



TOWN OF HAVERHILL *New Hampshire*

DEAN MEMORIAL AIRPORT ZONING REGULATIONS

An Ordinance regulating and restricting the height of structures and objects of natural growth, and otherwise regulating the use of property in the vicinity of the Dean Memorial Airport by:

- Creating the appropriate zones and establishing the boundaries thereof;
- Providing for changes in the restrictions and boundaries of such zones;
- Defining certain terms used herein;
- Referring to the Dean Memorial Airport Building Height Map, prepared by Jacobs Engineering dated August 2017 which is attached to these Regulations and made a part thereof;
- Providing for enforcement and imposing penalties.

This Ordinance is adopted pursuant to the authority conferred by the New Hampshire Revised Statutes Annotated, RSA 424:5. It is hereby found that obstruction:

- Has the potential for endangering the lives and property of users of Dean Memorial Airport, and property or occupants of land in its vicinity;
- May affect existing and future instrument approach minimums of Dean Memorial Airport,
- May reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of the Dean Memorial Airport and the public investment therein.

Accordingly, it is declared: The following Ordinance is hereby enacted by the voters of the Town of Haverhill, as follows:

1. That the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by Dean Memorial Airport.
2. That it is necessary in the interests of the public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
3. That the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of law enforcement.

The Town shall defer to NH RSA 424:10 (Acquisition of Air Rights) to protect the airspace through property acquisition.

Section I. Short Title

This Ordinance shall be known as and may be cited as the Dean Memorial Airport Zoning Regulations.

Section II. Definitions

As used in these Regulations unless the context otherwise requires:

1. Airport. Dean Memorial Airport. An airport owned by, and located in the Town of Haverhill, New Hampshire.
2. Airport elevation. The highest point of an airport's usable landing area measured in feet from sea level.
3. Approach surface. A surface longitudinally centered on the extended runway's centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height, limitation slope set forth in Section IV of these Regulations. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.
4. Approach, transitional, horizontal, and conical zones. These zones are set forth in Section III of these Regulations.
5. Zoning Board of Adjustment. Consisting of a board appointed by the Town of Haverhill Select Board and having the duties and powers as provided by RSA 673.3.
6. Conical surface. A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet.
7. Hazard to air navigation. An obstruction determined to have an adverse effect on the safe and efficient utilization of the navigable airspace. An adverse effect shall be determined by the results of submitting a FAA Form 7460-1 to the FAA.
8. Height. For the purpose of determining the height limits in all zones set forth in these Regulations and shown on the Dean Memorial Airport Building Height Map, the datum shall be Mean Sea Level (MSL) elevation unless otherwise specified.
9. Horizontal surface. A horizontal plane 150 feet above the established airport elevation of 581.7 ft MSL.
10. Navigable airspace. Airspace at and above the minimum flight altitudes prescribed by or under CFR 14 § 1 including airspace needed for safe takeoff and landing.
11. Nonconforming use. Any preexisting structure, object of natural growth, or use of land which is consistent with the provisions of these Regulations or an amendment thereto.
12. Non-Precision instrument runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance or area-type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned.
13. Obstruction. Any structure, growth, or other object, including any mobile object that exceeds a limiting height set forth in Section IV of these Regulations.

14. Person. An individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.
15. Primary surface. A surface longitudinally centered on a runway. The primary runway extends 200 feet beyond each of that runway. The width of the primary surface is set forth in Section III of these Regulations. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
16. Runway. A defined area on an airport prepared for landing and takeoff of aircraft along its length.
17. Structure. An object, including any mobile object, constructed or installed by human beings, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
18. Transitional Surfaces. These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.
19. Tree. Any object of natural growth.
20. Utility Runway. A runway that is constructed for and intended to be used for aircraft of 12,500 pounds maximum gross weight and less.
21. Visual Runway. A runway intended solely for the operation of aircraft using visual approach procedures.

Section III. Airport Zones

In order to carry out the provisions of these Regulations, there are hereby created and established zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to the Dean Memorial Airport.

Such zones are shown on the Dean Memorial Airport Building Height Map, prepared by Jacobs Engineering dated August 2017 (Appendix A) and the FAR Part 77 Obstruction Identification Surfaces Diagram (Appendix B) which is incorporated and made a part of these Regulations.

An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. Utility Runway 1 (Visual Approach Zone). The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway. (20:1)

2. Utility Runway 19 (Non-Precision Instrument Approach Zone). The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 2,000 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is a continuation of the centerline of the runway. (34:1)
3. Transitional Zones. The transitional zones are the areas beneath the transitional surfaces. (7:1)
4. Horizontal Zone. The horizontal zone is established by swinging arcs of 5,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
5. Conical Zone. The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outwards therefrom a horizontal distance of 4,000 feet.

Section IV. Airport Zone Height Limitations

Except as otherwise provided in these Regulations, no structure shall be erected, altered, or repaired, and no tree shall be allowed to grow in any zone created by these Regulations to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. Utility Runway Visual Approach Zone (Runway 1). Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline. (20:1)
2. Utility Runway Non-precision Instrument Approach Zone (Runway 19). Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface, and extending to a horizontal distance of 5,000 feet along the extended runway centerline. (34:1)
3. Transitional Zones-Slopes seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is 581.7 feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height limits sloping seven (7) feet outward for each foot upward beginning at

the sides of and at the same elevation as the approach surface, and extending a horizontal distance of 5,000 feet measured at 90 degree angles to the extended runway centerline.

4. Horizontal Zones-Established at 150 feet above the airport elevation or at a height of 731.7 feet above mean sea level.
5. Conical Zones-Slopes twenty (20) feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation. (20:1)

Section V. Use Restrictions

1. Notwithstanding any other provisions of these Regulations, no use may be made of land or water within any zone established by these Regulations in such a manner as to:
 - B. Create electrical interference with navigational signals or radio communication between the airport and aircraft,
 - C. Make it difficult for pilots to distinguish between airport lights and others,
 - D. Result in glare in the eyes of pilots using the airport,
 - E. Impair visibility in the vicinity of the airport,
 - F. Create bird strike hazards or wind turbulence,
 - G. Create or discharge smoke, steam, heat, dust or other obstructions to visibility, or in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

When one of these uses is in question, the FAA shall evaluate any proposed use as part of the FAA Form 7460-1 process.

Section VI. Nonconforming Uses

1. Regulations Not Retroactive. The regulations prescribed by these Regulations shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as of the effective date of these Regulations, or otherwise interfere with the continuance of nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of these Regulations and is diligently prosecuted.

In spite of the preceding provision of this Section, if an existing nonconforming structure is found, an obstruction analysis shall be submitted by the Town of Haverhill to the FAA's OE/AAA system. This is to ensure that the operators of aircraft in the vicinity of the airport are aware of the presence of such airport obstruction.

If the FAA determines it is truly an obstruction, the Town of Haverhill shall require the removal first and if removal is not feasible then the owner is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights. Such removal, installation, operation, and or maintenance shall be at the expense of the Town of Haverhill.

Section VII. Permits

Adopted pursuant to the authority conferred by the New Hampshire Revised Statutes Annotated, Title XXXIX Aeronautics, Section 424:6 Airport Zoning.
(Appendix C)

1. Future Use. Except as specifically provided in A, B, and C hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone hereby created unless a *Town of Haverhill, NH, Building Permit Application* (Appendix D) is completed and approved by an Agent of the Select Board. The applicant must conform to all federal, state, and local laws, ordinances, and regulations in addition to submitting FAA Form 7460-1 to the FAA and providing The Town of Haverhill with the FAA determination and confirmation that there is no hazard to air navigation.

Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient information to determine whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of these Regulations shall be granted unless a variance has been approved in accordance with Section VII, Subsection 4.

- A. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
- B. In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
- C. In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by these Regulations except as set forth in Section IV, Subsection 5, (Conical Zone).

2. Existing Uses. No building permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of these Regulations or any amendments thereto or than it is when the application for a building permit is made. A *Town of Haverhill, NH, Building Permit Application* (Appendix D) must be completed and approved by an Agent of the Select Board. The applicant must conform to all federal, state, and local laws, ordinances, and regulation in addition to submitting FAA Form 7460-1 to the FAA and providing The Town of Haverhill with the FAA determination and confirmation that there is no hazard to air navigation. Except as indicated, all applications for such a permit shall be granted.
3. Nonconforming Uses Abandoned or Destroyed. Whenever the Town of Haverhill determines that a nonconforming tree or structure has been abandoned or more than 80 percent torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations described in this document. If repair is indicated the applicant is responsible for submission of FAA Form 7460-1 to the FAA and for providing The Town of Haverhill with the determination.
4. Variances. Any person desiring to erect any structure or increase the height of any structure, or permit the growth of any tree, or otherwise use his/her property in violation of airport zoning regulations adopted hereunder may apply to the Town of Haverhill Zoning Board of Adjustment (hereafter "ZBA") (Appendices E, F, and G) for a variance from the zoning regulations in question. The application for a variance shall be accompanied by a determination from the Federal Aviation Administration (submission of FAA Form 7460-1 to the FAA) as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. The ZBA must follow the FAA's determination and recommendations but may make a determination that is more restrictive than the FAA. The Town can appeal a variation in the FAA requirements through the 7460 process.

A copy of the application for a variance shall be submitted to the Airport Zoning Commission and the Airport Consultant for review and recommendations with regard to the Regulations and the effects of the variance on the operation of air navigation facilities and the safe, efficient use of navigable airspace.

Such variances may be allowed where a literal application or enforcement of the Regulations would result in practical difficulty or unnecessary hardship and the relief granted would not be contrary to the public interest but do substantial justice and be in accordance with the spirit of the Regulations.

5. Obstruction Marking and Lighting. In granting any permit or variance under this section, the ZBA may, if it deems such action advisable to execute the purposes of these Regulations and reasonable in the circumstances, condition such permit or variance:
- A. As to require the owner of the structure or tree in question to install, operate, and maintain suitable obstruction markers and obstruction lights as may be necessary, at the owner's expense.
 - B. If deemed proper by the ZBA (and except for a determination from the FAA) this condition may be modified to require the owner of the structure or tree in question to permit the Town of Haverhill, at its own expense, to install, operate, and maintain suitable obstruction markers and obstruction lights.

Section VIII. Enforcement

It shall be the duty of the Town of Haverhill Airport Zoning Commission to administer the regulations and the duty of the Select Board to enforce the regulations prescribed herein.

Section IX. Zoning Board of Adjustment

The Town of Haverhill Zoning Board of Adjustment (hereinafter "ZBA") shall exercise the following powers:

1. To hear and decide appeals from any order, requirement, decision, or determination made by the Select Board or equivalent authority in the enforcement of these Regulations;
2. To hear and decide specific variances.

The Zoning Board of Adjustment shall make written findings of facts and conclusions of law, giving the facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of these Regulations.

The concurring vote of a majority of the members of the Zoning Board of Adjustment shall be sufficient to reverse any order, requirement, decision, or determination of the Select Board or decide in favor of applicant on any matter upon which it is required to pass under these Regulations or to effect variation to these Regulations.

Section X. Appeals

Any order, requirement, decision or determination made under these Regulations may be appealed to the ZBA as set forth in RSA 424:6-a and RSA 676:5.

The ZBA shall give public notice and due notice to the property owners who could potentially be affected by an appeal including those who abut the airport boundaries, and those who own property within 100 feet of the airport boundaries.

The ZBA may, in conformity with the provisions of these Regulations, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as may be appropriate under the circumstance.

Section XI. Judicial Review

Applicants receiving a negative decision from the ZBA may appeal to the Superior Court of Grafton County as provided in Section 4 of Chapter 677 of the Public Laws of the State of New Hampshire.

Section XII. Penalties

Violation of these Regulations or any regulation, order, or ruling promulgated hereunder shall be administered and enforced as set forth in RSA 424:6-a (Application of Zoning and Planning Laws), RSA 676:15 (Injunctive Relief), and RSA 676:17 (Fines and Penalties; Second Offense).

Section XIII. Conflicting Regulations

Where there exists a conflict between any of the regulations or limitations prescribed in these Regulations and any other regulations applicable to the same area, (whether the conflict is with respect to the height of structures or trees, and the use of land, or any other matter,) the more stringent limitation or requirement shall govern and prevail.

Section XIV. Severability

If any of the provisions of these Regulations or the application thereof to any person or circumstances are held invalid, such invalidity shall not affect other provisions or application of these Regulations which can be given effect without the invalid provision or application, and to this end, the provisions of these Regulations are declared to be severable.

Section XV. Effective Date

WHEREAS, the immediate operation of the provisions of these Regulations is necessary for the preservation of the public health, public safety, and general welfare, these Regulations shall be in full force and effect from and after its passage by a Town of Haverhill vote and publication and posting as required by law.

Approved by the Town of Haverhill Select Board on this ____ day of _____, 20____.

Signatures of Select Board Members:

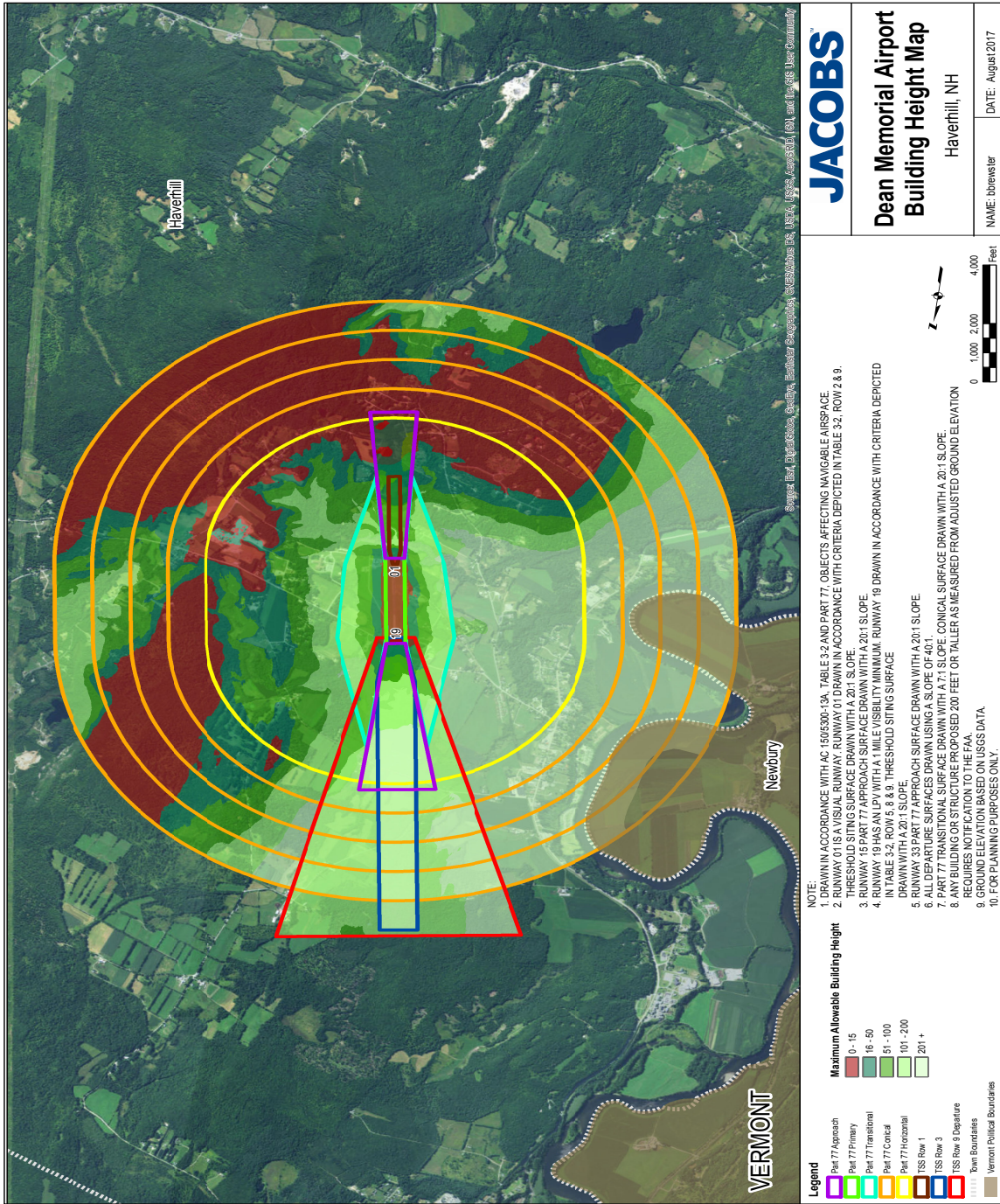
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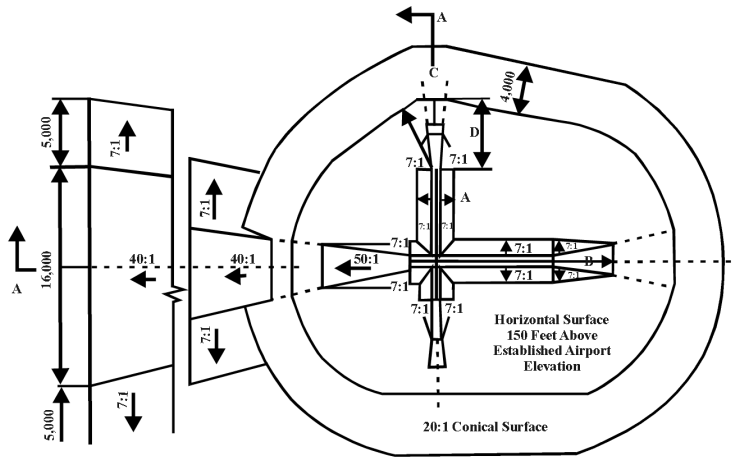
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Appendices:

- A. Dean Memorial Airport Building Height Map, prepared by Jacobs Engineering dated August 2017 https://www.nh.gov/dot/org/aerorailtransit/aeronautics/documents/5B9_Heatmap.pdf

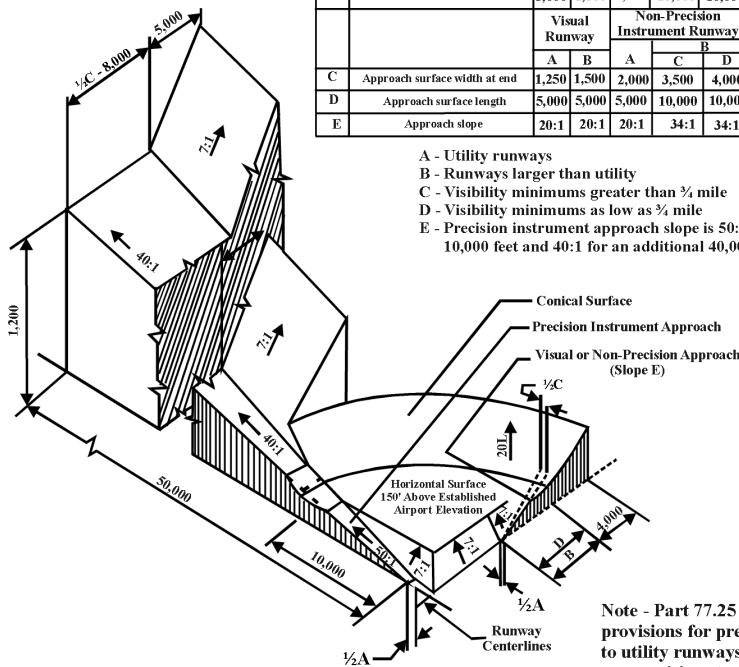


B. Federal Aviation Regulations Part 77 Obstruction Identification Surfaces Diagram.



DIM	ITEM	Dimensional Standards (Feet)					
		Visual Runway		Non-Precision Instrument Runway			Precision Instrument Runway
		A	B	A	C	D	
A	Width of primary surface and approach surface width at inner end	250	500	500	500	1,000	1,000
B	Radius of horizontal surface	5,000	5,000	5,000	10,000	10,000	10,000
C	Approach surface width at end	1,250	1,500	2,000	3,500	4,000	16,000
D	Approach surface length	5,000	5,000	5,000	10,000	10,000	*
E	Approach slope	20:1	20:1	20:1	34:1	34:1	*

- A - Utility runways
- B - Runways larger than utility
- C - Visibility minimums greater than 3/4 mile
- D - Visibility minimums as low as 3/4 mile
- E - Precision instrument approach slope is 50:1 for inner 10,000 feet and 40:1 for an additional 40,000 feet



Note - Part 77.25 does not make provisions for precision approaches to utility runways. In these situations, use precision standards for other than utility runways to develop the primary, approach, and transition surfaces.

- C. New Hampshire Revised Statutes Annotated, Title XXXIX Aeronautics, Section 424 Airport Zoning
<http://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-XXXIX-424.htm>
- D. Town of Haverhill, NH, Building Permit Application https://www.haverhill-nh.com/vertical/sites/%7B7B636F77-2058-47A7-A817-81AAD9EE8E62%7D/uploads/BUILDING_PERMIT_APP__FEE_SCHEDULE.pdf
- E. Instructions To Applicants Appeal To The Board of Adjustment https://www.haverhill-nh.com/vertical/sites/%7B7B636F77-2058-47A7-A817-81AAD9EE8E62%7D/uploads/ZBA_Retyped_app.pdf
- F. NH RSA 674:33 Powers of the Zoning Board of Adjustment
<http://www.gencourt.state.nh.us/rsa/html/lxiv/674/674-mrg.htm>
- G. NH RSA 676:5 Appeals to Board of Adjustment
<http://www.gencourt.state.nh.us/rsa/html/lxiv/676/676-5.htm>

