

**TO: Brennon Williams, Planning Department Director
Mikaela Renz-Whitmore, Long Range Manager**

**FROM: Jolene Wolfley, Planning Department Associate Director
and DRB Chair**

**SUBJECT: IDO Annual Update 2020 – Substitute Submittal for
Amendment to the IDO Text (5-2, 5-11, and 4-3)**

DATE: January 8, 2020

Director Williams and Ms. Renz-Whitmore,

Please accept the following substitute submittal for Amendments to the IDO Text (affecting 5-2, 5-11, and 4-3) as part of the 2020 IDO Annual Update application.

Since the application was submitted in November, the amendments have been reviewed and vetted with focus groups and stakeholders including:

- Architects and Landscape Architects
- Developers of market rate and affordable housing
- Apartment owners and managers of affordable housing
- Affordable housing advocacy groups
- Neighborhood coalition leaders

Changes have been made to the text of the amendments to reflect the additional knowledge and experience that these groups offered.

Site Design and Climatic/Geographic Responsiveness

- **Topic:** Site Design
- **IDO Page #:** 230
- **IDO Section:** New Section 5-2(D) (re-letter accordingly)
- **Change/ Discussion:** Add a new provision to Section 5-2 on Site Design
- **Requestor:** Planning Department
- A. Explanation:** The purpose of this amendment is to add an additional site design provision—climatic and geographic responsiveness--that seeks to improve the building performance of Albuquerque developments. This amendment is based on guidance from a focus group of local architects (Bill Sabatini, Jonathan Siegel, Baker Morrow, and Doug Heller). Albuquerque has compelling environmental forces—the daily and seasonal position of the sun and dramatic views to the Sandia mountains and other physical features--that should guide building layout and site design. The climatic responsive design approach is consistent with the American Institute for Architects 2030 Commitment for Building Performance and other national and global initiatives. When design responds to Albuquerque's unique environmental context, the design quality will

rise to provide us architecture with a strong sense of place and identity.

The first requirement would be for a **sun and shade analysis** to reduce summer heat/glare and to capture winter sun. This computer modeled analysis is standard practice for architects.

The second requirement is to analyze the site's potential to **capture views** of the Sandia mountains, Bosque/Rio Grande, and Volcanoes/Northwest Escarpment in placement and orientation of buildings, windows, balconies, and patios. The view capture evaluation would ask all architects—local or out-of-state—to evaluate the ability to capture significant views available on that specific site.

These requirements apply to all multi-family residential development greater than 25 units and non-residential development, except industrial development. Low density residential development is exempt from these requirements.

The IDO amendment to add a new Section 5-2 on climatic and geographic responsiveness has been introduced and reviewed with **focus groups** and individual stakeholders in meetings with architects, landscape architects, affordable housing developers and advocates, other multi-family developers, and neighborhood representatives. The feedback so far has been positive. Architects appreciate the flexible approach that seeks to inspire good design, while respecting the creative design process guided by an architect. Developers of multifamily projects want to build buildings that are designed well, contribute positively to the community, and have lower operating costs over time.

The following provides additional detail on the benefits of this Amendment.

1. **Climate responsiveness** helps create sustainable buildings for both market rate and affordable housing. The points below include excerpts from the AIA, Building Performance Handbook, part of the 2030 Challenge.
https://architecture2030.org/2030_challenges/2030-challenge/
 - a. Buildings account for 39% of annual account global Greenhouse Gas Emissions.
 - b. An apartment building has a lifespan of about 60 years and a commercial structure lifespan is 75 years. The user of a building built today will likely change over time.
 - c. During a brief period in the design of a building, an architect makes decisions that affect the lifetime energy use of the building.
 - d. There are design decisions possible in early design that could optimize energy use, but would be difficult and expensive to make later in the design process.
 - e. Massing and orientation are critically important to energy performance. They affect the ability to utilize passive solar energy and they impact heating, cooling, lighting, and natural ventilation.
 - f. A climate-responsive building in Albuquerque would be responsive to both our hot summers and cold winters.

- g. Albuquerque is moving forward with energy efficient building envelopes through the new Energy Code (2018 IECC). An advancement for sustainability is to partner an efficient building envelope with the building orientation and layouts that are proposed in this IDO Amendment (a new Section 5-2).
- 2. **Geographic responsive building design** takes an additional step forward in the design process to respond to the dramatic views available with Albuquerque’s unique topography. This approach creates buildings unique to Albuquerque.
 - a. The most prominent landforms are the Sandia mountains, the Volcanos/Northwest Escarpment, and the Bosque/Rio Grande.
 - b. Sites may have the ability to capture views in windows, patios, and balconies.
- 3. A design derived when **both climate and geography** are prominent forces results in unique architecture whose characteristics are varied by virtue of the Albuquerque's particular features. The resulting design is indigenous and timeless.
 - a. When design responds to Albuquerque's unique environmental context, design quality will rise to provide architecture with a strong sense of place and identity.
 - b. One neighborhood leader understood this idea in a meeting by referencing Page 7-1 of the Comprehensive Plan which is a quote by renowned architect Bucky Fuller:
 - “When I’m working on a problem, I never think about beauty. I think only how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong.”
 - c. This approach has been introduced to stakeholders. There is consensus that this approach is the most productive way to review building ‘design’ because it would advance the physical form of the City in a way that promotes Albuquerque’s sustainability.
- 4. Any changes to design requirements need to be measured against their **effect on housing affordability**—which is a critical need in Albuquerque. The literature indicates that affordable housing is advanced when building performance is improved. Interiors often are more livable with natural light. The long term operating costs to heat and cool the building are also improved. The Albuquerque developers, owners, and architects of affordable housing showed support for this new direction for Albuquerque design,
- 5. The importance of the design approach of climatic and geographic responsiveness is to make things happen at the **earliest stage of design**. For this reason, staff and professionals plan to create an Albuquerque Design Book with photos of real projects that utilize the climatic and geographic responsive design approaches. The Design Book would be available on the City’s website and would be promoted during Planning Review Team Meetings and Sketch Plat Reviews with the Development Review Board—long

before actual design submittals are made. The IDO amendment requires the architect and landscape architect for the project submit documentation of the sun and shade analysis and provide certification that a standard list of design considerations had been ‘evaluated’ in producing the site design, building layout and design. The approach is structured this way based on the understanding that not all projects can achieve the highest order of climatic and geographic responsiveness as there are a myriad of variables affecting a project’s design.

Accompanying climatic and geographic responsiveness approach to design would be a condensed set of design criteria to focus just on the essence of what **multi-family building design** should include for suburban Albuquerque areas. Past work identifying design regulations in urban areas UC-MS-PT would remain in the IDO. The amendments affecting multi-family design standards follow.

Multi-family Building Design and Use Specific Standards

- **Topic:** Multi-family Residential Buildings
- **IDO Page #:** 154; 321-322
- **IDO Section:** 5-11(D) and 4-3(B)(7)
- **Change/ Discussion:** Amend the Building Design Standards (Section 5-11-(D)) and Use Specific Standards (Section 4-3 (B)(7))
- **Requestor:** Planning Department
- **Explanation:** The purpose of this amendment is to provide the essential design elements—coupled with the climatic and geographic responsive design--for a multi-family building outside the urban UC-MS-PT areas. The standards would be consistent for multi-family regardless of being in a residential (R-ML and R-MH) or Mixed Use zone district. The revised standards identify the desire that both market rate affordable housing is designed well for the typical 60-year life of the building. Rather than offer a menu of options, these standards require the essential elements that provide large buildings that are at a human scale and that will add to the aesthetic quality of existing neighborhoods.

These design standards were developed by staff working with an Architects Focus group (Bill Sabatini, Jonathan Siegel, Baker Morrow, and Doug Heller). Then the standards were vetted with developers (market rate and affordable), apartment associations, affordable housing advocacy groups, architects and landscape architects. Adjustments to the requirements were made so that no requirements would be barriers to the production of public or private affordable housing.

It is important to remember that these standards apply to multi-family developments outside of the UC-MS-PT areas; UC-MS-PT would retain the standards now in the IDO.

Modifications to Multi-family Design Building and Landscaping standards are a good companion to the climatic and geographic responsive design approach. They move in the direction of outlining what is most necessary to make a building relatable at a human scale through:

- articulation that provides movement and rhythm
- well placed windows
- heat mitigation for western facing facades
- increased landscape requirements for high density residential
- identifying that most usable open space be for the community of residents and be at ground level to improve the quality of live for those residents

The following adjustments were made to the original submittal to remove or adjust requirements affecting the feasibility of affordable multi-family housing. Please note that the articulation requirements of 5-11 were reviewed and found to be in line with requirements of the New Mexico Mortgage Finance Authority. Some of these important elements are:

- Allow windows in workforce housing to be flush with the façade. This allows the use of standard windows easily available at a good price point. And it allows the installation to be successful for long term weather protection of the stucco as all laborers can successfully install them.
- Increasing net lot landscaping for the benefit of people who are living in a denser environment while allowing playgrounds (a common component of affordable housing) to ‘count’ toward that increase. Please note that community gardens—desired in affordable projects--already ‘count’ toward required landscaping.
- Identifying the value of trees as the most important plant for affordable housing projects. Maintaining the value of trees in counting toward live vegetation requirements, while also keeping trees from being overcounted. This is done by making no tree count more than 600 square feet in the requirement that 75% of the landscape be living.