



CHAPTER 5 INDUSTRIAL

By nature, industrial developments serve users that require large spaces for indoor and/or outdoor operations. Industrial development is often characterized by large buildings with service and loading areas that dominate the architecture, and a large quantity of parking.

Industrial developments can be designed to positively contribute to the overall character of an area through intentional use of massing and scale, colors and materials, architectural design, building orientation and placement, façade articulation, among others.

Industrial lots should provide a pleasant and accessible work environment, contribute to the city’s overall image and identity, and coexist appropriately with adjacent developments.

Applicability: These guidelines apply to site and building design for all industrial developments located in PEP, LI, GI, or HI zoning districts. All new construction, additions, remodels or other major site design modifications should also be designed according to these guidelines, and shall at a minimum, require design review by the Development Review Board consistent with requirements of the City of Mesa Zoning Ordinance.

INDUSTRIAL

A. SITE DESIGN

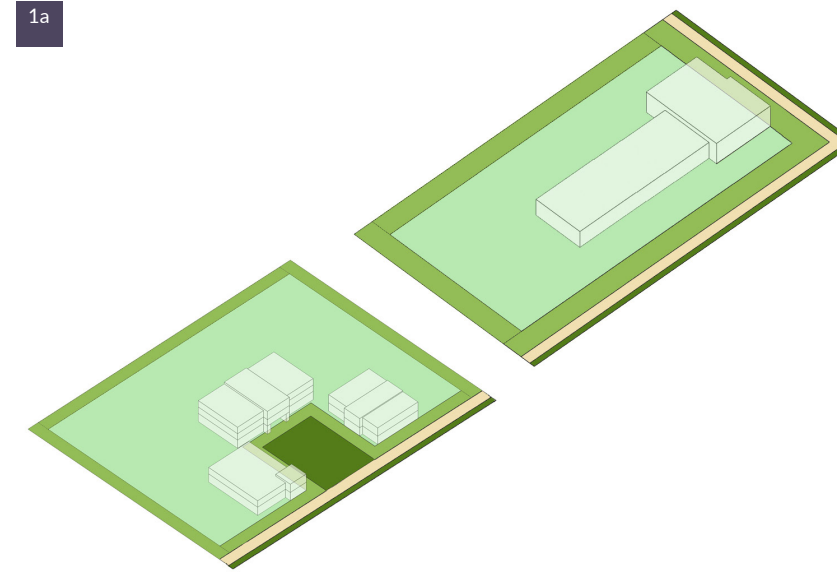
Industrial developments should be designed to minimize potential visual impacts due to its scale, location of industrial/mechanical equipment, and outdoor storage. These visual impacts can be mitigated through proper site planning and the placement and design of buildings, screen walls, and landscaping.

1. Building Placement and Orientation

- a. Buildings, entries, office areas, windows and other prominent design features should face streets and public areas. Architectural enhancements, special landscaping and hardscape treatments and other design features that will provide visual interest should be concentrated in areas visible from public view and public areas within the site. This includes views from streets, freeways, and the public areas of adjacent properties.
- b. Industrial buildings should have a strong relationship to the street and include primary entrances that serve as a visual focal point.
- c. Buildings should be placed on the site in a coordinated manner to provide order to employees and visitors.
- d. Buildings on a corner should treat both street sides as “fronts”, adhere to the minimum front setback requirements along both streets, and include pedestrian-friendly building design features such as windows, doors, walkways, and signage along both streets. If the lot does not reasonably support the ability for the building to adhere to setback requirements of both streets as fronts, the primary entrance and facade should face the primary street. The secondary front should include windows and use landscaping to create an attractive street edge.
- e. Noise generating functions should be located as far away as possible from adjacent, noncompatible uses.
- f. Consider the orientation of buildings to mitigate solar exposure, maximize natural shade, optimize natural ventilation, and reduce energy consumption
- g. Outdoor public spaces and amenities used for sitting, eating, and gathering are an employee benefit and should be designed into the project.
- h. Priority should be given to avoid a constant wall of buildings with similar height, massing and setbacks from street line. Siting of buildings will be encouraged to have a variety of front yard setbacks depending on both the building design and on the siting of adjacent buildings.

Design Guidelines

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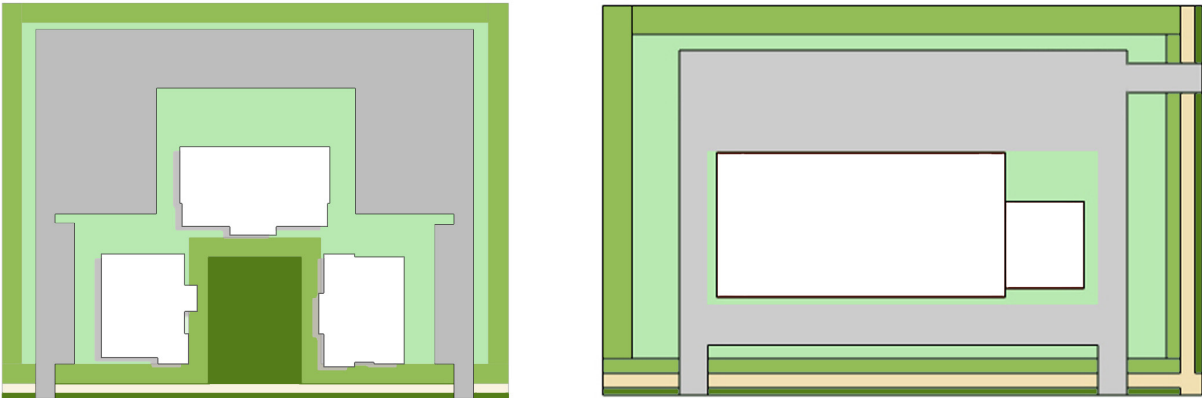
1d



1f,g



2a



2c



2h



2f



2g



2b



2k



2. Parking, Loading, and Vehicular Access

Parking on industrial developments is crucial to support the employees that work in each business, yet the location and design is important in promoting long term sustainability of developments throughout the city and contributing to the visual character and streetscape appeal for all residents. Parking area design should consider siting spaces directly away from primary entrances and public spaces, using permeable or sustainable materials when possible, and coherent parking access in consolidated patterns that maximize usable pedestrian and landscape space around it.

- a. Parking lots should not be the dominant visual element of the site. However, small customer-oriented parking lots may be appropriate in front of buildings.
- b. To avoid large expanses of paved areas, large parking lots should be divided into smaller parking areas through the use of landscaping, pedestrian connections, cross aisles or other similar features. Buildings should not be located in a manner that make them appear like “islands” surrounded by paved parking areas.
- c. Parking lots adjacent to and visible from public streets should be screened from view through the use of berms, low screen walls, grade changes, landscaping or combinations thereof.
- d. Primary entry drives for automobiles, especially visitors, should be enhanced with ornamental landscaping, low-level decorative walls, monument type signs, and/or decorative paving to emphasize site access locations.
- e. Shared parking and shared access drives are encouraged where practicable. This reduces the total amount of pavement and circulation

space needed, allowing for more developable space for businesses and fewer curb cuts to detract from the streetscape. Permeable paving materials are encouraged where the use allows.

- f. Loading and service areas must be located away from public view on the side or rear of buildings and may not face public street or private streets.
- g. Conflicts between heavy trucks, employee and visitor vehicles, and bicyclists and pedestrians should be avoided. Loading and service areas should be provided with separate access and circulation systems where appropriate.
- h. When it is not possible to locate loading facilities and service areas on a non-street side of a building or away from public view, loading docks and doors should not dominate the building facade and/or should be screened from all adjoining public rights-of-way with architectural wing walls, freestanding walls, landscaping, or other means.
- i. Carpool spaces, electric vehicle charging stations, bike share locations, and ridesharing passenger pick-up and drop-off areas are encouraged.
- j. Groupings of trees and architectural shading elements such as trellises, canopies, carports, and awnings should be provided. These serve to reduce heat retention of paved surfaces, increase ground permeability of unpaved areas and offer sun protection for pedestrians.
- k. Solar panels are encouraged as a part of Mesa's goal of energy efficient design.

3. Landscaping and Shading

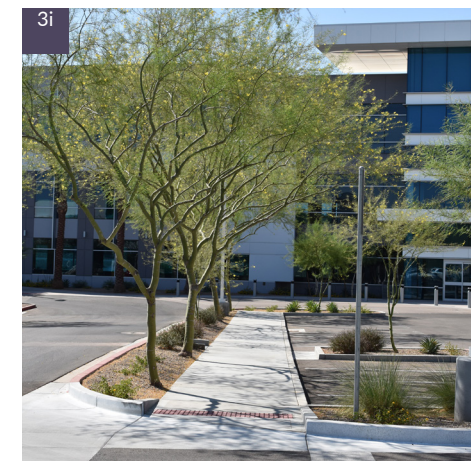
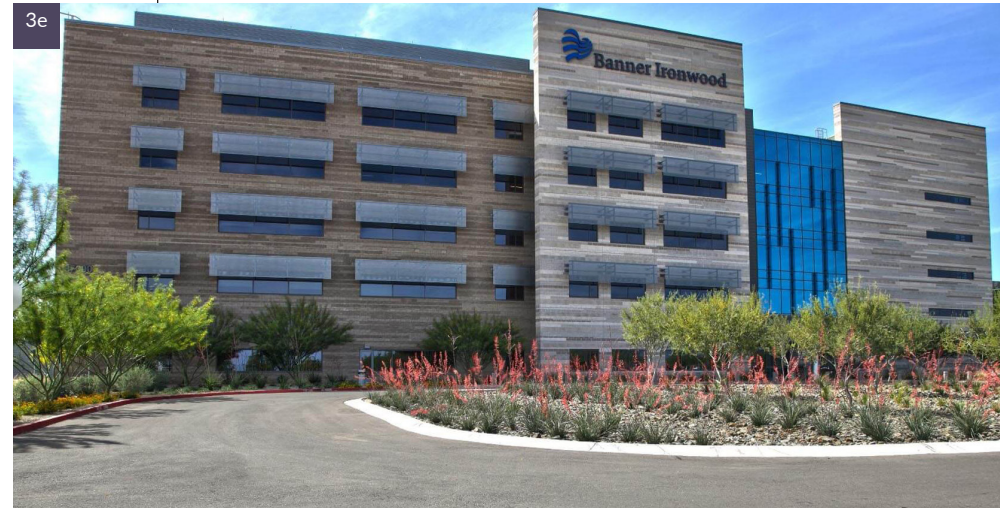
Open spaces on industrial developments are necessary to accommodate retention needs and enhance the overall quality of the development. Furthermore, landscaping and programming of the open space serves employees, visitors, and neighbors on nearby lots by creating attractive environments. Landscaped open spaces improve morale and create comfortable, outdoor places, which encourages healthy lifestyles.

All new developments should include usable outdoor open space. "Human-scaled" development that incorporates site design and amenities such as courtyards, plazas, shaded arcades and functional landscaped areas that link adjoining buildings and take advantage of outdoor as well as indoor space is encouraged. These features can be located in areas with recessed facades or setbacks in excess of minimum standards. These areas may be designed for use by employees and/or customers. Pedestrian features such as benches, tables, fountains, artwork, and landscaping should be incorporated as focal points or relaxation areas for industrial developments.

- a. Internal courtyards should be visible from public streets and/or directly connected to the public sidewalk. The overall size of the courtyard should be in proportionate scale to the size and height of adjacent buildings. As the building height increases so should the open space courtyard.
- b. Provide open areas and public amenities where employees can take advantage of recreational uses. Such improvements should be appropriate for the intended users. Outdoor public spaces and amenities used for sitting, eating, and gathering are an employee benefit and should be designed into the project. Where provided, they should be located away from loading, storage and trash areas, and should be provided with shade, seating, trash receptacles, etc.
- c. Low maintenance, drought tolerant plants are encouraged. Landscape buffers may be alongside property lines, building edges, sidewalks or may be stand-alone design elements.
- d. Incorporate existing natural features such as trees, topography, washes, and vegetation into the site plan. These and similar natural elements



- e. Design arterial street intersection frontage with substantial hardscape and landscape features, creative grading design, seasonal color, art and/or vertical landscape focal points.
- f. Infrastructure elements such as stormwater retention basins should be incorporated into the overall landscape plan.
- g. Plants should be used to define building entrances, parking lots, and the edges of various land uses. Plants should also be used to buffer and screen neighboring properties. Consider safety, environmental impacts, and accent elements when selecting and locating landscaping features.
- h. Use deciduous trees along south and west facing facades and in pedestrian areas to provide seasonal shading.



- i. Pedestrian connections between buildings, adjacent supporting industrial and commercial uses and the public sidewalk should be provided.
- j. Misting systems and other similar cooling techniques should be used in common areas to provide necessary relief from the desert sun.
- k. Special hardscape, such as pavers, stained concrete, and stone, should be used to identify pathways and gathering places in projects. Use of permeable pavers, permeable concrete, and cool pavements is recommended for pedestrian facilities, parking lots, plazas, building entrances, and other suitable areas.
- l. Shade elements, both landscape and architectural should be provided at prominent pedestrian points such as near the entry, near secondary outdoor spaces such as employee lunch areas, and along paths serving the parking lot. A fully covered outdoor area should be located within each employee break area.



4. Exterior Lighting

- a. Entries should use accent lighting that creates a focal point, such as the use of recessed fixtures over door locations
- b. Consider using Energy efficient lighting types, including LED lighting. Glare must be minimized by using soft or reflected lighting. This helps create a sense of security, but also enhances the pedestrian experience. Lighting must be down faced so as not to cause night sky pollution, nor flood any adjacent uses
- c. Fixture designs used shall be harmonious with the building design, and with the architectural theme of the overall project, including multiple building projects.
- d. Highlighting of significant architectural features, specimen trees and artwork with accent lighting should be considered. Lighting an entire building or major portion thereof is discouraged.



B. ARCHTECTURAL DESIGN

Building form and materials are significant factors in creating a development that is attractive and positively contributes to its surroundings. Industrial developments should establish a project identity that contributes to the character of the area. Architectural styles for industrial developments should draw from local or regional design influences with an overall effect of cohesiveness and a high-quality built environment.

1. General Design

- a. Stand-alone pads within larger developments should maintain a stylistic or thematic expression that ties the individual building to the larger development. However, precise replication of building design is discouraged.
- b. Corporate identity and design theme should be secondary to the character of the surrounding neighborhood or community and be consistent with the architecture style of the larger development.
- c. Exposed industrial systems and equipment may be integrated into the building design as an architectural element where practical.
- d. The highest degree of architectural detail should be focused on a building's public frontage.
- e. In portions of the building with active uses, a high level of fenestration is encouraged on the ground floor. Special architectural design features that highlight the ground floor and provide an engaging facade at the pedestrian level are also recommended. For example, large glass openings allow views into the building; awnings over multiple windows provide an alternating rhythm along the facade and cast shadows; and material changes utilizing attractive colors, patterns, or textures create a visual base for the building at the most visible level.
- f. Where the building frontage cannot be broken up due to unique use constraints (i.e. manufacturing or warehouse space) building walls should be detailed through the use of texture, color, material changes, shadow lines, and other facade treatments that add visual interest and avoid large monotonous facades.
- g. All stairways to upper levels shall be located within the building unless otherwise approved by the Design Review Board for secondary access to outdoor patio decks.
- h. Dependent upon the architectural style of a structure, industrial buildings are encouraged to use decorative roof elements such as cornices to enhance a building's roof edge.
- i. Provide weather and sun protection, such as overhangs, awnings, canopies, etc. to create shade and shadow and mitigate climatic and solar conditions





2. Entrances

Primary entries should be designed to facilitate the transition from public to private spaces, provide order to a streetscape, and help orient visitors.

- Building entries should be oriented toward the predominant public view, usually the street frontage. This allows the public to more easily determine where the front entrance is located and provides a more attractive street frontage. Entries should be designed to be consistent with the overall architectural design, including colors and materials.
- Buildings should have a strong relationship to the street, including a functional public entrance that is also a visual focus for the building. In place of a street oriented public entrance, a strong pedestrian connection that establishes a sense of formal public entry may be substituted.
- Large buildings which front multiple streets should provide multiple entrances. Building entrances which connect to a central lobby should be distributed on different street facing facades.
- Primary entry drives for automobiles, especially visitors, should be enhanced with ornamental landscaping, low-level decorative walls, monument type signs, and/or decorative paving to emphasize site access locations.
- Entrances should be clearly defined with a massing change or design element such as a canopy, trellis, awning, or portico to connect the building with its surroundings and provide frontage that interacts with the sidewalk and public realm. This element may be multi-story but must include the ground floor.
- Every entrance must be served by a pedestrian walkway that includes lighting and prominent landscaping to ensure the entrance is clearly recognizable.

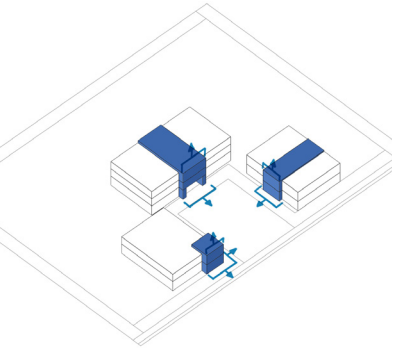
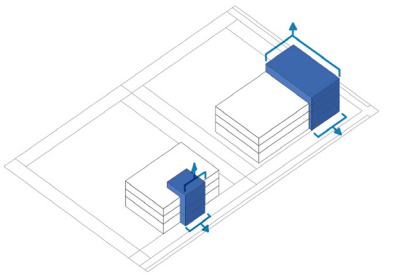
3. Massing and Scale

Due to the inherent character of industrial sites, special attention must be provided to the massing and scale of buildings to prevent bulk and large blank walls. Buildings with expansive facades should use massing changes and other architectural treatments to provide human-scaled development.

- Massing can be reduced through several methods including, but not limited to:
 - Recessing building floors above the first story;
 - Providing vertical or horizontal offsets in the wall surfaces;
 - Reducing the overall size of buildings;
 - Incorporating other structures on the site with varying sizes;
 - Articulating details around doors, windows, balconies, plate lines, recessed design elements, interesting cornice treatment details, exposed expansion joints, reveals, change in texture, or other methods of visual relief;
 - Avoiding long, repetitive, monotonous facades – particularly those that repeat the same design element several times along the same elevation; or
 - Reducing overly large and tall roof designs.

- Consider using horizontal massing changes to break up long facades and highlight features such as entries and corners.
- Variations in building height and roof forms should be used to reduce the scale of industrial buildings and avoid long continuous rooflines.
- Building mass and scale should be compatible with buildings in the surrounding vicinity. Exceptions will be considered where alternative development character may be desired.
- Taller buildings or portions of a building should be located internally to a site with buildings stepping down in height as they reach the edges of sites that are adjoined by smaller scaled development.

3a



4. Facade Articulation

- a. Rooflines of industrial buildings should include variations to avoid long horizontal rooflines. Roofline articulation can be accomplished by alternating roof heights, providing variations in materials and colors, architectural features such as awnings, or other appropriate methods.
- b. Changes in vertical plane are encouraged and should include changes in parapet height and form. Distinct forms that punctuate the skyline and create a visual identity for the building, such as towers, are encouraged within these vertical changes. Special roof forms and tower elements should emphasize corners and entrances.



5. Materials and Colors

The overall type and color of materials have a significant effect on the scale, style, character, and quality of a building. For industrial developments, material and color variation is especially important when combined with massing and articulation to provide variation and avoid bulky forms.

- a. High-quality authentic building materials - such as stone, brick, wood, and stucco - should be utilized to enhance the building's architectural character and assure a long-lasting building life.
- b. The use of materials that artificially simulate another material, such as stucco used to mimic wood, are strongly discouraged.
- c. The use of metal siding exclusively on any building is prohibited. Metal siding used for accents on any development shall be of the decorative, architectural metal type. The use of corrugated metal siding is prohibited unless used as a decorative element to accent a particular architectural style.

- d. Select building colors and materials to reinforce building design, detailing, and architectural form in order to achieve harmony and continuity of the overall design.
- e. The selection and placement of building materials should provide visual interest at the pedestrian level. Heavier materials should be used to form the building base and as accents on upper stories and walls. Materials and colors should be used to enhance buildings and adjacent pedestrian spaces by adding color, shadows, and interesting forms.
- f. Apply materials in a manner that corresponds to variation in building massing. Wrap outside corners to avoid a tacked-on appearance.
- g. Materials should be selected that have proven durability under high amounts of sun exposure. All exterior materials, textures and colors should be appropriate for the architectural style or theme of the building and should contribute towards the quality of the streetscape.
- h. Exterior building colors should be compatible with the surrounding neighborhood setting and should be in keeping with the geographic and climatic conditions specific to Mesa.
- i. Change in color should always be accompanied by a change in plane and separated by a facade element, enhanced architectural detail or other means.
- j. Accent colors should be used to enhance details such as trim, doors, and architectural elements.
- k. Side and rear facades visible to the public shall include materials of equal quality to the front facade.

6. Signage

- a. All signage should be designed using style, materials, and colors compatible with the building architecture.
- b. Strong contrast helps signs standout within their surroundings. Bright colors and reflective, fluorescent colors should be used sparingly when complimentary to the buildings overall design theme.
- c. Signs should be simple and easy to read.



7. Service Areas and Utilities

- a. Buildings, walls, and landscaping should be arranged to screen less visually aesthetic components necessary for industrial development, including loading and service bays, storage areas, trash enclosures, mechanical equipment, and noise and odor producing functions. Service areas should be located at the sides and/or rear of main buildings where not visible from public view, and screened with compatible architectural features and walls, and/or dense landscaping.
- b. Trash enclosure walls and gates must be architecturally compatible with the site design and should be carefully integrated into the site plan consistent with City of Mesa solid waste handling requirements.
- c. Mechanical equipment, electrical meter and service components, roof drainage systems and similar utility devices whether ground level, wall mounted, or roof mounted, shall be screened and designed to appear as an integral part of the building.



C. EXAMPLES AND INSPIRATION

