Planning staff will be briefing the Community Development/Housing/General Government Committee on UDO-248 (a text amendment regarding Solar Farms) at its March 11 meeting. The creation of Solar Farms in other counties around the state has led to concerns about the possible impacts of this use on surrounding properties. This text amendment attempts to proactively address potential impacts.

The attached staff report provides a more detailed explanation of the specific provisions of the ordinance. Also attached are two versions of the proposed text amendment. The first is the version recommended by the City-County Planning Board at its January 9th meeting. The second is the version adopted by the Board of Commissioners at its February 24th meeting.

If you have any questions or comments which you would like addressed before the Community Development/Housing/General Government Committee meeting, please contact me at 747-7061 or pauln@cityofws.org.
ACTION REQUEST FORM

DATE: January 22, 2014
TO: The Honorable Mayor and City Council
FROM: A. Paul Norby, FAICP, Director of Planning and Development Services

COUNCIL ACTION REQUEST:

Request for Public Hearing on Zoning Text Amendment proposed by Planning and Development Services Staff

SUMMARY OF INFORMATION:

Zoning text amendment proposed by the Planning and Development Services staff to amend Chapter A (Definitions) and Chapter B 2-5 (Use Conditions) to define and add specific conditions for the use Solar Farms within the use conditions for Utilities (UDO-248).

PLANNING BOARD ACTION:

MOTION ON PETITION: APPROVAL
FOR: UNANIMOUS
AGAINST: NONE
SITE PLAN ACTION: NOT REQUIRED
STAFF REPORT

DOCKET # UDO-248
STAFF: David Reed

REQUEST

Zoning text amendment proposed by the City-County Planning and Development Services staff to amend Chapters A and B of the Unified Development Ordinances (UDO) to define and add specific conditions for the use Solar Farms within the use conditions for Utilities (UDO-248).

BACKGROUND

Over the last several years, there has been a rapid increase solar energy development in North Carolina. The creation of Solar Farms in other counties around the state has led to concerns about the possible impacts of this use on surrounding properties. The North Carolina Sustainable Energy Association in conjunction with the North Carolina Solar Center brought together a broad stakeholder group to develop a Template Solar Energy Development Ordinance for North Carolina. This template ordinance provides numerous regulation possibilities which local jurisdictions can consider to help address local interests. Planning and Development Services staff has reviewed the template ordinance and adapted some of the proposed regulations to fit in with the language in the UDO.

ANALYSIS

The use “Solar Farm” is currently classified as a Utility in the UDO. There are some use conditions for Utilities in the UDO, however, because of the potential large site area of Solar Farms, staff recommends adding some specific conditions for large ground mounted Solar Farms.

There are some existing conditions for the buffering and fencing of Utilities in residential zoning districts, however, the potential size and locations of solar farms warrant additional considerations. Staff recommends additional conditions for the planting of evergreen trees as a screen in the required setback area for Solar Farms and requirements for the termination of use. Setbacks for all Utilities adjacent to residentially zoned properties are adequately addressed in the UDO and apply to Solar Farms. The proposed ordinance references to residentially zoned properties include the AG and YR zoning districts.

Roof mounted solar panels or small scale ground mounted solar panels that are accessory to another use are not affected by this text amendment.

RECOMMENDATION

APPROVAL
David Reed presented the staff report.

PUBLIC HEARING

FOR: None
AGAINST: None

WORK SESSION

During discussion by the Planning Board, the following points were made:

There are no solar farms in Forsyth County at this time although there is one which is an Accessory Use. This is an attempt to be proactive and look at potential issues for nearby property owners when solar farms are requested and address those issues in advance.

MOTION: Paul Mullican moved approval of the text amendment.
SECOND: Lynne Mitchell
VOTE:
   FOR: Tommy Hicks, Arnold King, Clarence Lambe, Darryl Little, Barry Lyons, Lynne Mitchell, Paul Mullican, Brenda Smith, Allan Younger
   AGAINST: None
   EXCUSED: None

A. Paul Norby, FAICP
Director of Planning and Development Services
Be it ordained by the City Council of the City of Winston-Salem, North Carolina, that the *Unified Development Ordinances* is hereby amended as follows:

Section 1. Chapter A, Article II of the *UDO* is amended as follows:

**Chapter A - Definitions Ordinance**

**Article II – Definitions**

**Solar Farm.** Ground mounted components and subsystems required to convert solar energy into electric energy on sites one acre or larger.

Section 2. Chapter B, Article II Section 5.80 of the *UDO* is amended as follows:

**Chapter B - Zoning Ordinance**

**Article II – Zoning Districts, Official Zoning Maps and Uses**

2-5.80 UTILITIES

(A) **Setbacks**

Any structure erected or use instituted shall be set back not less than forty (40) feet from property lines of any adjacent residentially zoned property.

(B) **Solar Farms**

The following additional conditions apply to Solar Farms:

(1) **Screening.** Adjacent to residentially zoned property and public rights-of-way, natural evergreen plant materials shall be required along the property line (Suggested plant materials are listed in Section B.3-4.10 (E)).

(a) Minimum Height. The minimum height of the plant material shall be six (6) feet at installation; and,
(b) Spacing. The spacing of the planting shall be in a double row configuration, staggered, with five (5) foot spacing between the centers of the main trunks.

(2) Termination of Use. The components and subsystems of a Solar Farm that is no longer used to convert solar energy into electric energy must be removed within 12 months of the date it is taken out of service.

(c-b) Residential Districts
The following conditions apply in residential districts:

(1) Health or Safety Hazards. All uses which may produce health or safety hazards shall be enclosed by a fence a minimum of six (6) feet in height. Any required buffers or screening shall be installed between the fence and the property line.

(2) Bufferyard. All uses which may be potential nuisances by creating glare, dirt, noise or other adverse impacts shall be screened, except for driveways, with a type I bufferyard as specified in Section B.3-5. Solar Farms require screening described in Section 2-5.80 (B) (1) above.

(3) Exemptions.

(a) General. Exempt from the provisions of this section are lines for the transportation, transmission, and distribution of the various utilities. This category includes but is not limited to electricity, telegraph, and telephone services, and their supporting structures, other than buildings; the lines related to sewerage, water, oil, steam and gas; and rail trackage.

(b) Fencing and Screening. Exempt from the above fencing and screening requirements are reservoirs, water treatment plants, and wastewater treatment plants.

Section 3. This ordinance shall be effective upon adoption.
ADOPTED BY THE BOARD OF COMMISSIONERS
A UDO TEXT AMENDMENT PROPOSED BY
CITY-COUNTY PLANNING AND DEVELOPMENT SERVICES STAFF
TO AMEND CHAPTERS A AND B OF
THE UNIFIED DEVELOPMENT ORDINANCES
TO DEFINE AND ESTABLISH USE CONDITIONS
FOR SOLAR FARMS

Be it ordained by the Board of Commissioners of Forsyth County, North Carolina, that the Unified Development Ordinances is hereby amended as follows:

Section 1. Chapter A, Article II of the UDO is amended as follows:

Chapter A - Definitions Ordinance
Article II – Definitions

Solar Farm. Ground mounted components and subsystems required to convert solar energy into electric energy on sites one acre or larger.

Section 2. Chapter B, Article II Section 5.80 of the UDO is amended as follows:

Chapter B - Zoning Ordinance
Article II – Zoning Districts, Official Zoning Maps and Uses

2-5.80 UTILITIES

(A) Setbacks
Any structure erected or use instituted shall be set back not less than forty (40) feet from property lines of any adjacent residentially zoned property.

(B) Solar Farms

The following additional conditions apply to Solar Farms:

(1) Screening. Adjacent to residually zoned property and public rights-of-way, natural evergreen plant materials shall be required along the property line (Suggested plant materials are listed in Section B.3-4.10 (E)).

(a) Minimum Height. The minimum height of the plant material shall be six (6) feet at installation; and,
(b) Spacing. The spacing of the planting shall be in a double row configuration, staggered, with five (5) foot spacing between the centers of the main trunks.

(c) Alternative Compliance. One of the following can serve as an alternative to the evergreen screening requirement described in subsections (a) and (b) above:

(1) If an undisturbed area of mature trees with overlapping drip lines exists that is at least 40 feet wide between the property line and the ground mounted components and subsystems, that area, if retained in its undisturbed condition, may be used to meet the above screening requirement. Any gaps in the overlapping drip line within the 40 foot wide area shall meet the requirements of subsections (a) and (b) above.

(2) A buffer area of at least 40 feet in width may be sequentially planted with seedlings in a recognized Forestry Management Plan as defined in GS 153A-452 (a) (2), in two managed timber segments, each having a width of at least 20 feet, allowing for the second and subsequent planting(s)/harvest(s) to occur after the previous planting reaches a minimum height of twelve feet. Any gaps in the overlapping drip line within the 40 foot wide area shall meet the requirements of subsections (a) and (b) above.

(2) Termination of Use. The components and subsystems of a Solar Farm that is no longer used to convert solar energy into electric energy must be removed within 12 months of the date it is taken out of service.

(C.B) Residential Districts

The following conditions apply in residential districts:

(1) Health or Safety Hazards. All uses which may produce health or safety hazards shall be enclosed by a fence a minimum of six (6) feet in height. Any required buffers or screening shall be installed between the fence and the property line.

(2) Bufferyard. All uses which may be potential nuisances by creating glare, dirt, noise or other adverse impacts shall be screened, except for driveways, with a type I bufferyard as specified in Section B.3-5. Solar Farms require screening described in Section 2-5.80 (B) (1) above.
(3) **Exemptions.**

(a) General. Exempt from the provisions of this section are lines for the transportation, transmission, and distribution of the various utilities. This category includes but is not limited to electricity, telegraph, and telephone services and their supporting structures, other than buildings; the lines related to sewerage, water, oil, steam and gas; and rail trackage.

(b) Fencing and Screening. Exempt from the above fencing and screening requirements are reservoirs, water treatment plants, and wastewater treatment plants.

**Section 3.** This ordinance shall be effective upon adoption.