

APPENDIX C

COLLATERAL DEVELOPMENT

Over time, airports tend to acquire adjacent lands for a variety of purposes including potential expansion of aviation facilities, mitigation of impacts associated with noise or to gain control of the property in order to protect the airspace above. Lambert-St. Louis International Airport (STL), like other hub airports that have expanded to provide capacity for the primary air carrier operators, has acquired significant amounts of contiguous land areas that are currently unutilized or underutilized. Without an active tenant on the property, the land does not provide any revenue to the Airport and generally has expenses associated with maintenance and on going security. The potential to generate revenue from these underutilized lands is increasingly attractive to airports as operating costs continue to rise. This analysis provides an in-depth analysis of four areas at STL that could be developed for aviation-related uses to support the core mission of the airport and/or non-aviation related uses that provide a stable base of revenue support to the Airport. The analysis begins with a broad discussion of the surrounding communities and existing development patterns in the immediate vicinity and Greater St. Louis market. The potential for aviation-related uses is evaluated and finally, each site is discussed in detail providing attributes, opportunities and potential strategies for each development area are presented.

GENERAL VICINITY SETTING – AIRPORT ENVIRONS COMMUNITY CHARACTERISTICS

The potential for collateral non-aviation development of existing airport property must take into account the characteristics of the larger area in which this development may occur. **Table 1** defines the characteristics of the municipalities within the immediate vicinity to the Airport.

Table 1
OVERVIEW OF SURROUNDING AIRPORT MUNICIPALITIES

Municipalities	Area (Square Miles)	Population (2000 Census)	Socioeconomics					
			General Characteristics		Social Characteristics		Economic Characteristics	
			Total Housing Units	Owner- occupied Housing Units (%)	High School Graduate or Higher (%)	Bachelor's Degree or Higher (%)	Median Household Income	Per Capita Income
Berkeley	4.9	10,063	3,953	65%	76%	9%	\$ 32,219	\$ 13,788
Kinloch	0.7	449	231	31%	53%	0%	\$ 10,156	\$ 8,798
St. John	1.4	6,871	2,978	79%	78%	14%	\$ 37,754	\$ 18,581
Edmundson	0.3	840	356	62%	77%	10%	\$ 37,083	\$ 14,123
Woodson Terrace	0.8	4,189	1,776	76%	80%	9%	\$ 36,363	\$ 18,581
St. Ann	3.1	13,607	6,554	59%	80%	13%	\$ 32,351	\$ 18,318
Bridgeton	15.2	15,550	93	70%	87%	26%	\$ 49,216	\$ 23,955
Hazelwood	16.8	26,206	11,433	65%	87%	23%	\$ 45,110	\$ 22,311
Florissant	11.7	50,497	21,027	77%	86%	17%	\$ 44,462	\$ 20,622

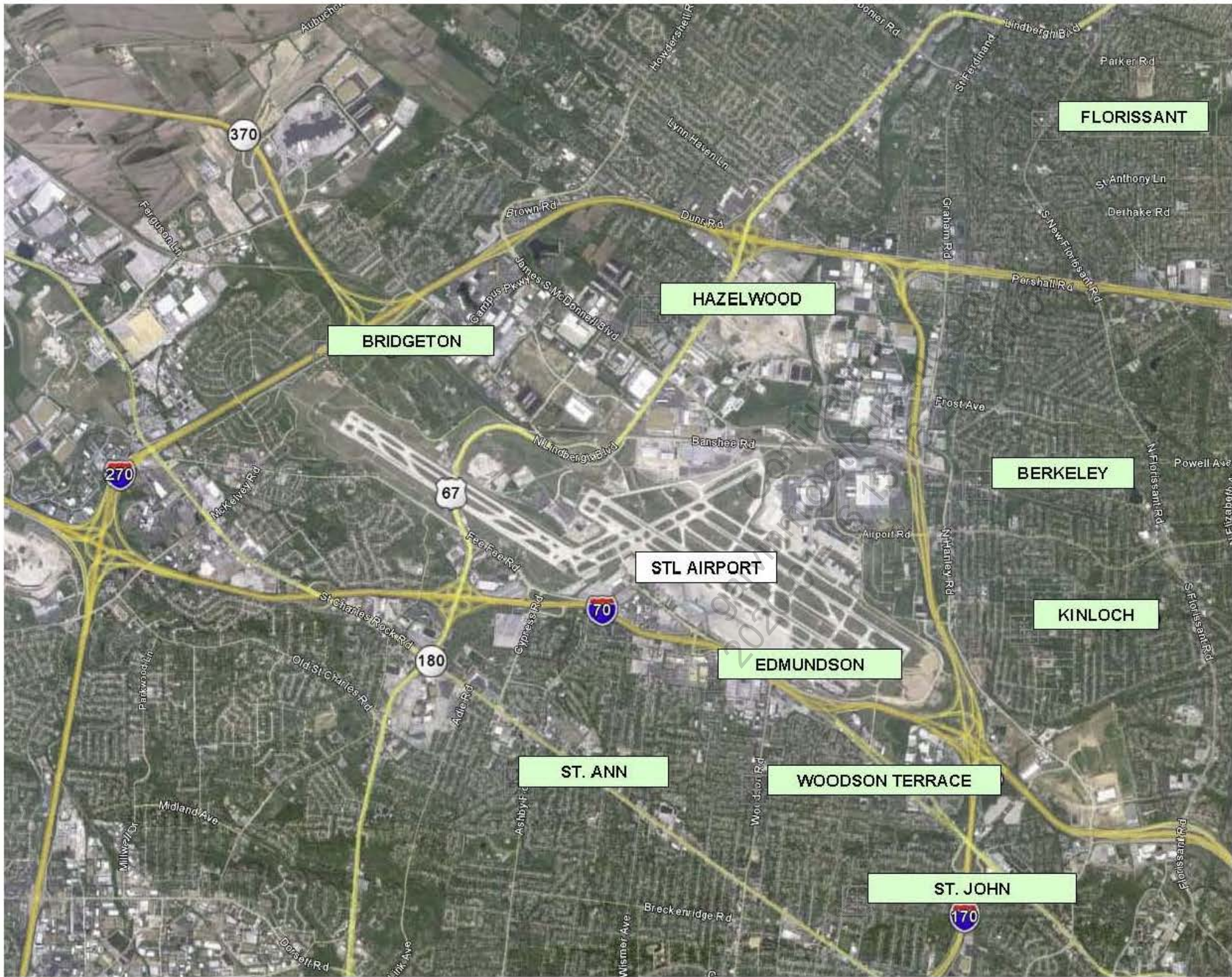
The areas east of the Airport (Berkeley and Kinloch) are generally low to lower income, with an aging housing stock and a high percentage of rental property. These areas are showing evidence of blighted conditions/development, and in some portions of both communities there are high incidences of crime, which tend to impact the emergence of commercial redevelopment. Properties north of I-70 and east of I-170 comprising the North Park development hold some potential to spur economic activity/redevelopment and could improve the overall nature of the communities noted above. To date, development in the North Park site has been slow to occur, occupancies are generally low and significant land area remains cleared and prepared for construction.

South of the airport are the communities of St. John, Edmundson, Woodson Terrace and St. Ann. These communities are typified by housing stock dating from the 1950/1960 time period. No significant new development has occurred in any of these communities as most of the available land is already developed. There are increasing numbers of rental properties with mostly a low/moderate to moderate income population. These community populations are composed of a mix of both older original residents and new residents who have migrated from the northern part of the City of St. Louis and communities between North St. Louis City and the Airport.

Next, the City of Bridgeton is typified by a slightly newer housing stock dating from the 1960/1970 time period characterized by ranch style homes that remain in good condition and in well-maintained, stable neighborhoods. From a commercial perspective, businesses along St. Charles Rock Road between I-70 and I-270 have experienced a relatively significant impact from recent economic conditions. A number of large commercial structures along with an array of smaller commercial tenant spaces are currently vacant and on the market due to business closures.

Conversely, the Cities of Hazelwood/Florissant have not experienced the extent of decline in their housing stock as that noted in Berkeley or Kinloch. These areas had continued development of newer residential subdivisions (notably in Hazelwood) through the 1980s and 1990s. Additionally, Hazelwood experienced the closure of the Ford vehicle assembly plant and has facilitated the demolition of the former facilities and conversion of the site to a large, vacant, business park development area. While having a slightly older housing stock, Florissant has remained stable. Like other communities in the area, the demographics include a heavier low/moderate to moderate income population base than that of West St. Louis County. Both communities were locations for first-time homebuyers. Over time there has been some flight from these areas as persons become more upwardly mobile and move to newer areas in West St. Louis County and in St. Charles County. **Exhibit A** illustrates the vicinity of the Airport and the surrounding communities, as well as their spatial relationship to each other.

Exhibit A
VICINITY MAP – STL AIRPORT AND SURROUNDING COMMUNITIES



THIS PAGE INTENTIONALLY LEFT BLANK

Confidential
garvinm@stlouis-mo.gov
2020-01-16 13:16:21 +0000

Summary

- Aging and in some cases declining housing stock (notably to the immediate east of the Airport and to a lesser extent to the south) in adjacent communities is an impact to the desirability of the area.
- Communities south and east of the Airport, such as Berkeley, Kinloch, St. John, Edmundson, Woodson Terrace and St. Ann, are characterized as bedroom communities with retail.
- Schools in portions of the area are not among the highest rated in the county. Of those in the top 50 in St. Louis County, all of these are in either in the Pattonville or Hazelwood school districts, west/southwest and north of the Airport, respectively.
- Hazelwood and Florissant, communities north of the Airport, are principally industrial/warehousing.
- Non-residential development in the Airport vicinity is typified by a general industrial development pattern with no significant Class A office inside the 270 corridor.
- Significant vacant available industrial property exists in immediate vicinity of the Airport, (generally within a 1 mile radius).
- Significant vacant developable land, approximately 9.9 million square feet of developable building space, exists in immediate vicinity, (Hazelwood, North Park, former Ford site).
- Communities have seen original residents migrate to other newer communities in St. Louis and St. Charles Counties.
- Recent loss of jobs and loss of population to all immediate airport communities have yielded erosion of tax base.
- Income characteristics in the area are generally lower middle class to middle class. Of the following communities in the airport vicinity (Berkley, Edmundson, St. Ann, St. John, Bridgeton, Hazelwood, Ferguson, Kinloch or Woodson Terrace) none exceeded the 2000 St. Louis County average per capita income level of \$27,595. Significantly higher per capita income levels are concentrated in portions of University City, along with Clayton, Ladue, Town and Country, Chesterfield, Clarkson Valley and other communities in West St. Louis County. These areas are also typified by concentrations of office use, or proximity/access to centers of this activity as well as upper-end retail and commercial.

The basic question that arises given the above points relates to what these characteristics suggest relative to the potential for the complexion and absorption of collateral development that might occur on STL property. The answer to that question is likely to be that in the absence of any significant gentrification of the communities around the Airport, the pattern/types of existing retail commercial land uses in the immediate airport vicinity and their vitality provide a reasonably good indication of market forces and business viability. This point was also noted by community representatives in meetings that were conducted with adjacent communities.

POTENTIAL COLLATERAL DEVELOPMENT SITES

This analysis focuses on four tracts of land owned by Lambert-St. Louis International Airport that are currently not utilized for aviation or non-aviation purposes. For purposes of identification these tracts consist of the following:

- Development Site A consists of land in the former Brownleigh Subdivision
 - Location: Immediately northeast of the Airport, north of Runway 30R End and situated between Airport Road, McDonnell Boulevard and Interstate 170.
 - General Attributes: In close proximity to and north of Runway 30R. Easily accessible to Interstates 70 and 170, McDonnell Boulevard, and the north and east airfields. Numerous roadways and light vegetation on site.
 - Area: 123.1 acres
 - Past Uses: Central portion of the site contained a school campus with an elementary and high school, while the remainder of the site was made up of residential and neighborhood commercial.
- Development Site B consists of land along north side of Runway 11/29
 - Location: Directly northwest of the Airport, north of Runway 11 End and sited between Interstate 270, Missouri Bottom Road, Gist Road and Fee Road.
 - General Attributes: In close proximity to and north of Runway 11. Easy access to Interstate 270, Missouri Bottom Road and Lindbergh Boulevard. Light vegetation on southern half of site, and dense vegetation on northern half of site.
 - Area: 238 acres
 - Past Uses: Predominately residential with a fire-station and city park on the western end of the site.
- Development Site C consists of land located west of I-270
 - Location: Immediately west of the Airport, west of Runway 11 End and situated between Interstate 270, State Highway 370, Taussig Road, and State Highway 180.
 - General Attributes: In close proximity to and west of Runway 11 and Interstate 270. Not easily accessible to Interstate 270. Access to site provided via two roads: Gist Road and Woodford Way. Numerous interconnecting roadways and dense vegetation on site.
 - Area: 313 acres
 - Past Uses: Predominately residential over the majority of the site with a few commercial lots in the northwest corner of the site.

- Development Site D consists of land along the south side of Runway 11/29
 - Location: Directly southwest of the Airport, south of Runway 11 End and sited between Interstate 270 and Natural Bridge Road.
 - General Attributes: In close proximity to and south of Runway 11. Easy access to Interstate 270 and Natural Bridge Road. Numerous roadways and dense vegetation on site.
 - Area: 88 acres
 - Past Uses: Single-family residential.

Each of the sites described above is graphically depicted in blue on **Exhibit B**. A fifth site, known as the Northern Tract, is shown in orange on Exhibit B. The Northern Tract is a development project of a third-party developer, Aero Term, which has been retained to redevelop much of the former McDonnell Douglas/Boeing Aircraft Facilities. While not specifically analyzed in this briefing paper, the Northern Tract will be discussed through the paper as its location and potential for development has implications on the plans and strategies for some of the development sites.

Throughout this analysis the fact that STL is first and foremost an airport was maintained as the No. 1 priority. The sites were looked at in terms of their potential to support the Airport's primary function to serve the aviation needs of the flying community. Secondly, for those sites not suitable for aviation uses and with direct airfield access, the potential for aviation-support facilities was evaluated. Finally, potential strategies for sites that were not suitable for aviation or aviation-support uses were reviewed in terms of potential negative impacts on aviation.

As mentioned, the initial development scheme that needs to be considered for each site is its potential for aviation-related development purposes. This potential was determined to exist for two of the four collateral development sites. These consist of Development Site B, located along the north side of Runway 11/29 between Lindbergh Boulevard and I-270, and Development Site A, comprising the former Brownleigh subdivision area in the northeast portion of the Airport.

The remaining two development sites were not deemed viable for aviation-related uses for several reasons. For example, property south of Runway 11/29 would require as much as 80-90 feet of fill to be viable for aviation use. Also, a taxiway would be required to access the area as there is insufficient room for a parallel taxiway along the south side of Runway 11/29. Site development costs would be prohibitively expensive for there to be a viable return from aviation development of this property, given other available areas. The same condition applies to Development Site C, which would require the development of a Taxiway bridge over I-270 and significant site work if the area was to accommodate any type of development that would serve aircraft (MRO, GA, cargo). These considerations are discussed in additional detail later in this analysis.

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit B
MAJOR STL ON-AIRPORT DEVELOPMENT TRACTS



THIS PAGE INTENTIONALLY LEFT BLANK

Confidential
garvinm@stlouis-mo.gov
2020-01-16 13:16:21-0000

Aviation-Related Development Potential by Site

The two sites (outside of the Northern Tract/AeroTerm site) possessing potential for aviation-related development consist of either Site A, the Brownleigh Subdivision site, or Site B, comprising the area north of Runway 11/29 and west of the re_aligned right of way of Lindbergh Blvd.

Macro Level Issues Affecting Aviation Development Uses

Projections of aviation demand for STL did not forecast significant increases in either the air cargo or the GA segments. The forecasts do not provide a basis for a facilities requirements estimate tied to a significant projected need for added aviation-related development area. Discussions with the Fixed Base Operation (FBO) indicate that there is a potential need for additional hangar space at the Airport to provide for growth in based aircraft and to house any future corporate flight department that may enter the market. Further, as it relates to cargo, the larger of the two existing air cargo buildings is not fully occupied. In discussions with UPS representatives, they indicated that their building in the existing cargo area has significant additional capacity; more capacity than they foresaw occurring within the 20-year planning period. Although the current users have not indicated need for additional space, the cargo and GA market are somewhat opportunistic and providing for future opportunities for growth, particularly on sites with direct airfield access, is prudent.

The Northern Tract development has the potential to add approximately 500,000 square feet of indoor space, including hangars and sort facilities, and ramp space capable of serving Group V aircraft. The ultimate composition of the tenants on the Northern Tract is not known, but the agreement permits maintenance, GA, cargo and other aviation-support facilities. It should be noted that the agreement between the Airport and AeroTerm does not preclude the Airport from pursuing new tenants directly, and the need to provide space for aviation growth is not diminished by the agreement with AeroTerm. If either the Airport or AeroTerm successfully attract new users to the Airport, both parties could benefit from the natural increase in demand for additional on or near airport space to support the new tenants' operation.

The presence of Boeing on the airfield is another significant contributor to the potential success of developing Sites A and B for aviation use. Early in the master plan process, Boeing expressed interest in the Brownleigh property and had requested data on other available land areas around the Airport. The fact that STL is the headquarters of their defense sector suggests that it could be viable for facility consolidation to benefit STL. Another possibility to enhance efficiency could be replication of requirements used in the auto industry that require suppliers to be located in proximity to production facilities.

Issues Associated with Aviation Development In Summary:

- Demand for new aviation development land at STL is not driven by the activity forecasts. Rather, these facilities are more opportunistic in nature; key factors are competition and the provision of services.
- There is significant weakness in the U.S. MRO sector, and this is not anticipated to change in the short term. Several relatively close airports, including MCI and IND, currently have vacant space in purpose-built facilities. This sector is one specifically identified for the Northern Tract developer.
- Existing air cargo facilities have considerable remaining capacity to accommodate domestic cargo. International cargo (notably the China initiative) will not generate significant demand for facilities and appears to be targeted to use the Northern Tract.
- The Aeroterm Northern Tract development/redevelopment over the next ten years will bring on line at least 500,000 square feet of interior space (hangar, cargo processing, logistics, etc.) and ramp areas capable of accommodating up to Group V aircraft.
- Reserving space for an added FBO, assuming this is not incorporated into the Northern Tract development program, is reasonable, given initiatives in the past.
- Discussions with Boeing should be continued. As a major partner in the success of the Airport and the overall St. Louis economy, Boeing is a major stakeholder in the future aviation development at the Airport.

MACRO LEVEL ISSUES ASSOCIATED WITH NON-AVIATION COLLATERAL DEVELOPMENT ACTIONS

In short, there are certain basic realities that must be factored into any decision regarding the potential, and the viability of undertaking collateral development on the major tracts of undeveloped land owned by STL.

- **The Airport Improvement Program (AIP)** provides grants to public agencies for the planning and development of public-use airports. The Federal Aviation Regulation, Part 150, Airport Noise Compatibility Planning, is the primary federal regulation guiding and controlling planning for aviation noise compatibility on and around airports. These funds can be used in various types of formats such as planning, property acquisitions, property relocations and property construction. Use of noise funds to acquire portions of all four locations is a consideration if the properties cannot be used for a specific aviation-related purpose and the Airport does not intend to sell the property but rather develop it themselves. Typically, if a parcel purchased using funds from the noise set-aside is identified for an aviation-related development purpose, an airport is not required to sell the property and return the proceeds of the sale to the Noise Program. A non-aviation commercial or industrial development for revenue-generation purposes,

- undertaken on land acquired as a part of the noise mitigation program, has not been accepted as a legitimate aviation-related use and noise-funded property that might be devoted to such a use is typically considered surplus, requiring its sale by the airport.

This issue has implications on three of the four potential development sites. Virtually all the Brownleigh Subdivision site was purchased with noise funds, as was almost all of the property owned by the Airport along the north side of Runway 11/29, and approximately 55 percent to 60 percent of the property west of I-270. If all or portions of the properties are delineated for non-aviation development, the FAA could require the Airport to sell all land not devoted to aviation-related development and acquired with noise funding. Examples of this process taking place include the land comprising the Hazelwood Commerce Park development site and North Park. STL recognized this issue and has been lobbying Congressional representatives to initiate legislation to change the existing regulatory requirements; however the status of these efforts and/or likelihood of success are unknown at this time.

- **Market conditions**, while poor at the current time, may not bode well for the longer term. Through the third quarter of 2009, the vacancy rate for available industrial space in the region was 9.1 percent, while in North County the rate was 12.4 percent with more than 2.5 million square feet of available space and absorption of only 59,000 square feet for the first three quarters of 2009. Note that this was for available building space and does not take into consideration the demolition of the former Ford plant, which reduced existing industrial space in North County by more than one half million square feet and has been converted to a business park development site encompassing up to 2.6 million square feet of proposed space.

The office space market was similar, showing high vacancy rates and low to negative absorption over the same period. In the St. Louis Region office vacancy was 14.4 percent while in North County more than 405,000 square feet of the total 1.785 million square feet of office space was vacant, resulting in a vacancy rate of 22.2 percent. It is also of note that North County comprises only 3.4 percent of the total office space within the St. Louis region. It is anticipated that part of the reason for this may relate to the community conditions that were discussed previously.

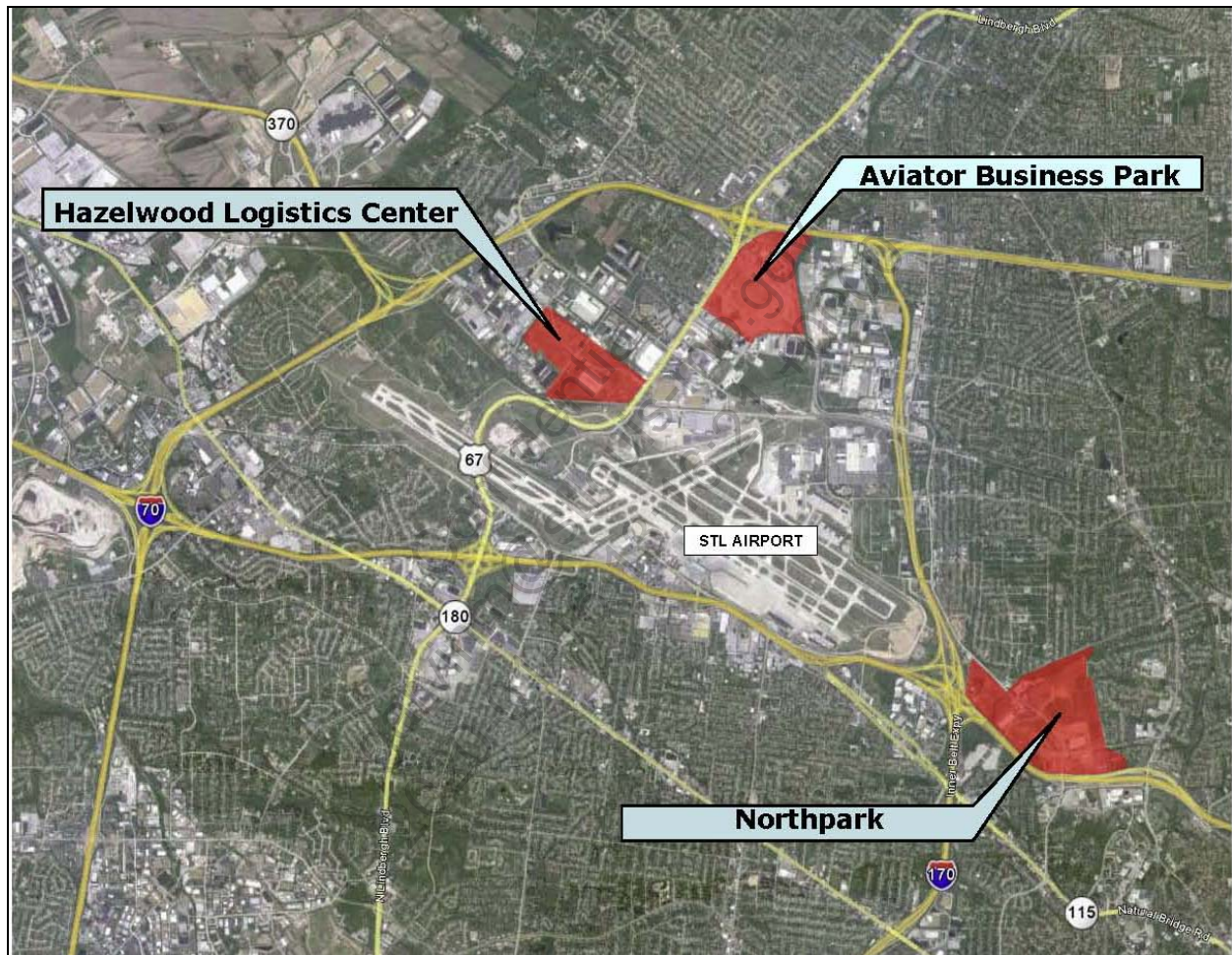
Without even considering the competition from other major centers of office and industrial activity in the region, such as exists in the Westport/Page Road area, Clayton/Brentwood vicinity, Chesterfield valley, west county I-64 corridor, Fenton/I-44 and City of St. Louis itself, the market in the immediate vicinity of the Airport is already heavily saturated with development property and existing facilities. Located within a three-quarter-mile radius of the Airport are three major development projects offering office/industrial land and building space. These sites are defined below and shown in **Exhibit C**.

LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT MASTER PLAN UPDATE

Site	Acreage	Approved Building Area
Hazelwood Commerce Park	151 acres	2.6 million sq. ft.
North Park	550 acres	5.5 million sq. ft.
Aviator Business Park	160 acres	2.6 million sq. ft.
Total	861 acres	10.7 million sq. ft.

Exhibit C

THREE MAJOR BUSINESS PROJECTS – BUSINESS PARKS



Each of the developments noted above were developed with a variety of incentives including the designation of North Park and Hazelwood Commerce Park as Foreign Trade Zone; Aviator Business Park is an enhanced enterprise zone with 25 years of tax abatement. Since their opening only a limited amount of development has occurred in North Park and the Hazelwood Commerce Park to date, while no buildings have been developed at Aviator Business Park. It needs to be remembered that each of these developments have fully prepared building sites, served with all requisite infrastructure and two of the three (Aviator and North Park) are immediately adjacent to major

interstate highways. In short, these development projects comprise the Airport's direct competition for potential tenants for non-aviation development on Airport land.

In summary, current market conditions show high vacancy rates (higher than the region as a whole) for both office and industrial property, and historically North County has not accounted for a large percentage of the office space in the region. At the same time, there is a significant inventory of development property in three areas in the immediate Airport vicinity. These three projects, when built out, will increase the total inventory of industrial property in North County by more than 50 percent adding 10.7 million square feet.

- **The financial position of STL** is another key consideration in the definition of collateral development potential. If it is the Airport's desire to hold title to the property and act as the developer of the land, there will be site development costs for each individual site. Exact figures have not been requested, but it is believed that the Airport's current outstanding debt associated with Runway 11/29 and the current Airport Experience improvements is in the range of \$900 million to \$1 billion. While the goal of the collateral effort is to increase the diversity and amount of revenue through land development and the associated lease revenues from this non-aviation development, this goal must be weighed against the market factors in the area, the characteristics influencing development in the area, the bonding capacity of the Airport and the resultant impact to cost per passenger and finally the amount of investment necessary to render the property viable for development.
- **Significant site preparation/development improvements are necessary** for all four collateral development sites to be viable for development, and this is particularly evident for the land area north, south and west of Runway 11/29. The four areas under consideration for non-aviation development will require improvement to be viable for development. The improvements required vary from site to site, but generally include the extension of basic utilities sized to meet the demands of commercial/office or industrial development, site grading, fill and overall preparation of building sites, storm water management system improvements, and significant roadway and access improvements that could include in some instances a new interstate interchange. Finally, on at least three of the four areas, there have been indications that the basements and foundation of demolished buildings remain on site. If those instances where this is the case, it will also be necessary to remove all of the materials prior to the site being viable for building construction. The site characteristics and site development requirements for each of the four areas under consideration are discussed individually in the following sections.

DEVELOPMENT SITE A – FORMER BROWNLEIGH SUBDIVISION

Introduction

The Brownleigh subdivision area is located on the northeast side of the Airport bordered by Airport Road on the north, I-170 on the east and McDonnell Boulevard on the south and west. The Brownleigh area consists of approximately 123 acres separated from the existing STL airfield. The Boeing Company owns land to the north of the site along the north side of Airport Road. On previous occasions they have expressed varying levels of interest in the property for generally undefined or confidential purposes. The last such expression of interest by Boeing occurred approximately 12 to 15 months ago; there was no follow up after information was provided to Boeing representatives. There are several key considerations that affect the potential use of the Brownleigh property for either aviation or non-aviation related development or for non-aviation development. These considerations are discussed in the following sections.

Existing Challenges to Development

Aviation-Related Development

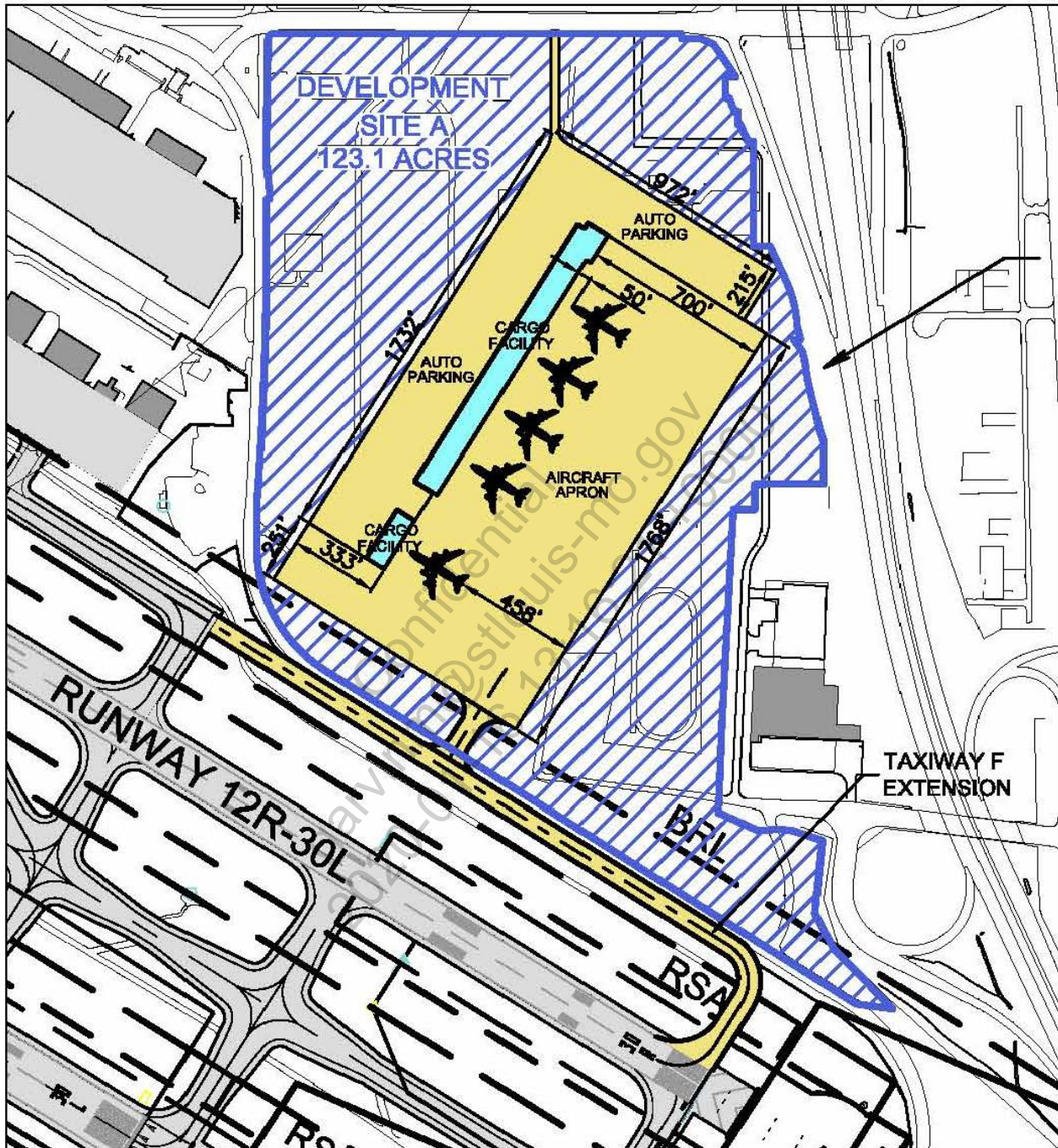
The Brownleigh area has previously been considered as a site for development of aviation uses, such as an air cargo facility and also as a location for the relocation of the former Air National Guard 131st Fighter Wing. For the property to be accessible to the airfield, three primary actions are required.

First, an existing noise berm along the southern side of the property would need to be removed to facilitate airside access. This berm contains a significant quantity of earth/material that would have to be transported to some other location for disposal. The value of this material as fill is not known.

Second, the alignment of McDonnell Boulevard that currently lies along the west and south side of the site would have to be either closed (which calls into question the recent expense of the realignment further south) or a new alignment developed through portions of the Brownleigh Subdivision site with the attendant cost considerations.

Third, once the two previous actions have been completed, an extension to the alignment of Taxiway F, totaling approximately 2,850 feet, would be needed to provide unencumbered access to the airfield. In order to provide airfield access to the Development Site A area, a cost estimate was prepared a number of years ago totaling approximately \$15 million. **Exhibit D** illustrates the Taxiway F extension and provides a conceptual layout of cargo facilities on the site for reference purposes.

**Exhibit D
CONCEPTUAL CARGO FACILITY LAYOUT – SITE A**



Incurring this level of development cost would suggest a need for a high-revenue-producing use that would offset the costs of the improvements, as well as provide a return on investment (ROI) for the Airport. It would need to provide significant value to the Airport, revenue to the Airport, and/or extensive economic impact to the region.

Non-Aviation Development Considerations

Several of the major factors that influence either the viability or the nature of non-aviation development on the Brownleigh site have been discussed earlier in this overview. For reference purposes these consist of:

- Virtually all of the Brownleigh Subdivision was purchased with noise funding. Unless regulatory requirements change, the development of non-aviation land uses on the noise-funded property appears to be precluded, and any land so designated would need to be sold with significant proceeds returned to the noise program. **Exhibit E** depicts the status of the property within Development Site A.

Exhibit E

SITE A PROPERTY BY FUNDING SOURCE AND/OR STATUS



- Community characteristics immediately east of the site in both Berkeley and Kinloch may not support significant general commercial/retail development, and the nature of any general commercial/retail will most likely be driven by the socio-economics of those communities, (i.e., AutoZone or Discount Auto Parts, highway-related convenience, gas station). This point was confirmed through discussions with the City Planner from the City of Berkeley.
- While commercial/retail uses may not be able to survive based on demand from nearby residents, a set of uses may be able to be supported by the employment base associated with the Boeing Company and with commuters/traffic along I-170. (For example, the nearest Starbuck's is north of I-270 on Hanley Road, or in the STL Terminal.) The economics in Berkeley may not be sufficient to support a number of commercial enterprises, but highway and Boeing traffic might.
- As noted, the market for industrial and or office development is heavily saturated. General office uses (not associated with Boeing) are also affected by the neighboring community characteristics

Development Considerations

While challenges exist, Development Site A does possess attributes that could act to support development of both aviation and/or non-aviation uses depending upon the impact of other circumstances, as noted below:

- **Access to the Brownleigh** area via major roadways is ideal. I-170 can currently be accessed at two points on the site. Access from I-170 can be gained both to and from the area via Scudder Road that borders the south side of the area or via Airport Road that borders the north side of the area. While I-170 is a partial intra-urban interstate connector, it does provide direct access to Interstate 70 that extends from Utah to Pennsylvania, as well as I-64 that extends from St. Louis to the Virginia Coast. I-170 also connects to I-270 an outer beltway around St. Louis that connects to I-44 extending from St. Louis to Texas and I-55 that extends from the Gulf Coast to Chicago. The site has excellent regional access within the metro area and excellent connections to major interstates connecting an array of significant national markets.
- **Utility infrastructure** located immediately adjacent to the site appears to be adequately sized to meet the requirements of more intensive commercial or industrial development. While it is assumed that most of the in-ground utility lines on the site itself would need to be removed and reconfigured, the area itself is surrounded by relatively large feeder/collector lines for water gas, and sewer. Specifically, these include:
 - **SANITARY SEWER**
 - 8-inch vitreous clay south side of site
 - 8-inch to 18-inch to 12-inch VC east side from south progressing north
 - 12-inch VC north side of site
 - 8-inch VC east side of site

- **GAS**

- 8-inch line on east side of site
- 16-inch and 10-inch on west side of site
- 22-inch and 16-inch on south side of site
- 10-inch north side of site

- **WATER**

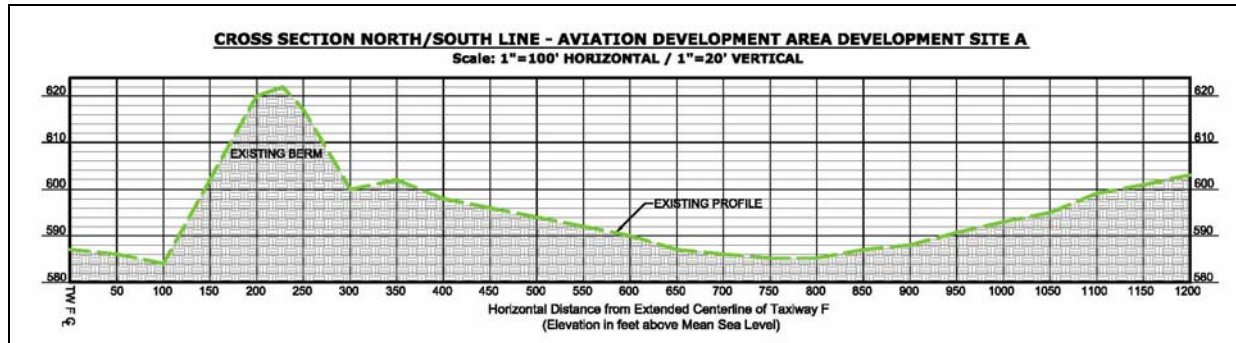
- 24-inch water along south side of site
- 20-inch, 12-inch and 8-inch water along west side of site (parallel lines)
- 16-inch water along north side of site
- 6-inch water along streets on site

Based on the existing location of these in-ground facilities and their location on the boundaries of the Brownleigh site, there does not appear to be the need for significant capacity enhancement of existing major feeder or collector lines resulting in some corresponding savings.

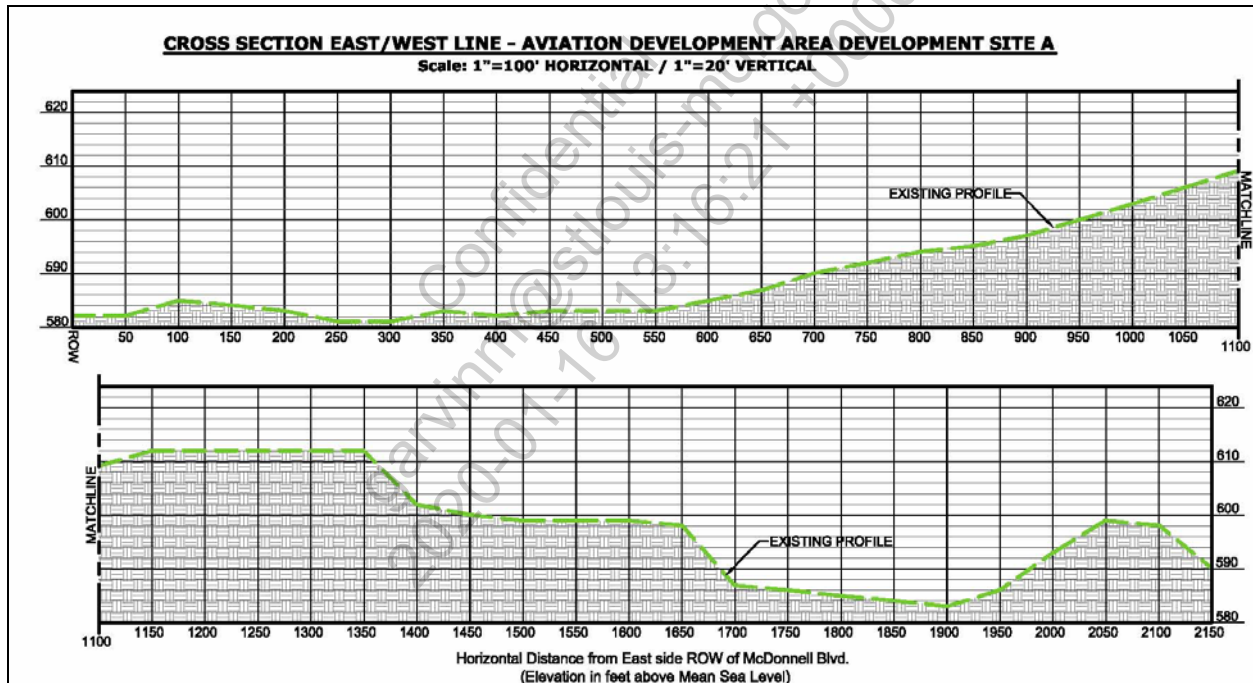
- **Linkages to Berkeley planning efforts** would also be possible. Discussions with the City Planner from the City of Berkeley have indicated a desire on the part of the city to see the development of the property. These discussions have tended to suggest that the nature of the development is less of a concern (certainly within reason) than seeing some development on the site that would aid in the City's efforts to redevelop the Airport Road corridor. The City has expressed a desire to undertake the beautification of the I-170/Airport Road intersection. They are in the process of establishing a highly flexible zoning designation for the Brownleigh area and have noted that the northern section of the site might be available for the development of a series of pad sites for restaurants that could serve persons on I-170 as well as the employees on the Boeing complex.
- **Brownleigh would involve less site preparation** than other sites. Of the four areas under consideration, Brownleigh has the most forgiving topography of any of the potential development areas. While site preparation will still be necessary at the Brownleigh site, the extent of earthwork is significantly less than that of the other three undeveloped tracts that are under consideration for collateral development. **Exhibit F** and **Exhibit G** display a cross-section from north to south and west to east respectively to provide an indication of the topography.

**LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT
MASTER PLAN UPDATE**

**Exhibit F
NORTH TO SOUTH DEVELOPMENT SITE A CROSS SECTION**



**Exhibit G
WEST TO EAST DEVELOPMENT SITE A CROSS SECTION**



The sub-surface conditions are not known at this time. It is generally believed that the foundations of each of the structures that were originally located in the area remain and that prior to the development they would have to be removed along with any residual building debris to accommodate the development of any buildings or structures.

Possible Development Strategies

Given the factors noted in the preceding discussion of the overriding factors in the airport vicinity along with the discussion of the specific considerations associated with the Brownleigh area, several possible approaches or strategies are presented that could provide the basis for defining future uses and development on the site.

The first potential approach involves the preservation in a land banking process of the area, for as long as practical, essentially keeping it available for either Boeing, Boeing vendors or another major user who would require significant acreage. To do this, all property within Site A would be designated as aviation-related development area and kept in this designation until such time as other viable development opportunities emerged. As a part of this strategy STL should make a decision on the level of interest, if any, of the Boeing Company relative to their future use of all or a portion of the site.

As an element of this approach it could be beneficial to determine if Boeing is considering requiring certain key vendors to locate in close proximity to the Boeing manufacturing site. If this were to become the case, the Brownleigh area could be a highly viable location for the development of facilities by one or more vendor. Further, there is no indication to date that they have any requirements, nor will enforce any requirements relative to the proximity of their vendors. Finally, as most of Site A (the Brownleigh site) was acquired with noise funds, the ability to land bank will be driven by the FAA's acceptance of the premise that the area is viable for aviation-related development. Given the proximity of the site to the airfield, this issue would appear to be very justifiable.

A variation of the first approach would involve STL becoming somewhat more proactive. Currently, Boeing is in the running for designing and producing the KC-X for the United States Air Force. Most likely, this project would not directly affect Boeing in St. Louis, but may allow them to invest more in their St. Louis facilities sometime in the near future. Boeing is currently up against EADS and Aerospace/Antonov in the bidding war. No final decision will be made until late 2010.

This effort is not something that STL can, or should undertake on its own, but rather should seek the support of the Regional Chamber and Growth Association (RCGA), municipal leaders, County leaders and leadership from the State of Missouri as well. STL, however, is a key player should this approach be viewed as having merit and could be the initiator as others may not have considered the possibilities.

The second potential strategy would be to consider approximately the southern two thirds of the site for retention as aviation-related development. As an element of this strategy, it might be viable to initially consider the area on the southern end of the Brownleigh area as a site for a remote surface level long-term parking area to serve a portion of the unmet demand that is routinely occurring in Terminal 2 (East Terminal). This use would act to address the existing parking deficit, as well as provide a lower-cost option in that it would involve a surface parking lot and

could be a source for enhanced airport revenues. Depending upon how the product is developed, it might also re-capture some lost parking customers who currently use off-airport parking facilities operated by private providers. This option also allows STL to claim the area as an aviation-related terminal support use, and this can act as a means of protecting the property and preserving it for aviation-related development well into the future, should such demand emerge.

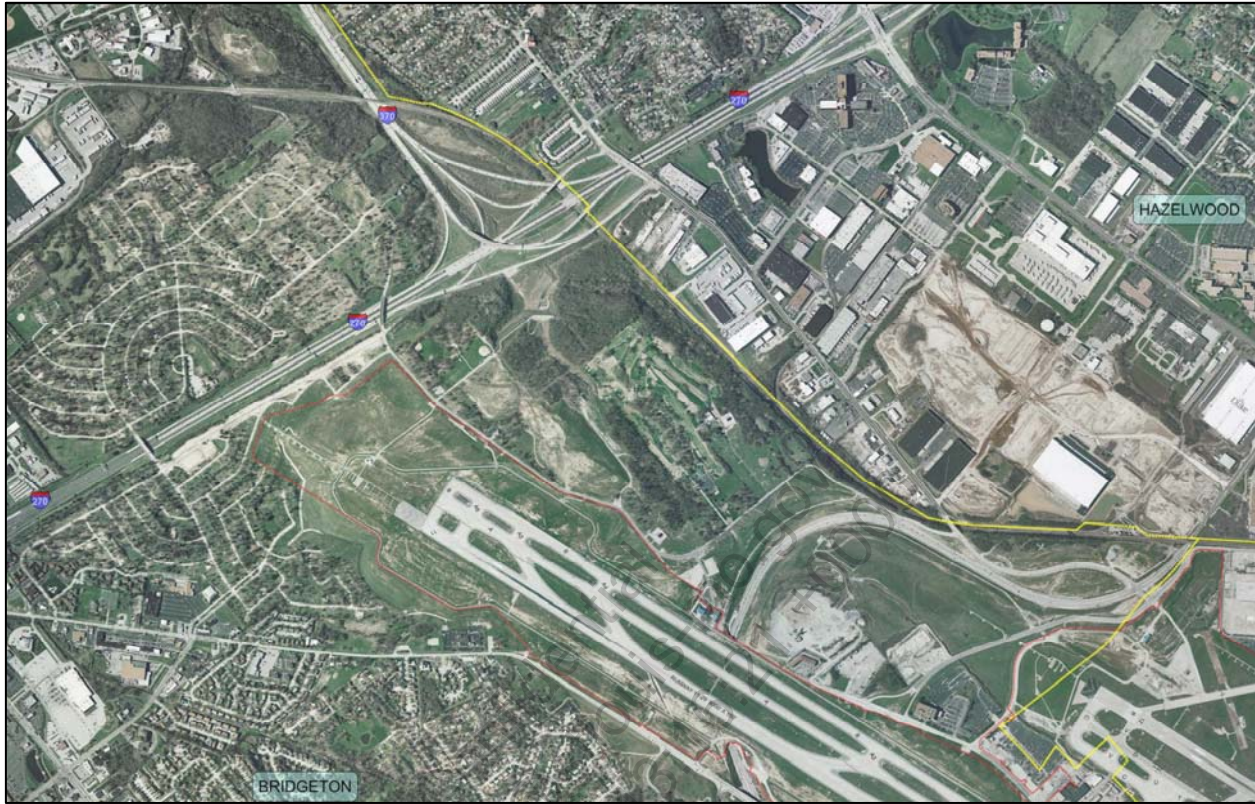
In association with the split of the site between aviation and non-aviation development, the Airport could consider working with the City of Berkeley to develop a commercial corridor along the south side of Airport Road. The focus of the uses in the area could be service related in support of the employment base on the northeast side of the Airport (restaurant, dry cleaners, coffee shop, gas station/convenience store, etc.). This assumes the restrictions on use of noise land are removed.

DEVELOPMENT SITE B - LAND AREA NORTH OF RUNWAY 11/29

Introduction

As shown in **Exhibit H**, this area is generally defined by the re-aligned right of way at Lindbergh Boulevard on the east, the alignment of the Norfolk Southern Railroad to the north, the centerline and extended centerline of Runway 11/29 on the south and I-270 on the west. The 9-hole Berry Hill Golf Course is located in the center of the area, and ownership of this course is retained by the City of Bridgeton. The Cowmire Creek storm-water detention facility is located on the west end of the site. The site is composed of approximately 238 acres of land. Most of the land area north of Runway 11/29 lies beneath the approach surface to Runway 12R, which is a consideration in the development of the property. The topography is not consistent throughout the site and includes some drastic changes between Gist Road and the alignment of Taxiway B as well as between Gist Road and the Berry Hill Golf Course. Approximately 3,600 feet of the site faces Taxiway B, which parallels the north side of Runway 11/29 providing direct access to the active runway/taxiway system at STL.

**Exhibit H
DEVELOPMENT SITE B LOCATION MAP**



The majority of land within the area north of Runway 11/29 was purchased with noise funds as a part of noise mitigation programs associated with the original airfield. As such, the limitations associated with the redevelopment of the property purchased with noise funding impact virtually the entire site.

Existing Challenges to Development

There are a number of issues identified in the general discussion. These include market conditions, availability of extensive development that is already prepared to accommodate buildings, and land acquisition using noise funds. In addition to these, there are other factors that must be considered while assessing the development potential and the designation of aviation versus non-aviation uses for the land.

Aviation-Related Development

Clearly, the development of aviation-related uses must take into consideration the fact of demand, and the reality that a significant share if not all of the demand for air cargo, MRO, and even FBO development will be targeted by AeroTerm for the Northern Tract as delineated in their agreement and so they can meet their contractual obligations to the City of St. Louis. As noted earlier, the forecast of operational demand does not suggest significant need for expansion of air cargo

activity, potential for significant growth in GA or expansion of MRO facilities. Despite each of these considerations, it is not unreasonable to identify land area to be preserved -- particularly land that is directly adjacent to the airfield operations area -- for future aviation-related development, even if this is well in excess of any level that is forecast.

The aviation industry is dynamic, and competitive. Opportunities arise that can never be forecast or projected. A clear example of this is that a portion of this area was previously under consideration as a site for the development of a new FBO. The forecasts do not definitively suggest the need for an additional FBO, but development of a competing FBO could drive demand. Over the course of a 20-year planning period, other opportunities may arise. Ensuring the availability of a variety of sites to provide choices to potentially new tenants to meet these opportunities is a logical and prudent business decision. Thus, it is recommended that property fronting the northern side of Taxiway B west of the relocated Lindbergh Boulevard should be preserved for a variety of aviation/airport-related development due to the direct access afforded to the airfield.

The land area north of Runway 11/29 and east of realigned Lindbergh Boulevard has well defined boundaries that logically support the designation of the area for aviation-related development. These boundaries consist of Runway 11/29 on the south, Runway 6/24 on the east and the alignment of Runway 12R/30L and its affiliated Runway Protection Zone on the north.

The potential land area to be preserved for aviation-related development west of Lindbergh Boulevard is not as readily identifiable as the area east of Lindbergh Boulevard. It is driven more by distance from the active airfield, topography, need to maintain ground access, and the existence of two key uses consisting of the Berry Hill Golf Course and a major detention basin that occupy large portions of the overall site. The golf course and the detention area combine to impact the viability and depth of the aviation development area north of Runway 11/29 as well as the availability and configuration of any remaining land for non-aviation revenue-support development.

To aid in defining a northern boundary for aviation-related development, a series of facilities were benchmarked at other major airports to determine development envelopes for a variety of aviation uses including FBOs, Maintenance Repair and Overhaul (MRO) facilities for air carriers, regional commuter airlines, and major general aviation facilities. Consideration was also given to the FBO facility that was under consideration prior to the recent financial crisis. The goal is to identify a general logical boundary on the site that would define aviation from non-aviation land uses in the area north of Runway 11/29.

Defining the area to be reserved for aviation development is also guided by a variety of factors that include:

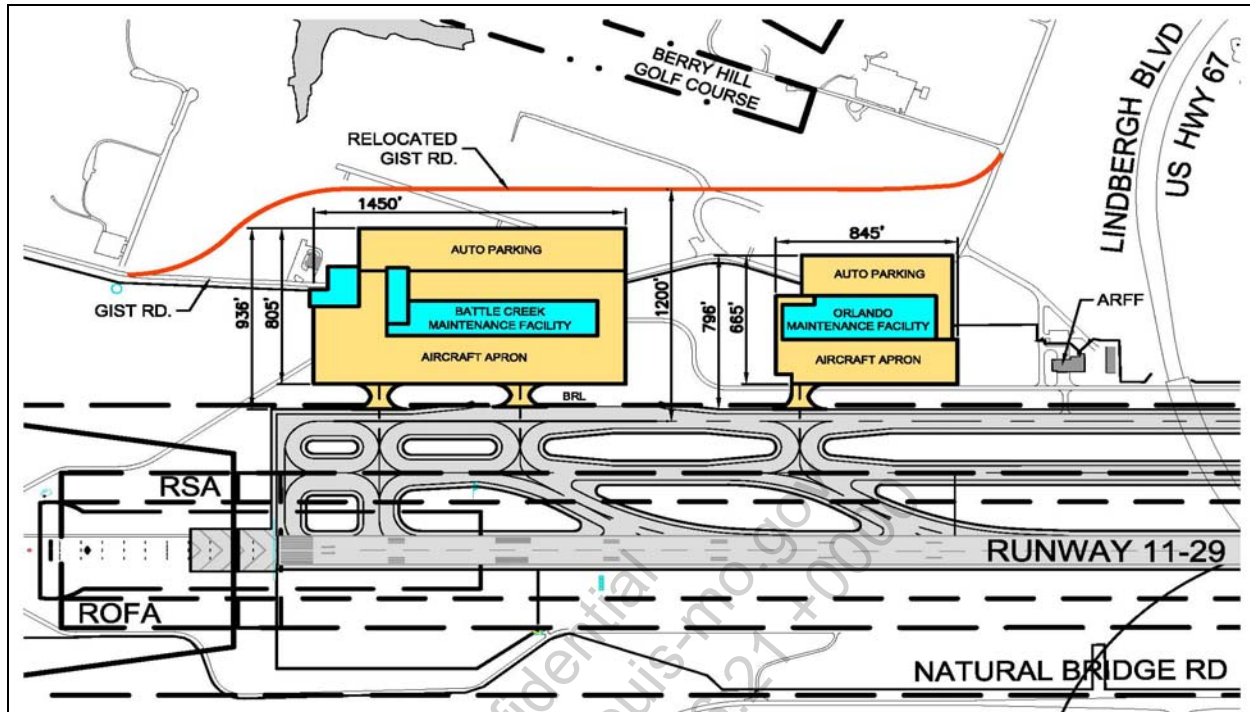
- The area north of Taxiway B rises sharply (approximately 30 feet to the Gist Road Right of Way) requiring extensive earthwork to be viable for any development involving aircraft access to the facility
- The ultimate disposition of the Berry Hill Golf Course, which is surrounded by airport-owned property, but remains under the ownership of the City of Bridgeton
- The extent, if any, of the impact on development by FAR Part 77 or other imaginary surfaces that combine to establish maximum building heights
- The realignment of Gist Road, which currently serves as the primary means of access to the area north of Runway 11/29. The realignment is affected by the general topography between existing Gist Road and Berry Hill Golf Course
- The extent of site preparation/modification required to achieve a viable development site conforming to transverse grade requirements for aircraft movements

Using this approach two major general aviation maintenance bases developed in the recent past were used as a benchmark for the determination of the facility value. The benchmark facilities used for dimensional purposes consisted of the Kal Aero maintenance base at W.K. Kellogg Airport in Battle Creek, Michigan, and the Cessna maintenance base at Orlando International Airport in Orlando, Florida. These facilities were constructed in a non-constrained manner and accommodate significant general aviation aircraft undergoing an array of maintenance, retro-fit and other services. **Exhibit I** below provides a conceptual layout of both facilities on the site for reference purposes. Based on these benchmark facilities, a depth of 1,200 feet from the centerline of Taxiway B would be adequate; however, there is nothing to stop STL from preserving a greater depth should they so desire. Applying this depth would place the northern boundary of the development area between 160 feet at the closest point and 360 feet at the furthest point north of the current Gist Road alignment.

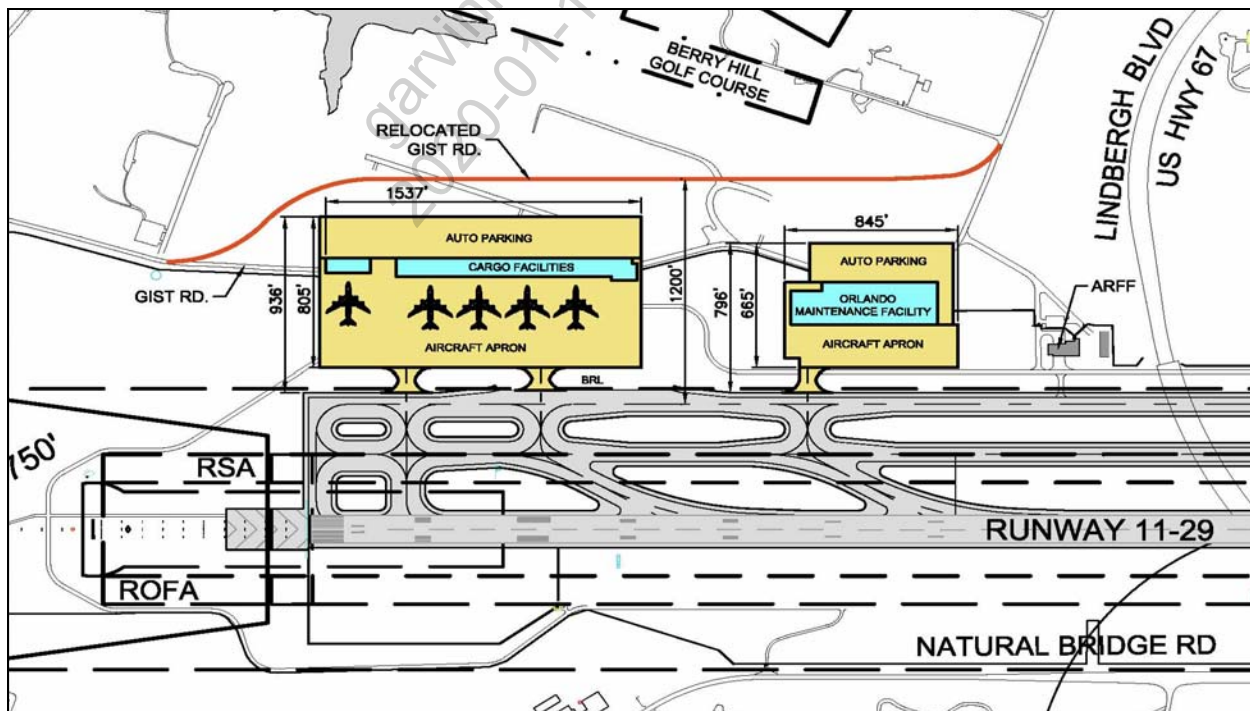
Additionally, **Exhibit J** depicts a conceptual layout of cargo facilities and the Orlando example maintenance facility within Development Site B. The cargo facilities layout retains most of the dimensions used in the Battle Creek maintenance facility example. The main difference is the widths of the auto parking and aircraft apron. In the cargo facilities layout, the width is 1,537 feet, which is an 87-foot increase in width to that of the maintenance layout.

**LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT
MASTER PLAN UPDATE**

**Exhibit I
CONCEPTUAL MRO FACILITY LAYOUT – SITE B**



**Exhibit J
CONCEPTUAL CARGO AND MRO FACILITIES LAYOUT – SITE B**



This depth from the centerline of Taxiway B also provides ample space to accommodate a cargo facility, similar to the facility described for Site A, should a user desire a site immediately adjacent to a primary runway at STL. To validate the adequacy of the land envelope, a generic cargo facility configuration was developed using a combination of International Air Transport Association (IATA) and Airport Consultant's Council (ACC) industry-accepted dimensional standards and the B747-400F (aircraft design group V) as the design aircraft. The following summarizes the assumed dimensional configuration.

- Parallel taxiway lane north of Taxiway B maintaining a taxiway to parallel taxilane centerline separation of 267 feet consistent with Group V standards;
- Maintained 138 feet taxilane centerline to Fixed or Movable Object (FOMO) separation either side of the taxilane consistent with Group V standards;
- Provided a 25-foot-wide vehicle roadway between FOMO line and tail of the B747-400F design aircraft;
- Provided for a 232-foot fuselage length perpendicular to the alignment of the taxilane for B747-400F per Boeing aircraft characteristics manual;
- Provided a 50-foot setback between the nose of the B747-400F and the airside wall of the cargo building;
- Assumed the development of a 150-foot-wide (depth perpendicular to alignment of Taxiway B) cargo building lying parallel to the alignment of the runway/taxiway system;
- Provided truck docks, parking, maneuvering and circulation area 195 feet in depth based on two times the length of the largest truck trailer combination (in Missouri that is 80 feet) plus a 35-foot-wide circulation lane on the landside of the cargo building.

Using the dimensions noted above results in a site depth of 1,057 feet from the centerline of existing Taxiway B. For comparative purposes, the current air cargo area on the east side of the airport has a depth of approximately 680 feet from the southern end of the aircraft ramp to the northernmost edge of landside pavement. In short, an aviation-development envelope depth of 1,200 feet is more than adequate to meet the facility needs of a wide variety of aviation-related development including FBO, MRO (Maintenance, Repair, and Overhaul), and Air Cargo facilities.

Significant earthwork was undertaken during the development of Runway 11/29, and a large quantity of this material is stored in the center of the site immediately north of Gist Road. As noted above, the existing topography between the airfield and Gist Road rises sharply. The distance between the centerline of Taxiway B and Gist Road is approximately 640 feet horizontally and experiences an elevation difference of approximately 30 feet. Rendering the area along the north side of Runway 11/29 west of Lindbergh Boulevard to a depth of 1,200 feet north of the centerline of Taxiway B viable for facilities having airfield access will require extensive site preparation and earthwork including the removal of several thousand cubic yards of soil. In addition, there would be a need to relocate and likely upgrade current infrastructure including an 8-inch water line along Gist, the extension of gas

LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT
MASTER PLAN UPDATE

service and the likely need to upgrade an 8-inch sewer line along the south side of Berry Hill Golf Course. **Exhibit K** and **Exhibit L** below provided an indication of the existing ground elevations along two south-to-north cross sections within the proposed aviation development portion of Site B along the north side of Runway 11/29. These cross sections extend from the centerline of Taxiway B on the left a distance of 1,200 feet to the north into the aviation-development site.

Exhibit K
DEVELOPMENT SITE B AVIATION DEVELOPMENT AREA CROSS
SECTION/WESTERN PORTION OF SITE

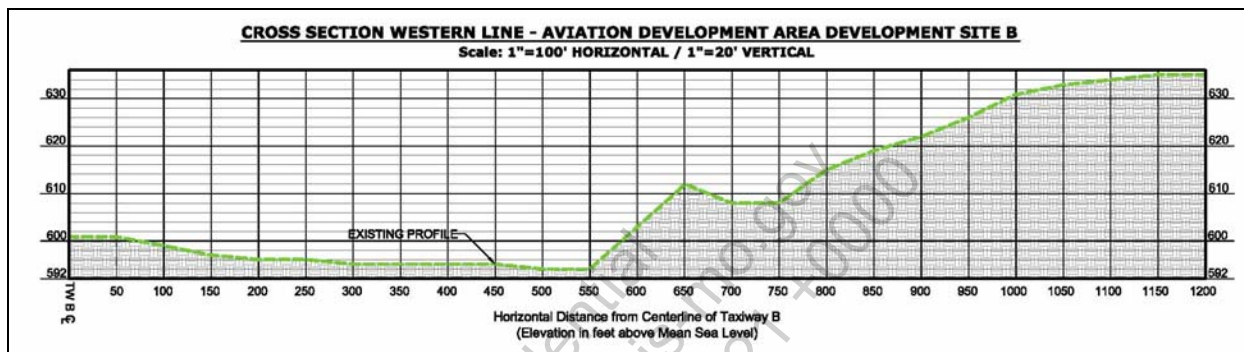
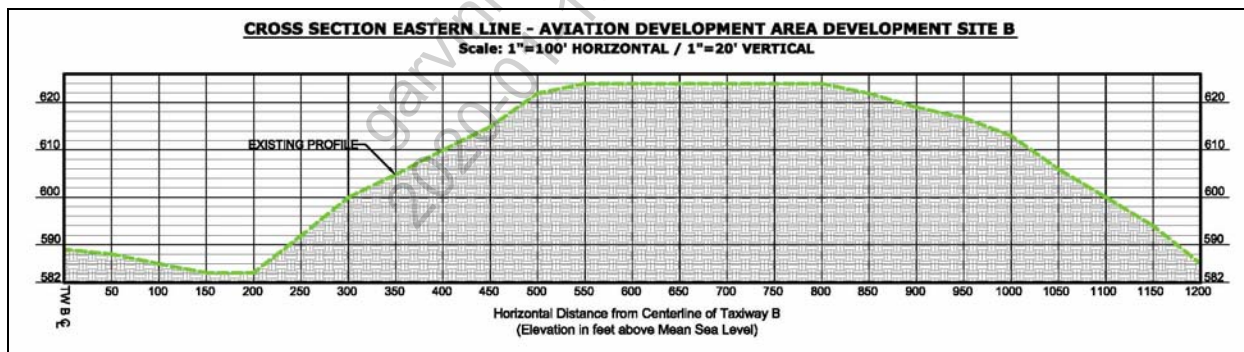


Exhibit L
DEVELOPMENT SITE B AVIATION DEVELOPMENT AREA CROSS
SECTION/EASTERN END OF SITE B

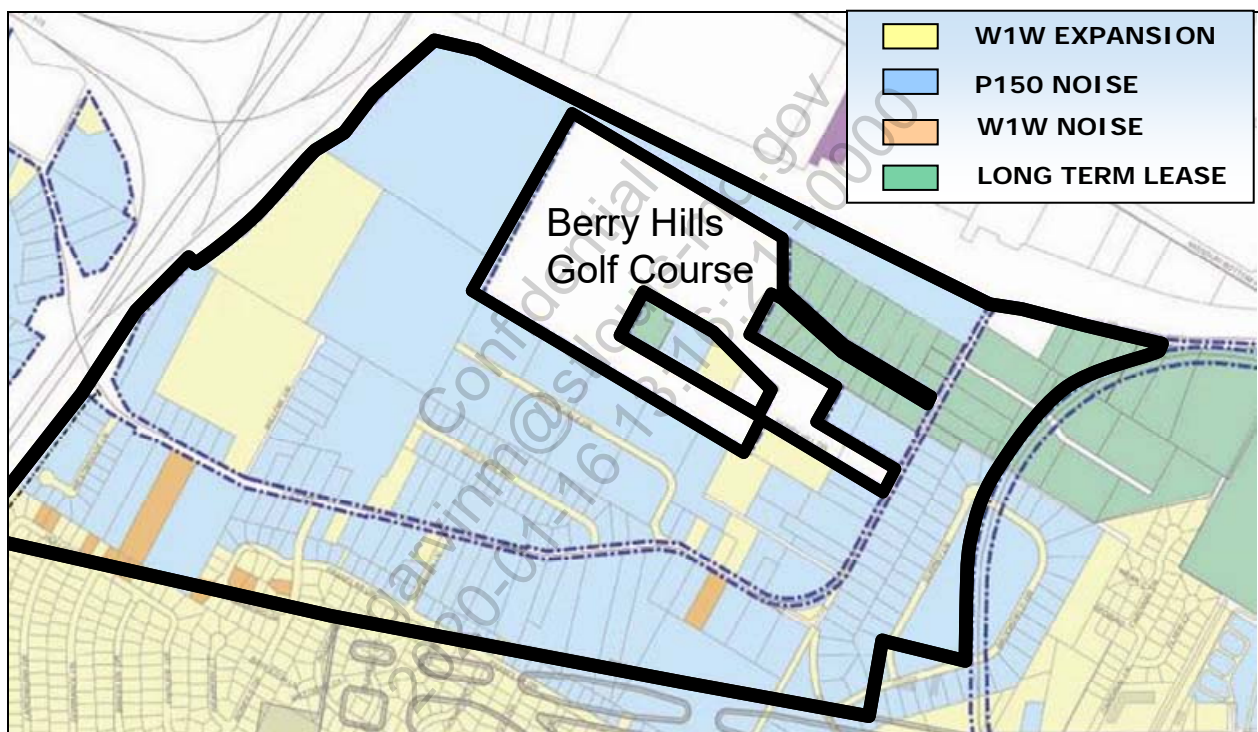


Non-Aviation Development Considerations

Several of the major factors that influence either the viability or the nature of non-aviation development on the property north of Runway 11/29 site have been discussed earlier in this overview. For reference purposes these consist of:

- Virtually all of the land along the North side of Runway 11/29 was purchased with noise funding. Unless regulatory requirements change the development of non-aviation land uses on the noise funded property, then it appears to be precluded. Any land so designated would likely trigger a designation of surplus, requiring the land to be sold with proceeds returned to the noise program. This would not negate the viability of selling the property to a third party developer for compatibility commercial/industrial purposes. **Exhibit M** depicts the acquired land by funding source used in the acquisition and the area generally defined for aviation use.
-

**Exhibit M
SITE B ACQUISITION BY FUNDING SOURCE**



- The saturation of the market for new developments and the more limited demand for office versus the inventory of available land and developable square footage is a significant consideration. Given absorption rates, there is enough existing land and developable square footage to meet market demand for years into the future.

Development Considerations

There are several other factors unique to the area north of Runway 11/29 that also influence the viability of the area for non-aviation collateral development. This is particularly true if the area designated for aviation-related development is removed and non-aviation development is then designated for the remainder of the area north of Runway 11/29.

- The area north of Runway 11/29 is not extensively served by existing on-site utility infrastructure, and both extensions of facilities and the upgrading of this service would be needed. This could apply to aviation-related development as well. Currently, utilities on or adjacent to the site consist of:
 - **Water:**
 - 20-inch line along Old Lindbergh Boulevard (3,300 feet east from the eastern end of Site B).
 - 8-inch line along the Gist Road alignment which is one of two 8-inch feeder lines to Development Site C west of I-270 area
 - **Gas:**
 - 30-inch line along the new re-aligned Lindbergh Boulevard at the eastern end of Site C
 - **Sewer:**
 - 8-inch line extending from the West ARFF station along the south side of Berry Hill Golf Course beneath the Cowmire detention basin connecting to a 12-inch line beneath I-270 on the west end of the site.

Extension or expansion of all utility feeds to the site, with the exception of gas, would be required to meet the added demand from development and fire flow requirements for facilities.

- The configuration of the developable land area outside of the acreage allocated for aviation-related development (1,200 feet north from the Taxiway B C/L) is disjointed and development of other land uses is adversely impacted due to the location and layout of the Berry Hill Golf Course. Closure or relocation of the golf course off the site would lead to a more developable area footprint. This would allow for a more efficient layout of roads, utilities, and development sites. The City of Bridgeton has indicated a desire to have the course relocated, noting a preference for the area west of I-270, along with a goal of expanding the course to an 18-hole facility. While some preliminary discussions had previously taken place, no final decision has been reached. In subsequent sections of this analysis, other options for the golf course will be explored. Resolution of this issue is an important first step in the finalization of development strategies for all three development sites within the City of Bridgeton.
- The remaining land area outside of that identified for potential aviation related use is typified by steep and irregular topography through the center of the area. It has a large quantity of acreage devoted to the Cowmire Creek Detention Basin, which was required as a part of the development program for Runway 11/29.
- Part 77 surfaces associated with the approach to the existing landing threshold for Runway 12R may restrict the height of development in the area along the north/south segment of Gist Road.

- Access to the site for both non-aviation and aviation-related development of any consequence is generally circuitous and poor, with no direct access to either Lindbergh Boulevard or, more importantly, to I-270 or State Highway 370. The need for a direct connection to I-270 is clear. Given the short distance, however, between the St. Charles Rock Road interchange and that associated with State Highway 370, including their exit and merge lanes, the ability to develop a functioning diamond interchange to serve the site will be difficult given the configuration of other interchanges and traffic interaction/weaving requirements and likely does not conform to state design parameters. The ability to provide access from the site directly onto Lindbergh Boulevard is complicated by the steep topography along the west side of Lindbergh.

Development Solutions

Attributes/Opportunities

While there are challenges that impact the potential for non-aviation development on Site B, the location does have certain attributes that support both the aviation and non-aviation development scheme. These are noted below:

- **Existing development precedent north of the site** fully supports a commercial/industrial land use pattern on portions of Development Site B. Land uses in the City of Hazelwood, located to the immediate north of the site and north of the Norfolk & Southern Railroad, consist of a mix of warehouse/distribution activities, office warehousing, and corporate office developments. This large cluster of office and industrial development has direct access to I-270 and State Highway 370 via Missouri Bottom Road. The land uses in this area are separated from Development Site B by the rail line that runs in an east-west orientation along Site B's northern boundary. The location and extent of this development clearly establishes the viability of the intensity and pattern of uses that could be considered. As noted above, one of the key site factors impacting development is the circuitous and relatively constrained access to the site given the configuration of existing roadways. If a better linkage exists between Site B and the land uses immediately north of the rail line, then the area might be better linked **Potential for an alternative, and more direct, access to I-270 and State Highway 370** exists. A review of aerial photography indicates that for the most part, the south side of Missouri Bottom Road is fully developed with a mix of commercial/industrial structures and uses. An exception is one area adjacent to the west side of a rail spur that accesses the industrial area north of Missouri Bottom Road approximately half way between the Fee Road/Missouri Bottom Road intersection and the interstate interchange. This parcel appears to be undeveloped or under-developed and could provide an outlet that would significantly improve the connectivity to the interstate system through enhanced access via Missouri Bottom Road.

This access would act to link the northern portion of Site B to the existing industrial uses located immediately north. To accomplish this, a new roadway would intersect Missouri Bottom Road approximately 170 feet east of Eagle Industrial Court and extend from the south right of way of Missouri Bottom Road approximately 950 feet, bridging the alignment of the Norfolk Southern Rail line. This would require the acquisition of the right of way for the new access roadway. In turn, it could require eminent domain and coordination with St. Louis County to obtain approval for a new intersection on Missouri Bottom Road. It would also incur costs for the roadway development and bridging of the railroad but provide a considerably more direct access to the center of the site and thus reduce travel times from potential land uses to and from the adjacent interstates.

- **Access to rail infrastructure on the site** could be facilitated though the development of a spur line off of the current Norfolk Southern line that borders the north side of the development site. As noted above, a similar spur line extends off of the Norfolk Southern mainline north to the industrial areas along and north of Missouri Bottom Road. The access to rail is complicated by the location of the detention facility and also by the location of the Berry Hill Golf Course. While relocating the detention facility is not likely, closure or relocation of the golf course would greatly benefit the configuration of any relatively large scale non-aviation collateral development that might occur and would render the development of a new north access to Missouri Bottom Road viable.
- **Proposed development scheme links to current City of Bridgeton planning efforts.** The City of Bridgeton had initiated an update to the Comprehensive Plan for the City prior to the initiation of the master planning process for STL. Significant progress had been made on the comprehensive city plan. A key element of this effort was the consideration of development goals and land use designations within the northern sectors of the City that were impacted by the development of Runway 11/29. Recognizing that STL was initiating a master planning process, the City of Bridgeton placed their city planning process on hold to facilitate coordination of efforts by the City and that of the Airport.

At the time that the Bridgeton effort was suspended, a preliminary set of recommendations had been developed in relation to the property within the City that was purchased by the Airport. These recommendations showed the areas including Development Site B as changing from their original use designation of residential to a more intense pattern of commercial/industrial utilization. This intensity of use is consistent with the general pattern of activity that would be considered under a collateral development effort. Thus, the form of development under consideration would appear to be consistent with the recommended pattern and intensity of land use currently proposed for the site by the City of Bridgeton Comprehensive City Plan.

Close cooperation with the City of Bridgeton in defining the future land use designation of the property should continue to ensure the greatest flexibility possible relative to potential land uses on the property and to ensure that viable uses of the land are not precluded.

Further, the support and assistance of the City of Bridgeton in defining and pursuing possible development incentives from local, county, state and federal sources will enhance the potential for success in obtaining the necessary support. Given the fact that the other major development sites around the Airport have received tax abatement and other designations that support their marketability, it will be very important that similar incentives be secured for these areas to effectively compete in the market.

Potential Strategies

Based on these considerations, there appear to be three potential strategies for the property not currently defined for aviation-development purposes. These are briefly explored in the following sections.

Strategy One involves holding onto the acreage not currently noted as being needed for future aviation development, along with initiating negotiations with the City of Bridgeton to trade property owned by the Airport south of Runway 11/29, to provide for the relocation of the nine-hole Berry Hills Golf Course to the south side of Runway 11/29. A cursory evaluation indicates that adequate property exists to accommodate a 9-hole replacement course on the south side of Runway 11/29. Removal of the Berry Hills Golf Course would result in a more viable development site, facilitate a rail spur extension to the site, and could potentially facilitate the development of access from Missouri Bottom Road and the linking of industrial development north of the rail line with a development concept south of the rail line. A similar property trade was undertaken between the City of Bridgeton and STL involving a park site that was formerly situated on the north side of Gist Road and land that had been purchased by the Airport in the area south of Runway 11/29.

Shifting the 9-hole golf course to the south side of Runway 11/29 and coordinating it with the development of the proposed replacement park would generate some use synergy. By placing the course on the south side of Runway 11/29, its accessibility to the residents of Bridgeton and North County is enhanced.

With the relocation of the golf course, the Airport would have two options that it could pursue under the first development strategy. The first option would involve teaming with the City of Bridgeton to define a development scheme and implementation program to include the definition of uses, coordination with the Regional Commerce and Growth Association (RCGA) relative to one or more of their six identified target industry clusters, and lobbying key political leaders to support the provision of economic development funding and incentives to support the effort. A potential industry cluster that could be considered is in the area of Advanced Manufacturing and working through the Center for Aerospace Manufacturing Technologies. As stated on the RCGA website, this group "was created in partnership with Missouri University of Science and Technology, Boeing Phantom Works, and the Air Force Research Laboratory. It serves as a center for the development and transition of innovative advanced technologies for the aerospace manufacturing industry."

Utilizing this first development option would require the allocation of considerable funding by the Airport and/or the City for major site preparation, infrastructure extensions/expansions and for access improvements such as the interconnection of Site B with Missouri Bottom Road as discussed previously. The current financial position of the airport and the availability of the amount of funding that could be required could present a challenge. The City of Bridgeton may also not be in the position to address all or a portion of these costs, particularly given market conditions in North County, absorption rates and the current inventory of competing development sites within a one-mile radius of the Airport.

The second option under Strategy One is virtually identical to the first with the exception that rather than having the City and the Airport be responsible for site improvements and infrastructure, the Airport would issue an Request for Proposals (RFP) for a third-party developer to develop the site within parameters set by the Airport in the RFP and developer contract. While the Airport is the owner of the property in question, having the City of Bridgeton as an active participant in the process would present a number of potential benefits to both parties. Obviously, an agreement between the Airport and the City should be developed prior to the issuance of an RFP in order to address roles, responsibilities, financial commitments, goals, and objectives that are to be achieved.

Strategy Two involves the expansion of the Berry Hill Golf Course within Site B outside of the area reserved for aviation development either through the sale of property or a long-term lease (if acceptable to the FAA) in order to accommodate an additional 9 holes added to the current course. While much of the expansion of the current course would likely occur on land purchased with noise money, and as a result proceeds from the sale of this land would be returned to the noise mitigation program, some of the expansion of the course would take place on property bought with other sources of funds or through the W1W expansion program that would provide a return to the Airport.

The Cowmire Creek Detention facility could be incorporated into the layout and serve as a feature of the course itself. The proposed strategy would also meet the desire of the City of Bridgeton to provide for an expanded recreational facility for its residents, albeit one that is separated from the residents by the alignment of Runway 11/29.

Risk under this scenario, assuming the City of Bridgeton purchased the required property, is taken by the City of Bridgeton, as the transfer of property would be a fee simple sale transaction. The financial return to the, however, Airport would be limited due to the need to reimburse the noise program for any proceeds from land purchased with noise money. While not a responsibility of the Airport, it would make sense for the City of Bridgeton to undertake a market study of the return on their investment given the golf market in St. Louis and in particular North County. It should be noted that currently there is one 36-hole course, six 18-hole golf courses, four 9-hole courses (including Berry Hill) and one 9-hole par 3 executive course in North County, not to mention additional courses such as those

in Forest Park and St Charles County. Thus, the viability of an expanded Berry Hill Golf Course is a factor that the City of Bridgeton would need to take into consideration. The courses noted above are listed in **Table 2**.

It is not recommended that STL get into the golf course business, but only participate through either a long-term lease to a third party or by the sale of the property for the course with appropriate deed restrictions. The costs associated with the planning, design, permitting, construction and on-going maintenance and operation requirements can be significant. Given the current financial picture of the Airport assuming this risk, in an area that is already served with a number of courses and whose socio-economic characteristics are not indicative of a strong golfing market, the Airport moving into this business is likely not warranted.

Table 2
GOLF COURSES IN NORTH COUNTY

COURSE	NUMBER OF HOLES	LOCATION
Eagle Springs	18	Town of Black Jack, Redman Ave. west of Old Halls Ferry Road
Emerald Greens	18	Spanish Lake, Larimore Road at Riverview Drive
Florissant City Golf Course	18	Old Halls Ferry Road near U.S. 67
Normandy Golf Club	18	St. Charles Rock Road, east of Hanley Road
Glen Echo Country Club	18	Lucas and Hunt Road, south of Natural Bridge Road
Norwood Hills Country Club	36	West Florissant Road at Lucas and Hunt Road
North Golf Club	9	West Florissant Road at Canfield Drive
Ruth Park Golf Club	9	South of Olive Blvd, east of I-170
Crystal Springs Quarry	18	Maryland Heights Expressway, south of I-70
St. Ann Golf Course	9	Ashby Road between St. Charles Rock Road and I-70
Golfport of Maryland Heights ¹	9	Maryland Heights Expressway, south of I-70
Berry Hill Golf Course	9	Fee Fee Road south of Missouri Bottom Road

Strategy Three would essentially place all land along the north side of Runway 11/29 into a holding category until market conditions and the financial position of the Airport improved. This action would involve designation of all land north of Runway 11/29 as aviation-use property and maintaining this designation or changing it as market conditions warranted. In short, this strategy would essentially be a deferral of any action to move forward with any non-aviation development until a later date. The basis for this approach could be reserving the site for possible large wage such as an expansion of Boeing. It should be remembered that at the start of the master plan, Boeing did inquire about the status of property on the north side of Runway 11/29.

¹ Golfport is a par 3 executive course

This would not, however, suggest that no action whatsoever be undertaken. The Airport should still coordinate very closely with the City of Bridgeton throughout the completion of the City Comprehensive Plan and through any changes in zoning that may arise to support the implementation of the Comprehensive Plan recommendations. Attention would need to be paid to the specific requirements of each zoning district that is considered for implementation by the City for Airport-owned property. The attention should focus on a number of issues associated with the Comprehensive Plan and police powers used to implement the plan that include but are not necessarily limited to:

- Permitted uses by district and those permitted through a special/conditional use process;
- Permitted accessory uses allowed by district;
- Lot coverage/impervious surface limitations;
- Required setbacks from property, roadway and lease lines;
- Parking and loading requirements – should be targeted to aviation-related demand levels for the specific use;
- Landscaping, architectural and sign requirements;
- Impact fees associated with development activities (these are typically not FAA-eligible even for an eligible development activity);
- Height limitations; and
- Potential for developing an airport zoning designation employing planned district use designations and flexible design standards.

The primary risk associated with this approach is that at some point the FAA could bring pressure to either commit noise fund land to a viable aviation-related use or to dispose of the land as surplus property.

DEVELOPMENT SITE C - WEST OF I-270

Introduction

The land area to the west of I-270 is composed of a total of approximately 313 acres of former residential subdivision. The area is generally bordered on the north by I-370 on the east by I-270 and by industrial areas to the south and west. The land area to the west of I-270 is generally just beyond the limits of the Runway Protection Zone (RPZ) on the western end of Runway 11/29. Access to the site is obtained from Gist Road on the north and Woodford Road on the southern end of the site. Although it abuts the alignments of both Interstate 370 and 270, no direct access from development site C directly onto either interstate currently exists. Development Site C was formerly a single-family residential subdivision and retains a residential street pattern and infrastructure distribution typical of a residential pattern and a single-family residential demand level. All dwellings within the former subdivision have been demolished. In most cases, however, the basements of the former homes have not been removed only filled.

Existing Challenges to Development

Site C located west of, and physically separated from, the active airfield by I-270 has several factors and challenges that must be considered in rendering a decision relative to the viability of using the property for aviation-related purposes.

Aviation-Related Development

The area west of I-270 is not viewed as being viable for any typical form of aviation-related development. Access to the airfield would be inordinately expensive requiring the development of a major taxiway bridge across the alignment of I-270, along with the need to undertake massive site improvements to develop a generally level development area.

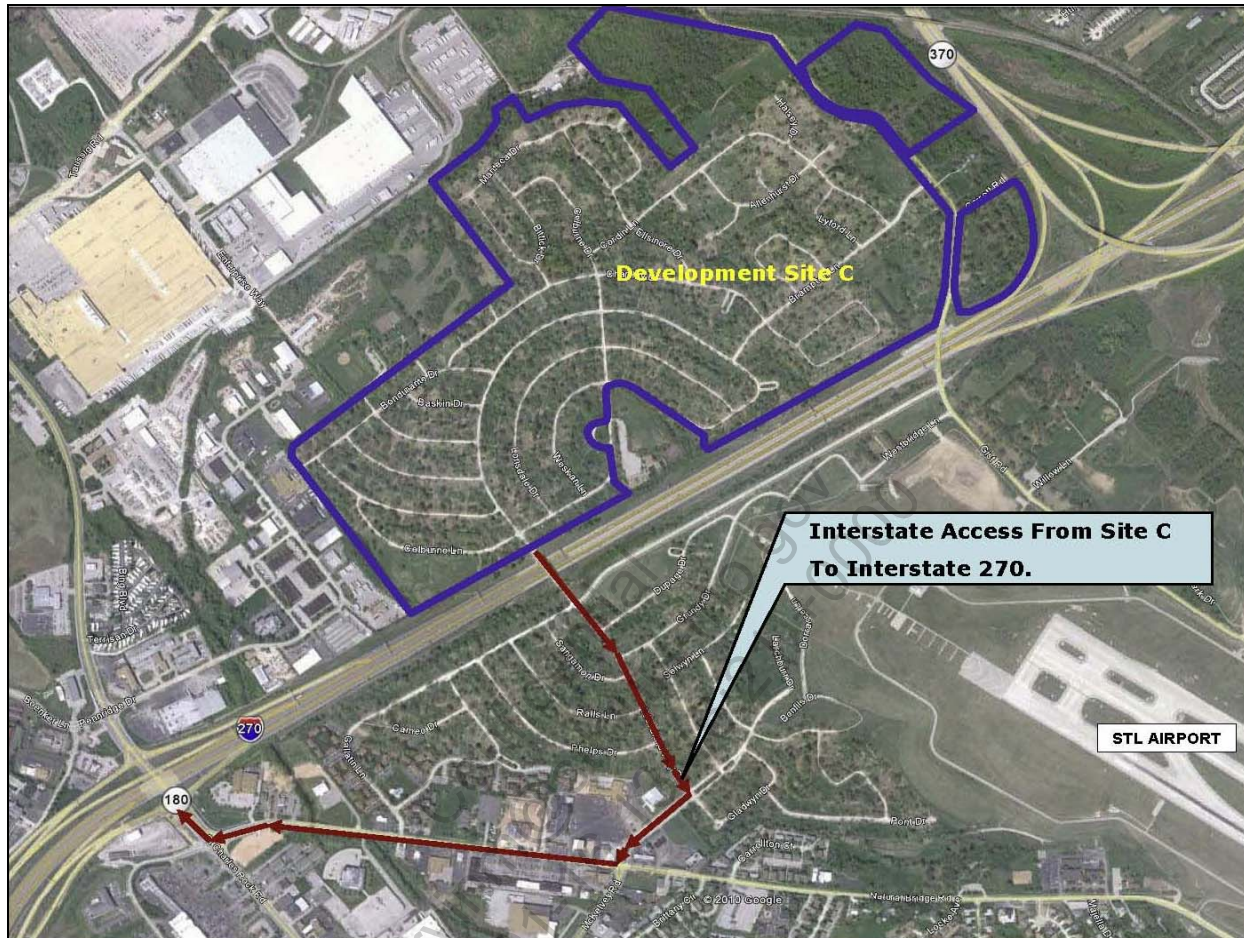
Uses could include a belly haul cargo facility, ground service equipment maintenance facility, or other miscellaneous maintenance facilities that would not require the extent of development needed for a use serving aircrafts. The land area west of I-270 is far removed from the primary developed aviation facilities at the Airport. Tug distances for belly haul or even for GSE storage and maintenance are excessive being approximately 2 miles from the nearest terminal concourse.

Relocating facilities associated with airport maintenance activities to the area west of I-270 would be inconsistent with the goal of consolidating maintenance facilities and activities in an area with quick and direct access to the majority of the airfield and the developed airport facilities. Finally, for all three of the potential non-aircraft related activities, there would remain the need to develop a dedicated bridge for the movement of equipment to and from the secure portion of the AOA. This bridge would need to span the entire right of way of I-270 including all six traffic lanes. For these reasons, it is anticipated that the most viable re-use/redevelopment option for the property west of I-270 would be for some form of non-aviation development.

Non-Aviation Development Considerations

A significant factor complicating the viability of the area west of I-270 for development is the limited **accessibility of the site**. The property has extensive frontage along the west side of I-270 but has no direct means of accessing the interstate. Currently, access to the site is afforded by Gist Road from the east and from the west and Woodford Way from the east and south. To access I-270 via Woodford Way, it is necessary to take Woodford Way to Bonfils, Bonfils to Natural Bridge Road, Natural Bridge Road to St. Charles Rock Road and St. Charles Rock Road to I-270. Woodford Way is a former two-lane residential collector street and not sized or designed for significant non-residential development. **Exhibit N** depicts the interstate access route from Site C to Interstate 207.

**Exhibit N
SITE C INTERSTATE ACCESS MAP**



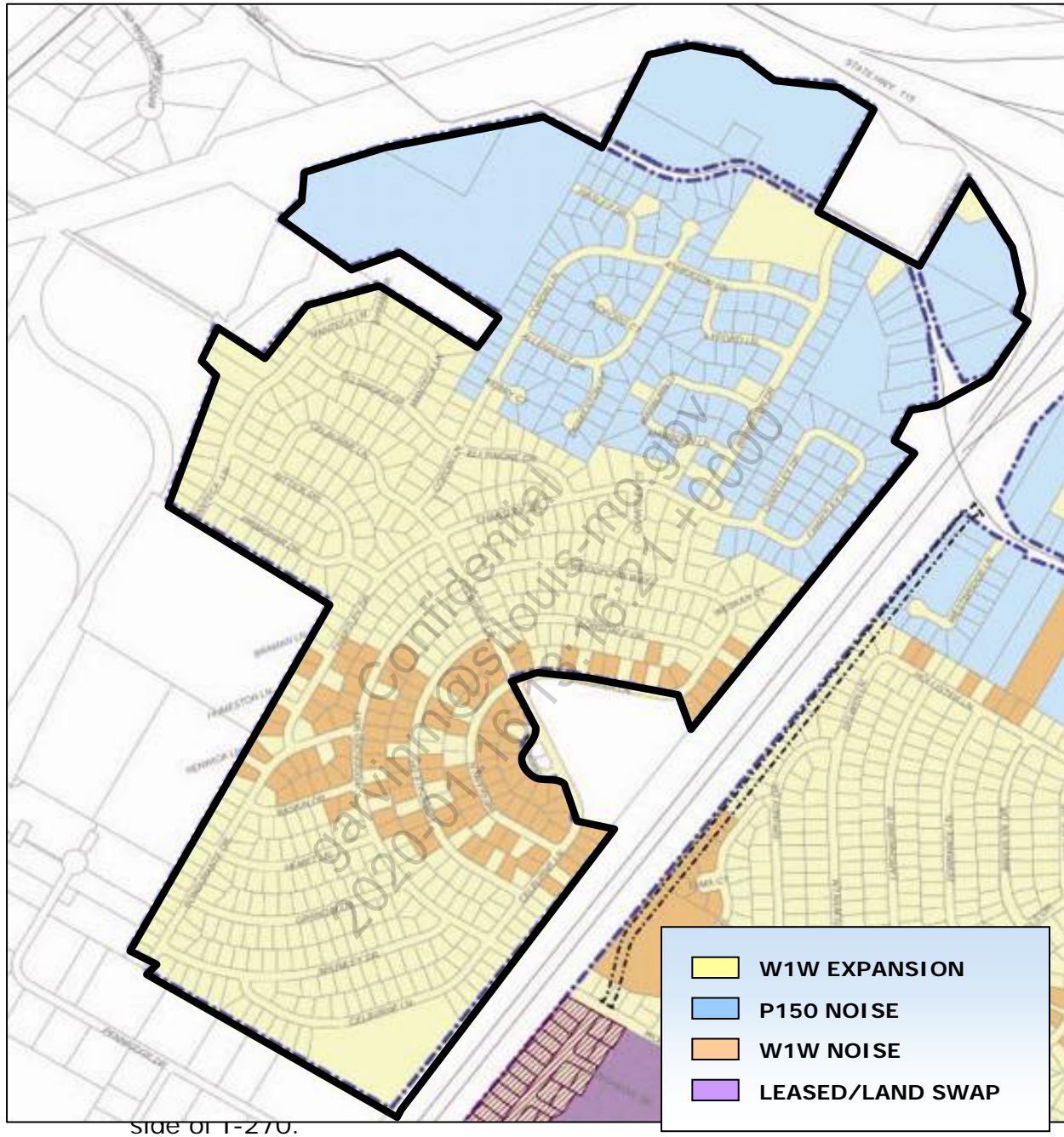
Gist Road is a narrow two-lane roadway having lane widths of 10 and 12 feet. Interstate access via Gist Road can be gained either by following the roadway to the east across I-270 to Fee Fee Road and following Fee Fee Road to the intersection of Missouri Bottom Road -- a distance of approximately one mile -- and then proceeding west on Missouri Bottom Road another .75 miles to the interchange with I-270, or west on Gist Road to the west to intersect with Taussig Road and then taking Taussig Road north to the interchange with I-370 or south to its intersection with St. Charles Rock Road. (Depending upon the direction of travel sought on I-370, a distance of just under two miles or just less than 1.6 miles must be traveled.) In both instances significant improvements to Gist Road would also be necessary, including widening of the current road along with construction of additional lanes, a new widened bridge over I-270, bridge improvements over a creek west of the site, and potential bridging of the Norfolk and Southern rail line to the west of the site or at a minimum a significant upgrading of the crossing.

One option that was previously identified and deemed possible was the development of enhanced access of I-270 to the area along the north side of Runway 11/29. The previous airport master plan identified the potential development of a new interchange that would be placed along I-270 in the immediate vicinity of the Woodford Way overpass. While this alignment was identified at a highly conceptual level, the proximity of the proposed interchange to entrance and exit ramps associated with two other major interchanges in the area and the associated traffic interactions would render the development of an additional interchange on I-270 difficult at best. The alignment of Woodford Way crosses I-270 only .67 miles north of St. Charles Rock Road, while the northbound entrance ramp onto I-270 from St. Charles Rock Road ends only .15 mile south of Woodford Way. The southbound exit ramp from I-270 to St. Charles Rock Road and I-70 begins only 250 feet south of the Woodford Way overpass.

The I-370/I-270 interchange is located 1 mile north of the Woodford Way overpass over I-270, while the exit lane from I-270 to I-370 commences only .30 miles north of Woodford Way and the I-370 ramp onto southbound I-270 fully merges into I-270 .56 miles north of Woodford Way. Constructing a typical diamond interchange at Woodford Way in the midst of the merging and exiting traffic associated with vehicle movements to and from I-370, St. Charles Rock Road and I-70, particularly given traffic volumes along I-270, is not deemed likely. Even if it were to be approved by the State of Missouri, the cost of a typical interstate diamond interchange to support potential development of Airport-owned property would likely have to be borne by the Airport and likely cost in the range of \$20-25 million.

Unlike Site A and Site B, the property comprising Site C does not have as high a percentage of acreage that was acquired using either 14 CFR Part 150 or other noise-related funds. While this may be the case from a comparative perspective, there is a significant component of the overall site that was acquired through the use of noise money. Almost the entire northern third of the site was purchased through 14 CFR Part 150 programs tied to the original airfield. A second swath of property that cuts the southern two-thirds of the site in half was acquired using noise funds associated with the WIW expansion program. The configuration of noise-acquired land versus land acquired with funds other than those related to the noise program complicates the ability of STL to assemble the entire site as a unified development tract, unless changes are made in the requirement to dispose of surplus noise property not devoted to an aviation-related use. If this requirement is not amended at some point in the future, the Airport would have the option of either purchasing at fair market value the property purchased with noise funds, selling the entire 313 acres tract to a developer or construct a development partnership of some sort with a developer who would own all of the property that had been acquired with noise funds with STL retaining title to all of the non-noise funded property. Site C property by funding source is displayed in **Exhibit O**.

**Exhibit O
SITE C ACQUISITION BY FUNDING SOURCE**



Development Considerations

Access to infrastructure is not as limited and extensions of existing systems would not be as potentially difficult as with Sites B and C. The current infrastructure in place in the immediate vicinity of Site D is delineated below.

➤ **Water**

- 6-inch lines throughout the former subdivision with the exception of an 8-inch loop line along Woodford Way and an 8-inch lateral along Hermet Avenue.

➤ **Gas**

- 6-inch loop gas line along Woodford Way to Brampton Lane and then north on Brampton to Gist, turn to the west on Gist Road.
- 4-inch line from Woodford Way along Bondurante Drive to Chartley Drive along Chartley Drive to Celburn Lane and downsizing to a 2-inch line at Celburn. All other lines are 2-inch throughout the remainder of the former subdivision.
- 16-inch line approximately 1,420 feet south of the southeastern corner of Site C.

➤ **Sewer**

- 8-inch Vitreous Clay (VC) pipes serve the entire former subdivision and are generally located along the alignments of the existing streets.
- 8-inch VC line draining the southern third of subdivision to the south connecting to 36-inch VC along St. Charles Rock Road.
- Two gravity-feed, 10-inch VC pipes running generally parallel to one another from the vicinity of the intersection of Chartley Drive and Celburn Lane west to intersect a 30-inch collector line approximately 150 feet west of the westernmost property boundary. These lines drain the northern two-thirds of the site, primarily through a system of gravity-feed lines.

It is possible that extensive site work would be required to render Site C viable and ready for development with the attendant costs that would go along with the reconfiguration of the lay of the land. The topography of Site C is something of a double-edged sword. This factor can have both negative (from a site work and cost perspective) and positive (from a planned development urban design) features. The ultimate extent to which topography is either an attribute or constraint will ultimately depend upon the development strategy that is implemented. If it were determined to move forward with an industrial/office warehouse concept, one only has to look at the amount of earthwork that was undertaken both for North Park and Hazelwood Commerce Park to gain an understanding of the extent of site work necessary to render Site C ready for development.

As noted in the introduction to the Site C discussion, an added concern within the limits of Site C is the fact that in a number of cases during the demolition of the former residential structures, the basements of these dwellings were not removed, but simply filled. Prior to development, any demolition debris would need to be

removed and existing basements would also have to be excavated, concrete removed and then backfilled with appropriate fill material. This is particularly the case if large commercial/industrial structures are to be developed on the site.

Development Solutions

Attributes/Opportunities

While there are challenges that impact the potential for non-aviation development on Site C, the location does have certain attributes that could support a non-aviation development scheme, which are noted below:

- **Existing development precedent to the south and west of the site** fully supports a commercial/industrial land use pattern on portions of Development Site C. Land uses in both the City of Bridgeton south and west of the site and the City of Hazelwood to the northwest of the site, and north of I-370 consist of a mix of warehouse/distribution activities, office warehousing, corporate office developments, retail commercial uses along with a large scale recreational/sports complex. This large cluster and mix of development has direct access to I-370 as well as to I-270 via I-370, Missouri Bottom Road and St. Charles Rock Road. The land uses in this area are separated from Development Site C by the Norfolk Southern Rail Line and by site topography along the west and south side of the development site. The location and extent of the development in the vicinity of Site B clearly establishes a precedent relative to the intensity, mix and pattern of uses that could be considered. As noted above, one of the key site factors affecting the development potential of Site C is the circuitous and relatively constrained access to the site given the configuration of existing roadways. Assuming enhanced linkages between Site C and the regional road network can be achieved, the development potential of the area will be enhanced, particularly in comparison to Hazelwood Commerce Park, which also does not have immediate access directly onto one of the vicinity interstates.

Further, Site C is bordered on the east and north by major urban interstate highways (I-270/I-370) and by developed industrial areas on the south and west. As a result, the uses to the south and west are compatible with virtually any intensity of land use that might be considered as long as they do not interfere with flight operations. The noise levels associated with major urban interstates, coupled with the wide rights of way of these highways, act to significantly buffer any noise and or aesthetic impacts that might be associated with development of Site C.

- **Topography of the site** possesses the potential to be a limitation or an asset to development, depending on the use planned for the site. The site is not suitable for logistics and warehousing but could be incorporated into a development scheme that takes advantage of visual corridors, potential views across the Missouri River Valley. **Exhibit P** provides the existing ground elevations along a north to south cross section within the proposed aviation development portion of Site C perpendicular to Interstate 270.

Exhibit Q provides the existing ground elevations along an east-to-west cross section within the proposed aviation development portion of Site C parallel to Interstate 270.

Exhibit P

NORTH TO SOUTH DEVELOPMENT SITE C CROSS SECTION

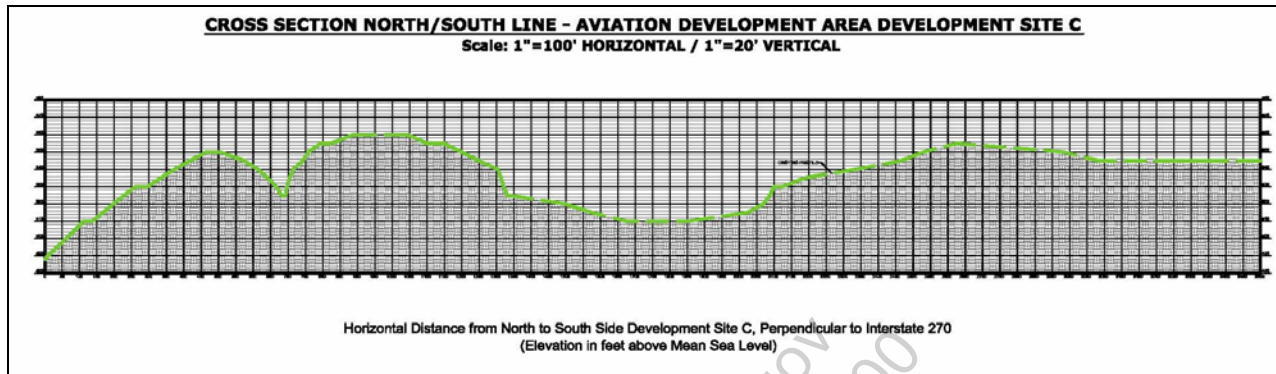
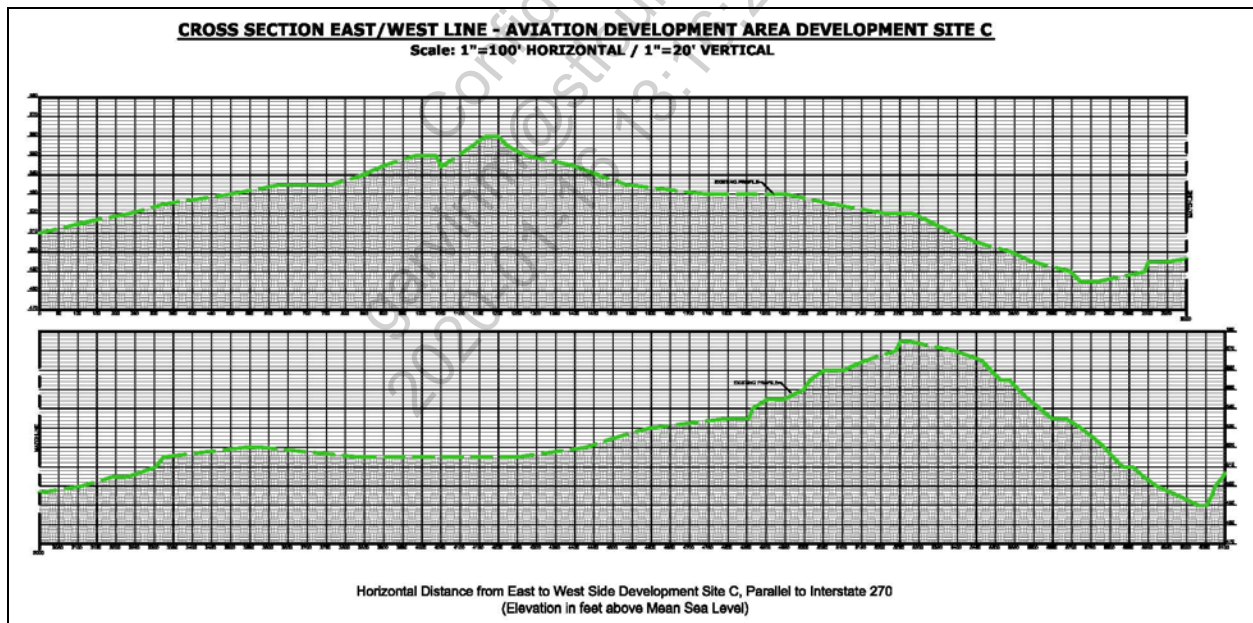


Exhibit Q

EAST TO WEST DEVELOPMENT SITE C CROSS SECTION



- **Potential to develop a cooperative planning approach** working in close coordination with the City of Bridgeton, in both the planning and the development of an implementation program. This would include coordination with the City on the development of a series of incentives to provide for transportation improvements, infrastructure enhancements and potential trade zone or other enterprise zone designations to enhance the competitive position of Site C in relation to existing development areas including North Park, Aviator Business Park and Hazelwood Commerce Center. The City of

Bridgeton clearly has a strong vested interest in a successful development program for Site C, which possesses the largest combined acreage of the three potential development sites located in the city of Bridgeton.

Potential Strategies

Solar Energy Facility

In mid-2008, Denver International Airport (DEN) inaugurated a solar farm situated on 7.5 acres directly south of the Jeppesen Terminal between Peña Boulevard's inbound and outbound lanes. The solar farm at DEN consists of more than 9,200 solar panels that follow the sun to maximize efficient energy production and generate more than 3 million kilowatt hours of electricity per year. The system – designed and built by WorldWater & Solar Technologies – is owned and operated by MMA Renewable. The energy generated by the solar park supplies a quantity of electricity equal to half of the power required annually to operate the DEN's people-mover train system. Communities and airports are increasingly investigating ways to increase energy efficiency, reduce costs and reduce their environmental footprint. Further, the move toward renewable energy sources by public agencies has received increased attention and opens up potential funding that is typically not available for more traditional systems. Solar systems of varying size and capability have also been installed at San Jose International Airport, San Francisco International Airport and George Bush Intercontinental Airport to name just a few.

While DEN is one of the key examples of a solar energy system at a major U.S. airport, there are several potential considerations that would have to be explored should STL consider a similar undertaking.

Portions of Site C are located beneath the approach to Runway 11, 12R, while the approach to Runway 12L lies to the north of Site C. The development of a solar energy facility beneath or near the final approach of these two runways could be problematic depending upon the orientation of the solar arrays and the extent to which the panel reflect light and create glare that could interfere with a pilot's vision during this critical stage of landing. Much of the glare can be mitigated by the type of solar panel that is used and by the orientation of the panel. Careful coordination with the FAA would be recommended if this option were determined to be one that the Airport would be interested in pursuing.

Another factor to be considered and one that would require input from experts in the solar energy industry would be the suitability of the St. Louis area for a solar array. The potential power that could be generated from such a facility is rather significant. The Airport would also receive some ROI with this project; however, the exact numbers are undetermined at this time. Based on solar suitability mapping provided National Renewable Energy Laboratory Resource Assessment Program based off of 30 years of collected data, the St Louis area receives an average of between 4 to 5 hours of solar radiation per day. To put this into perspective, other locales experiencing a similar exposure include Dallas, San Antonio and Austin, TX, Tampa, Orlando, Miami, Fort Myers and Jacksonville,

Florida along with Savannah GA, Columbia SC, Wichita KS, Medford OR, Rapid City, SD and Charlotte, Greensboro and Raleigh NC. The highlighted locations are known to have already implemented solar power generation projects.

Several factors come into play when looking at this project, which are listed below:

- In the initial deployment of a solar system, and taking into consideration the potential for FAA concerns relative to glare, the initial site should be situated so as to negate potential for reflective glare towards the cockpit of an approaching aircraft
- The approaches to Runway 11 and Runway 12L are oriented along an east/southeast direction, which would significantly mitigate possible impacts from the solar array, which is generally oriented to the south
- St. Louis is generally located at Latitude 38.64 degrees North, resulting in the sun being directly overhead a limited time of the year and much of the year crossing in a position to the south
- The solar panels would face to the south (away from the alignment of the approach) and be set at an angle of to enhance their efficiency. This angle could likely be 20+ degrees
- Highly reflective/mirrored solar panels that are typically used to heat water for power generation are not anticipated
- A solar array that would incorporate technology to allow panels to track the movement of the sun would be the most efficient and would be recommended for consideration

Given the above, Site C was reviewed and an area at the southern end of the site was identified that would appear to have strong potential to accommodate a system of collectors while not resulting in potential impacts to flight operations. This area is defined as follows:

- Commencing at the intersection of the west Right-of-Way (ROW) of I-270 (also the eastern boundary of Site C) and the south ROW of Woodford Way and extending to the south/southwest along the I-270 ROW approximately 1,040 feet to the southeastern corner of Site C. Proceeding from this corner to the west/northwest approximately 1,640 feet to the southwestern most corner of Site C and then turning to the north/northeast and extending for approximately 730 feet to the intersection of the Site C boundary with the south ROW of Grandin Lane. The boundary then follows the south ROW of Grandin Lane to its intersection with the south ROW of Woodford Way and thence back to the point of beginning.

At its closest point, the northernmost point of the proposed solar sight is approximately 525 feet to the south of the extended centerline of the Runway 11 approach. The area described above would provide a total of 37.6 +/- acres for the development of the solar array and affiliated facilities. The output of a facility within a 37-acre footprint could significantly reduce the utility expenditures at STL

and likely power a number of airfield and landside facilities. This action would be consistent with local initiatives including that of the Regional Commerce and Growth Associations St. Louis Climate Prosperity Project.

As a basis of comparison, Yosemite Valley International Airport (formerly Fresno Air Terminal), working through a third-party developer, installed a 9.5-acre, 11,700-panel solar system that generate 2 megawatts and provides for more than 40 percent of their total electrical requirements. Denver's system is also a 2-megawatt system and was also developed by a third party, with Denver retaining the right to purchase the system at a later date. Additionally, the development of the system might be undertaken in conjunction with the City of Bridgeton and could be used as a potential incentive to development of facilities in the immediate area.

Site preparation would be required and would likely include the need to re-contour the area with a gentle sloping from Woodford Way towards the southern end of the proposed site. If fill material is needed, ample quantities that could be used are presently stored on Site B. This proposed development action would not impact any property acquired with noise funding and would also not adversely impact other potential schemes that have been identified. In the case of the office park concept, the proposed development action could be one point that differentiates a planned office warehouse/office park development on Site C versus existing facilities elsewhere. Finally, this option could be undertaken without the likely need of selling the land for the proposed activity, as is more likely with the next two development schemes.

Traditional Office Warehouse or Office/Research Park Development

While earlier discussions regarding market conditions for new commercial/industrial space suggest it will be some time before the supply of available space is reduced to a point that would support demand for new development land, the fact remains that the pattern of land use in the area supports this form of development. Certainly, land use precedent exists in the immediate vicinity of Site C that would suggest that an office warehouse and or office park form of development would be consistent with other development in the area. The problem is not with the precedent, but rather with the state of the market. If the decision were to proceed with an office or research park concept, the question would become how could STL differentiate a development of this nature on Site C from other competing products in the immediate area so as to make Site C the location of choice. Any third party that might consider buying the raw land would also need to address this question. For Site C to be viable, it is anticipated that potentially multiple items will be needed to differentiate the product provided on this site from the others in North County.

Some of the basic issues and requirements that are known to be required, or at a minimum desired, are listed below:

- Implementation of incentives (Enterprise Zone, Foreign Trade Zone, etc.) will be required to provide a competitive position with the major other developments adjacent to STL;

- Upgrades and access improvements, at a minimum along the existing routes of access to Site C, will be required;
- Define development potential based on height restrictions and minimization of concentrations of people directly beneath the approach to Runway 11. Runway 11 threshold is at 617.92 feet MSL while the highest elevation on Site C is 604 feet MSL immediately south of Gist Road adjacent to the ROW of I-270. In the vicinity of the Runway 11 extended centerline, the high point is 578 feet MSL located approximately 571 feet south of the centerline and 3,580 feet west of the Runway 11 threshold. Using the One Engine Inoperative surface of 62.5 to one would permit an elevation at this high point of 57.28 feet above the current ground elevation.
- Removal of remaining basements and debris as a part of site preparation is necessary;
- Coordinate with the RCGA to specifically identify and market the area, and preferably the site, as a target area for concentrating efforts in one of their targeted industry clusters;
- Gain support from the St. Louis County Economic Council that the entity will support the development efforts remembering that this same entity has a major stake in at least one other competing development adjacent to the Airport;
- Reconfigure and expand capacity of underlying utility infrastructure to meet the forecast level of service demand;
- Ultimately resolve the issue of non-aviation uses on noise-funded property, as that decision could direct the manner of development and the role of the Airport in the overall development process along with whether the Airport would be required to sell noise-funded property rather than be an active partner participating in its development;

The preceding items do not necessarily differentiate a Site C office or research park development from other available sites in North County or the metro area but act to level the playing field for a Site C development program. These actions would be precursors to the development process.

Two approaches that could be implemented to differentiate an office/research development park on Site C have been tentatively identified; however, through ongoing discussions with the planner from the City of Bridgeton, other possibilities could be defined. The first approach would involve the design of the area, incorporating into the design the use of the existing natural topography, visual corridors, tree cover, landscaping and site design amenities associated with these features. This approach is significantly different than that exhibited with the basically sterile, contaminated sites that are typical of North Park and Hazelwood Commerce Park. Essentially, the differentiator would involve undertaking a planned development program that provides an aesthetically pleasing environment for tenants that could include the incorporation of walking paths, recreation amenities, and vistas over the river valley and incorporation of the park area adjacent to the western boundary of the site.

LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT MASTER PLAN UPDATE

A clearly successful example of just such a planned district office park incorporating natural setting and recreational amenities can be found in Overland Park, Kansas, as shown in **Exhibit R**.

Exhibit R SITE D PROPERTY BOUNDARY AND FUNDING SOURCE



Corporate Woods, which is located along the south side of I-435 in Overland Park, was constructed on a site partially bisected by Indian Creek and its associated floodway. Rather than attempt to channel the creek, the developer incorporated the creek, its adjacent wooded areas and the wildlife it supported into the development. The development is also connected to a county-wide system of bike paths that run along Indian Creek with numerous off-shoots. As noted in the Policy Handbook of Corporate Woods, "Approximately 60 acres along Indian Creek have been given to the City of Overland Park by the developers of corporate Woods to be developed and maintained by the City's Parks and Recreation Department. The City Park includes shelters, grills and picnic tables....as well as a par course with exercise stations along Indian Creek." Given the linkage to park facilities, some time might be spent determining if this development concept could be extended across I-270 to incorporate all or part of Site D as well.

One caution should be noted: it is not the intent of referencing Corporate Woods to suggest the replication of the concept, but rather to draw attention to this concept as an example of a development effort that differentiated itself from the typical development pattern exhibited in the area and has experienced success. There are other factors that also played a part in the success of the Corporate Woods example, many of which relate to market, inventory and socio-economics. The intention is to suggest the idea of employing a more environmentally linked park-like office development could provide a product not seen elsewhere in North County or in the region.

The second differentiator is associated with the first development concept that was discussed in this section. As noted, it is believed that there could be the potential for the development of a solar energy array that could provide significant electrical power for STL. This is based on the identification of an area of approximately 37 acres that appears suitable for the configuration of the solar collectors. Remembering that both Denver International Airport and Fresno-Yosemite International Airport have developed 2-megawatt facilities on 7.5 acres and 9.5 acres, respectfully, there would appear to be the viability for development of a solar facility that could both provide economic benefit to the Airport (reduction in expenditures for electric with corresponding cash savings) as well as potentially provide a source of green energy for the proposed development. When this potential is taken into consideration along with other technologies and green building techniques, the second differentiator emerges. Along with being a major differentiator, this approach would also open up sources of technology funding to support green infrastructure installation and would bring significant positive attention to the Airport and to the City of Bridgeton while also being consistent with the initiatives of the RCGA.

Other technologies, with the exception of large-scale wind turbines, which are not suitable in close proximity to airports due to height and radar interference could also be incorporated into the design through a series of technology demonstration programs such as the recent Ameren Solar Energy Demonstration initiatives for Missouri and Illinois.

One of the key factors that will require resolution under this scenario and the next scenario is related to the whether the Airport opts to sell the land to another party to develop or whether the Airport intends to retain property ownership and be an active participant in the process or have the development undertaken through a third-party process. Key to this decision is the resolution of the ability of the Airport to retain ownership of noise-funded land and commit this land for non-aviation revenue purposes. A second element key to this decision relates to the financial picture of the Airport and the comparative return on investment and the time frame for this return when considering the outright sale of land versus a long-term development program. The first issue ultimately can only be answered by the action of Congress or by a change in policy by FAA, while the second issue is a decision to be made by STL senior management.

Regional Motorsports Complex

While likely to be considered somewhat unorthodox, the combination of the rolling topography of the site, the overall size of the area and the relative isolation of the area from adjacent residential land use, could support the potential development of a multi-use motorsports park. Precedent for such a use of airport property exists both in Central Region, as well as at other airports in the U.S. Kansas City International Airport (MCI) is working with the Sports Car Club of America to develop a sports car track on airport property with a lease instrument that ensures the availability of the property for aviation-related development at such time that demand exists. The area under consideration at MCI for the development of the track has similar topography to that typical of Site C. The fact that the Kansas International Speedway is located within 10 miles of MCI did not adversely impact the viability of the proposed SCCA track. Further, the venues to be held at a facility can be tailored to the market, for example, not every track is intended to accommodate the Indy Racing League or NASCAR. Most tracks accommodate a diverse array of events from motorcycle road races to vintage car events, each bringing its own fan base.

Other airports that sponsor annual races on all or portions of their current airport property include Albert Whitted Airport in St. Petersburg, Florida, which hosts the Honda Grand Prix of St. Petersburg. Now in its sixth season, the annual event is run on a 1.8-mile, 14-turn waterfront circuit that includes a combination of adjacent downtown streets circling Pioneer Park, the Mahaffey Theatre and extending onto the main runway/taxiway at Albert Whitted Airport that overlook the Bay and St. Petersburg Harbour and Marina. The main event is typically the running of the IZOD IndyCar Series and the Firestone Indy Lights.

Sebring Regional Airport in Sebring, Florida, is home to the oldest continually used, road racing circuit in the United States and has hosted the 12 hours of Sebring endurance race, which is part of the American LeMans series since 1952. The race course is located on the landside at Sebring Regional Airport.

Development of such a facility would have to take into consideration vehicle access to the site and a provision of parking. Some portion of the required vehicle parking could be provided on Site C. Grading to support future aviation related

development on Site B would result in an area of approximately 110 to 120 acres and with minimal surface treatment (gravel surface) could accommodate as many as 7,500 vehicles. Further additional space would be available on Site D until such time as some other development of the area occurs. The accommodation of parking would further increase corresponding revenue to STL. If this concept were considered, traffic would likely be a significant issue and potential challenge. Without direct interstate access, traffic from an event would have three options for arriving and departing. These would consist of Gist to Taussig to I-370 to either I-70 or I-270; Gist Road to Fee Fee Road to Missouri Bottom Road and then to Lindbergh and either south to I-70 or north to I-270 or taking Missouri Bottom Road west to I-270. The final option would involve taking Woodford Way to Bonfils Drive, Bonfils Drive to McKelvey Road, McKelvey Road to St. Charles Rock Road and then St Charles Rock Road west to I-270 or east to I-70. Of these routes Gist Road, Woodford Way, Bonfils Drive and Fee Fee Road would all require significant expansion and improvements.

This concept would require some site preparation to provide sites for grandstands, concessions, pits, etc., while minimizing concentrations of persons in the immediate vicinity of the approach to Runway 11. The impact of subsurface debris on a racing surface would also need to be reviewed and could require mitigation. One of the attributes of Site C for this form of development is the ability to make use of the existing topography in the development of the circuit as has been done at a number of major racing venues such as Watkins Glen, Laguna Seca, Mid-Ohio Sports Car Course, Road America and Road Atlanta.

A detailed market assessment would be required, and it could be possible to develop such a facility as a potential interim use until such time as market conditions in North County would support a more intensive form of development of the site.

DEVELOPMENT SITE D - SOUTH OF RUNWAY 11/29

Introduction

The available land area south of the alignment of Runway 11/29, excluding acreage that was previously transferred to the City of Bridgeton, is composed of approximately 95 acres. The 95 acres also excludes property located within the boundary or the Runway Protection Zone (RPZ) on the west end of Runway 11/29. RPZ guidelines limit land uses and effectively preclude any concentration of persons in the area, which negates the potential for aviation or non-aviation development activities. The boundary of Site D is very irregular (Exhibit U later in this section), which complicates the layout of potential alternative land uses within the area.

Existing Challenges to Development

Site D is located between the alignment of Runway 11/29 and Natural Bridge Road. The area is tucked behind commercial and multi-family residential uses that are situated along the north side of Natural Bridge Road and, as a result, Site D is not readily visible to passing motorists. As a result, site D is considered much more isolated. This sense is perhaps reinforced by the 90-foot-tall embankment at the north edge of the site that provides the base for Runway 11/29.

The original tract south of Runway 11/29 included approximately 57 acres of land located south of Woodford Way along with the estimated 95 acres remaining to the north of Woodford Way. The 57 acres south of Woodford Way were conveyed to the City of Bridgeton through a land exchange between the City and STL involving the city's former Freebourne Park site located on the north side of Gist Road in

Site B. It is currently understood that the City of Bridgeton will use the 57-acre site south of Woodford Way as a location for the development of a new city park to replace the former park located on Gist Road.

The site topography is lowest in the center of the site along the alignment of Bonfils Drive and rising to both the east and particularly to the west. To the west the elevation increases as much as 60 feet above the elevation along Bonfils Drive. Natural topography along the northern edge of the site has been significantly altered by the extensive embankment associated with Runway 11/29. Drainage from the site runs down a paved ditch that lies in the center of Bonfils Drive. The site retains the grading typical of a residential subdivision and the residential street pattern that previously existed is similar to conditions on Site C. During the demolition process, broken up pieces of some residential-unit basements were buried on site with a layer of fill. **Exhibit S** below provides an indication of the existing ground elevations along a north to south cross section within the proposed aviation development portion of Site D perpendicular to Runway 11-29. **Exhibit T** provides an indication of the existing ground elevations along an east to west cross section within the proposed aviation development portion of Site D parallel to Runway 11-29.

Exhibit S NORTH TO SOUTH DEVELOPMENT SITE D CROSS SECTION

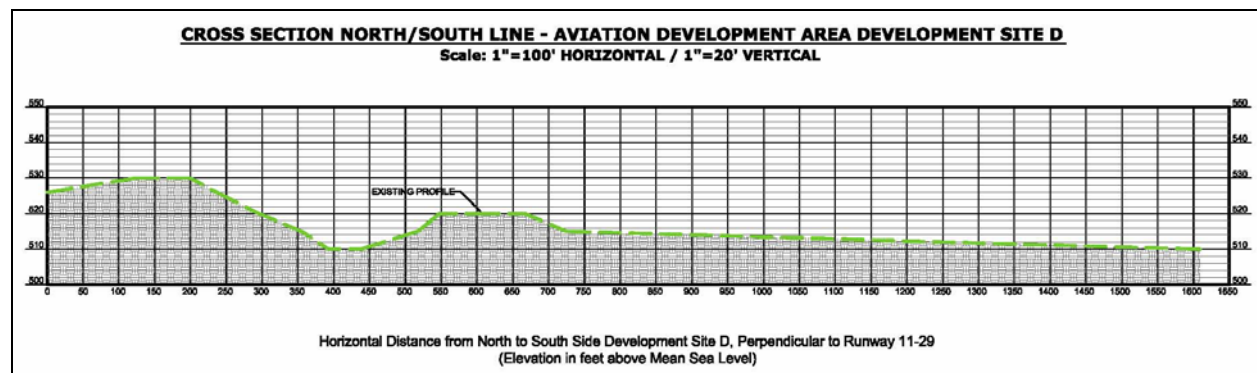
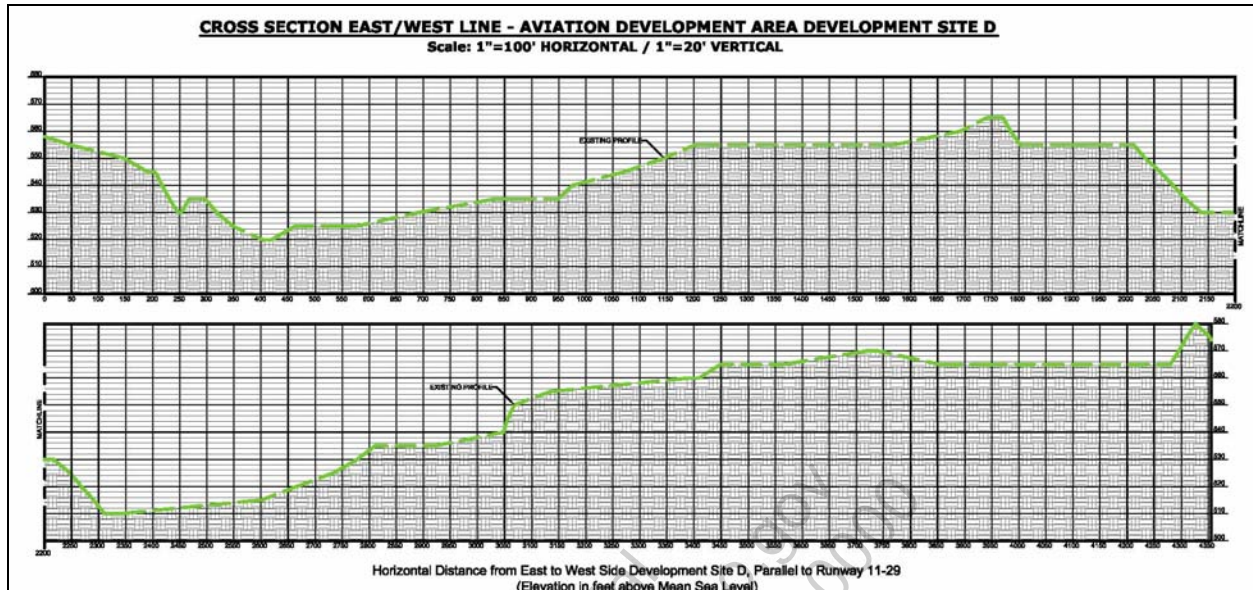
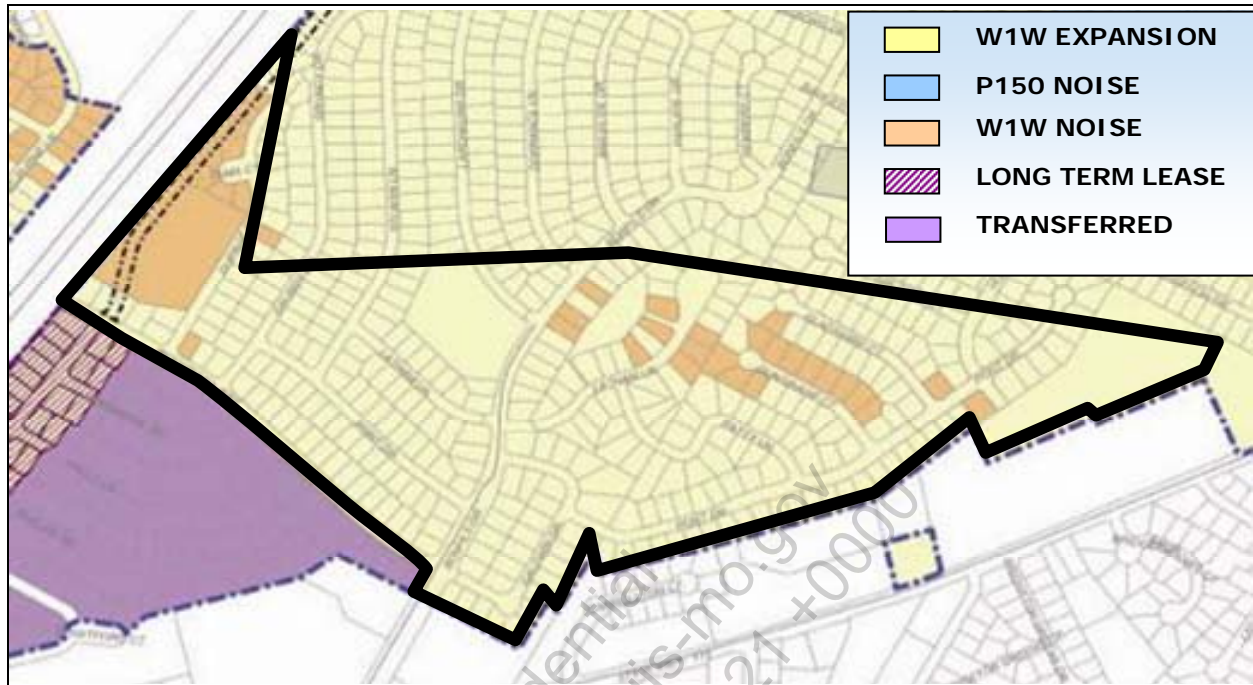


Exhibit T
EAST TO WEST DEVELOPMENT SITE D CROSS SECTION



As noted above, the boundary of the 95-acre area comprising Site D has an irregular shape with numerous odd angles that are challenging to the maximization of the re-use and development of the site. The site boundary depicted in **Exhibit U** creates a number of oddly shaped tracts of land, which if considered for commercial/industrial development are difficult to develop once setbacks and other zoning requirements are factored into the site-development and platting process. As a result of the boundary line configuration, it could be difficult to obtain a strong yield of developable land, which is a key factor in ensuring the investment cost to render the site developable is offset by the return revenues from the development.

**Exhibit U
SITE D PROPERTY BOUNDARY AND FUNDING SOURCE**



Finally, this analysis has previously identified the extensive inventory of developable land that exists in North St. Louis County and has alluded to the fact that there are other existing properties in the area that are currently vacant and available. While a detailed assessment was not undertaken to define all vacant properties in North County, a quick check on industrial/warehousing property in the City of Bridgeton using available reality reports was performed on May 5th, 2010. On that date there were more than 1.4 million square feet of vacant and available industrial/warehouse space (not including vacant developable land) within the limits of the City of Bridgeton. It needs to also be noted that none of these properties are within any of the three large developments (Hazelwood Commerce Center, Aviator Business Park or North Park) that have been previously discussed.

Aviation-Related Development Considerations

The land area south of Runway 11/29 west of the existing Bridgeton City Hall was previously noted as not being considered a desirable or even a viable location for the development of aviation-related development. The area in question is located along the south side of the western quarter of Runway 11/29. Extensive embankment was placed along the north side of Site D site to provide the requisite grade for the runway alignment. This embankment results in most of the area south of the runway lying between 40 feet and 90 feet below the elevation of the runway alignment.

If an aviation-use involving aircraft access to the site were envisioned, this development scheme, depending upon the intensity of the use, would potentially trigger a need for the development of taxiway access to and from Runway 11/29. This taxiway access would have to involve the use of the existing parallel taxiway along the north side of the runway, as there is insufficient existing embankment to accommodate a full or partial parallel taxiway along the south side to the runway due in part to the Glide Slope critical area. Further, a massive amount of embankment would be required to bring the site up to a viable surface elevation to accommodate any use that involved the movement of aircraft to and from facilities located within the area south of Runway 11/29.

Ground Service Equipment (GSE) uses or Belly Haul cargo are not deemed viable options as the site is too far removed from the areas where this equipment is in use. While it would be possible to develop facilities south of Runway 11/29 for these forms of use and angle an roadway up the embankment to enter into the AOA, the distance from the terminal and coupled with tug times for cargo are undesirably high. Airport Maintenance facilities could be developed in this area; however, they would not be conveniently located relative to the majority of the airfield nor the vast majority of the airport buildings that they serve. Overall, while some uses related to the airport operations or remote maintenance facility could conceivably be located in the area, these are generally unlikely and would not typically require the full 95 acres of land.

Non-Aviation Development Considerations

Development of non-aviation land uses on the 95 acres of available development space would face most of the significant macro level issues that were discussed earlier in this analysis related to market conditions for both developable land and for commercial, office and industrial space along with the saturation of the market that currently exists for these activities. These issues go hand in hand with the current market for commercial real estate within the City of Bridgeton as was noted above. Additionally, any use that would require the Airport to commit financial resources to render the site viable for development is also challenged by the financial position of the Airport and the fact that funding from the FAA is not available for non-aviation development purposes. This limits the available funding to airport-generated revenues, which are generally fully committed to the operation and maintenance of current airport facilities, or to outside or third-party sources.

Direct access to the area from the interstate highway system is doubtful. The likelihood of a new interchange off of I-270 at Woodford Way was previously discussed and as noted in that discussion faces a number of design and cost-related challenges. Therefore, it is anticipated that access to the interstate from the site is via a two lane section of Natural Bridge Road to its intersection with St. Charles Rock Road, which occurs slightly east of the St Charles Rock Road/I-270 interchange. Combined, the distance from Bonfils Drive to the I-270/St. Charles Rock Road interchange is approximately eight tenths of a mile. The I-270 interchange provides access for parties coming to the site from the south, west

and north/northwest. Access to and from the east would likely be provided via the St. Charles Rock Road/Interstate 70 interchange, which is approximately 1.4 miles from the site.

To some degree, a question of highest and best use has to be addressed taking into consideration previous actions of the City of Bridgeton. Part of the rationale for the Freebourne Park land swap is related to the fact that the alignment of the runway cut the park off from the residents who would typically make use of the facility. A second basis was that by relocating the park, a better configured and more developable tract would be provided for the airports use. Both points have strong merit. With the completion of the runway, Bridgeton's residential population is all located south of the Runway 11/29 alignment, and moving the park to a position south of the runway places the facility in much closer proximity to its users.

It has been noted that the runway has isolated the golf course and cut it off from the majority of the persons who had typically used the course. Further changes in the roadways that occurred during the runway development program changed the road pattern further confusing or impacting potential golfers who might otherwise make use of the facility. Representatives of the City of Bridgeton have expressed a potential interest in relocating the 52-acre Berry Hill Golf Course from its current location to one that is more accessible to the residents of the community. There has also been some noted interest in the expansion of the course to a full 18-hole facility.

During informal discussions with City staff and others from Bridgeton, the value and the potential economic benefit of recreational facilities was mentioned. This related largely to the draw that the Bridgeton Municipal Athletic Center (BMAC) has been accommodating major regional events such as softball tournaments that host teams from all over the Midwest. There was a clear recognition that there could be value in expanding facilities to better tap into the potential direct economic benefit associated with such recreation and sporting venues

Development Considerations

Access to infrastructure is not as limited and extensions of existing systems would not be as potentially difficult as with Sites B and C. The current infrastructure in place in the immediate vicinity of Site D is delineated below.

➤ Water

- 12-inch line along Natural Bridge Road south of site with 8-inch lines feeding site along Bonfils Drive, Gallatin Lane and Carrollton Drive

➤ Gas

- 8-inch and 16-inch gas line south of site along the southern side of Natural Bridge Road

➤ Sewer

- 12-inch Vitreous Clay line along Bonfils draining to a 15-inch line at Natural Bridge and a 30-inch reinforced concrete line along St. Charles Rock Road

Development Solutions

Attributes/Opportunities

While there are challenges that impact the potential for non-aviation development on Site D, the location has several attributes that support a non-aviation development scheme. These are noted below:

- Impact of Noise funded Land Acquisition. A large portion of the land area with Development Site D was purchased with Airport Expansion funding with only a limited percentage of the total site being acquired with noise-related funds. The limitations that noise funding has presented to the development of Sites A, B, and C are far less of an issue with Site D. Exhibit U also displays the funding used for land acquisition and the current status of property within Development Site D.
- Access to the area South of Runway 11/29 via major roadways. While Site D does not have direct access to any of the area interstates, the site is not that far removed from the St. Charles Rock Road/I-270 interchange or the I-70/St. Charles Rock Road interchange. The site is also generally accessible via Lindbergh, St. Charles Rock Road, Natural Bridge Road and McKelvey Road to the residents of the City of Bridgeton as evidenced by the decision of the City to construct its new City Hall along the north side of Natural Bridge Road just west of Bonfils Drive.
- Linkages to previous Bridgeton efforts or Other Major Uses in the Community. Potential activity on Site D could benefit from linking the proposed development with actions that have been taken by the City of Bridgeton. These actions could include determining if there is any spin-off potential from the development of the new City Hall. For example, a development format with the new City Hall as a focal point creating a new identify with Site D incorporated into this concept through a planned professional, medical office, small retail, service uses and restaurant format.

The other potential asset that could be considered would be to try to build on the reputation of the existing medical services complex associated with the DePaul Health Center, which is only one mile south of Site D. DePaul Health Center is and known for leadership in robotic surgery, orthopedic surgery (notably knee and hip replacements), stroke care, neurosciences and a host of other clinical services. Some consideration to linking these activities with the RCGA industry clusters effort. As noted on the RCGA web site, "The St. Louis BioBelt comprises companies engaged in the development and production of medicines...organic chemical manufacturing, medical equipment manufacturing, and research and development."

A final linkage could be to build on the City's effort to develop a replacement park south of Runway 11/29 by also relocating the Berry Hill Golf Course to the area enhancing the potential development of Site B. This would also act to link the soon-to-be-developed park with the golf course and existing Oak Valley Park on the north side of Natural Bridge adjacent to the old city hall.

Potential Strategies

Berry Hill Golf Course Relocation

Strategy One involves a concept that was alluded to earlier in this report. As noted in the analysis of Site B, there have been discussions in the past relative to the possibility of relocating Berry Hill Golf Course to a new location within the City of Bridgeton. Discussions of this action did not progress to the point of defining the specific elements of an agreement, but could follow one of two potential tracks.

The first option would follow the same general process that occurred in a previous land transfer between STL and the City of Bridgeton, consisting of a swap of property north of Runway 11/29 for land area south of the runway. There are approximately 40 more acres of land south of Runway 11/29 that exists within the current boundary of Berry Hill Golf Course, so it is likely that the swap would also entail added compensation to STL to cover the Fair Market Value requirement. Additionally, as a part of the agreement, it would be appropriate to require that the access to Site C afforded by Woodford Way be maintained as a public ROW. The net benefit of this to the Airport would be the potential value of a unified Site B and the revenue from the sale of the additional acreage.

The second option would involve a long-term lease of land south of Runway 11/29 to accommodate a relocated golf course. This would leave the property north of Runway 11/29 under the ownership of the City of Bridgeton, unless STL were to purchase the land. Of the two options, the first approach appears to have the most merit as it would generate some revenue to the Airport. It would allow for the consolidation of Site B into a far more viable development tract and would also benefit the City of Bridgeton by allowing for a consolidated recreational complex for its residents.

The current Berry Hills golf course is a 9-hole facility. While the area south of Runway 11/29 is approximately 40 acres larger than the current Berry Hill site, it is considered unlikely that an added 9-holes could be accommodated, unless additional property was combined with the 95 acres comprising Site D. The City could devote part of the 57 acres they received from the previous land transfer, and with this addition, an 18-hole course might be possible.

Office/Research Park Development

Strategy Two involves the possible extension of the planned office research development concept from Site C onto Site D. Given the intent to develop such an area in harmony with the lay of the land and existing attributes, the new park proposed by the City of Bridgeton could be incorporated into the development concept as a positive feature in association with some form of small office park planned development. As was the case on Site C, any office or office research park planned development concept has to be tempered with the clear recognition of market conditions and with the understanding that there has to be some differentiating factor. One value that Site D has is its proximity to DePaul Health Center, a potential generator and beneficiary of a research park. With the added benefit of the potential solar option, as well as the possible extension/expansion of the solar energy facility along the southerly facing embankment supporting Runway 11/29, the capability of the solar facility could be expanded from the 37 acre site to include an additional 9 acres of area that possess no development value.

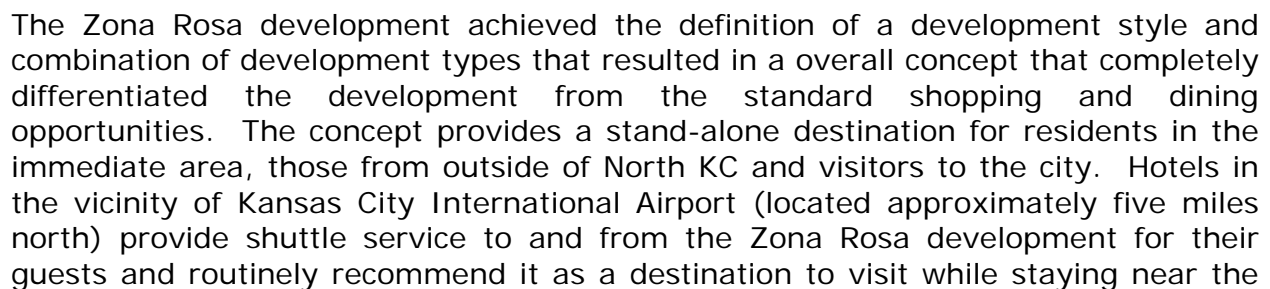
The development process could be seen as a joint effort between the City of Bridgeton, a jointly selected third-party developer, and STL with the roles of each providing one or more key inputs to the process. The City could act as the sponsor for development incentives and infrastructure district establishment. STL could retain ownership of all land and also coordinate third-party development of the expanded solar option in the identified 9 acres of land within Site D. Also, the third-party developer could bring the understanding of the market and key differentiators and act as the marketer of the project to potential tenants of spec. buildings or to those wishing a site to build upon. Again, the key to this concept is to define a product that is distinct from other developments and that has an attraction as a place to locate.

A variation of this development scheme, and one that would have to be led by the City of Bridgeton, is the concept of anchoring a potential downtown or city center around the construction of the new City Hall. This concept would potentially include the Site D land area, but would have to extend well beyond to encompass the somewhat distressed commercial corridor and land uses that front along Natural Bridge Road. STL would have the choice of either selling the property for development or could potentially act as a conduit for third-party development of the Site D property within the context of a larger redevelopment plan of the City of Bridgeton. A concept something like that seen at Celebration in Florida or a denser configuration such as Zona Rosa in Kansas City could be considered.

The Zona Rosa development has some applicability as it was developed in a part of the metropolitan area not known for extensive commercial development. It certainly was not known for a downtown concept involving a mix of restaurants, small shops, larger national retailers all located in two- and three-story structures with the commercial uses on the first floor and a mix of office and residential apartments on the second and third floors. A general site layout of the Zona Rosa development in North Kansas City is provided in **Exhibit V**.

Exhibit V

CONCEPT DEVELOPMENT PLAN ZONA ROSA DEVELOPMENT



airport. This concept has risk and is only suggested as a potential development scheme that might be considered as a part of a larger planning and redevelopment effort by the City of Bridgeton.

Summary of Action Items

The preceding discussion has identified an array of concerns, conditions and potential issues that need to be considered in the decision-making process relative to the inventory of major potential development sites presently owned by Lambert-St. Louis International Airport.

The fact that a significant percentage of the land presently available for various development schemes was purchased as a part of noise mitigation programs, coupled with the current rules limiting the re-use of this land to aviation-related development or requiring it to be classified as surplus and sold, is another major consideration. This is particularly true given the fact that the market for raw development land in most major urban areas simply no longer exists, significantly undermining the value of the property on the market and negating the goal for which the requirement was established. It is anticipated that one benefit of this situation may be some relaxation by the FAA to enforce this requirement as they do recognize there is little value in disposing of a potential asset at fire sale prices.

Given these and other noted factors, the preceding analysis has attempted to establish a sense of the issues being faced. More significant factors are delineated in the following list, which also includes some suggestions relative to actions that could be beneficial and decisions that may be needed.

- 1.) The resolution of the re-use of noise-funded land acquisition for non-aviation development is central to the strategy relative to defining development programs for Site A, B and C. Lobbying efforts to change the current requirements should be continued and coordination with other airports could be considered in the efforts.
- 2.) A policy decision relative to whether the Airport wishes and has the financial capacity to develop the various sites, wants to hold any potential development until a later date, or would proceed through some form of third-party arrangement, should be discussed and a general idea developed relative to the most viable approach.
- 3.) Initiate contact with the Missouri Department of Transportation to ascertain the cost and design viability of enhanced access to Sites B, C and D via an interchange on I-270. Also discuss options other than this interchange for enhanced access to I-370 or other roadways. These decisions are potentially critical to the ultimate discussion of and decision of site development options on the three noted sites. Also, monitor developments of any potential improvements to I-170 and Hanley Road with affiliated reconfiguration of entrance and exit ramps on I-170.

- 4.) Closely coordinate with the City of Bridgeton's Comprehensive city planning effort relative to future use designations for Sites B, C and D. The rationale for this is discussed previously in this section. It might be beneficial, depending upon discussions, to consider a memorandum of understanding between the parties.
- 5.) Commence discussions with the City of Bridgeton concerning the status of Berry Hill Golf Course to gain a better understanding of the city's goals, their intended approach to the issue and what they see as their requirements.
- 6.) Initiate discussion with senior Boeing representatives regarding the Brownleigh Subdivision property relative to their earlier-stated desire to potentially use the property, their potential for tie-ring suppliers and as a communication that the property will be taken off the table and developed for other uses if there is no interest.
- 7.) Coordinate with the St. Louis County Economic Council (Mr. Denny Coleman) relative to development incentive processes and requirements in association with development on Sites A through C and potentially D.
- 8.) Query water, sewer and gas utility providers relative to the line size capacity requirement to meet the capacities of non-aviation collateral development (notably focusing on office warehouse/office uses should these be selected as the development format).
- 9.) If deemed a desired action, initiate discussion with solar energy expertise to define the potential output of a solar array (as discussed relative to Site C) and to also better define cost, development options, potential financial incentives and funding sources and overall viability.
- 10.) Firm up the specific area to be reserved for aviation-related development in reference to Site B and Site A. Relative to Site A, the viability of significant commercial development is limited to the property generally fronting on Airport Road (Berkeley Planner concurred). This decision may be driven more by a desire to maintain the status quo relative to retention of the property.

THIS PAGE INTENTIONALLY LEFT BLANK