CITY OF SURPRISE
Planning and Zoning Commission Meeting
16000 N. Civic Center Plaza
Surprise, AZ 85374
Thursday, September 3, 2020 @ 6:00 PM
COUNCIL CHAMBERS

NOTICE: In an effort to protect health and safety of city employees, residents, and visitors, the Council Chambers will be closed to the public during this meeting. The public may access the meeting by viewing a live stream or broadcast of the meeting. To watch live, please visit www.surpriseaz.gov/surprisetv, the Surprise City Gov Facebook page at www.facebook.com/cityofsurprise. Cox channel 11 and Century Link channel 8513 will also carry the meeting live.

For instructions on how to comment on agenda items and public hearings, please go to **http://bit.ly/33zgqWv**

A. Call To Order
B. Roll Call
C. Pledge of Allegiance
D. Current Events and Reports
E. Staff Reports
F. Planning and Zoning Commission Agenda:

CALL TO THE PUBLIC:

Public comment will be taken through email or via phone. To submit email comments, including Call to the Public for non-agenda items, please email PandZComments@surpriseaz.gov. Comments for Call to the Public must be submitted prior to the start of the meeting. To comment on agenda items, emails must be submitted prior to the time(s) designated for public comment by the Commission Chair during the meeting or before the agenda item has otherwise concluded.

To comment live by phone for Call to the Public for non-agenda items or for agenda items, please call 623--222--3030 prior to, or during, the meeting to have your name placed on a callback list. If you reach voicemail, please leave your name and phone number. The Commission Secretary will call those wishing to comment from the dais during the meeting, and the call will be streamed through the Council Chamber audio system. Only calls received before Call to the Public for non-agenda items or before or during the time(s) designated for public comment by the Commission Chair during the meeting on the subject agenda item will be accepted and streamed. No calls will be accepted after the time(s) designated by the Commission Chair for public comment or after an agenda item has otherwise concluded.

CONSENT AGENDA:

1.	Internal	Consideration and action pertaining to approval or disapproval of the August 20, 2020 Planning and Zoning Commission Minutes.	Ashley Labhart Community Development

REGULAR AGENDA ITEM - PUBLIC HEARING:

REGULAR AGENDA ITEM - NON-PUBLIC HEARING:

2.	Citywide	Presentation and discussion regarding the community pool requirement in Planning and Engineering Design Standards as part of the code update (FS18-296 LDO Code Update).	None JOSHUA MIKE Community Development

G. Other Business and Future Agenda Items

H. Executive Session

For information purposes: Upon a public majority vote of a quorum (“Commission”), the Commission may hold an executive session, which will not be open to the public, but for only the following purposes: discussion or consideration of records exempt by law from public inspection (A.R.S. §38-431.03(A)(2));

or discussion or consultation for legal advice with the attorney or attorneys of the public body (A.R.S. §38-431.03(A)(3)).

Confidentiality Requirements: Pursuant to A.R.S. §38-431.03(C)(D), any person receiving executive session information pursuant to A.R.S. §38-431.02 shall not disclose that information except to the Attorney General or County Attorney or by agreement of the Commission, or as otherwise ordered by a court of competent jurisdiction.

The Commission may vote to hold an executive session for the purpose of obtaining legal advice from the Commission’s attorney on any matter listed on the agenda pursuant to A.R.S. § 38-431.03(A)(3).

I. Adjournment

SHERRY ANN AGUILAR, CITY CLERK, MMC

POSTED:August 27, 2020 at 3:07 PM

SPECIAL NOTE: PERSONS WITH SPECIAL ACCESSIBILITY NEEDS, INCLUDING LARGE PRINT MATERIALS OR INTERPRETER, SHOULD CONTACT THE CITY CLERK’S OFFICE @ 623.222.1200 OR TTY 623.222.1002, BY NO LATER THAN 24 HOURS IN ADVANCE OF THE REGULAR SCHEDULED MEETING TIME.

CITY OF SURPRISE
Planning and Zoning Commission Meeting

Council Meeting Date: September 3, 2020 Contact Person: Ashley Labhart
Submitting Department: Community Development District: Internal
Staff Recommendations:

Consent: Yes Regular: No Public Hearing: No Report/Discussion: No

Agenda Wording:
Consideration and action pertaining to approval or disapproval of the August 20, 2020 Planning and Zoning Commission Minutes.

Motion:
I move to approve/disapprove the August 20, 2020 Planning and Zoning Commission minutes.

Background:

Objective Analysis:

Policy Compliant:

Financial Impact:

Budget Impact:

FTE Impact:

ATTACHMENTS:
1. 08-20-20 EVR PZ MIN

CITY OF SURPRISE
PLANNING AND ZONING COMMISSION

MEETING MINUTES

August 20, 2020 / 6:00 PM

COUNCIL CHAMBERS
16000 North Civic Center Plaza
Surprise, AZ 85374

CALL TO ORDER.

Chair Dennis Bash called the Planning and Zoning Commission Meeting to order at 6:00 p.m. at Surprise City Hall, 16000 North Civic Center Plaza, Surprise, Arizona 85374, on August 20, 2020.

A. ROLL CALL
In attendance was Chair Dennis Bash, Vice-Chair Matthew Keating, Commissioner Scott Krous, Commissioner Ken Chapman, Commissioner Dennis Smith, and Commissioner Mitchell Rosenbaum.

STAFF PRESENT:
Ellen VanRiper, Chief Deputy City Attorney; Chris Boyd, Community Development Director; Lloyd Abrams, Assistant Community Development Director; Robert Kuhfuss, Current Planning Supervisor; Shirley Phan, Current Planner; Hobart Wingard, Current Planner; Sergio Angulo, Current Planner and Ashley Labhart, Planning and Zoning Secretary.

COUNCIL MEMBERS PRESENT:
None.

B. PLEDGE OF ALLEGIANCE

C. CURRENT EVENTS REPORT
Mr. Boyd announced the upcoming Land Development Ordinance Stakeholder meeting that is scheduled to occur on August 24, 2020. An update and results of the meeting will be provided to the Planning and Zoning Commission during the September 3, 2020 Planning and Zoning Commission meeting.
Mr. Boyd also announced the opportunity for two individuals from the Planning and Zoning Commission to attend the upcoming American Planning Association (APA) 2020 Virtual Conference that is to be held September 9-11, 2020. The opportunity for attendance is a result of the City of Surprise Community Development sponsorship for the year.

D. STAFF REPORT
None.

CALL TO THE PUBLIC:

Chair Bash opened the call to the public to discuss any items not listed on the agenda.

Hearing no comments, Chair Bash closed the call to the public.

CONSENT AGENDA:

Item 1 – Internal – Consideration and action to review and approve or disapprove the August 6, 2020, Planning and Zoning Commission Minutes.

Commissioner Smith made a motion to approve the August 6, 2020, Planning and Zoning Commission Minutes as presented.
Commissioner Chapman seconded the motion. Motion passes with 6 votes in favor.

REGULAR AGENDA ITEMS REQUIRING A PUBLIC HEARING:

ITEM: 2 – District 6 - Consideration and action pertaining to the rezoning of approximately 49.1 acres from Industrial Performance (IP) to Industrial General (IG), for property generally located north and west of the northwest corner of Dysart and Cactus Roads -- FS20-372.

Hobart Wingard, Current Planner, presented item 2 to the Commission.

Samantha Pinkal, Project Representative, was available on the phone line to address any questions or comments posed by the Commissioners.

Chair Bash opened the public hearing.

Hearing no comments, Chair Bash closed the public hearing.

The Commission discussed the following:
- Representation from the City of Surprise

Vice Chair Keating made a motion to recommend approval to the Mayor and City Council the rezoning of approximately 49.1 acres from Industrial Performance (IP) to Industrial General (IG), for a property located north and west of the northwest corner of Dysart and Cactus Roads, subject to stipulations “a” and “b”.
Commissioner Krous seconded the motion. Motion passes with 6 votes in favor.

ITEM: 3 – District 5 - Consideration and action pertaining to approval of a Conditional Use Permit to allow for a new Minor Automobile Service Center within the Sierra Verde PAD, generally located north of Waddell Road and east of 140th Drive - FS20-045

Shirley Phan, Current Planner, presented item 3 to the Commission.

Project Representatives Kent Lupton and Lori Gafner were available on the phone line to address any questions or comments posed by the Commissioners.

Chair Bash opened the public hearing.

Hearing no comments, Chair Bash closed the public hearing.

The Commission discussed the following:
- Project process and timelines
- Parking
- Number of employees

Vice Chair Keating made a motion to recommend approval of the Conditional Use Permit to allow for a new Minor Automobile Service Center within the Sierra Verde PAD generally located north of Waddell Road and east of 140th Drive, subject to stipulations “A” through “E”.
Commissioner Krous seconded the motion. Motion passes with 6 votes in favor.

REGULAR AGENDA ITEMS NOT REQUIRING A PUBLIC HEARING:

ITEM: 4 – District 3 - Consideration and action regarding the Preliminary Plat entitled “Revised Preliminary Plat for a Portion of Unit N - Phase 2 - Toll at Prasada” -- FS20-117

Commissioner Krous recused himself and did not participate or vote upon this agenda item.

Rob Kuhfuss, Current Planning Supervisor, presented item 4 to the Commission.

Aaron Insco, Project Representative, was available on the phone line to address any questions or comments posed by the Commissioners.

Commissioner Chapman made a motion to recommend approval of the Preliminary Plat entitled “Revised Preliminary Plat for a Portion of Unit N-Phase 2-Toll at Prasada” subject to stipulations “a” through “c”.
Commissioner Rosenbaum seconded the motion. Motion passes with 5 votes in favor.

ITEM: 5 – District 1 - Consideration and action pertaining to a recommendation of the Preliminary Plat entitled, “Mesquite Mountain Ranch” dated June 10, 2020, an approximately 201 acre property generally located on the northeast corner of Beardsley Road and 227th Avenue -- Case FS19-870

Hobart Wingard, Current Planner, presented item 5 to the Commission.

The Commission discussed the following:

- Access easement
- Pool requirements
- Revised PUD & PAD
- Lot size and variety

Commissioner Rosenbaum made a motion to recommend approval of the Preliminary Plat to the City Council for a plat entitled, “Preliminary Plat for Mesquite Mountain Ranch,” received June 15, 2020, a property generally located on the northeast corner of Beardsley Road and 227th Avenue, subject to stipulations “a” through “c”.
Vice Chair Keating seconded the motion. Motion passes with 5 votes in favor.

ITEM: 6 – District 1 - Consideration and action pertaining to approval of the Site Plan entitled “Asante Bungalows” received July 15, 2020, an approximately 25 acre property generally located north of Pat Tillman Boulevard and west of 163rd Avenue - Case FS20-126

Commissioner Krous recused himself and did not participate or vote upon this agenda item.

Sergio Angulo, Current Planner, presented item 6 to the Commission.

Mark Reddie, Project Representative, was available on the phone line to address any questions or comments posed by the Commissioners.

The Commission discussed the following:

- Emergency vehicle access
- Traffic review and studies
- Traffic volume
- Pedestrian access and trail system
- Amenities
- Zoning
- Elevations and style
- Right of Way
- Happy Valley Road development status
- Benefits of communities with on-site management
- Resident comments and concerns

Ashley Labhart, Commission Secretary, read into record the two emails received from the public via the Planning and Zoning Comments email. Email comments received were from the following individuals:
Chris Simmons – Surprise, AZ – Traffic concerns
Deborah and Donald Zimmerman – Surprise, AZ – Traffic concerns and negative neighborhood impacts

Vice Chair Keating made a motion to approve the Site Plan entitled "Asante Bungalows" received July 15, 2020, generally located north of Pat Tillman Boulevard and west of 163rd Avenue, subject to stipulations "A" through "D".
Commissioner Smith seconded the motion. Motion passes with 5 votes in favor.

OTHER BUSINESS:

Item G – Other Business and Future Agenda Items.

Chair Bash advised the Commissioners notify him directly of any interest in attending the American Planning Association (APA) 2020 Virtual Conference.

ADJOURNMENT:

Hearing no further business, Chair Bash requested a motion to adjourn. Commissioner Rosenbaum made a motion to adjourn the Planning and Zoning Commission meeting. Commissioner Krous seconded the motion.

Meeting adjourned at 7:05 P.M.

_____
Dennis Bash
Planning and Zoning Commission Chair

The foregoing instrument is a full, true and correct copy of the original document on file in the office of the City Clerk, City of Surprise, Arizona.

ATTEST BY: _____
Ashley Labhart, Commission Secretary

DATE: _____

CITY OF SURPRISE
Planning and Zoning Commission Meeting

Council Meeting Date: September 3, 2020 Contact Person: JOSHUA MIKE
Submitting Department: Community Development District: Citywide
Staff Recommendations: None

Consent: No Regular: Yes Public Hearing: No Report/Discussion: No

Agenda Wording:
Presentation and discussion regarding the community pool requirement in Planning and Engineering Design Standards as part of the code update (FS18-296 LDO Code Update).

Motion:
Presentation and discussion only.

Background:
Staff has prepared changes to the Land Development Ordinances that will implement the General Plan 2035. This code update has included across-the-board teamwork from all disciplines of the development community; home builders, architects, engineers, landscape architects, planners, etc. Since April 2020, after the stay-at-home order was put in place, staff continued to revise the drafts based on those meetings and other feedback such as phone calls and emailed suggestions. The newest draft is a comprehensive version, incorporating revisions that attempt to follow the direction set by City leaders and address the needs of developers in the City. This presentation will include feedback from the industry regarding provisions for residential zoning and community pool requirements.

Objective Analysis:

Policy Compliant:

Financial Impact:
There is no direct financial impact. Any financial impact will be determined during the budget process.

Budget Impact:

FTE Impact:

ATTACHMENTS:
1. 01 FS18-296 Surprise Planning Engineering Design Standards (August 2020 REDLINE DRAFT

with notes)
2. 02 FS18-296 Surprise Planning Engineering Design Standards (August 2020 CLEAN DRAFT)
3. 03 Code Update Presentation 9.3.2020
4. 00 FS18-296 LDO Code Update Memo-9.3.2020

PLANNING AND ENGINEERING DESIGN STANDARDS

(PEDS)

SURPRISE
ARIZONA

August 2020

VOLUME 1: PLANNING DESIGN STANDARDS

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VOLUME 2: ENGINEERING DESIGN STANDARDS

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List of Abbreviations

ADA	Americans with Disabilities Act
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
A.R.S.	Arizona Revised Statutes
C of O	Certificate of Occupancy
EDS	Engineering Development Standards
FCDMC	Flood Control District of Maricopa County
FEMA	Federal Emergency Management Agency
LDO	Land Development Ordinances
MAG	Maricopa Association of Governments
MCDES	Maricopa County Department of Environmental Services
MCDOT	Maricopa County Department of Transportation
PEDs	Planning and Engineering Design Standards
SUDC	Surprise Unified Development Code

Introduction

The purpose of Volume One of the "Planning & Engineering Design Standards (PEDS) Manual" is to communicate to developers, architects, engineers, and other design professionals, the City's design standards and development expectations for the many and varied land uses in the City of Surprise. The Planning Design Standards are not intended to be viewed as the only solution, but as the baseline for the minimum design expectations necessary for development approval by the City. These design standards are preferred approaches, but alternative solutions that achieve expected protection of existing neighborhoods and the native desert setting may be proposed and considered. The intent is to ensure the creation of smartly designed, sustainable, compatible, quality development that enhances the livability and desirability of the City of Surprise.

The Standards identify key site design and architectural elements, streetscape, right-of-way and on-site landscaping, and connectivity and *multimodal* aspects that are important to the City while providing latitude for creative, innovative solutions to design proposals. The basic nature of these standards affords the necessary flexibility to permit creativity and innovation, which the City encourages, as new technologies, techniques, and products become available as well as to accommodate difficult or unusual site design situations. However, the following Planning Design Standards and all appendices herein are formally adopted in Chapter 107 of the Land Development Ordinance (LDO) and therefore have the full force and effect of law.

Some land uses will be more auto-centric than others, but in all cases an objective is to balance vehicular access with those of alternative modes such as pedestrians, bicyclists, transit/bus, and the potential for commuter/light rail in the future.

In addition to ensuring quality development, these Planning Design Standards are intended to implement the Surprise General Plan 2035 by:

- Increasing pedestrian and *multimodal* connectivity;
- Promoting energy efficient and environmentally sensitive designs;
- Creating sustainably built environments;
- Providing quality development with compatibility between developments;
- Diversifying development in a manner that enhances the value of property;
- Encouraging distinctive development that reinforces Surprise's "sense of place".

The following Volume One Planning Design Standards work in conjunction with the Engineering Design Standards found in Volume Two to constitute the Surprise PEDS Manual. Words or phrases expressed using *italics* shall assume the meaning as ascribed in Appendix A herein.

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Commented [a1]: The HBACA is generally opposed to the adoption of residential design standards or guidelines, including the regulation of architecture and aesthetic design. These types of regulations are often overly burdensome, dictate features that should be left up to individual consumers, discount the substantial resources builders expend to determine what buyers want, and may prevent a potential home buyer from being able to move into a neighborhood. [1]

In addition, the HBACA is concerned that these types of regulations are inherently subjective and vague, which may run afoul of our members' due process rights.[2]

City Comment: These regulations are meant to create a clear and transparent expectation for the quality of design while not being prescriptive not dictate the architectural aesthetics.

CHAPTER 1: STANDARD REQUIREMENTS FOR ALL LAND USES

1.1 GENERAL LAND/SITE DESIGN & DEVELOPMENT

A. Existing features of the site, including but not limited to, rock outcroppings, steep slopes, washes, and views of the surrounding mountains shall be incorporated in the planning and design of the development to shape the identity and character of both the development and the open space component to the greatest extent possible.

B. Sustainable development practices shall be followed when planning the design of any proposed project regardless of it physical location within the City of Surprise. In addition, the provisions and standards found in **Chapter 5: Environmentally Sensitive Lands Standards** herein and the regulations in **Article2, Chapter 104** of the LDO shall be followed ~~when planning the design of~~for any proposed project on property that possesses *cultural resources* and/or *environmentally sensitive features*.

C. If a development parcel is located adjacent to or encompasses areas identified as open space, trails and *greenways*, in either the Surprise General Plan or Parks and Recreation Master Plan, the development shall be required to provide for and incorporate those areas into the overall site design and the open space network of the development. Conservation of these identified community-wide open spaces, trails, and *greenways* and construction of the improvement within them shall be the responsibility of the developer. These larger community-wide trails shall be platted as a "multi-use trail easement" and stated to allow for public use and access, with maintenance responsibilities falling onto the Homeowners' Association, unless those open spaces, trails and *greenways* have been dedicated to and accepted by the City of Surprise into the City park system for maintenance responsibilities.

D. The open space component of a new development shall tie to the City's broader *multimodal* system, open space system including washes and wildlife corridors, and ultimately to the hierarchy of parks planned throughout the City.

E. The development's pedestrian circulation and open space system shall provide for connections to adjacent developments to enhance continuous *multimodal* circulation and open space throughout the City of Surprise. These spaces shall be large enough to also serve as a buffer between incompatible land uses, different development densities, and different development patterns.

F. All new dry utilities must be placed underground; with the exception of wireless facilities (WF) and 69 KV or larger electric lines.

1.2 OPEN SPACE DESIGN

A. The amount of required open space for any development is based on the zoning of the property and further outlined in Chapter 104 and ~~the specific articles of~~ **Chapter 106** in the LDO. Different kinds of open space serve different needs (for example, ecological, recreational, entertainment, and culture). While some open space may serve more than one need, there is a particular need to retain

Commented [a2]: The HBACA is concerned that some of these set asides for public benefit may constitute a taking of property which would require compensation by the City. In addition, we are concerned that assigning the maintenance responsibilities to the HOA will result in dramatically increased HOA dues that home owners will not be willing to pay.

City Comment: The open space identified in the GP 2035 is primarily FEMA floodways that intend to preserve these unbuildable swaths of natural desert as recreational amenity. This provision is consistent with HOA maintained open space/trails. The public access easement addresses unenforceable trespassing rules on trails that connect one subdivision or commercial development to another.

Commented [a3]: The HBACA will provide further comment on these requirements once subsequent drafts of the LDO have been published for comment.

natural desert open space and corridors.

B. The required open space shall be designed, located, and oriented to provide:

1. Conservation of the Sonoran Desert vegetation and *wildlife habitats* that are important to native wildlife species and create a "sense of place" for the community.

2. Individual development parcels that provide opportunities for hiking, cycling and equestrian trails that are safely and conveniently located and provide bicycle racks, benches and/or other amenities that promote their use.

3. Physical connections to adjacent parcels that enhance a structure of continuous open space, streetscape, and a *multimodal* circulation system.

4. Preservation and/or enhancement of watersheds, major drainage ways, *wildlife corridors*, *cultural resources*, and natural desert open space view corridors to the surrounding mountains.

5. Include on-site storm water retention facilities as an integral component and useable amenity of the open space network. Plan the site's drainage to lead runoff away from active use areas, pathways, and parking areas while utilizing a Low Impact Design.

6 Wherever and whenever possible, orient open space for optimal solar access to extend its use throughout the year. Provide user-friendly gathering and rest areas that are shaded, landscaped, lighted, and furnished to invite and encourage use by the public.

7. Maintain appropriate buffer areas and/or setbacks between wildlife corridors and developed areas to mitigate edge effects on wildlife corridors.

8. Maintain connectivity to other community and regional parks, trails and greenspaces.

9. Provide for wildlife permeability within open space corridors and across restrictive sections of major roadways and other potential barriers.

C. In addition to the ~~any~~ undeveloped buffer areas, the preserved *environmentally sensitive features*, and/or *cultural resources* the following amenities and infrastructure designs are examples of ~~what might~~ areas/elements that can also be calculated as open space for the purpose of meeting the open space requirements for the specific property:

~~4~~1. Existing desert washes and *wildlife corridors* if:

a. they are incorporated into the overall open space design of the development in their historical unaltered location; and

b. the buffer area adjacent to such wash/corridor is improved with a multi-use pathway for bicycles, pedestrians and if applicable equestrians.

~~1~~2. Landscaped or hardscaped plazas, landscaped tracts at ends of residential blocks, gathering and sitting areas designed to provide an open park like atmosphere;

~~2~~3. Community gardens;

~~3~~4. Protected bike lanes within the right-of-way and multi-use pathways outside of the right-of-way (not sidewalks associated with the street right-of-way);

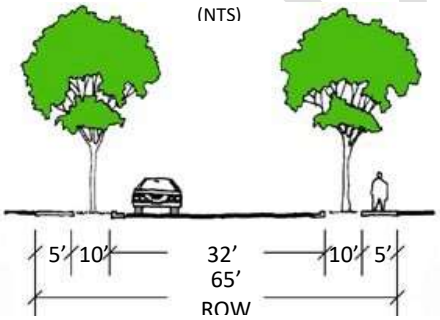
5. Retention facilities if:

   a. given a "natural" character (not ditch-like in design) by terracing, berming, and contouring to naturalize and enhance the aesthetics of the basin and constructed with/of natural materials (not concrete lined); and

   b. landscaped and connected into the overall open space system in a manner that could accommodate recreational facilities such as tot lots, play fields, and other amenities provided all amenities are located above the 100-year, 2 hour storm event level.

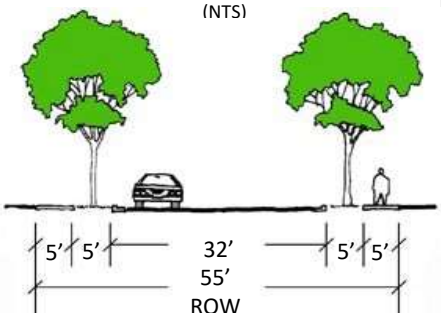
6. If the developer chooses to utilize the Alternative Local Street cross section (see **Illustration 1A)** in lieu of the Standard Local Street cross section (see **Illustration 1B**) then the entire ~~landscaped boulevard strip~~landscape strip may be calculated as open space even though the ~~boulevard strip~~landscape strip is within the public right-of-way. The excess ~~boulevard strip~~landscape strip must exceed standards by a minimum of five (5) foot for open space credit to apply.

ILLUSTRATION 1A
(NTS)



Alternative Local Street: Provides a 10 foot ~~boulevard strip~~landscape strip rather than the standard 5 foot; the entire ~~boulevard strip~~landscape strip (10 feet) may be calculated as open space.

ILLUSTRATION 1B
(NTS)



Standard Local Street: Provides a 5 foot ~~boulevard strip~~landscape strip.

Commented [AB4]: The City should define what it considers to be protected bike lanes. Is providing bollards sufficient to be considered protected? Or, is the City expecting a separate tract of the right-of-way to provide an isolated, separate bike lane? Or, somewhere in between these two options?

City Comment: Because of the inconsistent understanding of the term 'complete streets', it has been removed in favor of the term multimodal that focuses on and permits any non-vehicle dominant method of travel.

Commented [AB5]: In regards to Illustration 1A:

For local streets interior to a residential subdivision, the preference among builders, developers, and home owners is for a narrower street design which still allows for emergency and public works access. By increasing the curb to curb distance, the City will actually be encouraging higher rates of speed within subdivisions which is contrary to the stated goal of more multimodal traffic and safe pedestrian activity, particularly where children are playing. The City should revisit this requirement.

City Comment: The pavement width is the same (32'). The extra width is the landscape strip.

1.3 CIRCULATION DESIGN FOR COMPLETE STREETS

A. ROADWAY DESIGN.

1. The road system shall be designed to permit the safe, efficient and orderly movement of vehicles, bicycles and pedestrians; meet the needs of present and future populations served; have a simple and logical pattern; respect natural features and topography, promotes street life and activity and; present an attractive streetscape.

2. There shall be no development of roadways built to freeway, highway, or parkway standards unless and until that roadway and roadway alignment is shown in the Roadway Systems Element of the Surprise General Plan 2035 as a proposed roadway; unless an amendment to the General Plan is approved.

3. All proposed public rights-of-way shall be developed ~~utilizing the "*complete streets*" model~~ with ~~a high proportion of~~ interconnected streets, sidewalks and pathways to accommodate multimodal travel ~~a variety of travel modes~~ and comply~~ing~~ with ADA requirements. Travel modes~~,~~ may ~~including~~ include but are not limited to, vehicles, Neighborhood Electric Vehicles (NEV), pedestrians, bicycles, public transit and, where appropriate equestrian~~ uses shall be considered in the planning and design of a "*complete street*" system~~.

4. All parkway, arterial and collector streets shall be designed with on-street bicycle lanes, a minimum of ~~six~~ five feet (~~6~~5') in width.

   a. Parkway and arterial streets shall provide ~~"fully~~ protected bike lanes~~" through the use of an approved vertical element that creates a clear and distinctly separated bike lane that is non-traversable by vehicular traffic (see **Illustration 2** below)~~.

   b. The collector streets may use striping to delineate the on-street bike lane.

5. All parkway, arterial and collector streets shall separate vehicular traffic from pedestrian uses by utilizing detached sidewalks that create a ~~*boulevard strip*~~*landscape strip*. The ~~*boulevard strip*~~*landscape strip* ~~shall should~~should be designed to allow landscape plantings, including but not limited to street trees, and in a manner that utilizes LID design for watering. Plant material ~~shall~~ should not impact either the drive lane or the sidewalk with low overhanging branches or root ~~upheave~~upheaval. For arterial and collector streets the sidewalk typically will run parallel to the street with the ~~*boulevard strip*~~*landscape strip* between curb and sidewalk being between eight ~~(8)~~ feet to sixteen feet (8'-16-) ~~feet~~ in width for the specific type of street per the Engineering Design Standards outlined in Volume Two.

6. Collector streets shall be designed to the street widths necessary to serve the planned intensity and density of land uses, the number of average daily trips generated by those uses, at the appropriate service level acceptable to City, as demonstrated by the required Traffic Impact Analysis (TIA).

7. All existing and proposed street alignments and connections shall provide direct routes to local destinations such as neighborhood commercial centers, schools, parks and other common destinations in

Commented [AB6]: This section requires bike lanes on all arterial and collector streets. The City was also proposing to include separate bike lanes as open space. If a builder/developer provides on-street bicycle lanes does that still count as open space? Also, see comment below regarding on-street bicycle lane width.

City Comment: The min standard for on-street bike lanes will not count as open space. To be counted it must comply with Section 1.2(C)(4) above.

Commented [AB7]: Illustration 2 below shows bike lanes that are 5' to 6' wide. However, Section I.3(A)(4) requires that the on-street bike lanes be a minimum of 6' wide. We believe that a 5' wide on-street bicycle lane is sufficient. The City should also provide examples of "approved vertical elements."

Generally, it is always best practice to begin a complete streets program with protected bike lanes in the densest areas of the municipality and then expand from there. Requiring new residential development to incorporate complete streets in areas of low traffic that do not connect to a larger complete street network defeats the purpose of a complete streets program while increasing the cost of new development.

City Comment: The bike lane width has been revised. Because of the inconsistent understanding of the term 'complete streets', it has been removed in favor of the term multimodal that focuses on and permits any non-vehicle dominant method of travel.

Commented [AB8]: We believe that the requirement to provide detached sidewalks, *boulevard strips,* protected bike lanes, etc. should be driven by the existing amenities that are provided on the adjacent streets. For example, it does not make much sense to have a protected bike lane or detached sidewalk for a quarter mile stretch and then nothing for the next two miles. The City should clarify that this requirement should be tied into existing infrastructure or, at least recognize that there may be some instances where this is not required and strike the word "All" and replace "shall" with "should."

City Comment: The bike lane width has been revised. Because of the inconsistent understanding of the term 'complete streets', it has been removed in favor of the term multimodal that focuses on and permits any non-vehicle dominant method of travel.

order to: encourage greater use of streets by pedestrians and cyclists; eliminate concentration of traffic on just a few roads; and avoid the use of overly circuitous street layouts and cul-de-sacs, unless physical site constraints require modifications to the connections and alignments.

8. The intersection of two (2) streets shall be at right angles with one another; except when constrained by topography and approved by the City Engineer.

B. CUL-DE-SAC DESIGN.

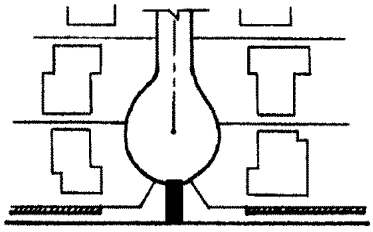
1. Cul-de-sacs may be permitted only to accommodate specific site conditions, such as natural topographical constraints when all other design options have been exhausted.

2. When adjacent to a parkway, arterial, ~~or~~ collector road, community trail, or regional drainage corridor a cul-de-sac shall be designed so that the bulb end provides a minimum thirty foot (30') ~~foot~~ wide landscaped open space tract that directly connects the cul-de-sac to the parkway, arterial, ~~or~~ collector road, trail, or corridor. This open space area shall be designed with a paved walkway/trail to allow pedestrian and bicycle access to the larger community circulation and/or open space systems. (see **Illustration 3**).

Commented [AB9]: "Shall" should be replaced with "should" as there may be some instances where topographical or other limitations would not make the required landscaped open space or required connections possible.

City Comment: The term 'shall' will be maintained as the standard because the PEDS waiver permits alternative designs to address the intent being solved in various ways.

ILLUSTRATION 3



Arterial &/or Collector Street
Community Trail, or
Regional Drainage Corridor

Provide landscaped open space and connectivity by opening the subdivision perimeter fence at the end of abutting interior cul-de-sac streets.

C. MULTIMODAL/MULTI-USE PATHWAY DESIGN.

1. The pedestrian network in all new development shall consist of both:

   a. Sidewalks ~~(associated with the *complete street* system)~~ that provide continuous direct routes and connections internally to neighborhood parks and externally to adjacent arterial and collector streets to provide safe routes to places where people want to go - including homes, schools, parks, recreation, *third places* and neighborhood shopping areas, public services, and transit.

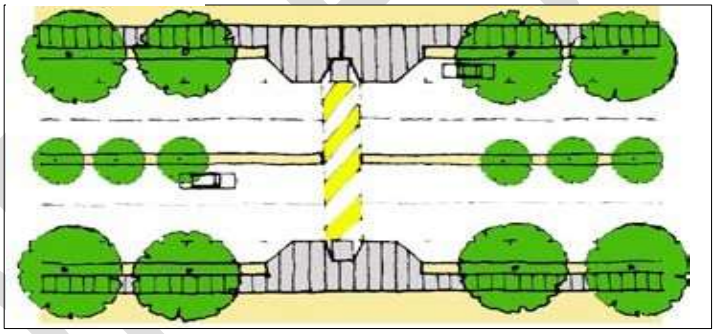
   b. Multi-use pathways (associated with the open space and greenways) designed to accommodate pedestrians and cyclists, and where necessary equestrians, that are an integral component of the open space system and that facilitates the interconnectivity

to different neighborhoods, adjacent developments, and the larger community and regional pathways and open space systems.

2. Developments that either contain, are adjacent to, or can directly connect to a Community and/or Regional Trail/Path, as shown in the Surprise Parks and Recreation Master Plan, shall both design the pedestrian and bicycle trails/paths as outlined and provide the minimum easements as delineated in the said Master Plan. Equestrian trails shall also be considered; where appropriate and adjacent to the "Regional Path" as shown on the Surprise General Plan 2035 and the Surprise Parks and Recreation Master Plan.

3. Where multi-use pathways cross arterial streets, the pathway shall comply with ADA requirements and include safety measures; such as bicycle and pedestrian activated signals, median refuges, warning signs for both motor vehicles and pathway users, special street markings or striping, and barrier posts ("bollards") that are spaced widely enough to permit cyclists and wheelchair user's easy passage but prevent motor vehicle access (see **Illustration 4** below).

ILLUSTRATION 4



Special markings shall be required where pathways intersect major arterial streets.

4. A multi-use pathway shall be designed to be, at a minimum, ten~~twelve~~ feet (10'~~2~~) ~~feet~~ wide for two-way pedestrian and bicycle movements. The pathway may be either a single or split pathway provided there is a minimum hard-surface width of ~~six~~ five feet (5~~6~~') for pedestrians and five~~six~~ feet (5~~6~~') for bicycles and skaters.

Commented [AB10]: We believe that a minimum 10' wide or 5'/5' wide pathway would be sufficient to accommodate the anticipated traffic.

5. Multi-use pathways shall be placed within tracts or public use easements and located outside of the public right-of-way to provide pedestrians, cyclists and other users' alternate means of moving throughout the development via a complete and continuous separation from vehicular traffic. Where the pathway is adjacent and parallel to the roadway a minimum ten foot (10') wide landscaped ~~*boulevard strip*~~*landscape strip* shall be provided to separate the street from the pathway (see **Illustration 5** below).

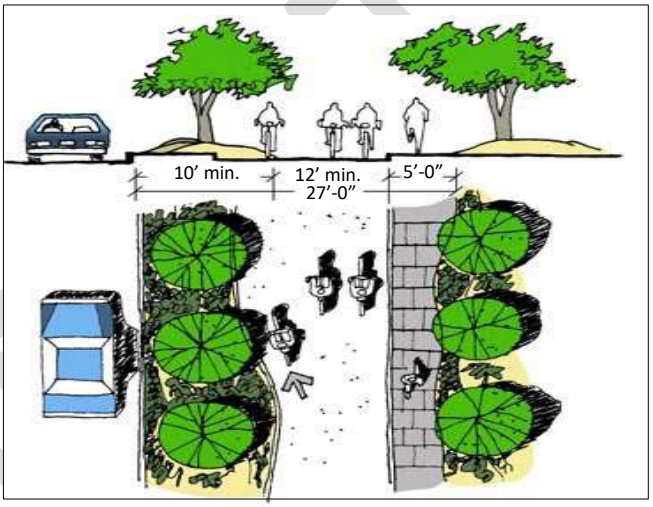
6. Where pathway corridors are also designed for use by equestrians, the minimum width of the total pathway right-of-way, including a minimum

landscaped area of ten feet (10') shall be twenty-seven feet (27'), with the additional five foot (5') portion devoted to equestrians constructed of a softer surface consisting of stabilized decomposed granite, a ground gravel or other compatible dense, yet soft material (see **Illustration 5** below).

7. Under-crossings for multi-use pathways shall be well lit and designed to provide a minimum width of fourteen feet (14') and a minimum overhead clearance of ten feet (10').

8. When equestrian paths are designed they may require additional standards.

ILLUSTRATION 5



Illustrative Example: Multi-use pathway parallel to a roadway.

1.4 LANDSCAPE AND STREETSCAPE DESIGN

A. GENERAL LANDSCAPE STANDARDS.

1. Xeriscape methods and low water use drought tolerant plants shall be utilized within all public rights-of-way, public spaces, and landscaped areas associated with all surface parking lots; the plant list for such public spaces is **Appendix B** in PEDS Volume 1 herein. The City's preferred plant list for homeowners associations/property associations for private development open spaces, buffer areas, and the individual homeowner's on-site use is **Appendix C** in PEDS Volume 1 herein.

2. All landscape areas shall be supplied with an efficient irrigation system. Introduced landscape materials shall consist primarily of durable species tolerant of soil compaction, and requiring minimal irrigation, fertilization and maintenance (see **Appendix B** and **Appendix C** herein).

3. The landscape design should strive to visually create a larger massing of a single color groundcover and/or shrub with an accent color rather than being seen as a number of individual plants.

4. The use of turf shall not be allowed in any public rights-of-way. The use of natural turf outside of the public rights-of-ways shall be limited to twenty ~~(20%)~~ percent (20%) of the total landscaped area; excluding artificial turf and designated turf areas on a single family lot, when required in retention basin, within public parks, ~~and golf~~and golf courses.

~~4~~5. Retain native trees and cacti and incorporate it into the project unless determined to be unsalvageable by a licensed landscape professional (refer to **Chapter 107** of the LDO).

~~5~~6. Any landscape design in the City of Surprise shall comply with the provisions of the city's Water Conservation regulations (**Chapter 58; Article VII**) and in particular the specific limitations regarding the use, design, location and installation of fountains or water features.

~~6~~7. Landscaping maintenance of the center medians within those streets classified as Parkways and Arterial streets shall be the responsibility of the City of Surprise after acceptance.

~~78. Landscaping maintenance of medians within those streets classified as Collector and Local streets and the adjacent public rights-of-way, including the landscaped *boulevard striplandscape strips* between the curb and the detached sidewalk, shall be the responsibility of the adjacent property owner or the property association formed by the adjacent property.~~

8. Additional standards for Neighborhood Developments, Commerce, Office and Mixed-Use Developments, and Business Park and Industrial Developments may be found respectively in **Articles 2, 3 and 4** herein. Additionally, adherence to the landscape regulations in **Chapter 107** of the **LDO** shall be required.

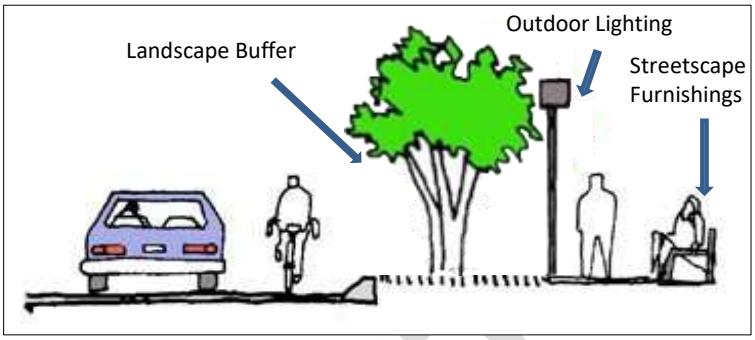
Commented [AB11]: We are concerned that assigning the maintenance responsibilities to the HOA will result in dramatically increased HOA dues that home owners will not be willing to pay. This is particularly true where the landscaping in medians and the landscaped *boulevard strips* are to provide a public benefit beyond the adjacent development.

B. GENERAL STREETSCAPE STANDARDS.

1. Landscape medians within the right-of-way shall utilize "Low Impact Development" methods to capture first flush stormwater, refer to **Section 1.6** herein and meet the requirements of Volume Two Engineering Design Standards; Chapter 8 of the PEDS.

2. To encourage high pedestrian usage and reinforce the community's *multimodal* circulation system the street rights-of-way shall incorporate landscaping, outdoor lighting and, when determined by the City, appropriate streetscape furnishings along arterial and collector roadways. (See **Illustration 6** below).

ILLUSTRATION 6



Landscaping between street and detached sidewalks create an intimate streetscape.

1.5 BUILDING FORM AND ARCHITECTURE

A. High quality "stylized" or "theme" architecture is permitted, as long as it incorporates the architecture of the area and maintains continuity with the community as a whole.

B. Buildings shall be designed and oriented to minimize heat gain and maximize pedestrian shade opportunities; including materials, elements, and details (i.e. extended or cantilevered roof eaves, thickened building walls, awnings).

C. The City strongly encourages all new buildings to meet Leadership in Energy and Environment Design (LEED) certification standards; and building sites and development in general to utilize Low Impact Development (LID) technologies.

D. All exterior elevations shall provide architectural detailing (360° architecture) by the consistent use of color, patterning, finish, type and application of materials, and the wrapping of materials around onto adjoining walls of the structure to provide design continuity and a finished appearance to the building.

E. Flat monolithic facades and large unvaried rooflines are not permitted. The building façade shall utilize recessed entryways and windows, groupings of windows, horizontal and vertical offsets and reveals and three-dimensional detail between surface planes, to create shadow lines and break up long continuous flat wall areas.

F. The use of architectural features such as three-dimensional cornice treatments, enclosed parapet wall forms and details, and overhanging eaves shall be utilized to enhance the architectural character of the roof.

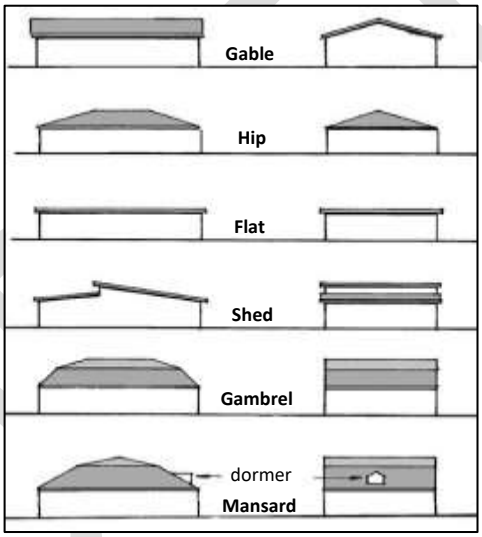
G. Solar panels located on rooftops shall be placed consistent with roof pitch, and sized to appear as an integral part of the overall roof design. The solar panels may be used as the roof structure itself (e.g. carports, shade structures, patio covers).

H. When appropriate to the style of a building, a variety or combination of roof forms are preferred as a means of adding visual interest and diversity to the City's "roof horizon" and to avoid the "sameness" of roof styles. The more typical roof types are gable, hip, flat, shed, gambrel and mansard style roofs as shown in **Illustration 7**.

1.6 GRADING & DRAINAGE DESIGN AND FLOODWAYS

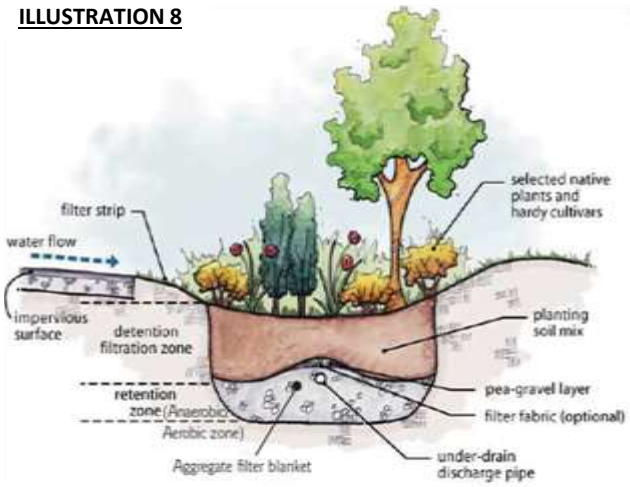
A. Washes and drainage patterns shall be maintained in their historic location. Mass grading of parcels over five ~~(5)~~ acres (5 ac) in size shall require additional approval from the Community Development Director; phased grading of a development is the preferred method. The grading concept for any site shall be a balanced cut and fill on the site to limit damage to the natural topography; except in the case of approved and permitted mining activities.

ILLUSTRATION 7



B. Low Impact Development (LID) construction methods to meet the needs of ~~Assess~~ both on-site and off-site stormwater drainage ~~aspects of stormwater to determine what type of Low Impact Development (LID) construction methods~~, such as but not limited to, bioswales, bioretention planters, and strategic use of water features shall be implemented to both improve stormwater management and enhance the built environment of the development (see **Illustration 8** below).

ILLUSTRATION 8

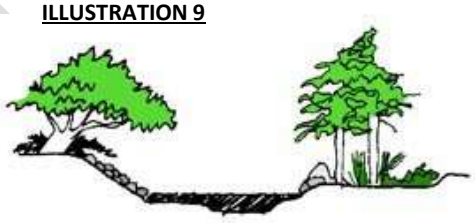


C. In the event that retention basins are required, per the drainage analysis, they shall be designed as landscape features rather than large, plain depressions in the site. To the greatest extent possible, basins shall be located and oriented to connect with other open space areas of the development which in turn connect physically, functionally, and visually with open space in adjoining developments/sites.

D. Design any water harvesting approaches to supplement landscape irrigation, reduce stormwater discharge, and downsize retention facilities.

E. Where a floodway or wash traverses a development site, the floodway or wash shall be set aside as open space and improved using environmentally sensitive channel and bank stabilization techniques to provide a naturally appearing restored, enhanced and stabilized floodway or wash. Under no circumstance shall the channel or sides of a floodway or wash be paved over in concrete or similar material (see **Illustration 9**).

ILLUSTRATION 9



1.7 Utility Screening

A. Above ground ancillary equipment appurtenant to underground utility facilities, such as surface-mounted transformers, electrical panel boxes, pull boxes, pedestal cabinets, service terminals, telephone splice enclosures, or other similar above-ground facilities normally associated with an underground utility system shall be located to the rear of the project site, not located along a street frontage or at the entrance to a development, and shall be decoratively screened from public view.

B. All residential development site utility equipment including, but not limited to, HVAC equipment, electrical transformers, electrical and telephone panels and switch gear, generators, irrigation backflow prevention devices, natural gas pressure regulators, fire distribution valves, and cable and junction boxes shall be located so as not to be visible from any street, pedestrian way or other public right-of-way. Said utility equipment shall be screened from public view, located within the building structure, or placed underground.

C. Utility equipment serving large commercial, office, industrial, and civic/institutional buildings shall be located in a utility room(s) within the building structure; or within a separate structure attached to the principal building on the site.

D. When undergrounding utility support equipment is determined not to be feasible due to a pre-existing land condition such as a high water table or excessive bedrock, or a technical or space limitation problem within the building itself would preclude an indoor location; the utility support equipment shall be located away from abutting streets and screened by one or a combination of the following techniques:

1. An architectural barrier such as a decorative, masonry wall enclosure consisting of sound absorbent and sound scattering wall materials; and/or

2. Landscaped earthen berm having a minimum height of four feet that incorporates planting having a minimum height at maturity of six feet (6'), measured from the top of the berm. Berm landscaping shall consist of a combination of dense shrubbery and clusters of trees having a minimum three-inch caliper trunk measurement; and/or

3. Incorporated/decorated as public art.

4. Chain-link and/or slat fencing shall not be used to satisfy screening requirements for utility and service areas.

1.~~7~~8 ART IN PUBLIC PLACES

A. To encourage the creation of more attractive, unique, and aesthetically pleasing social spaces, artwork is encouraged to be integrated into public and private spaces within all types of development and accessible to the public via different multi-use pathway systems.

B. Public art ~~that~~ invites participation and interaction, ~~that~~ adds local meaning, ~~or~~ and reinforces the unique character and "sense of place" when incorporated into a development's outdoor spaces, such as but not limited to plazas and park spaces,

subdivision entries, or public facilities. Public art that ~~are~~ is designed for public use may be credited as open space if it can be demonstrated that the art meets one of the following options:

1. Building features and enhancements such as customized bike racks, gates, benches, water features, or pedestrian shade screens, which are unique to the development;
2. Landscape art enhancements such as walkways, bridges, formal plantings or art features within a community garden;
3. *Murals* or mosaics covering walls, floors, and walk ways. Non-signage *murals* may be painted or constructed with a variety of materials, including the use of imbedded and nontraditional materials;
4. Sculptures, which can be freestanding, wall-supported or suspended, kinetic, electronic, and made of endurable materials;~~.~~
5. Community art projects resulting in tangible artwork, such as community non-signage *murals*, sculptures, or kiosks;
6. Spaces for regular artistic expression of performance art as well as the creation of artwork which is experienced by an audience;
7. Community accents at intersections, at neighborhood gathering locations, or in neighborhood parks such as statues, animal feeders or baths, artistic variations on standard street furniture elements, water features, or place markers;
8. Temporary artistic installations in social settings or permanent location(s) in which artwork is regularly relocated or rotated to;
9. Artistic design on utility boxes or screening of the utility boxes.

C. Art work on or adjacent to roadways and public right-of-way shall not be in conflict with traffic safety, such as covering signs or reducing sight visibility.

Commented [AB12]: When would these types of amenities be credited as open space? Are there examples that are not provided in the 1 to 9 examples? If the public art were provided adjacent to a public right-of-way and integrated within a subdivision entry, would that be acceptable?

CHAPTER 2: NEIGHBORHOOD LAND USES

2.1 GENERAL LAND/SITE DESIGN & DEVELOPMENT

A. The development as a whole shall be interconnected through the open space, landscaping, and its visual design characteristics.

B. Large development projects proposed for phased development shall be planned and designed so that each phase is complete and can exist independently in terms of the functionality of its infrastructure and circulation systems as well as the drainage.

C. When allowed, high-density residential and non-residential development shall be located within mixed-uses projects or adjacent to, and oriented toward, the arterial and/or collector roadways, transit/bus services, and the community's pedestrian circulation and trail system.

D. ~~If any development chooses to impose enhanced architectural and streetscape aesthetics on itself, in order to create a specific textural character, they shall apply to the entire development and not just to a select parcel(s) within the development.~~

~~**E.**~~ New residential development shall be designed so that lots that abut or front adjacent to an arterial or collector roadway take access from an internal local residential street or a frontage local roadway, or from an alley.

E~~F~~. Subdivision and street layout, lot orientation, and home design and siting, shall utilize the most advantageous solar orientation, climatic, and environmental conditions of the development site.

F~~G~~. Design of accessory elements such as group mailboxes and security huts and gates, transit/bus shelters, and streetscape shall be compatible with the architectural style and/or unique theme of the development or neighborhood in which it is located.

G~~H~~. Group mailboxes for new residential development shall not be freestanding, but shall be placed into an architectural form that is strategically and conveniently located throughout the development as a part of the development's pedestrian open space and circulation system and providing amenities such as illumination, shade trees and benches for neighbor interaction. All group mailboxes shall be accessible to persons with disabilities.

H~~I~~. ~~Trash and Refuse Collection:~~

~~1.~~ ~~Single family: Street, lot, and driveway design for any development shall accommodate placement of containers curbside at the street front for each dwelling unit and in a manner that does not impede pedestrian and bicycle circulation, landscape areas, or off-street parking on collection days.~~

~~2.~~ Multi-family & Non-residential Buildings in the Neighborhood Land Use: Trash and refuse collection containers shall be screened from public view with a six foot (6') decorative masonry wall enclosure and located such that they are not the visual focal point of a driveway or cannot be viewed from a public street. Those sites that can only locate the refuse containers in a highly visible location shall provide

Commented [AB13]: Often residential subdivisions will offer a variety of products from entry level through luxury within a single development. This allows for greater diversity of housing products that appeal to a broader buyer base. Therefore, it would make sense that a builder may want to impose enhanced architectural or streetscape aesthetics to a specific parcel within the development but not to the entire development.

Similarly, a builder may want to impose different enhanced architectural and streetscape aesthetics to different parts of a development. The City should embrace any way a builder wants to impose enhanced architectural and streetscape aesthetics. This will ensure that builders are most likely to do these enhancements and will help to avoid the "sameness" these guidelines are attempting to prevent.

Finally, a "development" may include more than one builder offering different products for different buyers. In that instance, it would not be appropriate to hold all builders to a standard that one builder may chose for a particular product series.

City Comment: The provision has been removed

Commented [AB14]: Placing the containers in front of the curb on narrow streets does not impeded pedestrian and bicycle circulation. The narrow streets already slow vehicular speed, the placement of the containers further slows speeds to allow for safe bicycle and pedestrian passage. This requirement should be removed as unnecessary.

City Comment: The provision has been removed. Additional solid waste provisions have been added later in the chapter.

screening the containers with decorative latching gates at the opening to the enclosure.

I~~J~~. To reduce the impact of the garage dominant architecture garage doors shall not comprise more than forty-five percent (45%) of the total linear frontage of the residential front elevation.

7. Up to ten percent (10%) of home products with additional options such as but not limited to front porch or patio that comprises of the remaining front elevation, or balconies within a subdivision may have garage doors up to sixty percent (60%) of the total linear frontage of the residential front elevation.

8. For 3-car garages, garage proportions may be up to fifty percent (50%) on homes greater than forty feet (40') in width. Stalls will be separated such that no more than two (2) stalls are in the same vertical plane or adjacent to each other (i.e., provide a two-foot (2') offset with architectural trim for at least one (1) stall or provide one (1) stall in a side-entry or tandem configuration).

J. To create a more diverse street character all residential lots shall incorporate a combination of the following designs methods for site layout (see **Illustration 10** below):

1. A ~~10~~five-foot (10') stagger in the building front setbacks between adjacent lots;
2. A five foot (5') recess for the garage;
3. A porte-cochere;
4. A detached garage located in the rear of the lot utilizing a single car drive adjacent to the home;
5. A side-entry garage product as part of a variety of floor plans; or
6. Decorative pavers or other driveway treatments to the menu of options.
7. Garage doors with windows, raised or recessed panels, architectural trim, and/or single garage doors
8. Architectural treatment above the garage such as windows or balconies

Commented [AB15]: Stakeholder Comment: This section states that it requires a "combination," so we are assuming that a builder would have to use at least 2 of these options. The City should clarify what is required. Further, a blanket prohibition on the garage door comprising more than 45% of the front elevation would effectively preclude three-car garages on smaller width products. There should be additional accommodation to allow for this popular product type.

It is also important to note that the City already has other requirements in place, which when applied with the garage proportion requirement softens the garage dominance of the streetscape.

Given this regulatory framework, the following are options supported by the HBACA for providing additional flexibility in the City's design standards for garage proportion:

Add decorative pavers or other driveway treatments to the menu of options.

Allow some lots to have a garage forward of the livable space. A requirement to have livable space in front of all garages achieves "sameness" through regulation.

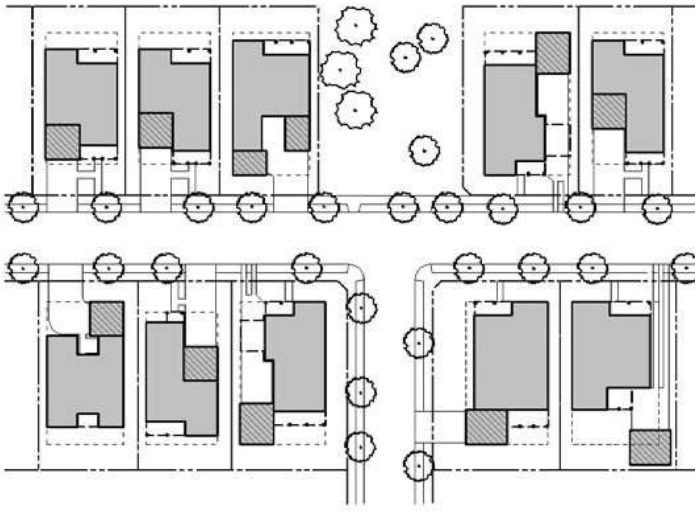
If the home is set back even further than the required maximum, then allow greater than 45% coverage because of the improved street scene.

Allow a greater garage proportion if the builder provides for one or two additional options such as alternative garage locations (e.g., rear or side entry) for I 0% of houses; garage doors with windows, raised or recessed panels, architectural trim, and/or single garage doors; or architectural treatment above the garage such as windows or balconies, to create visual interest.[3]

For 3-car garages, allow garage proportion up to 50% on homes greater than 40' in width, if stalls are separated such that no more than 2 stalls are in the same vertical plane or adjacent to each other (i.e., provide a 2-foot offset with architectural trim for at least I stall or provide I stall in a side-entry or tandem configuration).

City Comment: The provision has been revised

ILLUSTRATION 10



K. Traditional Neighborhood Developments (TND) shall provide blended density residential neighborhoods that provide for and encourage different housing types (i.e. detached single-family, attached-product, duplex, townhome, shared court, shared cluster, mansion apartment, and live-work) and varying lot sizes within the same residential development parcel(s) and preferably on the same street rather than separating housing types by whole neighborhoods.

2.2 OPEN SPACE DESIGN AND PUBLIC PLACES

A. GENERAL RESIDENTIAL OPEN SPACE DESIGN.

1. Multi-use pathways and equestrian trails uses as a secondary mode of travel and access throughout neighborhoods and the City shall be landscaped, provided with low level lighting for safety, and furnished to provide rest areas at transition points and other locations as determined to accommodate the specific needs of the community.

2. In the event retention basins are required, per the drainage analysis, they shall be developed as an amenity and landscaped to accommodate active and/or passive recreation. They shall be located and oriented to connect with other open space areas of the development which in turn connect either physically, functionally, and/or visually with open space in adjoining developments.

3. Retention basins with a bottom area in excess of one-half acre (1/2ac), shall be designed, turfed in a manner to accommodate a play/sport field rather than being landscaped with decomposed granite. All structures and

Commented [JM16]: HBACA Comments: Section 2.2.A.3 requires turf in a retention basin. The concern expressed is that this is a very water intensive land use which is also expensive to maintain. Would the City be willing to provide additional flexibility on turfing? Does the City have a requirement that turfed areas be overseeded in the winter?

City Comment: The LDO only requires overseeding on 5+ acres of open space to accommodate organized winter activities.

play equipment are to be located above the ~~50~~ 100 ~~-~~year ~~(100)~~, 2 ~~-~~hour ~~(2)~~ high water line and an ADA path provided to the structures.

4. When naturally occurring desert washes are present, the development's drainage shall be designed to allow storm water retention to meander through the development as a greenbelt, simulating natural filtration lands, as opposed to constructing a series of separate and distinct basins.

5. Open space shall be evenly distributed and connected throughout the development and constructed in conjunction with the approved phasing plan; if applicable. Exceptions may be made, if approved by the Community Development Director, when natural washes and floodways account for the required open space acreage.

6. The development shall provide a backbone network of both on-street bike lanes as well as off-street multi-use pathways to accommodate all levels of cyclists and to provide a safe alternative *multimodal* system, such as open space lots used to break up block lengths. On-street bike lanes will not be calculated as part of the required open space unless they are "protected bike lanes". Off-street multi-use pathways may be calculated as open space.

7. Golf courses shall be designed to be watered using effluent water, reclaimed water, or a renewable water source.

~~8. In addition to those amenities and infrastructure designs outlined in **Sec 1.2.C.** herein, the following are further examples of what may be calculated as open space for the purpose of meeting the required open space, for the specific residential zoning district, as designated in **Chapter 106** of the **LDO**:~~

~~a. Playgrounds, tot lots, sports fields, parks; and~~

~~b. Golf courses; up to fifty (50%) percent may count towards open space.~~

~~8~~9. Open space within and throughout any residential development shall be designed so that a playground, ball field, public gathering area, ~~pedestrian~~ multi-use pathway, bicycle trail, picnic ramada, or community garden is provided within one thousand three hundred and twenty feet (1,320') ~~feet~~ of every residential lot.

a. Access to park and open space areas shall be direct from a street or a cul-de-sac that abuts or extends into the open space; or through designated access between lots.

b. The access shall be of adequate width so that the placement of adjoining homes and fences will not create a long, narrow, "tunnel" effect. Such accesses shall be a minimum of thirty feet (30') ~~feet~~ in width.

Commented [AB17]: Stakeholder Comment: Is the "backbone network" intended to be interior to a residential subdivision? Local streets are provided predominantly for access to the residential properties that front them. While they should be designed to discourage excessive speeds, they do not have the traffic levels needed to comply with complete streets programs, including on-street bike lanes, and should be exempt. Street elements that can discourage excessive speeds include narrow street widths, textured pavement, street parking, and trees.

City Comment: The bike lane width has been revised. Because of the inconsistent understanding of the term 'complete streets', it has been removed in favor of the term multimodal that focuses on and permits any non-vehicle dominant method of travel. The multimodal system includes trails between homes on the open space lots that are often used to break up block lengths and provide non-vehicular connectivity.

Commented [AB18]: Stakeholder Comment: "Shall" should be replaced with "should." There may be topographical or other limitations which make the quarter mile requirement impossible or impracticable to meet.

City Comment: The term 'shall' will be maintained as the standard because the PEDS waiver permits alternative designs to address the intent being solved in various ways.

Commented [JM19]: HBACA Comment: Section 2.2.A.8 requires open space to be designed so that it is located within 1,320 feet of every residential lot. The comment is a request to verify that this can be accomplished with a walking path connecting to other open space areas. Otherwise, it may be difficult to accomplish and would significant impact land plans.

City Comment: Yes, additional walking paths are encouraged to move people in more ways than street sidewalks.

c. View fences may be constructed along the adjacent private property lines along the access. The maximum height of a view fence along an access shall not exceed four feet (4').

d. Adjoining houses are encouraged to provide windows facing the access to provide a sense that the space is being observed and is not isolated.

~~910. Neighborhood parks and playgrounds shall provide off-street parking.~~

Commented [JM20]: HBACA Comment: Section 2.2.A.9 requires off-street parking at neighborhood parks and playgrounds. Neighborhood parks is not defined in the code and so there is a request to clarify where this applies. Depending on the size and location of what the City is requiring for parking, on-street parking may satisfy the demand for smaller areas. Perhaps some additional clarification is warranted.

City Comment: This provision has been removed as parking for "community facilities" is governed by the LDO.

B. AMENITIES AND RECREATION SINGLE-, TWO, AND THREE-FAMILY DEVELOPMENTS

1. Public open space shall conform to the goals and standards of the parks and trails master plan.

2.~~8.~~ In addition to those amenities and infrastructure designs outlined in **Sec 1.2.C.** herein, the following are further examples of what may be calculated as open space for the purpose of meeting the required open space, for the specific residential zoning district, as designated ~~in Chapter~~ in Chapter **106** of the **LDO**:

~~a. Playgrounds, tot lots, sports fields, parks; and~~

~~b. Golf courses: up to fifty percent (50%) percent may count towards open space.~~

Less than twenty (20) units = One (1) amenity

Twenty (20) to one hundred (100) units = Three (3) or more amenities

One hundred (100) to one hundred eighty (180) units = Four (4) or more amenities

One hundred eighty (180) to two hundred sixty (260) units = Five (5) or more amenities

Two hundred sixty (260) units or larger = Six (6) amenities plus a large community amenity listed below.

Commented [JM21]: Staff has prepared an alternative requirement for a 'large community amenity' instead of the prescribed requirement for a community pool.

3. The following amenity options shall encourage and enhance development within a neighborhood, such as but not limited to

a. Ramada with BBQ and seating area.

b. Tot lot minimum three thousand (3,000) square feet with three (3) pieces of play equipment.

c. Regulation size volleyball court.

d. Concrete multi-use court sixty (60) feet by sixty (60) feet minimum.

e. Lighted, regulation size tennis courts, racquetball courts, and/or pickle ball court.

f. Weight room.

g. Putting green.

h. Large amenities that may include but are not limited to a *community facility* for social, entertainment, athletic, or recreational *uses* or community pool as required is **Section 2.2.B.4** below

4. All new residential developments shall provide a large amenity when either of the two (2) following criteria are met:

a. The residential development is 80 gross acres or more with a gross density equal to or greater than 3.25 Dwelling Units per Acre (DU/Ac); or,

b. Any residential development that contains more than 10% the following lot categories.

(1) R-1 zoning districts: Lot Categories A

(2) R-2 zoning districts: Lot Categories A and B

(3) TND-R zoning districts: Lot Categories A and B

(4) Other zoning district: lots with a *required rear yard* that are less than fifty feet (50') wide and contain a required rear yard area of less than one thousand square feet (1,000 sf)

5. When provided, a large amenity shall meet the following criteria:

a. Sited strategically such to place the greatest number of dwelling units possible within one-quarter (¼) mile radius of the facility.

b. The size of the large amenity shall be based on the number of occupants as determined by the following formula:

(Number of dwelling units within the residential development) X (3.8 persons per dwelling unit) X (10%)

c. A Community Pool Amenity included as a large amenity shall include a deck area as required by the Building Code in effect at the time of permit application, based on the number of occupants as determined using the formula stated in Paragraph E.3.ii above.

d. The large amenity shall include semi-public restrooms, the number and configuration of which meeting the requirements as stated in the Building Code in effect at the time of permit application.

e. The large amenity shall include water fountains, the number and configuration of which meeting the requirements as stated in the Building Code at the time of permit application.

Commented [JM22]: Defined in the LDO as "A noncommercial *use* established primarily for the benefit and service of the population of the community in which it is located (typically includes social, entertainment, athletic, or recreational *uses* and may also include *business office* associated with the community such but not limited to Homeowners Association or *apartment* rental *office*)."

Commented [JM23]: The revisions allows for alternate large amenities, but the community pool design requirements (for when it's built) are still listed Section 2.2.B.5.

f. The large amenity shall include not less than one (1) shade structure.

g. The large amenity shall include parking in accordance with the Community Facility requirement as stated in Chapter 108 of the Land Development Ordinance.

h. The swimming pool shall be equipped with a pool barrier as required by the Maricopa County Environmental Services Department.

i. The Community Pool Amenity shall meet all applicable accessibility requirements as stated in the Surprise Municipal Code.

C. ADDITIONAL OPEN SPACE DESIGN STANDARDS FOR TND DEVELOPMENTS.

1. The TND development shall be integrated through a combination of multi-use pathways, *greenways*, parks, community and civic facilities, public plazas, and compact open space areas that relate to a compact multimodal ~~and *complete street*~~ system. Landscaping shall be strategically planned and provide for urban plazas and parks in selected areas to encourage pedestrian movement and as well as shaded respites.

2. The open space component of any TND shall include some sort of appropriate active outdoor recreational facilities for adults, such as lighted athletic fields, full court basketball courts, tennis courts, volleyball courts, and other similar recreational facilities along with facilities for children such as tot lots.

3. Increase the pedestrian experience at the street level as well as in plazas, parks, and recreational open space by providing site amenities such as shade, street furniture, special paving treatments, bikeways ~~or *sharrows*~~, and strategic use of ~~turf,~~ accent and flowering plants to provide both comfort and safety for the residents.

4. In order to create user-friendly spaces and to encourage use by the public, the required open space and other public spaces shall incorporate all of the following features to the maximum extent feasible:

   a. A sense of privacy for outdoor seating areas with landscaping, topography, and/or buildings and structures;

b. A consistent palette of streetscape furnishings, such as lighting, benches, landscaping, shelter, and trash receptacles;

c. Locate streetscape furnishings in clusters or nodes throughout the entire TND – not just within the "neighborhood core"; and

d. Use creative surfaces and materials for walking paths and gathering and seating areas that are appropriate for their respective functions. Stabilized porous hardscape, sustainable materials, and water harvesting should be considered.

5. Open spaces and outdoor public spaces shall be located to:

a. Be shared by adjoining buildings, when within the same site or complex;

b. Visually and/or physically connect with open space on adjacent properties and to the community-wide open space network;

c. Connect the entrances of multiple buildings on a site to provide meeting and gathering spaces;

d. Orient towards views of activities or natural features that provide visual interest;

e. Provide a connection between the TND and the greater City of Surprises open space system.

6. Each parcel within the TND, developed as a residential subdivision, shall provide both bicycle and pedestrian connections to the TND's backbone open space network.

D. OPEN SPACE DESIGN STANDARDS for MULTI-FAMILY DEVELOPMENTS.

1. Multi-family developments shall create on-site open space that follow the guidelines outlined in **Section 2.2.B.5**. above, and at a ratio per dwelling unit as outlined in **Chapter 106** of the LDO. This open space shall include surfacing that is ADA compliant, safety features such as lighting, and amenities that enable residents to use and enjoy the open space.

2. Common open space that is accessible to all dwelling units via sidewalks or local paths shall provide:

a. Features to make the area more functional and enjoyable for a range of users including, but not limited to, paths or walkable areas, landscaping, seating, lighting, play structures, sports courts or other pedestrian amenities. Potential noise issues related to hard court sports such as basketball, tennis and handball may require additional design considerations.

b. Common space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, view fence, or other treatments as approved by the Community Development

Director or Designee that enhance safety and privacy for both the common open space and the dwelling units.

c. The space shall be oriented to maximize afternoon shade, unless site conditions such as topography warrant waiving this requirement by the Community Development Director or Designee.

3. Rooftop decks and terraces may be considered as common open space provided these areas contain amenities such as seating areas, barbeques, fireplaces, recreational space, shade structures and landscaping as an integral component of the areas.

4. On-site indoor recreational areas may be considered as open space if the area(s) are designed for communal use by all residents and provide space for entertaining, gathering, or fitness activities.

2.3 CIRCULATION DESIGN ~~FOR COMPLETE STREETS~~

A. GENERAL STANDARDS.

1. All proposed residential developments shall provide a Traffic Impact Analysis (TIA) for the proposed development. If as a result of the traffic analysis, it is determined that a new roadway(s) at the Arterial classification level is necessary to serve the development a General Plan Amendment may be required. The TIA shall be used to determine projected traffic volumes, desired operating speeds, projected traffic types, projected construction phasing, and determine the need for new traffic signals.

2. Local streets shall utilize either the alternative or standard cross section (see **Illustration #1A** and **#1B** herein).

3. Collector streets in new residential developments shall be located to minimize cut-through vehicular traffic on the local streets and through the neighborhoods, by utilizing a modified grid street pattern.

4. Streets classified as a Parkway, Arterial, and/or Collector shall utilize the City's most updated cross section with a detached sidewalk design with the resulting ~~*boulevard strip*~~*landscape strip* ~~being a minimum of eight~~ five feet ~~(5ft) feet in width or greater depending on the specific street classification~~.

Commented [AB24]: The HBACA agrees that the goal of subdivision design should be to minimize cut through traffic. Internal local street design is going to do more to minimize cut through vehicular traffic. By utilizing narrower streets for slower speeds, curvilinear design, and the use of cul-de- sacs, subdivisions will not be conducive to cut through traffic.

Commented [AB25]: We believe that a 5' wide *boulevard strip* is sufficient to safely accommodate the anticipated traffic.

City Comment: The measurement for the landscape strip is part of the Engineering standard details for street cross-sections.

B. ROADWAY DESIGN.

1. Within the hierarchy of existing and proposed two-way City streets, a minimum unobstructed pavement width of twenty feet (20'), with a minimum vertical clearance of fifteen feet (15') shall be provided for fire apparatus access. The unobstructed pavement width for fire apparatus may be reduced to a minimum of twelve feet (12') in developments where median divided streets exist.

2. New collector streets within a residential development ~~shall be designed to provide~~ may require a landscaped ~~bicycle~~ multi-use path in addition to the on-street bicycle lane to connect with a regional trail system.

3. The periodic and strategic placement of traffic calming devices, including roundabouts, chicanes, bulb-outs, and narrow landscaped medians on residential collector and residential local streets shall be encouraged throughout the City to help slow traffic, discourage through neighborhood traffic, and to create a unique sense of place. Traffic calming devices shall not narrow the travel way. Additional traffic calming measures may be approved by the City Engineer on a case-by-case basis.

ILLUSTRATION 11

Chicane with parking alternating from side to side.

4. To achieve the community's desire for developing pedestrian-friendly streets, all new residential development shall provide for the use of staggered or off-set parking bays, parking "one-side-only", or other alternative means of accommodating on-street parking of vehicles on local streets; required in any TND residential neighborhood where a shared court, shared cluster, or a 5-pack housing product is approved (see **Illustration 11**).

5. The layout and design of alleys, local streets, cul-de-sacs, and traffic calming devices shall accommodate the width and turning radius necessary for city sanitation and emergency vehicle use (refer to the Volume Two of the PEDS ~~EDS~~ for specifics).

6. Block lengths for "local streets" within the interior of a residential development may range from four hundred to eight hundred feet (400' – 800') in length, with the optimal length being closer to ~~shall not exceed~~ six hundred feet (600') in length in order to create a walkable scale and exterior access points at safe distances from the arterial/collector intersections.

C ADDITIONAL DESIGN REQUIREMENTS FOR TND DEVELOPMENTS.

1. If the area of the TND is traversed by or adjacent to a proposed collector or arterial street as shown on the Surprise General Plan, the TND shall be designed to continue the street(s) and dedicate the necessary right-of-way within the TND boundaries to accommodate said street unless otherwise approved through a General Plan Amendment approved by the City Council.

2. The collector streets and rights-of-way shall be shared between vehicles (moving and parked), bicycles, and pedestrians and shall be shaded by rows of trees to slow traffic and improve the environment for pedestrians and bicycles. Design conflict between vehicular and pedestrian movement shall be decided in favor of the pedestrian.

Commented [AB26]: Is this requiring that on a collector street within a residential development that the street cross-section would include, an on-street bicycle lane, a detached landscaped bicycle path, and a pedestrian *boulevard strip?* This is an excessive requirement for a collector street adjacent to a residential development with likely reduced traffic flows.

The City has not provided a Collector street cross-section. Collector streets are not typically located within a residential development, rather, they would be located adjacent to a residential development. The City should provide clarification as to where on-street bicycle lanes are required.

City Comment: Collectors are regularly included within residential developments as access points for from arterials. The requirements for an additional multimodal path was revised to only apply when part of a larger trail system.

Commented [AB27]: 600' is an arbitrary distance. This should be a more generalized requirement for shorter block lengths which will provide for walkability but are not so short to provide site constraints or encourage cut through traffic.

City Comment: This had been revised to accommodate site flexible design options

3. Different pavement surfaces may be considered, if found to be acceptable by the City Engineer, in order to enhance pedestrian and bicycle safety and comfort or to create an aesthetically pleasing or unique environment.

4. The creation of new dead-end streets shall not be permitted in a TND Development. All thoroughfares shall terminate at other thoroughfares, forming a network. Internal thoroughfares shall connect wherever possible to thoroughfares on adjacent sites or developments, except when constrained by topography.

D. ACCESS.

1. A subdivision development may be permitted "limited access" points to the surrounding collector and arterial streets at a quarter mile (¼) spacing and "full access" points on the half mile (½) and full mile spacing; where supported by the Traffic Impact Analysis (TIA) and accepted by the City Traffic Engineer.

2. The use of alley~~way~~s with rear garage configurations and entry access points may be considered as a~~n alternative~~ means of vehicular and pedestrian access to a residential lot.

3. Alleys shall be paved, well-lit~~,~~ and designed for ~~as addition as~~ pedestrian connectivity ~~with secondary vehicular access~~ and view-fencing rather than solid fencing along the rear property lines to further enhance the safety, appearance, and use of the alley.

4. All lots shall have frontage onto a fully improved publicly dedicated or approved private street developed to "local street" standards and may have access by either the public/private local street or an alley refer to the Volume Two of the PEDS for specifics ~~classified as and built to "residential alley" standards~~.

E. CIRCULATION AUXILIARY AMENITIES.

1. The planning and design of public transit and school bus stops within a master planned development and individual neighborhoods shall be considered and should at a minimum include an improved hardscaped space of adequate size for adults and/or children to safely gather and sit.

2. Private "pedestrian-only" walking paths (excluding cyclists, skateboarders, wheelchair, and equestrian uses) are allowed, when approval by the Community Development Director. Where permitted these paths shall:

   a. Be a minimum of five feet (5') in width; have a maximum grade of five percent (5%) ; be constructed of concrete, asphalt, permeable paving surface, or stabilized decomposed granite material.

   b. Shall be lighted for pedestrian safety, in accordance with a City approved photometrics plan, and with pedestrian scaled (overhead or bollard style) light fixtures that are compatible with the character of the area, and spaced appropriately to provide an even, non-glare light level along the course of the walking path.

3. Parking Lots: Multi-family and non-residential buildings within the neighborhood land use shall be designed in an "up front" manner that locates buildings along the street frontage and the required off-street parking spaces located in the rear or to the side of the structures. Parking may also be designed beneath the structures to avoid interrupting the rhythm of the established streetscape and to make land on site available for gardens and courtyards rather than for surface parking. Parking lots shall be landscaped in accordance with **Chapter 107** of the LDO and utilizing the plant palette list in **Appendix C** herein.

2.4 LANDSCAPE AND STREETSCAPE DESIGN

A. LANDSCAPE STANDARDS.

1. Private Lots:

   a. Individual residential lots shall be designed to minimize the use of turf, including artificial turf, per Chapter 107 of the LDO ~~to no more than twenty (20%) percent of the frontage landscape area~~. Low water use/drought tolerant landscaping materials, as listed in **Appendix C** of these PEDS, is preferred overall.

   b. Drip irrigation systems or automatic sprinkler systems shall be required and rain sensors should be utilized.

2. Common Area(s):

   a. Landscaping along sidewalks, multi-use pathways, and "pedestrian-only" walking paths shall include continuous clusters of low-maintenance, drought-resistant, plant materials that require minimum maintenance and can survive without extensive irrigation; and are deep-rooting species that do not extend into the walkway and cause root up-lift.

   b. Trees shall be located along both the sidewalk system and the multi-use pathway system and clustered to form shade canopies when adjacent to seating and rest areas.

   c. Where possible, seating areas should be integrated into the common area and open space landscaping in the form of retaining walls, planter walls and other such landscape architectural treatments; with limited use of freestanding benches.

   d. Different tree species and amenities (i.e. seating, shade, lighting, and materials etc.) shall be used to enhance common area design and to define and identify the hierarchy of the open space areas within and throughout a development.

   e. Irrigation, construction, and plan standards shall adhere to those outlined in **Chapter 107** of the **LDO** and **Appendix D** herein. The specific plant palette utilized shall adhere to City of Surprise Right-

of-Way Plant List included herein as **Appendix B** and to the "Low Water Use/Drought Tolerant Plant List" included herein as **Appendix C** of these PEDS.

B. STREETSCAPE STANDARDS.

1. General Requirements for All Development:

   a. Landscape within the public right-of-way, public areas, and common areas of a development shall adhere to the plant palette listed in **Appendix B** herein.

   b. Landscaping within the street rights-of-way (medians and ~~*boulevard strip*~~*landscape strip*) shall include both street trees and shrubs and/or cacti. Local streets shall plant street trees within the ~~*boulevard strip*~~*landscape strip* to provide shade to both the street and sidewalk. Arterial and collector streets shall plant street trees and shrubs and/or cacti within the center medians and street trees and shrubs (not cacti) within the ~~*boulevard strip*~~*landscape strip*. Landscape planting shall not obscure traffic signs or the sight visibility.

   c. If the City of Surprise has a designated arterial street "street tree" for the geographic area of the city in which the development is located then the development shall incorporate that street tree into their landscape palette.

   d. Different tree species shall be used to enhance streetscape design and to define and identify the hierarchy of streets within and throughout a development.

   e. Lighting at the sidewalk along "local streets" and in common areas shall maintain a pedestrian scale to aid in the walkability of the development with a total maximum height (pole and light fixture) of twelve feet (12').

   f. Lighting along all roadways shall comply with the Outdoor Lighting regulations in **Chapter 107** of the LDO per the specific Lighting Zone in which the development is located.

2. Additional Streetscape Requirements for TND Developments.

   a. The TND Development Plan shall identify the specific species of tree(s) that will be planted as the collector and local "street trees" along with a key that identifies which species will be used for the main thoroughfares and the different development parcels throughout the TND development.

   b. Within the "public frontages" the prescribed types of public planting shall be drought tolerant and shall be called out in the application and Development Plan for the TND as part of the uniqueness and texture of the TND. Likewise, public lighting shall conform to the outdoor light regulations in **Chapter 107** of the **LDO** but the specific

Commented [AB28]: The HBACA will provide comment once the additional chapters of the LDO have been published for comment.

design of the lighting standards and fixtures may be unique to the TND.

2.5 BUILDING FORM AND ARCHITECTURE

A. GENERAL STANDARDS.

1. All homes shall provide an architecturally integrated, open enhanced entryways designed to engage with the streetscape ~~covered front porch~~ of at least 60 square feet (60sf) ~~and a covered rear patio of at least eighty square feet (80sf) as a standard feature~~. No dimension shall be less than 6 feet in depth as measured from the dwelling façade to the interior edge of the supporting post. Enhanced entryway designs include but are not limited to covered front porches, patios, and plazas.

2. Mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and designed to appear as an integral part of the building, with the exception of solar panels. The mechanical equipment screening shall be included in the overall allowed building height. Mechanical equipment shall be treated to be non-reflective. Electrical meters, service components, and SES cabinets should be screened from public view or designed to appear as an integral part of the building and painted to match the building.

3. Ground mounted mechanical equipment and building projections (other than roof eaves) shall not be located within the required "unobstructed" side yard setback and shall be screened from public view (see **Chapter 106** of the LDO for setback information).

4. All exterior elevations of a residential structure shall provide architectural detailing (360° architecture); not just the front elevation. Window embellishments shall be provided on all homes by adding architectural features which enhance the elevations, e.g. greater variation of window design, different window styles, recesses, surrounds, shutters, lintels and sills, gabled roof features over the windows, etc. Such features must be added to all of the exterior elevations of the structure, including second story windows, to provide interest and relief. In the case of residential construction this material wrap/wainscot shall continue along the side elevations to the point where it meets the side lot perimeter fence return.

5. The City strongly encourages new residential neighborhoods to meet Leadership in Energy and Environmental Design (LEED-ND) certification standards and building sites to utilize Low Impact Development (LID) technologies.

6. Production homebuilders shall provide a minimum of four (4) floor plans, with a minimum of three (3) distinctly different elevations ~~and three (3) distinctly different architectural styles~~ for each floor plan, including a variety of products with front ~~doors~~ entries facing the street. Additionally, a minimum of three (3) roof pitches/styles/materials/colors, three (3) styles of garage doors, three (3) window designs/embellishments, and three (3)

Commented [AB29]: Front porches are nice features, but the Arizona lifestyle is more oriented to the back yard. This is an expensive requirement that will have an adverse impact on the cost of new homes for features that consumers may not want to pay for. Increasing the cost of the home by government required features will reduce the choices available to consumers for features which are more in demand. Finally, an extended garage lends itself best to a front porch design, but those types of garages appear to be disfavored under these standards.

By requiring *all* homes to have an architecturally integrated covered front porch, the City will be mandating the very "sameness" these standards are seeking to avoid. Typically, a municipality will only require a covered front porch as an option on a single elevation. The City should follow this typical practice and remove the requirement for *all* homes.

In addition, we do not believe that a local government has a legitimate interest in regulating porches in the back yards of homes that are not usable by the public nor always visible to the public. Consumers have different preferences for features in the backyard and may not want a covered patio of this size to intrude into their private open space. The determination on the size and scope of a backyard patio must be left to the consumer based on an individualized cost-benefit analysis.

There must be flexibility in this guideline. These features should be offered as options on new homes. However, the decision to utilize one of these features should be made by the consumer based on an individualized cost-benefit analysis.

Finally, these features would occupy at least 140 square feet of lot coverage that could otherwise be used as interior livable space. The City should consider revising its lot coverage allowances to better account for the reduction in available interior livable space.

City Comment: This provision is at the direction to increase standards and front elevations to combat garage dominance but has been amended to allow design flexibility beyond just porches.

Commented [AB30]: The City should clarify "architectural styles." Four floor plans, with three elevations, with three different architectural styles seems overly restrictive, particularly for a smaller subdivision. Typically, municipalities will require three or four floor plans with three elevations without mention of architectural style. A builder may want to keep the architectural style similar for a harmonious community with a "sense of place" or a "signature look." Limiting this restriction to elevations should satisfy the City's concern with housing diversity.

City Comment: The provision has been revised

Commented [AB31]: This section should be revised so that the front "entry" faces the street, not the front "door." This would unnecessarily eliminate a lot of potential architectural designs which utilize courtyards and other "enhanced "entry ways.

City Comment: This comment prevents recessed doors facing small side yards. The provision has been revised.

exterior paint colors shall be required as a standard feature to further promote visual interest and architectural diversity. ~~The builder shall provide at least three (3) energy saving features for each home product.~~

7. The developer/production home builder shall be responsible for assuring that no two similar rear building elevations and rooflines are allowed on adjacent lots that back to a public right-of-way.

8. The developer/production home builder shall be responsible for assuring that not more than two (2) of the same building elevations are ~~similar front building elevations and/or architectural style are not allowed~~ on adjacent lots and on lots directly across the street from one another. For clarification, lots "directly across the street" are those where at least fifty one percent (51%) of the lot's street frontage is directly across from the street frontage of the lot on the opposite side of the street (measured by extending sided lot lines to the street centerline).

9. Corner lots shall be limited to a single story home and the side elevation fronting the side street shall be fully embellished and the roofline varied.

B. ATTACHED SINGLE-FAMILY DWELLINGS.

1. All buildings shall have their main entrance fronting onto either a street or oriented towards and arranged around a shared open space courtyard.

2. A variety of rooflines styles and heights shall be used as well as building projections and recesses. The structures shall have stylistic architectural design elements on all exposes building elevations. The architecture shall incorporate style-appropriate and varied door and window openings and architectural embellishments. A variety of front and rear porch configurations shall be used to provide functional yet varied architectural integrity to the buildings.

3. Brick, integral colored block, or slump block shall be used (not painted concrete masonry units) for buildings using masonry as the primary material.

4. Flat asphalt shingles shall not be permitted. Clay tile, concrete tile, architectural asphalt shingles, cementitious or fiberglass tiles, and standing-seam or corrugated metal shall be the permitted roofing material. Alternative roofing products shall require city approval.

C. MULTI-FAMILY DWELLINGS.

1. The residential development shall have a building frontage presence to the neighborhood street rather than a parking lot frontage. The front entry shall include a walkway to the street or surrounding neighborhood.

2. All multi-story buildings shall have unified and stylistic design elements present on all sides of the building(s). A variety of massing and building heights and stepping rooflines are strongly encouraged. Straight rooflines should be minimized by using offsets, differing heights, stepping, or different orientations to produce variety within a development.

Commented [AB32]: Arizona, in particular the Phoenix market, has been extremely successful in energy efficient home design. By way of illustration in 2017, 59% of homes built in Arizona were certified Energy Star by the Environmental Protection Agency. Of those in Maricopa County, the market penetration was roughly 90% according to APS. In comparison, the next highest state was Maryland at 36%.[5] Therefore, we do not believe the requirement to provide at least three energy saving features for each home product is necessary, because the builders are already doing this. Finally, it should be noted that this requirement should more properly be located in the building code rather than the design guidelines.

City Comment: The provision has been revised

Commented [AB33]: The City should define "similar." The City is proposing to require a number of different floor plans, elevations, color schemes, roof tiles, etc. This should provide enough combinations that would provide for a diverse street scape without having to prevent the same "elevations" from being adjacent to or across from the same or similar elevations. If the color schemes are different then similar elevation should be allowed otherwise this is overly restrictive and will severely limit consumer options. This restriction should be as narrowly tailored as possible to achieve the City's desire for a diverse streetscape.

City Comment: The provision has been revised

3. A color palette of earth tones shall be the predominate color used. The use of accent colors is encouraged to provide a festive and lively streetscape. Accent color, different from the dominate wall color, should, at a minimum, be used to accent entryways and special architectural features of a building.

4. Reflective building materials are prohibited; except for the normal use of glass windows. Metallic surfaces, including roof materials, shall be treated to be non-reflective.

5. The use of metal or corrugated metal as the primary building material is prohibited; it may however be used as an architectural accent or decorative element.

6. All buildings shall harmonize architecturally with the residential character of the neighborhood as determined by the Community Development Director or designee.

D. MODEL HOME COMPLEX

Commented [JM34]: City Comment: Retained from the SUDC and revised

1. Guidelines:

   a. Seventy-five percent of plans constructed in a model home complex must be "non-garage dominant".

   b. If any approved product line consists of one plan that provides a significantly recessed garage, that plan must be modeled.

   c. If any approved product line consists of two or more plans that provide a significantly recessed garage, the number of those plans modeled will be determined by the city manager or designee.

2 Site standards:

   a. Site design shall comply Sec 106-10.29 of the LDO.

   b. Landscapes for model home complexes shall comply with the PEDS and Chapter 107 of the LDO.

3. A "zero-step" entrance shall be required for all model homes within the City of Surprise.

   a. "Zero-step" entry shall have a floor or landing on each side of the primary entrance door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level, except for exterior landings, which are permitted to have a slope not to exceed 0.25 units vertical in 12 units horizontal (two percent). Thresholds for such doors shall not exceed one-half-inch in height, and thresholds with changes in level greater than one-quarter-inch shall be beveled with a slope not greater than one unit vertical in units horizontal.

   b. The city manager or designee may waive the requirement "zero-step" entry if it is found that it would prove to be cost prohibitive.

Such cases however, the builder must still provide a zero-step entry into at least one model home and an ADA compliant pathway to all models.

c. Model signage. All new model homes and sales areas shall include signage that read - "Ask Us About Accessibility Options."

d. Education. An educational DVD shall be available to sales staff and potential homebuyers regarding the benefits of visitability.

E. ~~D.~~ ADDITIONAL BUILDING TYPES in TND DEVELOPMENTS.

1. In order to create neighborhoods of blended densities; to provide a broad choice of housing types for lifelong livability and a diversity of needs; to promote walkability; and to enable appropriately-scaled and well-designed compatible land uses it is important for the TND to consider building types other than what might traditionally be expected.

2. The following four (4) types of housing products shall only be permitted in conjunction with the Traditional Neighborhood Development (TND) Zoning District (see **Chapter 106**, **Article 4** of the LDO):

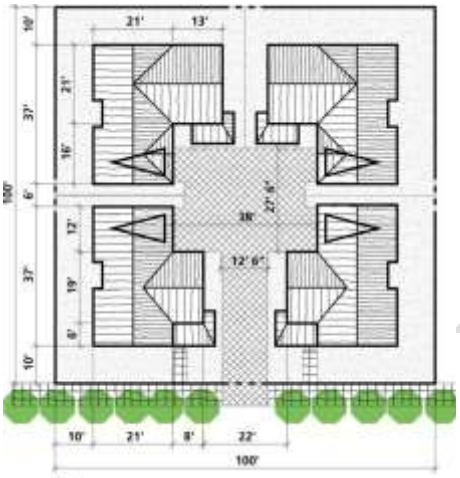
   a. Shared Court: This design consists of a 4-5 of detached dwellings arranged to a defined shared auto court that is typically perpendicular to the street; known as 4-packs and 5-packs (see **Illustration 12** below).

   b. Shared Cluster: The shared cluster takes the place of a private rear or front yard and becomes an important community-enhancing element for this product type. This product type is appropriately scaled to fit four (4) units on an individual lot of ten thousand square feet (10,000 sf) or more. (See also **Illustration 13** below).

   c. Mansion Apartment: This building type consists of a minimum of 4 side-by-side and/or stacked dwelling units with one shared entry. This product type has all the appearance of a medium-large sized single-family home and is appropriately scaled to fit on an individual lot size of ten thousand square feet (10,000 sf) or more (see **Illustration 14** below).

   d. Rowhouse/Townhouse: This building type is a small to medium sized, typically attached structure that consists of 4–8 rowhouses placed side-by-side that front to a public street. This type may be appropriate in a location that transitions from a traditional detached single-family neighborhood into a higher density, mixed use, neighborhood core (TND), or a transit-oriented development (TOD) land use with the appropriate scale to fit on an individual lot of four thousand square feet (4,000 sf) or more. (See **Illustration 15** below).

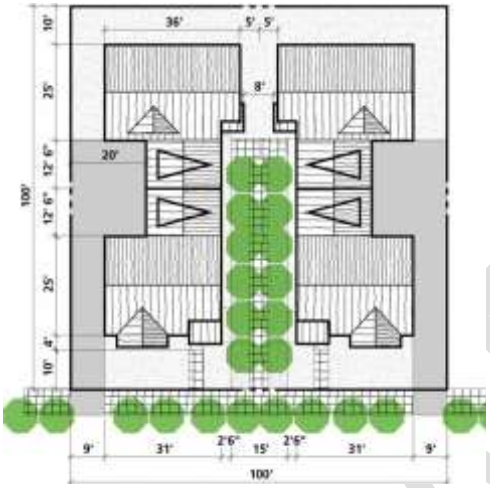
ILLUSTRATION 12 - Shared Court



Specifics: (minimum 10,000 SF lot)

- 4-5 attached or detached units
- (1,600–1,850 square foot each) possible.
- Two units face the public street, gives appearance of two single-family homes from street.
- As shown would require condominium ownership. With modifications, may also be possible with units on separate lots oriented toward the shared court as a private street tract.
- Arranged around a shared driveway with special paving that provides both vehicle and pedestrian access. Single access point allows up to 4 off-street parking spaces.

ILLUSTRATION 13 - Shared Cluster



Specifics: (minimum 10,000 SF lot)

- 4 units (1,500–1,950 square foot each)
- Arranged around a common green, either attached or detached.
- Intended to allow fee simple ownership, with common green held as a common tract.
- Massing of front units reflects neighborhood patterns of houses on 50' wide lots.

ILLUSTRATION 14 - Mansion Apartment

Specifics: (minimum 10,000 SF lot)

- Min of 4 units (1,000-1,400 sq. ft. each; not including garages)
- One shared main entrance area off front porch. Unit division from within structure.
- Street frontage designed to reflect appearance and scale of a single-dwelling house to blend with neighborhood context.

ILLUSTRATION 15 – Row House/Townhome

Specifics: (minimum 4,000 SF lot/DU)

- Consists of 4–8 rowhouses placed side-by-side that
- Front to a public street
- Transitions from a traditional detached single-family neighborhood into a higher

E. NON-RESIDENTIAL BUILDINGS IN THE NEIGHBORHOOD LAND USE.

1. Non-residential structures shall be designed to create transitions to the surrounding residential development with the size, massing and height of the structure relating to the prevailing scale of the adjacent residential neighborhood.

2. Taller buildings shall be made to appear less imposing by stair-stepping building heights and rooflines back from the property lines, breaking up the mass of the building, providing a broader open space/landscape area as foreground for the building, and providing a building frontage presence to the neighborhood street rather than a parking lot frontage.

3. Assembly Uses may be required to provide a traffic study, depending on the specific location.

2.6 EDGE TREATMENT AND TRANSITIONS

A. EDGE TREATMENT.

1. No transition or buffer area shall be required if a new development that directly adjoins/abuts an established residential neighborhood is of the same density and provides lot sizes that are approximately the same size as the existing neighborhood.

2. New residential development proposed for the edge of the urbanized area of the City shall buffer and transition from existing adjacent agricultural or rural developments. Any increased density shall be designed inward onto the new project and/or along the shared urbanized edge.

   a. Buffer the existing established neighborhood using a landscaped open space tract that is a minimum of one-hundred feet (100') in width along the perimeter between the two neighborhoods (see **Illustration 17** below); and

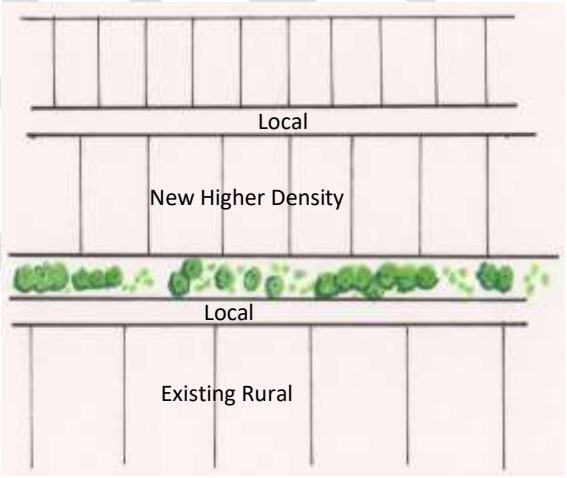
   b. The open space buffer area shall be designed in a manner to connect to the open space, pedestrian and trail systems within the new development and in a manner that will further accommodate future connections from other adjoining developments as urbanization occurs.

   c. The buffer area shall be preserved for perpetuity as either a tract or easement, allows public use and access, and calculated as part of the development's open space requirement.

ILLUSTRATION 17

3. When a new development of higher density proposes to only be separated from an established lower density or rural residential neighborhood by a "residential local" street the new development shall provide a landscaped buffer, a minimum of fifty feet (50') in width, adjacent to the shared local street plus a single row of lots, which are no smaller than one-half the average lot size of the adjacent existing rural neighborhood lots (see **illustration 18** below).

ILLUSTRATION 18



4. New residential developments that directly adjoin /abut a planned or existing open space, trails and *greenways* area, as designated in the Surprise General Plan or Parks and Recreation Master Plan, shall utilize

an open style of perimeter fencing rather than a solid or view obscuring perimeter wall along that specific edge of the development.

5. New residential development proposed in those areas that abuts one of the three (3) Employment Character Areas of the City, as shown in the General Plan, shall be responsible for providing the buffer and transition area from the employment character area and not the other way around. The use of appropriate landscaped buffering, lot orientation, stepped building heights, and street design should be utilized in close proximity to these designated areas.

B. ADDITIONAL EDGE TREATMENT STANDARDS for TND DEVELOPMENTS.

1. The exterior boundaries for a TND development shall be designed in a manner that provides fifty percent (50%) of the frontages to the greater community that are something other than typical privacy perimeter walls, including but not limited to, open space areas, civic space land uses, mixed-use and multi-family land uses.

2. Residential development parcels, within the TND development, that have home sites backing onto the exterior boundaries of the TND development along public rights-of-way shall provide both a decorative privacy wall and then a landscaped open space tract, a minimum of thirty feet (30') in width, outward towards the greater community along said exterior boundary.

3. If residential lots are platted directly adjacent to an existing residential neighborhood or a vested but undeveloped residential parcel (outside the TND) then those TND lots shall provide a lot size not less than one-half (½) the size of the existing or proposed adjacent lots as applied to the lot line that borders the existing or vested residential parcel(s) except if lots are separated by a street or open space buffer area that is at least one hundred feet (100') in depth.

C. TRANSITIONS.

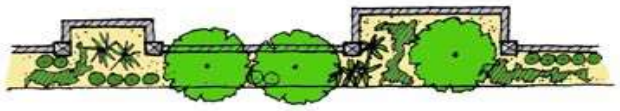
1. Buildings located along the exterior edge of new master plan projects, adjacent to undeveloped land or existing rural development shall either maintain a low profile in terms of height, bulk and massing or increase the width of the buffer area between the two (2) different intensities of use by a distance equal to the proposed building height.

2. Grade changes from the off-site grades along the perimeter of a new subdivision shall be minimized and lots in the new subdivision shall not be more than eighteen inches (18") above or below the abutting lots in the existing subdivision. If a greater grade change is desired or necessary, there shall be a buffer or a gradual grade transition on the new subdivision in order to minimize the change at the property line.

D. SCREENING.

1. In order to promote a more "visually friendly" and open community, the construction of long, unbroken and monotonous expanses of six foot (6') high, solid fences and stucco walls around the perimeter of new single and/or multi-family residential developments is strongly discouraged. If perimeter walls are provided, they shall be designed to include: changes in the surface plane of the wall or fence; variable heights; articulated recesses and wall offsets sufficient in depth to permit landscaped pockets for the planting of significant clusters of mature trees and shrubbery. (See **Illustration 19** below)

ILLUSTRATION 19



2. Walls and fences shall be kept as low as possible and be designed to blend with the site's architecture through the use of similar materials and colors.

2.7 RESIDENTIAL SOLID WASTE GUIDELINES

A. GENERAL STANDARDS.

1. All solid waste collection routes shall meet engineering design criteria (street width and turning radii).

2. Residential refuse/recycle collection. Solid waste collection vehicles require free and clear access to street right of way and clear curbside access to residential solid waste containers placed out for service on designated day of collection. In addition, solid waste collection vehicles require collection routes shall be designed so that collection vehicles can safely access and lift containers without obstruction. (ground or aerial).

3. Solid waste vehicles require 44' – 0" outside turning radius and 28' – 6" inside turning radius. (see detail)

4. Solid waste collection vehicles are approximately 30'-0" long and can weigh up to 29 tons when fully loaded. Collection routes must be engineered to support collection vehicles.

5. To maintain the safety of the site, solid waste vehicles shall not be required to back up more than 50 feet when or after servicing a trash/recycle container.

6. The collection route must be designed such that, collection vehicles shall travel through a site without back tracking or making u-turns.

7. No building, awning, or fixed structure projections shall be allowed in the route of the solid waste collection vehicle. Residential collection requires a minimum overhead clearance of 16 feet from the right of way, and a minimum of 2 feet behind the collection container and/ or sidewalk, is required along the route curb line.

8. Routes shall be clear of all obstructions at the curb, to include walls, overhead wires, awnings, and other fixed objects.

9. Private streets must have an area for collection without obstruction.

10. Private streets must be designed to withstand the weight of 37 cubic yard collection vehicles (approx. 29 tons).

11. Gated subdivisions must supply the solid waste department with a gate code and three remotes at the time of installation. Exit only gates will be wired for automatic opening.

12. Street width requirements for on street parking:

    a. Under 30' width shall have no parking either side

    b. 30' width-no parking on one side as signed. Developers will coordinate with solid waste and engineering to determine which side may have parking.

    d. 32'- no parking in front of barrel.

13. Developments with more than two (2) abutting lots of less than fifty-feet (50') wide shall be signed "no parking on trash days"

B. CLUSTER HOMES, SHARED DRIVEWAYS, AND DEADEND ALLEYS

1. Each unit must have a predetermined location for a minimum of two containers (trash and recycle) per unit (2/du). Containers shall have a designated location on the street with a permanent marking on the curbing identifying address or unit number. Show all container locations, with addresses on site plan, for visibility triangle, refer to latest version of engineering and design standards.

2. Designated container location shall be signed "no parking on trash days". There should be 15' of space from the start of the no parking area to the first container. Containers should have a minimum 78" spacing center to center of container. There should be 15' of space from the last container to the end of the no parking area.

3. Placement designations will not be located near cluster mailboxes.

4. The required use of identified locations should be included in the homeowners conditions covenants, and restrictions.

5. Designated container locations will also be used for bulk collection for each unit.

CHAPTER 3: COMMERCE, OFFICE, AND MIXED USE LAND USES

3.1 GENERAL LAND/SITE DESIGN ~~&~~ AND DEVELOPMENT

A. GENERAL BUILDING SITE DESIGN.

1. Limited residential land uses may be permitted in the Commerce and Office Character Areas as shown in the General Plan; in which case development patterns shall provide for higher street connectivity, smaller block lengths, and improved transit options. When developed, residential land uses must be zoned mixed-use (MU), high density residential (R-3), or be part of a TND development, and located along and oriented toward a proposed or existing collector or arterial corridor where direct access to transit is available or will be provided over time.

2. The project design, including the building location and orientation, shall incorporate and benefit from the desirable local elements (e.g. winter sun, mountain views, and even stormwater for irrigation) and to deflect unwanted elements (e.g. noise, summer sun) regardless if the development is a conventional single structure building, freestanding as "pad" sites and/or "in-line" buildings within a commercial center, outdoor recreational facilities, or parking structures.

3. Building(s) shall be designed in a manner to take advantage of the connection to the greater community open space system. Appropriate linkages (i.e. double building frontages, outdoor seating and dining spaces, walkways, common landscape areas, plazas, and unfenced property lines) shall be considered to further encourage a *multimodal* connection to the site and the use of the public open spaces as a transitional element.

4. Community/regional commercial development, office, institutional, mixed-use, and civic/cultural land uses shall be located adjacent to and oriented toward major arterials, public transportation routes, and the community's *multimodal* circulation system when applicable.

5. The building(s) shall be visually if not physically linked to both the on-site parking lot as well as to the public street by way of a designated walkway to safely and conveniently move pedestrians as they use the development. These pedestrian connections shall provide relief from the sun through the use of shade trees, arbors and other shade techniques that may prove acceptable to the City. These pedestrian connections may be constructed using a type of permeable pavement.

6. A corner building shall have a strong frontage "presence" at the setback lines for each street. This "presence" requirement may be accomplished through angled or sculpted building corners, providing an open plaza, outdoor patios, display (not storage) areas, and seating areas that further encourage and add to the pedestrian environment at the street (see photo examples below).

7. Undeveloped pad sites/phases of a development that have been disturbed in any manner shall be required to install dustproof ground cover ahead of the construction phase schedule to prevent the intrusion of unwanted dust or blowing debris from the site/lot.

B. MULTIPLE BUILDINGS SITE DESIGN.

1. When a development has multiple buildings (e.g. office complexes, commercial centers, mixed-use/residential etc.) the buildings shall be designed as groups or integrated clusters rather than designing them in-line, as stand-alone buildings, or pad sites. The way these buildings are grouped or clustered should further define and create an outdoor room of open space for either active or passive uses, including but not limited to, plazas, courtyards, gathering areas. The resulting open space area should allow for extended shop fronts, outdoor dining, and entertainment areas at the edges of this open space/plaza area.

2. All large scale retail centers and commercial office centers shall provide a pedestrian oriented design with sidewalks, seating, trees, lighting, and pedestrian scale signage. At least one outdoor gathering space/open space, that provides amenities, including but not limited to, seating, shade, lighting, and heating for year-round use, shall be provided for every one hundred and fifty thousand (150,000 sf) of developed floor space or fraction thereof.

3. As a center of pedestrian activity, plazas in multiple building commercial, office, and mixed-use developments shall provide adequate seating in the form of benches or low seating walls in addition to any seating areas that may be provided in association with dining areas.

4. Plazas, including their entrances and exits, shall be illuminated in a manner that facilitates natural surveillance opportunities and discourage unsafe activities. All lighting in plazas shall adhere to the lighting standards in **Chapter 107** of the LDO.

C. ADDITIONAL STANDARDS for TND DEVELOPMENTS

1. The commercial development within the TND shall be designed with interior oriented parcels for the development of a "neighborhood core" to first serve the TND and secondly serve the wider community. The neighborhood core is intended for smaller scale pedestrian oriented retail, service, mixed-use, and public facility/civic space uses that provide opportunities to create *third places* and serve the daily needs of the residents within the TND development.

2. The neighborhood core and other commercial parcels shall be integrated into the TND by providing:

   a. prevalent pedestrian connections to the TND pathway system and adjacent residential parcels; and

   b. gathering spaces and outdoor areas that connect the commercial spaces to the open space network and the TND pathway system (other than sidewalks along the street system) of the TND; and

   c. compact design and spatial organization of the commercial buildings that are walkable and inviting by providing seating and shade; and

   d. *multimodal* use of right-of-ways and incorporation of streetscape and amenities that enhance the pedestrian activity level of the street; and

e. vehicular connection internal to the TND that does not require access via an arterial street outside of the TND development.

3. As part of a mixed use development, residential uses are encouraged as a vertically integrated use within commercial buildings both within the residential neighborhoods and in the neighborhood core setting.

4. The horizontal integration of different and mixed land uses, particularly within the neighborhood core, shall be compact and interconnected through the pedestrian space; utilizing the hardscape area between uses and buildings for extended shop fronts, outdoor dining, entertainment and outdoor gathering areas, information kiosks, mobile carts, and other street related activities.

5. Live/Work units (occupant owned business) are encouraged when allowed.

D. SCREENING.

1. Trash and refuse collection containers shall be screened with a six (6) foot decorative masonry wall. Trash and refuse containers shall be located such that they are not the visual focal point of a driveway or parking area, or cannot be viewed from a public street. Projects which provide on-site daily management and maintenance personnel (i.e. service stations and convenience markets), and those sites that can only locate the refuse containers in a highly visible location shall provide decorative latching gates, for screening the containers, at the opening to the enclosure.

2. Equipment such as, but not limited to, vending machines, collection bins, newsstands, and shopping cart corrals shall be placed in an area designed for their use. These uses shall be screened and situated in a manner so as not to block vehicular or pedestrian traffic, reduce any required parking, block the sidewalk, or become a focal point for the development.

3. Outside storage areas, work areas, and production areas shall be screened from the public street view and adjacent residences, mixed-use, office, and other commercial uses with a minimum six feet (6') high decorative masonry wall; except for the living plant materials areas associated with an outdoor landscape/garden center which may use non-masonry fencing. Non-plant materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

4. Building site details related to utility boxes, transformers, generators, chiller farms, mailboxes, and air conditioning units shall be integrated into the overall design of the building and/or development and screened from public view, yet remain accessible for servicing.

5. Mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and architecturally designed to appear as an integral part of the building; except for solar panels. The mechanical equipment screening shall be included in the overall building height. Mechanical equipment shall be treated to be non-reflective. Electrical meters, service components, and SES cabinets shall be screened from public view and designed to appear as an integral part of the building.

6. Electrical transformers, backflow prevention devices, large water standpipes, telephone panel boxes and any other obtrusively large electrical or mechanical device that is installed as a part of, or results from, a new development project shall be located to the rear of the project site; and screened from public view through the use of landscaping and/or screening walls. If new installations require locations at the front of a development site or where such devices currently exist at the front of a site, they shall be screened by substantial landscaping, an architectural barrier, or an artistic wrap to blend or match the existing environment.

7. No deliver or loading dock, mechanical trash compacting equipment, or service loading bay (automotive service, tire, etc.) shall be located in a manner that will cause them to front onto the development entry drive, or onto a major or minor arterial roadway. These items shall be located in the least obtrusive manner, preferably on a less prominent and visible side of the building and shall be adequately screened from public view.

8. Parking areas adjacent to the required ~~front yard~~setback from right-of-ways shall be screened from public view and from adjacent residential properties by a solid three foot (3') high screen wall that is decoratively treated to match the architectural style and design of the development or a landscape berm or combination thereof.

9. Boundary line fencing along the common property line shall be required when the development is abutting a single family residentially zoned property. This wall shall be a solid decorative masonry wall limited to six feet (6') in height; unless otherwise indicated on the LDO. A *multimodal* pathway connection shall be required from the residential neighborhood into the commercial development whenever the adjacent residential development can accommodate such access point.

10. All masonry walls intended for screening functions shall have an architectural texture, color and finish compatible with the primary building.

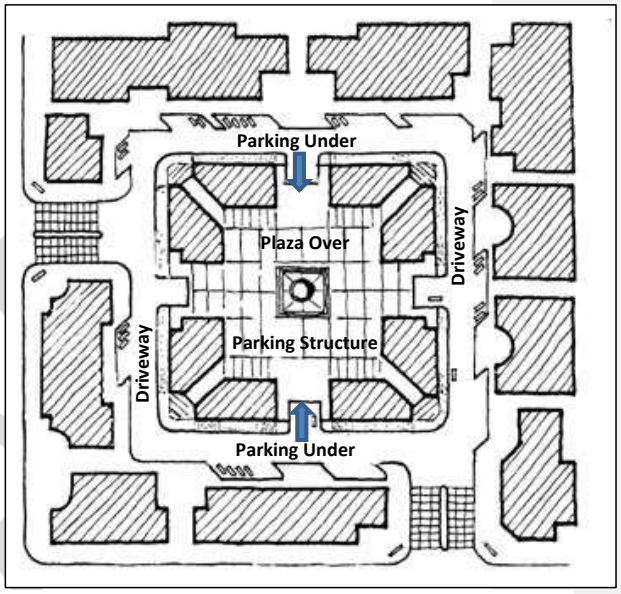
E. PARKING DESIGN.

1. Private parking lots for commercial and office uses that are adjacent to one another, but operate under separate property ownership, shall to the greatest extent possible, be designed and located contiguously to each other, provide for prominent drop-off points for ride sharing, and have shared and reciprocal access and an internal circulation system that

provides for the safe and efficient internal site movement of motor vehicles, pedestrians and cyclists from one property to another without having to re-enter the street serving the developments.

2. Off-street parking serving large multi-use commerc~~ial~~ centers, mixed-use projects, and office complexes are encouraged to provide shared parking facilities in the form of underground structures whose roof tops can be developed as landscaped pedestrian plazas, as well as retail and dining uses or clustered *parking pods* that are heavily landscaped and integrated with the onsite circulation driveways and connected to the pedestrian and open space system (see **Illustration 18**).

ILLUSTRATION 18



Shared parking in submerged or underground garage

3. Above ground parking structures shall incorporate design features such as electric re-charging stations, autonomous vehicle (AV) staging areas, and solar panel shade structures. Rather than ramped floors, the structure itself should be designed with level floors and attached spiral/ramp access structure to facilitate reuse and conversion (i.e. warehousing, commercial office space, or affordable housing units) in the future if the demand and/or need for parking decreases.

4. To maximize the business visibility from public streets, provide definition and scale to the streetscape, and establish a pedestrian rhythm to the streetscape no more than fifty percent (50%) of the off-street parking for large commercial centers shall be directly visible from the primary abutting street. Rather, the off-street parking spaces shall be located in smaller *parking pods* and/or to the rear or side of the structures; with the structures moved closer to the street.

5. New office, commercial, and mixed- use developments that are over ten (10) acres in size and located adjacent to major arterials and transit stops designated to provide express service to the regional transit network, may

be required to provide a sheltered transit stop as determined by the City in partnership with the regional transit provider.

6. Parking lots that contain over one hundred (100) spaces should be designed with traffic calming devices installed (other than speed bumps/humps) to enhance safety and to clearly indicate the hierarchy of on-site vehicular circulation consisting of major access drives, major internal circulation drives, and parking aisles for direct access to parking spaces.

7. Provide landscaped bioretention planters at the end of parking aisles and in-between parking rows, in accordance with the provisions outlined in **Chapter 107** of the **LDO**, to provide shade for both cars and people.

8. Utilize the rainwater harvesting technique of sloping the parking lot surfaces to direct the stormwater runoff toward these landscaped bioretention planters. The bioretention landscaped planters may be designed as: raised flow-through planter boxes; flush in-ground planter boxes; or below grade planter boxes. Use curbstop sections, formed curb with curb openings, or flush curbs to stop car tires but allow water to flow into the planting areas.

9. All walkways that traverse vehicle drive aisles shall be differentiated from driving surfaces through a change of hardscape materials, textures, or color to emphasize the conflict points. Decorative materials such as specialty pavers, permeable pavers, stamped or colored concrete should be used to clearly delineate pedestrian travel areas from drive aisles. All paving material for walkways shall be developed in accordance with ADA requirements.

10. Minimize the use of driveways and parking aisles for walking routes by combining the landscaped islands with walkways.

3.2 OPEN SPACE DESIGN AND PUBLIC PLACES

A. Open space areas shall be clustered into larger, more meaningful areas rather than equally distributing them into smaller individual areas of lesser significance.

B. The required on-site parking area shall not be calculated as open space. Those portions of the required parking lot landscaping that are also designed in conjunction with a walking route may be calculated as open space. Building setbacks, street frontage, and on-site retention areas may be calculated as open space if those areas are landscaped.

C. The pedestrian connections, plazas, courtyards, and gathering areas within and throughout the development may be calculated as open space if they are landscaped and/or shaded in some manner and provide seating, lighting, and other pedestrian amenities.

D. The use of permeable paving (such as a structural grid system or permeable pavers), designed to accommodate stormwater and reduce the heat island effect, may be considered in areas of lower traffic volume limited only to private on-site sidewalks, pathways, and plazas where the soils are acceptably permeable and a maintenance plan and property owners association is in place to maintain the permeability of the surfaces.

E. Public art is encouraged and should be in harmony with the character and scale of the open space area in which it is placed (see **Section 1.7** herein for more specific guidelines).

3.3 CIRCULATION DESIGN FOR COMPLETE STREETS

A. When determined necessary by the City Engineer, a development project may be required to provide a Traffic Impact Analysis (TIA) prior to receiving approval. When required the TIA shall, at a minimum, discuss the ingress and egress points, the impact of commercial traffic on adjacent development, and the overall internal circulation system of the proposed development.

B. Commercial retail and office center developments that include separately leased or owned lots/pad sites or outparcels fronting on major arterial and /or collector streets shall be treated as a single development unit, and access to the outparcels shall be from the internal circulation system of the principal commercial center rather than from separate driveways and entrances located along the adjoining arterial and/or collector street and meet the Engineering Design Standards (EDS) access management standards.

C. Access from adjacent residential areas shall be provided by incorporating wall and landscape openings with physical connections to the commercial development's onsite pedestrian circulation system.

D. Provide locations for bicycle racks and storage areas as well as facilities that are necessary to the use of public transportation (transit stops, benches, shade, and lighting) if suggested by the TIA. Bicycle racks shall be located off of the development's onsite pedestrian circulation system and/or near to building front entrances.

E. Proposed new major centers of employment and governmental offices shall plan and design their pedestrian walkways and bicycle paths and open space system to link directly with public transit stops.

F. New large scale commercial and civic and institutional uses shall incorporate decorative paving patterns, approved traffic "calming" devices, landscaping, streetscape furnishings, and lighting at onsite street intersections.

G. The pedestrian circulation system may also be used for other uses and activities, including informational kiosks, public art installations, and outdoor dining; provided such uses and activities do not interfere with the safety of and accessibility by pedestrians and leave a five foot (5') clear path of travel.

H. Sidewalks shall be designed primarily for pedestrians, conform to ADA guidelines, and be as free from obstacles as possible such as but not limited to, trash bins, fire hydrants, utility equipment and cabinets, signal poles, mail drops as well as excessive overhang from automobiles parked either diagonally or perpendicularly to the sidewalk.

I. Within a Traditional Neighborhood Development (TND) the local streets and any arterial street within the "village core" shall be designed in a grid pattern to create a walkable street system that improves the overall pedestrian environment.

3.4 LANDSCAPE AND STREETSCAPE DESIGN

A. GENERAL REQUIREMENTS.

1. Design landscapes to:
   a. Utilize, to the greatest extent possible, harvested stormwater; and
   b. Strategically locate appropriate plantings to cool buildings and shade parking lots, plazas and gathering areas; and
   c. Provide visual screens; and
   d. Improve both visual and physical aesthetics.
2. When a phased commercial development abuts residential uses the perimeter landscape and fencing shall be required to be installed and maintained along the shared property lines ahead of the construction phasing schedule.

B. ON-SITE LANDSCAPING.

1. All surface parking facilities shall provide a master landscape plan that delineates mature landscaping along the perimeter of the lot, as well as throughout the interior of the lot in accordance with **Chapter 107** of the **LDO** and with the plant palette listed in **Appendix B** herein.
2. Landscape should be fully integrated with the building mechanical systems such that air conditioning condensate collection may be used directly by

the landscape or directed into a cistern system; and building roof drains and downspouts whether exposed or integrated within the building walls shall be directed to landscape areas adjacent to the building where it can be stored and used to irrigate the plants or infiltrated into the ground. To accommodate pedestrian traffic the use of grated drains shall be used to direct the stormwater under sidewalks that may be adjacent to the building and into the landscape areas.

3. Initiatives utilizing short term landscape treatments should be considered for vacant building and/or pad sites within a phased development to improve the visual character as well as provide interim dust and weed control.

4. Any proposed water features should be located in plazas and gathering areas and not in auto-oriented entryways. Water features, while in use, shall continuously recirculate the water. Fountains and other water features shall be located and sized according to the scale and specific use of the open space area within a development as determined by the Community Development Director; with smaller water features utilized in smaller, more intimate open space/gathering areas.

5. Trees planted within the paved area of a sidewalk or pedestrian plaza in commercial and/or office areas having high pedestrian usage shall have tree grates that are flush with the level of the surrounding sidewalk surface, and shall be located so as not to impede through pedestrian movement. Sizing of the grates shall account for the expected growth of the trees.

C. STREETSCAPE.

1. Landscaping, lighting, furnishings, and signage should be key components in the design, location, orientation and material treatment of pedestrian and bicycle paths, and their integration into the urban streetscape.

2. As part of the first phase of a multi-phased project the perimeter right-of-way improvements, such as but not limited to, landscaping and sidewalks shall be installed.

D. ADDITIONAL TND STANDARDS

1. In the civic space area and commercial areas of the TND the “public frontage” shall include trees of various species suitable to Surprise’s natural environment, planted in a regularly-spaced lineal pattern of single or alternated species with shade canopies of a height that at maturity clears at least one story.

2. At retail frontages the spacing of the trees may be irregular to avoid obscuring shopfronts.

3. Accommodate locations for street vendors such as mobile carts, information kiosks, public art, entertainment and other outdoor temporary uses.

3.5 BUILDING FORM AND ARCHITECTURE

A. GENERAL ARCHITECTURAL STANDARDS.

1. Where these standards call for using similar materials, forms and details, in the interest of conveying a coordinated design for a development, it does not mean that all buildings should look the same within the development. Rather, it actually seeks to balance continuity and consistency with similarity and diversity. Continuity is considered achieved when a sufficient number of design variables are similar in execution (but not necessarily identically) throughout a development.

2. All buildings on the same site shall be architecturally unified. This provision shall apply to new construction, additions and remodeling. Architectural unity means that buildings shall be related in unifying elements such as architectural style, color scheme, and building materials but that does not mean identical.

3. "Big Box" stores that have outdoor storage areas and garden centers shall incorporate the outdoor storage and/or garden center area into the initial architectural design of the primary building. Screening materials and colors shall be consistent with the overall theme of the building.

4. Monotonous look-a-like structures will be discouraged. Buildings shall be designed to create a visually interesting "building rhythm" by varying building form, volume, massing, heights, roof styles and site orientation.

5. Projects with more than one building or with a single building over 20,000 SF in size shall create different angles of buildings to the street to avoid monotony in site design unless other architectural treatments can achieve the desired result.

6. The development shall be designed to facilitate the efficient use of energy through building orientation, window and door placement, awnings, canopies, window treatments and other appropriate design solutions.

7. Buildings over thirty feet (30') in height shall be made to appear less imposing by a combination of stair-stepping the building height back from the street, breaking up the mass of the building, and/or providing a broader open space/pedestrian plaza areas as foreground for the building.

8. All buildings shall provide architectural detailing on all exterior elevations (360° architecture); not just the front elevation. Window embellishments shall be provided by adding architectural features that enhance the elevations (e.g. greater variation of window design, different window styles, tile inlays and recesses, structural pop-outs, gabled roof features over the windows, etc.).

B. MATERIALS and COLOR.

1. Subtler, less intense colors shall be used on larger, more plain-looking buildings, while the use of a greater variety and intensity of color may be appropriate for smaller structures. The use of accent colors is encouraged to provide a festive and lively streetscape. Color should be used to accent entryways and special architectural features of a building.

C. ROOF ARCHITECTURE.

1. Full roof architecture utilizing simple and varied roof forms shall be required for all new commercial, office and mixed-use development; while long, continuous mansard roofs, false mansard roofs, large expanses of flat roofs and veneer (false-front) parapets are discouraged. Parapet walls shall be designed and constructed in a manner to appear as a solid, three-dimensional form rather than a veneer.

2. Roof access shall be from within the interior of the building.

3. Green or living roofs may be considered; in efforts to absorb rainwater, provide building insulation from solar gain and heat loss, help mitigate the surrounding heat island effect, and create *wildlife habitat*.

4. Roof-top plumbing, vents, ducts, air conditioning and heating equipment, and any other mechanical or electrical equipment shall be concealed from public view; and screened in a manner so as not to be visible from any angle or any height outside a building. The height of a parapet wall for screening purposes must be equal to or greater than the height of any mechanical equipment. Roof top communication antennae shall be camouflaged and/or stealth in design in accordance with **Chapter 107** of the **LDO**.

5. All rooftop screening shall be part of the articulation of a building and not appear as an afterthought; shall be architecturally integrated and compatible with the architectural style.

D. BUILDING FACADES.

1. Commercial "storefronts" that reflect the architectural style of the building, balance window space to building wall space, and create display windows rather than floor to ceiling glass fronts is encouraged. Windows and doors shall be aligned and sized to bring order to the building façade and sufficiently recessed to contribute to the building's energy efficiency and create facade patterns that add variety and visual interest to the building design.

2. Some element(s) of display windows, awnings, entry areas, colonnades and arcades shall be designed along the street frontage, plaza areas and along the pedestrian sidewalks.

3. In the event an arcade or colonnade is to be used along the front of a building as a primary pedestrian way, the arcade or colonnade shall be designed as an integral part of the overall architecture of the building;

located and oriented to connect with adjacent open space areas of the development; and of sufficient height and width to accommodate the anticipated unobstructed pedestrian traffic generated by anticipated uses in the development.

4. All building facades must contain conspicuously placed street address numbers (refer to **Chapter 109** of the LDO).

E. ADDITIONAL STANDARDS FOR TND DEVELOPMENT

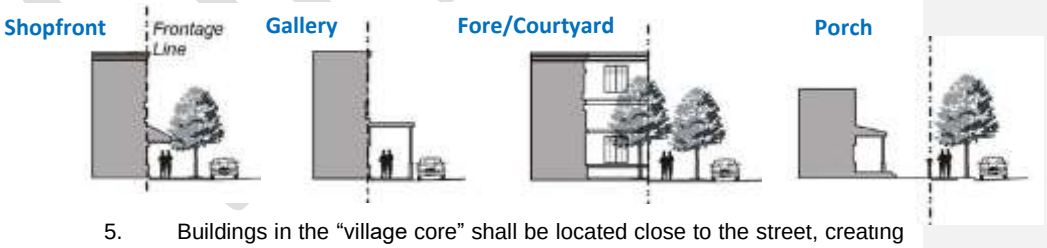
1. The edges of a commercial area should blend into adjacent neighborhoods and/or the civic space through building forms, massing and architectural styles and without buffers. Parking lots and garage doors rarely front the street.

2. All commercial activities shall be conducted entirely within the enclosed commercial buildings with limited outside storage which shall be screened from public view with an opaque fence or decorative wall not to exceed six(6') feet in height. Materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

3. Outdoor patios and dining areas, seating areas, or small "vignette style" display areas are required to add to the pedestrian environment of the neighborhood.

4. The commercial buildings shall be designed in a manner that is more residential in scale and mass to be compatible with the residential neighborhood. Shopfront, Gallery, Fore/Courtyard and even Porch frontages are strongly encouraged and should provide a pedestrian connection to the sidewalk, street, or open space network (see **Illustration 20**).

ILLUSTRATION 20



5. Buildings in the "village core" shall be located close to the street, creating a well-defined outdoor room.

6. Consideration of Other Building Types in TND Developments

   a. Vertically Integrated Mixed-Use: This building type is a small-to medium-sized structure, typically attached, intended to provide a vertical mix of uses with ground-floor retail, or service uses and upper-floor service, or residential uses. This type is an appropriate component of a TND neighborhood core but could be utilized within

the residential parcels if carefully located and designed, thereby being a key component for providing neighborhood appropriate retail and/or services.

b. Live/Work: This building type is a small to medium-sized attached or detached structure that consists of one dwelling unit above and/or behind a flexible ground floor space that can be used for residential, service, or retail uses. Both the ground-floor flex space and the unit above are owned and/or occupied by one entity. This type is typically located within blended density neighborhoods or in a location that transitions from a residential neighborhood into higher intensity uses such as the neighborhood core. It is especially appropriate for incubating neighborhood-serving retail and service uses and allowing the TND neighborhood core to expand as the market demands.

3.6 EDGE TREATMENT AND TRANSITIONS

A. EDGE TREATMENTS

1. All major new commercial development should include a pedestrian circulation system of active and passive open space areas designed, located and oriented to provide: high pedestrian accessibility within and around the development; connections to adjacent developments to enhance a structure of continuous open space throughout the community; and a buffer between less developed, less densely developed lands and urban development patterns.

2. Buildings located on the exterior of new projects adjacent to the undeveloped edge of the City shall maintain a low profile in terms of single-story height, bulk and massing; except in an urban environment.

B. TRANSITIONS

1. Structures within a multi-building development should be designed to transition into either the surrounding development or natural landscape; with the size, massing and height of the proposed structures relating to the prevailing scale of adjacent development.

3.7 OTHER CONSIDERATIONS.

1. The signage needs (both building mounted signage and freestanding signage) should be carefully considered for all of the buildings/tenants when developing the site plan, landscape plans and elevations for commercial centers.

2. Outdoor lighting shall be consistent and comply with the standards outlined in **Chapter 107** of the **LDO** and Volume Two of this PED Manual when applicable.

CHAPTER 4: BUSINESS PARK AND INDUSTRIAL LAND USES

4.1 GENERAL LAND/SITE DESIGN ~~&~~ AND DEVELOPMENT

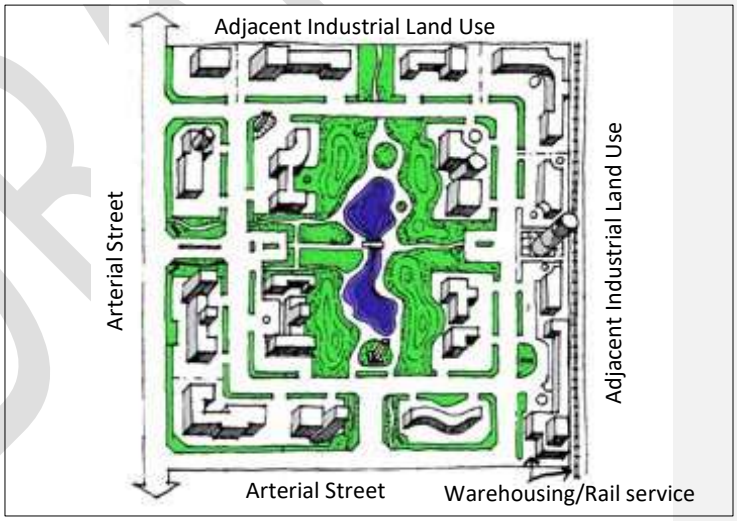
A. GENERAL BUILDING SITE DESIGN.

1. Some limited Commercial land uses may be permitted in the Employment Character Areas as shown in the General Plan; in which case the development of such commercial land uses must be part of a business park development rather than a stand-alone commercial development.

2. Land uses permitted by the Business Park (BP) zoning, as delineated in **Chapter 106** of the **LDO**, shall be developed as part of or within an approved planned business park development rather than as a stand-alone project.

3. Business parks shall be designed with an interior street system that takes its access from the major arterials (see **Illustration 21** below). Proposed new major centers of employment and governmental offices shall plan and design their development to link directly with public transit stops when available or will be provided over time and when defined in the TIA for the development.

ILLUSTRATION 21



4. When industrially zoned parcels are developed with permitted industrial land uses, as delineated in **Chapter 106 - Table 106-3** of the **LDO**, and developed as a stand-alone use they shall take direct access only from an arterial street that is appropriately scaled to serve commercial and freight traffic.

5. Subdivision design, site plans, and building design must reflect sensitivity to natural features of the site; including topography; adjacent uses and

development; and views of surrounding mountains.

B. SCREENING.

1. Trash and refuse collection containers: Shall be screened with a six foot (6') solid masonry wall. Trash and refuse containers shall be located such that they are not the visual focal point of a driveway or parking area, or cannot be viewed from a public street. Those sites that can only locate the refuse containers in a highly visible location shall provide decorative latching gates, for screening the containers, at the opening to the enclosure.

2. Outside storage areas, work areas, and production areas: When permitted shall be limited to the rear or side yard (not front yard) and screened as outlined below. Materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

   a. When adjacent to any roadway the screen wall shall be a solid masonry wall, not to exceed eight feet (8')in height, located within the lot at the building setback line (not along the property line). Exceptions to this locational requirement may be made when the business park or industrial subdivision is platted with a landscape tract, not less than thirty-five feet (35') in width, adjacent to the roadway in which case the screen wall may be placed at the rear and/or side lot line.

   b. When adjacent to residential, mixed-use, office, or commercial land uses the screen wall may be located along the shared property line with the required setback area behind the screen wall. The screen wall shall be a solid masonry wall at least six feet (6') but not to exceed eight feet (8') in height. The City may require the screen wall to be placed at the setback line, rather than on the property line, if it is determined that public access to an existing or planned public open space system would be prevented if the wall were placed at the property line.

   c. When a business park parcel/lot is adjacent to other business park parcel/lot, a solid masonry wall, not to exceed eight feet (8') in height, may be located at the side and rear property line.

   d. When an industrial land parcel/lot is adjacent to another industrial land parcel/lot, a fence, not to exceed eight feet (8') in height, may be located along the shared property line.

3. Parking areas: When in front of the building and/or adjacent to a street the parking area shall be screened from public view by a solid three foot (3') high screen wall that is decoratively treated to match the architectural style and design of the development or a three foot (3') high landscape berm or combination thereof. Parking areas shall not encroach into the required front yard and the screen wall shall be located at the front building setback line. The side yard screening wall may be located along the side property

line. The screen wall shall be a minimum three feet (3') back of the parking surface area to accommodate for vehicular overhang.

4. All solid masonry walls intended for screening functions shall be decorative having an architectural texture, color and finish compatible with the primary building; with the finished elevation exposed to the public view or adjacent property.

C. PARKING DESIGN

1. Parking lots for major employers, government offices, and businesses within a business park development that contain over one hundred and fifty (150) spaces should be designed with electric re-charging stations, and solar panel shade structures.

2. Parking lots shall be designed to utilize rainwater harvesting techniques by sloping the parking lot surfaces to direct the stormwater runoff into landscaped bioretention planters within and/or along the perimeter of the parking lot. The bioretention landscaped planters may be designed as: raised flow-through planter boxes; flush in-ground planter boxes; or below grade planter boxes. Use curbstop sections, formed curb with curb openings, or flush curbs to stop car tires but allow water to flow into the planting areas.

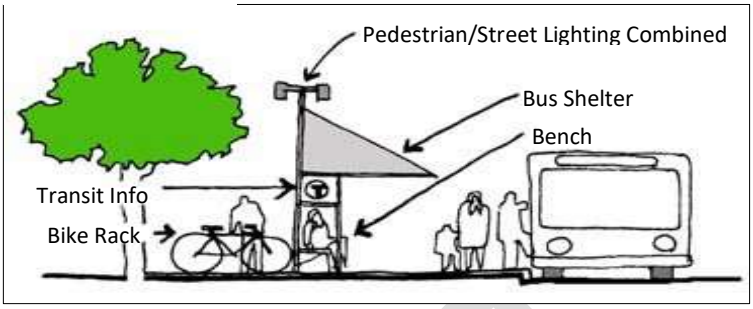
4.2 CIRCULATION DESIGN FOR COMPLETE STREETS

A. Unless otherwise determined by the City's Traffic Engineer, all development projects are required to provide a Traffic Impact Analysis (TIA) prior to receiving approval; with specific emphasis on the impact of truck traffic on adjacent development, the internal circulation system of the proposed development, and the appropriate development of transit amenities.

B. Proposed new business park developments and major industrial employment centers shall provide transit related site design features and amenities such as, but not limited to, shelters, benches and lighting (see **Illustration 22** below).

C. *Multimodal* connections between workplace uses and abutting support uses such as retail and service commercial establishments is encouraged and should include drive, walkway, and trail connections.

ILLUSTRATION 22



4.3 LANDSCAPE AND STREETSCAPE DESIGN

A. Design the required landscaping to;

1. Utilize, to the greatest extent possible, harvested stormwater; and
2. Strategically locate appropriate plantings to cool buildings and shade parking lots; and
3. Provide both visual screening and land use buffering; and
4. Improve the aesthetics of the development as seen from public view.

B. Landscape should be fully integrated with the building mechanical systems such that air conditioning condensate collection may be used directly by the landscape or directed into a cistern system; and building roof drains and downspouts whether exposed or integrated within the building walls shall be directed to landscape areas adjacent to the building where it can be stored and used to irrigate the plants or infiltrated into the ground. Foundation planting shall be required along all building elevations that are visible from the public street and may utilize the plant palette listed in **Appendix C** herein.

C. All required on-site parking lots shall provide landscaping along the perimeter of the parking lot and within the parking lot utilizing the plant palette listed in **Appendix B** herein and in accordance with **Chapter 107** of the **LDO**.

D. The ~~boulevard strip~~*landscape strip*, all required front building setbacks, and those setback areas in front of a screen wall shall utilize the plant palette listed in **Appendix B** herein. Street trees shall be planted in a regularly spaced lineal pattern of single or alternating species with shade canopies of a height that at maturity clears at least one story.

E. All other required yards that are open areas (outside of screened storage areas, work areas, and production areas or boundary line walls) shall be landscaped utilizing the plant palette listed in **Appendix C** herein.

4.4 BUILDING FORM AND ARCHITECTURE

A. GENERAL ARCHITECTURAL STANDARDS.

1. All buildings shall provide architectural detailing on all exterior elevations (360° architecture); not just the front elevation. Window embellishments shall be provided by adding architectural features that enhance the elevations (e.g. greater variation of window design, different window styles, tile inlays and recesses, structural pop-outs, gabled roof features over the windows, etc.).

2. For all buildings the mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and designed to appear as an integral part of the building; except for solar panels. The mechanical equipment screening shall be included in the overall building height. Mechanical equipment shall be treated to be non-reflective.

3. Service and loading bays shall be oriented away from adjacent residential and mixed-use zoning districts and to the greatest extent possible should not front onto or be visible from the public street. For those sites that can only locate said activities in a highly visible location screening be a method approved by the City may be required.

4. Buildings shall be designed to facilitate the efficient use of energy through building orientation, window and door placement, awnings, canopies, window treatments and other appropriate design solutions.

5. Building orientation and building design shall address and mitigate the negative impacts of noise, odor, or dust that may be generated from a building and/or land use of any Business Park or Industrial development.

B. BUILDING MATERIAL AND DETAILS

1. Reflective building materials are prohibited. Mirrored surfaces or any treatment that changes ordinary glass into a mirrored surface are prohibited. Metallic surfaces, including roof materials, shall be chemically treated to be non-reflective.

2. Color should be used to accent entryways and special architectural features of the building rather than color bands of corporate identity.

C. ROOF ARCHITECTURE.

1. Full roof architecture utilizing simple and varied roof forms shall be required for all new business park and industrial development; while long, continuous mansard roofs, false mansard roofs, large expanses of flat roofs and veneer (false-front) parapets are discouraged. Parapet walls shall be designed and constructed in a manner to appear as a solid, three-dimensional form rather than a veneer.

2. All rooftop screening shall be part of the articulation of a building and not appear as an afterthought; shall be architecturally integrated and compatible with the architectural style.

3. Roof access shall be from within the building.

D. BUILDING FACADES.

1. Windows and doors shall be aligned and sized to bring order to the building façade and sufficiently recessed to contribute to the building's energy efficiency and create facade patterns that add variety and visual interest to the building design.

2. All building facades must contain conspicuously placed street address numbers (refer to **Chapter 109** of the LDO).

4.5 EDGE TREATMENT AND TRANSITIONS

A. Non-vehicular connections to adjacent developments through shared and/or aligned retention areas, *multimodal* trails, and open space areas are to be made by the Employment land uses whenever available and/or when designated for such future connectivity by the Surprise General Plan or the Parks and Recreation Master Plan.

B. Development of subdivisions within the Business Park and Industrial zoning districts shall provide a landscape buffer strip, as outlined in **Chapter 106** and **Chapter 108** of the **LDO**, along the perimeter of the development on a subdivision basis rather than encumbering the individual lots within the subdivision with the buffer area requirement.

C. When developed as a stand-alone industrial land use adjacent to the undeveloped edge of the City or to an existing residential development the industrial development shall be responsible for providing the required buffer area for the development.

D. Buildings located on lots along the perimeter boundary of a business park and/or industrial subdivision that are adjacent to the undeveloped edge of the City or to an existing residential development shall maintain a low profile building in terms of single-story heights not to exceed twenty-five feet (25'). Building heights above twenty-five feet (25'), up to the maximum building height allowed per the zoning district, may be achieved by increasing the building setback adjacent to the perimeter boundary as outlined under the specific zoning sections of **Chapter 106** of the **LDO**.

CHAPTER 5: ENVIRONMENTALLY SENSITIVE LANDS STANDARDS

5.1 GENERAL LAND/SITE DESIGN ~~&~~ AND DEVELOPMENT

A. The City of Surprise requires responsible development, the preservation of natural habitats for flora and fauna, and the conservation of environmentally and culturally sensitive lands and resources. Sustainable and creative development is encouraged with the goal being to fit development into the natural site with minimal intrusion, and to be sensitive to adjacent uses. For this reason any property that possesses characteristics which would support their identification as *cultural resources* or having *environmentally sensitive features* shall utilize an *integrated conservation design* approach to development and assure compliance with the Environmentally Sensitive Lands and Cultural Resource Standards set forth in this section and those in **Chapter 104** of the **LDO** as a part of any development submittal.

B. **INTEGRATED CONSERVATION DESIGN APPROACH.** An *integrated conservation design* is vital to reducing fragmentation of both *habitat* and *wildlife movement areas*, improving community character, and protecting both *environmentally sensitive features* and *cultural resources*. Regardless of the acreage or zoning, when any portion of a development site is determined to be in an area with *environmentally sensitive features* or *cultural resources* the entire development site shall be required to utilize an *integrated conservation design* approach and develop an Environmental Inventory Plan (as described in **Chapter 104** of the **LDO**). The development shall provide the City with a development plan rooted in this integrated design approach and based on the Environmental Inventory Plan. The following 4-steps are involved when developing any project using this *integrated conservation design* approach. For subdivisions theses design steps occur in an order opposite that of conventional subdivisions.

1. Identify Conservation or Preservation Areas. The first step is identifying areas of the property to conserve or preserve. This is done by completing an "Environmental Inventory Plan" (detailed in **Section 104-2.2** of the **LDO**) that delineates the location of all *environmentally sensitive features*, *cultural resources*, and the associated *buffer areas*. Also, identify the location of any additional *open space* required to satisfy the zoning requirements for the development; keeping in mind the potential to create areas and connections beyond the boundaries of the proposed development to maximize the benefit to wildlife and residents alike.

Example Site Before Development

Integrated Conservation Design identifies the environmentally sensitive features & cultural resources of the site *before* drawing lot lines & roads.

2. Select Building/Housing Locations. Select building/housing sites to complement the location of the *environmentally sensitive features*, *cultural resources*, and *open space*. Designing the lots around these conserved spaces ensures that each occupant/resident can take full advantage of these conserved common areas. Utilizing a *cluster development* design may make this simpler to achieve but it is not required.

3. Connect the Dots. Draw in a *multimodal* network of streets and trails that connect the development to existing roads and, if possible, regional trail networks or public greenways.

4. Draw in the Lot Lines. Finally, draw in the individual lot lines.

C. ESTABLISHMENT OF BUFFER AREAS. The *buffer areas* required by **Chapter 104** of the **LDO** shall be designed to achieve the following performance standards:

Conventional Development vs. Cluster Development

The cluster subdivision (right) accommodates the same amount of development as its conventional counterpart (left); in this example 32 lots. The difference, however, is that the cluster design provides that more than half of the site is retained as preserved or open space, a permanent amenity shared by all property owners. Conventional development gives each owner a large lot surrounded on all four sides by neighbors whereas the cluster design provides each resident an uninterrupted view of the surrounding landscape and access to preserved communal open space within the development.

1. Protect the biological function and enhance wildlife use of any natural habitat identified by the Environmental Inventory Plan for the development site.

2. Minimize and, to the greatest extent possible, mitigate the anticipated impacts of development to *environmentally sensitive features* and *cultural resources*.

3. Enhance the integration of development with the site by preserving existing site topography, including but not limited to, such characteristics as: hillside areas, steep slopes, ridgelines, significant rock outcroppings, and existing drainage and water features.

4. Preservation of significant stands of vegetation and communities of *protected native plant*(s) within and/or adjacent to a development site.

5. Prevent unnecessary and adverse impact upon species utilizing special habitat features, including nest and/or den sites, night roosts, key feeding areas, wintering and/or production areas as identified by the Environmental Inventory Plan.

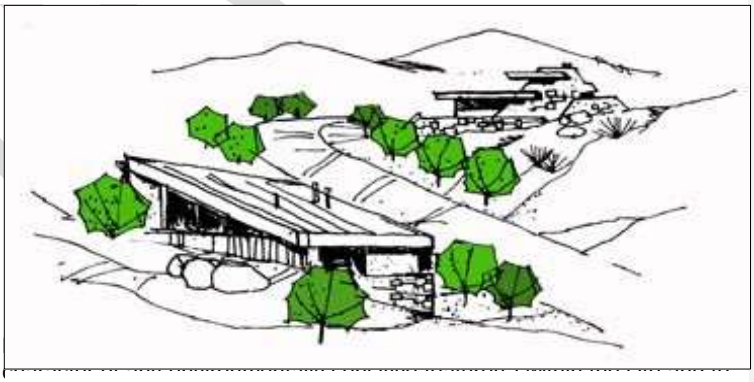
6. Preserve and enhance the existence of *wildlife corridors* and wildlife movement between natural features, through and adjacent to the development site.

7. Provide appropriate areas for passive human access to the site's natural habitats, *environmentally sensitive features* and *cultural resources*.

D. GENERAL SITE DESIGN.

1. Projects in the vicinity of large natural habitats and natural habitat corridors shall be designed to complement the visual context of the natural habitat. Techniques such as architectural design, site design, the use of native landscaping and choice of colors and building materials shall be utilized in such a manner that scenic views across or through the site are protected, and that manmade facilities are screened from off-site observers and blend with the natural visual character of the area (see **Illustration 23** below). These requirements shall apply to all elements of a project, including any aboveground utility installations.

ILLUSTRATION 23

2. 

Illustrative Example: Building siting respects the topography of the area. the site.

3. The greatest amount of development and the highest densities of housing should occur in the flat land (under five percent (5%) slopes). Irregular terrain with irregular slope conditions and hillside lands (over ten percent (10%) slopes) shall be larger lot residential with a *building envelope* delineated to insure building/site integration and to reduce the impact of development to the hillside.

4. Mass grading is prohibited in the *hillside development area.* Mass grading shall be limited or prohibited for other lands within the environmentally sensitive areas of the City where damage to existing vegetative cover, washes and drainage patterns might occur.

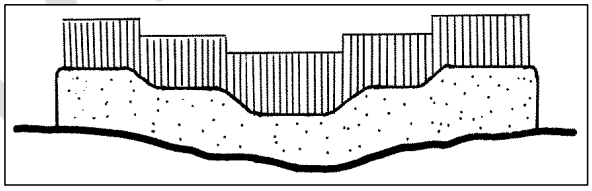
5. Wherever possible, but particularly in *hillside development areas*, site plans and designs should reflect a sensitive approach to development wherein roads, hiking and equestrian trails, access walkways, driveways and drainage areas conform as closely as possible to the natural contours of the site.

5.2 WALLS: PERIMETER, PRIVACY AND RETAINING

A. PERIMETER WALLS

1. Perimeter walls or fences shall follow the contour of the natural terrain and be "open" in design where a wall abuts an open space area, buffer area, or environmentally sensitive feature. Walls or fences shall be a maximum of six feet (6') in height with no more than three feet (3') being constructed of a solid or opaque material. That "open" portion of the wall or fence may not include chain-link or wood materials (see **Illustration 24** below). Notwithstanding the foregoing, walls exceeding six feet (6') in height and constructed of solid or opaque material may be approved by the Community Development Director if the wall is for the purpose of screening non-residential uses.

ILLUSTRATION 24



Perimeter walls shall follow the contour of the natural terrain.

2. Perimeter walls and fences surrounding a lot, tract, or subdivision within a *hillside development area* shall be prohibited; only privacy walls and retaining walls may be permitted as outlined below.

3. Within the ten to fifteen percent (10-15%) slope category of a *hillside development area*, exceptions to the above prohibition on perimeter fences or walls may be permitted. In those instances where an exception is desired, applicants shall submit a detailed Wall Plan to the Community Development Director for review and action. In conjunction with the submittal of the Wall Plan to the Community Development Director, the applicant shall submit a copy of the Wall Plan to the appropriate City department(s) for review and approval for conformance with all City grading and drainage requirements. Wall Plans shall indicate the proposed locations of walls or fences, the proposed materials, colors and design of any wall or fence, and fence construction and disturbance mitigation measures. Such plans shall be accompanied by a narrative explaining the reasons why such an exception should be made. Wall Plans may be approved by the Community Development Director upon a finding that the proposed location and design of the wall(s) will not be contrary to the intent and purpose of the Environmentally and Culturally Sensitive Land Developments Standards.

B. PRIVACY WALLS

1. Fences or walls on lots within a *hillside development area* shall be restricted to privacy walls attached to or directly screening a portion of the main residence. Privacy walls shall not exceed six feet (6') in height, shall be architecturally compatible with the main residence and shall be limited to the *building envelope* area only.

2. Privacy walls shall not be erected on a retaining wall and shall be offset a minimum of four feet (4') when utilized unless the combined height of the walls does not exceed six feet (6').

C. RETAINING WALLS

1. The design of all retaining walls shall be prepared by a registered engineer or architect and shall be designed to blend with the surrounding environment and/or development in color, materials and style.

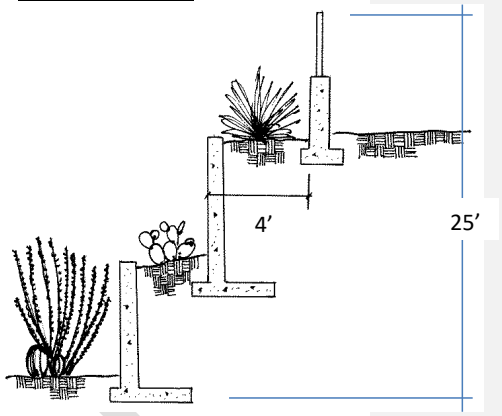
2. No first-tier lots shall have a side or rear yard retaining wall exceeding six feet (6') in total vertical wall height in any residential district or ten feet (10') in a non-residential district.

3. A single retaining wall in any front yard shall not exceed four feet (4') in height in residential districts or six feet (6') in height in non-residential districts.

4. Retaining walls of over four feet (4') in height shall not be placed at the property line.

5. Additional retaining height may be achieved through the use of offset retaining walls and terraces: such walls shall be offset a minimum of four feet (4') and all terraces shall be landscaped appropriately for the width of the offset (see **Illustration 25**). Retaining walls shall incorporate weep holes for drainage and sleeves for irrigation.

ILLUSTRATION 25

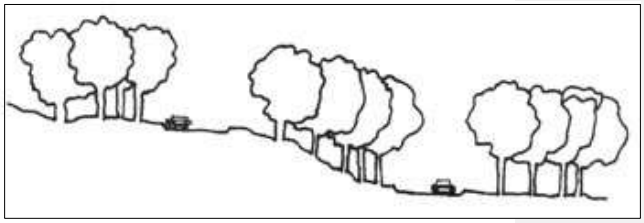


6. The total vertical wall face (including view fencing) visible from any street, adjacent property line or publically-accessible open space for any single lot shall not exceed twenty-five feet (25') in height. Terraced walls shall be constructed with decorative products and terraces shall be landscaped to minimize their visual impact.

5.3 ROADWAYS

A. Rather than transforming the area, the roadways shall follow the natural topography of the area with the roadways designed to minimize excavation and embankment scars and the overall amount of land disturbance. The City prefers the use of curvilinear horizontal alignments and gently rolling profiles consistent with the natural topography to minimize unnecessary disturbance to the existing environment (see **Illustration 26**).

ILLUSTRATION 26



Split roadway sections to accommodate grade change.

B. Additional rights-of-way may be required for cut or fill slopes, bike paths, horse trails, traffic control devices, fire hydrants or other public facilities located adjacent to streets. Where cut or fill slopes extend beyond the rights-of-way, a permanent easement may be provided in lieu of increasing the width of the rights-of-way.

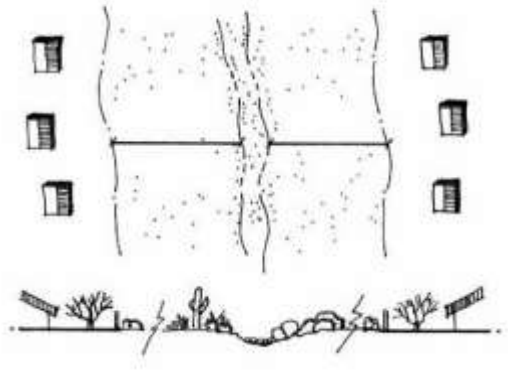
5.4 WATER FEATURES

A. NATURAL WASHES and FLOODWAYS.

1. County *Floodways* and FEMA designated washes that traverse and/or are adjacent to a development site shall be assimilated into a linear open space system that is integrated into both the development's and the community's open space system. A seventy five foot (75') buffer area shall be required along the perimeter of these floodways and washes. Within the required seventy-five foot (75') *buffer area*, associated with and adjacent to these types of floodways and washes, paths for both pedestrians and bicycles and if applicable equestrian trails are encouraged and may be required to be developed as an amenity by the developer (see **Illustration 27**).

ILLUSTRATION 27

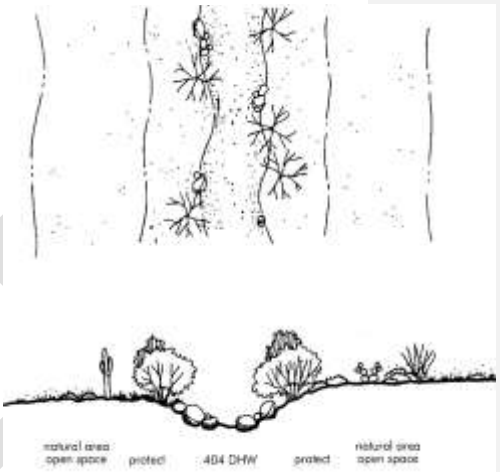
2. Naturally occurring ephemeral desert washes identified by the Drainage Report shall, as much as possible, be retained in their natural condition with *buffer areas* established as natural area open space and with development setback the appropriate distances necessary to allow the *wildlife corridors* to remain uninterrupted (see **Illustrations 28**). Specific *buffer area* dimensions to be determined by the City in consultation with Arizona Game and Fish.



3. Disturbance to larger ephemeral washes shall be limited to that required for road and utility crossings only. The uses of bridges and culverts should be considered for such crossings where their use would cause fewer disturbances to the washes. Disturbed areas shall be revegetated using indigenous vegetation.

4. The City may grant open space credit (at a 1: 1.25 ratio) for habitat restoration of and along those ephemeral washes that have been identified by Arizona Game and Fish as being missing links/sections in important *wildlife corridors*. (see **Illustrations 29**)

ILLUSTRATION 29



5. Drainage basins, retained washes, and new drainage channels shall be given a "natural" desert character. Native materials in the construction of all storm water features (ie. basins, channel bottoms, and headwalls) must be used. Terracing, berming and contouring is required to naturalize and enhance the aesthetics of all drainage basins, retained washes, and channels. Basin slopes shall comply with Engineering Design Standards.

6. Trails will be permitted within these corridors, but motorized vehicles would be prohibited.

5.5 TRANSITION STANDARDS AND EDGE TREATMENTS

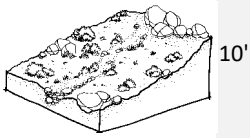
A. On sites where there is significant change in the grade levels from the site to adjacent properties, the site design should accommodate the grading transition through design techniques such as landscaped terraces, landscaped slopes of 4:1 (run-to-rise) or gentler, or some similar gradual technique.

B. When the site has a non-residential use and the adjacent site is a residential use, required screening walls should either be placed along the edge of the parking/driveway areas if the developing site is higher than the adjacent residential site, or at the property line if the site is lower.

C. Hillside development shall receive edge treatments that soften the appearance of an abrupt transition between the built and natural environments. Such treatments shall consist of alternative perimeter fencing (adobe, native stone or vegetation etc.), offset, or staggered rear lot lines, transitional landscaping or other similar elements intended to soften the transition.

5.6 HILLSIDE DEVELOPMENT AREA

A. Those lands considered to be in a *hillside development area* (ten percent (10%) or greater) shall be limited in the density permitted based on the slope bands of the property as further delineated in **Chapter 104** of the **LDO**.



B. Slopes that are fifteen percent (15%) and greater are considered to be *steep slopes* and development shall be highly restricted.

C. The grading concept for any site shall seek to balance cut and fill on the site to avoid off-site stockpiling and further damage to the natural topography.

D. Significant rock outcroppings, ridgelines and unstable slopes need to be identified and conserved. Incorporate such features as an inclusive element in the overall design of the development rather than isolated and inaccessible.

E. All site plans and designs should utilize topographic maps that reflect the existing terrain, including: contour intervals (at a maximum of 10 feet), and variations in, the site terrain; elevation of critical spots; rock outcrops and special characteristics of the site.

F. All structures located within a *hillside development area* shall blend naturally into the landscape through the use of materials and colors compatible with the natural earth colors of the ridgeline area, rather than stand out as a prominent focal point.

G. Multilevel buildings, as well as all rooflines of buildings, shall follow the general slope of the site in order to keep the building height and profile in scale with surrounding natural features (see **Illustration 30**).

ILLUSTRATION 30

APPENDIX A – GLOSSARY OF TERMS

A. General Terms. For the purpose of carrying out the intent of these Planning and Engineering Design Standards (PEDS), certain terms or words used herein shall be interpreted or defined as follows:

1. Words used or defined in one tense or form shall include other tenses and derivative forms; words used in the singular include the plural; and words in the plural include the singular.
2. The words "shall", "must", and "will" are mandatory and not permissive.
3. The words "should", "encourage, and "may" are permissive.
4. The word "person" includes an individual, tenant, lessee, firm, co-partnership, joint venture, corporations, associations, estate, trust, receiver, or and any other group or combination acting as a singular entity, including the federal government, another city, county, or school district, except as exempt by law.
5. The following words or terms when applied in these PEDS may be used interchangeably unless contrary to the circumstances: lot, plat, parcel or premise; and "building" applies to the word "structure".

B. Abbreviations. The following abbreviations and/or acronyms shall have the following meaning:

A.R.S.	Arizona Revised Statutes
PEDs	Planning and Engineering Design Standards

C. Italicized. Words or phrases throughout the PEDS which are expressed using italics shall assume the meaning as ascribed in this Appendix. Words or phrases not expressed in italics shall assume the common meaning of the word or phrase unless such word or phrase is otherwise included herein this Appendix.

D. Specific Terms. The following specific terms, words and phrases shall, for the purposes of understanding these standards, have the following definitions and meanings:

A.

***Adaptive Reuse*:** The conversion of historic or obsolescent building(s) from their original or most recent use to a new use representing compatible and appropriate change.

***Apartment Complex*:**

***Archeological Resource*:** Any material remains of past human life or activities that are of historic or pre-historic significance. Such material includes, but is not limited to, pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, cultural landscapes, rock paintings, rock carvings, intaglios, graves, skeletal remains, or any piece of any of the foregoing items (see *cultural resource* herein).

***Architectural Feature*:** A decorative element intended to enhance the building or structure and lend to the overall exterior form, context and appearance of the building or structure. Architectural features may include, but are not limited to balconies, canopies, columns, doors, eaves, porches, wing walls, or similar three-dimensional exterior element of a building or structure.

Aquatic Center: A type of *public pool* that is established primarily for the purpose of hosting water related competitive events such as but not limited to swim meets, water polo, diving, as well as associated practice. The programming of events may include local public and charter schools, public and private universities, local athletic clubs, and other competitive organizations. A city-owned aquatic center may, at the discretion of the Parks and Recreation Department Director, be open to the general public during times when not scheduled for competitive events or related practice times. The facility may also be programed for city-sanctioned aquatic classes.

B.

***Berm*:** A mound of earth that is used to shield, screen or buffer undesirable views, separate incompatible land uses, provide visual and landscape interest, decrease noise, or control the direction of water flow.

***Bicycle Circulation System*:** Multi-use pathways and on-street bicycle lanes combine to provide a comprehensive means by which bicycles can travel within and through the City.

***Bollard*:** A thick, low, architecturally, designed vertical post, or a series of vertical posts, that are placed to help define, or border, pedestrian and/or bicycle paths.

***Buffer Area*:** An area of land retained in its natural state which protects and/or surrounds an *environmentally sensitive feature* or *cultural resource* with the purpose of mitigating any potentially negative impacts to the feature or resource.

***Buffering*:** The technique of providing landscape or other improvements on land set aside or in a *buffer area* used to separate different intensities and types of land use.

***Building Envelope*:** That area on a lot that encompasses all development including but not limited to excavation, cut, fill, grading, buildings, structures, access ways, parking and any area of disturbance.

***Bus/Transit Shelter*:** A roofed structure that is located on or adjacent to the right-of-way of a street, and which is designed and used for the protection and convenience of waiting bus passengers.

***Boulevard Strip*:** See *Landscape* Strip~~The landscaped area between sidewalk and curb along a public street (aka *park strip*)~~.

C.

***Community Circulation System*:** A network of transit, automobile, bicycle, pedestrian, and equestrian trails and/or rights-of-way that connect origins and destinations.

***Complete Streets*:** A street system that is designed and operated to enable safe, attractive and comfortable access and travel for all users. Pedestrians, bicyclists, transit riders, and motorists

of all ages and abilities are able to safely and comfortably move along and across a complete street and are given equal space, consideration and safety issues. Complete streets also create a sense of place and improve social interaction as they encourage walking, biking and transit as viable transportation options.

***Cluster Development/Subdivision*:** Concentration of development on only a portion of a site, allowing *environmentally sensitive features* and areas to be protected with no loss in the number of lots and maintaining the overall density of the site. It requires transferring density on the same site and the undeveloped land to be permanently retained for open space, habitat, or conservation of *environmentally sensitive features*.

***Cultural Resources*:** An aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about a culture.

D.

***Detached Sidewalk*:** A sidewalk that is separated from the street by a ~~*boulevard strip*~~*landscape strip* that is measured from the back of the street curb and runs continuously along the length of the street.

***Disturbed Area*:** The area of natural ground that has been, or is proposed to be, altered through grading, cut and fill, removal of natural vegetation, placement of material and equipment, trenching, or by any means that causes a change in the undisturbed natural surface of the land or natural vegetation.

E.

***Environmentally Sensitive Features*:** Elements in the landscape that play a particularly large role in sustaining the natural environment and ecosystem and supporting wildlife and plant diversity, but at the same time are especially sensitive to degradation such as: *hillside development areas*; *important habitat*; *protected native vegetation*; *significant rock outcroppings*; *significant stands of vegetation*; ridgelines; *steep slopes*; *water features*; *wildlife corridors* (as further specified in **Chapter 104** of the **LDO**).

F.

Floodplain: Any land area susceptible to being inundated by water from any source. It may or may not include a *floodway*.

Floodway, one hundred-year: The channel of a river or other watercourse and the adjacent land areas which must be kept free of encroachment in order to carry and discharge the 100 year flood without substantial increases in flood height.

***Fore/Courtyard*:** a building frontage where the building facade is aligned close to the front property line with a portion of the facade set back. The resulting forecourt and/or interior courtyard are suitable for gardens, restaurant seating, or an entry plaza. A short wall may also be placed at the property line.

G.

***Gallery*:** A private frontage typically used in retail applications where the façade is aligned close to the front property or street line with an attached cantilevered shed or a lightweight colonnade overlapping the sidewalk.

***Gateway*:** A major or minor thoroughfare entry to the City of Surprise, as designated by the Surprise General Plan, which has been especially designed using unique and/or special landscape, architectural, sign and lighting treatments to project the city's image and inform visitors that they have arrived in Surprise.

***Green*:** A civic space type for unstructured recreation spatially defined by landscaping rather than building frontages.

***Greenway*:** An enhanced open space corridor which may include amenities as well as pathways for bicycles and pedestrians; may also be left in largely natural conditions.

H.

***Habitat*:** The physical and biological environment where an organism lives. Habitat includes such components as cover, food, shelter, water, and breeding sites.

***Habitat Connectivity*:** Physical and biological conditions that join blocks of habitat so that animals can move between them.

***Habitat Fragmentation*:** The division of contiguous tracts of *wildlife habitat* into progressively smaller patches which is typically a result of human encroachment such as roads and development.

***Hardscape*:** Any hardened and/or paved surface, including but not limited to a street, sidewalk, plaza, pathway or other similar surface, where the surface materials often are used to create unique patterns of color, design and texture for purposes of creating visual interest.

***Hillside Development Area*:** Those lands where the natural terrain has an average cross slope of ten percent (10%) or greater. However, a ten percent (10%) or greater slope, created by a natural wash on land that otherwise would not be classified as hillside land shall be exempt from the hillside regulations.

I.

***Important Habitat*:** Habitat that supports federally endangered plant or animal species, Species of Greatest Conservation Need (SGCN) in Arizona, and sensitive plant species (as may be identified on federal and state lists).

***Integrated Conservation Design*:** A development concept that considers site characteristics, natural features, and layout in the larger context of the site and its surrounding parcels. Integrated conservation design is intended to preserve important and unique natural features such as *hillside development areas* and *steep slopes*, *wildlife corridors*, natural habitat, and *cultural resources* that are known and those that may be discovered on the site as well as conservation of community viewsheds, and the required *open space* per the zoning district.

J.; K.; L.

***Landscape strip*:** The landscaped area between sidewalk and curb along a public street (commonly known as boulevard or *park strip*).

***Low-Impact Development (LID)*:** A land planning and engineering design approach that uses natural and engineered infiltration and storage techniques to manage stormwater where it is generated; combining conservation practices with distributed storm water source controls and pollution prevention to maintain or restore watershed functions.

M.

***Multimodal*:** Means of traveling within or through a community toby a combination that includes automobiles, buses, trolley, rail, bicycles, pedestrian friendly walkways and path and trail systems, and/or any other means in additional typical vehicular traffic~~One or more means of traveling within or through a community to include automobiles, buses, trolley, rail, hyperloop, bicycles, pedestrian walkways and path systems, and any other means of moving persons and goods by a surface, overhead or underground means of transportation~~.

***Mural*:** An artistic painting or mosaic typically found on a wall or building elevation.

N.

***New Urbanism*:** A design-focused approach to urban planning that advocates integrating housing, workplace, recreation and leisure areas within walkable, town-core, environmentally-sensitive, and sustainable communities; emphasizing transit, human scale, building-forward architecture, with a mix of housing, civic, workplace and retail uses in close proximity and within the neighborhoods, while preserving open lands and achieving other environmental goals.

O.

***Open Space*:** Land and/or water areas, improved or unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment as active and passive recreational areas or for environmental, scenic, or conservation purposes. Not to include parking or roadways.

***Open Space, active*:** Land and water areas specifically designed as an activity-based recreational area that may include boating, water sports, sports fields, golf courses, local and community parks having picnic, playground, recreational and support components, and pedestrian, hiking, bicycle, and equestrian trails.

***Open Space, natural*:** Land and water areas that are retained in their natural state, or restored natural state if previously disturbed, required for the preservation and conservation of plant and animal life, including habitat for wildlife species; and areas required for ecological, cultural and other scientific study purposes for long-term public benefit.

***Open Space, passive*:** Land and water areas that are either partially improved, undeveloped, or in a natural state that are intended for scenic, environmental, conservation, and/or resource

protection; and include such resource-based activities as nature study, nature trails, and any other activities requiring a natural condition that cannot easily be duplicated by human actions.

P.

***Parking Pods*:** The smallest parking increment of a larger off-street parking lot, designed as a heavily tree-shaded parking area to accommodate 50 or less cars and separated from other parking clusters by pedestrian walkways.

***Paving Enhancement*:** A material and/or color used in the pavement design of a street, parking area, or pedestrian walkway to provide visual interest.

***Pedestrian Friendly*:** An environment in which conflict between the automobile and pedestrian is minimized or eliminated through the provision of a comprehensive means of vehicular-separated pedestrian travel that is fast, attractive and comfortable for a wide range of age and abilities groups; and by the design of buildings and other uses in a manner that is sensitive to the needs of the pedestrian.

***Plaza*:** A large, paved, pedestrian entry setting for a building that should contain a combination of seating areas, trees, and landscaping and may also include fountains, public art and sculpture works.

Pool, Private: A *swimming pool* that is owned and maintained by individual homeowner for personal use.

Pool, Public: A *swimming pool*, that is open to the public with or without the payment of a fee, including a *swimming pool* that is operated by a county, municipality, political subdivision, school district, university, college, or a commercial establishment whose primary business is the operation of a *swimming pool*.

Pool, Semi-Public: A *swimming pool* operated for the residents of lodgings such as hotels, motels, resorts, apartments, condominiums, townhouse complexes, trailer courts, mobile home parks, or similar establishments. A semi-public swimming pool includes a *swimming pool* that is operated by a neighborhood or community association for the residents of the community and their guests and any a *swimming pool* at a country club, health club, camp, or similar establishment where the primary business of the establishment is not the operation of a *swimming pool* and where the use of the *swimming pool* is included in the fee for the primary use of the establishment. (commonly known as Community Pool)

Pool, Swimming: Any *structure* intended for swimming or recreational bathing that contains water over 18 inches (457 mm) deep at any point, and, other than hot tubs and spas is wider than 8 feet (2400 mm) at any point. This includes in-ground, above ground and on-ground swimming pools and, other than the width, hot tubs and spas.

***Protected Native Plants*:** Those species listed in Chapter 104; Table No. 104-X of the LDO.

Q.; R.

Required Rear Yard Area: That area of the rear yard that is bound by the side and rear lot lines and the rear setback line.

Ridgelines: Prominent topographic features that are used by raptors to orient, nest and/or catch thermals while migrating.

S.

***Sensitive Land Areas*:** Land that encompasses *wildlife habitats* and corridors, wash corridors that replenish local groundwater, archaeological sites, unique plant environments, and scenic vistas.

Significant Rock Outcroppings: Any surface rock formation having an area of five hundred square feet (500 sf) or larger or any surface rock formation having a height greater than ten feet (10) from the surrounding grade.

Significant Stand of Vegetation: A single native or protected tree or cactus (as listed in **Chapter 104** of the **LDO**) that is of a height greater than twenty-five feet (25') or three (3) or more trees or cacti, located within a radius of fifteen feet (15'), each having a height greater than eighteen feet (18').

***Significant Vegetation Specimen*:** A native tree with an eight inch (8") or greater caliper trunk or multitrunked in good health, a saguaro over twenty feet (20') in height and/or multiple arms or crest or other unusual configuration in good health, or other mature federally endangered plant, or Species of Greatest Conservation Need (SGCN) in Arizona, or native plant species.

***Sharrows*:** Specific road markings used to indicate a shared lane for bicycles and automobiles used to reinforce the legitimacy of bicycle traffic within the travel lane, encourage bicyclists to position themselves safely in narrow lanes to comfortably travel side by side within the same traffic lane, advertises the presence of bikeway routes to all user, and provides a wayfinding element along bike routes.

***Square*:** An open space available for unstructured recreation and civic purposes.

***Steep Slopes*:** Unimproved land, parcel, or tract of land, where the existing natural terrain has an average cross-slope of fifteen percent (15%) or greater and where the natural state of such should be left undeveloped and conserved as open space.

***Streetscape*:** The general appearance of a block or group of blocks with respect to the structures, setbacks from public-rights-of-way, open space, landscaping, public art, lighting, signage, paving materials, street furnishings and other elements that contribute to the overall character and image of a City block.

***Street Furnishings*:** All items that are placed within the public right-of-way for both an aesthetic and functional purpose, including, but not necessarily be limited to, benches, bus shelters, trash receptacles, plant containers, kiosk signs, lighting fixtures, tree grates and guards, bicycle racks, bollards, fountains and public art.

T.

***Third Place*:** a private building that includes a space conducive to unstructured social gathering. Third places are usually bars, cafés, coffee shops, and corner stores.

***Traffic Calming*:** A technique or method of reducing traffic speeds and/or neighborhood cut-through traffic volumes that utilizes changes in street alignment, installation of barriers, and other physical measures.

U.

***Unsalvageable Plant*:** A protected native plant that cannot be successfully relocated due to: 1) deteriorated health from disease, infestation, or natural causes; or 2) physical constraints related to plant location, orientation, or general condition which obstruct and/or prevent the application of approved relocation techniques as determined by a landscape professional (ASLA or certified nurseryman).

Unstable Slopes: Land where the natural state of the slopes is unstable due to topography, drainage patterns, soil stability, soil compaction or geotechnical issues, boulders or rock outcroppings, and prior land disturbance.

V.

***View Corridor*:** The area or areas along a street, pedestrian path, hiking trail or other such opening that allow for a clear and unobstructed view of, or one that frames, highlights, or accentuates a prominent object, site, scene, panorama, building, or structure.

W.

***Water Feature*s:** Includes those features as listed and defined below:

a. ***Floodplains*:** The area along a perennial or ephemeral stream or river that fills with water periodically. Floodplains can include riparian areas and sometimes have a distinct vegetative community that included water-loving plants. However, in Maricopa County, many floodplains are simply characterized by dry river or streambeds. (See the **LDO** for Floodplain Management Regulations.)

b. ***Riparian Areas***: The ecosystem located along a perennial or ephemeral wash or river. Usually characterized by water-intensive plants/trees, riparian areas run parallel to streams and rivers.

c. ***Rivers/Streams*:** The lowest point within a watershed where water moves downstream. Streams and rivers in Maricopa County can be perennial or ephemeral.

d. ***Springs/Seeps*:** Fixed locations where groundwater emerges from the earth perennially or ephemerally. These features usually have a distinct water-loving plant community associated with them which can include mesic grasses, reeds, rushes, sedges, cattails and a variety of shrubs and trees.

e. ***Wetlands*:** An area that is saturated by water perennially or seasonally and have a distinct vegetation community associated with water. The term wetlands encompass both the aquatic environmental associated with the pond or lake and

the distinct vegetative community around the periphery which can be characterized by mesic grasses, reeds, rushes, sedges and/or cattails.

***Wildlife Corridor*:** Pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural factors in combination with urbanization, and which 1) permit animals to move between remaining habitats allowing depleted populations to be replenished and promoting genetic exchange; 2) provide escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or species extinction; 3) serve as travel paths for individual animals as they wander throughout their home ranges in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

***Wildlife Habitat*:** Locations where native wildlife has a tendency to congregate due to provision of food, shelter and/or water.

X.; Y.; Z.

APPENDIX B – PUBLIC RIGHT OF WAY & PUBLIC SPACES PLANT LIST

The City of Surprise desires to promote and preserve the Sonoran Desert environment. Therefore the below plant palette for the urban forest is more restrictive than the Arizona Department of Water Resources (DWR) list of low water use drought tolerant plants allowed under the Phoenix Active Management Area. Therefore, the two (2) tables below (**Table No. 1** and **No. 2**) list only those trees, shrubs and plants that the City of Surprise permits within the public rights-of-way and other public spaces unless modifications are approved by the City Manager or designee.

TABLE NO. 1 - MAJOR ARTERIAL STREETS: (STREET TREES)

Botanical/Common Name *(Main Tree Type)*	**Botanical/Common Name** *(Secondary Tree Type)*	**For Specific Street**
Ulmus parvifolia/Evergreen Elm (100%)	N/A	Dysart Road
Quercus heritage/Heritage Oak (100%)	N/A	Litchfield Road
Cercidium floridum/Blue Palo Verde (100%)	N/A	Bullard Avenue
Pistacia atlantica/Red Push Pistache (50%)	Acacia salicina/Willow Acacia (50%)	Reems Road
Prosopis velutina/Velvet Mesquite (75%)	Olneya tesota/Ironwood (25%)	163rd Pkwy/Sarival Ave.
		Loop 303
Olea europaea/Swan Hill Olive (50%)	Pistacia atlantica/Red Push Pistache (50%)	Cotton Lane
		Sun Valley Parkway
Quercus heritage/Heritage Oak (50%)	Pistacia atlantica/Red Push Pistache (50%)	Bell Road
Prosopis velutina/Velvet Mesquite (75%)	Olneya tesota/Ironwood (25%)	Greenway Road
Ulmus parvifolia/Evergreen Elm (75%)	Quercus heritage/Heritage Oak (25%)	Waddell Road
Prosopis velutina/Velvet Mesquite (100%)	N/A	Cactus Road
		US 60/Grand Avenue
Cercidium microphyllum/Foothills Palo Verde (75%)	Olneya tesota/Ironwood (25%)	SR 74/Carefree Highway

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	**~~Boulevard Strip~~*Landscape strip***	**Parking Lot**	**Buffer Areas**
TREES: (▲) Denotes tree which are indigenous to the Phx metropolitan area & (*) trees which are native to Arizona **(X) Denotes plants that are allowed & (O) trees which are limited to use in medians greater than 14 feet in width**					
Acacia aneura	Mulga	X	X	X	X
Acacia farnesiana or smalli	* Sweet Acacia	O			X
Acacia salicina	Willow Acacia	X	X	X	X
Acacia saligna	Blue Leaf Wattle Tree	X	X	X	X
Acacia schaffneri	Twisted Acacia	O			X
Caesalpinia cacalaco	Casalote	X	X	X	X
Celtis reticulata	Western Hackberry	O			X
Cercidium floridum	▲ Blue Palo Verde	O			X
Cercidium microphyllum	▲ Foothills Palo Verde	X			X
Cercidium praecox	Palo Brea	O			X
Chilopsis linearis	* Desert Willow	X	X	X	X
Fraxinus velutina, spp	Arizona Ash & Fantex Ash	X	X	X	X
Lysiloma thornberi	* Desert Fern	O			X
Olneya tesota	▲ Ironwood	O			X
Pistacia atlantica	Red Push Pistache	O	X	X	X
Pistacia Chinensis	Chinese Pistache	O	X	X	X
Pithecellobium,flexicaule	Texas Ebony	O			X
Pithecellobium,mexicana	Mexican Ebony	O			X
Prosopis glandulosa	▲ Honey Mesquite	O			X

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	**~~Boulevard Strip~~*Landscape strip***	**Parking Lot**	**Buffer Areas**
Prosopis velutina	▲ Velvet Mesquite	**O**			**X**
Quercus heritage	Heritage Oak	**X**	**X**	**X**	**X**
Quercus virginiana	Southern Live Oak	**X**	**X**	**X**	**X**
Schinus terebinthifolius	Brazilian Pepper Tree	**O**		**X**	**X**
Tipuana tipu	Tipu Tree	**O**		**X**	**X**
Ulmus parvifolia	Chinese Evergreen Elm	**X**	**X**	**X**	**X**
Vitex agnus-castus	Chaste/Monk's Pepper	**X**			**X**
SHRUBS: (▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona					
Abutilon palmeri	Superstition Mallow				**X**
Acacia constrict	* White Thorn Acacia	**X**			**X**
Acacia greggii	▲ Catclaw Acacia	**X**			**X**
Anisacanthus thurberi	Mexican Honeysuckle	**X**		**X**	**X**
Atriplex canescens	Fourwing Saltbush				**X**
Caesalpinia mexicana	Mexican Bird of Paradise	**X**			**X**
Caesalpinia pulcherrima	Red Bird of Paradise	**X**			**X**
Calliandra californica	Baja Fairy Duster	**X**		**X**	**X**
Calliandra eriophylla	* Fairy Duster	**X**	**X**	**X**	**X**
Cassia artemisioides	Feathery Cassia	**X**		**X**	**X**
Cassia covesii	* Desert Senna	**X**			**X**
Cassia phylodenia	Silver Cassia	**X**	**X**	**X**	**X**
Cassia wislizeni	* Shrubby Senna	**X**	**X**	**X**	**X**

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	**~~Boulevard Strip~~*Landscape strip***	**Parking Lot**	**Buffer Areas**
Celtis pallida	▲ Desert Hackberry	X			X
Cordia parviflora	Little Leaf Cordia	X			X
Dalea pulchra	* Bush Dalea/Indigo Bush	X			X
Dodonaea viscosa	* Hop Bush	X			X
Encelia farinosa	▲ Brittle Bush	X	X	X	X
Ephedra trifurca	▲ Morman Tea	X			X
Ericameria laricifolia	▲ Turpentine Bush	X			X
Hesperaloe parviflora	Pink Yucca	X	X	X	X
Hyptis emoryi	Desert Lavender	X			X
Justicia californica	▲ Chuperosa	X	X	X	X
Larrea tridentate	▲ Creosote Bush	X	X	X	X
Leucophyllum frutescens	Texas Ranger/Sage	X	X	X	X
Leucophyllum laevigatum	Chihuahuan Sage	X	X	X	X
Lycium andersonli	▲ Anderson Lycium				X
Lycium fremontii	▲ Wolfberry Lycium				X
Rhus ovata	* Sugar Bush	X			X
Ruellia peninsularis	Baja Ruellia	X	X	X	X
Salvia clevelandii	Chaparral Sage	X	X	X	X
Simmindsia chinesis	▲ Jojoba	X	X	X	X
Tecoma stans	* Yellow Bells	X		X	X
Zizyphus obtusifolia	▲ Greythorn	X			X
GROUNDCOVERS:					

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	**~~Boulevard Strip~~*Landscape strip***	**Parking Lot**	**Buffer Areas**
(▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona					
Ambrosia deltoidea	▲ Triangleleaf Bursage	X	X	X	X
Baileya multradiata	▲ Desert Marigold	X	X	X	X
Convolvulus cneorum	Bush Morning Glory	X	X	X	X
Dalea greggii	Trailing Indigo Bush	X	X	X	X
Dalea versicolor v. sessilis	* Weeping Dalea	X	X	X	X
Eriogonum fasciculatum	▲ Flattop Buckwheat	X	X	X	X
Eschscholtzia Mexicana	Mexican Gold Poppies	X	X	X	X
Gazania rigens	Trailing Gazania	X	X	X	X
Lupinus species	Lupine	X	X	X	X
Melampodium leucanthum	* Blackfoot Daisy	X	X	X	X
Oenothera berlandieri	Mexican Evening Primrose	X	X	X	X
Penstemon parryi	* Parry's Penstemon	X	X	X	X
Phacelia crenulata	Desert Bluebells	X	X	X	X
Psilostrophe cooperi	Paperflower	X			X
Salvia farinacea	Mealy Cup Sage	X	X	X	X
Salvia greggii	Texas Red Sage	X	X	X	X
Sphaeralcea ambigua	▲ Globe Mallow	X	X	X	X
Tetraneuris acaulis	Angelita Daisy	X	X	X	X
Teucrium chamaedrys "Prostratum"	Creeping Germander	X	X	X	X

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	**~~Boulevard Strip~~*Landscape strip***	**Parking Lot**	**Buffer Areas**
Verbena pulchella	Rock Verbena	X	X	X	X
Wedelia trilobata	Yellow Dot	X	X	X	X
Zauschneria californica	* Hummingbird Trumpet	X	X	X	X
Zinnia grandiflora	* Prairie Zinnia	X	X	X	X
CACTI & SUCCULENTS:					
(▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona					
Agave parryi	* Parry's Agave	X	X		X
Aloe, species	Aloe species	X	X	X	X
Asclepias subulata	* Desert Milkweed	X	X	X	X
Carnegiea gigantea	▲ Saguaro	X			X
Dasylirion wheeleri	* Desert Spoon	X			X
Echinocactus grusonii	Golden Barrel	X			X
Ferocactus cylindraceus	* Compass Barrel	X			X
Fouquieria splendens	Ocotillo	X			X
Hesperaloe parviflora	Red Yucca	X	X	X	X
Holocantha emoeyi	▲ Crucifixion Thorn	X			X
Opuntia basilaris	* Beavertail Prickly Pear	X			X
Opuntia engelmannii	* Engelmann's Prickley Pear	X			X
Opuntia santa-rita	* Purple Prickly Pear	X			X
Yucca baccata	▲ Banana Yucca	X			X
Yucca elata	* Soaptree Yucca	X			X

APPENDIX C – LOW WATER USE DROUGHT TOLERANT PLANT LIST

This list does not include all of the possible low water use drought tolerate plants approved for the Phoenix Active Management Area; rather it lists those plants that the City of Surprise would prefer a homeowner/property association to use within areas they maintain and for private homeowners to use on-site. The use of other indigenous low water use drought tolerant plants may be permitted. However, the use of plants which are known to be invasive to indigenous vegetation shall be prohibited.

It is strongly recommended that homeowners check with their neighborhood's landscape covenants before designing their private landscaping.

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
TREES					
Acacia constrict	White Thorn Acacia	10' X 15'	habitat & stabilization	moderate	medium
Acacia farnesiana	Sweet Acacia	20' X 20'	habitat & screen	moderate	small
Acacia smallii	Desert Sweet Acacia	20' X 20'	habitat & screen	moderate	small
Acacia salicina	Willow Acacia	30' X 15'	habitat & stabilization	low	none
Acacia saligna	Blue Leaf Wattle	20' X 20'	screening & revegetation	seasonal	none
Acacia schaffneri	Twisted Acacia	18' X 20'	specimen/character	seasonal	small
Acacia stenophylla	Shoestring Acacia	30' X 20'	screening	low	none
Brachychiton populneus	Bottle Tree	40' X 30'	specimen & screening	low	none
Caesalpinia cacalaco	Cascalote	15' X 15'	specimen	low	medium
Celtis reticulata	Western Hackberry	25' X 25'	specimen/character	low	none
Cercidium floridia	Blue Palo Verde	30' X 30'	habitat	seasonal	small
C. microphyllum	Foothills Palo Verde	15'X 15'	habitat	seasonal	medium
Cercidium praecox	Palo Brea	25' X 25'	habitat	low	small

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Chilopsis linearis	Desert Willow	25’ X 20’	habitat	seasonal	none
Dalbergia sissoo	Rosewood/Sissoo	40’ X 30’	shade & stabilization	low	none
Fraxinus v. Rio Grande	Fan-Tex Ash	40’ X 25’	shade	low	none
Jacaranda mimosifolia	Jacaranda	40’ X 30’	specimen	seasonal	none
Lysiloma thornberi	Desert Fern	15’ X 15’	habitat	high	none
Olneya tesota	Ironwood	25’ X 25’	habitat	seasonal	small
Parkinsonia x (hybred)	Desert Museum Palo Verde	25’ X 25’	habitat	seasonal	none
Pistacia Chinensis	Chinese Pistache	40’ X 35’	shade	seasonal	none
Pistacia atlantica X integerrima	Red Push Pistache	40’ X 40’	shade	seasonal	none
Pithecellobium flexicaule	Texas Ebony	20’ X 15’	specimen/character	moderate	sharp
Pithecellobium mexicana	Mexican Ebony	30’ X 20’	specimen/character	seasonal	sharp
Prosopis glandulosa	Honey Mesquite	25’ X 30’	habitat	seasonal	large
Prosopis pubescens	Screwbean Mesquite	20’ X 20’	habitat	seasonal	
Prosopis velutina	Velvet Mesquite	25’ X 25’	habitat	seasonal	small
Quercus virginiana	Southern Live Oak	40’ X 50’	shade	seasonal	none
Schinus molle	California Pepper	30’ X 30’	screening & shade	moderate	none
Schinus terebinthifolius	Brazilian Pepper	20’ X 25’	shade	low	none
Tipuana tipu	Tipu Tree	30’ X 35’	shade	seasonal	none
Ulmus parvifolia	Evergreen Elm	35’ X 35’	shade	seasonal	none
Vitex agnus-castus	Monk’s Pepper	20’ X 20’	habitat	moderate	none

SHRUBS

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Abutilon palmeri	Superstition Mallow	4' X 3'	accent	low	none
Acacia greggii	Catclaw Acacia	6' X 6'	habitat & revegetate	moderate	sharp
Anisacanthus thurberi	Mexican Honeysuckle	3' X 4'	hummingbirds	low	none
Anisacanthus quadrifidus	Flame Honeysuckle	3' X 4'	hummingbirds & butterflies	low	none
Atriplex canescens	Fourwing Saltbush	5' X 8'	habitat & revegetate	low	none
Caesalpinia gilliesii	Yellow Bird of Paradise	6' X 5'	hummingbirds & butterflies	Low	none
Caesalpinia mexicana	Mex. Bird of Paradise	8' X 8'	hummingbirds	moderate	none
Caesalpinia pulcherrima	Red Bird of Paradise	6' X 6'	hummingbirds & butterflies	low	prickly stems
Calliandra californica	Red Baja Fairy Duster	5' X 5'	hummingbirds & butterflies	Low	none
Calliandra eriophylla	Pink Fairy Duster	3' X 4'	hummingbirds	Low	none
Callistemon citrinus	Lemon Bottlebrush	6' X 8'	specimen	low	none
Cassia artemisioides	Feathery Cassia	4' X 4'	fragrance & screening	seasonal	none
Cassia covesii	Desert Senna	4' X 4'	revegetate	moderate	none
Cassia wislizeni	Shrubby Senna	3' X 4'	specimen	low	none
Celtis pallida	Desert Hackberry	5' X 8'	screening & habitat	low	thorny/sharp
Cordia parviflora	Little Leaf Cordia	6' X 6'	screening	Low	none
Dalea pulchra	Bush Dalea/Indigo Bush	4' X 5'	winter color & butterflies	moderate	none
Dodonaea viscosa	Hop Bush	10' X 8'	screening	low	none
Encelia farinosa	Brittle Bush	3' X 4'	habitat & revegetate	low	none
Ephedra trifurca	Morman Tea	3' X 3'	accent	low	none
Ericameria laricifolia	Turpentine Bush	2' X 3'	revegetate & habitat	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
Gossypium harknessii	San Marcos Hibiscus	3’ X 4’	specimen	low	none
Hyptis emoryi	Desert Lavender	6’ X 4’	fragrance & habitat	low	none
Justicia californica	Chuperosa	4’ X 4’	hummingbirds	low	none
Larrea tridentate	Creosote Bush	6’ X 6’	screening & revegetate	low	none
Leucophyllum frutescens	Texas Ranger/Sage	6’ X 6’	hedge/screening	low	none
Leucophyllum laevigatum	Chihuahuan Sage	4’ X 5’	fragrant & screening	low	none
Leucophyllum langmaniae	Langman’s Sage	5’ X 5’	fragrant & screening	low	none
Lycium fremontii	Wolfberry	8’ X 8’	habitat & hummingbirds	low	thorny
Nerium oleander	Oleander	6’ X 4’	screening	moderate	none
Plumbago scandens	White Plumbago	3’ X 3’	screening	low	none
Rhus ovata	Sugar Bush	6’ X 6’	screening	low	none
Ruellia peninsularis	Baja Ruellia	3’ X 4’	hummingbirds	low	none
Simmindsia chinesis	Jojoba	6’ X 6’	screening & revegetate	low	none
Sophora secundiflora	Texas Mountain Laurel	8’ X 6’	fragrant & screening	low	none
Tecoma stans v. angustata	Arizona Yellow Bells	6’ X 6’	hummingbirds	moderate	none
Viguiera deltoidea	Golden Eye	3’ X 3’	revegetate	low	none
GROUNDCOVERS, VINES & PERENNIALS					
Acacia redolens	Trailing Acacia	1’ X 10’	bank & erosion control	low	none
Ambrosia deltoidea	Triangleleaf Bursage	1’ X 2’	natural landscape	low	none
Antigonon leptopus	Queen’s Wreath	15’ X 15’	vine	seasonal	none
Baileya multiradiata	Desert Marigold	1’ X 1’	year round blooms	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Bougainvillea spectabilis	Bougainvillea	spreading	accent	high	large
Chrysactinia mexicana	Damianita	2’ X 2’	Fragrant & accent	low	none
Convolvulus cneorum	Bush Morning Glory	2’ X 3’	attracts pollinators	low	none
Dalea greggii	Trailing Dalea	2’ X 8’	hardy cover & habitat	low	none
Gazania rigens	Trailing Gazania	8” X 18”		low	none
Glandularia species	Verbena species	1’ X 3’	attracts butterflies	low	none
Hymenoxys acaulis	Angelita Daisy	1’ X 1’	accent	low	none
Jasminum mesnyi	Primrose Jasmine	10’ X 6’	vine & informal screen	low	none
Lantana spp.	Trailing Lantana	1’ X 4’	attracts butterflies	low	none
Melampodium leucanthum	Blackfoot Daisy	1’ X 2’	fragrant & habitat	low	none
Merremia aurea	Yuca Vine	10’ X 10’	vine	seasonal	none
Myoporum parvifolium	Myoporum	8” X 6’	slope & erosion control	Low	none
Oenothera berlandieri	Mex. Evening Primrose		fragrant & habitat	low	none
Oenothera stubbei	Saltillo Primrose	18” X 4’	erosion control & habitat	low	none
Penstemon spp.	Penstemon varieties	2’ X 2’	attracts hummingbirds	low	none
Phacelia crenulata	Desert Bluebells	1’ X 1’	revegetate & habitat	low	none
Phacelia campanulana	California Bluebells	1’ X 1’	revegetate & habitat	low	none
Podranea ricasoliana	Pink Trumpet Vine	spreading	vine	seasonal	none
Psilostrophe cooperi	Paperflower	1’ X 2’	habitat	low	none
Ratibida columnaris	Mexican Hat	2’ X 1’	cut flower	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
Rosmarinus officinalis	Trailing Rosemary	2' X 4'	attracts pollinators	low	none
Ruellia peninsularis	Ruellia	3' X 3'	attracts butterflies	low	nonne
Salvia clevelandii	Chaparral Sage	4' X 4'	attracts hummingbirds	low	none
Salvia farinacea	Mealy Cup Sage	2' X 2'	attracts hummingbirds	low	none
Senna covesii	Desert Senna	18" X 18"	summer blooms	low	none
Sphaeralcea ambigua	Globe Mallow	3' X 3'	flowers & seeds	low	none
Teucrium chamaedrys	Creeping Germander	6" X 3'	fragrance	low	none
Wedelia trilobata	Yellow Dot	18" X 6'	accent	low	none
Zauschneria californica	Hummingbird Trumpet	1' X 2'	attracts hummingbirds	low	none
Zinnia acerosa	Desert Zinnia	6" X 12"		low	none
Zinna grandiflora	Prairie Zinnia	1' X 1'	attracts butterflies	low	none
FLOWERS and GRASSES (TURF)					
All turfs are considered high water use and therefore should be restricted in their use. Prefer limiting use to sport fields, small play areas and private backyards.					
Bouteloua curtipendula	Sideoats Grama	2' X 2'	ornamental grass & habitat	Low	none
Eschscholzia mexicana	Mexican Gold Poppy	1' X 1'	wildflower (reseeds)	low	none
Gaillardia pulchella	Blanket Flower	18" X 18"	summer blooms	low	none
Linum spp.	Red Flax & Blue Flax	2' X 2'	wildflower	low	none
Lupinus arizonicus	Lupine	3' X 3'	habitat & wildflowers	low	none
Muhlenbergia rigens	Deer Grass	4' X 4'	ornamental grass	low	none
Orthocarpus purpurascens	Owl's Clover	6" X 6"	wildflower	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
CACTUS and SUCCULENTS and ACCENT PLANTS					
Agave, various species				low	varies
Aloe, various species				low	varies
Asclepias subulata	Desert Milkweed	3’ X 3’	attracts butterflies	low	none
Brahea armta	Mexican Blue Palm	25’ X 10’	specimen/containers	low	small
Carnegiea gigantea	Saguaro	20’ X 10’	habitat	low	long
Dasylirion longissimum	Grass Tree	5’ X 5’	accent plant	low	none
Dasylirion wheeleri	Desert Spoon	4’ X 4’	accent plant	low	sawtooth
Echinocactus grusonii	Golden Barrel	2’ X 2’	accent plant	low	long
Echinocereus engelmannii	Hedgehog Cactus	1’ X 2’		low	long
Ferocactus acanthodes	Compass Barrel	2’ X 2’	naturalistic landscapes	low	long
Fouquieria splendens	Ocotillo	12’ X 10’	attracts hummingbirds	low	medium
Hesperaloe funifera	Giant Hesperaloe	5’ X 5’	attracts butterflies	low	none
Hesperaloe parviflora	Red Yucca	3’ X 5’	attracts hummingbirds	low	none
Opuntia, various species	Prickly Pear		food source	low	spiny
O. ficus-indica	Indian Fig	12’ X 18’	sculptural accent	low	none
O. basilaris	Beavertail Prickly Pear	1’ X 3’	habitat	low	small
O. engelmannii	Desert Prickly Pear	5’ X 8’	habitat	low	medium
O. santa-rita	Purple Prickly Pear	4’ X 5’	habitat	low	small
Phoenix dactylifera	Date Palm	60’ X 25’	accent & fruit	seasonal	sharp fronds
Washingtonia robusta	Mexican Fan Palm	75’ X 10’	accent	seasonal	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Yucca, various species					
Y. baccata	Banana Yucca	3’ X 5’	effective security plant	low	sharp tips
Y. brevifolia herbertii	Joshua Tree	15’ 10’	accent	low	sharp tips
Y. elata	Soaptree Yucca	10’ X 4’	accent	low	sharp tips

PLANNING AND ENGINEERING DESIGN STANDARDS

(PEDS)

SURPRISE
ARIZONA

August 2020

VOLUME 1: PLANNING DESIGN STANDARDS

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VOLUME 2: ENGINEERING DESIGN STANDARDS

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List of Abbreviations

ADA	Americans with Disabilities Act
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
A.R.S.	Arizona Revised Statutes
C of O	Certificate of Occupancy
EDS	Engineering Development Standards
FCDMC	Flood Control District of Maricopa County
FEMA	Federal Emergency Management Agency
LDO	Land Development Ordinances
MAG	Maricopa Association of Governments
MCDES	Maricopa County Department of Environmental Services
MCDOT	Maricopa County Department of Transportation
PEDs	Planning and Engineering Design Standards
SUDC	Surprise Unified Development Code

Introduction

The purpose of Volume One of the "Planning & Engineering Design Standards (PEDS) Manual" is to communicate to developers, architects, engineers, and other design professionals, the City's design standards and development expectations for the many and varied land uses in the City of Surprise. The Planning Design Standards are not intended to be viewed as the only solution, but as the baseline for the minimum design expectations necessary for development approval by the City. These design standards are preferred approaches, but alternative solutions that achieve expected protection of existing neighborhoods and the native desert setting may be proposed and considered. The intent is to ensure the creation of smartly designed, sustainable, compatible, quality development that enhances the livability and desirability of the City of Surprise.

The Standards identify key site design and architectural elements, streetscape, right-of-way and on-site landscaping, and connectivity and *multimodal* aspects that are important to the City while providing latitude for creative, innovative solutions to design proposals. The basic nature of these standards affords the necessary flexibility to permit creativity and innovation, which the City encourages, as new technologies, techniques, and products become available as well as to accommodate difficult or unusual site design situations. However, the following Planning Design Standards and all appendices herein are formally adopted in Chapter 107 of the Land Development Ordinance (LDO) and therefore have the full force and effect of law.

Some land uses will be more auto-centric than others, but in all cases an objective is to balance vehicular access with those of alternative modes such as pedestrians, bicyclists, transit/bus, and the potential for commuter/light rail in the future.

In addition to ensuring quality development, these Planning Design Standards are intended to implement the Surprise General Plan 2035 by:

- Increasing pedestrian and *multimodal* connectivity;
- Promoting energy efficient and environmentally sensitive designs;
- Creating sustainably built environments;
- Providing quality development with compatibility between developments;
- Diversifying development in a manner that enhances the value of property;
- Encouraging distinctive development that reinforces Surprise's "sense of place".

The following Volume One Planning Design Standards work in conjunction with the Engineering Design Standards found in Volume Two to constitute the Surprise PEDS Manual. Words or phrases expressed using *italics* shall assume the meaning as ascribed in Appendix A herein.

CHAPTER 1: STANDARD REQUIREMENTS FOR ALL LAND USES

1.1 GENERAL LAND/SITE DESIGN & DEVELOPMENT

A. Existing features of the site, including but not limited to, rock outcroppings, steep slopes, washes, and views of the surrounding mountains shall be incorporated in the planning and design of the development to shape the identity and character of both the development and the open space component to the greatest extent possible.

B. Sustainable development practices shall be followed when planning the design of any proposed project regardless of it physical location within the City of Surprise. In addition, the provisions and standards found in **Chapter 5: Environmentally Sensitive Lands Standards** herein and the regulations in **Article2, Chapter 104** of the LDO shall be followed for any proposed project on property that possesses *cultural resources* and/or *environmentally sensitive features*.

C. If a development parcel is located adjacent to or encompasses areas identified as open space, trails and *greenways*, in either the Surprise General Plan or Parks and Recreation Master Plan, the development shall be required to provide for and incorporate those areas into the overall site design and the open space network of the development. Conservation of these identified community-wide open spaces, trails, and *greenways* and construction of the improvement within them shall be the responsibility of the developer. These larger community-wide trails shall be platted as a "multi-use trail easement" and stated to allow for public use and access, with maintenance responsibilities falling onto the Homeowners' Association, unless those open spaces, trails and *greenways* have been dedicated to and accepted by the City of Surprise into the City park system for maintenance responsibilities.

D. The open space component of a new development shall tie to the City's broader *multimodal* system, open space system including washes and wildlife corridors, and ultimately to the hierarchy of parks planned throughout the City.

E. The development's pedestrian circulation and open space system shall provide for connections to adjacent developments to enhance continuous *multimodal* circulation and open space throughout the City of Surprise. These spaces shall be large enough to also serve as a buffer between incompatible land uses, different development densities, and different development patterns.

F. All new dry utilities must be placed underground; with the exception of wireless facilities (WF) and 69 KV or larger electric lines.

1.2 OPEN SPACE DESIGN

A. The amount of required open space for any development is based on the zoning of the property and further outlined in Chapter 104 and **Chapter 106** in the LDO. Different kinds of open space serve different needs (for example, ecological, recreational, entertainment, and culture). While some open space may serve more than one need, there is a particular need to retain natural desert open space and corridors.

B. The required open space shall be designed, located, and oriented to provide:

1. Conservation of the Sonoran Desert vegetation and *wildlife habitats* that are important to native wildlife species and create a "sense of place" for the community.

2. Individual development parcels that provide opportunities for hiking, cycling and equestrian trails that are safely and conveniently located and provide bicycle racks, benches and/or other amenities that promote their use.

3. Physical connections to adjacent parcels that enhance a structure of continuous open space, streetscape, and a *multimodal* circulation system.

4. Preservation and/or enhancement of watersheds, major drainage ways, *wildlife corridors*, *cultural resources,* and natural desert open space view corridors to the surrounding mountains.

5. Include on-site storm water retention facilities as an integral component and useable amenity of the open space network. Plan the site's drainage to lead runoff away from active use areas, pathways, and parking areas while utilizing a Low Impact Design.

6 Wherever and whenever possible, orient open space for optimal solar access to extend its use throughout the year. Provide user-friendly gathering and rest areas that are shaded, landscaped, lighted, and furnished to invite and encourage use by the public.

7. Maintain appropriate buffer areas and/or setbacks between wildlife corridors and developed areas to mitigate edge effects on wildlife corridors.

8. Maintain connectivity to other community and regional parks, trails and greenspaces.

9. Provide for wildlife permeability within open space corridors and across restrictive sections of major roadways and other potential barriers.

C. In addition to the undeveloped buffer areas, the preserved *environmentally sensitive features*, and/or *cultural resources* the following amenities and infrastructure designs are examples of areas/elements that can also be calculated as open space for the purpose of meeting the open space requirements for the specific property:

1. Existing desert washes and *wildlife corridors* if:

   a. they are incorporated into the overall open space design of the development in their historical unaltered location; and

   b. the buffer area adjacent to such wash/corridor is improved with a multi-use pathway for bicycles, pedestrians and if applicable equestrians.

2. Landscaped or hardscaped plazas, landscaped tracts at ends of residential blocks, gathering and sitting areas designed to provide an open park like atmosphere;

3. Community gardens;

4. Protected bike lanes within the right-of-way and multi-use pathways outside of the right-of-way (not sidewalks associated with the street right-of-way);

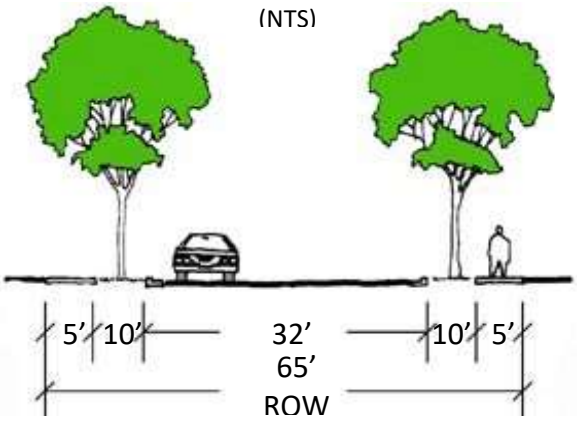
5. Retention facilities if:

   a. given a "natural" character (not ditch-like in design) by terracing, berming, and contouring to naturalize and enhance the aesthetics of the basin and constructed with/of natural materials (not concrete lined); and

   b. landscaped and connected into the overall open space system in a manner that could accommodate recreational facilities such as tot lots, play fields, and other amenities provided all amenities are located above the 100-year, 2 hour storm event level.

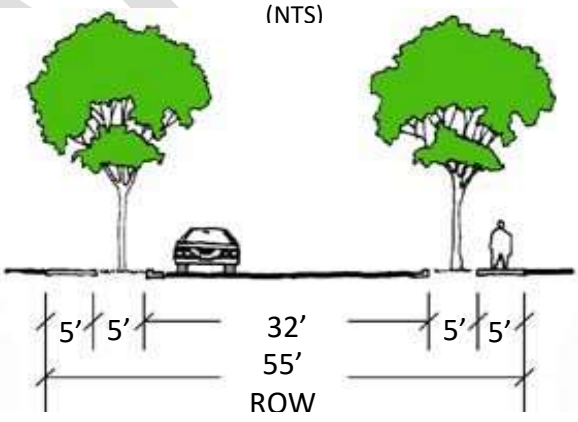
6. If the developer chooses to utilize the Alternative Local Street cross section (see **Illustration 1A)** in lieu of the Standard Local Street cross section (see **Illustration 1B**) then the entire *landscape strip* may be calculated as open space even though the *landscape strip* is within the public right-of-way. The excess *landscape strip* must exceed standards by a minimum of five (5) foot for open space credit to apply.

ILLUSTRATION 1A
(NTS)



Alternative Local Street: Provides a 10 foot landscape strip rather than the standard 5 foot; the entire landscape strip (10 feet) may be calculated as open space.

ILLUSTRATION 1B
(NTS)



Standard Local Street: Provides a 5 foot landscape strip.

1.3 CIRCULATION DESIGN FOR COMPLETE STREETS

A. ROADWAY DESIGN.

1. The road system shall be designed to permit the safe, efficient and orderly movement of vehicles, bicycles and pedestrians; meet the needs of present and future populations served; have a simple and logical pattern; respect natural features and topography, promotes street life and activity and; present an attractive streetscape.

2. There shall be no development of roadways built to freeway, highway, or parkway standards unless and until that roadway and roadway alignment is shown in the Roadway Systems Element of the Surprise General Plan 2035 as a proposed roadway; unless an amendment to the General Plan is approved.

3. All proposed public rights-of-way shall be developed with interconnected streets, sidewalks and pathways to accommodate multimodal travel and comply with ADA requirements. Travel modes may include but are not limited to, vehicles, Neighborhood Electric Vehicles (NEV), pedestrians, bicycles, public transit and, where appropriate equestrian.

4. All parkway, arterial and collector streets shall be designed with on-street bicycle lanes, a minimum of five feet (5') in width.

   a. Parkway and arterial streets shall provide protected bike lanes.

   b. The collector streets may use striping to delineate the on-street bike lane.

5. All parkway, arterial and collector streets shall separate vehicular traffic from pedestrian uses by utilizing detached sidewalks that create a *landscape strip*. The *landscape strip* should be designed to allow landscape plantings, including but not limited to street trees, and in a manner that utilizes LID design for watering. Plant material should not impact either the drive lane or the sidewalk with low overhanging branches or root upheaval. For arterial and collector streets the sidewalk typically will run parallel to the street with the *landscape strip* between curb and sidewalk being between eight feet to sixteen feet (8'-16-) in width for the specific type of street per the Engineering Design Standards outlined in Volume Two.

6. Collector streets shall be designed to the street widths necessary to serve the planned intensity and density of land uses, the number of average daily trips generated by those uses, at the appropriate service level acceptable to City, as demonstrated by the required Traffic Impact Analysis (TIA).

7. All existing and proposed street alignments and connections shall provide direct routes to local destinations such as neighborhood commercial centers, schools, parks and other common destinations in order to: encourage greater use of streets by pedestrians and cyclists; eliminate concentration of traffic on just a few roads; and avoid the use of overly circuitous street layouts and cul-de-sacs, unless physical site constraints require modifications to the connections and alignments.

8. The intersection of two (2) streets shall be at right angles with one another; except when constrained by topography and approved by the City Engineer.

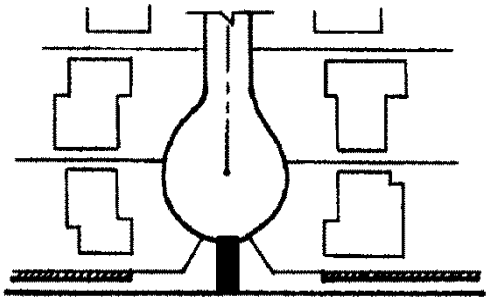
B. CUL-DE-SAC DESIGN.

1. Cul-de-sacs may be permitted only to accommodate specific site conditions, such as natural topographical constraints when all other design

options have been exhausted.

2. When adjacent to a parkway, arterial, collector road, community trail, or regional drainage corridor a cul-de-sac shall be designed so that the bulb end provides a minimum thirty foot (30') wide landscaped open space tract that directly connects the cul-de-sac to the parkway, arterial, collector road, trail, or corridor. This open space area shall be designed with a paved walkway/trail to allow pedestrian and bicycle access to the larger community circulation and/or open space systems. (see **Illustration 3**).

ILLUSTRATION 3



Arterial &/or Collector Street
Community Trail, or
Regional Drainage Corridor

Provide landscaped open space and connectivity by opening the subdivision perimeter fence at the end of abutting interior cul-de-sac streets.

C. MULTIMODAL/MULTI-USE PATHWAY DESIGN.

1. The pedestrian network in all new development shall consist of both:

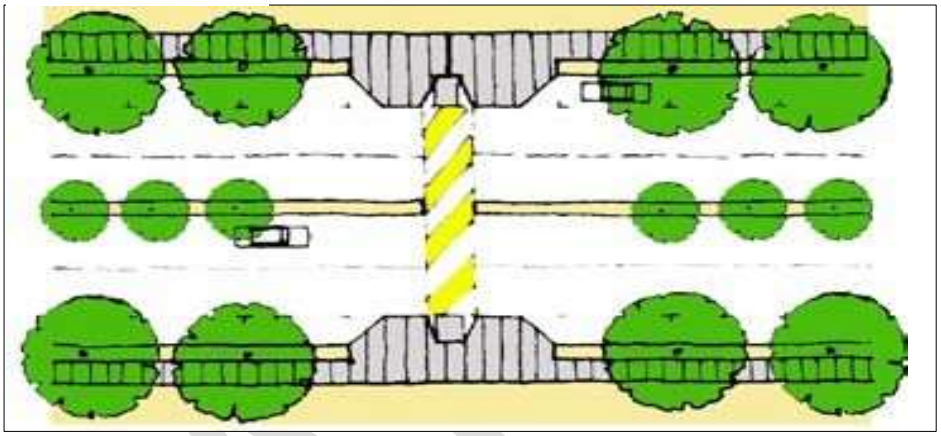
   a. Sidewalks that provide continuous direct routes and connections internally to neighborhood parks and externally to adjacent arterial and collector streets to provide safe routes to places where people want to go - including homes, schools, parks, recreation, *third places* and neighborhood shopping areas, public services, and transit.

   b. Multi-use pathways (associated with the open space and greenways) designed to accommodate pedestrians and cyclists, and where necessary equestrians, that are an integral component of the open space system and that facilitates the interconnectivity to different neighborhoods, adjacent developments, and the larger community and regional pathways and open space systems.

2. Developments that either contain, are adjacent to, or can directly connect to a Community and/or Regional Trail/Path, as shown in the Surprise Parks and Recreation Master Plan, shall both design the pedestrian and bicycle trails/paths as outlined and provide the minimum easements as delineated in the said Master Plan. Equestrian trails shall also be considered; where appropriate and adjacent to the "Regional Path" as shown on the Surprise General Plan 2035 and the Surprise Parks and Recreation Master Plan.

3. Where multi-use pathways cross arterial streets, the pathway shall comply with ADA requirements and include safety measures; such as bicycle and pedestrian activated signals, median refuges, warning signs for both motor vehicles and pathway users, special street markings or striping, and barrier posts ("bollards") that are spaced widely enough to permit cyclists and wheelchair user's easy passage but prevent motor vehicle access (see **Illustration 4** below).

ILLUSTRATION 4



Special markings shall be required where pathways intersect major arterial streets.

4. A multi-use pathway shall be designed to be, at a minimum, ten feet (10') wide for two-way pedestrian and bicycle movements. The pathway may be either a single or split pathway provided there is a minimum hard-surface width of five feet (5') for pedestrians and five feet (5') for bicycles and skaters.

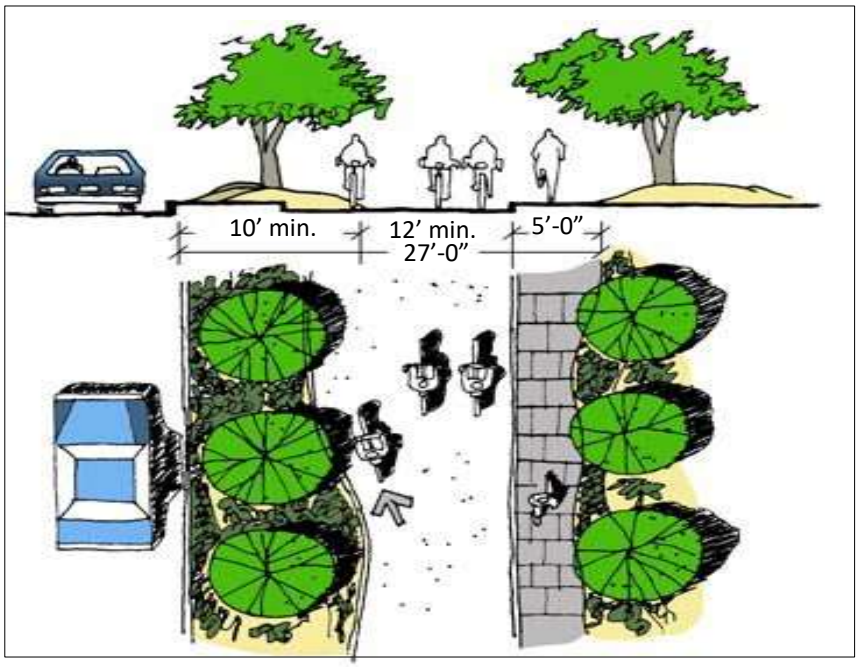
5. Multi-use pathways shall be placed within tracts or public use easements and located outside of the public right-of-way to provide pedestrians, cyclists and other users' alternate means of moving throughout the development via a complete and continuous separation from vehicular traffic. Where the pathway is adjacent and parallel to the roadway a minimum ten foot (10') wide landscaped *landscape strip* shall be provided to separate the street from the pathway (see **Illustration 5** below).

6. Where pathway corridors are also designed for use by equestrians, the minimum width of the total pathway right-of-way, including a minimum landscaped area of ten feet (10') shall be twenty-seven feet (27'), with the additional five foot (5') portion devoted to equestrians constructed of a softer surface consisting of stabilized decomposed granite, aground gravel or other compatible dense, yet soft material (see **Illustration 5** below).

7. Under-crossings for multi-use pathways shall be well lit and designed to provide a minimum width of fourteen feet (14') and a minimum overhead clearance of ten feet (10').

8. When equestrian paths are designed they may require additional standards.

ILLUSTRATION 5



Illustrative Example: Multi-use pathway parallel to a roadway.

1.4 LANDSCAPE AND STREETSCAPE DESIGN

A. GENERAL LANDSCAPE STANDARDS.

1. Xeriscape methods and low water use drought tolerant plants shall be utilized within all public rights-of-way, public spaces, and landscaped areas associated with all surface parking lots; the plant list for such public spaces is **Appendix B** in PEDS Volume 1 herein. The City's preferred plant list for homeowners associations/property associations for private development open spaces, buffer areas, and the individual homeowner's on-site use is **Appendix C** in PEDS Volume 1 herein.

2. All landscape areas shall be supplied with an efficient irrigation system. Introduced landscape materials shall consist primarily of durable species tolerant of soil compaction, and requiring minimal irrigation, fertilization and maintenance (see **Appendix B** and **Appendix C** herein).

3. The landscape design should strive to visually create a larger massing of a single color groundcover and/or shrub with an accent color rather than being seen as a number of individual plants.

4. The use of turf shall not be allowed in any public rights-of-way. The use of natural turf outside of the public rights-of-ways shall be limited to twenty percent (20%) of the total landscaped area; excluding artificial turf and designated turf areas on a single family lot, when required in retention basin, within public parks, and golf courses.

5. Retain native trees and cacti and incorporate it into the project unless determined to be unsalvageable by a licensed landscape professional (refer to **Chapter 107** of the LDO).

6. Any landscape design in the City of Surprise shall comply with the provisions of the city's Water Conservation regulations (**Chapter 58; Article VII**) and in particular the specific limitations regarding the use, design, location and installation of fountains or water features.

7. Landscaping maintenance of the center medians within those streets classified as Parkways and Arterial streets shall be the responsibility of the City of Surprise after acceptance.

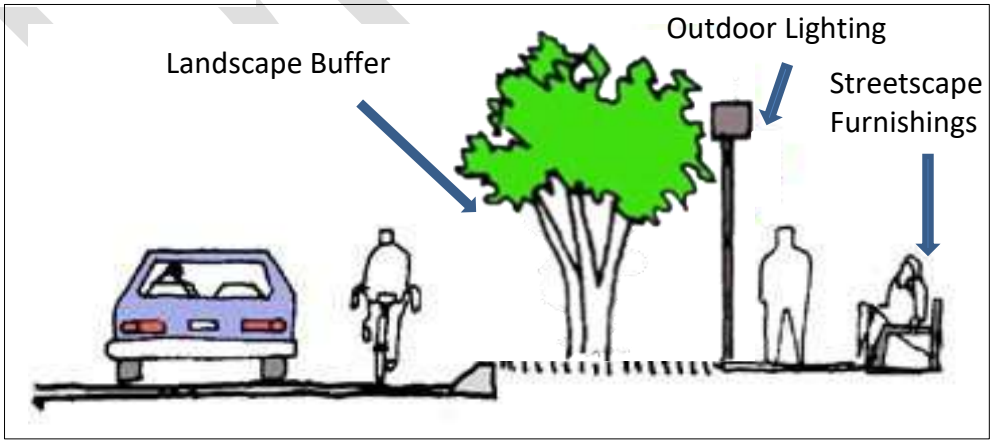
8. Additional standards for Neighborhood Developments, Commerce, Office and Mixed-Use Developments, and Business Park and Industrial Developments may be found respectively in **Articles 2, 3 and 4** herein. Additionally, adherence to the landscape regulations in **Chapter 107** of the **LDO** shall be required.

B. GENERAL STREETSCAPE STANDARDS.

1. Landscape medians within the right-of-way shall utilize "Low Impact Development" methods to capture first flush stormwater, refer to **Section 1.6** herein and meet the requirements of Volume Two Engineering Design Standards; Chapter 8 of the PEDS.

2. To encourage high pedestrian usage and reinforce the community's *multimodal* circulation system the street rights-of-way shall incorporate landscaping, outdoor lighting and, when determined by the City, appropriate streetscape furnishings along arterial and collector roadways. (See **Illustration 6** below).

ILLUSTRATION 6



Landscaping between street and detached sidewalks create an intimate streetscape.

1.5 BUILDING FORM AND ARCHITECTURE

A. High quality "stylized" or "theme" architecture is permitted, as long as it incorporates the architecture of the area and maintains continuity with the community as a whole.

B. Buildings shall be designed and oriented to minimize heat gain and maximize pedestrian shade opportunities; including materials, elements, and details (i.e. extended or cantilevered roof eaves, thickened building walls, awnings).

C. The City strongly encourages all new buildings to meet Leadership in Energy and Environment Design (LEED) certification standards; and building sites and development in general to utilize Low Impact Development (LID) technologies.

D. All exterior elevations shall provide architectural detailing (360° architecture) by the consistent use of color, patterning, finish, type and application of materials, and the wrapping of materials around onto adjoining walls of the structure to provide design continuity and a finished appearance to the building.

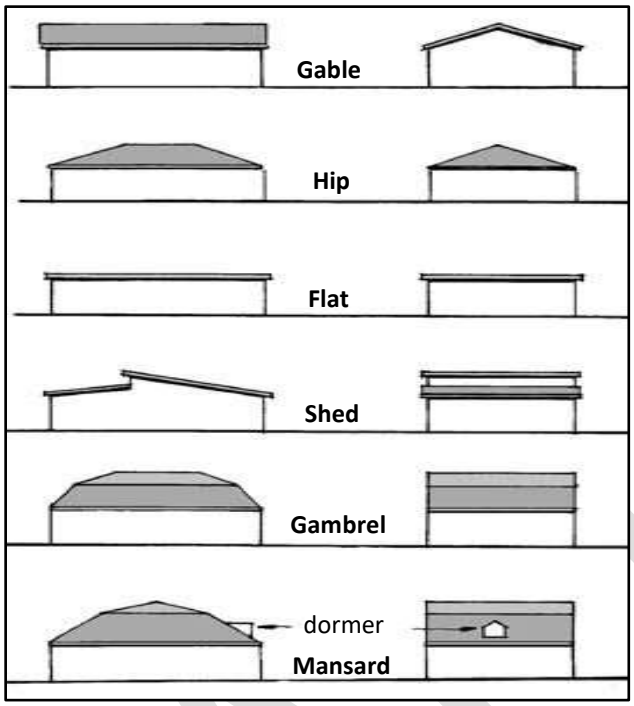
E. Flat monolithic facades and large unvaried rooflines are not permitted. The building façade shall utilize recessed entryways and windows, groupings of windows, horizontal and vertical offsets and reveals and three-dimensional detail between surface planes, to create shadow lines and break up long continuous flat wall areas.

F. The use of architectural features such as three-dimensional cornice treatments, enclosed parapet wall forms and details, and overhanging eaves shall be utilized to enhance the architectural character of the roof.

G. Solar panels located on rooftops shall be placed consistent with roof pitch, and sized to appear as an integral part of the overall roof design. The solar panels may be used as the roof structure itself (e.g. carports, shade structures, patio covers).

H. When appropriate to the style of a building, a variety or combination of roof forms are preferred as a means of adding visual interest and diversity to the City's "roof horizon" and to avoid the "sameness" of roof styles. The more typical roof types are gable, hip, flat, shed, gambrel and mansard style roofs as shown in **Illustration 7**.

ILLUSTRATION 7

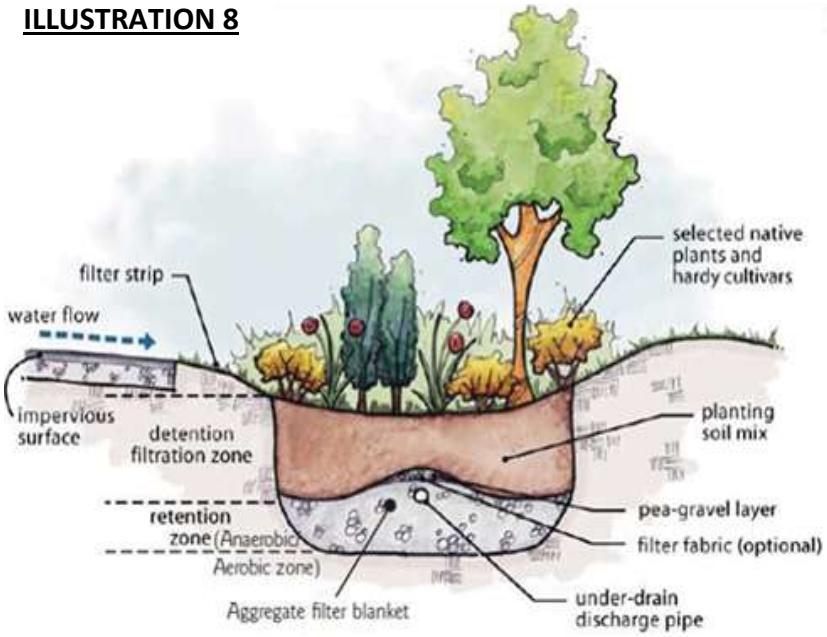


1.6 GRADING & DRAINAGE DESIGN AND FLOODWAYS

A. Washes and drainage patterns shall be maintained in their historic location. Mass grading of parcels over five acres (5 ac) in size shall require additional approval from the Community Development Director; phased grading of a development is the preferred method. The grading concept for any site shall be a balanced cut and fill on the site to limit damage to the natural topography; except in the case of approved and permitted mining activities.

B. Low Impact Development (LID) construction methods to meet the needs of both on-site and off-site stormwater drainage , such as but not limited to, bioswales, bioretention planters, and strategic use of water features shall be implemented to both improve stormwater management and enhance the built environment of the development (see **Illustration 8** below).

ILLUSTRATION 8

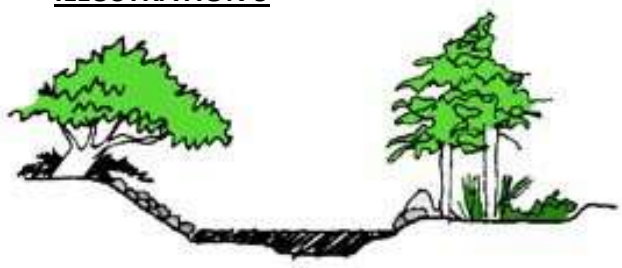


C. In the event that retention basins are required, per the drainage analysis, they shall be designed as landscape features rather than large, plain depressions in the site. To the greatest extent possible, basins shall be located and oriented to connect with other open space areas of the development which in turn connect physically, functionally, and visually with open space in adjoining developments/sites.

D. Design any water harvesting approaches to supplement landscape irrigation, reduce stormwater discharge, and downsize retention facilities.

E. Where a floodway or wash traverses a development site, the floodway or wash shall be set aside as open space and improved using environmentally sensitive channel and bank stabilization techniques to provide a naturally appearing restored, enhanced and stabilized floodway or wash. Under no circumstance shall the channel or sides of a floodway or wash be paved over in concrete or similar material (see **Illustration 9**).

ILLUSTRATION 9



1.7 UTILITY SCREENING

A. Above ground ancillary equipment appurtenant to underground utility facilities, such as surface-mounted transformers, electrical panel boxes, pull boxes, pedestal cabinets, service terminals, telephone splice enclosures, or other similar above-ground facilities normally associated with an underground utility system shall be located to the rear of the project site, not located along a street frontage or at the entrance to a development, and shall be decoratively screened from public view.

B. All residential development site utility equipment including, but not limited to, HVAC equipment, electrical transformers, electrical and telephone panels and switch gear, generators, irrigation backflow prevention devices, natural gas pressure regulators, fire distribution valves, and cable and junction boxes shall be located so as not to be visible from any street, pedestrian way or other public right-of-way. Said utility equipment shall be screened from public view, located within the building structure, or placed underground.

C. Utility equipment serving large commercial, office, industrial, and civic/institutional buildings shall be located in a utility room(s) within the building structure; or within a separate structure attached to the principal building on the site.

D. When undergrounding utility support equipment is determined not to be feasible due to a pre-existing land condition such as a high water table or excessive bedrock, or a technical or space limitation problem within the building itself would preclude an indoor location; the utility support equipment shall be located away from abutting streets and screened by one or a combination of the following techniques:

1. An architectural barrier such as a decorative, masonry wall enclosure consisting of sound absorbent and sound scattering wall materials; and/or

2. Landscaped earthen berm having a minimum height of four feet that incorporates planting having a minimum height at maturity of six feet (6’), measured from the top of the berm. Berm landscaping shall consist of a combination of dense shrubbery and clusters of trees having a minimum three-inch caliper trunk measurement; and/or

3. Incorporated/decorated as public art.

4. Chain-link and/or slat fencing shall not be used to satisfy screening requirements for utility and service areas.

1.8 ART IN PUBLIC PLACES

A. To encourage the creation of more attractive, unique, and aesthetically pleasing social spaces, artwork is encouraged to be integrated into public and private spaces within all types of development and accessible to the public via different multi-use pathway systems.

B. Public art invites participation and interaction, adds local meaning, and reinforces the unique character and "sense of place" when incorporated into a development's outdoor spaces, such as but not limited to plazas and park spaces, subdivision entries, or public facilities. Public art that is designed for public use may be credited as open space if it can be demonstrated that the art meets one of the following options:

1. Building features and enhancements such as customized bike racks, gates, benches, water features, or pedestrian shade screens, which are unique to the development;

2. Landscape art enhancements such as walkways, bridges, formal plantings or art features within a community garden;

3. *Murals* or mosaics covering walls, floors, and walk ways. Non-signage *murals* may be painted or constructed with a variety of materials, including the use of imbedded and nontraditional materials;

4. Sculptures, which can be freestanding, wall-supported or suspended, kinetic, electronic, and made of endurable materials;

5. Community art projects resulting in tangible artwork, such as community non-signage *murals*, sculptures, or kiosks;

6. Spaces for regular artistic expression of performance art as well as the creation of artwork which is experienced by an audience;

7. Community accents at intersections, at neighborhood gathering locations, or in neighborhood parks such as statues, animal feeders or baths, artistic variations on standard street furniture elements, water features, or place markers;

8. Temporary artistic installations in social settings or permanent location(s) in which artwork is regularly relocated or rotated to;

9. Artistic design on utility boxes or screening of the utility boxes.

C. Art work on or adjacent to roadways and public right-of-way shall not be in conflict with traffic safety, such as covering signs or reducing sight visibility.

CHAPTER 2: NEIGHBORHOOD LAND USES

2.1 GENERAL LAND/SITE DESIGN & DEVELOPMENT

A. The development as a whole shall be interconnected through the open space, landscaping, and its visual design characteristics.

B. Large development projects proposed for phased development shall be planned and designed so that each phase is complete and can exist independently in terms of the functionality of its infrastructure and circulation systems as well as the drainage.

C. When allowed, high-density residential and non-residential development shall be located within mixed-uses projects or adjacent to, and oriented toward, the arterial and/or collector roadways, transit/bus services, and the community's pedestrian circulation and trail system.

D. New residential development shall be designed so that lots that abut or front adjacent to an arterial or collector roadway take access from an internal local residential street or a frontage local roadway, or from an alley.

E. Subdivision and street layout, lot orientation, and home design and siting, shall utilize the most advantageous solar orientation, climatic, and environmental conditions of the development site.

F. Design of accessory elements such as group mailboxes and security huts and gates, transit/bus shelters, and streetscape shall be compatible with the architectural style and/or unique theme of the development or neighborhood in which it is located.

G. Group mailboxes for new residential development shall not be freestanding, but shall be placed into an architectural form that is strategically and conveniently located throughout the development as a part of the development's pedestrian open space and circulation system and providing amenities such as illumination, shade trees and benches for neighbor interaction. All group mailboxes shall be accessible to persons with disabilities.

H. Multi-family & Non-residential Buildings in the Neighborhood Land Use: Trash and refuse collection containers shall be screened from public view with a six foot (6') decorative masonry wall enclosure and located such that they are not the visual focal point of a driveway or cannot be viewed from a public street. Those sites that can only locate the refuse containers in a highly visible location shall provide screening the containers with decorative latching gates at the opening to the enclosure.

I. To reduce the impact of the garage dominant architecture garage doors shall not comprise more than forty-five percent (45%) of the total linear frontage of the residential front elevation.

7. Up to ten percent (10%) of home products with additional options such as but not limited to front porch or patio that comprises of the remaining front elevation, or balconies within a subdivision may have garage doors up to

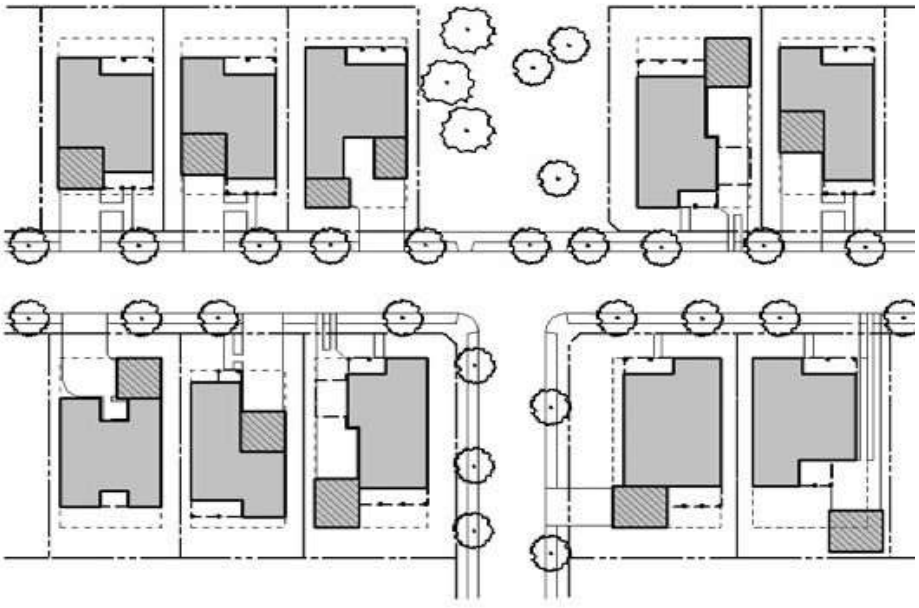
sixty percent (60%) of the total linear frontage of the residential front elevation.

8. For 3-car garages, garage proportions may be up to fifty percent (50%) on homes greater than forty feet (40') in width. Stalls will be separated such that no more than two (2) stalls are in the same vertical plane or adjacent to each other (i.e., provide a two-foot (2') offset with architectural trim for at least one (1) stall or provide one (1) stall in a side-entry or tandem configuration).

J. To create a more diverse street character all residential lots shall incorporate a combination of the following designs methods for site layout (see **Illustration 10** below):

1. A five-foot (10') stagger in the building front setbacks between adjacent lots;
2. A five foot (5') recess for the garage;
3. A porte-cochere;
4. A detached garage located in the rear of the lot utilizing a single car drive adjacent to the home;
5. A side-entry garage product as part of a variety of floor plans; or
6. Decorative pavers or other driveway treatments to the menu of options.
7. Garage doors with windows, raised or recessed panels, architectural trim, and/or single garage doors
8. Architectural treatment above the garage such as windows or balconies

ILLUSTRATION 10



K. Traditional Neighborhood Developments (TND) shall provide blended density residential neighborhoods that provide for and encourage different housing types (i.e. detached single-family, attached-product, duplex, townhome, shared court, shared cluster, mansion apartment, and live-work) and varying lot sizes within the same residential development parcel(s) and preferably on the same street rather than separating housing types by whole neighborhoods.

2.2 OPEN SPACE DESIGN AND PUBLIC PLACES

A. GENERAL RESIDENTIAL OPEN SPACE DESIGN.

1. Multi-use pathways and equestrian trails uses as a secondary mode of travel and access throughout neighborhoods and the City shall be landscaped, provided with low level lighting for safety, and furnished to provide rest areas at transition points and other locations as determined to accommodate the specific needs of the community.

2. In the event retention basins are required, per the drainage analysis, they shall be developed as an amenity and landscaped to accommodate active and/or passive recreation. They shall be located and oriented to connect with other open space areas of the development which in turn connect either physically, functionally, and/or visually with open space in adjoining developments.

3. Retention basins with a bottom area in excess of one-half acre (1/2ac), shall be designed, turfed in a manner to accommodate a play/sport field rather than being landscaped with decomposed granite. All structures and play equipment are to be located above the 100-year, 2hour high water line and an ADA path provided to the structures.

4. When naturally occurring desert washes are present, the development's drainage shall be designed to allow storm water retention to meander through the development as a greenbelt, simulating natural filtration lands, as opposed to constructing a series of separate and distinct basins.

5. Open space shall be evenly distributed and connected throughout the development and constructed in conjunction with the approved phasing plan; if applicable. Exceptions may be made, if approved by the Community Development Director, when natural washes and floodways account for the required open space acreage.

6. The development shall provide a backbone network of both on-street bike lanes as well as off-street multi-use pathways to accommodate all levels of cyclists and to provide a safe alternative *multimodal* system, such as open space lots used to break up block lengths. On-street bike lanes will not be calculated as part of the required open space unless they are "protected bike lanes". Off-street multi-use pathways may be calculated as open space.

7. Golf courses shall be designed to be watered using effluent water, reclaimed water, or a renewable water source.

8. Open space within and throughout any residential development shall be designed so that a playground, ball field, public gathering area, multi-use pathway, bicycle trail, picnic ramada, or community garden is provided within one thousand three hundred and twenty feet (1,320') of every residential lot.

    a. Access to park and open space areas shall be direct from a street or a cul-de-sac that abuts or extends into the open space; or through designated access between lots.

    b. The access shall be of adequate width so that the placement of adjoining homes and fences will not create a long, narrow, "tunnel" effect. Such accesses shall be a minimum of thirty feet (30') in width.

    c. View fences may be constructed along the adjacent private property lines along the access. The maximum height of a view fence along an access shall not exceed four feet (4').

    d. Adjoining houses are encouraged to provide windows facing the access to provide a sense that the space is being observed and is not isolated.

B. AMENITIES AND RECREATION SINGLE-, TWO, AND THREE-FAMILY DEVELOPMENTS

1. Public open space shall conform to the goals and standards of the parks and trails master plan.

2. In addition to those amenities and infrastructure designs outlined in **Sec 1.2.C.** herein, the following are further examples of what may be calculated as open space for the purpose of meeting the required open space, for the specific residential zoning district, as designated in Chapter **106** of the **LDO**:

    Less than twenty (20) units = One (1) amenity

    Twenty (20) to one hundred (100) units = Three (3) or more amenities

    One hundred (100) to one hundred eighty (180) units = Four (4) or more amenities

    One hundred eighty (180) to two hundred sixty (260) units = Five (5) or more amenities

    Two hundred sixty (260) units or larger = Six (6) amenities plus a large community amenity listed below.

3. The following amenity options shall encourage and enhance development within a neighborhood, such as but not limited to

a. Ramada with BBQ and seating area.

b. Tot lot minimum three thousand (3,000) square feet with three (3) pieces of play equipment.

c. Regulation size volleyball court.

d. Concrete multi-use court sixty (60) feet by sixty (60) feet minimum.

e. Lighted, regulation size tennis courts, racquetball courts, and/or pickle ball court.

f. Weight room.

g. Putting green.

h. Large amenities that may include but are not limited to a *community facility* for social, entertainment, athletic, or recreational *uses* or community pool as required is **Section 2.2.B.4** below

4. All new residential developments shall provide a large amenity when either of the two (2) following criteria are met:

   a. The residential development is 80 gross acres or more with a gross density equal to or greater than 3.25 Dwelling Units per Acre (DU/Ac); or,

   b. Any residential development that contains more than 10% the following lot categories.

      (1) R-1 zoning districts: Lot Categories A

      (2) R-2 zoning districts: Lot Categories A and B

      (3) TND-R zoning districts: Lot Categories A and B

      (4) Other zoning district: lots with a *required rear yard* that are less than fifty feet (50') wide and contain a required rear yard area of less than one thousand square feet (1,000 sf)

5. When provided, a large amenity shall meet the following criteria:

   a. Sited strategically such to place the greatest number of dwelling units possible within one-quarter (¼) mile radius of the facility.

   b. The size of the large amenity shall be based on the number of occupants as determined by the following formula:

      (Number of dwelling units within the residential development) X (3.8 persons per dwelling unit) X (10%)

   c. A Community Pool Amenity included as a large amenity shall include a deck area as required by the Building Code in effect at

the time of permit application, based on the number of occupants as determined using the formula stated in Paragraph E.3.ii above.

d. The large amenity shall include semi-public restrooms, the number and configuration of which meeting the requirements as stated in the Building Code in effect at the time of permit application.

e. The large amenity shall include water fountains, the number and configuration of which meeting the requirements as stated in the Building Code at the time of permit application.

f. The large amenity shall include not less than one (1) shade structure.

g. The large amenity shall include parking in accordance with the Community Facility requirement as stated in Chapter 108 of the Land Development Ordinance.

h. The swimming pool shall be equipped with a pool barrier as required by the Maricopa County Environmental Services Department.

i. The Community Pool Amenity shall meet all applicable accessibility requirements as stated in the Surprise Municipal Code.

C. ADDITIONAL OPEN SPACE DESIGN STANDARDS FOR TND DEVELOPMENTS.

1. The TND development shall be integrated through a combination of multi-use pathways, *greenways*, parks, community and civic facilities, public plazas, and compact open space areas that relate to a compact multimodal system. Landscaping shall be strategically planned and provide for urban plazas and parks in selected areas to encourage pedestrian movement and as well as shaded respites.

2. The open space component of any TND shall include some sort of appropriate active outdoor recreational facilities for adults, such as lighted athletic fields, full court basketball courts, tennis courts, volleyball courts, and other similar recreational facilities along with facilities for children such as tot lots.

3. Increase the pedestrian experience at the street level as well as in plazas, parks, and recreational open space by providing site amenities such as shade, street furniture, special paving treatments, bikeways, and strategic use of accent and flowering plants to provide both comfort and safety for the residents.

4. In order to create user-friendly spaces and to encourage use by the public, the required open space and other public spaces shall incorporate all of the following features to the maximum extent feasible:

   a. A sense of privacy for outdoor seating areas with landscaping, topography, and/or buildings and structures;

   b. A consistent palette of streetscape furnishings, such as lighting, benches, landscaping, shelter, and trash receptacles;

   c. Locate streetscape furnishings in clusters or nodes throughout the entire TND – not just within the "neighborhood core"; and

   d. Use creative surfaces and materials for walking paths and gathering and seating areas that are appropriate for their respective functions. Stabilized porous hardscape, sustainable materials, and water harvesting should be considered.

5. Open spaces and outdoor public spaces shall be located to:

   a. Be shared by adjoining buildings, when within the same site or complex;

   b. Visually and/or physically connect with open space on adjacent properties and to the community-wide open space network;

   c. Connect the entrances of multiple buildings on a site to provide meeting and gathering spaces;

   d. Orient towards views of activities or natural features that provide visual interest;

   e. Provide a connection between the TND and the greater City of Surprises open space system.

6. Each parcel within the TND, developed as a residential subdivision, shall provide both bicycle and pedestrian connections to the TND's backbone open space network.

D. OPEN SPACE DESIGN STANDARDS for MULTI-FAMILY DEVELOPMENTS.

1. Multi-family developments shall create on-site open space that follow the guidelines outlined in **Section 2.2.B.5**. above, and at a ratio per dwelling unit as outlined in **Chapter 106** of the LDO. This open space shall include surfacing that is ADA compliant, safety features such as lighting, and amenities that enable residents to use and enjoy the open space.

2. Common open space that is accessible to all dwelling units via sidewalks or local paths shall provide:

    a. Features to make the area more functional and enjoyable for a range of users including, but not limited to, paths or walkable areas, landscaping, seating, lighting, play structures, sports courts or other pedestrian amenities. Potential noise issues related to hard court sports such as basketball, tennis and handball may require additional design considerations.

    b. Common space shall be separated from ground level windows, streets, service areas and parking lots with landscaping, view fence, or other treatments as approved by the Community Development Director or Designee that enhance safety and privacy for both the common open space and the dwelling units.

    c. The space shall be oriented to maximize afternoon shade, unless site conditions such as topography warrant waiving this requirement by the Community Development Director or Designee.

3. Rooftop decks and terraces may be considered as common open space provided these areas contain amenities such as seating areas, barbeques, fireplaces, recreational space, shade structures and landscaping as an integral component of the areas.

4. On-site indoor recreational areas may be considered as open space if the area(s) are designed for communal use by all residents and provide space for entertaining, gathering, or fitness activities.

2.3 CIRCULATION DESIGN

A. GENERAL STANDARDS.

1. All proposed residential developments shall provide a Traffic Impact Analysis (TIA) for the proposed development. If as a result of the traffic analysis, it is determined that a new roadway(s) at the Arterial classification level is necessary to serve the development a General Plan Amendment may be required. The TIA shall be used to determine projected traffic volumes, desired operating speeds, projected traffic types, projected construction phasing, and determine the need for new traffic signals.

2. Local streets shall utilize either the alternative or standard cross section (see **Illustration #1A** and **#1B** herein).

3. Collector streets in new residential developments shall be located to minimize cut-through vehicular traffic on the local streets and through the neighborhoods, by utilizing a modified grid street pattern.

4. Streets classified as a Parkway, Arterial, and/or Collector shall utilize the City's most updated cross section with a detached sidewalk design with the resulting *landscape strip*.

B. ROADWAY DESIGN.

1. Within the hierarchy of existing and proposed two-way City streets, a minimum unobstructed pavement width of twenty feet (20'), with a minimum vertical clearance of fifteen feet (15') shall be provided for fire apparatus access. The unobstructed pavement width for fire apparatus may be reduced to a minimum of twelve feet (12') in developments where median divided streets exist.

2. New collector streets within a residential development may require a landscaped multi-use path in addition to the on-street bicycle lane to connect with a regional trail system.

3. The periodic and strategic placement of traffic calming devices, including roundabouts, chicanes, bulb-outs, and narrow landscaped medians on residential collector and residential local streets shall be encouraged throughout the City to help slow traffic, discourage through neighborhood traffic, and to create a unique sense of place. Traffic calming devices shall not narrow the travel way. Additional traffic calming measures may be approved by the City Engineer on a case-by-case basis.

4. To achieve the community's desire for developing pedestrian-friendly streets, all new residential development shall provide for the use of staggered or off-set parking bays, parking "one-side-only", or other alternative means of accommodating on-street parking of vehicles on local streets; required in any TND residential neighborhood where a shared court, shared cluster, or a 5-pack housing product is approved (see **Illustration 11**).

ILLUSTRATION 11

Chicane with parking alternating from side to side.

5. The layout and design of alleys, local streets, cul-de-sacs, and traffic calming devices shall accommodate the width and turning radius necessary for city sanitation and emergency vehicle use (refer to the Volume Two of the PEDS for specifics).

6. Block lengths for "local streets" within the interior of a residential development may range from four hundred to eight hundred feet (400' – 800') in length, with the optimal length being closer to six hundred feet (600') in length in order to create a walkable scale and exterior access points at safe distances from the arterial/collector intersections.

C ADDITIONAL DESIGN REQUIREMENTS FOR TND DEVELOPMENTS.

1. If the area of the TND is traversed by or adjacent to a proposed collector or arterial street as shown on the Surprise General Plan, the TND shall be designed to continue the street(s) and dedicate the necessary right-of-way within the TND boundaries to accommodate said street unless otherwise approved through a General Plan Amendment approved by the City Council.

2. The collector streets and rights-of-way shall be shared between vehicles (moving and parked), bicycles, and pedestrians and shall be shaded by rows of trees to slow traffic and improve the environment for pedestrians and bicycles. Design conflict between vehicular and pedestrian movement shall be decided in favor of the pedestrian.

3. Different pavement surfaces may be considered, if found to be acceptable by the City Engineer, in order to enhance pedestrian and bicycle safety and comfort or to create an aesthetically pleasing or unique environment.

4. The creation of new dead-end streets shall not be permitted in a TND Development. All thoroughfares shall terminate at other thoroughfares, forming a network. Internal thoroughfares shall connect wherever possible to thoroughfares on adjacent sites or developments, except when constrained by topography.

D. ACCESS.

1. A subdivision development may be permitted “limited access” points to the surrounding collector and arterial streets at a quarter mile (¼) spacing and “full access” points on the half mile (½) and full mile spacing; where supported by the Traffic Impact Analysis (TIA) and accepted by the City Traffic Engineer.

2. The use of alleys with rear garage configurations and entry access points may be considered as a means of vehicular and pedestrian access to a residential lot.

3. Alleys shall be paved, well-lit and designed for pedestrian connectivity and view-fencing rather than solid fencing along the rear property lines to further enhance the safety, appearance, and use of the alley.

4. All lots shall have frontage onto a fully improved publicly dedicated or approved private street developed to “local street” standards and may have access by either the public/private local street or an alley refer to the Volume Two of the PEDS for specifics.

E. CIRCULATION AUXILIARY AMENITIES.

1. The planning and design of public transit and school bus stops within a master planned development and individual neighborhoods shall be considered and should at a minimum include an improved hardscaped space of adequate size for adults and/or children to safely gather and sit.

2. Private "pedestrian-only" walking paths (excluding cyclists, skateboarders, wheelchair, and equestrian uses) are allowed, when approval by the Community Development Director. Where permitted these paths shall:

   a. Be a minimum of five feet (5') in width; have a maximum grade of five percent (5%) ; be constructed of concrete, asphalt, permeable paving surface, or stabilized decomposed granite material.

   b. Shall be lighted for pedestrian safety, in accordance with a City approved photometrics plan, and with pedestrian scaled (overhead or bollard style) light fixtures that are compatible with the character of the area, and spaced appropriately to provide an even, non-glare light level along the course of the walking path.

3. Parking Lots: Multi-family and non-residential buildings within the neighborhood land use shall be designed in an "up front" manner that locates buildings along the street frontage and the required off-street parking spaces located in the rear or to the side of the structures. Parking may also be designed beneath the structures to avoid interrupting the rhythm of the established streetscape and to make land on site available for gardens and courtyards rather than for surface parking. Parking lots shall be landscaped in accordance with **Chapter 107** of the LDO and utilizing the plant palette list in **Appendix C** herein.

2.4 LANDSCAPE AND STREETSCAPE DESIGN

A. LANDSCAPE STANDARDS.

1. Private Lots:

   a. Individual residential lots shall be designed to minimize the use of turf, including artificial turf, per Chapter 107 of the LDO. Low water use/drought tolerant landscaping materials, as listed in **Appendix C** of these PEDS, is preferred overall.

   b. Drip irrigation systems or automatic sprinkler systems shall be required and rain sensors should be utilized.

2. Common Area(s):

   a. Landscaping along sidewalks, multi-use pathways, and "pedestrian-only" walking paths shall include continuous clusters of low-maintenance, drought-resistant, plant materials that require minimum maintenance and can survive without extensive irrigation; and are deep-rooting species that do not extend into the walkway and cause root up-lift.

   b. Trees shall be located along both the sidewalk system and the multi-use pathway system and clustered to form shade canopies when adjacent to seating and rest areas.

c. Where possible, seating areas should be integrated into the common area and open space landscaping in the form of retaining walls, planter walls and other such landscape architectural treatments; with limited use of freestanding benches.

d. Different tree species and amenities (i.e. seating, shade, lighting, and materials etc.) shall be used to enhance common area design and to define and identify the hierarchy of the open space areas within and throughout a development.

e. Irrigation, construction, and plan standards shall adhere to those outlined in **Chapter 107** of the **LDO** and **Appendix D** herein. The specific plant palette utilized shall adhere to City of Surprise Right-of-Way Plant List included herein as **Appendix B** and to the "Low Water Use/Drought Tolerant Plant List" included herein as **Appendix C** of these PEDS.

B. STREETSCAPE STANDARDS.

1. General Requirements for All Development:

a. Landscape within the public right-of-way, public areas, and common areas of a development shall adhere to the plant palette listed in **Appendix B** herein.

b. Landscaping within the street rights-of-way (medians and *landscape strip*) shall include both street trees and shrubs and/or cacti. Local streets shall plant street trees within the *landscape strip* to provide shade to both the street and sidewalk. Arterial and collector streets shall plant street trees and shrubs and/or cacti within the center medians and street trees and shrubs (not cacti) within the *landscape strip*. Landscape planting shall not obscure traffic signs or the sight visibility.

c. If the City of Surprise has a designated arterial street "street tree" for the geographic area of the city in which the development is located then the development shall incorporate that street tree into their landscape palette.

d. Different tree species shall be used to enhance streetscape design and to define and identify the hierarchy of streets within and throughout a development.

e. Lighting at the sidewalk along "local streets" and in common areas shall maintain a pedestrian scale to aid in the walkability of the development with a total maximum height (pole and light fixture) of twelve feet (12').

f. Lighting along all roadways shall comply with the Outdoor Lighting regulations in **Chapter 107** of the LDO per the specific Lighting Zone in which the development is located.

2. Additional Streetscape Requirements for TND Developments.

a. The TND Development Plan shall identify the specific species of tree(s) that will be planted as the collector and local "street trees" along with a key that identifies which species will be used for the main thoroughfares and the different development parcels throughout the TND development.

b. Within the "public frontages" the prescribed types of public planting shall be drought tolerant and shall be called out in the application and Development Plan for the TND as part of the uniqueness and texture of the TND. Likewise, public lighting shall conform to the outdoor light regulations in **Chapter 107** of the **LDO** but the specific design of the lighting standards and fixtures may be unique to the TND.

2.5 BUILDING FORM AND ARCHITECTURE

A. GENERAL STANDARDS.

1. All homes shall provide an architecturally integrated, open enhanced entryways designed to engage with the streetscape of at least 60 square feet (60sf). No dimension shall be less than 6 feet in depth as measured from the dwelling façade to the interior edge of the supporting post. Enhanced entryway designs include but are not limited to covered front porches, patios, and plazas.

2. Mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and designed to appear as an integral part of the building, with the exception of solar panels. The mechanical equipment screening shall be included in the overall allowed building height. Mechanical equipment shall be treated to be non-reflective. Electrical meters, service components, and SES cabinets should be screened from public view or designed to appear as an integral part of the building and painted to match the building.

3. Ground mounted mechanical equipment and building projections (other than roof eaves) shall not be located within the required "unobstructed" side yard setback and shall be screened from public view (see **Chapter 106** of the LDO for setback information).

4. All exterior elevations of a residential structure shall provide architectural detailing (360° architecture); not just the front elevation. Window embellishments shall be provided on all homes by adding architectural features which enhance the elevations, e.g. greater variation of window design, different window styles, recesses, surrounds, shutters, lintels and sills, gabled roof features over the windows, etc. Such features must be added to all of the exterior elevations of the structure, including second story windows, to provide interest and relief. In the case of residential construction this material wrap/wainscot shall continue along the side elevations to the point where it meets the side lot perimeter fence return.

5. The City strongly encourages new residential neighborhoods to meet Leadership in Energy and Environmental Design (LEED-ND) certification standards and building sites to utilize Low Impact Development (LID) technologies.

6. Production homebuilders shall provide a minimum of four (4) floor plans, with a minimum of three (3) distinctly different elevations for each floor plan; including a variety of products with front entries facing the street. Additionally, a minimum of three (3) roof pitches/styles/materials/colors, three (3) styles of garage doors, three (3) window designs/embellishments, and three (3) exterior paint colors shall be required as a standard feature to further promote visual interest and architectural diversity.

7. The developer/production home builder shall be responsible for assuring that no two similar rear building elevations and rooflines are allowed on adjacent lots that back to a public right-of-way.

8. The developer/production home builder shall be responsible for assuring that not more than two (2) of the same building elevations are on adjacent lots and on lots directly across the street from one another. For clarification, lots "directly across the street" are those where at least fifty one percent (51%) of the lot's street frontage is directly across from the street frontage of the lot on the opposite side of the street (measured by extending sided lot lines to the street centerline).

9. Corner lots shall be limited to a single story home and the side elevation fronting the side street shall be fully embellished and the roofline varied.

B. ATTACHED SINGLE-FAMILY DWELLINGS.

1. All buildings shall have their main entrance fronting onto either a street or oriented towards and arranged around a shared open space courtyard.

2. A variety of rooflines styles and heights shall be used as well as building projections and recesses. The structures shall have stylistic architectural design elements on all exposes building elevations. The architecture shall incorporate style-appropriate and varied door and window openings and architectural embellishments. A variety of front and rear porch configurations shall be used to provide functional yet varied architectural integrity to the buildings.

3. Brick, integral colored block, or slump block shall be used (not painted concrete masonry units) for buildings using masonry as the primary material.

4. Flat asphalt shingles shall not be permitted. Clay tile, concrete tile, architectural asphalt shingles, cementitious or fiberglass tiles, and standing-seam or corrugated metal shall be the permitted roofing material. Alternative roofing products shall require city approval.

C. MULTI-FAMILY DWELLINGS.

1. The residential development shall have a building frontage presence to the neighborhood street rather than a parking lot frontage. The front entry shall include a walkway to the street or surrounding neighborhood.

2. All multi-story buildings shall have unified and stylistic design elements present on all sides of the building(s). A variety of massing and building heights and stepping rooflines are strongly encouraged. Straight rooflines should be minimized by using offsets, differing heights, stepping, or different orientations to produce variety within a development.

3. A color palette of earth tones shall be the predominate color used. The use of accent colors is encouraged to provide a festive and lively streetscape. Accent color, different from the dominate wall color, should, at a minimum, be used to accent entryways and special architectural features of a building.

4. Reflective building materials are prohibited; except for the normal use of glass windows. Metallic surfaces, including roof materials, shall be treated to be non-reflective.

5. The use of metal or corrugated metal as the primary building material is prohibited; it may however be used as an architectural accent or decorative element.

6. All buildings shall harmonize architecturally with the residential character of the neighborhood as determined by the Community Development Director or designee.

D. MODEL HOME COMPLEX

1. Guidelines*:*

   a. Seventy-five percent of plans constructed in a model home complex must be "non-garage dominant".

   b. If any approved product line consists of one plan that provides a significantly recessed garage, that plan must be modeled.

   c. If any approved product line consists of two or more plans that provide a significantly recessed garage, the number of those plans modeled will be determined by the city manager or designee.

2 Site standards*:*

   a. Site design shall comply Sec 106-10.29 of the LDO.

   b. Landscapes for model home complexes shall comply with the PEDS and Chapter 107 of the LDO.

3. A "zero-step" entrance shall be required for all model homes within the City of Surprise.

a. "Zero-step" entry shall have a floor or landing on each side of the primary entrance door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level, except for exterior landings, which are permitted to have a slope not to exceed 0.25 units vertical in 12 units horizontal (two percent). Thresholds for such doors shall not exceed one-half-inch in height, and thresholds with changes in level greater than one-quarter-inch shall be beveled with a slope not greater than one unit vertical in units horizontal.

b. The city manager or designee may waive the requirement "zero-step" entry if it is found that it would prove to be cost prohibitive. Such cases however, the builder must still provide a zero-step entry into at least one model home and an ADA compliant pathway to all models.

c. Model signage. All new model homes and sales areas shall include signage that read - "Ask Us About Accessibility Options."

d. Education. An educational DVD shall be available to sales staff and potential homebuyers regarding the benefits of visitability.

E. ADDITIONAL BUILDING TYPES in TND DEVELOPMENTS.

1. In order to create neighborhoods of blended densities; to provide a broad choice of housing types for lifelong livability and a diversity of needs; to promote walkability; and to enable appropriately-scaled and well-designed compatible land uses it is important for the TND to consider building types other than what might traditionally be expected.

2. The following four (4) types of housing products shall only be permitted in conjunction with the Traditional Neighborhood Development (TND) Zoning District (see **Chapter 106**, **Article 4** of the LDO):

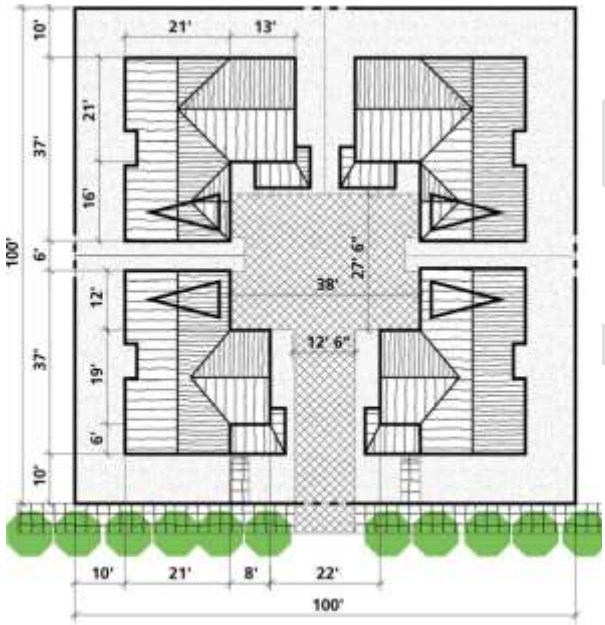
a. Shared Court: This design consists of a 4-5 of detached dwellings arranged to a defined shared auto court that is typically perpendicular to the street; known as 4-packs and 5-packs (see **Illustration 12** below).

b. Shared Cluster: The shared cluster takes the place of a private rear or front yard and becomes an important community-enhancing element for this product type. This product type is appropriately scaled to fit four (4) units on an individual lot of ten thousand square feet (10,000 sf) or more. (See also **Illustration 13** below).

c. Mansion Apartment: This building type consists of a minimum of 4 side-by-side and/or stacked dwelling units with one shared entry. This product type has all the appearance of a medium-large sized single-family home and is appropriately scaled to fit on an individual lot size of ten thousand square feet (10,000 sf) or more (see **Illustration 14** below).

d. Rowhouse/Townhouse: This building type is a small to medium sized, typically attached structure that consists of 4–8 rowhouses placed side-by-side that front to a public street. This type may be appropriate in a location that transitions from a traditional detached single-family neighborhood into a higher density, mixed use, neighborhood core (TND), or a transit-oriented development (TOD) land use with the appropriate scale to fit on an individual lot of four thousand square feet (4,000 sf) or more. (See **Illustration 15** below).

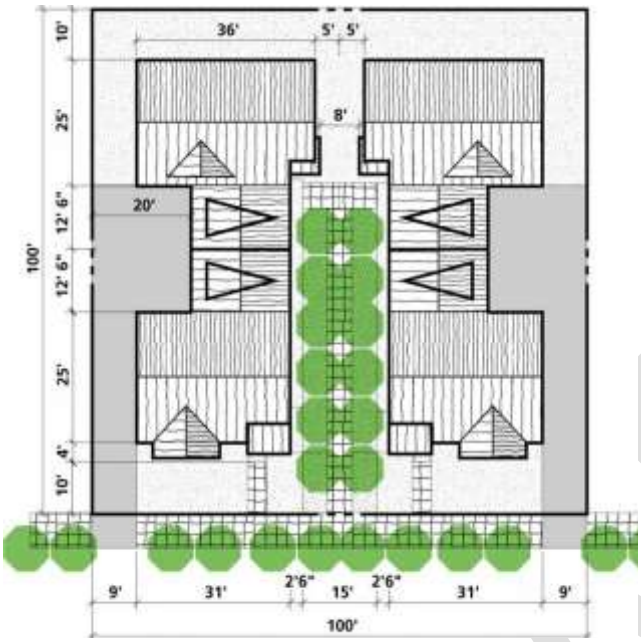
ILLUSTRATION 12 - Shared Court



Specifics: (minimum 10,000 SF lot)

- 4-5 attached or detached units
- (1,600–1,850 square foot each) possible.
- Two units face the public street, gives appearance of two single-family homes from street.
- As shown would require condominium ownership. With modifications, may also be possible with units on separate lots oriented toward the shared court as a private street tract.
- Arranged around a shared driveway with special paving that provides both vehicle and pedestrian access. Single access point allows up to 4 off-street parking spaces.

ILLUSTRATION 13 - Shared Cluster



Specifics: (minimum 10,000 SF lot)

- 4 units (1,500–1,950 square foot each)
- Arranged around a common green, either attached or detached.
- Intended to allow fee simple ownership, with common green held as a common tract.
- Massing of front units reflects neighborhood patterns of houses on 50' wide lots.

ILLUSTRATION 14 - Mansion Apartment

Specifics: (minimum 10,000 SF lot)

- Min of 4 units (1,000-1,400 sq. ft. each; not including garages)
- One shared main entrance area off front porch. Unit division from within structure.
- Street frontage designed to reflect appearance and scale of a single-dwelling house to blend with neighborhood context.

ILLUSTRATION 15 – Row House/Townhome

Specifics: (minimum 4,000 SF lot/DU)

- Consists of 4–8 rowhouses placed side-by-side that
- Front to a public street
- Transitions from a traditional detached single-family neighborhood into a higher

E. NON-RESIDENTIAL BUILDINGS IN THE NEIGHBORHOOD LAND USE.

1. Non-residential structures shall be designed to create transitions to the surrounding residential development with the size, massing and height of the structure relating to the prevailing scale of the adjacent residential neighborhood.

2. Taller buildings shall be made to appear less imposing by stair-stepping building heights and rooflines back from the property lines, breaking up the mass of the building, providing a broader open space/landscape area as foreground for the building, and providing a building frontage presence to the neighborhood street rather than a parking lot frontage.

3. Assembly Uses may be required to provide a traffic study, depending on the specific location.

2.6 EDGE TREATMENT AND TRANSITIONS

A. EDGE TREATMENT.

1. No transition or buffer area shall be required if a new development that directly adjoins/abuts an established residential neighborhood is of the same density and provides lot sizes that are approximately the same size as the existing neighborhood.

2. New residential development proposed for the edge of the urbanized area of the City shall buffer and transition from existing adjacent agricultural or rural developments. Any increased density shall be designed inward onto the new project and/or along the shared urbanized edge.

   a. Buffer the existing established neighborhood using a landscaped open space tract that is a minimum of one-hundred feet (100') in width along the perimeter between the two neighborhoods (see **Illustration 17** below); and

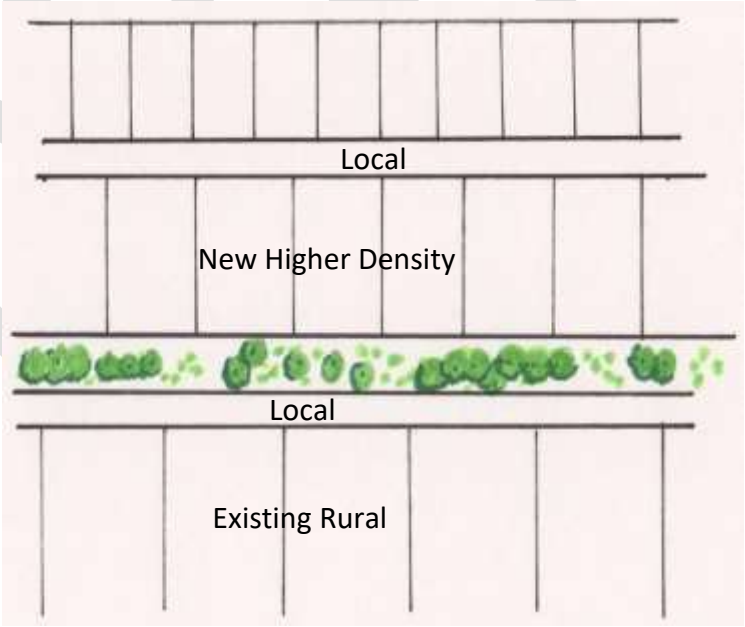
   b. The open space buffer area shall be designed in a manner to connect to the open space, pedestrian and trail systems within the new development and in a manner that will further accommodate future connections from other adjoining developments as urbanization occurs.

   c. The buffer area shall be preserved for perpetuity as either a tract or easement, allows public use and access, and calculated as part of the development's open space requirement.

ILLUSTRATION 17

3. When a new development of higher density proposes to only be separated from an established lower density or rural residential neighborhood by a "residential local" street the new development shall provide a landscaped buffer, a minimum of fifty feet (50') in width, adjacent to the shared local street plus a single row of lots, which are no smaller than one-half the average lot size of the adjacent existing rural neighborhood lots (see **illustration 18** below).

ILLUSTRATION 18



4. New residential developments that directly adjoin /abut a planned or existing open space, trails and *greenways* area, as designated in the Surprise General Plan or Parks and Recreation Master Plan, shall utilize

an open style of perimeter fencing rather than a solid or view obscuring perimeter wall along that specific edge of the development.

5. New residential development proposed in those areas that abuts one of the three (3) Employment Character Areas of the City, as shown in the General Plan, shall be responsible for providing the buffer and transition area from the employment character area and not the other way around. The use of appropriate landscaped buffering, lot orientation, stepped building heights, and street design should be utilized in close proximity to these designated areas.

B. ADDITIONAL EDGE TREATMENT STANDARDS for TND DEVELOPMENTS.

1. The exterior boundaries for a TND development shall be designed in a manner that provides fifty percent (50%) of the frontages to the greater community that are something other than typical privacy perimeter walls, including but not limited to, open space areas, civic space land uses, mixed-use and multi-family land uses.

2. Residential development parcels, within the TND development, that have home sites backing onto the exterior boundaries of the TND development along public rights-of-way shall provide both a decorative privacy wall and then a landscaped open space tract, a minimum of thirty feet (30') in width, outward towards the greater community along said exterior boundary.

3. If residential lots are platted directly adjacent to an existing residential neighborhood or a vested but undeveloped residential parcel (outside the TND) then those TND lots shall provide a lot size not less than one-half (½) the size of the existing or proposed adjacent lots as applied to the lot line that borders the existing or vested residential parcel(s) except if lots are separated by a street or open space buffer area that is at least one hundred feet (100') in depth.

C. TRANSITIONS.

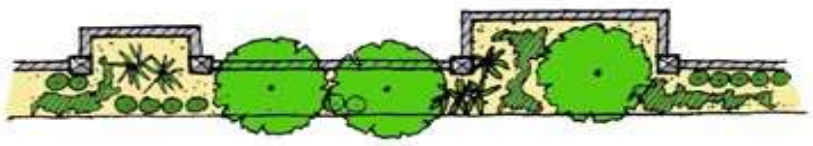
1. Buildings located along the exterior edge of new master plan projects, adjacent to undeveloped land or existing rural development shall either maintain a low profile in terms of height, bulk and massing or increase the width of the buffer area between the two (2) different intensities of use by a distance equal to the proposed building height.

2. Grade changes from the off-site grades along the perimeter of a new subdivision shall be minimized and lots in the new subdivision shall not be more than eighteen inches (18") above or below the abutting lots in the existing subdivision. If a greater grade change is desired or necessary, there shall be a buffer or a gradual grade transition on the new subdivision in order to minimize the change at the property line.

D. SCREENING.

1. In order to promote a more "visually friendly" and open community, the construction of long, unbroken and monotonous expanses of six foot (6') high, solid fences and stucco walls around the perimeter of new single and/or multi-family residential developments is strongly discouraged. If perimeter walls are provided, they shall be designed to include: changes in the surface plane of the wall or fence; variable heights; articulated recesses and wall offsets sufficient in depth to permit landscaped pockets for the planting of significant clusters of mature trees and shrubbery. (See **Illustration 19** below)

ILLUSTRATION 19



2. Walls and fences shall be kept as low as possible and be designed to blend with the site's architecture through the use of similar materials and colors.

2.7 RESIDENTIAL SOLID WASTE GUIDELINES

A. GENERAL STANDARDS.

1. All solid waste collection routes shall meet engineering design criteria (street width and turning radii).

2. Residential refuse/recycle collection. Solid waste collection vehicles require free and clear access to street right of way and clear curbside access to residential solid waste containers placed out for service on designated day of collection. In addition, solid waste collection vehicles require collection routes shall be designed so that collection vehicles can safely access and lift containers without obstruction. (ground or aerial).

3. Solid waste vehicles require 44' – 0" outside turning radius and 28' – 6" inside turning radius. (see detail)

4. Solid waste collection vehicles are approximately 30'-0" long and can weigh up to 29 tons when fully loaded. Collection routes must be engineered to support collection vehicles.

5. To maintain the safety of the site, solid waste vehicles shall not be required to back up more than 50 feet when or after servicing a trash/recycle container.

6. The collection route must be designed such that, collection vehicles shall travel through a site without back tracking or making u-turns.

7. No building, awning, or fixed structure projections shall be allowed in the route of the solid waste collection vehicle. Residential collection requires a minimum overhead clearance of 16 feet from the right of way, and a minimum of 2 feet behind the collection container and/ or sidewalk, is required along the route curb line.

8. Routes shall be clear of all obstructions at the curb, to include walls, overhead wires, awnings, and other fixed objects.

9. Private streets must have an area for collection without obstruction.

10. Private streets must be designed to withstand the weight of 37 cubic yard collection vehicles (approx. 29 tons).

11. Gated subdivisions must supply the solid waste department with a gate code and three remotes at the time of installation. Exit only gates will be wired for automatic opening.

12. Street width requirements for on street parking:

    a. Under 30' width shall have no parking either side

    b. 30' width-no parking on one side as signed. Developers will coordinate with solid waste and engineering to determine which side may have parking.

    d. 32'- no parking in front of barrel.

13. Developments with more than two (2) abutting lots of less than fifty-feet (50') wide shall be signed "no parking on trash days"

B. CLUSTER HOMES, SHARED DRIVEWAYS, AND DEADEND ALLEYS

1. Each unit must have a predetermined location for a minimum of two containers (trash and recycle) per unit (2/du). Containers shall have a designated location on the street with a permanent marking on the curbing identifying address or unit number. Show all container locations, with addresses on site plan, for visibility triangle, refer to latest version of engineering and design standards.

2. Designated container location shall be signed "no parking on trash days". There should be 15' of space from the start of the no parking area to the first container. Containers should have a minimum 78" spacing center to center of container. There should be 15' of space from the last container to the end of the no parking area.

3. Placement designations will not be located near cluster mailboxes.

4. The required use of identified locations should be included in the homeowners conditions covenants, and restrictions.

5. Designated container locations will also be used for bulk collection for each unit.

CHAPTER 3: COMMERCE, OFFICE, AND MIXED USE LAND USES

3.1 GENERAL LAND/SITE DESIGN AND DEVELOPMENT

A. GENERAL BUILDING SITE DESIGN.

1. Limited residential land uses may be permitted in the Commerce and Office Character Areas as shown in the General Plan; in which case development patterns shall provide for higher street connectivity, smaller block lengths, and improved transit options. When developed, residential land uses must be zoned mixed-use (MU), high density residential (R-3), or be part of a TND development, and located along and oriented toward a proposed or existing collector or arterial corridor where direct access to transit is available or will be provided over time.

2. The project design, including the building location and orientation, shall incorporate and benefit from the desirable local elements (e.g. winter sun, mountain views, and even stormwater for irrigation) and to deflect unwanted elements (e.g. noise, summer sun) regardless if the development is a conventional single structure building, freestanding as "pad" sites and/or "in-line" buildings within a commercial center, outdoor recreational facilities, or parking structures.

3. Building(s) shall be designed in a manner to take advantage of the connection to the greater community open space system. Appropriate linkages (i.e. double building frontages, outdoor seating and dining spaces, walkways, common landscape areas, plazas, and unfenced property lines) shall be considered to further encourage a *multimodal* connection to the site and the use of the public open spaces as a transitional element.

4. Community/regional commercial development, office, institutional, mixed-use, and civic/cultural land uses shall be located adjacent to and oriented toward major arterials, public transportation routes, and the community's *multimodal* circulation system when applicable.

5. The building(s) shall be visually if not physically linked to both the on-site parking lot as well as to the public street by way of a designated walkway to safely and conveniently move pedestrians as they use the development. These pedestrian connections shall provide relief from the sun through the use of shade trees, arbors and other shade techniques that may prove acceptable to the City. These pedestrian connections may be constructed using a type of permeable pavement.

6. A corner building shall have a strong frontage "presence" at the setback lines for each street. This "presence" requirement may be accomplished through angled or sculpted building corners, providing an open plaza, outdoor patios, display (not storage) areas, and seating areas that further encourage and add to the pedestrian environment at the street (see photo examples below).

7. Undeveloped pad sites/phases of a development that have been disturbed in any manner shall be required to install dustproof ground cover ahead of the construction phase schedule to prevent the intrusion of unwanted dust or blowing debris from the site/lot.

B. MULTIPLE BUILDINGS SITE DESIGN.

1. When a development has multiple buildings (e.g. office complexes, commercial centers, mixed-use/residential etc.) the buildings shall be designed as groups or integrated clusters rather than designing them in-line, as stand-alone buildings, or pad sites. The way these buildings are grouped or clustered should further define and create an outdoor room of open space for either active or passive uses, including but not limited to, plazas, courtyards, gathering areas. The resulting open space area should allow for extended shop fronts, outdoor dining, and entertainment areas at the edges of this open space/plaza area.

2. All large scale retail centers and commercial office centers shall provide a pedestrian oriented design with sidewalks, seating, trees, lighting, and pedestrian scale signage. At least one outdoor gathering space/open space, that provides amenities, including but not limited to, seating, shade, lighting, and heating for year-round use, shall be provided for every one hundred and fifty thousand (150,000 sf) of developed floor space or fraction thereof.

3. As a center of pedestrian activity, plazas in multiple building commercial, office, and mixed-use developments shall provide adequate seating in the form of benches or low seating walls in addition to any seating areas that may be provided in association with dining areas.

4. Plazas, including their entrances and exits, shall be illuminated in a manner that facilitates natural surveillance opportunities and discourage unsafe activities. All lighting in plazas shall adhere to the lighting standards in **Chapter 107** of the LDO.

C. ADDITIONAL STANDARDS for TND DEVELOPMENTS

1. The commercial development within the TND shall be designed with interior oriented parcels for the development of a "neighborhood core" to first serve the TND and secondly serve the wider community. The neighborhood core is intended for smaller scale pedestrian oriented retail, service, mixed-use, and public facility/civic space uses that provide opportunities to create *third places* and serve the daily needs of the residents within the TND development.

2. The neighborhood core and other commercial parcels shall be integrated into the TND by providing:

   a. prevalent pedestrian connections to the TND pathway system and adjacent residential parcels; and

   b. gathering spaces and outdoor areas that connect the commercial spaces to the open space network and the TND pathway system (other than sidewalks along the street system) of the TND; and

   c. compact design and spatial organization of the commercial buildings that are walkable and inviting by providing seating and shade; and

   d. *multimodal* use of right-of-ways and incorporation of streetscape and amenities that enhance the pedestrian activity level of the street; and

e. vehicular connection internal to the TND that does not require access via an arterial street outside of the TND development.

3. As part of a mixed use development, residential uses are encouraged as a vertically integrated use within commercial buildings both within the residential neighborhoods and in the neighborhood core setting.

4. The horizontal integration of different and mixed land uses, particularly within the neighborhood core, shall be compact and interconnected through the pedestrian space; utilizing the hardscape area between uses and buildings for extended shop fronts, outdoor dining, entertainment and outdoor gathering areas, information kiosks, mobile carts, and other street related activities.

5. Live/Work units (occupant owned business) are encouraged when allowed.

D. SCREENING.

1. Trash and refuse collection containers shall be screened with a six (6) foot decorative masonry wall. Trash and refuse containers shall be located such that they are not the visual focal point of a driveway or parking area, or cannot be viewed from a public street. Projects which provide on-site daily management and maintenance personnel (i.e. service stations and convenience markets), and those sites that can only locate the refuse containers in a highly visible location shall provide decorative latching gates, for screening the containers, at the opening to the enclosure.

2. Equipment such as, but not limited to, vending machines, collection bins, newsstands, and shopping cart corrals shall be placed in an area designed for their use. These uses shall be screened and situated in a manner so as not to block vehicular or pedestrian traffic, reduce any required parking, block the sidewalk, or become a focal point for the development.

3. Outside storage areas, work areas, and production areas shall be screened from the public street view and adjacent residences, mixed-use, office, and other commercial uses with a minimum six feet (6') high decorative masonry wall; except for the living plant materials areas associated with an outdoor landscape/garden center which may use non-masonry fencing. Non-plant materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

4. Building site details related to utility boxes, transformers, generators, chiller farms, mailboxes, and air conditioning units shall be integrated into the overall design of the building and/or development and screened from public view, yet remain accessible for servicing.

5. Mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and architecturally designed to appear as an integral part of the building; except for solar panels. The mechanical equipment screening shall be included in the overall building height. Mechanical equipment shall be treated to be non-reflective. Electrical meters, service components, and SES cabinets shall be screened from public view and designed to appear as an integral part of the building.

6. Electrical transformers, backflow prevention devices, large water standpipes, telephone panel boxes and any other obtrusively large electrical or mechanical device that is installed as a part of, or results from, a new development project shall be located to the rear of the project site; and screened from public view through the use of landscaping and/or screening walls. If new installations require locations at the front of a development site or where such devices currently exist at the front of a site, they shall be screened by substantial landscaping, an architectural barrier, or an artistic wrap to blend or match the existing environment.

7. No deliver or loading dock, mechanical trash compacting equipment, or service loading bay (automotive service, tire, etc.) shall be located in a manner that will cause them to front onto the development entry drive, or onto a major or minor arterial roadway. These items shall be located in the least obtrusive manner, preferably on a less prominent and visible side of the building and shall be adequately screened from public view.

8. Parking areas adjacent to the required setback from right-of-ways shall be screened from public view and from adjacent residential properties by a solid three foot (3') high screen wall that is decoratively treated to match the architectural style and design of the development or a landscape berm or combination thereof.

9. Boundary line fencing along the common property line shall be required when the development is abutting a single family residentially zoned property. This wall shall be a solid decorative masonry wall limited to six feet (6') in height; unless otherwise indicated on the LDO. A *multimodal* pathway connection shall be required from the residential neighborhood into the commercial development whenever the adjacent residential development can accommodate such access point.

10. All masonry walls intended for screening functions shall have an architectural texture, color and finish compatible with the primary building.

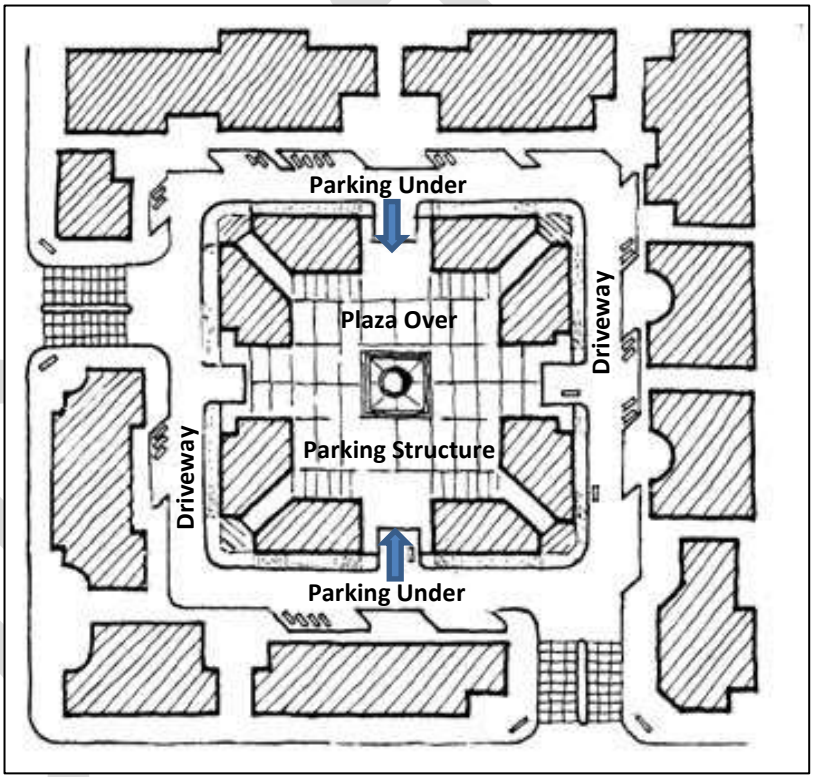
E. PARKING DESIGN.

1. Private parking lots for commercial and office uses that are adjacent to one another, but operate under separate property ownership, shall to the greatest extent possible, be designed and located contiguously to each other, provide for prominent drop-off points for ride sharing, and have shared and reciprocal access and an internal circulation system that

provides for the safe and efficient internal site movement of motor vehicles, pedestrians and cyclists from one property to another without having to re-enter the street serving the developments.

2. Off-street parking serving large multi-use commerce centers, mixed-use projects, and office complexes are encouraged to provide shared parking facilities in the form of underground structures whose roof tops can be developed as landscaped pedestrian plazas, as well as retail and dining uses or clustered *parking pods* that are heavily landscaped and integrated with the onsite circulation driveways and connected to the pedestrian and open space system (see **Illustration 18**).

ILLUSTRATION 18



Shared parking in submerged or underground garage

3. Above ground parking structures shall incorporate design features such as electric re-charging stations, autonomous vehicle (AV) staging areas, and solar panel shade structures. Rather than ramped floors, the structure itself should be designed with level floors and attached spiral/ramp access structure to facilitate reuse and conversion (i.e. warehousing, commercial office space, or affordable housing units) in the future if the demand and/or need for parking decreases.

4. To maximize the business visibility from public streets, provide definition and scale to the streetscape, and establish a pedestrian rhythm to the

streetscape no more than fifty percent (50%) of the off-street parking for large commercial centers shall be directly visible from the primary abutting street. Rather, the off-street parking spaces shall be located in smaller *parking pods* and/or to the rear or side of the structures; with the structures moved closer to the street.

5. New office, commercial, and mixed- use developments that are over ten (10) acres in size and located adjacent to major arterials and transit stops designated to provide express service to the regional transit network, may be required to provide a sheltered transit stop as determined by the City in partnership with the regional transit provider.

6. Parking lots that contain over one hundred (100) spaces should be designed with traffic calming devices installed (other than speed bumps/humps) to enhance safety and to clearly indicate the hierarchy of on-site vehicular circulation consisting of major access drives, major internal circulation drives, and parking aisles for direct access to parking spaces.

7. Provide landscaped bioretention planters at the end of parking aisles and in-between parking rows, in accordance with the provisions outlined in **Chapter 107** of the **LDO**, to provide shade for both cars and people.

8. Utilize the rainwater harvesting technique of sloping the parking lot surfaces to direct the stormwater runoff toward these landscaped bioretention planters. The bioretention landscaped planters may be designed as: raised flow-through planter boxes; flush in-ground planter boxes; or below grade planter boxes. Use curbstop sections, formed curb with curb openings, or flush curbs to stop car tires but allow water to flow into the planting areas.

9. All walkways that traverse vehicle drive aisles shall be differentiated from driving surfaces through a change of hardscape materials, textures, or color to emphasize the conflict points. Decorative materials such as specialty pavers, permeable pavers, stamped or colored concrete should be used to clearly delineate pedestrian travel areas from drive aisles. All paving material for walkways shall be developed in accordance with ADA requirements.

10. Minimize the use of driveways and parking aisles for walking routes by combining the landscaped islands with walkways.

3.2 OPEN SPACE DESIGN AND PUBLIC PLACES

A. Open space areas shall be clustered into larger, more meaningful areas rather than equally distributing them into smaller individual areas of lesser significance.

B. The required on-site parking area shall not be calculated as open space. Those portions of the required parking lot landscaping that are also designed in conjunction with a walking route may be calculated as open space. Building setbacks, street frontage, and on-site retention areas may be calculated as open space if those areas are landscaped.

C. The pedestrian connections, plazas, courtyards, and gathering areas within and throughout the development may be calculated as open space if they are landscaped and/or shaded in some manner and provide seating, lighting, and other pedestrian amenities.

D. The use of permeable paving (such as a structural grid system or permeable pavers), designed to accommodate stormwater and reduce the heat island effect, may be considered in areas of lower traffic volume limited only to private on-site sidewalks, pathways, and plazas where the soils are acceptably permeable and a maintenance plan and property owners association is in place to maintain the permeability of the surfaces.

E. Public art is encouraged and should be in harmony with the character and scale of the open space area in which it is placed (see **Section 1.7** herein for more specific guidelines).

3.3 CIRCULATION DESIGN FOR COMPLETE STREETS

A. When determined necessary by the City Engineer, a development project may be required to provide a Traffic Impact Analysis (TIA) prior to receiving approval. When required the TIA shall, at a minimum, discuss the ingress and egress points, the impact of commercial traffic on adjacent development, and the overall internal circulation system of the proposed development.

B. Commercial retail and office center developments that include separately leased or owned lots/pad sites or outparcels fronting on major arterial and /or collector streets shall be treated as a single development unit, and access to the outparcels shall be from the internal circulation system of the principal commercial center rather than from separate driveways and entrances located along the adjoining arterial and/or collector street and meet the Engineering Design Standards (EDS) access management standards.

C. Access from adjacent residential areas shall be provided by incorporating wall and landscape openings with physical connections to the commercial development's onsite pedestrian circulation system.

D. Provide locations for bicycle racks and storage areas as well as facilities that are necessary to the use of public transportation (transit stops, benches, shade, and lighting) if suggested by the TIA. Bicycle racks shall be located off of the development's onsite pedestrian circulation system and/or near to building front entrances.

E. Proposed new major centers of employment and governmental offices shall plan and design their pedestrian walkways and bicycle paths and open space system to link directly with public transit stops.

F. New large scale commercial and civic and institutional uses shall incorporate decorative paving patterns, approved traffic "calming" devices, landscaping, streetscape furnishings, and lighting at onsite street intersections.

G. The pedestrian circulation system may also be used for other uses and activities, including informational kiosks, public art installations, and outdoor dining; provided such uses and activities do not interfere with the safety of and accessibility by pedestrians and leave a five foot (5') clear path of travel.

H. Sidewalks shall be designed primarily for pedestrians, conform to ADA guidelines, and be as free from obstacles as possible such as but not limited to, trash bins, fire hydrants, utility equipment and cabinets, signal poles, mail drops as well as excessive overhang from automobiles parked either diagonally or perpendicularly to the sidewalk.

I. Within a Traditional Neighborhood Development (TND) the local streets and any arterial street within the "village core" shall be designed in a grid pattern to create a walkable street system that improves the overall pedestrian environment.

3.4 LANDSCAPE AND STREETSCAPE DESIGN

A. GENERAL REQUIREMENTS.

1. Design landscapes to:
    a. Utilize, to the greatest extent possible, harvested stormwater; and
    b. Strategically locate appropriate plantings to cool buildings and shade parking lots, plazas and gathering areas; and
    c. Provide visual screens; and
    d. Improve both visual and physical aesthetics.
2. When a phased commercial development abuts residential uses the perimeter landscape and fencing shall be required to be installed and maintained along the shared property lines ahead of the construction phasing schedule.

B. ON-SITE LANDSCAPING.

1. All surface parking facilities shall provide a master landscape plan that delineates mature landscaping along the perimeter of the lot, as well as throughout the interior of the lot in accordance with **Chapter 107** of the **LDO** and with the plant palette listed in **Appendix B** herein.

2. Landscape should be fully integrated with the building mechanical systems such that air conditioning condensate collection may be used directly by the landscape or directed into a cistern system; and building roof drains and downspouts whether exposed or integrated within the building walls shall be directed to landscape areas adjacent to the building where it can be stored and used to irrigate the plants or infiltrated into the ground. To accommodate pedestrian traffic the use of grated drains shall be used to direct the stormwater under sidewalks that may be adjacent to the building and into the landscape areas.

3. Initiatives utilizing short term landscape treatments should be considered for vacant building and/or pad sites within a phased development to improve the visual character as well as provide interim dust and weed control.

4. Any proposed water features should be located in plazas and gathering areas and not in auto-oriented entryways. Water features, while in use, shall continuously recirculate the water. Fountains and other water features shall be located and sized according to the scale and specific use of the open space area within a development as determined by the Community Development Director; with smaller water features utilized in smaller, more intimate open space/gathering areas.

5. Trees planted within the paved area of a sidewalk or pedestrian plaza in commercial and/or office areas having high pedestrian usage shall have tree grates that are flush with the level of the surrounding sidewalk surface, and shall be located so as not to impede through pedestrian movement. Sizing of the grates shall account for the expected growth of the trees.

C. STREETSCAPE.

1. Landscaping, lighting, furnishings, and signage should be key components in the design, location, orientation and material treatment of pedestrian and bicycle paths, and their integration into the urban streetscape.

2. As part of the first phase of a multi-phased project the perimeter right-of-way improvements, such as but not limited to, landscaping and sidewalks shall be installed.

D. ADDITIONAL TND STANDARDS

1. In the civic space area and commercial areas of the TND the “public frontage” shall include trees of various species suitable to Surprise’s natural environment, planted in a regularly-spaced lineal pattern of single

or alternated species with shade canopies of a height that at maturity clears at least one story.

2. At retail frontages the spacing of the trees may be irregular to avoid obscuring shopfronts.

3. Accommodate locations for street vendors such as mobile carts, information kiosks, public art, entertainment and other outdoor temporary uses.

3.5 BUILDING FORM AND ARCHITECTURE

A. GENERAL ARCHITECTURAL STANDARDS.

1. Where these standards call for using similar materials, forms and details, in the interest of conveying a coordinated design for a development, it does not mean that all buildings should look the same within the development. Rather, it actually seeks to balance continuity and consistency with similarity and diversity. Continuity is considered achieved when a sufficient number of design variables are similar in execution (but not necessarily identically) throughout a development.

2. All buildings on the same site shall be architecturally unified. This provision shall apply to new construction, additions and remodeling. Architectural unity means that buildings shall be related in unifying elements such as architectural style, color scheme, and building materials but that does not mean identical.

3. "Big Box" stores that have outdoor storage areas and garden centers shall incorporate the outdoor storage and/or garden center area into the initial architectural design of the primary building. Screening materials and colors shall be consistent with the overall theme of the building.

4. Monotonous look-a-like structures will be discouraged. Buildings shall be designed to create a visually interesting "building rhythm" by varying building form, volume, massing, heights, roof styles and site orientation.

5. Projects with more than one building or with a single building over 20,000 SF in size shall create different angles of buildings to the street to avoid monotony in site design unless other architectural treatments can achieve the desired result.

6. The development shall be designed to facilitate the efficient use of energy through building orientation, window and door placement, awnings, canopies, window treatments and other appropriate design solutions.

7. Buildings over thirty feet (30') in height shall be made to appear less imposing by a combination of stair-stepping the building height back from the street, breaking up the mass of the building, and/or providing a broader open space/pedestrian plaza areas as foreground for the building.

8. All buildings shall provide architectural detailing on all exterior elevations (360° architecture); not just the front elevation. Window embellishments shall be provided by adding architectural features that enhance the elevations (e.g. greater variation of window design, different window styles, tile inlays and recesses, structural pop-outs, gabled roof features over the windows, etc.).

B. MATERIALS and COLOR.

1. Subtler, less intense colors shall be used on larger, more plain-looking buildings, while the use of a greater variety and intensity of color may be appropriate for smaller structures. The use of accent colors is encouraged to provide a festive and lively streetscape. Color should be used to accent entryways and special architectural features of a building.

C. ROOF ARCHITECTURE.

1. Full roof architecture utilizing simple and varied roof forms shall be required for all new commercial, office and mixed-use development; while long, continuous mansard roofs, false mansard roofs, large expanses of flat roofs and veneer (false-front) parapets are discouraged. Parapet walls shall be designed and constructed in a manner to appear as a solid, three-dimensional form rather than a veneer.

2. Roof access shall be from within the interior of the building.

3. Green or living roofs may be considered; in efforts to absorb rainwater, provide building insulation from solar gain and heat loss, help mitigate the surrounding heat island effect, and create *wildlife habitat*.

4. Roof-top plumbing, vents, ducts, air conditioning and heating equipment, and any other mechanical or electrical equipment shall be concealed from public view; and screened in a manner so as not to be visible from any angle or any height outside a building. The height of a parapet wall for screening purposes must be equal to or greater than the height of any mechanical equipment. Roof top communication antennae shall be camouflaged and/or stealth in design in accordance with **Chapter 107** of the **LDO**.

5. All rooftop screening shall be part of the articulation of a building and not appear as an afterthought; shall be architecturally integrated and compatible with the architectural style.

D. BUILDING FACADES.

1. Commercial “storefronts” that reflect the architectural style of the building, balance window space to building wall space, and create display windows rather than floor to ceiling glass fronts is encouraged. Windows and doors shall be aligned and sized to bring order to the building façade and sufficiently recessed to contribute to the building’s energy efficiency and create facade patterns that add variety and visual interest to the building design.

2. Some element(s) of display windows, awnings, entry areas, colonnades and arcades shall be designed along the street frontage, plaza areas and along the pedestrian sidewalks.

3. In the event an arcade or colonnade is to be used along the front of a building as a primary pedestrian way, the arcade or colonnade shall be designed as an integral part of the overall architecture of the building; located and oriented to connect with adjacent open space areas of the development; and of sufficient height and width to accommodate the anticipated unobstructed pedestrian traffic generated by anticipated uses in the development.

4. All building facades must contain conspicuously placed street address numbers (refer to **Chapter 109** of the LDO).

E. ADDITIONAL STANDARDS FOR TND DEVELOPMENT

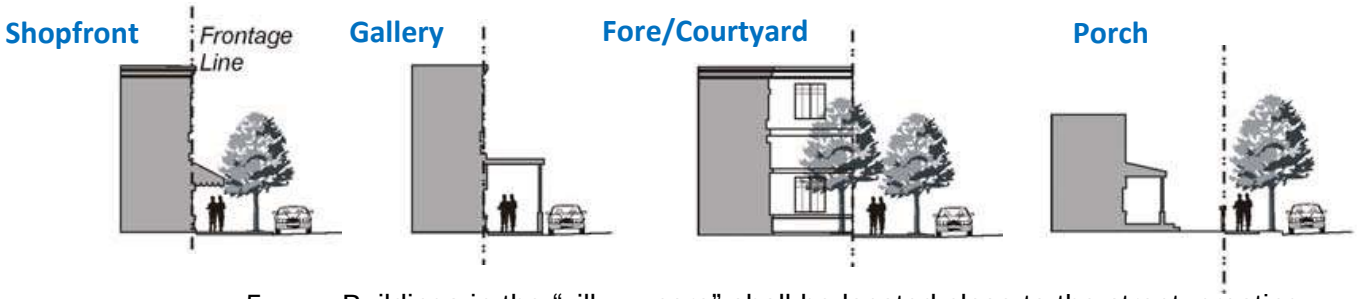
1. The edges of a commercial area should blend into adjacent neighborhoods and/or the civic space through building forms, massing and architectural styles and without buffers. Parking lots and garage doors rarely front the street.

2. All commercial activities shall be conducted entirely within the enclosed commercial buildings with limited outside storage which shall be screened from public view with an opaque fence or decorative wall not to exceed six(6') feet in height. Materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

3. Outdoor patios and dining areas, seating areas, or small "vignette style" display areas are required to add to the pedestrian environment of the neighborhood.

4. The commercial buildings shall be designed in a manner that is more residential in scale and mass to be compatible with the residential neighborhood. Shopfront, Gallery, Fore/Courtyard and even Porch frontages are strongly encouraged and should provide a pedestrian connection to the sidewalk, street, or open space network (see **Illustration 20**).

ILLUSTRATION 20



5. Buildings in the "village core" shall be located close to the street, creating a well-defined outdoor room.

6. Consideration of Other Building Types in TND Developments

   a. Vertically Integrated Mixed-Use: This building type is a small-to medium-sized structure, typically attached, intended to provide a vertical mix of uses with ground-floor retail, or service uses and upper-floor service, or residential uses. This type is an appropriate component of a TND neighborhood core but could be utilized within the residential parcels if carefully located and designed, thereby being a key component for providing neighborhood appropriate retail and/or services.

   b. Live/Work: This building type is a small to medium-sized attached or detached structure that consists of one dwelling unit above and/or behind a flexible ground floor space that can be used for residential, service, or retail uses. Both the ground-floor flex space and the unit above are owned and/or occupied by one entity. This type is typically located within blended density neighborhoods or in a location that transitions from a residential neighborhood into higher intensity uses such as the neighborhood core. It is especially appropriate for incubating neighborhood-serving retail and service uses and allowing the TND neighborhood core to expand as the market demands.

3.6 EDGE TREATMENT AND TRANSITIONS

A. EDGE TREATMENTS

1. All major new commercial development should include a pedestrian circulation system of active and passive open space areas designed, located and oriented to provide: high pedestrian accessibility within and around the development; connections to adjacent developments to enhance a structure of continuous open space throughout the community; and a buffer between less developed, less densely developed lands and urban development patterns.

2. Buildings located on the exterior of new projects adjacent to the undeveloped edge of the City shall maintain a low profile in terms of single-story height, bulk and massing; except in an urban environment.

B. TRANSITIONS

1. Structures within a multi-building development should be designed to transition into either the surrounding development or natural landscape; with the size, massing and height of the proposed structures relating to the prevailing scale of adjacent development.

3.7 OTHER CONSIDERATIONS.

1. The signage needs (both building mounted signage and freestanding signage) should be carefully considered for all of the buildings/tenants when developing the site plan, landscape plans and elevations for commercial centers.

2. Outdoor lighting shall be consistent and comply with the standards outlined in **Chapter 107** of the **LDO** and Volume Two of this PED Manual when applicable.

CHAPTER 4: BUSINESS PARK AND INDUSTRIAL LAND USES

4.1 GENERAL LAND/SITE DESIGN AND DEVELOPMENT

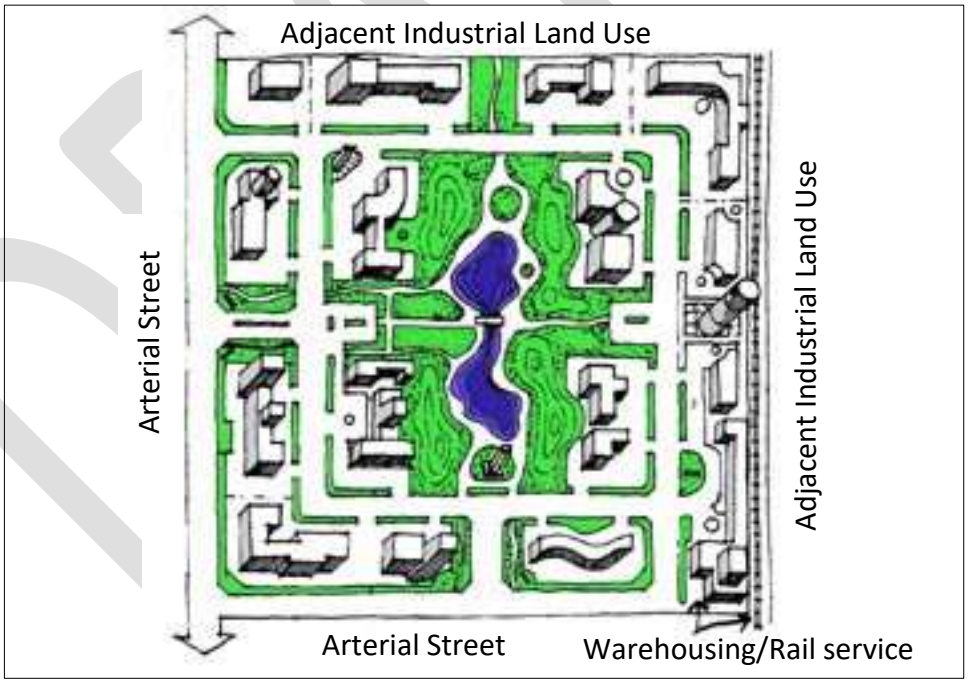
A. GENERAL BUILDING SITE DESIGN.

1. Some limited Commercial land uses may be permitted in the Employment Character Areas as shown in the General Plan; in which case the development of such commercial land uses must be part of a business park development rather than a stand-alone commercial development.

2. Land uses permitted by the Business Park (BP) zoning, as delineated in **Chapter 106** of the **LDO**, shall be developed as part of or within an approved planned business park development rather than as a stand-alone project.

3. Business parks shall be designed with an interior street system that takes its access from the major arterials (see **Illustration 21** below). Proposed new major centers of employment and governmental offices shall plan and design their development to link directly with public transit stops when available or will be provided over time and when defined in the TIA for the development.

ILLUSTRATION 21



4. When industrially zoned parcels are developed with permitted industrial land uses, as delineated in **Chapter 106 - Table 106-3** of the **LDO**, and developed as a stand-alone use they shall take direct access only from an arterial street that is appropriately scaled to serve commercial and freight traffic.

5. Subdivision design, site plans, and building design must reflect sensitivity to natural features of the site; including topography; adjacent uses and

development; and views of surrounding mountains.

B. SCREENING.

1. Trash and refuse collection containers: Shall be screened with a six foot (6') solid masonry wall. Trash and refuse containers shall be located such that they are not the visual focal point of a driveway or parking area, or cannot be viewed from a public street. Those sites that can only locate the refuse containers in a highly visible location shall provide decorative latching gates, for screening the containers, at the opening to the enclosure.

2. Outside storage areas, work areas, and production areas: When permitted shall be limited to the rear or side yard (not front yard) and screened as outlined below. Materials shall not be stacked, piled, or stored in such a manner as to project above the screen wall.

    a. When adjacent to any roadway the screen wall shall be a solid masonry wall, not to exceed eight feet (8')in height, located within the lot at the building setback line (not along the property line). Exceptions to this locational requirement may be made when the business park or industrial subdivision is platted with a landscape tract, not less than thirty-five feet (35') in width, adjacent to the roadway in which case the screen wall may be placed at the rear and/or side lot line.

    b. When adjacent to residential, mixed-use, office, or commercial land uses the screen wall may be located along the shared property line with the required setback area behind the screen wall. The screen wall shall be a solid masonry wall at least six feet (6') but not to exceed eight feet (8') in height. The City may require the screen wall to be placed at the setback line, rather than on the property line, if it is determined that public access to an existing or planned public open space system would be prevented if the wall were placed at the property line.

    c. When a business park parcel/lot is adjacent to other business park parcel/lot, a solid masonry wall, not to exceed eight feet (8') in height, may be located at the side and rear property line.

    d. When an industrial land parcel/lot is adjacent to another industrial land parcel/lot, a fence, not to exceed eight feet (8') in height, may be located along the shared property line.

3. Parking areas: When in front of the building and/or adjacent to a street the parking area shall be screened from public view by a solid three foot (3') high screen wall that is decoratively treated to match the architectural style and design of the development or a three foot (3') high landscape berm or combination thereof. Parking areas shall not encroach into the required front yard and the screen wall shall be located at the front building setback line. The side yard screening wall may be located along the side property

line. The screen wall shall be a minimum three feet (3') back of the parking surface area to accommodate for vehicular overhang.

4. All solid masonry walls intended for screening functions shall be decorative having an architectural texture, color and finish compatible with the primary building; with the finished elevation exposed to the public view or adjacent property.

C. PARKING DESIGN

1. Parking lots for major employers, government offices, and businesses within a business park development that contain over one hundred and fifty (150) spaces should be designed with electric re-charging stations, and solar panel shade structures.

2. Parking lots shall be designed to utilize rainwater harvesting techniques by sloping the parking lot surfaces to direct the stormwater runoff into landscaped bioretention planters within and/or along the perimeter of the parking lot. The bioretention landscaped planters may be designed as: raised flow-through planter boxes; flush in-ground planter boxes; or below grade planter boxes. Use curbstop sections, formed curb with curb openings, or flush curbs to stop car tires but allow water to flow into the planting areas.

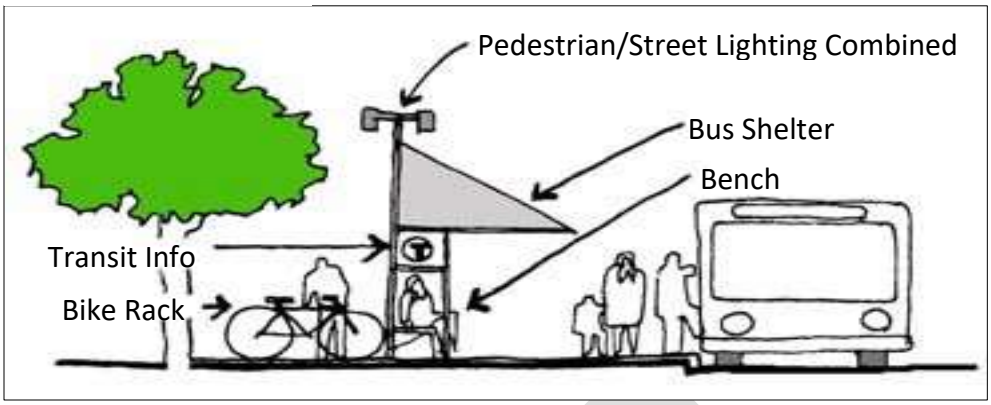
4.2 CIRCULATION DESIGN FOR COMPLETE STREETS

A. Unless otherwise determined by the City's Traffic Engineer, all development projects are required to provide a Traffic Impact Analysis (TIA) prior to receiving approval; with specific emphasis on the impact of truck traffic on adjacent development, the internal circulation system of the proposed development, and the appropriate development of transit amenities.

B. Proposed new business park developments and major industrial employment centers shall provide transit related site design features and amenities such as, but not limited to, shelters, benches and lighting (see **Illustration 22** below).

C. *Multimodal* connections between workplace uses and abutting support uses such as retail and service commercial establishments is encouraged and should include drive, walkway, and trail connections.

ILLUSTRATION 22



4.3 LANDSCAPE AND STREETSCAPE DESIGN

A. Design the required landscaping to;

1. Utilize, to the greatest extent possible, harvested stormwater; and
2. Strategically locate appropriate plantings to cool buildings and shade parking lots; and
3. Provide both visual screening and land use buffering; and
4. Improve the aesthetics of the development as seen from public view.

B. Landscape should be fully integrated with the building mechanical systems such that air conditioning condensate collection may be used directly by the landscape or directed into a cistern system; and building roof drains and downspouts whether exposed or integrated within the building walls shall be directed to landscape areas adjacent to the building where it can be stored and used to irrigate the plants or infiltrated into the ground. Foundation planting shall be required along all building elevations that are visible from the public street and may utilize the plant palette listed in **Appendix C** herein.

C. All required on-site parking lots shall provide landscaping along the perimeter of the parking lot and within the parking lot utilizing the plant palette listed in **Appendix B** herein and in accordance with **Chapter 107** of the **LDO**.

D. The *landscape strip*, all required front building setbacks, and those setback areas in front of a screen wall shall utilize the plant palette listed in **Appendix B** herein. Street trees shall be planted in a regularly spaced lineal pattern of single or alternating species with shade canopies of a height that at maturity clears at least one story.

E. All other required yards that are open areas (outside of screened storage areas, work areas, and production areas or boundary line walls) shall be landscaped utilizing the plant palette listed in **Appendix C** herein.

4.4 BUILDING FORM AND ARCHITECTURE

A. GENERAL ARCHITECTURAL STANDARDS.

1. All buildings shall provide architectural detailing on all exterior elevations (360° architecture); not just the front elevation. Window embellishments shall be provided by adding architectural features that enhance the elevations (e.g. greater variation of window design, different window styles, tile inlays and recesses, structural pop-outs, gabled roof features over the windows, etc.).

2. For all buildings the mechanical equipment and similar utility devices, whether ground level or roof mounted, shall be screened from public view and designed to appear as an integral part of the building; except for solar panels. The mechanical equipment screening shall be included in the overall building height. Mechanical equipment shall be treated to be non-reflective.

3. Service and loading bays shall be oriented away from adjacent residential and mixed-use zoning districts and to the greatest extent possible should not front onto or be visible from the public street. For those sites that can only locate said activities in a highly visible location screening be a method approved by the City may be required.

4. Buildings shall be designed to facilitate the efficient use of energy through building orientation, window and door placement, awnings, canopies, window treatments and other appropriate design solutions.

5. Building orientation and building design shall address and mitigate the negative impacts of noise, odor, or dust that may be generated from a building and/or land use of any Business Park or Industrial development.

B. BUILDING MATERIAL AND DETAILS

1. Reflective building materials are prohibited. Mirrored surfaces or any treatment that changes ordinary glass into a mirrored surface are prohibited. Metallic surfaces, including roof materials, shall be chemically treated to be non-reflective.

2. Color should be used to accent entryways and special architectural features of the building rather than color bands of corporate identity.

C. ROOF ARCHITECTURE.

1. Full roof architecture utilizing simple and varied roof forms shall be required for all new business park and industrial development; while long, continuous mansard roofs, false mansard roofs, large expanses of flat roofs and veneer (false-front) parapets are discouraged. Parapet walls shall be designed and constructed in a manner to appear as a solid, three-dimensional form rather than a veneer.

2. All rooftop screening shall be part of the articulation of a building and not appear as an afterthought; shall be architecturally integrated and compatible with the architectural style.

3. Roof access shall be from within the building.

D. BUILDING FACADES.

1. Windows and doors shall be aligned and sized to bring order to the building façade and sufficiently recessed to contribute to the building's energy efficiency and create facade patterns that add variety and visual interest to the building design.

2. All building facades must contain conspicuously placed street address numbers (refer to **Chapter 109** of the LDO).

4.5 EDGE TREATMENT AND TRANSITIONS

A. Non-vehicular connections to adjacent developments through shared and/or aligned retention areas, *multimodal* trails, and open space areas are to be made by the Employment land uses whenever available and/or when designated for such future connectivity by the Surprise General Plan or the Parks and Recreation Master Plan.

B. Development of subdivisions within the Business Park and Industrial zoning districts shall provide a landscape buffer strip, as outlined in **Chapter 106** and **Chapter 108** of the **LDO**, along the perimeter of the development on a subdivision basis rather than encumbering the individual lots within the subdivision with the buffer area requirement.

C. When developed as a stand-alone industrial land use adjacent to the undeveloped edge of the City or to an existing residential development the industrial development shall be responsible for providing the required buffer area for the development.

D. Buildings located on lots along the perimeter boundary of a business park and/or industrial subdivision that are adjacent to the undeveloped edge of the City or to an existing residential development shall maintain a low profile building in terms of single-story heights not to exceed twenty-five feet (25'). Building heights above twenty-five feet (25'), up to the maximum building height allowed per the zoning district, may be achieved by increasing the building setback adjacent to the perimeter boundary as outlined under the specific zoning sections of **Chapter 106** of the **LDO**.

CHAPTER 5: ENVIRONMENTALLY SENSITIVE LANDS STANDARDS

5.1 GENERAL LAND/SITE DESIGN AND DEVELOPMENT

A. The City of Surprise requires responsible development, the preservation of natural habitats for flora and fauna, and the conservation of environmentally and culturally sensitive lands and resources. Sustainable and creative development is encouraged with the goal being to fit development into the natural site with minimal intrusion, and to be sensitive to adjacent uses. For this reason any property that possesses characteristics which would support their identification as *cultural resources* or having *environmentally sensitive features* shall utilize an *integrated conservation design* approach to development and assure compliance with the Environmentally Sensitive Lands and Cultural Resource Standards set forth in this section and those in **Chapter 104** of the **LDO** as a part of any development submittal.

B. **INTEGRATED CONSERVATION DESIGN APPROACH.** An *integrated conservation design* is vital to reducing fragmentation of both *habitat* and *wildlife movement areas*, improving community character, and protecting both *environmentally sensitive features* and *cultural resources*. Regardless of the acreage or zoning, when any portion of a development site is determined to be in an area with *environmentally sensitive features* or *cultural resources* the entire development site shall be required to utilize an *integrated conservation design* approach and develop an Environmental Inventory Plan (as described in **Chapter 104** of the **LDO**). The development shall provide the City with a development plan rooted in this integrated design approach and based on the Environmental Inventory Plan. The following 4-steps are involved when developing any project using this *integrated conservation design* approach. For subdivisions theses design steps occur in an order opposite that of conventional subdivisions.

1. Identify Conservation or Preservation Areas. The first step is identifying areas of the property to conserve or preserve. This is done by completing an "Environmental Inventory Plan" (detailed in **Section 104-2.2** of the **LDO**) that delineates the location of all *environmentally sensitive features*, *cultural resources*, and the associated *buffer areas*. Also, identify the location of any additional *open space* required to satisfy the zoning requirements for the development; keeping in mind the potential to create areas and connections beyond the boundaries of the proposed development to maximize the benefit to wildlife and residents alike.

Example Site Before Development

Integrated Conservation Design identifies the environmentally sensitive features & cultural resources of the site *before* drawing lot lines & roads.

2. Select Building/Housing Locations. Select building/housing sites to complement the location of the *environmentally sensitive features*, *cultural resources*, and *open space*. Designing the lots around these conserved spaces ensures that each occupant/resident can take full advantage of these conserved common areas. Utilizing a *cluster development* design may make this simpler to achieve but it is not required.

3. Connect the Dots. Draw in a *multimodal* network of streets and trails that connect the development to existing roads and, if possible, regional trail networks or public greenways.

4. Draw in the Lot Lines. Finally, draw in the individual lot lines.

C. ESTABLISHMENT OF BUFFER AREAS. The *buffer areas* required by **Chapter 104** of the **LDO** shall be designed to achieve the following performance standards:

Conventional Development vs. Cluster Development

The cluster subdivision (right) accommodates the same amount of development as its conventional counterpart (left); in this example 32 lots. The difference, however, is that the cluster design provides that more than half of the site is retained as preserved or open space, a permanent amenity shared by all property owners. Conventional development gives each owner a large lot surrounded on all four sides by neighbors whereas the cluster design provides each resident an uninterrupted view of the surrounding landscape and access to preserved communal open space within the development.

1. Protect the biological function and enhance wildlife use of any natural habitat identified by the Environmental Inventory Plan for the development site.

2. Minimize and, to the greatest extent possible, mitigate the anticipated impacts of development to *environmentally sensitive features* and *cultural resources*.

3. Enhance the integration of development with the site by preserving existing site topography, including but not limited to, such characteristics as: hillside areas, steep slopes, ridgelines, significant rock outcroppings, and existing drainage and water features.

4. Preservation of significant stands of vegetation and communities of *protected native plant*(s) within and/or adjacent to a development site.

5. Prevent unnecessary and adverse impact upon species utilizing special habitat features, including nest and/or den sites, night roosts, key feeding areas, wintering and/or production areas as identified by the Environmental Inventory Plan.

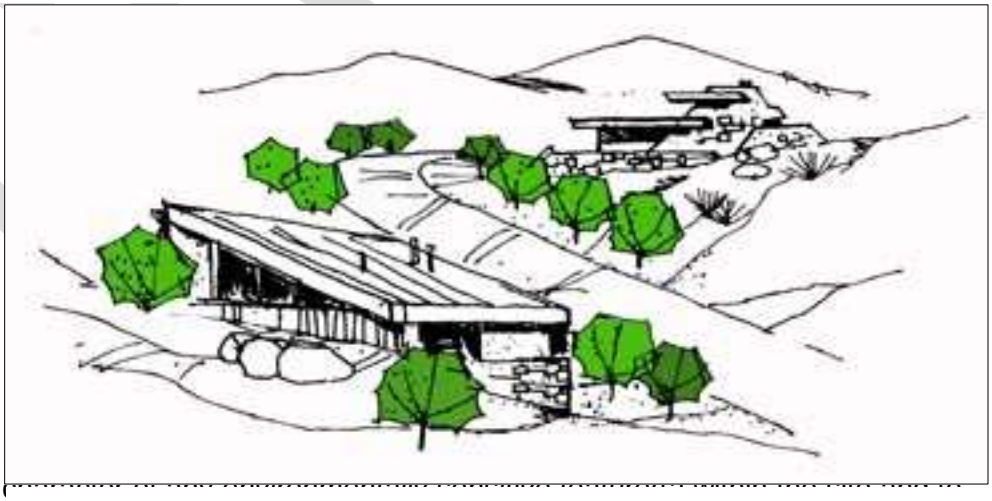
6. Preserve and enhance the existence of *wildlife corridors* and wildlife movement between natural features, through and adjacent to the development site.

7. Provide appropriate areas for passive human access to the site's natural habitats, *environmentally sensitive features* and *cultural resources*.

D. GENERAL SITE DESIGN.

1. Projects in the vicinity of large natural habitats and natural habitat corridors shall be designed to complement the visual context of the natural habitat. Techniques such as architectural design, site design, the use of native landscaping and choice of colors and building materials shall be utilized in such a manner that scenic views across or through the site are protected, and that manmade facilities are screened from off-site observers and blend with the natural visual character of the area (see **Illustration 23** below). These requirements shall apply to all elements of a project, including any aboveground utility installations.

ILLUSTRATION 23

2. 

Illustrative Example: Building siting respects the topography of the area. the site.

3. The greatest amount of development and the highest densities of housing should occur in the flat land (under five percent (5%) slopes). Irregular terrain with irregular slope conditions and hillside lands (over ten percent (10%) slopes) shall be larger lot residential with a *building envelope* delineated to insure building/site integration and to reduce the impact of development to the hillside.

4. Mass grading is prohibited in the *hillside development area.* Mass grading shall be limited or prohibited for other lands within the environmentally sensitive areas of the City where damage to existing vegetative cover, washes and drainage patterns might occur.

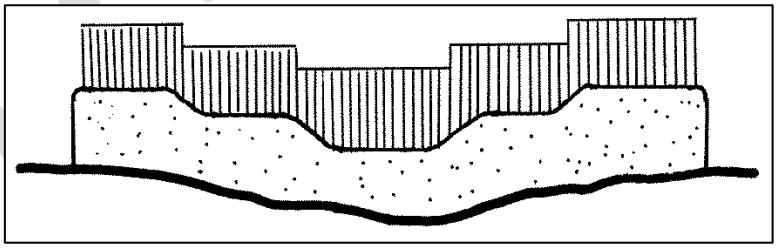
5. Wherever possible, but particularly in *hillside development areas*, site plans and designs should reflect a sensitive approach to development wherein roads, hiking and equestrian trails, access walkways, driveways and drainage areas conform as closely as possible to the natural contours of the site.

5.2 WALLS: PERIMETER, PRIVACY AND RETAINING

A. PERIMETER WALLS

1. Perimeter walls or fences shall follow the contour of the natural terrain and be "open" in design where a wall abuts an open space area, buffer area, or environmentally sensitive feature. Walls or fences shall be a maximum of six feet (6') in height with no more than three feet (3') being constructed of a solid or opaque material. That "open" portion of the wall or fence may not include chain-link or wood materials (see **Illustration 24** below). Notwithstanding the foregoing, walls exceeding six feet (6') in height and constructed of solid or opaque material may be approved by the Community Development Director if the wall is for the purpose of screening non-residential uses.

ILLUSTRATION 24



Perimeter walls shall follow the contour of the natural terrain.

2. Perimeter walls and fences surrounding a lot, tract, or subdivision within a *hillside development area* shall be prohibited; only privacy walls and retaining walls may be permitted as outlined below.

3. Within the ten to fifteen percent (10-15%) slope category of a *hillside development area*, exceptions to the above prohibition on perimeter fences or walls may be permitted. In those instances where an exception is desired, applicants shall submit a detailed Wall Plan to the Community Development Director for review and action. In conjunction with the submittal of the Wall Plan to the Community Development Director, the applicant shall submit a copy of the Wall Plan to the appropriate City department(s) for review and approval for conformance with all City grading and drainage requirements. Wall Plans shall indicate the proposed locations of walls or fences, the proposed materials, colors and design of any wall or fence, and fence construction and disturbance mitigation measures. Such plans shall be accompanied by a narrative explaining the reasons why such an exception should be made. Wall Plans may be approved by the Community Development Director upon a finding that the proposed location and design of the wall(s) will not be contrary to the intent and purpose of the Environmentally and Culturally Sensitive Land Developments Standards.

B. PRIVACY WALLS

1. Fences or walls on lots within a *hillside development area* shall be restricted to privacy walls attached to or directly screening a portion of the main residence. Privacy walls shall not exceed six feet (6') in height, shall be architecturally compatible with the main residence and shall be limited to the *building envelope* area only.

2. Privacy walls shall not be erected on a retaining wall and shall be offset a minimum of four feet (4') when utilized unless the combined height of the walls does not exceed six feet (6').

C. RETAINING WALLS

1. The design of all retaining walls shall be prepared by a registered engineer or architect and shall be designed to blend with the surrounding environment and/or development in color, materials and style.

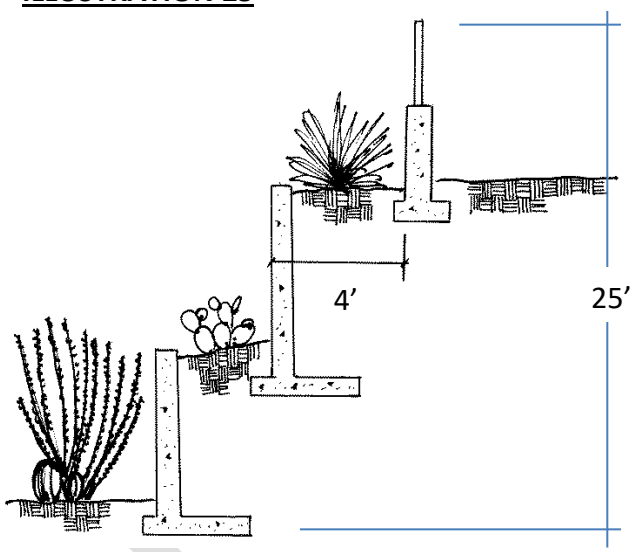
2. No first-tier lots shall have a side or rear yard retaining wall exceeding six feet (6') in total vertical wall height in any residential district or ten feet (10') in a non-residential district.

3. A single retaining wall in any front yard shall not exceed four feet (4') in height in residential districts or six feet (6') in height in non-residential districts.

4. Retaining walls of over four feet (4') in height shall not be placed at the property line.

5. Additional retaining height may be achieved through the use of offset retaining walls and terraces: such walls shall be offset a minimum of four feet (4') and all terraces shall be landscaped appropriately for the width of the offset (see **Illustration 25**). Retaining walls shall incorporate weep holes for drainage and sleeves for irrigation.

ILLUSTRATION 25

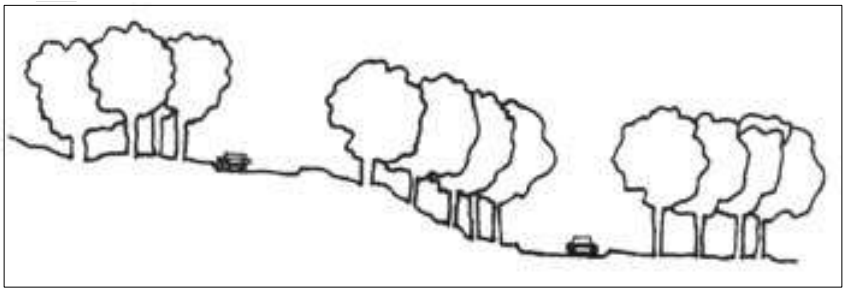


6. The total vertical wall face (including view fencing) visible from any street, adjacent property line or publically-accessible open space for any single lot shall not exceed twenty-five feet (25') in height. Terraced walls shall be constructed with decorative products and terraces shall be landscaped to minimize their visual impact.

5.3 ROADWAYS

A. Rather than transforming the area, the roadways shall follow the natural topography of the area with the roadways designed to minimize excavation and embankment scars and the overall amount of land disturbance. The City prefers the use of curvilinear horizontal alignments and gently rolling profiles consistent with the natural topography to minimize unnecessary disturbance to the existing environment (see **Illustration 26**).

ILLUSTRATION 26



Split roadway sections to accommodate grade change.

B. Additional rights-of-way may be required for cut or fill slopes, bike paths, horse trails, traffic control devices, fire hydrants or other public facilities located adjacent to streets. Where cut or fill slopes extend beyond the rights-of-way, a permanent easement may be provided in lieu of increasing the width of the rights-of-way.

5.4 WATER FEATURES

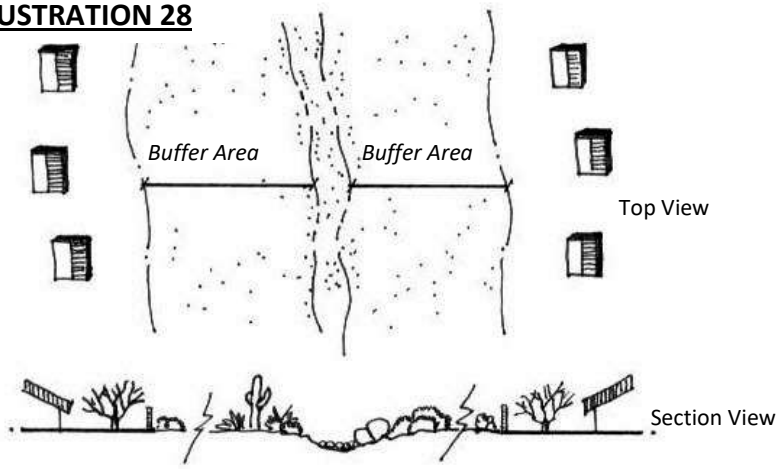
A. NATURAL WASHES and FLOODWAYS.

1. County *Floodways* and FEMA designated washes that traverse and/or are adjacent to a development site shall be assimilated into a linear open space system that is integrated into both the development's and the community's open space system. A seventy five foot (75') buffer area shall be required along the perimeter of these floodways and washes. Within the required seventy-five foot (75') *buffer area*, associated with and adjacent to these types of floodways and washes, paths for both pedestrians and bicycles and if applicable equestrian trails are encouraged and may be required to be developed as an amenity by the developer (see **Illustration 27**).

ILLUSTRATION 27

2. Naturally occurring ephemeral desert washes identified by the Drainage Report shall, as much as possible, be retained in their natural condition with *buffer areas* established as natural area open space and with development setback the appropriate distances necessary to allow the *wildlife corridors* to remain uninterrupted (see **Illustrations 28**). Specific *buffer area* dimensions to be determined by the City in consultation with Arizona Game and Fish.

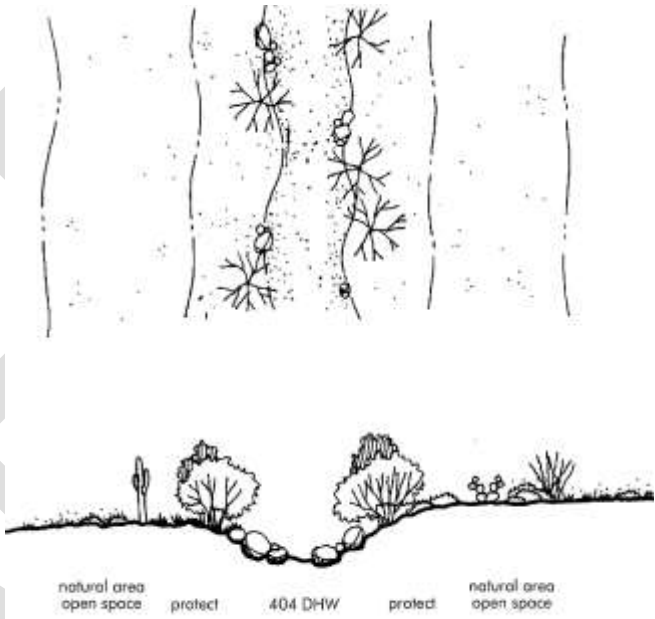
ILLUSTRATION 28



3. Disturbance to larger ephemeral washes shall be limited to that required for road and utility crossings only. The uses of bridges and culverts should be considered for such crossings where their use would cause fewer disturbances to the washes. Disturbed areas shall be revegetated using indigenous vegetation.

4. The City may grant open space credit (at a 1: 1.25 ratio) for habitat restoration of and along those ephemeral washes that have been identified by Arizona Game and Fish as being missing links/sections in important *wildlife corridors*. (see **Illustrations 29**)

ILLUSTRATION 29



5. Drainage basins, retained washes, and new drainage channels shall be given a "natural" desert character. Native materials in the construction of all storm water features (ie. basins, channel bottoms, and headwalls) must be used. Terracing, berming and contouring is required to naturalize and enhance the aesthetics of all drainage basins, retained washes, and channels. Basin slopes shall comply with Engineering Design Standards.

6. Trails will be permitted within these corridors, but motorized vehicles would be prohibited.

5.5 TRANSITION STANDARDS AND EDGE TREATMENTS

A. On sites where there is significant change in the grade levels from the site to adjacent properties, the site design should accommodate the grading transition through design techniques such as landscaped terraces, landscaped slopes of 4:1 (run-to-rise) or gentler, or some similar gradual technique.

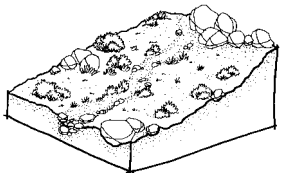
B. When the site has a non-residential use and the adjacent site is a residential use, required screening walls should either be placed along the edge of the parking/driveway areas if the developing site is higher than the adjacent residential site, or at the property line if the site is lower.

C. Hillside development shall receive edge treatments that soften the appearance of an abrupt transition between the built and natural environments. Such treatments shall consist of alternative perimeter fencing (adobe, native stone or vegetation etc.), offset, or staggered rear lot lines, transitional landscaping or other similar elements intended to soften the transition.

5.6 HILLSIDE DEVELOPMENT AREA

A. Those lands considered to be in a *hillside development area* (ten percent (10%) or greater) shall be limited in the density permitted based on the slope bands of the property as further delineated in **Chapter 104** of the **LDO**.

10% Slope:



B. Slopes that are fifteen percent (15%) and greater are considered to be *steep slopes* and development shall be highly restricted.

C. The grading concept for any site shall seek to balance cut and fill on the site to avoid off-site stockpiling and further damage to the natural topography.

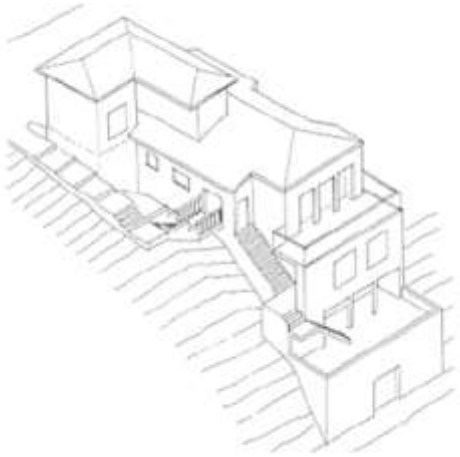
D. Significant rock outcroppings, ridgelines and unstable slopes need to be identified and conserved. Incorporate such features as an inclusive element in the overall design of the development rather than isolated and inaccessible.

E. All site plans and designs should utilize topographic maps that reflect the existing terrain, including: contour intervals (at a maximum of 10 feet), and variations in, the site terrain; elevation of critical spots; rock outcrops and special characteristics of the site.

F. All structures located within a *hillside development area* shall blend naturally into the landscape through the use of materials and colors compatible with the natural earth colors of the ridgeline area, rather than stand out as a prominent focal point.

G. Multilevel buildings, as well as all rooflines of buildings, shall follow the general slope of the site in order to keep the building height and profile in scale with surrounding natural features (see **Illustration 30**).

ILLUSTRATION 30



APPENDIX A – GLOSSARY OF TERMS

A. General Terms. For the purpose of carrying out the intent of these Planning and Engineering Design Standards (PEDS), certain terms or words used herein shall be interpreted or defined as follows:

1. Words used or defined in one tense or form shall include other tenses and derivative forms; words used in the singular include the plural; and words in the plural include the singular.

2. The words "shall", "must", and "will" are mandatory and not permissive.

3. The words "should", "encourage, and "may" are permissive.

4. The word "person" includes an individual, tenant, lessee, firm, co-partnership, joint venture, corporations, associations, estate, trust, receiver, or and any other group or combination acting as a singular entity, including the federal government, another city, county, or school district, except as exempt by law.

5. The following words or terms when applied in these PEDS may be used interchangeably unless contrary to the circumstances: lot, plat, parcel or premise; and "building" applies to the word "structure".

B. Abbreviations. The following abbreviations and/or acronyms shall have the following meaning:

A.R.S.	Arizona Revised Statutes
PEDs	Planning and Engineering Design Standards

C. Italicized. Words or phrases throughout the PEDS which are expressed using italics shall assume the meaning as ascribed in this Appendix. Words or phrases not expressed in italics shall assume the common meaning of the word or phrase unless such word or phrase is otherwise included herein this Appendix.

D. Specific Terms. The following specific terms, words and phrases shall, for the purposes of understanding these standards, have the following definitions and meanings:

A.

***Adaptive Reuse*:** The conversion of historic or obsolescent building(s) from their original or most recent use to a new use representing compatible and appropriate change.

***Apartment Complex*:**

***Archeological Resource*:** Any material remains of past human life or activities that are of historic or pre-historic significance. Such material includes, but is not limited to, pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, cultural landscapes, rock paintings, rock carvings, intaglios, graves, skeletal remains, or any piece of any of the foregoing items (see *cultural resource* herein).

***Architectural Feature*:** A decorative element intended to enhance the building or structure and lend to the overall exterior form, context and appearance of the building or structure. Architectural features may include, but are not limited to balconies, canopies, columns, doors, eaves, porches, wing walls, or similar three-dimensional exterior element of a building or structure.

Aquatic Center: A type of *public pool* that is established primarily for the purpose of hosting water related competitive events such as but not limited to swim meets, water polo, diving, as well as associated practice. The programming of events may include local public and charter schools, public and private universities, local athletic clubs, and other competitive organizations. A city-owned aquatic center may, at the discretion of the Parks and Recreation Department Director, be open to the general public during times when not scheduled for competitive events or related practice times. The facility may also be programed for city-sanctioned aquatic classes.

B.

***Berm*:** A mound of earth that is used to shield, screen or buffer undesirable views, separate incompatible land uses, provide visual and landscape interest, decrease noise, or control the direction of water flow.

***Bicycle Circulation System*:** Multi-use pathways and on-street bicycle lanes combine to provide a comprehensive means by which bicycles can travel within and through the City.

***Bollard*:** A thick, low, architecturally, designed vertical post, or a series of vertical posts, that are placed to help define, or border, pedestrian and/or bicycle paths.

***Buffer Area*:** An area of land retained in its natural state which protects and/or surrounds an *environmentally sensitive feature* or *cultural resource* with the purpose of mitigating any potentially negative impacts to the feature or resource.

***Buffering*:** The technique of providing landscape or other improvements on land set aside or in a *buffer area* used to separate different intensities and types of land use.

***Building Envelope*:** That area on a lot that encompasses all development including but not limited to excavation, cut, fill, grading, buildings, structures, access ways, parking and any area of disturbance.

***Bus/Transit Shelter*:** A roofed structure that is located on or adjacent to the right-of-way of a street, and which is designed and used for the protection and convenience of waiting bus passengers.

***Boulevard Strip*:** See *Landscape* Strip.

C.

***Community Circulation System*:** A network of transit, automobile, bicycle, pedestrian, and equestrian trails and/or rights-of-way that connect origins and destinations.

***Complete Streets*:** A street system that is designed and operated to enable safe, attractive and comfortable access and travel for all users. Pedestrians, bicyclists, transit riders, and motorists of all ages and abilities are able to safely and comfortably move along and across a complete

street and are given equal space, consideration and safety issues. Complete streets also create a sense of place and improve social interaction as they encourage walking, biking and transit as viable transportation options.

***Cluster Development/Subdivision*:** Concentration of development on only a portion of a site, allowing *environmentally sensitive features* and areas to be protected with no loss in the number of lots and maintaining the overall density of the site. It requires transferring density on the same site and the undeveloped land to be permanently retained for open space, habitat, or conservation of *environmentally sensitive features*.

***Cultural Resources*:** An aspect of a cultural system that is valued by or significantly representative of a culture, or that contains significant information about a culture.

D.

***Detached Sidewalk*:** A sidewalk that is separated from the street by a *landscape strip* that is measured from the back of the street curb and runs continuously along the length of the street.

***Disturbed Area*:** The area of natural ground that has been, or is proposed to be, altered through grading, cut and fill, removal of natural vegetation, placement of material and equipment, trenching, or by any means that causes a change in the undisturbed natural surface of the land or natural vegetation.

E.

***Environmentally Sensitive Features*:** Elements in the landscape that play a particularly large role in sustaining the natural environment and ecosystem and supporting wildlife and plant diversity, but at the same time are especially sensitive to degradation such as: *hillside development areas*; *important habitat*; *protected native vegetation*; *significant rock outcroppings*; *significant stands of vegetation*; ridgelines; *steep slopes*; *water features*; *wildlife corridors* (as further specified in **Chapter 104** of the **LDO**).

F.

Floodplain: Any land area susceptible to being inundated by water from any source. It may or may not include a *floodway*.

Floodway, one hundred-year: The channel of a river or other watercourse and the adjacent land areas which must be kept free of encroachment in order to carry and discharge the 100 year flood without substantial increases in flood height.

***Fore/Courtyard*:** a building frontage where the building facade is aligned close to the front property line with a portion of the facade set back. The resulting forecourt and/or interior courtyard are suitable for gardens, restaurant seating, or an entry plaza. A short wall may also be placed at the property line.

G.

***Gallery*:** A private frontage typically used in retail applications where the façade is aligned close to the front property or street line with an attached cantilevered shed or a lightweight colonnade overlapping the sidewalk.

***Gateway*:** A major or minor thoroughfare entry to the City of Surprise, as designated by the Surprise General Plan, which has been especially designed using unique and/or special landscape, architectural, sign and lighting treatments to project the city's image and inform visitors that they have arrived in Surprise.

***Green*:** A civic space type for unstructured recreation spatially defined by landscaping rather than building frontages.

***Greenway*:** An enhanced open space corridor which may include amenities as well as pathways for bicycles and pedestrians; may also be left in largely natural conditions.

H.

***Habitat*:** The physical and biological environment where an organism lives. Habitat includes such components as cover, food, shelter, water, and breeding sites.

***Habitat Connectivity*:** Physical and biological conditions that join blocks of habitat so that animals can move between them.

***Habitat Fragmentation*:** The division of contiguous tracts of *wildlife habitat* into progressively smaller patches which is typically a result of human encroachment such as roads and development.

***Hardscape*:** Any hardened and/or paved surface, including but not limited to a street, sidewalk, plaza, pathway or other similar surface, where the surface materials often are used to create unique patterns of color, design and texture for purposes of creating visual interest.

***Hillside Development Area*:** Those lands where the natural terrain has an average cross slope of ten percent (10%) or greater. However, a ten percent (10%) or greater slope, created by a natural wash on land that otherwise would not be classified as hillside land shall be exempt from the hillside regulations.

I.

***Important Habitat*:** Habitat that supports federally endangered plant or animal species, Species of Greatest Conservation Need (SGCN) in Arizona, and sensitive plant species (as may be identified on federal and state lists).

***Integrated Conservation Design*:** A development concept that considers site characteristics, natural features, and layout in the larger context of the site and its surrounding parcels. Integrated conservation design is intended to preserve important and unique natural features such as *hillside development areas* and *steep slopes*, *wildlife corridors*, natural habitat, and *cultural resources* that are known and those that may be discovered on the site as well as conservation of community viewsheds, and the required *open space* per the zoning district.

J.; K.; L.

***Landscape strip*:** The landscaped area between sidewalk and curb along a public street (commonly known as boulevard or *park strip*).

***Low-Impact Development (LID)*:** A land planning and engineering design approach that uses natural and engineered infiltration and storage techniques to manage stormwater where it is generated; combining conservation practices with distributed storm water source controls and pollution prevention to maintain or restore watershed functions.

M.

***Multimodal*:** Means of traveling within or through a community by a combination that includes automobiles, buses, trolley, rail, bicycles, pedestrian friendly walkways and path and trail systems, and/or any other means in additional typical vehicular traffic.

***Mural*:** An artistic painting or mosaic typically found on a wall or building elevation.

N.

***New Urbanism*:** A design-focused approach to urban planning that advocates integrating housing, workplace, recreation and leisure areas within walkable, town-core, environmentally-sensitive, and sustainable communities; emphasizing transit, human scale, building-forward architecture, with a mix of housing, civic, workplace and retail uses in close proximity and within the neighborhoods, while preserving open lands and achieving other environmental goals.

O.

***Open Space*:** Land and/or water areas, improved or unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment as active and passive recreational areas or for environmental, scenic, or conservation purposes. Not to include parking or roadways.

***Open Space, active*:** Land and water areas specifically designed as an activity-based recreational area that may include boating, water sports, sports fields, golf courses, local and community parks having picnic, playground, recreational and support components, and pedestrian, hiking, bicycle, and equestrian trails.

***Open Space, natural*:** Land and water areas that are retained in their natural state, or restored natural state if previously disturbed, required for the preservation and conservation of plant and animal life, including habitat for wildlife species; and areas required for ecological, cultural and other scientific study purposes for long-term public benefit.

***Open Space, passive*:** Land and water areas that are either partially improved, undeveloped, or in a natural state that are intended for scenic, environmental, conservation, and/or resource protection; and include such resource-based activities as nature study, nature trails, and any other activities requiring a natural condition that cannot easily be duplicated by human actions.

P.

***Parking Pods*:** The smallest parking increment of a larger off-street parking lot, designed as a heavily tree-shaded parking area to accommodate 50 or less cars and separated from other parking clusters by pedestrian walkways.

***Paving Enhancement*:** A material and/or color used in the pavement design of a street, parking area, or pedestrian walkway to provide visual interest.

***Pedestrian Friendly*:** An environment in which conflict between the automobile and pedestrian is minimized or eliminated through the provision of a comprehensive means of vehicular-separated pedestrian travel that is fast, attractive and comfortable for a wide range of age and abilities groups; and by the design of buildings and other uses in a manner that is sensitive to the needs of the pedestrian.

***Plaza*:** A large, paved, pedestrian entry setting for a building that should contain a combination of seating areas, trees, and landscaping and may also include fountains, public art and sculpture works.

Pool, Private: A *swimming pool* that is owned and maintained by individual homeowner for personal use.

Pool, Public: A *swimming pool*, that is open to the public with or without the payment of a fee, including a *swimming pool* that is operated by a county, municipality, political subdivision, school district, university, college, or a commercial establishment whose primary business is the operation of a *swimming pool*.

Pool, Semi-Public: A *swimming pool* operated for the residents of lodgings such as hotels, motels, resorts, apartments, condominiums, townhouse complexes, trailer courts, mobile home parks, or similar establishments. A semi-public swimming pool includes a *swimming pool* that is operated by a neighborhood or community association for the residents of the community and their guests and any a *swimming pool* at a country club, health club, camp, or similar establishment where the primary business of the establishment is not the operation of a *swimming pool* and where the use of the *swimming pool* is included in the fee for the primary use of the establishment. (commonly known as Community Pool)

Pool, Swimming: Any *structure* intended for swimming or recreational bathing that contains water over 18 inches (457 mm) deep at any point, and, other than hot tubs and spas is wider than 8 feet (2400 mm) at any point. This includes in-ground, above ground and on-ground swimming pools and, other than the width, hot tubs and spas.

***Protected Native Plants*:** Those species listed in Chapter 104; Table No. 104-X of the LDO.

Q.; R.

Required Rear Yard Area: That area of the rear yard that is bound by the side and rear lot lines and the rear setback line.

Ridgelines: Prominent topographic features that are used by raptors to orient, nest and/or catch thermals while migrating.

S.

***Sensitive Land Areas*:** Land that encompasses *wildlife habitats* and corridors, wash corridors that replenish local groundwater, archaeological sites, unique plant environments, and scenic vistas.

Significant Rock Outcroppings: Any surface rock formation having an area of five hundred square feet (500 sf) or larger or any surface rock formation having a height greater than ten feet (10) from the surrounding grade.

Significant Stand of Vegetation: A single native or protected tree or cactus (as listed in **Chapter 104** of the **LDO**) that is of a height greater than twenty-five feet (25') or three (3) or more trees or cacti, located within a radius of fifteen feet (15'), each having a height greater than eighteen feet (18').

***Significant Vegetation Specimen*:** A native tree with an eight inch (8") or greater caliper trunk or multitrunked in good health, a saguaro over twenty feet (20') in height and/or multiple arms or crest or other unusual configuration in good health, or other mature federally endangered plant, or Species of Greatest Conservation Need (SGCN) in Arizona, or native plant species.

***Sharrows*:** Specific road markings used to indicate a shared lane for bicycles and automobiles used to reinforce the legitimacy of bicycle traffic within the travel lane, encourage bicyclists to position themselves safely in narrow lanes to comfortably travel side by side within the same traffic lane, advertises the presence of bikeway routes to all user, and provides a wayfinding element along bike routes.

***Square*:** An open space available for unstructured recreation and civic purposes.

***Steep Slopes*:** Unimproved land, parcel, or tract of land, where the existing natural terrain has an average cross-slope of fifteen percent (15%) or greater and where the natural state of such should be left undeveloped and conserved as open space.

***Streetscape*:** The general appearance of a block or group of blocks with respect to the structures, setbacks from public-rights-of-way, open space, landscaping, public art, lighting, signage, paving materials, street furnishings and other elements that contribute to the overall character and image of a City block.

***Street Furnishings*:** All items that are placed within the public right-of-way for both an aesthetic and functional purpose, including, but not necessarily be limited to, benches, bus shelters, trash receptacles, plant containers, kiosk signs, lighting fixtures, tree grates and guards, bicycle racks, bollards, fountains and public art.

T.

***Third Place*:** a private building that includes a space conducive to unstructured social gathering. Third places are usually bars, cafés, coffee shops, and corner stores.

***Traffic Calming*:** A technique or method of reducing traffic speeds and/or neighborhood cut-through traffic volumes that utilizes changes in street alignment, installation of barriers, and other physical measures.

U.

***Unsalvageable Plant*:** A protected native plant that cannot be successfully relocated due to: 1) deteriorated health from disease, infestation, or natural causes; or 2) physical constraints related to plant location, orientation, or general condition which obstruct and/or prevent the application of approved relocation techniques as determined by a landscape professional (ASLA or certified nurseryman).

Unstable Slopes: Land where the natural state of the slopes is unstable due to topography, drainage patterns, soil stability, soil compaction or geotechnical issues, boulders or rock outcroppings, and prior land disturbance.

V.

***View Corridor*:** The area or areas along a street, pedestrian path, hiking trail or other such opening that allow for a clear and unobstructed view of, or one that frames, highlights, or accentuates a prominent object, site, scene, panorama, building, or structure.

W.

***Water Feature*s:** Includes those features as listed and defined below:

a. ***Floodplains*:** The area along a perennial or ephemeral stream or river that fills with water periodically. Floodplains can include riparian areas and sometimes have a distinct vegetative community that included water-loving plants. However, in Maricopa County, many floodplains are simply characterized by dry river or streambeds. (See the **LDO** for Floodplain Management Regulations.)

b. ***Riparian Areas***: The ecosystem located along a perennial or ephemeral wash or river. Usually characterized by water-intensive plants/trees, riparian areas run parallel to streams and rivers.

c. ***Rivers/Streams*:** The lowest point within a watershed where water moves downstream. Streams and rivers in Maricopa County can be perennial or ephemeral.

d. ***Springs/Seeps*:** Fixed locations where groundwater emerges from the earth perennially or ephemerally. These features usually have a distinct water-loving plant community associated with them which can include mesic grasses, reeds, rushes, sedges, cattails and a variety of shrubs and trees.

e. ***Wetlands*:** An area that is saturated by water perennially or seasonally and have a distinct vegetation community associated with water. The term wetlands encompass both the aquatic environmental associated with the pond or lake and the distinct vegetative community around the periphery which can be characterized by mesic grasses, reeds, rushes, sedges and/or cattails.

***Wildlife Corridor*:** Pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural factors in combination with urbanization, and which 1) permit animals to move between remaining habitats allowing depleted populations to be replenished and promoting genetic

exchange; 2) provide escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events, such as fire or disease, will result in population or species extinction; 3) serve as travel paths for individual animals as they wander throughout their home ranges in search of food, water, mates, and other needs, or for dispersing juveniles in search of new home ranges.

***Wildlife Habitat*:** Locations where native wildlife has a tendency to congregate due to provision of food, shelter and/or water.

X.; Y.; Z.

APPENDIX B – PUBLIC RIGHT OF WAY & PUBLIC SPACES PLANT LIST

The City of Surprise desires to promote and preserve the Sonoran Desert environment. Therefore the below plant palette for the urban forest is more restrictive than the Arizona Department of Water Resources (DWR) list of low water use drought tolerant plants allowed under the Phoenix Active Management Area. Therefore, the two (2) tables below (**Table No. 1** and **No. 2**) list only those trees, shrubs and plants that the City of Surprise permits within the public rights-of-way and other public spaces unless modifications are approved by the City Manager or designee.

TABLE NO. 1 - MAJOR ARTERIAL STREETS: (STREET TREES)

Botanical/Common Name *(Main Tree Type)*	**Botanical/Common Name** *(Secondary Tree Type)*	**For Specific Street**
Ulmus parvifolia/Evergreen Elm (100%)	N/A	Dysart Road
Quercus heritage/Heritage Oak (100%)	N/A	Litchfield Road
Cercidium floridum/Blue Palo Verde (100%)	N/A	Bullard Avenue
Pistacia atlantica/Red Push Pistache (50%)	Acacia salicina/Willow Acacia (50%)	Reems Road
Prosopis velutina/Velvet Mesquite (75%)	Olneya tesota/Ironwood (25%)	163rd Pkwy/Sarival Ave.
		Loop 303
Olea europaea/Swan Hill Olive (50%)	Pistacia atlantica/Red Push Pistache (50%)	Cotton Lane
		Sun Valley Parkway
Quercus heritage/Heritage Oak (50%)	Pistacia atlantica/Red Push Pistache (50%)	Bell Road
Prosopis velutina/Velvet Mesquite (75%)	Olneya tesota/Ironwood (25%)	Greenway Road
Ulmus parvifolia/Evergreen Elm (75%)	Quercus heritage/Heritage Oak (25%)	Waddell Road
Prosopis velutina/Velvet Mesquite (100%)	N/A	Cactus Road
		US 60/Grand Avenue
Cercidium microphyllum/Foothills Palo Verde (75%)	Olneya tesota/Ironwood (25%)	SR 74/Carefree Highway

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	***Landscape strip***	**Parking Lot**	**Buffer Areas**
TREES: (▲) Denotes tree which are indigenous to the Phx metropolitan area & (*) trees which are native to Arizona (X) Denotes plants that are allowed & (O) trees which are limited to use in medians greater than 14 feet in width					
Acacia aneura	Mulga	**X**	**X**	**X**	**X**
Acacia farnesiana or smalli	* Sweet Acacia	**O**			**X**
Acacia salicina	Willow Acacia	**X**	**X**	**X**	**X**
Acacia saligna	Blue Leaf Wattle Tree	**X**	**X**	**X**	**X**
Acacia schaffneri	Twisted Acacia	**O**			**X**
Caesalpinia cacalaco	Casalote	**X**	**X**	**X**	**X**
Celtis reticulata	Western Hackberry	**O**			**X**
Cercidium floridum	▲ Blue Palo Verde	**O**			**X**
Cercidium microphyllum	▲ Foothills Palo Verde	**X**			**X**
Cercidium praecox	Palo Brea	**O**			**X**
Chilopsis linearis	* Desert Willow	**X**	**X**	**X**	**X**
Fraxinus velutina, spp	Arizona Ash & Fantex Ash	**X**	**X**	**X**	**X**
Lysiloma thornberi	* Desert Fern	**O**			**X**
Olneya tesota	▲ Ironwood	**O**			**X**
Pistacia atlantica	Red Push Pistache	**O**	**X**	**X**	**X**
Pistacia Chinensis	Chinese Pistache	**O**	**X**	**X**	**X**
Pithecellobium,flexicaule	Texas Ebony	**O**			**X**
Pithecellobium,mexicana	Mexican Ebony	**O**			**X**
Prosopis glandulosa	▲ Honey Mesquite	**O**			**X**

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	***Landscape strip***	**Parking Lot**	**Buffer Areas**
Prosopis velutina	▲ Velvet Mesquite	**O**			**X**
Quercus heritage	Heritage Oak	**X**	**X**	**X**	**X**
Quercus virginiana	Southern Live Oak	**X**	**X**	**X**	**X**
Schinus terebinthifolius	Brazilian Pepper Tree	**O**		**X**	**X**
Tipuana tipu	Tipu Tree	**O**		**X**	**X**
Ulmus parvifolia	Chinese Evergreen Elm	**X**	**X**	**X**	**X**
Vitex agnus-castus	Chaste/Monk's Pepper	**X**			**X**
SHRUBS: (▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona					
Abutilon palmeri	Superstition Mallow				**X**
Acacia constrict	* White Thorn Acacia	**X**			**X**
Acacia greggii	▲ Catclaw Acacia	**X**			**X**
Anisacanthus thurberi	Mexican Honeysuckle	**X**		**X**	**X**
Atriplex canescens	Fourwing Saltbush				**X**
Caesalpinia mexicana	Mexican Bird of Paradise	**X**			**X**
Caesalpinia pulcherrima	Red Bird of Paradise	**X**			**X**
Calliandra californica	Baja Fairy Duster	**X**		**X**	**X**
Calliandra eriophylla	* Fairy Duster	**X**	**X**	**X**	**X**
Cassia artemisioides	Feathery Cassia	**X**		**X**	**X**
Cassia covesii	* Desert Senna	**X**			**X**
Cassia phylodenia	Silver Cassia	**X**	**X**	**X**	**X**
Cassia wislizeni	* Shrubby Senna	**X**	**X**	**X**	**X**
Celtis pallida	▲ Desert Hackberry	**X**			**X**

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	***Landscape strip***	**Parking Lot**	**Buffer Areas**
Cordia parviflora	Little Leaf Cordia	X			X
Dalea pulchra	* Bush Dalea/Indigo Bush	X			X
Dodonaea viscosa	* Hop Bush	X			X
Encelia farinosa	▲ Brittle Bush	X	X	X	X
Ephedra trifurca	▲ Morman Tea	X			X
Ericameria laricifolia	▲ Turpentine Bush	X			X
Hesperaloe parviflora	Pink Yucca	X	X	X	X
Hyptis emoryi	Desert Lavender	X			X
Justicia californica	▲ Chuperosa	X	X	X	X
Larrea tridentate	▲ Creosote Bush	X	X	X	X
Leucophyllum frutescens	Texas Ranger/Sage	X	X	X	X
Leucophyllum laevigatum	Chihuahuan Sage	X	X	X	X
Lycium andersonli	▲ Anderson Lycium				X
Lycium fremontii	▲ Wolfberry Lycium				X
Rhus ovata	* Sugar Bush	X			X
Ruellia peninsularis	Baja Ruellia	X	X	X	X
Salvia clevelandii	Chaparral Sage	X	X	X	X
Simmindsia chinesis	▲ Jojoba	X	X	X	X
Tecoma stans	* Yellow Bells	X		X	X
Zizyphus obtusifolia	▲ Greythorn	X			X

GROUNDCOVERS:

(▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES

Botanical Name	Common Name	Medians	*Landscape strip*	Parking Lot	Buffer Areas
Ambrosia deltoidea	▲ Triangleleaf Bursage	X	X	X	X
Baileya multradiata	▲ Desert Marigold	X	X	X	X
Convolvulus cneorum	Bush Morning Glory	X	X	X	X
Dalea greggii	Trailing Indigo Bush	X	X	X	X
Dalea versicolor v. sessilis	* Weeping Dalea	X	X	X	X
Eriogonum fasciculatum	▲ Flattop Buckwheat	X	X	X	X
Eschscholtzia Mexicana	Mexican Gold Poppies	X	X	X	X
Gazania rigens	Trailing Gazania	X	X	X	X
Lupinus species	Lupine	X	X	X	X
Melampodium leucanthum	* Blackfoot Daisy	X	X	X	X
Oenothera berlandieri	Mexican Evening Primrose	X	X	X	X
Penstemon parryi	* Parry's Penstemon	X	X	X	X
Phacelia crenulata	Desert Bluebells	X	X	X	X
Psilostrophe cooperi	Paperflower	X			X
Salvia farinacea	Mealy Cup Sage	X	X	X	X
Salvia greggii	Texas Red Sage	X	X	X	X
Sphaeralcea ambigua	▲ Globe Mallow	X	X	X	X
Tetraneuris acaulis	Angelita Daisy	X	X	X	X
Teucrium chamaedrys "Prostratum"	Creeping Germander	X	X	X	X
Verbena pulchella	Rock Verbena	X	X	X	X
Wedelia trilobata	Yellow Dot	X	X	X	X

TABLE NO. 2 - ALL OTHER PUBLIC RIGHT-of-WAY & PUBLIC SPACES					
Botanical Name	**Common Name**	**Medians**	***Landscape strip***	**Parking Lot**	**Buffer Areas**
Zauschneria californica	* Hummingbird Trumpet	X	X	X	X
Zinnia grandiflora	* Prairie Zinnia	X	X	X	X
CACTI & SUCCULENTS:					
(▲) Denotes plants which are indigenous to the Phx metropolitan area & (*) plants which are native to Arizona					
Agave parryi	* Parry's Agave	X	X		X
Aloe, species	Aloe species	X	X	X	X
Asclepias subulata	* Desert Milkweed	X	X	X	X
Carnegiea gigantea	▲ Saguaro	X			X
Dasylirion wheeleri	* Desert Spoon	X			X
Echinocactus grusonii	Golden Barrel	X			X
Ferocactus cylindraceus	* Compass Barrel	X			X
Fouquieria splendens	Ocotillo	X			X
Hesperaloe parviflora	Red Yucca	X	X	X	X
Holocantha emoeyi	▲ Crucifixion Thorn	X			X
Opuntia basilaris	* Beavertail Prickly Pear	X			X
Opuntia engelmannii	* Engelmann's Prickley Pear	X			X
Opuntia santa-rita	* Purple Prickly Pear	X			X
Yucca baccata	▲ Banana Yucca	X			X
Yucca elata	* Soaptree Yucca	X			X

APPENDIX C – LOW WATER USE DROUGHT TOLERANT PLANT LIST

This list does not include all of the possible low water use drought tolerate plants approved for the Phoenix Active Management Area; rather it lists those plants that the City of Surprise would prefer a homeowner/property association to use within areas they maintain and for private homeowners to use on-site. The use of other indigenous low water use drought tolerant plants may be permitted. However, the use of plants which are known to be invasive to indigenous vegetation shall be prohibited.

It is strongly recommended that homeowners check with their neighborhood's landscape covenants before designing their private landscaping.

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
TREES					
Acacia constrict	White Thorn Acacia	10' X 15'	habitat & stabilization	moderate	medium
Acacia farnesiana	Sweet Acacia	20' X 20'	habitat & screen	moderate	small
Acacia smallii	Desert Sweet Acacia	20' X 20'	habitat & screen	moderate	small
Acacia salicina	Willow Acacia	30' X 15'	habitat & stabilization	low	none
Acacia saligna	Blue Leaf Wattle	20' X 20'	screening & revegetation	seasonal	none
Acacia schaffneri	Twisted Acacia	18' X 20'	specimen/character	seasonal	small
Acacia stenophylla	Shoestring Acacia	30' X 20'	screening	low	none
Brachychiton populneus	Bottle Tree	40' X 30'	specimen & screening	low	none
Caesalpinia cacalaco	Cascalote	15' X 15'	specimen	low	medium
Celtis reticulata	Western Hackberry	25' X 25'	specimen/character	low	none
Cercidium floridia	Blue Palo Verde	30' X 30'	habitat	seasonal	small
C. microphyllum	Foothills Palo Verde	15'X 15'	habitat	seasonal	medium
Cercidium praecox	Palo Brea	25' X 25'	habitat	low	small

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
Chilopsis linearis	Desert Willow	25’ X 20’	habitat	seasonal	none
Dalbergia sissoo	Rosewood/Sissoo	40’ X 30’	shade & stabilization	low	none
Fraxinus v. Rio Grande	Fan-Tex Ash	40’ X 25’	shade	low	none
Jacaranda mimosifolia	Jacaranda	40’ X 30’	specimen	seasonal	none
Lysiloma thornberi	Desert Fern	15’ X 15’	habitat	high	none
Olneya tesota	Ironwood	25’ X 25’	habitat	seasonal	small
Parkinsonia x (hybred)	Desert Museum Palo Verde	25’ X 25’	habitat	seasonal	none
Pistacia Chinensis	Chinese Pistache	40’ X 35’	shade	seasonal	none
Pistacia atlantica X integerrima	Red Push Pistache	40’ X 40’	shade	seasonal	none
Pithecellobium flexicaule	Texas Ebony	20’ X 15’	specimen/character	moderate	sharp
Pithecellobium mexicana	Mexican Ebony	30’ X 20’	specimen/character	seasonal	sharp
Prosopis glandulosa	Honey Mesquite	25’ X 30’	habitat	seasonal	large
Prosopis pubescens	Screwbean Mesquite	20’ X 20’	habitat	seasonal	
Prosopis velutina	Velvet Mesquite	25’ X 25’	habitat	seasonal	small
Quercus virginiana	Southern Live Oak	40’ X 50’	shade	seasonal	none
Schinus molle	California Pepper	30’ X 30’	screening & shade	moderate	none
Schinus terebinthifolius	Brazilian Pepper	20’ X 25’	shade	low	none
Tipuana tipu	Tipu Tree	30’ X 35’	shade	seasonal	none
Ulmus parvifolia	Evergreen Elm	35’ X 35’	shade	seasonal	none
Vitex agnus-castus	Monk’s Pepper	20’ X 20’	habitat	moderate	none
SHRUBS					

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Abutilon palmeri	Superstition Mallow	4’ X 3’	accent	low	none
Acacia greggii	Catclaw Acacia	6’ X 6’	habitat & revegetate	moderate	sharp
Anisacanthus thurberi	Mexican Honeysuckle	3’ X 4’	hummingbirds	low	none
Anisacanthus quadrifidus	Flame Honeysuckle	3’ X 4’	hummingbirds & butterflies	low	none
Atriplex canescens	Fourwing Saltbush	5’ X 8’	habitat & revegetate	low	none
Caesalpinia gilliesii	Yellow Bird of Paradise	6’ X 5’	hummingbirds & butterflies	Low	none
Caesalpinia mexicana	Mex. Bird of Paradise	8’ X 8’	hummingbirds	moderate	none
Caesalpinia pulcherrima	Red Bird of Paradise	6’ X 6’	hummingbirds & butterflies	low	prickly stems
Calliandra californica	Red Baja Fairy Duster	5’ X 5’	hummingbirds & butterflies	Low	none
Calliandra eriophylla	Pink Fairy Duster	3’ X 4’	hummingbirds	Low	none
Callistemon citrinus	Lemon Bottlebrush	6’ X 8’	specimen	low	none
Cassia artemisioides	Feathery Cassia	4’ X 4’	fragrance & screening	seasonal	none
Cassia covesii	Desert Senna	4’ X 4’	revegetate	moderate	none
Cassia wislizeni	Shrubby Senna	3’ X 4’	specimen	low	none
Celtis pallida	Desert Hackberry	5’ X 8’	screening & habitat	low	thorny/sharp
Cordia parviflora	Little Leaf Cordia	6’ X 6’	screening	Low	none
Dalea pulchra	Bush Dalea/Indigo Bush	4’ X 5’	winter color & butterflies	moderate	none
Dodonaea viscosa	Hop Bush	10’ X 8’	screening	low	none
Encelia farinosa	Brittle Bush	3’ X 4’	habitat & revegetate	low	none
Ephedra trifurca	Morman Tea	3’ X 3’	accent	low	none
Ericameria laricifolia	Turpentine Bush	2’ X 3’	revegetate & habitat	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
Gossypium harknessii	San Marcos Hibiscus	3’ X 4’	specimen	low	none
Hyptis emoryi	Desert Lavender	6’ X 4’	fragrance & habitat	low	none
Justicia californica	Chuperosa	4’ X 4’	hummingbirds	low	none
Larrea tridentate	Creosote Bush	6’ X 6’	screening & revegetate	low	none
Leucophyllum frutescens	Texas Ranger/Sage	6’ X 6’	hedge/screening	low	none
Leucophyllum laevigatum	Chihuahuan Sage	4’ X 5’	fragrant & screening	low	none
Leucophyllum langmaniae	Langman’s Sage	5’ X 5’	fragrant & screening	low	none
Lycium fremontii	Wolfberry	8’ X 8’	habitat & hummingbirds	low	thorny
Nerium oleander	Oleander	6’ X 4’	screening	moderate	none
Plumbago scandens	White Plumbago	3’ X 3’	screening	low	none
Rhus ovata	Sugar Bush	6’ X 6’	screening	low	none
Ruellia peninsularis	Baja Ruellia	3’ X 4’	hummingbirds	low	none
Simmindsia chinesis	Jojoba	6’ X 6’	screening & revegetate	low	none
Sophora secundiflora	Texas Mountain Laurel	8’ X 6’	fragrant & screening	low	none
Tecoma stans v. angustata	Arizona Yellow Bells	6’ X 6’	hummingbirds	moderate	none
Viguiera deltoidea	Golden Eye	3’ X 3’	revegetate	low	none
GROUNDCOVERS, VINES & PERENNIALS					
Acacia redolens	Trailing Acacia	1’ X 10’	bank & erosion control	low	none
Ambrosia deltoidea	Triangleleaf Bursage	1’ X 2’	natural landscape	low	none
Antigonon leptopus	Queen’s Wreath	15’ X 15’	vine	seasonal	none
Baileya multiradiata	Desert Marigold	1’ X 1’	year round blooms	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Bougainvillea spectabilis	Bougainvillea	spreading	accent	high	large
Chrysactinia mexicana	Damianita	2’ X 2’	Fragrant & accent	low	none
Convolvulus cneorum	Bush Morning Glory	2’ X 3’	attracts pollinators	low	none
Dalea greggii	Trailing Dalea	2’ X 8’	hardy cover & habitat	low	none
Gazania rigens	Trailing Gazania	8” X 18”		low	none
Glandularia species	Verbena species	1’ X 3’	attracts butterflies	low	none
Hymenoxys acaulis	Angelita Daisy	1’ X 1’	accent	low	none
Jasminum mesnyi	Primrose Jasmine	10’ X 6’	vine & informal screen	low	none
Lantana spp.	Trailing Lantana	1’ X 4’	attracts butterflies	low	none
Melampodium leucanthum	Blackfoot Daisy	1’ X 2’	fragrant & habitat	low	none
Merremia aurea	Yuca Vine	10’ X 10’	vine	seasonal	none
Myoporum parvifolium	Myoporum	8” X 6’	slope & erosion control	Low	none
Oenothera berlandieri	Mex. Evening Primrose		fragrant & habitat	low	none
Oenothera stubbei	Saltillo Primrose	18” X 4’	erosion control & habitat	low	none
Penstemon spp.	Penstemon varieties	2’ X 2’	attracts hummingbirds	low	none
Phacelia crenulata	Desert Bluebells	1’ X 1’	revegetate & habitat	low	none
Phacelia campanulana	California Bluebells	1’ X 1’	revegetate & habitat	low	none
Podranea ricasoliana	Pink Trumpet Vine	spreading	vine	seasonal	none
Psilostrophe cooperi	Paperflower	1’ X 2’	habitat	low	none
Ratibida columnaris	Mexican Hat	2’ X 1’	cut flower	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
Rosmarinus officinalis	Trailing Rosemary	2’ X 4’	attracts pollinators	low	none
Ruellia peninsularis	Ruellia	3’ X 3’	attracts butterflies	low	nonne
Salvia clevelandii	Chaparral Sage	4’ X 4’	attracts hummingbirds	low	none
Salvia farinacea	Mealy Cup Sage	2’ X 2’	attracts hummingbirds	low	none
Senna covesii	Desert Senna	18” X 18”	summer blooms	low	none
Sphaeralcea ambigua	Globe Mallow	3’ X 3’	flowers & seeds	low	none
Teucrium chamaedrys	Creeping Germander	6” X 3’	fragrance	low	none
Wedelia trilobata	Yellow Dot	18” X 6’	accent	low	none
Zauschneria californica	Hummingbird Trumpet	1’ X 2’	attracts hummingbirds	low	none
Zinnia acerosa	Desert Zinnia	6” X 12”		low	none
Zinna grandiflora	Prairie Zinnia	1’ X 1’	attracts butterflies	low	none
FLOWERS and GRASSES (TURF)					
All turfs are considered high water use and therefore should be restricted in their use. Prefer limiting use to sport fields, small play areas and private backyards.					
Bouteloua curtipendula	Sideoats Grama	2’ X 2’	ornamental grass & habitat	Low	none
Eschscholzia mexicana	Mexican Gold Poppy	1’ X 1’	wildflower (reseeds)	low	none
Gaillardia pulchella	Blanket Flower	18” X 18”	summer blooms	low	none
Linum spp.	Red Flax & Blue Flax	2’ X 2’	wildflower	low	none
Lupinus arizonicus	Lupine	3’ X 3’	habitat & wildflowers	low	none
Muhlenbergia rigens	Deer Grass	4’ X 4’	ornamental grass	low	none
Orthocarpus purpurascens	Owl’s Clover	6” X 6”	wildflower	low	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY					
Botanical Name	**Common Name**	**Height X Spread**	**Function**	**Litter**	**Thorns**
CACTUS and SUCCULENTS and ACCENT PLANTS					
Agave, various species				low	varies
Aloe, various species				low	varies
Asclepias subulata	Desert Milkweed	3’ X 3’	attracts butterflies	low	none
Brahea armta	Mexican Blue Palm	25’ X 10’	specimen/containers	low	small
Carnegiea gigantea	Saguaro	20’ X 10’	habitat	low	long
Dasylirion longissimum	Grass Tree	5’ X 5’	accent plant	low	none
Dasylirion wheeleri	Desert Spoon	4’ X 4’	accent plant	low	sawtooth
Echinocactus grusonii	Golden Barrel	2’ X 2’	accent plant	low	long
Echinocereus engelmannii	Hedgehog Cactus	1’ X 2’		low	long
Ferocactus acanthodes	Compass Barrel	2’ X 2’	naturalistic landscapes	low	long
Fouquieria splendens	Ocotillo	12’ X 10’	attracts hummingbirds	low	medium
Hesperaloe funifera	Giant Hesperaloe	5’ X 5’	attracts butterflies	low	none
Hesperaloe parviflora	Red Yucca	3’ X 5’	attracts hummingbirds	low	none
Opuntia, various species	Prickly Pear		food source	low	spiny
O. ficus-indica	Indian Fig	12’ X 18’	sculptural accent	low	none
O. basilaris	Beavertail Prickly Pear	1’ X 3’	habitat	low	small
O. engelmannii	Desert Prickly Pear	5’ X 8’	habitat	low	medium
O. santa-rita	Purple Prickly Pear	4’ X 5’	habitat	low	small
Phoenix dactylifera	Date Palm	60’ X 25’	accent & fruit	seasonal	sharp fronds
Washingtonia robusta	Mexican Fan Palm	75’ X 10’	accent	seasonal	none

TABLE NO. 1 –PREFERRED LOW WATER USE PLANT LIST FOR PRIVATE PROPERTY

Botanical Name	Common Name	Height X Spread	Function	Litter	Thorns
Yucca, various species					
Y. baccata	Banana Yucca	3’ X 5’	effective security plant	low	sharp tips
Y. brevifolia herbertii	Joshua Tree	15’ 10’	accent	low	sharp tips
Y. elata	Soaptree Yucca	10’ X 4’	accent	low	sharp tips

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Presentation:
Updating the Development Code

Planning and Zoning Commission

September 3, 2020

Tonight's Discussion

- Overview of the update
  - Newest drafts – www.surpriseaz.gov/developnext
- Stakeholder Meetings
  - New hybrid format
  - Summary of discussions
- Community Pools (Facilities) Discussion
  - Purpose of community facilities
  - Thresholds

Code Update

Changes to the overall code must follow 3 principles:

1. Easy to Read
   - Clear and transparent for individuals, property owners, and developers
2. Easy to Administer
   - Straightforward interpretation for staff when reviewing projects
3. Easy to Enforce
   - Well-defined regulations for enforcement officers/inspectors to evaluate

Stakeholder Meetings

- Early 2020, in-person meetings
- Discussed Pools, Residential Standards, TND Zoning, Land Division
- Paused during social distancing and gathering restrictions
- Input continued, staff revise the drafts
- Restarting with virtual stakeholder outreach meetings

Stakeholder Meetings

Community Facilities ~~Pools~~

Current Regulation – Required to construct a community pool

- Medium density projects that exceed 60 dwelling units

Leadership direction to Staff – Revise the current regulations with a practical approach

- Narrow/small lot subdivisions lack of individual recreational space
- Restricts pools homeowners from building a private pool.
- Provide for a desired amenity and serves as a common gathering space.

Stakeholder Meetings

Community Facilities ~~Pools~~

Stakeholder Comment

- Agree that the current 60-lot threshold is significantly too low
- Reiterated to staff that the market should be the driving force behind providing a community pool
- Difficult to amortize the cost of constructing and maintaining a community pool across the price point of the homes and HOA fees.
- Prefer not prescribed regulation, at least request more flexibility

Pools Costs - Stakeholder Comments

- 100 unit subdivision with small pool: $63.52/month
- 250 unit subdivision with small pool: $25.41/month
- 200 unit subdivision with medium pool: $37.37/month
- 500 unit subdivision with medium pool: $14.95/month
- 500 unit subdivision with large pool: $19.70/month
- 1000 unit subdivision with large pool: $9.85/month

Note: This is just for the pool

so additional master and sub association fees would need to be added to understand the total HOA fees per month

(Typically min. of $65/month),

Estimated Pool Expenses

Based on small, medium and large pools for corresponding sized communities
Includes; restroom building, equipment room, wrought iron fencing/pedestrian gates, heated pool (no spa), reserves, etc.

Date of Last Revision: 3/5/20

		Small		Medium		Large	
# of Units:		100	250	200	500	500	1,000
Monthly Assessment:		$63.52	$25.41	$37.36	$14.95	$19.70	$9.85
INCOME							
40005	Assessments	76,226		89,674		118,183	
TOTAL INCOME		76,226		89,674		118,183	
CONTRACT SERVICES							
55022	Janitorial Contract	3,600		5,000		8,000	
55032	Pool Maintenance Contract	7,000		10,000		12,000	
55035	Management Contract	1,200		2,400		3,600	
TOTAL CONTRACTS		11,800		17,400		23,600	
ADMINISTRATIVE EXPENSES							
51046	Gate/Key Expense	800		1,000		1,200	
51065	Insurance	2,000		2,500		3,000	
51170	Permits/Inspections	275		275		275	
TOTAL ADMIN EXPENSES		3,075		3,775		4,475	
MAINTENANCE & LABOR							
53027	Janitorial Supplies	1,400		1,600		1,800	
53055	Pest Control	500		500		500	
53105	Building Maintenance & Repair	800		800		800	
53205	Pool Repairs & Maintenance	3,200		4,000		4,800	
53215	Pool Supplies & Chemicals	4,000		6,000		8,000	
TOTAL MAINTENANCE & LABOR		9,900		12,900		15,900	
UTILITY EXPENSES							
52005	Electricity - Pool	3,800		4,200		4,800	
52027	Water - Pool	3,600		4,800		6,000	
52045	Gas	28,471		30,119		40,983	
TOTAL UTILITY EXPENSES		35,871		39,119		51,783	
TOTAL OPERATING EXPENSES		60,646		73,194		95,758	
OPERATING INCOME		15,579		16,481		22,425	
49001	Transfers to Reserve Fund	(15,579)		(16,481)		(22,425)	
NET INCOME		-		(0)		-	

Pools Costs - Stakeholder Comments

- Initial Construction Costs to be provided by home builders, requested by P&Z and City Council
- Survey of resale market for community pools
  - 22% YES vs 50 % NO
    - (27% MAYBE based on buyers ability to build private pool)
  - Do HOA fees with community pool that deter buyers?
    - 33% split (yes vs no vs unanswered)
  - Buyer preference
    - Private backyard pool – 61%
    - Community pool – 5%
    - Both – 27%
    - Neither – 5%

Revised Standards

Community Facilities ~~Pools~~

Proposed Regulation – Located in the PEDS (basic idea, more dwelling units = more amenities)

- Sliding scale of amenities, calculated on the number of dwelling units provided
  - Less than twenty (20) units = One (1) amenity
  - Twenty (20) to one hundred (100) units = Three (3) or more amenities
  - One hundred (100) to one hundred eighty (180) units = Four (4) or more amenities
  - One hundred eighty (180) to two hundred sixty (260) units = Five (5) or more amenities
  - Two hundred sixty (260) units or larger = Six (6) amenities ~~plus a community pools~~
    - This provision is meant to support the threshold mentioned below, must be reworded

Revised Standards

Community Facilities ~~Pools~~

Proposed Regulation – Located in the PEDS

- "…Single-, Two, and Three-family Developments shall provide a Community Facility ~~Pool Amenity~~…"
  - The residential development is **80 gross acres or more** with a gross density equal to or greater than **3.25 DU/ac**; or,
  - ~~The development contains any lot or lots that are less than 50 feet wide and contain a required rear yard area of less than 1,000sf.~~
    - Known as the '1-lot failure' to preventing shorting, but nearly impossible to regulate
    - Find a threshold where projects beneath the don't need a facility

Revised Standards

Community Facilities ~~Pools~~

Proposed Regulation – Located in the PEDS

- PEDS also includes criteria for size and design of community facility ~~pool~~
  - Serve greatest number of dwelling units possible within ¼ mile radius of the facility
  - Restrooms, shade structure, water fountain, pool barrier, etc.
- Only require 1 community facility per new subdivision, not meant as a cumulative requirement

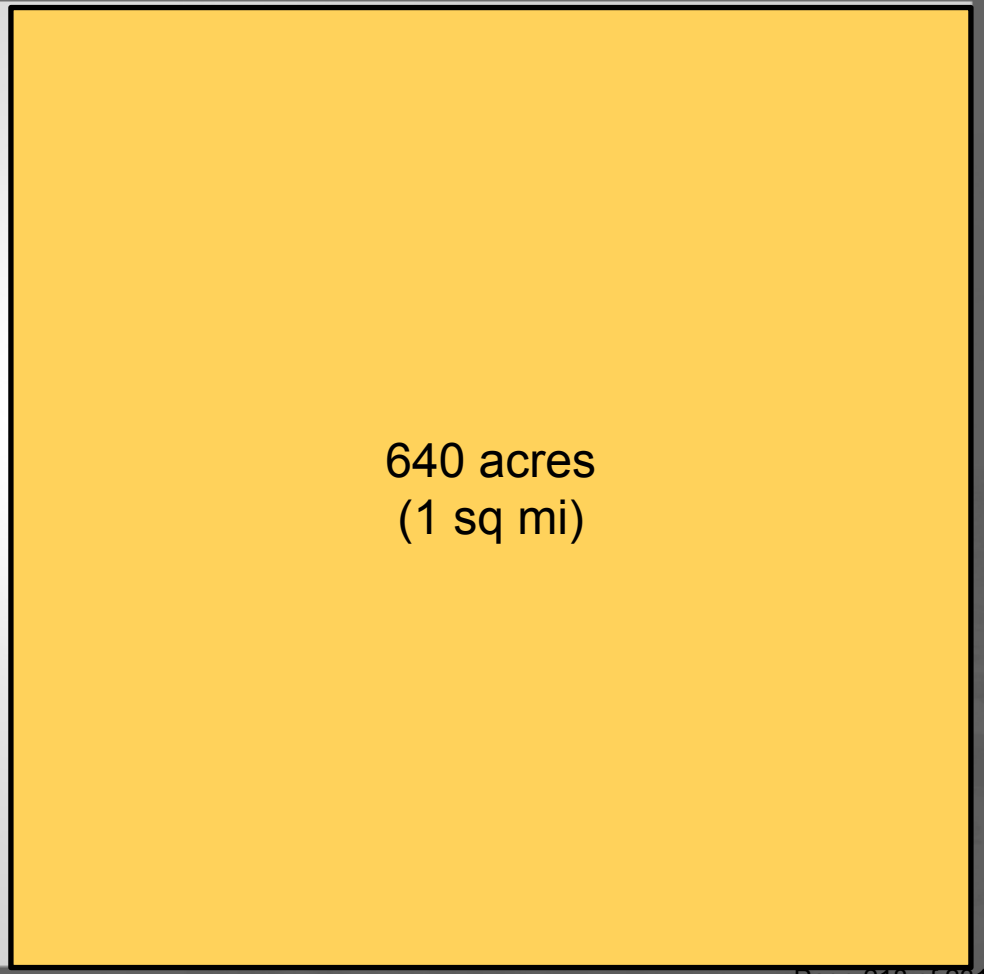
Community Facilities ~~Pools~~

New R-1 and R-2 Subdivisions must provide a Community **Facility** ~~Pool~~

Threshold: Size and Density
- 80 acres or greater, AND
- 3.25 du/ac or greater

(about 260 dwelling units)

~~Also a single Lot failure rule~~
- ~~Lot less than 50' wide and~~
- ~~Required rear yard area of less than 1,000sf (about 20-25 rear setback)~~



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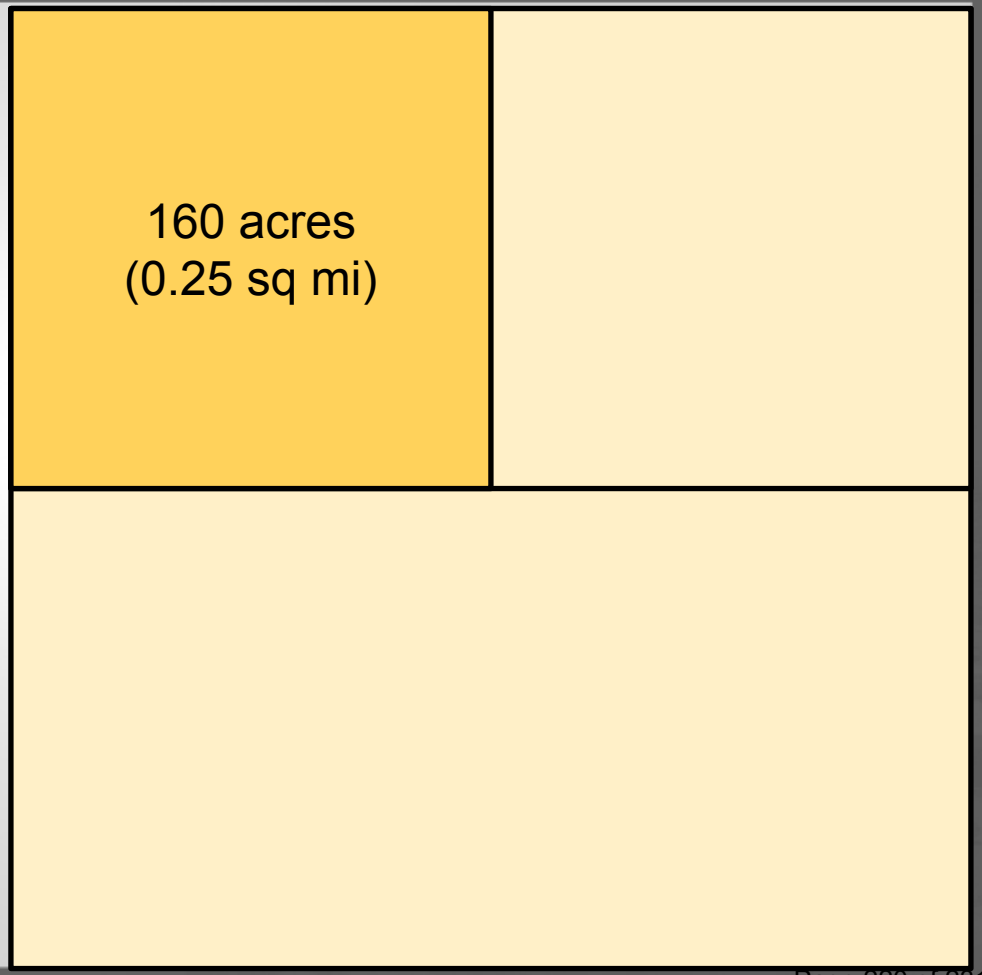

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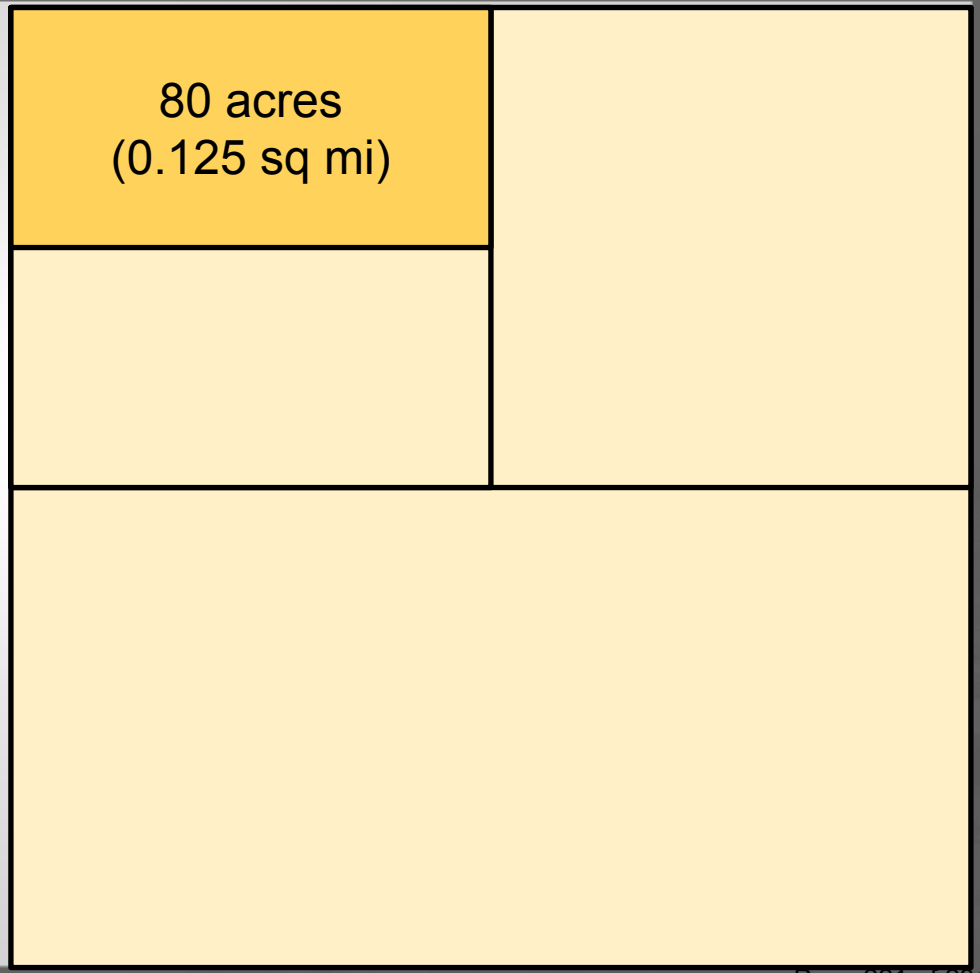
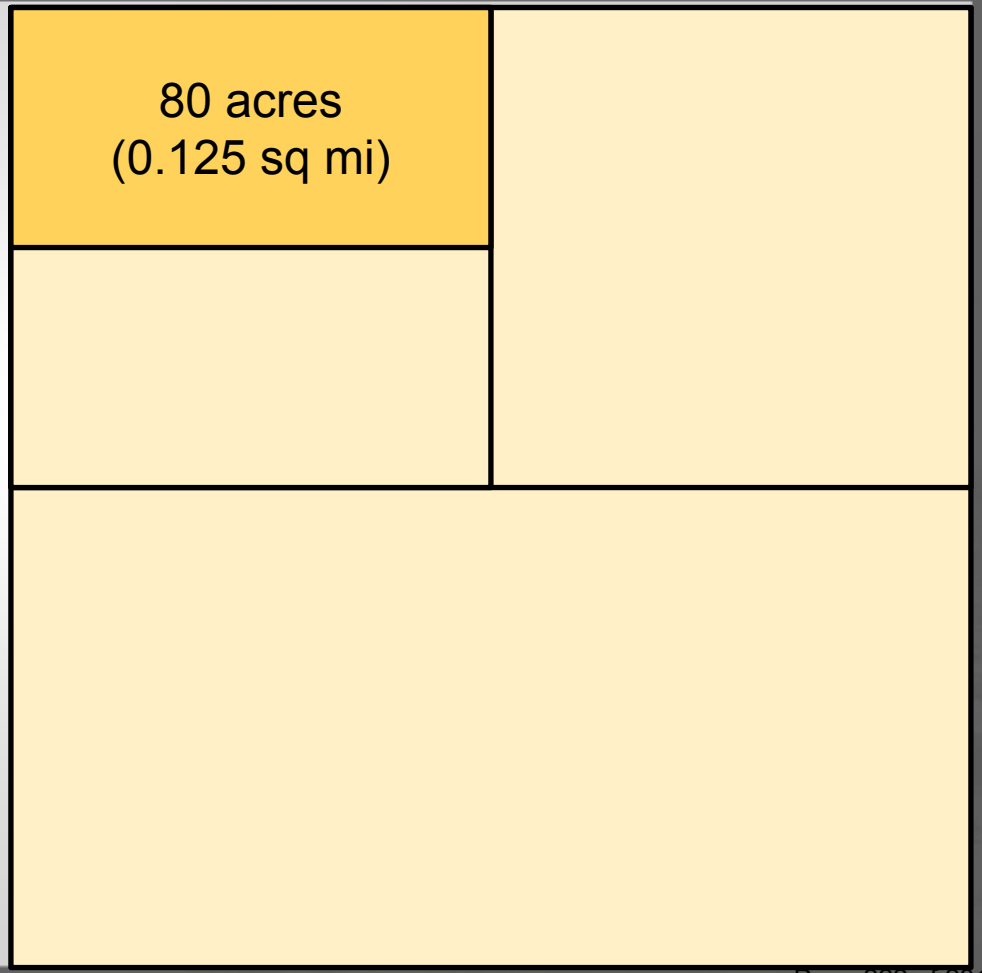


Size Rationale

- 1 square mile, area of 640 acres
- A 1/4 section, an area of 160 acres
- A 1/8 section, an area of 80 acres
- **Places the amenity within walking distance**



Stakeholder Response

- A large amenity or community pool requirement is too prescriptive
- ‘1-lot failure’ rules: any threshold creates an opportunity to develop outside that scenario
- Not all large amenities necessitate bathrooms, water fountains, shade structure, etc.
- If a provision for a large amenity remains the thresholds and sliding scale of amenities should be recalculated
- Provide a mechanism to accommodate infill projects or subdivisions phased within a larger development

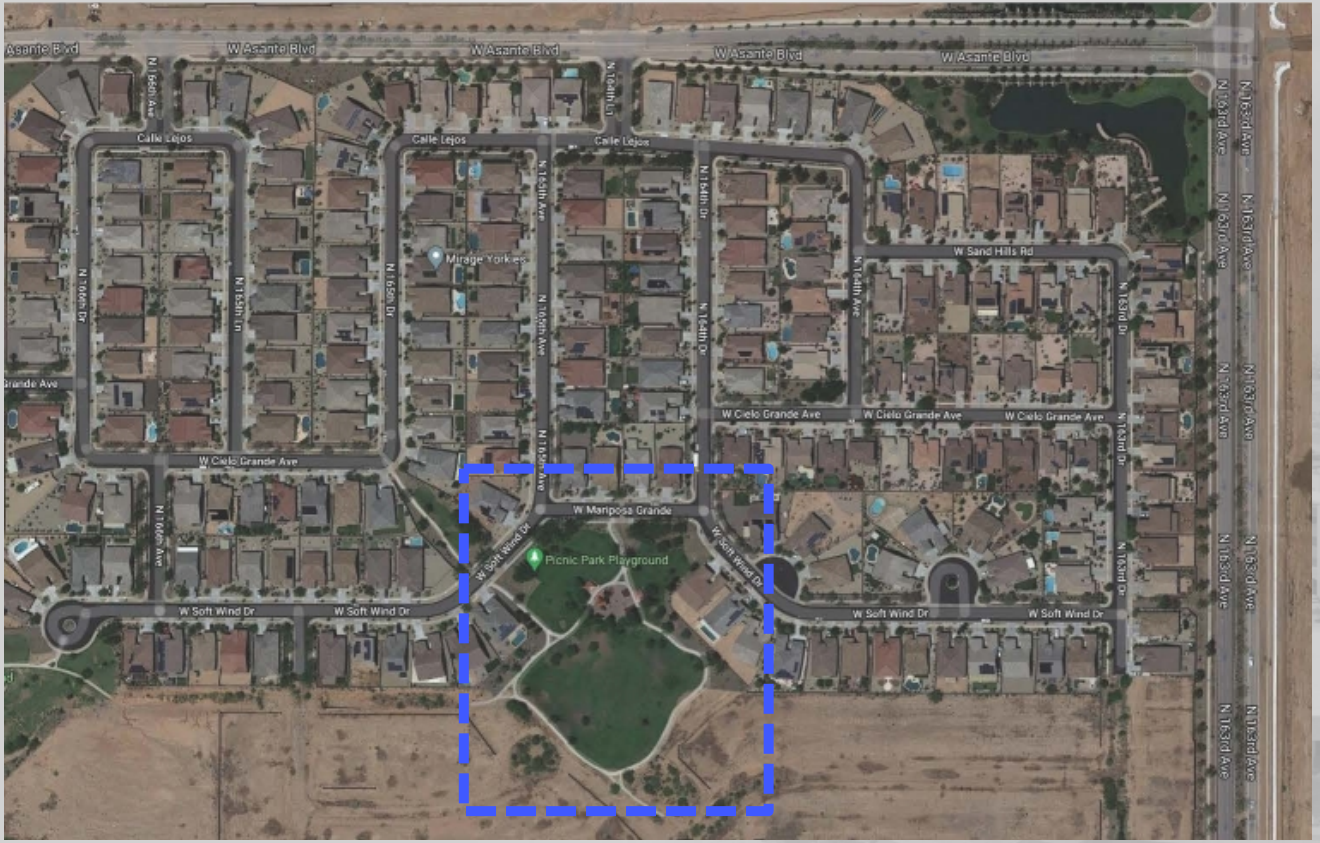
Direction Needed

- Should the PEDS include a requirement for a community pool or a large amenity?
- Should this requirement be removed to allow market forces determine amenities?
- Can the extra provisions that account for unique, ‘1-lot failure’ rule situations be removed from the PEDS?
- Can features like bathrooms, showers, water fountains, shade structure, etc be regulated by other regulations, like building codes?

Direction Needed

- Is the threshold for the large amenity sufficient or should it be changed (and to what)?
  - 80 gross acres or more, and 3.25 DU/ac or more gross density
- Is the size calculation for the size of the large amenity sufficient?
  - Number of dwelling units within the residential subdivision X 3.8 persons per dwelling unit X 100 sf per persons served
  - For example:
    260 DU X 3.8 persons/DU X 100 sf/persons = **98,800 sf**
- Or should this be a single minimum measurement, such as 100,000 sf?

Approximately 100,000sf of OS



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QUESTIONS OR COMMENTS?

Thank You

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LDO Update Discussion

Case:	**FS18-296**
Project Name:	**Land Development Ordinances Update – Pools and Community Facility**
Council Districts:	**Citywide**
Meeting Date:	**September 3, 2020**
Planner:	**Joshua Mike**
Attachments:	**Draft Planning and Engineering Design Standards (PEDS) Volume 1 (Clean Draft and Revised With Notes Draft, dated August 2020)**

Background:

It's been nine years since the City has completed a comprehensive update to the existing Surprise Unified Development Code (SUDC), which effectively acts as the City's Zoning Code. In December 2019, the Community Development Department published a proposed comprehensive update, which will replace the existing SUDC with Land Development Ordinances (LDO) within the city's Municipal Code and establish the Planning and Engineering Design Standards (PEDS).

During the first few months of this year, many of the draft chapters were presented and discussed at stakeholder meetings, Planning and Zoning Commission meetings, and City Council Work Sessions. Over the past few months, while social distancing protocols and gathering restrictions have been in place, staff has continued to revise the drafts based on those meetings and additional feedback received by phone and email.

Introduction:

This memo presents the provisions in the PEDS as it relates to the regulations for community pools. It will show the current regulation in the SUDC, draft language presented to stakeholders and City leadership, and a summary of outreach discussions. It will identify multiple options discussed between staff and stakeholders. Direction will be sought from the Planning and Zoning Commission and City Council on how to finalize design standards.

The attachments to this memo include updated drafts of the PEDS since the first draft was published. One copy includes all the changes shown in red and includes notes from stakeholder and City comments. The other copy has all the revisions accepted and displayed as a clean version of the draft.

SUDC Pool Requirement:

The existing SUDC requires that medium density projects that exceed 60 dwelling units must include a community pool as part of the development. At previous discussions with the Planning and Zoning Commission and the City Council, staff was directed to draft language as a revision to the current regulations with a more practical approach.

The priority centered around 2 main concepts:

1. The increasing number of proposed narrow/small lot subdivisions results in a lack of individual recreational space and restricts the homeowner from building a private pool.
2. Community pools provide for a desired amenity and serves as a common gathering space.

Draft PEDS Language-Community Pools;

In February 2020, staff presented design standard language in the PEDS that retained a requirement for a community pool but with different thresholds for a given development. A summary of those provisions included:

- All single-, two-, and three-family developments must provide a sliding scale of amenities, calculated on the number of dwelling units provided, i.e. **more homes = more amenities**.
    1. Less than twenty (20) units = One (1) amenity
    2. Twenty (20) to one hundred (100) units = Three (3) or more amenities
    3. One hundred (100) to one hundred eighty (180) units = Four (4) or more amenities
    4. One hundred eighty (180) to two hundred sixty (260) units = Five (5) or more amenities
    5. Two hundred sixty (260) units or larger = Six (6) amenities a large community amenity listed below
- The following are types of individual amenities that meet the above requirement.
    1. Ramada with BBQ and seating area.
    2. Tot lot minimum three thousand (3,000) square feet with three (3) pieces of play equipment.
    3. Regulation size volleyball court.
    4. Concrete multi-use court sixty (60) feet by sixty (60) feet minimum.
    5. Lighted, regulation size tennis courts, racquetball courts, and/or pickle ball court.
    6. Weight room.
    7. Putting green.
    8. Large amenities that may include but are not limited to a community facility for social, entertainment, athletic, or recreational uses or community pool
- Developer to provide semi-public pool facility in single-, two-, and three-family developments when each of the following are met:
    1. 80 gross acres or more, and
    2. 3.25 DU/ac or more gross density
    3. All lots must have minimum required rear yard area of 1,000 square feet or pool requirement is invoked regardless of gross area or gross density (known as the '1-lot failure' rule)
- Location of pool must be within ¼ mile of most homes and size determined by a calculation of number of residents served
    1. Number of dwelling units within the residential development X 3.8 persons per dwelling unit X 0.1 sf per persons served
    2. For example: 260 DU X 3.8 persons/DU X 0.1 sf/persons = 98.9 sf
- Community Pool is quasi-public for the subdivision's residents and must include bathrooms, water fountains, shade structure, etc.

Discussion and Input:

Discussions with stakeholders, Planning and Zoning Commission meetings, and City Council Work Sessions, included the ongoing costs for a homeowners associations (HOA) amortized over various size subdivisions, the opposition to prescribed rigidness of a required community pool, and the quality of life benefits of a community facility that offers gathering spaces and/or recreation.

Feedback from the WeSERV Association of REALTORS showed that the resale homebuyers are not consistently seeking community pool options when searching for homes, but instead prefer private pools if choosing between the two options. Approximately 27% of those asked prefer both. High HOA fees associated community pools deter about 1/3 of buyers.

Home builders echoed the sentiment that community pools are only added to a subdivision when it adds value to the package and lifestyle of its identity. Other subdivisions include other amenity options to differentiate the subdivision from others.

Direction from City Leadership:

Staff was directed to maintain a regulation for some form of large amenity and explore options that provide builders with flexibility. Stakeholders were informed that quality of life and benefits from a large amenity are important and can be integrated into large subdivisions to benefit both the builder in the short-term and the residents of the City in the long-term.

Updated Revisions:

Using the discussion and direction from City Leadership, staff revised the language from February 2020 and presented to stakeholders at a virtual stakeholder meeting on August 24, 2020. While this started as a discussion exclusive to the community pool requirement, it has evolved into an open space/amenities package discussion. This allows a broader approach to understand the whole issue that community pools were previously trying to address.

A summary of the revised approach includes:

- A **large amenity** replace the explicit requirement for a community pool
    1. The type of amenity is flexible for developers but must meet a general size determined by a calculation of number of residents served.
    2. Any variety of amenities may be placed within that **large amenity** portion of subdivision, such as playgrounds, clubhouse, splash pads, community pool, etc.
- The '1-lot failure' rule is connected to exceeding a percentage of the small lot categories in the development standards table in the zoning chapter of the LDO.

Stakeholder Response:

Stakeholders engaged in a thorough discussion during the meeting on August 24, voicing their response and offering suggested revisions. A summary of those revisions include:

- First and foremost, a large amenity or community pool requirement is too prescriptive. The City should maintain the open space and trails requirements, but allow market forces to determine the types/sizes of amenities installed within the open space.
- Provisions related to '1-lot failure' rules are intended to prevent shorting but any threshold will create an opportunity to develop outside that scenario.
    1. The City should accept that anything developed outside the threshold means the project is acceptable without that provision.
- Not all large amenities necessitate bathrooms, showers, water fountains, shade structure, etc. Those features do not universally provide value compared to costs and maintenance. The building code should be the authority if those features must be provided, such as community pools, clubhouses, fitness centers, etc.
- If a provision for a large amenity remains in the final draft of the PEDS, the thresholds and sliding scale of amenities should be recalculated to reflect better value and practicality for the design of a subdivision
- The City should provide a mechanism to accommodate infill projects or subdivisions phased within a larger development that has included a large community facility.

Direction Needed:

In order to prepare the next set of revisions for the LDO and the PEDS, staff is considering some of the suggestions identified by the stakeholder groups. Direction from the City Leaders is needed on the following concepts.

- Should the PEDS include a requirement for a community pool or a large amenity?
- Should this requirement be removed to allow market forces determine amenities?
- Can the extra provisions that account for unique, '1-lot failure' rule situations be removed from the PEDS?
- Can features like bathrooms, showers, water fountains, shade structure, etc. be regulated by other regulations, like building codes?
- Is the threshold for the large amenity sufficient or should it be changed (and to what)?
    - 80 gross acres or more, and
    - 3.25 DU/ac or more gross density
- Is the size calculation for the size of the large amenity sufficient?
    - Number of dwelling units within the residential subdivision X 3.8 persons per dwelling unit X 100 sf per persons served
    - For example: 260 DU X 3.8 persons/DU X 100 sf/persons = 98,800 sf
- Or should this simply be a single minimum measurement, such as 100,000 sf?

Conclusion:

Feedback from this meeting will be discussed and revisions to the PEDS will be made. Updated drafts will be published and distributed to the stakeholder and discussed at future stakeholder meetings, Planning and Zoning Commission meetings, and City Council Work Sessions.