

Transit Passenger Shelters

General Considerations

Transit passenger shelters are used for the protection of waiting passengers from bad weather, provision of seating for elderly patrons, posting of schedule information materials, and generally, for the convenience of the travelling public. The following criteria are guidelines for installing a shelter:

- The average number of passengers using the stop must not be lower 150 passengers per day (24 hour period) or 800 per week.
- The size of a shelter is determined by the acceptable size of the queue of the waiting passengers, calculated at a density of 6.25 sq. ft. per waiting passenger and the total cost of installation.
- Sidewalks with widths less than 3.1 m cannot safely accommodate a transit passenger shelter.

Shelter Design

- Transit passenger shelters vary widely in materials and dimensions. The following dimensions are typical for shelters used city-wide. These dimensions can be used as guidelines for designing bus stop areas:
 - 1.2m (4') wide X 2.4m (8') length (non-heated, one opening/no door)
 - 1.5m (5') wide X 3.8m (11') length (non-heated, one opening/no door)
 - 2.4m (8') wide X 4.5m (15') to 12.2m (40') length (heated, two doors)
- Shelter openings should be a minimum width of 800mm (2.62') in order to allow a wheelchair to pass through.
- Doorway openings in small unheated transit passenger shelters must be designed to the standards specified in the Manitoba Building Code.
- Doorway openings and doors in large transit passenger shelters must be designed to the standard specification in the Manitoba Building Code.
- The safety strip applied to transparent surfaces should be a minimum width of 75mm (3") wide and must be blue in colour. The stripe should be at the midpoint of the transparent shelter panel, approximately 140-160mm (55-63") above ground level.
- Seating should be provided, if feasible, with sufficient space for passenger movement. Seating should be oriented in the direction of approaching buses.

Seating

- Accessible seats should have a seat height of 450 to 550mm and a seat depth of 400 to 500mm.
- The front edge of a seat should be at least 600mm from the nearest travel path.

Figures 5, 6 and 7 illustrate examples of layout designs for all of the elements of a typical bus stop. Layout of individual stops depends primarily on the characteristics of the particular site (i.e. built-up urban, suburban, and wide suburban boulevard environments).

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Criteria for Installation

Requests for the placement of a transit shelter at a bus stop are received from Transit customers in general. Occasionally, requests are received from bus operators or other Transit staff members.

1. Placement Evaluation:

To ensure fairness in the placement of new transit passenger shelters throughout the City of Winnipeg, all requests are evaluated according to the following criteria as adopted by the Committee on Works and Operations on August 27, 1973:

Priority should be given to locations:

1. At transfer points where some inconvenience to passengers is occasioned by the necessity of transferring and waiting for the second bus.
2. At major transit passenger generators, such as hospitals, parks, and educational establishments and major shopping centers.
3. At intermediate points of routes where a considerable number of residents have walking distances substantially greater than the normal of 1/4 to 1/2 mile (400 meters).
4. At bus stops nearest to major Senior Citizens= Housing Units.

On March 7th, 1980 the Committee approved the following additional criterion:

5. At locations which are in open areas affected by the elements (e.g. Wind-swept).

Based on the evaluation, each requested location is assigned a score, which either represents a 'high' or 'low' priority. Requests are then either placed on a priority waiting list or filed for future review.

2. On-Site Inspections:

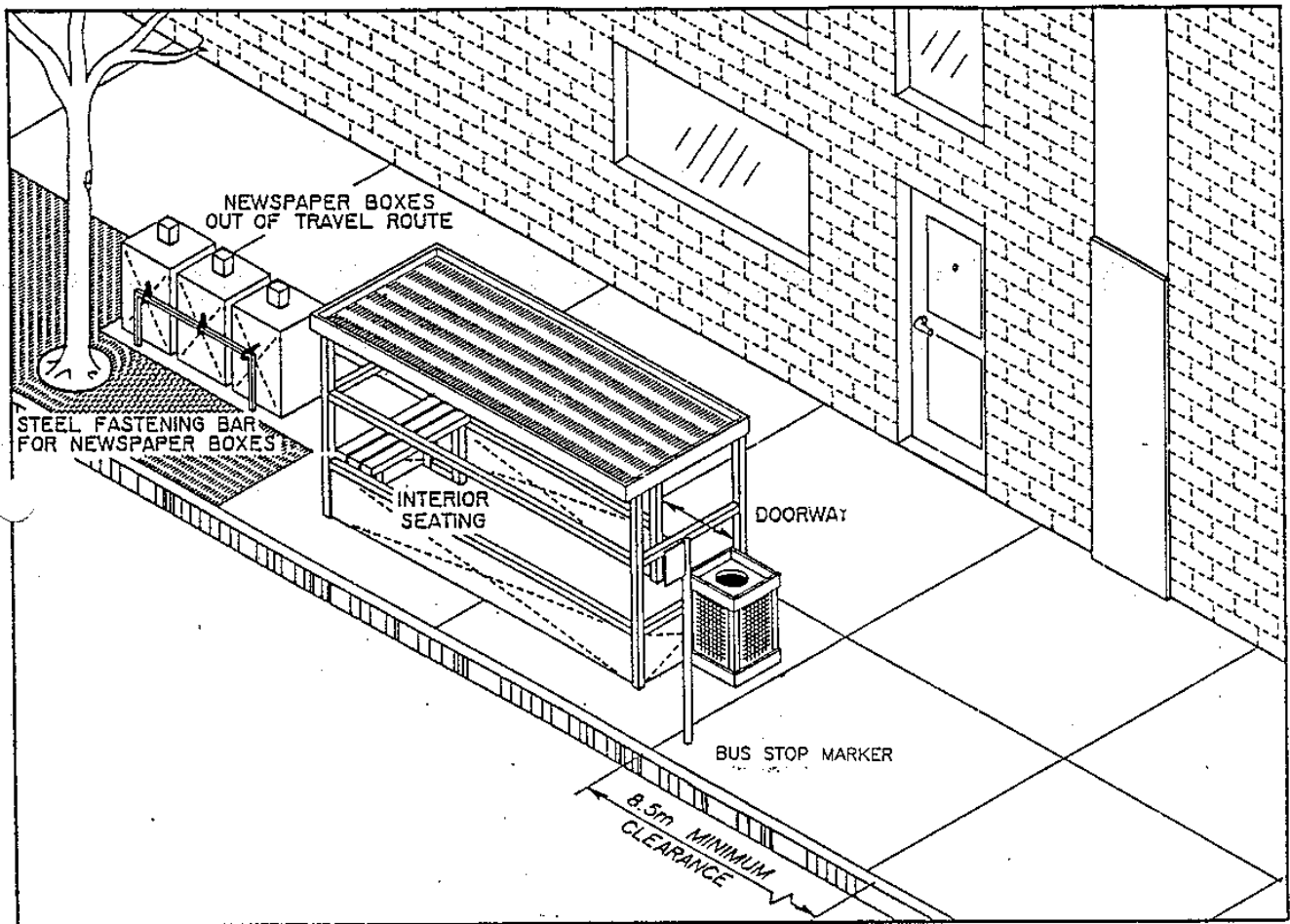
A "high" priority shelter request will be placed on a waiting list and will be fulfilled in order of priority, subject to there being no operational or safety impediments to installing a shelter at a given location. The Chief Inspector and Operations Planner from Winnipeg Transit conduct an on-site inspection of every bus stop that is on the priority waiting list to check for operational suitability before a shelter can be recommended for placement.

The operational criteria used are as follows:

1. Is there protection against prevailing winds given the possible orientation of shelter
2. Clearance for passage of pedestrians (is there adequate sidewalk and/or boulevard space to place shelter?)
3. Clearance for snow plow (is there adequate sidewalk space for snow plow to pass shelter in winter?)
4. Lighting conditions (can passengers see and be seen?)
5. Visibility for motorists and pedestrians (would the shelter obstruct their view?)

Although some locations may make the priority waiting list, they may never receive a shelter because of some type of operational or safety impediments or lack of physical space that prevents the placement of a shelter.

FIGURE 5: Typical Bus Stop - Built-up Urban Boulevard

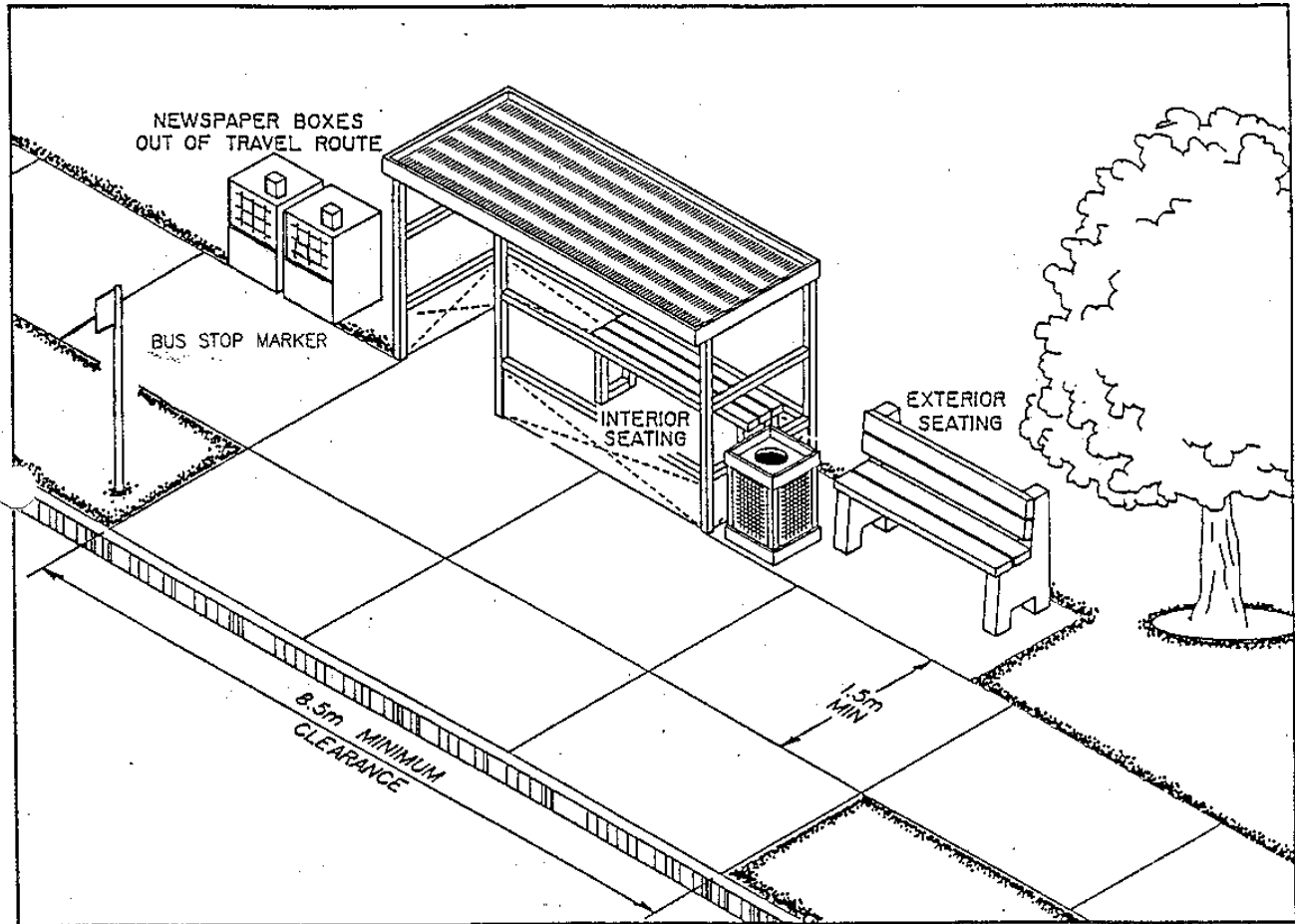


Bus Stop and Passenger Waiting Area Design

General Points:

- Accessible travel paths should follow the shortest distance between two points
- Walkways must be well maintained (stable pavement, level, and well drained)
- Walkways must be clear of snow, ice and other debris.
- Street furniture and signage, such as posts, benches, newspaper boxes, garbage receptacles should be located out of the travel path of transit passengers and pedestrians.

FIGURE 6: Typical Bus Stop - Suburban Boulevard

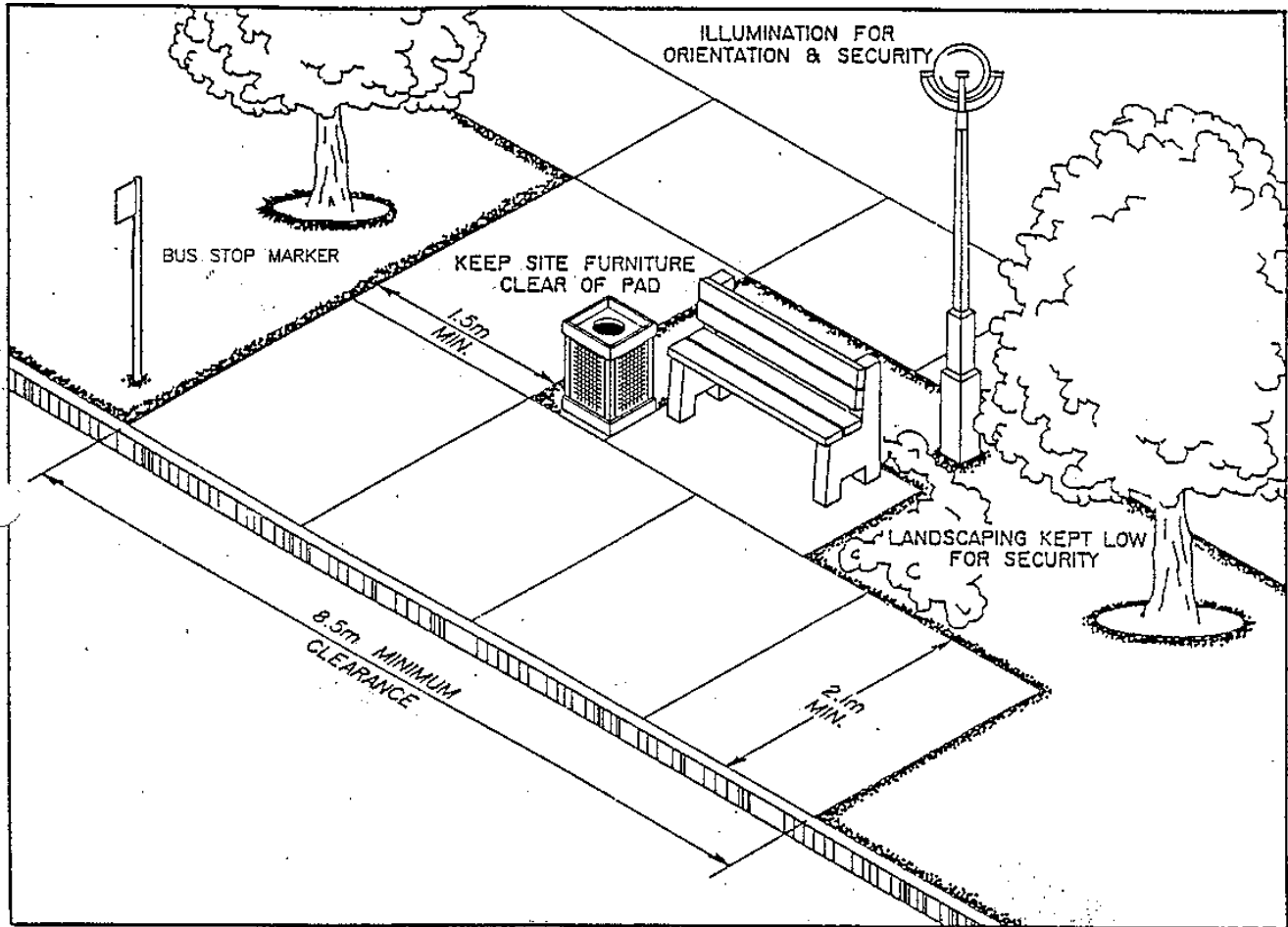


Bus Stop and Passenger Waiting Area Design

General Points:

- Accessible travel paths should follow the shortest distance between two points
- Walkways must be well maintained (stable pavement, level, and well drained)
- Walkways must be clear of snow, ice and other debris.
- Street furniture and signage, such as posts, benches, newspaper boxes, garbage receptacles should be located out of the travel path of transit passengers and pedestrians.

FIGURE 7: Typical Bus Stop - Wide Suburban Boulevard



Bus Stop and Passenger Waiting Area Design

General Points:

- Accessible travel paths should follow the shortest distance between two points
- Walkways must be well maintained (stable pavement, level, and well drained)
- Walkways must be clear of snow, ice and other debris.
- Street furniture and signage, such as posts, benches, newspaper boxes, garbage receptacles should be located out of the travel path of transit passengers and pedestrians.

FIGURE 8: Standard Bus Stop (with Shelter) - Distances and Dimensions

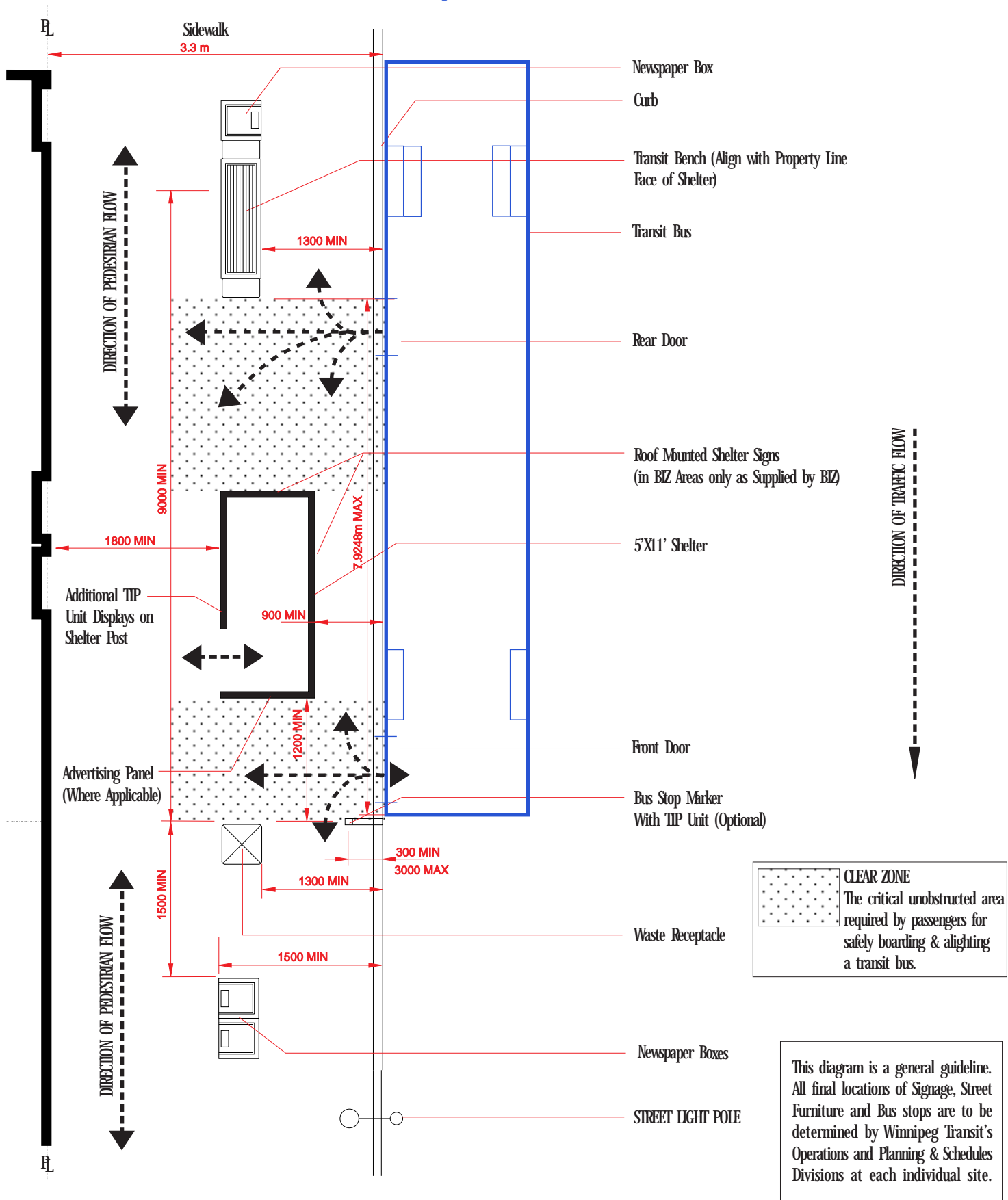


FIGURE 8a: Standard Bus Stop (without shelter) - Distances and Dimensions

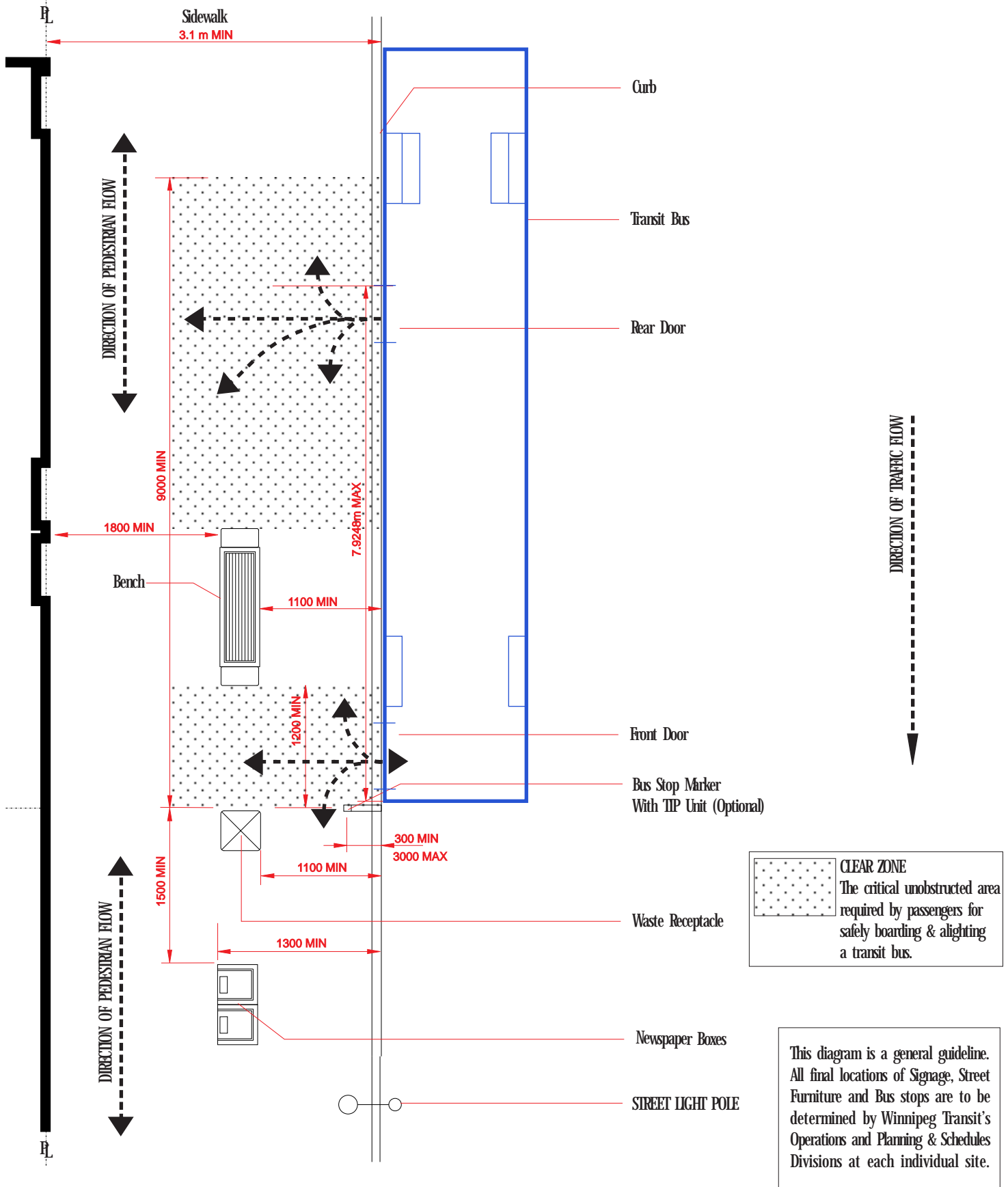
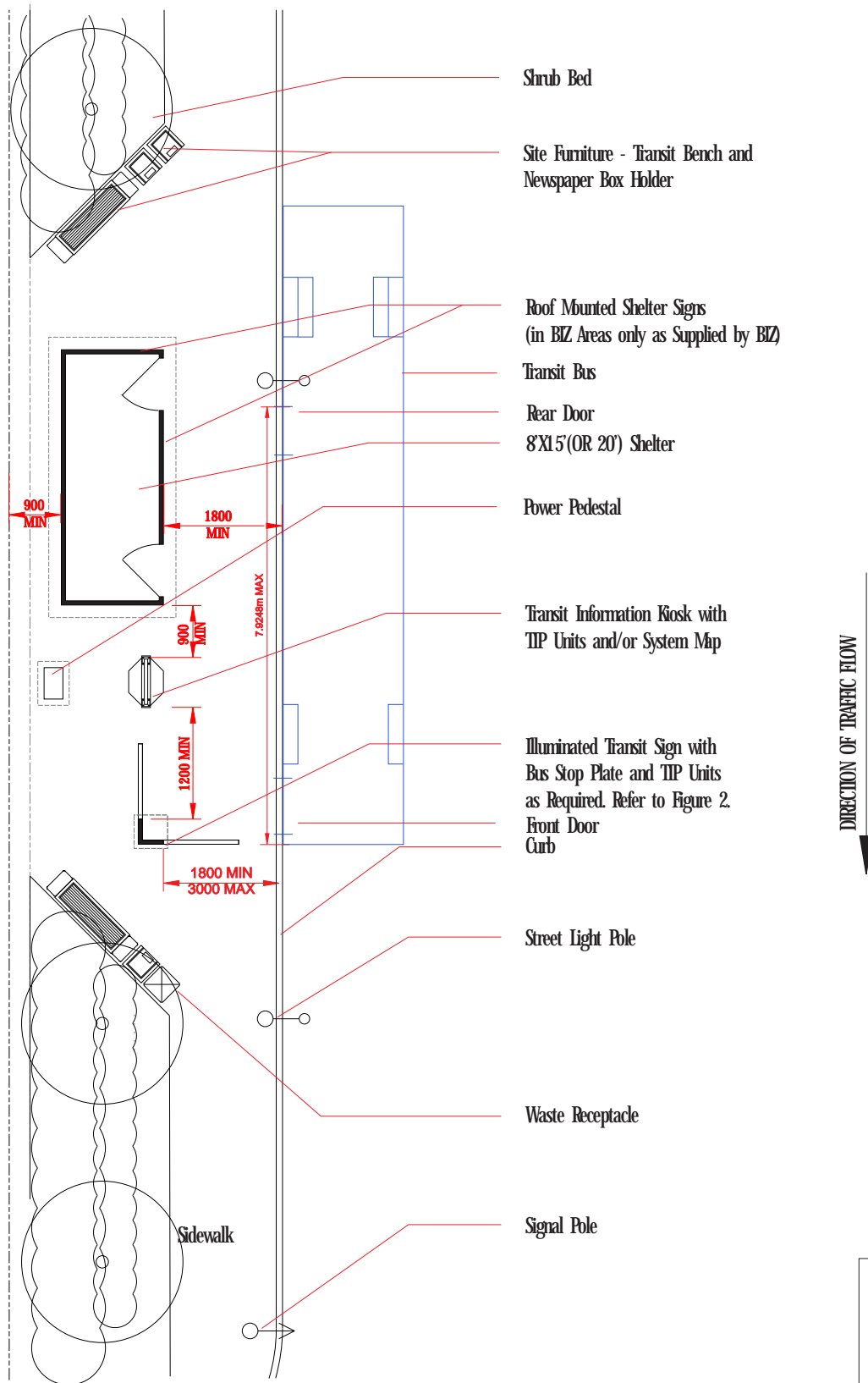


FIGURE 9: Major Bus Stop - Distances and Dimensions



Shrub Bed

Site Furniture - Transit Bench and Newspaper Box Holder

Roof Mounted Shelter Signs (in BIZ Areas only as Supplied by BIZ)

Transit Bus

Rear Door
8'X15'(OR 20') Shelter

Power Pedestal

Transit Information Kiosk with TIP Units and/or System Map

Illuminated Transit Sign with Bus Stop Plate and TIP Units as Required. Refer to Figure 2.
Front Door
Curb

Street Light Pole

Waste Receptacle

Signal Pole

DIRECTION OF TRAFFIC FLOW

This diagram is a general guideline. All final locations of Signage, Street Furniture and Bus stops are to be determined by Winnipeg Transit's Operations and Planning & Schedules Divisions at each individual site.