15. PARKING LOT DESIGN

The following is a brief overview of parking facility requirements including characteristics, basic dimensions, design criteria, and accepted standards. Station parking (park-n-ride) requirements include the number parking spaces are determined using the Travel Demand Forecast model and also dictated by developable/useable land in the vicinity of the nearest station.

Facilities will be paved, landscaped and designed to provide safe and convenient parking and bus transfer facilities for sbX riders. The parking lot facilities may include:

- Passenger/pedestrian circulation areas;
- Passenger information;
- Landscape areas;
- Stormwater retention basins;
- Standard parking spaces;
- Kiss-n-ride parking (optional);
- Accessible parking;
- Bicycle storage;
- Motorcycle parking (optional); and
- Security features including lighting, ETELs, cameras, etc.

To comply with accessibility requirements, the California Building Code specifies accessible parking space requirements for all sized lots. For smaller lots anticipated for Omnitrans projects, requirements include: 1 accessible space for each 25 spaces for the first 100 spaces, and 1 accessible space for each 50 spaces for the next 100 spaces up to 200 spaces. Van accessible spaces are also required.

For parking lots with off-street sbX stations such as the Kendall/Palm Station on the sbX Green Line, the facilities should also include:

- Passenger waiting and loading areas;
- All of the amenities planned for the on-street stations;
- Parallel stops or saw-toothed bus bays or islands designed for circulation of articulated buses; and,
- In some cases a bus turnaround.

Table 15-1: Typical Parallel Parking Dimensions

Size	Width (ft)	Length (ft)	Aisle Width
Standard	8.5-9.5	18-20	24-26
Intermediate	8-9	16-18	22-24
Compact	7.5-8.5	15-17	20-22
Accessible	9.0 + 5.0	18.0	
Van Accessible	9.0 + 8.0	18.0	
Source: *Guide for Design of Park-and-Ride facilities, AASHTO*			

Local and sbX service may need to be accommodated via bus bays within the parking lots. Design characteristics for sawtooth and parallel bus berths include:

- Sawtooth berth design:
  - Length of space for articulated bus: 80'-85'
  - Recessed area from curb line: 7'-10'
- Parallel berth design:
  - Length of space for articulated bus: 100'

Ingress and egress must meet local traffic engineering design standards for turning radii, and entrance and exit locations relative to nearby intersections. Parking bay widths, aisle widths, parking stall lengths, drainage, stormwater management, etc.

must meet the municipal code of the affected local agency. Shown in Table 15-1 are typical parking lot dimensions.

Any required bus layover areas should be located on the inbound roadway to the passenger loading area. Storage capacity should be provided according to the service plan developed for the lot.

The minimum layover area should be designed to accommodate two articulated buses. The bus loading area should be separated from roadways used by other vehicles. This area is ideally accessed directly from the street and should be consistent with the capacity requirements of the service plan.