

Section 4 DU Transportation Plan

In addition to the text of this section refer to "Eastmark Master Transportation Plan Update – February 2014" dated 2-27-2014 and "Eastmark Transportation Plan for Development Unit 3/4," dated 3-27-2014 – prepared by AECOM and as updated and approved by the City of Mesa Traffic Engineer.

The transportation plan for DU 3/4 focuses the circulation in the area toward the southwest corner of the community. This intensity in the circulation plan supports increasing intensity in the land use planning. In DU 3/4, all of the Arterial and District streets (Eastmark Parkway / "Spine East," Inspirian Parkway / "Spine West," "Business Boulevard," "Warner North," Point Twenty-two Boulevard / "Warner South," and Ray Road) will be public roadways. Roadways connecting to these may be public or private streets and may be gated to limit vehicular and pedestrian access. The internal streets will provide access from the Arterial and District streets into the neighborhoods and uses of the DU. The internal streets will provide access to the parking lots, buildings, private driveways and truck loading areas. Streets inside (behind) private gates will be private streets.

4.1 Pedestrian Corridors

Pedestrian corridors are an essential element of DU 3/4 providing shaded, comfortable, easy routes connecting neighborhoods, the Eastmark Great Park, the DU 3/4 Activity Core, the university campus and the Ellsworth Road commercial uses. The pedestrian corridors are also positioned to provide connectivity to other uses outside of the Eastmark community such as the ASU Polytechnic campus, the Phoenix-Mesa Gateway Airport and the San Tan Regional Park.

A. District and Arterial Streets - Typical

Pedestrian corridors will be located along the district and arterial streets of DU 3/4 and will provide access to neighborhoods, private enclaves and the uses they surround. They will generally follow the roadways along Eastmark Parkway, Inspirian Parkway, "Business Boulevard," "Warner North," Point Twenty-two Boulevard and Ray Road. They will also access the internal areas as shown on **Exhibit 4.1 – Pedestrian Corridors**. Additional pedestrian access points are neither prohibited nor discouraged, but may be limited due to the private nature of adjacent uses. Pedestrian sidewalks along the district and arterial streets will be a minimum of six (6) feet wide and will generally parallel the roadway. The required minimum sidewalk setback from face-of-curb will typically be six (6) feet. In vehicular site visibility triangles, the sidewalk may be closer to the back of curb or attached. The areas between back-of-curb and the sidewalk setback that do not contain understory vegetation may be paved as well. This additional paved area may include tree wells and/or street furniture and may be paved with pavers, stamped concrete or pored concrete and may be different paving material(s) than the sidewalk. In areas with landscape corridors along the major roadways, such as the Eastmark Great Park the sidewalk may be detached from the roadway by a significant distance to engage the pedestrian in the landscape. Access points between the roadway adjacent pathways should be provided for access from the roadway when needed and the pedestrian route can not be placed so far from the roadway that it is inconvenient for pedestrians following the roadway (as determined by the City of Mesa Traffic Engineer). Crosswalks are encouraged at all intersections that provide pedestrian access into the internal areas of DU 3/4. Landscaping along the pedestrian corridors will be installed and maintained to create a comfortable, shaded walking environment and the sidewalk may be off set for lengths to create visual interest for pedestrians on long, straight runs. Paved areas around pedestrian ramps and intersections should be minimized in favor of landscaped areas whenever possible.

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Bus stops and “far-side” bus pullouts should be located, when possible, to correspond to pedestrian entries from the district and arterial streets, major social amenities, and focal points in the pedestrian network (see **Exhibit 4.1 – Pedestrian Corridors** for such locations). The location of bus stops and bus pullouts will be coordinated with the City Staff. Bus stops at these locations can facilitate and encourage future transit use by residents within DU 3/4 and their guests. Crosswalks are also encouraged at these locations/intersections to facilitate the use of bus stops on the far side of the street. Crosswalks may be simple painted stripes, stamped or colored pavement, decorative pavement or grade changes in the roadway pavement to denote the pedestrian corridor. All traffic controls suggested here (specifically marked crosswalks) require the approval of the City of Mesa Traffic Engineer.



B. District Streets – Multi-modal Corridor

A segment of two (2) district streets in DU 3/4 are enhanced to be major multi-modal corridors. The two segments are “Business Boulevard” (between Point Twenty-two Boulevard and “Warner North”) and Point Twenty-two Boulevard (between Ellsworth Road and Inspirian Parkway). These segments will be designed to include a twelve (12) foot wide multi-use path and an eight (8) foot wide jogging path on the university side of the street, six (6) foot bike lanes on the roadway in each direction and an extra wide, minimum nine (9) foot, sidewalk on the other side of the street. These pedestrian and bike paths will be shaded by tree-lines along the roadway and between the paths (see **Exhibit 5.8 – Landscape within the Public Right of Way – “Business Boulevard”** and **Exhibit 5.9 – Landscape within the Public Right of Way – Point Twenty-two / “Warner South”**).

C. Internal Streets

Internally to the DU, the pedestrian network (while not required) will primarily rely on the local roadway network. Pedestrian activity is anticipated to be concentrated on the many district and arterial streets. Heavy pedestrian activity is also anticipated on the enhanced multi-modal corridor routes between the neighborhoods and the Activity Core, the Eastmark Great Park, the university campus and the Ellsworth Road commercial uses. Sidewalks within the neighborhoods or uses along public streets will be a minimum of five (5) feet wide. Some pedestrian routes are anticipated to have little to no activity. In these areas, sidewalks may be provided on only one (1) side of the street with the approval of the City Traffic Engineer. Along private streets, sidewalks may be provided on only one (1) side of the street. Paved areas around pedestrian ramps and intersections should be minimized in favor of landscaped areas when ever possible.

Internal streets will not typically be served by buses. If neighborhood shuttles are provided, they will stop at pedestrian entries to neighborhoods and private enclaves, major social amenities, and focal points in the pedestrian network (see **Exhibit 4.1 – Pedestrian Corridors** for such locations).

1. Standard Neighborhood Streets

Along standard neighborhood streets, five (5) foot wide sidewalks will be located on both sides of the road. These may be separated from the roadway by a tree lined parkway. Sidewalks will typically parallel the roadway.

2. Park Streets

Neighborhood parks are designed to be destinations in the pedestrian circulation system. Along parks, sidewalks along the roadway surrounding the park will typically only be provided on the home side. Sidewalks generally will not be included on the park side except at entries or across the ends of the parks to facilitate pedestrian connectivity as depicted in the CP and as approved by the City Traffic Engineer.

D. Regional Trail Segments

South of Ray Road in DU 3/4 a segment of a large regional trail system will be a part of the pedestrian circulation. The trail will generally follow the north bank of the Powerline Floodway south of Ray Road. East of Ellsworth Road, another segment of the regional trail system will parallel Ellsworth Road. These decomposed granite trails will typically be six (6) feet wide or wider. While not required, portions of the trail may be paved. These trails will not typically be illuminated and may parallel roadside sidewalks.

Exhibit 4.1 - Pedestrian Corridors



- Additional Pedestrian Corridors Typically Required if LUG D,V,GU or UC
- Minimum 12' Wide Multi - Use Path
- Minimum 9' Wide Sidewalk
- Minimum 6' Wide Sidewalk
- Minimum 5' Wide Sidewalk
- Minimum 6' Wide Trail
- Potential Signaled Intersection

- Potential Connection to Adjacent Property (Outside Eastmark)
- Gated Entry Anticipated

Notes:

The areas, connections, shapes, quantities, sizes and locations shown are conceptual representations of the future potential development. Actual areas, connections, shapes, quantities, sizes and locations may differ from those shown.



4.2 Primary Public and Private Streets and Extended Access Ways

Refer to **Exhibit 4.2 – Major Roadways** and **Exhibit 4.3 - DU 3/4 Transportation Plan**

A. Ray Road

- South boundary of DU 3/4
- Six Lane Perimeter Arterial (see Exhibit 10.7 – 6 Lane Perimeter Arterial/6 Lane Internal Arterial (Ray Road) – Detailed Cross Section, of the CP)
- 65' – 75' wide 1/2 street ROW (other half part of DU3s) – full right of way for portion of Ray between DU3s and Ellsworth Road
- 40 mile per hour design speed and posted speed limit (see Exhibit 10.3 – District and Arterial Streets – Roadway Hierarchy, of the CP)
- Raised and/or landscaped median
- Vertical Curb
- No Parking
- Very high volume vehicular traffic street
- Little pedestrian activity moving along the length of the street although encouraged adjacent to the Ellsworth Road commercial corridor
- Neighborhood entries with full turning intersections with curb returns (rather than driveway aprons) are anticipated
- When neighborhood/commercial entries align with potential signal locations, street cross section shall be a minimum of thirty-four (34) foot back-of-curb – three lanes.
- Not likely to have a tight urban cross-section because of the adjacent Powerline Floodway on the south and non-commercial uses on the north. A tight urban cross-section is encouraged with adjacent commercial, civic or religious uses when possible and may incorporate a liner street to provide access and parking.
- Bus stops may be located near the intersections with Eastmark Parkway and Inspirian Parkway to accommodate the Eastmark Great Park users. If bus service is provided along the length of Ray Road, bus stops may also be located to align with neighborhood entries to the north. Bus service shall be as determined by the transit authority.

B. Ellsworth Road

- West boundary of DU 3/4
- Six Lane Perimeter Arterial (see Exhibit 10.7 – 6 Lane Perimeter Arterial/6 Lane Internal Arterial (Ray Road) – Detailed Cross Section, of the CP)
- 65' – 75' wide 1/2 street ROW
- 45 mile per hour design speed and posted speed limit (see Exhibit 10.3 – District and Arterial Streets – Roadway Hierarchy, of the CP)
- Raised and/or landscaped median
- Vertical Curb
- No Parking
- Very high volume vehicular traffic street
- Little pedestrian activity moving along the length of the street although encouraged adjacent to the Ellsworth Road commercial corridor
- Commercial entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- When neighborhood/commercial entries align with potential signal locations, street cross section shall be a minimum of thirty-four (34) foot back-of-curb – three lanes.

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- Not likely to have a tight urban cross-section in early phases of development, however a tight urban cross-section is encouraged with adjacent commercial, civic or religious uses when possible and may incorporate a liner street to provide access and parking.
- Stormwater storage in surface and sub-surface facilities is anticipated along this frontage
- Bus stops may be located near the intersections with Ray Road, Point Twenty-two Boulevard and "Warner North" to accommodate adjacent users. If bus service is provided along the length of Ellsworth Road, bus stops may also be located to align with major commercial entries to the east. Bus service shall be as determined by the transit authority.

C. Point Twenty-two Boulevard

- Located in the middle of DU 3/4 – generally running east-west from Ellsworth Road to Eastmark Parkway
- Two-Way Four Lane District Street (see Exhibit 10.8 – Two-Way Four Lane District Street – Detailed Cross Section, of the CP)
- ROW will be located at back of curb (approximately 64' back of curb to back of curb)
- 9' Raised and/or landscaped median (not required to be raised for all segments – may be paved 11' center lane with adjacent 10' travel lanes)
- Vertical Curb
- Typically no on-street parking, however parking may be added to the roadway to complement adjacent uses and encourage pedestrian interaction and front-of-house operations to engage the roadway
- 6' Bike Lanes
- High volume, low speed vehicular traffic street
- High pedestrian activity moving along the length of the street to the Eastmark Great Park from the university and Activity Core as well as activity crossing the street between the halves of the park, between the neighborhoods and university campus, between the uses in the Ellsworth Road commercial corridor
- Several neighborhood and parcel entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- Not likely to have a tight urban cross-section along the Eastmark Great Park, however a tight urban cross-section is encouraged with adjacent commercial, civic, educational or religious uses when possible and may incorporate a liner street to provide access and parking
- Bus stops may be located near the intersections with Eastmark Parkway and Inspiran Parkway to accommodate the Eastmark Great Park users. Bus stops may be located near the intersections with "Business Boulevard" and Ellsworth Road to accommodate the university campus, Activity Center and Ellsworth Road commercial corridor users. Bus service may be provided along the length of Point Twenty-two with bus stops typically located to align with neighborhood entries and adjacent major uses. Bus service shall be as determined by the transit authority.

D. "Warner North"

- North boundary of DU 3/4
- Two-Way Four Lane District Street (see Exhibit 10.8 – Two-Way Four Lane District Street – Detailed Cross Section, of the CP)
- ROW will be located at back of curb (approximately 64' back of curb to back of curb)
- Minimum 9' wide raised and/or landscaped median (not required to be raised for all segments – may be paved 11' center lane with adjacent 10' travel lanes)
- Vertical Curb
- Typically no on-street parking, however parking may be added to the roadway to complement adjacent uses and encourage pedestrian interaction and front-of-house operations to engage the roadway

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- 6' Bike Lanes
- High volume, low speed vehicular traffic street
- High pedestrian activity moving along the length of the street to the Eastmark Great Park as well as activity crossing the adjacent uses and the park
- Several neighborhood and parcel entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- Not likely to have a tight urban cross-section along the Eastmark Great Park, however a tight urban cross-section is encouraged with adjacent commercial, civic, educational or religious uses when possible and may incorporate a liner street to provide access and parking
- Bus stops may be located near the intersections with Eastmark Parkway and Inspirian Parkway to accommodate the Eastmark Great Park users. Bus stops may be located near the intersections with "Business Boulevard" and Ellsworth Road to accommodate the university campus and Ellsworth Road commercial corridor users. Bus service may be provided along the length of "Warner North" with bus stops typically located to align with neighborhood entries and adjacent major uses. Bus service shall be as determined by the transit authority.

E. Eastmark Parkway / "Spine East"

- Eastern boundary of DU 3/4 between Point Twenty-two Boulevard and "Warner North"
- Two-Way Four Lane District Street (see Exhibit 10.8 – Two-Way Four Lane District Street – Detailed Cross Section, of the CP)
- ROW will be located at back of curb (approximately 81' back of curb to back of curb)
- 12' wide raised and/or landscaped median (not required to be raised for all segments – may be paved 12' center lane with adjacent 11' travel lanes)
- Vertical Curb
- 8' Parallel Parking on both sides
- 5' Bike Lanes – no striping except to denote edge of travel lane
- High volume, low speed vehicular traffic street
- High pedestrian activity moving along the length of the street adjacent to the Eastmark Great Park as well as activity crossing between adjacent uses and the park
- Several crossings to access the Eastmark Great Park are anticipated
- Several neighborhood and parcel entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- Not likely to have a tight urban cross-section because of the uses on either side
- Bus stops may be located near the intersections with Point Twenty-two Boulevard and "Warner North" to accommodate the Eastmark Great Park users. If bus service is provided along the length of Eastmark Parkway, informal "flag" stops may also be located to align with neighborhood entries and adjacent major users. Bus service shall be as determined by the transit authority.

F. Inspirian Parkway / "Spine West"

- Eastern boundary of DU 3/4 between Point Twenty-two Boulevard and Ray Road (internal to the DU north to "Warner North")
- Two-Way Four Lane District Street (see Exhibit 10.8 – Two-Way Four Lane District Street – Detailed Cross Section, of the CP)
- ROW will be located at back of curb (approximately 81' back of curb to back of curb)
- 12' wide raised and/or landscaped median (not required to be raised for all segments – may be paved 12' center lane with adjacent 11' travel lanes)
- Vertical Curb

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- 8' Parallel Parking on both sides
- 5' Bike Lanes – no striping except to denote edge of travel lane
- High volume, low speed vehicular traffic street
- High pedestrian activity moving along the length of the street adjacent to the Eastmark Great Park as well as activity crossing between adjacent uses and the park
- Several crossings to access the Eastmark Great Park are anticipated
- Several neighborhood and parcel entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- Not likely to have a tight urban cross-section because of the uses on either side
- Bus stops may be located near the intersections with Ray Road, Point Twenty-two Boulevard and “Warner North” to accommodate the Eastmark Great Park users. If bus service is provided along the length of Inspirian Parkway, informal “flag” stops may also be located to align with neighborhood entries and adjacent major users. Bus service shall be as determined by the transit authority.

G. “Business Boulevard”

- Parallel to Ellsworth Road, one block east in DU 3/4 between Point Twenty-two Boulevard and “Warner North”
- Two-Way Two Lane District Street (see Exhibit 10.9 – Two-Way Two Lane District Street – Detailed Cross Section, of the CP)
- ROW will be located at back of curb (approximately 50' back of curb to back of curb)
- 9' wide raised and/or landscaped median (not required to be raised for all segments – may be paved 11' center lane with adjacent 10' travel lanes)
- Vertical Curb
- No Parking
- 6' Bike Lanes
- High volume, low speed vehicular traffic street
- High pedestrian activity moving along the length of the street adjacent to the university campus as well as activity crossing Point Twenty-two Boulevard connecting the uses of the Ellsworth Road commercial corridor
- Several crossings to access the university campus are anticipated
- Several parcel entries with full turning intersections and curb returns (rather than driveway aprons) are anticipated
- A tight urban cross-section is encouraged with adjacent commercial, civic, educational or religious uses when possible and may incorporate a liner street to provide access and parking
- Bus stops may be located near the intersections with Point Twenty-two Boulevard and “Warner North” to accommodate the university campus and Ellsworth Road commercial corridor users. If bus service is provided along the length of “Business Boulevard”, informal “flag” stops may also be located to align with parcel entries and major adjacent users. Bus service shall be as determined by the transit authority.

H. Internal Streets

- Neighborhood Streets and potential Service Lanes
- ROW typically at back of curb (when provided)
- Various road sections (see Exhibits 10.10 through 10.13, of the CP)
- Potentially gated (gated streets will be private streets)
- Through access may be limited if provided at all

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1. Internal Streets - Entry Drives

- Provide access to neighborhoods or parcels from district and arterial streets
- Two-Way Neighborhood Street
- ROW will be located at back of curb (approximately 23' back of curb to back of curb) (minimum 34' back of curb to back of curb required if entry aligns with potential traffic signal location on arterial streets)
- No Median (typical), median may be added for gated entries, but pavement width should be minimized.
- Vertical Curb
- No Parking
- No Bike Lanes
- Medium volume, low speed vehicular traffic street
- Pedestrian activity moving along the length of the street varies
- Roadways often tee into cross traffic on the neighborhood/parcel end or transition to standard neighborhoods streets after crossing a neighborhood park
- Bus stops may be located at intersections with major streets - Bus service shall be as determined by the transit authority

2. Internal Streets – Standard Neighborhood Streets

- Standard Neighborhood Street section
- Two-Way Neighborhood Street
- ROW will be located at back of curb (approximately 35' back of curb to back of curb if on-street parking is provided on both sides of the street)
- No Median (typical)
- Rolled Curb (typical), with option for vertical or ribbon curb
- Parking on both sides
- No Bike Lanes
- Medium to low volume, low speed vehicular traffic street
- Pedestrian activity moving along the length of the street varies based on location
- No bus stops - Bus service shall be as determined by the transit authority

3. Internal Streets – Park Side Streets

- Provide access to along and around neighborhood parks
- Two-Way Neighborhood Street
- ROW will be located at back of curb (smaller R.O.W. approximately 28' back of curb to back of curb is allowed)
- No Median
- Rolled Curb (typical) on side opposite the park, Vertical Curb along park
- 7' parallel parking on side opposite the park
- No parking at intersections where "chicanes," "neck downs" or "bulb outs" are desired
- No Bike Lanes
- Medium to low volume, very low speed vehicular traffic street
- High Pedestrian activity moving along the length of the street and crossing the streets to access the park
- Roadways often transition to standard neighborhoods streets at intersections
- No Bus stops anticipated – if neighborhood circulator provided, informal/"flag" bus stop in close proximity to the built shade structure (when present) would be desired - Bus service shall be as determined by the transit authority

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4. Internal Streets – Block End Streets

- Provide connections between blocks in DU 3/4, used to visually open neighborhoods to district roadways and landscape areas, used to provide pedestrian connectivity without providing automobile connectivity
- Two-Way Neighborhood Street
- ROW will be located at back of curb (smaller R.O.W. approximately 23'-35' back of curb to back of curb is allowed)
- No Median
- Rolled Curb (typical)
- No Parking required, 7' parallel parking may be provided on one or both sides
- No Bike Lanes
- Medium to low volume, low speed vehicular traffic street
- Pedestrian activity moving along the length of the street varies based on location but is often low when Block End Streets are used to visually open up the neighborhood to perimeter streets or along open spaces or to provide through pedestrian only access.
- Roadways are often short and typically have limited driveway conflicts
- No Bus stops anticipated - Bus service shall be as determined by the transit authority

4.3 Intersections

DU 3/4 shall be accessed primarily from the district and arterial streets as shown on **Exhibit 4.3 – DU 3/4 Transportation Plan**. Several separate entry drives/intersections to access DU 3/4 may be provided for various vehicle types and users and may be signed appropriately. Drives/intersections accessing the internal portions of DU 3/4 may be secured and/or gated in one or more locations and may limit through access across the DU. Streets inside private gates will be private streets. It is further anticipated that:

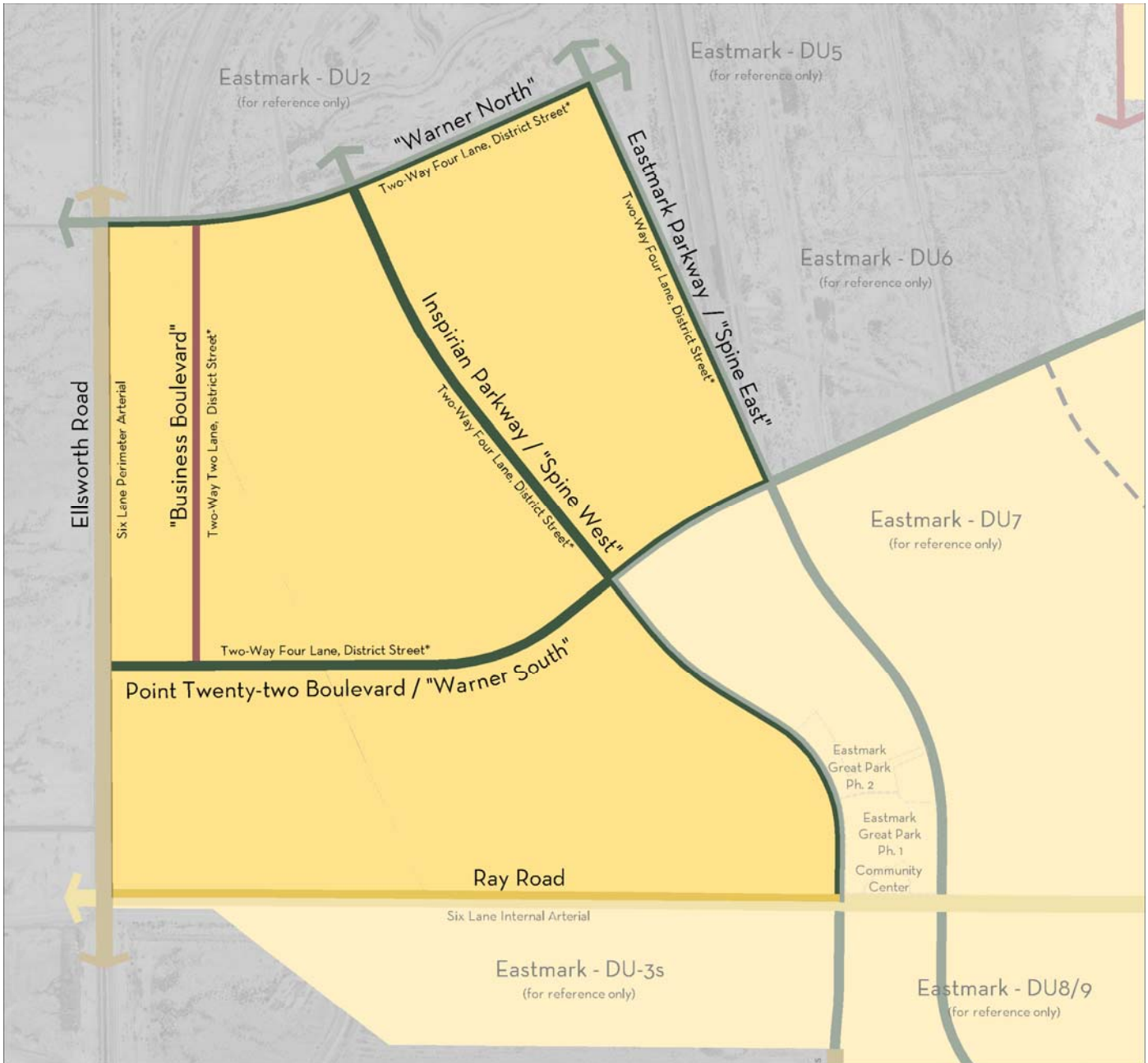
- at least four (4) drives will access DU 3/4 from Ray Road
- at least four (4) drives will access DU 3/4 from Point Twenty-two Boulevard
- at least one (1) drive will access DU 3/4 from “Warner North”
- at least four (4) drives will access DU 3/4 from Ellsworth Road
- at least two (2) drives will access DU 3/4 from “Business Boulevard”
- at least one (3) drives will access DU 3/4 from Inspirian Parkway
- the Eastmark Great Park will be accessed in several locations from Inspirian Parkway, Eastmark Parkway, Point Twenty-two Boulevard and “Warner North”
- the university campus will be accessed in at least five (5) locations from Inspiran Parkway, Point Twenty-two Boulevard and “Business Boulevard”

If the traffic counts warrant a traffic signal at intersections as shown on **Exhibit 4.3 – DU 3/4 Transportation Plan**, they shall be provided to ease access to the DU.

4.4 Street and Circulation Phasing

Street and circulation improvements shall be phased and developed with adjacent development as shown on **Exhibit 4.4 – Street and Circulation Phasing**. It is anticipated that the “Warner North” full street road improvements will not be necessary to accommodate the use anticipated in DU 3/4 however at least half-street improvements will be developed along with the adjacent parcels. Specific phasing and timing of the road construction will be coordinated with the City of Mesa. Temporary locations to turn around traffic may be required by the City of Mesa Traffic Engineer at the ends of phases that do not provide an un-gated, public through route for traffic. These turn around locations may require additional, temporary pavement or temporary striping.

Exhibit 4.2 - Major Roadways



Note: The areas, connections, shapes, quantities, sizes and locations shown are conceptual representations of the future potential development. Actual areas, connections, shapes, quantities, sizes and locations may differ from those shown.



Six Lane Perimeter Arterial



Six Lane Internal Arterial



Two-Way Four Lane, District Street with Raised Median*



Two-Way Two Lane, District Street with Raised Median*

*raised and/or landscaped median optional; on-street parking, bike lanes or other options at perimeter of roadway permitted

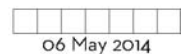


Exhibit 4.3 - DU 3/4 Transportation Plan



Note: The areas, connections, shapes, quantities, sizes and locations shown are conceptual representations of the future potential development. Actual areas, connections, shapes, quantities, sizes and locations may differ from those shown.

Perimeter Roadways

Interior Roadways, Driveways and Access*

Potential Signalized Intersection

*Public, interior circulation shown here conceptually for reference - additional streets may be provided

G Gated Entry Anticipated

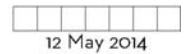
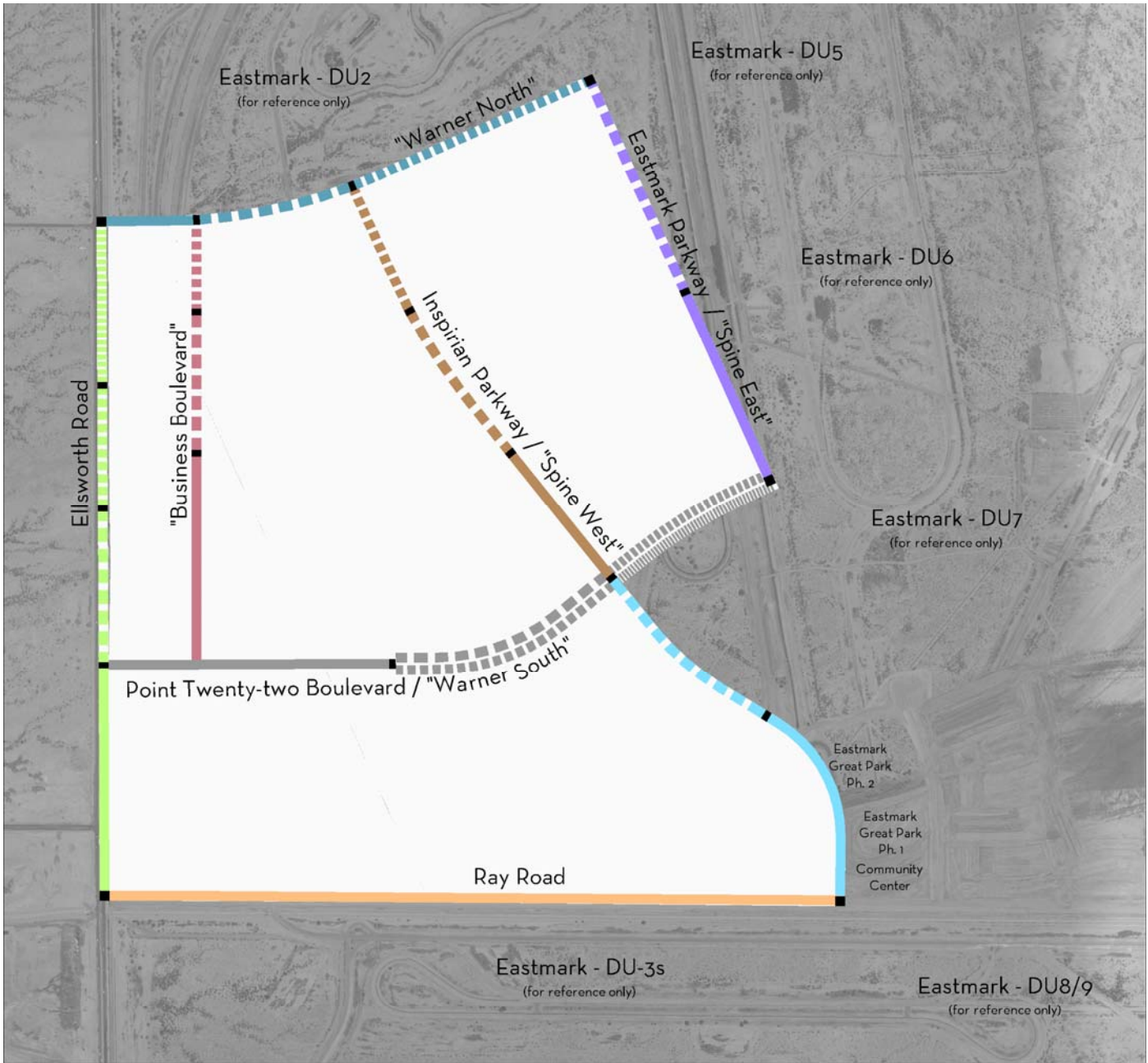


Exhibit 4.4 – Streets and Circulation Phasing

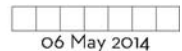
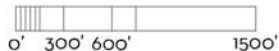


- Phase 1A - Ray Road - S. Half
- Phase 1B - Ellsworth Road - E Half
- Phase 2B - Ellsworth Road - E Half
- Phase 3B - Ellsworth Road - E Half
- Phase 4B - Ellsworth Road - E Half
- Phase 1C - "Business Boulevard"
- Phase 2C - "Business Boulevard"
- Phase 3C - "Business Boulevard"
- Phase 1D - "Warner North"
- Phase 2D - "Warner North"
- Phase 3D - "Warner North"

- Phase 1E - P22 Blvd
- Phase 2E - P22 Blvd - N. Half
- Phase 3E - P22 Blvd - S. Half
- Phase 4E - P22 Blvd - N. Half
- Phase 5E - P22 Blvd - S. Half
- Phase 1F - Eastmark Pkwy
- Phase 2F - Eastmark Pkwy

- Phase 1G - Inspirian Pkwy
- Phase 2G - Inspirian Pkwy
- Phase 3G - Inspirian Pkwy
- Phase 1H - Inspirian Pkwy
- Phase 2H - Inspirian Pkwy

Note: The areas, connections, shapes, quantities, sizes and locations shown are conceptual representations of the future potential development. Actual areas, connections, shapes, quantities, sizes and locations may differ from those shown.



4.5 Gates and Limited Access Points

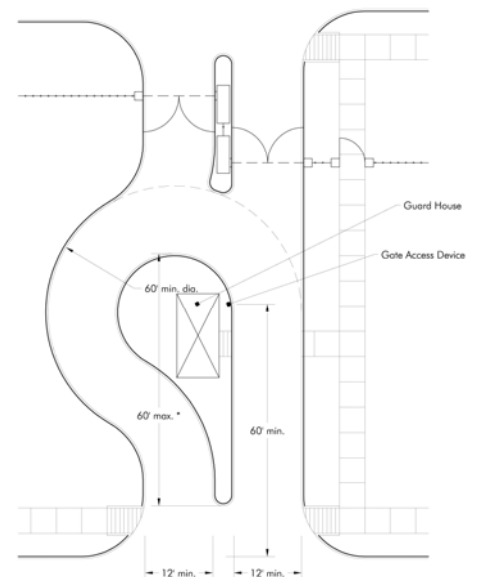
A. Vehicular Gates

As shown on **Exhibit 4.3 – DU 3/4 Transportation Plan**, vehicular gates are anticipated to be a major component of the circulation system on the university campus. In addition to these locations, it is anticipated that vehicular gates will be used to secure private residential enclaves and corporate campuses. Additionally vehicular gates will likely be used to screen service areas/drives and limit access to parking garages and parking fields. The layout and character of these gates may vary greatly depending on use and setting. The following are permitted layouts and uses for gates.

1. Formal Gate/Gate House Arrival

At limited access main gate locations at the university campus, residential enclaves and commercial campuses, a Formal Gate/Gate House Arrival is required. These arrivals are to be designed to the following standards.

- all vehicular stacking (at the gate) shall be provided on-site
- designs with long stacking distances are discouraged
- arrivals may have one or two arrival lanes
- curb returns rather than driveway aprons are encouraged
- if driveway aprons are used, the use of the Eastmark standard driveway apron design is encouraged
- pedestrian access at this location is encouraged
- the center median must be attractively designed with materials consistent with the associated uses/buildings and is encouraged to be landscaped
- the guard house is optional, but if present should be designed to serve both vehicular and pedestrian traffic
- swing arm may be provided to stop vehicles at the gate house before proceeding through the gate
- vehicular traffic may be limited via a gated with or without limiting pedestrian access
- curvilinear design shown below may also be a linear design with a wider median to accommodate the turn around maneuver



* Per Exhibit 10.16 - Defensible Positions of the C.P.

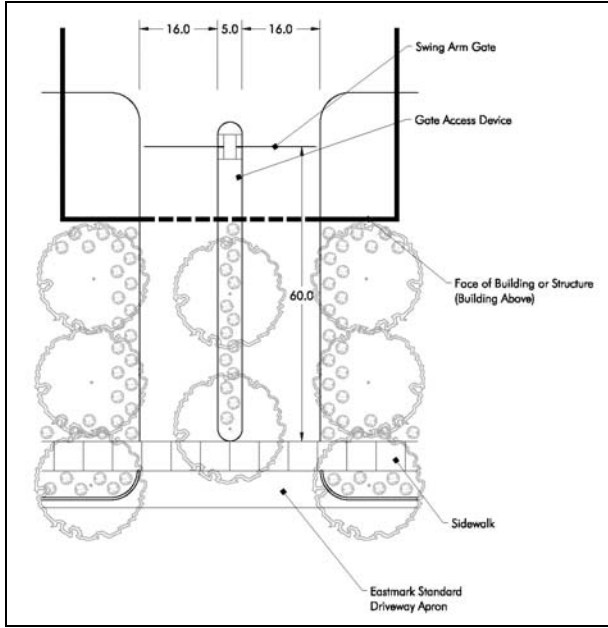
2. Private Parking Entry

At limited access vehicular entries to private parking structures/lots or at secondary limited access locations to the university campus, residential enclaves and commercial campuses, the Private Parking Entry is permitted. These arrivals are to be designed to the following standards.

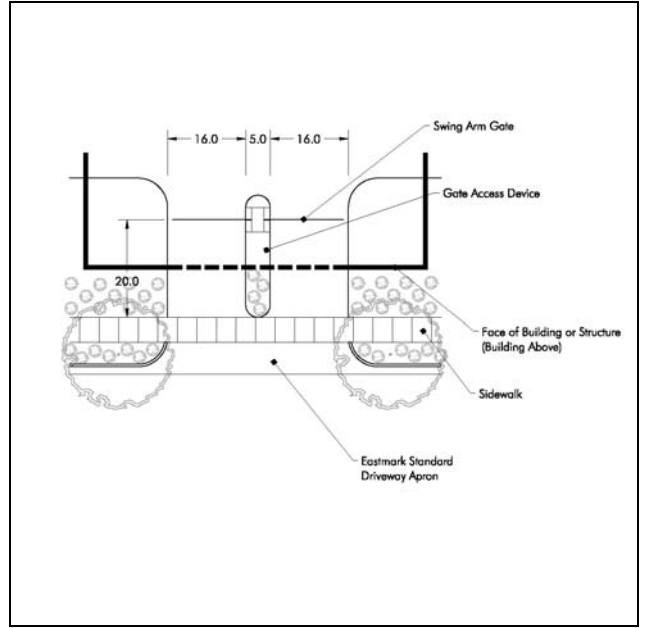
- all vehicular stacking (at the gate) shall be provided on-site when entering from arterial streets or two-way four-lane district streets without on-street parking
- vehicular stacking (at the gate) may be provided on-street when entering from two-way four lane district streets with on-street parking (using the parking lane as staking), two-way two lane district streets, local streets or private drives
- designs with long stacking distances are discouraged
- arrivals may have one or two arrival lanes
- pedestrian access is permitted, but not required at these locations
- minor pedestrian access for people leaving parking lots and structures at these locations is encouraged
- when a center median is present (not required) the center median must be attractively designed with materials consistent with the associated uses/buildings and is encouraged to be landscaped
- a guard house at this location is optional, but if present should be designed to serve both vehicular and pedestrian traffic
- swing arm or gate may be used to provided limit vehicular access
- vehicular traffic may be limited via a gated with or without limiting pedestrian access
- linear design required so that the gate is clearly visible from the roadway
- driveway apron required so that entry clearly appears as a private entry
- building or parking structure may overhang the entry and gates
- not permitted for guest parking entries where guest's entry needs to be verified



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Private Parking Entry - from arterial streets or two-way four-lane district streets without on-street parking



Private Parking Entry - from two-way four-lane district streets with on-street parking, two-way two-lane district streets, local streets or private drives



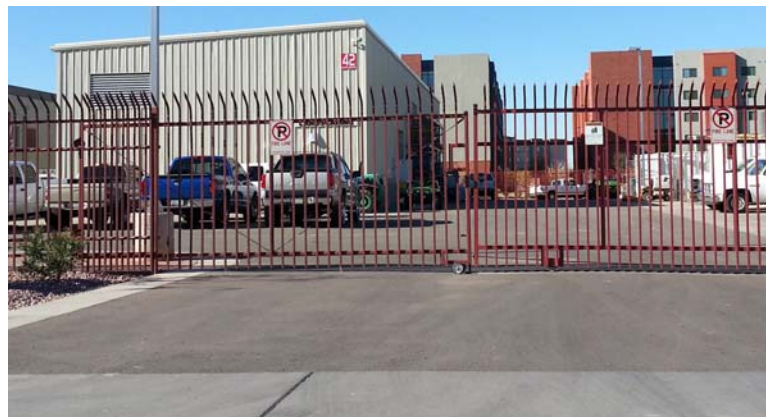
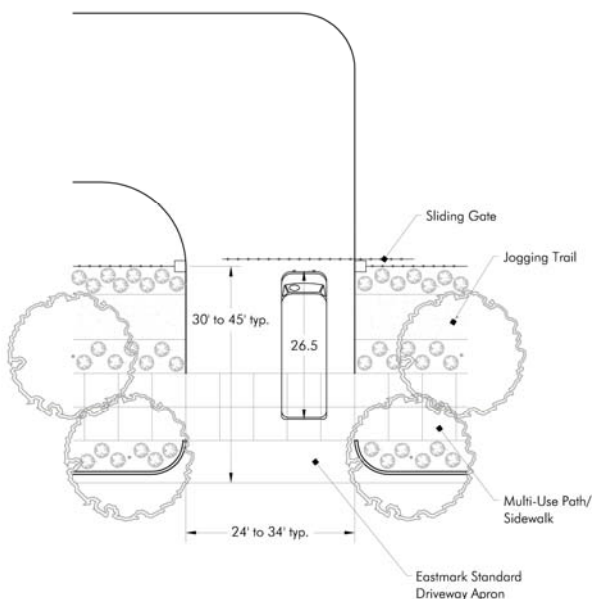
3. Service Yard/Occasional Use Entry

At limited access vehicular entries to service yard or driveways only used on rare occasions, the Service Yard/Occasional Use Entry is permitted. These gate types are anticipated:

- to screen back-of-house service areas where the gate opens automatically when a vehicle approaches
- on private drives that access the university campus only for student housing load-in events, fire access or grounds maintenance
- at service areas where the gate is open while the yard is in operation (“open for business”).

These arrivals are to be designed to the following standards.

- this entry gate type is only permitted in locations where the gate is fully open during use, or opens automatically (every time) when a vehicle approaches the gate
- vehicular stacking (at the gate) is not required
- designs with long stacking distances are discouraged
- pedestrian access is permitted, but not required at these locations
- a guard house at this location is optional, but if present should be designed to serve both vehicular and pedestrian traffic
- vehicular traffic may be limited via a gated with or without limiting pedestrian access
- linear design required so that the gate is clearly visible from the roadway
- driveway apron required so that entry clearly appears as a private entry
- building or parking structure may overhang the entry and gates
- not permitted for guest parking entries where guest’s entry needs to be verified
- swing arm may not be used to limit vehicular access
- automatic gates must default to the open position in case of a power failure
- the gate must be set back sufficiently to permit the stacking of one vehicle between the gate and the edge of travel lane. This stacking should accommodate the largest standard size vehicle typically arriving at the gate (i.e. delivery truck, service vehicle)
- driveway width shall typically be twenty-three (23) feet wide. Driveways up to thirty-four (34) feet wide permitted. Driveways wider than thirty-four (34) feet are only permitted if required for typical vehicle turning radii.



B. Pedestrian Gates – Full Access

Pedestrian gates may be provided anywhere in the pedestrian circulation network, provided they are not lockable. Such gates are useful to denote play area zones (such as a splash pad/water play area) or to keep younger children away from major streets (such as the four (4) foot fencing along Everton Terrace). The design of the gate must meet all ADA standards for the design of the latch/handle and the swing clear zones. The design of the gate must be a holistic part of the overall landscape character and must meet or exceed the design standards for the fence or wall the gate is installed in. These gates must remain unlocked and open to the general public.

C. Pedestrian Gates – Limited Access

As shown on **Exhibit 4.1 – Pedestrian Corridors**, limited access pedestrian gates are anticipated to be a major component of the pedestrian circulation system on the university campus. In addition to these locations, it is anticipated that limited access pedestrian gates will be used to secure private residential enclaves, commercial buildings and corporate campuses.

1. Front Door Pedestrian Gate

At locations where pedestrian access is limited, one “front door” pedestrian access must be provided to each overall site (or building if only the building is secured). A front door pedestrian gate is anticipated off of “Business Boulevard” to access the university campus. All front door pedestrian gates must meet the following conditions.

- Must be located in a prominent location such that all guests arriving by foot or by bicycle know where they should approach the site
- Should be designed as a ceremonial, “front door” quality arrival
- The design of the gate must be a holistic part of the overall landscape or building character and must meet or exceed the design standards for the fence or wall the gate is installed in
- Must provide same system of contacting tenants/residents/users as is provided for vehicular gates
- The design of the gate must meet all ADA standards for the design of the latch/handle and the swing clear zones

2. Secondary Limited Access Pedestrian Gates

At locations where pedestrian access is limited, one “front door” pedestrian access must be provided to each overall site (or building if only the building is secured). Additional gates may be provided for use by residents or tenants and may, if desired, not provide for guest/general public arrival. All secondary limited access pedestrian gates must meet the following conditions.

- Should not be designed as a ceremonial arrival, but rather as a subtle or blind access
- The design of the gate must be a holistic part of the overall landscape or building character and must meet or exceed the design standards for the fence or wall the gate is installed in
- The design of the gate must meet all ADA standards for the design of the lock, latch/handle, access device and the swing clear zones

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