

Section 4.2 | DU2 Street Design and Transportation Plan

Street Design Concepts

Streets within PPGN are designed as a core component of the overall planning framework and are integral to the New Traditional Community concept. The streets will be designed to function as efficient movement corridors that play an important role in shaping the sense of place and social life of the community. Street design within PPGN is based upon the “Great Streets” concept, which recognizes that streets are an important public place that are a critical component of overall place-making and should be designed to provide equal access to all modes of transportation as well as place an emphasis on the importance of pedestrian activity along the street.

The street system is designed to be both formal and simple, providing uncomplicated access to the various land uses and establishing a strong backbone for landscaping throughout the community. Streets will be visually narrowed through strategic use of formal tree-lined streets and other design elements such as landscape buffering and medians. A signature feature the PPGN street concept is a network of focal roundabouts that act as both a formal terminus for each internal roadway segment and as an important community identity element. The roundabouts will be complimented by adjacent parks that are positioned to accent these special community features and both identify and connect recreational nodes.

Neighborhood planning will be closely coordinated with the streetscape design to promote an active, lively street scene that is complimented by homes and buildings oriented towards the street with public places such as porches, patios and courtyards designed to enliven the front yard experience. Non-residential areas will include design elements such as shaded sidewalks, outdoor seating and dining, buffer areas for protection from vehicles, and distinctive and functional design elements that create interesting places along the streets. Parking areas will be visually minimized and located to the side or behind buildings where possible. On street parking is encouraged both in residential and non-residential areas.

The streets within PPGN will also be designed to extend and enrich the open space system and network of pedestrian pathways throughout the community. A comprehensive on-street sidewalk system is planned that will be interconnected to a secondary off-street pedestrian trails and paseos. Pedestrian pathways will be designed to promote walkability and provide an amenity for each neighborhood while forging strong links with surrounding neighborhoods. The trail and paseo system will include direct linkages to the on-street connectivity system, resulting in a highly accessible and connected community designed to serve the varying needs of all residents and users.

Street Types

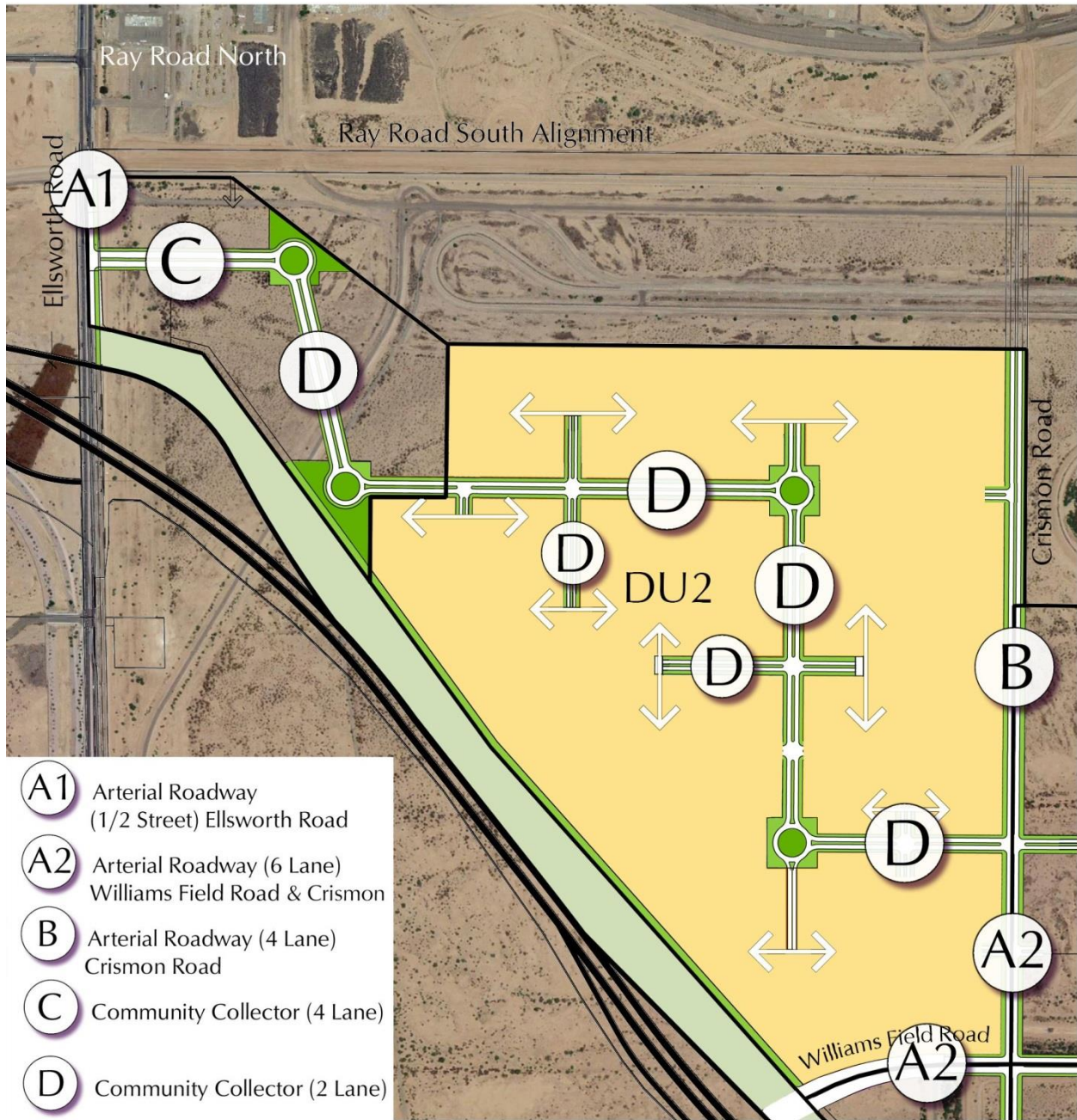
The roadway system within Development Unit 2 is comprised of three main roadway classifications, 1) Arterials, 2) Community Collectors, and 3) Local Streets. The hierarchy of internal streets gives structure to the overall community and is designed to provide efficient vehicular circulation to the perimeter regional transportation corridors, including Ellsworth, Crismon and Williams Field Roads, and the future SR24 freeway. Multiple connections to the perimeter arterial streets will be established to promote an even distribution of traffic that minimizes impacts on individual neighborhoods and adjacent communities

Arterial Streets. Arterial streets adjacent to Development Unit 2 include Crismon Road to the east and Williams Field Road to the south. The arterial roadways are high traffic volume streets that establish community edges. Crismon Road, to the north, becomes the Inspirian Parkway alignment within the Eastmark community. Crismon Road is an important arterial within the community as it bisects Development Units 2 and 4. Care will be taken to provide both a physical and visual transition between Development Units 2 and 4 to ensure that cohesive community character is maintained. The Arterial Streets will be designed to City of Mesa standards.

Community Collectors. The Community Collector is planned as a signature design element within PPGN and forms the backbone of the vehicular and pedestrian circulation system. The Community Collector is comprised of a series of straight, formal roadway segments punctuated by focal roundabouts that act as both a formal terminus for each internal roadway segment and as an important community identity element. The Community Collector is a two-lane median-separated roadway within Development Unit 2 that transitions to a four-lane median-separated roadway within Development Unit 1. The two-lane Community Collector cross-section may also be used for neighborhood entries. Landscape areas are planned immediately back of curb along the streets and provide a generous canvas for community-themed landscaping and street trees. Sidewalks are set back a minimum of ten feet from the back of curb to provide a safe pedestrian environment that encourages walking throughout the community.

Local Streets. Local Streets are the primary street type within the neighborhoods throughout PPGN and will connect individual homes, buildings, and community amenities. Local Streets are designed to accommodate significant pedestrian traffic and provide sidewalk connections to community amenities such as parks, open spaces, and pedestrian trails. Local Streets may include on-street parking, which will contribute to visually narrowing the street corridor.

The following Street and Circulation Plan identifies the general planned location for various street types.



Traffic Impact Analysis

As part of the PPGN Community Plan, a Master Traffic Impact Analysis (“Master TIA”) was prepared and approved by the City of Mesa in August 2014. A revised Master TIA was prepared in coordination with this Development Unit Plan for DU2 to reflect a reduction in overall density. The Master TIA analyzes the entire PPGN development plan based on maximum allowable densities and estimates traffic generation and traffic distribution and establishes lane configurations and traffic control needs both internal to PPGN and at adjacent intersections and roadways.

Private Street Segments

Certain locations within the residential portions of PPGN will include private street segments that are intended to be a visual extension of the public street system, but function like a shared private drive for generally two to four homes. These private street segments will be differentiated from the public street by a concrete drive strip and sidewalk. Utilities within the private street segments will also be private, and maintained by the HOA. Homes beyond 150’ from the public right-of-way must be sprinklered as determined by the City of Mesa Fire Department, and the asphalt surface within the private street segment will be designed and constructed with a pavement width of 24’ – 35’, similar to the public streets. See Exhibit 4.2.2 – Private Street Segments for a typical detail and notes regarding design requirements for the private street segments.

Community Street Cross Sections

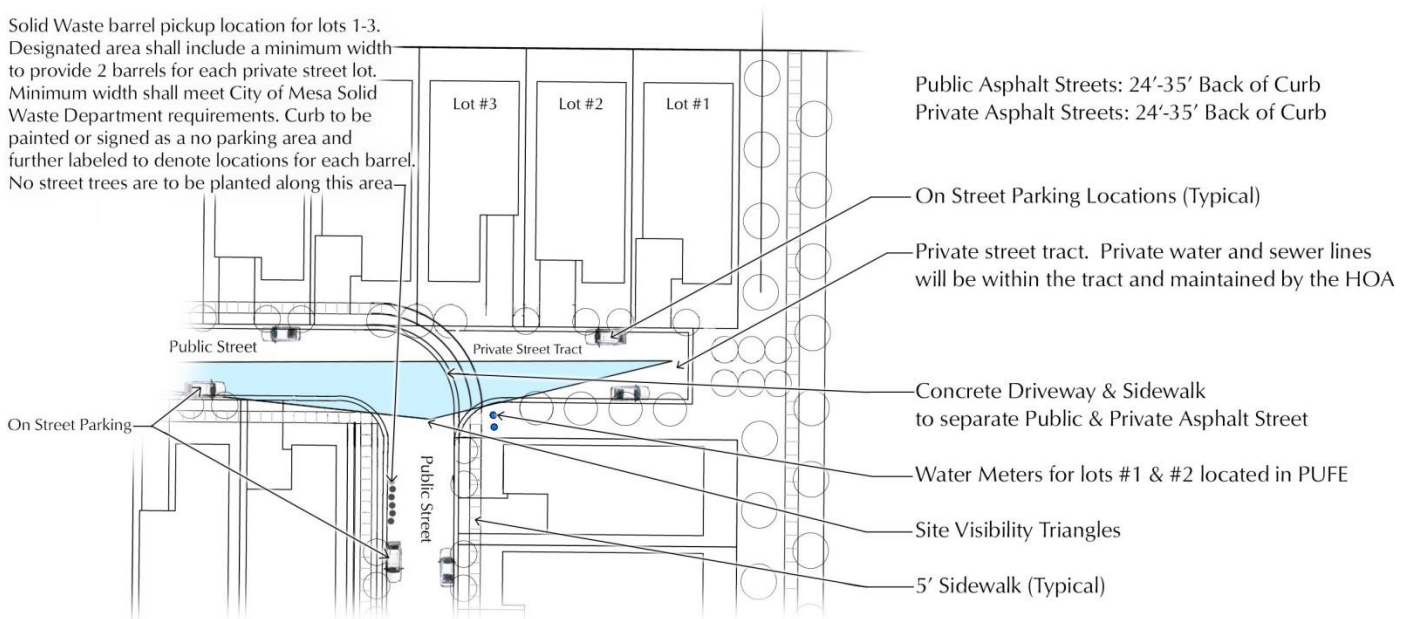
Specific street cross sections for PPGN were approved as part of the PPGN Community Plan. Updated cross sections have been included within the Development Unit 2 DUP to provide additional development options for the Community Collector and Local Streets. Specifically these cross sections provide an option where the right-of-way is located back of curb (See Exhibit 4.2.3 – Community Cross Sections). Project specific implementation of the alternate cross sections within Development Unit 2 is subject to review and approval by the City Engineer or designee pursuant to Chapter 3.12(c) of the PPGN Community Plan.

Street Improvement Phasing

Street improvements within Development Unit 2 will be phased as necessary to support overall development phasing. The Community Collector will be, at a minimum, partially developed with phase one residential housing from Ellsworth Road to the terminus of the third roundabout. Improvements to Ellsworth Road will be required adjacent to the primary project entry as part of phase one as required by the City of Mesa. Requirements for secondary access for phase one and future phases will be coordinated with the City of Mesa. Specific phasing and timing of all street improvements will require approval by the City of Mesa.

Exhibit 4.2.2 – Private Street Segments

Solid Waste barrel pickup location for lots 1-3. Designated area shall include a minimum width to provide 2 barrels for each private street lot. Minimum width shall meet City of Mesa Solid Waste Department requirements. Curb to be painted or signed as a no parking area and further labeled to denote locations for each barrel. No street trees are to be planted along this area.



*Site visibility triangles as shown are conceptual and must be submitted with plans for all approaches from all directions.

** Homes beyond 150' from the edge of fire access street must be sprinklered.

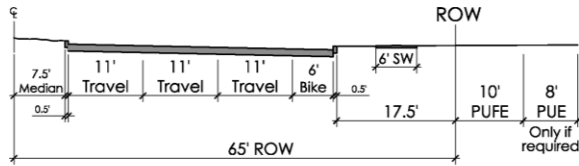


Public/Private Asphalt Streets Example

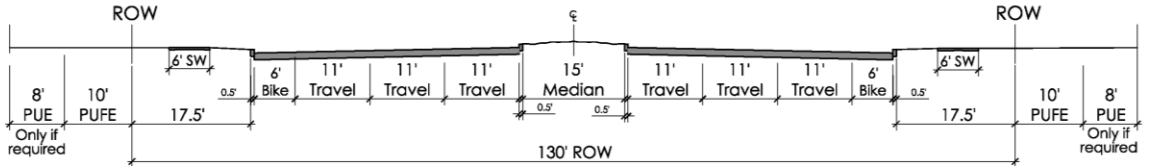
Pacific Proving Grounds North Typical Residential Dead End Street Exhibit

Exhibit 4.2.3 – Community Street Sections

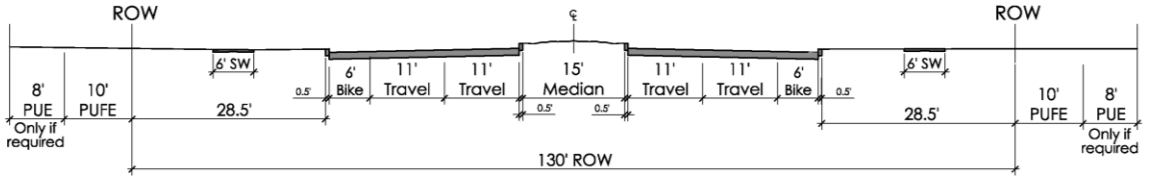
A1
Arterial Roadway
1/2 Street (3 Lane)
Ellsworth Road



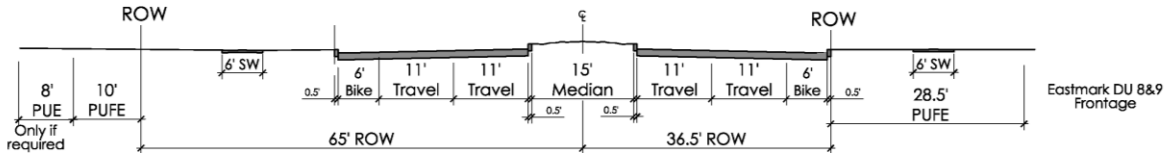
A2
Arterial Roadway
(6 Lane)
Williams Field Road
& Crismon Road



B1
Arterial Roadway
(4 Lane)
Crismon Road



B2
Arterial Roadway
(4 Lane)
Crismon Road

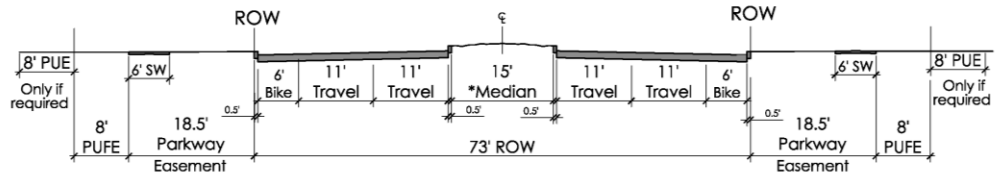


B2 will be used as necessary to transition from Crismon Road within Eastmark to the B1 cross section within PPGN.

C
Community Collector
(4 Lane)

*Medians may be located within a private tract with a PUFE or Parkway Easement in certain locations upon review and approval by the Engineering Department.

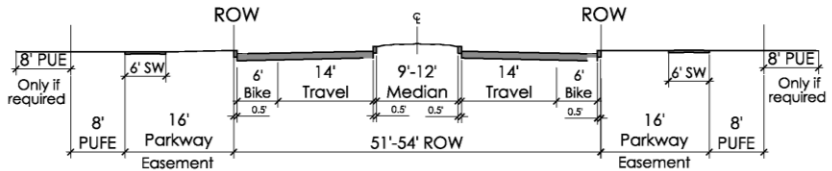
** Parkway width may vary when sidewalk is detached.



D
Community Collector Road &
Neighborhood Entry (2 Lane)

*Medians may be located within a private tract with a PUFE or Parkway Easement in certain locations upon review and approval by the Engineering Department.

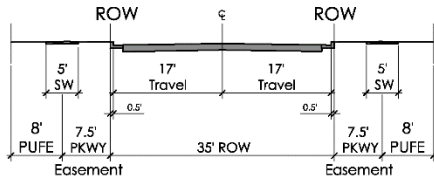
** Parkway width may vary when sidewalk is detached.



E

Local Street

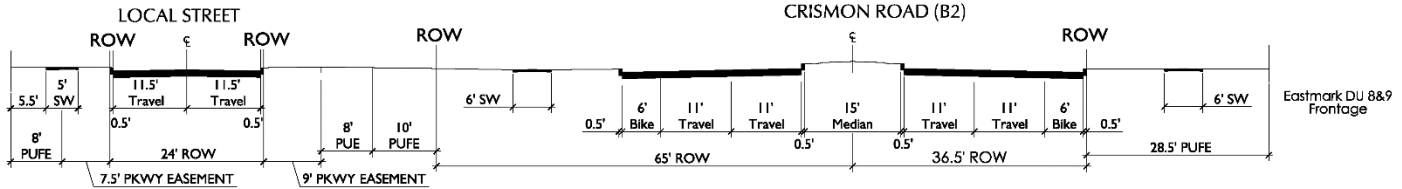
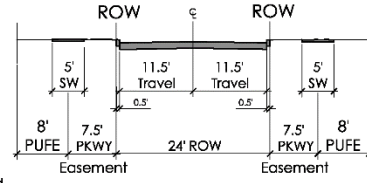
*On Street Parking Allowed
** Parkway width may vary when sidewalk is detached.



F

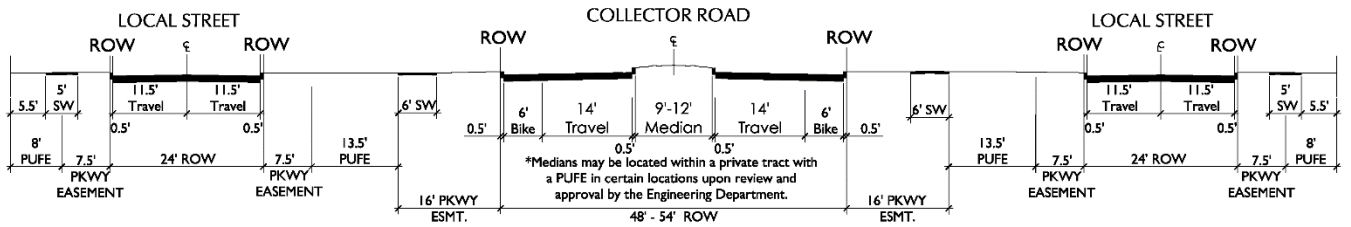
Local Street

** Parkway width may vary when sidewalk is detached.



G1

CRISMON ROAD PARALLEL WITH A LOCAL STREET



H1

COMMUNITY COLLECTOR PARALLEL WITH A LOCAL STREET

Pacific Proving Grounds North Street Sections

July 22, 2014