An aerial, black and white photograph of the Aspen/Pitkin County Airport and surrounding landscape. The foreground is dominated by dense evergreen trees. In the middle ground, the airport tarmac is visible with several aircraft parked. Beyond the airport, a residential area with houses and buildings is nestled in a valley. The background features a range of mountains with patches of snow under a bright, hazy sky.

Aspen / Pitkin County Airport

DESIGN GUIDELINES

Aspen/Pitkin County Airport

DESIGN

GUIDELINES

SECTION ONE

1.0 Airfield, Security and Operational Facilities

- 1.1 Existing Conditions
- 1.2 Airfield Standard and Restrictions
- 1.3 Security Requirements
- 1.4 Operational Efficiency
- 1.5 Maintenance

SECTION TWO

2.0 Architectural Guidelines

- 2.1 Scenic Impacts/Aesthetic Character
- 2.2 Neighborhood Compatibility
- 2.3 Sustainability
- 2.4 Customer Service and Experience

SECTION THREE

3.0 Site Improvement & Landscape Guidelines

- 3.1 Site Grading Standards & Landform Use
- 3.2 Planting Standards
- 3.3 Parking Lot Standards
- 3.4 Drainage and Stormwater Runoff
- 3.5 Visual Impacts
- 3.6 Environmental Factors
- 3.7 Neighborhood Compatibility
- 3.8 Customer Service and Experience

SECTION FOUR

4.0 Construction Management

- 4.1 Construction Management

SECTION FIVE

5.0 Review Process

- 5.1 Review Process
- 5.2 Relationship of Design Guidelines to Other Standards and Regulations
- 5.3 Ongoing Documents and Compliance Monitoring

APPENDIX A

A.0 Appendix

- Airport Facilities and Properties
- Database Creation and Maintenance
- Compliance Monitoring/Enforcement

Introduction



These guidelines are grounded in the belief that simple, strong design solutions that utilize indigenous materials and quality craftsmanship is the best way to create a facility that honors the community's values relative to architecture and community planning.

Introduction

Through the long-term development and redevelopment of necessary facilities at the Airport, in accordance with these Design Guidelines, the County seeks to create an airport campus which is welcoming, expressive of local culture, functional, attractive and understated. These Guidelines are intended to create a facility that continues the tradition of allowing this world renowned mountain community to be readily experienced by those who live and visit here each time they step off an airplane. These guidelines are grounded in the belief that simple, strong design solutions that utilize indigenous materials and quality craftsmanship is the best way to create a facility that honors the community's values relative to architecture and community planning. The Airport also recognizes the importance of preserving some aspects of the existing airport facilities as new facilities are developed. These include ease of access, integrating buildings into the landscape, emphasizing the quality of the pedestrian experience through convenience and landscape enhancements, among others. These guidelines encourage reintroduction of the native mountain landscape throughout the airport, including the passenger terminal area, and reap the resulting environmental benefits. Re-establishing links to the area's ranching history is also promoted through subtle planting arrangements and by preserving and enhancing views of existing historic structures and landforms. As reflected in the guidelines, the airport strives to be a good neighbor while continuing to serve as a major contributor to the local economy.

This document is an outflow of the 2012 Aspen/Pitkin County Airport Master Plan Update (Airport Master Plan) which was approved by the Pitkin County Board of County Commissioners (BOCC) in December of 2012. The BOCC's approval of the Airport Master Plan was conditioned upon the establishment of a set of Design Guidelines to govern all future improvements at the Airport. The Airport Master Plan includes recommendations for the type, approximate size and arrangement of future airport facilities necessary to accommodate the forecast air travel

needs of the community. The recommendations in the Airport Master Plan were derived after a lengthy and comprehensive planning process that incorporated input from a broad spectrum of community groups, organizations and individuals. The design guidelines contained in this document are not intended to revisit the findings and recommendations contained in the Airport Master Plan. Rather, they are intended to provide a mechanism to ensure that future development and redevelopment at the Aspen/Pitkin County Airport, as contemplated in the Airport Master Plan, is implemented in a manner consistent with community values which reflect high standards for architectural quality, environmental sensitivity, neighborhood compatibility, and sustainability. These Design Guidelines are intended to provide clear and concise direction for all participants in the development process at the Airport, including developers and those who are responsible for reviewing development proposals for consistency with community values.

The Aspen /Pitkin County Airport is located along Highway 82 in the area between Maroon Creek and Shale Bluffs, which has been the subject of intense scrutiny over the past few years as a result of recent community planning efforts. This area is referred to as the “Gateway to the Aspen Area Community” in recently-adopted planning documents including the Aspen Area Community Plan (AACP) and the West of Maroon Creek Plan (WOMP). The West of Maroon Creek planning area provides the physical entrance to the community as well as the transition from the rural landscape to the more urban environment of the City of Aspen. Preserving the distinct and memorable arrival experience along this corridor, which is created by large open space areas back-dropped by the surrounding mountains and ski resorts, has been identified as a critically important goal for the community. The Airport recognizes that the development of future airport facilities can contribute positively to this important goal through careful planning and design and has developed these Design Guidelines with this in mind.



Figure I.1



Figure I.2

In their resolution approving the Airport Master Plan, the BOCC also required that the Airport pursue a study of best practices for mass transit at other similar airports in order to identify and implement specific measures to encourage the use of alternative modes of transportation. This study was conducted in parallel with the development of this Design Guidelines document and will be implemented independently. However, there are a number of guidelines in this document which address the development of facilities that are either directly or indirectly related to Airport's role in the local and regional transportation system. As a result, it's appropriate to provide some background information regarding the Airport's role in the current transportation system as well as its philosophy for how to plan for the transportation system of the future.

Currently, the airport serves an important role in the regional transportation system by providing both commercial airline and general aviation service, which provides an alternative to arriving via motorized vehicles on Highway 82. Highway 82, the primary transportation route between the City of Aspen and Glenwood Springs, is heavily travelled and frequently congested. Reducing traffic congestion on Highway 82 has been a major concern throughout the valley for many years. Airport users currently have several transportation options for their trips to and from the Airport including valley-wide bus service provided by the Roaring Fork Transportation Authority (RFTA). In 2012 RFTA operated a fleet of over 80 vehicles and carries approximately 4.5 million passengers per year, making them the second largest transit system in the State. RFTA offers both local bus service and, with the recent opening its VelociRFTA service, regional express-bus service from Aspen to Glenwood Springs. Local bus service is also available between Aspen and Snowmass Village. RFTA also provides free skier shuttle service to all four of the Aspen Ski Company's ski resorts via the Four Mountain Connector service. These bus routes all include stops at the Airport/ABC transit stations. In addition, many of the lodges in Aspen and Snowmass Village offer shuttle service to and from the Airport. The Airport

is also connected to both Aspen and Snowmass Village via paved commuter trails. However, for a variety of reasons, including the lack of baggage storage on RFTA buses, no weather-protected walkways, and lack of a local shuttle bus service, many airport users will continue to rely on rental cars and private automobiles to get to and from the Airport. As a result, the Airport Master Plan has identified a need for continued parking facilities for these vehicles.

The Airport's location offers a unique opportunity in terms of its future role in the regional transportation system. The Airport is located approximately 8 miles from the Snowmass Village Mall and just over 3 miles from the downtown core of the City of Aspen. This proximity together with the fact that the community has reserved a transportation corridor between the City of Aspen and the Airport, as described in the Entrance to Aspen Record of Decision (ETA-ROD), allows consideration of a variety of transit solutions to serve local residents and visitors in the upper valley. The potential also exists, as a result of the 1997 acquisition of the Denver and Rio Grande Western Railroad right-of-way, to consider other valley-wide transportation alternatives that require a dedicated off-highway corridor. Ultimately, the Airport's role in any future transportation system will depend on decisions as yet to be made by the City of Aspen, Pitkin County, Snowmass Village and other communities in the valley. The Airport's philosophy in this regard has been to ensure that planning for future airport facilities allows the community the flexibility to accommodate a variety of transportation solutions and technologies.

The Airport has always been a proponent of transit and has worked to preserve the community's transportation options in the Airport/ABC area through its recent master planning efforts. This is most evident in the current Airport Master Plan, which focused on the redevelopment of the passenger terminal area, and which continues to preserve the transportation corridor along the Airport-side of Highway 82 as

contemplated in the ETA-ROD. The Airport also worked with RFTA to determine the best location for the current bus rapid transit system (BRT) stations to serve both the existing and proposed future passenger terminal locations. The Airport Master Plan also includes a number of other measures intended to accommodate future transportation alternatives including the recommendation to develop a weather-protected pedestrian corridor between the future passenger terminal and the transportation system stations and pedestrian underpass located along Highway 82. The design guidelines in this document address design details related to these and other transportation-related improvements recommended in the Airport Master. Careful design of these facilities, making them more efficient and more appealing, can help promote the use of alternative transportation modes as well as improve the overall user experience.

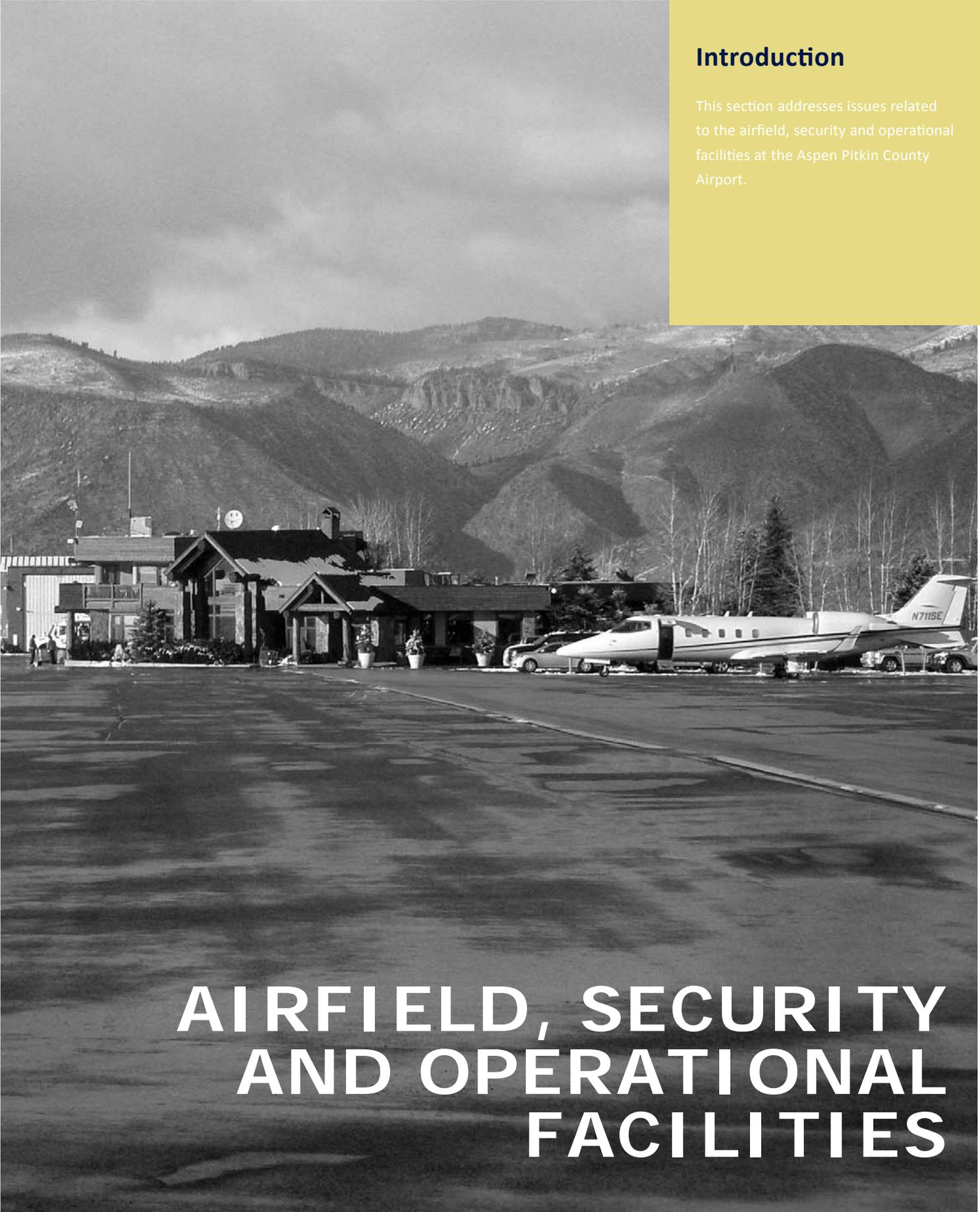
This document has been prepared with input from the community through several outreach efforts, including a series of meetings with a 12-person task force that was appointed by the BOCC. The task force was comprised of local architects, planners, business owners, and nearby residents, among others. The public outreach effort also included several focus group meetings with airport tenants, employees, and general aviation users as well as a public open house meeting. The input from these groups and events was recorded and posted on the Airport's website (<http://www.aspenairportplanning.com/>) and referenced throughout the preparation of this document. In addition, public input gathered during the planning processes for the 2012 Aspen Area Community Plan (AAP), the West of Maroon Creek Plan (WOMP), and the 2012 Aspen Airport Master Plan was also reviewed.

This document is intended to be used in concert with the Aspen-Pitkin County Airport Master Plan, the West of Maroon Creek Plan (WOMP), the Airport Landscape Master Plan, the Aspen-Pitkin County Airport Sustainable Construction Management Plan, and the Design Intent & Specifications for Exterior Signage (July 2006). Other important reference documents are identified in the bibliography.

SECTION ONE

Introduction

This section addresses issues related to the airfield, security and operational facilities at the Aspen Pitkin County Airport.



AIRFIELD, SECURITY AND OPERATIONAL FACILITIES

SECTION ONE

Airfield, Security and Operational Facilities



The Airport is a key hub in the multi-modal transit system within the Roaring Fork Valley, which integrates private vehicles, commercial vehicles, public mass-transit, pedestrians, bicycles, and aviation users.

Section 1-Airfield, Security and Operational Facilities

1.1. EXISTING CONDITIONS

The Aspen-Pitkin County Airport (ASE) sits along Colorado Highway 82, to the Northwest of the City of Aspen. The Airport is owned and operated by the Pitkin County Board of County Commissioners (BOCC) and is under the supervision of the Airport Director and the County Manager's Office. The Airport is a key hub in the multi-modal transit system within the Roaring Fork Valley, which integrates private vehicles, commercial vehicles, public mass-transit, pedestrians, bicycles, and aviation users. As a Federal requirement, the land depicted as Airport Property on the Exhibit "A" Property Map (see Airport Master Plan) must be used in accordance with the approved Airport Layout Plan (ALP), which can also be found in Chapter 11 of the Airport Master Plan. Property designated for aeronautical use cannot be used for non-aeronautical purposes except under limited circumstances or with FAA approval.

There is a designated transportation corridor running along Colorado Highway 82. Any development that would encroach on this corridor is prohibited. The transportation corridor is depicted on the ALP in the Airport Master Plan. There are also electrical and communication utility corridors on airport grounds. Due diligence should be exercised early on in a project to identify potentially impacted utilities and investigate the implications. Drawings can be provided by the airport that show approximate utility locations for informational purposes only, field verification should be made to determine exact locations and depths of utilities in the vicinity of proposed construction.

1.2. AIRFIELD STANDARD AND RESTRICTIONS

- a. Aspen is classified as a D-III airport and is subject to FAA regulations and standards. Runway and taxiway dimensional standards must meet or exceed the specified widths and clearances specific to critical aircraft to ensure safe operation for landing, take-off, and taxi. The Airport has one runway, Runway 15/33, and one partial parallel taxiway system. The FAA regulates development on and near the Airport through a series of airfield safety areas. These safety areas, and the development restrictions associated with them, are described in detail in the Airport Master Plan (Section 3.2.8), the boundaries of the safety areas are depicted on the ALP. All improvements at the Airport must comply with standards and restrictions associated with the airfield safety zones.
- b. Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, establishes airspace requirements which impact the geometry of buildings within the vicinity of an airfield. This document establishes three-dimensional “imaginary surfaces” designed to protect the airspace around an airfield. These surfaces are discussed in greater depth in the adopted Airport Master Plan (Section 3.2.9). Based on these regulations, a Building Restriction Line (BRL) has been established on either side of the runway which sets a conservative baseline structure height of 35 feet. The BRL is depicted on the ALP. Part 77 also includes a formula for considering the height of structures outside of the BRL. It’s important to note that the height of construction equipment must also be evaluated for compliance under Part 77.
- c. The Airport Traffic Control Tower (ATCT) must have a clear visual line of sight to all movement areas of the airport, particularly the runway ends. Movement areas are designated areas on the tarmac where all vehicles and aircraft must be in communication with the tower in order to operate. The ATCT in ASE has a supplemental camera pole

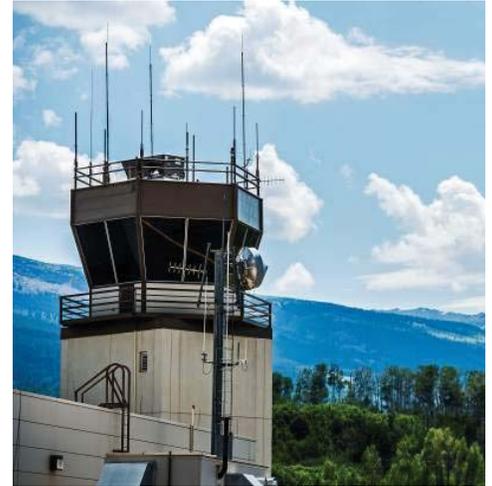


Figure 1.1

SECTION ONE



Figure 1.2

at the Southeastern corner of the airport to augment the visual line of sight. The Airport Administration will assist persons interested in development at or near the Airport in analyzing compliance with the requirements of Part 77 and the line-of-sight requirements for the ATCT.

1.3. SECURITY REQUIREMENTS

- a. The County is obligated to have and implement a security program in accordance with 49 CFR, Part 1542, Airport Security, which is administered by the Transportation Security Administration (TSA). ASE should take specific measures to ensure all required TSA regulations are satisfied. One requirement of Part 1542 is that the entire airfield be surrounded by a perimeter security and wildlife fence. (see Figure 1.2)
- b. In order to maintain the efficacy of the airport perimeter fence, the area outside the fence should have a 10-foot clear buffer from the exterior of the fence to any items (site furnishings, trees, berms, buildings, etc.) that could be used to facilitate unauthorized entrance into the AOA.

1.4. OPERATIONAL EFFICIENCY

- a. Where possible, new general aviation(GA) hangar developments should be designed with double loaded aprons, with hangars on opposing sides of the pavement, to minimize the pavement required for each unit, and be organized to allow for flexible aircraft maneuvering.
- b. Consideration should be given to how snow removal and storage will be dealt with, and whether there will be any impact on the airport's snow removal plan.
- c. Aircraft fueling and deicing facilities should be located where they will not interfere with other aircraft movements.

- d. Dedicated vehicle service roads and landside access points should be located so as to minimize interactions between aircraft and private vehicles.
- e. Construction projects should be coordinated with the airport to reduce the impact to airport operations and to ensure safe construction practices given concerns associated with an active airport.

1.5. MAINTENANCE

- a. All repairs and maintenance to aircraft and vehicles should be made in areas designated by the airport. Any approved work performed on a public space on the airport should leave the area in a neat, clean, safe, and orderly condition upon completion of such services.



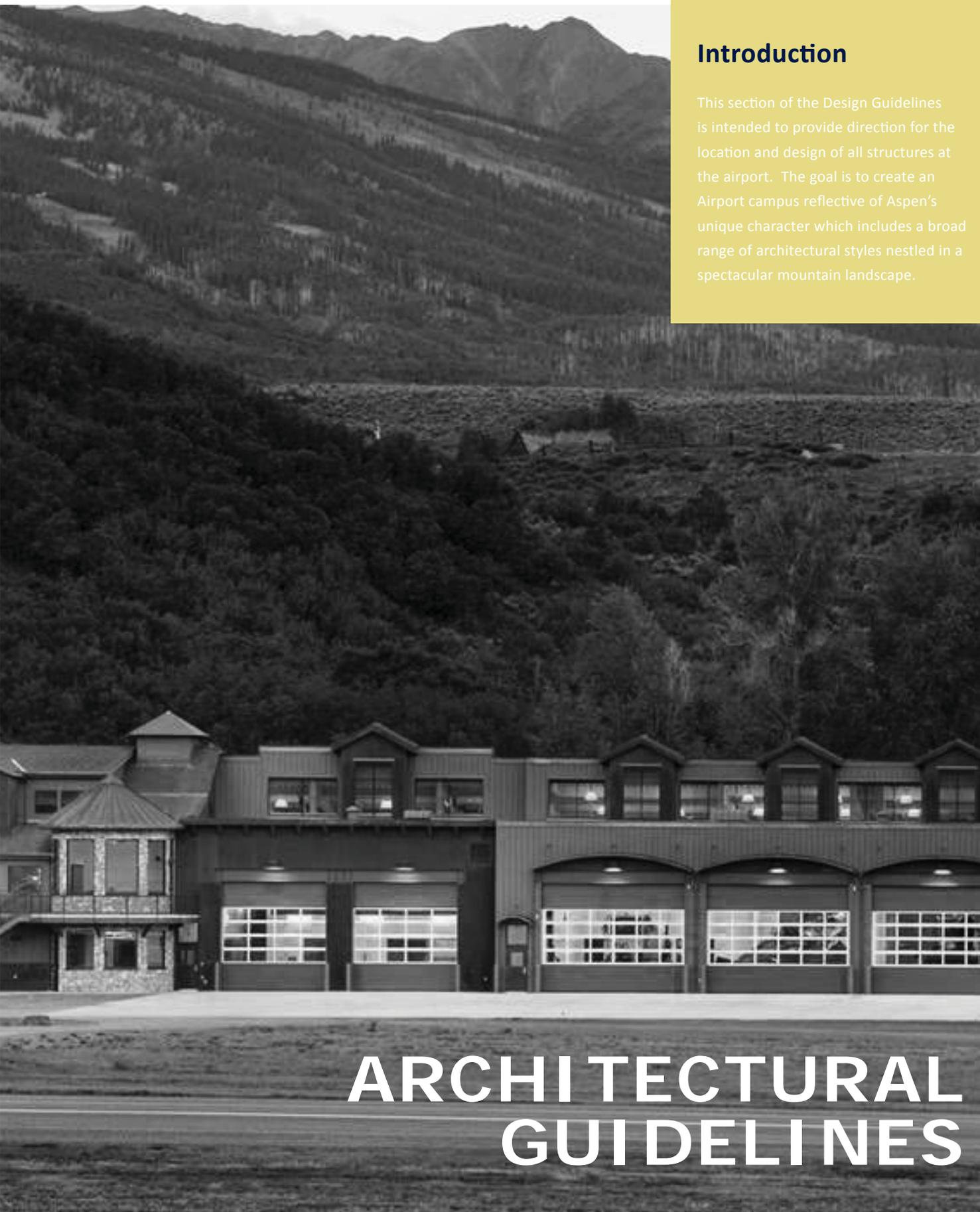
Figure 1.3

DRAFT

SECTION TWO

Introduction

This section of the Design Guidelines is intended to provide direction for the location and design of all structures at the airport. The goal is to create an Airport campus reflective of Aspen's unique character which includes a broad range of architectural styles nestled in a spectacular mountain landscape.



ARCHITECTURAL GUIDELINES

Architectural Guidelines



The goal is to create an airport campus reflective of Aspen's unique mountain-town character which includes a broad range of architectural styles nestled in a spectacular mountain landscape.



Section 2-Architectural Guidelines

This section of the Design Guidelines is intended to provide direction for the location and design of all structures at the Airport. These guidelines will apply to the development of new structures as well as the renovation and redevelopment of existing structures. ***The goal is to create an airport campus reflective of Aspen's unique mountain-town character which includes a broad range of architectural styles nestled in a spectacular mountain landscape.*** While individual buildings may have dissimilar functions, sizes and even materials, it is desired that they relate visually to each other, while avoiding monotony. Buildings at the Airport should generally be characterized as low in profile, distinctively designed, crafted of materials and colors that complement the surrounding native environment on a year-round basis and expressing high standards for functionality, environmental sustainability and neighborhood compatibility.

2.1 SCENIC IMPACTS/AESTHETIC CHARACTER

- a. General building massing and form ("right sizing")- Buildings should fit within the visual context of the site and not dominate the overall landscape. It is desirable to employ architectural methods to "downsize" the apparent massing of structures.

1. Scale

- i. Building scale should be appropriate and expressive of the intended function(s) and strive for a clear and simple expression of design concept(s).
- ii. Low-profile horizontal buildings are preferred.
- iii. New structures and significant renovations of existing structures will need to consider the Scenic Guidelines contained in the West of Maroon Creek Plan (WOMP), which includes additional language related to building height and massing.
- iv. Where larger buildings are necessary to achieve their intended purpose, such buildings should be designed with separate

massing forms and/or different materials and colors to reduce perceived building mass without compromising the emphasis on simple forms and horizontality.

- v. Consider breaking larger buildings into modules or separate parts to reduce perceived scale. (see Figure 2.1)
- vi. Designs utilizing simple forms can employ creative combinations of materials, colors and fenestration to help create an appropriate building scale.
- vii. Where taller building volumes are necessary, they should be located at the central areas of buildings. Building masses should be transitioned by stepping outward and down from the taller masses where appropriate and beneficial.
- viii. Buildings should respond to the site topography to integrate into the landscape. Utilize finish grading for "earth sheltering" at buildings wherever possible. (see Figure 2.2)

2. Roof Articulation

- i. Simple geometric forms with an emphasis on horizontal profiles are encouraged. (see Figure 2.3)
- ii. Roof forms should reinforce a complimentary campus appearance at the Airport.
- iii. Roof forms should be considered from various viewpoints including Highway 82, Owl Creek Road, West Buttermilk Road and McClain Flats Road (above looking down). Consideration should also be given to the appearance of roof forms from the airside of buildings including ground level and aircraft approaches.
- iv. Building heights and roof forms should be designed so as not to interrupt views of the mountains or break ridge lines as viewed from Highway 82 or Owl Creek Road (see Scenic Guidelines section of the West of Maroon Creek Plan adopted by Pitkin County in October of 2013).



Figure 2.1



Figure 2.2



Figure 2.3

SECTION TWO

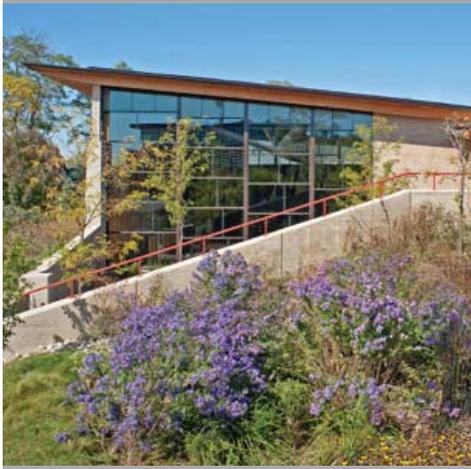


Figure 2.4



Figure 2.5

- v. Subtle use of complimentary roof shapes should be considered to minimize perceived building mass and create visual interest.
- vi. Roofs should accommodate daylighting of the building. (see Figure 2.4)
- vii. Rooftop equipment should be centrally located and screened to avoid being seen from the ground and from above. Equipment and screening design and color should be compatible with the building's other exterior materials.
- viii. Where existing topography will allow integration of the building into the terrain (earth-sheltered) in a manner compatible with the natural character of the existing landscape (natural slope, rolling terrain, etc.) sod roofs and earth sheltering should be considered.
- ix. Utilize "green roofs" where appropriate. (see Figure 2.5)
- x. Roofs and overhangs should be designed to shed snow away from entrances and walkways where possible.

3. Facades

- i. Utilize transitional architectural elements that provide weather protection along pedestrian ways (i.e. overhangs, canopies, porches, etc.) and also provide visual relief and interest at building entries. (see Figure 2.6)
- ii. Emphasize horizontality in the façade through the use of materials, window patterns, and joinery.
- iii. Public entries should be accentuated and easily identifiable.
- iv. Avoid large monolithic wall expanses.
- v. Utilize complimentary combinations of materials, fenestration and building façade articulation to add interest to buildings and create appropriate scale.
- vi. Utilize consistent architectural detailing on contiguous building facades.



Figure 2.6 - Example of Transitional Architectural Elements



SECTION TWO



Figure 2.7



Figure 2.8

4. Fenestration

- i. Use of glazing is encouraged to provide views of the natural surroundings and as a tool to create a strong relationship between exterior and interior spaces.
- ii. Care should be taken to avoid reflection from glazed surfaces, especially on the airfield side of structures.
- iii. All window glazing must incorporate measures to minimize interior light escaping at night (light pollution).
- iv. Operable windows that promote natural ventilation should be considered.
- v. Window areas should create visual interest through pattern, order and rhythm, horizontal elements and shading devices. Inappropriate styles (i.e. residential, historic) should be avoided. (see Figure 2.7)
- vi. Incorporate more extensive glazing on the south side of structures to provide for wintertime solar energy gain. Shading to reduce excessive solar gain during summer months should also be provided.

5. Entrances

- i. Building entrances offer the most obvious opportunity to create a strong relationship between interior and exterior spaces. Public entrances should be designed to create as seamless a transition as possible between the interior and exterior through the use of plants, building materials (especially flooring), exterior overhangs or canopies, visual connections, lighting, programming, and furnishings. Exterior gathering spaces should also be located near public entrances to create a more active and inviting environment.
- ii. Public entrances should be easily identifiable, inviting, weather-protected and designed to human scale.
- iii. Entrances should be designed to stand out against the primary building facade. (see Figure 2.8)

6. Service Areas

- i. Wherever possible locate service areas away from public use areas and where they would negatively impact views of the surrounding mountain landscape.
- ii. Provide screening from public roadways, internal airport roads, and entries, where appropriate.
- iii. Screening elements (landscaping, fences, walls, etc.) should be compatible with the adjacent building and/or other site improvements.

b. Roadway Setbacks

1. Highway 82 - All structures and outside uses are required to be setback 100 feet from the Highway 82 right-of-way line. Outside uses include parking lots, signs and light fixtures.
2. Owl Creek Road – The following setbacks are recommended:
 - i. Structures – 100 feet
 - ii. Outside Uses (including parking lots, signs and light fixtures) – 50 feet
3. Building setbacks should be varied to avoid creating the feel of a continuous wall of structures along either street frontage.

c. Building Height/View Plane Intrusion

1. Low-profile structures, which can be integrated into the surrounding terrain, are strongly preferred. Where taller structures are necessary to serve the intended function(s), such structures should be designed to reduce the perceived height of the building by locating taller building elements near the center and stepping outward and down from the taller masses.
2. Compliance with the scenic guidelines contained in the West of Maroon Creek Plan will also be considered.
3. Building heights must conform to FAA (Part 77) and be approved by the FAA.



Figure 2.9



Figure 2.10

SECTION TWO



Figure 2.11

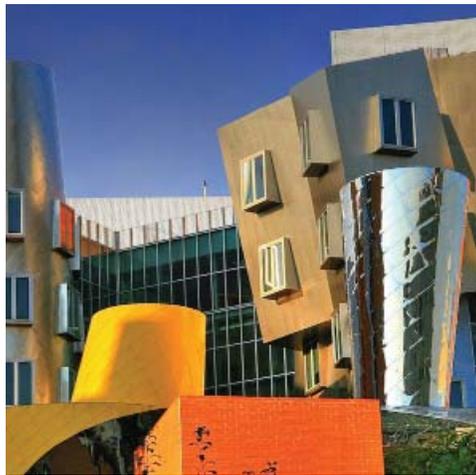


Figure 2.12



Figure 2.13

4. Compliance with provisions of the Pitkin County Building Codes, which address limitations related to height for fire fighting or other life and safety reasons, will be required unless variations are approved by the Pitkin County Community Development Department and the Aspen Fire Protection District.

d. Exterior Materials

1. Visual continuity and use of complimentary exterior materials and colors is desired throughout the Airport. (see Figure 2.11)
2. Materials and treatments which relate to human scale are encouraged. Such materials (e.g.; brick, stone, masonry, precast concrete, glazing and metal panels) should be organized in design modules to create a comfortable scale and emphasize horizontality.
3. Exterior materials on adjacent buildings should be compatible. Subtle use of the same or very similar materials on adjacent buildings to suggest continuity while avoiding repetition or monotony is encouraged.
4. Materials should avoid color fading and minimize the appearance of damaged areas.
5. Textured concrete and dark metal panels may be acceptable if used in appropriate scale, modules, and combinations.
6. Materials should be suitable for site-specific functions and climatic conditions in order to provide durability and low maintenance. Future replacement, repair, color fastness, fade resistance and exposure to freeze-thaw cycles and jet fuel exhaust should be considered.
7. If used, wood should be treated for protection from the sun and climate conditions.
8. Avoid excessive variety of materials or large expanses of light-colored materials on building facades. (see Figure 2.12)
9. Avoid reflective surfaces; glass with reflective or metallic coatings can be an air-traffic safety issue and is not allowed except on building facades that can't be seen from the airside of structures.

Special care should be taken with solar collectors to ensure that they do not create a hazard for aircraft operations.

10. The color of materials should relate to the inherent nature of the materials. In general, natural, earth-toned colors are preferred, with color accents occurring at entries, circulation elements (elevators/stairs), and signage.
11. The colors and patterns of exterior materials should respond to seasonal changes in weather conditions (ie: should blend well in winter or summer). It is preferred that building colors relate to the natural landscape in order to best fit within the site context. Muted (earth tone) colors and textured (natural matte) materials are preferred.

e. Landscape Screening/Integration

1. Architecture should be integrated into the site and landscape so that improvements appear as a seamless composition.
2. New structures and additions to existing structures should take advantage of existing land forms to the extent possible. This can be achieved through bunkering or keeping the heights of the roof or major building elements as close to or below land form heights to the extent possible.
3. New land forms and grading adjacent to the structures should be explored when needed and should complement and extend the lines of existing land forms to the extent possible.
4. Planting should work in tandem with land forms to further connect the structure to the landscape.
5. Planting can also achieve sustainability goals by shading the architecture and minimizing solar heat gain in summer.
6. Planting design should incorporate wildfire mitigation measures as needed. Wildfire breaks, or gaps in the planting, should be considered when planting adjacent to the architecture is desired.

SECTION TWO



Figure 2.14

f. Exterior Lighting

1. Lighting associated with the airside facilities at the Airport (runway/taxiway system, deice pad, aircraft parking areas and other facilities located inside the security fence) is regulated by the Federal Aviation Administration (FAA) for safety. Detailed information related to FAA standards can be found in the FAA Circulars listed below. These circulars are periodically amended and the reference below specifies that the applicable standards are those contained in the version which is most current at the time the project is proposed.
 - i. AC 150/5340-30 (current issue) – Design and Installation for Airport Visual Aids and
 - ii. AC 70/7460-1 (current issue) – Obstruction Marking and Lighting
2. The Airport will continue to shield the rotating beacon located on the commercial passenger terminal building. Should the terminal building be redeveloped as contemplated in the Airport Master Plan the new rotating beacon will be designed to provide shielding similar to or better than the current beacon.
3. All other lighting at the Airport should be designed to achieve a balance between the safety and security needs of airport users and the desire to preserve the night sky. Specific standards for achieving this objective are included in the Scenic Guidelines section of the WOMP and are listed as follows:
 - i. Outdoor fixtures other than those associated with the runway/taxiway system and deice pad shall be installed in a fixed down direction, shall be full cutoff fixtures and 100% shielded. Shielding shall be required to reduce glare so that neither the light source nor its image from the reflective surface shall be directly visible from beyond the property line.
 - ii. The maximum height of a freestanding outdoor light fixture shall be twelve feet (12'). This includes fixtures for parking areas, which shall be spaced so as to achieve an average illumination

no greater than 0.5 foot-candles.

- iii. All new outdoor lighting fixtures shall be energy efficient. Energy efficient lights include all high intensity discharge (HID) lamps (high pressure sodium and low pressure sodium) and any other fixtures of equal or greater efficiency subject to approval by the Community Development Department.
 - iv. Outdoor light fixtures used to illuminate flags shall use a very narrow cone of light for the purpose of confining the light to the object of interest and minimize light trespass and glare.
 - v. Lighting controls that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent functions from a programmable lighting controller, building automation system or lighting energy management system, shall be utilized whenever possible.
 - vi. The following outdoor light fixtures shall be prohibited as specified below. Existing light fixtures legally permitted or authorized prior to adoption hereof may be maintained.
 - Uplighting/backlit canopies
 - Neon tubing or band lighting along building structures as articulation
 - Flashing lights
 - Illumination of entire building or illumination of building facades
 - Floodlighting, up lighting
 - Any light that imitates or causes visual interference with a traffic signal or other necessary safety or emergency light.
 - Walkway and path lighting that exceeds three (3) feet in height (as measured from the light source to existing grade)
4. The design of projects that involve structures or significant outdoor lighting should include participation from a lighting consultant familiar with local lighting standards and regulations.

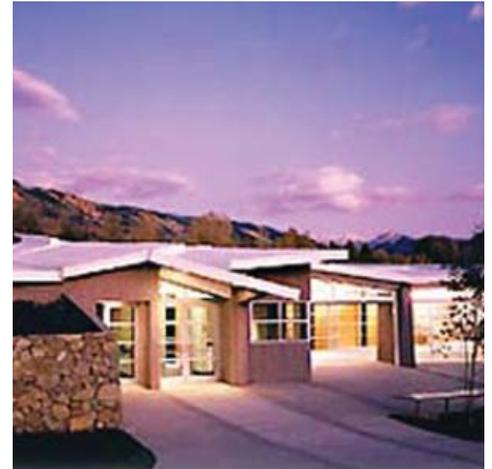


Figure 2.15

SECTION TWO



Figure 2.16

5. Lighting must be down-directed. (see Figure 2.16)
6. Exterior lighting for public buildings and use areas should be limited to pedestrian areas, parking lots and select building elements that should be highlighted such as entries, exits, canopies, circulation elements (stairs, elevators).
7. Exterior lighting on utility and other non-public buildings should be limited to entry areas and should be controlled as described in guideline 2.1(f)(2)(v) above.

g. Regional Expression

1. Aspen's architectural personality is characterized by interesting, diverse, and creative solutions which exhibit strong design and are crafted from high-quality materials. While more utilitarian buildings need not exhibit the same architectural emphasis as those frequented by the public, the intent is for all buildings at the airport to be architecturally compatible and express a common, timeless architectural vocabulary. (see Figures 2.17 and 2.18)
2. Architectural solutions should relate strongly to the natural site and local geographic context. This can be expressed through references to the sub-alpine natural environment and mountain geography, as well as Aspen's unique heritage, which embraces history, culture, and active outdoor lifestyles.
3. Aspen's built environment spans a broad range of architectural styles including Victorian, chalet, rustic, modernist and contemporary. Incorporating some aspects of the modernist style, which is characterized by well-sited, low-slung structures built from indigenous materials, is encouraged. (see Figures 2.20 through 2.28)
4. Historic "themed" responses should be avoided. Architecture which responds to current and future needs, along with "timeless" contextual designs, is preferred to "themed" or "preconceived," form-driven solutions. Similar creative solutions should be used for



Figure 2.17



Figure 2.18

all structures at the Airport, including public, private, utilitarian and service facilities. Contextual design responses which relate to the natural surroundings and environment are preferred.

h. Strong Interior/ Exterior Expression

1. Experiencing the outdoors is a major aspect of the Aspen experience and every effort should be made to diminish real and perceived barriers between indoor and outdoor space.
2. The inclusion of appropriate transition spaces will help establish a strong interior/exterior relationship in public buildings. Adequate weather-protected walkways, waiting spaces, vertical circulation connectors and entries are some of the components that could help diminish the barrier between interior and exterior spaces.
3. Use of similar building materials, signage and lighting on both interior and exterior spaces will also contribute to a sense of connection between exterior and interior spaces.
4. Plantings, such as interior green-walls, should be incorporated within buildings. (see Figure 2.19)
5. Incorporating plantings on buildings such as green walls and roofs is encouraged.
6. Window placements should frame and emphasize views of the adjacent landscaped spaces as well as the distant mountain views to provide a strong visual orientation to the outdoors.
7. Generous use of windows is encouraged to provide natural daylight which enhances the connection to the outdoors and can also conserve energy if properly designed.
8. Efforts should be made to diminish the sense of interior-exterior separation through space programming. Examples of this would include dining areas having large doors which open to exterior seating during summer months, or lobby areas that open onto courtyards or outdoor plazas.



Figure 2.19



Figure 2.20



Figure 2.21



Figure 2.22



Figure 2.23



Figure 2.24



Figure 2.25

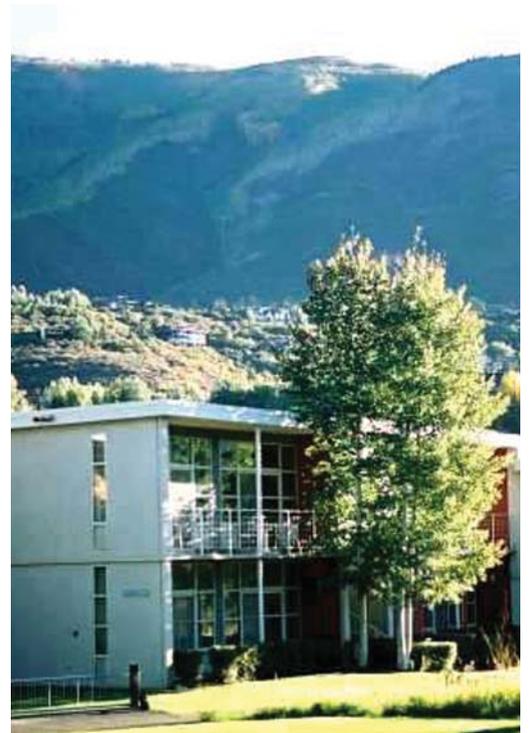


Figure 2.26



Figure 2.27



Figure 2.28

i. Temporary Structures

1. During the phasing of certain construction projects, it may be necessary to utilize temporary structures in order to maintain fully operational facilities (i.e. temporary terminal elements, screening or holdroom areas, protected walk-ways, etc.). Temporary structures shall not remain in place for more than two years. These structures shall comply with the Design Guidelines to the greatest extent practical (color, scale, heights, massing, etc.). However, the temporary nature of these structures (i.e. lower durability materials, utilitarian layout, simplified detailing, site constraints, etc.) is not well suited to accommodating all the requirements that are expected of permanent structures.

DRAFT

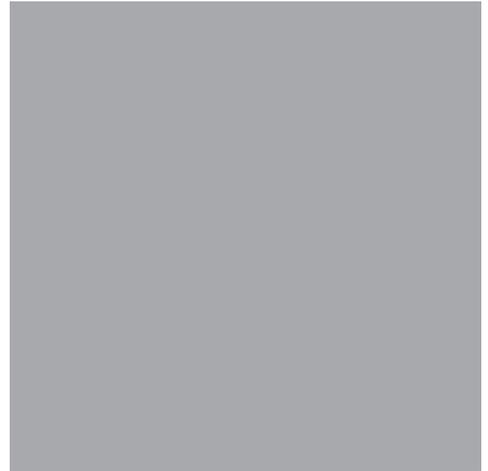
2.2 NEIGHBORHOOD COMPATIBILITY

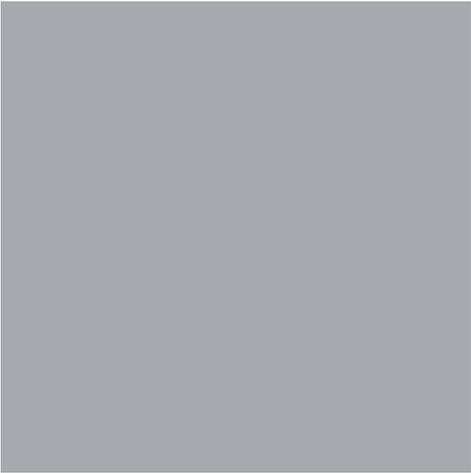
a. Traffic Impacts

1. The Airport has commissioned a study of best practices for mass transit service at other similar airports. One of the objectives of this study is to define specific measures to encourage and prioritize the use of alternative modes of transportation and to diminish reliance upon rental vehicles and increased parking. The Airport intends to pursue implementation of any appropriate findings and recommendations from this study.
2. Future improvements in the passenger terminal area should strengthen and enhance pedestrian access to and from the new transit stations and pedestrian underpass located on Highway 82 as part of an effort to encourage the use of transit and diminish reliance on private automobiles and rental cars.
3. Traffic impacts on Owl Creek Road will be addressed as part of an environmental analysis associated with any related projects requiring federal funding on the west side of the Airport. In addition, any proposals for a fixed base operator on the west side of the Airport should include a traffic analysis that addresses traffic impacts and contains recommendations for measures to mitigate those impacts, including any necessary improvements to Owl Creek Road.

b. Parking Adequacy - See Airport MP for data

1. The Airport Master Plan identifies a potential parking need of approximately 1,300 spaces on the east side, including long-term, short-term, rental ready, rental car storage and general aviation. An additional 60 spaces is identified for the potential future fixed base operator facilities on the west side of the Airport. These numbers should be considered when evaluating future development and redevelopment at the Airport.
2. The process of determining the appropriate quantity of off-street parking for any particular facility should begin with an evaluation





based on anticipated traffic generation rates for similar uses as documented in publications of the Institute of Transportation Engineers and/or parking requirements for similar uses as documented in publications of the National Parking Association.

3. The use of travel demand management (TDM) measures may be required to minimize the need for off-street parking and limit the overall parking spaces at the Airport to an amount similar to that which is identified in item 2.2(b)(1)1 above. Proposed TDM measures will be evaluated on a project-by-project basis.
 4. Shared parking between the passenger terminal, general aviation terminal and other airport facilities is strongly encouraged, particularly on the east side of the Airport, as part of a strategy to reduce the overall parking spaces at the Airport.
- c. Potential Patio Shelter Enclosure:** The Airport Master Plan recommends enclosing the existing patio shelters (open-sided small aircraft hangars located to the north of the air traffic control tower) to provide better weather protection for local based aircraft. The patio shelters are very highly visible from Highway 82 and the design for their enclosure should consider factors such as noise and scenic impacts. To minimize scenic impacts and diminish the potential for deflecting highway noise in a manner that would adversely affect nearby residential areas, the Airport should study the potential of screening all, or a portion of, the Highway 82 side of the patio shelters with a landform, wall, dense vegetation, or some combination of these measures.
- d. Interior Lighting**
1. Interior lighting should be controlled to minimize nighttime light “spill” toward residential and public areas.
 2. The placement of windows on all structures should consider potential impacts from interior lighting on nearby residential

areas and the ability to otherwise screen those windows from the residential areas.

e. Noise

1. Future developments at the Airport should be evaluated to determine whether the project can help reduce the impacts of ground noise on the residential areas to the east of the Airport either through building placement and orientation or related landscaping and retaining walls.
2. When existing structures at the Airport are removed, consideration should be given as to what affect the removal may have on ground noise conditions.
3. Although construction activity is inherently noisy, there are several steps the Airport employs to make construction on the site quieter include the following:
 - i. Construction sites can be established to include temporary barriers/enclosures (i.e. plywood with sound absorbing materials) around noisy construction areas. Noise perimeter zones can be established and outlined in construction layout plans. Certain loud work activity should be scheduled to take place only during certain hours of the day.
 - ii. Specifying the use of quieter equipment. (i.e. Tier IV Diesel motors on heavy equipment, generators with vibration dampeners, noise reducing saw blades, etc.)
 - iii. All equipment should be well maintained to ensure that it runs as quietly as possible. Older equipment should be modified to operate more quietly, if possible.
4. Additional measures can be found in the section discussing noise guidelines related to Site Improvements & Landscape (Section 3.7(a)).



2.3 SUSTAINABILITY

- a. Sustainability Vision - The Aspen-Pitkin County Airport could be a leader in the community in terms of sustainability and the promotion of high-performing buildings with environmentally sensitive materials. At the time these Design Guidelines were being prepared, the Airport was in the process of creating an Evolving Sustainability Program the focus of which will be to promote economic viability, operational efficiency, natural resource conservation and social responsibility. This program is being designed to evolve in response to local needs and available resources and technologies. As part of this work, the Airport has adopted the Sustainable Aviation Guidance Alliance (SAGA) definition of sustainability which reads as follows:

“A holistic approach to managing an Airport so as to ensure the integrity of the Economic Viability, Operational Efficiency, Natural Resources Conservation and Social Responsibility of the Airport.”

When the Airport’s Evolving Sustainability Program has been completed more comprehensive standards and guidelines will be available and will need to be taken into consideration for all future development at the Airport in addition to the recommendations contained in this document. Should there be conflicts between these Design Guidelines and the Airport’s future sustainability program, the standards and recommendations in the sustainability program will take precedence.

All future development at the Airport should incorporate green building practices and technologies to achieve measurable reductions in energy consumption, water use, and solid waste production as well as reduced operating and maintenance costs. The goal of these measures should be to achieve high standards for sustainability as appropriate for the type of structure or facility. The decision as to whether to pursue LEED certification through the U.S.

Green Building Council or other design and construction certifications such as Net-Zero is left up to individual project developers.

There are measures intended to promote sustainability in all aspects of development at the Airport included throughout this document. Those measures have not been repeated here. Rather, the guidelines listed in this section touch on issues or measures that have not been addressed elsewhere in this document. The following guidelines should be viewed as a short list of measures recommended to promote sustainable development at the Airport. Other measures can be proposed in association with individual projects and will be considered during the evaluation of compliance with these Design Guidelines.

Regarding the development of the potential future passenger terminal, the Airport commissioned a study entitled “Sustainable Design/LEED Evaluation Report for the ASE Terminal Plan” which includes more detailed findings and recommendations regarding sustainability. The findings and recommendations in the LEED Evaluation Report will be considered during the planning and design phase of the passenger terminal redevelopment project should that project go forward. Recommendations from the LEED Evaluation Report which were deemed to be generally applicable to development at the Airport have been included among the guidelines in this section.

b. Energy Efficiency

1. Interior lighting systems should incorporate automatic or computer-based controls and should use compact fluorescent or other high-efficiency light source technologies wherever possible.
2. All equipment and appliances should be Energy Star rated.
3. Opportunities for utilizing solar photovoltaic technology should be evaluated for all structures where feasible given the priority for avoiding hazards for pilot navigation associated with reflective surfaces.

SECTION TWO

4. Use of high-performance heating and ventilation systems is strongly encouraged. These systems should be equipped with real-time monitoring and control equipment to ensure peak performance is being achieved on a consistent basis.
5. Lighting and HVAC control systems should be designed to allow control at a local level based on building occupancy and current climatic conditions.
6. Performance of all heating, cooling, and lighting systems should be monitored, recorded and evaluated on a regular basis. Maintenance procedures should include a systems performance evaluation protocol and responsible personnel should receive appropriate training regarding system monitoring, evaluation and performance.

c. Sustainable Sites

1. Buildings should be sited to maximize solar energy exposure where possible given the confines of the existing Airport site and FAA-regulated airfield safety areas.

d. Waste Handling/Recycling

1. Handling and disposal of hazardous waste on Airport property must comply with all applicable state and federal regulations.
2. The approach to the handling of non-hazardous waste should address three basic categories; waste minimization, recycling/composting, and waste collection and disposal. Policies aimed at reducing the amount of waste in the latter category should be developed for each facility at the Airport.
3. Waste minimization measures such as those listed below should be encouraged throughout the Airport:
 - i. Seek alternatives to products sold in non-recyclable packaging (bottled water, packaged foods, etc.)
 - ii. Adopt a cradle-to-grave approach to analyzing products and resources utilized at the Airport.

- iii. Encourage paperless approach for document storage and distribution.
- iv. Recycling is strongly encouraged at all facilities on the Airport and should be incorporated in all aspects of operations and by all Airport tenants.
- v. Adequate space should be preserved in all new structures for the appropriate collection, storage, and loading of recyclable materials.

e. Greenhouse Gas Emissions

As part of the ongoing work to develop the Evolving Sustainability Program, the Airport has already collected background information and completed an airport-wide greenhouse gas emissions inventory. This information will be used to help understand the unique issues and opportunities at the Airport which should be used to make the Evolving Sustainability Program more effective. The Airport should continue to update and refine the greenhouse gas emissions inventory periodically as new development occurs and new equipment and technology is employed.

1. See Section 3.7(b) of these Guidelines for additional information and guidelines related to air quality.

Cradle-to-grave is the practice of considering the full life cycle of a resource, from extraction to disposal. The intent is to favor resources which can be recycled and reused in multiple forms such as trees from which paper is produced that can be recycled into cardboard or cellulose insulation. Resources for which the end product is inert are preferred.

SECTION TWO

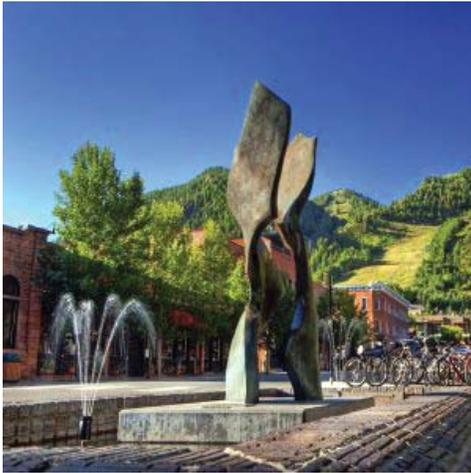


Figure 2.29

2.4 CUSTOMER SERVICE AND EXPERIENCE

a. Ease of Access and Quality of Arrival and Departure Experience

1. Passenger Experience - One of the great benefits of a regional airport is an intimate environment and an efficient passenger experience. The environment should be more inviting than a large hub airport and at a smaller human scale. The services offered should be close at hand, intuitive, and inviting. Overall the experience should be one that promotes familiarity, connection, relationship and comfort all to a high degree.

b. Expression of Local Arts and Culture

1. It is essential to reflect and celebrate the communities' local culture in the design through building materials and the use of local art and expression. (see Figure 2.29)
2. Local artists should be sought out to provide permanent or temporary art installations at key locations on the airport grounds. Art installations may be interactive elements that allow the public to engage with the landscape. The placement of local art installations in public open spaces will serve as centerpiece elements that foster social interaction, interest, and an interpretive learning experience.
3. Local materials and plantings should be used to reflect the surrounding aesthetics of the community. Hardscape and softscape materials should remain true to the surrounding design aesthetic, while simultaneously establishing a unique sense of place at the airport.

c. Other Amenities

1. A variety of interactive and interpretational elements or amenities should be added to the design of public-oriented facilities to enhance user experience. These additional amenities may include pedestrian and bike trails, permanent and nonpermanent concessions, interactive elements that foster play and socialization,

and interpretative signage and installations that highlight the surrounding social and ecological history and culture of the community and the site itself.

2. Interactive and interpretational elements should be programmed to be both permanent installations and ones that are revolving. Partnerships with like-minded organizations, such as the Aspen Historical Society or the Aspen Center for Environmental Studies, can help to determine these programs.
3. Other possible amenities that can be considered in association with the potential development of a new passenger terminal include, but are not limited to, the following:
 - WiFi Hot Spots, Internet Cafes
 - Quality Concessions
 - Business center
 - Child play areas
 - Nature trail/garden
 - Pet relief areas
 - Music/stage area
 - Art/craft/exhibit gallery
 - Observation deck
 - Games; mini golf, foosball, ping-pong, etc.
 - Exhibition, demonstration, workshop area
 - Fun Freebies; flowers, snacks, blank post-cards, toothbrushes, luggage tags, etc.
 - Napping areas

d. Enhance Pedestrian Experience

1. The overall pedestrian experience should be enhanced to encourage walking within the airport property and to and from the airport via neighborhood connections, including the Highway 82 pedestrian underpass.



SECTION TWO



Figure 2.30 - The incorporation of structured public open space will improve overall user experience

2. Understanding pedestrian destinations and purposes for travelers, airport staff and other users will help articulate where convenient and effective pedestrian connections and routes are needed. These can be new connections and routes or missing links.
3. Pedestrian circulation paths should be safe and comfortable to use at all times of the year. They should be easily cleared of snow and ice, appropriately lit, and located in areas that are visible to others. Planting design adjacent to paths should avoid plant materials that screen paths from view.
4. Educational and interpretative elements can be located along paths to create additional interest in the pedestrian experience.
5. Easy to understand wayfinding is critical to integrate within the path system. Signage should be clear, concise, and scaled for the pedestrian.
6. Cycling to and from the airport is encouraged and clearly-marked bicycle lanes should be provided along streets to accommodate safe bicycle travel. Cycling on pedestrian paths should be discouraged.
7. The incorporation of structured or programmed public open space along with pedestrian paths will provide travelers, airport staff and other users with an enhanced airport experience that should accommodate for a diverse range of needs. In these spaces it is critical to provide areas for seating, social interaction, cultural interpretation, and outdoor dining. (see Figure 2.30)
8. Circulation should consist of primary and secondary paths. Primary circulation should be quick and efficient, moving users to and from one destination to the next with ease. Secondary circulation should provide a more intimate and in depth experience. This may include outdoor nature walks through surrounding native ecosystems, interpretative and informative signage that highlights the surrounding culture and ecological structure, or forms of public entertainment such as vendors and concessions.

e. Information Access

1. Multi-modal transit display boards (flight, bus schedules, bike times, walk times, drive times, etc.) should be provided in the passenger terminal, terminal parking structure (if developed), transit station, and GA terminal facilities.
2. Video screens with weather, traffic and news should also be available in the passenger terminal building.
3. Historical markers/plaques and other displays should be located at key gathering places throughout the Airport and in the passenger terminal building. These displays should provide information regarding Aspen's history, culture and local events and should be easily modified for seasonal events and other time-specific information.
4. Interpretive and educational opportunities as described in item 2.4(c) of these guidelines are also recommended.

f. Interior/Exterior Connections

1. Interior and exterior spaces should be cohesive in program, design, and function. A seamless transition between interior and exterior spaces should be created through the use of plants and building materials, visual connections, lighting, programming, and site furnishings. Reiterating this connection by providing visual cues in the design, such as in the placement of plants or variations in pavement material, can be essential for improved way finding and minimize the visual clutter of too many signs. (see Figure 2.31)

g. Functional Relationships and Efficiency

1. Efficiency and a comfortable user experience are the Airport's highest priorities after safety and can be promoted through the logical arrangement of uses and functions as well as through intuitive design. This is true not only for the internal spaces of the terminal building but for the relationship between various of the



Figure 2.31

SECTION TWO

facilities on the Airport. During project programming, emphasis should be placed on clustering dependent facilities as much as possible, creating a close-knit campus feeling.

2. Individual facilities within the airport campus should be connected by clear circulation corridors that allow pedestrians to move efficiently throughout the site. Similarly, clusters of dependent facilities should be connected to outlying less-dependent facilities by vehicular and/or pedestrian corridors.
3. Where possible, service uses should be co-located to serve multiple facilities and should be distinguished from public spaces. This reserves prime spaces for functions which serve the airport user more directly.
4. Function and efficiency can also be established through the use of clear, user-friendly way finding and signage, an economical multimodal transportation network, and connections to surrounding trails and major circulation networks.

h. Relationship to Transit and Hotel Shuttles

1. Transit and hotel shuttles can provide alternatives to automobiles and taxis if they are convenient, affordable and provide frequent service.
2. During the design of the terminal area parking and vehicular circulation facilities, priority should be given to the location of hotel shuttles in relation to the terminal building entries.
3. The entries to the future passenger terminal building should be located as close as possible to the transit stations and underpass on Highway 82 and pedestrian routes between the terminal building and transit station should be as direct as possible and should be given priority over other modes of travel in the design of the terminal area parking and vehicular circulation system.
4. Pedestrian access routes between the passenger terminal entries and the transit stations and hotel shuttle staging area should be clearly understood and easily negotiated.

i. Enhance the Transit User's Experience

1. Protection from the elements should be included in the design. The existing transit stations located adjacent to State Highway 82 are weather protected facilities. Protection along the primary pedestrian access route should also be provided to the extent possible. This can be achieved with covered walkways, buildings and landforms and/or plantings that buffer winds and rain and provide shade. (see Figure 2.32)
2. Real-time information for the arrival of buses should be included within the public buildings. Real time signs are already located at the transit stations. Real-time bus information is also available via smart phones and portable devices.
3. Pedestrian routes to the transit stations should serve other pedestrian circulation purposes to the extent possible and should connect to existing bike trails and pedestrian paths.
4. Transit system map(s) and information should be included within the public buildings in a way that makes choosing to travel by bus convenient and reliable.
5. Guidelines for pedestrian circulation design (see Section 3.4(e) of these guidelines) should be incorporated in the provision of transit access routes, including the opportunity for interpretation and education and the need to make the routes usable and safe.

j. Convenience and Comfort of Parking Facility

1. Parking areas should be located as close as possible to the destination facilities, preferably within two minutes walking time (average walking speed = 240 feet per minute).
2. Parking payment systems and equipment should be convenient, easy to use, and accessible to all.
3. Covered parking, as shown on the Recommended Improvement Plan in the Airport Master Plan, is preferred.



Figure 2.32

SECTION TWO

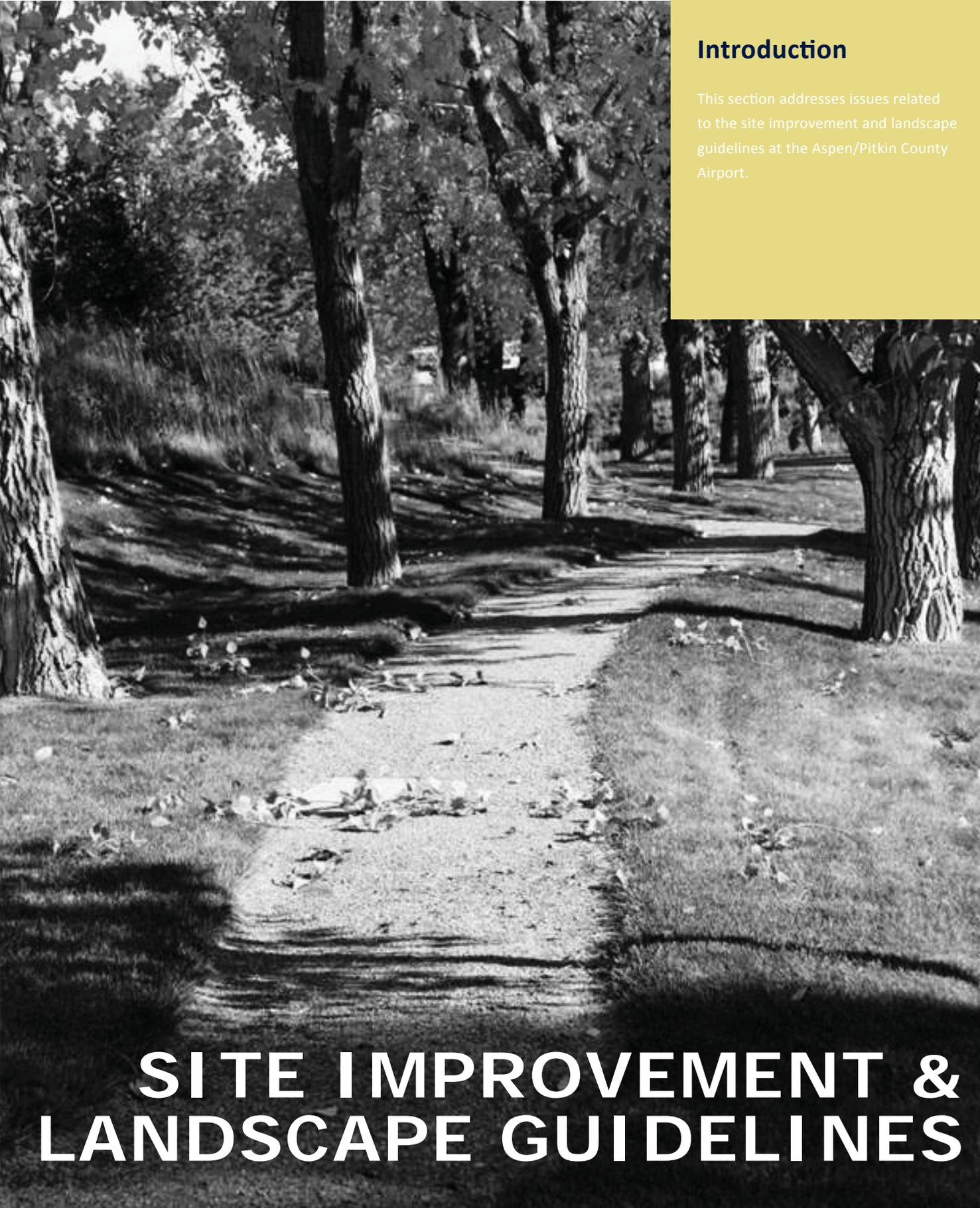
4. For parking structures, day lighting and visual connections to the adjacent and distant landscape should be incorporated into the structure design.
5. Parking structures should incorporate passive cooling and heating systems, if possible, to help moderate temperature fluctuations, improve air quality, and make the parking facility less reliant on mechanical heating and ventilation.
6. Surface parking areas and associated pedestrian walkways should be landscaped and should include public art at appropriate locations to provide natural wayfinding queues and to enhance the pedestrian experience.
7. Covered walkways and outdoor pedestrian areas are desirable near building entries and along main pedestrian circulation routes. (Perhaps only seasonally covered or heated)

DRAFT

SECTION THREE

Introduction

This section addresses issues related to the site improvement and landscape guidelines at the Aspen/Pitkin County Airport.



SITE IMPROVEMENT & LANDSCAPE GUIDELINES

Site Improvement & Landscape Guidelines



The Airport also seeks to break down perceived barriers between indoor and outdoor space through the use of visual connections, materials, lighting, form, color, and space programming.



Section 3-Site Improvement & Landscape Guidelines

The guidelines in this section are intended to ensure that site improvements and landscaping at the Airport reinforce its role as part of the gateway to the City of Aspen, Pitkin County, and the surrounding resort community. These guidelines also further the concepts and intent of the existing Airport Landscape Master Plan with the exception that the Airport plans to move toward a more natural or native landscape appearance in the passenger terminal area and minimize the use of manicured (mowed lawn) landscaping. The Airport also seeks to break down perceived barriers between indoor and outdoor space through the use of visual connections, materials, lighting, form, color, and space programming. These goals will be achieved through a variety of design techniques and themes. One such theme is to intensify and distil the existing native ecosystems so that they are more easily perceived. Another is to expand the experiential opportunities of the site and landscape beyond the visual realm to include scale, sound, culture, movement, and scent. The guidelines in this section encourage the creative use of a broad range of site improvements and landscape elements including form, paving, screening, site furnishings, signage, planting, lighting, water, and art to implement these themes and create an airport campus that is easy to navigate, aesthetically inspiring and functionally efficient.

The site and landscape improvements to which the guidelines in this section apply include roads, surface parking lots, retaining walls, walkways, trails, planting and landscape lighting, landforms, plazas, fencing, informational and wayfinding signs, planters, outdoor seating areas, drainage structures, utilities, weather equipment and facilities, remote camera systems, freestanding communications antennas and equipment, generators, water wells, irrigation systems and all other paved areas including runways, taxiways and aircraft aprons.

3.1. SITE GRADING STANDARDS & LANDFORM USE

a. Airfield Grading

1. Grading within the Safety Areas of the airport is dictated by the FAA. Beyond these areas, developments should be designed and graded to visually 'fit' into existing topography and landscape. Smooth slope transitions are encouraged between development areas.
2. If retaining walls are necessary, they should be as low profile as possible, comprised of compatible materials, and consistent with the guidelines for "earth berms and topography" as described in Section 3.1(c) below. Retaining walls should be formed concrete, stone veneer or another material approved by the Airport. Concrete masonry unit wall construction is not desirable due to unsightly efflorescence problems.
3. GA apron slopes should not exceed 2% maximum slope in any direction.
4. Tie-back slopes shall generally not exceed a ratio of 4:1 horizontal to vertical.

b. Road and Parking Lot Grading

1. Parking areas where ADA access is a concern should not exceed 2% in any direction.
2. Grading should complement the drainage intent of using surface devices for conveyance and quality improvements instead of sub surface systems, to the extent possible.



Figure 3.1



Figure 3.2

SECTION THREE



Figure 3.3 - Use of landforms and native vegetation

c. Earth Berms and Topography

1. Landforms, in combination with vegetation, can be used along State Highway 82 and in other strategically determined locations, such as for noise barriers, for screening purposes as well as to enhance the site and landscape experience, but should not be continuous or give the appearance of a wall or tunnel. The implementation of smaller landforms as a buffer or experiential feature is also encouraged to provide benefits on a smaller scale by creating a micro-environment that support a range of flora and fauna. (see Figure 3.3)
2. Site grading and newly constructed landforms should smoothly transition to existing landforms, where present, to achieve a natural and non-"machined" appearance. Newly-constructed landforms combined with natural landscape undulation should also convey a feeling of movement evident in the surrounding mountain ridge lines. A sense of movement created via landform undulation is encouraged within close proximity to structures or as viewed from within interior spaces.
3. The slope of landforms should vary to create a more natural appearance. The recommended slope variation is between 3:1 and 8:1 horizontal to vertical. Slopes greater than 4:1 require the use erosion control blankets to give the seeding and vegetation time to get established.
4. All finished grades should meet and blend smoothly with existing grades at the limit of the work area. Tops and toes of slopes should have smooth transitions.
5. The construction of the berms should include appropriately specified topsoil seeded with an approved Pitkin County seed mix.
6. Boulders can be used to provide interest to a landform and should be set low in the grade to give the appearance of having been in place for a long time. A general rule of thumb is to bury at least 1/3 of the boulder.

7. Other above grade site features, such as utility poles, boxes and pedestals, should be located at low points within the topography as related to all vantage points. This will screen these features from view. Vegetation or boulders alone should not be used to accomplish screening of these features.
8. Access for subgrade features, such as buried utilities, should be flush with adjacent finished grade.



Figure 3.4

DRAFT

SECTION THREE



Figure 3.5 - The use of local materials and plantings reiterates the surrounding aesthetics of the community

3.2. PLANTING STANDARDS

- a. Multiple vegetation communities exist at the airport—native grass/sage/wildflower meadow, agricultural mowed grassland, riparian stream/wetlands and woodland/shrub. Proposed planting should identify the predominant vegetative characteristics of the above communities, then distill and intensify those characteristics in a way that reinforces the essence of each. One example of distillation and intensification of the native grass/sage/ wildflower meadow community may include selecting a beautiful and prominent native grass and creating a monoculture in a controlled space, such as in plaza planters or parking lot islands.
- b. Planting design should establish a strong and cohesive indoor and outdoor relationship through the use of visual connection, materials, and repetition.
- c. Existing vegetation should be evaluated as to its contribution to the four plant communities and, if found contributing, preserved to the extent possible. Vegetation that is in conflict with the WOMP Design Guidelines, ie: obscuring identified views, should be evaluated for removal on a case by case basis.
- d. Planting design should include only species native to the Roaring Fork Valley and ideally the airport site. Exceptions can be considered for green roofs or other challenging microclimates where a broader palette range of native plants will be necessary for success.
- e. Planting design should provide seasonal interest via color, form or other means. (see Figures 3.5 and 3.6)
- f. Planting should be used to mitigate the heat island effect of paving and other hardscapes including structures.

Figure 3.6 - Planting palette that includes native species while simultaneously providing seasonal interest



SECTION THREE



Figure 3.7 - Use of native plant material to break up the extent of parking areas



Figure 3.8

- g. Planting should be used where feasible to aid in stormwater conveyance and quality management.
- h. Planting design should discourage habitat creation and wildlife attraction.
- i. Planting adjacent to and within parking areas should effectively soften views of parked cars. (see Figure 3.7)
- j. The West of Maroon Creek Plan (WOMP) provides planting Design Guidelines with specific ones for the “Pitkin County Airport Activity Node.” The use of native plant material to break up the extent of parking areas is one guideline from the WOMP that can be applied to all parking area planting. A complete list of “Pitkin County Airport Activity Node” landscape attributes is provided below.
 1. Maintain weed control
 2. Maintain the south and north ends of the runway as unobstructed areas vacant of tall plantings and containing native grasses and shrubs
 3. On the west side of the Pitkin County Airport near the Airport Operations Center (AOC), maintain native plantings that mimic the surrounding Owl Creek corridor landscape vegetation, which could include cottonwoods and aspens behind the development contemplated to the north of the existing AOC structure
 4. Maintain the Owl Creek riparian corridor with native, natural vegetation where consistent with the Aspen-Pitkin Airport Wildlife Hazard Management Plan.

3.3. PARKING LOT STANDARDS

a. Pedestrian Circulation

1. The material, color, texture and width of pavement used for pedestrian circulation should express a clear path hierarchy. Primary pedestrian paths should be significant in width so as to allow comfortable, continuous, and barrier-free movement for all users. (see Figure 3.9)
2. Access to primary pedestrian paths should be clearly visible from buildings and parking facilities.
3. Parking lot primary pedestrian circulation should link to other pedestrian paths within and adjacent to airport property, including those connecting to the RFTA transit stations, the Highway 82 Underpass and the valley trail system.
4. Secondary paths should complement the design of the primary paths but express a lower hierarchy. These paths can be for service use only or can be for connections within each parking area.

b. Irrigation

1. Surface drainage should be used for irrigation purposes where possible. The design of these features should be reminiscent of the existing riparian, stream and wetland systems that occur on the Airport today. However, care should be taken to avoid the creation of standing water, which is a wildlife attractant.
2. Site design improvements should incorporate opportunities for parking lot runoff to be directed towards vegetation to supplement needed irrigation. These can include rain gardens and vegetated swales that are designed to limit the extent and duration of standing water.
3. Permanent irrigation should be provided to newly planted areas where water rights and infrastructure allow.
4. The use of drip or other water-conserving application techniques is strongly encouraged.



Figure 3.9 - Establishing a sense of path hierarchy through the use of materiality, color and path width



Figure 3.10

SECTION THREE



Figure 3.11 - Consistent outdoor lighting enhances safety

5. Irrigation should be designed to include zones that are calibrated for specific plant water requirements. Irrigation management should be employed to reduce water consumption as plants mature.
6. 'Smart Controllers' that measure soil moisture, wind velocity, and other site characteristics should be utilized to conserve water.
7. Using raw water for irrigation is preferred over potable water when feasible. Stormwater runoff from roofs should also be directed to plantings where possible. House Bill 13-1044 signed on 5/5/13, allows the use of grey water systems while preserving health, safety, and welfare of Coloradan's. Grey water use represents one strategy of achieved great efficiency in the use of the state's water resources.
8. Irrigation valve boxes and equipment should be located so they are not visible.

c. Lighting

1. To reinforce the objective of creating a strong indoor-outdoor relationship, fixtures with similar forms and materials should be used especially in transitional spaces (building entries, covered walkways, courtyards, etc.). Placement of fixtures where visual connections between interior and exterior spaces exist will also contribute to this objective. (see Figure 3.11)
2. Lighting proposed for safety purposes should balance intensity provided for safety purposes with impacts on adjacent development and initiatives to preserve dark skies. Adjacent developments include, but are not limited to, the Airport Business Center, North 40, West Buttermilk, and Starwood subdivisions. Also see page 27 for guideline regarding rotating beacon.
3. Proposed lighting design and materials should be consistent with the forms and materials used in buildings and site improvement elements.
4. Designers should consider the experience created by the scale of lighting. For example, lighting viewed from a vehicle will provide a

different experience than path lighting. The scale at which lighting is experienced and its placement for safety purposes are important considerations to evaluate simultaneously.

5. See Section 2.1(f) of these Design Guidelines for additional guidelines.

d. Drainage – (See Section 3.4 of these guidelines)

e. Pavement

1. Use of permeable pavers should be considered for pedestrian areas, parking lots and other areas where airside operations/ FAA regulations do not require capturing and piping runoff. Permeable pavers provide such benefits as reducing runoff volume, improving water quality, and enhancing groundwater recharge. Winter maintenance considerations and ADA requirements should be assessed to determine feasible locations for successful implementation. The Airport will require that all appropriate measures are taken to address non-point source pollutants, such as oil and other fluids from vehicles, in all paved areas, especially where permeable pavement is used. (see Figure 3.12)
2. Color, texture and width of pavement should be used to help define hierarchy for pedestrian circulation paths as well as for strengthening overall airport campus aesthetics. However, overly complex paving patterns and materials should be avoided. (see Figure 3.14)
3. Simple interjections of a secondary material in pavement are a means for communicating locations/junctions where pedestrian and vehicular safety precautions are important.
4. Proposed pavement design should take into consideration strategies for minimizing heat-island affect. For example, pavement systems that support the integration of trees or vegetation should be considered, where appropriate. (see Figure 3.13)



Figure 3.12 - Permeable pavers provide benefits such as reducing runoff volume, improving water quality, and enhancing groundwater recharge



Figure 3.13

SECTION THREE

Figure 3.14 - Color, texture and width of pavement should be used to help define hierarchy for pedestrian circulation paths



5. Paved areas should be minimized through shared parking and other measures to reduce the heat-island affect and to avoid excessive stormwater runoff.
6. Planting should be utilized on the interior of parking areas to break up large paved areas. (see Figure 3.15)
7. Traffic calming measures should be incorporated in parking areas and internal roads to improve pedestrian safety and reduce the potential for vehicle accidents.
8. The pavement design for vehicles shall meet AASHTO (American Association of State Highway and Transportation Officials) standards for the anticipated vehicle types that will be using the pavement.
9. Pavement design for aircraft shall meet the FAA pavement design requirements outlined in Advisory Circular 150/5320-6E Airport Pavement Design and Evaluation as amended.
10. Pavement on the airside must be maintained in good condition to avoid FOD (Foreign Object Debris). Cracking and deteriorating pavement can result in FOD, a serious hazard on an airport. FOD has the potential to damage aircraft during critical phases of flight, which can lead to catastrophic loss of life and aircraft, and at the very least increased maintenance and operating costs.

f. ADA Requirements/Universal Design

1. Parking facilitates should be designed such that the primary path of circulation is barrier free and accessible to all users.
2. Refer to the Code of Federal Regulations for the Americans with Disabilities Act (ADA) Standards for Accessible Design.



Figure 3.15 - Planting adjacent to and within parking areas effectively softens views of cars

SECTION THREE



Figure 3.16 - Treatment of stormwater and runoff through the use of appropriately placed swales and rain gardens

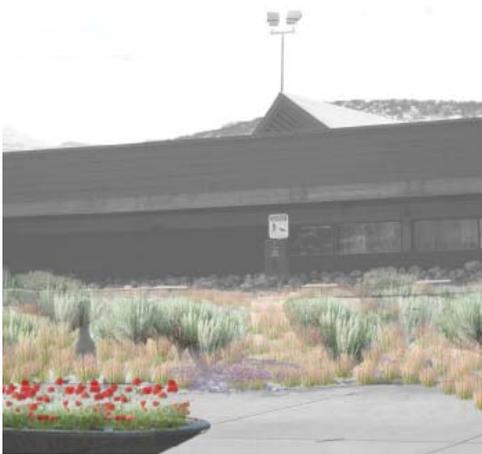


Figure 3.17

3.4. DRAINAGE AND STORMWATER RUNOFF

- a. Proposed improvements should incorporate surface drainage systems that allow for the treatment of stormwater runoff in appropriate locations. Suitable locations include landside facilities such as the passenger terminal, ground access and circulation, automobile parking, and support facilities. Surface drainage systems include bioswales, rain gardens, vegetated swales, permeable pavement, sand and organic filters, infiltration trenches and soil amendments to support infiltration. (see Figure 3.16)
- b. Non-point source pollutants such as oil, grease, and heavy metals are a few contaminants that are of concern near roads, parking lots and other non-airside facilities. Rather than directing all runoff to piped systems in these areas, sustainable drainage systems such as capturing surface runoff and treating via phytoremediation, should be integrated into parking lot design. Drainage systems include bioswales, rain gardens, vegetated swales, permeable pavement, sand and organic filters, infiltration trenches and soil amendments to support infiltration. The extent and duration of standing water must be limited so as not to attract wildlife.
- c. Drainage systems should be designed to serve as site amenities and unifying design elements in addition to their practical purpose.
- d. The potential aesthetic value of proposed drain inlets should be considered as they relate to nearby architecture and site improvements. Inlets located in pedestrian spaces should be smaller than those used in roads or in airside facilities.

3.5. VISUAL IMPACTS

a. View Planes

1. Proposed site improvements should take into account views as experienced at multiple locations including the view planes identified within the WOMP.
2. As indicated in the West of Maroon Creek Plan (WOMP) “landscaping on the Pitkin County Airport should be designed so as not to obstruct views of Mt. Daly and/or the Buttermilk Ski Area Mountain as viewed from Highway 82.”
3. Site improvements on the west side of the Airport should be designed in accordance with the scenic guidelines contained in the WOMP including screening to minimize impacts as viewed from Owl Creek Road, the Owl Creek Pedestrian Trail and Starwood.
4. Where desired and appropriate, screening of paved areas and other low-profile site improvements should be achieved through the use of landforms and native plantings utilizing the least possible grading and vegetation, and maintaining views to distant ridge lines as described in the WOMP.

b. Roadway Setbacks

1. See Section 2.1(f) of these Design Guidelines

c. Revegetation and Irrigation

1. Revegetation design should utilize plants that are consistent with one or more of the four existing native plant communities as appropriate given the existing vegetation in the area where revegetation is needed.
2. Because of wildlife hazard mitigation requirements, elements in each plant community that attract wildlife should be removed when revegetation occurs.
3. Revegetation design occurring on a large scale should take into consideration the opportunity to express design elements such



Figure 3.18 - Revegetation through the use of the four existing native plant communities



Figure 3.19 - Movement conveyed through the plant palette and design

SECTION THREE



Figure 3.20



Figure 3.21

as movement via plant selection and placement. For example, revegetation using native seed on the northwest side of a berm, will catch the wind and provide the physical qualities of movement.

4. Revegetation practices should include the practice of stripping and stockpiling existing topsoil at the start of the construction process. Stockpiled topsoil should be used for soil preparation prior to planting. Use of appropriately specified topsoil is required for optimal vegetation establishment.
5. Transplanting existing vegetation identified for removal should be incorporated into revegetation plans and specifications to the extent practical. Mature trees identified for removal are to be protected for revegetation purposes when feasible.
6. Erosion Control and Revegetation methods:
 - i. During construction, Best Management Practices, including silt fences, sediment and erosion control logs, and erosion control blankets on steep slopes, should be utilized to minimize erosion caused by storm water run-off. (see Figure 3.20)
 - ii. Following construction, disturbed ground should be dressed with a minimum use of appropriately specified topsoil prior to seeding with hydromulch. Topsoil depth depends on the specific seed mix.
 - iii. To ensure revegetation establishment contractors should be required to supply a 2-year maintenance bond for twice the value of the seeding work. During this time, the contractor would be responsible to maintain, water, and seed as needed in order to establish growth. At the end of 2 year period, if the vegetation is not acceptable, the airport can exercise the bond or extend the duration of it.
 - iv. Seeding should be performed only when the ground surface is not frozen and should be avoided during the summer period between June 15 and September 1 for conditions most conducive to germination and early growth. Seeding time

depends upon the specific seed mix.

- v. Specified seed mixtures may be drilled or sown at the rate specified. All seeds sown by broadcast-type seeders should be “raked-in” or otherwise covered with soil to a depth of at least ¼-inch.
- vi. Boundaries between different seed mixes should be blended to create a transitional area. The contractor shall water, mow, weed, and otherwise maintain the area until the seeded areas are considered established.

d. Treatment of cut slopes

1. Cut and Fill slopes should be artfully designed so that they fit into the surrounding landscape and have the appearance of being natural rather than machined. (see Figure 3.22)
2. Cut and Fill slopes should not exceed a 4:1 slope (horizontal to vertical), in order to avoid erosion and promote successful revegetation.
3. For further guidance related to grading, refer to Section 3.1 of these Design Guidelines.



Figure 3.22

SECTION THREE



Figure 3.23 - Surface water quality system

3.6. ENVIRONMENTAL FACTORS

a. Weed Management

1. Compliance with the Pitkin County Weed Management Plan should be required throughout the Airport property.
2. Prior to completion, a new project should provide a weed management plan specific to the proposed improvements shall be provided. The proposed weed management plan should identify weed species for removal and key strategies for weed prevention, minimization and removal methods in specified locations. Practices outlined in the weed management plan shall not be detrimental to people, the environment or the existing native ecosystem.
3. Key areas requiring weed control are landscape zones within close proximity to the airport terminal and ecologically sensitive areas, such as the Owl Creek riparian habitat preservation zone.

b. Surface Water Quality

1. Surface water quality standards are regulated by the State of Colorado Department of Public Health and Environment, Water Quality Control Commission. Stormwater management and surface drainage design at the Airport must comply with the requirements contained in FAA Advisory Circular 150/5320-5D as amended from time to time.
2. Aspen-Pitkin County Airport operates under a heavy industrial activity permit issued through the Colorado Discharge Permit System (CDPS). As part of this permit, the airport maintains a Stormwater Management Plan (SWMP), which identifies Best Management Practices (BMPs) to address impacts on water quality associated with airport operations. The SWMP is on file at the Airport Administration Office.
3. The airport currently has a Spill Prevention Control and Countermeasures (SPCC) plan in place that meets all applicable state and federal regulations regarding the use of fuels and

industrial chemicals on the airport. All fuel tanks and storage pallets must have the appropriate secondary containment and monitoring systems, as well as a plan to address and report spills to minimize the impact to the environment in the event of an accident.

4. Pursuant to EPA rules (40 CFR 449), the Airport is required to use non-urea-containing deicers, or alternatively, meet a numeric effluent limitation for ammonia. The airport is also required to monitor deicing activities to ensure the BMPs are addressing potential impacts. Sampling is required on an annual basis and must occur within 72 hours of a storm event with greater than 0.1 inch of rainfall. Runoff can be from rain storms or melting snow.
5. The design and grading for paved areas should consider the potential impacts of stormwater runoff on nearby surface water including Owl Creek and its associated riparian area.
6. Solutions for surface water management should include bioswales, bioremediation and vegetation for phytoremediation. Native vegetation should be utilized as part of the above surface water management systems. (see Figures 3.24 and 3.25)
7. Permeable pavement is recommended where feasible.
8. Using potential locations existing in the local native ecosystem to treat surface water quality is a recommended strategy. For example, the designed landscape buffers on both sides of the Owl Creek corridor can aid in clearing pollution from the surface water without compromising the quality of Owl Creek.
9. The Airport Master Plan specifies a 100-foot buffer area on either side of Owl Creek to reduce potential runoff impacts to Owl Creek and the connected Roaring Fork River.
10. The Airport shall pursue other measures to mitigate impacts to surface water quality as may be made possible through new technologies and changes to best practices.



Figure 3.24 - Phytoremediation using native plants can treat stormwater and provide educational opportunities



Figure 3.25 - Bioswale

c. Riparian Habitat Preservation

1. Protection of Owl Creek and the associated riparian corridor was addressed by the Pitkin County BOCC in the resolution of approval for the 2012 Airport Master Plan Update (see pages 6-2 through 6-5 of the Airport Master Plan). The following language has been taken from the Airport Master Plan and reformatted for the Design Guidelines. The sponsor is committed to ensuring that future development on the west side of the Airport respects the highest possible standard for protection of Owl Creek and the associated riparian corridor ***while working within FAA safety guidelines and requirements, including those related to on-airport wildlife attractants***. This objective will be achieved through a multi-tiered approach. The first tier involves a thorough analysis of the corridor and potential impacts through the environmental review process that would be required in association with any west-side projects that require federal funding. The second tier would be to ensure compliance with the setback requirements described in items “i” and “ii” below in association with the design and development of any facilities on the west side. The third tier would involve the use of best management practices during the construction and operation of any west-side facilities.
 - i. All development on the west side of the Airport shall be setback a minimum of 100 feet from the centerline of Owl Creek. Additional setback may be required as determined through evaluation of an analysis as described in item “ii” as follows.
 - ii. Any proposal for development on the west side of the Airport shall be accompanied by a riparian habitat analysis, prepared by a qualified wildlife biologist, which provides a summary of the extent and condition of the riparian area in the vicinity of the project, and which addresses the following criteria for consideration of an increase to the minimum 100-foot setback:

- Slopes adjacent to the protected feature equal or exceed thirty (30) percent.
 - Highly erodible soils or unstable stream bank conditions are present.
 - The proposed use of the property presents a significant special hazard to water quality or wetlands (e.g., storage or handling of hazardous or toxic materials).
 - The 100-year or intermediate regional flood zone exceeds the minimum 100-foot setback requirement.
 - Additional area is needed to protect existing trees, shrubs, or other natural features that provide for stream bank stability, habitat enhancement for aquatic environments, and riparian area protection.
 - Habitat for plant, animal, or other wildlife species listed as threatened or endangered by the United States Fish and Wildlife Service exists.
 - Habitat for plant, animal, or other wildlife species listed by the State of Colorado as rare, threatened, or endangered, or species of special concern.
 - Additional area is needed to prevent or minimize flood damage by preserving storm and flood water storage capacity.
 - Additional area is needed to protect fish spawning, breeding, nursery, and feeding grounds.
2. The riparian habitat associated with the Owl Creek corridor is identified as the single largest wildlife attractant at the Airport. However, the Owl Creek riparian corridor also contributes significantly to the Airport's scenic character and helps screen structures and other Airport facilities from Highway 82. Every effort should be made to determine whether there are solutions that could achieve the dual objectives of preserving riparian habitat and ensuring the safety of aircraft operations for the foreseeable future.



Figure 3.26

SECTION THREE



Figure 3.27 - Vegetation which attracts wildlife is not permissible



Figure 3.28 - Maintained wildlife fencing on Airport property

d. Wildlife Management

1. The Airport has an FAA-approved Wildlife Hazard Management Plan (WHMP) which identifies wildlife hazards (wildlife species with the potential for conflicts with aircraft operations) and recommends management strategies to address safety concerns, including the modification of wildlife habitat for known wildlife hazard species. In accordance with the WHMP the Airport has appointed a Wildlife Coordinator who is responsible for overseeing wildlife hazard management efforts. The Wildlife Coordinator will be the Airport's principal liaison for developers considering projects at the Airport and will be responsible for addressing issues and questions related to wildlife management and interpreting the recommendations of the WMHP.
2. Vegetation known to be wildlife attractants, especially fruit bearing trees and shrubs, should not be used at the Airport. Existing fruit-bearing trees and shrubs that are not native should be removed. Existing native fruit-bearing trees and shrubs should be considered for removal on a case-by-case basis.
3. Remove standing dead and severely declining trees to eliminate perching and nesting opportunities.
4. Site trash and recycling containers should be bear-proof in their design. Container contents should be removed nightly to further discourage wildlife. Large dumpsters and other centrally located containers should be provided within a structure.
5. Maintain and/or continue the wildlife fencing that exists on the Airport property in all areas except those requiring public access. Close any gaps that may exist and ensure that the fence is in good repair. This fencing is effective in keeping large and smaller, non-burrowing animals from the property. (see Figure 3.28)
6. Ensure that new fencing does not inadvertently trap animals or otherwise put them in harm's way especially adjacent to roadways.

AACP Quote – “Historic preservation connects us to our heritage, enabling us to learn from and appreciate the stories and context of our past. Preserving our historic resources differentiates us as a community and contributes to our long-term cultural awareness and sustainability as a community.

7. Where feasible, the fencing should be screened from view.
8. Incorporate below-grade fencing along fence line to discourage burrowing animals from entering the property.
9. Incorporate small-opening mesh on the fence’s lower half to prevent small mammals from passing through onto the property.

e. Wetland Impact

1. An on-site survey conducted by the jurisdictional Corps of Engineers identified several wetlands on the Airport. Although wetlands are an important ecosystem, they, along with the Owl Creek riparian corridor, represent a significant hazard to the safe operation of aircraft at the Airport as described in the Aspen/Pitkin County Airport Wildlife WHMP. The WHMP includes recommendations for monitoring wildlife activity associated with the existing wetlands and executing appropriate mitigation measures to reduce wildlife conflicts with aircraft. These measures may include converting some of the existing wetlands to an upland condition.
2. Impacts to jurisdictional wetlands require a Clean Water Act 404 Permit from the U. S Army Corps of Engineers and compliance with any required mitigation.
3. Any future capital project potentially affecting areas delineated as wetlands would require detailed examination and, if necessary, approval of the jurisdictional Corps of Engineers.

f. Historic Resources

1. The Airport Ranch is the only historic site located on the airport property. Drawing the Airport Ranch landscape vernacular into the greater airport landscape as well as into smaller pedestrian spaces will create a stronger connection to the land and the airport’s conception.
2. Coordination with the State Historic Preservation Officer and the Pitkin County Historic Preservation Officer is required prior to any construction actions near the Airport Ranch.

SECTION THREE

3. Should any construction activity at the Airport expose buried archaeological material, work should be stopped in that area and the FAA and the Colorado Historical Society should be contacted.

DRAFT

3.7. NEIGHBORHOOD COMPATIBILITY

a. Noise

1. Although airport noise cannot be entirely mitigated, there are design strategies and solutions that can be used to reduce ground noise in and around the airport. It is critical that these strategies take into consideration neighboring residential communities and other noise-sensitive uses.
2. Many of the guidelines for structures and land forms in this document can help mitigate the impacts of ground noise from the airport. Site elements with significant mass such as densely planted landforms or solid landscape retaining walls can help to mitigate ground noise if they are carefully placed relative to the noise source and the noise-impacted area(s). (see Figure 3.29)
3. Thorough site analysis should be conducted to determine appropriate placement and size of site features to successfully mitigate ground noise. Factors to take into consideration include distance from the noise source, aesthetic quality, and scenic vistas that should be maintained.
4. The Airport Master Plan includes a recommendation that a landscaped buffer be constructed between the existing GA ramp and the residential area to the east side of Highway 82.
5. Airport operators have limited authority to restrict aircraft operations to reduce flight noise, but can influence noise exposure by promoting voluntary noise abatement measures and encouraging compatible land uses. The Airport has a voluntary noise initiative known as “Fly Green/Fly Clean.” The purpose of the program is to encourage aircraft owners to operate as quietly as possible at the Airport. The program is intended to grow and change as new noise abatement procedures and technologies for aircraft and airspace management become available. The Airport is committed to maintaining the Fly Green/Fly Clean program.



Figure 3.29 - The use of berms will significantly mitigate airport noise

SECTION THREE



Figure 3.30 - On site bike share facilities that encourage and support sustainable modes of transportation

6. Other noise abatement measures in effect at the Airport include:
 - i. The airport is closed between the hours of 11:00 p.m. to 7:00 a.m. as required pursuant to Ordinance No. 94-27 of the Pitkin County Board of County Commissioners.
 - ii. The use of electrical ground power units, instead of internal combustion engine powered units to serve aircraft on the apron.

b. Air Quality

1. Design solutions should encourage the use of sustainable modes of transportation such as transit, electric cars, and bikes through the thoughtful incorporation of on-site bus stations, electric charging stations, and bike share facilities.
2. Connections to surrounding trail infrastructure should be enhanced. This sustainable transportation approach will help to minimize pollution and runoff into surrounding sensitive riparian areas while simultaneously reducing toxic emissions.
3. If appropriate based on their use, new buildings, and major renovations of existing buildings, should incorporate measures to reduce energy consumption and other green building technologies as necessary to achieve LEED gold certification or equivalent at a minimum.
4. The Airport should continue to pursue the use of electrical ground power to units serve aircraft on the apron and to explore emerging technologies for reducing impacts to air quality associated with airport activities. (see Figure 3.31)

c. Exterior Lighting - see Section 2.1(f) of these Guidelines



Figure 3.31 - Electrical ground power unit

3.8. CUSTOMER SERVICE AND EXPERIENCE

a. Informational and Waypoint Signage

1. New informational and wayfinding signs should be designed in accordance with the Aspen/Pitkin County Airport Design Intent & Specifications for Exterior Signage document. (see example in Figure 3.33)
2. The airport's identity sign located at the entrance from State Highway 82 should set the design character for site signage at the airport. Its materials of weathering steel and textured angular stone and its form and placement within the site are readily identified with the airport. (see Figure 3.32)
3. The Airport should seek additional directional signage along Highway 82 to make it easier for visitors to find and safely access the Airport grounds.
4. On-airport signage should be kept to a minimum by incorporating wayfinding devices into the site and landscape design. When considering wayfinding needs, integrated design solutions such as paving choices, planting design, and land forms should be considered first.
5. Signage should be scaled to the user, eg: small signs work best for pedestrians who will experience the sign from a close up, while larger signs are needed for vehicle occupants who will view them from further away.
6. Lighting should be incorporated into the design of some or all of the signage to ensure it is usable both day and night. This could include signs with integrated lighting or lighting designed for the sign's setting. All lighting must comply with Pitkin County lighting code requirements.

b. Pedestrian Convenience and Quality of Experience

1. Incorporating public open space and gathering areas throughout the site will promote social interaction and improve visitor experience.



Figure 3.32

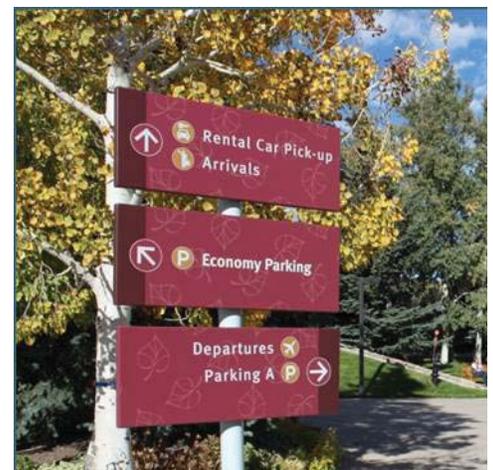


Figure 3.33

SECTION THREE



Figure 3.34 - Site furnishings that reflect the program of a space and facilitate social interaction and engagement

2. It is essential to establish a cohesive connection between indoor and outdoor programs and spaces, relating the architecture to the landscape.
3. The culture and character of Pitkin County as well as the airport itself should be reflected in design elements through the use of materiality, plantings, and public art and sculptures. Infusing a sense of the community into the design will create a strong sense of place and identity for the airport.

c. Site Furniture

1. Site furniture shall reflect the program of particular spaces. In the public open spaces site furniture shall encourage and promote social interaction and engagement. Site features should reflect community character through the use of materiality and design aesthetic. Design features, such as paving, plantings, and forms, shall also convey a sense of movement to relate to the airports primary program of travel and efficiency.

SECTION FOUR

Introduction

This section addresses issues related to the construction management and processes at the Aspen/Pitkin County Airport.



CONSTRUCTION MANAGEMENT

Construction Management

The Plan is intended to act as a guide to help construction projects of all size levels achieve a greater degree of environmental, social, and financial sustainability.

Section 4-Construction Management

4.1. CONSTRUCTION MANAGEMENT

The Airport has a history of aggressive construction management due to the inherent nature of many airport improvement projects which often involve substantial earthmoving, grading and vegetation removal. In October of 2011 the Airport completed a comprehensive construction management plan which is grounded in the principles of sustainability. The Sustainable Construction Management Plan, as the document is titled, is structured around the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) green building rating systems. The Sustainable Construction Management Plan is applicable to use on both airfield (inside the security fence) and landside (outside the security fence) construction projects. The Plan is intended to act as a guide to help construction projects of all size levels achieve a greater degree of environmental, social, and financial sustainability. The Plan addresses construction impacts in the following categories:

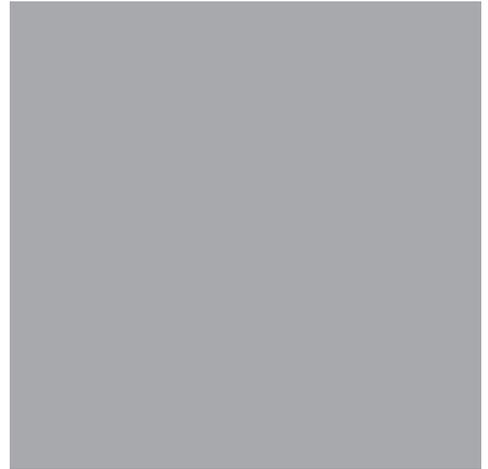
- Air Quality
- Water Resources
- Energy Efficiency
- Noise Pollution
- Aesthetics and Light Pollution
- Materials and Resources
- Surface Transportation Traffic

The Sustainable Construction Management Plan identifies the Airport's construction-related sustainability goals and defines measures and practices to achieve those goals. The measures are divided into four groups; Existing Practice, Expected Practice, Constrained Practice, and Policy/Locationally Strained Practice. For purposes of considering compliance with these Design Guidelines, improvement projects will be expected to comply with all measures in the "Existing Practice" group. In addition, every effort

should be made to comply with the measures in the “Expected Practice” group of the Sustainable Construction Management Plan.

The Sustainable Construction Management Plan will be updated periodically to reflect changes in technology and best practices. Developers and project managers must inquire with the Airport Administration office as to the most current version of the Plan.

Where construction projects include landforms that would help mitigate noise for adjacent residential areas, these landforms should be installed as early as possible in the construction schedule.

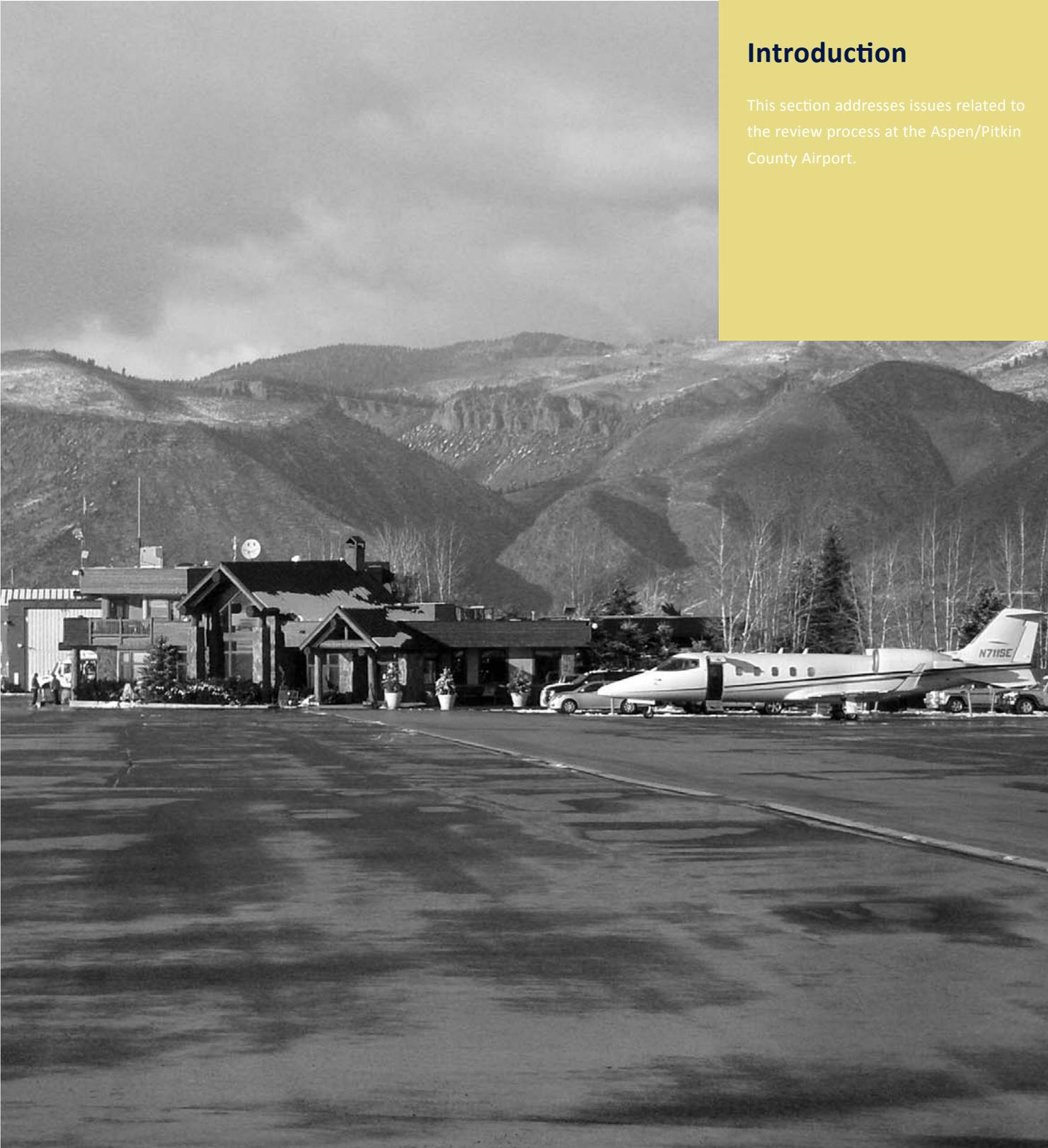


DRAFT

SECTION FIVE

Introduction

This section addresses issues related to the review process at the Aspen/Pitkin County Airport.



REVIEW PROCESS

Review Process



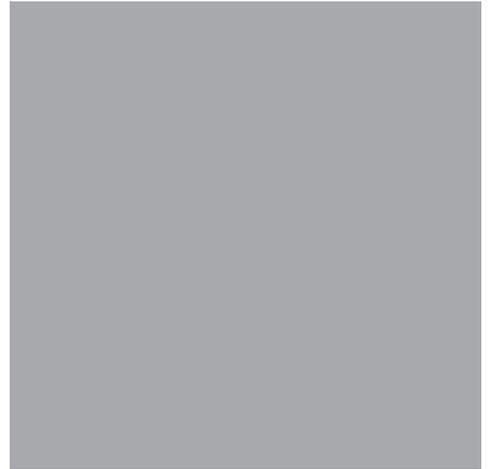
The process of reviewing projects for compliance with these guidelines will be tailored based on project type.

Section 5-Review Process

5.1. REVIEW PROCESS

- a. Determination of status and definition of applicable standards.
 1. Minor – L & E Exempt Airport Improvements
 - i. Pavement maintenance
 - ii. Tree planting and removal – replacement of dead or dying trees only
 - iii. Exterior finishes – siding, roofing, painting, staining of existing structures
 - iv. Lighting upgrades – Airside lighting including runway, taxiway, de-ice pad, approach lighting, apron lighting, safety beacons, (same lighting identified as exempt in the airport section of the WOMP Scenic Guidelines)
 - v. Interior remodel that don't constitute a change in use
 - vi. Signs – new and replacement signs which are consistent with the Airport's adopted sign standards (2006 Aspen/Pitkin County Airport Design Intent & Specifications for Exterior Signage)
 - vii. Window replacement and upgrades on existing buildings
 - viii. Electric vehicle charging stations
 - ix. Flags
 - x. Navigational Aids including localizer antenna and similar facilities
 - xi. Drainage improvements and maintenance that do not significantly alter the look of the existing terrain. Examples include drainage ditch improvements and maintenance, installation of small-scale culverts, adding rip-rap and other erosion control measures to existing drainage ways, etc.
 - xii. Any others as determined by the planning department as appropriate

- 2. Major – All projects not listed above
- 3. Commercial Passenger Terminal Area Redevelopment
- b. Design Review Committee
 - 1. Composition and responsibilities
 - i. Minor – Administrative Review Committee
 - Composition
 - » Assistant Aviation Director of Operations and Facilities
 - » Airport Facilities Manager
 - » Airport Security Director
 - » Airport on-call engineer (non-voting, resource only)
 - ii. Major – Airport Design Review Committee (ADRC)
 - Composition
 - » Assistant Aviation Director of Operations and Facilities
 - » Airport Facilities Manager
 - » Pitkin County Planning Commission Member – Airport liaison during their appointed term (Selected by P&Z – Airport preference for P&Z member who has participated on Airport Master Plan or other airport planning projects)
 - » Two Community Members (selected by Airport Director – preference for persons who have served on task force for Airport Master Plans or other airport planning projects)
 - » Airport on-call engineer (non-voting, resource only)
 - iii. Commercial Passenger Terminal Area Redevelopment
 - Composition
 - » Selected by Pitkin County Board of County Commissioners (up to 7 members)
 - One P & Z member
 - Two Airport Tenants
 - Two Community Members (Selected by the BOCC)
 - Up to Two at large
 - » Airport on-call engineer (non-voting, resource only)



SECTION FIVE

c. Process - All Projects

1. Predevelopment information packet obtained from Airport Administration
 - i. Airport Master Plan, including current Airport Layout Plan
 - ii. Airport Design Guidelines
 - iii. Airport Landscape Master Plan
 - iv. Other Documentation as appropriate (i.e. WHMA, Signage Plan, etc.)
2. Pre-submittal meeting (w/ representative of Airport Administration)
 - i. Review preliminary project concept
 - ii. Define project category (major, minor, terminal) and review process
 - iii. Interpret Design Guidelines & Master Plan, if necessary
 - iv. Provide guidance regarding airport goals and project compatibility
 - v. Fees and other costs
 - vi. Define checklist of items for submittal

d. Process – Minor Projects

1. Application Submission
 - i. Submission requirements – Specific to minor projects – see minor projects list
 - ii. Submit to Airport Director
 - iii. Schedule Review Meeting - Administrative Review Committee
2. Compliance Review Meeting – Administrative Review Committee
 - i. Meeting protocol – quorum, applicant presentation, etc.
 - ii. Discussion and findings
 - iii. Vote (Majority)
 - iv. Record Keeping
3. Letter of Decision
 - i. If approval – findings regarding compliance, and referral to Community Development Department.
 - ii. If denial – Provide summary of options, i.e. appeal to Airport

Director or resubmit revised application

- 15 days to submit notice of appeal or intent to resubmit
- 60 days application deemed closed, or request extension

iii. Submit building permit application to Pitkin County Community Development Department, if necessary

e. Process - Major Projects:

1. Application Submission

- i. Submission requirements – More substantive and include material necessary to address all design criteria, including architectural guidelines, if appropriate
- ii. Submit to Airport Director
- iii. Schedule Review Meeting – Airport Design Review Committee (ADRC)

2. Compliance Review Meeting – ADRC

- i. Meeting protocol –quorum, applicant presentation, etc.
- ii. Discussion and findings
- iii. Vote (Majority)
- iv. Record Keeping

3. Letter of Decision

- i. If approval – findings regarding compliance, and direction to submit application to Pitkin County Com Dev Dept for L&E Review
- ii. If denial – Provide summary of options, i.e. appeal to Airport Director or resubmit revised application
 - 15 days to submit notice of appeal or intent to resubmit
 - 120 days application deemed closed, or request extension

4. Pitkin County L&E review

- i. Pre-application meeting with Community Development Department
- ii. Application preparation and submission
- iii. Completeness review and referral to review agencies
- iv. Schedule public hearing w/P&Z

SECTION FIVE

- v. Public hearing w/P&Z
 - vi. Notice of P&Z decision
 - vii. If denial – option to appeal through process specified in State Statutes
5. Submit revised plans to airport for ADRC review (if changes required through L&E process)
 6. Final ADRC review of revised plans, if necessary
 7. Submit building permit application to Pitkin County Community Development Department, if necessary
- f. Airport Review Appeal – All Projects
1. Appeal in writing to Director of Aviation within 15 days of determination
 2. Director of Aviation may seek input from BOCC regarding appeal request
 3. Letter of decision regarding appeal with rationale for decision provided to applicant
 4. If denial upheld, advise applicant of terms to resubmit revised plans
 5. If denial reversed, advise applicant regarding next steps
 - i. Submission of L&E application, building permit application (if necessary) for major projects
 - ii. Submission of building permit application (if necessary) for minor projects
- g. Process – Commercial Passenger Terminal Area Redevelopment
1. Design process defined by BOCC with input from Airport Administration
 2. Items c (i) and (ii) (Process - All Projects) above to be completed prior to proceeding to BOCC-defined process
 3. Items e (i) through (vii) (Process - Major Projects) to be completed after completion of BOCC-defined process

5.2. RELATIONSHIP OF DESIGN GUIDELINES TO OTHER STANDARDS AND REGULATIONS

- a. Pitkin County – L&E Review
- b. FAA Standards and Procedures
- c. Approved Airport Master Plan
- d. Other adopted documents and ordinances

5.3. ONGOING DOCUMENTATION AND COMPLIANCE MONITORING

- a. Airport facilities and properties database creation and maintenance
 - 1. Request that the contractor provide copies of all submittals, operating manuals, and as-built drawings to the airport for archived records.
- b. Compliance monitoring and enforcement
 - 1. Perform Quality Acceptance testing to verify that completed construction elements meet specifications.
 - 2. Yearly inspection – for lease compliance, design guideline compliance?
 - 3. Time frame for corrective action

APPENDIX

Introduction

This section refers to the aviation glossary of terms.



APPENDIX

APPENDIX A: AVIATION GLOSSARY OF TERMS

- **See attached Word Doc**

DRAFT