February 23, 2017

Chair Shiner and the Planning & Growth Management Committee

RE: Amendments to By-law 569-2013 (Section 200.15)

Councillors,

I am writing in relation to the proposed amendments to By-law 569-2013 (Section 200.15) which seek to bring the City of Toronto's zoning requirements around accessible parking spaces in line with the requirements set out in the Provincial legislation known as the Accessibility for Ontarians with Disabilities Act (AODA). I understand that BILD is also submitting correspondence to the Committee regarding the need for transitional provisions to avoid negative impacts on in-process development applications.

My firm has extensive experience with the design of above- and below-grade parking structures and surface parking facilities. We welcome an opportunity to harmonize Provincial legislation with the City of Toronto's zoning by-law. We believe this presents an opportunity to reduce confusion, provide for appropriate and efficient designs, and ensure that the transportation needs of users with mobility issues are being met.

I present, on BA Group's behalf, two principal areas of concern with the proposed changes that we believe will have a negative impact on design and may result in frequent requests by development applicants for relief from the proposed rules. Simply, these potential issues could be resolved by more closely following the AODA, rather than layering additional requirements upon it. Attached are figures illustrating a few of the specific situations discussed below.

"Type" of Accessible Parking Space

Accessible parking spaces, under the AODA, fall into two 'types'. "Type A" spaces are 3.4m in width, designed to be "van accessible" and permit the side loading of accessible vehicles. "Type B" spaces are 2.4m in width and are designed for the use of those with mobility issues that require proximity to entrances/exits but do not require extra parking space width. Both "types" of spaces are required to be adjacent to an accessible aisle 1.5m that is wide. The AODA permits the required accessible parking supply to be split 50/50 between the two types of spaces (i.e., if 6 accessible spaces are required, 3 can be "Type A" and 3 "Type B").

The proposed changes to the by-law would require that all accessible parking spaces in the City of Toronto be sized as a "Type A" space. We are not aware of any technical studies which indicate that the 50/50 mix of "Type A" and "Type B" spaces required by the AODA are deficient, requiring "Type B" spaces to be widened.

The impact to development of the proposed change is significant. The current width of 3 City of Toronto parking spaces (the typical number of spaces that fit within a typical structural grid in an above- or below-grade parking structure) is 7.8m plus the width of adjacent columns (Figure 1). Three typical spaces can be replaced with 2 AODA-compliant accessible parking spaces (3.4m "Type A" + 1.5m aisle + 2.4m "Type B" = 7.3m, Figure 2). Replacing 3 typical spaces with 2 proposal-compliant accessible spaces results in a required width of 8.3m (Figure 3). This exceeds the typical structural grid used in above- or below-grade parking facilities and may require structural changes near accessible spaces.

BA Consulting Group Ltd.
300 – 45 St. Clair Ave. W
Toronto ON M4V 1K9
TEL 416 961 7110
EMAIL bagroup@bagroup.com

Length of Accessible Parking Spaces

The AODA specifies the width of accessible parking spaces, but does not specify the length. It is our understanding that this was specifically omitted from the Province's legislation such that the accessible parking space dimensions could be easily integrated into local zoning by-laws, which often have different parking space length and drive aisle width requirements.

The proposed changes to Section 200.15 of By-law 569-2013 include the provision of a length requirement for accessible spaces of 5.9m. This is longer than the length requirement for a typical City of Toronto parking space of 5.6m.

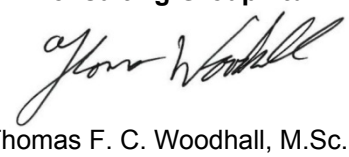
This additional 0.3m does not offer significant advantages to the loading and unloading of passengers from accessible vehicles. Rear loading vehicles would still need to utilize a significant portion of the drive aisle to load/unload passengers regardless of space length. Attached is an information sheet from an accessible vehicle retrofit provider. As noted the ramp length for one of their installations is approximately 45" (or 1.14m). If this was fitted on the back of a 2012 Dodge Caravan (a 95th percentile design vehicle with a length of 5.15m typically used for this purpose) the total length for a rear loading vehicle with the ramp deployed would be 6.29m. Application of standard parking space design principles would require the provision of a 0.3m (1 foot) buffer in front of the vehicle which would result in a total parking space length of 6.59m. The provision of a parking space that is 5.9m in length would not provide any benefit to this condition, as a user loading into the vehicle would be positioned within the drive aisle regardless of if the parking space was sized to 5.6m or 5.9m in length.

However, there are significant impacts to structured and surface parking facilities by lengthening accessible spaces to 5.9m from 5.6m. An additional 0.3m would require that typical parking spaces opposite the accessible spaces (those on the other side of the drive aisle) would need to be moved to permit the 6.0m drive aisle required under the bylaw. This has three unintended impacts.

1) Drivers, travelling down the drive aisle, would see the 6.0m aisle "jog" to the side as they travelled, resulting in a less safe condition within the parking area (Figure 4).
2) Parking spaces opposite the barrier free spaces may become shorter (5.3m in length) which would require by-law relief (Figure 4). Without relief all parking spaces within the impacted zone would be forced to shift (with parking spaces also shifting the entirety of the parking area) or resulting in the creation of unusable space within the parking area (Figure 5).
3) If structural grids could not be adjusted to accommodate the shifts required by the longer spaces, some parking spaces might violate the City's "obstruction rule" within the By-law (200.5.1.10 (D)), resulting in the need to seek relief from the rule through a variance or Site Specific By-law (Figure 6).

Our recommendation would be to adopt the sharing rules (between Type A and Type B spaces) as set out in the AODA and to adjust the length requirement to 5.6m so as to be compliant with the AODA and to be compatible with other critical zoning by-law parking dimensions.

Sincerely,
BA Consulting Group Ltd.



Thomas F. C. Woodhall, M.Sc.(Eng.), P.Eng., Associate

Figure 1

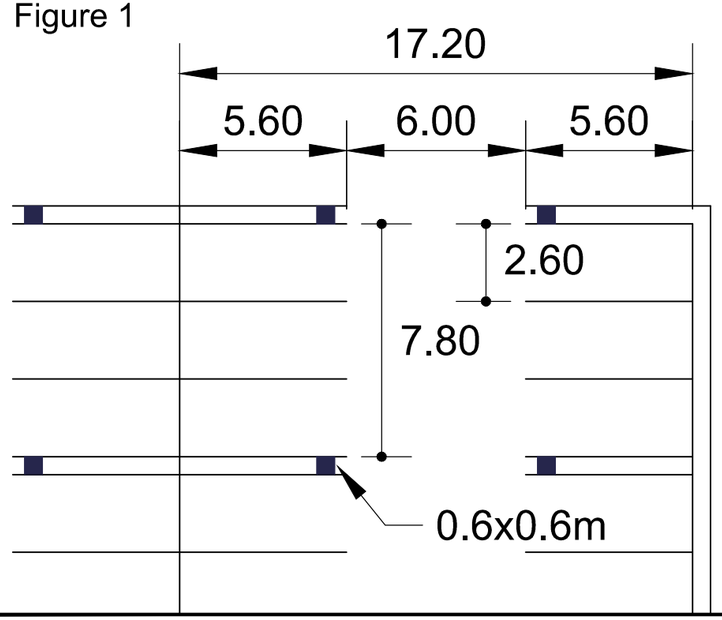


Figure 2

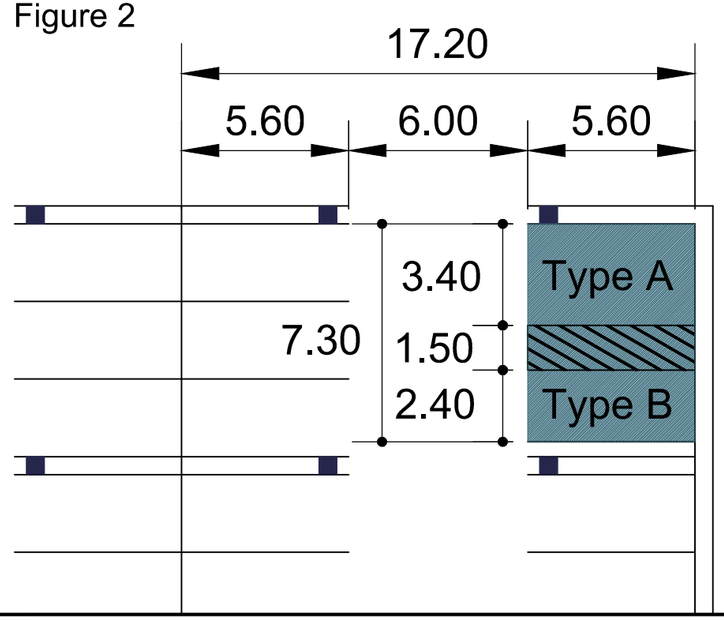


Figure 3

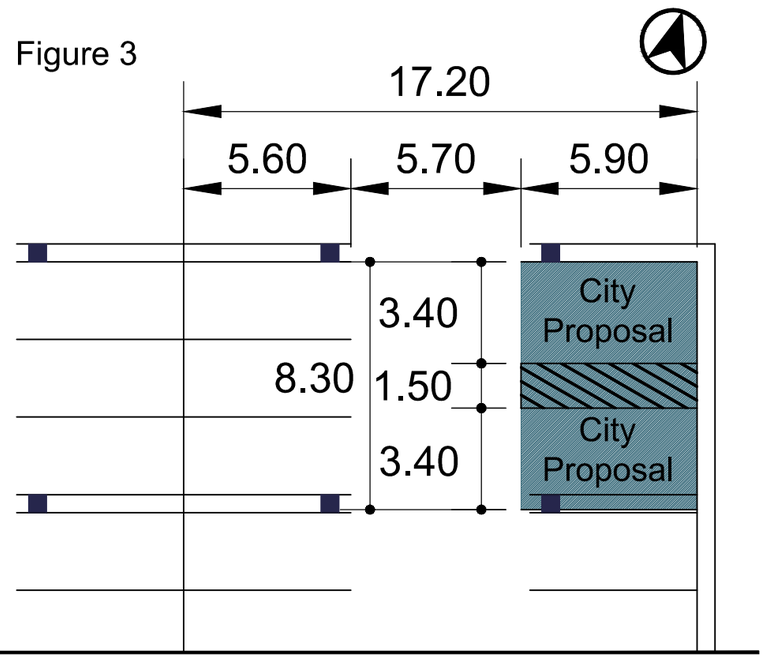


Figure 4

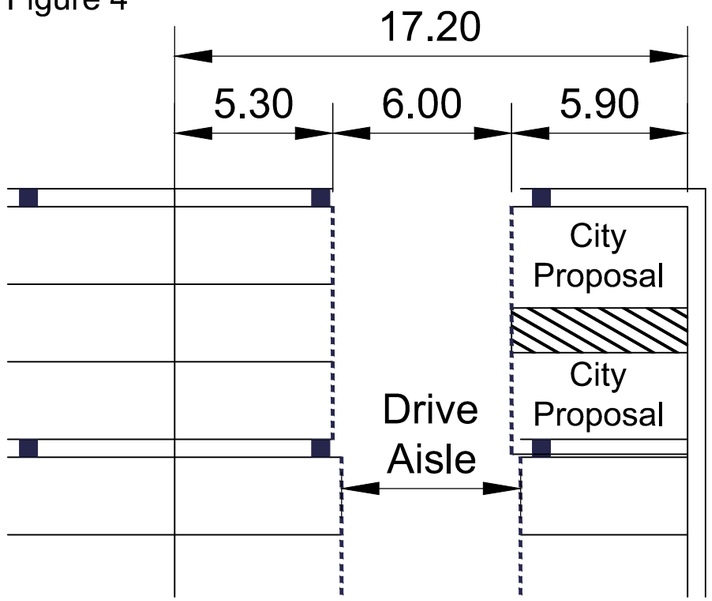


Figure 5

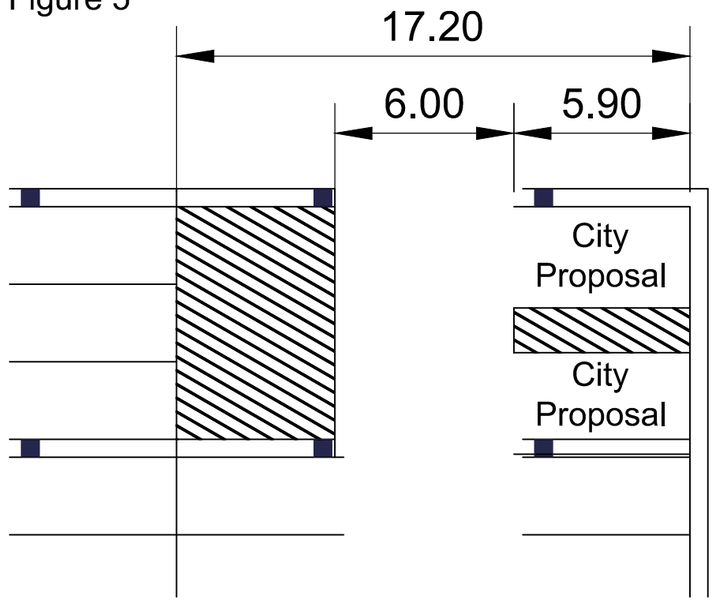
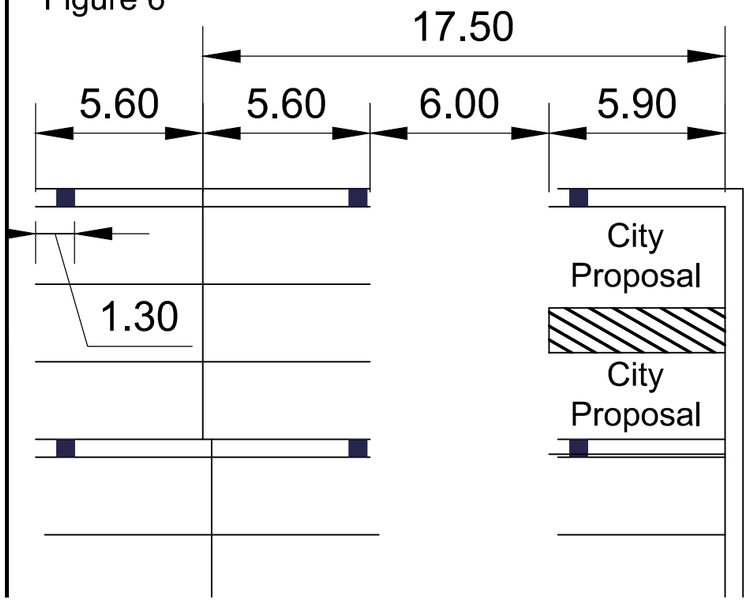


Figure 6



Date Plotted: February 22, 2017 Filename: H:\Barrier Free Parking\Planning Growth Committee Materials\PMGC Submission.dwg

BA Group

Proposed Adjustments to Accessible Parking Spaces

Submitted to the Planning & Growth Management Committee

Project:	PGMC Submission
Project No.	0000-00
Date:	February 22, 2017
Revised:	--

Scale 1:200 (0 1 2 3 4 5 10m)

Drawing No. Figures 1 - 6

BraunAbility

Life is a Moving Experience®

Dodge Power Rear-Entry

With a power door and 30" wide power ramp, the BraunAbility® Dodge Power Rear-Entry is the perfect choice for those who travel by themself. A rear-entry vehicle's low-angle ramp makes it easy to access the interior through the rear hatch. The unique design of this mobility upgrade makes it possible to use standard parking spaces when accessible parking is unavailable.

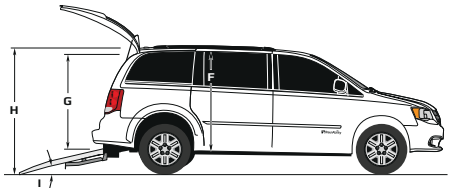
A variety of seating options can be installed to best meet your needs, based on the number of passengers you need to accommodate.

Visit your local BraunAbility® dealer and start experiencing a new level of convenience today.

800.THE.LIFT 800.843.5438

braunability.com







Dimensions

All dimensions are for reference only.

Lowered Floor Length - Long Option	A	87"
Lowered Floor Width	B	31"
Ramp Width (Usable Clear Opening)	C	30"
Ramp Length (Power)	D	45"
Distance Between 2nd Row OEM Flip & Fold Seats (Unfolded)	E	7"
Distance Between 2nd Row Aftermarket Bucket Seats	E	21"
2nd Row Wheelchair Location Interior Height	F	57"
Entrance Height	G	54"
Overall Height (Hatch Closed - with Roof Rails)	H	75.5"
Overall Height (Hatch Closed - without Roof Rails)	H	73"
Ramp Angle	I	11°

Due to manufacturing tolerances both with the OEM vehicle and the conversion components, all dimensions may vary slightly from those shown.

© 2016 BraunAbility®. All rights reserved. All illustrations, descriptions and specifications in this brochure are based on the latest product information at the time of publication. The Braun Corporation reserves the right to make changes at any time without notice.