

## Request for Public Comment

Prepared by the Maricopa County Planning and Development Department

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<b>Case:</b>	TA2009014 – By-Right Solar and Small Wind
<b>Supervisor District:</b>	All
<b>Issue:</b>	The Maricopa County Planning and Development Department proposes a Text Amendment to the Maricopa County Zoning Ordinance as it pertains to by-right solar and small wind electrical generating equipment.

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### **Discussion:**

1. The primary purpose of this Text Amendment (TA) is to set or clarify development standards as they pertain to solar electrical generation as a by-right use. The amendment was triggered by a number of recent permit applications involving relatively high system outputs, which necessitated a considerable portion of the individual's lot to be occupied by solar arrays. As a result, the Department needed to make a determination based on the currently ambiguous language of the ordinance. Staff wishes to remove this ambiguity.
2. While the subject TA was sparked by circumstances involving single-family development in Rural zoning, there is an opportunity to include two-family, multi-family, commercial and industrial settings in this analysis. Also, while "small wind" has not reached a level of popularity in Maricopa County, primarily due to the lack of sufficient wind velocities needed to make small wind effective, staff believes an opportunity exists to include the analysis of small wind applications in this context. Staff also notes this TA would be the first in a series of amendments geared towards a larger goal of promoting sustainable development, which has recently become the subject of much activity in the planning community, in addition to being among the stated goals of the County's recently adopted Green Government Program.
3. A cursory review would suggest that allowing solar and small wind is a relatively straight forward matter; however, there are a number of competing issues that should be addressed before making a final determination as to how ordinance changes should be structured. In

order to better understand these complexities, staff's wishes to contemplate the following questions:

- a. Should small wind be included in this analysis?
- b. Should solar arrays be counted towards lot coverage?
- c. Should system output be a consideration in limiting the size of a system?
- d. What height limitations should be considered?
- e. Where on the lot should solar panels and/or small wind turbines be allowed?
- f. Should there be a limitation to the number of the individual generating units?
- g. Should solar orientation be regulated?
- h. What are the implications and limitations of the electrical power grid?
- i. What if any implication does this have on the local building codes?
- j. How does solar access law affect the implementation of this amendment?
- k. Are there any other state or federal laws that should be considered?
- l. What are the implications of Proposition 207?
- m. What are the recent trends in local government regarding renewable energy?
- n. How does this amendment further LEED and LEED-ND efforts?
- o. Does this amendment further the goals of sustainable development, in particular as discussed in the Comprehensive Plan and the County's Green Government Program?

- p. Should there be an intermediate layer between what is allowed by-right and what requires a Special Use Permit?
  - q. How do industry and community stakeholders feel about this amendment?
4. Staff is researching various sources in an effort to answer the above questions. In the interim, staff composed draft language, which is stated below and included the attached draft. The draft ordinance is written in legislative format as are the corresponding excerpts in the staff report, with the exception of the new Article 1206, which is written in standard format in this staff report.

**Language for Consideration**

5. Revise **Chapter 2 – Definitions** to create or amend definitions for the following terms:

**“BLADE SWEEP:**

THE CIRCUMFERENCE OF THE OUTERMOST TIP OF A BLADE OR SET OF BLADES THAT A WIND TURBINE TRACES WHILE THE BLADES ARE IN MOTION.



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**BUILDING, ACCESSORY:**

A building ~~or structure~~ which is subordinate to, and the use of which is incidental to that of the principal building, structure or use on the same lot. (SEE STRUCTURE, ACCESSORY).

**EASEMENT, SOLAR ACCESS:**

AN EASEMENT IN WHICH THE OWNER OF A PROPERTY (GRANTOR) AGREES TO MAINTAIN THE AIRSPACE ABOVE THE GRANTOR'S PROPEPTY IN SUCH A MANNER AS TO NOT INHIBIT THE ABILITY OF THE GRANTEE'S PROPERTY TO RECEIVE THE SUNLIGHT THAT WOULD NORMALLY PASS THROUGH THE GRANTOR'S AIRSPACE IN THE ABSENCE OF ANY STRUCTURES OR LANDSCAPING.

**LOT COVERAGE:**

The percentage of the area of a lot which is occupied by all buildings ~~or other covered structures~~. The first two (2) feet of roof(s) overhang from the exterior walls of all PRIMARY structures BUILDINGS, AND THE FIRST ONE (1) FOOT OF ROOF(S) OVERGANG FROM THE EXTERIOR WALLS OF ALL ACCESSORY BUILDINGS, shall not be included in the lot coverage.

**RENEWABLE ENERGY:**

ENERGY OTHER THAN NUCLEAR THAT DOES NOT RELY ON FOSSIL FUELS.

**SOLAR, CONCENTRATING:**

A TECHNOLOGY THAT DIRECTS HEAT ENERGY FROM THE SUN ONTO A FOCAL POINT WHICH COLLECTS AND UTILIZES THAT HEAT FOR THE PURPOSE OF EITHER CREATING STEAM THROUGH A HEAT TRANSFER PROCESS FOR USE IN A STEAM-POWERED ELECTRICAL GENERATING STATION, OR FOR THE PURPOSE OF CREATING MECHANICAL ENERGY WHICH IS USED TO GENERATE ELECTRICITY AS IN A STERLING ENGINE.

**SOLAR FARM:**

A PARCEL OR ASSEMBLAGE OF PARCELS CONTAINING MULTIPLE SOLAR COLLECTORS LOCATED WITHIN CLOSE PROXIMITY TO EACH OTHER, WHICH ARE COLLECTIVELY INTENDED TO PROVIDE ELECTRICITY ON A UTILITY SCALE.

**SOLAR, PHOTO-VOLTAIC:**

A TECHNOLOGY THAT CONVERTS PHOTONS OF LIGHT DIRECTLY INTO ELECTRICAL ENERGY.

**STRUCTURE:**

1) Anything constructed BY HUMANS ~~or erected~~ which requires ~~location on~~ IS AFFIXED, ANCHORED, OR OTHERWISE ATTACHED TO OR BELOW THE SURFACE OF the ground; 2) ANYTHING CONSTRUCTED BY HUMANS WHICH IS ~~or attached to something having location on the ground~~ BEEN AFFIXED, ANCHORED, OR OTHERWISE ATTACHED TO OR BELOW THE SURFACE OF THE GROUND, including multi-sectional manufactured homes, but not including other types of mobile homes, tents, recreational vehicles or travel trailers.

**STRUCTURE, ACCESSORY:**

A STRUCTURE WHICH IS SUBORDINATE TO, AND THE USE OF WHICH IS INCIDENTAL TO THAT OF THE PRINCIPAL BUILDING, STRUCTURE OR USE ON THE SAME LOT.—(SEE BUILDING, ACCESSORY).

**SUSTAINABLE DEVELOPMENT:**

USES OF PROPERTIES THAT MAINTAIN OR ENHANCE ECONOMIC OPPORTUNITY AND COMMUNITY WELL-BEING WHILE PROTECTING AND RESTORING THE NATURAL ENVIRONMENT UPON WHICH PEOPLE AND ECONOMIES DEPEND. SUSTAINABLE DEVELOPMENT MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS AT THE SAME LEVEL OF CONSUMPTION.

**WIND FARM:**

A PARCEL OR ASSEMBLAGE OF PARCELS CONTAINING MULTIPLE WIND-TURBINE GENERATORS LOCATED WITHIN CLOSE PROXIMITY TO EACH OTHER, WHICH ARE COLLECTIVELY INTENDED TO PROVIDE ELECTRICITY ON A UTILITY SCALE.

**WIND, LARGE:**

A WIND TURBINE GENERATOR WITH AN ELECTRICAL OUTPUT GREATER THAN 105 KILOWATTS.

**WIND, SMALL:**

A WIND TURBINE GENERATOR WITH AN ELECTRICAL OUTPUT OF 105 KILOWATTS OR LESS."

[Note: Chapter 2 includes a definition of Government Action. A portion of that definition is currently underlined and italicized for emphasis, but is not included as part of the subject request.]

6. Add language in the Purpose Statements of **Chapter 5 – Rural Zoning Districts**, Articles 501.1, 502.1, and 503.1 encouraging sustainable development:

**"ARTICLE 501.1.**                   **PURPOSE:** The principal purpose of this zoning district is to conserve and protect farms and other open land uses, foster orderly growth in rural areas, ~~and~~ prevent urban and agricultural land use conflicts, AND ENCOURAGE SUSTAINABLE DEVELOPMENT. The primary purpose of requiring large minimum lots of not less than **190,000 square feet** in area is to discourage small lot or residential subdivisions where public facilities such as water, sewage disposal, parks and playgrounds, and governmental services such as police and fire protection are not available or could not reasonably be made available. Principal uses permitted in this zoning district include both farm and non-farm residential uses, farms, and recreational and institutional uses."

**"ARTICLE 502.1.**                   **PURPOSE:** The principal purpose of this zoning district is to conserve and protect farms and other open land uses, foster orderly growth in rural areas, ~~and~~ prevent urban and agricultural land use conflicts, AND ENCOURAGE SUSTAINABLE DEVELOPMENT. The primary purpose of requiring large minimum lots of not less than **70,000 square feet** in area is to discourage small lot or

residential subdivisions where public facilities such as water, sewage disposal, parks and playgrounds, and governmental services such as police and fire protection are not available or could not reasonably be made available. Principal uses permitted in this zoning district include both farm and nonfarm residential uses, farms and recreational institutional uses."

**"ARTICLE 503.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve and protect farms and other open land uses, foster orderly growth in rural and agricultural areas, ~~and prevent urban and agricultural land use conflicts,~~ AND ENCOURAGE SUSTAINABLE DEVELOPMENT; but when governmental facilities and services, public utilities and street access are available, or can reasonably be made available, applications for change of this zoning district to any single-family residential zoning district will be given favorable consideration. Principal uses permitted in this zoning district include both farm and non-farm residential uses, farms and recreational and institutional uses."

7. Amend Article 501.2.21 adding a new paragraph 'f' that allows solar and/or wind at a residential scale as an accessory use and referring the reader to a new Section 1206.

"F. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES AT A RESIDENTIAL SCALE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE."

8. Amend the Revision tables to reflect effective date of subject TA.
9. Add language in the Purpose Statements of **Chapter 6 – Single-family Residential Zoning Districts**, Articles 601.1, 602.1, 603.1, 604.1, 605.1 and 606.1 encouraging sustainable development.

**"ARTICLE 601.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of

not less than **35,000 square feet** in area are suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs, and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks, playgrounds and other community facilities."

**"ARTICLE 602.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of not less than **18,000 square feet** in area are suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks and playgrounds and other community facilities."

**"ARTICLE 603.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of not less than **10,000 square feet** in area are suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks and playgrounds and other community facilities."

**"ARTICLE 604.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of not less than **8,000 square feet** in area are

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suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks and playgrounds and other community facilities."

**"ARTICLE 605.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of not less than **7,000 square feet** in area are suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks and playgrounds and other community facilities."

**"ARTICLE 606.1.**

**PURPOSE:** The principal purpose of this zoning district is to conserve, ~~and protect,~~ AND ENCOURAGE SUSTAINABLE single-family residential development where minimum lots of not less than **6,000 square feet** in area are suitable and appropriate taking into consideration existing conditions, including present use of land, present lot sizes, future land use needs and the availability of public utilities. Principal uses permitted in this zoning district include single-family dwellings, churches, schools, parks and playgrounds and other community facilities."

10. Amend Article 601.2.14 adding a new paragraph 'f' that allows solar and/or wind at a residential scale as an accessory use and referring the reader to a new Section 1206.

"F. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES AT A RESIDENTIAL SCALE SUBJECT TO

THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF  
THIS ORDINANCE.

11. Amend footnotes to reflect effective date of subject TA.
12. Add language in the Purpose Statements of **Chapter 7 – Two-Family and Multi-Family Residential Zoning Districts**, Articles 701.1 and 702.1 encouraging sustainable development.

**"ARTICLE 701.1.**                    **PURPOSE:** The principal purpose of this zoning district is to provide for efficient use of land and facilities by single-family attached or detached dwellings and limited multiple-family residential projects taking into consideration SUSTAINABLE DEVELOPMENT PRACTICES, AND existing conditions, including present use of land, future land use needs and the availability of public utilities. The minimum lot required is **6,000 square feet** in area and the minimum lot area required for each dwelling unit is **4,000 square feet**. Principal uses permitted in this zoning district include single-family, two-family, and limited multiple-family dwellings and other uses permitted in the single-family residential zoning district."

**"ARTICLE 702.1.**                    **Purpose:** The principal purpose of these zoning districts are to provide for multiple-family residential developments in locations which are suitable and appropriate taking into consideration existing conditions, SUSTAINABLE DEVELOPMENT PRACTICES, AND including present use of land, future land use needs, and the availability of public utilities. The minimum lot area required for each dwelling unit in each of the districts is as follows: **3,000 square feet for R-3; 2,000 square feet for R-4; and 1,000 square feet for R-5**. Principal uses permitted in these zoning districts include two-family dwellings, multiple-family dwellings and the uses permitted in the single-family residential zoning district."

13. Amend Articles 701.2.3 and 702.2.5 adding a new paragraph 'c' that allows solar and/or wind at a residential scale as an accessory use and referring the reader to a new Section 1206.

"C. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES AT A RESIDENTIAL SCALE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE."

14. Amend footnotes to reflect effective date of subject TA.
15. Add language in the Purpose Statements of **Chapter 8 – Commercial Zoning Districts**, Articles 801.1, 802.1, 803.1, 804.1, and 805.1 encouraging sustainable development.

**"ARTICLE 801.1.** **PURPOSE:** The principal purpose of this zoning district is to provide for well designed and attractive retail shopping facilities on sites not less than five (5) acres in size and in appropriate locations to serve adjacent and nearby residential neighborhoods- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Permitted uses in this zoning district include the retail sale of merchandise and services customarily considered as shopping center uses."

**"ARTICLE 802.1.** **PURPOSE:** The principal purpose of this zoning district is to provide for well designed and attractive business and professional office facilities on sites in appropriate locations- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. This zoning district would constitute a transition between other commercial land uses and residential neighborhoods. Principal uses in this zoning district include professional, semi-professional and business office uses."

**"ARTICLE 803.1.** **PURPOSE:** The principal purpose of this zoning district is to provide for smaller shops and services in convenient locations to meet the daily needs of families in the immediate

residential neighborhoods- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Principal uses permitted in this zoning district include food markets, drugstores and personal service shops.”

**“ARTICLE 804.1.**

**PURPOSE:** The principal purpose of this zoning district is to provide for the sale of commodities and the performance of services and other activities in locations for which the market area extends beyond the immediate residential neighborhoods- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Principal uses permitted in this zoning district include automobile sales and services, furniture stores, hotels and motels, travel trailer parks, restaurants, and some commercial recreation and cultural facilities such as movies and instruction in art and music. This zoning district is designed for application at major street intersections.”

**“ARTICLE 805.1.**

**PURPOSE:** The principal purpose of this zoning district is to provide for commercial uses concerned with wholesale or distribution activities in locations where there is adequate access to major streets or highways- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Principal uses permitted in this zoning district include retail and wholesale commerce and commercial entertainment.

16. Amend Articles 801.2 and 802.2 adding a new paragraph ‘8’ and ‘14’, respectively, that allows solar and/or wind as an accessory use in accordance with a new Section 1206.

“8. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS AN ACCESSORY USE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE.”

“14. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS AN ACCESSORY USE

SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE."

17. Amend Article 803.2.44 clarifying that solar and/or wind is allowed as an accessory use in accordance with a new Section 1206.

"44. Accessory buildings and uses customarily incidental to the above uses. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS AN ACCESSORY USE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE."

18. Amend footnotes to reflect effective date of subject TA.

19. Add language in the Purpose Statements of **Chapter 9 – Industrial Zoning Districts**, Articles 901.1, 902.1, and 903.1 encouraging sustainable development.

**"ARTICLE 901.1.** **PURPOSE:** The principal purpose of this zoning district is to provide sufficient space in appropriate locations for certain types of business and manufacturing uses that are quiet, attractive and well designed including appropriate screening and/or landscape buffers to afford locations close to existing residential uses, so that people can live and work in the same neighborhood- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES.

**"ARTICLE 902.1.** **PURPOSE:** The principal purpose of this zoning district is to provide for light industrial uses in locations which are suitable and appropriate taking into consideration the land uses on adjacent or nearby properties, access to a major street or highway, rail service or other means of transportation, and the availability of public utilities- WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Principal uses permitted in this zoning district include the manufacture, compounding, processing, packaging or treatment of materials which do not cause or produce objectionable effects that would impose hazard to adjacent or other

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properties by reason of smoke, soot, dust, radiation, odor, noise, vibration, heat, glare, toxic fumes, or other conditions that would affect adversely the public health, safety and general welfare.”

**“ARTICLE 903.1.**

**PURPOSE:** The principal purpose of this zoning district is to provide for heavy industrial uses in locations which are suitable and appropriate, taking into consideration land uses on adjacent or nearby properties, access to a major street or highway, rail service or other means of transportation, and the availability of public utilities. WHILE ENCOURAGING SUSTAINABLE DEVELOPMENT PRACTICES. Principal uses permitted in this zoning district include the industrial uses that are not permitted in any other zoning district.”

20. Amend Article 901.2.15 and 902.2.19 clarifying that solar and/or wind is allowed as an accessory use in accordance with a new Section 1206.

“15. Accessory buildings and uses customarily incidental to the above uses. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS AN ACCESSORY USE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE.”

“19. Accessory buildings and uses customarily incidental to the above uses. ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS AN ACCESSORY USE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE.”

21. Amend Article 903.2 clarifying that solar and/or wind is allowed as a primary use in accordance with to a new Section 1206.

**“ARTICLE 903.2.**

**USE REGULATIONS:** A building or premise shall be used only for any industrial use not in conflict with any Ordinance of Maricopa County, and subject to procedural regulations as listed in Chapter 9, Section 903., Article 903.11-~~herein~~.

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ELECTRICAL GENERATION BY SOLAR OR WIND TECHNOLOGIES ARE ALLOWED AS A PRIMARY USE SUBJECT TO THE REQUIREMENTS AS SET FORTH IN SECTION 1206 OF THIS ORDINANCE."

22. Amend footnotes to reflect effective date of subject TA.
23. Amend the Purpose Statement in **Chapter 10 – Overlay Zones**, Article 1001.1 by adding a new paragraph 4 that speaks to sustainable development practices as a rationale for the implementation of a Planned Area Development (PAD) Overlay.

**"ARTICLE 1001.1.PURPOSE:** The Planned Area Development (PAD) Overlay Zoning District is intended to accomplish the following:

1. Permit and encourage the unified planning of large areas in order to achieve the mixture, variety and cohesiveness of land uses and amenities that such large scale planning makes possible.
2. Establish development parameters for land uses, densities and intensities, and design standards, while allowing final detailed site plans and parcel descriptions to be deferred to the time of subdividing or site planning.
3. Assure both the County and the property owner that the development approved under a PAD may be carried out over a specified time.
4. PROMOTE SUSTAINABLE DEVELOPMENT PRACTICES."

24. Add language in the Purpose Statements of Articles 1002.1, 1003.1 and 1004.1 encouraging sustainable project design as a rationale for Unit Plan of Development (UPD) Overlays.

**"ARTICLE 1002.1.** The purpose of the Residential Unit Plan of Development is to allow large-scale residential development where variation in development standards

is warranted due to topography, innovative OR SUSTAINABLE project design, or other considerations.”

**“ARTICLE 1003.1.** The purpose of the Commercial Unit Plan of Development is to allow variations in development standards in commercial projects which require special design techniques or flexibility due to topography, innovative project OR SUSTAINABLE design, or other considerations.”

**“ARTICLE 1004.1.** The purpose of the Industrial Unit Plan of Development is to allow variations in development standards in industrial projects that require special design techniques or flexibility due to topography, innovative OR SUSTAINABLE project design, or other considerations.”

25. Amend Articles 1002.5, 1003.5, and 1004.5 adding a new paragraph requiring developments to be designed and constructed using sustainable development practices as a condition of receiving approval of a UPD Overlay.

**“ARTICLE 1002.5.** The recommendation of the Commission shall include the reasons for approval or disapproval of the plan, and if recommended for approval, specific evidence and facts showing the following:

1. The buildings shall be used only for single-family dwellings, two-family dwellings, multiple-family dwellings or manufactured houses, customary accessory uses, and community facilities.\*<sup>1</sup>
2. The average lot area per dwelling unit or manufactured house, exclusive of the area occupied by streets, shall not be less than that required by the zoning district regulation otherwise applicable to the site.\*<sup>1</sup>
3. The proposed development will not adversely affect adjacent properties or the permitted uses thereof.
4. THE PROPOSED DEVELOPMENT WAS DESIGNED, AND WILL BE CONSTRUCTED, IN A MANNER

CONSISTENT WITH SUSTAINABLE DEVELOPMENT PRACTICES.”

**“ARTICLE 1003.5.** The recommendation of the Commission shall include the reasons for approval or disapproval of the plan, and if recommended for approval, specific evidence and facts showing the following:

1. The use(s) of the property will conform to the permitted uses as listed in the use regulations of the commercial zoning district in which it is located.
2. The project will have access to, and frontage along, a paved street of sufficient capacity for the proposed use(s).
3. The proposed development will not adversely affect adjacent properties or the permitted uses thereof.
4. THE PROPOSED DEVELOPMENT WAS DESIGNED, AND WILL BE CONSTRUCTED, IN A MANNER CONSISTENT WITH SUSTAINABLE DEVELOPMENT PRACTICES.”

**“ARTICLE 1004.5.** The recommendation of the Commission shall include the reasons for approval or disapproval of the plan, and if recommended for approval, specific evidence and facts showing the following:

1. The subject project will not adversely affect adjacent properties or the public health, safety, and general welfare by causing or producing objectionable effects that would impose hazard to adjacent or other properties by reason of smoke, soot, dust, radiation, odor, noise, vibration, heat, glare, toxic fumes or other undesirable conditions.
2. The project will have access to a major street or highway, rail service or other means of transportation.

3. The use(s) of the property will conform to the permitted uses as listed in the use regulations of the industrial zoning district in which it is located.
4. THE PROPOSED DEVELOPMENT WAS DESIGNED, AND WILL BE CONSTRUCTED, IN A MANNER CONSISTENT WITH SUSTAINABLE DEVELOPMENT PRACTICES."

26. Amend the Purpose Statements in Articles 1008.1 and 1009.1 adding a new Paragraph encouraging sustainable development practices in the Wickenburg and Highway 74 Scenic Corridors.

**"ARTICLE 1008.1. PURPOSE:** The principal purposes of the Wickenburg Scenic Corridor Overlay Zoning District are:

1. To maintain the scenic beauty that now exists along the Wickenburg Highway.
2. To encourage orderly and sensitive development within the scenic corridor.
3. To encourage safe and efficient traffic flow along the Wickenburg Highway.
4. To encourage and improve the economic, social and physical living environment for the residents within the Scenic Corridor.
5. TO ENCOURAGE SUSTAINABLE DEVELOPMENT PRACTICES."

**"ARTICLE 1009.1. PURPOSE:** The Highway 74 Scenic Corridor Overlay Zoning District establishes criteria that encourage preservation of the natural and cultural landscape and its scenic quality along Highway 74. The specific purpose of this Overlay Zoning District is to:

1. Protect scenic land and associated views and viewsheds of natural, cultural and visual resources along Highway 74, while also recognizing the legitimate expectations of property owners and the County's overall land use and economic needs and goals.

2. Preserve Upper Sonoran Desert and hillside landforms to the greatest extent feasible for the benefit of residents, visitors and as an economic resource to Maricopa County in tourism and recreation activities.
3. Protect designated recreational areas, such as regional parks, by minimizing any potentially negative impacts from adjacent development.
4. Encourage innovative and sensitive planning, high quality design and construction techniques for development along Highway 74.
5. Encourage safe and efficient traffic flow along Highway 74.
6. Enhance the economic, social and physical living environment for the residents.
7. TO ENCOURAGE SUSTAINABLE DEVELOPMENT PRACTICES."

27. Amend footnotes to reflect effective date of subject TA.
28. Add language to **Chapter 11 – General Provisions**, Article 1111.2 excepting solar and wind powered electrical generating systems from the provisions of this article, and directing the reader to a new Section 1206.

**"ARTICLE 1111.2. BUILDING APPURTENANCES:** Chimneys, church steeples, refrigeration coolers, ventilating fans, elevator bulkheads, fire towers, ornamental towers or spires, and mechanical appurtenances, EXCEPT SOLAR AND WIND POWERED ELECTRICAL GENERATING EQUIPMENT LOCATED IN SINGLE-FAMILY, TWO-FAMILY, AND MULTI-FAMILY ZONING DISTRICTS, necessary to operate and maintain the building, may be erected to a height not exceeding **100 feet**, if such structure is set back from each lot line at least **one foot** for each foot of additional height above the height limit otherwise permitted in the zoning district in which the structure is located. The above setbacks are measured from the lot line to the closest point (including overhangs or other projections) on the

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structures. SOLAR AND WIND POWERED ELECTRICAL GENERATING SYSTEMS LOCATED WITHIN SINGLE-FAMILY, TWO-FAMILY, AND MULTI-FAMILY ZONING DISTRICTS SHALL BE SUBJECT TO THE REQUIRMENTS OF ARTICLE 1206.2.2.5 HEREIN."

[Note: staff is currently working on a separate Text Amendment under TA2007002 for the purpose of addressing parking standards under Section 1102. Staff anticipates that as part of TA2007002, language will be added to Section 1102 that speaks issues such as solar co-use on parking shade canopies, electrical vehicular charging stations, the use of pervious parking surfaces, etc.]

29. Add a new Section 1206 in **Chapter 12 – Development Regulations** that speaks specifically to Renewable Energy Systems. (Note: the following language is expressed in standard format here, but is written in legislative format in the draft ordinance.)

## **"Section 1206 – Renewable Energy Systems**

**Article 1206.1**                      **Purpose:** Promote efficient implementation of small scale renewable energy systems, while setting practical guidelines for such implementation that are respectful of the neighborhood context within which such systems may occur.

### **Article 1206.2 General Provisions:**

- 1206.2.1                      Renewable energy systems of any generating capacity are allowed within the IND-3 zoning district, subject to the following:
1.                      The property is developed in accordance with the development standards of the IND-3 zoning district, and;
  2.                      any power generated by the system in excess of that utilized by the primary and accessory uses on the property is capable of entering the electrical power grid in a manner

suitable to the electrical power company holding the CC&N for that service area.

1206.2.2 Utility-scale renewable energy systems may be approved subject to a Special Use Permit as specified in Article 1301.1.21 herein.

1206.2.3 Renewable energy systems consisting of solar water heaters, photo-voltaic solar panels, dish-engine concentrating solar, and small wind turbines are allowed as an accessory use in any zoning district subject to the limitations set forth below.

1. Such renewable energy systems may consist of some or all of the technologies enumerated in article 1206.2.3 above.
2. The aggregate energy output of the renewable energy system shall not exceed the aggregate peak demand generated by the primary and accessory uses on the property.
3. Renewable energy systems serving more than one property may be approved within a Unit Plan of Development provided;
  - a) the parameters for the system were approved as part of the Unit Plan of Development, and;
  - b) the system serves only the properties included within the Unit Plan of Development, and;
  - c) the system does not exceed the peak demand for all properties located within the Unit Plan of Development; and
  - d) the system is physically located within the project area of the Unit Plan of Development on a tract or tracts specifically dedicated to that purpose.
4. Renewable energy systems may be either free-standing or roof-mounted provided any supporting structures are capable of the imposed loads as required by the applicable construction code.

5. Renewable energy systems located in other than Single-Family, Two-Family or Multi-Family zoning districts may be treated as an appurtenant structure as provided in Article 1111.2.
6. The height of renewable energy systems located within Single-Family, Two-Family or Multi-Family zoning districts shall be limited to the Height Regulations of that zoning district.

1206.2.4. Solar systems:

1. Solar systems shall not constitute an increase to lot coverage unless the system in and of itself constitutes a Building as defined in Chapter 2 herein. In which case the system shall contribute to the overall Lot Coverage of the lot, and shall be calculated as outlined in Article 1206.2.6.5 below.
2. Free-standing solar systems located within a lot's Buildable Area shall not exceed the height limitations of the underlying zoning district regardless of angle or method of installation.
3. Free-standing solar systems located with a lot's rear yard shall not exceed a height of six (6) feet, regardless of angle or method of installation. All such systems shall be screened from view by a wall or fence equal to the height of the system.
4. Free-standing solar systems, regardless of location on the lot, shall maintain a setback from Rural or Residential zoning districts a distance not less than the height of the system.

1206.2.5. Small wind systems:

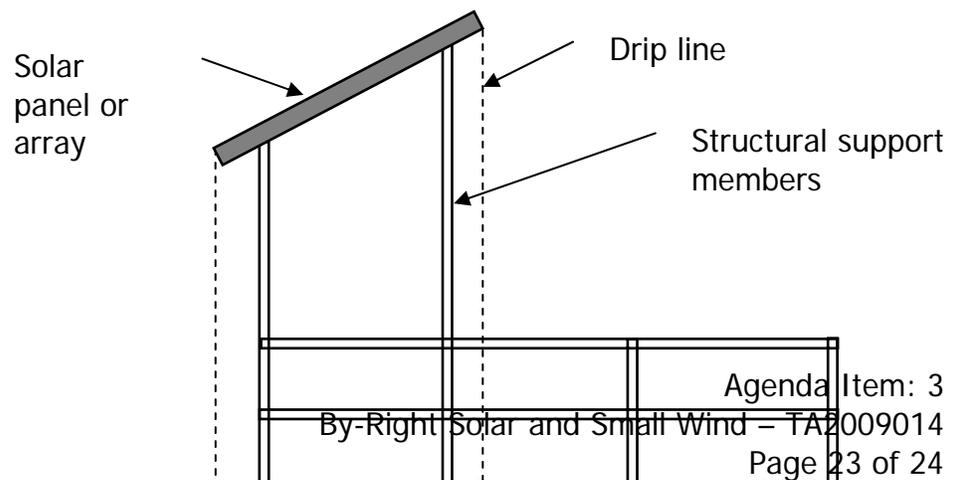
1. Small wind systems shall not constitute an increase to lot coverage.
2. Free-standing small wind systems located within a lot's Buildable Area shall not exceed the height limitations of the underlying zoning district.
3. Small wind systems shall not be allowed within the lot's rear yard unless mounted on the roof of an accessory building.

No portion of a system mounted to the roof of an accessory building shall encroach into the required setbacks nor shall exceed the height limitations as specified in the underlying zoning district.

4. Free-standing small wind systems shall be setback from any Rural or Residential zoning district a distance equal to the height of the unit.

1206.2.6. Measurements:

- 1) The height of a solar system shall be measured relative to the top of the panel or supporting structure, whichever is highest.
- 2) Setbacks to solar systems shall be measured relative to the edge of the solar panel or supporting structure, whichever is closest to the property line from which the setback is being calculated.
- 3) The height of a small wind system shall be measured relative to the top of the blade sweep at a point where the blade is in its most vertical position.
- 4) Setbacks to small wind systems shall be measured relative to the blade sweep at a point where the blade is closest to the property line from which the setback is being calculated.
- 5) In the event that a solar system is deemed to constitute a Building as discussed in Article 1206.2.4.1 above, the Lot Coverage shall be based on area directly beneath the projected drip line as applied to the perimeter of the solar panel or panels.



- 1206.2.7. The development standards identified in Articles 1206.2.4 and 1206.2.5 of this Section may only be varied by the Board of Adjustment through the variance process following demonstration of hardship, or through an approved Unit Plan of Development.

**Article 1206.3 Solar Access:**

The owner of a property on which a renewable energy system is installed assumes all risk associated with diminished performance of said system caused by any present or future adjacent structure or landscaping that may interfere with the system's ability to produce power at its rated capacity, regardless of when that adjacent structure or landscaping is constructed or installed.

[Note: The Maricopa County Subdivision Regulations (MCSR) currently includes language encouraging solar orientation. In keeping with the spirit of Sustainable Development, Article 1206.3 of the MCZO would be augmented by a subsequent provision in the Maricopa County Subdivision Regulations (MCSR) that would require the creation of a Solar Access Easement over some or all of the lots created by that subdivision. This would be accomplished via a separate Text Amendment to come at a later date and would only pertain to subdivision applications that occur following a specified date i.e. such a provision would not be retroactive.]

30. Revise the Index in **Chapter 17 – Index & Appendices**, Section 1701 to add reference to various terms.
31. Staff also recommends making certain housekeeping amendments, which will be incorporated in the draft ordinance. A legislative-edit version of the draft ordinance may be obtained through the Planning and Development Department by contacting Robert H. Kuhfuss, AICP, Senior Planner at [robertkuhfuss@mail.maricopa.gov](mailto:robertkuhfuss@mail.maricopa.gov) or by calling 602-506-6533.