

PART A. TECHNICAL DESIGN PARAMETERS

The following technical design parameters for adoption have been developed to guide the Broadway street design once the baseline conceptual alignment is adopted.

1. **Overall Design Guidance.** The general direction and guidelines to be followed in developing the Broadway design going forward are to:
 - a. Minimize the number of buildings to be acquired and demolished
 - b. Maintain access and as much parking as possible for existing development
 - c. Reduce construction and acquisition costs. The line work on this drawing indicates the “best case” scenario for minimizing the number of buildings directly impacted. Changes in both the alignment and width will likely result during further design and through the acquisition process. This may change the number of buildings directly impacted.

2. **Street Element Widths.** The widths of street elements generally are:
 - 11' Travel Lane
 - 10' Single Left Turn Lane
 - 11'/10' Combination for Double Left Turn Lanes
 - 10' Right Turn Lane
 - 8' Median
 - 6' Bike Lane
 - 6' Sidewalk, 8' at transit stops per ADA requirements
 - 5' Deep x 29' Long Bus Shelter
 - Bus pullouts will be provided at arterial intersections with sufficient length to accommodate two buses (local and express) concurrently.
 - Bus pullouts will be provided at other signalized intersections where feasible, when property and budget constraints allow

3. **Excess Right-of-Way Width.** When design refinements and acquisition result in additional right-of-way width, it will be allocated in the following order:
 - a. Widen bike lane up to 7' and provide elevated cycle track where uninterrupted stretches of sufficient length exist.
 - b. Widen sidewalk to as much as 8'.
 - c. Provide a landscaped buffer between the bike lane and sidewalk of up to 8' width. The width of excess property available will be determined during the design/acquisition process, and will depend on decisions by property owners as well as the project design team.
 - d. Include features such as:
 - i. **Bicycle Bypasses.** Bicycle bypasses behind bus stops and pullouts will be provided where feasible. In such cases, the bicycle lane passes behind the bus platform. This decreases conflicts between cyclists and the bus.
 - ii. **Green Streets and Water Harvesting.** City of Tucson has a policy of providing water harvesting and green street treatment of stormwater whenever feasible, and additional space within the right-of-way can provide for this landscape.
 - iii. **Other Potential Transit Facilities.** Transit facilities improvements that will be considered during technical design include: level boarding onto low floor buses, queue jumps at intersections, transit priority at signals, fare payment before boarding, street design that can accommodate future high-capacity transit more easily, and relocating utilities to accommodate easier implementation of future high-capacity transit (e.g., streetcar, Bus Rapid Transit, etc.).

4. **Directly Impacted Buildings.** Buildings that would extend into the footprint of the proposed improvements are referred to here as “directly impacted.” In the Baseline Alignment drawing, those directly impacted buildings are fully or partially between the yellow dotted lines. Because the street element widths are already minimal, avoiding those direct impacts can only happen by shifting the alignment.

While the intent of the Baseline Alignment is to retain as many existing structures as possible, it is recognized that even if a building is not directly impacted by the improvements that does not ensure it will not ultimately be acquired and demolished. Acquisition does not always mean

demolition. That determination will be made during the design/acquisition process, depending on:

- a. Engineering factors such as loss of access and parking, ability to provide ADA-compliant access, provisions for utilities, grade differential, drainage and constructability;
 - b. Economic factors of acquisition negotiations, which incorporates individual comparisons of costs to cure vs. total acquisition for properties as well as block-by-block comparisons along both sides of the street; and,
 - c. Building code and public safety issues.
5. **Parking & Access.** Parking and access to existing buildings will be maintained where practicable. The priority of parking approaches will be as follows:
 - a. Maintain public access to existing parking. This provides the least chance of acquisition occurring.
 - b. Maintain sufficient space between the buildings and street such that adjacent property owners are able to establish joint access/parking facilities, if they choose. Any improvements needed by the private property owners cannot, by state statute, be included as part of a public project outright, but could be included in a transaction for partial acquisition.
 - c. Access to properties will generally be governed by the City’s access management ordinance.