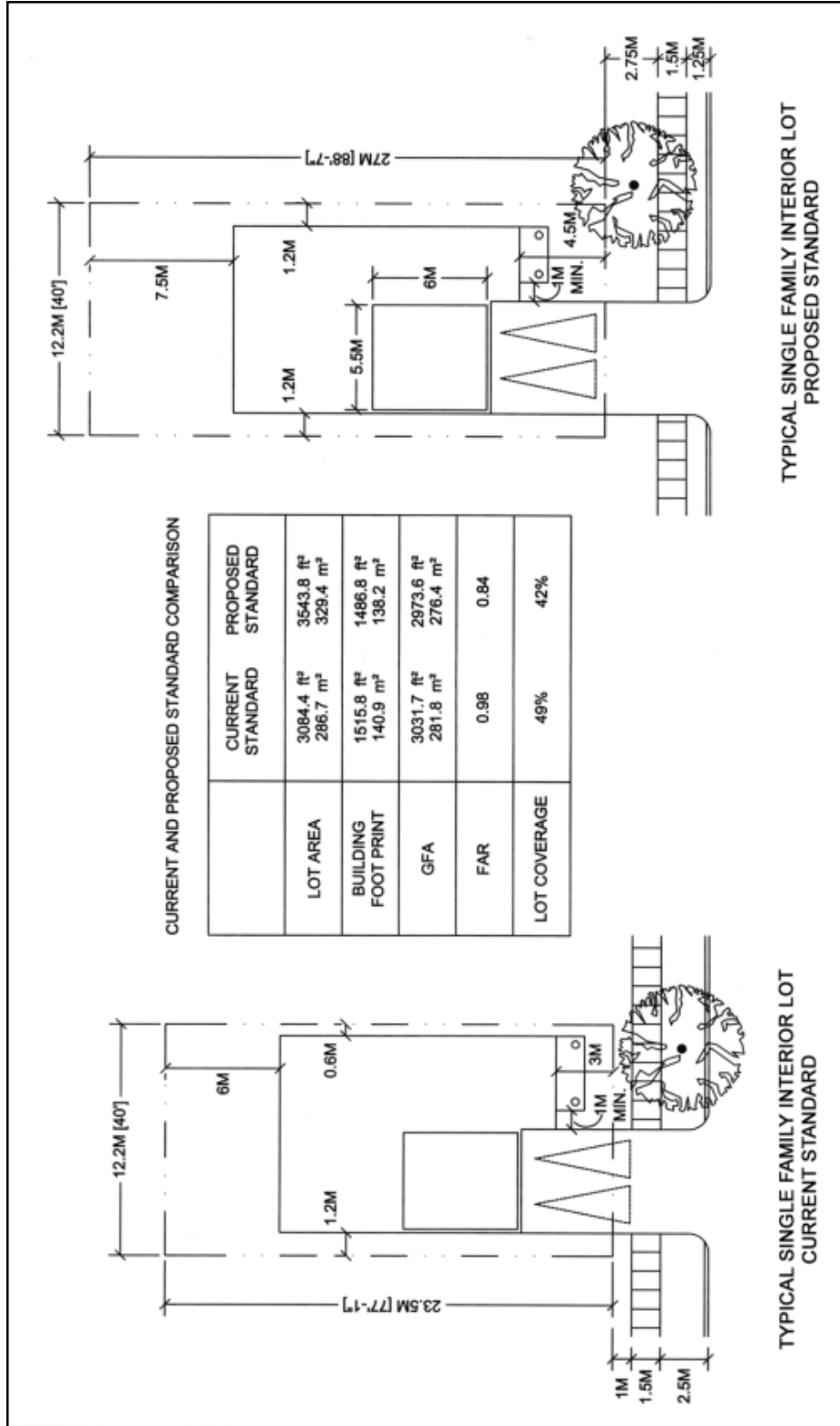


Figure 12: Current and proposed standards comparison results in approximately 7% less building coverage on the lot.

- a) The dwelling size should be constructed in proportion to the lot size. When the lot size decreases, the dwelling size should decrease proportionately. **(Figure 12)**
- b) The garage width should not exceed the habitable portion of the house to allow for reasonably scaled principal rooms facing the street, front porches and front yard landscaping.
- c) No encroachments should be permitted other than a front porch, entrance awning, eaves or bay window in the front yard and similar projections in the rear yard including a deck/porch, garden shed. Porch encroachments should include connecting steps.
- e) Garden sheds are currently under review and will be calculated as a percentage of the lot.

3.3.2 Zoning Recommendations: Single Detached, Semi-Detached and Townhouses

See Table A and the accompanying guideline drawings.

3.3.2.1 Minimum Front Yard Setbacks

Standard Recommendations: (Figures 13 & 14)

- a) From the property line to the front face of a two-car garage where the driveway crosses a sidewalk, the minimum front yard setback shall be increased from 5.8 metres to 6.0 metres.
- b) From the property line to the front face of a two-car garage where the driveway does not cross a sidewalk, the minimum front yard setback shall be increased from 5.0 metres to 6.0 metres.
- c) From the property line to the front face of a one-car garage on lots less than 11.0 metres, where the driveway crosses a sidewalk, the minimum front yard setback shall be 6.0 metres.
- d) From the property line to the front face of a one-car garage on lots less than 11.0 metres, where the driveway does not cross a sidewalk, the minimum front yard setback shall be 6.0 metres.
- e) The minimum front yard setback on a lot accessed by a driveway or lane shall be increased from 3.0 metres to 4.5 metres.
- f) A range of front yard setbacks (from 4.5 to 6.0 metres) is recommended in order to achieve a diversity of setbacks on the streetscape.
- g) Front porches may encroach into the front yard by a maximum of 3.0 metres including access steps of which the front porch may be a maximum depth of 2.5 metres. A 1.5 metre no encroachment zone shall be maintained between the front porch (including access steps) and the property line.

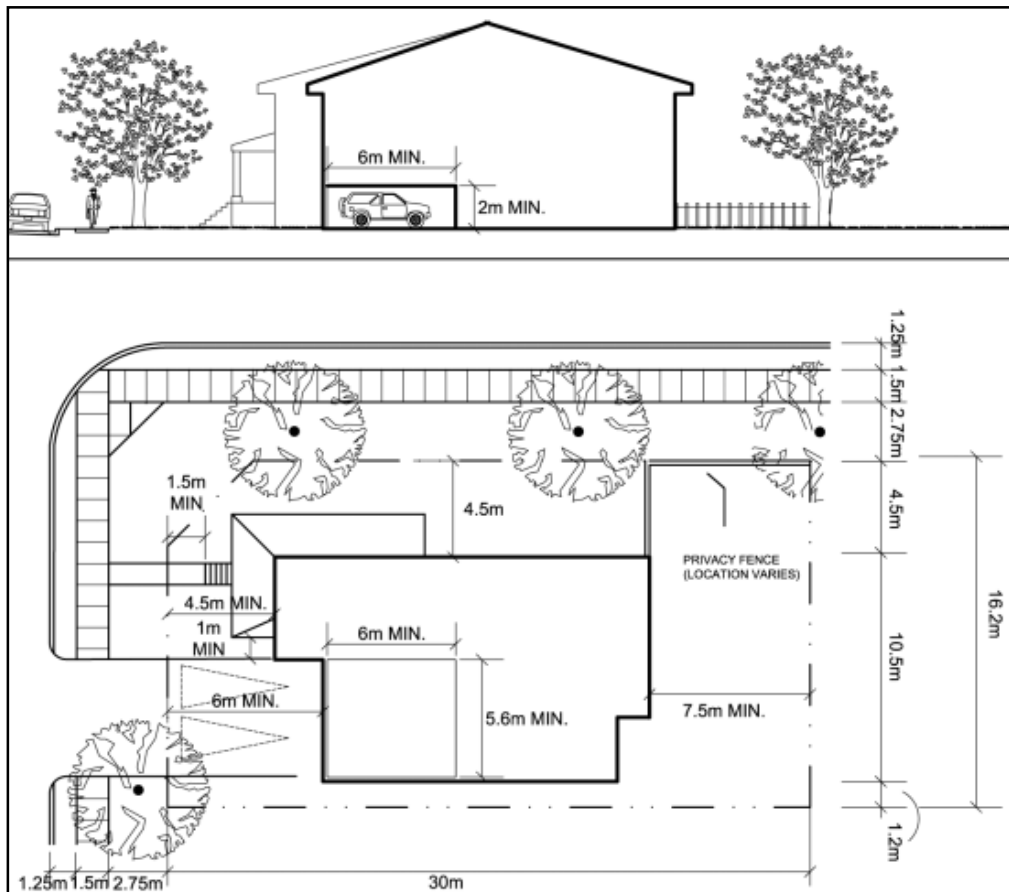


Figure 13: Recommended front, side and rear yard setback standards

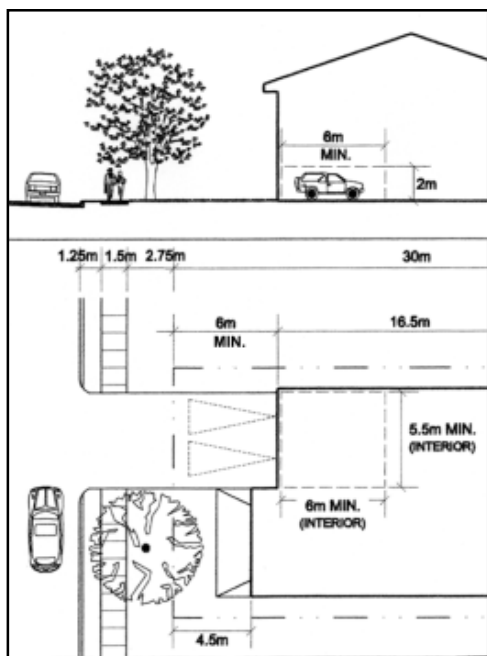


Figure 14: Increased standards for front yard setbacks increase opportunities for porches and landscaping

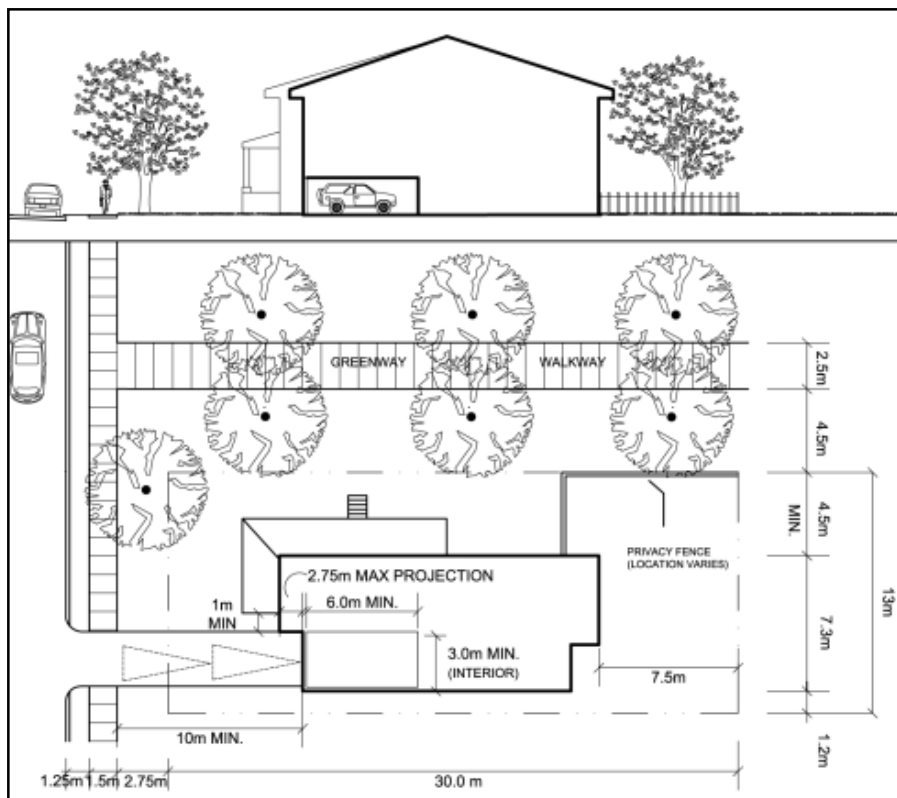


Figure 15: Setbacks for an end lot adjacent to a Greenway

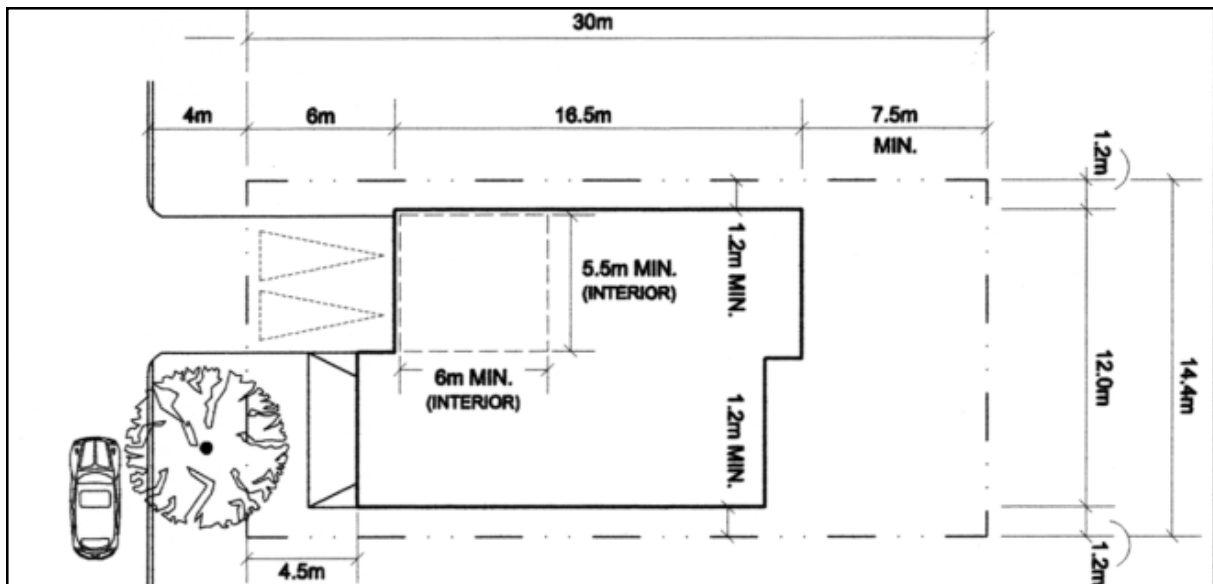


Figure 16: Setbacks for a typical interior single detached lot

3.3.2.2 Fencing on Flankage Lots

Standard Recommendations:

a) To minimize the length of fences between houses on flankage lots, the fence may, similar to the front porch, encroach into the front yard by a maximum of 3.0 metres. A 1.5 metre no encroachment zone shall be maintained between furthest extents of the fence to the property line.

3.3.2.3 Minimum Interior Side Yard Setbacks

Standard Recommendations: (Figures 15 & 16)

- a) On a less than 12.0 metre lot with an attached garage the minimum interior side yard setback shall be increased from 1.2 and 0.6 metres to 1.2 and 1.2 metres.
- b) On a greater than 12.0-metre lots with an attached garage the minimum interior side yard setback shall be increased from 1.2 and 0.6 metres to 1.2 and 1.2 metres.

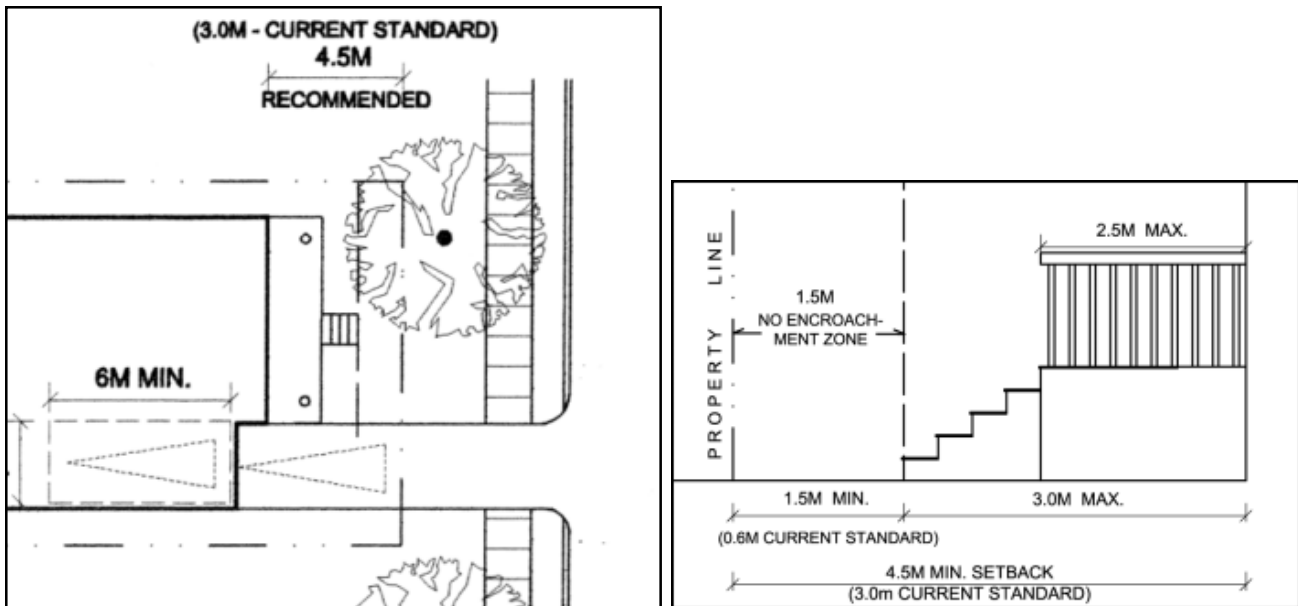


Figure 17: Recommended Standard Front Porch Placement

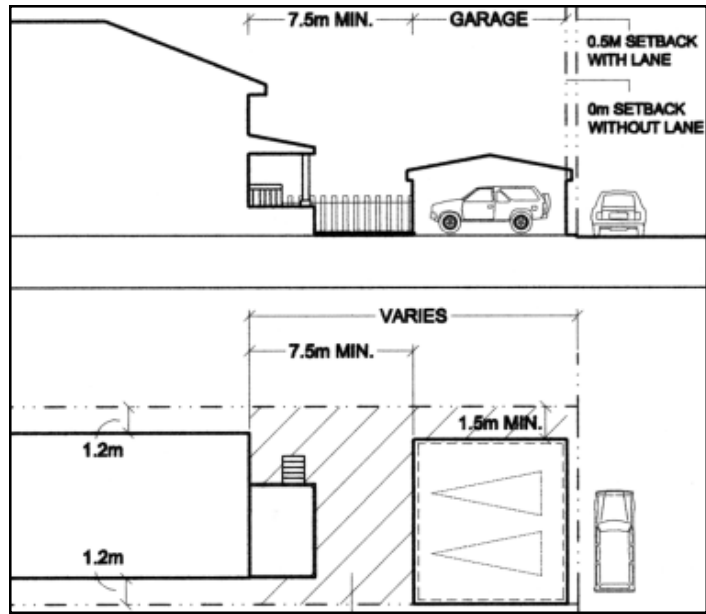


Figure 18: Rear yard porch/deck encroachment: with garage

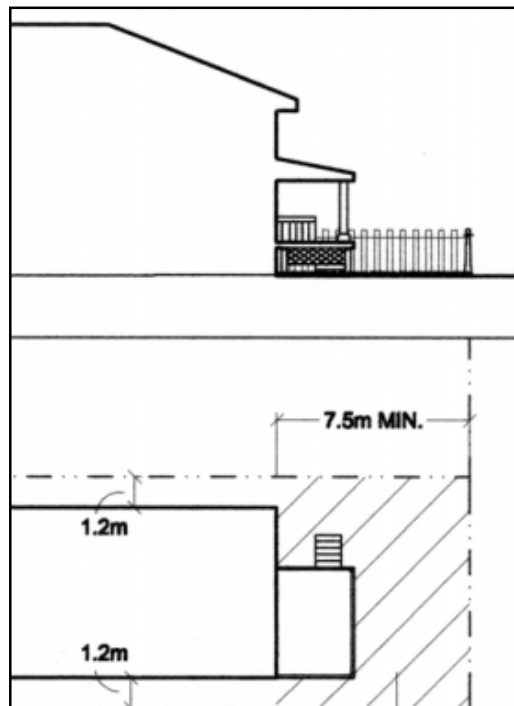


Figure 19: Rear yard porch/deck encroachment:
no garage

- b) On a 9.0 metre lot and less with an attached garage, the minimum interior side yard setback shall be maintained as 1.2 and 0.6 metres.
- c) On a lot with a garage located in the rear yard accessed by a driveway the minimum interior side yard setback shall be increased from 2.75 and 0.6 metres to 3.5 and 1.2 metres.
- d) On a lot abutting a non-residential use (including a walkway) the minimum interior side yard setback shall be increased from 2.75 and 1.2 metres to 3.5 and 1.2 metres.

3.3.2.4 Minimum Exterior Side Yard Setbacks

Standard Recommendations: (Figure 17)

- a) The minimum exterior side yard setback (including those with a side yard porch) shall be increased from 3.0 to 4.5 metres with a no encroachment zone of 1.5 metres.
- b) Porches may encroach into the exterior side yard by a maximum of 3.0 metres including access steps of which the front porch may be a maximum depth of 2.5 metres. A 1.5 metre no encroachment zone shall be maintained between the front porch (including access steps) and the property line.
- c) On lots adjacent to a rear lane the minimum exterior side yard setback shall be increased from 2.4 to 3.0 metres.
- d) On lots adjacent to a site triangle (including those with a front or side yard porch) the minimum exterior setback shall be increased from 0.6 to 1.2 metres.
- e) On lots adjacent to a site triangle (including those with a front or side yard porch) abutting an entrance feature, the minimum exterior setback shall be increased from 0.6 to 3.0 metres of which a porch may not encroach beyond the 1.5 metre no encroachment zone set back from the property line.

3.3.2.5 Minimum Rear Yard Setbacks

Standard Recommendations: (Figures 18 & 19)

- a) On lots accessed by a driveway the minimum rear yard setback shall remain as 7.5 metres measured from the rear face of the garage, or rear property line, to the rear face of the dwelling.
- b) On lots accessed by a lane the minimum rear yard setback shall be increased from 13.0 to 15.0 metres.
- c) All other lots shall have a minimum rear yard setback of not less than 7.5 metres measured from the rear property line to the rear face of the dwelling.

- d) Rear yard decks/porches and garden sheds shall be permitted rear yard encroachments, provided that the rear yard is a minimum 7.5 metres in length, excluding rear yard garages that are attached to the dwelling or at the rear of the property (lane or driveway access).

3.3.2.6 Garage Dimensions and Projections

Standard Recommendations: (Figures 20-23)

- a) On lots less than 11.0 metres interior one-car garage dimensions shall be a minimum 3.0 metres wide by 6.0 metres deep.
- b) On lots 11.0 to 11.5 metres, interior one-car garage dimensions shall be a minimum 3.0 metres wide by 6.0 metres deep. A maximum width of 4.5 metres may be applied to permit a one-car garage with storage.
- c) On lots 11.6 to 11.9 metres, interior one-car garage dimensions shall be a minimum 3.0 metres wide by 6.0 metres deep. A maximum width of 5.0 metres may be applied to permit a one-car garage with storage.
- d) On lots 12.0 metres and greater, interior two-car garage dimensions shall be a minimum 5.5 metres wide by 6.0 metres deep.
- e) One access step only may be permitted into the interior of the garage.
- f) The minimum height clearance from structural or mechanical encumbrances (including overhead bulkheads, lofts, garage closures, etc.) in the garage shall be 2.0 metres.
- g) The maximum garage projection in front of the main wall of the house shall be 1.0 metre where there is no front porch, and 2.0 metres where there is a front porch.

3.3.2.7 Minimum Lot Depth

Standard Recommendations:

- a) The minimum lot depth shall increase from 23.5 to 27.0 metres.

3.3.2.8 Maximum Building Height

Standard Recommendations:

- a) The maximum building height should change from 9.5 (wide shallow lots) to 11.0 metres, to a consistent maximum height of 11.0 metres for single, semi-detached and townhouse dwellings.
- b) Building height shall be measured from grade level at the front of the house to the mid-point of the roofline for a pitched roof, or the mid-point of the parapet for a flat roof.

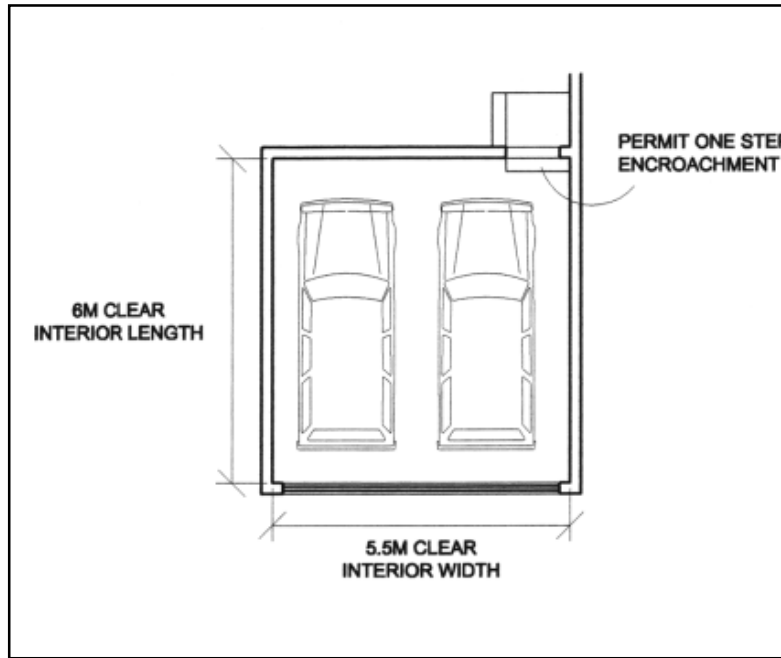


Figure 20: Double Car Garage, 12.0 m lots or greater

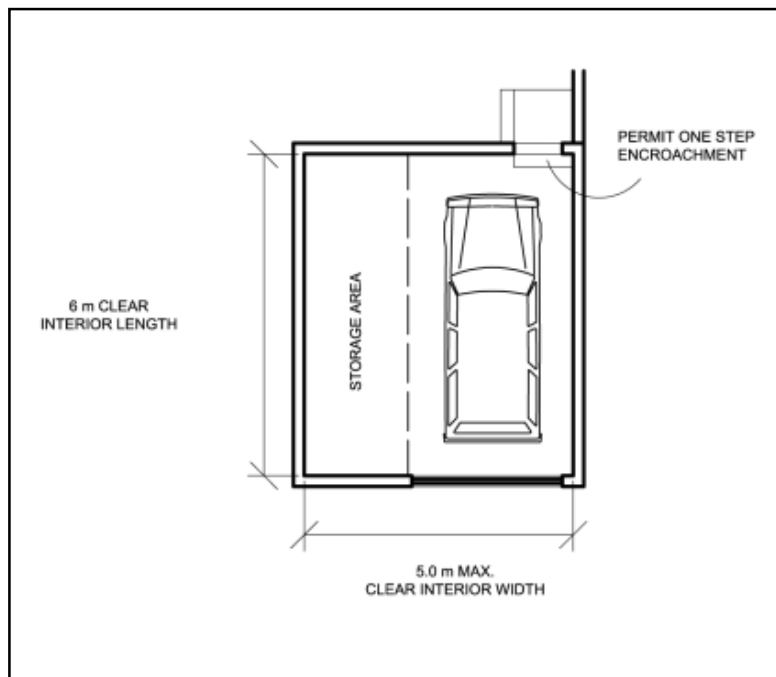


Figure 21: Single Car Garage with storage, 11.0 - 11.9m lots

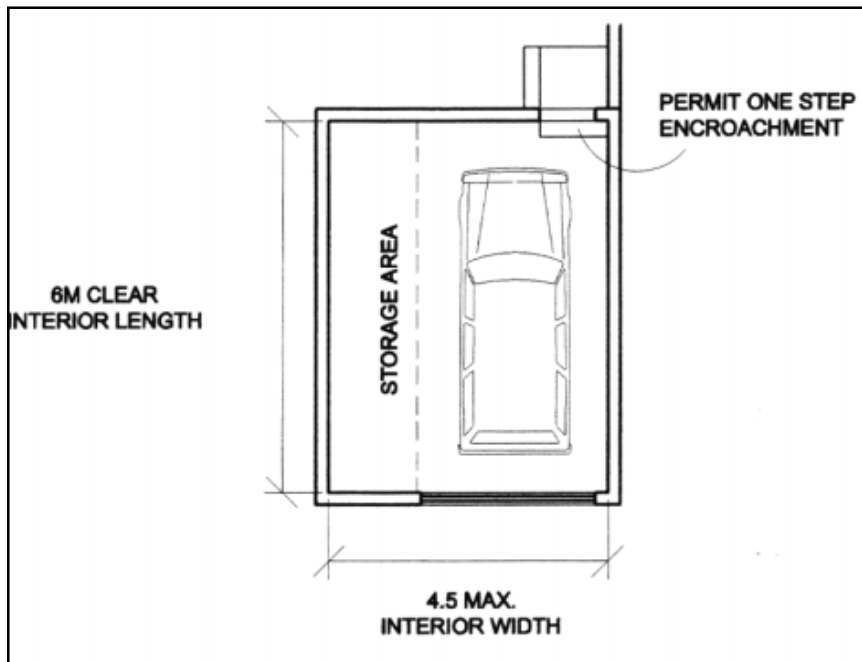


Figure 22: Single Car Garage with storage, 11.0-11.5m lots

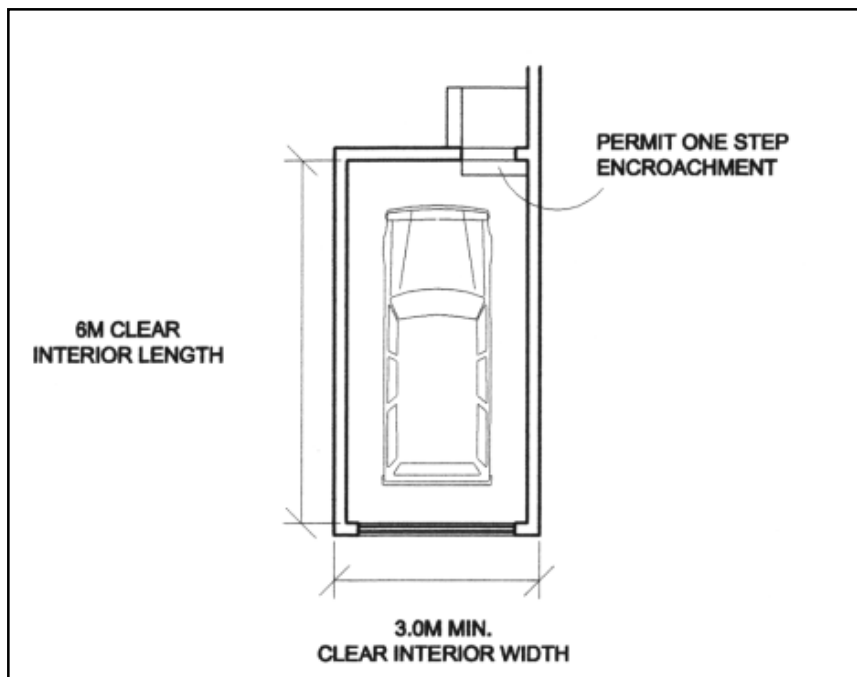


Figure 23: Single Car Garage, lots less than 11.0m

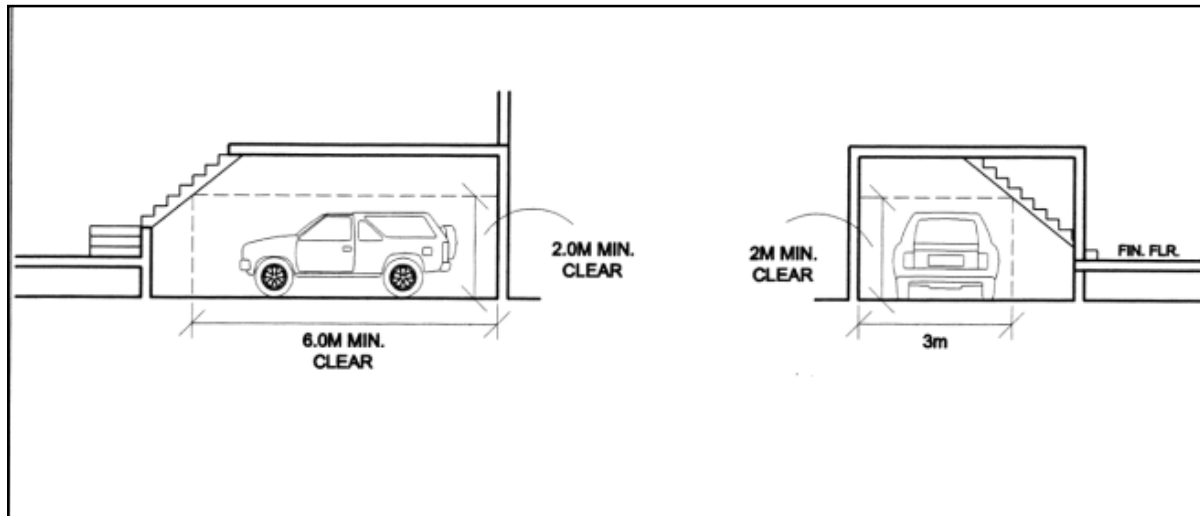


Figure 23: Garage Sections illustrate minimum 2.0m height clearance requirements

3.4 General Residential Recommendations

3.4.1 Wide-shallow lots

Current Standard Issues:

- Current standards for wide shallow lots do not reflect the intent of this form of housing in which a wider lot that permits an attached garage facing the street is combined with a shallow lot depth.
- The minimum width and depth of wide shallow lots combined with the current setback standards has resulted in too much house on the lot.

Standard Recommendations:

- a) Wide shallow lots should not be permitted in their current form.
- b) The minimum setbacks, lot depth, setbacks and proportion of garage to house required for single, semi-detached and townhouse dwellings should apply to all dwellings including the wide shallow lot form.

3.4.2 Semi-Detached Lots

Standard Recommendation (Figure 24)

- a) Increase the minimum lot frontage from 7.5 metres to 8.5 metres per dwelling unit.
- b) See Section 3.3.3 and Table A for minimum setbacks.
- c) Discourage the housing form of detached units on a semi-detached lot. (Permitted by by-law exception only)
- d) Only attached semis where two dwellings share a fully attached party wall should be allowed on semi-detached lots.

3.4.3 Townhouse Lots

General:

- For corner lots and end units for townhouses, the by-law should be amended (all housing forms) to require increased lot frontages and areas based the house form and the zone classification.
- The current minimum width for townhouses at 5.5m is too narrow.
- Townhouse blocks of more than six attached units create a monotonous streetscape image, and access difficulties between units for emergency services.

3.4.3.1 Townhouses (garage facing public street)

Standard Recommendation: **(Figure 25)**

- Increase the minimum lot frontage from 5.5 metres to 6.0 metres. The end units are recommended to be wider to balance the proportion of house and garage to overall lot frontage.
- Allow a maximum of 6 dwelling units attached together **(Figure 25)**
- See above for minimum lot depth and yards.

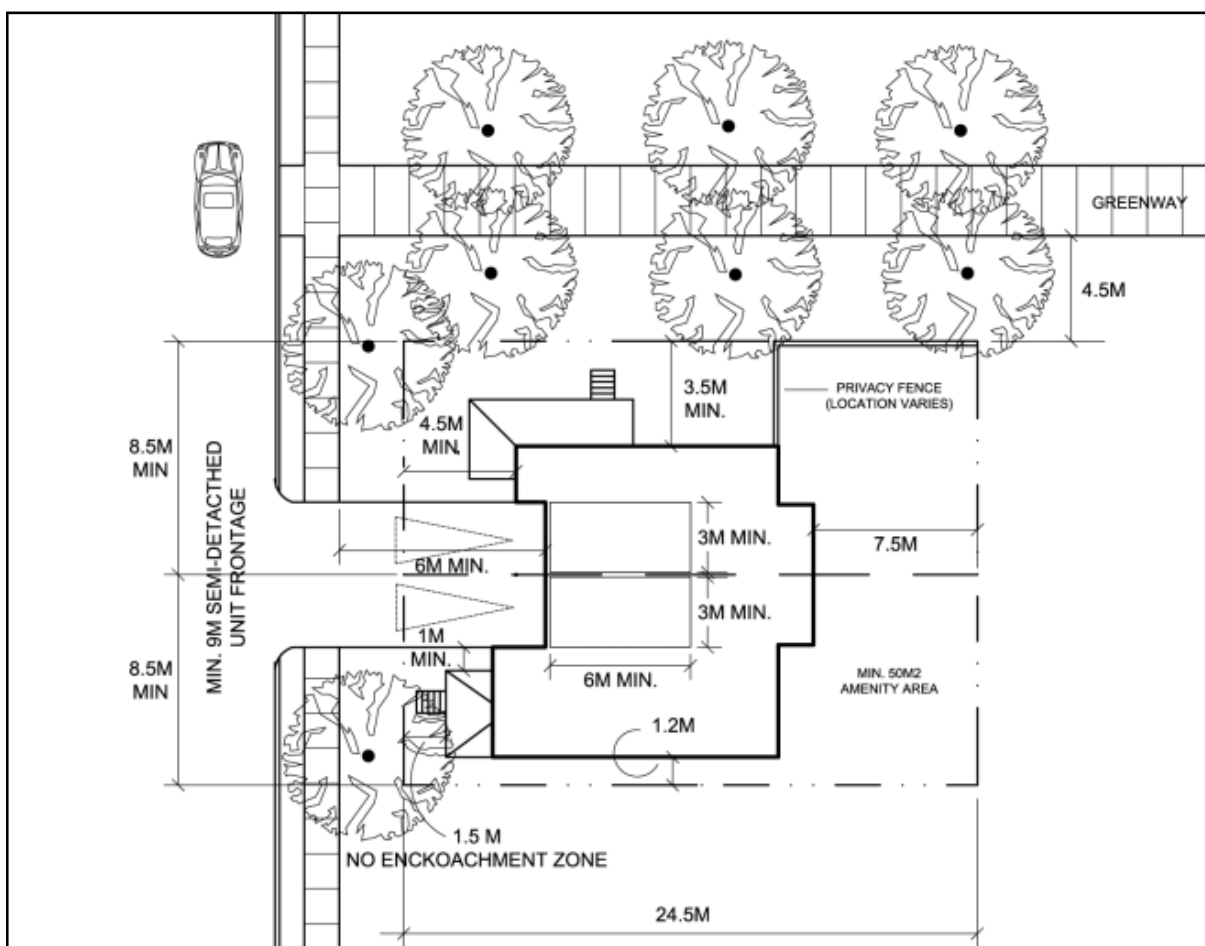


Figure 24: Recommendations for semi-detached end lots

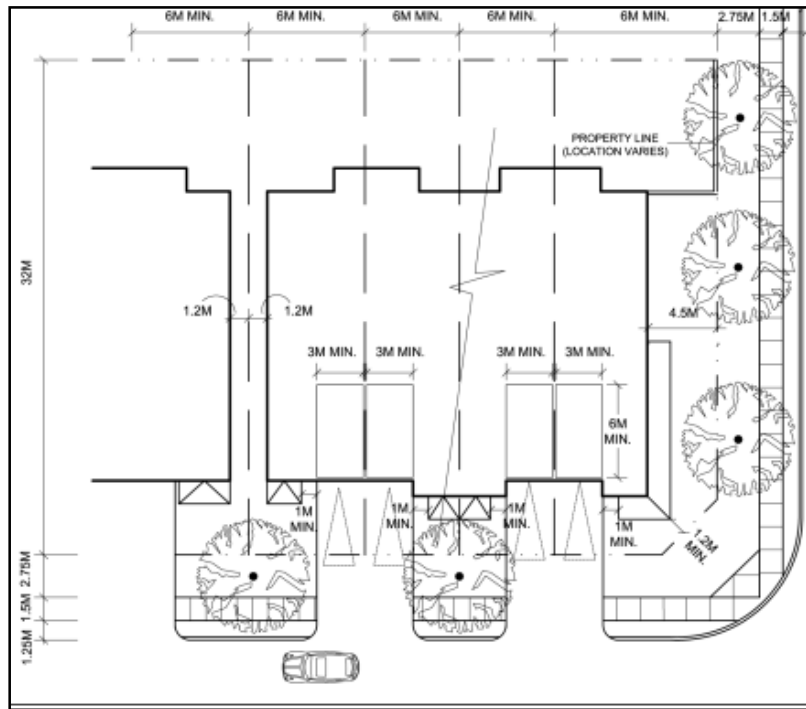


Figure 25: A minimum of 6.0 m for townhouse frontages is recommended

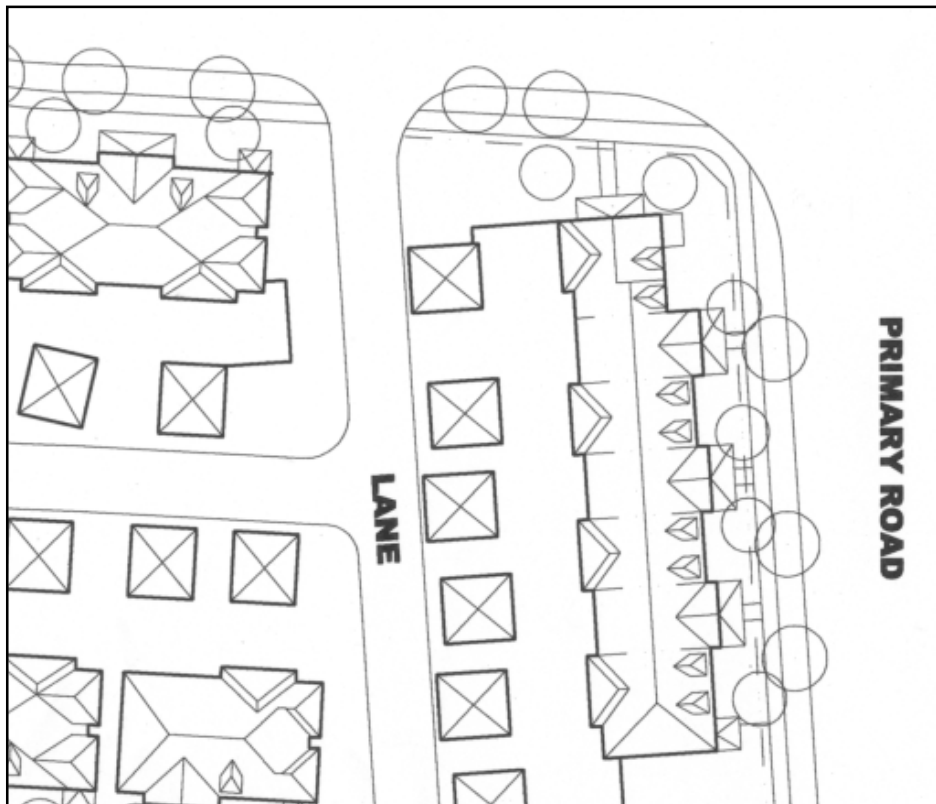


Figure 26: A maximum of 6 townhouse units should be permitted in a row

3.4.3.2 Rear Lane Townhouses (garage facing rear lane)

Standard Recommendations:

- a) Increase the minimum lot frontage from 4.5 - 5.4 metres to 6.0 for a single car garage.
- b) Increase the minimum metre separation between the dwelling unit and the detached garage from 6.0 to 7.0 metres.
- c) Increase side yards for townhouse end units from 1.5 metres to 2.0 to facilitate access for emergency services.
- d) A maximum of two garages shall be paired together with minimum setbacks of 1.2 metres on either side.
- e) Fencing shall include a doorway within one of the side yards to allow entry between the lane and rear yard.

3.4.4 Corner Lots

Issues:

- Corner lots and townhouse end units should be amended to require increased setbacks based on the lot location and proximity to daylight triangles, entrance features and privacy fencing.
- The application of minimum setbacks at corner lot setbacks does not permit front porches to be properly integrated on corner sites.
- Where front porches are included, they are too shallow (less than 1.5 metres [5 feet]) to be used as active areas for sitting or socializing.
- Community features within the public right-of-way including landscaping and gateway or signage elements are located too close to dwellings that are built to minimum setbacks.

Design Recommendations:

- a) The minimum exterior side yard setback (including those with a side yard porch) shall be increased from 3.0 to 4.5 metres.
(Figure 27)
- b) On lots adjacent to a rear lane the minimum exterior side yard setback shall be increased from 2.4 to 3.0 metres. **(Figure 28)**
- c) On lots adjacent to a site triangle (including those with a front or side yard porch) the minimum exterior setback shall be increased from 0.6 to 1.2 metres.
- d) On lots adjacent to a site triangle (including those with a front or side yard porch) abutting an entrance feature, the minimum exterior setback shall be increased from 0.6 to 3.0 metres.
- e) Lots adjacent to corner lots shall place driveways on the opposite side furthest from the corner lot to increase sight lines that may be impeded by privacy fencing while exiting from the driveway to the street.

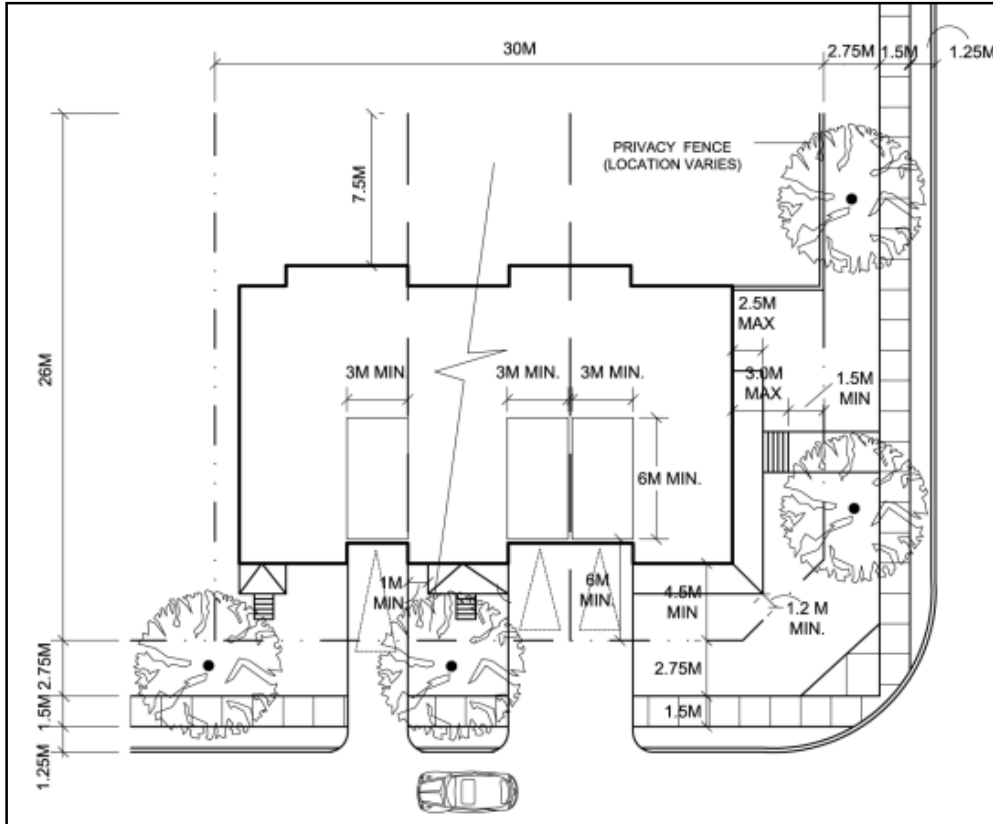


Figure 27: Recommendations for typical block and corner configuration

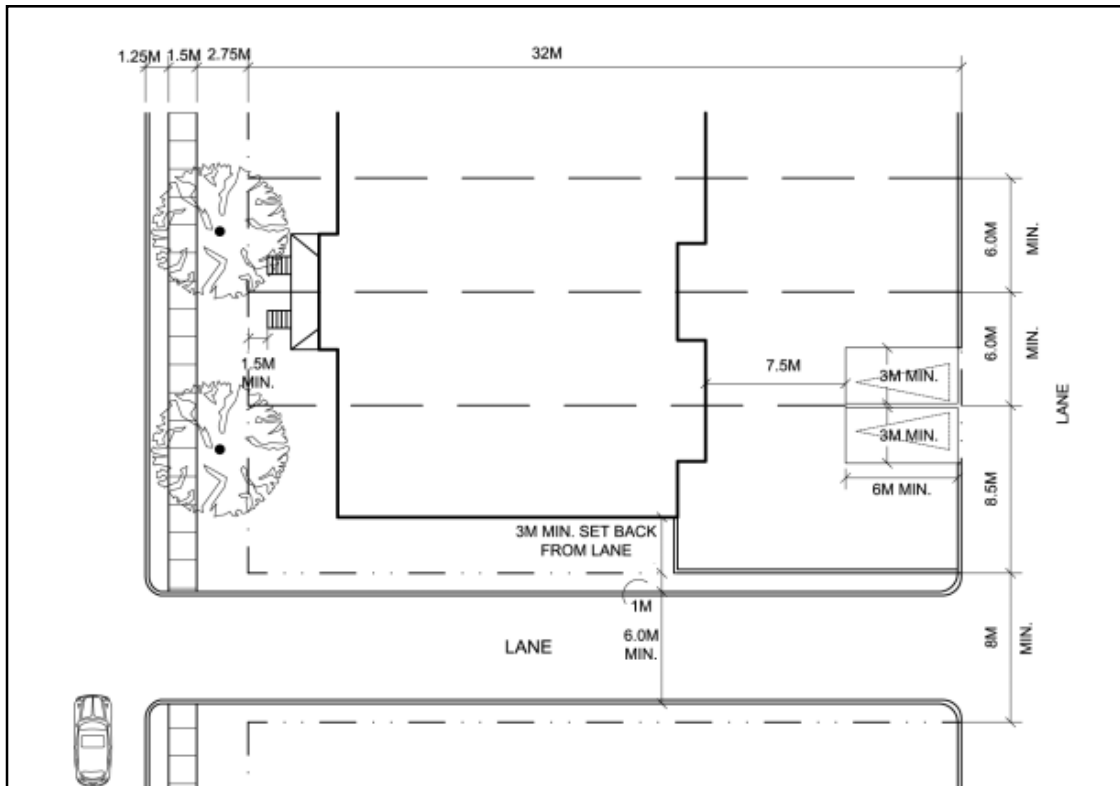


Figure 28: Recommendations for end lots adjacent to a lane

3.4.5 Parking: Minimizing the Presence of Garages and Driveways

Current Standard Issues:

- Current parking standards reduce the established parking space and garage standards of By-Law 1-88.
- Many site specific by-law exceptions contain provisions that reduce the new standards even further.
- Zoning requires 3 parking spaces on the lot for all single-family dwellings regardless of lot size. There are special exceptions on a development-by-development basis. Typically 2 spaces are provided in the driveway and one is provided in the garage. The second space in the garage usually has reduced width and/or length and therefore cannot be included in the calculations. (In some cases encroachments are constructed within the second garage space to the point that a car cannot be parked.)
- No zoning standards exist for minimum double car garages sizes.
- Garage widths are too narrow (ie. can't get out of car and the car door hits the interior garage wall and/or the front porch outside on the driveway). **(Photo 24)**
- There is difficulty in parking cars within driveways without overhanging the sidewalk and roadway.
- There is difficulty in removing snow from sidewalks due to cars parked in the driveways blocking the sidewalk.
- In particular, lots less than 12.0 metres with front yard double car garages create a house and streetscape image that is garage and driveway dominated. **(Photo 23)**
- Multiple curb cuts at the street edge interfere with pedestrian activity on sidewalks and reduce opportunities for street tree planting, placement of utilities and street parking.
- The proportion of the garage dominates dwellings over the habitable portion of the house at grade where opportunities to provide front porches, windows and front facing rooms are minimized. Opportunities for casual surveillance of the street from the house is limited.

Standard Recommendation:

(See Section 3.3.2, Zoning Recommendations and Table A)

- a) Regulate interior garage sizes, exterior garage projections and permitted encroachments.
- b) On lots less than 11.0 metres, reduce the parking requirements for single car garages from three cars on the lot to two, thereby removing the requirement for tandem parking in the front yard and reducing the minimum front yard setback to 6.0 metres (see Table A and Section 3.3.2.1, Front Yard Setbacks).



Photo 23: Garage-dominated house forms limit at grade connections between the house and the street.



Photo 24: The proximity of the front porch to the driveway and minimum front yard set-back creates a tight space for front yard parking

- c) See Section 3.3.2, Zoning Recommendations and Table A for minimum interior garage dimensions
- d) Remove the existing zoning provision that allows one half of the common wall that separates the garage from the dwelling to be included within the minimum garage size.

3.4.6 Attached Garages

Current Standard Issues:

- Streetscapes are dominated by the consistent image of attached and or projecting garages.
- In the majority of cases where the maximum width of the garage width shall not exceed 50% of the lot frontage, a 5-metre wide garage is permitted on a 10 metre (32 feet) lot.
- The projection of the attached garages from the dwelling units has a negative effect on the streetscape.
- The maximum garage projection is regulated by sub-note # 8 to Schedule "A1" of By-Law 1-88. Sub-note # 8 provides for a range of between 2.5 to approx. 4.5 ± metres and is subject to approximately fifteen provisions.

Standard Recommendations:

- a) To reduce the garage dominance on the streetscape, as a general rule the width of garages should not exceed 50% of the width of the dwelling. (See Section 3.3.2.6, Interior Garage Dimensions and Table A).
- b) The maximum garage projection from the front face of the house shall be 1.0 metre where there is no front porch and 2.0 metres where there is a front porch.

3.4.7 Driveways and Tandem Parking

Current Standard Issues

- The homeowner generally expects that driveways should be straight and not tapered or skewed, and be as wide as the outside dimensions of the garage.
- Driveways are being tapered and skewed at angle bend and culs-de-sac lots.
- Driveways are being tapered and skewed to avoid street utilities and to provide room for snow storage.
- There is insufficient curb frontage in front of the lots to provide for zoning and engineering designs standards.
- The By-law requires 3 parking spaces on the lot for single-family dwellings. Builders either must provide a double car garage with one parking space in the driveway or two in the driveway and one in the garage. Single car garages require tandem front yard parking with a minimum front yard

setback of 10 metres between the front face of the garage and the sidewalk or street curb.

- To comply with the parking requirements of the By-law, and the limited available curb frontage for lots in a cul-de-sac, double car garages must have their driveways tapered or skewed to match the limited curb frontage available. This results in conformity with the zoning by-law but creates an undesirable situation for the homeowners (See Section 3.2.3, Minimum Frontages on Culs-de-Sac and Angle Bends).

Standard Recommendations:

- a) The draft plan of subdivisions must be reviewed and approved having lots that have the appropriate curb frontages while still providing for straight and non-tapered driveways.
- b) Maintain the existing driveway standards respecting separation of abutting driveways and setbacks to all on-street hardware.
- c) Tandem parking should not be permitted in the front yard. Reduce the parking requirement of 3 parking spaces on a lot to 2 spaces for single car garages on lots less than 11.0 metres (see Table A) to allow the front yard setback for single car garages to be reduced from 10.0 to 6.0 metres. This will result in the reduction of excessive garage setbacks required for front yard tandem parking and will create a more desirable relationship of garage face to habitable dwelling face.
- d) Require the submission of engineering construction drawings that will specify the location and size of driveways on a lot. Driveway locations must include the locations of all on street hardware and provide for driveway widths that comply with the zoning by-laws. These locations must provide for straight and non-tapered driveway locations taking in to account the proposed house location. Both the zoning and grading staff should review these plans prior to their approval (as a condition of Draft Approval).
- e) Existing lot grading criteria should be reinforced to ensure that driveways are built straight and are not tapered or skewed. The house designs and locations must be altered or revised to ensure the appropriate relationship between the driveway and the street edge is provided.

3.4.8 Lot Grading and Drainage

Current Standard Issues:

- Small lots with minimum setbacks have improper drainage.
- Rear yards with catch basins require large swales to direct runoff that are disproportionate to the rear yard.
- Side yards are too narrow to accommodate drainage between properties, causing erosion at grass areas.

Standard Recommendations:

- a) Increase building setbacks to create a balanced proportion of lot to house, and to allow drainage to be directed between properties.
- b) Minimize the number of catch basins in rear yards to only those required due to irregular topographic conditions.

3.4.9 Permitted Yard Encroachments

Current Standard Issues:

- Homeowner's expectations are not being met. (e.g. front porches are too close to the street and lot lines)
- There is too much home in proportion to the lot. The house is too close to the street and back yards are too small.
- There is insufficient access to the rear yard with current side yard setbacks.
- Additional setback issues exist for corner lots with sight triangles and entrance features.
- A complete set of permitted yard encroachment standards was developed in conjunction with the introduction of new developments to the City. Generally these standards have the effect of permitting a larger variety of encroachments closer to the property lines. The homeowner's expectations are not being met with these reduced standards.
- Yard encroachments (front porches, steps etc.) are permitted within 0.60 metres of property lines and in some cases right up to the property line (sight triangles)
- Hydro/electrical meters protrude within 0.60 metre side yard.
- 0.30 metres reserves are included within minimum setback requirements for the lots.
- Side doors entrances permitted within 1.20 metre side yards (permitted by by-law exception only) protrude within side yards.

Standard Recommendations:

- a) City's zoning by-laws should be amended to reduce the permitted yard encroachments.
- b) Increase the minimum amenity areas for both the front and rear yards and provide for better access to the rear yards. (See Section 3.3.2, Zoning Recommendations)

- c) Allow permitted yard encroachment no closer than 1.5 metres to any front, exterior or side yard and no closer than 1.2 metres for sight triangles (except eaves and gutters).
- d) Allow only covered porches (not enclosed with walls) with or without a cold cellar underneath and bay windows to encroach a maximum 3.0 metres into a 4.5 metre side yard. The 3.0 metre encroachment includes the porch and access steps, where the front porch depth shall be a maximum of 2.5 metres. No permitted yard encroachment shall be permitted within 1.50 metres from a front, exterior side lot line or sight triangle.
- e) Eliminate the 0.30 metre reserve required for zoning setback calculations.

3.5 DESIGN STANDARDS IMPLEMENTATION

3.5.1 Coordination Between Departments

The Design Standards Review process has been undertaken with the participation and on-going consultation between the Community Planning, Urban Design, Growth Management, Engineering, Buildings, Forestry, Legal Services and Fire Departments. The implementation of the Design Standards will require the continued commitment between all departments as development procedures take place.

A collaborative approach between departments to review each phase of development is recommended. A senior management representative and additional staff member from each department should be assigned to ensure the continuity of representation at key meetings and during development review procedures (Block Plan, Site Plan and Urban Design Guideline Review).

3.5.2 Revisions to the Zoning By-law

Current Issues:

- A complete set of zoning standards was developed in conjunction with the introduction of the new community developments to the City (By-law 1-88, Sections 4.15 to 4.21 and Schedule "A1")
- Additional zoning exceptions are written for each new draft plan amending the newly created standards.
- There is a lack of consistency with current zoning regulations and consequently they are difficult to administer.
- It is difficult for staff to judge survey compliance with some of the new zoning standards from as-constructed surveys submitted.
- Standards are being created by amendment. Each development has its own set of zoning standards exclusive to the subject development. The amendments may create, amend or delete any standards that may or may not exist. These amendments generally reduce the prescribed standard that was created.

- Zone classifications are often ignored. Zoning compliance is dependant upon many factors that can only be understood from the approved architectural construction drawings.

Recommendations:

- a) Pending Council adoption of the standard recommendations set out in this report including the zone provisions for single, semi-detached and townhouse dwellings outlined in Table A, revisions to the current zoning by-law should be made. City Council and the Commissioner of Planning and Urban Design will continue to be responsible for guiding the implementation of the recommended standards as well as the direction of any significant changes to these standards.
- b) A Technical Review Committee comprised substantially of members of the Design Standards Review Committee is recommended to provide ongoing support and advice to the Commissioner of Planning and Urban Design during the Block Plan, Site Plan and Urban Design Guideline review stages of development.

