



**via e-mail**

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August 10, 2010

Ms. Jeanette Goldsmith  
Principal  
McCallum Sweeney Consulting  
200 North Main Street  
Suite 303  
Greenville, South Carolina 29601  
Boston, MA 02111

Re: L109 - Duke Site Readiness Study  
Lancaster County Airport Industrial Park

Dear Jeanette:

Attached is a summary report and exhibits of the general engineering characteristics of the Lancaster County Airport Industrial Park. We hope this information is helpful in the further development of the property and the economic development of Lancaster County in general. If you have any questions, please don't hesitate to contact me, Karl Becker or Richard Lindler at the number listed below.

Thank you for the opportunity to provide engineering services for this project!

Sincerely,

Eugene J. Resch, P.E., LEED AP  
President

Enclosures

cc: Randy Broome, Broome Consulting & Development  
Keith Tunnel, Lancaster County Economic Development

## **Duke Energy Site Readiness – Lancaster County Airport Industrial Park**

### **1) Existing Conditions:**

a) **General:** The proposed Lancaster County Airport Industrial Park is located on land immediately adjacent to the Lancaster County Airport, McWhirter Field, (LKR). The property is located on the eastern shore of the Catawba River, north of South Carolina Highway 9, Chester Highway. Access for Phase I would be provided off of Chester Highway in two locations and Phase II would have access from Riverside Road. The site also has Catawba River access to the west. The majority of the property is still wooded and used for timber purposes. Phase I of the project involves approximately 460 acres on the south side along SC Highway 9. Phase II includes approximately 225 acres along Riverside Road west and north of the airport. Possible future phases to the north of the airport, east of Riverside Road and south of Highway 9 are also shown on the attached exhibits.

### **b) Utilities:**

- i) **Electric:** The site is currently served by Duke Energy from a 12kV distribution line running parallel SC Highway 9
- ii) **Gas:** Gas service is provided by Lancaster County Natural Gas and is located on the property in a 6” steel pipe. The capacity of this line is 190 Dt per hour with an available volume of 180 Dt per hour at 90 psi.
- iii) **Water:** The City of Lancaster currently provides water to the airport terminal through a 12” water line. They also have a 20” main near the SCDHEC facility on the south side of SC Highway 9. The Lancaster County Water and Sewer District, (LCW&SD). Has a 3” water line adjacent to the site on Riverside Road.
- iv) **Sewer:** The City of Lancaster currently provides sewer service for the airport terminal with a pump station near Aviation Boulevard and SC Highway 9. The current capacity of this pump station is 125,000 gpd with approximately 95% available capacity. This pump station can be upgraded to 185,000 gpd capacity with an approximate investment of \$500,000. The City of Lancaster WWTP has an available capacity of approximately 4.5 MGD.
- v) **Telecommunications:** Comporium Communications has a fiber optic backbone for telephone and internet service available at the property.

### **c) Transportation:**

- i) **Highway:** The site is located adjacent to SC Highway 9 which is a 4 lane divided highway. Access to Interstate I-77 is approximately 8 miles to the west. Another access is from Riverside Road on the east.
- ii) **Rail:** Rail is available to the site through the Lancaster & Chester Railway. L&CRR is a Class III rail carrier with access to both CSX and NS lines.
- iii) **Air:** The site is adjacent to the Lancaster County Airport, (LKR) which is a general aviation airport with a 6,004’ x 100’ runway. Direct access to the taxiway is available from some of the lots in the park. The nearest commercial airport is Charlotte Douglas

International Airport, (CLT). Charlotte is a hub for US Airways and is approximately 50 miles from the site on the 4 lane SC Highway 9 and I-77.

- d) **Topography:** See Exhibit 3 for the USGS topography overlain by the airspace contours of the Lancaster County Airport. The site topography is rolling with elevations ranging from 450 to 540 feet in Phase I and 500 to 570 in Phase II. There is one blue line stream which meanders through the site through two existing ponds. There are areas of 15% slope or greater and these are shown on Exhibit 4. These areas are mostly limited to the banks of the existing blue line stream.
- e) **Hydrology:** There is one blue line stream on the property that begins in the northern area of Phase II and meanders through the site to the Catawba River to the west. There are three existing ponds on the site. The Catawba River has a 100 year flood plain associated with it which reaches up into a portion of Phase I. This is shown on all of the exhibits. There are currently no delineated wetlands on the property, but the National Wetlands Inventory shows possible wetlands along the blue line stream and the ponds, in addition to one other area near the airport property. South Carolina Department of Health and Environmental Control requires a 100' buffer along non-delineated wetlands. This area is shown on Exhibit 4 as non-buildable area. The wetlands could be delineated to reduce this buffer distance to 25 feet. A wetlands delineation will need to be completed for lots near the blue line stream prior to any development on the property.
- f) **Soils:** The NCRS Soils Survey Map is shown on Exhibit 5. By looking at the existing soils we can begin to develop a better understanding of where there might be problem spots for grading and conformation of some wetlands. There are two predominant soil types across the site. These are Cecil and Davidson soils which are clays and clay loam. There are two soils classified as hydric which are located in the low areas along the blue line stream. As with any development, it is our recommendation that interested parties conduct detailed geotechnical investigations before final development plans are made. These studies should be conducted to better understand not only surface soil conditions but subsurface conditions as well.
- g) **Zoning:** The portion of the site is currently zoned for industrial use. Approximately 50% of Phase I is zoned I1 for industrial use. From the information provided, it appears the remainder of Phase I and Phase II is zoned R30. Rezoning of these parcels will need to be completed prior to development of this property as an industrial park.

## 2) Proposed Lot Layout:

The proposed lot layout for the Lancaster County Airport Industrial Park is shown on Exhibit 2. A portion of Phase I and Phase II are shown on the Lancaster County Airport Master Plan to be acquired by the airport for future expansion and construction of a new terminal and hangars. These areas are shown on the Exhibit 2 as a cross hatched area. Prior to development of these lots, the Airport should be consulted.

Phase I has a total buildable area of approximately 340 acres. Phase I is shown with two access points to SC Highway 9 at Grace Avenue and Nebo Road. A new proposed roadway crosses the site

east to west allowing access to Aviation Boulevard. A proposed L&CRR rail spur is shown parallel to the roadway, giving almost all of the lots the possibility of rail access. The layout has been configured to use the topography of the site to create natural boundaries between lots. A total of 28 lots are shown in Phase I with lot sizes varying from 5 acres to 45 acres. This gives a broad range of development possibilities. Lots immediately adjacent to the airport property may have some height limitations due to the airspace requirements. The airspace contours are shown on Exhibit 3 and range from 500 to 635.8 across some of the lots. Due to the varying natural terrain and expected grading which would need to be done to develop the site, each prospect should evaluate specific lots with their needs in mind.

Phase II has a total buildable area of approximately 185 acres. Phase II has a connection to the proposed road from Phase I and a connection to Riverside Road to the east. A total of 13 lots are shown in Phase II varying from 3.4 acres to 49 acres.