

APPENDIX C

Correspondence



**DELTA AIRPORT
CONSULTANTS, INC.**

1805 Sardis Road North, Suite 101 ♦ Charlotte, North Carolina 28270
Phone: (704) 521-9101 ♦ Fax: (704) 521-9109 ♦ www.deltaairport.com

Roy G. Lewis

From: Colleen M. Cummins
Sent: Monday, December 03, 2012 2:49 PM
To: 'Ellie Irons (Ellie.Irons@deq.virginia.gov)'; 'Kampinen, Andrea (DHR)'; 'Marcus.Brundage@faa.gov'; 'evans.gregory@dof.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'William.Pfeifle@deq.virginia.gov'; 'mbittner@craterpdc.org'; 'West, Kelley (DEQ)'; 'Baird, Alice (DCR)'; 'saryal@richmondregional.org'; 'john.fisher@deq.virginia.gov'
Cc: Roy G. Lewis; 'Trudeau, Thomas'; 'millcreekenvironment@comcast.net'; Douglas E. Sander; 'Dane, Charles'
Subject: FCI EA Agency Meeting, 12-6-12, Conference Call Instructions
Attachments: Agency_agenda mtg 12-6-12.pdf
Importance: High
Categories: Filed by Newforma

All –

The Chesterfield County Airport agency coordination meeting will be held this Thursday, December 6th in the airport's 2nd floor conference room at 2:00 PM; please see attached agenda. The airport is located at 7511 Airfield Drive, North Chesterfield, 23237-2297.

Below is a list of attendees received to date. If you have not responded and plan on attending please advise as soon as possible.

Ellie/John, would you please forward to all reviewers as done with original invite?

Attendees:

1. Tom Trudeau, Chesterfield County Airport
2. Charlie Dane, Chesterfield County
3. Matt Neely, Mill Creek Environmental Consultants
4. Doug Sander, Delta Airport Consultants
5. Roy Lewis, Delta Airport Consultants
6. Colleen Cummins, Delta Airport Consultants
7. Susan Simmers, Virginia Department of Aviation
8. Mark Bittner, Crater Planning District Commission
9. Kelley West, Virginia Department of Environmental Quality
10. Silvia Gazzera, Army Corps of Engineers
11. Bill Pfeifle, Virginia Department of Environmental Quality
12. Sulabh Aryal, Richmond Regional Planning District Commission

Attendees via conference call:

1. Marcus Brundage, Federal Aviation Administration
2. Andrea Kampinen, Department of Historic Resources

Should you be unable to attend but are available by conference call please call as noted below.

Phone Number: 866.951.1151

Conference Room Number: 2276798

Thank you ,

Colleen

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

Roy G. Lewis

From: Colleen M. Cummins
Sent: Tuesday, December 04, 2012 3:20 PM
To: 'Ellie Irons (Ellie.Irons@deq.virginia.gov)'; 'Kampinen, Andrea (DHR)'; 'Marcus.Brundage@faa.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'William.Pfeifle@deq.virginia.gov'; 'mbittner@craterpdc.org'; 'West, Kelley (DEQ)'; 'Baird, Alice (DCR)'; 'saryal@richmondregional.org'; 'john.fisher@deq.virginia.gov'
Cc: Roy G. Lewis; 'Trudeau, Thomas'; 'millcreekenvironment@comcast.net'; Douglas E. Sander; 'Dane, Charles'; Key, Rob; 'Tilley, Julie'
Subject: RE: FCI EA Agency Meeting, 12-6-12, Conference Call Instructions
Attachments: 5_10086 - 06131-RW Dev Alt 4-Exh 6-5.pdf; 3_10086 - 06131-No Action Alt-Exh 6-2.pdf; 4_10086 - 06131-RW Dev Alt 3-Exh 6-4.pdf

Categories: Filed by Newforma

All –

As some will be attending via conference call and won't have the benefit of viewing the 24x36 exhibit boards, I have attached the alternatives from the 2011 ALP Update which are to be evaluated in the EA and discussed at meeting.

Also, please note the attendee list has been revised to include Rob Key, Chesterfield County.

Thank you,

Colleen

Attendees:

1. Tom Trudeau, Chesterfield County Airport
2. Charlie Dane, Chesterfield County
3. Rob Key, Chesterfield County
4. Matt Neely, Mill Creek Environmental Consultants
5. Doug Sander, Delta Airport Consultants
6. Roy Lewis, Delta Airport Consultants
7. Colleen Cummins, Delta Airport Consultants
8. Susan Simmers, Virginia Department of Aviation
9. Mark Bittner, Crater Planning District Commission
10. Kelley West, Virginia Department of Environmental Quality
11. Silvia Gazzera, Army Corps of Engineers
12. Bill Pfeifle, Virginia Department of Environmental Quality
13. Sulabh Aryal, Richmond Regional Planning District Commission

Attendees via conference call:

1. Marcus Brundage, Federal Aviation Administration
2. Andrea Kampinen, Department of Historic Resources

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltaairport.com



Please consider the environment before printing.

From: Colleen M. Cummins

Sent: Monday, December 03, 2012 2:49 PM

To: 'Ellie Irons (Ellie.Irons@deq.virginia.gov)'; 'Kampinen, Andrea (DHR)'; 'Marcus.Brundage@faa.gov'; 'evans.gregory@dof.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'William.Pfeifle@deq.virginia.gov'; 'mbittner@craterpdc.org'; 'West, Kelley (DEQ)'; 'Baird, Alice (DCR)'; 'saryal@richmondregional.org'; 'john.fisher@deq.virginia.gov'

Cc: Roy G. Lewis; 'Trudeau, Thomas'; 'millcreekenvironment@comcast.net'; Douglas E. Sander; 'Dane, Charles'

Subject: FCI EA Agency Meeting, 12-6-12, Conference Call Instructions

Importance: High

All –

The Chesterfield County Airport agency coordination meeting will be held this Thursday, December 6th in the airport's 2nd floor conference room at 2:00 PM; please see attached agenda. The airport is located at 7511 Airfield Drive, North Chesterfield, 23237-2297.

Below is a list of attendees received to date. If you have not responded and plan on attending please advise as soon as possible.

Ellie/John, would you please forward to all reviewers as done with original invite?

Attendees:

14. Tom Trudeau, Chesterfield County Airport
15. Charlie Dane, Chesterfield County

16. Matt Neely, Mill Creek Environmental Consultants
17. Doug Sander, Delta Airport Consultants
18. Roy Lewis, Delta Airport Consultants
19. Colleen Cummins, Delta Airport Consultants
20. Susan Simmers, Virginia Department of Aviation
21. Mark Bittner, Crater Planning District Commission
22. Kelley West, Virginia Department of Environmental Quality
23. Silvia Gazzera, Army Corps of Engineers
24. Bill Pfeifle, Virginia Department of Environmental Quality
25. Sulabh Aryal, Richmond Regional Planning District Commission

Attendees via conference call:

3. Marcus Brundage, Federal Aviation Administration
4. Andrea Kampinen, Department of Historic Resources

Should you be unable to attend but are available by conference call please call as noted below.

Phone Number: 866.951.1151

Conference Room Number: 2276798

Thank you ,

Colleen

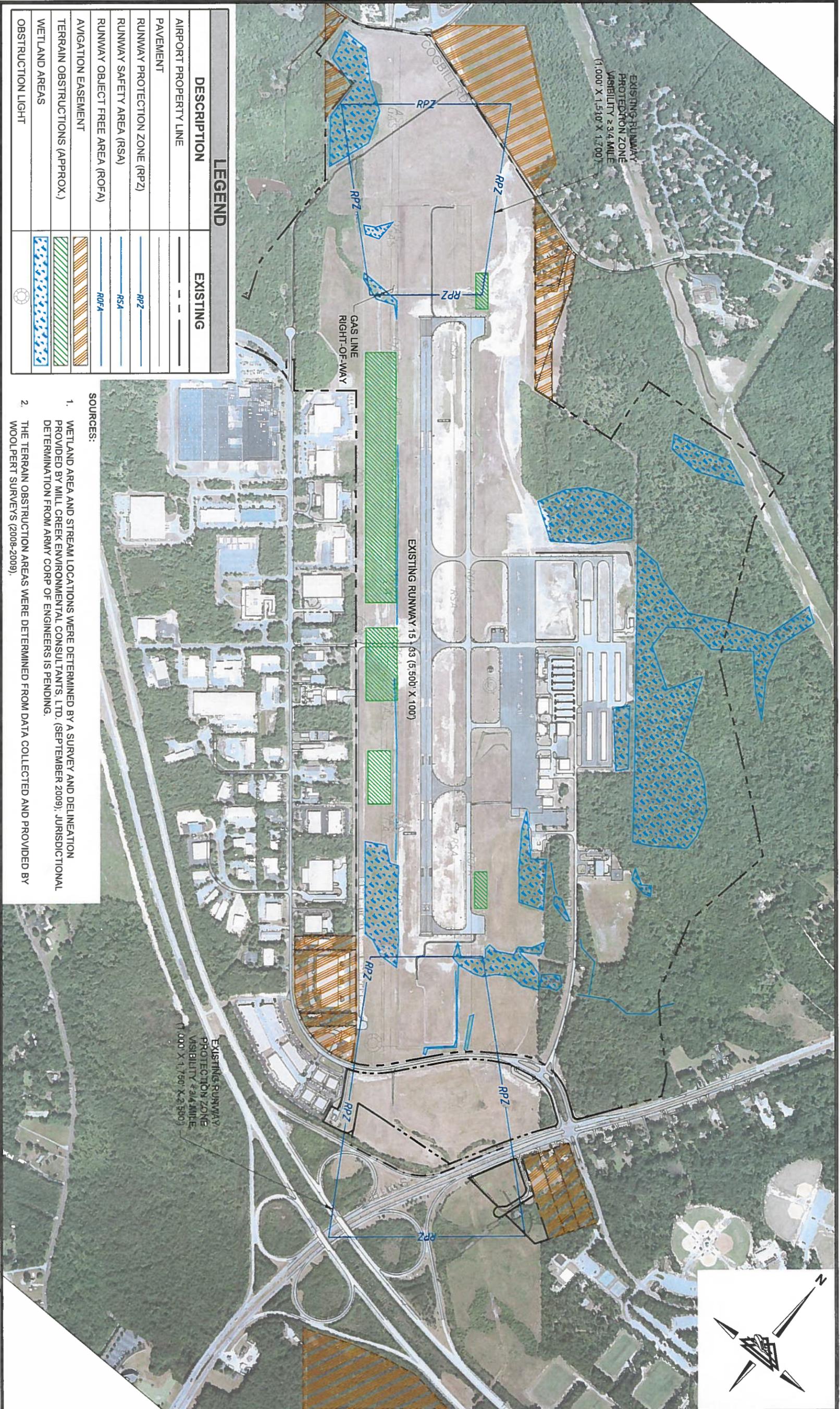
Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

LEGEND	
DESCRIPTION	EXISTING
AIRPORT PROPERTY LINE	---
PAVEMENT	---
RUNWAY PROTECTION ZONE (RPZ)	RPZ
RUNWAY SAFETY AREA (RSA)	RSA
RUNWAY OBJECT FREE AREA (ROFA)	ROFA
AVIGATION EASEMENT	---
TERRAIN OBSTRUCTIONS (APPROX.)	---
WETLAND AREAS	---
OBSTRUCTION LIGHT	---

- SOURCES:**
1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD. (SEPTEMBER 2009). JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
 2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).



RUNWAY DEVELOPMENT - ALTERNATIVE 1 - NO ACTION
CHESTERFIELD COUNTY AIRPORT



www.dellaairport.com

DRAWN BY: RWV CHECKED BY: CMC SCALE: NTS DATE: NOVEMBER 2012



www.dellaairport.com

DESCRIPTION	EXISTING	PROPOSED
AIRPORT PROPERTY LINE	---	---
PAVEMENT	---	---
RUNWAY SAFETY AREA (RSA)	---	---
RUNWAY OBJECT FREE AREA (ROFA)	---	---
RUNWAY PROTECTION ZONE (RPZ)	---	---
LOCALIZER CRITICAL AREA	---	---
AVIGATION EASEMENT	---	---
LAND ACQUISITION	---	---
WETLAND AREAS	---	---
TERRAIN OBSTRUCTIONS (APPROX.)	---	---
OBSTRUCTIONS (TO BE REMOVED)	---	---
OBSTRUCTION LIGHT	---	---

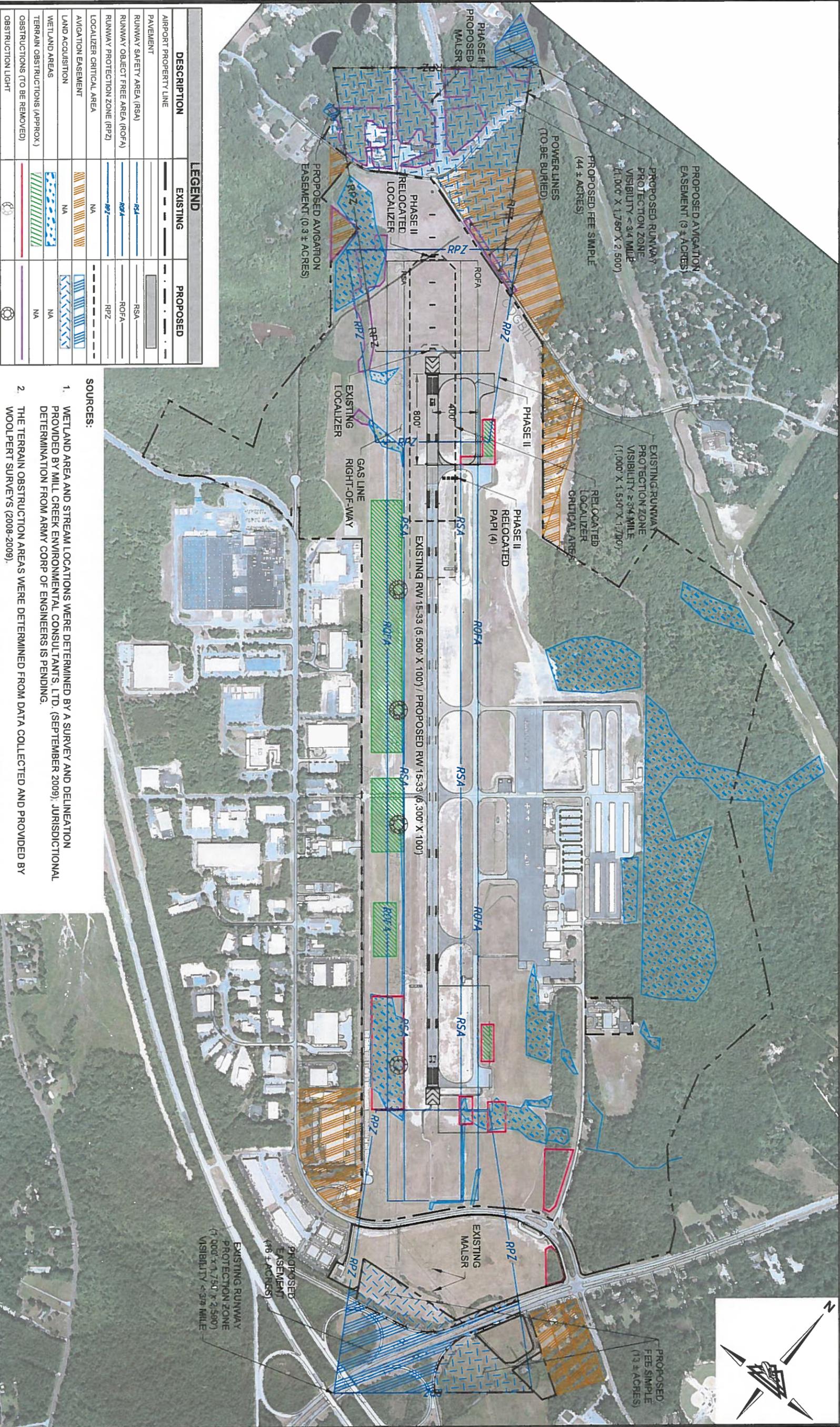
DESCRIPTION	EXISTING	PROPOSED
PROPOSED AVIGATION EASEMENT (3 ± ACRES)	---	---
PROPOSED RUNWAY PROTECTION ZONE VISIBILITY < 3/4 MILE (1,000' X 1,750' X 2,500')	---	---
EXISTING RUNWAY PROTECTION ZONE VISIBILITY ≥ 3/4 MILE (1,000' X 1,540' X 1,700')	---	---
RELOCATED LOCALIZER CRITICAL AREA	---	---
PHASE II RELOCATED PAPI (4)	---	---
EXISTING RW 15-33 (5,800' X 100')	---	---
PROPOSED RW 15-33 (6,300' X 100')	---	---
EXISTING RW 15-33 (6,300' X 100')	---	---
PROPOSED AVIGATION EASEMENT (0.3 ± ACRES)	---	---
EXISTING LOCALIZER	---	---
PROPOSED AVIGATION EASEMENT (13 ± ACRES)	---	---
EXISTING MALSR	---	---
PROPOSED AVIGATION EASEMENT (48 ± ACRES)	---	---
EXISTING RUNWAY PROTECTION ZONE VISIBILITY < 3/4 MILE (1,000' X 1,750' X 2,500')	---	---

- SOURCES:**
1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD. (SEPTEMBER 2009). JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
 2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).

RUNWAY DEVELOPMENT - ALTERNATIVE 3 (6,300')

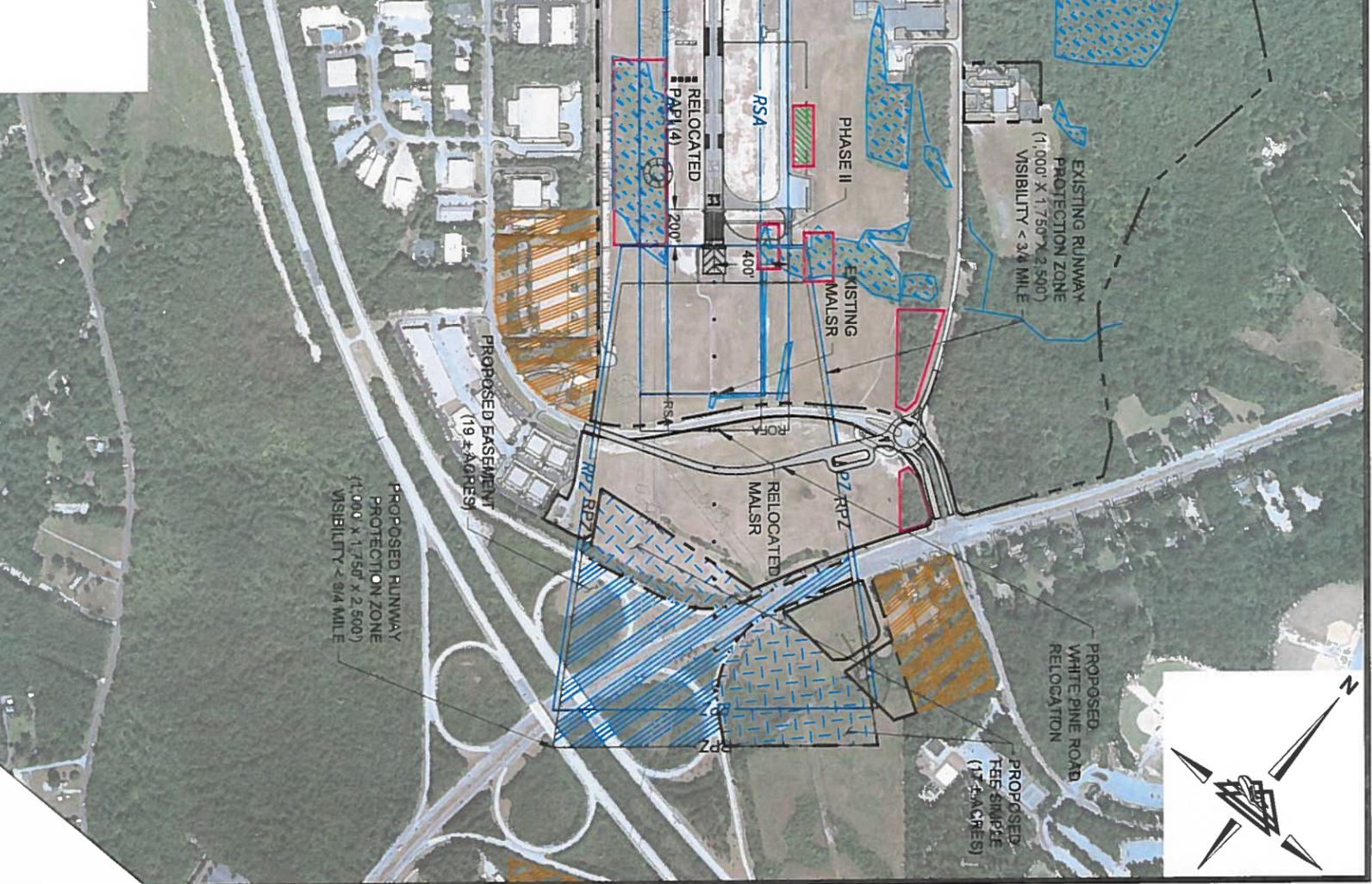
CHESTERFIELD COUNTY AIRPORT

DRAWN BY: RWV CHECKED BY: CMC SCALE: NTS DATE: NOVEMBER 2012



LEGEND	
DESCRIPTION	LEGEND
AIRPORT PROPERTY LINE	EXISTING
PAVEMENT	PROPOSED
RUNWAY SAFETY AREA (RSA)	EXISTING
RUNWAY OBJECT FREE AREA (ROFA)	PROPOSED
RUNWAY PROTECTION ZONE (RPZ)	EXISTING
LOCALIZER CRITICAL AREA	PROPOSED
AVIGATION EASEMENT	EXISTING
LAND ACQUISITION	PROPOSED
WETLAND AREAS	EXISTING
TERRAIN OBSTRUCTIONS (APPROX.)	PROPOSED
OBSTRUCTIONS (TO BE REMOVED)	EXISTING
OBSTRUCTION LIGHT	PROPOSED

- SOURCES:**
1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD. (SEPTEMBER 2009). JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
 2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).



www.dellaairport.com

DRAWN BY: RWV CHECKED BY: CMC SCALE: NTS DATE: NOVEMBER 2012



www.dellaairport.com

RUNWAY DEVELOPMENT - ALTERNATIVE 4 (6,300')

CHESTERFIELD COUNTY AIRPORT

AGENDA

Chesterfield County Airport Environmental Assessment Agency Coordination Meeting

**December 6, 2012
2:00 PM**

- I. Introductions
- II. Purpose and Need of Environmental Assessment
- III. Projects to be Assessed
- IV. Alternatives to be Evaluated
- V. Subconsultants
 - **Mill Creek** – Wetlands; Endangered and Threatened Species/Biotic Communities; and Water Quality
 - **Coastal Carolina Research, Inc.** – Phase I Cultural Resources Survey
- VI. Potential Environmental Consequences
- VII. Comments / Questions

Sign-In Sheet

Chesterfield Airport
Environmental Assessment
Agency Coordination Meeting
December 6, 2012
2:00 PM



NAME (PRINT)/ORGANIZATION

MAILING ADDRESS/E-MAIL

Math Neely, Mill Creek Environmental

11400 Longtown Dr., Middlehian VA 23112 millcreekenvironment@comcast.net

Kileen Cummins, Delta Airport Consultant

ccummins@deltaairport.com

Roy Lewis, DELTA

RLWUS@DELTAairport.com

Bill Pfeiffer, DEQ

4945 A Cox Rd Glen Allen VA 23060

Sylvia GAZZONA, COE

9100 Atterbury Parkway Suite 235 Richmond VA 23236

Kelley West, DEQ

4949 A Cox Rd. Glen Allen 23060

Justin Brown, DEQ

"

Charles Jane, CC.

7511 Airfield Dr Chesapeake 23237

Sulabh Nyal, RRDC

Richmond Regional PDC ~~6911~~ 9211 Forest Hill Ave Suite 200
23235

Susan Simmers, ROAV

MARK BITTNER, CRATER PDC

mbittner@craterpdc.org

Debbie C. Fragakis

From: Colleen M. Cummins
Sent: Thursday, January 03, 2013 11:00 AM
To: 'Ellie Irons (Ellie.Irons@deq.virginia.gov)'; 'Kampinen, Andrea (DHR)'; 'Marcus.Brundage@faa.gov'; 'evans.gregory@dof.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'William.Pfeifle@deq.virginia.gov'; 'mbittner@craterpdc.org'; 'West, Kelley (DEQ)'; 'Baird, Alice (DCR)'; 'saryal@richmondregional.org'; 'john.fisher@deq.virginia.gov'
Cc: Roy G. Lewis; 'Trudeau, Thomas'; 'millcreekenvironment@comcast.net'; Douglas E. Sander; 'Dane, Charles'
Subject: FCI EA 12-6-12 Agency Meeting Notes
Attachments: 10086 EA Agency Coord Mtg Notes 12-19-12.pdf
Categories: Filed by Newforma

All –

Happy New Year! Please find attached notes from the agency meeting held on December 6, 2012 for your records. Should you have any questions please do not hesitate to contact me.

Thank you,

Colleen

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

From: Colleen M. Cummins
Sent: Monday, December 03, 2012 2:49 PM
To: 'Ellie Irons (Ellie.Irons@deq.virginia.gov)'; 'Kampinen, Andrea (DHR)'; 'Marcus.Brundage@faa.gov'; 'evans.gregory@dof.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'William.Pfeifle@deq.virginia.gov'; 'mbittner@craterpdc.org'; 'West, Kelley (DEQ)'; 'Baird, Alice (DCR)'; 'saryal@richmondregional.org'; 'john.fisher@deq.virginia.gov'
Cc: Roy G. Lewis; 'Trudeau, Thomas'; 'millcreekenvironment@comcast.net'; Douglas E. Sander; 'Dane, Charles'
Subject: FCI EA Agency Meeting, 12-6-12, Conference Call Instructions
Importance: High

All –

The Chesterfield County Airport agency coordination meeting will be held this Thursday, December 6th in the airport's 2nd floor conference room at 2:00 PM; please see attached agenda. The airport is located at 7511 Airfield Drive, North Chesterfield, 23237-2297.

Below is a list of attendees received to date. If you have not responded and plan on attending please advise as soon as possible.

Ellie/John, would you please forward to all reviewers as done with original invite?

Attendees:

1. Tom Trudeau, Chesterfield County Airport
2. Charlie Dane, Chesterfield County
3. Matt Neely, Mill Creek Environmental Consultants
4. Doug Sander, Delta Airport Consultants
5. Roy Lewis, Delta Airport Consultants
6. Colleen Cummins, Delta Airport Consultants
7. Susan Simmers, Virginia Department of Aviation
8. Mark Bittner, Crater Planning District Commission
9. Kelley West, Virginia Department of Environmental Quality
10. Silvia Gazzera, Army Corps of Engineers
11. Bill Pfeifle, Virginia Department of Environmental Quality
12. Sulabh Aryal, Richmond Regional Planning District Commission

Attendees via conference call:

1. Marcus Brundage, Federal Aviation Administration
2. Andrea Kampinen, Department of Historic Resources

Should you be unable to attend but are available by conference call please call as noted below.

Phone Number: 866.951.1151

Conference Room Number: 2276798

Thank you ,
Colleen

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

Chesterfield County Airport Environmental Assessment
Agency Coordination Meeting Minutes
Chesterfield County Airport, 2nd Floor Conference Room
December 6, 2012, 2:00 p.m.

1. **Attendees:**

Tom Trudeau, Chesterfield County
Charlie Dane, Chesterfield County
Matt Neely, Mill Creek Environmental Consultants
Doug Sander, Delta Airport Consultants
Roy Lewis, Delta Airport Consultants
Colleen Cummins, Delta Airport Consultants
Susan Simmers, Virginia Department of Aviation
Mark Bittner, Crater Planning District Commission
Silvia Gazzera, Army Corps of Engineers
Sulabh Aryal, Richmond Regional Planning District Commission
Kelley West, Virginia Department of Environmental Quality
Bill Pfeifle, Virginia Department of Environmental Quality
Justin Brown, Virginia Department of Environmental Quality

2. **Attendees via conference call:**

Marcus Brundage, Federal Aviation Administration
Jeff Breeden, Federal Aviation Administration
Andrea Kampinen, Department of Historic Resources

3. **Introductions:** Ms. Cummins called the meeting to order at 2:01 p.m. and requested roundtable introductions for the benefit of the phone attendees.

4. **Purpose and Need of Environmental Assessment:** Chesterfield County completed an Airport Layout Plan (ALP) Update in 2011. The ALP Update was conducted to determine the airport's development needs over the next twenty years and beyond including runways, taxiways, hangars, etc. The next step in the development process is to comply with the National Environmental Policy Act by conducting an Environmental Assessment (EA) for upcoming projects.

The purpose and need for the recommended projects is to provide airfield infrastructure to meet Federal Aviation Administration (FAA) design criteria to serve medium size business jets and to meet current and future operational demands. The ALP Update determined the need for a runway extension as well as related projects which include land acquisition, hangar development, fuel farm expansion, and relocation of navigational aids.

The land acquisition is to be acquired in both fee simple and avigation easement. The fee simple acquisition is within the runway protection zones (RPZ) which the FAA requires to be kept clear of development. Avigation easements are to be acquired to clear obstructions on properties not belonging to the airport. Obstructions also exist on airport property and are proposed to be cleared.

5. **Alternatives to be evaluated:** Three build alternatives were evaluated in the ALP Update, two of which are being brought forward into the EA for detailed consideration. The alternative not being brought forward (ALP Update Alternative 2) is to be included in the "Alternatives Considered but Not Brought Forward for Detailed Consideration" section of the EA.

- 1) Runway Development - No Action – Everything will stay as is today, and the airport will not move forward with any actions. No clearing of obstructions.
- 2) Runway Development, Achieve Standards – Was not brought forward into the EA – Delta is to make the public aware that this alternative was considered but not brought forward as it did not meet the purpose and need of the EA.
- 3) Runway Development, Extend Runway 15 - This is the preferred alternative and is to be Alternative 2 within the EA. This alternative extends the runway by 800 ft. on runway 15 end.
- 4) Runway Development, Extend Runways 15 & 33 – This alternative extends Runway 15 by 600 ft and Runway 33 by 200 ft. This is to be Alternative 3 within the EA.

Mr. Lewis offered a review of details in each Alternative.

6. **Sub Consultants:**

Mill Creek – Responsible for Wetlands, Endangered and Threatened Species/Biotic Communities, and Water Quality. Mill Creek conducted the wetland delineation in two phases. The first preliminary jurisdictional determination was received in July 2011, by Dr. Gazzera, Corps of Engineers, which included all of the wetlands within airport property. The second jurisdictional determination letter was received November 2012 on parcels potentially impacted by the proposed development.

The initial project review from the U.S. Fish and Wildlife Service did not determine any endangered species or threatened species in the vicinity of the project area. The initial return from the state (DCR) has a 30-day return and is currently at day 16 with no questionable findings and none are anticipated at this time.

Mr. Neely stated a technical report for water quality assessment has not been written at this time. He stated a review of the north and west sides of the runway determined that run off drains into Licking Creek and on the south and east into Reedy Creek. Mill Creek does not anticipate any significant findings or problems.

Coastal Carolina Research, Inc. – Responsible for the Phase I Cultural Resources Survey – Ms. Kampinen recently requested to move forward with this survey. The survey looks for architectural and archeological resources that may be within the project area. The field work for the survey is expected to take place before the end of the year and a report submitted January/February 2013.

7. **Potential Environmental Consequences:** The EA reviews 18 different categories. Impacts are only anticipated in four of the areas - wetlands, biotic resources, social, and socioeconomic.

Mr. Neely noted that filling activities do not appear to be an issue and most likely a permit from the Corps will not be required: however, the state may take jurisdiction and require a permit. Mr. Pfeifle stated the Department of Environmental Quality (DEQ) will require details of how vegetation would be cut before he can determine if a permit is needed. He suggested a storm water permit may need to be upgraded. Any changes to the storm water permit need to be submitted to Tamira Cohen, Tamira.Cohen@deq.virginia.gov or 804-527-5012. The Corps of Engineers will also require the details of vegetation removal.

Ms. Gazzera offered an overview of a preliminary jurisdictional determination and an approved jurisdictional determination. The current preliminary jurisdictional determination is acceptable unless there is a dispute.

Ms. Cummins asked the Planning Commissions if they had concerns which they did not. Mr. Bittner asked how many land owners will be impacted. Mr. Lewis offered a review of RPZ's and impacts.

8. **Comments / Questions:**

Mr. Breeden asked if the approach lights on the Runway 15 were included in the EA as part of the overall development plan. Ms. Cummins responded by saying yes. He also asked if Phase II, as depicted on the ALP, was included in the overall development plan for the EA. Mr. Lewis stated that projects anticipated to be completed within five years of the Finding of No Significant Impact (FONSI) were included. Mr. Breeden then asked if other exhibits would be made available as part of the EA and Open House presentation which include the hangar development. Ms. Cummins stated that several exhibits to be presented at the Open House reflect all details of the development plan including the ALP.

Alternative exhibits to be included in the EA are to be presented at the following open houses and presentations. The purpose of tonight's Open House and property owner meeting was to review the alternatives being carried forward from the 2011 ALP Update and review the purpose and need. Delta and the County did not want to confuse the public with additional information this is not ready to be presented.

Mr. Dane explained that Chesterfield County is requiring additional meetings in order to be transparent and as engaging as possible with the public causing Delta to alter their path in not presenting everything all at once. Tonight's meeting is meant to be more of a kick off informational meeting.

Ms. Gazzera asked how much wetland acreage is required to be cleared. Ms. Cummins stated that the limits of disturbance have not been defined at this time so detailed impacts are not available.

Ms. Cummins adjourned the meeting.

Respectfully submitted by:

Julie L. Tilley
Chesterfield County
Airport Secretary

Roy G. Lewis

From: Roy G. Lewis
Sent: Tuesday, August 06, 2013 6:22 PM
To: Marcus.Brundage@faa.gov; Simmers, Susan H. (DOAV); Ellie Irons (Ellie.Irons@deq.virginia.gov); 'john.fisher@deq.virginia.gov'; Alice.Baird@dcr.virginia.gov; 'william.pfeifle@deq.va.gov'; Barryl@chesterfield.gov; Smedleys@chesterfield.gov; evans.gregory@dof.virginia.gov; Andrea.Kampinen@dhr.virginia.gov
Cc: Trudeau, Thomas; Dane, Charles; Douglas E. Sander; Amanda B. Chilson; Bryan O. Elliott; millcreekenvironment@comcast.net
Subject: FCI Environmental Assessment Informational Meeting
Attachments: Agency_agenda mtg 081413.pdf
Importance: High
Categories: Filed by Newforma

All –

In follow up to the initial Agency Coordination meeting held during December 2012, a second Agency Coordination Meeting is being scheduled for September 4, 2013. In preparation for discussion at that meeting, Delta Airport Consultants, Inc. is presenting information on Wednesday, August 14, 2013 from the draft Preliminary Engineering Report for review and consideration. A meeting agenda is attached and agencies are invited to attend in person or via teleconference.

The Informational Meeting will be held at the Chesterfield County Airport, 7511 Airfield Drive, Chesterfield, VA 23237, **Wednesday, August 14, 2013 at 1:30 PM** in the 2nd floor conference room.

Please advise if your agency will be attending in person or joining via conference call, with name of person and contact information, to Roy G. Lewis, 704-521-9101 or rlewis@deltaairport.com by Friday, August 9, 2013 to ensure appropriate materials are distributed to attendees prior to the meeting. Dial-in instructions will be provided via email at least 24 hours in advance of the call.

Should you have questions or require additional information, please contact me directly at your convenience.

Thank you,
Roy

Roy G. Lewis, A.A.E.
VP - Director of Planning
Delta Airport Consultants, Inc.
Office - 704.521.9101

From: Colleen M. Cummins
Sent: Friday, November 02, 2012 3:05 PM
To: Ellie Irons (Ellie.Irons@deq.virginia.gov); 'john.fisher@deq.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'william.pfeifle@deq.va.gov'; 'cindy_schulz@fws.gov'
Cc: Trudeau, Thomas; Dane, Charles; Roy G. Lewis; Adam D. Switzer; Douglas E. Sander; 'Tilley, Julie'
Subject: FCI Environmental Assessment Agency Coordination Meeting

Chesterfield County, Virginia, owner and operator of the Chesterfield County Airport has contracted Delta Airport Consultants, Inc. to conduct an Environmental Assessment (EA), to evaluate the impacts associated with developing the

airport in accordance with the approved Airport Layout Plan (ALP). The proposed improvements are intended to achieve compliance with Federal Aviation Administration (FAA) regulations and meet the existing and projected aviation demands. Three alternatives, including a No Action, are being evaluated during the EA process.

The purpose of this letter is to invite interested and involved parties to an agency coordination meeting at the Chesterfield County Airport, 7511 Airfield Drive, North Chesterfield, 23237-2297, on **Thursday, December 6, 2012 at 2:00 PM** in the 2nd floor conference room. The meeting is to discuss the proposed projects, possible impacts/concerns, and familiarize coordination agencies with the project site. A public open house will also be held on this date and location at 6:30 PM. Stations will be set up at the open house for those interested in speaking to the staff or consultants to discuss the projects' purpose and need or other related questions. The meeting will also provide the opportunity for public comment.

Please advise if your agency will be attending, with name of person and contact information, to Ms. Colleen M. Cummins, 704-521-9101 or ccummins@deltairport.com no later than November 28, 2012. An existing airport layout exhibit and a USGS quad map have been enclosed for your reference.

If you have questions or need further information, please do not hesitate to contact me.

Thank you for your consideration in this matter.

-Colleen

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

AGENDA

Chesterfield County Airport Environmental Assessment Informational Meeting Preliminary Engineering Report Presentation

**August 14, 2013
1:30 PM**

- I. Introductions

- II. Purpose and Need of Environmental Assessment

- III. Preliminary Engineering Report
 - Alternatives Considered
 - Proposed Action
 - Potential Environmental Consequences

- IV. Comments / Questions

Roy G. Lewis

From: Roy G. Lewis
Sent: Thursday, August 15, 2013 5:01 PM
To: Marcus.Brundage@faa.gov
Subject: RE: FCI Environmental Assessment Informational Meeting

Categories: Filed by Newforma

Marcus,

Given our discussion yesterday and the understanding that the agencies will review the draft EA prior to further discussion or comment... it seems appropriate to defer the next agency coordination meeting until after the draft EA is distributed.

With your concurrence, we'll postpone the meeting anticipated for early September and reschedule it about 30 days after distribution of the draft EA.

Please call at your convenience if you wish to discuss.

Thank you,
Roy

Roy G. Lewis, A.A.E.
VP - Director of Planning
Delta Airport Consultants, Inc.
Office - 704.521.9101

From: Marcus.Brundage@faa.gov [mailto:Marcus.Brundage@faa.gov]
Sent: Wednesday, August 07, 2013 8:57 AM
To: Roy G. Lewis
Subject: Re: FCI Environmental Assessment Informational Meeting

Good morning Roy:

I can join via conference call. If that date and time is good for most please send out a calendar invite so it can populate calendar.

Thanks

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: "Roy G. Lewis" <RLewis@deltaairport.com>
To: Marcus Brundage/AEA/FAA@FAA, "Simmers, Susan H. (DOAV)" <susan.simmers@doav.virginia.gov>, "Ellie Irons (Ellie.Irons@deg.virginia.gov)" <Ellie.Irons@deg.virginia.gov>, "John.fisher@deg.virginia.gov" <john.fisher@deg.virginia.gov>, "Alice.Baird@dcv.virginia.gov" <Alice.Baird@dcv.virginia.gov>, "william.pfeifle@deg.va.gov" <william.pfeifle@deg.va.gov>, "Barry!@chesterfield.gov" <Barry!@chesterfield.gov>

"Smedleys@chesterfield.gov" <Smedleys@chesterfield.gov>, "evans.gregory@dof.virginia.gov" <evans.gregory@dof.virginia.gov>, "Andrea.Kampinen@dhr.virginia.gov" <Andrea.Kampinen@dhr.virginia.gov>

Cc: "Trudeau, Thomas" <TrudeauT@chesterfield.gov>, "Dane, Charles" <DaneC@chesterfield.gov>, "Douglas E. Sander" <dsander@deltaairport.com>, "Amanda B. Chilson" <AChilson@deltaairport.com>, "Bryan O. Elliott" <BElliott@deltaairport.com>, "millcreekenvironment@comcast.net" <millcreekenvironment@comcast.net>

Date: 08/06/2013 06:21 PM

Subject: FCI Environmental Assessment Informational Meeting

All –

In follow up to the initial Agency Coordination meeting held during December 2012, a second Agency Coordination Meeting is being scheduled for September 4, 2013. In preparation for discussion at that meeting, Delta Airport Consultants, Inc. is presenting information on Wednesday, August 14, 2013 from the draft Preliminary Engineering Report for review and consideration. A meeting agenda is attached and agencies are invited to attend in person or via teleconference.

The Informational Meeting will be held at the Chesterfield County Airport, 7511 Airfield Drive, Chesterfield, VA 23237, on **Wednesday, August 14, 2013 at 1:30 PM** in the 2nd floor conference room.

Please advise if your agency will be attending in person or joining via conference call, with name of person and contact information, to Roy G. Lewis, 704-521-9101 or rlewis@deltaairport.com by Friday, August 9, 2013 to ensure appropriate materials are distributed to attendees prior to the meeting. Dial-in instructions will be provided via email at least 24 hours in advance of the call.

Should you have questions or require additional information, please contact me directly at your convenience.

Thank you,
Roy

Roy G. Lewis, A.A.E.
VP - Director of Planning
Delta Airport Consultants, Inc.
Office - 704.521.9101

From: Colleen M. Cummins

Sent: Friday, November 02, 2012 3:05 PM

To: Ellie Irons (Ellie.Irons@deq.virginia.gov); 'john.fisher@deq.virginia.gov'; 'Silvia.B.Gazzera@usace.army.mil'; 'william.pfeifle@deq.va.gov'; 'cindy_schulz@fws.gov'

Cc: Trudeau, Thomas; Dane, Charles; Roy G. Lewis; Adam D. Switzer; Douglas E. Sander; 'Tilley, Julie'

Subject: FCI Environmental Assessment Agency Coordination Meeting

All –

Chesterfield County, Virginia, owner and operator of the Chesterfield County Airport has contracted Delta Airport Consultants, Inc. to conduct an Environmental Assessment (EA), to evaluate the impacts associated with developing the airport in accordance with the approved Airport Layout Plan (ALP). The proposed improvements are intended to achieve compliance with Federal Aviation Administration (FAA) regulations and meet the existing and projected aviation demands. Three alternatives, including a No Action, are being evaluated during the EA process.

The purpose of this letter is to invite interested and involved parties to an agency coordination meeting at the Chesterfield County Airport, 7511 Airfield Drive, North Chesterfield, 23237-2297, on **Thursday, December 6, 2012 at 2:00 PM** in the 2nd floor conference room. The meeting is to discuss the proposed projects, possible impacts/concerns, and familiarize coordination agencies with the project site. A public open house will also be held on this date and location at 6:30 PM. Stations will be set up at the open house for those interested in speaking to the staff or consultants to discuss the projects' purpose and need or other related questions. The meeting will also provide the opportunity for public comment.

Please advise if your agency will be attending, with name of person and contact information, to Ms. Colleen M. Cummins, 704-521-9101 or ccummins@deltairport.com no later than November 28, 2012. An existing airport layout exhibit and a USGS quad map have been enclosed for your reference.

If you have questions or need further information, please do not hesitate to contact me.

Thank you for your consideration in this matter.

-Colleen

Colleen M. Cummins, AICP
Project Manager
Delta Airport Consultants, Inc.
1805 Sardis Road North, Ste 101
Charlotte, NC 28270
704.521.9101 (ph) / 704.521.9109 (f)
ccummins@deltairport.com



Please consider the environment before printing.

[attachment "Agency_agenda mtg 081413.pdf" deleted by Marcus Brundage/AEA/FAA]

Roy G. Lewis

From: Terry.Page@faa.gov
Sent: Friday, March 22, 2013 12:17 PM
To: Trudeau, Thomas
Cc: Dane, Charles; Douglas E. Sander; Jeffrey.Breeden@faa.gov; Kyle.Allison@faa.gov; Marcus.Brundage@faa.gov; Roy G. Lewis
Subject: Re: VaARNG Operations at FCI
Categories: Filed by Newforma

Tom:

Thank you for the information below. My guidance is the same that we discussed at the VAB meeting this past month in Richmond. The EA must include all changes in the airport in the foreseeable future, and therefore include and address the environmental impacts that may result from this increase in based helicopters and in helicopter operations.

The information you present below documents this point. The current 5010 Data Report for your airport lists 4 helicopters based, and 200 military operations annually (the number of helicopter operations is not listed.). The info you present below will result in increasing based helicopters from 4 to 11 (almost triple the number), and a significant increase in military operations. In addition, military helicopters may have greater noise impacts than the civilian counterparts. All the potential airport changes and environmental impacts of this change must be in the EA. (Aircraft noise is the most obvious potential impact, but there may be other changes or impacts. i.e., will the new operation include fuel storage and handling changes, or increases in hazardous waste material to name a few ?)

So to answer the question in your last sentence below, is the same guidance we discussed earlier. The EA must include and analyze the proposed change in based helicopters and helicopter operations, and the associated impacts to the environment that may result from these additional aircraft and this additional tenant.

I hope this answers the question. If this is not clear, then please let me know.

Terry J. Page, Manager
Washington Airports District Office
Office 703-661-1357

From: "Trudeau, Thomas" <TrudeauT@chesterfield.gov>
To: Terry Page/AEA/FAA@FAA
Cc: Marcus Brundage/AEA/FAA@FAA, Jeffrey Breeden/AEA/FAA@FAA, Kyle Allison/AEA/FAA@FAA, "Roy G. Lewis" <RLewis@deltaairport.com>, "Douglas E. Sander" <dsander@deltaairport.com>, "Dane, Charles" <DaneC@chesterfield.gov>
Date: 03/22/2013 10:45 AM
Subject: VaARNG Operations at FCI

Terry:

As you will recall, at the last VAB Meeting, you expressed concern with the Army Guard's interest in leasing a couple of our vacant hangars and indicated that the operations they would bring to FCI may need to be addressed in our EA. In response I am passing along the annual operations estimated by the VaARNG, 224th Aviation. The operations are for partial aviation units they would like to move to FCI on a short term (five year) lease, or at least until such time as they can build a permanent Army

Aviation Support Facility. That permanent location that will be determined through a competitive bid process and may very well not be located at FCI.

Here is their estimated number of annual operations (take offs and landings) by type of aircraft, broken down by day (0700-2200) and night (2200-0700).

UH72	750 day time operations; 70 night operations
UH60	385 day time operations; 40 night operations

Those operations will be generated by three Blackhawk (UH60) and four Lakota (UH72) Helicopters and conform to our standard traffic pattern and follow our existing airport rules that include local aircraft operations. It may also be important to note that we have helicopters based here already two of which are State Police Eurocopters that are the civilian equivalent of the Lakota.

You should also know that a lease agreement has not been executed, but the VaARNG is working with us on a draft that will have to be passed through the National Guard Bureau for approval. Effects of Sequestration could be a factor in approval, but all the VaARNG parties to this lease agreement, including the NGB, are moving forward with the intent to lease and in belief that there will be a positive outcome.

Please advise us of any requirements for inclusion in our on going EA, the extent that the intended helicopter operations will need to be addressed and how best to proceed.

Tom

Mary Ashburn Pearson

From: Mary Ashburn Pearson
Sent: Wednesday, October 15, 2014 5:16 PM
To: Mary Ashburn Pearson
Subject: FCI EA - DOAV initial comments
Attachments: 20131114 Chapter 1 DOAV initial comments.docx; 20131114 Chapter 2 DOAV initial comments.docx; 20131114 Chapter 3 DOAV initial comments.docx; 20131114 Chapter 4 DOAV initial comments.docx; 20131114 Chapter 5 DOAV initial comments.docx

From: Simmers, Susan H. (DOAV) [<mailto:susan.simmers@doav.virginia.gov>]
Sent: Thursday, November 14, 2013 4:54 PM
To: Roy G. Lewis
Subject: initial comments

Attached are some of my initial comments on the draft EA report. I think several of my comments here and ones I did not put in yet will be addressed with the work you are doing to address the initial comments from Marcus. Please let me know if you have any questions.

Susan Simmers
Airport Services Division
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, VA 23250
804-236-3632, ext 105

RICHMOND EXECUTIVE - CHESTERFIELD COUNTY AIRPORT

Environmental Assessment (EA)

DOAV Comment Responses

November 19, 2013

Chapter One

1. Page 1-1: Please update the name of the airport throughout the document to Richmond Executive – Chesterfield County Airport.
Response: *Updated.*
2. Page 1-3: Efforts to remove the obstruction issue with the pipeline equipment aboveground have been discussed at meetings. How does that fit into these projects?
Response: *The pipeline valve discussion is included in the Alternatives discussion; also in Preliminary Engineering report.*
3. Page 1-7: This does not match the approved forecast from the master plan project.
Response: *Updated.*
4. Page 1-9: Where are the details for this airport? The statement provided here could be used for any airport and does not provide a sense of what the sponsor needs or wants to accomplish.
Response: *Text has been expanded and revised for clarity.*

Chapter Two

5. Page 2-5: The wording is confusing as the project is to extend the runway. The alternatives get into the different way to extend the runway.
Response: *Text has been revised for clarity.*
6. Page 2-10: Specify which alternatives.
Response: *This section was removed during revisions; the alternatives section includes lists and discussions of specific projects for each alternative.*
7. Page 2-14: It is difficult to match this to the purpose and need in Chapter 1.
Response: *Text has been revised for clarity.*

8. Page 2-21: This text does not provide a sense of Alternative 2 being better than Alternative 3 or the selection process and decisions (locality and public input, etc.).

Response: *Text has been revised to include discussion of public participation during planning process.*

Chapter Three

9. Page 3-11: The communication providers should also be listed.

Response: *This section was deleted during revisions.*

10. Page 3-12: It was difficult to follow information on the 18 categories. Some was here, and other parts were in the next chapter. And it seemed like some information from the master plan update narrative was not included. Also, not much was discussed about impacts after the proposed improvements are made.

Response: *Format has been revised to match 1050.1E; all impact categories are now discussed.*

11. Page 3-12: These categories do need to be discussed. The information provided in the master plan update narrative should be used here at least.

Response: *All categories are now discussed.*

12. Page 3-21: Please confirm that the county park across Route 10 does not have golf facilities.

Response: *Updated to include golf facility.*

13. Page 3-23: What about impacts after the selected alternative is built?

Response: *Text has been updated to include this discussion.*

14. Page 3-31: Where is the discussion on coordination work with the county offices?

Response: *Coordination with County Environmental Engineers is related to water quality. Discussion has been added to water quality section.*

15. Page 3-33: Where is the discussion on which permits are needed for the specified improvements at FCI?

Response: *This information is included in Exhibits 27 and 28.*

Chapter Four

16. Page 4-7: Specify the acquisition.

Response: *Mitigation discussion is included in the Alternatives section as well as in Section VII.*

17. Page 4-12: Specify that this would occur during construction.

Response: *Included in Section VI-D, Construction Impacts.*

18. Page 4-16: How will this affect the houses to the northeast of Runway 15?
Response: *Text has been updated to include discussion of nearby residential areas.*
19. Page 4-25: What about the churches that have property they planned to build on before this project began?
Response: *We do not believe this represents a disproportionate impact to a minority population and therefore have concluded that no impacts are anticipated.*
20. Page 4-27: When was this submitted? What is the status of the review?
Response: *Submission date (September 13, 2013) has been added. (Status of review: Response received September 19, 2013).*
21. Page 4-35: What is expected for mitigation?
Response: *Discussion on anticipated impacts has been added.*
22. Page 4-39: What plans and such were reviewed? What coordination is expected?
Response: *This section was removed during revisions; however, Section V does discuss the consistency between the ALP and the Chesterfield Comprehensive Plan.*
23. Page 4-40: What is the mitigation?
Response: *This section was removed during revisions. Please see Section VII, Mitigation.*

Chapter Five

24. Page 5-1: Why is Colleen listed as she is no longer working on the project? What efforts was she responsible for?
Response: *Colleen's name has been removed and Mary Ashburn Pearson's name has been added.*

CHESTERFIELD COUNTY AIRPORT
ENVIRONMENTAL ASSESSMENT
PRELIMINARY ENGINEERING REPORT

Review Comment Responses
October 23, 2013

Report

- 1) Scope of Services – This draft of the PER will be revised to address review comments and resubmitted as a Final Preliminary Engineering Report.

Response: *Correct.*

- 2) Scope of Services – This effort should reflect a 15% design effort for each alternative and a 30% design effort for the preferred Alternative. The report should have more quantitative analysis to support the project impacts (ex. grades used to determine the limits of disturbance or narrative discussion on runway longitudinal grades).

Response: *Additional discussion has been included.*

- 3) Scope of Services – Complete a funding and phasing plan to show the intended project funding. This plan should be included in the report and coordinated with our office to prepare for the federal CIP update. Approximately \$5M a year may be a reasonable federal request.

Response: *The funding and phasing plan has been updated in IV J.*

- 4) Scope of Services – A limited ground survey was included in the scope of services to document the elevation of Cogbill Road. Was this survey completed? Include appropriate discussion and documentation in the PER. Section IV, Alternate 2 discusses the MALSR and Cogbill Road.

Response: *A limited ground survey was completed. Additional discussion is included in Section IV C.*

- 5) Scope of Services – Did Woolpert provide 1 foot contours for the project area as per the scope? Include appropriate discussion and documentation in the PER.

Response: *Yes, 1 foot contours were included. They are documented in the Grading section of Section III.B.3. An exhibit (Exhibit 8) has been added that depicts the completed survey.*

- 6) General – The format of this report is difficult to follow. The EA will be the document comparing the alternatives and impacts. As a preliminary engineering report I suggest discussing one project or alternate at a time and including all the engineering aspects that were evaluated.

Response: *The report format has been modified. All the development projects other than*

the runway extension are common to both Alternative 2 and 3. It was decided not to repeat the same information twice but has been included in the same section as the runway development alternatives.

- 7) Section I – Clarify the “project” or “projects” in the project summary. This section only appears to list the runway extension project. What about the other projects to be completed within 5 years?

Response: *This section has been clarified by removing the words runway alternatives since all projects were evaluated using the same parameters.*

- 8) Section I – Please note that the EA will need to address environmental impacts for all projects and each alternative, not just the preferred runway extension alternative.

Response: *So noted.*

- 9) Section II – Recommend adding “and parallel taxiway” to the runway alternative descriptions. This will assist in understanding the project scope.

Response: *Descriptions modified as requested.*

- 10) Section II – Relocate Glide Slope is included in Alternate 3 and as a separate project. Clarify the separate project to be relocation outside ROFA.

Response: *Descriptions modified for clarity.*

- 11) Section II – A reference is made to the ACIP. Include the funding and phasing plan in this report as per comment 3.

Response: *Funding and phasing plan has been included in Section IV J.*

- 12) Section II – A reference is made to Chapter Two of the EA. The EA document has not been submitted for review. Appropriate documentation should be included in this report. The Preliminary Engineering Report should be a stand along document that will be used to expand the project design in the future.

Response: *Reference to EA chapter deleted.*

- 13) Section III – Obstruction Lights are proposed along the gas line to mitigate the terrain penetration. Has preliminary design proposed the height of these lights? Include some design discussion on why the Southernmost light has been moved. The approved ALP appears to show one existing and three proposed lights along the gas line. Exhibit 1 in Appendix B appears to have relocated one of the proposed lights to the site of the existing obstruction light. Clarify the design.

Response: *Additional discussion has been included. It appears that an incorrect location for the southernmost obstruction light was shown on several original layouts. The southernmost obstruction light will be located as shown on the approved ALP and the PER text revised.*

- 14) Section IV, Alt 1 – a. Additional discussion is needed for the disadvantages of the No Action for the runway extension. Which FAA design standards are not met? b. Fee and easement acquisition should be discussed to control the RPZ even if the runway is not extended. Existing obstructions need to be mitigated even if the runway is not extended. c. Does the existing runway meet the current design standards for the last quarter of the runway?

Response:

- a. *Additional discussion on FAA design standards has been added.*
- b. *Although 'Achieve Standards' was an Alternative examined in the Master Plan, it is not an Alternative considered in Scope of EA. On-Airport existing obstructions could be addressed should the "No Action" Alternative be selected if no wetlands are impacted, however wetlands are impacted. If a FONSI is not issued for this Environmental Assessment, another Environmental document, i.e. Form "C", may be prepared to address the existing obstruction conditions.*
- c. *As of September 2012, the last quarter of the runway does not meet current design standards.*

**Now Section III.A.*

- 15) Section IV, Alt 2 – Clarify the location of the obstructions off the end of runway 15 that are not on the ALP. Is an ALP pen & ink updated needed?

Response: *The corridor of trees to be removed for the MALSR light plane has been described in the text. No Pen & Ink is required for this item as the land is proposed for acquisition.*

**Now Section III.B.*

- 16) Section IV, Alt 2 – The extent (pavement depth, mill and overlay, complete reconstruction, etc.) of the grade correction should be discussed.

Response: *Additional discussing has been included as to the extent of the grade correction.*

**Now Section III.B.*

- 17) Section IV, Alt 2 – Phasing will need to be coordinated in the future design within the Construction Safety and Phasing Plan (CSPP) review. The temporary use of declared distances will have to be evaluated and approved by FAA. The 1000' runway safety area (RSA) beyond the threshold will have to be maintained to keep men and equipment outside the RSA and to reduce impacts from jet blast. **(Similar comment for Alt 3)**

Response: *Additional text has been added to clarify.*

**Now Section III.B.*

- 18) Section IV, Alt 2 – Evaluate including a discussion on the Glide Slope relocation outside ROFA and installation of LEDs in paragraph 6. AIP eligibility of airfield signs will have to be evaluated in the future. Location and direction signs are not required at the airport. **(Similar comment for Alt 3)**

Response: *The Glide Slope relocation to the west is covered under the Common Development projects section. Reference to LED has been removed. The anticipated*

signs are runway distance remaining and runway hold sign. Location and direction signs are not anticipated to be a part of this project.

**Now Section III.B.*

- 19) Section IV, Alt 2 – The location of the relocated supplemental wind cones need to be shown on the approved ALP. Pen & ink ALP revision may be necessary. **(Similar comment for Alt 3)**

Response: *A pen and ink change to the ALP will be submitted following the completion of the EA.*

**Now Section III.B.*

- 20) Section IV, Alt 2 – Discuss the coordination that was conducted with Dominion Power. This coordination effort was included in the PER scope of services. **(Similar comment for Alt 3)**

Response: *There has been limited response from Dominion Power and coordination is ongoing.*

**Now Section III.B.*

- 21) Section IV, Alt 2 – The < 3/4 mile visibility minimum identified for Runway 15 is not noted in the Runway Data Table on the ALP. The plan view on the ALP does appear to show the visibility reduction and the increased RPZ dimensions. The data table should be corrected in a future pen & ink ALP revision. **(Similar comment for Alt 3)**

Response: *A pen and ink change to the ALP will be submitted following the completion of the EA.*

**Now Section III.B.*

- 22) Section IV, Alt 2 – The Natural Gas Pipeline valve station is listed as a disadvantage but is not discussed in this section. Include additional information on this valve station. **(Similar comment for Alt 3)**

Response: *Additional information on the valve station has been added.*

**Now Section III.B.*

- 23) Section IV, Alt 3 – The first paragraph documents that vehicles on State Route 288 are Part 77 penetrations. Include discussion on impacts based on end siting criteria. Be advised that FAA/WADO discourages declared distances for general aviation airports. Use of declared distances would have to be reviewed and approved on the ALP.

Response: *Text modified to include discussion of runway end siting criteria from AC150/5300-13A, Table 3-2 in Section III.C.2.*

**Now Section III.C.*

- 24) Section IV, Alt 3 – If the runway is extended on the 33 approach end will the pavement section have to be reconstructed with the required grade correction for the last quarter? FAA may determine that the grade correction must be included with the runway project if the pavement is extended on this approach end. FAA may accept including the grade correction in a future rehabilitation project for Alt 2.

Response: *The last quarter runway grade would have to be corrected on the 33 approach even with a 200 foot extension to the south.*

**Now Section III.C.*

- 25) Section IV, Alt 3 – Suggest including more description on the impacted wetlands. The actual impacts may need to be quantified for alternative analysis in the EA.

Response: *Wetland impacts are discussed in Section IV G. Actual wetland impacts for Alternative 3 would require more than the 15% level of effort in the scope of work.*

- 26) Section IV, Alt 3 – Drainage reconstruction, 50:1 approach penetrations and sanitary sewer relocation are listed as disadvantages but are not discussed in this section. Include additional discussion on these issues.

Response: *Additional discussion has been included in Sections III.C.2, III.C.3, and III.C.7.*

**Now Section III.C.*

- 27) Section V – Projects are generally described but not much preliminary engineering has been discussed.

Response: *Additional preliminary engineering is discussed.*

**Now Section III.D.*

- 28) Section V, A and B – These projects document that site work was completed during previous projects. Include a statement for each project on the previous environmental effort.

Response: *The date of the FONSI for the site work has been added.*

**Now Section III.D.3 and III.D.4.*

- 29) Section V, D – This section states that the perimeter fence and taxiway cannot be moved. The existing fence could be moved if necessary and there is no aeronautical use for the taxiway within the area needed for the relocated glide slope. This taxiway is not identified for use on the approved ALP.

Response: *The text has been revised.*

**Now Section III.D.5.*

- 30) Section V, D. 2. – Potential for foreign structure interference is listed as a disadvantage. Discuss which structure may interfere. Suggest that a study analyzing the GS signal will need to be conducted to determine impacts.

Response: *The structures in question have been identified on the exhibit. A recommendation for further study of the glide slope signal has been included.*

**Now Section III.D.5.*

- 31) Section VI – State the projects included in the “preferred alternate”.

Response: *Projects in the preferred alternative have been noted.*

**Now Section IV.*

32) Section VI, A. – Verify exhibit number references.

Response: *The reference has been corrected.*
**Now Section IV.*

33) Section VI – References to A7.7 should be corrected to A7-7.

Response: *The reference has been corrected.*
**Now Section IV.A.2.*

34) Section VI, C. – Clarify if the runway grade correction would improve/eliminate the pipeline terrain penetration.

Response: *The grade correction will not eliminate the pipeline terrain penetration and has been noted. A more detailed survey would need to be determined if it pushes the beginning of the obstruction further north.*
**Now Section IV.B.2.*

35) Section VI, E. – Traffic Mix for pavement design will be evaluated during the future design process.

Response: *So noted*
**Now Section IV.E.*

36) Section VI, F. – Include the approximate distance of the relocation and/or number of poles. Document the status of the coordination.

Response: *The text has been updated to include this information.*
**Now Section IV.F.1.*

37) Section VI, G – Based on this section the glide slope relocation to the west side of the runway appears to be included in the preferred alternative. Be consistent throughout the document.

Response: *The consistency concerning the glide slope has been corrected.*
**Now Section IV.G.*

38) Section VI, G – References are made to Chapter Four and body of the EA. The EA document has not been submitted for review. Appropriate documentation should be included in this report. The Preliminary Engineering Report should be a stand along document that will be used to expand the project design in the future.

Response: *References to EA text have been removed.*
**Now Section IV.G.*

39) Section VI, G, Table 2 – Verify impacts. Exhibits 15 and 16 appear to show more impacts.

Response: *Error in table. Impacts numbers have been revised.*
**Now Section IV.G.*

40) Section H – This section is located on page 19 of 20. The next two pages in the document

are labeled 1 of 20 and 2 of 20. Are pages missing?

Response: *Footer formatting error has been corrected.
Now Section IV.H.

- 41) Section J – Include cost estimates for the proposed phasing and funding plan.

Response: *Cost estimates have been added to text.
Now Section IV.J.

- 42) Exhibit 1 – Do all the projects identified on this plan make up the preferred alternative to be evaluated in the EA?

Response: *Yes. The glide slope relocation has been included.*

- 43) Exhibit 2 – Several areas shown to be cleared on Exhibit 1 around the interchange are not highlighted as proposed easements or fee acquisitions. Clarify or revise as necessary.

Response: *Proposed easement for land use restriction within RPZ. No formal easement acquisition required for obstruction removal within VDOT Right-of-Way.
Now Exhibit 13.

- 44) Exhibit 3 – Do any proposed aviation easements exist on this sheet as per the hatch pattern in the legend? It would be beneficial to document which areas were previously cleared with AIP funding. AIP funding can be used to clearing an area once.

Response: *No. The proposed aviation easements for the VDOT property are only for land use within RPZ. Areas previously cleared will be included in the design documents for the first obstruction removal project.
Now Exhibit 6.

- 45) Exhibit 14 – The taxiway turnaround/bypass between the t-hangar and the conventional hangars has not been included in this document. Include this project in the EA if the airport plans to initiate this project within the 5 year development plan.

Response: *The Airport does not plan to initiate the t-hangar taxiway turnaround/bypass project within the 5 year development period and will not be included as part of this EA.
Exhibit 14 has been removed.

- 46) Engineer's Opinion of Probable Construction Cost – Include descriptions to clarify non-AIP projects and AIP revenue producing projects. All airside needs must be met before entitlement funding can be used on AIP eligible revenue producing projects.

Response: *AIP verses non-AIP descriptions have been added to the engineer's opinion of probable construction costs.*



U. S. Department
of Transportation

Federal Aviation
Administration

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

December 11, 2013

Mr. Tom Trudeau
Airport Manager
Chesterfield County Airport
7511 Airfield Drive
Richmond Virginia 23237

Re: Draft Environmental Assessment (EA)-Five (5) Year Development Plan, Chesterfield
County Airport (FCI)

Dear Mr. Trudeau:

The Federal Aviation Administration has completed its review of the revised draft EA
received on November 22, 2013, for the proposed five (5) year development plan project
at FCI. Our review of the document revealed that additional information is needed.

An electronic track change EA with questions and comments is provided that must be
appropriately addressed. If you have any questions or comments, please contact me at
Marcus.Brundage@faa.gov or 703-661-1365.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Marcus Brundage', with a long horizontal flourish extending to the right.

Marcus Brundage, REM
Environmental Protection Specialist

Enclosure

cc: Mr. Roy G. Lewis, A.A.E., Delta (encl via email only)
Susan Simmers, DOAV (encl via email only)
Mr. Kyle Allison, P.E., FAA (encl via email only)
Mr. Jeff Breeden, AICP, FAA (encl via email only)

Richmond Executive-Chesterfield County Airport (FCI)

Draft Environmental Assessment

FAA Comment Responses

December 27, 2013

1. Page 1-1(INTRODUCTION AND BACKGROUND): Recommend revising the above title and supporting documentation to be consistent with Five-Year Development Plan.
Response: The document header has been updated to read “Five-Year Development Plan.” The cover page will also reflect this change on the final document.

2. Page 1-4 (PROPOSED ACTION): Proposed action is used here in the document but later this action is referred to as the preferred alternative. Recommend either using only Proposed, Preferred, or Proposed/Preferred throughout the document so the reader is not confused.
Response: The Preferred Alternative has been renamed “Proposed Action” throughout the document.

3. Page 1-6 (PURPOSE AND NEED): What are the design criteria? Please spell it out here for the reader.
Response: More information has been added here.

4. Page 1-6 (PURPOSE AND NEED): Revise to refer to the 2012 Master Plan Update, not ALP. Please revise throughout the document.
Response: Updated.

5. Page 1-6 (PURPOSE AND NEED): Recommend deleting this and revising this statement.
Response: Updated.

6. Page 1-6 (PURPOSE AND NEED): Please add “...operational demands to accommodate the existing and forecasted fleet of aircraft.”
Response: Updated.

7. Page 1-6 (PURPOSE AND NEED): Recommend adding: “In addition this EA...”
Response: Updated.

8. Page 1-6 (PURPOSE AND NEED): "...completion of the EA as shown on the approved ALP."
Response: Updated.

9. Page 1-6 (PURPOSE AND NEED): Please add "forecast of aviation activity..."
Response: Updated.

10. Page 1-6 (PURPOSE AND NEED): 2012 Master Plan update.
Response: Updated.

11. Page 1-6 (PURPOSE AND NEED): This sentence seems redundant of the previous sentence.
Response: This sentence has been deleted.

12. Page 1-8 (PURPOSE AND NEED): This section should fully discuss Exhibit 4 of how the current critical aircraft, the Gulfstream III, is transitioning over to the family of Challenger/Hawker/Gulfstream 200.
Response: More discussion has been added here.

13. Page 1-10 (PURPOSE AND NEED): Please add "...Phase I which would be sufficient to accommodate the Challenger 604, Hawker 800, and Gulfstream 200, which are the future critical aircraft for FCI."
Response: Updated.

14. Page 1-11 thru 1-13 (ALTERNATIVES): This section is very confusing and should not be in this No build Alternative section because it explains some level of project actions. Also why is the section, **Alternatives Considered but not Carried Forward**, above, mentioned because it is repeated below, however the title is incorrect.
Response: The "No Action" alternative has been removed from the "Alternatives Considered but Not Carried Forward" section.

15. Page 1-13 (No Action): The term "No action" and "no build" are the exact same depending upon the proposed project action. Here it states that it will be carried forward but above it states that it will not be carried forward. The no build alternative needs to be carried forward.
Response: Response: The "No Action" has been removed from the "Alternatives Considered but Not Carried Forward" section. Alternative 1a has been renamed "Alternative A." The No Action alternative remains "Alternative 1."

16. Page 1-14 (No Action): Explain why doing nothing would cause the airport to operate or continue to operate in violations/out of compliance with FAA guideline/AC/Regulations/etc...validate to the reader why this alternative is not a viable option.

Response: More discussion has been added here.

17. Page 1-14 (Build Alternatives): Were all the comments submitted regarding this PER addressed?

Response: The comments have been addressed. A response to comments has not yet been submitted because of one outstanding item that requires outside coordination with Dominion Power.

18. Page 1-14 (Build Alternatives): This states the common elements shared by the two alternatives however this section has “demolition of the existing holding bay” but the proposed project does not, etc.

Response: This section has been deleted from the text.

19. Page 1-15 (Alternative 2 Preferred Alternative – Extend Runway 15 by 800 feet): Preferred or Proposed...see other comment made regarding using this.

Response: Updated.

20. Page 1-17 (Alternative 2 Preferred Alternative – Extend Runway 15 by 800 feet): The official acronym for the United States Army Corps of Engineers is USACE. Please revise throughout the document. Please be certain that this project is properly coordinated with USACE and other applicable agencies regarding Wetlands/RPAs/RMA.... Integrating Section 404 permitting and NEPA increases the likelihood that one NEPA document will contain the information and findings needed for Corps and FAA decisions (40 CFR Section 1500.5(h)). It also strengthens efficient and consistent consideration of public concerns. In addition, integrating these processes increases the likelihood the agencies will make their respective decisions on the proposed action at similar times. To properly integrate the 404 and NEPA processes, it is essential the sponsor meet early with the Corps, FAA, and other parties interested in the action’s effects on wetlands.”

Response: Acronym has been updated throughout the document. The remaining comment has been noted.

21. Page 1-17 (Alternative 2 Preferred Alternative – Extend Runway 15 by 800 feet): Also exhibit 9 & 10.

Response: Updated.

22. Page 1-21 (Alternative 3 – Extend Runway 15 (600 feet) and Runway 33 (200 feet)): Also exhibit 9 & 10.

Response: Updated.

23. Page 1-23 (Exhibit 9 – Qualitative Alternative Evaluation Matrix): Please see earlier comment. This alternative 1 and 1a is confusing. The No build or No Action Alternative, whichever term will be used throughout the document, is exactly what it implies and mean: things will remain at its current state. Please revise/address this throughout the document.

Response: Alternative 1a has been renamed “Alternative A” to reduce confusion. The No Action alternative has been removed from “Alternatives Considered but Not Carried Forward” section. The No Action alternative remains “Alternative 1.”

24. Page 1-24 (Preferred Alternative): Preferred/Proposed.

Response: Updated.

25. Page 1-24 (Preferred Alternative): Was this proposed/preferred alternative actually selected as a result of public involvement or was it the proposed project and the public, via the public meetings, had no objections to it?

Response: This sentence has been reworked.

26. Page 1-24 (Preferred Alternative): This statement contradicts Exhibit 9 and the previous text. The “No Action” should involve zero environmental impacts vs. few unless by doing nothing it can be shown that this alternative then creates adverse environmental impacts.

Response: This sentence has been updated to reflect no environmental impacts.

27. Page 1-25 (Preferred Alternative): Recommend adding “...as the proposed project”

Response: Updated.

28. Page 1-30 (Land Use): FAA preference? Please list the applicable reference.

Response: This paragraph has been reworked and AC 150/5300-13a has been referenced.

29. Page 1-30 (Land Use): Curious as to why these two listings are a standalone sentences per relevancy.

Response: These sentences have been deleted.

30. Page 1-33 (Past, Present, and Reasonably Foreseeable Actions): This is rather confusing. I believe I know what is trying to be conveyed here but it needs to be explained better. Are you referring to cumulative impacts (air quality, noise, etc) that are included in the analysis section of this NEPA document per the proposed project?

Response: This sentence has been reworked to reduce confusion.

31. Page 1-33 (Past, Present, and Reasonably Foreseeable Actions): Whenever referring to a claim or statement of some sort, please provide information to substantiate.

Response: We have clarified that the planning division is the source of the information and have added information from the Watermark development website.

32. Page 1-34 (Environmental Consequences): However it is located in a maintenance area. The Proposed actions are not exempt and are not presumed to conform therefore an “applicability analysis” must be done.

Response: This section has been reworked and an emissions analysis has been conducted using EDMS.

33. Page 1-35 ((B) Coastal Resources): A Consistency certification and determination is required regardless if there are wetlands or not. Recommend deleting this sentence or revising it. This sentence reads as if the wetlands are the trigger for this CZMA requirement.

Response: This sentence has been deleted.

34. Page 1-35 ((B) Coastal Resources): Requirements and approvals of what will be obtained? A federal consistency determination is required prior to final design unless the final design is prior to a NEPA finding. Please revise this sentence to accurately reflect the CZMA in relation to the NEPA process.

Response: This sentence has been deleted.

35. Page 1-37 ((C) Compatible Land Use): Earlier on page 30 it states” **Land Use:** The airport is currently zoned Light Industrial. The area surrounding airport property is characterized by light industrial, mixed use, and parkland”. Is there a difference between Light Industrial and Industrial?

Response: This has been updated to “Industrial.”

36. Page 1-37 ((C) Compatible Land Use): Again please see earlier comments regarding using Preferred and Proposed. The document uses both in different sections so please use one or the other for clarity. Or let the reader know the preferred is the proposed.

Response: Updated.

37. Page 1-38 ((D) Construction Impacts): Be sure to see and address comment earlier regarding section VI-A (Air Quality).

Response: Noted.

38. Page 1-43 ((I) Hazardous Materials, Pollution Prevention, and Solid Waste): Please revisit FAA's guidance per how to properly address these sections (Hazardous Materials & Solid Waste). This analysis needs to be more specific to the proposed/preferred project rather than a generalized discussion. Does the structure(s) to be demolished contain asbestos? If so, what was the process to determine it and how and when will it be disposed of relative to the demolishing of the structure? Are there any visible signs of soil discoloration? If so or not, who made this determination and how was it made? Will any hazardous material be used in the development stage of the proposed projects, if so how will they be stored and disposed of after usage. The fuel farm is a proposed project action, what is involved in the transfer from USTs to ASTs? Will the USTs be removed or abandoned in place? This process will need to be discussed in this section regarding methods taken to avoid/contain/cleanup spills during decommissioning of the USTs and the commissioning of the ASTs. For Solid Waste, what guidelines will the Airport be using to address C&D waste, recycling, etc?

Response: Discussion has been added to address these questions.

39. Page 1-43 ((I) Hazardous Materials, Pollution Prevention, and Solid Waste): Confusing statement...no impacts to hazardous materials...?

Response: This sentence has been reworked.

40. Page 1-45 ((J) Historical, Architectural, Archeological, and Cultural Resources): VDHR responded on 12/06/2013. Please be sure to insert the response in the appropriate section of the revised draft document.

Response: This has been included in the text.

41. Page 1-47 ((L) Natural Resources and Energy Supply): ...and Sustainable Design.

Response: Updated.

42. Page 1-47 ((L) Natural Resources and Energy Supply): This section is to cover more than adverse impacts. Will there be low impact development (LIDs). As a positive impact, will the new construction be per sustainable design to include LED lights, sufficient low flow water systems, etc. These things should be reported in this section to meet Presidential Executive Orders, etc, if feasible.

Response: Discussion has been added to address these questions.

43. Page 1-48 ((M) Noise): INM Version 7.0d is the most recent release of INM. It includes database updates and correction of minor software issues, but no new functionality added relative to INM Version 7.0c. Please see:

https://www.faa.gov/about/office_org/headquarters_offices/apl/research/models/inm_model/

Response: Noted.

44. Page 1-60: There will be impacts, however no adverse impacts are anticipated.

Response: Updated.

45. Page 1-60: There will be impacts, however no adverse impacts are anticipated.

Response: Updated.

46. Page 1-60: If mitigation is discussed, it shall be in sufficient detail to describe the benefits of the mitigation. Each impact category in Appendix A identifies conditions that normally indicate a threshold beyond which the impact is considered significant and an EIS is required for the action (see also paragraph 506h regarding mitigation). If the EA contains mitigation measures necessary to reduce potentially significant impacts below applicable significance thresholds, an EIS is not needed and the approving official may issue a FONSI provided that:

(1) The agency took a “hard look” at the problem.

(2) The agency identified the relevant areas of environmental concern.

(3) The EA supports the agency’s determination that the potential impacts will be insignificant.

(4) The agency has identified mitigation measures that will be sufficient to reduce potential impacts below applicable significance thresholds and has assured commitments to implement these measures.

FAA Order 1050.1E, **201c**. When proposed actions incorporate mitigation measures to avoid, eliminate, or reduce anticipated harm, a FONSI may be prepared and **must** include appropriate mitigation measures. Also see chapter 4 of FAA Order 1050.1E

Response: Noted. The mitigation discussion was broadened in Section VII, Mitigation.

47. Page 1-61: USACE.

Response: Updated.

48. Page 1-62: As mentioned in an earlier comment, please revise throughout the document: (USACE)

Response: Updated.

49. Page 1-62: There will be impacts, however no adverse impacts are anticipated.

Response: Updated.

50. Page 1-60: There will be impacts, however no adverse impacts are anticipated.

Response: Updated.

51. Page 1-66 ((R) Wild and Scenic Rivers): How was this determined? This is an incorrect statement. Please address this section accurately.

See http://www.dcr.virginia.gov/recreational_planning/documents/srlist.pdf

Response: This has been expanded to include discussion on State Scenic rivers.

52. Page 1-66 (Exhibit 26 Comparison of Environmental Consequences for Runway Development Alternatives): What is the purpose of this chart being in this section?

Response: This chart has been moved to the next page to reduce confusion.

53. Page 1-67 (Mitigation): If mitigation is discussed, it shall be in sufficient detail to describe the benefits of the mitigation. Each impact category in Appendix A identifies conditions that normally indicate a threshold beyond which the impact is considered significant and an EIS is required for the action (see also paragraph 506h regarding mitigation). If the EA contains mitigation measures necessary to reduce potentially significant impacts below applicable significance thresholds, an EIS is not needed and the approving official may issue a FONSI provided that:

(1) The agency took a “hard look” at the problem.

(2) The agency identified the relevant areas of environmental concern.

(3) The EA supports the agency’s determination that the potential impacts will be insignificant.

(4) The agency has identified mitigation measures that will be sufficient to reduce potential impacts below applicable significance thresholds and has assured commitments to implement these measures.

FAA Order 1050.1E, **201c**. When proposed actions incorporate mitigation measures to avoid, eliminate, or reduce anticipated harm, a FONSI may be prepared and **must** include appropriate mitigation measures. Also see chapter 4 of FAA Order 1050.1E

Response: The mitigation discussion was broadened here.

54. Page 1-69 (Exhibit 28 Permits, Letters, & Concurrences): VDEQ-Virginia Department of Environmental Quality.

Response: Updated.

55. Page 1-70 (Federal Aviation Administration): Please remove the FAA from this section as we/It technically are/is not defined as a preparer for this document. **FAA Order 1050.1E, 405h. List of Preparers.** When an EA is prepared by the FAA, the EA must include a list of the names and qualifications of personnel who prepared the EA. **When EA's are prepared for the FAA, the EA must list the names and qualifications of the preparers of an EA. Contractors will be identified as having assisted in, or having prepared, the EA.**

Response: FAA has been deleted here.

56. Page 1-72 ((IX) List of Agencies and Persons Consulted): The FAA, VDEQ, and the section of the County that responded per the RPA/RMA need to be listed in this section. Be sure that all these Agencies get a copy of the draft EA

Response: These agencies have been added.

57. Page 1-72 ((IX) List of Agencies and Persons Consulted): The 2012 Master Plan Update needs to be listed as well.

Response: Updated.

Mary Ashburn Pearson

From: Simmers, Susan H. (DOAV) [susan.simmers@doav.virginia.gov]
Sent: Thursday, December 12, 2013 1:55 PM
To: trudeaut@chesterfield.gov
Cc: Marcus.Brundage@faa.gov; Roy G. Lewis; Mary Ashburn Pearson
Subject: DOAV comments on FCI EA Draft Report
Attachments: 100 DOAVAS 20131212 FCI EA Draft 2 Comments W.pdf

Categories: Filed by Newforma

Attached are DOAV's comments on the revised draft report for the EA at the Richmond Executive – Chesterfield County Airport. Please let me know if you have any questions.

Susan Simmers
Airport Services Division
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, VA 23250
804-236-3632, ext 105



COMMONWEALTH of VIRGINIA

Randall P Burdette
Director

Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422

V/TDD • (804) 236-3624
FAX • (804) 236-3635

Transmitted Via Email

December 12, 2013

Mr. Tom Trudeau, Airport Manager
Chesterfield County Airport
7511 Airfield Drive
Richmond, VA 23237

Re: Richmond Executive - Chesterfield County Airport
Environmental Assessment
Revised Draft Review

Dear Mr. Trudeau:

The Virginia Department of Aviation (DOAV) has reviewed the revised draft report of the Environmental Assessment for the Richmond Executive - Chesterfield County Airport. DOAV offers the following comments to be added to those provided by FAA:

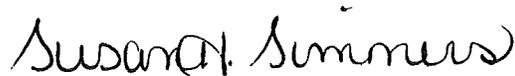
1. The presentation of the information in the revised report was well done and made the review of the information much easier.
2. Forecast Summary: Some of the numbers in Exhibit 3 Forecast Summary, page 1-7, do not match the approved forecast in the master plan. If different numbers are to be considered, an explanation of the new forecasts and comparison to the approved forecast needs to be provided for agency reviews.
3. In the section Hazardous Materials, Pollution Prevention, and Solid Waste, page 1-43, a mention is made of existing obstruction removal for Alternative 1, No Action. No other mention of this obstruction removal was found anywhere in the report. Please clarify.
4. Several mentions are made of the need to relocate two residential properties and one church and the impacts. What about the impact of the acquisition that would involve land for the new church facilities? Representatives were at the public meetings for this project and the public hearing for the master plan project, and they would expect to see that included.



5. In the Water Quality section, the fifth paragraph on page 1-59 and the first paragraph on page 1-60 read almost the same. What is the need for the text to be repeated?
6. Deicing activities are mentioned in the Water Quality section on page 1-59. What deicing activities take place at FCI? If none, there is no need to include this in the report for FCI.
7. In the section on Wild and Scenic Rivers on page 1-66, please either delete “or state” or indicate that there are no state scenic rivers in the area.
8. Please provide a heading with lead-in text for Exhibit 26 Comparison of Environmental Consequences for Runway Development Alternatives, page 1-66, to reduce the confusion of the table appearing to be part of section H.
9. Please provide the discussion on Cumulative Impacts within the Environmental Consequences section.

Please let us know if you have any questions on these comments. You can contact me at susan.simmers@doav.virginia.gov or 804-236-3632, extension 105.

Sincerely,



Susan H. Simmers
Airport Services Division

ec: Marcus Brundage, FAA WADO
Roy Lewis, Delta Airport Consultants, Inc.
Mary Ashburn Pearson, Delta Airport Consultants, Inc.

Richmond Executive-Chesterfield County Airport (FCI)

Draft Environmental Assessment

DOAV Comment Responses

December 27, 2013

1. The presentation of the information in the revised report was well done and made the review of the information much easier.

Response: *Noted.*

2. Forecast Summary: Some of the numbers in Exhibit 3 Forecast Summary, page 1-7, do not match the approved forecast in the master plan. If different numbers are to be considered, an explanation of the new forecasts and comparison to be approved forecast needs to be provided for agency reviews.

Response: *Additional operations were added to the approved forecast due to the potential relocation of military helicopters basing at FCI during 2013. A note has been added to this table within the EA.*

3. In the section Hazardous Materials, Pollution Prevention, and Solid Waste, page 1-43, a mention is made of existing obstruction removal for Alternative 1, No Action. No other mention of this obstruction removal was found anywhere in the report. Please clarify.

Response: *This has been deleted.*

4. Several mentions are made of the need to relocate two residential properties and one church and the impacts. What about the impact of the acquisition that would involve land doe the new church facilities? Representatives were at the public meetings for this project and the public hearing for the master plan project, and they would expect to see that included.

Response: *A discussion regarding this parcel of land has been added to Section O, Socioeconomic Impacts, Environmental Justice, and Children's Health and Safety.*

5. In the Water Quality section, the fifth paragraph on page 1-59 and the first paragraph on page 1-60 read almost the same. What is the need for the text to be repeated?

Response: *The repeated paragraph has been deleted.*

6. Deicing activities are mentioned in the Water Quality section on page 1-59. What deicing activities take place at FCI? If none, there is no need to include this in the report for FCI.

Response: *While no deicing facilities are located at FCI, deicing services are offered and fluid is found at the airport.*

7. In the section on Wild and Scenic Rivers on page 1-66, please either delete “or state” or indicate that there are no state scenic rivers in the area.

Response: *This has been updated to include state rivers.*

8. Please provide a heading with lead-in text for Exhibit 26 Comparison of Environmental Consequences for Runway Development Alternatives, page 1-66, to reduce the confusion of the table appearing to be part of section H.

Response: *This exhibit has been moved to the next page to reduce confusion.*

9. Please provide the discussion on Cumulative Impacts within the Environmental Consequences section.

Response: *This discussion is included within Section N, Secondary (Induced) Impacts.*



U. S. Department
of Transportation

Federal Aviation
Administration

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

January 10, 2014

Mr. Charlie Dane
Deputy Director of General Services
Chesterfield County Airport
7511 Airfield Drive
Richmond Virginia 23237

Re: Draft Environmental Assessment (EA)-Five (5) Year Development Plan, Chesterfield County Airport (FCI)

Dear Mr. Dane:

The Federal Aviation Administration has completed its second review of the revised draft EA received on November 22, 2013, for the proposed five (5) year development plan project at FCI. Our second review of the document revealed that additional information is needed.

An electronic track change EA with questions and comments is provided that must be appropriately addressed. If you have any questions or comments, please contact me at Marcus.Brundage@faa.gov or 703-661-1365.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Marcus Brundage', with a long horizontal flourish extending to the right.

Marcus Brundage, REM
Environmental Protection Specialist

Enclosure

cc: Mr. Roy G. Lewis, A.A.E., Delta (encl via email only)
Susan Simmers, DOAV (encl via email only)
Mr. Kyle Allison, P.E., FAA (encl via email only)
Mr. Jeff Breeden, AICP, FAA (encl via email only)

Richmond Executive-Chesterfield County Airport (FCI)

Draft Environmental Assessment

FAA Comment Responses

January 21, 2014

1. Page 1-6 (PURPOSE AND NEED): Please put (Airport Design AC).

Response: Updated.

2. Page 1-12 ((A) Achieve Standards): Why does this Alternative have an alphabet and the others have numbers? Although it states that this alternative is not carried forward in the title above and is not considered further, as the document progresses it is carried forward against the other alternatives in the qualitative charts listed. Please revise to be consistent.

Response: The “Achieve Standards” alternative is labeled “A” to distinguish it from the three alternatives carried forward, which are numbered 1, 2, and 3. Alternative A has been removed from Exhibits 9 and 10 (quantitative and qualitative charts) to avoid confusion.

3. Page 1-13 (No Action): Recommend “Alternative 1/No Action.

Response: Updated.

4. Page 1-13 (No Action): Incorrect. It is carried forward as the title above “**Alternatives Considered and Carried Forward**” indicates and as it is required to. I recommend stating “Although this alternative does not meet the stated project Purpose and Need, it is evaluated in this EA in accordance with CEQ and FAA guidance to serve as a baseline against which to measure impacts.”

Response: Updated with suggested wording.

5. Page 1-15 (Build Alternatives): This statement is somewhat confusing.

Response: Reworked sentence to clarify.

6. Page 1-16 (Alternative 2/Proposed Action – Extend Runway 15 by 800 feet): The land acquisition will only involve the relocation of two residences and an existing church? What is the process and where is the Airport in the process?

Response: More information has been added to describe the process and where the Airport is in the process.

7. Page 1-17 (Alternative 2/Proposed Action – Extend Runway 15 by 800 feet): Please qualify and quantify the obstruction removal by including an approximate amount and how much of that amount is in wetlands, etc. Also go in some details of how the obstructions will be removed and approximately how much will be removed and in what manner (grading, grubbing, silviculture, etc).
Response: The total acreage of obstruction removal, the manner of removal, and the approximate amount of wetlands impacts has been added to the discussion.

8. Page 1-17 (Alternative 2/Proposed Action – Extend Runway 15 by 800 feet): Approximately how much wetlands and how?
Response: This section has been updated with a description of potential wetlands impacts.

9. Page 1-17 (Alternative 2/Proposed Action – Extend Runway 15 by 800 feet): This reads as if VDEQ is requiring ASTs oppose to USTs. Replacement of USTs could very well meet VDEQ's requirements. Also qualify and quantify.
Response: More information has been added to facilitate clarification and to quantify the fuel farm improvements.

10. Page 1-18 (Alternative 2/Proposed Action – Extend Runway 15 by 800 feet): Please be sure to use 7.0d version.
Response: Corrected to read "A noise analysis was conducted." This analysis was conducted as part of the 2012 MPU.

11. Page 1-20 (Alternative 3-Extend Runway 15 (600 feet) and Runway 33 (200 feet)): The land acquisition will only involve the relocation of two residences and an existing church? What is the process and where is the Airport in this process?
Response: More information has been added to describe the process and where the Airport is in the process.

12. Page 1-21 (Alternative 3-Extend Runway 15 (600 feet) and Runway 33 (200 feet)): Please qualify and quantify the obstruction removal by including an approximate amount and how much of that amount is in wetlands, etc. Also go in some details of how the obstructions will be removed and approximately how much will be removed and in what manner (grading, grubbing, silviculture, etc).
Response: The total acreage of obstruction removal, the manner of removal, and the approximate amount of wetlands impacts has been added to the discussion.

13. Page 1-21 (Alternative 3-Extend Runway 15 (600 feet) and Runway 33 (200 feet)): Approximately how much wetlands and how?
Response: This section has been updated with a description of potential wetlands impacts.
14. Page 1-21 (Alternative 3-Extend Runway 15 (600 feet) and Runway 33 (200 feet)): This reads as if VDEQ is requiring ASTs oppose to USTs. Replacement of USTs could very well meet VDEQ's requirements. Also qualify and quantify
Response: More information has been added to facilitate clarification and to quantify the fuel farm improvements.
15. Page 1-22 (Alternative 3-Extend Runway 15 (600 feet) and Runway 33 (200 feet)): Please be sure to use 7.0d version.
Response: Corrected to read "A noise analysis was conducted." This analysis was conducted as part of the 2012 MPU.
16. Page 1-24 (Exhibit 9 Qualitative Alternative Evaluation Matrix): Recommend deleting this Alternative A column from this Alternative Evaluation Matrix...see reasoning in the above comment per Alternative A.
Response: Alternative A has been deleted from Exhibits 9 and 10.
17. Page 1-24 (Exhibit 9 Qualitative Alternative Evaluation Matrix): Recommend putting in parenthesis (No Action).
Response: Updated in both Exhibits 9 and 10.
18. Page 1-24 (Exhibit 9 Qualitative Alternative Evaluation Matrix): Recommend changing to N/A or stating "Standards are met."
Response: Updated.
19. Page 1-24 (Exhibit 9 Qualitative Alternative Evaluation Matrix): This is misleading. Actually all of the FAA Impact Categories are considered and not just Wetlands, however Wetlands are the only one with an adverse impact that will hopefully be mitigated to no significance.
Response: Updated heading to read "Anticipated Environmental & Land Impacts" to reduce confusion.
20. Page 1-25 (Exhibit 10 Quantitative Alternative Evaluation Matrix): What is the purpose of this numbering system/quantitative matrix relative to? Environmental impacts, design criteria, etc are all in this matrix to mean what? In the total number output it states that the no action (Alt 1) seems to be a better choice than Alternative 3, however in the text explanation this is not true. It is not clear what this chart is trying to convey. I have seen these type matrices used before to help substantiate the

reasoning why one alternative and /or the proposed/preferred was chosen or eliminated over the other but this one doesn't do that. The Total numbers per the Alternatives doesn't quantitatively defend the reasoning here.

Response: A paragraph has been added below Exhibit 10. This quantitative alternative evaluation matrix was taken from the 2012 MPU and represents another method of evaluating the development alternatives. The paragraph explains that although the total numbers may suggest that one alternative is "better" than the other, the ultimate selection of the Proposed Action took into account several other factors, including the Qualitative factors included in Exhibit 9, to weigh the alternatives.

21. Page 1-38 ((B) Coastal Resources): Pursuant to the Coastal Zone Management Act of 1972.

Response: Updated.

22. Page 1-46 ((I) Hazardous Materials, Pollution Prevention, and Solid Waste): The tank metals, piping, mechanical equipment, and monitoring equipment are all recyclable. Please look into this as to avoid/divert the landfill.

Response: Every effort will be made to recycle these materials and this will be the decision of the contractor who is awarded the contract under competitive bid. A statement to this effect was added to the text.

23. Page 1-47 ((I) Hazardous Materials, Pollution Prevention, and Solid Waste): No adverse.

Response: Updated.

24. Page 1-51 ((L) Natural Resources and Energy Supply and Sustainable Design): This EA will...

Response: Updated.

25. Page 1-51 ((L) Natural Resources and Energy Supply and Sustainable Design): Do not adversely impact...

Response: Updated.

26. Page 1-52 ((L) Natural Resources and Energy Supply and Sustainable Design): No adverse, however you mention above that low flow channels and water quality facilities are in the plan...This is a positive impact to natural resources.

Response: Updated.

27. Page 1-52 ((M) Noise): There is a later version 7.0d.

Response: Noted. However these noise contours have already been created using the previous version 7.0c. These were created as part of the 2012 MPU.

28. Page 1-72 (Exhibit 28 Comparison of Environmental Consequences for Runway Development Alternatives): Again why is this chart listed here and what does it truly represent? What does the Yes and No represent? It is clear that some of the impact categories will be impacted, however not adversely, by both “build alternatives” and they have a “NO” by them. And the “Yes” for Wetlands means what? Wetlands will be adversely impacted but yet hopefully mitigated to no significance.

Response: A column title, “Anticipated Adverse Environmental Consequence” has been added to reduce confusion. The “No” responses have been updated to “None” and the “Yes” responses have been updated to more specific amounts/types of impacts.

29. Page 1-72 (Exhibit 28 Comparison of Environmental Consequences for Runway Development Alternatives): Natural Resources, Energy Supply, and Sustainable Design.

Response: Updated.

30. Page 1-73 ((VII) MITIGATION): ** (Page 4-14 of FAA Order 1050.1E)

(3) The FONSI shall present any measures that must be taken to mitigate adverse impacts on the environment and which are a condition of project approval (see paragraph 406e). The FONSI should also reflect coordination of proposed mitigation commitments with, and consent and commitment from, those with the authority to implement specific mitigation measures committed to in the FONSI.

(4) The FONSI shall reflect compliance with all applicable environmental laws and requirements, including interagency and intergovernmental coordination and consultation, public involvement, and documentation requirements (see paragraph 403 and Appendix A). Findings and determinations required under special purpose environmental laws, regulations, and executive orders, if not made in the EA, must be included in the FONSI...

Response: The “Mitigation” section (Section VII) has been expanded in order to include more specific information on mitigation measures to be taken. In coordination with the USACE the County will mitigate the determined wetland impacts through the acquisition of 30.6 credits from wetland banks, an amount which was determined using USACE mitigation ratios, at an estimated cost of \$50,000 per credit.

Research into 10 wetland banks within the impacted watershed revealed 136 available credits as of January 17, 2014.

31. Page 1-75 (Exhibit 29 Permits, Letters, & Concurrences): RPA/RMA info should also be listed here.

Response: Updated to include RPA/RMA information.

32. Page 1-75 (Exhibit 29 Permits, Letters, & Concurrences): Should be “concurrence.”

Response: Updated.

33. Page 1-79 ((IX) List of Agencies and Persons Consulted): RPA/RMA should not be listed under/with FAA. Under/with the FAA you can list Washington Airports District Office.

Response: "Washington Airports District Office (WADO)" has been added.

Mary Ashburn Pearson

From: Simmers, Susan H. (DOAV) [susan.simmers@doav.virginia.gov]
Sent: Tuesday, January 21, 2014 7:18 PM
To: danec@chesterfield.gov; wilkinsonj@chesterfield.gov
Cc: Marcus.Brundage@faa.gov; Roy G. Lewis; Mary Ashburn Pearson
Subject: DOAV comments on FCI EA December Draft
Attachments: 100 DOAVAS 20140121 DOAV comments EA Dec Draft.pdf

Categories: Filed by Newforma

Our comments, which are in addition to those provided by FAA, are provided on the attached PDF file. Please let me know if you have any questions on the comments or have trouble with the file.

Susan Simmers
Airport Services Division
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, VA 23250
804-236-3632, ext 105

Richmond Executive-Chesterfield County Airport (FCI)

Draft Environmental Assessment

DOAV Comment Responses

January 27, 2014

1. Page 1-6: For the benefit of other state agencies that will be reviewing this document, please indicate that DOAV also approved the forecast.

Response: Updated.

2. Page 1-12: The reference to the alternatives should be consistent, not mixed between letters and numbers.

Response: The letter reference to the “Achieve Standards” alternative has been removed.

3. Page 1-16: Shouldn't this be the RSA to match the 800-foot extension instead of the extension identified as ultimate in the ALP?

Response: This is correct. The word “ultimate” has been removed to reduce confusion

4. Page 1-16: Please identify the runway end for the lighting system.

Response: The runway end has been added to this sentence.

5. Page 1-17: Please provide a heading to separate this discussion from the improvements presented above.

Response: A heading has been provided here.

6. Page 1-20: The road relocation should be mentioned here first.

Response: This mention has been added in this section.

7. Page 1-20: Specify the runway end for the lighting system.

Response: The runway end has been added to this sentence.

8. Page 1-20: This discussion should indicate what is or isn't needed at the Runway 15 end in regard to land or easement acquisition.

Response: Specific figures have been added to this discussion.

9. Page 1-22: See previous comment on headings.

Response: A heading has been provided here.

10. Page 1-25: Consider the role of the advisory group and county board of supervisors in the selection process.

Response: A sentence has been added noting the involvement of the Steering Committee and the Advisory Board in the selection of the preferred alternative.

11. Page 1-31: In the paragraph above, a protected area for the airport is discussed. Wouldn't that remove the concern about land use?

Response: The concern discussed here is specifically regarding within the RPZ areas and involves fee simple ownership, not land use controls.

12. Page 1-33: Commonwealth.

Response: Updated.

13. Page 1-35: Please be consistent in presenting the conclusion, both in text and formatting (bold, etc), for each category.

Response: The responses for Air Quality, Coastal Zone, and Wetlands have been bolded.

14. Page 1-47: Something is missing in the second sentence.

Response: Corrected.

15. Page 1-49: Please correct this sentence.

Response: This word has been corrected.

16. Page 1-77: Please update this to show current management.

Response: The word "former" has been inserted before "Airport Manager" in this section.

Mary Ashburn Pearson

From: Marcus.Brundage@faa.gov
Sent: Monday, October 06, 2014 12:35 PM
To: Mary Ashburn Pearson; susan.simmers@doav.virginia.gov
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2
Attachments: Letter Brundage - 120613.pdf

Mary Ashburn:

1. Specifically to your response to #2, why not coordinate this effort directly with USACE per the potential impacts, prior to the JPA, to see if EPA would be involved and if so to what degree. Because this may in fact cause the NEPA to have to be reopened/further coordinated per any required analysis/mitigations. I thought the primary discussion regarding the wetlands/water quality impacts was because of the increased impacts not a reduction/avoidance. I'm confused because it appears from your response that there would be a reduction and hopefully the determination would be confirmed/determined that EPA does not need to be involved during the follow up coordination and not at the permitting stage.

2. Comments per #3 (CZMA):

A Master Plan for Chesterfield was completed in 2012. This should be consistently documented in this write up as well.

"The airfield infrastructure projects shown below constitute this Proposed Action. In addition, these projects are also included in the airport's five-year Airport Capital Improvement Program (ACIP) and on the approved 2011 Airport Layout Plan (ALP)."

In the CZMA FCC (excerpt below) it states that "The exact acreage for each of these impacts will not be known until final project design is complete." The survey/JD gives you a rough estimate of the impacts per the proposed projects. And then it states "In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE)". A preliminary engineering report was also done. I recommend you revisit this section and revise accordingly.

Please carefully review this FCC to ensure that it reflects what's in the body of the EA sections as well.

C. Wetlands Management – Some of the development activities in the Proposed Action at the Chesterfield County Airport (FCI) will involve impacts to non-tidal jurisdictional wetlands or waters of the United States under 33 CFR 328.3 (a) and will require a US Army Corps of Engineers (USACE) permit. The exact acreage for each of these impacts will not be known until final project design is complete. In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE) (Enclosure 2.)

3. SHPO Also per the section 106, please verify if there are any discrepancies with what was submitted to VDHR in the past with what is now (the APE/LOD). If there are any differences this will need to be addressed via a separate

submission to the SHPO, however if not then they can review it for further comment once the document is out for the 30 day public review period.

NOTE: My comment in #1 was just for clarity and caution but if you are comfortable, after addressing comments above, with the document for public review (to include all applicable Agencies) after I have reviewed the remaining responses to comments and if DOAV has no comments I will draft the letter to print and proceed with NOA.

Thanks,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [mailto:mapearson@deltairport.com]
Sent: Monday, October 06, 2014 10:57 AM
To: susan.simmers@doav.virginia.gov
Cc: Brundage, Marcus (FAA); 'Driscoll, Patrick'; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; Key, Rob
Subject: FW: 10086 Draft FCI EA- Updated for Review #2

Susan,

Please see the FAA comments, below, on the FCI draft Environmental Assessment, for your information. I will also send to you via Info Exchange the updated FCC for CZMA which is mentioned in the comment responses. It is being sent in a separate email due to file size.

Please let me know if you have questions or additional comments.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Mary Ashburn Pearson
Sent: Monday, September 29, 2014 4:09 PM
To: 'Marcus.Brundage@faa.gov'
Cc: 'Driscoll, Patrick'; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; Key, Rob
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Marcus,

Please see the responses to your three comments on the 5/13/14 draft EA, listed below:

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.

This update has been made; please see the attached, updated page.

2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?

Your recollection is correct; with the initial wetland impacts anticipated to be 23.5-acres to be filled/graded and 1,532-linear feet (LF) of stream impacts, the question of EPA involvement was discussed in a meeting with the wetland sub-consultant (Mill Creek) and the USACE regarding mitigation credits. The anticipated impacts has since been reduced to 11.3 acres of wetlands to be filled/graded and 11.9-acres to be cleared of obstructions (no grubbing or removal of stumps), and 0-LF of stream impacts. As a result of this significant reduction, we recommend follow-up coordination with USACE (which would occur during DEQ review) to confirm that its expectations to “minimize and avoid” impacts have been adequately met. The complete JPA will be submitted to USACE; it is our understanding that at that point, USACE would determine what, if any, involvement is required by EPA.

We will include all written communication (e-mails) regarding this issue and any correspondence between our sub consultant (Mill Creek) and the USACE regarding wetland impacts in the EA under Appendix C, Correspondence.

3. Also on the most recent draft submission (hard copy and CD), there were no Appendices (as I understand it is huge) provided for review so please be sure you go back and revise the Federal Consistency Certificate (FCC) for CZMA...the project description needs accurately reflect what's in the EA, The Introduction in the FCC needs to be revised and also revisit the 9 impact categories to ensure they are addressed properly per VDEQs requirements.

The FCC has been updated; because of file size, it is being sent to you in a separate e-mail.

NOTE: Once these comments and any other actions that I may have unintentionally overlooked, are properly addressed I will then draft the formal letter to proceed to print/NOA.

Per your request please see the attached, draft NOA to be published in local newspapers, for your review.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Monday, September 22, 2014 11:12 AM
To: Mary Ashburn Pearson; DriscollP@chesterfield.gov
Cc: Roy G. Lewis; Kimberly A. Marcia; keyr@chesterfield.gov; Douglas E. Sander
Subject: RE: Draft FCI EA- Updated for Review #2

Mary Ashburn:

The comments is for my review of 5/13/14 document (the latest revision).

Three (3) comments (3rd comment was on a separate email that followed):

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.
2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?
3. Also on the most recent draft submission (hard copy and CD), there were no Appendices (as I understand it is huge) provided for review so please be sure you go back and revise the Federal Consistency Certificate (FCC) for CZMA...the project description needs accurately reflect what's in the EA, The Introduction in the FCC needs to be revised and also revisit the 9 impact categories to ensure they are addressed properly per VDEQs requirements.

NOTE: Once these comments and any other actions that I may have unintentionally overlooked, are properly addressed I will then draft the formal letter to proceed to print/NOA.

Thank you,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [<mailto:mapearson@deltaairport.com>]
Sent: Monday, September 22, 2014 10:59 AM
To: Brundage, Marcus (FAA); DriscollP@chesterfield.gov
Cc: Roy G. Lewis; Kimberly A. Marcia; 'keyr@chesterfield.gov'; Douglas E. Sander
Subject: RE: Draft FCI EA- Updated for Review #2

Thank you Marcus for these comments. I noticed the attached version on your 09/19/14 email is from January 2014. We are looking for any comments you may have on the version that was submitted to you digitally on May 12, 2014 (followed by a hard copy at your request which was sent via UPS on 05/13/14).

In regard to your comment that a response to your 09/19/14 email is sufficient, do we understand correctly that once these two comments are addressed via email, the document is ready for submission to DEQ?

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Friday, September 19, 2014 9:19 AM

To: Mary Ashburn Pearson; DriscollP@chesterfield.gov

Cc: Roy G. Lewis

Subject: FW: Draft FCI EA- Updated for Review #2

Good morning Mary Ashburn:

I'm at the point of finalizing any comments per the draft document.

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.
2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?

A response to this email will be sufficient.

Thanks,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

Mary Ashburn Pearson

From: Marcus.Brundage@faa.gov
Sent: Monday, October 06, 2014 11:00 AM
To: Mary Ashburn Pearson
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Patrick/Mary Ashburn:

Specifically to your response to #2, why not coordinate this effort directly with USACE per the potential impacts, prior to the JPA, to see if EPA would be involved and if so to what degree. Because this may in fact cause the NEPA to have to be reopened/further coordinated per any required analysis/mitigations. I thought the primary discussion regarding the wetlands/water quality impacts was because of the increased impacts not a reduction/avoidance. I'm confused because it appears from your response that there would be a reduction and hopefully the determination would be confirmed/determined that EPA does not need to be involved during the follow up coordination and not at the permitting stage.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [mailto:mapearson@deltaairport.com]
Sent: Monday, September 29, 2014 4:09 PM
To: Brundage, Marcus (FAA)
Cc: 'Driscoll, Patrick'; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; Key, Rob
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Marcus,

Please see the responses to your three comments on the 5/13/14 draft EA, listed below:

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.

This update has been made; please see the attached, updated page.

2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?

Your recollection is correct; with the initial wetland impacts anticipated to be 23.5-acres to be filled/graded and 1,532-linear feet (LF) of stream impacts, the question of EPA involvement was discussed in a meeting with the

wetland sub-consultant (Mill Creek) and the USACE regarding mitigation credits. The anticipated impacts has since been reduced to 11.3 acres of wetlands to be filled/graded and 11.9-acres to be cleared of obstructions (no grubbing or removal of stumps), and 0-LF of stream impacts. As a result of this significant reduction, we recommend follow-up coordination with USACE (which would occur during DEQ review) to confirm that its expectations to “minimize and avoid” impacts have been adequately met. The complete JPA will be submitted to USACE; it is our understanding that at that point, USACE would determine what, if any, involvement is required by EPA.

We will include all written communication (e-mails) regarding this issue and any correspondence between our sub consultant (Mill Creek) and the USACE regarding wetland impacts in the EA under Appendix C, Correspondence.

3. Also on the most recent draft submission (hard copy and CD), there were no Appendices (as I understand it is huge) provided for review so please be sure you go back and revise the Federal Consistency Certificate (FCC) for CZMA...the project description needs accurately reflect what's in the EA, The Introduction in the FCC needs to be revised and also revisit the 9 impact categories to ensure they are addressed properly per VDEQs requirements.

The FCC has been updated; because of file size, it is being sent to you in a separate e-mail.

NOTE: Once these comments and any other actions that I may have unintentionally overlooked, are properly addressed I will then draft the formal letter to proceed to print/NOA.

Per your request please see the attached, draft NOA to be published in local newspapers, for your review.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Monday, September 22, 2014 11:12 AM
To: Mary Ashburn Pearson; DriscollP@chesterfield.gov
Cc: Roy G. Lewis; Kimberly A. Marcia; keyr@chesterfield.gov; Douglas E. Sander
Subject: RE: Draft FCI EA- Updated for Review #2

Mary Ashburn:

The comments is for my review of 5/13/14 document (the latest revision).

Three (3) comments (3rd comment was on a separate email that followed):

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.
2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?
3. Also on the most recent draft submission (hard copy and CD), there were no Appendices (as I understand it is huge) provided for review so please be sure you go back and revise the Federal Consistency Certificate (FCC) for CZMA...the

project description needs accurately reflect what's in the EA, The Introduction in the FCC needs to be revised and also revisit the 9 impact categories to ensure they are addressed properly per VDEQs requirements.

NOTE: Once these comments and any other actions that I may have unintentionally overlooked, are properly addressed I will then draft the formal letter to proceed to print/NOA.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [<mailto:mapearson@deltaairport.com>]
Sent: Monday, September 22, 2014 10:59 AM
To: Brundage, Marcus (FAA); DriscollP@chesterfield.gov
Cc: Roy G. Lewis; Kimberly A. Marcia; 'keyr@chesterfield.gov'; Douglas E. Sander
Subject: RE: Draft FCI EA- Updated for Review #2

Thank you Marcus for these comments. I noticed the attached version on your 09/19/14 email is from January 2014. We are looking for any comments you may have on the version that was submitted to you digitally on May 12, 2014 (followed by a hard copy at your request which was sent via UPS on 05/13/14).

In regard to your comment that a response to your 09/19/14 email is sufficient, do we understand correctly that once these two comments are addressed via email, the document is ready for submission to DEQ?

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Friday, September 19, 2014 9:19 AM
To: Mary Ashburn Pearson; DriscollP@chesterfield.gov
Cc: Roy G. Lewis
Subject: FW: Draft FCI EA- Updated for Review #2

Good morning Mary Ashburn:

I'm at the point of finalizing any comments per the draft document.

1. On page 1-81 IX) List of Agencies and Persons Consulted, the Federal Aviation Administration please delete the 2013 RPA/RMA discussion as this can be misleading...actually this office discuss the entire draft document. Again indented

under the Federal Aviation Administration just list the Washington Airports District Office and delete the 2013 RPA/RMA discussion.

2. I recall having a conversation with Roy that the USEPA needs to be involved/contacted with the proposed project due to the wetlands impact/water quality. What was/is the result of those conversations if any?

A response to this email will be sufficient.

Thanks,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Marcus Brundage [<mailto:Marcus.Brundage@faa.gov>]
Sent: Friday, January 10, 2014 3:05 PM
To: Mary Ashburn Pearson; "Dane, Charles"
Cc: "Roy G. Lewis"; "Simmers, Susan H."; Kyle Allison; Jeffrey Breeden; "Wilkinson, Jeremy"
Subject: Draft FCI EA- Updated for Review #2

Good afternoon Mr. Dane:

Please see attachment for letter and draft EA (w/comments). Please print for your files.

NOTE: Please carefully review the entire document, including all supplemental documentation, in the event the FAA may have overlooked some things unintentionally.

Thank you,

NOTE: Wetlands in Appx A & H, please combine. Also please make sure the TOC is accurate and the correct Appx reflect what's in the content of the document. Please go back and revise the Federal Consistency Certificate (FCC) for CZMA...the project description needs accurately reflect what's in the EA, The Introduction in the FCC needs to be revised and also revisit the 9 impact categories to ensure they are addressed properly.

Please review the entire supportive documentation (Appendices) to assure it's accuracy.

Thank you,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"



FCI Draft EA with Comments #2.docx



FCI Draft EA-5yr Development review-comment ltr2-10Jan14.pdf

Mary Ashburn Pearson ---01/09/2014 11:26:41 AM---Here you are Marcus. Please let me know if you need anything else. Thank you,

From: Mary Ashburn Pearson <mapearson@deltaairport.com>
To: Marcus Brundage/AEA/FAA@FAA
Cc: "Roy G. Lewis" <RLewis@deltaairport.com>
Date: 01/09/2014 11:26 AM
Subject: RE: draft FCI EA- Updated for Review

Here you are Marcus. Please let me know if you need anything else.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAairport.com



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Thursday, January 09, 2014 11:16 AM
To: Mary Ashburn Pearson
Cc: Roy G. Lewis
Subject: Re: draft FCI EA- Updated for Review

Good morning Mary AP:

Please send me a word doc version of the document (see attachment) with the revisions made on it to me via email. I have finished reviewing the revised document and still have some comments. I will try and have this back to the Sponsor/you by no later than tomorrow, provided "nothing" happens to interfere with the plans.

Thank you,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370

marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson <mapearson@deltaairport.com>
To: Marcus Brundage/AEA/FAA@FAA
Cc: "'danec@chesterfield.gov'" <danec@chesterfield.gov>, "Roy G. Lewis" <RLewis@deltaairport.com>, "Douglas E. Sander" <dsander@deltaairport.com>, "Simmers, Susan H. (DOAV)" <susan.simmers@doav.virginia.gov>, "Bryan O. Elliott" <BElliott@deltaairport.com>, "Amanda B. Chilson" <AChilson@deltaairport.com>
Date: 12/27/2013 05:21 PM
Subject: draft FCIEA- Updated for Review

Marcus,

Please see the attached, updated draft Environmental Assessment for FCI, with the FAA comments received on December 11 incorporated. In addition, I am attaching the FAA comment response sheet; and, the new Appendix M, Air Emissions Analysis. As per your request, I have highlighted all changes made as a result of FAA and DOAV comments.

I am sending these updates on behalf of Chesterfield County at the request of Charlie Dane.

Please let me know if you need anything else to facilitate your review. I will be in the office every day next week.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
Delta Airport Consultants
direct phone: (804) 955-4556

[attachment "EA_draft_FCI_FAA_and_DOAV_comments_122713.pdf" deleted by Marcus Brundage/AEA/FAA]
[attachment "10086 FAA Comment Responses.pdf" deleted by Marcus Brundage/AEA/FAA] [attachment "Appendix M Emissions Results.pdf" deleted by Marcus Brundage/AEA/FAA] [attachment "10086_EA_draft_FCI_FAA_and_DOAV_comments_121113 - Copy.docx" deleted by Marcus Brundage/AEA/FAA]

Mary Ashburn Pearson

From: Mary Ashburn Pearson
Sent: Tuesday, October 07, 2014 3:07 PM
To: 'Marcus.Brundage@faa.gov'
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2
Attachments: Pages from 10086 FCI Mill Creek FCZC FCI Updated.pdf

Marcus,

Please see the responses to your 10/06/14 comments in red, below, and the portion of the updated FCC for CZMA, attached.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAAIRPORT.COM



From: Marcus.Brundage@faa.gov [mailto:Marcus.Brundage@faa.gov]
Sent: Monday, October 06, 2014 12:35 PM
To: Mary Ashburn Pearson; susan.simmers@doav.virginia.gov
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Mary Ashburn:

1. Specifically to your response to #2, why not coordinate this effort directly with USACE per the potential impacts, prior to the JPA, to see if EPA would be involved and if so to what degree. Because this may in fact cause the NEPA to have to be reopened/further coordinated per any required analysis/mitigations. I thought the primary discussion regarding the wetlands/water quality impacts was because of the increased impacts not a reduction/avoidance. I'm confused because it appears from your response that there would be a reduction and hopefully the determination would be confirmed/determined that EPA does not need to be involved during the follow up coordination and not at the permitting stage.

Our sub consultant, Mill Creek, has been in contact with the Corps throughout this effort. It is the understanding of Mill Creek that the EPA will not have a clear view of the project impacts until the JPA with its alternatives analysis and compensatory mitigation plan are submitted. The Corps and DEQ currently do not have an accurate estimate of impacts for the project. Nor have they seen an adequate alternatives analysis or compensatory mitigation plan. Our recommendation is to submit the JPA with the required documentation which will begin the dialogue with the agencies.

2. Comments per #3 (CZMA):

A Master Plan for Chesterfield was completed in 2012. This should be consistently documented in this write up as well.

“The airfield infrastructure projects shown below constitute this Proposed Action. In addition, these projects are also included in the airport’s five-year. Airport Capital Improvement Program (ACIP) and on the approved 2011 Airport Layout Plan (ALP).”

In the CZMA FCC (excerpt below) it states that “The exact acreage for each of these impacts will not be known until final project design is complete.” The survey/JD gives you a rough estimate of the impacts per the proposed projects. And then it states “In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE)”. A preliminary engineering report was also done. I recommend you revisit this section and revise accordingly.

Please carefully review this FCC to ensure that it reflects what’s in the body of the EA sections as well.

The appropriate portion of the CZMA text has been updated to reflect these comments (please see attached).

C. Wetlands Management – Some of the development activities in the Proposed Action at the Chesterfield County Airport (FCI) will involve impacts to non-tidal jurisdictional wetlands or waters of the United States under 33 CFR 328.3 (a) and will require a US Army Corps of Engineers (USACE) permit. The exact acreage for each of these impacts will not be known until final project design is complete. In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE) (Enclosure 2.)

3. SHPO Also per the section 106, please verify if there are any discrepancies with what was submitted to VDHR in the past with what is now (the APE/LOD). If there are any differences this will need to be addressed via a separate submission to the SHPO, however if not then they can review it for further comment once the document is out for the 30 day public review period.

The APE/LOD has not changed since the Phase 1 cultural resources survey was conducted in September 2013 (and subsequent submittal to DHR). The APE was expanded in spring 2013 to include additional areas of tree removal along State Route 288. The September 2013 Phase 1 study included these areas.

NOTE: My comment in #1 was just for clarity and caution but if you are comfortable, after addressing comments above, with the document for public review (to include all applicable Agencies) after I have reviewed the remaining responses to comments and if DOAV has no comments I will draft the letter to print and proceed with NOA.

Thanks,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

Mary Ashburn Pearson

From: Marcus.Brundage@faa.gov
Sent: Wednesday, October 08, 2014 8:22 AM
To: Mary Ashburn Pearson
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2
Attachments: Pages from 10086 FCI Mill Creek FCZC FCI Updated.pdf

Mary Ashburn:

Please be sure the revised language in C. **Wetlands Management** of the attachment is reflected throughout the EA in the appropriate sections. Also if a wetland survey/JD has been established and the Sponsor has a Proposed/preferred project and Alternatives that are studied/analyzed via the EA process (and in this preliminary engineering report) then the information in C. **Wetlands Management (and in wetland and water quality section of environmental consequences in EA)** should be enough to present to USACE and/or EPA to determine if there is a “threshold” when the EPA should weigh at this stage of the process.

I’m only bring this up because I would hate for this to come up later in the process to either shift the direction of this effort and/or prolong it when this could be resolved now or at least have a clearer path to follow. But taking all this in mind, to include the excerpt below, if you believe what you have is enough to “go to print” (proceed with the NOA for the 30 day public review) please advise and I will draft the letter.

NOTE: During the drafting of this email Roy Lewis and I chatted via telephone and he will also further relay what he and I discussed.

EXCERPT:

**** (Page 4-14 of FAA Order 1050.1E)**

(3) The FONSI shall present any measures that must be taken to mitigate adverse impacts on the environment and which are a condition of project approval (see paragraph 406e). The FONSI should also reflect coordination of proposed mitigation commitments with, and consent and commitment from, those with the authority to implement specific mitigation measures committed to in the FONSI.

(4) The FONSI shall reflect compliance with all applicable environmental laws and requirements, including interagency and intergovernmental coordination and consultation, public involvement, and documentation requirements (see paragraph 403 and Appendix A). Findings and determinations required under special purpose environmental laws, regulations, and executive orders, if not made in the EA, must be included in the FONSI, which may be combined with a decision document, sometimes called a Record of Decision or FONSI/ROD.

18.2a. Early review of proposed actions will be conducted with agencies with special interest in wetlands. Such agencies include State and local natural resource and wildlife agencies, the FWS, the NMFS, the Coast Guard, the Army Corps of Engineers, the Department of Agriculture Wildlife Service, and EPA, as appropriate. This review may be combined as much as possible with the State and local officials. Specific consultation is required under the Fish and Wildlife Coordination Act with the FWS and the State agency having administration over the wildlife resources.

18.2b. If the action requires an EA, but it would not affect wetlands, the EA should contain a

statement to that effect. In that case, no wetland impact analysis is needed.

18.2c. If there is uncertainty about whether an area is a wetland, the local district office of the Army Corps of Engineers or a wetland delineation specialist must be contacted for a delineation determination (or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS) to delineate wetlands on agricultural lands). The EA includes information on the location, types, and extent of wetland areas that might be affected by the proposed action. This information can be obtained from the FWS or State or local natural resource agencies.

18.2d. If the action would affect wetlands and there is a practicable alternative that avoids the wetland, this alternative becomes the environmentally preferred alternative, provided there are no other overriding environmental impacts. The EA should state that the original project would have affected wetlands, but selection of the practicable alternative enabled the project proponent to avoid the wetlands.

18.2e. If the action would affect wetlands and there is no practicable alternative, all practical means should be employed to minimize the wetland impacts due to runoff, construction, sedimentation, land use, or other reason. The EA or EIS must contain a description of proposed mitigations, with the understanding that a detailed mitigation plan must be developed to the satisfaction of the 404 permitting agency in consultation with those agencies having an interest in the affected wetland.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [mailto:mapearson@deltairport.com]
Sent: Tuesday, October 07, 2014 3:07 PM
To: Brundage, Marcus (FAA)
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Marcus,

Please see the responses to your 10/06/14 comments in red, below, and the portion of the updated FCC for CZMA, attached.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Monday, October 06, 2014 12:35 PM
To: Mary Ashburn Pearson; susan.simmers@doav.virginia.gov
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Mary Ashburn:

1. Specifically to your response to #2, why not coordinate this effort directly with USACE per the potential impacts, prior to the JPA, to see if EPA would be involved and if so to what degree. Because this may in fact cause the NEPA to have to be reopened/further coordinated per any required analysis/mitigations. I thought the primary discussion regarding the wetlands/water quality impacts was because of the increased impacts not a reduction/avoidance. I'm confused because it appears from your response that there would be a reduction and hopefully the determination would be confirmed/determined that EPA does not need to be involved during the follow up coordination and not at the permitting stage.

Our sub consultant, Mill Creek, has been in contact with the Corps throughout this effort. It is the understanding of Mill Creek that the EPA will not have a clear view of the project impacts until the JPA with its alternatives analysis and compensatory mitigation plan are submitted. The Corps and DEQ currently do not have an accurate estimate of impacts for the project. Nor have they seen an adequate alternatives analysis or compensatory mitigation plan. Our recommendation is to submit the JPA with the required documentation which will begin the dialogue with the agencies.

2. Comments per #3 (CZMA):

A Master Plan for Chesterfield was completed in 2012. This should be consistently documented in this write up as well.

"The airfield infrastructure projects shown below constitute this Proposed Action. In addition, these projects are also included in the airport's five-year Airport Capital Improvement Program (ACIP) and on the approved 2011 Airport Layout Plan (ALP)."

In the CZMA FCC (excerpt below) it states that "The exact acreage for each of these impacts will not be known until final project design is complete." The survey/JD gives you a rough estimate of the impacts per the proposed projects. And then it states "In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE)". A preliminary engineering report was also done. I recommend you revisit this section and revise accordingly.

Please carefully review this FCC to ensure that it reflects what's in the body of the EA sections as well.

The appropriate portion of the CZMA text has been updated to reflect these comments (please see attached).

C. Wetlands Management – Some of the development activities in the Proposed Action at the Chesterfield County Airport (FCI) will involve impacts to non-tidal jurisdictional wetlands or waters of the United States under 33 CFR 328.3 (a) and will require a US Army Corps of Engineers (USACE) permit. The exact acreage

for each of these impacts will not be known until final project design is complete. In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE) (Enclosure 2.)

3. SHPO Also per the section 106, please verify if there are any discrepancies with what was submitted to VDHR in the past with what is now (the APE/LOD). If there are any differences this will need to be addressed via a separate submission to the SHPO, however if not then they can review it for further comment once the document is out for the 30 day public review period.

The APE/LOD has not changed since the Phase 1 cultural resources survey was conducted in September 2013 (and subsequent submittal to DHR). The APE was expanded in spring 2013 to include additional areas of tree removal along State Route 288. The September 2013 Phase 1 study included these areas.

NOTE: My comment in #1 was just for clarity and caution but if you are comfortable, after addressing comments above, with the document for public review (to include all applicable Agencies) after I have reviewed the remaining responses to comments and if DOAV has no comments I will draft the letter to print and proceed with NOA.

Thanks,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

Mary Ashburn Pearson

From: Mary Ashburn Pearson
Sent: Monday, October 13, 2014 2:58 PM
To: 'Marcus.Brundage@faa.gov'
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2
Attachments: 10086 draft NOA_County.docx

Marcus,

Our sub consultant, Mill Creek, has spoken directly with Sylvia Gazzera of USACE, who recommends that a pre-application meeting be held during the permitting process in the Design phase. This of course will be after the EA, but prior to submittal of the JPA. She confirms that the USACE can only make a determination after reviewing the completed application, which can only occur after 90% Design.

Because of the amount of wetland impacts, Sylvia assumes that EPA will want to comment during the permitting process. Once the JPA is submitted, all other agencies will have an opportunity for review and comment as well.

Given the feedback from the USACE, Delta is advising by this email on behalf of Chesterfield County, and at the request of Mr. Rob Key, Director of General Services, that we are ready to “go to print” and proceed with submission of the draft E.A. for DEQ review. I have attached the draft NOA for your review.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [mailto:Marcus.Brundage@faa.gov]
Sent: Wednesday, October 08, 2014 8:22 AM
To: Mary Ashburn Pearson
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Mary Ashburn:

Please be sure the revised language in C. **Wetlands Management** of the attachment is reflected throughout the EA in the appropriate sections. Also if a wetland survey/JD has been established and the Sponsor has a Proposed/preferred project and Alternatives that are studied/analyzed via the EA process (and in this preliminary engineering report) then the information in C. **Wetlands Management (and in wetland and water quality section of environmental consequences in EA)** should be enough to present to USACE and/or EPA to determine if there is a “threshold” when the EPA should weigh at this stage of the process.

I’m only bring this up because I would hate for this to come up later in the process to either shift the direction of this effort and/or prolong it when this could be resolved now or at least have a clearer path to follow. But taking all this in

mind, to include the excerpt below, if you believe what you have is enough to “go to print” (proceed with the NOA for the 30 day public review) please advise and I will draft the letter.

NOTE: During the drafting of this email Roy Lewis and I chatted via telephone and he will also further relay what he and I discussed.

EXCERPT:

**** (Page 4-14 of FAA Order 1050.1E)**

(3) The FONSI shall present any measures that must be taken to mitigate adverse impacts on the environment and which are a condition of project approval (see paragraph 406e). The FONSI should also reflect coordination of proposed mitigation commitments with, and consent and commitment from, those with the authority to implement specific mitigation measures committed to in the FONSI.

(4) The FONSI shall reflect compliance with all applicable environmental laws and requirements, including interagency and intergovernmental coordination and consultation, public involvement, and documentation requirements (see paragraph 403 and Appendix A). Findings and determinations required under special purpose environmental laws, regulations, and executive orders, if not made in the EA, must be included in the FONSI, which may be combined with a decision document, sometimes called a Record of Decision or FONSI/ROD.

18.2a. Early review of proposed actions will be conducted with agencies with special interest in wetlands. Such agencies include State and local natural resource and wildlife agencies, the FWS, the NMFS, the Coast Guard, the Army Corps of Engineers, the Department of Agriculture Wildlife Service, and EPA, as appropriate. This review may be combined as much as possible with the State and local officials. Specific consultation is required under the Fish and Wildlife Coordination Act with the FWS and the State agency having administration over the wildlife resources.

18.2b. If the action requires an EA, but it would not affect wetlands, the EA should contain a statement to that effect. In that case, no wetland impact analysis is needed.

18.2c. If there is uncertainty about whether an area is a wetland, the local district office of the Army Corps of Engineers or a wetland delineation specialist must be contacted for a delineation determination (or the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS) to delineate wetlands on agricultural lands). The EA includes information on the location, types, and extent of wetland areas that might be affected by the proposed action. This information can be obtained from the FWS or State or local natural resource agencies.

18.2d. If the action would affect wetlands and there is a practicable alternative that avoids the wetland, this alternative becomes the environmentally preferred alternative, provided there are no other overriding environmental impacts. The EA should state that the original project would have affected wetlands, but selection of the practicable alternative enabled the project proponent to avoid the wetlands.

18.2e. If the action would affect wetlands and there is no practicable alternative, all practical means should be employed to minimize the wetland impacts due to runoff, construction, sedimentation, land use, or other reason. The EA or EIS must contain a description of proposed mitigations, with the

understanding that a detailed mitigation plan must be developed to the satisfaction of the 404 permitting agency in consultation with those agencies having an interest in the affected wetland.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: Mary Ashburn Pearson [<mailto:mapearson@deltairport.com>]
Sent: Tuesday, October 07, 2014 3:07 PM
To: Brundage, Marcus (FAA)
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov; susan.simmers@doav.virginia.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Marcus,

Please see the responses to your 10/06/14 comments in red, below, and the portion of the updated FCC for CZMA, attached.

Thank you,

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Marcus.Brundage@faa.gov [<mailto:Marcus.Brundage@faa.gov>]
Sent: Monday, October 06, 2014 12:35 PM
To: Mary Ashburn Pearson; susan.simmers@doav.virginia.gov
Cc: DriscollP@chesterfield.gov; Roy G. Lewis; Kimberly A. Marcia; Douglas E. Sander; KeyR@chesterfield.gov
Subject: RE: 10086 Draft FCI EA- Updated for Review #2

Mary Ashburn:

1. Specifically to your response to #2, why not coordinate this effort directly with USACE per the potential impacts, prior to the JPA, to see if EPA would be involved and if so to what degree. Because this may in fact cause the NEPA to have to be reopened/further coordinated per any required analysis/mitigations. I thought the primary discussion regarding the wetlands/water quality impacts was because of the increased impacts not a reduction/avoidance. I'm confused because it appears from your response that there would be a reduction and hopefully the determination would be confirmed/determined that EPA does not need to be involved during the follow up coordination and not at the permitting stage.

Our sub consultant, Mill Creek, has been in contact with the Corps throughout this effort. It is the understanding of Mill Creek that the EPA will not have a clear view of the project impacts until the JPA with its alternatives analysis and compensatory mitigation plan are submitted. The Corps and DEQ currently do not have an accurate estimate of impacts for the project. Nor have they seen an adequate alternatives analysis or compensatory mitigation plan. Our recommendation is to submit the JPA with the required documentation which will begin the dialogue with the agencies.

2. Comments per #3 (CZMA):

A Master Plan for Chesterfield was completed in 2012. This should be consistently documented in this write up as well.

“The airfield infrastructure projects shown below constitute this Proposed Action. In addition, these projects are also included in the airport’s five-year. Airport Capital Improvement Program (ACIP) and on the approved 2011 Airport Layout Plan (ALP).”

In the CZMA FCC (excerpt below) it states that “The exact acreage for each of these impacts will not be known until final project design is complete.” The survey/JD gives you a rough estimate of the impacts per the proposed projects. And then it states “In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE)”. A preliminary engineering report was also done. I recommend you revisit this section and revise accordingly.

Please carefully review this FCC to ensure that it reflects what’s in the body of the EA sections as well.

The appropriate portion of the CZMA text has been updated to reflect these comments (please see attached).

C. Wetlands Management – Some of the development activities in the Proposed Action at the Chesterfield County Airport (FCI) will involve impacts to non-tidal jurisdictional wetlands or waters of the United States under 33 CFR 328.3 (a) and will require a US Army Corps of Engineers (USACE) permit. The exact acreage for each of these impacts will not be known until final project design is complete. In order to determine the exact location of these wetlands and avoid or minimize project impacts, several wetlands delineations have been conducted both on and off airport property, and a jurisdictional determination (JD) for each of these delineations obtained from the Norfolk District, US Army Corps of Engineers (USACE) (Enclosure 2.)

3. SHPO Also per the section 106, please verify if there are any discrepancies with what was submitted to VDHR in the past with what is now (the APE/LOD). If there are any differences this will need to be addressed via a separate submission to the SHPO, however if not then they can review it for further comment once the document is out for the 30 day public review period.

The APE/LOD has not changed since the Phase 1 cultural resources survey was conducted in September 2013 (and subsequent submittal to DHR). The APE was expanded in spring 2013 to include additional areas of tree removal along State Route 288. The September 2013 Phase 1 study included these areas.

NOTE: My comment in #1 was just for clarity and caution but if you are comfortable, after addressing comments above, with the document for public review (to include all applicable Agencies) after I have reviewed the remaining responses to comments and if DOAV has no comments I will draft the letter to print and proceed with NOA.

Thanks,

Marcus Brundage,REM,CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

Mary Ashburn Pearson

From: Marcus.Brundage@faa.gov
Sent: Tuesday, August 06, 2013 10:12 AM
To: Roy G. Lewis
Cc: Amanda B. Chilson; Bryan O. Elliott; Dane, Charles; Douglas E. Sander; Simmers, Susan H. (DOAV); Trudeau, Thomas; Kyle.Allison@faa.gov
Subject: RE: FCI EA - Preliminary Design Engineering Report & Conceptual Wetland Mitigation Plan
Categories: Filed by Newforma

Good morning Roy:

I can be available early afternoon on the dates listed via telcon. Have USACE, the State, County, etc, confirmed availability yet?

Thanks,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: "Roy G. Lewis" <RLewis@deltaairport.com>
To: Marcus Brundage/AEA/FAA@FAA, "Simmers, Susan H. (DOAV)" <susan.simmers@doav.virginia.gov>
Cc: "Trudeau, Thomas" <TrudeauT@chesterfield.gov>, "Dane, Charles" <DaneC@chesterfield.gov>, "Douglas E. Sander" <dsander@deltaairport.com>, "Bryan O. Elliott" <BElliott@deltaairport.com>, "Amanda B. Chilson" <ACHilson@deltaairport.com>
Date: 08/05/2013 06:24 PM
Subject: RE: FCI EA - Preliminary Design Engineering Report & Conceptual Wetland Mitigation Plan

Marcus / Susan,

During an EA project progress conference call last week, the County asked that Delta coordinate a meeting with the agencies in early September to discuss the Preliminary Design Report and plans for the conceptual mitigation of identified wetland and stream impacts.

Please advise if you have available dates September 3-6 that would be convenient to meet in Richmond? Of course, the option to join the meeting via conference call is always available as well.

Thank you,
Roy

Roy G. Lewis, A.A.E.
VP - Director of Planning
Delta Airport Consultants, Inc.

From: Roy G. Lewis
Sent: Tuesday, August 06, 2013 8:18 AM
To: Douglas E. Sander
Subject: FW: Chesterfield Airport Master Plan /ALP Consistency Certification

Please review and call to discuss. thx

Roy G. Lewis, A.A.E.
VP - Director of Planning
Delta Airport Consultants, Inc.
Office - 704.521.9101

From: millcreekenvironment@comcast.net [<mailto:millcreekenvironment@comcast.net>]
Sent: Tuesday, August 06, 2013 7:47 AM
To: Roy G. Lewis
Subject: Fwd: Chesterfield Airport Master Plan /ALP Consistency Certification

Roy:

The forward below is an email that I received from John Fisher of DEQ's Office of Environmental Impact Review reference the CZCC document which was submitted to the Department for coordination. Prior to submission of the document I had held a phone conversation with John reference the purpose of the certification which I thought was to serve as an appendix to the EA. Based on his comment in this email it should be submitted separately with the NEPA document for the proposal.

The basic supporting documentation for the FCC is some form of preliminary design for the runway extension with supporting taxiways, the total area (acreage) to be timber harvested and the locations as well as the recommended method of clearing, the area of RPA to be left adjacent to the three (3) perennial streams in the airport property, etc..

When these calculations are completed, I can plug that data into the appropriate area of the CZCC. Also I assume this is being provided to the Department of Aviation at some time prior to publication of the EA.

If you have questions or comments about the DEQ email or the CZCC document previously submitted, please contact our office.

Thanks.

Bob

Robert A. Neely
President
Mill Creek Environmental Consultants, Ltd.
3940 Palmer Road
Massanutten, VA 22840

540-289-6735 Phone
757-272-6741 cell

From: "John Fisher (DEQ)" <John.Fisher@deq.virginia.gov>
To: millcreekenvironment@comcast.net

Sent: Thursday, August 1, 2013 1:49:32 PM

Subject: Chesterfield Airport Master Plan /ALP Consistency Certification

Bob:

After reviewing the Federal Consistency Certification submitted for the Chesterfield Airport Master Plan/Airport Layout Plan Update Projects, in accordance with 15 CFR 930, Subpart D, Section 930.60(a)(2), it has been determined that there is insufficient information in the document to begin the Commonwealth's coordinated review under the Coastal Zone Management Act Federal Consistency Regulations. At this time, in the absence of preliminary site planning and supporting information, data, mapping and analysis, it is not possible to accurately determine the nature and extent of potential impacts of the upgrades to the enforceable policies of the VCP (e.g. wetlands impacts, subaqueous lands impacts, CBPA impacts, etc.). In addition, the Department of Aviation has indicated that the Master Plan/Airport Layout Plan update is not sufficiently developed at this time to initiate a consistency review, based on recent discussions the agency has had with the primary consultant on the project. Accordingly, once sufficient information has been developed for the Master Plan/Airport Layout Plan Update please resubmit the FCC for the State's review and concurrence. In addition, we encourage the applicant to submit the FCC together with the NEPA document for the proposal. Let me know if you have any questions.

John

John E. Fisher
Virginia Department of Environmental Quality
Division of Environmental Enhancement
Office of Environmental Impact Review
629 East Main Street, #634
Richmond, Virginia 23219
(804) 698-4339
(804) 698-4319 fax
john.fisher@deq.virginia.gov
www.deq.virginia.gov

Mary Ashburn Pearson

From: Mary Ashburn Pearson
Sent: Wednesday, October 15, 2014 4:48 PM
To: Mary Ashburn Pearson
Subject: RE: Chesterfield County Airport (FCI) potential permitting issues

Mary Ashburn Pearson, AICP
Project Manager
DELTA AIRPORT CONSULTANTS, INC.
9711 FARRAR COURT, SUITE 100, RICHMOND, VIRGINIA, 23236
P. 804.955.4556 F. 804.275.8371 WWW.DELTAIRPORT.COM



From: Mary Ashburn Pearson
Sent: Wednesday, October 15, 2014 4:48 PM
To: 'Mary Ashburn Pearson'
Subject: FW: Chesterfield County Airport (FCI) potential permitting issues

Begin forwarded message:

From: "Gazzera, Silvia B NAO" <Silvia.B.Gazzera@usace.army.mil>
Date: October 8, 2014 at 12:46:46 PM EDT
To: "millcreekenvironment@comcast.net" <millcreekenvironment@comcast.net>
Subject: RE: Chesterfield County Airport (FCI) potential permitting issues

Hello Matt,

Thank you for contacting me regarding this project. As I indicated to you on the phone, because of the acreage of proposed impacts, I strongly recommend that we meet with you and your client prior to submittal of the JPA. A pre-application meeting is generally recommended mostly for projects proposing a large acreage of wetland impacts.

Because the project will be public noticed, the public as well as EPA are invited to comment. Based on my experience, EPA will likely comments on a project such this, proposing a large acreage of wetland impacts.

In the application review process, the Corps will determine, based among other things information provided by the applicant, if the proposed project, is the least environmentally practicable alternative and if wetland impacts have been avoided to the maximum extent practicable. We can only make that determination after reviewing the application and completing the public interest review.

Please contact me with any additional questions.

Sincerely,

Silvia. B. Gazzera, Ph.D.
Environmental Scientist
U.S. Army Corps of Engineers
9100 Arboretum Parkway, Suite 235
Richmond Virginia 23236
(804) 212-6817 (cell)
<http://www.nao.usace.army.mil/>

The Norfolk District is committed to providing the highest level of support to the public. In order for us to better serve you, we would appreciate you completing our Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. We value your comments and appreciate your taking the time to complete the survey.

Please consider the environment before printing this e-mail.



**DELTA AIRPORT
CONSULTANTS, INC.**

April 14, 2014

Mr. Charles Dane
Deputy Director, General Services
PO Box 40
6751 Minns Loop
Chesterfield, VA 23832

Subject: VDOT Right-of-Way Clearing Meeting
Runway 33 Obstruction Removal
Richmond Executive – Chesterfield County Airport

Dear Mr. Dane:

A meeting for the referenced project was held to discuss the proposed wetland clearing within the VDOT right-of-way on March 20, 2014. Attached are the meeting notes and an updated clearing exhibit.

If you should have any other questions concerning this matter, please do not hesitate to contact our office.

Sincerely,

Douglas E. Sander, P.E.

Enclosure:

1. Meeting Notes
2. Clearing Limits Exhibit

c: Paul Bodie, VDOT
Jeremy Wilkinson, FCI

w/encl.
w/encl.

10086 VDOT Meeting Notes

MEETING NOTES

VDOT Right-of-Way Tree Removal

Richmond Executive - Chesterfield County Airport
Richmond, VA

Airport Terminal Conference Room
3/20/14, 10:00 AM

Attendees:

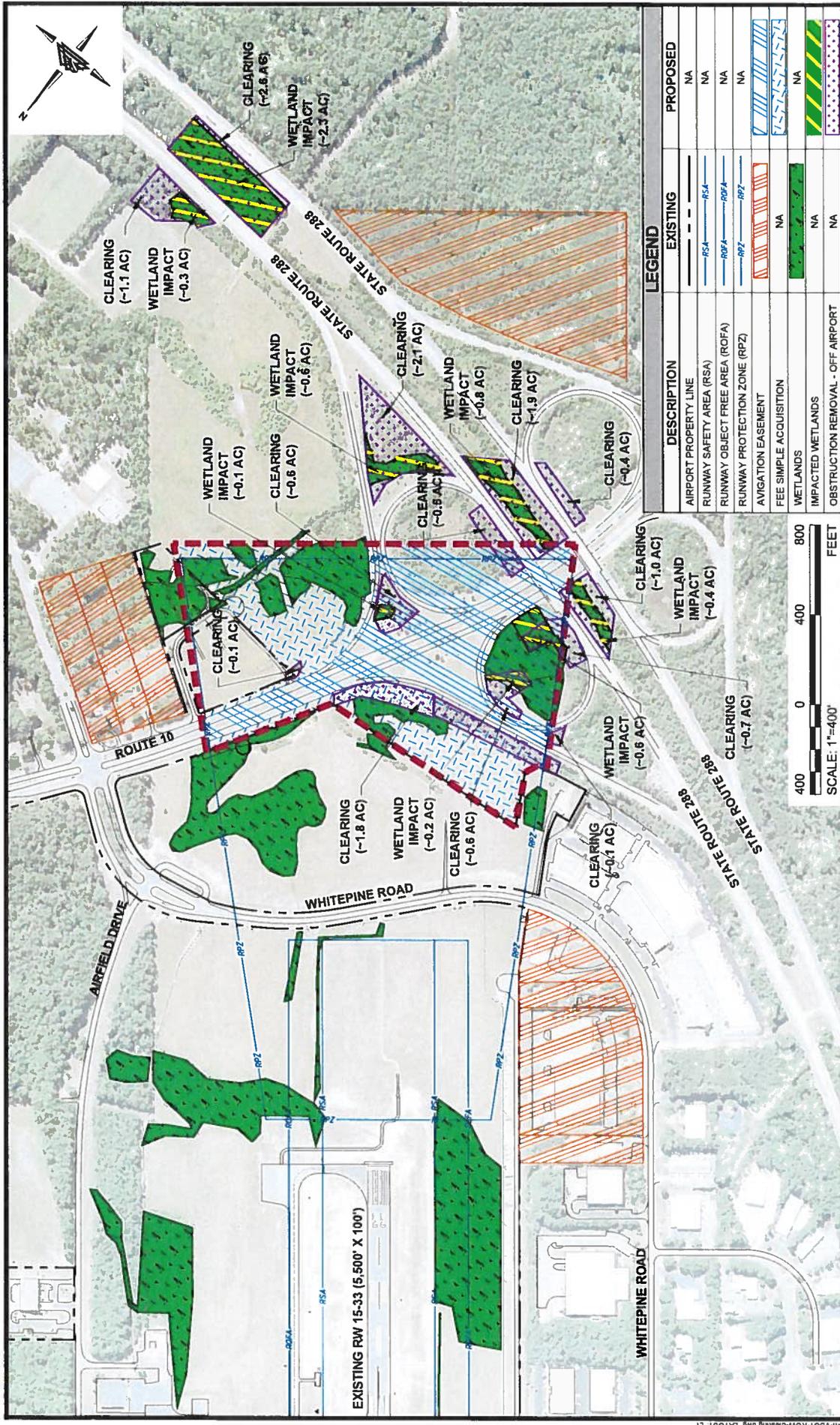
Charles Dane: Deputy Director, General Services
Jeremy Wilkinson: Facilities Maintenance Supervisor
Paul Bodie: VDOT Permitting
Matt Neely: Mill Creek Environmental
Doug Sander: Delta Airport Consultants

Doug Sander provided a brief review the proposed project to remove trees from the VDOT right-of-way at the intersection of Route 288 and Route 10. The trees are obstructions to the approaches to Runway 33 at the Richmond Executive Airport – Chesterfield County (FCI). A meeting between the Airport and VDOT held in August of 2013 concluded that it was best to remove the trees and grade the site to drain so the area could be maintained with mowers. Matt Neely with Mill Creek Environmental indicated that in a meeting with the Army Corps of Engineers (ACOE) and Virginia Department of Environment Quality (DEQ), that the large amount of wetland filling would be difficult to permit and would most likely involve the Environmental Protection Agency (EPA).

Delta requested the obstructions removal work in wetlands within the VDOT right-of-way be limited to clearing only and no disturbance of the stumps or ground. The non-wetland clearing would be grubbed and seeded to be maintained by mowers. Paul Bodie with VDOT indicated that VDOT had no objections, but VDOT would only maintain the area within 15 feet of the guardrail or paved shoulder. Any maintenance work within VDOT right-of-way beyond 15 feet would be the responsibility of the County. Charles Dane with the County indicated that the County had no issue with that. Mr. Bodie indicated that he could work with the County to obtain up to a 5 year maintenance permit for the County to maintain the cleared areas instead of having to obtain a new permit every year. The County was very appreciative of that possibility.

Mr. Bodie indicated that it may take up to two months to obtain the permits to begin construction of the tree removal. VDOT cannot issue the permit until a wetlands permit is received by the ACOE. He did indicate that the process may be started before the ACOE permit is received.

Delta will provide VDOT with an updated exhibit of the tree clearing within the right-of-way and a copy of the Environmental Assessment when it is complete.



DESCRIPTION	EXISTING	PROPOSED
AIRPORT PROPERTY LINE	---	NA
AIRPORT SAFETY AREA (RSA)	---	NA
RUNWAY SAFETY AREA (RSA)	---	NA
RUNWAY OBJECT FREE AREA (ROFA)	---	NA
RUNWAY PROTECTION ZONE (RPZ)	---	NA
AVIGATION EASEMENT	---	NA
FEE SIMPLE ACQUISITION	---	NA
WETLANDS	---	NA
IMPACTED WETLANDS	---	NA
OBSTRUCTION REMOVAL - OFF AIRPORT	---	NA

LEGEND

400 0 400 800
FEET
SCALE: 1"=400'

VDOT RIGHT OF WAY CLEARING FOR ROUTE 288 & ROUTE 10
RICHMOND EXECUTIVE - CHESTERFIELD COUNTY AIRPORT, CHESTERFIELD, VIRGINIA

DRAWN BY: [] CHECKED BY: [] DES: [] SCALE: [] DATE: []

EXHIBIT
1



U. S. Department
of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

Oct 10, 2012

Ms. Andrea Kampinen
Architectural Historian
Virginia Department of Historic Resources
Office of Review and Compliance
2801 Kensington Avenue
Richmond, Virginia 23221

Subject: Section 106 Consultation, Environmental Assessment for Five (5) Year Development at Chesterfield County Airport, Virginia

Dear Ms. Kampinen:

The Federal Aviation Administration (FAA) has issued a grant for the completion of an Environmental Assessment (EA) in compliance with the National Environmental Policy Act of 1969 and FAA regulations for proposed development projects as listed below at the Chesterfield County Airport. At this time, the FAA is initiating formal coordination with Virginia Department of Historic Resources (DHR) pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, to review this proposed undertaking.

Proposed Projects:

- Existing Obstruction Removal
 - Install Obstruction Lights
 - Land Acquisition – Avigation Easement
- Extend Runway 15
 - Land Acquisition – Fee Simple & Avigation Easement
 - Future Obstruction Removal
 - Construct Standard Runway Safety Area (RSA)
 - Construct Blast Pads
 - Construct Taxiway Turnout/Hold Apron
 - Install Medium Intensity Approach Lighting System with Runway Alignment Indicator (MALSR)
 - Relocate Localizer and Precision Approach Path Indicator (PAPI)
 - Relocate Power Lines (underground)
- Hangar Construction
- Relocate Glideslope Equipment
- Fuel Farm Improvement
- Replace Rotating Beacon

A Maps Only Archives Search for the area surrounding the airport was conducted by DHR in December 2008 as shown on enclosed exhibit. The archives search did not show any recorded

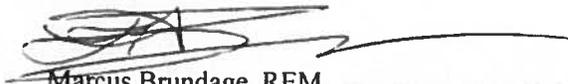
Subject: Section 106 Consultation, Environmental Assessment for Five (5) Year Development at Chesterfield County Airport, Virginia

resources within the proposed project area. An exhibit has also been enclosed illustrating the proposed area of potential effect (APE). The APE encompasses those areas proposed for land acquisition as well as all proposed projects listed above. Noise contours completed as part of the 2010 Airport Layout Plan Update have also been shown on the exhibit. The contours for the proposed development are not expected to expand beyond existing or proposed airport boundaries.

The FAA is requesting your concurrence with the APE and guidance on whether a Phase I Study is needed.

Should you have any questions or require additional information to facilitate your review, please do not hesitate to contact me at Marcus.Brundage@faa.gov or 703-661-1365.

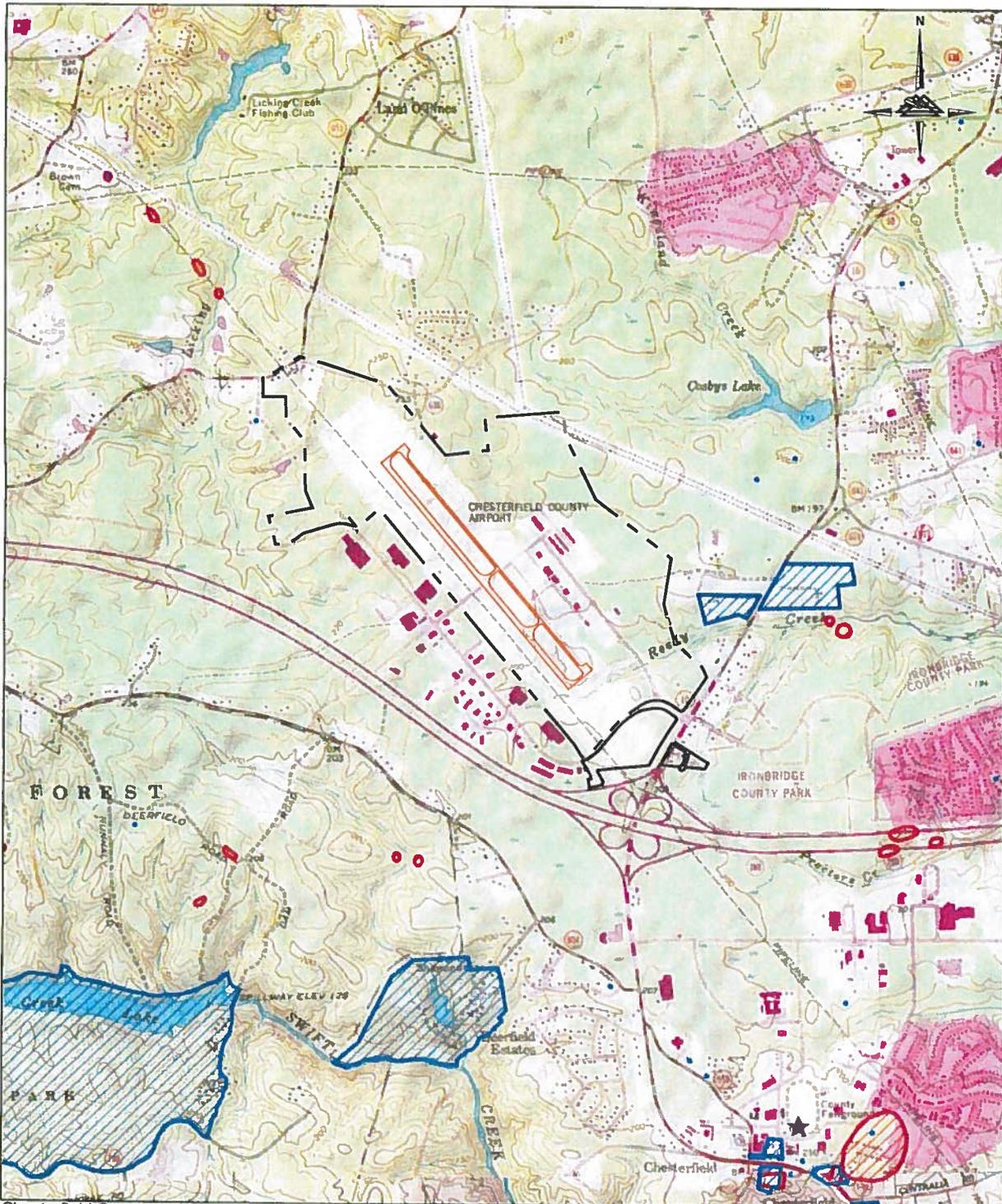
Sincerely,



Marcus Brundage, REM
Environmental Protection Specialist

Enclosures

cc: Thomas Trudeau, Airport Manager (encl via email only)
Kirk Turner, Chesterfield County Historic Districts and Landmarks (encl via email only)
Colleen M. Cummins, AICP, Delta Airport Consultants, Inc. - CLT (encl via email only)
Susan Simmers, DOAV (encl via email only)



Data Sources: VDHP, 2008; National Geographic, 2003; VGIN, 2002

Chesterfield County Airport
December 16, 2008



Legend

- architectural resources
- archaeological resources
- AIRPORT PROPERTY (APPROXIMATE LOCATION)

SOURCE:
VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
MAP ARCHIVES SEARCH, DECEMBER 2008



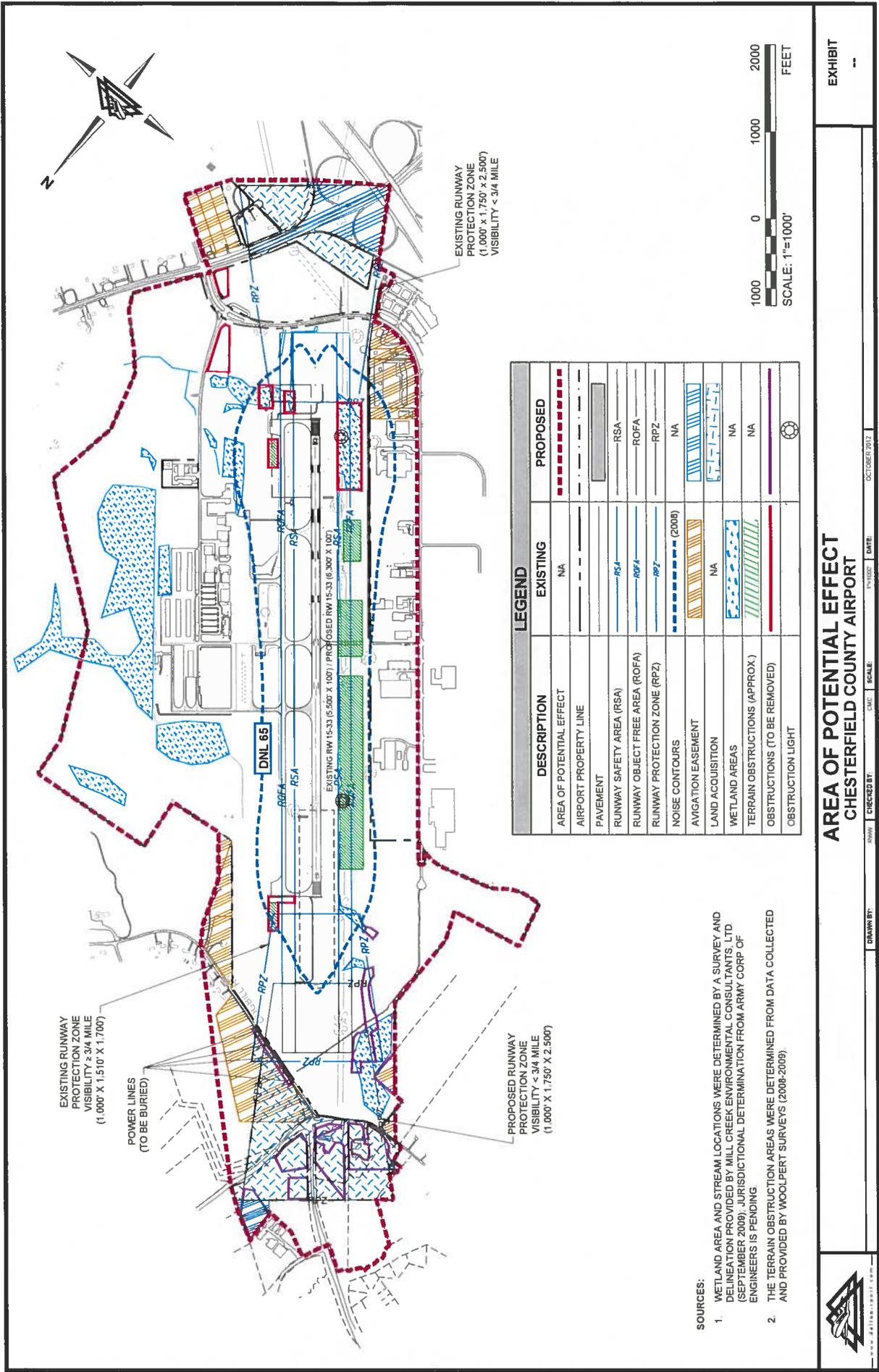
www.deltairport.com

**CULTURAL RESOURCES
CHESTERFIELD COUNTY AIRPORT**

**EXHIBIT
5-4**

DRAWN BY: LKH CHECKED BY: KSK SCALE: NTS DATE: OCTOBER 2010

DRAWING: 06131-cult-res-map.dwg LAYOUT: L-1



EXISTING RUNWAY PROTECTION ZONE
 (1,000' X 1,750' X 2,500')
 VISIBILITY < 3/4 MILE

EXISTING RUNWAY PROTECTION ZONE
 VISIBILITY ≥ 3/4 MILE
 (1,000' X 1,510' X 1,700')

POWER LINES
 (TO BE BURIED)

PROPOSED RUNWAY PROTECTION ZONE
 VISIBILITY < 3/4 MILE
 (1,000' X 1,750' X 2,500')



DESCRIPTION	EXISTING	PROPOSED
AREA OF POTENTIAL EFFECT	NA	---
AIRPORT PROPERTY LINE	---	---
PAVEMENT	---	---
RUNWAY SAFETY AREA (RSA)	---	---
RUNWAY OBJECT FREE AREA (ROFA)	---	---
RUNWAY PROTECTION ZONE (RPZ)	---	---
NOISE CONTOURS	---	---
AVIATION EASEMENT	---	---
LAND ACQUISITION	---	---
WETLAND AREAS	---	---
TERRAIN OBSTRUCTIONS (APPROX.)	---	---
OBSTRUCTIONS (TO BE REMOVED)	---	---
OBSTRUCTION LIGHT	---	---

- SOURCES:**
1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD (SEPTEMBER 2009). JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
 2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).

**AREA OF POTENTIAL EFFECT
 CHESTERFIELD COUNTY AIRPORT**

EXHIBIT
 --



DATE: OCTOBER 2012
 SCALE: 1"=1000'
 CHECKED BY: [Name]
 DRAWN BY: [Name]



COMMONWEALTH of VIRGINIA

Department of Historic Resources

Douglas W. Domenech
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

November 15, 2012

Marcus Brundage, Environmental Specialist
Federal Aviation Administration
Washington Airports District Office
23723 Air Freight Lane, Suite 210
Dulles, VA 20166

Re: Chesterfield County Airport – Five Year Development Plan
Chesterfield, Virginia
DHR File No. 2012-1591

Dear Mr. Brundage,

On October 15, 2012, the Virginia Department of Historic Resources (DHR) received information regarding the above referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. It is our understanding that the Federal Aviation Administration (FAA) will provide funding for the Environmental Assessment, and would like to initiate consultation at this time.

DHR understands that the Chesterfield County Airport is proposing a five year development plan to include:

- Existing Obstruction Removal
- Extend Runway 15
- Hangar Construction
- Relocate Glideslope Equipment
- Fuel Farm Improvement
- Replace Rotating Beacon

Unfortunately, the DHR Archives search you provided, at five years old, is out-of-date. For Section 106 consultation, DHR requires the archives search to be current to within six months. Please submit another archives search within your Area of Potential Effect (APE). Make sure to include the resource numbers on the map and any spreadsheet that lists the resources captured by the search.

Based upon a review of the information provided, DHR concurs with the APE as delineated for direct and indirect effects. In order to continue with the Section 106 process, DHR requests that the FAA move forward with the identification of known and unknown historic resources within the

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6416
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Office
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way
2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Avenue, SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Northern Region
Preservation Office
P.O. Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

November 15, 2012
Mr. Marcus Brundage
Page 2

APE. Please complete a Phase I Cultural Resources Survey for both architectural and archaeological resources within the APE. The architectural survey should be at the reconnaissance level to identify those resources older than 50 years, and should evaluate the potential for any district. The Phase I archaeological survey should be conducted at all areas of proposed ground disturbance that have not been previously studied.

These recommended studies must be completed by a qualified professional in each respected discipline, architectural history and archaeology, who meets the *Secretary of the Interior's Professional Qualification Standards*. Please refer to our *CRM Guidelines for Conducting Cultural Resource Survey in Virginia* (rev. October 2011), for surveying architectural resources, and our *Survey Guidelines* (rev. 2003), for archaeological resources. The report can be combined but please make sure each section is clearly separated. Two hardcopies and one digital copy of the resulting report should be submitted to our office for review prior to any ground disturbance. Once we have the results of the survey, we will be able to advise you whether any further investigations are warranted.

For questions regarding archaeology, please contact Roger Kirchen at (804) 482-6091. Should you have additional questions, please contact me at (804) 482-6084, or via email at andrea.kampinen@dhr.virginia.gov.

Sincerely,



Andrea Kampinen
Architectural Historian, Office of Review and Compliance

Cc: Susan Simmers, DOAV
Colleen Cummins, Delta Airport Consultants, Inc.
Kirk Turner, Chesterfield Co. Historic Districts and Landmarks
Thomas Trudeau, Airport Manager

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6416
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Office
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way
2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Avenue, SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Northern Region
Preservation Office
P.O. Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

Roy G. Lewis

From: Marcus.Brundage@faa.gov
Sent: Tuesday, December 18, 2012 3:00 PM
To: Kampinen, Andrea (DHR)
Cc: Colleen M. Cummins; Planning@chesterfield.gov; Simmers, Susan H. (DOAV); TrudeauT@chesterfield.gov
Subject: Re: Chesterfield County Airport, DHR File No. 2012-1591
Attachments: Letter Brundage - 111512.pdf; DHR4.pdf
Categories: Filed by Newforma

Ms. Kampinen:

Please see attachment for the current DHR Archive search per your 15 November 2012 letter. It will also be incorporated in the Phase I upon completion.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"

From: "Kampinen, Andrea (DHR)" <Andrea.Kampinen@dhr.virginia.gov>
To: Marcus Brundage/AEA/FAA@FAA
Cc: "Simmers, Susan H. (DOAV)" <susan.simmers@doav.virginia.gov>, "ccummins@deltaairport.com" <ccummins@deltaairport.com>, "Planning@chesterfield.gov" <Planning@chesterfield.gov>, "TrudeauT@chesterfield.gov" <TrudeauT@chesterfield.gov>
Date: 11/15/2012 10:10 AM
Subject: Chesterfield County Airport, DHR File No. 2012-1591

Dear Mr. Brundage,

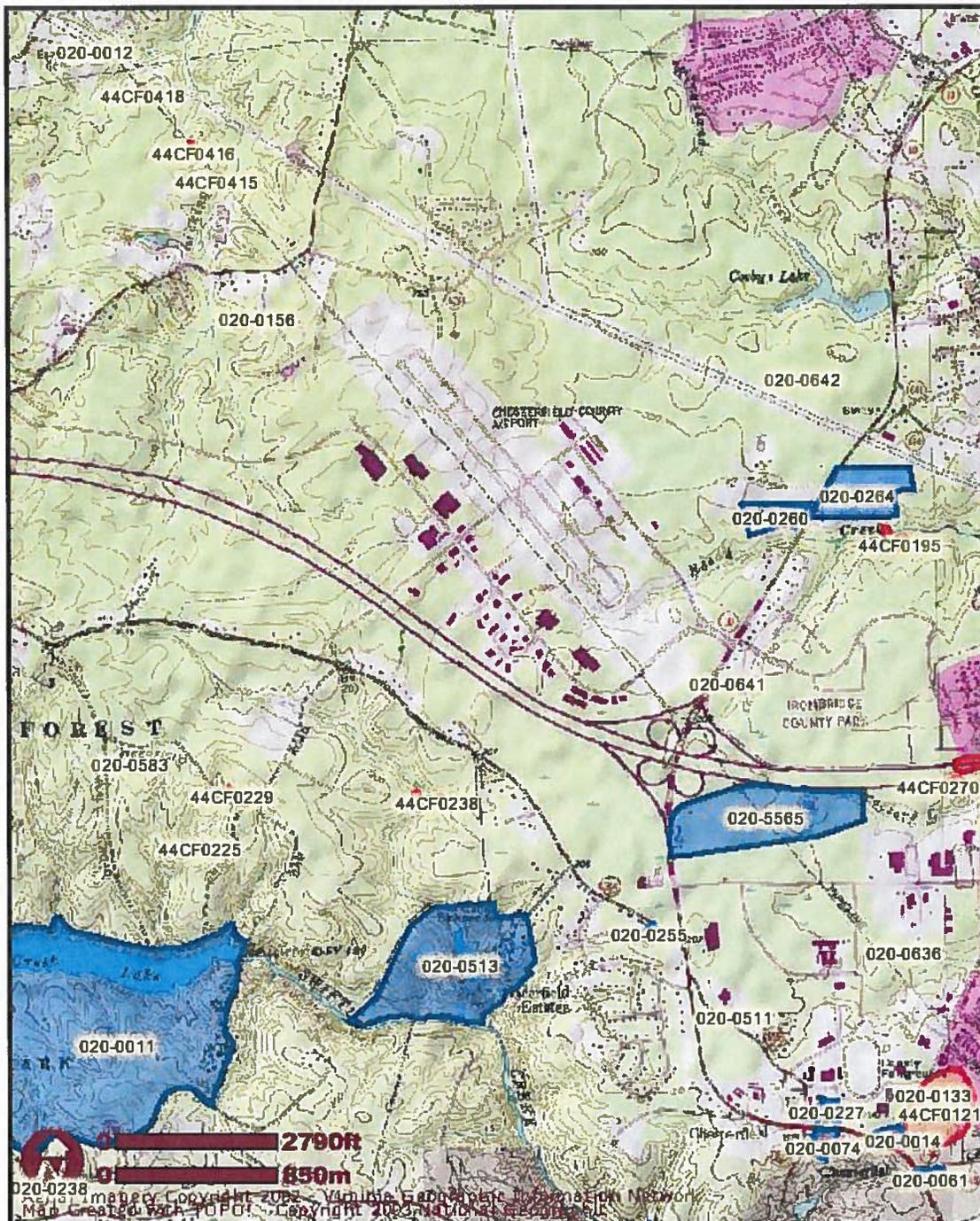
Please see the attached letter for the above referenced project. A hard copy will not follow so please print the attachment for your records. Should you have any additional questions, I can be reached at the phone number or email address listed below.

Regards,

Andrea Kampinen

Andrea Kampinen
Architectural Historian, Office of Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Virginia Department of Historic Resources Data Sharing System, 12/14/2012



- LEGEND**
- Architecture Labels
 - Archaeology Labels
 - Interstates
 - Architecture (polygon)
 - Archaeology (polygon)
 - County Boundary
 - 24k TOPO
 - 100k TOPO

Roy G. Lewis

From: Marcus.Brundage@faa.gov
Sent: Tuesday, September 24, 2013 9:39 AM
To: Kampinen, Andrea (DHR)
Cc: Trudeau, Thomas; Roy G. Lewis; Simmers, Susan H.; Kyle.Allison@faa.gov
Subject: Chesterfield County Airport, DHR File No. 2012-1591
Attachments: FCI DHR ltr 24Sep13.pdf; Letter Brundage - 111512.pdf

Good morning Ms. Kampinen:

Please see attachment for letter. It is understood that your review time starts when you receive the hard copy of the document which will be mailed out today.

Thank you,

Marcus Brundage, REM, CHS-V
Environmental Protection Specialist
FAA Washington Airport District Office-AEA-WAS-ADO
23723 Air Freight Lane, Suite 210
Dulles, VA 20166
(O) 703-661-1365; (F) 703-661-1370
marcus.brundage@faa.gov

"We're Only As Strong As Our Weakest Link"



U. S. Department
of Transportation

**Federal Aviation
Administration**

WASHINGTON AIRPORTS DISTRICT OFFICE
23723 Air Freight Lane, Suite 210
Dulles, Virginia 20166
Telephone: 703/661-1354
Fax: 703/661-1370

September 24, 2013

Ms. Andrea Kampinen
Architectural Historian
Virginia Department of Historic Resources
Office of Review and Compliance
2801 Kensington Avenue
Richmond, Virginia 23221

Subject: Environmental Assessment for Five Year Development Plan
Chesterfield County Airport, Virginia
DHR File No. 2012-1591

Dear Ms. Kampinen:

As the result of a more recent preliminary engineering review there are additional areas of existing obstruction removal required beyond the Area of Potential Effect (APE) that was previously coordinated with the Virginia Department of Historic Resources (VDHR) which received a concurrence on November 15, 2012. An expanded APE, also defined as the limit of disturbance (LOD), is being proposed as illustrated on an enclosed exhibit. The existing obstructions (trees) are located within the Virginia Department of Transportation (VDOT) right-of-way along Route 288 and penetrate the approach surface for the precision instrument approach procedure to Runway 33. An exhibit highlighting the obstruction removal areas over an aerial photo is also provided.

Additionally, as per your request in the above referenced correspondence dated November 15, 2012, enclosed are two hardcopies and one CD containing a digital copy of the Phase I Cultural Resources Survey Report. There are five properties located adjacent to the proposed project area identified as greater than 50 years old. Original photos with accompanying data sheets are enclosed for each of these properties.

The Federal Aviation Administration (FAA) is requesting your review and concurrence with the expanded APE and the Phase I Report. Should you have any questions or require additional information to facilitate your review, please do not hesitate to contact me at Marcus.Brundage@faa.gov or 703-661-1365.

Sincerely,

Marcus Brundage, REM
Environmental Protection Specialist

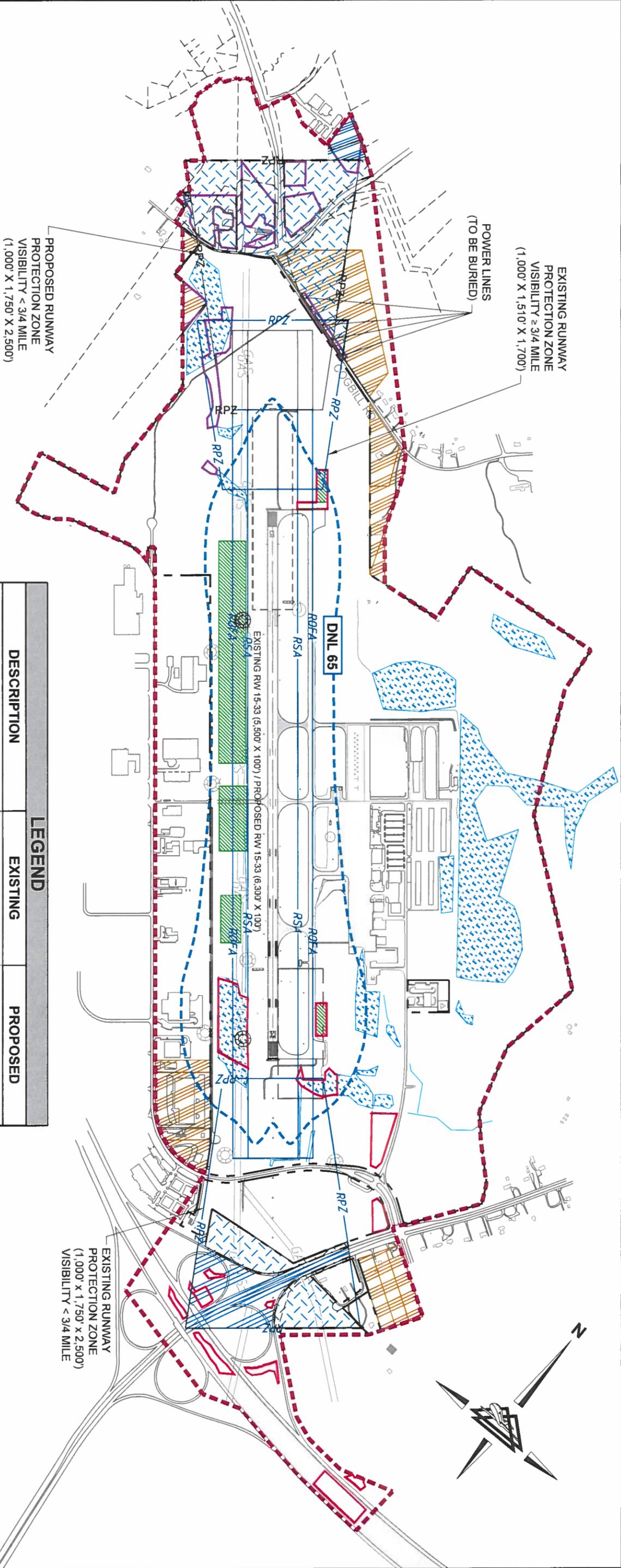
Enclosures

cc: Thomas Trudeau, Airport Manager (encl via email only)
Roy G. Lewis, A.A.E. Delta Airport Consultants, Inc. – CLT (encl via email only)
Kirk Turner, Chesterfield County Historic Districts and Landmarks (encl via email only)
Susan Simmers, Virginia Department of Aviation (encl via email only)
Kyle Allison, P.E., FAA (encl via email only)



www.dellaireperri.com

- SOURCES:**
1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD. (SEPTEMBER 2009). JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
 2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).



LEGEND		
DESCRIPTION	EXISTING	PROPOSED
AREA OF POTENTIAL EFFECT	NA	---
AIRPORT PROPERTY LINE	---	---
PAVEMENT	---	---
RUNWAY SAFETY AREA (RSA)	—RSA—	—RSA—
RUNWAY OBJECT FREE AREA (ROFA)	—ROFA—	—ROFA—
RUNWAY PROTECTION ZONE (RPZ)	—RPZ—	—RPZ—
NOISE CONTOURS	--- (2008)	NA
AVIGATION EASEMENT	---	---
LAND ACQUISITION	NA	---
WETLAND AREAS	---	---
TERRAIN OBSTRUCTIONS (APPROX.)	---	---
OBSTRUCTIONS (TO BE REMOVED)	---	---
OBSTRUCTION LIGHT	---	---



AREA OF POTENTIAL EFFECT CHESTERFIELD COUNTY AIRPORT

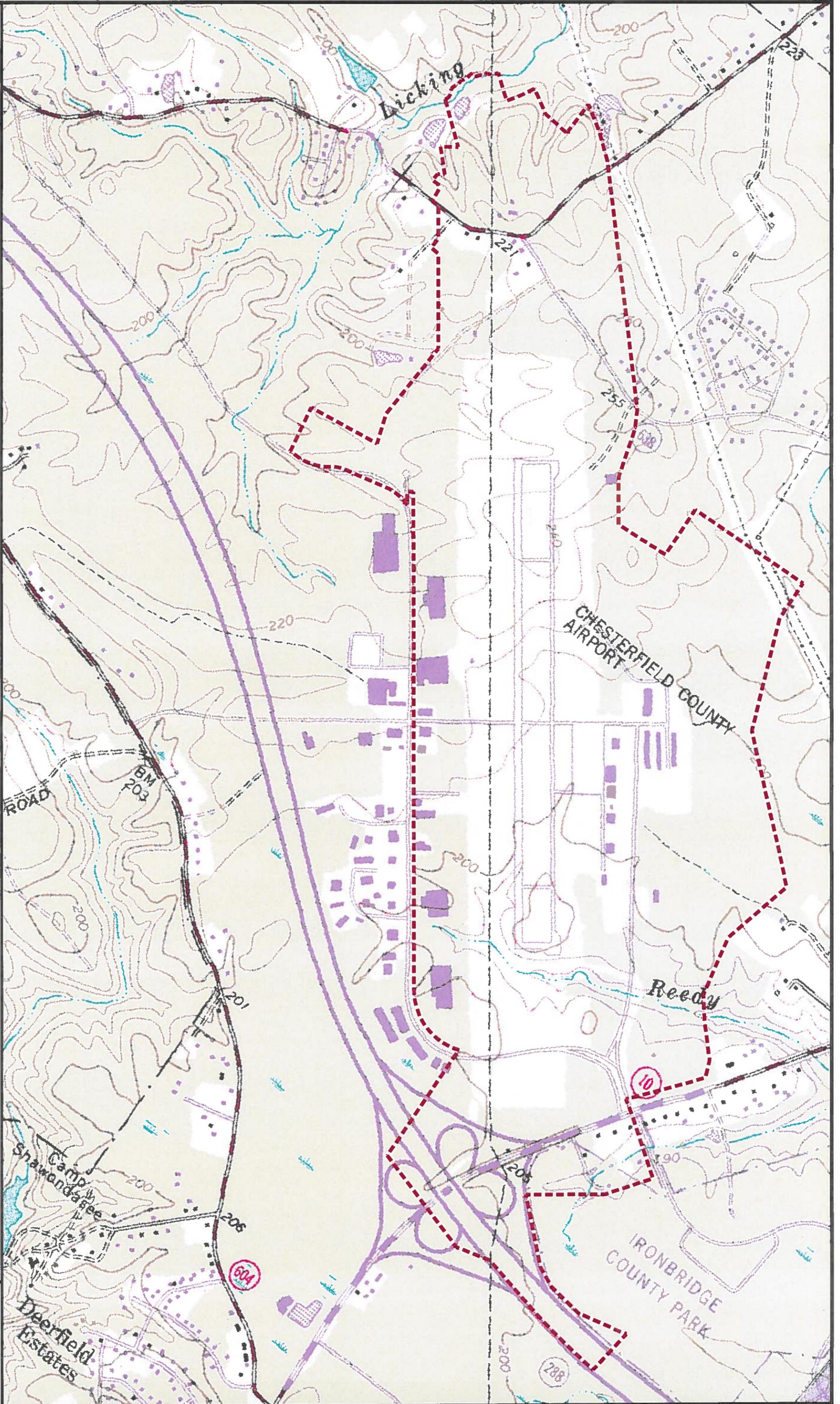
DRAWN BY: RWW CHECKED BY: GNC SCALE: 1"=1000' DATE: SEPTEMBER 2013



AREA OF POTENTIAL EFFECT
 CHESTERFIELD COUNTY AIRPORT

DRAWN BY: RWW
 CHECKED BY: GWC
 SCALE: 1"=1000'
 DATE: SEPTEMBER 2013

EXHIBIT





COMMONWEALTH of VIRGINIA

Department of Historic Resources

Douglas W. Domenech
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

December 6, 2013

Marcus Brundage, Environmental Specialist
Federal Aviation Administration
Washington Airports District Office
23723 Air Freight Lane, Suite 210
Dulles, VA 20166

Re: Chesterfield County Airport Five Year Plan – Phase I Cultural Resources Survey
Chesterfield, Virginia
DHR File No. 2012-1591

Dear Mr. Brundage,

On September 25, 2013, the Virginia Department of Historic Resources (DHR) received the Cultural Resources Survey report regarding the above referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. It is our understanding that the Federal Aviation Administration (FAA) will provide funding for the project. We are pleased to inform you that the report and forms met our quality control standards on November 7, 2013.

DHR understands that the Chesterfield County Airport is proposing a five year development plan to include land acquisition, existing obstruction removal, extend runway 15, hangar construction, relocate glide slope equipment, fuel farm improvement, replace rotating beacon, power line and road relocation. We also understand that the Area of Potential Effects (APE) has been expanded to account for additional obstruction removal.

We have reviewed the report, *Phase I Cultural Resources Survey, Environmental Assessment, Chesterfield County Airport, Richmond, Virginia*, prepared by Coastal Carolina Research in September 2013. Two (2) previously surveyed architectural resources and five (5) newly recorded resources were surveyed within the (APE) for indirect effects. DHR concurs with the consultants recommendations that none of the surveyed resources are eligible for listing in the Virginia Landmarks Register (VLR) or National Register of Historic Places (NRHP). Please see the attached table for our detailed recommendations on eligibility.

The archaeological study identified four sites and one artifact location. The location is, by definition, not eligible for listing in the National Register of Historic Places and no further consideration of this resource is warranted. Sites 44CF0781, 0783, and 0784 are low-density Native

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6416
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Office
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Tidewater Region Office
14415 Old Courthouse Way
2nd Floor
Newport News, VA 23608
Tel: (757) 886-2807
Fax: (757) 886-2808

Roanoke Region Office
1030 Penmar Avenue, SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Northern Region
Preservation Office
P.O. Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

American artifact scatters which lack subsurface features and reflect some prior disturbance. Site 44CF0782 is a multi-component site that includes Native American and late 18th to mid-20th century European artifacts and remains. This site also contains the structural ruins of a relatively recent building, a possible well, and cemetery. Overall, the site retains little to no archaeological integrity due to extensive disturbance from the demolition of the structures. The cemetery, recorded as part of DHR ID #020-5611, remains somewhat intact and includes possible burials outside of the walled enclosure. The consultant recommends Sites **44CF0781, 0782, 0783, and 0784**, including the cemetery, as *not eligible* for listing in the VLR/NRHP and DHR concurs. We do recommend, however, that the cemetery and its immediate surroundings be avoided during any ground disturbing activity. Should impacts be necessary in the vicinity of the cemetery, please continue consultation with our office regarding appropriate treatment of this resource.

Please let us know if the FAA is ready to make a determination of effects for this project. Under this current scope of work, it appears that there are no historic properties within the APE. For questions regarding archaeology, please contact Roger Kirchen at (804) 482-6091. Should you have additional questions, please contact me at (804) 482-6084, or via email at andrea.kampinen@dhr.virginia.gov.

Sincerely,



Andrea Kampinen
Architectural Historian, Office of Review and Compliance

Cc: Susan Simmers, DOAV
Colleen Cummins, Delta Airport Consultants, Inc.
Kirk Turner, Chesterfield Co. Historic Districts and Landmarks
Thomas Trudeau, Airport Manager

DHR ID #	Resource Name/Address	Eligibility - CCR September 2013	Eligibility - DHR December 2013
020-0641	House, 8131 Iron Bridge Rd.	Demolished	Demolished
020-5565	Farmstead & Gas Station	Not individually eligible (DHR 2011)	Not individually eligible
020-5607	House, 8121 Iron Bridge Rd.	Not individually eligible	Not individually eligible
020-5608	House, 8111 Iron Bridge Rd.	Not individually eligible	Not individually eligible
020-5609	House, 8041 Iron Bridge Rd.	Not individually eligible	Not individually eligible
020-5610	House, 8031 Iron Bridge Rd.	Not individually eligible	Not individually eligible
020-5611/44CF0782	Farmer Rudd Cemetery, W of Iron Bridge Rd., N of Whitepine Rd.; Multi-component 18 th -20 th c. Domestic Scatter	Not individually eligible	Not individually eligible
44CF0781	Late Archaic Native American Lithic Scatter	Not individually eligible	Not individually eligible
44CF0783	Native American Lithic Scatter	Not individually eligible	Not individually eligible
44CF0784	Native American Lithic Scatter	Not individually eligible	Not individually eligible

RW length 1000w
AIRPORT AND RUNWAY DATA

Airport elevation	237 feet
Mean daily maximum temperature of the hottest month	88.80 F.
Maximum difference in runway centerline elevation	37 feet
Length of haul for airplanes of more than 60,000 pounds	1000 miles

wet and slippery runways

RUNWAY LENGTHS RECOMMENDED FOR AIRPORT DESIGN

Small airplanes with approach speeds of less than 30 knots . . .	310 feet
Small airplanes with approach speeds of less than 50 knots . . .	820 feet
Small airplanes with less than 10 passenger seats	
75 percent of these small airplanes	2570 feet
95 percent of these small airplanes	3120 feet
100 percent of these small airplanes	3710 feet
Small airplanes with 10 or more passenger seats	4280 feet
Large airplanes of 60,000 pounds or less	
75 percent of these large airplanes at 60 percent useful load	5380 feet
75 percent of these large airplanes at 90 percent useful load	7010 feet
100 percent of these large airplanes at 60 percent useful load	5800 feet
100 percent of these large airplanes at 90 percent useful load	8660 feet
Airplanes of more than 60,000 pounds	Approximately 6050 feet

REFERENCE: Chapter 2 of AC 150/5325-4A, Runway Length Requirements for Airport Design, no Changes included.



June 4, 2009

Chesterfield County Airport
7511 Airfield Drive
Richmond, Virginia 23237-2297

Dear Tom,

I have conducted the performance analysis as requested by Roy Lewis of Delta Airport Consultants to better determine the benefits that could be realized by an extension of 600 feet (6100 feet total length) to runway 15/33 at the Chesterfield County Airport.

The present runway environment at Chesterfield County Airport provides access to the southern Richmond area for NetJets Fractional Owners and Marquis Jet Card holders. Each of the NetJets fleet aircraft have been approved into KFCI with exception of the Boeing Business Jet, a 737-700, due to available weight bearing. Each fleet is able to take advantage of the low weather approaches. The reported PAPI angles of 3.0° allow NetJets to apply credits associated with Part 91K Destination Airport Analysis Program criteria. Runway grooving further allows select fleets to take advantage of dry runway performance numbers if the runway condition is wet.

Based upon a review of Owner activity, Chesterfield County is visited most by our Hawker 800XP Owners (35% of all NetJets activity over the last three years). Citation Excel and Excel/S models followed with 25% over the same time period. Out of the two high activity aircraft, the Hawker could see close to an hour of range increase as a result of a runway extension. Other midsized cabin fleet aircraft, although not requested to the same extent, could see up to a 1.1 hour increase in range due to the ability to carry more fuel.

NetJets supports this runway extension. A longer runway at Chesterfield County will provide a safer environment for all aircraft. A runway length of 6100 feet allows medium cabin aircraft such as the Hawker 800XP to operate closer to its design capacity with greater utility in wider temperature range while providing transportation for its occupants.

Performance samples with reference temperatures of 30° and 15° C (including wet and dry calculations) are attached for your review. We welcome any additional communication regarding the content of this analysis.

Best regards,

A handwritten signature in blue ink, appearing to read "Al Ball".

Al Ball
Manager
Operational Intelligence & Analysis
614 239 4873
ball@netjets.com

KFCI

Chesterfield County, Virginia

Aircraft Type	Max Landing Wt	Landing Distance Required													
		15° Dry				15° Wet				30° Dry				30° Wet	
		Distance	Part 91-K	Factored	Distance	Distance	Factored	Distance	Part 91-K	Factored	Distance	Factored	Distance	Factored	
Citation Encore	15200	3169	3961	5283	4752	6075	3308	4135	5514	4987	6341				
Citation Excel	18700	3507	4384	5846	5588	6723	3652	4565	6086	5797	7000				
Citation Sovereign	27100	3050	3813	5083	3926	5845	3164	3955	5274	4096	6065				
Citation X	31800	3599	4499	5999	5049	6899	3787	4734	6312	5377	7259				
Hawker 400XP	15700	3583	4479	5249	3583	5249	3718	4648	5437	3718	5437				
Hawker 800XP	23350	2667	3334	4445	2667	4445	2667	3334	4445	2667	4445				
Falcon 2000	33000	3139	3924	5232	3610	6017	3139	3924	5232	3610	6017				
Gulfstream 200	28000	3324	4155	5541	3324	5541	3463	4329	5772	3463	5772				
G-IV-SP	66000	3192	3990	5320	3671	6118	3192	3990	5320	3671	6118				
G-V	75300	2799	3499	4665	3219	5365	2799	3499	4665	3219	5365				

Conditions:

- Aircraft configured at Max Landing Weight
- Airport elevation at 236 mean sea level
- Assumed landing runway 15 with 5501 feet useable runway
- Runway slope computed at downhill 0.69%
- Distance is "Part 91" landing distance
- Factored landing distance is Part 135, 60% landing distance
- Part 91-K landing distance computed at 80% of useable runway with exception of Hawker 400XP



Aircraft can take 'Dry Runway' credit due to grooved runway
 Landing distance required exceeds runway length
 Temperature/length duplication
 Tables do not exist for this configuration

NETJETS®

This information not valid for flight planning

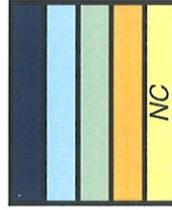
KFCI

Chesterfield County, Virginia

Aircraft Type	Max T/O Weight	15° Dry						15° Wet			30° Dry			30° Wet				
		Std Flaps		Alt Flaps		Std Flaps	Alt Flaps											
		15	7	15	7											15	7	15
Citation Encore	16630	15	7			15318									15963			
Citation Excel	20000	15	7								19914				19914			
Citation Sovereign	30300	15	7															
Citation X	35700	15	5	32225	24032	30573	32484	31113	NC									28489
Hawker 400XP	16300	10	20															
Hawker 800XP	28000	15	0	27319		27319	26587	25318	26587	25318	26587	25318	26587	25318	25318			25318
Falcon 2000	36500	20	10	33715	33579	33344	32750	32841	32750	32841	32750	32841	32750	32841	32750			32497
Gulfstream 200	35450	20	12	30604	31434	30604	28731	27759	28731	27759	28731	27759	28731	27759	28731			27759
G-IV-SP	74600	20	10	67210	69580	61910	67710	65370	67710	65370	60210	65370	60210	65370	60210			58190
G-V	90500	20	10	80525	83993	79912	82307	78662	82307	78662	78203	82307	78662	78203	78662			74637

Conditions:

- Airport elevation at 236 mean sea level
- Departure weights computed for existing runway length
- Upslope value of 0.69% used in computations
- Alternate Flaps settings sometimes allow departures in higher temperatures



Climb limited configuration
 Aircraft can take 'Dry Runway' credit due to grooved runway
 Maximum takeoff weight allowed this configuration
 Takeoff weight limited by runway length
 Tables do not exist for this configuration

NETJETS®

Aircraft Type	Max T/O Weight	Maximum Allowable Takeoff Weight - Proposed RWY, 6000 feet									
		15° Dry		15° Wet		30° Dry		30° Wet			
		Std Flaps	Alt Flaps	Std Flaps	Alt Flaps	Std Flaps	Alt Flaps	Std Flaps	Alt Flaps		
Citation Encore	16630	15	7								
Citation Excel	20000	15	7								
Citation Sovereign	30300	15	7								
Citation X	35700	15	34886	5	33092	32893	32062	33746	32081	30659	30847
Hawker 400XP	16300	10		20							
Hawker 800XP	28000	15		0				27698	26429	27698	26429
Falcon 2000	36500	20	34659	10	34440	34659	34440	33845	33661	33845	33639
Gulfstream 200	35450	20	32828	12	31788	32828	31788	29827	28761	29827	28761
G-IV-SP	74600	20	72700	10	70210	65020	62760	70740	68310	63210	61010
G-V	90500	20	86486	10	83214	82820	79392	84702	81340	81178	77533

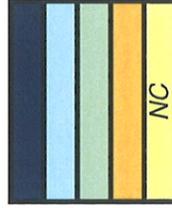
Conditions:

Airport elevation at 236 mean sea level

Departure weights computed for proposed runway length of 6000 feet

Upslope value of 0.69% used in computations

Alternate Flaps settings sometimes allow departures in higher temperatures



Climb limited configuration

Aircraft can take 'Dry Runway' credit due to grooved runway

Maximum takeoff weight allowed this configuration

Takeoff weight limited by runway length

Tables do not exist for this configuration

Runway Requirements at Max Weight - Elevation 236 feet													
Aircraft Type	Max T/O Weight	15° Dry			15° Wet			30° Dry			30° Wet		
		Std Flaps	Alt Flaps	Alt Flaps	Std Flaps	Alt Flaps	Alt Flaps	Std Flaps	Alt Flaps	Alt Flaps	Std Flaps	Alt Flaps	Alt Flaps
Citation Encore	16630	15	3787	7	4228	5401	5881	4300	4815	5258	5696		
Citation Excel	20000	15	4016	7	4604	4019	4604	4593	5566	4593	5566		
Citation Sovereign	30300	15	4063	7	4330	4801	4571	4303	4586	5015	4791		
Citation X	35700	15	6298	5	7743	7056	8050	6772	8615	7555	8838		
Hawker 400XP	16300	10	4511	20	4082	4511	4082	5111		5111			
Hawker 800XP	28000	15	5336	0	5742	5336	5742	6135	6894	6135	6894		
Falcon 2000	36500	20	6765	10	7090	6765	7090	6975	7457	6975	7457		
Gulfstream 200	35450	20	7333	12		7333							
G-IV-SP	74600	20	6311	10	6766	7644	8150	6667	7150	8040	8577		
G-V	90500	20	6907	10	7534	7641	8135	7394	8000	8066	8559		

Conditions:

- Max takeoff weight each aircraft type
- Takeoff distance based upon unlimited runway
- Takeoff distance computed with 0.69% upslope



- Brake limited configuration
- Climb limited configuration
- Aircraft can take 'Dry Runway' credit due to grooved runway
- Proposed runway length would be exceeded
- Tables do not exist for this configuration

KFCI

Chesterfield County, Virginia Benefit Due to Runway Extension

Aircraft Type	Runway Length Max T/O Weight	Dry Conditions						% Incr due Rwy Lgth	Wgt/Fuel #	30° Dry	15° Dry	30° Dry	15° Dry	30° Dry	15° Dry	30° Dry					
		5501 Feet		6000 Feet		30° Dry	15° Dry										30° Dry	15° Dry	30° Dry	15° Dry	30° Dry
		15° Dry	30° Dry	15° Dry	30° Dry																
Citation Encore	16630	16630	16630	16630	16630	16630	0.0	0	0	0	0	0	0	0	0	0					
Citation Excel	20000	20000	20000	20000	20000	20000	0.0	0	0	0	0	0	0	0	0	0					
Citation Sovereign	30300	30300	30300	30300	30300	30300	0.0	0	0	0	0	0	0	0	0	0					
Citation X	35700	33516	32484	34886	33746	33746	3.8	1370	1262	1370	1262	1370	1262	1370	1262	0.69					
Hawker 400XP	16300	16300	16300	16300	16300	16300	0.0	0	0	0	0	0	0	0	0	0					
Hawker 800XP	28000	28000	26587	28000	27698	27698	0.0	0	1111	0	1111	0	1111	0	1111	0.9					
Falcon 2000	36500	33579	32750	34659	33845	33845	3.0	1080	1095	1080	1095	1080	1095	1080	1095	0.73					
Gulfstream 200	35450	31434	28731	32828	29827	29827	3.9	1394	1096	1394	1096	1394	1096	1394	1096	0.6					
G-IV-SP	74600	69580	67710	72700	70740	70740	4.2	3120	3030	3120	3030	3120	3030	3120	3030	1.1					
G-V	90500	83993	82307	86486	84702	84702	2.8	2493	2395	2493	2395	2493	2395	2493	2395	0.85					

Climb limited above posted weight
 Max Weight, no changes

NETJETS®

AVIATION DEPARTMENT



June 11, 2009

Mr. Tom Tredeau
Airport Manager
Chesterfield County Airport
7511 Airfield Drive
Richmond, VA 23237

Dear Mr. Tredeau:

Thank you for the opportunity to voice our support of the proposed runway extension at the Chesterfield County Airport (FCI). Massey Energy Company currently bases a Challenger 601 at FCI.

In reviewing the operational capabilities and requirements of the Challenger and given our typical mission profile, we frequently need the capability to depart Chesterfield County with a useful load at or above 90 percent. The existing runway length is inadequate to support our operations year round and during all weather conditions. I have enclosed sample performance computations for the Challenger which highlight the minimum required runway lengths at 60 and 90 percent useful load, for both dry and wet runway conditions, assuming a temperature of 87 degrees Fahrenheit at FCI.

In conclusion, a runway length of 6,000 feet would allow our Challenger operations to more effectively meet our goals of operational safety and efficiently in conjunction with our mission objectives without undue inconvenience to our passengers. We are in full support of the County's efforts to extend the runway. Please do not hesitate to contact me should you have questions or require additional information.

Sincerely,

Bryan M. Haga
Chief Pilot

attachment

Sample calculation – Massey Energy Company – Challenger 601

Our calculations indicate that at 90% useful load under the specified conditions of a dry runway at 30°C 6217FT is required at FCI for our Challenger.

At 60% useful load and the same conditions 4692FT is required at FCI.

Therefore at the current runway length of 5500FT at FCI we would *not* have adequate runway length at the specified conditions with 90% useful load, whereas at 60% useful load we would have adequate runway length.

Also, using the tables for contaminated runway, we have determined that for a wet runway, at 60% useful load, (assuming reverse thrust is available and used in the event of a rejected takeoff) the TOFL is 5138FT.

Therefore the current runway length would be adequate for a takeoff at 60% useful load on a wet runway at FCI at 30°C.

Since the current length of runway at FCI is inadequate for a dry runway takeoff at 90% useful, it would clearly also be inadequate for a wet runway takeoff at 90% useful load.

Here are the calculations:

MGTOW 44,600LB
BOW weight 26,600LB
Useful Load 18,000LB
90% useful load 16,200LB
60% useful load 10,800LB

TOW at 90% useful load = 42,800LB rounded up to 43,000LB
TOW at 60% useful load = 37,400LB rounded up to 38,000LB

TOFL at 90% useful load:

Conditions: 30°C, dry runway, pressure alt 236FT MSL

At 43,000LB SEA LEVEL TOFL is 6020FT

At 43,000LB 1000FT MSL TOFL is 6475FT

Interpolating for 236FT elevation at FCI: $((6475 - 6020) \times 0.236) + 6020 = 6127\text{FT}$

Therefore TOFL at 90% useful load is 6217FT

TOFL at 60% useful load:

Conditions: 30°C, dry runway, pressure alt 236FT MSL

At 38,000LB SEA LEVEL TOFL is 4600FT

At 38,000LB 1000FT MSL TOFL is 4990FT

Interpolating for 236FT elevation at FCI: $((4990 - 4600) \times 0.236) + 4600 = 4692\text{FT}$

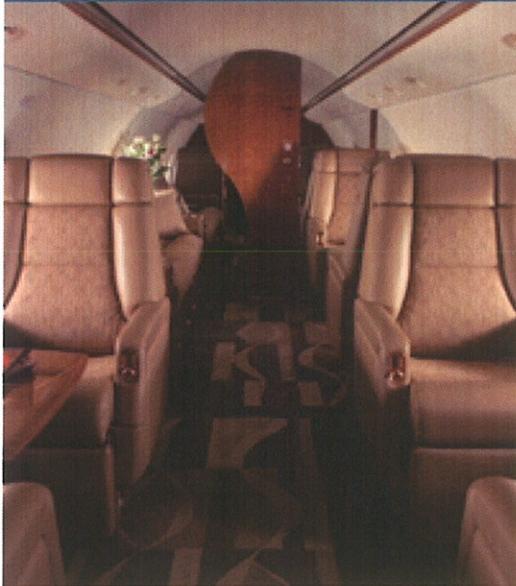
Therefore TOFL at 60% useful load is 4692FT

BOMBARDIER
CHALLENGER 604

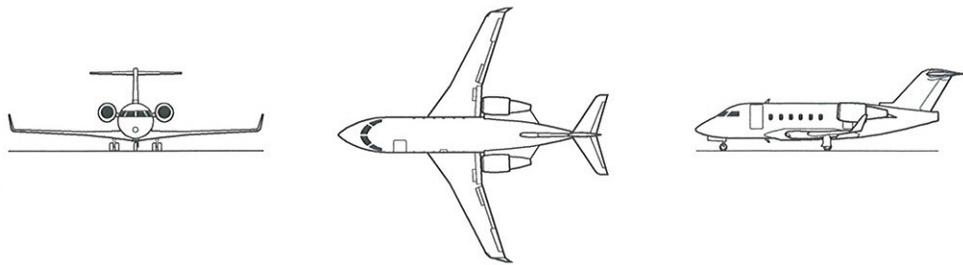


GENERAL SPECIFICATIONS. PERFORMANCE. DIMENSIONS.

BOMBARDIER CHALLENGER 604



Certified for civil operation in 40 countries, the Bombardier Challenger® 604 has established a proven track record for dependability, reliability and outstanding value, making it the best-selling jet in its class. Offering the widest cabin of any true business jet available today, stand-up room of over six feet and a passive noise insulation system, it provides superior cabin comfort for its passengers. With a maximum cruise speed of Mach 0.82 (541 mph; 870 km/h) and an intercontinental range of 4,077 nautical miles (7,551 km), the Bombardier Challenger 604 is well suited for any mission.



GENERAL

Capacity

Crew: 2+1
Passengers: 9-19

Engines

General Electric CF34-3B turbofans
Thrust: 8,729 pounds (38.84 kN) thrust at takeoff
9,220 pounds (41.0 kN) thrust APR
Flat-rating: ISA + 15°C (86°F)

Avionics

- Collins Pro Line 4 six-tube EFIS with PrecisionPlus upgrade
- Two-screen EICAS
- Dual Litton LTN-101 inertial reference systems
- Collins WXP-4220 digital weather radar
- Collins nav/comms
- TCASII, EGPWS, Dual GPS

PERFORMANCE

Range

Maximum range
at M 0.74: 4,077 NM 4,692 SM 7,551 km
Maximum range
at M 0.80: 3,769 NM 4,337 SM 6,980 km
(NBAA IFR Reserves, ISA, with 5 pax/2 crew and maximum fuel)

Speed	Mach	kts.	mph	km/h
High-speed cruise	0.82	470	541	870
Typical cruise speed	0.80	459	528	850
Long-range cruise speed	0.74	425	489	787

Airfield Performance

Balanced field length
(SL, ISA, MGTOW): 5,699 ft (1,737 m)
Landing distance
(SL, ISA, MLW): 2,777 ft (846 m)

Ceiling

Maximum operating altitude: 41,000 ft (12,497 m)
Climb to cruise altitude of
37,600 ft (11,460 m): 22 minutes

Noise Level

EPNdB
Takeoff: 80.9
Approach: 90.3
Sideline: 86.2

DIMENSIONS

External

Length: 68.42 ft (20.85 m)
Wingspan: 64.33 ft (19.61 m)
Wing area:
(basic) 492 ft² (45.71 m²)
Height overall: 20.67 ft (6.30 m)

Internal

Cabin length: 28.42 ft (8.66 m)
(from cockpit divider to end of pressurized compartment)
Cabin maximum width:
(centerline) 8.17 ft (2.49 m)
Cabin width:
(floorline) 7.17 ft (2.19 m)
Cabin height: 6.08 ft (1.85 m)
Floor area:
(excluding cockpit) 202 ft² (18.77 m²)
Total volume: 1,150 ft³ (32.56 m³)
(from cockpit divider to end of pressurized compartment)

Weights

A. Maximum ramp weight: 47,700 lb* (21,636 kg)
B. Maximum takeoff weight: 47,600 lb* (21,591 kg)
C. Maximum landing weight: 38,000 lb (17,237 kg)
D. Maximum zero fuel weight: 32,000 lb (14,515 kg)
E. Spec. basic
operating weight: 26,630 lb (12,079 kg)
F. Maximum fuel weight: 20,000 lb (9,072 kg)
Payload – full fuel (A-E-F)*: 1,070 lb (485 kg)
Maximum payload (D-E): 5,370 lb (2,436 kg)
Fuel with maximum payload: 15,700 lb (7,122 kg)

* 48,300 lb/48,200 lb option - yields a maximum payload with full fuel of 1,670 lb

90% = 46,200

BOMBARDIER AEROSPACE
BUSINESS AIRCRAFT
400 CÔTE-VERTU ROAD WEST
DORVAL, QUÉBEC, CANADA H4S 1Y9
IN NORTH AMERICA
CALL 800-268-0030
ELSEWHERE CALL 514-855-7698
WWW.AERO.BOMBARDIER.COM

PERFORMANCE IS BASED ON MAXIMUM TAKEOFF/LANDING WEIGHT, SEA LEVEL, STANDARD DAY (ISA) CONDITIONS, UNLESS OTHERWISE NOTED.

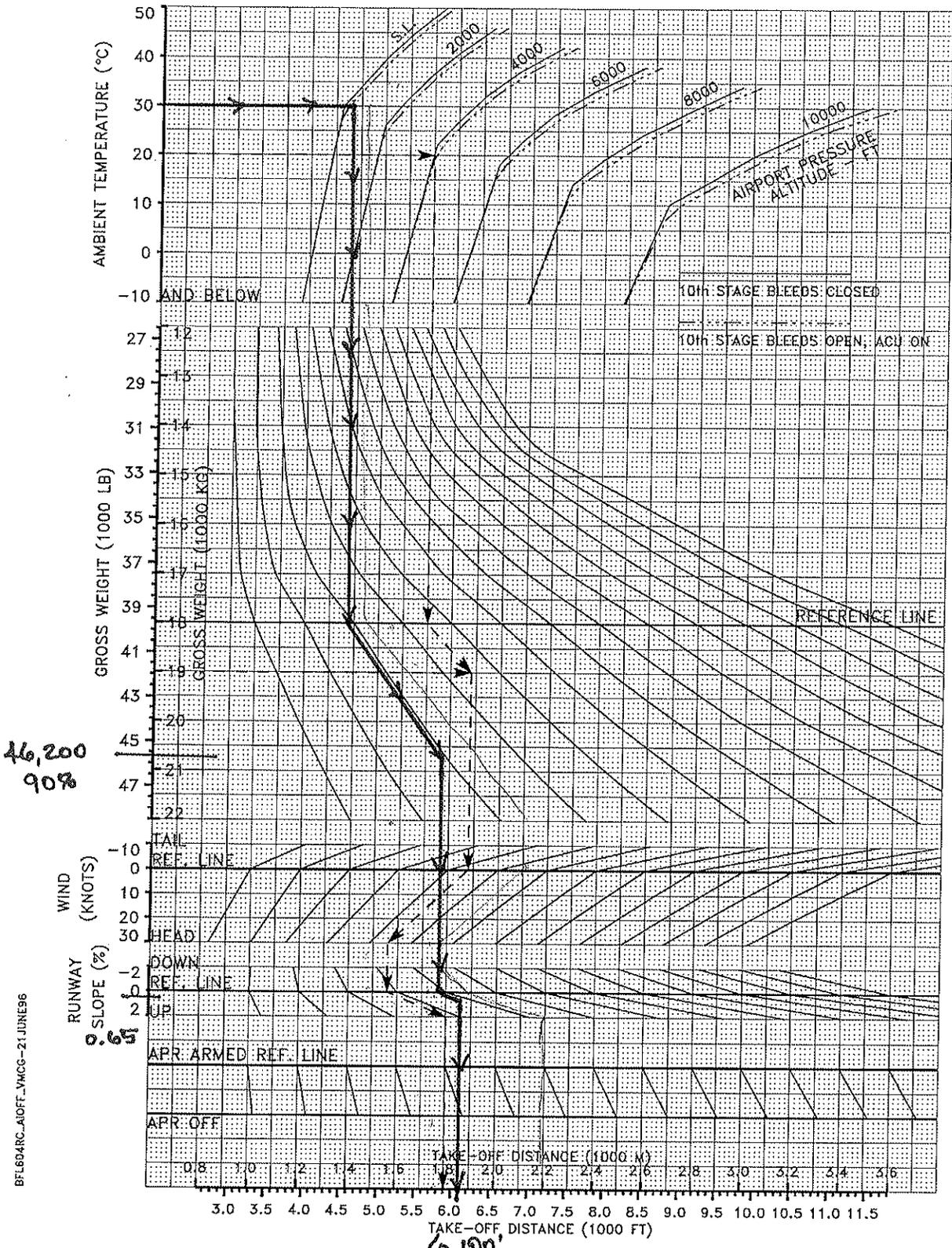
©2002 BOMBARDIER INC. ALL RIGHTS RESERVED. 08/02/USA

*REGISTERED TRADEMARK OF BOMBARDIER.

BOMBARDIER
AEROSPACE



Experience the Extraordinary



BFL604RC_AIOFF_VMCG-21 JUNE96

Take-Off Distance, Flaps 20° - Anti-Icing Off (Page 1 of 2)
Figure 06-03-4

SPECIFICATIONS

Weights

Maximum Take-Off Weight 48,200 lbs
Basic Operating Weight 27,600 lbs
Maximum Payload 4,400 lbs

External Dimensions

Wing Span 64.33 ft
Length 68.42 ft
Height to Top of
Horizontal Stabilizer 20.67 ft

Maximum Range

Mach 0.74 4,077 NM 4,692 SM 7,551 km
Mach 0.80 3,769 NM 4,337 SM 6,980 km

Take-Off Field Length At 48,200 lbs.

Total Distance 5,990 ft:

Internal Dimensions

Cabin Length 28.42 ft
(Excludes Pilot's Compartment; Includes Aft Baggage)
Cabin Height 6.08 ft
Cabin Width 8.17 ft
Cabin Floor Width 7.17 ft
Cabin Volume 1,150 cu ft
(Excludes Pilot's Compartment and Aft Baggage)
Aft Baggage Compartment Capacity
450 lb 115 cu ft

Cruise Speeds

Mach	kts	Mph	km/h
High Speed Cruise			
0.82	470	541	870
Normal Cruise Speed			
0.80	459	528	850
Long Range Cruise Speed			
0.74	425	489	787

CHALLENGER 604 - OVERVIEW

- ✈ Range of 4,500 miles
- ✈ Max cruise speed of 540 mph
- ✈ Can fly non-stop for up to 8 hours
- ✈ Executive seating for 12 passengers
(club seating for 4)
- ✈ Cabin accessible baggage
- ✈ Private aft lavatory
- ✈ Full service galley (with Flight Attendant)





DOMINION AVIATION

May 20, 2009

Mr. Tom Tredeau
Airport Manager
Chesterfield County Airport
7511 Airfield Drive
Richmond, VA 23237

Dear Mr. Tredeau:

Thank you for the opportunity to voice our support of the proposed runway extension at the Chesterfield County Airport (FCI). Dominion Aviation Services provides a wide range of services to the flying public including air charter and aircraft fractional ownership management. We currently operate a fleet of turbojet aircraft including Cessna Citation 560, Cessna Citation 560XL, Cessna Citation 501SP, Raytheon Premier 1A, and the Hawker 800XP at FCI.

In reviewing the operational capabilities and requirements of the Hawker and given our typical mission profile, we require the capability to depart Chesterfield County with a useful load at or above 90 percent. The existing runway length is inadequate to support our operations year round and during all weather conditions. I have enclosed sample performance computations for the Hawker which highlight the minimum required runway lengths at 60 and 90 percent useful load, for both dry and wet runway conditions, assuming a temperature of 87 degrees Fahrenheit at FCI.

An example of the most critical operational limitations we experience at FCI with the current length is during wet runway operations when the useful load may be decreased to as low as 33 percent! We have had occasion when the Hawker had to be ferried to Richmond International Airport for fueling and passenger loading. As a 14 CFR Part 135 charter operator, the resulting shuffle of passengers and crew assignments is certainly not our preferred method of conducting business.

In conclusion, a runway length of 6,000 feet would allow our Hawker operations to operate safely and efficiently, and meet our mission objectives without inconvenience to our passengers, and we are in full support of the County's efforts to extend the runway. Please do not hesitate to contact me should you have questions or require additional information.

Sincerely,

Andy Hughes
Chief Pilot
Dominion Aviation Services

FLAPS 15° with Zero Wind

Hard, level dry runway (APR ON) Tire speed 190 mph or 210 mph

NOTE: With engine antice ON, add 10° C to the actual air temperature before entering the table.

Field Pressure Altitude Feet		Airplane Weight lb														
		28,000					27,000					26,000				
		OAT °C	TOFL	V ₁ kts	V _R kts	V ₂ kts	OAT °C	TOFL	V ₁ kts	V _R kts	V ₂ kts	OAT °C	TOFL	V ₁ kts	V _R kts	V ₂ kts
Sea Level						37	5800	124	130	136	39	5540	121	128	133	
	34	5970	126	133	139	35	5630	123	130	136	35	5230	120	128	134	
	30	5640	126	133	139	30	5250	122	130	137	30	4890	119	128	135	
	25	5280	125	133	140	25	4920	121	130	138	25	4590	118	128	135	
	20	5110	125	133	140	20	4760	121	130	138	20	4440	117	128	135	
	15	5030	125	133	140	15	4700	121	130	138	15	4380	118	128	135	
	10	4940	125	133	140	10	4610	121	130	138	10	4300	118	128	135	
	5	4860	125	133	140	5	4530	121	130	138	5	4230	117	128	135	
0	4780	125	133	140	0	4460	121	130	138	0	4160	118	128	135		
1000											36	5680	121	128	133	
	31	6140	127	133	139	33	5870	124	130	136	35	5600	120	128	134	
	30	6050	126	133	139	30	5620	123	130	137	30	5230	119	128	134	
	25	5650	125	133	140	25	5260	122	130	137	25	4900	118	128	135	
	20	5340	125	133	140	20	4980	121	130	138	20	4640	118	128	135	
	15	5210	125	133	140	15	4850	121	130	138	15	4530	118	128	135	
	10	5120	125	133	140	10	4780	121	130	138	10	4460	118	128	135	
	5	5030	125	133	140	5	4700	121	130	138	5	4380	118	128	135	
0	4950	125	133	140	0	4630	121	130	138	0	4310	118	128	135		
2000											33	5840	121	128	133	
	27	6230	126	133	139	30	6040	124	130	136	30	5600	120	128	134	
	25	6060	126	133	139	25	5630	123	130	137	25	5240	119	128	134	
	20	5700	125	133	140	20	5310	122	130	137	20	4950	118	128	135	
	15	5420	125	133	140	15	5050	121	130	138	15	4710	118	128	135	
	10	5310	125	133	140	10	4950	121	130	138	10	4610	118	128	135	
	5	5220	125	133	140	5	4860	121	130	138	5	4540	118	128	135	
	0	5130	125	133	140	0	4790	121	130	138	0	4470	118	128	135	
V _{FTO} = 170 kts					V _{FTO} = 169 kts					V _{FTO} = 166 kts						
V _{ERC} = 187 kts					V _{ERC} = 183 kts					V _{ERC} = 180 kts						
V _{REF} = 137 kts					V _{REF} = 136 kts					V _{REF} = 134 kts						

Airport Information

Field Elevation (Feet)
 Bar. Pres(in.Hg or HPa)
 Pressure Altitude (Ft)
 Temperature (Deg. C)
 Wind Direction (Deg.)
 Wind Speed (Knots)

Runway Information

Runway Heading (Deg.)
 Runway Length (Feet)
 % Runway Slope (+/-)
 Clearway (Feet)
 Stopway (Feet)

SID Gradient

Yes No

Obstacle

Yes No

Anti-Ice

On Off

FLAPS

FLAPS 15 FLAPS 0

Takeoff Gross Weight(Lbs)

LANDING

Weight and Balance

Weight Limitation:

None

COMPUTED AFM DATA:

MAX. ALLOWABLE T.O.G.W (Lbs)...
 TAKEOFF DISTANCE (Ft).....
 2ND SEGMENT GRADIENT% (NET)
 V1 (Knots).....
 VR (Knots).....
 V2 (Knots).....
 VFTO (Knots).....
 VENR (Knots).....
 Takeoff Thrust (%) APR ARMED
 VREF (KNOTS)



COMPUTE

Help

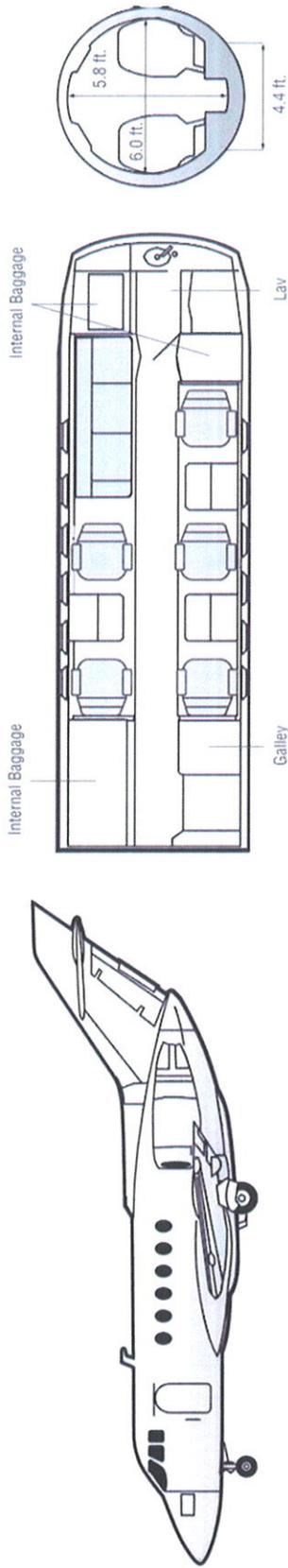
Print

File

WHX CORP. - N2G

Hawker 800

Mid-Cabin Jet



BASIC VARIABLE COST DATA

Variable Cost per Hour Components	
Engine and APU Maintenance Reserves	\$344.98
Airframe Maintenance	\$398.43
Fuel Cost @ \$3.80 per gallon based on 260 gph	\$988.00
Total Variable Cost per Hour	\$1,731.41
Average Block Speed (kts / mph)	385 / 445
Variable Cost per Naut. Mile / Stat. Mile	\$4.50 / \$3.91

ADDITIONAL AIRCRAFT INFORMATION

Typical Passenger Capacity	8
Baggage Capacity External / Internal (cubic ft)	00.0 / 48.0
Years in Production	1984 - 1995
Number of Aircraft Produced (approximate)	360
Average Pre-Owned Asking Prices (in millions)	\$4.2 - \$6.7

BASIC AIRCRAFT PERFORMANCE DATA

Seats Full Range (Naut. Miles / Stat. Miles)	2,390 / 2,750
Ferry (No Payload) (Naut. Miles / Stat. Miles)	2,570 / 2,960
Balance Field Length* (Take-off Distance) (ft)	6,300
Landing Distance (ft)	3,825
Normal Cruise Speed (kts / mph)	430 / 495
Long Range Cruise Speed (kts / mph)	390 / 450
Ceiling Service (ft)	39,000

*Consideration must also be given to, but not limited to: passenger weights, baggage weight, winds, runway length, temperature and airport elevation.



Sterling Aviation, LLC

kids R kids
SCHOOLS OF QUALITY LEARNING
Kids 'R' Kids Corporate Headquarters

June 12, 2009

Mr. Tom Tredeau
Airport Manager
Chesterfield County Airport
7511 Airfield Drive
Richmond, VA 23237

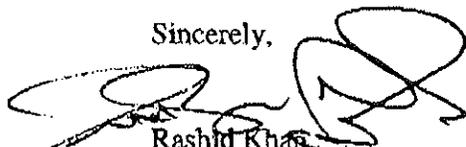
Dear Mr. Tredeau:

Thank you for the opportunity to voice our support of the proposed runway extension at the Chesterfield County Airport (FCI). Kids R Kids frequently operates a Citation Excel at FCI.

In reviewing the operational capabilities and requirements of the Excel and given our typical mission profile, we frequently require the capability to depart Chesterfield County with a useful load at or above 90 percent. The existing runway length is inadequate to support our operations year round and during wet and winter weather conditions.

In conclusion, a runway length of 6,000 feet would allow our operations to operate safely and efficiently, and meet our mission objectives without inconvenience to our passengers, and we are in full support of the County's efforts to extend the runway. Please do not hesitate to contact me should you have questions or require additional information.

Sincerely,



Rashid Khan
Chief Pilot

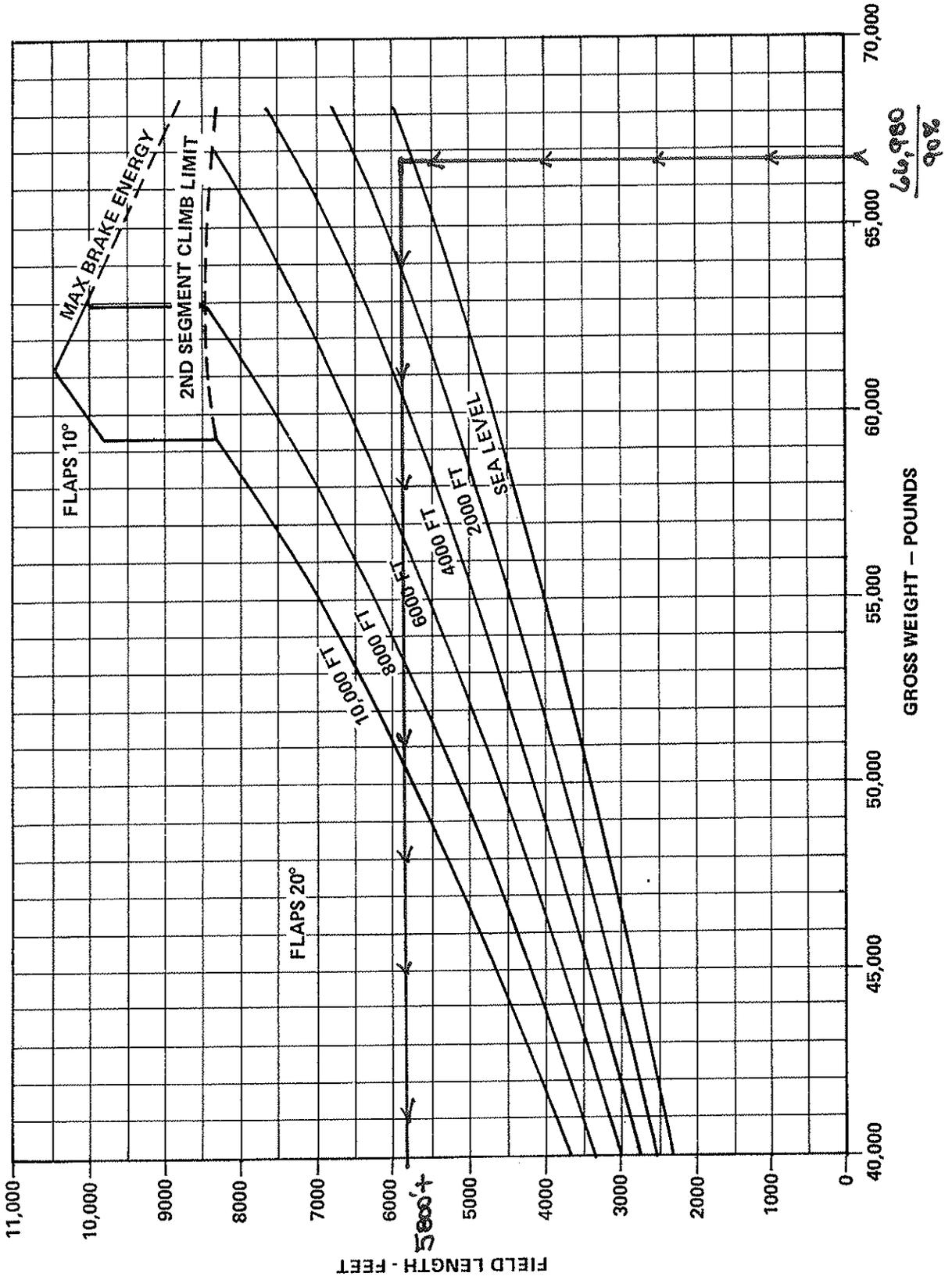
We Hold The Future®

1625 Executive Drive South, Duluth, Georgia 30096
(770) 279-7777 ♦ www.kidsrkids.com ♦ (800) 279-0033 ♦ FAX 770-279-9699

GULFSTREAM III

BALANCED FIELD LENGTH

ISA + 10° C



Technical Brief

General Specifications

Gulfstream IV-SP

vs Gulfstream IV and Gulfstream III

	GIV-SP	GIV	GIII
Weights (lbs)			
Maximum Ramp Weight	75,000	73,600	70,200
Maximum Takeoff Weight	74,600	73,200	69,700
Maximum Zero Fuel Weight	49,000	46,500	44,000
Maximum Landing Weight	66,000	58,500	58,500
Typical Basic Operating Weight	42,500	42,500	38,000
Maximum Useful Load	32,500	31,100	32,200
Maximum Payload	6,500	4,000	6,000
Maximum Fuel Capacity (1)	29,500	29,500	28,300
Maximum Payload with Full Fuel	3,000	1,600	3,900
Maximum Fuel with Full Payload	26,000	27,100	26,200
Performance			
Standard Passenger Load	8	8	8
Initial Cruise Altitude - ft. (2)	41,000	41,000	41,000
Final Cruise Altitude - ft. (3)	45,000	45,000	45,000
Maximum Certified Altitude - ft.	45,000	45,000	45,000
Long Range Cruise Speed - Mach	0.80	0.80	0.77
Normal Cruise Speed - Mach	0.80	0.80	0.80
High Speed Cruise - Mach	0.85	0.85	0.85
Mmo - Mach	0.88	0.88	0.85
Range at Long Range Cruise - nm	4,220	4,220	3,691
Range at Mach 0.80 - nm	4,220	4,220	3,567
Range at High Speed Cruise - nm	3,056	3,018	2,819
FAA Takeoff Distance - ft. (4)	5,460	5,265	5,115
FAA Landing Distance - ft. (5)	3,190	3,393	3,250
All Engine Rate of Climb - ft/min (4)	4,122	4,219	4,049

(1) Fuel density = 6.75 lb/gal.

(2) ISA Conditions, Takeoff at MTOW

(3) Normal Cruise, max range mission, with fuel remaining for 2 hours flight, plus NBAA IFR reserves.

(4) Max Takeoff Weight, Sea Level, ISA Conditions

(5) Max Landing Weight, Sea Level, ISA Conditions

**GULFSTREAM AEROSPACE
GULFSTREAM GIV
OPERATIONAL INFORMATION SUPPLEMENT**

ADVISORY DATA ONLY – NOT FAA APPROVED

GIV-OIS-2A

GIV-SP TAKEOFF PLANNING CHART

WET RUNWAY		AIRPORT PRESSURE ALTITUDE = SEA LEVEL						TAKEOFF FLAP 20°					
74,600 LB MTOGW	OAT (°C)	50	45	40	35	30	25	20	15	5	-5	-15	
	OAT (°F)	122	113	104	95	86	77	68	59	41	23	5	
	RATED EPR	1.59	1.62	1.64	1.67	1.70	1.70	1.70	1.70	1.69	1.69	1.69	
-- 74,600 LB --													
V _{FS} = 173 KCAS	FLD LNTH	*****	*****	*****	6,820	6,400	6,300	6,190	6,090	5,930	5,720	5,510	
V _{SE} = 180 KCAS	V ₁ KCAS	*****	*****	*****	133	131	132	132	132	132	133	133	
V _{REF} = 158 KCAS	V _R KCAS	*****	*****	*****	146	145	145	145	145	145	145	145	
MAX TEMP = 37°C	V ₂ KCAS	*****	*****	*****	150	150	150	150	150	150	150	150	
-- 70,000 LB --													
V _{FS} = 167 KCAS	FLD LNTH	*****	*****	6,410	6,000	5,640	5,550	5,460	5,370	5,230	5,040	4,860	
V _{SE} = 174 KCAS	V ₁ KCAS	*****	*****	129	127	125	125	125	125	126	126	126	
V _{REF} = 154 KCAS	V _R KCAS	*****	*****	141	140	140	140	140	140	140	140	140	
MAX TEMP = 43°C	V ₂ KCAS	*****	*****	145	145	145	145	145	145	145	145	145	
-- 65,000 LB --													
V _{FS} = 161 KCAS	FLD LNTH	*****	5,910	5,530	5,190	4,880	4,800	4,720	4,640	4,520	4,360	4,210	
V _{SE} = 168 KCAS	V ₁ KCAS	*****	123	121	119	117	117	118	118	118	118	119	
V _{REF} = 148 KCAS	V _R KCAS	*****	136	135	134	134	134	134	134	134	134	134	
MAX TEMP = 49°C	V ₂ KCAS	*****	140	140	140	140	140	140	140	140	140	140	
-- 60,000 LB --													
V _{FS} = 155 KCAS	FLD LNTH	5,410	5,090	4,930	4,780	4,650	4,570	4,490	4,410	4,270	4,110	3,960	
V _{SE} = 161 KCAS	V ₁ KCAS	118	116	116	117	117	117	117	117	117	117	118	
V _{REF} = 142 KCAS	V _R KCAS	130	129	129	128	127	127	127	127	127	127	127	
MAX TEMP = 50°C	V ₂ KCAS	135	135	135	135	135	135	135	135	135	135	135	
-- 55,000 LB --													
V _{FS} = 148 KCAS	FLD LNTH	5,030	4,870	4,720	4,580	4,460	4,380	4,310	4,240	4,090	3,940	3,800	
V _{SE} = 154 KCAS	V ₁ KCAS	116	116	117	117	118	118	118	118	118	118	118	
V _{REF} = 136 KCAS	V _R KCAS	126	125	124	124	123	123	123	123	123	123	123	
MAX TEMP = 50°C	V ₂ KCAS	131	131	131	131	131	131	131	131	131	131	131	
-- 50,000 LB --													
V _{FS} = 142 KCAS	FLD LNTH	4,780	4,640	4,500	4,380	4,270	4,190	4,120	4,050	3,910	3,770	3,630	
V _{SE} = 147 KCAS	V ₁ KCAS	117	117	117	118	118	118	118	118	119	119	119	
V _{REF} = 130 KCAS	V _R KCAS	125	124	123	122	122	122	122	122	122	122	122	
MAX TEMP = 50°C	V ₂ KCAS	131	131	131	131	131	131	131	131	131	131	131	
-- 45,000 LB --													
V _{FS} = 134 KCAS	FLD LNTH	4,550	4,420	4,300	4,190	4,080	4,020	3,950	3,880	3,750	3,610	3,480	
V _{SE} = 139 KCAS	V ₁ KCAS	117	118	118	119	119	119	119	119	119	120	120	
V _{REF} = 123 KCAS	V _R KCAS	124	123	122	121	121	121	121	121	121	121	121	
MAX TEMP = 50°C	V ₂ KCAS	131	131	131	131	131	131	131	131	131	131	131	

- NOTES:** 1. INCREASE AVAILABLE FIELD LENGTH 2% FOR EACH 5 KNOTS HEADWIND (UP TO 40 KNOTS).
2. DECREASE AVAILABLE FIELD LENGTH 18% FOR EACH 1% OF UPHILL SLOPE (UP TO 2%).

REVISION 1

GIV-OIS-2A

Page 17
January 31, 2001