DEVELOPMENT GUIDELINES

ALLEGHENY COUNTY AIRPORT 12 ALLEGHENY COUNTY AIRPORT WEST MIFFLIN, PA 15122



PREPARED FOR: ALLEGHENY COUNTY AIRPORT AUTHORITY

PITTSBURGH INTERNATIONAL AIRPORT LANDSIDE TERMINAL, 4TH FLOOR MEZZ

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1 INTRODUCTION

Development at Allegheny County Airport (AGC) is expected to increase in the coming years, and in order to maintain a constant building style at the airport and provide attractive, well-maintained and easily navigable Aviation and Non-Aviation facilities, the Allegheny County Airport Authority (ACAA) has requested that future development conform to these guidelines.

1.1 PURPOSE OF THE DEVELOPMENT GUIDELINES

These development guidelines were developed to serve as a single document that contains development standards for AGC for various types of use, including aviation and non-aviation development. Considering the nature of the facilities at Allegheny County Airport, new development and older, existing development will coexist. Continuity with existing development should be considered when applying these guidelines to new development. Variances to these guidelines may be granted in order to better blend the characteristics of new development with existing development.

The requirements of the Borough of West Mifflin serve as supplements to these design guidelines; where these guidelines and the requirements of Borough of West Mifflin conflict, the most restrictive of the standards shall apply.

1.2 ULTIMATE AIRPORT LAYOUT PLAN

The Ultimate Airport Layout Plan, as part of the Airport's Master Planning Process, serves as the basis for determining where particular types of development are likely to occur. It is intended to serve as a tool for ACAA to use in guiding development at AGC.

1.3 DEFINITIONS

ACAA: Allegheny County Airport Authority.

ADAAG: Americans with Disabilities Act (ADA) Accessibility Guidelines.

Airport: Allegheny County Airport (AGC).

<u>Aviation Facilities:</u> Facilities which exclusively serve aircraft, including maintenance, fueling and other services.

Borough: Borough of West Mifflin

<u>Building Line</u>: The horizontal or vertical edge or line that defines, in plan and/or section, the outside face of a building perimeter.

<u>Canopy</u>: That portion of a roof attached to a structure but beyond the building line and intended primarily to provide shelter for exterior activities beneath, including loading, circulation, and ingress/egress. A canopy may be an extension of the building's roof line or a separate roof structure abutting the building perimeter.

<u>Contract</u>: Legally binding agreement between the ACAA and the developer for the design and construction for development; the agreement.

<u>Contractor</u>: A constructor performing a certain scope of construction work, whether building- or site-related. A constructor hired by the developer or tenant that will construct the building shell and/or perform building fitout.

County: Allegheny County in the Commonwealth of Pennsylvania.

<u>Developer</u>: The entity in contract with ACAA to design, finance, construct, own, and lease the building and perform site work as identified in the contract.

DRC: Design Review Committee.

Eave Height: The vertical distance measured between the finished floor elevation of the ground floor and the intersection of the roof plane with the building line.

EIFS: Exterior Insulated Finish System.

FAA: The Federal Aviation Administration.

Fit-Out: Work performed within the shell to complete a space, room, or area.

<u>Improvement</u>: Structures and man-made changes to the natural condition of the land, including buildings, out-buildings, driveways, sidewalks, walls, fencing, screening, parking areas, service areas, loading areas, utilities, landscaping, exterior lighting, and all other structures, and man-made changes to the natural condition of the land.

<u>Mezzanine</u>: An intermediate level or levels between floor and ceiling of any story open to the main building space below, with an aggregate floor area of not more than one-third of the area of the room in which the level or levels are located. An area defined as a "mezzanine" may be subject to further definition and restrictions from applicable building codes.

<u>Non-Aviation Facilities:</u> Those facilities located on the airport that do not provide direct services to aircraft.

Owner: Allegheny County Airport Authority (ACAA)

Partition:

<u>Demising:</u> A full-height separating wall occurring continuously from floor to ceiling or underside of structure that separates rooms or areas between two tenants in the building shell. Typically fire-resistive in construction to the extent required by applicable building codes.

Room: A wall occurring from floor to ceiling which separates areas within a tenant's space into smaller areas or rooms.

<u>Screening</u>: A partially open or solid wall that is not continuous from floor to ceiling and which separates two rooms or areas within a tenant's space.

<u>Screen</u>: A material, device, or planting intended to conceal or obstruct something (e.g., mechanical equipment or trash receptacles) from view.

<u>Shell</u>: The perimeter portion of a building completed by the developer that separates, defines, and protects the interior spaces from the exterior and creates an area to be completed for tenant fitout. Typically comprised of exterior building walls and/or interior tenant demising partitions.

Signage:

<u>Building</u>: A sign provided by the developer and mounted on an exterior wall of an individual building as a means of identifying the building.

<u>Site</u>: Any of various freestanding signs to direct circulation to and within the site.

<u>Tenant</u>: A sign provided by the developer or the tenant and mounted on an exterior wall of an individual building as a means of identifying a tenant within the building.

<u>Tenant</u>: An entity renting space from the developer or ACAA.

<u>Tenant Space</u>: An area within the building shell that is occupied by a tenant and separated from other tenants via a demising partition.

Terminal: Allegheny County Airport Terminal.

Utilities:

<u>Lateral</u>: A utility line provided by the developer that connects a service in the building with the main.

Main: A utility line that provides a service to many building lateral lines.

<u>Service</u>: A utility line occurring within a building and connected to the lateral utility.

<u>Variance:</u> Permission obtained from zoning authorities (Borough of West Mifflin) or the Design Review Committee to construct or make site improvements which are forbidden by or are a departure from existing zoning regulations or ACAA Development Guidelines for AGC.

1.4 PROPERTY SUBJECT TO DEVELOPMENT GUIDELINES

These guidelines apply to all future development at AGC properties. Property covered by these development guidelines is depicted in the Ultimate Airport Layout Plan. Any additional property acquired by the ACAA for AGC shall be subject to the guidelines.

Existing developed properties will be required to apply these guidelines for future maintenance and improvement projects.

2 DESIGN REVIEW COMMITTEE

All development and construction at the AGC and its properties are reviewed and approved by the Design Review Committee (DRC).

2.1 ESTABLISHMENT OF THE DESIGN REVIEW COMMITTEE

ACAA shall establish a DRC that shall consist of three members. The members shall be employees or authorized agents or representatives of ACAA. The DRC shall consist of the ACAA Senior Director of Development, the staff ACAA Architect, and another member to be determined by the Senior Director of Development or the ACAA Executive Director.

2.2 AUTHORITY OF THE DESIGN REVIEW COMMITTEE

No improvement shall be erected, constructed, placed, altered, or removed by a developer or tenant, or shall exist on any site, until it is approved by the DRC, as outlined in Section 2.3, Procedures of the Design Review Committee.

2.3 PROCEDURES OF THE DESIGN REVIEW COMMITTEE

2.3.1 Approval

The DRC 's approval or disapproval shall be based upon:

- Adequacy of the building layout in conforming with regulatory site dimensions and use restrictions;
- Planned operations and uses for the site and building(s);
- Conformity and harmony of exterior design and materials in context with neighboring facilities and improvements;
- Impact on existing and proposed neighboring building sites;
- Placement and impact of the proposed improvements with the existing topography;
- Conformity of the plans and specifications with the provisions of these development standards;
- Conformity of the plans and specifications with the FAA required restrictions and the effect of the location and use of the proposed improvements on the present and future operation of the airfield;
- Conformity of the plans and specifications with all applicable federal, state, and local building codes and zoning regulations.

In reviewing plans and specifications for approval/disapproval, the DRC may permit variances from the design guidelines. Prior to granting/denying a variance, the DRC will convene a meeting to review the variance request. A variance shall be permitted only upon a determination by the DRC that it will not be obtrusive or adversely affect other building sites or the property as a whole, and will not be inconsistent with the purpose of the development guidelines.

The DRC may employ professional consultants to assist in performing its duties under this section.

2.3.2 Timing/Appeals

Any person submitting plans and specifications that are not approved may appeal the decision of the DRC to the ACAA Executive Director by delivering written notice to the ACAA Executive Director, with a copy to the DRC, stating that appeals the ruling. Such notice must be delivered to the ACAA Executive Director within 10 days after such party's receipt of the DRC's ruling. If plans and specifications submitted are incomplete, the ACAA Executive Director may reject such plans and specifications, or it may approve a portion of the plans and specifications, conditionally or unconditionally, and reject the remainder. The ACAA Executive Director shall respond to all written appeals within 30 days.

2.3.3 Submittals

The DRC and its authorized agents or representatives shall at reasonable times make themselves available to responsible persons or entities which have an interest in developing a site. Review of key items should occur during the development process as outlined below.

2.3.3.1 Schematic Review

The Schematic Review will include a review of the development guidelines, sketches, or other documents the prospective developer may have prepared relating to the development of a site.

2.3.3.2 Site Plan and Architectural Review

No later than 60 days prior to the projected date for construction commencement, there shall be a final submission to the DRC. At this time, the developer shall submit three copies of detailed information in writing regarding the proposed use of the site, copies of all applications for governmental permits, any accompanying correspondence, all plans to be submitted for governmental approval, and full sets of the final site plans, construction drawings, and specifications prepared and certified by a registered architect, professional engineer, landscape architect, and/or land surveyor (as appropriate) registered under Pennsylvania law. Drawings are to be submitted at an appropriate scale. The DRC shall have 30 days to respond with comments on the submitted information.

2.3.3.3 Updates/Change Orders

Document submittal is required for major revisions, alterations, or additions to approved or existing developments.

2.4 CONTENT OF PLANS AND SPECIFICATIONS

The items listed below must be presented at the time of the Site Plan and Architectural Review.

2.4.1 Site Plan and Architectural Review

- Description of proposed uses.
- Master plan for full development of the site, including future expansion and project phasing, where applicable.
- Site plan of the area proposed for development, showing:
 - O Location of all new and existing structures, property lines, easements, roadways, set-back lines, and curb cuts.
 - O Location of all sidewalks, parking areas, loading areas, dumpster/trash areas, enclosed or fenced/screened areas with screening details, driveways, curb cuts, and outside storage areas.
 - o Landscaping features, lawn areas, existing trees to be preserved, if any, and the limits of clearing.
 - o Site coverage data and calculations.
- Size (gross square footage and height) of all buildings and the capacity of all parking structures and areas.
- Parking data and calculations, including base data for projected needs.
- Existing topography and proposed grading.
- Proposed utility connections (above and underground), ground-mounted utility equipment, and proposed screening.
- Location of stormwater management facilities and description of erosion and sedimentation control measures.
- Architectural building elevation drawings of each building face, including:
 - o Location and color of all proposed building/roofing materials, with samples.
 - o Roof and parapet heights above the ground floor elevation.
 - o Profile of roof-mounted mechanical equipment and screening (if applicable) above the roof parapet.
- Temporary construction sign location and size.
- Permanent site and exterior building sign layouts and locations.
- NPDES (Non-point Discharge Elimination System) stormwater pollution prevention plan as filed with the appropriate government review agency.
- Certification by the developer's architect that the design complies with these development guidelines. If the design does not comply with these development guidelines, the architect shall specify and explain such noncompliance.

2.5 PUBLIC APPROVALS

In addition to complying with the rules enforced by the DRC, development at AGC is subject to and must be in compliance with all local zoning regulations, building codes, and other application regulations of the local municipalities, and the Federal Aviation Administration (FAA) regulations. In any situation in which these development guidelines are at a variance with zoning, building, or other applicable regulations or with the applicable regulations of the FAA, the most restrictive of any such provision shall be controlling.

2.5.1 Borough of West Mifflin Contact

Borough Manager Borough of West Mifflin 3000 Lebanon Church Road West Mifflin, PA 15122 412.466.8170

2.5.2 Federal Aviation Administration

Development at AGC is subject to the regulations of the FAA, including building height, exterior lighting to ensure safe flight operations on the airfield, and applicable electrical, electronic, radio wave, and other similar emissions that may interfere with aircraft navigation operation or radio communication on the airfield. Development is also subject to appropriate environmental clearances. The DRC will assist the developer in identifying and obtaining the necessary FAA approvals.

2.5.3 Other

Other approvals identified by the DRC may be required.

3 GENERAL AVIATION DESIGN STANDARDS

3.1 GENERAL REQUIREMENTS

The developer is encouraged to use sustainable design and innovative concepts in the construction of aviation structures. The size, shape, mass, height, scale, orientation and site coverage of aviation structures shall be designed in proportion with use and shall take into consideration the perception, appeal, and visual impact of development. Local Borough of West Mifflin requirements and Federal Aviation Administration (FAA) requirements and restrictions as presented in Section 5 shall be used as a reference for all aviation development.

The Design Review Committee (DRC) may grant a variance in these standards. Variances must be proposed and reviewed by the DRC prior to approval of the variance.

3.2 DESIGN ELEMENTS FOR HANGAR DEVELOPMENT

3.2.1 Loading

Aviation buildings shall be designed to resist any combination of dead load, live load, wind load and any other auxiliary design loads, as specified below. Roof live loads shall be considered as additive to all roof dead loads and applicable auxiliary loads.

- 1. Roofs shall be designed to support a minimum vertical live load of thirty (30) pounds per square foot of horizontal projection to all slopes. If a more severe loading condition is produced, the full intensity of roof live load shall be applied to any one contiguous portion of the roof area with zero load on the remainder of the area. Where the configuration of the building is such that a non-uniform accumulation of snow can occur, the increased roof loads shall be determined by a rational analysis.
- 2. Wind load shall be twenty (20) pounds per square foot of horizontal projection applied to all sloping or vertical surfaces. Wind loading shall be distributed as required in the "American National Standard Building Code Requirements for Minimum Design Loads in Buildings and Other Structures" (ANSI A58.1) latest edition, for both horizontal and uplift forces.
- 3. Dead load shall be the weight of the building structure, including electrical, mechanical, or other equipment supported by the building structure.
- 4. The dead load resisting movement of any structure shall not be less than one and one-half (1 ½) times the overturning moment due to wind and other lateral forces. The foundation and superimposed earth loads may be included provided the anchorage is sufficient to develop these weights.
- 5. Elevated floor live loads shall meet the Borough of West Mifflin requirements.

3.2.2 Foundation

All building footings shall be constructed of reinforced concrete.

- 1. Concrete in footings shall have an ultimate compressive strength of not less than three thousand (3,000) pounds per square inch (psi) at twenty-eight (28) days.
- 2. All building column piers shall be reinforced concrete or steel.
- 3. All footings must rest on undisturbed earth or engineered compacted fill and extend a minimum of three (3) feet below final grade.

3.2.3 Floor Slab

The ground floor of all hangar buildings shall be a reinforced concrete slab.

- 1. The floor slab shall be designed for anticipated aircraft loadings, but shall not be less than six (6) inches of concrete reinforced with one layer of 6 x 6 W2.9 x W2.9 welded wire fabric or fiberglass reinforced.
- 2. The floor slab shall be underlain by a four (4) inch minimum of crushed aggregate stone base course.
- 3. The concrete slab shall contain control joints at intervals recommended by the American Concrete Institute "Recommended Practice for Concrete Floor and Slab Construction" (ACI 302) latest edition.
- 4. If the Design Review Committee (DRC) shall determine that the exclusive use of the intended hangar building shall be for the purpose of support persons, vehicles and aircraft having a load not to exceed 6,000 lbs. gross weight, it may grant a variance of the requirement of this Section to allow for a floor not less than 4 inches of reinforced concrete.

3.2.4 Walls and Roofs

3.2.4.1 Metal Pane Thickness

Roofing and wall covering material shall conform to the following minimum criteria:

- 1. Steel, minimum of 26 "Manufacturer's Standard" gage;
- 2. Aluminum, minimum of 0.032 inches thickness
- 3. Other material may be substituted upon approval of the DRC.

A sample of all exterior material shall be submitted for approval. Materials used shall conform to the requirements of Section 4.1.1.

3.2.4.2 Finish

- 1. All metal siding and roofing panels shall have a minimum fifteen (15) year warranty against blisters, chips, checks, cracks, flakes or peels. In addition, the panels shall have a ten (10) year warranty against fading.
- 2. Interior framing steel and steel components shall be shop painted with field touch-up as required.
- 3. Conventional hangars shall use blue ("Great Lakes," PPG #251-5) for exterior walls and white ("Regal White," Valspar #431A886) as a highlight and roof color. T-hangars shall use tan ("Light Stone" Valspar #433B182) for exterior walls and white ("Regal White," Valspar #431A886) as a highlight and roof color.

3.2.5 Utility Service

Utility service shall be provided as approved by the DRC.

- 1. All utilities brought onto the property must be underground facilities, and shall be approved by the DRC. All hookups to existing airport facilities must be underground and at the sole cost of the developer.
- 2. A 100 amp. minimum electrical service, exclusive of heating requirements, shall be provided to hangars. Service to hangars which contain shops or special equipment shall be increased to meet the anticipated electrical usage requirements.
- 3. Lighting, both interior and exterior, shall be provided in all aircraft storage and maintenance areas. Illumination intensities shall meet the recommendations of the "Illumination Engineering Society Lighting Handbook," latest edition, and be designed to not interfere with the operation of the airport. All lighting shall be down lights to avoid interference.
- 4. Building insulation shall be provided at all heated areas. Roofs shall have a maximum "U" factor of 0.06. Sidewalls shall have a maximum "U" factor of 0.10.
- 5. Water and sewer service shall be provided to all maintenance hangars by the developer. Drains shall be provided at all faucet or hose bib locations. All floor drains in hangar areas shall flow into a grit and grease trap approved by the ACAA and the drain shall be hooked to the sanitary sewer line. This trap must be properly maintained to ensure drain continues to function.
- 6. Area floor drains shall be installed in maintenance and storage areas. Floors shall be constructed with a slope to drain toward floor drains.

3.2.6 Building Access Doors/Windows

All buildings shall be completely enclosed. Doors shall be of the same or better quality as the primary building construction.

- 1. Locking hardware shall be provided at each door/window to provide security. All electronic and manual door locks shall be in compliance with ACAA current standards. Electronic card readers shall be Barantec EVERSWITCH Proximity Reader w/8-bit Protocol Model # 39201405. Electromagnetic locks shall be General BHMA A156.23, Delayed Egress BHMA A156.24 or approved equivalent. Manual door locks shall be Schlage Primus IC (interchangeable core) and keyed to the ACAA's existing key system.
- 2. The Borough of West Mifflin requires a knox box be installed.
- 3. Aircraft access doors shall be bifold, overhead or sliding doors, as approved by the DRC.
- 4. All doors shall be located on construction plans.

3.2.7 Maintenance

The buildings and facilities shall be maintained in an operative, weatherproofed condition.

- 1. All damaged building areas shall be promptly repaired.
- 2. Building finishes shall be maintained to prevent metal deterioration.

Upon completion of the construction of facilities and site work, the developer shall maintain the facility in substantially the same condition that exists at the time of completion of the facility.

Specific site maintenance includes waste removal, landscape maintenance, exterior lighting, outside facilities, exterior surfaces, parking areas, drainage areas and detention ponds, and other items, as identified.

Such maintenance shall include the following, without limitation:

- 1. Promptly removing all litter, trash, refuse, and other wastes.
- 2. Mowing grass areas no less often than when grass reaches five inches in height.
- 3. Pruning trees and shrubbery and periodic removal of weeds from landscaped areas.

- 4. Maintaining exterior lighting, signs, service areas, loading areas, and other facilities in clean condition and good working order.
- 5. Maintaining parking areas, private drives, and other concrete or asphalt areas in reasonably good condition and repair, including, without limitation, striping of parking areas, sealing of all asphalt surfaces, repair of any damaged concrete or asphalt, and overall resurfacing when necessary.
- 6. Maintaining all exterior surfaces of buildings in good condition and repair, including painting of all exterior paint surfaces.
- 7. Repairing exterior damage to any improvement.
- 8. Maintaining all storm water detention areas and ditches, including weed and algae control, and mowing if detention area is dry.
- 9. Promptly replacing all dead and/or damaged landscape material.

If the site is not maintained as specified, ACAA may assume maintenance and pass on all costs to the developer.

3.2.8 Site Development

All site development work shall be approved by the DRC.

- 1. The area surrounding the building shall be graded to accommodate the stormwater flow. Grading and stormwater management shall conform to the most current edition of the Allegheny County Airport Stormwater Management Plan.
 - A Stormwater Management Plan must be prepared for each site and approved by the appropriate agencies. Each plan must provide for dry ponds or acceptable alternatives which must be maintained by the developer, and may not contain any elements that would attract waterfowl or other wildlife.
- 2. Roof discharge shall have a definitive flow path away from the structure. Roof drains shall discharge into an underground storm water drainage system or water retention system.
- 3. Aircraft access ramps for T-hangar areas shall have a minimum thickness of eight (8) inches of asphalt and nine and a half (9 ½) inches of crushed aggregate subbase, or equivalent. Taxiways, taxi lanes, and apron pavements shall be designed and constructed for the heaviest anticipated aircraft loading. The design shall be in accordance with the Federal Aviation Administration Advisory Circular AC No. AC150/5320-6 "Airport Pavement Design Evaluation" latest edition.

- 4. All unpaved areas shall be seeded or turfed.
- 5. All on-site signs shall conform to the General Non-Aviation Design Standards, Section 4.1.3.
- 6. On-site mailboxes may be installed inside or outside of the secure area. Mailboxes shall be attached to the building and not installed on a post.
- 7. Signs on Buildings:
 - a. Landside: Standard ACAA building sign. Red letters on white background
 - b. Airside: Black letters on yellow background.

3.2.9 Signage

- 1. Building identification signage shall be in conformance with ACAA's current standards.
- 2. All other signage shall be in accordance with Section 4.1.3.

3.2.10 Aviation Building Setback Requirements

Aviation building setbacks are presented in the Table below.

TABLE 3.2.10-1 AVIATION BUILDING (HANGAR) SETBACKS

Baseline	Building Setback	Yard Setbacks
Taxiway Centerline	75'	
Road Right-of-Way	10'	10'
Other Structures	10'	

3.2.11 Parking Requirements

Parking requirements for hangars shall be one (1) space per 1,200 square feet of building floor area, or one (1) space per T-hangar. Each space shall measure a minimum of 180 square feet per parking space. Variance requests to use spaces in common parking lots at the Airport will be considered. ADA accessible parking spaces shall be provided in accordance with local ordinances and state regulations.

3.2.12 Additional Standards

Any building or development work for which no standard is set forth in this Article shall comply with the current Pennsylvania Department of Labor and Industry Standards and other Borough of West Mifflin requirements.

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4 GENERAL NON-AVIATION DESIGN STANDARDS

4.1 GENERAL REQUIREMENTS

The developer is encouraged to use sustainable design and innovative concepts in the construction of non-aviation structures. The size, shape, mass, height, scale, orientation and site coverage of non-aviation structures shall be designed in proportion with use and shall take into consideration the perception, appeal, and visual impact of development. The design life of all buildings and systems shall be 50 years. Local Borough of West Mifflin requirements shall be conformed to for all non-aviation development.

The Design Review Committee (DRC) may grant a variance in these standards. Variances must be proposed and reviewed by the DRC prior to approval of the variance.

4.1.1 Color and Materials

White ("Regal White," Valspar #431A886) is to be used as a highlight color on all buildings.

The developer shall use the following materials for exterior walls:

- Masonry brick, pre-faced and ground-faced concrete masonry units (CMU).
 Limited use of split-face block is preferred. Decorative CMU can be used to identify building entries and building facades.
- Concrete both precast and site-cast poured-in-place is permitted. Concrete
 panels can be used for primary structural elements, and may be colored at the
 factory, site stained or painted. Tilt up or precast concrete flush or patterned
 panel wall systems with cast-in details, colors and accents may be used. Use of
 form linters to simulate CMU or to introduce other regular patterns may be
 considered.
- Decorative, plain, and/or glazed (pre-face) concrete block permitted for use on screenings and other "permanent" enclosures.
- Exterior Insulated Finish System (EIFS) Use of an EIFS should be limited to small areas and is discouraged below 12'.
- Storefronts and curtainwall glazing systems insulate thermally broken aluminum window/storefront systems with tinted, thermal, low-e, non-reflective glazing. The use and placement of windows on elevations facing public areas is required; windows are not required on airside elevations.

Other materials for exterior walls and roofing may be permitted if submitted to and approved by the DRC.

4.1.2 Exposure Frontage

The developer should give careful consideration to the building's place within the development and the points of view from which it will be observed. Also, consideration should be given to the fact that the function and layout of the building may dictate more than one "front."

In the case that a structure has a "front" on both Aviation and Non-Aviation development areas, the requirements of each respective development area shall be followed. If a structure facing both areas must conform to conflicting requirements for Aviation and Non-Aviation, the more restrictive standard shall be used. The DRC shall review these structures prior to final approval of conformity to Development Guidelines.

Adequate area shall be provided, if necessary, for all staging, loading, and maneuvering of trucks and other service vehicles in order that such operations are not carried out on the streets or neighboring properties. Loading and staging areas should be properly screened from view of public areas.

The developer shall provide:

- Adequate paving, circulation, and parking so as to prevent obstructions, both
 physical and visual, to vehicles traveling the roadway system. All parking areas
 and roadways shall be graded for proper drainage and paved with bituminous
 asphalt or concrete.
- Roadways that comply with local zoning regulations, are a minimum of 24 feet wide, and have curbs. All parking and loading dock areas shall have curbs or barriers sufficient that a vehicle may not drive or park on the grass.
- Roadway and parking lot lighting shall be down lighting to avoid interference with airport operations. Lighting plans shall be submitted to and approved by the DRC.
- Parking and access ramps that are ADA compliant.

4.1.3 Signage

A comprehensive signage design concept and program will be required as part of a development application and shall conform to Borough of West Mifflin requirements. The DRC will evaluate the application based upon:

- 1. Functionality, simplicity, and readability.
- 2. Overall quality relative to standards used at AGC.
- 3. Unified design compatible with the overall development.

TABLE 4.1.3-1
SIGNAGE SPECIFICATIONS ALL USES

SIGNS	MAX. NUMBER	MAX. SIZE	MAX. HEIGHT
Building	1 per site	40 S F.	3' below top of building
Ground-mounted / monument	1 per site; must include the address	40 S.F. per side maximum 25 S.F. minimum	6' maximum height
Tenant ID for buildings with separate exterior tenant entrances	1 per tenant	20 S. F.	Top of sign no more than 15' above ground or 6' below the top of building
Loading Dock	1 per dock door and 1 per tenant	1 S.F. per dock door 4.5 S.F. per tenant	2' above door
On site circulation and misc.	As reasonably approved by DRC	As reasonably approved by DRC	Standard height for traffic control signs
Address	As reasonably approved by DRC	Minimum character height of one foot Maximum size as reasonably approved by DRC	3' below top of building
Leasing signs	One per building	Maximum 32 S. F.	Max 6' high

If the developer is building on property located in a planned development, signage should be incorporated into the plan and should be consistent with the design of the planned development.

Sign design shall incorporate the address on every building in a minimum of one-foot-tall lettering.

Signs shall complement the site character, convey their message legibly, be durable, vandal-proof, weather resistant, and not overly illuminated.

Signage programs shall be well integrated and uniform/consistent in background hue and intensity, type style, and print color.

Sign design and layout shall be coordinated with lighting and landscaping. Lighting shall be down lighting to avoid interference with airport operations.

Illumination of wall-mounted building identification signs may be by individual back-lit letters or by floodlighting with appropriate detailing and landscaping.

Signs shall not be closer than 18 inches from a corner, and repetitious signage on the same building will be discouraged.

Visible raceways and transformers for individual letters are not allowed.

Roof-mounted signs are not allowed.

Signs that move are not allowed.

Low freestanding monument signs are appropriate as identification and must contain address. Directional or informational signs are permitted where site conditions allow for proper visibility. The sign base shall be permanent, durable, and of non-ferrous construction. Landscaping shall be used as appropriate to screen floodlight fixtures.

Except for traffic control and street name signage, freestanding signs on poles that have a top-heavy appearance will be discouraged. Traffic control signage shall be integrated with the sign programs, but must conform to the appropriate state and municipal standards.

Driveway directional signs will be allowed only where circulation is complex or traffic must proceed through the site along a specific path.

Dark colored backgrounds on signs are generally encouraged. Stark white or extremely bright background colors, such as bright red, orange, or yellow, are not allowed. A maximum of one background color and 3 additional colors will be allowed on any sign.

4.1.3.1 Building Identification Signs

The developer may provide a Building Identification Sign (which may be used by the tenant) and a Monument Sign for each building, with the design and location to be approved by DRC. The Building Identification Sign will be a maximum of 40 square feet in size.

4.1.3.2 Tenant Identification Signs

Generally, the tenant's typical logo signage shall be utilized at the location of the occupant's front door/area of entry and shall be commensurate with the building size. Size, mounting, and lighting methods shall be in compliance with the Borough of West Mifflin requirements, and be reviewed by the DRC for design size and appropriateness. All areas to receive tenant signage shall follow the basic requirements, as follows:

- One tenant identification sign, limited to the tenant's name and logo, will be permitted for each tenant space. Sign design shall be consistent with DRC specifications and approval. Maximum height of letters is to be 12".
- Style and color of letters will be as selected by the tenant. The tenant's

trademark is permitted within the allowed sign area. Signage is to be mounted on the building. The backgrounds for all tenant signs on a building shall be the same color.

- The sign shall be constructed of non-corrosive materials, including supports, fasteners, and electrical devices.
- The following types of signs or sign components shall be prohibited: painted, paper, or cardboard signs, stickers or decals hung around, on, or behind glass doors or windows, and multiple or repetitive signing.
- The use of a customized tenant sign and logo is limited to the front of the building. Hours of operation and address are allowed to be displayed on or next to the tenant's door.

4.1.3.3 Loading Dock Identification Signs

One tenant identification sign may be located at the loading dock doors. The sign shall be a maximum of 4.5 square feet, with four-inch-high letters. This sign shall be mounted above the loading dock door. All Loading Dock Identification signs on a building will use the same background color and the same text color.

4.1.4 Screening and Fencing

Screening shall be visually solid, substantial and durable, and applied in a manner that is compatible with the building and site design. Screening may employ combinations of enclosures, earth berms, and vegetation. Screening shall conform to Borough of West Mifflin requirements.

TABLE 4.1.4-1
SCREENING GUIDELINES

SCREENING	Height*	Opacity	Notes
Auto parking	3'	60 %	Combination of mound and landscaping
Dock loading/Truck parking	6'	75%	Combination of mound and landscaping
Dumpsters	Equal to or higher	100%	May be waived if not visible from off site.
Mechanical equipment roof	Equal to or higher	100%	If visual impact is minimal then may paint at designation of DRC
Outdoor storage	Equal to or higher	100%	Combination of mounding, landscaping or walls

^{*}Height and location can be adjusted to account for topography.

The design of fencing, sound walls, skirt walls, and similar site elements shall be compatible with the overall architecture, be integrated with the site design, grading, and landscaping, and use similar materials. Fencing is not allowed without screening and landscaping materials and must create a friendly appearance along the street. It must allow for visual penetration where possible and be functional. Chain link may be appropriate, based on use. If chain link is appropriate based on use, it must be black. Use of fencing design or materials should be discussed in the development application.

All new freestanding masonry walls or fences 50 feet in length or longer, and 4 feet in height or taller, shall be designed to minimize visual monotony though changes in plane, height, material, or texture, or significant landscape massing where appropriate.

Rooftop mechanical and electrical equipment, satellite antennae, and building elements used to screen such equipment shall be designed as an integral part of the building architecture and shall be a maximum of thirty-six inches (36") above roof level, located at a minimum of twenty feet (20') from the edge of the roof. Air conditioning condensing units may be mounted on a concrete pad at grade level with approved proper screening.

4.1.5 Utilities

All utilities shall be sized and installed in accordance with the requirements of applicable Borough of West Mifflin requirements and utility company/owner requirements. All service lines must be located underground. Transformers and other utility structures and

equipment not located underground or enclosed within the building shall be sited in non-prominent locations and adequately screened.

4.1.6 Storage, Service, and Refuse Areas

All exterior trash and storage areas, service yards, loading docks and ramps, utility meters, and other mechanical, plumbing, or electrical devices shall be located away from major routes or prominent points of view and shall be screened as described above. No vehicle or equipment service may be performed outside of a building.

4.1.7 Maintenance

Upon completion of the construction of facilities and site work, the developer shall maintain the facility in substantially the same condition that exists at the time of completion of the facility.

Specific site maintenance includes waste removal, landscape maintenance, exterior lighting, outside facilities, exterior surfaces, parking areas, drainage areas and detention ponds, and other items, as identified.

Such maintenance shall include the following, without limitation:

- 1. Promptly removing all litter, trash, refuse, and other wastes.
- 2. Mowing grass areas no less often than when grass reaches five inches in height.
- 3. Pruning trees and shrubbery and periodic removal of weeds from landscaped areas.
- 4. Maintaining exterior lighting, signs, service areas, loading areas, and other facilities in clean condition and good working order.
- 5. Maintaining parking areas, private drives, and other concrete or asphalt areas in reasonably good condition and repair, including, without limitation, striping of parking areas, sealing of all asphalt surfaces, repair of any damaged concrete or asphalt, and overall resurfacing when necessary.
- 6. Maintaining all exterior surfaces of buildings in good condition and repair, including painting of all exterior paint surfaces as designated by the DRC.
- 7. Repairing exterior damage to any improvement.
- 8. Maintaining all storm water detention areas and ditches, including weed and algae control, and mowing if detention area is dry.
- 9. Promptly replacing all dead and/or damaged landscape material.

If the site is not maintained as specified, ACAA may assume maintenance and pass on all costs to the developer.

4.1.8 Sound Insulation

As portions of Airport property are included in 65 DNL and above noise contours generated by aircraft operations, the developer shall include soundproofing materials for the building interiors, as appropriate for use. In addition, the developer shall promote ways to reduce the impact of on-site operations to the community by mitigating outbound sound, as necessary, for adjacent use.

To absorb sound generated by on-site operations, the developer is encouraged to incorporate earth berms specifically designed for sound absorption or reflection. Earth berms must be appreciably higher than the adjacent noise source and planted to maximize their effectiveness against diffraction.

Planting patterns are critical. Planting of single rows of deciduous trees must be avoided. Instead, trees must be planted in numerous rows in a staggered pattern, in conjunction with dense ground cover and medium height vegetation, so that these blend collectively into a continuous vegetative mass. This is more effective in absorbing noise than more ordered planting patterns.

As much of the site as possible should be planted with sound-absorbing materials to reduce the amount of sound energy bounced off the ground plane onto and into the buildings.

4.1.9 Setbacks and Site Coverage

Setbacks and site coverage shall conform to Borough of West Mifflin requirements and the following requirements;

- The building footprint will not exceed 50% of the site
- The building and hard surfaces will not exceed 80% of the site.

No improvement shall be erected or placed within the minimum setback area indicated in the Table below, unless submitted to and approved by the DRC. Side and rear setbacks shall be approved on a case-by-case basis as submitted to the DRC.

TABLE 4.1.9-1 SETBACKS

All Uses					
Road Type	Building	Sign	Parking		
	Setback	Setback	Setback		
	Front				
Spine Road	75'	30'	30'		
Connecting Road	50'	25'	25'		
Circulation Road	30'	15'	25'		

4.1.10 Circulation and Parking

Parking areas shall conform to Borough of West Mifflin requirements. All parking and circulation areas must be paved.

The developer must locate curb cuts only where appropriate and necessary, avoiding curb cuts on arterial streets and minimizing curb cuts for access to collector streets from parking or other uses.

The developer must size parking for a minimum of 4.5 parking spaces per 1,000 square feet of building gross floor area for office use. Parking for other uses is to be approved by the DRC. The developer must also:

- 1. Provide appropriate pavement markings and striping.
- 2. Protect trees in parking lots from vehicle damage by proper spacing and by use of curbing around the landscape pocket.
- 3. Provide adequate parking for bicycles.
- 4. Ensure that all paved areas have curbs or parking blocks.

4.1.11 Landscaping

The purpose of landscape design is to integrate and enhance through overall design the various elements and character of the site. Landscaping may include plant materials as well as site furnishings such as water features, sculpture, art, walls, fences, paving materials, and street furniture. Landscaped areas should help to create a coherent and balanced plan throughout the site. Landscaping shall only be required on non-aviation facing sides of development which faces on both aviation and non-aviation.

Landscape planting design should create interesting and pleasing spaces. It should also reinforce and complement the architecture and layout of the site in response to patterns of use, views, and the existing character of the site.

Landscape planting design should be used to improve undesirable site conditions such as soil erosion, noise, unsightly features or views, and glare. Planting design should increase human comfort by providing shade and wind protection.

Plant species should be selected with regard to aesthetics as well as to growth rate and suitability to the site climate and soil conditions. Plants should be chosen that are hardy, easily maintained, and insect- and disease-resistant. Special consideration must be given to site microclimates such as roadways, parking lots, and steep slopes. Plant species shall conform to those listed in the latest approved edition of the Pittsburgh International Airport Wildlife Hazard Management Plan (WHMP). A list of the recommended plant species is contained in the Appendix - Exhibit 9.4 as per the approved WHMP at the time of this publication. The latest approved version of the WHMP shall dictate in all

instances.

Trees should be carefully selected and located where they will complement buildings and grounds. Trees should be placed within 3 feet of the right-of-way line. One street tree shall be planted for every 40 feet of frontage or fraction thereof. These trees shall be placed along the right-of-way with a minimum of 3 trees per cluster, and with the approval of the DRC. Tree species should be selected with root growth habits that will not cause damage to sidewalks, or such tree species should be sited away from such paved areas. Proposed trees should be compatible with an established design program or with existing adjacent vegetation. Mature growth rates should not penetrate FAR Part 77 Surfaces. Tree species shall be in conformance with the WHMP, a list of acceptable tree species at the time of this publication is contained in the Appendix - Exhibit 9.4. The latest approved version of the WHMP shall dictate in all instances.

Landscaped areas should be designed to allow for routine maintenance and care of plantings, furnishings, and other features.

Landscaping should be provided adjacent to and within parking areas to screen vehicles from view and to help minimize the expansive appearance of parking fields. This landscaping should include trees in parking lots to create summer shade. Parking area landscaping should permit adequate sight distance for motorists and pedestrians entering and exiting a site, and should not interfere with circulation patterns. Interior parking lot landscaping requirements may be waived if the soils do not support tree growth. For this waiver, provision of an independently performed soils test indicating poor suitability for tree growth may be required for review by the DRC. In cases such as this, an equal amount of additional site landscaping will be substituted for parking lot landscaping.

Poor site soil conditions may stem from various factors. For example, general acidic soil conditions caused by previous mining operations at a development site, as well as acid mine drainage generated from mining operations, will adversely affect soil quality. Acid mine drainage often has a very low pH level and high levels of metals. This does not support significant ecological functions for various vegetative species to adequately compete, thrive, and reproduce within a natural setting.

Energy conservation within structures should be considered by providing appropriate tree species according to the sun exposure at the site (e.g., deciduous trees on the southern exposure, coniferous and broadleaf evergreen trees along the eastern and western exposures, and evergreens along the northern exposure).

A submitted landscape plan shall include location and planting details for parking lots, roadways, buffering, architectural enhancement, and special use areas. Planting specifications shall include required plant sizes and standards for planting and replacement of dying or dead plants.

Existing trees shall be integrated into the proposed development plan to the maximum extent practicable.

Tree and shrub plantings shall be grouped together where it is desired to create strong accent points, as identified through the course of development conferences with the DRC.

Buffer yards required by zoning shall be planted according to the same aesthetic and practical goals established by the landscaping plan for the rest of the site.

Standards for site protection and planting requirements shall include preservation of topsoil and associated requirements, removal of debris, and protection of existing vegetation. Protective measures shall remain in place until all danger from construction has passed.

Hedgerows used for screening, exterior space definition, or any other purpose may include frequent breaks for accent planting, if this is consistent with the overall plan.

No landscaping will be permitted that is within or exposed to the aircraft movement area.

Landscaping will be installed in such a way so that water will drain.

4.1.11.1 Site

Trees remaining and located within the developer's site should be integrated into the proposed development plan for that site, if possible.

Existing plants to be integrated into development plans shall be protected. Grade at dripline should remain at pre-existing elevations. Fence protection for shrubs shall be located a minimum of three feet from the plant, forming a total enclosure around the plant mass. Tree protection fencing shall be located at the dripline of the tree, or outside if existing branches are low to the ground. Fencing shall remain in place until all possible danger from construction has passed.

All trees will be a minimum 2-1/2" caliper and all shrubs a minimum of 24" in height.

The use of integrated pest management or less dangerous pest management procedures whenever possible is encouraged.

Landscaped areas directly adjacent to drive aisles and parking areas should be planted with site- and condition-appropriate specimens. If concrete curb and gutters are not proposed, open channel stormwater design will be utilized. If excessive salt spray is expected from snow removal efforts, plants, which are salt tolerant, should be considered.

4.1.11.2 Slopes

Slopes steeper than three to one shall be planted with a mixture of appropriate non-mowed grasses or ground cover plants.

4.1.11.3 Parking

The developer shall provide trees and landscaping in accordance with applicable municipal ordinances. The required trees and landscape areas shall be placed to shade parked cars and to soften the overall appearance of the development. Mature trees, woodlands, or other high-quality existing vegetation that remains undisturbed between the parking and adjacent public or neighboring uses may be used to satisfy this requirement. New shrubs or trees may be added as needed.

Perimeter plantings shall include sufficient shrubs or grasses or mounds to form a hedge or screen that meets the height requirements outlined in Section 4.1.4 **Screening and Fencing** at the time of planting.

Landscaping shall also be designed into the interior of parking areas to provide visual and climatic relief from large expanses of paving, to channel vehicular traffic, and to define areas for safe pedestrian circulation. Landscaped areas shall be planted with canopy trees uniformly distributed throughout and around the parking lots.

Curbed islands for trees or other projections into parking areas shall have a minimum landscaped area of 100 square feet per tree.

4.1.12 Utility and Transportation Easements

Existing utility and transportation easements must be addressed in the developer's site plan. ACAA reserves the right to grant future easements around the perimeter of the site that do not conflict with permanent operations.

4.1.13 Retaining Walls

Retaining walls shall conform to Borough of West Mifflin requirements. The height and length of retaining walls shall be minimized and the use of major retaining walls shall be minimized. Retaining walls shall incorporate design elements of other architectural or natural features of the project. Appearance of walls shall be softened through the use of appropriate landscaping. Tall retaining walls are discouraged. Where retaining walls exceed three feet in height, safety protection in the form of fencing or hedges shall be provided. Terracing in combination with low retaining walls shall be considered in lieu of tall or prominent retaining walls, particularly in highly visible areas.

4.1.14 Grading and Drainage

Grading and drainage design and construction shall conform to Borough of West Mifflin requirements and the most current edition of the Allegheny County Airport Stormwater Management Plan.

The proposed grading should take advantage of existing slopes wherever possible. Naturally sloped or terraced grading, within smaller pads and varied footprints, should conform to existing topography and minimize the need for large visible retaining or skirt walls. All grading should present a finished appearance with rounded slopes.

Balancing the cut and fill on site is highly encouraged when it does not result in further damage to the natural topography. Where the grading plan results in substantial hauling, a mitigation plan may be required to address the overall impact and clean-up of off-site construction activities.

The developer may be required to provide an independently performed Geotechnical Report, prepared by a certified professional engineer, for review by the DRC. Maximum design grades and subsurface drainage requirements shall be in accordance with the Geotechnical Report recommendations. However, in no case shall proposed mowed grass lawn slopes be greater than three to one, or steeper than two to one for other graded areas. In cases of high impact or visibility areas, the DRC reserves the right to further limit the maximum slope, if it is in the best interest of the overall development plan.

All on-site drainage shall be collected and conveyed to an approved storm drainage conveyance system. All on-site drainage patterns shall occur on or through areas designed to serve this function, using grassed swales whenever possible. Drainage from rooftops or other impermeable surfaces shall not be conveyed across hard surfaces into planter areas without a drain inlet.

4.1.15 Stormwater Management

A Stormwater Management Plan must be prepared for each site and approved by the appropriate agencies. Each plan must provide for dry ponds or acceptable alternatives and must be maintained by the developer, and may not contain any elements that would attract waterfowl or other wildlife. This plan shall conform to Borough of West Mifflin requirements and the most current edition of the Allegheny County Airport Stormwater Management Plan.

4.2 ARCHITECTURE AND SITE PLANNING FOR SPECIFIC USES

4.2.1 Office and Commercial Buildings

This is generally a Business Use Group classification that includes facilities that house professional or service-type occupancies. Uses may include professional offices, retail, and business park settings. The design of these facilities shall conform to Borough of West Mifflin requirements.

Buildings are typically sited in a prominent location with high public exposure, visibility, and access to major arteries surrounding the Airport. With high prominence comes the need for a high standard in design, land planning, massing, context sensitivity with

neighboring developments, and the use of more permanent materials on the building facades.

4.2.2 Warehouse and Light Industrial Buildings

This refers to facilities constructed for long term storage and/or light manufacturing such as assembling, disassembling, fabricating, finishing, manufacturing, packaging, and repair or processing operations. Depending on the nature of the materials stored and/or processes contained, facilities may be classified as low-, moderate- or high-hazard uses and are subject to Borough of West Mifflin requirements. The buildings are typically not accessed by the public, but require proper access to highways and transportation routes.

Use of industrial materials such as concrete wall panels will be acceptable, subject to review. The developer is encouraged to create an attractive, coordinated, aesthetic design and to avoid the monotony of long, large, flat facades constructed from a single material. Use of horizontal and/or vertical projections, column insets, exposed structural elements, and changes of material, color, and/or texture is encouraged.

4.2.3 Tech/Flex Warehouse Buildings

Generally one-story shell developments, the open nature of the floor plan allows maximum flexibility and is conducive to multiple tenant occupancies. Tech/flex buildings typically are arranged with a "front door" for office tenants, and a "back door" that allows for loading, trucking, and distribution functions. Proper building siting should be considered not only for vehicular traffic and circulation, but also for maintaining required screening and visual buffers required by these guidelines. These buildings are subject to Borough of West Mifflin requirements.

Possible users may include professional and sales offices, minor warehousing and distribution, and light manufacturing when in accordance with local zoning regulations.

The front-side/back-side nature of a tech/flex building may promote the use of higher-end materials such as masonry and concrete panels on the front. Continuity and appropriate selection of materials on all sides of the building will be examined by the DRC.

4.2.4 Hospitality and Recreational Buildings

These are higher-profile buildings that service the public and require appropriate access for both vehicular and pedestrian traffic. Functions may include hotels and motels, with associated restaurant and parking facilities, and public facilities, such as skating rinks, or driving ranges.

Proper siting for buildings is needed to address both public/community access of major roadways and airport/traveler access. The building's entrance should be well defined and convey a sense of entry, welcome and a feeling of security and safety. The design of these facilities shall conform to Borough of West Mifflin requirements.

4.2.5 Cargo Buildings

These facilities may be constructed requiring access to both aviation and non-aviation activities. Pending location, buildings may or may not have direct access to the aviation side, but may be placed in close proximity to the airfield. These facilities generally serve as a central location for the transfer of goods from aircraft to truck. They are usually short-term storage facilities without manufacturing and may have limited office space that is ancillary to the storage function. These buildings are subject to Borough of West Mifflin requirements.

The developer is encouraged to create an attractive, coordinated, aesthetic design and to avoid the monotony of long, large, flat facades constructed from a single material. Use of horizontal and/or vertical projections, column insets, exposed structural elements, and changes of material, color, and/or texture is encouraged. Use of EIFS materials below 12 feet above the finished floor is not acceptable. However, metal facades are permitted for the non-public sides of buildings.

Where these facilities face both Aviation and Non-Aviation areas, the requirements of each respective area shall govern the design. If a structure facing both areas encounters a conflicting requirement, the more restrictive requirement shall be followed. The DRC shall review these structures prior to final approval of conformity to Development Guidelines.

4.2.6 Heavy Industrial Buildings

This refers to facilities which are used for manufacturing and processing operations of a larger and/or more complex nature than light industrial buildings. These facilities may include significant outdoor storage areas. Heavy industrial facilities are typically not accessed by the public, but require proper access to highways and other transportation routes. These facilities shall be designed in accordance with Borough of West Mifflin requirements.

4.2.7 Retail Buildings

These facilities, such as car dealerships, are similar to hospitality and recreational buildings in requiring appropriate and easy access for vehicular and where appropriate, pedestrian traffic. Parking facilities will be included with any retail development. The building's main public entrance should be well defined and convey a sense of entry, welcome and a feeling of security and safety. The design of these facilities shall conform to Borough of West Mifflin requirements.

These buildings, which are typically well-lit, need to be designed with down-lighting to ensure that lighting and other aspects of retail facilities do not interfere with airport operations.

Where these facilities face both Aviation and Non-Aviation areas, the requirements of each respective area shall govern the design. If a structure facing both areas encounters a conflicting requirement, the more restrictive requirement shall be followed. The DRC shall review these structures prior to final approval of conformity to Development Guidelines.

5 FAA REQUIREMENTS AND RESTRICTIONS

FAA Requirements for development on AGC property potentially include the following clearances:

- Environmental from the Harrisburg Airports District Office, including Categorical Exclusions, Short Form EA, EA and EIS, as necessary. Reference FAA Order 1050.1E and 5050.4B.
- FAR Part 77 Obstruction (Form 7460) from the Eastern Region Airports Division, including review of navigational aids, electronics, ILS, and control tower from the Eastern Region Airways Facilities Division.
- IFR Safety from the Eastern Region Flight Standards Division.

The developer shall work with the DRC and the FAA to identify and complete the appropriate documentation to meet FAA requirements. Current contact information, including addresses and phone numbers, is available from ACAA.

ACAA must approve and submit the forms.

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6 CONSTRUCTION

This section outlines the requirements the developer must comply with both prior to and during construction. It covers rules, regulations, permitting, maintenance of airport operations, protection of utilities, and requirements governing the establishment and use of temporary facilities.

6.1 ROLES AND RESPONSIBILITIES

Protection of Work and Property - The developer shall be required to maintain adequate protection for all work and property, both public and private, and prevent damage or loss thereto as a result of construction operations under his contract.

Safety of the Public and Employees - The developer shall be required to maintain adequate protection for all work and property, both public and private, and prevent damage or loss thereto as a result of construction operations.

Accident Prevention - The developer shall be required to designate members of his organization who will be responsible for the prevention of accidents. The names and positions of the persons so designated shall be reported to ACAA.

Accident Reports - In case of an accident, the contractor shall immediately furnish ACAA with accident reports.

Blasting - Blasting will not be permitted unless authorized in writing 30 days prior by ACAA.

Regulations - Fire protection shall comply with fire regulations at the Airport and with specific requirements of ACAA and Borough of West Mifflin Fire Department.

Open Fires - No open fires will be permitted unless authorized in writing 30 days prior by ACAA.

Welding, etc. - No welding, flame cutting, or other operations involving the use of flame, arcs, or sparking devices will be allowed without adequate approved protection, in accordance with **Regulations** above.

Fire Lanes - Fire lanes shall be kept open at all times.

6.2 ENVIRONMENTAL PROTECTION CONTROLS

Construction operations shall comply with air and water standards established in FAA Advisory Circular 150/5370-7 "Airport Construction Controls to Prevent Air and Water Pollution."

6.3 SUSTAINABLE DESIGN PRINCIPALS

Where possible, the developer shall observe LEED® technologies and strategies in planning construction operations. A selective summary is provided below.

- Employ construction waste management techniques, including landfill diversion and material recycling.
- Establish clearly marked construction boundaries to minimize disturbance of existing site.
- Restore previously degraded areas to their natural state.
- Employ construction erosion and sedimentation control plans that include temporary seeding and mulching, earth dikes, silt fencing, and sediment traps.
- Protect building ventilation and sequence material installation to avoid contamination of absorptive materials by indoor pollutants during construction.

6.4 TEMPORARY FACILITIES

The following guidelines apply to temporary facilities that may be required for construction.

Location of new temporary roads for large projects shall be designated and approved by the DRC and ACAA.

No signs for advertising will be allowed on the premises other than approved leasing signs. A project sign identifying participating parties may be permitted with written permission of the DRC.

When required for protection of the public, a temporary 6'-0" high fence shall enclose the site. The fence shall be of substantial construction approved by ACAA. Exposed surfaces on the public side of wooden enclosures shall be painted with two coats of top quality exterior paint.

At the completion of work, the contractor shall be required to remove all surplus materials, tools, scaffolding, equipment, and appurtenances caused by and used in execution of his work, and shall leave the premises in clean condition. Temporary roads and equipment shall be removed at the completion of the work and grades restored to required elevations and in compliance with the landscaping plan.

6.5 USE OF PREMISES

The contractor shall be required to confine his equipment, storage of materials, and operations of workmen and subcontractors to the site.

6.6 ACCESS TO SITE

If a road is not available, ACAA will designate the route to be used and maintained for access to project sites and all vehicles shall use the designated route only.

The contractor shall be required to keep all roads free of loose construction materials and in good repair and shall promptly repair any damage.

6.7 Interruption of Airport Operations

Interruption of normal Airport operations is prohibited.

The contractor shall cooperate with other contractors, ACAA personnel, and utility forces working in the Airport area in such a manner that there will be minimal interference with their work and activities.

Details of all anticipated interruptions of this nature, together with recommendations of the Architect or Engineer for minimizing same, shall be reviewed with the ACAA.

6.8 EXISTING UTILITIES

Before proceeding with work, the contractor shall notify via PA One Call (1-800-242-1776) the various utilities and agencies who maintain underground facilities located within the limits of the Airport and request that those responsible for the utilities stake out their facility alignment and depth. The contractor shall also notify Airport Operations at (412) 466-4951.

Existing utilities shall not be disturbed until the owners of said utilities have been notified. The contractor shall be required to conduct his work so that utilities may be removed, relocated, or supported during excavations and while backfill is being placed, and maintained in service until the structure to be built under the contract is completed. Existing utilities shall be relocated only as approved by the utility owner and ACAA. The contractor shall cooperate with the owners of such utilities in the performance of his work.

The following existing utilities are on Allegheny County Airport property. The most up to date contact information for these utility owners can be obtained from the websites indicated or from PA One Call.

- Sunoco Logistics Hays Spur Pipeline
 http://www.sunocologistics.com/environment/environment_contact.asp
- Equitable Gas

http://www.eqt.com/Equitable_Gas/

- Pennsylvania American Water
 - http://www.amwater.com/awpr1/paaw/sitetools/contactus.html
- Borough of West Mifflin Sanitary Sewer Authority http://www.wmssma.org/
- Duquesne Light

http://www.duquesnelight.com/ContactUs/default.cfm

Verizon Communications http://www.verizon.com

The list of utilities provided is not, nor is it intended to be a complete list of utilities that may be on Airport property. The Contractor is responsible to do their own due diligence to obtain a complete list of utility providers.

Should existing utilities be damaged during construction operations, the contractor shall immediately notify the utility company and ACAA and the contractor will be held responsible for repair or replacement. Said repair and replacement shall be subject to approval of the utility company and ACAA.

6.9 CLEAN UP

The contractor shall be required to keep premises free from accumulation of rubbish and waste material. Combustible material shall be placed in covered metal containers daily, and all rubbish and waste shall be removed from the premises at least weekly and legally disposed of outside of Airport limits. Material from the site should not be allowed to create Foreign Object Debris that could affect airfield operations.

Please contact the Airport Manager at Allegheny County Airport for the current refuse contractor.

7 ENFORCEMENT

7.1 VIOLATION

Failure by a developer or lessee to perform or observe, or cause any other occupant of a building site to perform or observe, any condition or restriction to be performed or observed by ACAA under these development guidelines and failure by such developer or lessee to correct such failure within 30 days after the DRC provides notification or, if because the nature of such failure cannot be corrected within such 30-day period, failure by such developer or lessee to commence correction within a 30-day period and thereafter to expeditiously and continuously prosecute the correction to completion, shall be a material breach of these development standards and the developer shall be considered to be in default.

Immediately upon the occurrence of a material breach, or anytime thereafter, unless such material breach has been cured with the written consent of the DRC or expressly waived by it in writing, the DRC, or its authorized agent or representative, may bring remedy, whether public or private in nature.

7.2 ACCESS FOR INSPECTION

The DRC, or its authorized agent or representative, shall have the right to access a building or lessee site during reasonable hours, to enter on and inspect such site for any purpose associated with these development guidelines.

7.3 INDEMNIFICATION

The developer or lessee of a site shall indemnify and hold the DRC, or its authorized agent or representative, harmless from all liabilities, losses, damages, injuries, costs, and expenses, including legal fees, caused by or in any way related to the DRC's, or its authorized agents' or representatives', actions or failure to act pursuant to the provisions of the development guidelines, provided that the DRC or its authorized agents or representatives, did not act exhibiting intentional misconduct or a knowing violation of the law.

7.4 ENFORCEMENT

It is the intent that each developer or lessee acknowledges that the DRC shall act as an authorized representative of all developers and lessees for the purpose of enforcing these development guidelines upon the occurrence of a breach.

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8 MISCELLANEOUS

8.1 TERM

These development guidelines shall continue in full force and effect until terminated.

8.2 TERMINATION AND MODIFICATION

These development guidelines may be terminated, modified, or amended with written notification from ACAA.

8.3 ASSIGNMENT

Any or all of ACAA's rights, powers, duties, or obligations under these development guidelines may be assigned to any person or entity, public or private. If at any time, ACAA ceases to exist and has not made an assignment to a successor, then a successor to ACAA may be appointed in the same manner as these development guidelines may be terminated, modified, or amended.

8.4 WILDLIFE

The presence of wildlife is discouraged at AGC, since it is not compatible with Airport operations. Maintenance and feeding of wildlife is not permitted. Picnic tables will not be permitted to eliminate food litter. Dumpsters must be covered.

8.5 CONSTRUCTIVE NOTICE AND ACCEPTANCE

Any developer or lessee which hereafter acquires any right, title, or interest in a site, or any portion of a development on a site, shall be deemed to have consented and agreed to accept every condition, restriction, reservation, and easement set forth in these development guidelines when reference to these development guidelines is set forth in the deed, lease or instrument by which such person or entity acquired such right, title, or interest.

8.6 GENERAL RELEASE OF LIABILITY OF MEMBERS OF THE DESIGN REVIEW COMMITTEE

The DRC and the ACAA shall not be liable to any person or entity which has submitted plans or specifications or a description of intended operation and use, or to any lessee or occupant, as the result of or arising out of any mistake in judgment, negligence, or failure to act in connection with these development guidelines.

8.7 NOTICES

Any notice or other communication required or desired to be given to any party under these development guidelines shall be in writing.

8.8 NONWAIVER

The failure or delay of any party to enforce any provision or exercise any right under these

development guidelines shall not be construed as a waiver of such provision or right and shall not affect the validity of any provision of these development guidelines, or the right of such party thereafter to enforce such provision or to exercise such right. No waiver of any violation of these development guidelines shall be held to be a waiver of any other violation of these development guidelines.

8.9 GOVERNING LAW

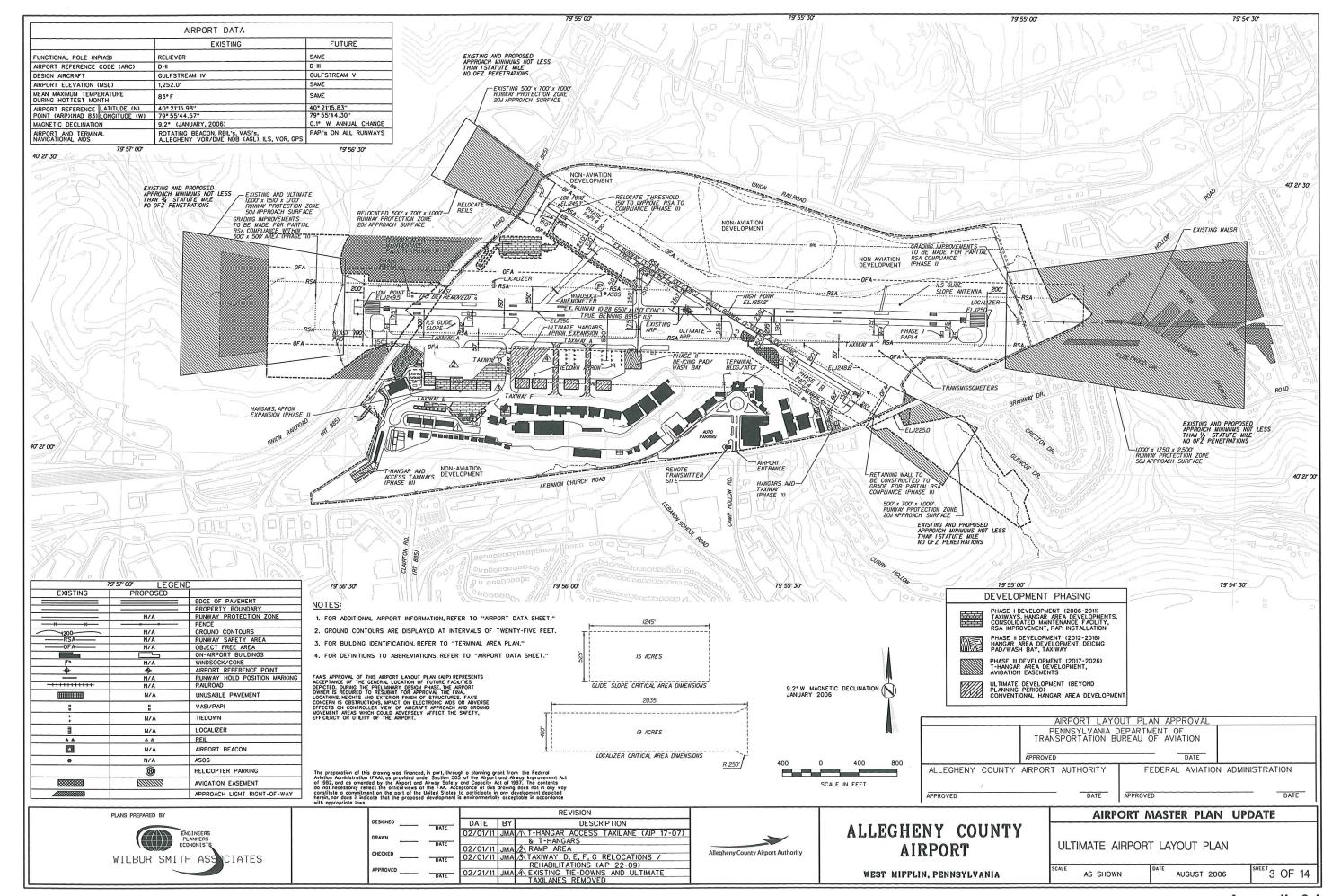
All questions concerning the validity and meaning of these development guidelines or relating to the rights, obligations, and duties of the parties with respect to performance under these development guidelines shall be construed and resolved under the laws of Pennsylvania.

8.10 SEVERABILITY

It is the intention of ACAA that these development guidelines comply fully with all applicable laws and these development guidelines shall be construed consistently with all such laws to the extent possible. If, and to the extent that, any court of competent jurisdiction is unable to so construe part or all of any provision of these development guidelines and holds part or all of that provision to be invalid, then such invalidity shall not affect the remainder of that provision or the remaining provisions of these development guidelines, which shall remain in full force and effect.

9 APPENDIX - SUPPORTING EXHIBITS

- 9.1 ULTIMATE AIRPORT LAYOUT PLAN
- 9.2 DESIGN REVIEW CHECKLIST
- 9.3 LANDSCAPING MATERIALS



DESIGN REVIEW CHECKLIST

Project Name:	
Reviewer:	
Date Submitted:: Date Due:	
Date Letter Mailed:	
2.3.3.2 Site Plan and Architectural Review	
Was plan submitted sixty (60) days prior to construction start?	
Were three complete sets of plans and information provided?	
2.4.1 Site Plan and Architectural Review	
Are the following provided:	
Description of proposed use.	
Master plan including future phasing.	
Site plan including:	
Location of all structures.	
Property lines.	
Easements. CurrentFuture	
Roadways.	
Set-back lines.	
Curb cuts.	
Sidewalks.	
Employee Parking Areas.	
Loading Areas.	

Dumpster/Trash Areas.
Outside storage areas, if any.
Screening details, if required.
Driveways and curb-cuts.
Landscaping features.
Limits of clearing.
Existing trees to be preserved.
Size of all buildings.
Capacity of all parking areas.
Parking data calculations.
Existing topography and proposed grading.
Utility connection.
Are all utilities underground?
Is any ground mounted utility equipment properly screened?
Location of storm water facility.
Building Elevations Including:
Location and color of all materials, with samples.
Roof and parapet heights.
Profile of roof mounted equipment and screening.
Temporary Construction Sign Location and Size:
Permanent signs, location, size and layout.
NPDES plan
Certification by the developer's architect that the design complies.

2.5	Public Approvals
Has the develo	oper submitted for township approval?
2.5.3	FAA
Have all FAA	approvals been submitted?
2.5.4	Other
Are any other	approvals required by the DRC?
3.1.1	Sustainable Design
Avoid standin	g water and ice build up
Use locally pr	oduced products
Use low main	tenance as well as recycled materials
3.1.2	Size, Shape, Mass, Height, Scale, Orientation, and Site Coverage ares and all light poles below FAA air space?
	g oriented properly?
	an access easily identifiable?
	ead doors generally the same size?
Are all faces of	of the building screened and landscaped properly?
Is there a conr	nection to the multi-purpose trail?
Is roof top equ	nipment visible?
Is noise gener	ating equipment properly located
3.1.3	Design Life
Is the building	designed for a 50 year life?

3.1.4 Color and Materials	
Is rapture red used as an accent color?	_
Is exterior material appropriate for the building?	-
Is EIFS used below 12 feet?	_
Is tinted low-E non-reflective glass used?	
Is the roof visible? If so, is it an appropriate color?	
3.1.5 Exposure Frontage	
Are all faces appropriately designed for their level of visibility?	
Are loading and service areas located properly?	
Is adequate staging, loading and maneuvering areas provided for trucks?	
Are driveways a minimum of 24 feet wide?	_
3.1.6 Lighting	
Are exterior lights and light poles in compliance with the standards?	_
Are any lights pointing upward?	_
Does lighting fit with the overall plan?	_
Is fixture mounting height appropriate for the project?	_
Lighting should not interfere with the operation of aircraft or the airport.	
3.1.7 Signage	
Are the following signs in compliance (number, size, height, consistency):	
Building.	-
Ground mounted.	
Tenant identification.	

Loading dock.
On-site circulation.
Address.
Leasing sign
Are the signs durable, weather-resistant and vandal proof?
Is signage coordinated with lighting and landscaping?
3.1.8 Screening and Fencing
Is screening provided for the following (height and opacity):
Auto parking.
Docks and truck parking.
Dumpsters.
Mechanical and roof equipment.
Outdoor storage.
Ground mounted utility equipment
3.1.9 Utilities
Are all utilities underground?
Are all utility boxes adequately screened?
3.1.10 Storage, Service and Refuse Areas
Are all storage, service and refuse areas properly screened?
3.1.11 Trail Development
Is an adequate trail connection provided?
Are any passive areas needed for this project?
Is the trail side of the building aesthetically pleasing?

3.1.12	Sound Insulation
Is the project l	located in 65 DNL or higher?
Is adequate in	sulation provided?
Is noise genera	ating equipment screened to reduce outbound noise?
3.1.13	Set-backs and Site Coverage
Is the building	g foot print less than 50% of the site?
Is the building	g and hard surfaces less than 80% of the site?
Are front yard	set backs adequate for the roadway?
Are side and r	ear yard set backs adequate for the adjoining use?
3.1.15	Circulation and Parking
Are all parkin	g and circulation areas paved?
Do all paveme	ents have curbs and/or parking blocks?
Are parking a	reas adequately striped?
Is any interior	landscaping adequately protected?
Is there adequ	ate vehicle parking?
Is there adequ	ate parking for bicycles?
3.1.16	Landscaping
Are plantings	on the approved list and approved size?
Are street tree	es placed within three feet of the right-of-way?
Is there one st	reet tree for every forty feet of frontage?
Is irrigation pr	rovided for the front yard?
Can landscape	e areas be easily maintained?

Can existing to	rees be saved?
Any additiona	l Landscape comments
3.1.16.1	Site
Are salt tolera	nt species used appropriately?
3.1.16.2	Slopes
Are slopes pla	anted in appropriate materials?
3.1.16.3	Parking
Does the lands	scape material provide adequate screening?
Are there adec	quate plantings inside the parking lot?
Do the islands	s provide a minimum of 100 square feet per tree?
3.1.17	Utility and Transportation Easements
Are existing a	nd proposed easements shown on the plan?
3.1.18	Retaining Walls
Is the height o	of the retaining walls minimized?
Is safety prote	ection provided for walls over three feet?
Can terracing	be used in lieu of high retaining walls?
3.1.19	Grading and Drainage
Does grading	provide a soft appearance?
Does the site of	drain adequately?
Is a Geo Tech	report required?

3.1.20 Storm Water Management
Is a storm water management plan provided?
Will all ponds be dry?
3.2 Architectural and Site Planning
Do we meet the requirements and guidelines for the following:
Office and commercial buildings.
Warehouse and light industrial buildings.
Tech Flex warehouse buildings.
Hospitality and recreational buildings.
Cargo buildings

Landscaping Materials

Please Note: It is the building site owner's responsibility to select plantings from this list which are resistant to pests, and/or road salt spray and care for the plantings in such a manner as to reduce the impact of all pests.

TREES				
TREE				
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED	ACCEPTABLE AS STREET TREE
Abies Concolor	White Fur	,,,	X	
Acer Ginnala	Amur Maple	X		X
Acer Palmatum	Japanese Maple	X		X
Acer Platanoides Spp.	Emerald Queen Norway Maple			
	Jade Glen Norway Maple			
	• •	X		
Acer Rubrum 'Franksred'	Red Sunset Red Maple	X		X
Acer Rubrum 'Red Sunset'	Red Sunset Maple	X		X
Acer Saccharum 'Monumentale'	Monumentale Sugar Maple		X	
Acer Saccharum 'Green Mountain'	Green Mountain Sugar Maple		X	
Acer Saccharum "Legacy'	Legacy Sugar Maple		X	
Amelanchier Arborea	Downy Serviceberry		X	
Amelanchier Canadensis	Shadblow Serviceberry		X	
Amelanchier Laevis	Allegheny Serviceberry		X	
Amelanchier X Gradiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry		X	
Betula Maximowicziana	Monarch Birch		X	
Betula Nigra	River Birch		X	
Betula Papyrifera 'Renci'	Renci Paper Birch	X		X
Betula Platyphylla Japonica 'Whitespire'	Whitespire Birch		X	
Carpinus Betulus	European Hornbeam	X		
Catalpa Bignoides	Southern Catalpa		X	
Celtis Occidentalis	Common Hackberry		X	
Cercidiphyllum Japonicum	Katsuratree	X		X
Cercis Canadensis	Redbud		X	
Cercis Canadensis forest Pansy	Forest Pansy Redbud	X		
Chionanthus Virginicus	Fringetree		X	
Cladrastis Kentukea	Yellowwood	X		
Cornus Florida	Flowering Dogwood		X	
Cornus Kousa	Pogoda Dogwood		X	
Cornus Mas	Cornelian-Cherry Dogwood		X	
Cornus Sericea	Kelseyi Redtwig Dogwood		X	
Crataegus Crus Galli Var. Inermis	Thornless Cockspur Hawthorn		X	
Crataegus Crusgalli Inermis 'Winter King'	Winter King Hawthorn		X	
Crataegus Laevigata	English Hawthorn		X	
Crataegus Lavallei	Lavelle Hawthorn		X	
Crataegus Phaenopyrum	Vaughns Washington Hawthorn		X	
Crataegus Punctata	Ohio Pioneer Hawthorn		X	
Crataegus Virdis 'Winter King'	Winter King Hawthorn		X	
Elaeagnus Angustifolia	Russian Olive		X	
Eucommia Ulmoides	Hardy Rubbertree	X		X
Fagus Grandifolia	American Beech		X	
Fagus Sylvatica	European Beech		X	
Franklinia Alatamaha	Franklin Tree	X		
Fraxinus Americana	White Ash	X		
Fraxinus Pennsylvanica Pennsylvanica	Marshall's Seedless Green Ash			
		X		

PIT WHMP-Pittsburgh International Airport Wildlife Hazard Management Plan dated 7/13/2011. The latest approved version dictates.

TREES				
		DITE	NOT	A CCEPTA DI E A C
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED	ACCEPTABLE AS STREET TREE
Ginko Biloba	Gingko		X	
Gleditsia Triacanthos. Inefrmis	Thornless Honeylocust	X		X
Gleditsia Triacanthos Inermis 'Shademaster'	Shademaster Honey Locust	X		X
Gleditsia Triacanthos Var Inermis 'Skyline'	Skyline Honey Locust	X		
Gymnocladus Dioica	Kentucky Coffeetree	X		
Halesia Carolina	Carolina Silverbell	X		
Halesia Monticola	Mountain Silverbell	X		X
Halesia Monticola Rosea	Rosea Mountain Silverbell	X		X
Juniperus Virginiana	Eastern Red Cedar		X	
Koelreuteria Paniculata	Panicled Goldenraintree	X		X
Laburnum x Watereri	Golden Chaintree	X		
Larix Decidua	Larch European	X		
Liquidambar Styraciflua	American Sweetgum	X		X
Liquidambar Styraciflua	Round-Lobed Sweetgum	X		X
Liquidambar Styraciflua Variegata	Veriegated Sweetgum	X		X
Liquidamber Styraciflua	Sweet Gum	X		X
Liriodendron Tulipifera	Tulip Poplar	X		X
Magnolia Soulangeana	Saucer Magnolia	X		X
Magnolia Stellata (non fruiting)	Star Magnolia	X		X
Magnolia Virginiana	Sweetbay Magnolia	X		X
Malus Astrosanguinea	Carmine Flowering Crabapple		X	
Malus Floribunda	Japanese Flowering Crabapple		X	
Malus Sargentil	Sargent Crabapple		X	
	Radiant Crabapple, Selkirk Crabapple, Snowdrift Flowering Crabapple, White Cascade			
	Weeping Crabapple, Pink Spires			
Malus Spp.	Flowering Crabapple		X	X
Malus X Zumi Calocarpa	Calocarpa Crabapple		X	
Metasequoia Glyptostroboides	Dawn Redwood	X		
Nyssa Sylvatica	Black Tupelo	X		X
Ostraya Virginiana	American Hophornbeam		X	
Oxydendrum Arboreum	Sorrel Tree	X		X
Phellodendron Amurense	Amur Corktree	X		X, male specimans only
Picea Abies	Norway Spruce		X	
Picea Engelmanni	Englemann Spruce		X	
Picea Glauca	White Spruce and Black Hills			
	Spruce		X	
Picea Omorika	Serbian Spruce		X	
Picea Pungens	Colorado Green Spruce		X	
Pinus Densiflora	Tanyosho Pine		X	
Pinus Nigra	Austrian Pine		X	
Pinus Strobus	Eastern White Pine		X	

TREES				
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED	ACCEPTABLE AS STREET TREE
Pinus Sylvestris	Scotch Pine	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	X	
Pinus Thunbergiana	Japanese Black Pine		X	
Platanus Acerfolia 'Bloodgood'	Bloodgood London Planetree	X		X
Platanus Occidentalis	American Sycamore	X		
Platanus X Acerfolia 'Columbia'	Columbia London Planetree	X		X
Platanus X Acerfolla 'Liberty'	Liberty London Planetree	X		X
Platanus X Acerifolia "Bloodgood"	London Planetree	X		X
Populus Tremuloides	Quaking Aspen	X		X
Prunus Cerasifera 'Thundercloud'	Thundercloud Purple Plum	71	X	21
Prunus Sargenti	Sargent Cherry		X	
Prunus Serrulata Kwanzan	Kwanzan Oriental Cherry	X	71	X
Prunus Subhirtella	Higan Weeping Cherry	21	X	21
Prunus X Incam "Okame"	Okame Cherry	X	71	X
Pseudotsuga Menziesii	Douglas Fir	71	X	21
Pyrus Calleryana	Callery Pear		X	
Ouercus Bicolor	Swamp White Oak		X	
Quercus Brealis	Northern Red Oak		X	
Ouercus Coccinea	Scarlet Oak		X	
Quercus Imbreicaria	Shingle Oak		X	
Quercus Palustris	Pin Pak		X	
Quercus Phellos	Willow Oak		X	
Quercus Pichos Ouercus Robus	English Oak		X	
Quercus Rubra	Red Oak		X	
Quercus Schumardii	Texas Red Oak		X	
Robinia Pseudoacacia	Black Locust	X	Α	
Sophora Japonica	Scholar Tree	X		X
Staphylea Trifolia	American Bladdernut	X		X
Stewartia	Stewartia	X		X
Stewartia Korean	Korean Stewartia	X		X
Syringa Reticulata	Japanese Tree Lilac	X		X
Taxodium Distichum	Bald Cypress	Λ	X	Λ
Thuja Occidentalis	Arborvitae		X	
Tilia Cordata 'Greenspire'	Greenspire Linden	X	Λ	X
Tilia Cordata Greenspite Tilia Cordata Spp.	Greenspire Little Leaf Linden	Λ		Λ
Tina Cordata Spp.	•	v		v
Tilia Euchlora	Little Leaf Linden Redmond Linden	X		X
Tsuga Canadensis	Canadian Hemlock	Λ	X	
Ulmus "Urban"	Urban Elm	X	Λ	X
Ulmus Parvifolia	Lacebark Elm, Chinese Elm	X		X
Zelkova Serrata	· · · · · · · · · · · · · · · · · · ·	Λ		Λ
Zeikova Serrata	Village Green Japanese Zelkova	X		X

SHURBS			
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED
Abelia "Edward Goucher"	Edward Goucher Abelia	X	
Abelia x Grandflora	Glossy Abelia	X	
Acer Campestre Compactum	Compact Hedge Maple	X	
Acer Tartaricum	Flame Amur Maple	X	
Aesculus Parviflora	Bottlebrush Buckeye	X	
Alnus Serrulata	Common Alder		X
Aronia Arbutifolia 'Brilliantissima'	Red Chokeberry		X
Aronia Melancarpa	Black Chokeberry		X
Berberis Thunbergii Atro, Nana	Pygmy Red Barberry		X
Berberis Thunbergii Atropurpurea	Red Barberry		X
Buxus Communis	Common Boxwood	X	
Buxus Green Mountain	Green Mountain Boxwood	X	
Buxus Green Velvet	Green Velvet Boxwood	X	
Buxus Koreana	Korean Boxwood	X	
Buxus Microphylla 'Winter Gem'	Winter Gem Boxwood	X	
Buxus Microphylia Compacta	Tiny Leafed Boxwood	X	
Buxus sinica var. Insularis	Winter Beauty Korean Boxwood	X	
Calycanthus Floridus	Carolina Allspice	X	
Caragano Arborescens Pendula	Weeping Siberian Peashrub	X	
Caryopteris X Clandonensis	Blue-Mist Shrub		X
Caryopteris x Clandonesis	Blue Mist Spirea	X	
Ceanothus x Pallidus	Marie Simon Ceanothus	X	
Cephalanthus Occidentalis	Button Bush	X	
Clethra Alnifolia 'September Beauty'	Summersweet	X	
Comus Alba Elegantissima	Silverblotch Dogwood		X
Continus Coggygria	Common Smokebush	X	
Continus Coggygria Velvet	Velvet Cloak Smokebush	X	
Cornus Amomum	Silky Dogwood		X
Cornus Racemosa	Gray Dogwood		X
Cornus Sericea 'Isanti'	Isanti Red Twig Dogwood		X
Cornus Stolonifera	Redosier Dogwood		X
Corylus Avellana Contorta	Harry Lauders Walking Stick	X	
Corylus Cornuta	Beaked Filbert	X	
Corylus Maxima	Giant Filbert	X	
Corylus Maxima Purpurea	Purple Giant Filbert	X	
Cytinus Scoparius Moonlight	Moonlight Scotch Broom	X	
Daphne x Burkwoodii	Carol Mackie Daphne	X	
Deutzia Gracilis	Slender Deutzia	X	
Deutzia Gracilis Nikko	Nikko Slender Deutzia	X	
Deutzia Scabra	Pink PomPom Fuzzy Deutzia	X	
Enkianthus Campanulatus	Redvein Enkianthus	X	
Euonymous Alatus Compactus	Dwarf Burningbush	X	
Euonymus Fortunei Em & Gld	Emerald N Gold Euonymus	X	
Euonymus Fortunei Emerald	Emerald Gaiety Euonymus	X	
Euonymus Fortunei Grn. Ln.	Green Lane Euonymus	X	
Euonymus Japonicus Aureus	Golden Japanese Euonymus	X	
Forsythia Major MT Airy	MT Airy Fothergilla	X	
1 ord and major mir mir	1711 Tilly I Othorgina	7.1	

SHURBS			
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED
Forsythia Suspansa Sieboldi	Siebold Weeping Forsythia		X
Forsythia Viridissima Bronx.	Bronx Forsythia	X	
Forsythia x Intermedia	Border Forthia	X	
Forsythia x Intermedia Sprg.	Spring Glory Border Forsythia	X	
Fothergilla Gardenii	Dwarf Fothergilla	X	
Hamamelis Vernalis	Vernal Witchhazel	X	
Hamamelis Virginiana	Common Witchhazel	X	
Hamamelis X Intermedia 'Arnold Promise'	Arnold Primose Witchhazel	X	
Hibiscus Syriacus	Rose - of- Sharon	X	
Hibiscus Syriacus Aphrodite	Aphrodite Rose - of - Sharon	X	
Hibiscus Syriacus Blue bird	Blue Bird Rose- of- Sharon	X	
Hibiscus Syriacus Diana	Diana Rose- of- Sharon	X	
Hydangea Arborescens Annabl.	Annabelle Hydrangea	X	
Hydrangea Macrophylla	Bigleaf Hydrangea	X	
Hydrangea Paniculata Grandiflora	P.G. Hydrangea	X	
Hydrangea Quercifolia	Oakleaf Hydrangea	X	
Hypericum Densiflorum	Dense St. Johnswort	X	
Hypericum Frondosum 'Sunburst'	Golden St. Johnswort	X	
Hypericum Patulum	Golden Cup ST. Johns Wart	X	
Ilex Glabra 'Nigra'	Nigra Inkberry – Male Cultivar Only	X	
Ilex Glabra 'Densa'	Densa Compact Inkberry		X
Ilex Glabra 'Shamrock'	Shamrock Inkberry		X
Ilex Verticillata 'Jim Dandy'	Jim Dandy Winterberry		X
Ilex Verticillata 'Red Spirte'	Red Sprite Winterberry		X
Ilex X 'Sparkleberry'	Sparkleberry Winterberry		X
Ilex X Meservae	Blue Holly		X
Itea Virginica 'Henry's Garnet'	Henry's Garnet Virg Sweetspire	X	
Itea Virginica 'Sprich'	Little Henry Virginia Sweetspire	X	
Juniperis Squamata 'Blue Star'	Blue Star Juniper	X	
Juniperus Communis Spp.	Compact Pfitzer Juniper, Saybrook Gold		
	Juniper and Sea Green Juniper		X
Juniperus Sabina Tamariscifolia	Tam Juniper	X	
Juniperus Virginiana	Grey Owl Juniper		X
Kalmia Iatifoliaq	Mountain Laurel	X	
Kerria Japanica	Japanese Kerria	X	
Kerria Japanica Picta	Verigated Japanese Kerria	X	
Kerria Japanica Pleniflora	Double Flowering Japanese Kerria	X	
Kolwitzia Amabilis	Beauty Bush	X	
Ligustrum Obtusifolium Regelianum	Regal Privet		X
Lindera Benzoin	Spice Bush	X	
Lonicera Fragrantissima	Winter Honeysuckle	X	
Lonicera Xylosteum	Fly Honeysuckle	X	
Lonicera Xylosteum Em. Mnd.	Emerald Mound honeysuckle	X	
Mahonia Aquifolium	Oregon Grapeholly		X
Myrica Pennsylvanica (male only)	Northern Bayberry	X	
Myrica Pensylvanica "Myriman"	Myriman Northern Bayberry	X	
Parrotia Persica	Persian Parota	X	

SHURBS			
BOTANICAL NAME	COMMON NAME	PIT WHMP	NOT ALLOWED
Philadelphus Min. Snw. Flake	Miniature Snowflake Mockorage	X	
Pieris Floribunda	Mountain Pieris	X	
Pieris Japonica	Japanese Pieris	X	
Pontenilla gold finger	Goldenfinger Bush Cinquefoil	X	
Pontentilla Fruitcosa Abb. Wd.	Abbotswood Bush Cinquefoil	X	
Pontentilla Fruiticosa 'Pink Beauty'	Pink Beauty Shrub Cinquefoil	X	
Rhododendron SPP.	Rhododendron	X	
Rhodotypos Scandens	Black Jetbead	X	
Rhus Aromatica	Fragrant Sumac		X
Rhus Coppalina	Flameleaf Sumac		X
Rhus Glabra	Smooth Sumac		X
Rhus Typhina	Staghorn Sumac		X
Sarcococca Hookerana	Sweetbox	X	
Spirea Japonica	Little Princess Spirea		X
Spirea X Bumalda	Anthony Waterer Spirea, Improved Red		
•	Dwarf Spirea and Gold Flame Spirea	X	
Symphoricarpos Alba	Common Snowberry		X
Symphoricarpos Orbiculatus	Indiancurrant Coralberry		X
Taxus Baccata Repardens	English Yew		X
Taxus M. Densiformis	Dense Yew		X
Tea Virginica	Virginia Sweetspire		X
Thuja Plicata 'Excelsa'	Excelsa Western Arborvitae	X	
Vaccinium Angustifolium	Lowbush Blueberry		X
Vaccinium Virgatum	Highbush Blueberry		X
Viburnum Carlesii	Korean Spice Viburnum		X
Viburnum Dentatum	Arrowwood Viburnum		X
Viburnum P.T. Mariesii	Maries Doublefile Viburnum		X
Viburnum Plicatum Var. Tomentosum	Doublefile Viburnum		X
Viburnum Prunifolium	Black Haw Viburnum		X
Weigela Braint Rubidor	Briant Rubidor tm Weigela	X	
Weigela Bristol Ruby	Bristol Ruby Weigela	X	
Weigela Florida	Old Fashioned Weigela	X	
Weigela Florida Java Red	Java Red Old Fasioned Weigela	X	
Weigela Forida Variegated	Variegated Weigela	X	
Weigela Newport Red	Newport Red Weigela	X	
Weigela Redd Prince	Red Prince Weigela	X	

	GRASSES	
TALL FESCUE		
NTEP Number	Cultivar or Selection	Endophyte Infection (%)
3	Justice	94
4	F-4	92
20	2nd Millennium	92
60	Adam's Valley	92
9	Pick-OD3-01	90
14	Rebel Sentry	90
40	Titan Ltd.	90
63	Constitution	90
129	SR 8600	90
6	Cochise III	88
50	Mustang 3	88
71	BAR Fa 1005	88
105	K01-8015	88
123	CAS-MC1	88
51	Dynasty	86
5	DaVinci	84
7	BR-4	82
31	Tuxedo	82
38	ATF 802	82
46	Padre	82
54	CIS TF-64	82
113	01-RUTOR 2	82
142	Kalahari	82
8	Roberts L1Z	80
109	K01-E09	80

Planting lists based on ACAA approved landscape materials, July 13, 2011