Department of Transportation

Proposed Permanent Rules Relating to Airport Zoning Standards

8800.0100 DEFINITIONS.

[For text of subparts 1 to 7, see Minnesota Rules]

Subp. 7a. **Building.** "Building" means any structure utilized or intended for supporting or sheltering any occupancy.

[For text of subparts 8 to 10, see Minnesota Rules]

Subp. 11. **FAA.** The capital letters "FAA" shall mean means the Federal Aviation Administration of the United States.

[For text of subparts 12 to 14, see Minnesota Rules]

Subp. 15. **Height.** "Height": for the purpose of determining the height limits set forth in these rules this chapter, the datum shall must be mean sea level elevation as determined by U.S. Geological Survey.

[For text of subparts 16 and 16a, see Minnesota Rules]

- Subp. 17. IFR. "IFR" means the symbol used to designate instrument flight rules.
- Subp. 18. **Letter of authority.** "Letter of authority" shall be is included in the term "license" as used herein in this chapter.

[For text of subparts 19 to 20a, see Minnesota Rules]

- Subp. 21. **Passenger.** "Passenger" means an occupant of an aircraft who is not assigned to perform a duty necessary for operating the aircraft.
- Subp. 22. **Person.** The term "Person" when used herein shall include includes an individual, firm, partnership, corporation, company, association, joint stock association, or

body politic and includes a trustee, receiver, assignee, administrator, executor, guardian, or other representative.

- Subp. 22a. **Personal-use airport.** A "Personal-use airport" is means a restricted airport that meets the criteria of part 8800.2200. A personal-use airport is intended for the personal use of the owner of the airport.
- Subp. 23. **Planned.** "Planned," as used in these rules, refers means only to those proposed future airport developments that are so indicated on a planning document having the approval of approved by the commissioner.

[For text of subpart 24, see Minnesota Rules]

- Subp. 24a. **Private airport.** A "Private airport" is means a restricted airport, whether privately or publicly owned. The persons who may use the airport are determined by the owner of the airport. A private airport may not be held out for public use nor may it be displayed on aeronautical charts except as a restricted facility.
- Subp. 24b. **Public airport.** A "Public airport" is means any airport, whether privately or publicly owned, the public use of which for aeronautical purposes is invited, permitted, or tolerated by the owner or person having the right of access and control.

[For text of subpart 25, see Minnesota Rules]

- Subp. 26. **Runway.** "Runway" means any existing or planned paved surface or turf covered area of the airport which that is specifically designated and used or planned to be used for the landing and taking off of aircraft.
- Subp. 26a. **Seaplane base.** A "Seaplane base" is means an area of water used or intended to be used for the landing and takeoff of aircraft, together with appurtenant shoreside buildings and facilities. A seaplane base is an airport as defined in subpart 3.

[For text of subpart 27, see Minnesota Rules]

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Subp. 28. **Structure.** "Structure" means an object constructed or installed by people, including, but without limitations, but not limited to buildings, towers, smokestacks, earth formations, and overhead transmission lines.

[For text of subparts 29 to 33, see Minnesota Rules]

Subp. 34. VFR. "VFR" is the symbol used to designate means visual flight rules.

[For text of subparts 35 and 36, see Minnesota Rules]

8800.2400 AIRPORT ZONING STANDARDS.

- Subpart 1. **Standards.** Contained herein are minimum standards for The zoning of public airports as to airspace, land use safety, and noise sensitivity must meet the minimum standards in this part.
- Subp. 2. **Airport zoning powers.** Any person or governmental body having airport zoning powers under Minnesota Statutes, sections 360.061 to 360.074 may adopt airport zoning ordinances, orders, or regulations more restrictive than the minimum zoning standards set forth herein in this part or in any other applicable law.
- Subp. 3. **Airspace zones.** The following airspace zones are established with relation to an airport and each runway:
- A. Primary zone: all that land which that lies directly under an imaginary primary surface, as defined in part 8800.1200, subpart 5, item A.
- B. Horizontal zone: all that land which that lies directly under an imaginary horizontal surface, as defined in part 8800.1200, subpart 5, item B.
- C. Conical zone: all that land which that lies directly under an imaginary conical surface, as defined in part 8800.1200, subpart 5, item C.
- D. Approach zone: all that land which that lies directly under an imaginary approach surface, as defined in part 8800.1200, subpart 5, item D.

- E. Precision instrument approach zone: all that land which that lies directly under an imaginary precision instrument approach surface, as defined in part 8800.1200, subpart 5, item E.
- F. Transitional zone: all that land which that lies directly under an imaginary transitional surface, as defined in part 8800.1200, subpart 5, item F.
- Subp. 4. **Height restrictions.** Except as necessary and incidental to airport operation, no structure or tree shall structures and trees must not be constructed, altered, or allowed to grow in any airport zone so as to project above any of the imaginary airspace surfaces as established in under subpart 3.
- Subp. 5. Land use safety zones. The following land use safety zones are established with relation to an airport and each existing or planned runway:

A. Safety zone A:

- (1) In the approach <u>zones</u> <u>zone</u> of a runway, safety zone A extends outward from the end of the primary <u>surface</u> <u>zone</u> a distance equal to two-thirds <u>of</u> the runway length <u>or planned runway length</u>.
- (2) In the instance of a planned extension or shortening of an existing runway, the length of safety zone A must be determined by the length of the planned or existing runway, whichever is longer.
 - (3) The length of safety zone A must not be required to exceed 4,000 feet.

B. Safety zone B:

(1) In the approach zones zone of a runway, safety zone B extends outward from the end of safety zone A a distance equal to one-third of the runway length or the planned runway length.

(2) In the instance of a planned extension or shortening of an existing runway, the length of safety zone B must be determined by the length of the planned or existing runway, whichever is longer.

- (3) The length of safety zone B must not be required to exceed 2,000 feet.
- <u>C.</u> Safety zone C: all that land which that is enclosed within the perimeter of the horizontal zone defined in subpart 3, item B and which that is not included in safety zone A or safety zone B.
- Subp. 6. Use restrictions. In order To restrict those uses which that may be hazardous to the operational safety of aircraft operating to and from an airport, and furthermore to limit population and building density in the runway approach areas, thereby creating to create sufficient open space so as to protect life and property in case of an accident, the following use restrictions are applied apply to the land use safety zones.
- A. No use shall be made of any land in any of the safety zones which creates or causes interference with the operation of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft, makes it difficult for pilots to distinguish between airport lights and other lights, results in glare in the eyes of pilots using the airport, impairs visibility in the vicinity of the airport, or otherwise endangers the landing, taking off, or maneuvering of aircraft.
- B. A. Safety zone A shall contain no must not contain buildings, temporary structures, or exposed transmission lines, or other similar land use structural hazards, and shall must be restricted to those uses which that will not create, attract, or bring together an assembly of persons thereon. Permitted uses may include, but are not limited to, such uses as agriculture (seasonal crops), horticulture, raising of livestock, animal husbandry, wildlife habitat, light outdoor recreation (nonspectator), cemeteries, and fencing, roadways, railways, trails, and auto parking.

C. B. Safety zone B shall must be restricted in use as follows. Each use shall must be on a site whose area shall not be is not less than three acres. Each use shall must not create, attract, or bring together a site population that would exceed 15 times that of the site acreage. Each site shall must have no more than one building plot upon which any number of structures may be erected.

A building plot shall <u>must</u> be <u>a single</u>, uniform, and noncontrived area, whose shape is uncomplicated and whose area shall <u>must</u> not exceed the following minimum ratios with respect to the total site area:

Site Area at Least (Acres)	But Less Than (Acres)	Ratio of Site area to Building Plot Area	Building Plot Area square feet	Maximum Site Population (15 Persons/A)
3		12:1	10,900	45
	4	12:1		
4		10:1	17,400	60
	6	10:1		
6		8:1	32,600	90
	10	8:1		
10		6:1	72,500	150
	20	6:1		
20	and up	4:1	218,000	300

The following uses are specifically prohibited in <u>safety</u> zone B: <u>ehurches institutions</u> <u>of religious assembly</u>, hospitals <u>and clinics</u>, nursing homes, schools, theaters, stadiums, hotels and motels, trailer courts, <u>eamp grounds</u> <u>campgrounds</u>, and other places of <u>public or semipublic assembly</u> similar use.

D. C. Safety zone C is subject only to the general restrictions contained in item AD.

D. The use of any land in any of the safety zones is prohibited if the use:

- (1) creates or causes interference with the operation of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft;
- (2) makes it difficult for pilots to distinguish between airport lights and other lights;
 - (3) results in glare in the eyes of pilots using the airport;
 - (4) impairs visibility in the vicinity of the airport; or
 - (5) otherwise endangers the landing, taking off, or maneuvering of aircraft.
- E. The provisions of items B and C shall not apply to land uses, in "established residential neighborhoods in built up urban areas." Such "established residential neighborhoods in built up areas" shall be Existing land uses are subject to the use restrictions contained in this paragraph item.
- (1) Airport safety zoning balances the public interest involved in safety for persons on the ground, safety of persons traveling in aircraft, and the public interest in maintaining existing land uses. The legislature has mandated special protection for existing land uses in "established residential neighborhoods in built up urban areas." The provisions of items A to D strike the appropriate balance with regard to other land uses and areas and shall therefore be applied in those cases. For purposes of this item, "existing land use" means the land use present when the area is first encumbered by an airport zoning ordinance.
- (2) Each governmental authority having airport zoning powers shall <u>must</u> determine which areas located in safety zones A and B of each airport within its jurisdiction are also located in "established residential neighborhoods in built up urban areas." In making such determination, the factors enumerated in subitem (4) shall be considered. Such neighborhoods designated as existing land uses. Existing land uses located in whole or part in safety zones A or B shall must be specifically located on the airport zoning map and shall

must be legally described in the airport zoning ordinance. Each governmental authority having airport zoning powers shall submit its proposed zoning map and ordinance to the commissioner of transportation for review and approval prior to holding a public hearing or taking other action thereon.

- (3) No land use in safety zones A or B and in an area designated as having been an "established residential neighborhood in a built up urban area" shall be prohibited by Areas designated as existing land uses are not subject to the land use restrictions of safety zones A or B in an airport zoning ordinance except as provided required in subitem (5) (4). In addition, any isolated low density residential building lot or low density residential structure which existed on January 1, 1978, in an "established residential neighborhood in a built up urban area," must either be allowed to continue as a conforming use under the terms of the local zoning ordinance or must be acquired, altered, or removed as provided in subitem (6). For this purpose, a low density residential structure shall mean a single family or two family home and an isolated low density residential building lot shall mean a single lot located in an area which is zoned for single family or two family residences and in which the predominant land use is such type of residences.
- (4) In determining what constitutes an "established residential neighborhood in a built up urban area" the governmental unit having zoning powers shall apply and consider the following criteria in relation to the neighborhood as it existed on June 30, 1979:
 - (a) location of the airport;
 - (b) nature of the terrain within safety zones A and B;
- (c) existing land uses and character of the neighborhood around the airport;
 - (d) population of the community;

- (e) that the average population density in all areas within one mile of any point on a runway be equal to or greater than one dwelling unit per acre;
- (f) population density near the airport compared with population density in other areas of the community;
- (g) the age and the economic, political, and social stability of the neighborhood and the community as a whole;
- (h) the proximity of supporting school, commercial, religious, transportation, and other facilities and their degree of integration with residential land uses;
- (i) presence or absence of public utilities including, but not limited to public central sanitary sewer system electric service and gas mains;
- (j) whether or not the factors listed in units (h) and (i) tend to make the community surrounding the airport a self sufficient unit;
- (k) whether the areas within one mile of the perimeter of the airport property would be considered primarily residential in character; and
- (1) other material factors deemed relevant by the governmental unit in distinguishing the area in question as established, residential, urban, and built up.
- (5) (4) Safety hazards: The following land uses if they exist The following existing land uses in safety zones A or B and in an "established residential neighborhood in a built up urban area" are considered by the commissioner to constitute airport safety hazards so severe, either to persons on the ground or to the air traveling public, or both, that they must be prohibited under local airport zoning ordinances:
- (a) any structure which a person or persons customarily use as a principal residence and which is that has more than half of its footprint located entirely within safety zone A and within 1,000 feet of the end of the primary zone;

- (b) any structure which a person or persons customarily use as a principal residence and which is that has more than half of its footprint located entirely within safety zone A or B and which that penetrates an imaginary approach surface as defined by part 8800.1200, subpart 5, item D; and
- (e) any land use in safety zone A or B which violates any of the following standards: the land use must not create or cause interference with the operation of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft; the land use must not make it difficult for pilots to distinguish between airport lights and other lights; and the land use must not result in glare in the eyes of pilots using the airport or impair visibility in the vicinity of the airport;
- (d) any isolated residential building lot zoned for single family or two family residences on which any structure, if built, would be prohibited by unit (a), (b), or (c). An "isolated" residential building lot is one located in an area in which the predominant land use is single family or two family residential structures; and
- (e) (c) any other land use which that presents, in the opinion of the commissioner, a material danger to the landing, taking off, or maneuvering of aircraft or to the safety of persons on the ground. In making such a determination, the commissioner shall must consider the following factors:
- i. the possibility that the land use may contribute to or cause a collision of two or more aircraft or an aircraft and some other object;
- ii. the possibility that the land use may, in case of an aircraft accident, cause an explosion, fire, or the release of harmful or noxious fumes, gases, or substances;
- iii. <u>the</u> tendency of the land use to increase the number of persons that would be injured in case of an aircraft accident;

iv. the effect of the land use on availability of clear areas for emergency landings; and

v. flight patterns around the airport, the extent of use of the runway in question, the type of aircraft using the airport, whether the runways are lighted, whether the airport is controlled, and other similar factors.

(5) (4) and which that is located in an "established residential neighborhood in a built up urban area" area designated as an existing land use in an airport zoning ordinance, as defined by the local government unit and reviewed and approved by the commissioner, the prohibited land use must be acquired, altered, or removed at public expense by the governmental body which that owns the airport. This may be accomplished by an exchange of land, purchase of development rights, acquisition of easements, or other method to be negotiated with the landowner or by outright purchase or exercise of eminent domain, if necessary.

are only those which that present the most severe safety hazards to the air traveling public or persons on the ground, as the case may be. Local governmental units may also prohibit other land uses in safety zones A and B as being unsafe to the public. The use restrictions contained in items A to D provide guidance as to what uses the commissioner deems not to be in the public interest in these safety zones. See also subitem (5), units (c) and (e). The local governmental unit must note the requirement of Minnesota Statutes 1978, section 360.066, subdivision 1a, paragraphs (a) and (d) that certain prohibited land uses must be acquired, altered, or removed at public expense.

(8) (7) In the event that the provisions of this item, as reflected in a proposed local zoning ordinance, would require the acquisition, alteration, or removal of any land use, then, in such event, at least 60 days prior to the first hearing on adoption of the ordinance, the local zoning authority shall so notify the airport owner. The airport owner shall then

extension or shortening, and displaced thresholds and shall then promptly notify the local zoning authority in writing, if it proposes to take any of such alternative actions the local zoning authority must notify the airport owner who must then notify the commissioner in writing. Within 90 days of receipt of the notification, the commissioner must evaluate whether the social and economic costs of acquisition, alteration, or removal of a land use outweigh the impacts that altering the airport would have on the utility of the airport, the state aviation system, and the state airports fund and provide a recommendation in writing to the airport owner.

(9) These rules shall be effective June 30, 1979, except as provided above as to isolated, low density residential building lots and low density residential structures.

Subp. 7. [See repealer.]

8800.2500 FINANCIAL AID FOR MUNICIPAL AIRPORT PROJECTS.

Subpart 1. Airport projects. The commissioner will must make a substantive decision as to the merit or necessity of each project and project application. A substantial aeronautical requirement must be shown by the municipality whereby the contemplated or existing airport is a necessary part of a system of public airports adequate to meet the present and anticipated needs of civil aviation in Minnesota.

- Subp. 2. Project requirements. The airport must be able to handle air traffic safely and adequately. The public interest and aeronautical progress of the state must be reflected in each project and project application. The municipality must show that:
- A. sufficient funds are available for that portion of the project costs to be borne by the municipality and that;
 - B. the project will be completed without undue delay, and that; and

<u>C.</u> the municipality submitting the project application has legal authority to engage in the development as proposed.

- Subp. 3. Clear zone. To be eligible for funding for the construction, improvement, or maintenance of airports or for air navigation facilities for an airport, each airport licensed as a public airport by the commissioner must comply with the clear zone provisions established in this part or provide written notice to the commissioner that demonstrates the airport's good faith efforts to make progress toward compliance.
- Subp. 4. Clear zone dimensions. Clear zone dimensions must be based on an airport's planned build-out conditions. The dimensions of each clear zone are established for and based on the type of existing or planned approach for each runway end.
- A. The inner edge of the clear zone is the same width as, and coincides with, the end of the primary surface, as defined in part 8800.1200, subpart 5, item A.
- B. The clear zone extends outward under the approach surface, as defined in part 8800.1200, subpart 5, item D. The clear zone expands uniformly from the end of the primary surface, following the approach surface to a terminal distance of:
 - (1) 1,000 feet for a utility runway;
- (2) 1,700 feet for a runway end of an other than utility runway with a visual or nonprecision instrument approach except those with visibility minimums as low as three-fourths of a statute mile; or
- (3) 2,500 feet for a runway end of an other than utility runway with a nonprecision instrument approach lower than three-fourths of a statute mile or a precision instrument approach.
- Subp. 5. Clear zone ownership. To provide for the safety of aircraft operations and populations in runway approach zones, airports must meet the requirements in item A or B:

A. an airport sponsor must own one hundred percent of all clear zones in fee simple based on planned build-out conditions in accordance with the dimensions provided in subpart 4; or

- B. the airport sponsor must prepare a clear zone acquisition plan as provided in subpart 6.
- Subp. 6. Clear zone acquisition plan. The airport sponsor must prepare a clear zone acquisition plan that documents the plan for acquiring all clear zones in fee simple and obtain approval from the commissioner as required under Minnesota Statutes, section 360.305, subdivision 5.
- Subp. 7. Exceptions. In cases where it is not feasible to own the entire clear zone in fee simple due to airport-specific constraints, such as cost burdens that present a hardship for the airport sponsor; the need to obtain a parcel that is not readily severable from other land; or natural features of the terrain, such as a river that make acquisition impracticable, the airport sponsor may request an exception. To request an exception, a clear zone acquisition plan must be prepared and include:
- A. a list of property interests currently owned and property interests identified for future acquisition;
- B. any natural and manmade features within clear zones based on the dimensions provided in subpart 4, items A and B, including those that may result in congregations of people or exceed height standards defined by part 8800.1200;
 - C. factors limiting clear zone acquisition;
- D. existing or proposed future land use control strategies to support airport-compatible land uses within clear zones; and

E. an explanation of any potential negative safety impacts that not owning the entire clear zone in fee simple may have on aircraft operations and populations in runway approach zones.

Subp. 8. Evaluation of clear zone acquisition plan. The commissioner must evaluate the clear zone acquisition plan and the information required by subpart 7. If the commissioner approves the clear zone acquisition plan, the airport sponsor must be notified in writing. If the commissioner does not approve the clear zone acquisition plan, the commissioner must notify the airport sponsor in writing and provide the reasons for disapproval. The commissioner must disapprove a plan upon finding that a requested exception does not adequately provide for the safety of aircraft operations and populations in the runway approach zones. The airport sponsor may revise and resubmit the clear zone acquisition plan within 90 days of the disapproval for further evaluation until the plan is approved.

Subp. 9. Applicability. Airports with airport layout plans approved under Minnesota Statutes, section 360.305, subdivision 5, on or after the effective date of this part must meet the criteria in subpart 5, item A or B. Airports without approved airport layout plans or airports with airport layout plans approved before the effective date of this part must meet the criteria in subpart 5, item A or B, when they next update their airport layout plan.

REPEALER. Minnesota Rules, part 8800.2400, subpart 7, is repealed.