

**AMENDED AGENDA**

**FOR THE REGULAR MEETING OF THE CITY OF BELEN PLANNING AND ZONING COMMISSION, STATE OF NEW MEXICO, COUNTY OF VALENCIA TO BE HELD ON MONDAY THE 12<sup>th</sup> OF MARCH 2018 AT 6:00 PM IN THE COUNCIL CHAMBERS AT CITY HALL, 100 SOUTH MAIN STREET, BELEN, NEW MEXICO 87002.**

ALL P & Z COMMISSION MEETINGS ARE VIDEO AND AUDIO RECORDED.

*A COPY OF THE AGENDA MAY BE OBTAINED FROM THE OFFICE OF THE CITY OF BELEN PLANNING & ZONING DEPARTMENT.*

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PLEDGE OF ALLEGEANCE**
- 4. APPROVAL OF AGENDA**
- 5. APPROVAL OF MINUTES**  
Minutes of February 12, 2018 & February 26, 2-19
- 6. PUBLIC COMMENT 3 MINUTE PRESENTATIONS:** If more time is needed for presentation, please ask to be scheduled on the next agenda.
- 7. PRESENTATION**
  - a. De La Reina Subdivision-Westway homes housing presentation.
- 8. DISCUSSION**
  - a. Landscape Ordinance-Final review
  - b. Becker Ave Zoning & C-R Zoning
- 9. INFORMATIONAL ITEMS**
  - a. Communication from the Commission and Staff
- 10. ADJOURNMENT**

RESPECTFULLY SUBMITTED

/s/  
Lisa R Miller, Planning & Zoning  
Administrator

cc: Mayor & City Council  
News Bulletin

Belen Chamber of Commerce  
Belen Recreation Center

Belen Public Library  
Belen City Hall

**JERAH R CORDOVA**  
MAYOR  
**LEONA VIGIL**  
CITY MANAGER



**CITY OF BELEN**  
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**WAYNE GALLEGOS**  
CITY COUNCIL  
**DAVID CARTER**  
CITY COUNCIL  
**DARLEEN ARAGON**  
CITY COUNCIL  
**FRANK ORTEGA**  
MAYOR PRO-TEM

**CITY OF BELEN  
PLANNING & ZONING COMMISSION MEETING  
MINUTES  
FEBRUARY 12 2018**

Chairman Steve Etheridge called the regular meeting of the Belen Planning and Zoning Commission meeting to order at 6:00 p.m.

**PRESENT:** Chairman Steve Ethridge  
Commissioner Claudine Montano  
Vice Chair Pete Armstrong  
Commissioner Gordon Reeves

**ABSENT:** Commissioner Jim Lardner

**CITY STAFF:** Steven Tomita, Economic Development  
Lisa R Miller, Planning & Zoning Administrator

**OTHERS:** Lenore Pena, Citizen

**PLEDGE OF ALLEGIANCE**

Chairman Steve Ethridge led the Pledge of allegiance.

**APPROVAL OF AGENDA:**

Vice Chair Pete Armstrong moved to approve the Agenda of January 29, 2018.

Commissioner Gordon Reeves seconded the motion.

Motion Carried.

**APPROVAL OF MINUTES:**

Commissioner Claudine Montano moved to approve the minutes of January 29, 2018.

Vice Chair Pete Armstrong seconded the motion.

Motion carried.

### **PUBLIC COMMENT**

Ms. Lenore Pena informed the Commission the City has been installing the new water meters and noticed that the silver meter caps on some of them are sticking up far enough to be a tripping hazard.

Steven Tomita said that she needs to talk to Carl Rael the City risk/Safety Specialist.

### **DISCUSSION**

**Becker Ave Zoning & Belen Alexander Airport.**

Steven Tomita said that he would like to combine the two discussion items under one discussion. The Commission had been working on the Landscaping Ordinance to be submitted to the City Council for discussion. The Commission had been involved with the Airport, trying to set up for a Master Plan. He is not sure that they are ready to get into that yet. The reason is that the FAA and the Air Force are pushing the MRCOG, the City and the County to have an intergovernmental agreement on the airport for the management and the development of the Airport Master Plan. An Airport Commission is also being requested. If an Airport Commission was put together then it would be the initial entity to put the Master Plan together. They would then bring the Master Plan to the Planning & Zoning Commission for review. Based on that, he feels that the P & Z Commission should not be going back into the Airport and the Master Plan until the County is on board and they are participating, since some of the surrounding area is in the County. At the last City Council meeting the Council approved a zone change for the City owned properties on the block where the new fire station is going to be, along with the City owned properties along Backer Ave. The zone was changed to C-2. He brought up the Becker Ave. Overlay Zone and the C-R zones need to be reviewed for changes. A lot of what is in those zones is either outdated or does not apply. The Great Blocks Grant design for the revitalization of the area along Frist St. then up Becker Ave. to Second St. That revitalization will entail narrowing Becker Ave. from First St. to Second St., and creating twelve foot (12') sidewalks, which is contrary to the C-R Zone. The C-R Zone limits any building to a total of 4,000 sq. ft. and most of the existing buildings exceed the 4,000 sq. ft. The Becker Ave. overlay zone has in it that 50% of the building front has to be brick and there are only two brick buildings on Becker Ave.

Chairman Steve Ethridge asked why there was a limit of 4,000 sq. ft.

Steven Tomita said he thinks it was to create small shops and encourage those small shops. We are encouraging the retail on the bottom with housing on the top. It is the old concept of keeping your eyes on the area. The Becker Ave. Overlay zone was also being looked at for expansion to include Dalies Ave. and possibly including all the way to Reinken Ave.

Chairman Steve Ethridge asked the Commission what they would like to work on, either the Becker Ave. Overlay or the Airport Ordinance.

The Commission agreed to go forward on the Becker Ave. C-R Zone review and table the Airport until we know what is going on with the County.

Vice Chair Pete Armstrong said what he would be cautious about, from his experience with the trade show, getting the County and others involved in this, can prove to be troublesome and feels some kind of time line needs to be placed on it. We are going to have to put a fire underneath them to get them to move.

Steven Tomita said that Sandra Gaiser or the MRCG, is going to be arranging a meeting between the County, the City, and MRCG to get this moving forward.

Vice Chair Pete Armstrong informed staff that he only received two of the three pages that the Becker Ave. Zone said it has.

Lisa Miller informed them that was because the last page just had the references like what Ordinance number it was and when it was updated. It had no written sections of the ordinance on it.

Steven Tomita said that the Commission can look at the Backer Ave Zone and then review the C-R zone which is the underlying zone in that area and the Becker Ave Zone supersedes the C-R Zone.

Chairman Steve Ethridge said that it was his understanding that an overlay zone is an addition set of rules and regulations that are included with the underlying zone.

Steven Tomita said it is in addition but an overlay zones governs if it is more restrictive.

The Commission left the Intent alone.

Steven Tomita said that the key to that Intent is that we are encouraging mixed development and a pedestrian-friendly atmosphere. That is the intent of the revitalization of First St. from the bridge to Becker Ave then up to Second St.

Vice Chair Pete Armstrong said that was what was done along Dalies also. They increased the sidewalk areas and cut down on the road.

Under General Provisions, the only thing that was added was the addition of Dalies Ave. in the Becker Ave Overlay Zone area.

Under Regulations:

Chairman Steve Ethridge said that under building design number one, where it speaks about bold patterns or large graphics or suing buildings as signs, he feels that it should not be prohibited but should be with approval. He sees no problem with someone doing this but with approval from the P & Z Commission. Some of those things are what gives downtowns character.

Steven Tomita said that the Commission came up with an Ordinance that addressed this and the City Council basically killed it because the said it was not enforceable. He said it would have to say approval with guidelines.

Lenore Pena said that it also needs to include the maintenance of those patterns or signs. A good example is the train painting over by the Post Office. This painting is showing signs of sun damage and is fading in areas.

Vice Chair Pete Armstrong said that will come with an approval. Those would be the conditions of approval.

Chairman Steve Ethridge said that number two under building design should be removed or a happy percentage be reached.

Steven Tomita said that the things is, like with the bold patterns, you are not changing the building or the history of the building, but if you come in with an aluminum siding buildings and mirrors all over, you are now stepping away from the preservation of the history. The intent of this overlay is to preserve and enhance its character

Chairman Steve Ethridge said that the Art League building is in violations of this ordinance by having the propanel fence.

Steven Tomita said that wasn't the building. It is like saying you want to see a Dollar General go in on Becker Ave. That type of building does not reflect the type of historic building style, etc. Dollar Tree was heavily debated by the City until they changed the exterior to what it is.

Chairman Gordon Reeves said to leave it the way it is.

Steven Tomita said that number three does not reflect the historic elements reflected along Becker & Dalies Ave. There are only two buildings that are brick buildings. He would say in order to continue a visual pattern of historic architectural elements reflected to building construction, the mixture of the old southwest, such as Southwest Vernacular, Western Territorial, Queen Ann, etc., styles shall be carried on.

Number 4 which concerns electrical equipment, solar hardware and satellite dish antennas was not changed. Letter C. Signs was not changed.

Steven Tomita said that the Sign Ordinance will also be looked at for any changes that need to be done.

Vice Chair Pete Armstrong said that under pedestrian walkways, he does not understand what it is trying to say. It says that a minimum or twelve feet and then later it says a minimum width of pedestrian walkway shall be six feet. He said that it is going to be hard to get that twelve feet for a walkway.

Steven Tomita said that what they are looking at is that there will be planters or an area where a few tables can be placed there but still have enough room to allow the free flow of pedestrians.

Commissioner Gordon Reeves asked if the liability would be on the property owners who utilize this space.

Steven Tomita said that the problem with this specific clause is that it is not clear. The pedestrian sidewalk pathway, if you look at downtown Albuquerque or San Diego, where they have the tables outside, it is fenced off and the pedestrian cannot use that area as a walkway. The owners of the establishment are the owners of that fenced off area, or they lease that area. This is what would be the same thing here where six feet would be the sidewalk for the public. The rest of it would be for tables & chairs, or items that are for sale to draw people into their store.

Chairman Steve Ethridge said that the sidewalk could meander all over it would take up all of the area.

Steven Tomita said that it could but it would be difficult. If you are setting up stores and you are putting out signs, merchandise and eating tables it would be difficult to be weaving in and out instead of having a defined pathway.

Commissioner Gordon Reeves said that maybe the first part of the paragraph should define the pedestrian pathway.

Steven Tomita said it could stay the same but after pedestrian activity put in of which six feet shall be clearly designated for walkways.

Commissioner Gordon Reeves said that is great but which six feet. Will it be along the curb or will it be somewhere else.

Steven Tomita said it could vary from street to street or block to block.

Vice Chair Pete Armstrong said you could vary outside of that designated six feet but that six feet should be along the curb.

Steven Tomita said maybe and maybe not because you may be putting trees along the curb. At the latest meeting of DOT, they advised us that the federal government may be reducing sidewalks back down to three feet.

Vice Chair Pete Armstrong said that he is thinking about the area of HWY 314 between Main St and Old Church Rd in Los Lunas. Their sidewalk is winding and they have a much larger sidewalk on the east side, but on the west side they have done what we are talking about doing and it is not a strait sidewalk, it is a meandering sidewalk. It is not solid concrete but is landscaped with asphalt.

Chairman Steve Ethridge said that the advantage to a meandering sidewalk is if there happens to be an obstruction by something like a three phase power line, the sidewalk will have to meander.

Steven Tomita said that you will have some instances where that will need to happen. You are going to have to think what is going on there. If you widened the sidewalk along Main St and you narrowed down Main St., it is kind of hard to meander a sidewalk because you are going to have all those stores wanting to display merchandise and you would have a mess on your hands.

Vice Chair Pete Armstrong asked where the owners property line going to be.

Steven Tomita said where they own up to.

Vice Chair Pete Armstrong said that in most cases, around here, that is right up to the sidewalk. Then it goes from the edge of the sidewalk to the curb, which belongs to the City.

Steven Tomita said yes and if you narrow down the street to 20 feet you would have the 12 feet on each side.

Vice Chair Pete Armstrong said that the City would be responsible for maintaining that twelve feet.

Steven Tomita said yes.

Chairman Steve Ethridge asked if there was a possibility that the City could enter into an agreement with the property owner for a six foot strip area. If he has a house on Dalies and the property line is right on the sidewalk, and the sidewalk is right next to the curb, if the City wants the sidewalk to be 12 feet, couldn't you trade properties to get to the 12 feet.

Steven Tomita said that he was trying to get into too much detail. There will be places that the City cannot comply with this, but the intent is to have the 12 foot sidewalk area.

Off-street parking was discussed.

Steven Tomita said that there will not be ample parking in these areas. You will have some parking, but most of the parking will occur where ever they can find parking on other streets.

Vice Chair Pete Armstrong said that there a various empty lots in the Becker and Dalies areas where a parking structure can be built to accommodate some of this traffic.

They moved on to Street Trees and Steven Tomita asked if this section matched the landscape ordinance that they have done.

Chairman Steve Ethridge said that he doesn't remember these being in it. He has some difficulty with the vertical clearances.

Vice Chair Pete Armstrong asked why just the trees.

Steven Tomita said that he feels that the Commission needs to go back and review what was done in the landscape ordinance because it gets into a lot of detail and they may be able to just reference that on this section.

Chairman Steve Ethridge said that he remembers talking about interference with street lights but not clearance from pedestrian walkway. He would like to see the numbers in number three to change from eight feet to ten feet over pedestrian walkways and fourteen feet over streets. The guy that drives a big delivery truck will be knocking down branches if it is left at 10 feet over the streets.

Steven Tomita said he would like to see this in the Landscape Ordinance and see this section go away except for a reference to the Landscape Ordinance.

Vice Chair Pete Armstrong said that he sees an issue with this, because a couple of organizations that deal with this on a daily basis is the fire department and the school busses. There are streets that the fire department avoids due to the low hanging tree branches.

Steven Tomita said that the trees need to be moved back away from the curb area.

Lisa Miller asked if it should be in this ordinance or should it be in the landscaping ordinance.

Vice Chair Pete Armstrong said that they should review the landscape ordinance before we decide on this.

They moved on to G. Area Lighting.

Steven Tomita said that this section is outdated. The Commission has updated this in the Zoning Ordinance. He feels that the lighting that has been established, the decorative lights, needs to be carried on throughout the overlay zone. He informed the Commission if one whole block decides they do not want that exact light but one that is harmony with the existing lights, and asked if the Commission would be ok with it.

Vice Chair Pete Armstrong said he would be ok with it, but it would need to be stated that they have to be of similar theme.

Steven Tomita said that the desire would be to maintain the lighting that has been established from Main St. to Third St., however light changes within a full block area may be considered if The lighting is of similar consistency.

Steven Tomita said that under drainage an on-site stormwater management plan needs to replace what is presently there.

Chairman Steve Ethridge said that under administrative procedures, all zoning enforcement officer needs to be changed Planning & Zoning Department. He asked if a Plat is the same as preliminary sketch.

Steven Tomita said that is part of the site plan. The preliminary sketch drawing are drawings of what the buildings are going to look like. We are more concerned about the exterior of the building than the interior of the building.

Chairman Steve Ethridge said that he is all in favor of all types of drawings.

Steven Tomita said that under Plan Review and Acceptance, the statement that this does not mean that they have an approved set of plans and they can build. They will still have to move forward and have a full set of construction drawings/building plans done and submitted for approval.

**INFORMATIONAL ITEMS**

**COMMUNICATIONS FROM THE COMMISSION AND STAFF.**

Lisa Miller informed the Commission that the zone change that was approved to go in by the airport has been rescinded.

Steven Tomita said that the storage yard, up by the airport, was approved by the City Council but it has now been rescinded and an order to cease and desist has been issued. It is a salvage yard, they are selling parts up there. They totally misrepresented themselves to the Commission and the Council.

Commissioner Gordon Reeves asked if someone went out there to check it out.

Steven Tomita said that they tried to sell an engine to one of our Councilmen.

Lisa Miller said that the gate was open and there were stacks of doors, dismantled cars, car parts stacked in piles. That is a salvage yard.

Steven Tomita said that Ace Hardware is open and so is the new Credit Union.

Lisa Miller said that she has the set of plans for the remodel of Wal-Mart. The Circle K plans have come in and are being reviewed.

Steven Tomita said that the city staff that have reviewed the drawings so far, have said that they are probably one of the most detailed drawings that they have seen submitted to the City of Belen. They are a beautifully detailed set of plans. Approximately 35% of the property will be landscaping.

Vice Chair Pete Armstrong asked about the Wal-Mart remodel.

Lisa Miller said that part of it is for the new truck area in the auto department and they are basically remodeling the whole inside of the store. They are replacing equipment, lighting, and fire suppressant systems, air conditioning units, roof repairs, etc.

Steven Tomita said that the Trades Conference that was held last week, was very successful. New Mexico Economic Development was so impressed that they asked for his agenda and a list of the attending businesses because they want to take the format throughout the state of New Mexico to promote the state and its businesses. There were twenty booths there. The companies that attended said that a different kind of crowd showed up at this event with resume submittals that filled positions that these companies have had open for months. They were extremely impressed with the students that showed up. Keter and Clariant are going to be working together to come up with a student program to offer student training. They are also wanting to work with Rio Metro and the Railrunner on provided better transportation to bring more employees down here. Clariant is looking at an expansion. They will be adding a research department and Keter already has a hundred employees. They are also looking at new products and markets. Geomny was in attendance. They bought out Blue Skies Consulting, up at the airport. They are a super sophisticated photogrammetry data collection operation. They can also inform a medical response team what was at a certain location before the disaster occurred and what has changed since the disaster and what is happening in real time. He also informed the Commission that the subdivision on Don Luis Trujillo Blvd is moving forward. They are flushing out the water and

sewer lines for testing and once that is done they will start construction. All the roads have been named and addressed.

Vice Chair Pete Armstrong said that he was also very impressed with the Trades Conference and said that an After Action Review needs to be done to get their inputs on the Conference. There are a few things that could be done differently but since it was the first on, it was excellent.

Chairman Steve Ethridge informed the Commission that they may have a job. He was talking with the payroll department and they asked how often the Commission would like their compensation to be paid. He told them biweekly, so the Commission would get paid more often.

Steven Tomita said that the way they were paying the Commission was incorrect and they have to put the Commissioners into the payroll system because of the taxes.

**ADJOURNMENT**

There being no further business to come before the City of Belen Planning & Zoning Commission, Commissioner Gordon Reeves moved to adjourn.

Vice Chair Pete Armstrong seconded the motion.

Motion carried.

The regular meeting of the City of Belen Planning & Zoning Commission adjourned at 7:36 pm.

\_\_\_\_\_  
Chairman Steve Ethridge

**ATTEST:** \_\_\_\_\_  
Steven Tomita, Planning & Economic Development Director

**JERAH R CORDOVA**  
MAYOR  
**LEONA VIGIL**  
CITY MANAGER



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**CITY OF BELEN**  
**PLANNING & ZONING COMMISSION MEETING**  
**MINUTES**  
**FEBRUARY 29 2018**

Vice Chair Pete Armstrong called the regular meeting of the Belen Planning and Zoning Commission meeting to order at 6:10 p.m.

**PRESENT:**

Vice Chair Pete Armstrong  
Commissioner Jim Lardner

**ABSENT:**

Chairman Steve Ethridge  
Commissioner Claudine Montano  
Commissioner Gordon Reeves

**CITY STAFF:**

Steven Tomita, Economic Development  
Lisa R Miller, Planning & Zoning Administrator

**OTHERS:**

Lenore Pena, Citizen

Vice Chair Pete Armstrong asked staff if there were enough Commissioners present to continue.

Staff informed the Commissioners present that there were not.

**ADJOURNMENT**

There being no quorum, Vice Chair Pete Armstrong closed the meeting. The regular meeting of the City of Belen Planning & Zoning Commission adjourned at 6:12 p.m.

\_\_\_\_\_  
Vice Chair Pete Armstrong

**ATTEST:**

\_\_\_\_\_  
Steven Tomita, Planning & Economic Development Director

## 17.54.060 FENCING & WALLS

### Purpose

The intent of fencing standards is to establish a uniformity of fencing appearance and materials of construction and create a general front yard harmony of one building with another in relation to the street.

Pre-existing fencing shall be grand fathered in and not subject to change under this Ordinance unless existing fencing is replaced in its entirety, then it shall comply with paragraph 14 under General Standards.

All new fence construction shall require City Planning Department approval prior to construction. Upon receiving all required material

### A. General standards

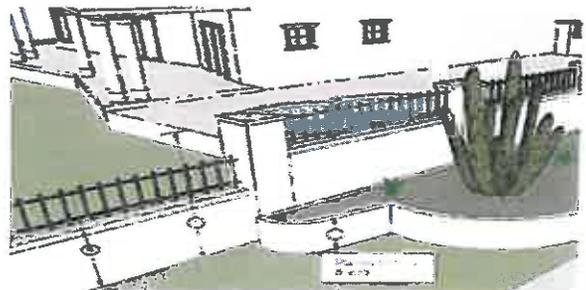
1. Fencing and screening shall be permitted as provided in this Section
2. Fencing materials shall be durable and consistent with abutting fences.
3. The height and location requirements of this section may be modified as part of a subdivision, planned area and development, with a conditional use approval. For fences on retaining walls, see definition of a retaining wall.
4. Any parcel in residential use with a lot size of 10,000 square feet or smaller shall have no fencing or screening located within the front yard with the exception of private courtyards.



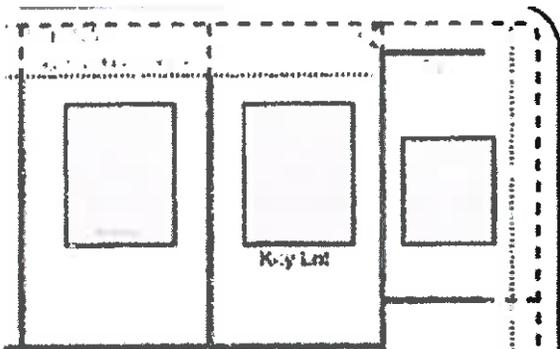
5. Front courtyard fencing shall not exceed thirty-six inches (36") in height. Such fences may be increased to forty-eight inches (48") maximum height if the fencing material extending above the thirty-six in height is an open material such as, but not limited to, wrought iron or vinyl rail.



6. A fence constructed on a side or rear property line shall not exceed a height of six feet (6') from highest finished grade adjacent to the fence, nor more than eight feet (8') from the lowest grade adjacent to the fence. Any fence of more than six feet (6') in height on the low side shall use berming, landscaping, fence offset(s) or similar enhancements to mask height differences, and in no case shall the fence height exceed eight feet (8'). Where the fence height exceeds six (6') on the lower side, a view fence shall be required for the portion above (6') in height.



7. Any fence above six feet (6') in height shall be designed by a New Mexico registered structural engineer and approved by the City.
8. On that part of the lot other than the required front yard setback area, fences may be erected up to six (6') feet in height.
9. For fencing purposes on a double front lot: the front shall be defined by the address assigned and the second street side shall be considered the side or rear of the property. Fencing along the side or rear of a corner lot shall be set back from the street side property line not less than half (1/2) the depth of the required front yard setback.



10. The fencing details shall show the proposed method of construction and anchoring of the fence, posts, gate and foundation details if applicable.
11. The fencing details shall clearly show the proposed distance between the fence and the abutting property lines and the sight line of a street right-of-way to the sight line of a street right-of-way intersection. Adequate sight distance shall be maintained as per 18.31.6 NMAC State Highway Access Management Requirements Table 18.F-2.

12. Front courtyard privacy fencing up to four feet (4') is allowed but must meet setback regulations.
13. The height of fences shall be determined by measurement from the ground level at all points upon which the fence is located. An increase in height shall be allowed when spacing for drainage under the fence is needed.
14. The use of barbed wire, wire mesh, electric fencing, or chain link shall not be used within Residential Zoning Districts of R-1, R-1A, R-2, R-2A, R-3, R-4.



15. Railroad ties and pallets shall not be used in any zoning districts.
16. Razor Wire, railroad ties, pallets, corrugated steel (unless new and specifically manufactured to be fencing material and framing shall be on the interior of the fence) shall not be used in any Residential Zoning districts.
17. Storage areas, solid waste dumpsters, and large items for solid waste pick-up shall be confined in an enclosed area and shall be of solid construction, six feet (6') high with locking gates providing access.
18. Fence lighting shall adhere to the night sky regulations, be low profile, no more

than eighteen inches (18") above the fence line and not be in a position to interfere with abutting owners privacy.

19. All fencing shall be maintained in like new conditions with proper repairs to replace any damaged fencing or posts. Any repairs shall not be with wire, zip ties, duct tape or other like material.

**B. New Subdivisions & Agricultural Zoning District (A-R).**

1. All fencing along the perimeter of an Agricultural Zoning District (A-R) and new subdivision not adjacent to an arterial or collector street shall be full view fencing of an open style material.



2. All fencing along arterial and collector streets shall be either full view fencing or partial view fencing (4' solid-2' view). The top of any view fence, if constructed of ornamental iron or a similar material shall have a rail or horizontal member such that no portion of the view fence protrudes not more than two inches (2") above the top rail or horizontal member. Columns and poles are exempt.



3. Construction of solid fences no taller than six feet (6') shall be limited to the lots within the subdivision. However, view fencing no taller than six feet (6') shall be limited to the buildable area of the lot within the building envelope. However, view fencing no taller than six feet (6') (3' solid – 3' view) may be allowed along property boundaries interior to the subdivision in accordance with the provisions of the title.



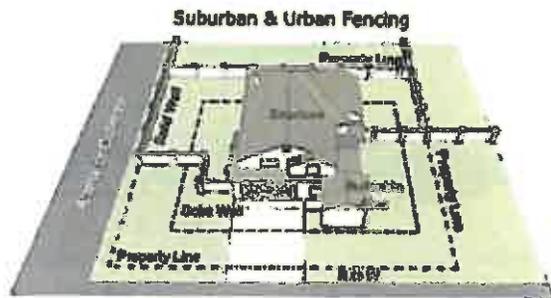
4. All solid and view fences within the building envelope shall be decoratively treated on the public side to match the architectural style and design of the neighborhood.





**C. Residential Zoning Districts R-1, R-1A, R-2, R-2A, R-3, R-4.**

1. Fences adjacent to streets may be solid and no taller than six feet (6') in height.
2. Fences adjacent to a community open space system or trail shall be partial view fencing (4' Solid – 2' view). The top of any view fence, if constructed of ornamental iron or a similar material, shall have a rail or horizontal member such that no portion of the view fence protrudes not more than two inches (2") above the top rail or horizontal member.
3. All fences shall be decoratively treated on the public side to match the architectural style and design of the neighborhood.



**D. Commercial Zone Districts C-R, C-1, C-2**

1. All residential uses located in a Commercial Zone shall use the Residential Zoning District fence regulations.
2. A fence constructed on a side or rear property line shall not exceed a height of seven feet (7') with one foot (1') of

out rigging for a total of eight feet (8') from the highest finished grade adjacent to the fence, nor more than ten feet (10') from the lowest grade adjacent to the fence. Any fence of more than six feet (6') in height on the low side shall use berming, landscaping, fence offset (s) or similar enhancements to mask height differences, and when adjacent to single or multi-family residential the fence height shall not exceed eight feet (8').

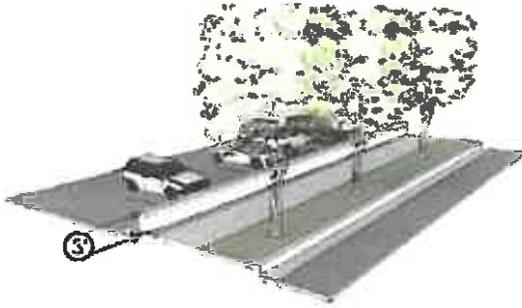


3. Front fencing and perimeter fencing shall be allowed in the following Commercial uses;
  - a. Storage units, Warehouses, Equipment buildings, Automotive related activities, utility buildings, open storage and impound areas.
4. All perimeter fences adjacent to an arterial or major collector shall be decorative. A decorative variation shall be provided every fifty feet.



5. All perimeter fences shall be finished on all sides to match the commercial and or industrial product architectural style and design.

6. Parking areas adjacent to the required front yard shall provide a decorative screen wall or landscape berm or combination thereof to a height not to exceed three feet (3') in order to adequately screen the undercarriages of the parked vehicles.

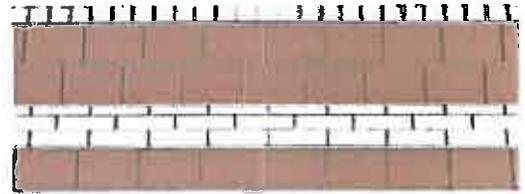


7. All other Commercial uses shall follow setback regulations for the specified Commercial zone provided in Title 17 of the City of Belen Municipal Codes.

**E. Manufacturing and Industrial Zone  
Districts M-C, M-1.**

1. Residential uses located within a Manufacturing and Industrial Zone District shall use the Residential Zoning District regulations.
2. A fence constructed on a side or rear property line shall not exceed a maximum height of Twelve feet (12'). Any fence of more than ten feet (10') in height side shall use berming, landscaping, fence offset (s) or similar enhancements to mask height.
3. Solid fencing use along arterial and collector street on the perimeter of residential projects addresses individual property concerns regarding noise, light, privacy and safety. Because solid fence use

affects the image, character, safety, and privacy of the community, design upgrades such as material choices and additional buffering to offset the reduction in project openness and reduce the impact of solid fencing is required.



4. Solid fence designs shall require use of a minimum of three (3) materials including stone, brick, block or textured block including treated, split-face, single-score or patterned integrally colored block or similar enhancement and may include changes in color or texture.



5. Fencing within the Manufacturing and Industrial Zone districts shall require a plan review by the Planning & Zoning Commission.



**F. Special Use Zone District SU-1.**

1. The underlying use within the Special Use Zone shall determine what fence regulations apply.
2. Fencing within the Special Use Zone shall require a plan review by the Planning and Zoning Commission.

**17.54.??? Landscaping Standards**

A. Purpose. The purpose of this section is to implement the goals of the City of Belen General Plan in regards to providing landscaping and buffering standards for landscaping that will capitalize on the City of Belen's agricultural character and identity while preserving natural resources, native plants, and scarce water supplies. These requirements will be applied to all new development, redevelopment or building expansion (greater than twenty-five percent (25%) of the gross building area) projects including streetscaping of rights-of-ways. Landscape plans, complete with irrigation plans, shall accompany any application for development approval. These minimum landscaping requirements will:

1. Establish a landscape theme including street trees and streetscape design to be used throughout the City to promote the overall City and neighborhood character and identity;
2. Provide buffering and transitions between less intensive land uses abutting intensive development and land uses and between washes, multi-use trails and low intensity residential development;

3. Preserve and accentuate the City of Belen's agricultural heritage;
4. Incorporate native plants, low-water need plant communities, and ecosystems into landscape design;
5. Promote innovative and cost-conscious approaches to the design, installation, and maintenance of landscaping while encouraging water and energy conservation;
6. Reduce soil erosion and increase infiltration in permeable land areas essential to storm water management and aquifer recharge;
7. Manage efficiently and effectively the groundwater supplies by using drought-tolerant, low maintenance, and low-water consumptive landscape;
8. Encourage community gardens for cultivation of fruits, flowers, vegetables, or ornamental plants;
9. Maintain and increase property values by requiring landscaping to be incorporated into development; and
10. Encourage all plant materials be selected from the New Mexico Extension Master Gardener Manual list of very-low, low, or moderate water use plants, The Planning Director may approve alternative plant materials.

B. Interpretation of Landscaping Terms. Where necessary to interpret the precise meaning of the technical landscaping terms used in this Section , reference shall be made to The American Standard For Nursery Stock, as published by the American Association of Nurserymen (AAN), which document is hereby incorporated by reference as if set forth in its entirety herein.

C. Minimum Standards for Landscaping Design and Development.

1. **Landscape Requirements.** Except for single family uses, the following minimum requirements shall be provided for each developed parcel:
  - a. **Street right-of-way landscaping.**  
One (1) tree and six (6) shrubs for each thirty feet of street frontage. The front twenty feet (20') of the required onsite landscape buffer setback area may also be used to satisfy this requirement. Tree spacing may be subject to the specific size of the tree canopy at maturity.
  - b. **On-site landscaping.** The following quantities of landscaping materials are required in all areas on-site including the parking lot:
    - I. **Commercial/Office/Retail Developments** – One (1) Tree and ten(10) shrubs per one thousand (1,000) square feet of landscape area.  
Alternative landscape designs that meet the intent of this section may be considered by the Planning Director.
    - II. **Industrial Developments-** One (1) tree and ten (10) shrubs per one thousand five hundred (1,500) square feet of landscape area.  
Alternative landscape designs that meet the intent of this section may be considered by the Planning Director.
  - c. The planting requirement of this paragraph, as well as the total

square footage of landscape area required may be reduced up to twenty-five percent (25%) where existing shade trees in excess of the minimum requirement are retained upon the approval of the Planning Director or his or her designee. Existing shade trees shall measure four inch (4") caliper or more when measured eighteen inches (18") above ground.

2. **Landscape Requirements for single family uses.** See the design criteria stated in the City of Belen Design Standards for front yard landscaping options

<b>Appropriate rootball sizes for balled and burlapped trees</b>	
<b>Trunk caliper (inches)</b>	<b>Minimum rootball diameter (inches)</b>
1/2	12
3/4	14
1	16
1 1/4	18
1 1/2	20
1 3/4	22
2	24
2 1/2	28
3	32
3 1/2	38
4	42
4 1/2	48
5	54
5 1/2	57
6	60
7	70
8	80

3. **Minimum Plant Size.** The minimum allowable plant size for new installations shall be as follows:

- a. The minimum size shall be a caliper of two inch (2") measured four inches (4") above the soil line.
- b. Shrubs shall measure a minimum of five (5) gallon size upon installation.
- c. Organic ground covers shall be a minimum of one (1) gallon size upon installation.
- d. Inorganic ground covers shall be used and shall consist of crusher fines (minimum size half-inch (1/2") minus or screened, except quarter-inch (1/4") minus shall be used on all trail of turf. Where boulders are use one-third (1/3) of the boulder shall be buried.



**4. Common Area Landscaping Requirements.**

- a. In any single family residential district a minimum of two (2) trees per dwelling unit shall be required, which may include street trees. In any multifamily district, a minimum of one (1) tree per dwelling unit shall be required which may include street trees

and perimeter landscaping. A minimum of twenty-five percent (25%) of required trees shall be a caliper of two inch (2") measured four inches (4") above the soil line.

- b. Office and commercial developments shall be landscaped not less than fifteen percent (15%) of the developed parcel and industrial developments not less than ten percent (10%) of the developed parcel.



**5. Landscape Buffer Setbacks.**

- a. A buffer setback as described in Table 5.3.1 shall be provided to ensure visual separation between uses when appropriate; create a transition area; to preserve and enhance property values; and, to implement the goals and policies of the General Plan. To the extent that there is an inconsistency between this Section and the Subdivision Ordinance, the more restrictive requirement shall be used.
- b. A landscape setback may be used for passive recreation. It may contain sidewalks or paths, parks, open space, or storm water

retention basins. Active recreational uses, such as play fields, swimming pools, or other active structured recreational uses or circulation drives and parking lots, shall not be permitted in the landscape setback.

- c. A 50% proportional share of the required landscape setback shall be installed along each property line by each development.
- d. A landscape setback shall be developed in the outer perimeter of a lot or parcel extending to the lot or parcel line. The landscape setback shall not be located within any public right-of-way or private street.

Table 5.3-1 Landscape Buffer Setbacks

	SFR	MFR	LLR	COM	EMP
SFR	0	30	30	30	40
MFR	30	0	20	20	20
LLR	30	30	30	30	40
COM	30	20	0	20	20
EMP	40	20	20	20	0

SFR - Single Family Residential  
MFR – Multi Family Residential  
LLR – Large lot Residential  
COM – Commercial  
EMP – Employment

- 6. *Landscape Street Setbacks.*
  - a. For all residential subdivision, multi-family and non-residential development a thirty foot (30') wide landscaped setback shall be provided along all abutting arterial roadways with breaks for approved access points. A minimum fifteen foot (15') wide

landscape setback shall be planted along collector roadways.

- 7. *Landscape Installation.* All landscaping shall be installed in accordance with accepted planting procedures. If after three (3) years following installation, plant materials have not formed an effective screen, or if an effective screen is not maintained, the Planning Director may require that another type of screen be added or additional plantings be installed. Landscaped areas shall require protection from vehicular encroachment. The Planning Director or his or her designee shall inspect all landscaping and not Certificate of Occupancy or similar authorization will be issued unless the landscaping meets the requirements herein provided.

*General.* All required landscaping materials shall be in place prior to the time of issuance of a final Certificate of Occupancy, weather permitting. In periods of adverse weather conditions, a temporary Certificate of Occupancy may be issued, subject to the posting of an acceptable form of financial insurance in an amount equal to one and one-half (1- ½) time the estimated cost of the landscaping, with said estimated cost to be certified by a landscaping provider. The acceptable form of financial insurance may be forfeited if the landscaping is not completed within one (1) year after if issuance of the temporary Certificate of Occupancy. Forfeiture of an

acceptable form of financial insurance shall not relieve the owner of the responsibility to complete the required landscaping.

- a. Trees and shrubs shall be adequately supported and staked when planted.
- b. All landscaped areas shall be finished with a natural topping material which may include, but is not limited to, the following: tuft, groundcover planting, and crusher fines.



- c. No trees shall be planted under overhead service wires if their mature heights will interfere with the wires.
- d. Trees shall not be planted under outdoor lighting structures. Landscape plant material shall be arranged in a manner not to obstruct security lighting. Where a conflict arises between landscape elements required under this Ordinance and security lighting, the Planning Director shall make the final determination.
- e. Plant material installed within the site triangle at roadway intersections shall not exceed twenty-four (24") in height at maturity. Mature tree canopy height shall not be less than six feet (6'). The site triangle at an intersection shall be calculated according to New Mexico Department of Transportation Access

Management Manual. The City of Belen's official reference for roadway design standards.

- f. All plant materials used in public right-of-way, medians, or parking lot islands shall come from the City of Albuquerque Plant List and the New Mexico Department of Transportation standards, if applicable, or as may be approved by the Planning Director.
8. *Site Stabilization.* The applicant shall revegetate the graded and or disturbed land where any construction activity has occurred in order to prevent erosion by water, wind or subsidence as follows:
    - a. Revegetate the construction area with native species or with revegetation seed mixes.
    - b. Slopes steeper than three to one (3:1), where revegetation and plant material alone will not hold soil in place, shall be held in place with turf, retaining walls, rip-rap, or shall be developed with a system of terraces or diversions to ensure slope stability, control surface water runoff and encourage rapid vegetation establishment, or any method deemed appropriate by the City.
  9. *Dust Control.* During grading and until revegetation is established, the applicant shall use the following methods to reduce and mitigate the production of dust and such methods shall be addressed prior to the commencement of construction.
    - a. A Storm Water Pollution Prevention Plan (SWPPP) and a Dust Control Plan shall be submitted and approved by the

City of Belen prior to construction.

**D. Prohibited Plants.**

Discussed at later date.

**E. Street Rights-Of Way Landscaping.**

1. Street trees and other plant materials (i.e. shrubs, ground cover, accent plantings, etc.) shall be planted within all street right-of-ways in all zoning districts.



2. Trees shall not be planted in planting strips that are less than five (5) feet wide, where possible or practical.
3. All parcels located at the intersection of an arterial intersection, shall observe a buffer setback pursuant to Table 5.3-1. Said buffer shall not be encumbered by parking areas, building or other improvements. The Planning Director or his or her designee shall have the authority to impose special condition or guidelines on the development of property at arterial intersection that affect the following design elements in order to achieve the purposes of this section:
  - a. Landscape architecture;
  - b. Building architecture;
  - c. Building orientation;

- d. Vehicular ingress, egress, and circulation;
  - e. Walls and screening devices; Building setbacks; and,
  - f. Encourage harmony.
4. Street trees shall be spaced on each side of the street and within medians where applicable, in order to form a pleasant experience for motorists, pedestrians, and building occupants, as applicable.



5. Planting shall be spaced at regular intervals without regard to property lines in order to present a balanced appearance. Required spacing shall be such to achieve a maximum tree canopy for the species of tree used.
6. Trees for an entire development shall be planted at the same time. In circumstances where existing trees have been removed or destroyed, trees shall be replaced at the same time within a year.
7. Up to two (2) different species of trees may be planted alternately, where an entire block is developed.
8. Shrubbery is strongly encouraged to create ground vegetation.
9. The entire area of the right-of-way, between the property line and back of curb (BOC) and/or pavement

except for approved driveways, walkways and bike paths, shall be landscaped.

- F. Parking lot landscaping. Discussed at later date.
- G. Retention Basin Landscaping and Design Requirements.
1. All private retention basins in single residence, duplex, multifamily, commercial, or industrial project, or districts shall be landscaped. Such basins shall not exceed more than fifty percent (50%) of the linear street frontage
  2. Retention basins shall be contoured and designed as an integral part of any frontage landscaping and shall not take on the appearance of a ditch or basin.



- H. Bosque Preservation. Discussed at a later date.
- I. Irrigation Guidelines. An irrigation Plan is required and subject to review and approval by the Planning Director or his or her designee.

J. General Landscaping and Site Maintenance.

1. The applicant, property owner, and/or subsequent or successor owners and their agents shall be responsible for the maintenance of landscaping on the property on a continuing basis for the life of the development as specified in this section. All required landscaping shall be maintained in a neat and orderly manner at all times. This shall include, but not be limited to, mowing, edging, pruning, fertilizing, watering, weeding, and other activities common to the maintenance of landscaping.
2. Landscaped area shall be kept free of trash, litter, weeds and other materials or plants not a part of the landscaping.
3. All required plant material shall be maintained in a healthy, growing condition as is appropriate for the season. Plant materials which exhibit evidence of insect pests, disease, and/or damage shall be appropriately treated, and dead plants promptly removed and replaced within the next planting season after installation. If replacement is necessary, all plants and other non-living landscape materials shall be equal in size, density and appearance as originally required at the time of the approval of the development permit.

**17.54.??? Open Space**

- A. All new development in the City of Belen shall provide Open Space as provided herein and designed as required by the City of Belen Subdivision Regulations.
- B. *Community Trails System.* The applicant shall provide a community open space network / or trails system, within the development that will allow connections to exterior systems as their planned development. Trails shall be maintained by the applicant.
- C. *Required Open Space.* Required open space shall be reserved for any development in the zoning districts type forth in Column "A" of Table 5.4-1, below, based upon the percentage of net square feet in the proposed development corresponding the zoning district as set forth in Columns "B" and "C" in Table 5.4-1 hereto.

**Table 5.4-1 Required Open Space**

A Zoning District	B Total Open Space	C Active Open Space
Rural Residential	0%	0%
Estate Residential	0%	0%
Suburban Residential (11,000-18,000 Sq. Ft. Lot size)	7.5%	10%
Urban Residential (3,000-10,000 Sq. Ft. lot size)	15%	30%
Commercial	15%	N/A
Manufacturing	10%	N/A

Review remainder of chart at a later date.

- 1. *Active Open Space.* Active Open Space shall be provided as referred in Table

- 5.4-1 and defined as open public usable space such as golf courses, sport courts/ fields, picnic areas, playgrounds and trials.
- 2. *Passive Open Space.* Open Space not defined as Active may be considered as Passive Open Space and would qualify as the Total Open Space.
- D. *Open Space Designation.* Open space shall not be further than the following distances from any lot or, if the proposed development does not involve a subdivision, any primary building, and the entrance allowing people, bikes, or equestrians to enter into the open space or view the open space area:
  - 1. One-Fourth (1/4<sup>TH</sup>) of a mile or one-thousand, three hundred and twenty feet (1,320') from and active open space.
- E. *Open Space Maintenance.* Land designated as open space shall be maintained as open space and may not be separately sold, subdivided, or developed except as provided below.
  - 1. Any areas reserved as open space shall be indicated on the sketch plan and preliminary site plan or subdivision plat. An Open Space Provision and Maintenance Plan shall be submitted as a part of the application for development approval including the project phasing schedule. This plan shall designate and indicate the boundaries of all open space areas required by this Ordinance. The Plan shall:

- a. Designate areas to be reserved as open space. The specific design of open space areas shall be sensitive to the physical and design characteristics of the site;
  - b. Designate the type of open space which will be provided; and
  - c. Specify the manner in which the open space shall be perpetuated, maintained, and administered.
2. The types of open space which may be provided to satisfy the requirements of this Ordinance, together with the maintenance required for each type, are as follows:
  - a. Passive open space shall be maintained in a healthy, neat, clean, and weed-free condition. Waterways and landscaped areas lying between public right-of-way lines and the property, unless such streets, waterways, or landscaped areas are expressly designated to be maintained by a designated governmental authority shall be free-flowing and devoid of debris;
  - b. No specific maintenance is required for agricultural uses;
  - c. Active open space areas shall be accessible to all residents of the development. Maintenance is limited to insuring that there exist no hazards, nuisances, or unhealthy conditions; and,
  - d. Greenways are linear green belts linking residential areas with other open-space areas. These greenways may contain bicycle paths, footpaths, and bridle paths. Connecting greenways between residences and recreational areas are encouraged. Maintenance is limited to a minimum removal and avoidance of hazards, nuisances, or unhealthy conditions.
3. All designated open space shall be of suitable size, location, dimension, topography and general character, and shall have proper toad and/or pedestrian access, as may be appropriate, to be usable open space.
  - a. Review at a later date.
  - b. Retention areas or detention basins which are required as part of this Ordinance, or the Subdivision Ordinance, shall not qualify as an open space area unless fifty percent (50%) or more of the active and usable area is above the twenty-five (25) year storm and is designed for multiple area(s) conforms to the requirements of subsection (1) and (2) below. This standard shall not apply to non-residential developments which shall be permitted to calculate the retention and detention area as part of the required open space area.
    1. Retention or detention areas shall be an integral part of the subdivision either as a greenbelt, or as a single basin. Retention areas shall be improved so as to be useable and accessible. Site and architectural amenities, such as armadas or

benches shall be provided. "Tot lots", playground equipment, and sport courts equipment shall be elevated above the bottom of the basin for uninterrupted use.

2. Retention of detention areas shall be given a natural character and shall be constructed of natural materials, Terracing, berming and contouring is required in order to naturalize and enhance the aesthetics of the basin. Basin slopes shall not exceed a three to one (3:1) slope.

- c. Open space areas shall be landscaped and the majority of the area shall be visible from at least one (1) adjoining arterial, collector, or local street.

F. *Preservation of Open Space.* Open space areas shall be maintained so that their use and enjoyment as open space are not diminished or destroyed. Open space areas may be owned, preserved, and maintained as determined by the City Council by any of the following mechanisms or combinations thereof:

1. Dedication of open space to the City, an appropriate public agency, or a non-profit entity if there is a public or non-profit agency willing to accept the dedication and financially capable of maintaining such open space.
2. Common Ownership of the open space by a homeowner's or neighborhood association which assumes full responsibility for its maintenance except for lands dedicated to the City. The restrictive covenants shall provide that, in the event that any private owner of open space fails to maintain

same according to the standards of this Ordinance, the City may, following reasonable notice and demand that deficiency of maintenance be corrected, enter the open space to maintain same. The cost of such maintenance shall be charged to those persons having the primary responsibility for maintenance of the open space and shall constitute a lien upon the property and buildable lots of the subdivision or development site; and,

3. Payment of a fee in lieu of dedication of the open space, if:

- a. The City Council establishes and Open Space Acquisition Trust Fund for the receipt of fees and other financial commitments for the acquisition and development of public open space.

- b. The City Council adopts and ordinance establishing a fee in lieu or dedication of land for open space. The ordinance shall include the following:

- 1) The fee amount per residential dwelling unit or equivalent residential dwelling unit;
    - 2) Time of determination of the fee;
    - 3) Time of payment of the fee;
    - 4) Form of payment of the fee;
    - 5) Restrictions on use of the fees collected;
    - 6) Time limit on expenditure of fees;
    - 7) Placement of fees in the Open Space Acquisition Trust Fund;
    - 8) Maintenance of financial records;
    - 9) Allocation of interest on trust fund accounts; and,

10) Refund procedures.

- G. *Open Space Requirements.* As a part of any application for development approval such as rezoning, site plan, and subdivision and in conjunction with the required landscape plans in Section 17.54.???, the applicant shall submit an Open Space Provision and Maintenance Plan meeting the requirement of subsections A through C herein.

**17.54.??? Lighting.**

A. *Purpose.* These provisions are intended to control the use of outdoor artificial illuminating devices emitting rays into the night sky which have a detrimental effect on the rural atmosphere, astronomical observations, and which create glare. It is the intention of this ordinance to encourage good lighting practices such that lighting systems are designed to conserve energy and money, to minimize glare to protect the use and enjoyment of surrounding property, and to increasing nighttime safety, utility, security, and productivity.

B. *Conformance with Applicable Codes.*

1. All outdoor artificial illuminating devices shall be installed in conformance with the provisions of this section and the New Mexico State Night Sky Protection Act, or current regulations.



## City of Albuquerque Plant List

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<b>Desert Accents and Succulents</b>							
<i>Agave lechuguilla</i>	Lechuguilla	12"	60"	Evergreen	Full Sun	Low	Low
<i>Agave parryi</i>	Pam's Agave	30"	30"	Evergreen	Full Sun	Low	Low
<i>Dasyliion wheeleri</i>	Sotol / Desert Spoon	60"	48"	Evergreen	Sun/Shade	Low	Low
<i>Echinocereus spp.</i>	Hedgehog Cactus	24"	36"	Evergreen	Sun	Low	Low
<i>Fouquieria splendens</i>	Ocotillo	96"	60"	Deciduous	Full Sun	Low	Low
<i>Hesperaloe funifera</i>	Giant / Coahuilan Hesperaloe	72"	60"	Evergreen	Sun/Shade	Medium	Low
<i>Hesperaloe parviflora</i>	Red-flowering Yucca	36"	36"	Evergreen	Sun/Shade	Medium	Low
<i>Nolina microcarpa</i>	Beargrass	60"	72"	Evergreen	Sun/Shade	Low	Low
<i>Nolina texana</i>	Beargrass	48"	60"	Evergreen	Sun/Shade	Low	Low
<i>Opuntia clavata</i>	Club / Dagger-spine Cholla	4"	36"	Evergreen	Full Sun	Low	Low
<i>Opuntia imbricata</i>	Walkingstick Cholla	96"	72"	Evergreen	Full Sun	Low	Low
<i>Opuntia leptocaulis</i>	Desert Christmas Cholla	72"	96"	Evergreen	Full Sun	Low	Low
<i>Opuntia spp.</i>	Prickly Pear Cactus	varies	varies	Evergreen	Full Sun	Low	Low
<i>Yucca baccata</i>	Datil / Banana Yucca	48"	60"	Evergreen	Full Sun	low	Low
<i>Yucca brevifolia</i>	Joshua Tree	120"	120"	Evergreen	Full Sun	Low+	Low
<i>Yucca elata</i>	Soaptree Yucca	180"	60"	Evergreen	Full Sun	Low	Low
<i>Yucca faxoniana</i>	Palm Yucca	180"	72"	Evergreen	Full Sun	Low	Low
<i>Yucca filamentosa</i>	Adam's Needle Yucca	36"	36"	Evergreen	Sun/Shade	Low+	Low
<i>Yucca glauca</i>	Soapweed	36"	36"	Evergreen	Full Sun	Low	Low
<i>Yucca pendula</i>	Soft Leaf Yucca	36"	24"	Evergreen	Full Sun	Low+	Low
<b>Flowering Bulbs</b>							
<i>Crocus spp.</i>	Crocus	6"	6"	Deciduous	Sun/Shade	Medium	Low
<i>Hyacinthus orientalis</i>	Hyacinth	12"	12"	Deciduous	Full Sun	Medium	Low
<i>Lycoris squamigera</i>	Pink Amaryllis	12"	18"	Deciduous	Sun/Shade	Medium	Low
<i>Narcissus spp.</i>	Daffodil	12"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Tulipa spp.</i>	Tulips	14"	8"	Deciduous	Sun/Shade	Medium	Low
<b>Flowers and Flowering Ground Covers</b>							
<i>Abronia sp.</i>	Sand Verbena	24"	24"	Deciduous	Full Sun	Low	Low
<i>Achillea ageratifolia</i>	Greek Yarrow	6"	12"	Evergreen	Sun/Shade	Low	Low
<i>Achillea millefolium</i>	Yarrow	24"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Achillea taygetea</i>	Moonshine Yarrow	18"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Aethionema cordifolium</i>	Persian Rockcress	6"	12"	Evergreen	Full Sun	Low	Low
<i>Agastache cana</i>	Giant Hyssop	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Agastache rupestris</i>	Licorice Mint Hyssop	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Alcea rosea</i>	Hollyhock	60"	18"	Deciduous	Full Sun	Low	Low
<i>Albinopsis spathulata</i>	Hardy Living Stones	1"	6"	Evergreen	Full Sun	Low	Low
<i>Amsonia arenaria</i>	Sand Stars	24"	24"	Deciduous	Full Sun	Low	Low
<i>Anacyclus depressus</i>	Mat Daisy	6"	12"	Evergreen	Sun/Shade	Low	Low
<i>Anemopsis californica</i>	Yerba de Mansa	18"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Antennaria rosea</i>	Pussytoes	6"	12"	Evergreen	Sun/Shade	Low	Low
<i>Anthemis tinctoria</i>	Golden Marguerite	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Arabis alpina</i>	Mountain Rockcress	6"	6"	Evergreen	Full Sun	Medium	Low
<i>Argemone squarrosa</i>	Prickly Poppy	36"	24"	Deciduous	Sun/Shade	Low	Low
<i>Armeria maritima</i>	Thrift	12"	12"	Evergreen	Full Sun	Medium	Low
<i>Artemisia abrotanum</i>	Southernwood	36"	36"	Deciduous	Sun/Shade	Medium	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Artemisia frigida</i>	Fringed Sage	36"	18"	Deciduous	Full Sun	Low	Low
<i>Artemisia ludoviciana</i>	Prairie Sage	18"	30"	Evergreen	Full Sun	Low+	Low
<i>Artemisia pontica</i>	Roman Wormwood	48"	48"	Deciduous	Full Sun	Medium	Low
<i>Artemisia stelleriana</i>	Beach Wormwood	12"	24"	Deciduous	Sun/Shade	Medium	Low
<i>Asclepias tuberosa</i>	Butterflyweed	30"	30"	Deciduous	Full Sun	Low	Low
<i>Aster novae-angliae</i>	Aster	48"	24"	Deciduous	Full Sun	High	Low
<i>Berlandiera lyrata</i>	Chocolate Flower	16"	16"	Deciduous	Full Sun	Low	Moderate
<i>Callirhoe involucrata</i>	Poppy Mallow/Winecups	24"	24"	Deciduous	Full Sun	Low+	Low
<i>Calyloplus species</i>	Sundrops	18"	18"	Deciduous	Full Sun	Low	Low
<i>Campanula carpatica</i>	Carpathian Harebells	8"	24"	Deciduous	Shade/Sun	High	Low
<i>Campanula rotundifolia</i>	Harebells	18"	24"	Deciduous	Shade/Sun	High	Low
<i>Castilleja spp.</i>	Indian Paintbrush	24"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Centaurea cineraria</i>	Dusty Miller	24"	24"	Evergreen	Full Sun	Low+	Low
<i>Centaurea dealbata</i>	Persian Cornflower	18"	18"	Deciduous	Full Sun	Medium	Low
<i>Centranthus ruber</i>	Red Valerian	36"	36"	Deciduous	Sun/Shade	Medium	Low
<i>Cerastium tomentosum</i>	Snow in Summer	8"	24"	Evergreen	Full Sun	Medium	Low
<i>Ceratostigma plumbaginoides</i>	Dwarf Plumbago	12"	24"	Deciduous	Shade/Sun	Medium	Low
<i>Chasmatophyllum musculinum</i>	Hardy Tiger Jaws	1"	10"	Evergreen	Full Sun	Low	Low
<i>Chrysanthemum maximum</i>	Shasta Daisy,	48"	24"	Deciduous	Full Sun	High	Low
<i>Chrysanthemum x morifolium</i>	Chrysanthemum	36"	36"	Deciduous	Full Sun	High	Low
<i>Chrysopsis villosa</i>	Golden Aster	18"	18"	Deciduous	Full Sun	Low	Low
<i>Clarkia unguiculata</i>	Clarkia, Annual	36"	24"	Deciduous	Full Sun	High	Low
<i>Colchicum autumnali</i>	Autumn C Crocus	6"	6"	Deciduous	Full Sun	Medium	Low
<i>Cooperia drummondii</i>	Rain Lily	10"	10"	Deciduous	Full Sun	Low+	Low
<i>Consolida ambigua</i>	Larkspur Annual	60"	24"	Deciduous	Full Sun	High	Low
<i>Coreopsis lanceolata</i>	Coreopsis	36"	24"	Deciduous	Full Sun	Medium	Low
<i>Coreopsis verticillata</i>	Threadleaf Coreopsis	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Datura meteloides</i>	Sacred Datura	24"	96"	Deciduous	Full Sun	Low	Low
<i>Delosperma aberdeenense</i>	Rifted Iceplant	1"	8"	Evergreen	Full Sun	Low	Low
<i>Delosperma cooperi</i>	Purple Iceplant	6"	18"	Deciduous	Full Sun	Low	Low
<i>Delosperma nubigenum</i>	Yellow Iceplant	3"	18"	Evergreen	Full Sun	Low	Low
<i>Delosperma sphaalmantoides</i>	Tufted Iceplant	1"	8"	Evergreen	Full Sun	Low	Low
<i>Dianthus barbatus</i>	Sweet William, Biennial	10"	10"	Deciduous	Sun/Shade	Medium	Low
<i>Dianthus deltooides</i>	Maiden Pink	12"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Dicentra spectabilis</i>	Bleeding Heart	24"	24"	Deciduous	Shade/Sun	High	Low
<i>Dictamnus spp.</i>	Gas Plant	48"	48"	Deciduous	Sun/Shade	Medium	Low
<i>Dimorphotheca sinuata</i>	African Daisy	12"	12"	Deciduous	Full Sun	Medium	Low
<i>Dyssodia acaresosa</i>	Wild Marigold	8"	8"	Deciduous	Full Sun	Low	Low
<i>Echinacea purpurea</i>	Purple Coneflower	60"	24"	Deciduous	Full Sun	Medium	Low
<i>Echinops species</i>	Globe Thistle	48"	48"	Deciduous	Full Sun	Medium	Low
<i>Erigeron spp.</i>	Fleabane Daisy	12"	18"	Deciduous	Full Sun	Medium	Low
<i>Eriogonum umbellatum</i>	Sulphur Flower	18"	18"	Evergreen	Full Sun	Low	Low
<i>Erysimum hieracifolium</i>	Siberian Wallflower	18"	18"	Evergreen	Full Sun	Medium	Low
<i>Erysimum linifolium</i>	Wallflower Bowles Mauve	24"	30"	Evergreen	Full Sun	Medium	Low
<i>Euphorbia amygdaloides</i>	Rubra Euphorbia	36"	36"	Evergreen	Full Sun	Low	Low
<i>Euphorbia griffithii</i>	Fire Glow Euphorbia	30"	24"	Evergreen	Full Sun	Low	Low
<i>Euphorbia myrsinites</i>	Blue Spurge	12"	24"	Evergreen	Full Sun	Low	Low
<i>Euphorbia wulfenii</i>	Wulfen's Spurge	36"	36"	Evergreen	Full Sun	Low	Low
<i>Euphorbia x martinii</i>	Martini Spurge	24"	36"	Evergreen	Full Sun	Low	Low
<i>Gaillardia x grandiflora</i>	Gaillardia	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Gaura lindheimeri</i>	Gaura	48"	48"	Deciduous	Full Sun	Medium	Low
<i>Geum ciliatum</i>	Prairie Smoke	24"	24"	Evergreen	Full Sun	High	Low
<i>Geranium macrorrhizium</i>	Geranium	4"	18"	Deciduous	Shade/Sun	Medium	Low
<i>Gypsophila paniculata</i>	Baby's Breath	36"	36"	Evergreen	Sun/Shade	Medium	Low
<i>Helenium hoopesii</i>	Common Sneezeweed	60"	24"	Deciduous	Full Sun	High	Low
<i>Helianthus annuus</i>	Sunflower, Annual	120"	48"	Deciduous	Full Sun	Medium	Low
<i>Helianthus maximilliana</i>	Maximillian Sunflower	120"	120"	Deciduous	Full Sun	Medium	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Hemerocallis hybrids</i>	Daylilies	24"	36"	Deciduous	Full Sun	Medium	Low
<i>Hesperis matronalis</i>	Dames Rocket	36"	36"	Deciduous	Sun/Shade	High	Low
<i>Heuchera sanguinea</i>	Coral Bells	30"	24"	Deciduous	Sun/Shade	High	Low
<i>Hosta spp.</i>	Plantain Lily	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Hymenoxys acaulis</i>	Angelita Daisy	12"	12"	Deciduous	Full Sun	Low+	Low
<i>Hymenoxys argentea</i>	Perky Sue	12"	12"	Evergreen	Full Sun	Low	Low
<i>Hypericum calycinum</i>	St. Johnswort	12"	12"	Evergreen	Sun/Shade	Medium	Low
<i>Iberis sempervirens</i>	Candytuft	12"	18"	Evergreen	Sun/Shade	Medium+	Low
<i>Iberis umbellata</i>	Globe Candytuft	15"	15"	Evergreen	Sun/Shade	Medium	Low
<i>Ipomoea leptophylla</i>	Bush Morning Glory	36"	36"	Deciduous	Full Sun	Low	Low
<i>Iris (rhizome-type)</i>	Bearded Iris	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Iris spp. (bulb-type)</i>	Bulb Irises	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Kniphofia uvaria</i>	Red Hot Poker	36"	36"	Deciduous	Full Sun	Low+	Low
<i>Lavandula angustifolia</i>	English Lavender	36"	36"	Evergreen	Full Sun	Medium	Low
<i>Lavandula stoechas</i>	Spanish Lavender	36"	36"	Evergreen	Full Sun	Medium	Low
<i>Liatris punctata</i>	Gayfeather	36"	36"	Deciduous	Full Sun	Low+	Low
<i>Liatris scariosa</i>	Tall Gayfeather	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Linaria maroccana</i>	Baby Snapdragon	18"	18"	Deciduous	Full Sun	Medium	Low
<i>Linaria vulgaris</i>	Butter and Eggs	18"	18"	Deciduous	Full Sun	Medium	Low
<i>Linum perenne</i>	Blue Flax	18"	18"	Evergreen	Full Sun	Medium	Low
<i>Liriope spp.</i>	Lily Turf	9"	9"	Evergreen	Shade/Sun	Medium	Low
<i>Lobelia cardinalis</i>	Cardinal Flower	48"	48"	Deciduous	Sun/Shade	High	Low
<i>Lobelia laxiflora</i>	Red Lobelia	10"	10"	Deciduous	Sun/Shade	Medium	Low
<i>Lupinus argenteus;</i>	Silverstem Lupine	24"	24"	Deciduous	Full Sun	Low	Low
<i>Lupinus hybrids</i>	Lupine	36"	36"	Deciduous	Full Sun	High	Low
<i>Lupinus perennis</i>	Sundial Lupine	24"	24"	Deciduous	Full Sun	High	Low
<i>Lupinus texensis</i>	Texas Bluebonnet	12"	12"	Deciduous	Full Sun	High	Low
<i>Melampodium leucanthum</i>	Blackfoot Daisy	12"	18"	Deciduous	Full Sun	Low	Low
<i>Mirabilis jalapa</i>	Four-O'Clock	48"	48"	Deciduous	Full Sun	Medium	Low
<i>Mirabilis multiflora</i>	Giant Four-O'Clock	24"	60"	Deciduous	Full Sun	Low+	Low
<i>Monarda citriodora</i>	Lemon Mint	24"	24"	Deciduous	Full Sun	High	Low
<i>Monarda didyma</i>	Beebalm	48"	48"	Deciduous	Full Sun	High	Low
<i>Monarda menthifolia</i>	Wild Bergemot	12"	12"	Deciduous	Full Sun	High	Low
<i>Nemophila menziesii</i>	Baby Blue-Eyes, Annual	12"	12"	Deciduous	Full Sun	High	Low
<i>Nepeta mussini syn faassenii</i>	Catmint	8"	24"	Deciduous	Sun/Shade	Medium	Low
<i>Nierembergia hippomanica 'Violacea'</i>	Cup Flower	8"	18"	Deciduous	Full Sun	Medium	Low
<i>Oenothera berlandieri</i>	Mexican Evening Primrose	12"	60"	Semi-Ever	Full Sun	Low+	Low
<i>Oenothera caespitosa.</i>	White Evening Primrose	12"	12"	Evergreen	Full Sun	Low	Low
<i>Oenothera hookeri</i>	Evening Primrose	24"	60"	Deciduous	Full Sun	Medium	Low
<i>Oenothera missouriensis</i>	Yellow Evening Primrose	12"	4"	Evergreen	Full Sun	Medium	Low
<i>Oenothera pallida</i>	Pale Evening Primrose	18"	18"	Evergreen	Full Sun	Medium	Low
<i>Osteospermum haberiae</i>	Hardy African Daisy	4"	12"	Deciduous	Full Sun	Medium	Low
<i>Paeonia lactiflora</i>	Peony	24"	36"	Deciduous	Sun/Shade	Medium-t	Low
<i>Papaver nudicaule</i>	Iceland Poppy	18"	18"	Deciduous	Sun/Shade	High	Low
<i>Papaver orientate</i>	Oriental Poppy	36"	36"	Deciduous	Sun/Shade	Medium	Low
<i>Penstemon ambiguus</i>	Bush Penstemon	24"	24"	Evergreen	Full Sun	Low	Low
<i>Penstemon angustifolius</i>	Narrowleaf Penstemon	12"	12"	Deciduous	Full Sun	Low	Low
<i>Penstemon barbatus</i>	Scarlet Bugler Penstemon	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Penstemon cardinalis</i>	Cardinal Penstemon	30"	30"	Evergreen	Full Sun	Low+	Low
<i>Penstemon clutei</i>	Sunset Penstemon	24"	24"	Evergreen	Full Sun	Low	Low
<i>Penstemon jamesii</i>	Penstemon, James	10"	10"	Evergreen	Full Sun	Low+	Low
<i>Penstemon palmeri</i>	Palmer Penstemon	60"	36"	Evergreen	Full Sun	Low	Low
<i>Penstemon pinifolius</i>	Pinleaf Penstemon	12"	20"	Evergreen	Full Sun	Low+	Low
<i>Penstemon pseudospectabilis</i>	Desert Beardtongue	36"	36"	Evergreen	Full Sun	Low	Low
<i>Penstemon secundifloris</i>	Sidebells	12"	8"	Deciduous	Full Sun	Low	Low
<i>Penstemon strictus</i>	Rocky Mtn. Penstemon	24"	24"	Evergreen	Full Sun	Medium	Low
<i>Perovskia atriplicifolia</i>	Russian Sage	60"	60"	Deciduous	Full Sun	Medium	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Petalostemon purpureum</i>	Prairieclover	36"	36"	Deciduous	Full Sun	Low+	Low
<i>Phlomis frutescens</i>	Jerusalem Sage	24"	36"	Deciduous	Full Sun	Medium	Low
<i>Phlox paniculata</i>	Summer Phlox	36"	36"	Deciduous	Full Sun	High	Low
<i>Phlox subulata</i>	Creeping Phlox	6"	24"	Deciduous	Full Sun	Medium	Low
<i>Phyla nodiflora</i>	Creeping Lippia	3"	3"	Deciduous	Full Sun	Medium	Low
<i>Physalis lobata</i>	Purple Groundcherry	6"	6"	Deciduous	Full Sun	Low+	Low
<i>Physostegia virginiana</i>	False Dragonhead	24"	12"	Deciduous	Full Sun	High	Low
<i>Potentilla tabernaemontani</i>	Spring Cinquefoil	6"	18"	Deciduous	Sun/Shade	Medium	Low
<i>Psilostrophe tagetina</i>	Paperflower	16	16	Deciduous	Full Sun	Low	Low
<i>Ratibida columnifera</i>	Coneflower	32"	32"	Deciduous	Full Sun	Low+	Low
<i>Rudbeckia fulgida</i>	Goldsturm Rudbeckia	24"	24"	Deciduous	Full Sun	High	Low
<i>Rudbeckia laciniata</i>	Golden Glow	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Ruschia hamata</i>	Trailing Iceplant	5"	18"	Evergreen	Full Sun	Low	Low
<i>Ruschia pulvinaris</i>	Shrubby Iceplant	3"	2"	Evergreen	Full Sun	Low	Low
<i>Ruta graveolens</i>	Rue	36"	36"	Evergreen	Full Sun	Medium	Low
<i>Salvia azurea grandiflora</i>	Pitcher Sage	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Salvia chamaedryoides</i>	Chihuahuan Sage	12"	18"	Evergreen	Full Sun	Low	Low
<i>Salvia officinalis</i>	Garden Sage	24"	24"	Evergreen	Full Sun	Medium	Low
<i>Saponaria ocymoides</i>	Soapwort	9"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Scabiosa caucasica</i>	Pincushion Flower	24"	24"	Deciduous	Sun/Shade	High	Low
<i>Sedum spectabile</i>	Stonecrop,	24"	24"	Evergreen	Sun/Shade	Low+	Low
<i>Sedum telephium</i>	Autumn Joy Sedum	24"	24"	Evergreen	Sun/Shade	Low+	Low
<i>Sempervivum tectorum</i>	Hen and Chicks	6"	6"	Evergreen	Full Sun	Medium	Low
<i>Senecio longiflora</i>	Silver Groundsel	24"	24"	Deciduous	Full Sun	Low	Low
<i>Solidago hybrids</i>	Goldenrod	36"	36"	Deciduous	Sun/Shade	Medium	Low
<i>Sphaeralcea coccinea</i>	Scarlet Globemallow	20"	20"	Deciduous	Full Sun	Low	Low
<i>Stachys byzantina</i>	Woolly Lamb's Ear	12"	18"	Deciduous	Sun/Shade	Medium	Low
<i>Tagetes erecta</i>	African Marigold, Annual	36"	36"	Deciduous	Full Sun	High	Low
<i>Tagetes lucida</i>	Licorice Mint Marigold	18"	18"	Deciduous	Full Sun	Medium	Low
<i>Tagetes patula</i>	French Marigold, Annual	18"	18"	Deciduous	Full Sun	High	Low
<i>Talinum calycinum</i>	Flame Flower	8"	8"	Deciduous	Sun/Shade	Low	Low
<i>Tanacetum densum-amani</i>	Partridge Feather	12"	12"	Evergreen	Sun/Shade	Low+	Low
<i>Tanacetum vulgare</i>	Tansy	36"	36"	Evergreen	Sun/Shade	Medium	Low
<i>Teucrium aronianum</i>	Greek Germander	9"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Teucrium chamaedrys</i>	Trailing Germander	12"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Thelesperma ambigua</i>	Rayed or Threadleaf Cota	18"	24"	Deciduous	Full Sun	Medium	Low
<i>Thymus pseudolanuginosus</i>	Woolly Thyme	2"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Thymus serpyllum</i>	Creeping Thyme	2"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Verbena bipinnatifida</i>	Fern Verbena	12"	18"	Deciduous	Full Sun	Low	Low
<i>Verbena rigida</i>	Sandpaper Verbena	8"	48	Deciduous	Full Sun	Low	Low
<i>Verbena wrightii</i>	Western Vervain	24"	24"	Deciduous	Full Sun	Low	Low
<i>Verbena x hybrida</i>	Garden Verbena	12"	12"	Deciduous	Full Sun	Medium	Low
<i>Veronica incana</i>	Silver Speedwell	18"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Veronica liwanensis</i>	Turkish Speedwell	3	24"	Evergreen	Sun/Shade	Medium	
<i>Veronica pectinata</i>	Woolly Speedwell	3	18"	Evergreen	Sun/Shade	Medium	
<i>Veronica spicata</i>	Veronica	36	36	Deciduous	Sun/Shade	High	Moderate
<i>Viola cornuta</i>	Tufted Violet	12"	12"	Evergreen	Sun/Shade	High	
<i>Viola odorata</i>	Sweet Violet	8"	14	Evergreen	Sun/Shade	High	Low
<i>Viola x wittrockiana</i>	Pansy, Annual	9"	9"	Evergreen	Full Sun	High	Low
<i>Wyethia scabra</i>	Desert Mule's Ear	24"	36"	Deciduous	Full Sun	Low	
<i>Zauschneria californica</i>	Hummingbird Plant	24"	36"	Deciduous	Full Sun	Medium	Low
<i>Zephyranthes candida</i>	Rain Lily	8"	8"	Deciduous	Full Sun	Medium	
<i>Zephyranthes sulphurea</i>	Rain Lily	8"	8"	Deciduous	Full Sun	Medium	Low
<i>Zinnia acerosa</i>	White Desert Zinnia	4"	6"	Deciduous	Full Sun	Low	
<i>Zinnia grandiflora</i>	Desert Zinnia	4"	6"	Deciduous	Full Sun	Low+	

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<b>Grasses, Turf</b>							
<i>Agrostis</i> spp.	Bentgrass	mowed	N/A	Evergreen	Full Sun	High	Moderate
<i>Bouteloua gracilis</i>	Blue Grama	4-12"	N/A	Deciduous	Full Sun	Low+	Low
<i>Buchloe dactyloides</i>	Buffalograss	3-8"	N/A	Deciduous	Full Sun	Medium	Low
<i>Cynodon dactylon</i>	Bermuda Grass	mowed	N/A	Deciduous	Full Sun	Medium	Low
<i>Festuca elatior</i> and all <i>Festuca</i>	Tall Fescue Turf	mowed	N/A	Evergreen	Sun/Shade	High	Low
<i>Festuca ovina</i> and all <i>Festuca</i> (except "glauca")	Sheep - Fescue	mowed	N/A	Evergreen	Sun/Shade	High	Low
<i>Lolium perenne</i> and all <i>Lolium</i>	Ryegrass Perennial	mowed	12"	Evergreen	Sun/Shade	High	Low
<i>Poa pratensis</i> and all <i>Poa</i>	Kentucky Bluegrass	mowed	N/A	Evergreen	Sun/Shade	High	Low
<i>Zoysia</i> spp.	<i>Zoysia</i> Grass	mowed	N/A	Deciduous	Full Sun	Medium	Low
<b>Grasses, Ornamental</b>							
<i>Agropyron smithii</i>	Western Wheatgrass	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Bouteloua curtipendula</i>	Sidecoats Grama	30"	24"	Deciduous	Full Sun	Medium	Low
<i>Cortaderia selloana</i>	Pampas Grass	72"	96"	Deciduous	Full Sun	Medium	Low
<i>Eragrostis trichodes</i>	Sand Lovegrass	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Eriantbus ravennae</i>	Ravenna Grass	72"	96"	Deciduous	Full Sun	Medium	Low
<i>Festuca ovina glauca</i>	Blue Fescue	12"	12"	Evergreen	Full Sun	Medium	Low
<i>Helictotrichon sempervirens</i>	Blue Avena Grass	24"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Hilaria jamesii</i>	Galleta	14"	14"	Deciduous	Full Sun	Low	Low
<i>Miscanthus sinensis</i>	Maidengrass	60"	48"	Deciduous	Sun/Shade	Medium	
<i>Muhlenbergia capillaris</i>	Gulf Muhly	60"	60"	Deciduous	Full Sun	Medium	Low
<i>Muhlenbergia lindheimerii</i>	Lindheimer Muhly	60"	60"	Deciduous	Full Sun	Low	Low
<i>Muhlenbergia rigida</i>	Deer Muhly	24"	36"	Deciduous	Full Sun	Medium	Low
<i>Ophiopogon japonicus</i>	Mondo Grass	6"	6"	Evergreen	Sun/Shade	Medium	Low
<i>Oryzopsis hymenoides</i>	Indian Ricegrass	18"	18"	Deciduous	Full Sun	Low	Low
<i>Pennisetum alopecuroides</i>	Hardy Fountain Grass	30"	30"	Deciduous	Full Sun	Medium	Low
<i>Pennisetum villosum</i>	Dwarf Feathertop	24"	24"	Deciduous	Full Sun	Medium	Low
<i>Schizachyrium scoparium</i>	Little Bluestem	30"	30"	Deciduous	Full Sun	Medium	Low
<i>Sporobolus cryptandrus</i>	Sand Dropseed	24"	24"	Deciduous	Full Sun	Low	Low
<i>Sporobolus wrightii</i>	Giant Sacaton	36"	36"	Deciduous	Full Sun	Medium	Low
<i>Stipa tenuissima</i>	Threadgrass	24"	24"	Deciduous	Full Sun	Low+	Low
<b>Ground Covers</b>							
<i>Anacyclus depressus</i>	Mat Daisy	6"	12"	Evergreen	Sun/Shade	Low	Low
<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	91"	24"	Evergreen	Shade/Sun	Medium	Low
<i>Artemisia frigida</i>	Fringed Sage	18"	18"	Deciduous	Full Sun	Low	Low
<i>Baccaris pilularis</i>	Dwarf Coyotebush	18"	36"	Evergreen	Sun/Shade	Low	Low
<i>Cerastium tomentosum</i>	Snow-in-Summer	8"	24"	Evergreen	Full Sun	Medium	Low
<i>Chamaemelum nobile</i>	Chamomile	6"	12"	Evergreen	Sun/Shade	Low+	Low
<i>Clematis ligusticifolia</i>	Western Virginbower	18"	120"	Deciduous	Sun/Shade	Medium	Low
<i>Convallaria majalis</i>	Lily of the Valley	12"	12"	Deciduous	Shade/Sun	High	Low
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster	12"	108"	Evergreen	Sun/Shade	Medium	Low
<i>Cotoneaster salicifolius</i> 'Repens'	Willowleaf Cotoneaster	12"	108"	Evergreen	Full Sun	Medium	Low
<i>Cytisus decumbens</i>	Creeping Broom	8"	36"	Evergreen	Sun/Shade	medium	Low
<i>Delosperma cooperi</i>	Purple Iceplant	6"	18"	Deciduous	Full Sun	Low	Low
<i>Delosperma nubigenum</i>	Yellow Iceplant	3"	18"	Evergreen	Full Sun	Low	Low
<i>Dichondra</i> spp.	Dichondra	2"	2"	Deciduous	Sun/Shade	High	Low
<i>Duchesnea indica</i>	Mock Strawberry	8"	24"	Deciduous	Sun/Shade	Medium	Low
<i>Eriogonum umbellatum</i>	Sulphur Flower	18"	18"	Evergreen	Full Sun	Low	Low
<i>Euonymus fortunei</i> 'Coloratus'	Purpleleaf Wintercreeper	12"	48"	Evergreen	Sun/Shade	High	Low
<i>Euphorbia cyparissias</i>	Cypress Spurge	12"	12"	Evergreen	Sun/Shade	Medium	Low
<i>Euphorbia epithymoides</i>	Cushion Spurge	12"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Euphorbia rigida</i>	Spurge	24"	24"	Evergreen	Sun/Shade	Low	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Galium odoratum</i>	Sweet Woodruff	6"	12"	Deciduous	Sun/Shade	High	Low
<i>Gypsophila repens</i>	Creeping Baby's Breath	4"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Juniperus horizontalis</i>	Juniper, Groundcover	12"	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus sabina</i>	Juniper, Groundcover	varies	varies	Evergreen	Full Sun	Low+	High
<i>Lamium maculatum</i>	Spotted Nettle	6"	6"	Deciduous	Full Sun	High	Low
<i>Mahonia repens</i>	Creeping Mahonia	12"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Marrubium rotundifolia</i>	Roundleaf Horehound	8"	18"	Evergreen	Full Sun	Low	Low
<i>Melampodium leucanthum</i>	Blackfoot Daisy	12"	18"	Deciduous	Full Sun	Low	Low
<i>Paxistima myrsinites</i>	Oregon Boxwood	30"	30"	Evergreen	Sun/Shade	High	Low
<i>Penstemon caespitosus</i>	Mat Penstemon	4"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Ranunculus repens</i>	Creeping Buttercup	18"	18"	Deciduous	Sun/Shade	High	Low
<i>Rosmarinus officinalis 'Prostrata'</i>	Creeping Rosemary	24"	72"	Evergreen	Full Sun	Medium	Low
<i>Sabia chamaedryoides</i>	Chihuahuan Sage	12"	18"	Evergreen	Full Sun	Low	Low
<i>Santolina chamaecyparissus</i>	Green Lavender Cotton	24"	60"	Evergreen	Full Sun	Low	Low
<i>Santolina virens</i>	Gray Lavender Cotton	24"	48"	Evergreen	Full Sun	Low	Low
<i>Saponaria ocymoides</i>	Soapwort	9"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Sedum spp.</i>	Stonecrop	24"	24"	Evergreen	Sun/Shade	Low+	Low
<i>Sedum spurium</i>	Dragon's Blood Sedum	6"	18"	Evergreen	Sun/Shade	Low	Low
<i>Sedum spurium</i>	Stonecrop	6"	18"	Evergreen	Sun/Shade	Low	Low
<i>Sempervivum tectorum</i>	Hen and Chicks	6"	6"	Evergreen	Full Sun	Medium	Low
<i>Teucrium aronianum</i>	Greek Germander	9"	18"	Evergreen	Sun/Shade	Medium	Low
<i>Teucrium chamaedrys</i>	Trailing Germander	12"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Thymus spp.</i>	Thyme	12"	24"	Evergreen	Sun/Shade	Medium	Low
<i>Trifolium spp.</i>	Clover	8"	8"	Deciduous	Sun/Shade	High	Low
<i>Verbena peruviana</i>	Verbena	9"	18"	Deciduous	Full Sun	Low	Low
<i>Veronica prostrata</i>	Harebell Veronica	8"	12"	Deciduous	Sun/Shade	Medium	Low
<i>Vinca major</i>	Giant Periwinkle	12"	48"	Evergreen	Shade/Sun	Medium	Low
<i>Vinca minor</i>	Periwinkle	9"	24"	Evergreen	Shade/Sun	Medium	Low
<i>Zinnia grandiflora</i>	Desert Zinnia	4"	6"	Deciduous	Full Sun	Low	Low
<b>Shrubs, Deciduous</b>							
<i>Amorpha cana</i>	Dwarf Leadplant	2"	3"	Deciduous	Full Sun	Medium	Low
<i>Amorpha canescens</i>	Leadplant	2"	3"	Deciduous	Full Sun	Low	Low
<i>Amorpha fruticosa</i>	False Indigo	10"	10"	Deciduous	Sun/Shade	Medium	Low
<i>Anisacanthus thurberi</i>	Hummingbird Trumpet	4"	4"	Deciduous	Sun/Shade	Low+	Low
<i>Arundo donax</i>	Carrizo Cane	20"	20"	Deciduous	Full Sun	Medium+	Low
<i>Berberis thunbergii</i>	Japanese Barberry	4"	4"	Deciduous	Sun/Shade	Medium	Moderate
<i>Berberis thunbergii Atropurpurea Nana</i>	Crimson Pigmy Barberry	1"	2"	Deciduous	Full Sun	Medium	Moderate
<i>Berberis thunbergii Atropurpurea</i>	Redleaf Barberry	4"	4"	Deciduous	Full Sun	Medium	Moderate
<i>Buddleia davidii nanhoensis</i>	Dwarf Butterfly Bush	5"	5"	Deciduous	Sun/Shade	Medium	Low
<i>Buddleia marrubifolia</i>	Wooly Butterfly Bush	6"	6"	Deciduous	Full Sun	Low+	Low
<i>Caesalpinia gilliesii</i>	Yellow Bird of Paradise	10"	10"	Deciduous	Full Sun	Low	Low
<i>Caragana sp.</i>	Peashrub	20"	20"	Deciduous	Full Sun	Medium	Low
<i>Caryopteris x clandonensis</i>	Blue Mist Spirea	3"	11"	Deciduous	Full Sun	Medium	Low
<i>Ceanothus fendleri</i>	Ceanothus	3"	3"	Deciduous	Full Sun	Medium	Low
<i>Celtis pallida</i>	Desert Hackberry	8"	8"	Deciduous	Full Sun	Low	Low
<i>Chaenomeles japonica</i>	Flowering Quince	6"	6"	Deciduous	Full Sun	High	Low
<i>Chamaebatiaria millefolium</i>	Fernbush	5"	5"	Deciduous	Full Sun	Low+	Low
<i>Chrysothamnus nauseosus</i>	Chamisa, Rabbitbrush	5"	5"	Deciduous	Full Sun	Low	Low
<i>Cornus alba</i>	Tartarian Dogwood	10"	10"	Deciduous	Shade/Sun	High	Low
<i>Cornus stolonifera</i>	Redtwig Dogwood	7"	7"	Deciduous	Sun/Shade	High	Low
<i>Cotoneaster apiculatus;</i>	Cranberry Cotoneaster	4"	8"	Deciduous	Sun/Shade	Medium	Low
<i>Cotoneaster divaricatus</i>	Spreading Cotoneaster	4"	8"	Deciduous	Sun/Shade	Medium	Low
<i>Cotoneaster horizontalis</i>	Rock Cotoneaster	2"	9"	Deciduous	Full Sun	Medium	Low
<i>Euonymus alata Compacta</i>	Dwarf Burning Bush	6"	6"	Deciduous	Sun/Shade	High	Low
<i>Fendlera rupicola</i>	Cliff Fendlerbush	6"	6"	Deciduous	Full Sun	Medium	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Forestiera neomexicana</i>	New Mexican Olive	15"	15"	Deciduous	Sun/Shade	Medium	Low
<i>Forsythia intermedia</i>	Forsythia	10'	10'	Deciduous	Full Sun	Medium	Low
<i>Genista tinctoria</i>	Summer Broom	2'	4'	Deciduous	Full Sun	Medium	Low
<i>Hibiscus syriacus</i>	Rose of Sharon	10'	10'	Deciduous	Full Sun	Medium	Low
<i>Hippophae rhamnoides</i>	Sea Buckthorn	30'	30'	Deciduous	Full Sun	High	Low
<i>Holodiscus dumosus</i>	Rock Spirea	6'	6'	Deciduous	Sun/Shade	Medium	Low
<i>Jasminum nudiflorum</i>	Winter Jasmine	4'	12'	Deciduous	Full Sun	Low+	Low
<i>Kolkwitzia amabilis</i>	Beauty Bush	10'	10'	Deciduous	Sun/Shade	Medium	Low
<i>Lagerstroemia indica x sauriei</i>	Crape Myrtle, Pecos, Zuni	10'	8'	Deciduous	Full Sun	High	Low
<i>Ligustrum vulgare</i>	Common Privet	8'	6'	Deciduous	Sun/Shade	High	Low
<i>Lonicera fragrantissima</i>	Winter Honeysuckle	5'	5'	Deciduous	Sun/Shade	Medium	Low
<i>Lonicera tartarica</i>	Tartarian Honeysuckle	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Parryella filifolia</i>	Dunebroom	3'	3'	Deciduous	Full Sun	Low	Low
<i>Philadelphus cultivars</i>	Mock Orange	10'	10'	Deciduous	Sun/Shade	Medium	Low
<i>Philadelphus microphyllus</i>	Littleleaf Mock Orange	6'	6'	Deciduous	Sun/Shade	Medium	Low
<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	3'	3'	Deciduous	Sun/Shade	Medium	Low
<i>Prunus besseyi</i>	Western Sand Cherry	3'	3'	Deciduous	Full Sun	Medium	Low
<i>Prunus tomentosa</i>	Nanking Cherry	6'	6'	Deciduous	Full Sun	High	Low
<i>Prunus X cistena</i>	Purpleleaf Plum Bush	6'	6'	Deciduous	Full Sun	High	Low
<i>Psoralea scoparia</i>	Broom Dalea	3'	3'	Deciduous	Full Sun	Low	Low
<i>Punica spp.</i>	Pomegranate	8'	8'	Deciduous	Full Sun	Low+	Low
<i>Rhamnus frangula Columnaris</i>	Tallhedge Buckthorn	10'	10'	Deciduous	Shade/Sun	High	Low
<i>Rhus glabra</i>	Smooth Sumac	20'	20'	Deciduous	Full Sun	High	Low
<i>Rhus glabra cismontana</i>	Cutleaf Sumac	3'	3'	Deciduous	Full Sun	Medium	Low
<i>Rhus microphylla</i>	Littleleaf Sumac	8'	9'	Deciduous	Full Sun	Low+	Low
<i>Rhus trilobata</i>	Three-Leaf Sumac	6'	6'	Deciduous	Full Sun	Low+	Low
<i>Rhus trilobata Prostrata</i>	Prostrate Sumac	2'	6'	Deciduous	Full Sun	Low+	Low
<i>Ribes aureum</i>	Golden Currant	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Rosa foetida</i>	Austrian Copper Rose	10'	10'	Deciduous	Full Sun	Medium	Low
<i>Rosa rugosa</i>	Species Rugosa Roses	8'	8'	Deciduous	Full Sun	Medium	Low
<i>Rosa spp.</i>	Tea, Floribunda, Grandiflora	8'	8'	Deciduous	Full Sun	Medium	Low
<i>Rosa woodsii</i>	Woods' Rose	6'	8'	Deciduous	Full Sun	Medium	Low
<i>Salvia greggii</i>	Autumn or Cherry Sage	2'	3'	Deciduous	Sun/Shade	Medium	Low
<i>Shepherdia argentea</i>	Silver Buffaloberry	15'	10'	Deciduous	Sun/Shade	Medium	Low
<i>Spiraea japonica</i>	Little Princess Spirea	1.5'	1.5'	Deciduous	Sun/Shade	High	Low
<i>Spiraea prunifolia Plena</i>	Bridal Wreath or Shoebuttton Spirea	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Spiraea vanhouttei</i>	Bridal Wreath Spirea	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Spiraea X bumalda</i>	Anthony Waterer' Spirea	3'	3'	Deciduous	Sun/Shade	High	Low
<i>Symphoricarpos albus</i>	Snowberry	6'	6'	Deciduous	Full Sun	Medium	Low
<i>Symphoricarpos orbiculatus</i>	Coralberry	6'	6'	Deciduous	Full Sun	Medium	Low
<i>Syringa laciniata</i>	Cutleaf Persian Lilac	8'	6'	Deciduous	Full Sun	Medium+	Low
<i>Syringa patula</i>	Korean Lilac	6'	6'	Deciduous	Sun/Shade	Medium	Low
<i>Syringa persica</i>	Persian Lilac	8'	8'	Deciduous	Full Sun	Medium	Low
<i>Syringa rothomagensis</i>	Chinese Lilac	8'	8'	Deciduous	Sun/Shade	Medium	Low
<i>Syringa vulgaris</i>	Common Lilac	15'	15'	Deciduous	Full Sun	Medium	Low
<i>Viburnum carlesii</i>	Korean Spicebush	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Viburnum opulus Sterile</i>	Snowball Bush	10'	10'	Deciduous	Sun/Shade	High	Low
<i>Viburnum plicatum tomentosum</i>	Mariesii Viburnum	10'	10'	Deciduous	Sun/Shade	High	Low
<i>Viburnum trilobum compactum</i>	Dwarf Cranberrybush	6'	6'	Deciduous	Sun/Shade	High	Low
<i>Vitex agnus-castus</i>	Chaste Tree	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Weigela florida</i>	Weigela	10'	10'	Deciduous	Full Sun	Medium	Low

**Shrubs, Evergreen**

<i>Abelia grandiflora</i>	Glossy Abelia	7'	7'	Evergreen	Sun/Shade	Medium	Low
<i>Arctostaphylos pungens</i>	Pointleaf Manzanita	3'	6'	Evergreen	Sun/Shade	Medium	Low
<i>Artemisia cana</i>	Silver Sage	3'	5'	Evergreen	Full Sun	Low	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Artemisia filifolia</i>	Sand Sage	4'	4'	Evergreen	Full Sun	Low	Low
<i>Artemisia X Powis Castle</i>	Powis Castle Sage	2'	5'	Semi-Ever.	Sun/Shade	Low+	Low
<i>Artemisia tridentata</i>	Big Sage	4'	4'	Evergreen	Sun/Shade Low 40	Low	Low
<i>Atriplex canescens</i>	Four Wing Saltbush	5'	6'	Evergreen	Full Sun	Low	Low
<i>Atriplex confertifolia</i>	Shadscale	2'	2'	Evergreen	Full Sun	Low	Low
<i>Baccharis Centennial</i>	Baccharis Centennial	2'	5'	Evergreen	Full Sun	Low	Low
<i>Baccharis salicina/sarothroides</i>	Desert Broom	7'	7'	Evergreen	Full Sun	Low+	Low
<i>Berberis gladywensis</i>	William Penn Barberry	6'	6'	Evergreen	Sun/Shade	Medium	Moderate
<i>Berberis haernatocarpa</i>	Algerita	8'	10'	Evergreen	Full Sun	Low+	Moderate
<i>Berberis julianae</i>	Wintergreen Barberry	5'	5'	Evergreen	Full Sun	Medium	Low
<i>Berberis mentorensis</i>	Mentor Barberry	7'	7'	Evergreen	Sun/Shade	High	Moderate
<i>Buxus spp.</i>	Boxwood	4'	4'	Evergreen	Shade	Medium	Low
<i>Cercocarpus ledifolius</i>	Curl-Leaf Mtn. Mahogany	10'	6'	Evergreen	Full Sun	Low+	Low
<i>Cercocarpus montanus</i>	Mountain Mahogany	10'	6'	Evergreen	Full Sun	Medium	Low
<i>Chrysactinia mexicana</i>	Damianita	2'	2'	Evergreen	Full Sun	Low	Low
<i>Cotoneaster buxifolius</i>	Grayleaf Cotoneaster	2'	9'	Evergreen	Full Sun	Medium	Low
<i>Cotoneaster congestus</i>	Pyrenees Cotoneaster	3'	3'	Evergreen	Sun/Shade	Medium	Low
<i>Cotoneaster lacteus</i>	Red Clusterberry	3'	3'	Evergreen	Full Sun	Medium	Low
<i>Cotoneaster salicifolius</i>	Willowleaf Cotoneaster	8'	10'	Evergreen	Full Sun	Medium	Low
<i>Cowania mexicana</i>	Cliffrose	6'	10'	Evergreen	Full Sun	Low	Low
<i>Cytisus scoparius</i>	Scotch Broom	8'	6'	Evergreen	Full Sun	Medium	Low
<i>Elaeagnus pungens</i>	Silverberry	4'	4'	Evergreen	Full Sun	Medium	Low
<i>Ephedra spp.</i>	Mormon Tea	10'	10'	Evergreen	Full Sun	Low	Low
<i>Ericameria laricifolia</i>	Turpentine Bush	3'	4'	Evergreen	Full Sun	Low	Low
<i>Euonymus japonica</i>	Japanese Euonymus	3'	4'	Evergreen	Full Sun	Low	Low
<i>Euonymus kiautschovia</i>	Manhattan Euonymus	6'	6'	Evergreen	Sun/Shade	Medium	Low
<i>Eurotia lanata</i>	Winterfat	3'	3'	Evergreen	Full Sun	Low	Low
<i>Fallugia paradoxa</i>	Apache Plume	5'	5'	Evergreen	Full Sun	Low	Low
<i>Garrya wrightii</i>	Wright's Silk Tassel	5'	5'	Evergreen	Full Sun	Low	Low
<i>Genista hispanica</i>	Spanish Broom	4'	4'	Evergreen	Full Sun	Medium	Low
<i>Helichrysum angustifolium</i>	Curry Plant	2'	3'	Evergreen	Full Sun	Medium	Low
<i>Ilex cornuta</i>	Burford Holly	8'	8'	Evergreen	Shade/Sun	High	Low
<i>Ilex wilsonii</i>	Wilson Holly	10'	10'	Evergreen	Shade/Sun	High	Low
<i>Juniperus chinensis</i>	Juniper, Shrub Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus sabina</i>	Juniper, Shrub Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus squamata</i>	Juniper, Shrub Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus virginiana</i>	Juniper, Shrub Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Larrea tridentata</i>	Creosote Bush	6'	8'	Evergreen	Full Sun	Low	Low
<i>Lavandula angustifolia</i>	English Lavender	3'	3'	Evergreen	Sun/Shade	Medium	Low
<i>Leucophyllum langmaniae</i>	Rio Bravo Rainsage	4'	4'	Evergreen	Full Sun	Medium	Low
<i>Leucophyllum zygophyllum</i>	Cimarron Rainsage	4'	4'	Evergreen	Full Sun	Medium	Low
<i>Ligustrum japonicum</i>	Waxleaf Privet	8'	8'	Evergreen	Sun/Shade	High	Low
<i>Mahonia aquifolium</i>	Oregon Grape Holly	6'	6'	Evergreen	Shade/Sun	Medium	Low
<i>Mahonia aquifolium Compacta</i>	Compact Oregon Grape	2'	3'	Evergreen	Shade/Sun	Medium	Low
<i>Nandina domestica, cultivars</i>	Heavenly Bamboo	8'	5'	Evergreen	Shade/Sun	Medium+	Low
<i>Parthenium incanum</i>	Mariola	2'	3'	Evergreen	Full Sun	Low	Low
<i>Photinia fraseri</i>	Photinia	8'	8'	Evergreen	Full Sun	Medium	Low
<i>Photinia serrulata</i>	Chinese Photinia	10'	10'	Evergreen	Full Sun	Medium+	Low
<i>Phyllostachys aurea</i>	Golden Bamboo	15'	15'	Evergreen	Sun/Shade	Medium+	Low
<i>Picea conica</i>	Alberta Spruce	7'	3'	Evergreen	Shade/Sun	Medium	Low
<i>Prunus caroliniana</i>	Carolina Cherry Laurel	10'	10'	Evergreen	Sun/Shade	High	Low
<i>Purshia tridentata</i>	Antelope Bitterbush	10'	8'	Evergreen	Full Sun	Low	Low
<i>Pyracantha coccinea</i>	Firstborn	10'	10'	Evergreen	Sun/Shade	Medium	Low
<i>Raphiolepis indica</i>	India Hawthorn	3'	4'	Evergreen	Sun/Shade	Medium	Low
<i>Rhamnus californica</i>	Coffeeberry	5'	5'	Evergreen	Full Sun	Low+	Low
<i>Rhododendron spp.</i>	Rhododendron, Azalea	3'	3'	Evergreen	Shade/Sun	High	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Rhus ovata</i>	Sugarbush	10'	10'	Evergreen	Full Sun	Low+	Low
<i>Rosmarinus officinalis cultivars</i>	Upright Rosemary	6'	6'	Evergreen	Sun/Shade	Low+	Low
<i>Sabnia dorrii</i>	Desert Sage	2'	3'	Evergreen	Full Sun	Low	Low
<i>Sabia lavandulifolia</i>	Lavender Sage	2'	2'	Evergreen	Full Sun	Medium	Low
<i>Santolina chamaecyparissus</i>	Gray Lavender Cotton	2'	5'	Evergreen	Full Sun	Low	Low
<i>Santolina virens</i>	Gray Lavender Cotton	2'	4'	Evergreen	Full Sun	Low	Low
<i>Sarcobatus vermiculatus</i>	Greasewood	8'	8'	Evergreen	Full Sun	Low	Low
<i>Spartium junceum</i>	Spanish Broom	10'	10'	Evergreen	Full Sun	Medium	Low
<i>Vauquelinia californica</i>	Arizona Rosewood	12'	8'	Evergreen	Full Sun	Low	Low
<i>Viburnum X burkwoodii</i>	Burkwood Viburnum	5'	5'	Evergreen	Shade/Sun	High	Low
<b>Trees Deciduous</b>							
<i>Acer ginnala</i>	Amur Maple	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Acer grandidentatum</i>	Bigtooth Maple	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Acer palmatum</i>	Japanese Maple	20'	20'	Deciduous	Shade/Sun	Medium+	Moderate
<i>Acer platanoides</i>	Norway Maple	50'	50'	Deciduous	Full Sun	Medium+	Moderate
<i>Acer saccharinum</i>	Silver Maple	40'	40'	Deciduous	Full Sun	Medium+	Low
<i>Acer truncatum</i>	Shantung Maple	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Albizia julibrissin Rosea</i>	Mimosa	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Amelanchier utahensis</i>	Serviceberry	12'	12'	Deciduous	Full Sun	Medium	Low
<i>Carya Illinoensis</i>	Pecan	40'	40'	Deciduous	Full Sun	Medium	Moderate
<i>Catalpa speciosa</i>	Catalpa	40'	40'	Deciduous	Full Sun	Medium	Low
<i>Celtis occidentalis</i>	Common Hackberry	40'	40'	Deciduous	Full Sun	Medium	Low
<i>Celtis reticulata</i>	Netleaf/Canyon Hackberry	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Cercis canadensis</i>	Eastern Redbud	30'	30'	Deciduous	Sun/Shade	Medium	Low
<i>Cercis occidentalis</i>	Western Redbud	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Cercis reniformis</i>	Oklahoma Redbud	25'	25'	Deciduous	Sun/Shade	Medium	Low
<i>Chilopsis linearis</i>	Desert Willow	20'	25'	Deciduous	Full Sun	Low	Low
<i>X Chitalpa tashkentensis</i>	Chitalpa	30'	30'	Deciduous	Full Sun	Medium	Low
<i>Cornus mas</i>	Cornelian Cherry	25'	20'	Deciduous	Full Sun	Medium	Low
<i>Cotinus coggygria</i>	Smoketree	30'	30'	Deciduous	Full Sun	Medium	Low
<i>Crataegus crus-galli Inermis</i>	Thornless Cockspur Hawthorn	20'	25'	Deciduous	Full Sun	Medium	Low
<i>Crataegus laevigata</i>	English Hawthorn	20'	20'	Deciduous	Sun/Shade	Medium	Low
<i>Crataegus phaenopyrum</i>	Washington Thom	25'	25'	Deciduous	Sun/Shade	High	Low
<i>Crataegus lavellei</i>	Carrieri Hawthorne	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Crataegus monogyna</i>	Single-Seed Hawthorne	30'	8'	Deciduous	Full Sun	Medium	Low
<i>Crataegus ambigua</i>	Hawthorne, Russian	20'	20'	Deciduous	Sun/Shade	Medium	Low
<i>Eleagnus angustifolia</i>	Russian Olive	40'	40'	Deciduous	Full Sun	Medium	Low
<i>Forestiera neomexicana</i>	New Mexico Olive	15'	15'	Deciduous	Sun/Shade	Medium	Low
<i>Fracinus cuspidata</i>	Fragrant Ash	20'	20'	Deciduous	Full Sun	Medium	High
<i>Fracinus oxycarpa</i>	Raywood Ash	35'	30'	Deciduous	Full Sun	Medium	High
<i>Fracinus pennsylvanica</i>	Green Ash	60'	60'	Deciduous	Full Sun	Medium	High
<i>Fracinus spp.</i>	Ash	45'	45'	Deciduous	Full Sun	Medium	High
<i>Fracinus texana</i>	Texas Ash	25'	25'	Deciduous	Full Sun	Medium	High
<i>Fracinus velutina Arizona</i>	Modesto Ash	40'	40'	Deciduous	Full Sun	Medium	High
<i>Fruit trees</i>	Fruit Trees	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Gleditsia triacanthos</i>	Honey Locust	80'	80'	Deciduous	Full Sun	Medium	Low
<i>Gymnocladus dioica</i>	Kentucky Coffee Tree	50'	40'	Deciduous	Full Sun	Medium	Low
<i>Juglans major</i>	Arizona Walnut	50'	50'	Deciduous	Full Sun	Medium	Moderate
<i>Juglans microphylla</i>	Little Walnut	30'	30'	Deciduous	Full Sun	Medium	Moderate
<i>Juglans regia</i>	English Walnut	60'	60'	Deciduous	Full Sun	Medium	Moderate
<i>Juglans regia Carpathian</i>	Carpathian Walnut	20'	20'	Deciduous	Full Sun	Medium	Moderate
<i>Koebeuteria paniculata</i>	Golden Rain Tree	25'	25'	Deciduous	Full Sun	Medium	Low
<i>Leucaena retusa</i>	Goldenball Leadtree	15'	20'	Deciduous	Full Sun	Low+	Low
<i>Liriodendron tulipifera</i>	Tulip Tree	45'	45'	Deciduous	Full Sun	Medium	Low
<i>Maclura pomifera</i>	Osage Orange	45'	45'	Deciduous	Full Sun	Medium	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Magnolia soulangiana</i>	Saucer Magnolia	20'	20'	Deciduous	Sun/Shade	Medium	Low
<i>Malus cultivars</i>	Crabapples	varies	varies	Deciduous	Full Sun	High	Low
<i>Melia azedarach umbraculiformis</i>	Texas Umbrella Tree	40'	40'	Deciduous	Full Sun	Low	Low
<i>Metasequoia glyptostroboides</i>	Dawn Redwood	60'	40'	Deciduous	Full Sun	Medium	Low
<i>Paulownia tomentosa</i>	Empress Tree	40'	40'	Deciduous	Sun/Shade	Medium	Low
<i>Pistachia chinensis</i>	Chinese Pistache	60'	60'	Deciduous	Full Sun	Medium	Low
<i>Platanus acerfolia</i>	London Plane Tree	70'	50'	Deciduous	Full Sun	High	High
<i>Platanus wrightii</i>	Arizona Sycamore	60'	70'	Deciduous	Full Sun	Medium	High
<i>Populus acuminata</i>	Lanceleaf Cottonwood	50'	50'	Deciduous	Full Sun	High	High
<i>Populus fremontii</i>	Western Cottonwood	50'	60'	Deciduous	Full Sun	Medium	High
<i>Prosopis glandulosa</i>	Honey Mesquite	20'	25'	Deciduous	Full Sun	Low+	Low
<i>Prosopis pubescens</i>	Screwbean Mesquite	20'	20'	Deciduous	Full Sun	Low+	Low
<i>Prunus americana</i>	American Plum	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Prunus armeniaca</i>	Apricot	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Prunus cerastifera</i>	Purpleleaf Plum	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Prunus virginiana</i>	Chokecherry	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Ptelea trifoliata</i>	Hoptree	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Pyrus calleryana</i>	Ornamental Pear	25'	15'	Deciduous	Full Sun	Medium	Low
<i>Quercus gambelii</i>	Gambel Oak	25'	25'	Deciduous	Sun/Shade	Medium	Moderate
<i>Quercus lobata</i>	Valley Oak	40'	25'	Deciduous	Sun/Shade	Medium	Moderate
<i>Quercus macrocarpa</i>	Bur Oak	60'	70'	Deciduous	Sun/Shade	Medium	Moderate
<i>Quercus muhlenbergia</i>	Chinquapin Oak	40'	40'	Deciduous	Sun/Shade	Medium	Moderate
<i>Quercus buckleyi</i>	Texas Red Oak	40'	30'	Deciduous	Sun/Shade	Medium	Moderate
<i>Quercus shumardii</i>	Shumard Oak	60'	60'	Deciduous	Sun/Shade	Medium	Moderate
<i>Rhamnus cathartica</i>	Buckthorn	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Rhus lanceolata</i>	Prairie Flameleaf Sumac	25'	25'	Deciduous	Sun/Shade	Medium	Low
<i>Robinia neomexicana</i>	New Mexico Locust	25'	15'	Deciduous	Full Sun	Medium	Low
<i>Robinia pseudoacacia</i>	Black Locust	60'	50'	Deciduous	Full Sun	Medium	Low
<i>Robinia x ambigua</i>	Idaho Locust	40'	30'	Deciduous	Full Sun	Medium	Low
<i>Sambucus mexicana</i>	Mexican Elder	20'	25'	Deciduous	Full Sun	Low+	Low
<i>Sapindus drummondii</i>	Western Soapberry	30'	30'	Deciduous	Full Sun	Low+	Low
<i>Sophora japonica (Staphnolobium)</i>	Japanese Pagoda Tree	35'	35'	Deciduous	Sun/Shade	Medium	Low
<i>Sorbus aucuparia</i>	European Mountain Ash	20'	20'	Deciduous	Sun/Shade	High	Low
<i>Syringa reticulata</i>	Japanese Tree lilac	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Taxodium distichum</i>	Bald Cypress	60'	30'	Deciduous	Full Sun	Medium+	Unknown
<i>Taxodium mucronatum</i>	Montezuma Cypress	60'	60'	Deciduous	Full Sun	Medium+	Unknown
<i>Tilia cordata</i>	Littleleaf Linden	40'	30'	Deciduous	Sun/Shade	High	Low
<i>Ulmus crassifolia</i>	Cedar Elm	40'	40'	Deciduous	Full Sun	Medium	Prohibited
<i>Ulmus parvifolia</i>	Lacebark Elm	40'	40'	Deciduous	Full Sun	Medium	Prohibited
<i>Vitex agnus-castus</i>	Chaste Tree	20'	20'	Deciduous	Full Sun	Medium	Low
<i>Zizyphus jujuba</i>	Jujube or Chinese Date	25'	25'	Deciduous	Full Sun	Low+	Low

**Trees, Evergreen**

<i>Abies concolor</i>	White Fir	50'	20'	Evergreen	Full Sun	High	Low
<i>Cedrus atlantica</i>	Atlas Cedar	75'	50'	Evergreen	Full Sun	High	Moderate
<i>Cedrus deodara</i>	Deodar Cedar	80'	60'	Evergreen	Full Sun	High	Moderate
<i>Cedrus libani</i>	Cedar of Lebanon	80'	50'	Evergreen	Full Sun	High	Moderate
<i>Cercocarpus ledifolius</i>	Curly-Leaf Mtn. Mahogany	10'	6'	Evergreen	Full Sun	Low+	Low
<i>Cupressocyparis leylandii</i>	Leyland Cypress	60'	35'	Evergreen	Full Sun	Medium	Moderate
<i>Cupressus arizonica</i>	Arizona Cypress	70'	50'	Evergreen	Full Sun	Medium	Prohibited
<i>Juniperus chinensis</i>	Juniper, Tree Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus deppeana</i>	Alligator Juniper	60'	40'	Evergreen	Full Sun	Low+	High
<i>Juniperus monosperma</i>	Oneseed Juniper	15'	15'	Evergreen	Full Sun	Low+	High
<i>Juniperus scopulorum</i>	Juniper, Rocky Mtn.	varies	varies	Evergreen	Full Sun	Low+	High
<i>Juniperus virginiana</i>	Juniper, Tree Varieties	varies	varies	Evergreen	Full Sun	Low+	High
<i>Magnolia grandiflora</i>	Evergreen Magnolia	30'	30'	Evergreen	Sun/Shade	Medium	Low
<i>Picea abies</i>	Norway Spruce	50'	20'	Evergreen	Full Sun	Medium+	Low

Scientific Name	Common Name	Aprox. Height	Average Spread	Deciduous/ Evergreen	Light Exposure	Water Use	Allergenic Potential
<i>Picea engelmanni</i>	Engleman Spruce	50'	20'	Evergreen	Full Sun	Medium+	Low
<i>Picea pungens</i>	Bluc Spruce	50'	20'	Evergreen	Full Sun	High	Moderate
<i>Pinus aristata</i>	Bristlecone Pine	30'	20'	Evergreen	Full Sun	Medium	Low
<i>Pinus edulis</i>	Pinon Pine	30'	20'	Evergreen	Full Sun	Medium	Low
<i>Pinus eldarica</i>	Afghan Pine	40'	18'	Evergreen	Full Sun	Medium	Low
<i>Pinus flexilis</i>	Limber Pine	30'	20'	Evergreen	Full Sun	Medium	Low
<i>Pinus nigra</i>	Austrian Pine	35'	25'	Evergreen	Full Sun	Medium	Low
<i>Pinus pinea</i>	Italian Stone Pine	60'	50'	Evergreen	Full Sun	Medium	Low
<i>Pinus ponderosa</i>	Ponderosa Pine	40'	0	Evergreen	Full Sun	Medium	Low
<i>Pinus strobiformis</i>	Southwestern White or Border Pine	30'	20'	Evergreen	Full Sun	Medium	Low
<i>Pinus sylvestris</i>	Scotch Pine	45'	25'	Evergreen	Full Sun	Medium	Low
<i>Poncirus trifoliata</i>	Trifoliolate Orange	15'	5'	Evergreen	Full Sun	Medium	Low
<i>Pseudotsuga menziesii</i>	Douglas Fir	50'	20'	Evergreen	Full Sun	Medium	Moderate
<i>Quercus fusiformis</i>	Escarpment Live Oak	25'	30'	Evergreen	Sun/Shade	Medium	Moderate
<i>Quercus oblongifolia/engelmannii</i>	Mexican Blue/Mesa Oak	25'	30'	Semi-Ever	Sun/Shade	Medium	Moderate
<i>Quercus turbinella</i>	Shrub Live Oak	18'	20'	Evergreen	Sun/Shade	Medium	Moderate
<i>Quercus virginiana</i>	Southern Live Oak	35'	40'	Semi-Ever.	Sun/Shade	Medium	Moderate
<i>Sequoia sempervirens</i>	Coast Redwood	50'	30'	Evergreen	Full Sun	Medium	Low
<i>Sequoiadendron giganteum</i>	Giant Sequoia	75'	30'	Evergreen	Full Sun	Medium	Unknown
<i>Taxus species</i>	Yew	varies	varies	Evergreen	Sun/Shade	High	Low
<i>Thuja species</i>	Arborvitae	varies	varies	Evergreen	Full Sun	Medium	Low
<b>Vines</b>							
<i>Campsis radicans</i>	Trumpet Vine	climbing	40'	Deciduous	Full Sun	Medium	Low
<i>Clematis hybrids</i>	Clematis	climbing	10'	Deciduous	Sun/Shade	High	Low
<i>Clematis ligusticifolia</i>	Western Virginbower	climbing	15'	Deciduous	Sun/Shade	Medium	Low
<i>Clematis tangutica</i>	Golden Lanterns	climbing	15'	Deciduous	Sun/Shade	High	Low
<i>Euonymus fortunei colorata</i>	Purpleleaf Wintercreeper	climbing	6'	Evergreen	Sun/Shade	High	Low
<i>Gelsemium sempervirens</i>	Carolina Jessamine	climbing	10'	Evergreen	Sun/Shade	Medium	Low
<i>Hedera helix</i>	English Ivy	climbing	5'	Evergreen	Sun/Shade	Medium	Low
<i>Lonicera chinensis purpurea</i>	Purple Leaf Honeysuckle	climbing	12'	Evergreen	Full Sun	Medium	Low
<i>Lonicera japonica Halliana</i>	Hall's Honeysuckle	climbing	12'	Evergreen	Sun/Shade	Medium	Low
<i>Lonicera sempervirens</i>	Coral Honeysuckle	climbing	8'	Evergreen	Sun/Shade	Medium	Low
<i>Parthenocissus inserta</i>	Woodbine	climbing	40'	Deciduous	Full Sun	Medium	Low
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	climbing	40'	Deciduous	Full Sun	Medium	Low
<i>Parthenocissus tricuspidata</i>	Boston Ivy	climbing	40'	Deciduous	Sun/Shade	Medium	Low
<i>Periploca graeca</i>	Silkvine	climbing	40'	Deciduous	Full Sun	Low+	Low
<i>Polygonum aubertii</i>	Silver Lacevine	climbing	40'	Deciduous	Full Sun	Low+	Low
<i>Rosa banksiae</i>	Rose Lady Banks	climbing	20'	Evergreen	Full Sun	Medium	Low
<i>Vitis labrusca</i>	American Grape	climbing	30'	Deciduous	Full Sun	Medium	Low
<i>Vitis vinifera</i>	European Grape	climbing	30'	Deciduous	Full Sun	Medium	Low
<i>Wisteria sinensis</i>	Wisteria	climbing	20'	Deciduous	Sun/Shade	Medium	Low

## 2017 Zone 5 Seed List: Southern Desertic Basins, Plains, and Mountains

Common Name	Botanical Name	Lbs of PLS*/Acre
<b>Annual quick-cover grasses</b>		
Oats	<i>Avena sativa</i>	0.50
Sterile triticale	<i>Triticum aestivum X Secale cereale</i> 'Quickguard'	0.50
 <b>Cool-season grasses</b>		
Bottlebrush squirreltail	<i>Elymus elymoides</i>	1.75
New Mexico feathergrass	<i>Hesperostipa neomexicana</i>	1.00
Western wheatgrass	<i>Agropyron smithii</i>	1.75
<hr/>		
<b>Warm-season grasses</b>		
Alkali sacaton	<i>Sporobolus airoides</i>	0.20
Black grama	<i>Bouteloua eriopoda</i>	0.20
Little bluestem	<i>Schizachyrium scoparium</i>	0.50
Needle grama	<i>Bouteloua aristidoides</i>	0.30
Sand dropseed	<i>Sporobolus cryptandrus</i>	0.08
Sideoats grama	<i>Bouteloua curtipendula</i> var. <i>Vaughn</i> **	0.75
 <b>Wildflowers</b>		
Blanket flower	<i>Gaillardia pulchella</i>	0.30
Desert marigold	<i>Baileya multiradiata</i>	0.10
Desert zinnia	<i>Zinnia acerosa</i>	0.20
Hairy golden aster	<i>Heterotheca villosa</i>	0.20
Lewis flax	<i>Linum lewisii</i>	0.20
Prairie aster	<i>Machaeranthera tanacetifolia</i>	0.20
Wild four o'clock	<i>Mirabilis multiflora</i>	0.30
White prairie clover	<i>Dalea candida</i>	0.30
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.30

## Woody Shrubs

Four-wing saltbush	<i>Atriplex canescens</i>	0.40
Sand sage	<i>Artemisia filifolia</i>	0.05
Winterfat	<i>Krascheninnikovia lanata</i>	0.20

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**\*PURE LIVE SEED/ACRE TOTAL** **10.28**

**\*\* Local, wild-sourced genotypes preferred. Provide specified registered variety only if wild-sourced seed is unavailable.**

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

minimum in depth, river run rock, or expanded shale.

c. Trees shall not be planted under outdoor lighting structures. Landscape plant material shall be arranged in a manner not to obstruct security lighting. Where a conflict arises between landscape elements required under this Ordinance and security lighting, the Planning Administrator shall make the final determination.

d. Plant material installed within the site triangle at roadway intersections shall not exceed twenty-four inches (24") in height at maturity. Tree canopy height shall not be less than six feet (6'). The site triangle at an intersection shall be calculated according to Chapter 9, Section 9.2 of the Maricopa County Department of Transportation Roadway Design Manual. The Town of Queen Creek's official reference for roadway design standards.

e. All plant materials used in public right-of-way, medians, or parking lot islands shall come from the Arizona Municipal Water Users Association Low Water Use Plant List.

9. *Site Stabilizations.* The applicant shall revegetate the graded and / or disturbed land where any construction activity has occurred in order to prevent erosion by water, wind or subsidence, as follows:

a. Revegetate the construction area with native species or with revegetation seed mixes. Revegetative native plants include: desert trees, desert shrubs and grasses, large specimen cacti or seeding of the same.

b. Weedy species such as Russian Thistle, Telegraph Plant, Desert Broom, Pigweed or Burrow Bush shall be weeded to prevent growth and spread of such species onto adjacent properties.

c. Slopes steeper than three to one (3:1), where revegetation and plant material alone will not hold soil in place, shall be held in place with turf, retaining walls, rip-rap, or shall be developed with a

system of terraces or diversions to ensure slope stability, control surface water runoff and encourage rapid vegetation establishment, or any method deemed appropriate by the Town.

10. *Dust Control.* During grading and until revegetation is established, the applicant shall use the following methods to reduce and mitigate the production of dust and such methods shall be addressed in the grading permit prior to commencement of construction.

a. Dust palliative approved by Town Engineer;

b. Watering during grading;

c. Use of decomposed granite or other decorative landscape material as a groundcover for non-slope and vehicular/pedestrian areas; and,

d. The use of motor oil, oil treatment, sodium chloride, or any other palliative method that cause adverse effects on human, animal or plant life or that may cause property damage shall be prohibited.

D. *Prohibited Plants.* The "Swan Hill Olive" and the "Wilson Hill Olive" varieties may be used due to their non-flowering non-pollen status and are exempt from the prohibited plants list:

1. Olive Trees (*Olea Europaea*) are prohibited for reasons of their profuse production of allergy producing pollen except for the two (2) varieties as mentioned above;

2. Fountain Grass (*Pennisetum Setaceum*) is prohibited as a defined weed with the potential to spread throughout the Town and become a fire hazard;

3. Common Bermuda grass (*Cynodon Dactylon*) is prohibited as a defined weed and for its profuse production of allergy producing pollen. (For clarification purposes, non-allergenic species are permissible as approved by the Town); and,

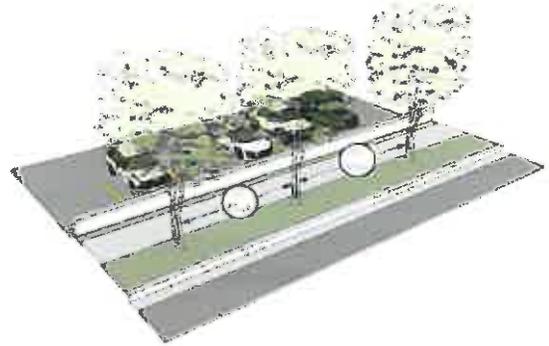
## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

4. Mulberry Trees (*Morus*) are prohibited as noxious pollen producers.

### E. *Street Rights-Of Way Landscaping.*

1. Street trees and other plant materials (i.e. shrubs, ground cover, accent plantings, etc.) shall be planted within all street right-of-ways in all zoning districts.
2. Trees shall not be planted in planting strips that are less than five (5) feet wide, measured from the back of curb to the edge of the adjacent sidewalk.
3. All parcels located at the intersection of an arterial intersection, shall observe a buffer setback pursuant to Table 5.3-1. Said buffer shall not be encumbered by parking areas, buildings or other improvements. The Planning Administrator or his or her designee shall have the authority to impose special conditions or guidelines on the development of property at arterial intersections that affect the following design elements in order to achieve the purposes of this section:
  - a. Landscape architecture;
  - b. Building architecture;
  - c. Building orientation;
  - d. Vehicular ingress, egress, and circulation;
  - e. Walls and screening devices; and,
  - f. Building setbacks.

4. Street trees shall be spaced on each side of the street and within medians where applicable, in order to form a pleasant experience for motorists, pedestrians, and building occupants, as applicable.



5. Planting shall be spaced at regular intervals without regard to property lines in order to present a balanced appearance. Required spacing shall be not greater than thirty feet (30') or fraction thereof to achieve a tree-lined street appearance. Linear planting is preferred.
6. Trees for an entire block shall be planted at the same time.
7. Up to two (2) different species of trees may be planted alternately where an entire block is developed.
8. A minimum of six (6) shrubs are required per every one (1) tree planted.



9. The entire area of the right-of-way, between the property line and back of curb (BOC) and / or pavement except for approved driveways, walkways and bike paths, shall be landscaped.

- F. *Parking Lot Landscaping.* Parking lots shall be landscaped in accordance with the requirements of Section 5.6 of this Ordinance.

- G. *Retention Basin Landscaping and Design Requirements.*

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

1. All private retention basins in single residence, duplex, multifamily, commercial, or industrial projects, or districts shall be landscaped. Such basins shall not exceed more than fifty percent (50%) of the linear street frontage.
2. Retention basins shall be contoured and designed as an integral part of any frontage landscaping and shall not take on the appearance of a ditch or basin.

### H. *Native Plant Preservation and Landscape Plan Standards.*

1. *Purpose.* The purpose of these standards is to protect native plants and to ensure appropriate re-vegetation for all development projects. The standards provide for in-place preservation protection of existing plants and the transplanting of native plant materials indigenous to the area such as: varieties of Acacia, Mesquite and Cercidium trees, Ocotillo, Cholla, Bursage and mixed Palo Verde-Cacti Community, Hedge Hog Cactus and Barrel Cactus, shrubbery and succulents typical of the Sonoran Desert Region. These standards protect the public health, safety and general welfare by:

- a. Preserving organic and inorganic characteristics of the Sonoran Desert Region;
- b. Preserving desert wildlife habitats and food sources;
- c. Requiring protection re-vegetation of native plants, disturbed during land development;
- d. Encouraging the use of native plants that are drought tolerant and require low maintenance and minimal groundwater after establishment; and,
- e. Reducing the potential for erosion by water, wind, or subsidence.

### 2. *Standards.*

- a. All existing native plants shall be preserved in their original location except within those areas permitted to be graded. Large and / or unique

native plants within areas proposed for grading shall be preserved in place.

- b. In no case, shall native plants be removed, destroyed, or relocated from an existing stand of native plants which is to be preserved in place.
- c. Protected native plants (as defined by the Arizona Department of Agriculture) determined to be transplantable shall be salvaged and relocated on-site when they are located within areas designated to be graded. Salvaged plants may be maintained in a temporary nursery pending relocation in accordance with the approved landscape plan. All temporary nurseries shall:

- 1) Provide automatic drip irrigation system.

- 2) Provide fertilizer to promote plant health.

- d. Native plants are to be transplanted on-site and shall be used within those areas designated as "common area" or landscaped area that has been graded as part of the approved grading plan and within the front yards of residential lots.
- e. Mistletoe infestations shall be removed from all salvaged plants prior to relocation.

### 3. *Determination of Salvageability.*

- a. Salvageability shall be indicated on the Landscape Plan submittal during the site plan process.
- b. All plants receiving a "high" rating shall be preserved in place or salvaged and transplanted within on-site landscaped areas. All "medium" and "low" rated plants shall be placed in a salvage pool from which fifty percent (50%) of the plants shall be used on site or replaced on a two to one (2:1) basis with nursery stock.

High: A "high" rating will be assigned to plants meeting the following criteria:

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

- 1) Plant health is good to excellent with no major infestations or apparent diseases.
  - 2) Plant age is young enough to suggest a likely chance of transplant survival.
  - 3) Plant is undamaged and is conducive to box or space transplanting, (upright branching).
  - 4) Soils can be excavated, are cohesive, and seem capable of supporting a boxed or spaded rootball.
  - 5) Surrounding topography permits access with the appropriate equipment needed to box or spade and remove the plant.
  - 6) Adjacent plants do not pose a likely interference with root systems or interfere with plant removal.
4. *Inspections.* All protected native plants scheduled to remain in place or authorized for destruction, removal or relocation by the approved Landscape Plan shall be tagged and numbered prior to an on-site inspection by the Planning Administrator. Salvage operators shall not commence until the Planning Administrator has performed an inspection and given approval to begin salvage.
5. Tagging shall be completed as outlined below:
- a. Tags shall be color-coded according to the following schedule so that the status of each plant may be easily identified: plants proposed for destruction shall be tagged with red plastic tape; plants proposed for relocation on-site shall be tagged with blue plastic tape; plants proposed for relocation to another site shall be tagged with yellow plastic tape; and plants proposed to remain in place shall be tagged with white plastic tape.
  - b. Tags required by this Section shall be affixed in a visible location on the plant. The initial inspection will be performed once tagging is completed and an inspection request has been received by the Planning Administrator.
  - c. Once affixed, the tags shall not be removed until the approved Landscape Plan is implemented and a final inspection has been performed by the Planning Administrator.
  - d. All areas designated to remain as natural open space shall be fenced or taped off for protection during the grubbing and / or grading operation. The developer is responsible for maintaining this "no disturbance" boundary line and no plants shall be salvaged from this protected area.
  - e. No permit for grubbing or grading of a site may be issued prior to the completion of the initial on-site inspection.
6. For single-family lot development, the Planning Administrator shall verify limits of grading and the relocation of any salvaged plants in accordance with the approved site plan.
7. A follow-up inspection shall be performed which verifies the required on site relocation of salvaged plants to their new locations or the holding nursery, and the required in place preservation of native plants.
- I. ~~*Irrigation Guidelines.* An irrigation plan is required and subject to review and approval by Planning Administrator or his or her designee.~~
- J. ~~*General Landscaping and Site Maintenance.*~~

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

1. The applicant, property owner, and / or subsequent or successor owners and their agents shall be responsible for maintenance of landscaping on the property on a continuing basis for the life of the development as specified in this Section. All required landscaping shall be maintained in a neat and orderly manner at all times. This shall include, but not be limited to, mowing, edging, pruning, fertilizing, watering, weeding, and other activities common to the maintenance of landscaping.
2. Landscaped areas shall be kept free of trash, litter, weeds and other materials or plants not a part of the landscaping.
3. All required plant material shall be maintained in a healthy, growing condition as is appropriate for the season. Plant materials which exhibit evidence of insect pests, disease, and / or damage shall be appropriately treated, and dead plants promptly removed and replaced within the next planting season after installation. If replacement is necessary, all plants and other non-living landscape materials shall be equal in size, density and appearance as originally required at the time of the approval of the development order or development permit.

the proposed development corresponding the zoning district as set forth in Columns "B" and "C" in Table 5.4-1 hereto.

**Table 5.4-1 Required Open Space**

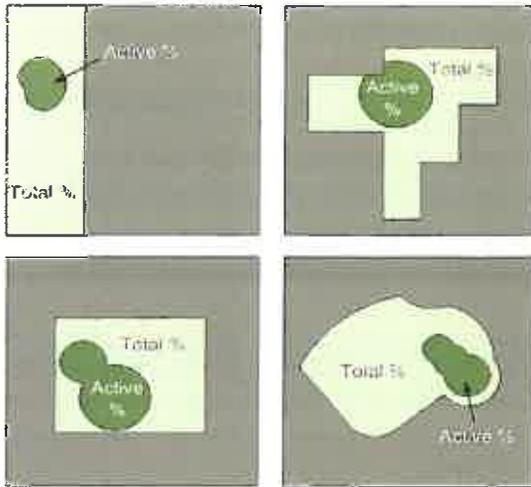
(A) Zoning District	(B) Total Open Space	(C) Active Open Space
Rural Residential (A-1, R1-190, R1-145, R1-108)	0%	0%
Estate Residential (R1-54 R1-43)	0%	0%
Suburban Type-A (R1-35)	5%	10%
Suburban Type-B (R1-18, R1-15, R1-12)	7.5%	15%
Urban Residential (R1-9, R1-8, R1-7, R1-6, R1-5, R1-4, R1-3, MDR, and HDR)	20%	30%
Commercial (B1, C-1, C-2, C-3, MU, AT and TC)	15%	N/A
Industrial (EMP-A and EMP-B)	10%	N/A

### 5.4 Open Space

- A. All new development in the Town of Queen Creek shall provide Open Space as provided herein and designed as required in Chapter 6 of the Town of Queen Creek Subdivision Ordinance.
- B. *Community Trails System.* The applicant shall provide a community open space network and / or trails system, which system shall be integrated with the *Parks Trails and Open Space Master Plan*, which is hereby incorporated by this reference as if set forth in its entirety herein. The trails shall be maintained by the applicant.
- C. *Required Open Space.* Required open space shall be reserved for any development in the zoning districts types forth in Column "A" of Table 5.4-1, below, based upon the percentage of net acres in

1. *Active Open Space.* Active Open Space shall be provided as referred in Table 5.4-1 may include, but shall not be limited to: recreational activities as golf courses, sport courts / fields, picnic areas, playgrounds and trails as defined in Section 1.14. Additional active amenities and reduction in active open space may be approved by the Planning Administrator.
2. *Passive Open Space.* Open Space not defined as Active maybe considered as Passive Open Space as defined in Article 1, Section 1.14 of this Ordinance.

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS



**D. Open Space Designation.** Open space shall not be further than the following distances from any lot or, if the proposed development does not involve a subdivision, any primary building, and the entrance allowing people, bikes, or equestrians to enter into the open space or view the open space area:

1. One-sixth ( $1/6^{\text{th}}$ ) of a mile or eight-hundred and eighty feet (880') from passive open space; and,
2. One-fourth ( $1/4^{\text{th}}$ ) of a mile or one-thousand, three-hundred and twenty feet (1,320') from active open space.

**E. Open Space Maintenance.** Land designated as open space shall be maintained as open space and may not be separately sold, subdivided, or developed except as provided below.

1. Any areas reserved as open space shall be indicated on the sketch plan and preliminary site plan or subdivision plat. An Open Space Provision and Maintenance Plan shall be submitted as a part of the application for development approval including the project phasing schedule. This plan shall designate and indicate the boundaries of all open space areas required by this Ordinance. The plan shall:
  - a. Designate areas to be reserved as open space. The specific design of open space areas shall be sensitive to the physical and design characteristics of the site;

b. Designate the type of open space which will be provided; and,

c. Specify the manner in which the open space shall be perpetuated, maintained, and administered.

2. The types of open space which may be provided to satisfy the requirements of this Ordinance, together with the maintenance required for each type, are as follows:

a. Passive open space shall be maintained in a healthy, neat, clean, and weed-free condition. Waterways and landscaped areas lying between public right-of-way lines and the property, unless such streets, waterways, or landscaped areas are expressly designated to be maintained by a designated governmental authority shall be free-flowing and devoid of debris;

b. No specific maintenance is required for agricultural uses;

c. Active open space areas shall be accessible to all residents of the development. Maintenance is limited to insuring that there exist no hazards, nuisances, or unhealthy conditions; and,

d. Greenways are linear green belts linking residential areas with other open-space areas. These greenways may contain bicycle paths, footpaths, and bridle paths. Connecting greenways between residences and recreational areas are encouraged. Maintenance is limited to a minimum removal and avoidance of hazards, nuisances, or unhealthy conditions.

3. All designated open space shall be of suitable size, location, dimension, topography and general character and shall have proper road and / or pedestrian access, as may be appropriate, to be usable open space.

a. The minimum dimension for usable open space shall be thirty feet (30') and the minimum area shall be one-thousand (1,000) square feet.

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b. Retention areas or detention basins which are required as part of this Ordinance or the Subdivision Ordinance shall not qualify as an open space area unless fifty percent (50%) or more of the active and usable area is above the twenty-five (25) year storm and is designed for multiple area(s) conforms to the requirements of subsection (1) and (2) below. This standard shall not apply to non-residential developments which shall be permitted to calculate the retention and detention area as part of the required open space area.

1) Retention or detention areas shall be an integral part of the subdivision either as a greenbelt, or as a single basin. Retention areas shall be improved so as to be useable and accessible. Site and architectural amenities, such as armadas or benches shall be provided. "Tot lots", playground equipment, and sport courts equipment shall be elevated above the bottom of the basin for uninterrupted use.

2) Retention or detention areas shall be given a natural character and shall be constructed of natural materials. Terracing, berming and contouring is required in order to naturalize and enhance the aesthetics of the basin. Basin slopes shall not exceed a three to one (3:1) slope.

c. Open space areas shall be landscaped and the majority of the area shall be visible from at least one (1) adjoining arterial collector, or local street.

F. *Preservation of Open Space.* Open space areas shall be maintained so that their use and enjoyment as open space are not diminished or destroyed. Open space areas may be owned, preserved, and maintained as determined by the Town Council by any of the following mechanisms or combinations thereof:

1. Dedication of open space to the Town, an appropriate public agency, or a non-profit entity if there is a public or non-profit agency willing to accept the dedication and financially capable of maintaining such open space. The Town may not

accept the dedication of open space unless such dedication is part of a linked open space or trails system included in the Queen Creek Open Space and Trails Plan. Dedication of Sonoqui and Queen Creek washes may be required along with rezoning and / or plat approval if the Town demonstrates that impacts of the development on stormwater discharge, public recreation, or water quality are proportionate to the amount of wash area being dedicated. The applicant for plat approval or rezoning may consent to said dedication, pursuant to Section 3.4 of this Ordinance or as a condition of development approval, and said consent shall be deemed to waive any and all constitutional challenges to said dedication requirement;

2. Common ownership of the open space by a homeowner's or neighborhood association which assumes full responsibility for its maintenance except for lands dedicated to the Town. The restrictive covenants shall provide that, in the event that any private owner of open space fails to maintain same according to the standards of this Ordinance, the Town may, following reasonable notice and demand that deficiency of maintenance be corrected, enter the open space to maintain same. The cost of such maintenance shall be charged to those persons having the primary responsibility for maintenance of the open space and shall constitute a lien upon the property and buildable lots of the subdivision or development site; and,

3. Payment of a fee in lieu of dedication of open space, if:

a. The Town Council establishes an Open Space Acquisition Trust Fund for the receipt of fees and other financial commitments for the acquisition and development of public open space.

b. The Town Council adopts an ordinance establishing a fee in lieu of dedication of land for open space. The ordinance shall include the following:

1) The fee amount per residential dwelling unit or equivalent residential dwelling unit;

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- 2) Time of determination of the fee;
- 3) Time of payment of the fee;
- 4) Form of payment of the fee;
- 5) Restrictions on use of the fees collected;
- 6) Time limit on expenditure of fees;
- 7) Placement of fees in the Open Space Acquisition Trust Fund;
- 8) Maintenance of financial records;
- 9) Allocation of interest on trust fund accounts; and,
- 10) Refund procedures.

G. *Open Space Requirements.* As a part of any application for development approval such as rezoning, site plan, and subdivision and in conjunction with the required landscape plans in Section 5.3, the applicant shall submit an Open Space Provision and Maintenance Plan meeting the requirement of subsections A through C herein.

### 5.5 Lighting

A. *Purpose.* These provisions are intended to control the use of outdoor artificial illuminating devices emitting rays into the night sky which have a detrimental effect on the rural atmosphere, astronomical observations, and which create glare. It is the intention of this Ordinance to encourage good lighting practices such that lighting systems are designed to conserve energy and money, to minimize glare, to protect the use and enjoyment of surrounding property, and to increasing nighttime safety, utility, security, and productivity. The provisions of this Section are authorized by Section 49-1106, A.R.S., which provides that the provisions of Section 49-1101 through Section 49-1106, A.R.S., are cumulative and supplemental and shall not apply within any county, city or town which by ordinance or resolution has adopted provisions restricting light pollution which are equal to or more stringent than the provisions of this Section.

#### B. *Conformance with Applicable Codes.*

1. All outdoor artificial illuminating devices shall be installed in conformance with the provisions of this section and the building code of the Town of Queen Creek.
2. Where any provisions of the Arizona Revised Statutes, or any Federal law, or any companion Ordinance conflicts with the requirements of this outdoor light control provision, the most restrictive shall govern.
3. The provisions of this section are not intended to prevent the use of any material or method of installation not specifically prescribed by this Ordinance. In considering any variance from the provisions of this Ordinance, the Board of Adjustment shall take into consideration any state of the art technology which is consistent with the intent of the Ordinance as new lighting technology develops which is useful in reducing light above the horizontal plane.

#### C. *Shielding and Filtration.*

1. All non-exempt outdoor lighting fixtures shall limited to the types of fixtures specified in Table 5.5-1 of this Ordinance and shall have shielding and filtration as required by Table 5.5-1 of this Ordinance.
2. Light source locations shall be chosen to minimize the hazards of glare. The ratio of spacing to mounting height shall not exceed a four to one (4:1) ratio.
3. Poles and standards. All poles or standards used to support outdoor lighting fixtures shall be anodized or otherwise coated to minimize glare from the light source.

D. *Illumination.* In order to minimize glare and hazardous conditions, illumination levels shall not exceed the levels set forth in Table 5.5-2 for any use permitted by this Ordinance. The maximum illumination shall be measured at grade at the property line of the site in accordance with subsection J of this Section.

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**Table 5.5-1** Shielding Requirement

Area / Activity	Lux (lx)	Footcandles (fc)
<b>Residential Zoning Districts</b>		
Building Exterior	50	5.0
Front, side, or rear yard (at property line)	10	1.0
<b>Non-residential zoning districts</b>		
Adjoining another non-residential zoning district along major arterial	20	2.0
Adjoining residential zoning district along major arterial	10	1.0
Adjoining another non-residential zoning district along minor arterial or collector street	6	0.6
Adjoining another non-residential zoning district along local street	4	0.4
Adjoining another non-residential zoning district along property line	10	0.9
Adjoining residential zoning district along property line	2	0.2
<b>Outdoor Events</b>		
Adjoining non-residential zoning district	1,000	100
Adjoining or within one-thousand feet (1,000') of residential zoning district	100	10

**Notes:**

- [1] This is the preferred light source to minimize undesirable light emission into the night sky affecting astronomical observations.
- [2] Metal halide lighting used primarily for display purposes shall not be used for security lighting after 11:00 p.m. Metal halide lamps shall be installed only in enclosed luminaires.
- [3] Outdoor advertising signs of the type constructed of translucent materials and wholly illuminated from within, do not require shielding. Dark backgrounds with light lettering or symbols are preferred, to minimize detrimental effects.
- [4] For the purposes of this Code, quartz lamps shall not be considered an incandescent light source.
- [5] Warm white and natural lamps are preferred to minimize detrimental effects.

- [6] Metal halide fixture lamp types shall be filtered. "Filtered" means any outdoor light fixture which has a glass, acrylic or translucent enclosure of the light source (quartz glass does not meet this requirement).

**Table 5.5-2** Illumination Standards

Fixture Lamp Type	Shielded	Filtered
Low Pressure Sodium [1]	Partially	None
High Pressure Sodium	Fully	None
Metal Halide	Fully [2, 6]	Yes
Fluorescent	Partially [3, 5]	Yes
Quartz [4]	Partially	None
Incandescent, Greater than 150W	Partially	None
Incandescent, 150W or Less	No	None
Fossil Fuel	No	None
Glass Tubes filled with Neon, Argon, Krypton	No	None

**E. Control of Glare.**

1. Any luminaire with a lamp or lamps rated at a total of more than 1,800 lumens and all flood or spot luminaires with a lamp or lamps rated at a total of more than 900 lumens shall not emit any direct light above a horizontal plane through the lowest direct light emitting part of the luminaire.
2. Any luminaire with a lamp or lamps rated at a total of more than 1,800 lumens and all flood or spot luminaires with a lamp or lamps rated at a total of more than 900 lumens shall be mounted at a height not exceeding the value  $3 + (D/3)$ , where D is the distance in feet to the nearest property boundary. The maximum height of the luminaire shall not exceed twenty-five feet (25').
3. *Exceptions.*
  - a. Any luminaire with a lamp or lamps rated at a total of 1,800 lumens or less and all flood or spot luminaires with a lamp or lamps rated at 900 lumens or less may be used without restriction to light distribution or mounting height except that if any spot or flood

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

luminaire rated 900 lumens or less is aimed, directed or focused such as to cause direct light from the luminaire to be directed toward residential buildings on adjacent or nearby land or to create glare perceptible to persons operating motor vehicles on public ways, the luminaire shall be re-directed or its light output controlled as necessary to eliminate such conditions.

- b. Luminaires used for public roadway illumination may be installed at a maximum height of twenty-five feet (25') and may be positioned at that height up to the edge of any bordering property.
- c. All temporary emergency lighting needed by the Police, the Fire Departments or other emergency services as well as all vehicular luminaires shall be exempt from the requirements of this Ordinance.

### F. Prohibitions.

1. *Mercury Vapor Fixtures and Lamps.* The installation of any mercury vapor fixture or lamp for use as outdoor lighting is prohibited.
2. *Certain Other Fixtures and Lamps.* The installation of any low pressure sodium, high pressure sodium, metal halide, fluorescent, quartz or incandescent outdoor lighting fixture or lamp that does not comply with the shielding requirements of Table 5.5-1 and the illumination standards of Table 5.5-2 is prohibited.
3. *Laser Source Light.* The use of laser source light or any similar high-intensity light for outdoor advertising, when projected above the horizontal, is prohibited.
4. *Searchlights.* The operation of searchlights for advertising purposes is prohibited between the hours of 11:00 p.m. and sunrise.
5. *Recreational Facilities.* No outdoor recreational facility, public or private, shall be illuminated by non-conforming means after 11:00 p.m., unless

otherwise permitted by the Town Council pursuant to a conditional use permit, except to conclude specific recreational or sporting event or any other activity conducted at a ball park, outdoor amphitheater, arena, or similar facility in progress prior to 11:00 p.m. All recreational outdoor lighting shall comply with height restrictions as specified in the building codes. Outdoor lighting for open-air arenas primarily used for rodeo and roping activities, shall be permitted to a maximum height of thirty feet (30'), provided shielding and filtration requirements are met.

6. *Outdoor Building or Landscaping Illumination.* The unshielded outdoor illumination of any building, landscaping, signing or other purpose is prohibited, except with incandescent fixtures of 150 Watts or less, or low pressure sodium fixtures.

G. *Exceptions.* The following types of light fixtures shall be exempt from the provisions of this Section:

1. *Non-Conforming Fixtures.* All outdoor light fixtures installed prior to January 1, 1985, those equipped with a permanent automatic shut-off device may remain unchanged, except that the subject light fixtures shall not be operated between the hours of 11:00 p.m. and sunrise.
  2. *Fossil Fuel Light.* Light which is produced directly or indirectly by the combustion of natural gas or other utility-type fossil fuels.
  3. *Low Intensity Fixtures.* Any outdoor lighting fixture which has a maximum candle power or less than one-thousand (1,000) candelas is exempt from these provisions, if equipped with an automatic device which shuts off the fixture between the hours of 11:00 p.m. and sunrise.
- H. *Recreational Facilities.* Any light source permitted by this Ordinance may be used for lighting of outdoor recreational facilities (public or private), such as, but not limited to football fields, soccer fields, baseball fields, softball fields, tennis courts, auto race-tracks, horse race-tracks or show

## ARTICLE 5 – SITE IMPROVEMENT STANDARDS

arenas, consistent with the illumination standards specified in Table 5.5-2 herein, provided all of the following conditions are met:

1. All fixtures used for event lighting shall be fully shielded, or shall be designed or provided with sharp cut-off capability, so as to minimize up-light, spill-light and glare.
2. All events shall be scheduled so as to complete all activity before or as near to 10:30 p.m. as practical, but under no circumstances shall any illumination of the playing field, court, or track be permitted after 11:00 p.m.; except to conclude a scheduled event that was in progress before 11:00 p.m. and circumstances prevented concluding before 11:00 p.m.
3. The height of such lighting shall be a maximum of eighty feet (80').

I. *Outdoor Display Lots.* Any light source permitted by this Ordinance may be used for lighting of outdoor display lots such as, but not limited to, automobile sales or rental, recreational vehicle sales or building material sales, provided all of the following conditions are met:

1. All fixtures used for display lighting shall be fully shielded, or be designed or provided with sharp cut-off capability, so as to minimize up-light, spill-light and glare.
2. Display lot lighting shall be turned off within thirty (30) minutes after the closing of the business. The full illumination of the lot may be permitted after 11:00 p.m., pursuant to a Temporary Use Permit (see Section 3.6). Any lighting used after shall be used as security lighting.

J. *Residential Neighborhoods.* Adequate lighting for residential neighborhoods may be provided for all outdoor amenities areas used at night (i.e. parks, trails, fields, open space areas, sport courts, etc). Lighting sources shall be appropriately shielded from adjacent residential uses to minimize any negative impacts. The following additional standards shall apply:

- a. All outdoor amenity area lighting within 100 feet of a residential property line shall not exceed a maximum height of fifteen feet (15');
- b. In all other amenity areas lighting shall not exceed a maximum height of twenty five feet (25');
- c. All outdoor amenity area lighting shall be setback from all property lines by a minimum distance of fifteen feet (15');
- d. *Submittal Requirements.* A Lighting Plan shall be submitted as part of the Site Plan or Preliminary Plat application which details the location and specifications of all proposed lighting. An ISO foot-candle diagram shall also be provided to indicate the level and extent of proposed lighting.

### K. *Measurement.*

1. *Metering Equipment.* Lighting levels are to be measured in foot-candles with a direct-reading, portable light meter. The meter typically has a color and cosine-corrected sensor with multiple scales and shall read within an accuracy of plus or minus five percent (5%). It shall have been tested, calibrated, and certified by an independent commercial photometric laboratory or the manufacturer within one (1) year of its use.
2. *Method of Measurement.* The meter sensor shall be mounted not more than six inches (6") above ground level in a horizontal position. Readings are taken by qualified personnel only after the cell has been exposed long enough to provide a constant reading. Measurements are made after dark with the light sources in question on, then with the same sources off. The difference between the two (2) readings shall be compared to the maximum permitted illumination and property line at ground level. This procedure eliminates the effects of moonlight and other ambient light sources. Where light patterns overlap, their total intensity shall be the sum of their individual intensities.

## Chapter 17.28 - C-R COMMERCIAL/ RESIDENTIAL

**Sections:**

## 17.28.010 - Intent.

The purpose of this zone is to permit a limited mixture of residential and retail commercial activities. This zone establishes and preserves areas for those commercial facilities which are essentially useful in close proximity to residential areas, while minimizing the undesirable impact of such commercial uses on the neighborhoods which they service. Any commercial establishment, other than a home occupation, located in this zone shall contain a total floor area no greater than four thousand (4,000) square feet.

(Ord. No. 2015-14, 11-16-2015)

## 17.28.020 - Accessory uses.

All accessory uses in this zone shall be the same as those listed in the R-2 zone district.

(Ord. No. 2015-14, 11-16-2015)

## 17.28.030 - Supplementary regulations.

All supplementary regulations in this zone shall be the same as those listed in the R-2 zone district, except that signs indicating a commercial or business establishment may not exceed forty (40) square feet per sign with a minimum width of two (2) feet.

(Ord. No. 2015-14, 11-16-2015)

## Chapter 17.30 - BECKER AVENUE ZONE

**Sections:**

## 17.30.010 - Intent.

The purpose of this zone is to promote the revitalization of historic Becker Avenue and to maintain a special character of mixed-use development for the properties along the street. This zone is also intended to provide a pedestrian-friendly atmosphere and a gathering place for the community. To the extent possible, historical and cultural elements of the properties along Becker Avenue shall be preserved and enhanced.

(Ord. No. 2015-14, 11-16-2015)

## 17.30.020 - General provisions.

- A. The Becker Avenue Zone shall be delineated on the Belen zone atlas. All properties that have frontage along Becker Avenue from Main Street to First Street shall be included in the Becker Avenue Zone.
- B. The Becker Avenue Zone shall be administered as an additional zone district with special requirements. Any development within the Becker Avenue Zone shall be subject to the administrative procedures and regulations provided in this section.

(Ord. No. 2015-14, 11-16-2015)

#### 17.30.030 - Regulations.

- A. Building Height. No building or structure shall exceed forty-five (45) feet in height.
- B. Building Design. In order to preserve and enhance the special character within the Becker Avenue Zone, buildings shall be designed using the following guidelines:
  1. Painting or decorating buildings with bold patterns or large graphics, or using buildings as signs is prohibited.
  2. Thin skin "curtain wall" buildings including aluminum siding, metal panels, and mirrored or otherwise dominating glass, are prohibited.
  3. In order to continue a visual pattern of historic architectural elements reflected through brick building construction, at least fifty (50) percent of the total facade on all new or reconstructed buildings fronting Becker Avenue shall be composed of brick.
  4. Exterior mounted mechanical and electrical equipment, including solar hardware and satellite dish antennas, shall be architecturally screened.
- C. Signs. All signs in the Becker Avenue Zone shall conform to sign regulations provided in chapter 17.58 of the Belen Municipal Code.
- D. Pedestrian Walkways. A minimum of twelve (12) feet measured from the curb line into abutting properties shall be reserved and developed for pedestrian activity. There shall be no obstruction within a pedestrian walkway which would impede pedestrian circulation. The minimum width of pedestrian walkways shall be six (6) feet, to allow for wheelchair access.
- E. Off-Street Parking. The off-street parking requirements defined in chapter 17.56 of the Belen Municipal Code may be reduced by a maximum of fifty (50) percent of the total number of spaces pertaining to the list of land uses in section 17.56.010. The reduction of spaces required for land uses in the Becker Avenue Zone shall be subject to the administrative procedures provided in this chapter.
- F. Street Trees. Within five (5) feet of the curb line of Becker Avenue, trees shall be planted approximately every thirty (30) linear feet of street frontage. General policies for street trees are as follows:
  1. Whenever possible, street trees shall be placed between the curb and pedestrian walkways.

2. Suitable street trees for Becker Avenue are mostly hardwood, non-fruit-bearing, deciduous trees. Consumption and nonallergenic trees are preferable.
  3. Adequate vertical clearance below street tree branches shall be maintained at no less than eight (8) feet over pedestrian walkways and nine (9) feet over streets.
- G. Area Lighting. The lighting of buildings and parking lots within the Becker Avenue Zone shall conform to the following guidelines:
1. The exterior lighting of any buildings, structures and surrounding grounds shall provide illumination for safety purposes, and shall be placed and screened such that it does not shine directly or reflect into any adjoining residential properties or streets.
  2. Fixtures used in exterior lighting shall be selected for functional and aesthetic value and shall not contain fluorescent lamps.
  3. Parking lot lighting shall provide for adequate security but must be shielded to prevent light from shining directly onto abutting residential lots.
- H. Drainage. In areas where a centralized stormwater collection system is not available, on-site stormwater retention shall be directed to the back portion of the lot.

(Ord. No. 2015-14, 11-16-2015)

17.30.040 - Administrative procedures.

- A. Site Plan Required. All development, redevelopment, and major improvements to property within the Becker Avenue Zone shall be constructed in accordance with a site plan which shall be reviewed and accepted by the zoning enforcement officer to establish compliance with the regulations provided herein. The site plan shall contain the following:
1. A plat or property map plan showing the location, dimensions, height, and setback of all buildings and structures on the development site;
  2. Location and description of all signs, lighting, parking and loading areas, traffic access and circulation routes, and pedestrian areas;
  3. Preliminary sketch drawings or elevations of proposed buildings;
  4. A landscaping plan showing location and type of street trees and other proposed and existing vegetation of the development site.
- B. Plan Review and Acceptance. In order to obtain acceptance for any proposed development within the Becker Avenue Zone, the required site plan shall be submitted to the zoning enforcement officer who shall determine compliance with the provisions and intent of the Becker Avenue Zone. A written decision of acceptance or non-acceptance shall be rendered by the zoning enforcement officer within thirty (30) days following receipt of the required site plan. Such written decision shall provide any special conditions of acceptance, or reasons for

non-acceptance if applicable. Appeal of any decision of the zoning enforcement officer may be carried out through the provisions established by the appeal process in the comprehensive zoning ordinance of the city of Belen.

(Ord. No. 2015-14, 11-16-2015)