

Pennsylvania House Local Government Committee Hearing on HB 2159

March 26, 2008

Testimony of Frederic H. Abendschein, P. E., Chair, Columbia Borough Planning Commission

Executive Summary

Bottom Line: passage of this bill will allow municipalities such as Columbia:

- To maintain the safety of people in the air and citizens on the ground.
- With an existing Zoning Ordinance containing appropriate height restrictions to not incur the expense of enacting additional height requirements in an Airport Hazard Area.
- To not incur the time and expense of having the municipal engineers verify the Airport Hazard Area height calculations for each new development in the Area.

Key points:

- Small airports and municipalities all over the Commonwealth are concerned with safety
- Columbia's 1995 Comprehensive Plan calls for Airport Hazard Area
- Council has not adopted one (cost to the taxpayer)
- An Airport Hazard Area for McGinness Field would include parts of:
 - Columbia Borough and West Hempfield and Manor Townships
 - 98th and 41st House Districts
 - 36th and 13th Senate Districts
- Impact on neighboring municipalities; interlock zones
- Many questions (engineering types) such as:
 - Where is the end of runway(s)?
 - Who determines runway end elevation?
 - Who determines Parcel elevation?
 - Where is Parcel elevation determined?
 - What about closed (but could be opened) runways?
- Each case needs to be checked against not only Zoning, but also checked against the Airport Hazard Area
- Examples of how Columbia handled such situations:
 - Cell tower
 - Condominium towers
 - Emergency tower
 - 40-story apartment variance
- Can be handled through Zoning height restrictions and FAA review

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My name is Fred Abendschein. I'm a Registered Professional Engineer (Mechanical) in the Commonwealth and a Lancaster County Master Planner.

I am Chair of the Columbia Borough Planning Commission (CBPC) and members authorized me to be their representative at this hearing. I've served on Planning for nine years and been Chair for four.

I writing this a bit hurriedly and from memory and so may not be as accurate as I would like to be. If there is anything in my testimony that the Committee would like me to verify I will be glad to do the appropriate checking to the best of my ability. As you'll see I'll approach problems from an engineering viewpoint rather than from an attorney's perspective.

Columbia Borough has a population of about 10,000 and a small private grass runway airport, McGinness Field, which is on the south side of town and currently does not offer commercial service. The owner, Mr. George McGinness, built the field after WWII.

When I learned of the Pennsylvania Supreme Court's fairly recent decision on Airport Hazard Areas, I immediately wondered what impact it would have on Columbia.

Our town's 1995 Comprehensive Plan, adopted under the Municipalities Planning code, recommended that Borough Council adopt an Airport Hazard Area Ordinance. CBPC in both its 2000 and 2006 reviews reiterated this recommendation. However, Council never did adopt such a measure because, if I recall correctly, the associated cost to the taxpayer.

Council did have its Solicitor draw up an Ordinance based on the Model Ordinance, but when I compared the two, I found some inconsistencies between them for reasons unknown.

In any case the Model Ordinance certainly is a wonderful starting point and I've referenced it often.

Just a cursory check showed that, just like water and air, an Airport Hazard Area does not recognize municipal, House, or Senate boundaries. In Columbia's case the Zone would extend over most of the Borough and parts of neighboring West Hempfield and Manor Townships. The Zone would include parts of the 98th and 41st House Districts and parts of the 36th and 13th Senate Districts.

A situation that arises where there are municipal boundaries involved is making sure that the respective Airport Hazard areas seamlessly and accurately mesh with one another.

I'm reasonably confident this is not a unique situation based on the PennDOT's informative state map on page 5.

You can learn more about McGinness Airport on pages 6 to 10.

On page 11 you'll be able to get an idea of what an Airport Hazard Area would be for Columbia. As you can see the Airport Hazard Area would cover all but the northern most (and lightly inhabited) part of the Borough.

I did some allowed-building height calculations in various Zones in the Airport Hazard Area as examples and here are the results:

Approach Surface Zone (this is the path the plane takes taking off and landing):

138 feet at Fifth and Mill Streets: site of Trinity House, a high rise for the elderly

Horizontal Surface Zone (surrounds and covers the airport):

236 feet at the Susquehanna River shoreline

-16 feet at the Borough Farm's hilltop location (i.e. the hill itself would be in violation!)

Conical Surface Zone (radiating out from the Horizontal Surface Zone):

436 feet at the Susquehanna River shoreline

72 feet at Columbia High School, which is on a hill

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In making this drawing and thinking about the Airport Hazard Area there were many engineering-type questions that arose in my mind:

- Where are the ends of the runways used to define the different zones? As you can see from the aerial photo of McGinness Airport that is not easy to determine. In setting up an Airport Hazard Area a municipality would need a clear definition for a runway end.
- Who determines the official runway ends elevations?
- Who determines the elevation of a parcel where land development is proposed?
- Where in the parcel is the elevation taken (especially on large parcel where there is a large change in elevation across it)? Highest (most conservative from a safety aspect)? Lowest (best for the developer who wants to maximize the building's height)? Average of high and low? Mean based on integrating over the parcel's whole surface?
- What happens when several zones intersect over a parcel? This could require multiple calculations.
- What about closed runways? Conservative approach is to assume that an owner might reopen them in the future and setup the Airport Hazard Area accordingly. This situation may currently exist at McGinness Airport.
- How should municipalities handle Airport Hazard Zones defined by multiple runways? Multiple runways will define overlapping and conflicting Horizontal and Conical Surface Zones?

There are costs associated with getting answers to all of these questions. Ideally there would be answers before a municipality adopts an Airport Hazard Area. Otherwise the municipal engineer, when encountering one of these or some other question, would have to stop and seek advice from the Solicitor causing an expense for the municipality. There would be a delay for the developer who in good faith assumed one answer, but not the one arrived at by the municipal engineer.

Almost every development that will happen in Columbia will require a developer to do a calculation and for our Borough Engineer to verify the calculation. Obviously there are costs associated with this for both the developer and the taxpayer.

Is there a way around this? Let's take a look at how we handled three situations in Columbia Borough.

The first arose when a telephone company wanted to put up a cell tower. In Columbia there is basically a 35-foot height restriction across the Borough in our Zoning Ordinance. Naturally the proposed cell tower would go above that. However, federal law often overrides local law with respect to cell towers. As I recall, a quick check based on the Model Ordinance showed that there would not be a problem.

A few years ago there was a proposal for a high-rise condominium building near the entrance to our Veterans Memorial Bridge. Again, from what I remember, calculations showed that there was not a problem and Planning also asked the developer to check with the Federal Aviation Administration.

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Another situation was construction of an emergency communications tower on the hilltop where our Borough Farm was. This was an ideal location because the tower would not only cover the Borough, but also out into the river to those attempting a river rescue. Here too, as I remember, Planning asked County to check with the FAA before building the tower. If an Airport Hazard Area were in place such a tower, beneficial to so many citizens, would not be permitted.

The most recent was a variance request to allow construction of a 40-story apartment building that would have been above what an Airport Hazard Area would allow. For that reason and others CBPC recommended to our Zoning Hearing Board that it deny the request and it did.

So you can see our existing Zoning Ordinance combined with using the Model Ordinance has served us well and, I believe, can do so in the future.

Enactment of this bill will allow Columbia Borough to avoid the expense of additional legislation and allow us to continue to responsibly address the safety needs of our citizens and our airport.

Thank you.

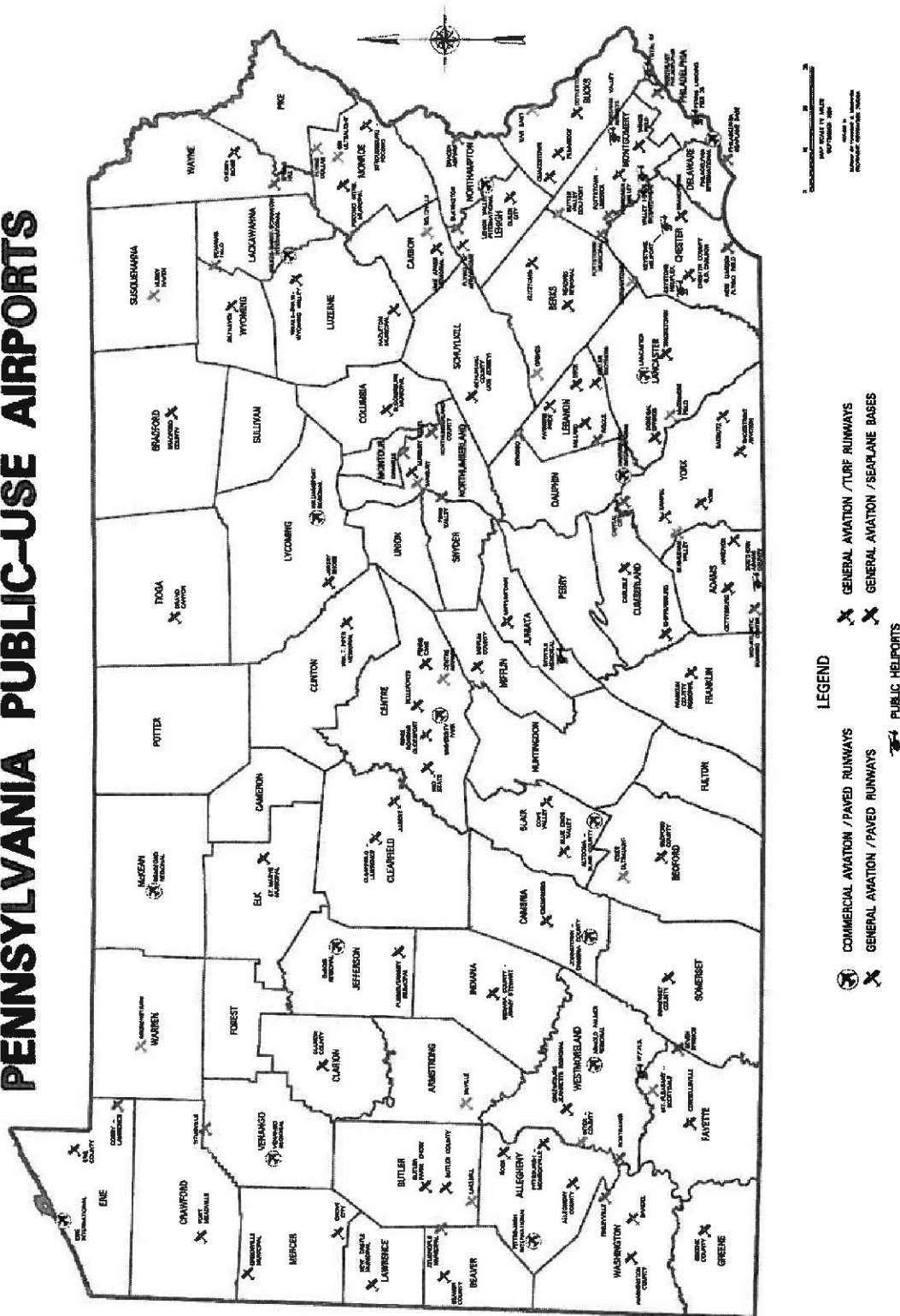
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PENNSYLVANIA PUBLIC-USE AIRPORTS



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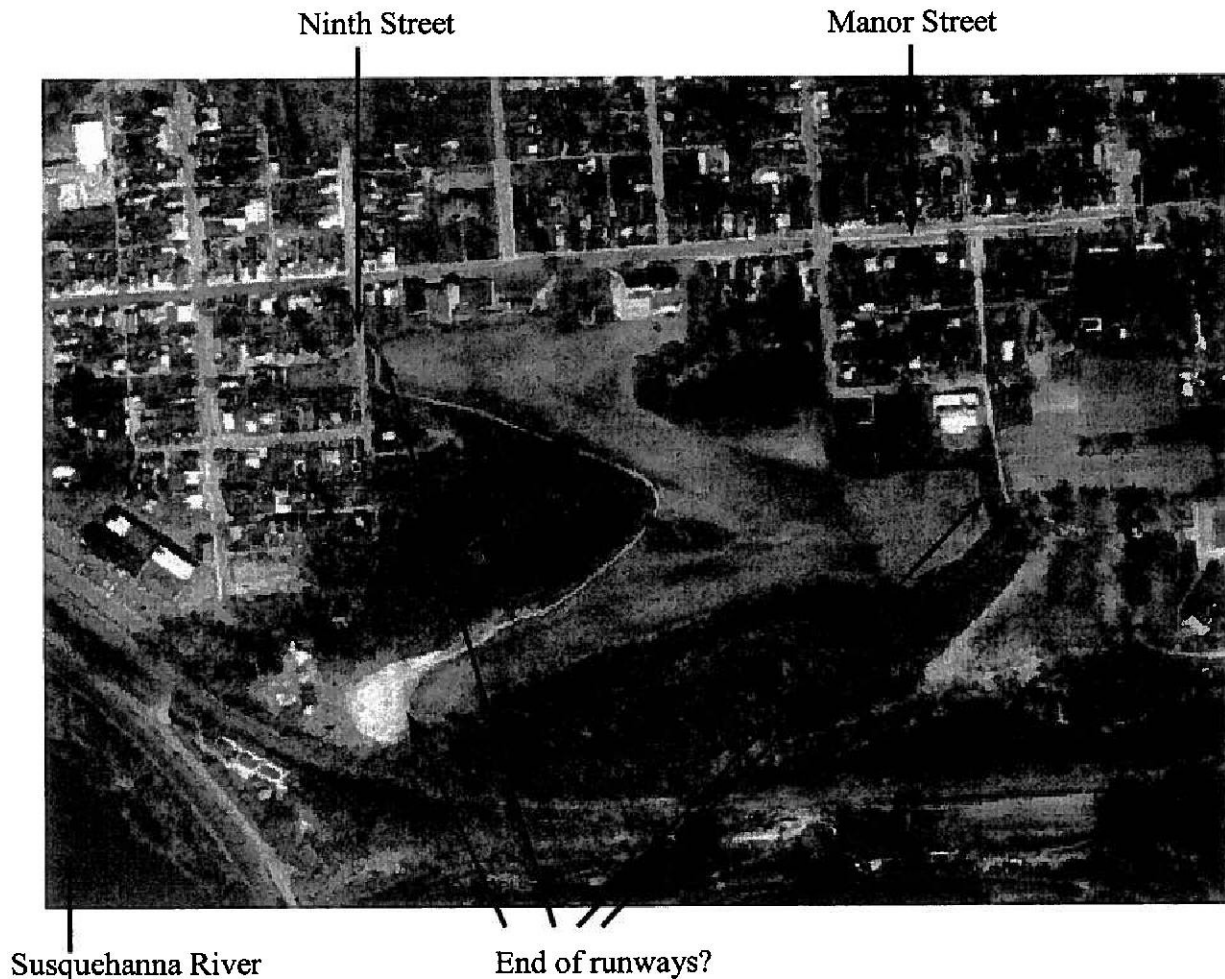
Partial History of McGinness Field, Columbia, Pa.

In the late 1940s Mr. George McGinness, World War II veteran and coach at Franklin and Marshall College, literally built this airport south of Manor Street in Columbia.

For a short period the U. S. Post Office had a mail drop at the airport.

Since constructing the airport, Mr. McGinness, a former Borough Councilman, has run his airport for small planes and, in later years, ultralights.

1999 Aerial Photo of McGinness Field



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McGinness Field Airport

McGinness Field Airport (8N7)

1020 Manor Street
Columbia, PA 17512
(717) 684-6157

Airport Aerial Photo

Economic Impact -- View the economic impact information for this facility.

These items are in Adobe PDF format. To view them, you MUST have PDF viewing software. This software is FREE! If you do not have the Adobe Acrobat software, please follow link to Adobe.com.

Elevation:	334'
Latitude:	40 01.51'
Longitude:	76 29.23'
Runway Dimensions:	RW 8/26 1820x100 ft. Turf
Lights:	None
Nav aids:	None
Communication:	CTAF
Weather:	None
Remarks:	RW 11/29 closed
Services:	Tiedown
Fuel:	None
FBO:	McGinness Aviation Service, (717) 684-6157
Accommodations:	Taxi; bus; phone; restaurant
Attractions:	Pennsylvania Dutch Tourist Area; Columbia Clock Museum; Bank Museum; camping at Prospect Campgrounds
Airport Manager:	George McGinness, (717) 684-6157

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Economic Impacts of Aviation

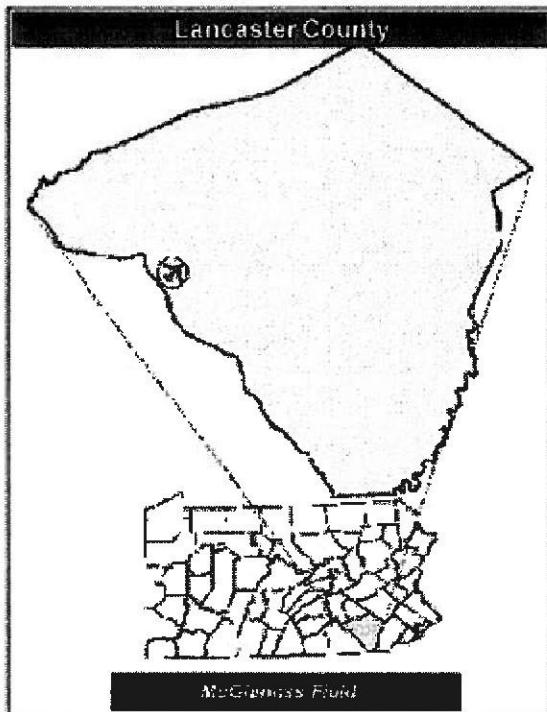
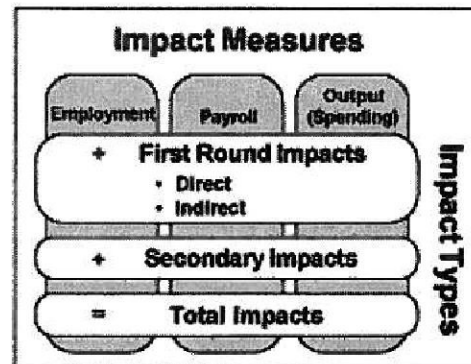


McGinness Field

Airport Location

McGinness Field is located one mile southeast of the Borough of Columbia in Lancaster County. The airport is situated within the Harrisburg, York, Lancaster area. Access to the airport is available via U.S. 30 and State Route 462. Major employers in Lancaster County include Armstrong World Industries, Inc.; Ford New Holland, Inc.; and the Mutual Assistance Group.

McGinness Field is classified as a general service airport by the Pennsylvania Bureau of Aviation. The airport does not have any based aircraft, yet does experience approximately 890 annual aircraft operations. The airport has one turf runway, Runway 8/26, which is 1,800 feet long and 100 feet wide. Runway 8/26 does not have runway lighting.



Economic Impact

Economic impacts at an airport are measured through employment, payroll, and output (spending). On-airport business and government activities (direct impacts) account for a significant portion of an airport's first round economic benefits. Additional first round benefits are also linked to visitors who arrive via the Commonwealth's system of airports (indirect impacts). Spending by these visitors supports additional employment and associated annual payroll. These first round impacts create additional spin-off benefits that ripple through the economy. These secondary or induced benefits were measured with Pennsylvania-specific IMPLAN multipliers. When combined, first round and secondary benefits equal the total economic impact associated with each airport.

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McGinness Field

First Round Impact

In 1999, there was one aviation-related tenant located on the airport. In order to preserve tenant confidentiality, total tenant and visitor impacts have been combined. This tenant's direct employment, payroll, and output impacts were derived from survey data. For 1999, the total combined first round output stemming from all on-airport tenants and general aviation visitors to McGinness Field was approximately \$44,200. Total first round full-time employment related to airport tenants and general aviation visitors is estimated at one person with a total first round payroll of approximately \$17,100 annually. Survey data indicated that

approximately 270 visitors used the airport in 1999.

Secondary Impact

The direct impacts associated with on-airport tenants and general aviation visitors also create secondary impacts throughout the Commonwealth. Secondary impacts are induced impacts calculated using the Pennsylvania-specific IMPLAN multipliers. The accompanying table presents the 1999 direct, secondary, and total impacts for output, payroll, and employment as they relate to on-airport tenants and general aviation visitors.

	<u>First Round</u>	<u>Secondary</u>	<u>Total</u>
✕ Employment			
Airport Tenants	***	***	***
GA Visitors	***	***	***
Total	1.4	1.1	2.5
✕ Payroll			
Airport Tenants	\$***	\$***	\$***
GA Visitors	\$***	\$***	\$***
Total	\$17,100	\$11,000	\$28,100
✕ Output			
Airport Tenants	\$***	\$***	\$***
GA Visitors	\$***	\$***	\$***
Total	\$44,200	\$36,900	\$81,100

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Economic Impacts of Aviation



McGinness Field

Total Impact

For 1999, the total output (including first round and secondary impacts) stemming from all on-airport tenants and general aviation visitors to McGinness Field was approximately \$81,100. Total full-time employment related to airport tenants and general aviation visitors, including all secondary impacts, is estimated at three persons, with a total annual payroll (first round and secondary) of approximately \$28,100 associated with these jobs.


Other Benefits


Similar to many of the Commonwealth's smaller general aviation airports, the benefits of McGinness Field are linked primarily to the recreational benefits that the airport provides.

This privately-owned, public-use airport is located in scenic and historic Lancaster County. The airport provides access to Pennsylvania Dutch tourist areas, Wilson Annatel Factory, the Columbia Clock Museum, and the Bank Museum. The airport is also in proximity to camping at Prospect Campgrounds. Many beginning pilots and weekend flyers prefer the uncongested operating environment afforded by airports similar to McGinness Field. The open and undeveloped character of the area surrounding the airport also makes it ideal for training activities of novice flyers. The airport provides two turf runways. The intrinsic recreational benefits provided by the airport are supported by the fact that the airport's low-density development helps to preserve green space and open areas in Lancaster County.

Summary

On an annual basis, McGinness Field currently provides the following total benefits:

 Employment
3

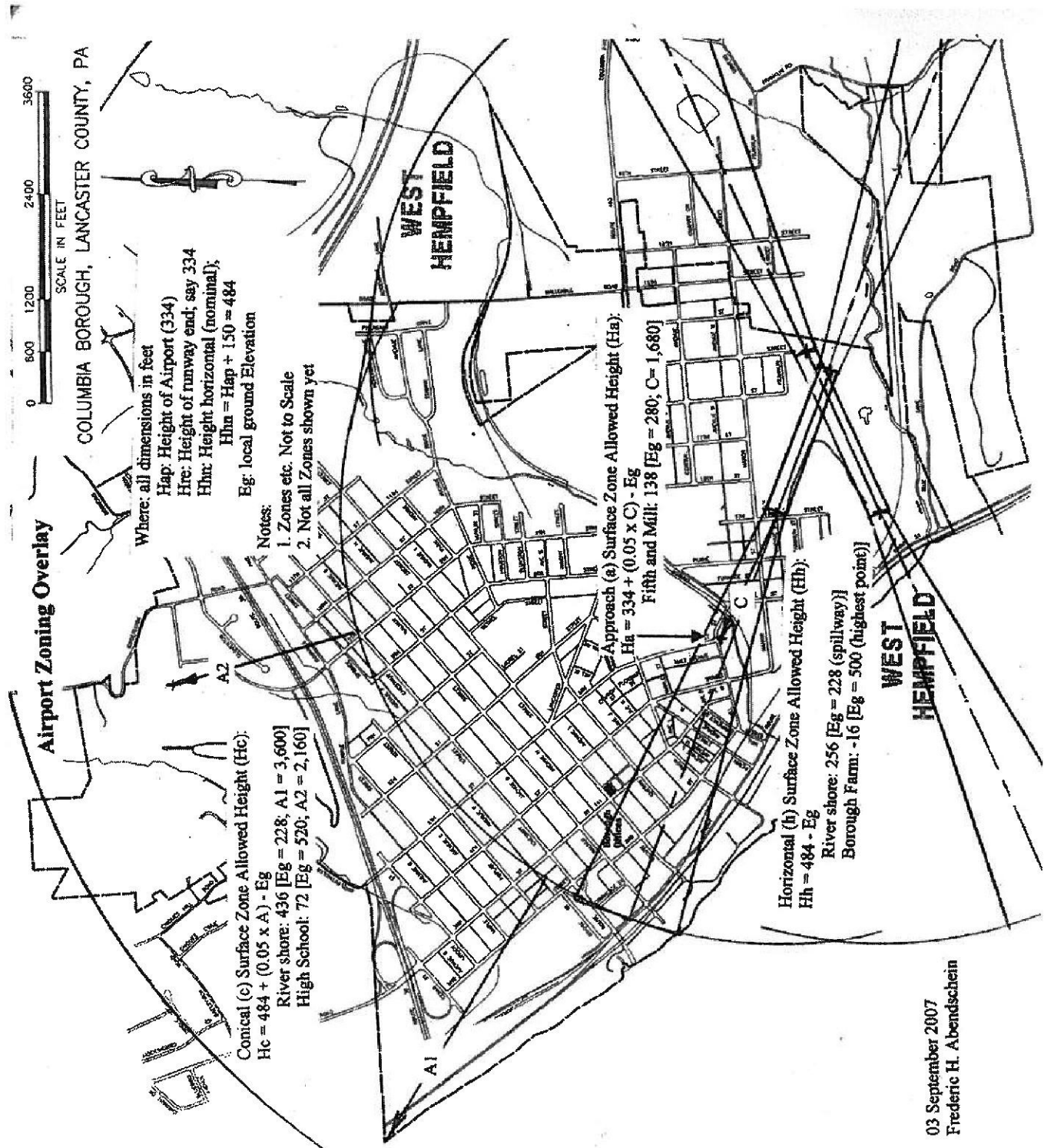
 Payroll
\$28,100

 Output
\$81,100

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03 September 2007
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