

# RONALD REAGAN WASHINGTON NATIONAL AIRPORT (DCA)

## RUNWAY 4-22 MODIFICATIONS

### ENVIRONMENTAL ASSESSMENT AND FEDERAL CONSISTENCY CERTIFICATION



*Prepared for:*  
**Metropolitan Washington Airports Authority**  
One Aviation Circle  
Washington, D.C., 20001

*Prepared by:*  
**EA Engineering, Science, and Technology, Inc.**  
15 Loveton Circle  
Sparks, Maryland 21152

**November 2007**

EA Project 13840.07



**EA Engineering, Science,  
and Technology, Inc.**

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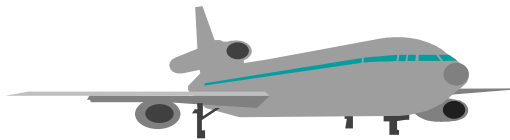
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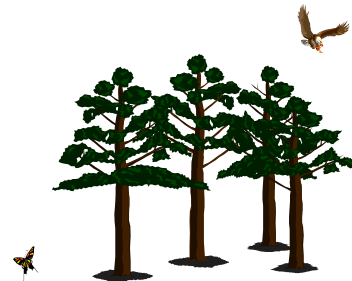
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**ENVIRONMENTAL  
EVALUATION  
FORM "C"  
(Short Environmental Assessment)  
for  
AIRPORT DEVELOPMENT  
PROJECTS**



*~ Aviation in Harmony with the Environment ~*



**FEDERAL AVIATION ADMINISTRATION  
EASTERN REGION  
AIRPORTS DIVISION**

Airport Name: Ronald Reagan Washington National Airport (DCA) Proposed Project: Runway 4-22 Modifications

This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible FAA official.

Responsible FAA Official: \_\_\_\_\_ Date: \_\_\_\_\_ - \_\_\_\_\_

**Note:** The form on which this document is based is a modification of the Form C developed by FAA Eastern Region dated March 22, 1999. The original form contained references to specific paragraphs of FAA Order 5050.4A. In the modified form, these references were replaced with references to the corresponding paragraphs of FAA Order 5050.4B, which replaced Order 5050.4A effective April 28, 2006, and FAA Order 1050.1E.

**FAA EASTERN REGION AIRPORTS DIVISION**  
**ENVIRONMENTAL EVALUATION FORM “C”**  
**FOR SHORT ENVIRONMENTAL ASSESSMENTS**

Environmental Evaluation Form “C,” Short Environmental Assessment (EA), is based upon the guidance in Federal Aviation Administration (FAA) Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions For Airport Actions* or subsequent revisions, which incorporates the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA), as well as the U.S. Department of Transportation environmental regulations (including FAA Order 1050.1E or subsequent revisions), and many other federal statutes and regulations designed to protect the Nation's natural, historic, cultural, and archeological resources. It was prepared by FAA Eastern Region Airports Division, and is intended to be used for proposed Airports projects in this region only. If you wish to use it for projects in other regions or divisions, you must first coordinate with that region or division to determine whether they approve of its use.

Form C is intended to be used when a project cannot be categorically excluded (CATEX) from formal environmental assessment, but when the environmental impacts of the proposed project are expected to be insignificant and a detailed EA would not be appropriate. Accordingly, Form C is intended to meet the intent of a short EA while satisfying the regulatory requirements of an EA. Proper completion of Form C would allow the FAA to determine whether the proposed airport development project can be processed with a short EA, or whether a more detailed EA must be prepared. FAA normally intends to use a properly completed Form C to support a Finding of No Significant Impact (FONSI).

Applicability

Form C should be used if the sponsor's proposed project meets the following two (2) criteria:

- 1) The proposed project involves conditions (“extraordinary circumstances”) identified in Order 5050.4B paragraph 903 (projects normally requiring an EIS); paragraph 702 (projects normally requiring an EA); Table 6-3 (extraordinary circumstances); or paragraph 706.h (cumulative impacts), and the sponsor shall demonstrate that involvement with, or impacts to, the extraordinary circumstances are not notable in number or degree of impact, and that any significant impacts can be mitigated below threshold levels.
  
- 2) The proposed project must fall under one of the following categories of Federal Airports Program actions noted with an asterisk (\*):
  - (a) Approval of an airport location (new airport).
  - \* (b) Approval of a project on an airport layout plan (ALP).
  - \* (c) Approval of federal funding for airport development.
  - \* (d) Requests for conveyance of government land.
  - \* (e) Approval of release of airport land.
  - \* (f) Approval of the use of passenger facility charges (PFC).
  - \* (g) Approval of development or construction on a federally obligated airport.

Do any of these listed Federal Airports program action(s), 2(b) - (g), apply to your project?  
 Yes   X   No\*\*        If “yes,” list them here (there can be more than one).

2 (b) Approval of a project on an airport layout plan (ALP);

2(g) Approval of development or construction on a federally obligated airport.

If “no,” see (\*\*) below.

**\*\* If the proposed project does not meet 1) or 2) above, i.e., one or more answers to the questions resulted in a (\*\*), do not complete this Form. Rather, contact the appropriate official (listed at the end of this form) for additional instructions.**

### Directions

Prior to completing Form C, FAA recommends that you contact the environmental specialist in the appropriate office listed at the end of this Form to insure that the proper Form (A, B, or C) is used for your proposed action. Once you have completed the Form in accordance with the following instructions, submit it to that office for review.

To complete Form C, the preparer should describe the proposed project and provide information on any potential impacts of the proposed project. Accordingly, it will be necessary for the preparer to have knowledge of the environmental features of the airport. Although some of this information may be obtained from the preparer's own observations, previous environmental studies and associated documents, or research, the best sources are the jurisdictional federal, state and local resource agencies responsible for protecting specially-protected resources, such as wetlands, coastal zones, floodplains, endangered or threatened species, properties in or eligible for National Register status, DOT Section 303/4(f) lands, etc.. As appropriate, these agencies should be consulted prior to submitting information to the FAA. It is important to note that in addition to fulfilling the requirements of NEPA through this evaluation process, the FAA is responsible for ensuring that airport development projects comply with the many laws and orders administered by the agencies protecting specially-protected resources. Moreover, the Form is not meant to be a stand-alone document. Rather, it is intended to be used in conjunction with applicable Orders, laws, and guidance documents, and in consultation with the appropriate resource agencies.

An electronic version of this Evaluation Form is available on-line at <http://www.faa.gov/arp/aea>. In addition, some of the guidance and regulatory documents referenced in this Evaluation Form are available on-line at <http://www.faa.gov/arp/arphone.htm>. A document entitled “Tips for Airport Sponsors and their Consultants” is also available at <http://www.faa.gov/asw/asw600/envreq.html>. We encourage the preparer to complete the Form electronically, rather than by hand. It may then be submitted via e:mail, with a copy of the completed signature page sent by fax or mail; or, a hard copy of the completed Form may be submitted by fax or mail. The contact list should be removed from the completed Form prior to its submittal. Those responses requiring further explanation, or separate project plans or maps, should be attached at the end of the Form. In the attachment, identify the issue by its associated number/title (e.g., response to Item 13, Coastal Zone Impacts).

Complete the following information:

1. Project Location:

Airport Name: Ronald Reagan Washington National Airport (DCA)

Airport Address: Washington, D.C. 20001-4901

City: \_\_\_\_\_ County: Arlington State: Virginia

2. Airport Sponsor Information:

Point of Contact: Stephan G. Smith, Deputy Vice President for Engineering

Address: Room 155 West Building, Ronald Reagan Washington National Airport  
Washington, DC 20001-4901

Telephone: (703) 417-8140 Fax: (703) 417-8199

E-mail: Stephan.Smith@MWAA.com

3. Evaluation Form Preparer Information:

Point of Contact: Renee Bartnik, Senior Environmental Planner

Address: Parsons Management Consultants  
45045 Aviation Dr., Suite 200, Dulles, VA 20166-7528

Telephone: (703)-572-1250 Fax: (703) 572-1279

E-mail: Renee.Bartnik@MWAA.com

4. Proposed Development Action (describe ALL associated projects that are involved):  
Ronald Reagan Washington National Airport (DCA) is located on a peninsula in the Potomac River in Arlington County, Virginia (Figure 1). The Metropolitan Washington Airports Authority (the Authority) is responsible for the day-to-day operation of DCA. The Authority is proposing to take a number of actions in regard to Runway 4-22 at DCA. The net impact of all proposed changes is to temporarily reduce the declared distances for departing aircraft on Runway 4, to reduce the largest category of aircraft permitted on the runway from Category C to Category A and/or B, and to eliminate departures and arrivals on Runway 22 as well as arrivals to Runway 4 per discussions between the Airport Manager and representatives of the FAA Washington Airports District Office (ADO). The change would be temporary (effective winter 2007) and is expected to last for a period of 2-5 years, at which time a decision will be made by the Authority whether to apply for an extension of the temporary designation or to make the changed designation permanent.

The modifications proposed for implementation of the temporary change in Runway 4-22 classification and reduction in approach category include full safety areas at both approach ends to the runway. Because of the proximity of the Potomac River to the threshold of Runway 22, the Safety Area associated with the runway will be established by relocating the threshold of Runway 22 approximately 600 feet to the southwest, effectively shortening the runway by 600 feet (Figure 2). The pavement affected by the shift will be reclassified as a taxiway. The runway edge lights will be relamped to correspond to the new threshold, and blue lenses installed on the 600-ft segment being reclassified as a taxiway. The Runway End Identifier Lights (REIL's) and the runway threshold lights will be relocated and the Visual Approach Slope Indicator (VASI) associated with Runway 22 will be temporarily placed out of service for the duration of the threshold relocation.

The Runway 4 threshold will be unaffected, and the lighting and instrumentation associated with the threshold will not change. However, the Runway end lights at the opposite end will be relocated to match the relocated threshold for Runway 22 (Figure 3).

Procedural modifications include the reclassification of Runway 4-22 as limited to Visual Approaches of no less than ¾-mile visibility by aircraft in Approach Categories A, B, as defined in FAA Advisory Circular AC 150/5300-13. The Safety Area for Runway 4 will be changed from 500 feet in width to 300 feet in width. The Object Free Area for both runways will be reduced from 1,000 feet to 600 feet in length beyond the runway threshold. The relocation of the threshold for Runway 22 will allow the establishment of a permanent safety area before the threshold of the runway as desired by FAA. As a result of the 600-ft relocation of the Runway 22 threshold, the declared distance for Runway 4-22 in both arrival and departure directions will be reduced from 4,911 feet available to 4,311 feet available.

An analysis of data on aircraft operations for the first five months of 2007 showed a total of 725 operations by all aircraft types in all directions on Runway 4-22 resulting in an average of slightly less than 5 operations per day. Of these, 477 arrivals and departures were performed by aircraft in Approach Category C averaging 3 per day. Reclassification of Runway 4-22 will require a shift of these operations from Runway 4-22 to either Runway 1-19 or Runway 15-33. Impacts to airfield and airspace as a result of the proposed changes are expected to be minimal.

For the time that Runway 4-22 is reclassified for departures by aircraft in Approach Category B and below, the Authority expects to gain as many as 560 additional public parking spaces in a remote lot

located beyond the runway end (south of Runway 4) (Figure 4). These spaces will be created in the space between the Approach Category C Object-Free Area and the Approach Category B Object-Free Area.

5. Describe the Purpose of and Need for the Project:

The proposed activities are intended to provide additional public parking space at DCA during construction of an additional parking deck on each of Garages A and B/C. Construction of the additional parking decks will result in a temporary loss of approximately 350-400 parking spaces. The proposed activities would allow the establishment of up to 560 additional parking spaces in an existing inactive temporary lot at the south end of Runway 4-22 (Figure 4) to replace those lost during construction of the additional parking decks for Garages A and B/C.

6. Alternatives to the Project: Describe any other reasonable actions that may feasibly substitute for the proposed project, and include a description of the “No Action” alternative. If there are no feasible or reasonable alternatives to the proposed project, explain why:

There are no feasible or reasonable action alternatives for the proposed action. There is no land available at DCA for additional parking, and there is no off-airport parking available. An ALP change to close the runway is also not an option; there is considerable pressure for high-rise development near DCA, and closing the runway could lead to permanent loss of airspace.

Alt #1 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Alt. #2 \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

No Action Alt.

Explanation The “No Action” Alternative would not offset the 350-400 public parking spaces estimated to be lost during construction of additional decks on the existing parking Garages A, and B/C. Parking at DCA would be available only in remaining designated spaces. Parking at DCA is already beyond capacity and is creating the necessity for expansion of the existing parking garages. Although the additional decks on the existing parking Garages A and B/C project is designed to be implemented in phases and phasing of the construction of the decks will minimize disturbances to public parking, traffic circulation, and rental car operations, phasing will not eliminate disruption to these operations and would still result in a temporary loss of approximately 350-400 parking spaces. Creating temporary parking south of Runway 4 would reduce the disruptions further by allowing the establishment of up to 560 additional parking spaces.

In addition, the loss of public parking spaces would increase the number of passengers using taxis and to a much lesser extent, Metrorail. Metrorail is not convenient for passengers coming to the airport from locations that do not have Metrorail service or for passengers with large quantities of luggage. The additional taxi traffic would add to the congestion on roads serving DCA.

7. Describe the affected environment of the project area (terrain features, level of urbanization, sensitive populations, etc). Attach a map or drawing of the area with the location(s) of the proposed action(s) identified. Attachment? Yes  No \_\_\_\_\_

Ronald Reagan Washington National Airport is the closest airport to Washington, D.C. and as such is located in a highly urban environment. The DCA property is approximately 860 acres adjacent to the Potomac River in Arlington County, Virginia (Figure 5). The area was once the site of Abingdon Plantation and much of the shoreline area was filled during construction of the airport facilities. The proposed project activities would be entirely within the DCA property boundary and in areas already developed and impervious (inactive parking lot and the existing ends of Runway 4-22).

8. Are there attachments to this Form? Yes  No \_\_\_\_\_ If "yes," identify them below.

Figure 1. Ronald Reagan Washington National Airport Location

Figure 2. Recommended Action Plan Runway 4-22

Figure 3. Recommended Action Plan Runway 22 End

Figure 4. Runway Protected Areas and Parking Area Runway 4 End

Figure 5. Project Area

Figure 6. 2004 Noise Exposure Contours

Figure 7. 2008 Noise Exposure Contours – No Action

Figure 8. 2013 Noise Exposure Contours – No Action

Figure 9. 2008 Noise Exposure Contours – Proposed Action

Figure 10. 2013 Noise Exposure Contours – Proposed Action

Figure 11. Noise Grid Analysis

Attachment A. Coastal Zone Management Act Consistency Certification

Attachment B. Comments Received Regarding the Draft Environmental Assessment (to be prepared)

9. Environmental Consequences – Special Impact Categories (refer to corresponding sections in 5050.4A , or subsequent revisions, for more information and direction to complete each category, including discussions of Thresholds of Significance).

**(1) NOISE**

1) Does the proposal require a noise analysis per Order 5050.4A? Explain. (Note: Noise sensitive land uses are defined in Table 1 of FAR Part 150). Yes  No \_\_\_\_\_

2) If "yes," determine whether the proposed project is likely to have a significant impact on noise levels over noise sensitive areas within the DNL 65 dBA noise contour.

In accordance with FAA Orders 5050.4B and 1050.1E, aircraft noise exposure in the Airport vicinity was analyzed for projected conditions in 2008 and 2013. The primary metric used in the noise analysis is the day-night average sound level (DNL), which is the average sound pressure level

in A-weighted decibels (dBA) for an average day of the year.<sup>1</sup> DNL is calculated using the sound energy generated by individual aircraft operations (arrivals or departures), the number of operations occurring during a theoretical average 24-hour period, and the times of day the operations occur. A 10-decibel (dB) weighting penalty is added for aircraft operations occurring during nighttime hours (between 10:00 p.m. and 6:59 a.m.). The 10-dB penalty represents the added intrusiveness of sounds that occur during sleeping hours, both because of the increased sensitivity to noise during sleep, and because ambient sound levels during nighttime hours are typically about 10 dB lower than during daytime hours. With the penalty, each operation during nighttime hours is considered to be equivalent to 10 operations of the same aircraft type during daytime hours (between 7:00 a.m. and 9:59 p.m.). As specified in FAA Orders 5050.4B and 1050.1E, DNL 65, 70, and 75 are the criterion levels for noise exposure analyses included in EAs for proposed airport improvement projects. The FAA defines a significant change in aircraft noise exposure as a DNL difference of 1.5 dBA over noise-sensitive land uses within an area exposed to aircraft noise of DNL 65 or higher.

The Integrated Noise Model (INM) is a computer model developed by the FAA and required for use in developing aircraft noise exposure maps. The INM contains aircraft operational and noise data in an aircraft database that reflect average aircraft operating conditions at an airport. Version 7.0 of the INM<sup>2</sup>—the latest accepted, state-of-the-art tool for determining the total effect of aircraft noise at and around airports at the time the noise exposure maps for this Environmental Evaluation Form “C” were prepared—was used for the 2008 and 2013 noise analysis. The INM Version 7.0 aircraft database contains representative data for commercial, general aviation, and military aircraft powered by turbojet, turbofan, or propeller-driven engines. For each aircraft type in the database, the following information is provided: (1) a set of departure profiles for each applicable trip length, (2) a set of approach parameters, and (3) sound exposure level (SEL) versus distance curves for several thrust settings. This information is needed to develop the noise exposure maps based on the DNL metric.

### **Environmental Setting**

The existing conditions (2004) noise exposure map for Ronald Reagan Washington National Airport (the Airport) is presented on Figure 6. 2004 aircraft operations data, fleet mix information, and runway and flight track use data are documented in a May 4, 2005, memorandum by Wyle Laboratories entitled, *Washington National Airport (DCA) 2004 DNL Contours*. The FAA accepted the existing conditions and future (2009) noise exposure maps contained in the Airport’s FAR Part 150 Noise Compatibility Program Update in August 2007.

As shown on Figure 6, the majority of the area exposed to DNL 65 and higher is located on Airport property or within the Potomac River. No population or noise-sensitive land uses are exposed to aircraft noise of DNL 65 and higher. Two land areas are exposed to aircraft noise of DNL 65 and higher: the first area is north of the Airport and includes Roaches Run Waterfowl Sanctuary and portions of the Pentagon. The second land area is directly south of the Airport and includes Daingerfield Island Marina.

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<sup>1</sup> A-weighted sound pressure level is a frequency-weighted sound level that correlates with the way sound is perceived by the human ear.

<sup>2</sup> Version 7.0 of the INM was released on April 30, 2007.

## **Environmental Consequences**

Noise exposure in 2008 and 2013 under the No Action and Proposed Action alternatives is described in the following sections.

### **No Action Alternative**

Under the No Action alternative, there would be no change to existing facilities at the Airport and no change to airport operational procedures including runway use and flight track use. Figures 7 and 8 show the 2008 and 2013 aircraft noise exposure contours for the No Action alternative superimposed on a map of generalized existing land use. As shown on Figures 7 and 8, the noise exposure contours for the Airport are anticipated to grow slightly in the future compared to the existing conditions contours. No population or noise-sensitive land uses would be exposed to aircraft noise of DNL 65 and higher in 2008 or 2013 under the No Action Alternative.

### **Proposed Action Alternative**

Under the Proposed Action, the Metropolitan Washington Airports Authority would make temporary modifications to Runway 4-22 in 2008. The temporary modifications of the runway would require the closure of Runway 22, and Runway 4 would only accommodate departure operations by approach category A and B aircraft. It was assumed for noise modeling purposes that aircraft that currently use Runway 4-22 for arrivals and departures would be redirected to Runway 1-19.

Figures 9 and 10 show the 2008 and 2013 aircraft noise exposure contours for the Proposed Action alternative superimposed on a map of generalized existing land use. The noise contours depicted on Figures 9 and 10 are virtually identical to the noise contours presented on Figures 7 and 8 for the No Action alternative. No population or noise-sensitive land uses would be exposed to aircraft noise of DNL 65 and higher in 2008 or 2013 under the Proposed Action Alternative.

A noise grid analysis was conducted to determine differences in noise levels at specific locations in the vicinity of the Airport under the Proposed Action and No Action alternatives. The noise grid points that were modeled in the INM, depicted on Figure 11, represent residential communities that are outside the DNL 65 noise contour, Daingerfield Island, and Roaches Run Waterfowl Sanctuary. As presented in Table 1, predicted noise levels at these grid point locations would be virtually identical in 2008 and 2013 under the Proposed Action and No Action alternatives. It is anticipated that noise levels at Point 2, Point 4, and Point 5 would be slightly lower (0.1 dB) in 2008 under the Proposed Action alternative when compared to the No Action alternative.

**Table 1. Noise Grid Analysis – Runway 4-22 Modifications**

Point	Land Use	Noise Exposure Level (DNL)			
		2008 No Action	2008 Proposed Action	2013 No Action	2013 Proposed Action
1	Park and Recreation	66.4	66.4	66.5	66.5
2	Park and Recreation	63.9	63.8	64.0	64.0
3	Residential	60.2	60.2	60.3	60.3
4	Residential	61.6	61.5	61.7	61.7
5	Residential	58.0	57.9	58.1	58.1
6	Residential	50.9	50.9	51.0	51.0

Notes: DNL = Day-night average sound level.

Source: Ricondo & Associates, Inc

Prepared by: Ricondo & Associates, Inc.

**Summary of Findings**

No population or noise-sensitive land uses would be exposed to aircraft noise of DNL 65 and higher in 2008 or 2013 under the Proposed Action or No Action alternatives. Noise levels south of the Airport in the vicinity of Daingerfield Island are anticipated to be 0.1 dB lower under the Proposed Action alternative when compared to the No Action alternative. The results of the noise analysis demonstrate that there would be no significant noise impacts in 2008 or 2013 under the Proposed Action.

**(2) COMPATIBLE LAND USE**

(a) Would the proposed project result in other (besides noise) impacts exceeding thresholds of significance that have land use ramifications, such as disruption of communities, relocation of residences or businesses, or impact natural resource areas? Yes \_\_\_ No X Explain.

No. The proposed activities resulting in the reclassification of Runway 4-22 and the creation of temporary replacement public parking spaces will utilize already developed land within the DCA property boundary and would not impact communities, businesses or natural resources.

(b) Would the proposed project be located near or create a wildlife hazard as defined in FAA Advisory Circular 150/5200-33, "Wildlife Hazards on and Near Airports"? Yes \_\_\_ No X Explain.

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**(3) SOCIAL IMPACTS**

(a) Would the proposed project cause relocation of any homes or businesses? Yes \_\_\_ No X  
Explain.

No. The proposed actions are within the existing DCA property boundaries and would not cause any relocation of residences or businesses (See 2(a) above).

(b) If “yes,” describe the availability of adequate relocation facilities

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(c) Would the proposed project cause an alteration in surface traffic patterns, or cause a noticeable increase in surface traffic congestion? Yes X No \_\_\_ Explain.

The construction of an additional deck on Garages A and B/C will result in the temporary loss of approximately 350-400 parking spaces. The changes proposed for Runway 4-22 would result in the establishment of a maximum of 560 temporary public parking spaces to offset those lost during construction. Some minor, temporary changes to airport roadway traffic patterns and parking operations would be expected as a result of the proposed project activities at DCA; however, traffic congestion is not expected.

**(4) INDUCED SOCIOECONOMIC IMPACTS**

Would the proposed project cause induced, or secondary, socioeconomic impacts to surrounding communities, such as change business and economic activity in a community; impact public service demands; induce shifts in population movement and growth, etc.?

Yes \_\_\_ No X Explain.

See 2(a) and 3(a) above.

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**(5) AIR QUALITY**

(a) Does the proposed project have the potential to increase airside or landside capacity, including an increase in capacity to handle surface vehicles? Explain. No. The proposed project involves temporary relocation of existing automobile parking, but not a permanent increase in parking capacity.

(b) Identify whether the project area is in a non-attainment or maintenance area for any of the six (6) criteria air pollutants having National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act Amendments (CAAA), and identify which pollutant(s) apply. If the proposed project is in an attainment area, no further air quality analysis is needed; skip to item (6). See EPA Green Book at [www.epa.gov/oar/oaqps/greenbk](http://www.epa.gov/oar/oaqps/greenbk) for current attainment areas.

DCA is located in the Washington Metropolitan area. This area is currently in attainment for all criteria pollutants except ozone (O<sub>3</sub>) and fine particulate matter (PM<sub>2.5</sub>). The Washington Metropolitan area is classified as moderate nonattainment for the new 8-hr ozone standard (0.08ppm), and as nonattainment for fine particulate matter (particles smaller than 2.5 microns) for which the standard is 35 micrograms per cubic meter as a 24-hr average, or 15 micrograms

per cubic meter as an annual average. The Metropolitan Washington Council of Governments is preparing State Implementation Plans (SIPs) for both ozone and PM<sub>2.5</sub>. Actions to be taken by VDEQ to reduce pollution to levels at or below the NAAQS are outlined in a CAA-mandated State Implementation Plan.

(c) Is an air quality analysis needed with regard to indirect source review requirements or levels of aircraft activity (See Order 5050.4A and the 1997 FAA Handbook "Air Quality Procedures for Civilian Airports and Air Force Bases"). Explain. If "yes," comply with state requirements. No. Indirect source review requirements are state-specific and are not required in Virginia, where the project area is located.

(d)(1) Would the proposed action be an "exempted action," as defined in 40 C.F.R Part 51.853(c)(2) of the General Conformity Rule? If exempt, skip to item (6). List exemption claimed. No.

(d)(2) Would the increase in the emission level of the regulated air pollutants for which the project area is in non-attainment or maintenance exceed the de minimis standards?

Yes \_\_\_\_\_ No X

Indirect emissions resulting from the project will be insignificant. Direct emissions associated with construction are estimated at 0.41 tons CO, 0.60 tons NO<sub>x</sub>, 1.0 tons VOC, 0.08 tons PM, and 0.05 tons SO<sub>x</sub> (Table 2). Thus, total direct and indirect emissions are well below de minimis standards and are not regionally significant.

(d)(3) If "no," would the proposed project cause a violation of any NAAQS, delay the attainment of any NAAQS, or worsen any existing NAAQS violation? Explain. Total direct and indirect emissions are well below de minimis standards and are not large enough to be regionally significant. At these emissions levels air quality impact modeling is not required under General Conformity because it is assumed that the emissions will not cause a violation or delay in attainment of the applicable NAAQS.

(d)(4) Would the proposed project conform to the State Implementation Plan (SIP) approved by the state air quality resource agency? Explain, and provide supporting documentation. Yes. Because total direct and indirect emissions from the proposed project are well below de minimis standards and are not regionally significant it can be presumed to conform to the applicable SIP.

Table 2. Estimated Air Quality Emissions for Runway 4/22 Modifications

Construction Equipment	Usage (hrs)	Emissions (lbs)				
		CO	NOx	VOC	PM	SOx
Asphalt Pavers	54	21.49	69.18	4.12	6.05	6.25
Plate Compactors		0.00	0.00	0.00	0.00	0.00
Concrete Pavers		0.00	0.00	0.00	0.00	0.00
Rollers		0.00	0.00	0.00	0.00	0.00
Scrapers		0.00	0.00	0.00	0.00	0.00
Paving Equipment		0.00	0.00	0.00	0.00	0.00
Signal Boards		0.00	0.00	0.00	0.00	0.00
Trenchers		0.00	0.00	0.00	0.00	0.00
Bore/Drill Rigs	27	85.84	102.73	13.46	13.44	8.68
Excavators		0.00	0.00	0.00	0.00	0.00
Concrete/Indust. Saw		0.00	0.00	0.00	0.00	0.00
Cement Mixers	27	1.69	4.04	0.38	0.33	0.34
Cranes	27	20.86	51.15	6.42	7.15	4.62
Graders		0.00	0.00	0.00	0.00	0.00
Off-Highway Trucks		0.00	0.00	0.00	0.00	0.00
Crushing/Proc. Equipment		0.00	0.00	0.00	0.00	0.00
Rough Terrain Lifts		0.00	0.00	0.00	0.00	0.00
Rubber Tired Loaders		0.00	0.00	0.00	0.00	0.00
Rubber Tired Dozer		0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	54	34.28	50.92	7.22	5.29	4.29
Crawler Tractors		0.00	0.00	0.00	0.00	0.00
Skid Steer Loader		0.00	0.00	0.00	0.00	0.00
Off-Highway Tractor		0.00	0.00	0.00	0.00	0.00
Dumpers/Tenders	1080	58.27	199.77	17.96	29.97	18.52
Forklifts		0.00	0.00	0.00	0.00	0.00
Other Construction Equipment	297	601.31	719.61	94.31	94.12	60.78
Paving Emissions	---	---	---	1,854.92	---	---
<b>TOTAL</b>	<b>(lbs):</b>	<b>823.73</b>	<b>1,197.40</b>	<b>1,998.80</b>	<b>156.34</b>	<b>103.47</b>
	<b>(tons):</b>	<b>0.41</b>	<b>0.60</b>	<b>1.00</b>	<b>0.08</b>	<b>0.05</b>
<i>de minimis</i> levels	<b>(tons/yr):</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>100</b>

Source: The above estimates were calculated using the methodology and information provided in the *Non-road Engine and Vehicle Emission Study--Report*, US EPA Doc 21A-2001, 1991.

## (6) WATER QUALITY

Describe the potential of the proposed project to impact water quality, including ground water, surface water bodies, any public water supply systems, etc. Provide documentation of consultation with agencies having jurisdiction over such water bodies, as applicable.

The proposed project involves two main construction activities: repaving an existing but unused parking lot and cutting grooves into the existing asphalt for the electrical conduit for parking lot lighting. Because these activities are not expected to disturb the underlying soil, no construction related runoff is expected. Therefore, no adverse effects to the water quality of Fourmile Run, located adjacent to the proposed parking area, and the nearby Potomac River are anticipated.

In the event that unanticipated soil disturbance would be needed for the proposed project, then construction activities will be under the restrictions identified in DCA's Virginia Pollutant Discharge Elimination System (VPDES) stormwater discharge permit, as well as pertinent state guidance such as the Northern Virginia Best Management Practices (BMPs) Handbook and the Virginia Stormwater Management Handbook. In addition to the management of stormwater runoff, the construction aspects of the project would be required to have an individual erosion and sediment control plan reviewed and approved by the Authority's Building Codes/Environmental Department. As required under Title 10.1, Chapter 6, Article 1.1 of the Code of Virginia and Section 4 VAC50-60-380 of the Virginia Administrative Code, MWAA's contractor will obtain registration coverage under the General Permit for Discharges of Stormwater From Construction Activities. Currently, the proposed project will be below the threshold for which an erosion and sediment control plan would be required.

**(7) DEPARTMENT OF TRANSPORTATION SECTION 303/4(f)**

Does the proposed project require the use of any publicly owned land from a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance? Yes \_\_\_ No X

Provide justification for your response. Include concurrence of appropriate officials having jurisdiction over such land regarding the use determination. The proposed project is entirely within the DCA property boundary and would not require the use of any publicly owned lands, recreation area, or wildlife or waterfowl refuge. There are identified historic resources at DCA; however, the project will not be located in an area where it could impact historical resources (See 8(a) below).

**(8) HISTORIC, ARCHITECTURAL, ARCHEOLOGICAL, AND CULTURAL RESOURCES**

(a) Describe any impact the proposed project might have on any properties in or eligible for inclusion in the National Register of Historic Places. Provide justification for your response, and include a record of your consultation with the State Historic Preservation Officer (SHPO), if applicable (attach correspondence with SHPO).

As stated in the Metropolitan Washington Airports Authority Design Manual, the Authority is responsible for the protection of the historic and archeological resources contained on MWAA-owned property. Historic resources have been identified at DCA and include the Abingdon Plantation Site; the Main Terminal and South hangar Line; the Abingdon Research Station; and the George Washington Memorial Parkway (see Figure 5). The project and its related activities will not impact historic resources at DCA; no consultation with VA SHPO is required.

(b) Describe whether there is reason to believe that significant scientific, prehistoric, historic, archeological, or paleontological resources would be lost or destroyed as a result of the proposed project. Include a record of consultation with persons or organizations with relevant expertise, including the SHPO, if applicable.

Since the proposed project will occur on developed/paved surfaces and the project area is located on fill material, it will not affect any significant prehistoric, historic, archeological or paleontological resources.

**(9) BIOTIC COMMUNITIES**

Describe the potential of the proposed project to directly or indirectly impact plant communities and/or the displacement of wildlife. This answer should also reference Section 6, Water Quality, if jurisdictional water bodies are present.

DCA is located in a highly urban environment adjacent to the Potomac River. The project is proposed for an area that has previously been developed and is entirely paved or disturbed. There are no natural plant communities or wildlife habitat at the project site; therefore the project will not have an impact on plant communities or wildlife habitat. Measures to prevent impact to the aquatic habitat of the Potomac River are described in Section 6.

**(10) FEDERAL and STATE-LISTED ENDANGERED AND THREATENED SPECIES**

Would the proposed project impact any federally- or state-listed or proposed endangered or threatened species of flora and fauna, or impact critical habitat? Yes \_\_\_ No X

Explain, and discuss and attach records of consultation efforts with jurisdictional agencies, if applicable.

No. There are no known federal or state listed endangered or threatened species or designated critical habitat within the project area; therefore the proposed project will not have an impact on any known or suspected threatened or endangered species or designated critical habitat

**(11) WETLANDS**

Does the proposed project involve the modification of delineated wetlands (wetlands must be delineated using methods in the US Army Corps of Engineers (ACE) 1987 Wetland Delineation Manual; delineations must be performed by a person certified in wetlands delineation).

Yes \_\_\_ No X Provide justification for your response.

No. The nearest wetland is the Fourmile Run shoreline, located directly south of the proposed parking area. Fourmile Run is classified as "waters of the US" by the US Army Corps of Engineers. The proposed project will not affect this wetland since construction activities are limited to the existing but unused parking lot.

**(12) FLOODPLAINS**

(a) Would the proposed project be located in, or would it encroach upon, any 100-year floodplains, as designated by the Federal Emergency Management Agency (FEMA)?

Yes X No \_\_\_

(b) Would the proposed project be located in a 500-year floodplain, as designated by FEMA?

Yes X No \_\_\_

(c) If "yes," is the proposed project considered a "critical action", as defined in the Water Resources Council Floodplain Management Guidelines? (see FR Vol. 43, No. 29, 2/10/78)

Yes \_\_\_ No X

(d) You must attach the corresponding FEMA Flood Insurance Rate Map (FIRM) or other documentation showing the project area. Map attached? Yes X No \_\_\_ If "no," why not? The Federal Emergency Management Agency (FEMA) has not mapped floodplains at Ronald Reagan Washington National Airport. However, according to FEMA, the airport is located in Zone D, areas of undetermined, but possible flood hazards (FEMA 1992) and the

100-year base flood elevation for the airport and surrounding water bodies is 11.4 feet above Mean Sea Level (MSL) (FEMA 1985). Figure 5 shows areas below the 100-year floodplain elevation at DCA. These floodplain areas were based on airport elevations from 1997 Air Survey topographic data and the 100-year base flood elevation for the airport of 11.4 feet.

(e) If the proposed project would cause an encroachment of a base floodplain (the base floodplain is the 100-year floodplain for non-critical actions and the 500-year floodplain for critical actions), what measures would be taken to provide an opportunity for early public review, in accordance with Order 5050.4A Par. 47 (g)(6)?

DCA is bounded on three sides by Roaches Run to the north, the Potomac River to the east, and Fourmile Run to the south. The 100-year floodplain elevation for these waterbodies at DCA is 11.4 ft above mean sea level. Approximately 200 acres of DCA are below the 100-year floodplain. Even though the proposed project is located within the 100-year floodplain there will be no change to the flooding potential of DCA as a result of project activities.

MWAA will inform the public of the proposed project by publishing a Public Notice that the Draft EA is available for review and information on the public comment period. See Public Involvement at the end of this form for more details on the public involvement process.

### **(13) COASTAL ZONE MANAGEMENT PROGRAM**

(a) Would the proposed project occur in, or affect, a coastal zone, as defined by a state's Coastal Zone Management Plan (CZMP)? Yes X No \_\_\_ Explain.

DCA is located in Arlington County which is within Virginia's designated Coastal Zone Management Area. Virginia implements the federal Coastal Zone Management Act (CZMA) through its Coastal Resources Management Program (VCP). A Federal Consistency Certification for the project is attached (Attachment B).

(b) If "yes," is the project consistent with the State's CZMP? Explain. If applicable, attach the sponsor's consistency certification and the state's concurrence of that certification. Early coordination is recommended. Yes X No \_\_\_

Yes. The project is consistent with the State's CZMP. Nine enforceable regulatory programs comprise the VCP: Tidal and non-tidal Wetlands, Fisheries Management, Subaqueous Lands Management, Dunes Management, Point Source Air Pollution Control, Point Source Water Pollution Control, Non-Point Source Water Pollution Control, Shoreline Sanitation, and Coastal Lands Management. The proposed project was determined to be in compliance with all nine programs therefore, there would be no impacts to the coastal zone. Attachment B contains a copy of the sponsor's consistency certification that will be sent to Virginia's Department of Environmental Quality (VDEQ) for review and concurrence.

### **(14) COASTAL BARRIERS**

Is the location of the proposed project within the Coastal Barrier Resources System, as delineated by the US Fish and Wildlife Service (FWS) or FEMA coastal barrier maps? Explain. Yes \_\_\_ No X

No. DCA is located inland of the Atlantic Coast and because of its location, is not within the Coastal Barrier Resource System.

**(15) WILD AND SCENIC RIVERS**

Would the proposed project affect any portion of the free-flowing characteristics of a Wild and Scenic River or a Study River, or any adjacent areas that are part of such rivers, listed on the Wild and Scenic Rivers Inventory? Yes\_\_ No X

Consult the (regional) National Parks Service (NPS), U.S. Forest Service (FS), or other appropriate federal authority for information. Early consultation is recommended.

No. Although DCA is located adjacent to the Potomac River, the river is not designated as a Wild and Scenic River.

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**(16) FARMLAND**

(a) Would the proposed project involve the use of federal financial assistance or conversion of federal government land? Yes\_\_ No X Explain.

No. DCA is located in a highly urban environment. The proposed project area has previously been developed. Therefore, no prime or unique farmland would be affected by the proposed project.

(b) If "yes" would it convert farmland protected by the Farmland Protection Policy Act (FPPA) (prime or unique farmland) to non-agricultural uses? Yes\_\_\_\_\_ No\_\_\_\_\_

(c) If "yes," determine the extent of project-related farmland impacts by completing (and submitting to the Natural Resources Conservation Service) the "Farmland Conversion Impact Rating Form" (NRCS Form AD 1006). Coordinate with the state or local agricultural authorities. Explain your response, and attach the Form AD 1006, if applicable.

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**(17) ENERGY SUPPLY AND NATURAL RESOURCES**

What effect would the proposed project have on energy or other natural resource consumption? Would demand exceed supply? Yes\_\_ No X Explain. Letters from local public utilities and suppliers regarding their abilities to provide energy and resources needed for large projects may be necessary.

The project is a modification of Runway 4-22 and would not increase consumption of energy or other natural resources. Any materials required for the project would be readily available.

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**(18) LIGHT EMISSIONS**

Would the proposed project have the potential for airport-related lighting impacts on nearby residents? Yes\_\_ No X Explain, and, if necessary, provide a map depicting the location of residences in the airport vicinity in relation to the proposed lighting system.

The project proposed includes the modification of runway lighting; however, the relamping, lens installations and relocation of some lighting will not affect residences in the airport vicinity.

**(19) SOLID WASTE**

Would the proposed project generate solid waste? Yes \_\_\_\_\_ No X

If "yes," are local disposal facilities capable of handling the additional volumes of waste resulting from the project? Explain.

No. The project is a modification of Runway 4-22 and as such would not generate solid waste that would affect the current solid waste handling program at DCA.

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**NOTE:** A sanitary landfill is incompatible with airport operations if the landfill is located within 10,000 feet of a runway serving turbo-powered aircraft, or 5,000 feet of a runway serving piston-powered aircraft. Refer to FAA Advisory Circular 150/5200.33 "Hazardous Wildlife Attractants on or Near Airports," and FAA Order 5200.5B, "Guidance Concerning Sanitary Landfills on or Near Airports."

**(20) CONSTRUCTION IMPACTS**

Would construction of the proposed project: 1) increase ambient noise levels due to equipment operation; 2) degrade local air quality due to dust, equipment exhausts and burning debris; 3) deteriorate water quality when erosion and pollutant runoff occur; 4) or disrupt off-site and local traffic patterns? Explain.

1) Noise impacts are expected but would be localized to the vicinity of the project site within the DCA property boundary. Construction equipment and vehicles will create localized increases in noise levels, but these temporary noise impacts will not disrupt normal airport operations.

2) Air quality degradation is not expected. Emissions related to construction activities will be limited to the duration of the proposed project and are below the *de minimis* level (see paragraph 5 – Air Quality). The State Implementation Plan (SIP) includes an allowance for construction emissions region-wide. Dust control is important for airport construction activities since light reflecting off of dust particles at night may jeopardize aircraft safety. Best Management Practices (BMPs) will be used to keep this to a minimum. No burning of debris will occur.

3) If uncontrolled, construction activities have the potential to cause erosion and sedimentation that can impact water quality. Since the proposed project involves two main construction activities that are not expected to disturb the underlying soil, repaving an existing but unused parking lot and cutting grooves into the existing asphalt for the electrical conduit for parking lot lighting, no construction related runoff is expected. In the event that unanticipated soil disturbance would be needed for the proposed project, erosion control measures required by the Authority Design Manual (2006) would be implemented to minimize erosion and sedimentation from the construction area. The Department of Conservation and Recreation (DCR) published the *Virginia Erosion and Sediment Control Handbook* (Third Edition, 1992) to provide guidance for all state erosion and sediment control programs. It covers basic concepts, design measures, installation, maintenance, plan review procedures and administrative guidelines to support compliance with the Virginia Erosion and Sediment Control Law and regulations. In addition, the project would be implemented with the appropriate erosion and sediment control plans consistent with State Erosion and Sediment Control Law. Contractors would be required to provide an erosion and sediment control plan that complies with the Virginia Erosion and Sediment Control Law (Title 10.1, Chapter 5, Article 4 of the Code of Virginia) and regulations, including the *Virginia Erosion and Sediment Control Handbook*. Currently, the proposed project will be below the threshold for which an erosion and sediment control plan would be required.

4) Construction of the proposed project will not result in changes to the level of service of area roads. According to MWAA Design Manual Section 2.14 AIRPORT OPERATIONS DURING CONSTRUCTION, paragraph 2.14.1, the Authority must safely conduct airport operations during the construction phase of the project. The project will be designed to consider passenger check-in, security screening, passenger departures, and passenger arrivals. The design will consider the continued operational needs of Airport Operations, airlines tenants, and concessionaires. Additionally it will ensure the continuity of services, maintenance of vehicular access, maintenance of pedestrian access, and security and safety requirements. During the construction period, construction-related vehicles will be traversing the airport access roads and internal roadways to deliver materials and equipment. Large or bulky construction equipment that is slow moving could temporarily congest roadway traffic. This congestion is likely to be intermittent and infrequent. This increase in roadway use will be managed to avoid impact to normal airport operations. The access roads and internal roadways may experience a slight increase in traffic volume; the increase should be easily accommodated on the existing roadways. The Authority will incorporate the provisions of Advisory Circular (AC) 150/5370-10A, standards for Specifying Construction of Airports, into the project specifications. This AC provides information to reduce airport-related construction impacts.

**(21) OTHER CONSIDERATIONS**

(a) Is the proposed project likely to be highly controversial on environmental grounds? Explain.

No. The project is a modification of an existing runway to enable the creation of additional parking spaces during the expansion of the existing parking garages. No controversy should result.

(b) Is the proposed project likely to be inconsistent with any federal, state or local law or administrative determination relating to the environment? Explain.

No. The proposed project would be consistent with all federal, state and local laws or administrative determinations related to the environment.

(c) Is the proposed project reasonably consistent with plans, goals, policies, or controls that have been adopted for the area in which the airport is located? Explain.

Yes. The proposed project is consistent with the following:

Arlington County Comprehensive Plan. 2003.

Arlington County Department of Community Planning, Housing, and Development. 2004. Arlington County Comprehensive Plan.

Arlington County Department of Environmental Services. 2001. Watershed Management Plan.

Coastal Zone Management Act, Arlington Co., VA (County Program).

District of Columbia. Comprehensive Plan. Revised 2006.

National Capital Planning Commission (NCPC). 2004. *Comprehensive Plan for the National Capital: Federal Element*. 2004.

Federal Aviation Administration (FAA) Metropolitan Washington Airports. Master Plan Ronald Reagan Washington National Airport. April 1990.

Metropolitan Washington Airports Authority (MWAA). 2003. Consolidated Spill Contingency Plan. Ronald Reagan Washington National Airport. March.

Metropolitan Washington Airports Authority (MWAA). 1987. Programmatic Memorandum of Agreement Among the Advisory Council on Historic Preservation, the Virginia State Historic Preservation Officer, and the Federal Aviation Administration Metropolitan Washington Airports.

## **(22) HAZARDOUS SITES/MATERIALS**

Would the proposed project require the use of land that may contain hazardous substances or may be contaminated? Explain your response and describe how such land was evaluated for hazardous substance contamination. Early consultation with appropriate expertise agencies (e.g., US Environmental Protection Agency (EPA), EPA-certified state and local governments) is recommended.

The proposed project area has been previously developed and disturbed and does not involve any Solid Waste Management Units or areas of concern that are the subject of RCRA Corrective Action. A review of the regulatory list search and airport files determined that a portion of the parking area was included in a CERCLIS investigation. A “solvent disposal area” located in the southwestern corner of the parking area is a component of a larger CERCLIS site. A “Focused Site Inspection Report” (Weston 1994) indicated that the results of two soil vapor surveys conducted in the “solvent disposal area” were inconclusive. The report was submitted to EPA with a request that “no further action” be required. Any hazardous material encountered throughout the project activities will be disposed of in accordance with applicable laws and regulations.

In 2007, FAA prepared a sampling and analysis plan for a Supplemental Site Investigation (SSI) of the CERCLIS site. The sampling and analysis plan includes a soil boring to be performed in the southwest corner of the proposed temporary parking lot. The area of the soil boring site will be closed to parking during sampling.

The proposed project will not disturb the soil that is the subject of the SSI. Electrical conduit for parking lot lighting will be laid in grooves cut into the existing asphalt paving, rather than in trenches. Thus no soil beneath the parking lot will be brought to the surface during implementation of the proposed action.

## **(23) PERMITS**

List all required permits for the proposed project. Indicate whether any difficulties are anticipated in obtaining the required permits. This project will not require any specific environmental permits.

**NOTE:** Even though the airport sponsor has/shall obtain one or more permits from the appropriate federal, state, and/or local agencies for the proposed project, initiation of such project shall **NOT** be approved until FAA has issued its environmental determination.

#### (24) ENVIRONMENTAL JUSTICE

Would the proposed project impact minority and/or low-income populations? Consider human health, social, economic, and environmental issues in your evaluation. Explain.

No. The project is a modification of Runway 4-22 to allow for the creation of temporary parking spaces during the expansion of the existing parking garages and is located entirely within the DCA property boundary. No minority and/or low income populations would be affected.

#### (25) CUMULATIVE IMPACTS

When considered together with other past, present, and reasonably foreseeable future development projects on or off the airport, federal or non-federal, would the proposed project produce a cumulative effect on any of the environmental impact categories above? You should consider projects that are connected, cumulative and similar (common timing and geography). Provide a list of such projects considered. For purposes of this Evaluation Form, generally use 3 years for past projects and 5 years for future foreseeable projects.

No. The proposed project is not expected to produce a cumulative effect on any of the environmental impact categories listed above. No substantive changes in the environment would result from implementation of the proposed project and other development projects in the vicinity of the airport. The following projects are under construction at DCA:

ARFF Station 301 – The project consists of a new Airport Rescue and Fire Fighting (ARFF) Facility Station 301 to replace the existing ARFF facility in the southern area of DCA. The new ARFF station will provide facilities crucial to the support of fire and rescue activities both in areas where aviation operations occur and in those public areas used by air travelers. The station will house ARFF equipment and staff required to respond to aircraft emergencies. In addition, the station will house both structural and Emergency Medical Service (EMS) units that support the landside and terminal areas of the airport. This project was found to qualify for a Categorical Exclusion from preparation of a formal environmental assessment.

Authority Office Building Expansion – The project consists of an expansion of the Authority Office Building (AOB) and an enclosed pedestrian connector bridge between the AOB and Hangar 11. The expansion will provide 5,000 square feet of office space at ground level and a 5,000-square foot second story. This project was found to qualify for a Categorical Exclusion from preparation of a formal environmental assessment.

The following projects are planned in the foreseeable future:

Regional Carrier Concourse - The project includes an airside concourse building and related apron and supporting facilities to serve regional airlines. The concourse facility was designed to accommodate up to 10 regional aircraft parking positions that will be served via passenger loading bridges. The facility is being constructed north of Terminals B and C and east of Hangar 11 and the MWAA offices. Access to the facility is provided via an underground pedestrian tunnel equipped with moving walkways.

In-Line Baggage Screening – Building Modifications – The project includes the installation of an In-Line Baggage Screening System at DCA to expedite passenger check-in and enhance security measures. The project will be constructed as an expansion on the landside of the terminal, and will consist of building modifications of a new landside baggage room.

Additional Levels Garages A and B/C - The proposed project consists of the addition of new parking decks to the existing Garages A and B/C located at DCA. The purpose of the project is to create additional parking at DCA due to the projected parking demands from an increase in passenger traffic at DCA.

Each of these projects, the Regional Carrier Concourse, In-Line Baggage Screening – Building Modifications, and Additional Levels Garages A and B/C was found to qualify for a Categorical Exclusion from preparation of a formal environmental assessment.

Potential Cumulative Impacts from construction:

Construction of the proposed project could cause environmental effects that would add to the expected environmental impacts of other development projects in that area of the airport. Cumulative effects that may occur include increased air emissions from construction vehicles, higher noise levels during construction, and additional vehicular traffic during the construction period. The proposed project would generate air emissions from use of vehicles and equipment at the site during construction. Compared with air emissions from vehicle use in the vicinity, the proposed project would generate a minimal contribution to the current and expected amount of air pollutants from other development. The cumulative impact on air quality would be not be significant and would not result in violation of NAAQS. During construction of the proposed project, noise levels would temporarily increase in the vicinity of the site. Similarly, construction traffic would add to existing traffic volumes on the airport roads. Construction traffic generated by the project would be minor compared with existing traffic levels in the area and to traffic volumes generated by other development. Cumulative noise and traffic impacts from development of the proposed project would not be significant and would amount to only a small portion of the increase in noise and traffic of development.

## 10. MITIGATION

(a) Describe those mitigation measures to be taken to avoid creation of significant impacts to a particular resource as a result of the proposed project, and include a discussion of any impacts that cannot be mitigated, or that cannot be mitigated below the threshold of significance (TOS) (See 5050.4A).

(b) Provide a description of the resources that are in or adjacent to the project area that must be avoided during construction. **Note:** The mitigation measures should be incorporated into the project's design documents. The proposed parking area is adjacent to Fourmile Run; however, construction activities for the parking area is not expected to disturb the underlying soil. Therefore, no construction related runoff is expected resulting in no effect to Fourmile Run. However, in the event that unanticipated soil disturbance would be needed for the proposed project, erosion control measures required by the Authority Design Manual (2006) will be implemented to minimize erosion and sedimentation from the construction areas to prevent

impacts to water quality. The project will then be implemented with the appropriate erosion and sediment control plans consistent with State Erosion and Sediment Control Law. Contractors will then be required to provide an erosion and sediment control plan that complies with the Virginia Erosion and Sediment Control Law (Title 10.1, Chapter 5, Article 4 of the Code of Virginia) and regulations, including the *Virginia Erosion and Sediment Control Handbook*.

#### 11. PUBLIC INVOLVEMENT

Describe what efforts would be made to involve the public with this proposed project. Discuss the appropriateness of holding public meetings and/or public hearings, making the draft document available for public comment, or the preparation of a public involvement plan, etc. MWAA will inform the public of the proposed project by publishing a Public Notice that the Draft EA is available for review and information on the public comment period. The Public Notice will appear in the *Washington Post*. The Draft EA will be made available to the public in several public libraries near DCA (to be listed in the Public Notice) and will be posted on MWAA's website. In addition, MWAA will distribute copies of the Draft EA to federal, state, and local government agencies. Comments will be accepted for a 30 day period. Comments received will be presented in Attachment C and will be summarized in the Final Environmental Assessment (EA). The Final EA will be revised in response to comments received.

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#### References

- Federal Emergency Management Agency (FEMA), 1985. Flood Insurance Study. District of Columbia, Washington DC. Federal Emergency Management Agency. November 15, 1985.
- Federal Emergency Management Agency (FEMA), 1992. Flood Insurance Rate Map, Arlington County, Virginia, Community Panel Number 515520 0010 B Federal Emergency Management Agency. May 1982.
- Roy F. Weston, Inc. 1994. Focused Site Inspection, Washington National Airport, South Investigation Site.

12. PREPARER CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct.

Renee Bartnik  
Signature

Nov 21, 2007  
Date

Renee Bartnik, Senior Environmental Planner  
Name, Title

Parsons Management Consultants/ Metropolitan Washington Airports Authority  
Affiliation

13. AIRPORT SPONSOR CERTIFICATION

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that except as otherwise approved by the Manager of the FAA Washington Airports District Office, no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s), and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

Stephan G. Smith  
Signature

11/21/07  
Date

Stephan G. Smith, Deputy Vice President for Engineering  
Name, Title

Metropolitan Washington Airports Authority  
Affiliation

**Note: This page to be completed by FAA only**

14. FAA DECISION:

Having reviewed the above information, certified by the responsible airport official, it is the FAA decision that the proposed project(s) of development warrants environmental processing as indicated below.

- The proposed development action has been found to qualify for a Short Environmental Assessment.
  
- The proposed development action exhibits conditions that require the preparation of a detailed Environmental Assessment (EA).
  
- The following additional documentation is necessary for FAA to perform a complete environmental evaluation of the proposed project: \_\_\_\_\_  
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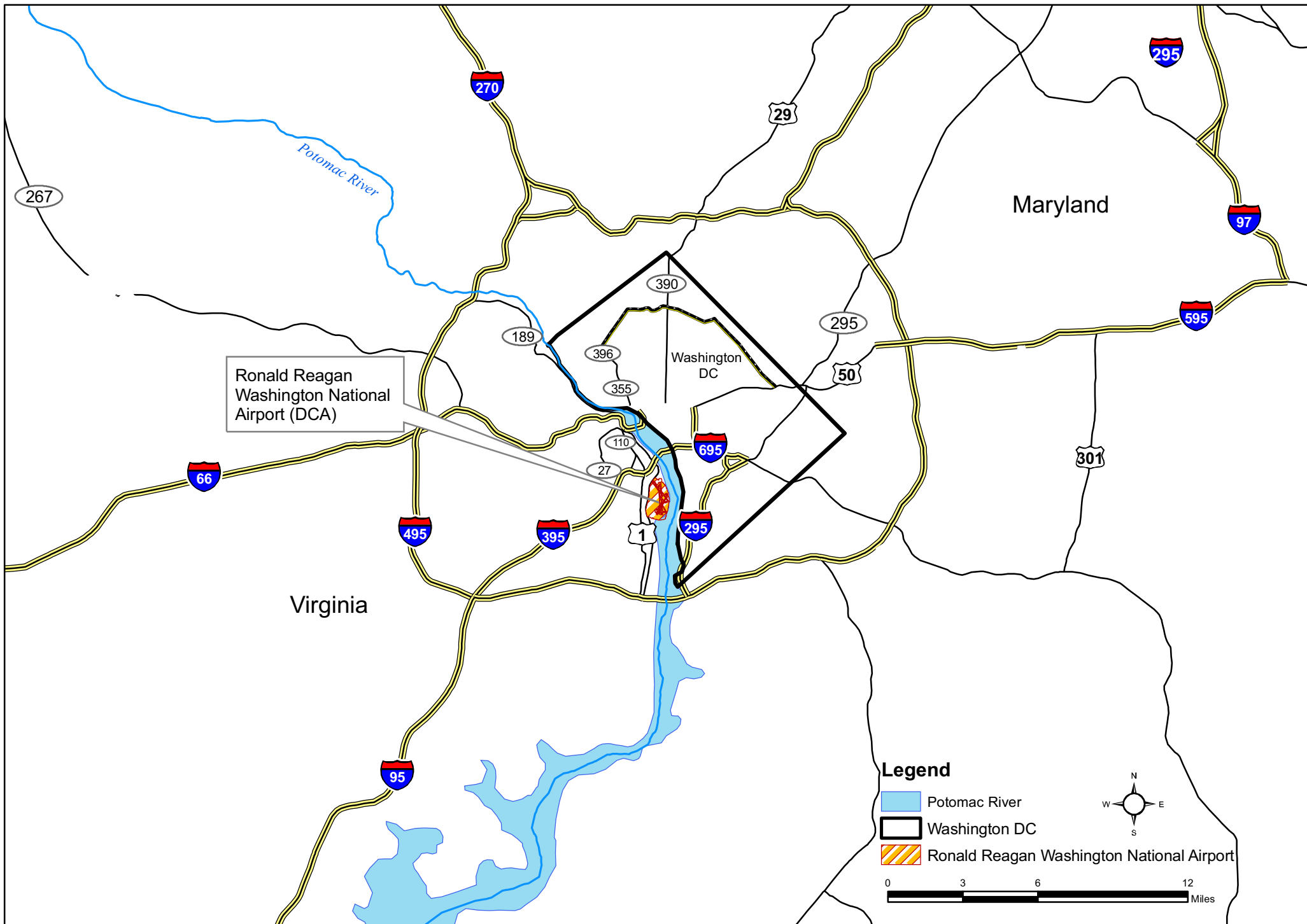
\*Action Reviewed/Recommended by:

_____	_____
(FAA Environmental Specialist)	Date

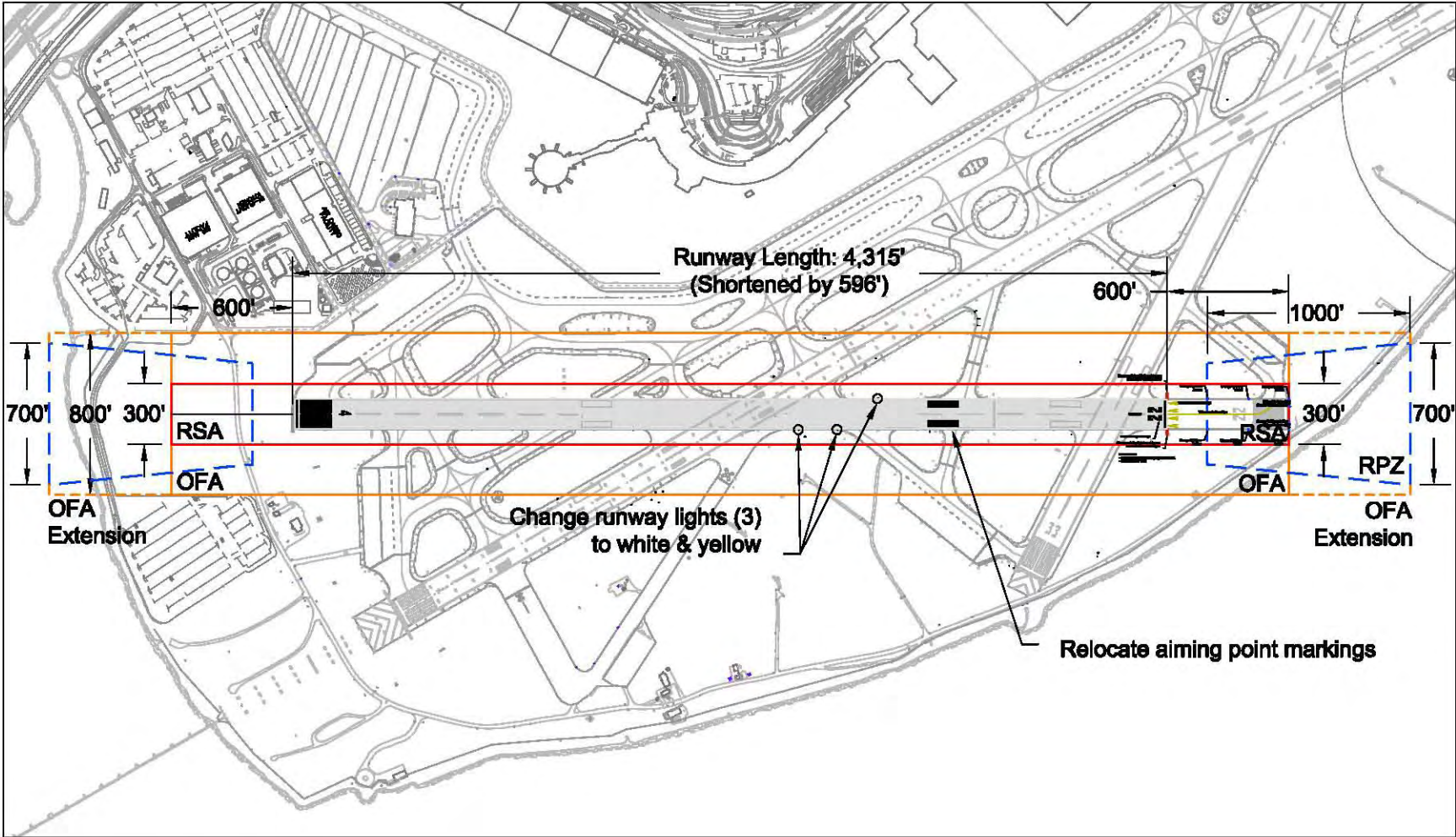
* <u>Approved:</u> _____	_____
(FAA Approving Official)	Date

\* The above FAA approval only signifies that the proposed development action(s), as described by the information provided in this Evaluation Form, initially appears to qualify for the indicated environmental processing action. This may be subject to change after more detailed information is made known to the FAA by further analysis, or though additional federal, state, local or public input, etc.

# FIGURES



**Figure 1. Ronald Reagan Washington National Airport (DCA)**



Source: Ricondo & Associates, Inc.  
Prepared by: Ricondo & Associates, Inc.

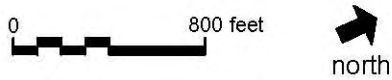
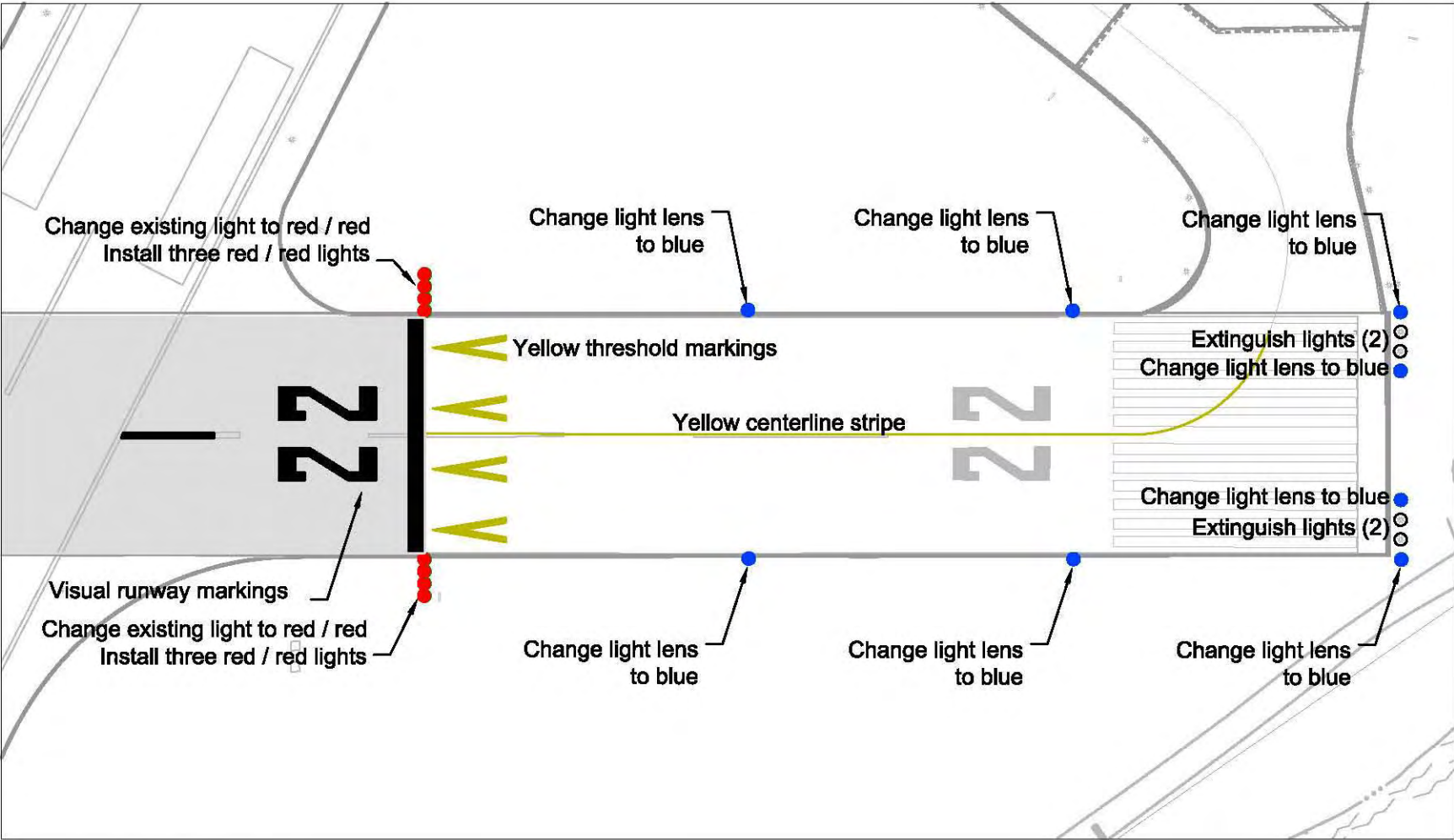
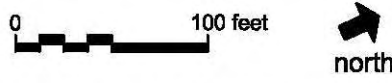


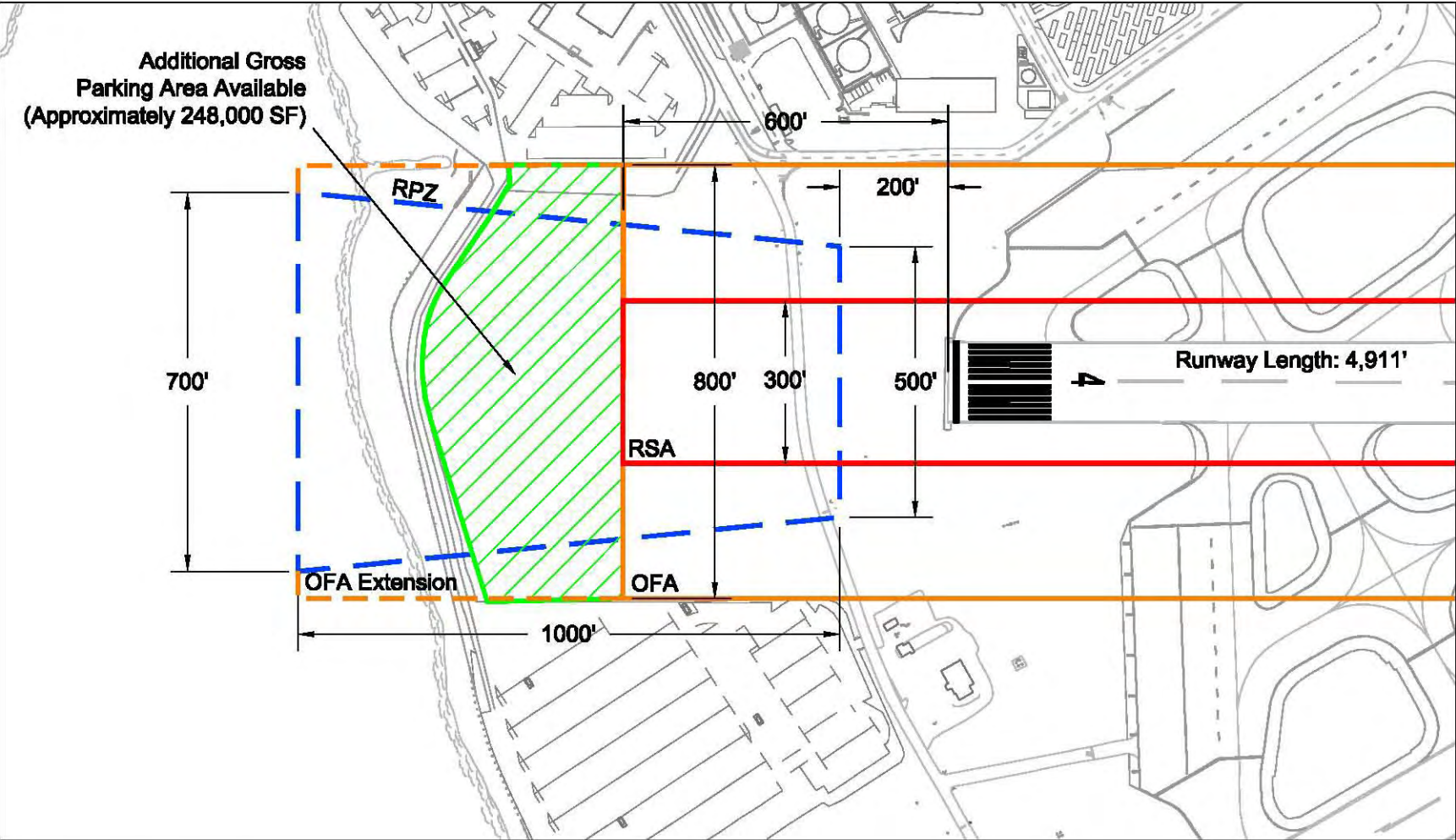
Figure 2 Recommended Action Plan Runway 4-22



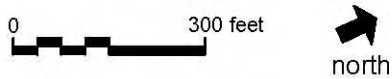
Source: Ricondo & Associates, Inc.  
Prepared by: Ricondo & Associates, Inc.



**Figure 3 Recommended Action Plan  
Runway 22 End**



Source: Ricondo & Associates, Inc.  
Prepared by: Ricondo & Associates, Inc.



**Figure 4 B-III Runway Protected Areas and Parking Area Runway 4 End**



**Legend**

- Historic Structures Identified at DCA
- Areas Below 100-Year Floodplain Elevation

Source: Elevation Data From FEMA, 1985 and Air Survey Topographic Data, 1997.

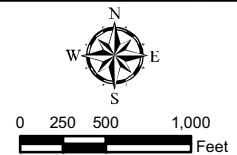
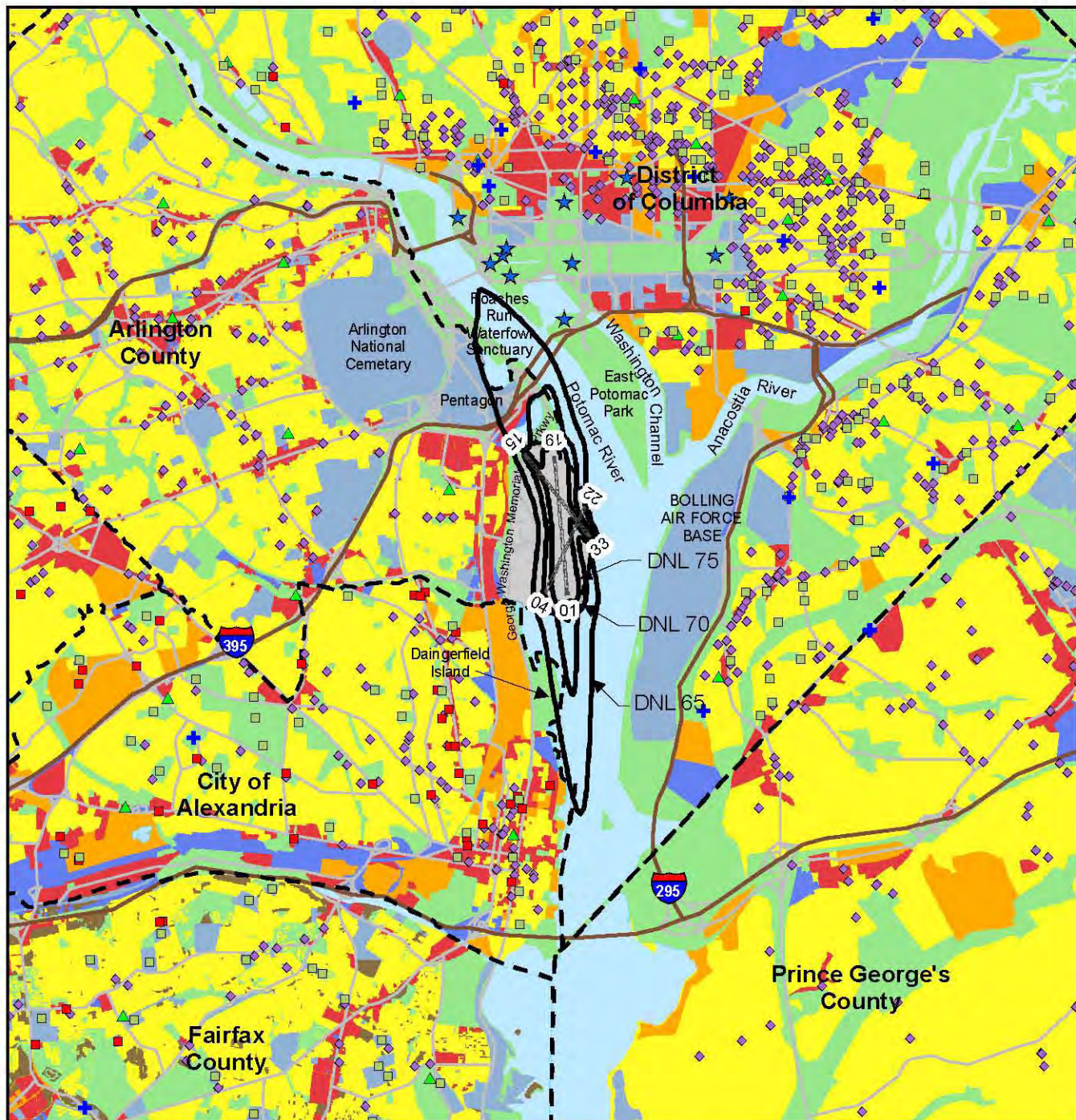
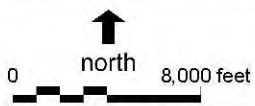


Figure 5. Project Area.

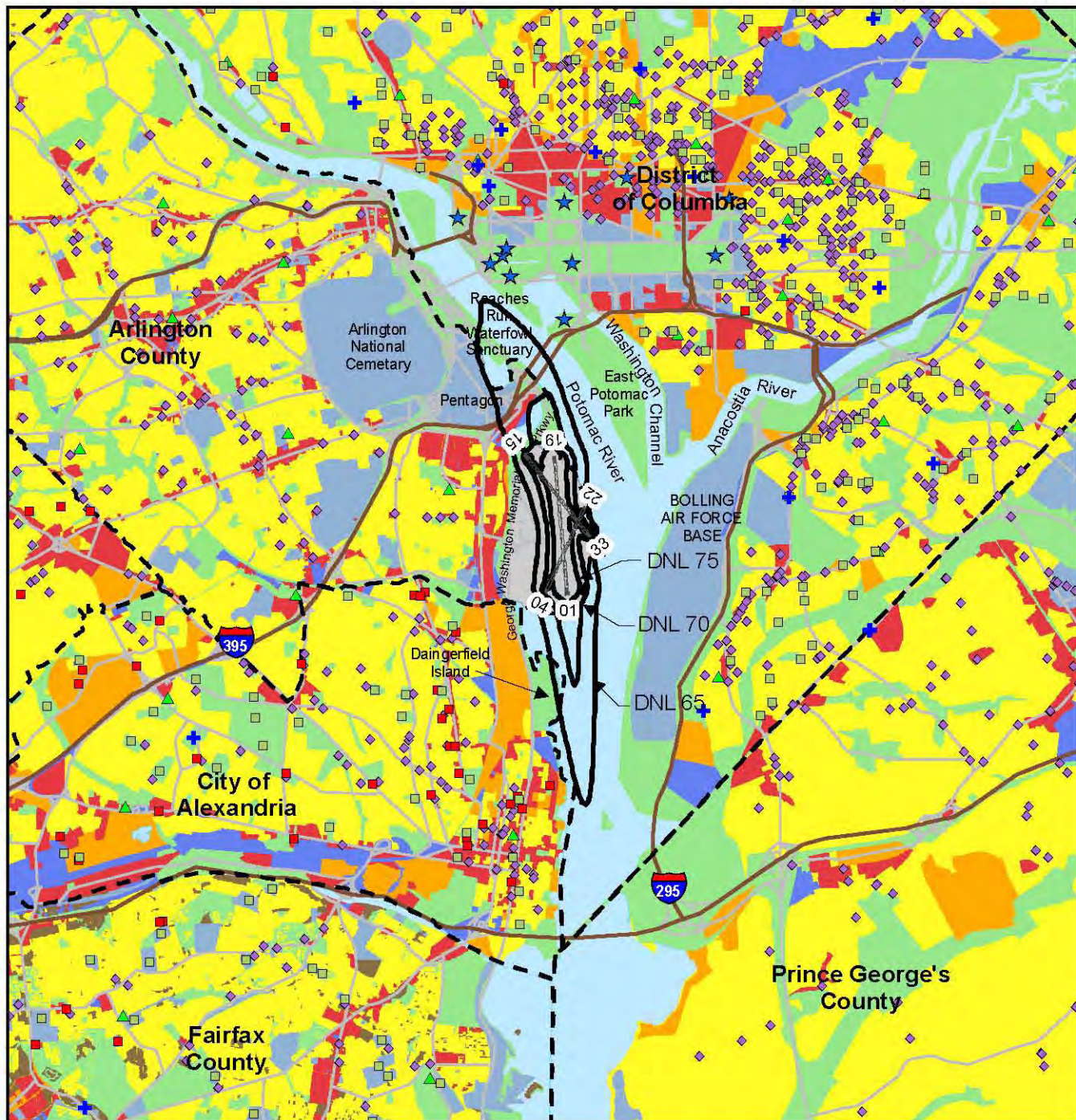


+	Hospital	★	Landmark	Yellow	Residential	Light Green	Parks and Recreation
■	School	— Interstate Highway	Interstate Highway	Red	Commercial	Dark Green	Open Space
■	Daycare	- - -	Jurisdictional Boundary	Orange	Mixed Use	Brown	Vacant Space
▲	Library	—	Major Road	Blue	Industrial	Light Blue	Ronald Reagan Washington National Airport
◆	Religious Facility	—	Noise Contour	Light Blue	Institutional / Government	White	Water

Source: Wyle Laboratories  
 Prepared by: Ricondo & Associates, Inc.

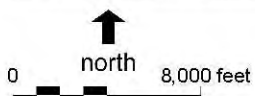


**Figure 6. 2004 Noise Exposure Contours  
 Ronald Reagan Washington National Airport**

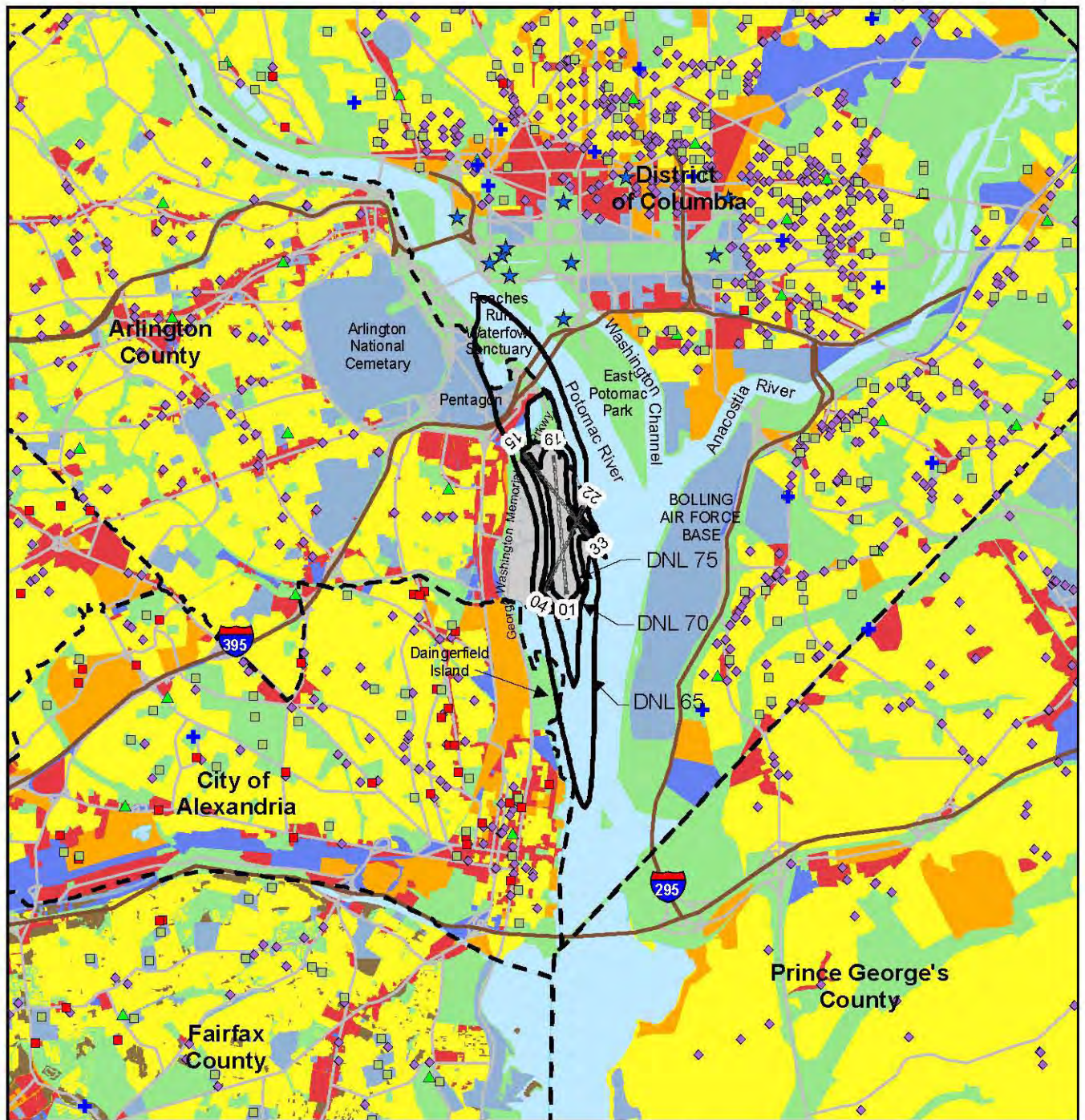


Hospital	Landmark	Residential	Parks and Recreation
School	Interstate Highway	Commercial	Open Space
Daycare	Jurisdictional Boundary	Mixed Use	Vacant Space
Library	Major Road	Industrial	Ronald Reagan Washington National Airport
Religious Facility	Noise Contour	Institutional / Government	Water

Source: Ricondo & Associates, Inc.  
 Prepared by: Ricondo & Associates, Inc.

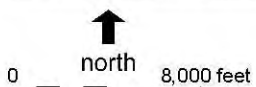


**Figure 7. 2008 Noise Exposure Contours - No Action  
 Ronald Reagan Washington National Airport**

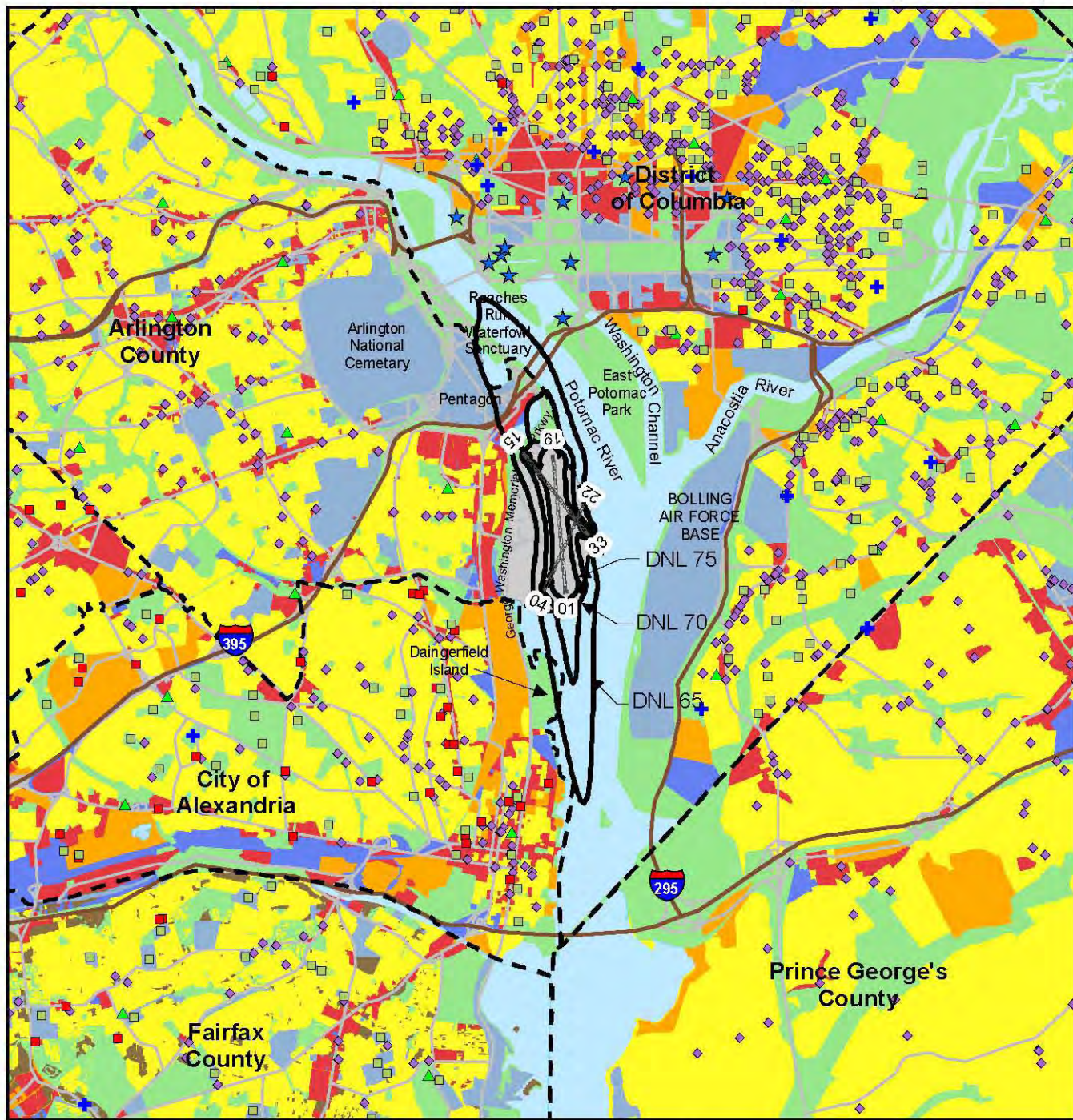


- |                    |                         |                            |   |
|--------------------|-------------------------|----------------------------|---|
| Hospital           | Landmark                | Residential                | Parks and Recreation                      |
| School             | Interstate Highway      | Commercial                 | Open Space                                |
| Daycare            | Jurisdictional Boundary | Mixed Use                  | Vacant Space                              |
| Library            | Major Road              | Industrial                 | Ronald Reagan Washington National Airport |
| Religious Facility | Noise Contour           | Institutional / Government | Water                                     |

Source: Ricondo & Associates, Inc.  
 Prepared by: Ricondo & Associates, Inc.

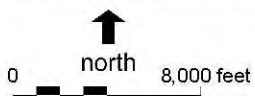


**Figure 8. 2013 Noise Exposure Contours - No Action  
 Ronald Reagan Washington National Airport**

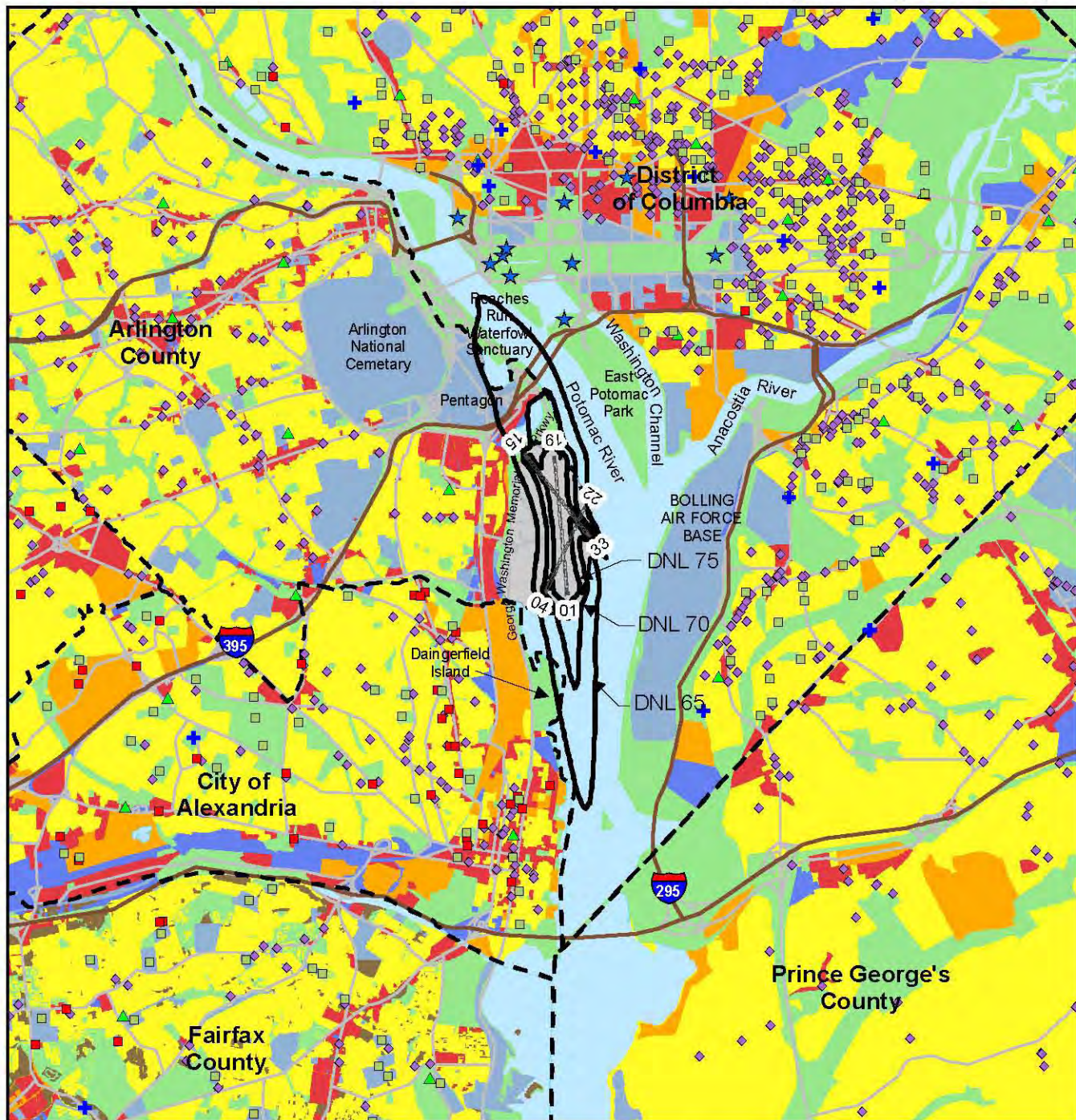


Hospital	Landmark	Residential	Parks and Recreation
School	Interstate Highway	Commercial	Open Space
Daycare	Jurisdictional Boundary	Mixed Use	Vacant Space
Library	Major Road	Industrial	Ronald Reagan Washington National Airport
Religious Facility	Noise Contour	Institutional / Government	Water

Source: Ricondo & Associates, Inc.  
 Prepared by: Ricondo & Associates, Inc.

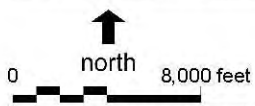


**Figure 9. 2008 Noise Exposure Contours - Proposed Action  
 Ronald Reagan Washington National Airport**

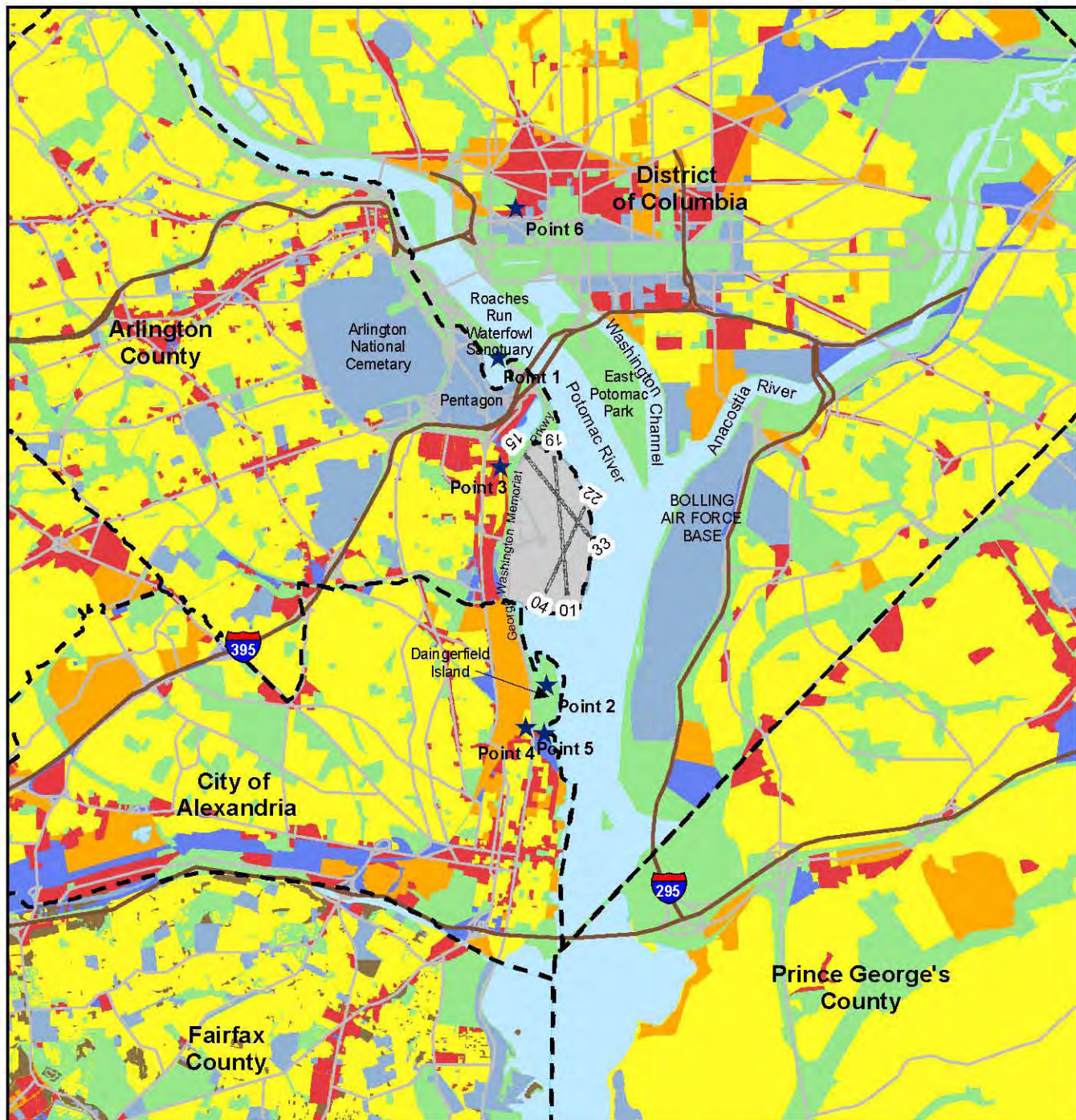


Hospital	Landmark	Residential	Parks and Recreation
School	Interstate Highway	Commercial	Open Space
Daycare	Jurisdictional Boundary	Mixed Use	Vacant Space
Library	Major Road	Industrial	Ronald Reagan Washington National Airport
Religious Facility	Noise Contour	Institutional / Government	Water

Source: Ricondo & Associates, Inc.  
 Prepared by: Ricondo & Associates, Inc.

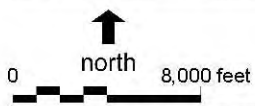


**Figure 10. 2013 Noise Exposure Contours - Proposed Action  
 Ronald Reagan Washington National Airport**



- ★ Noise Grid Location
- Interstate Highway
- - - Jurisdictional Boundary
- Major Road
- Residential
- Commercial
- Mixed Use
- Industrial
- Institutional / Government
- Parks and Recreation
- Open Space
- Vacant Space
- Ronald Reagan Washington National Airport
- Water

Source: Ricondo & Associates, Inc.  
 Prepared by: Ricondo & Associates, Inc.



**Figure 11. Noise Grid Analysis  
 Ronald Reagan Washington National Airport**

**ATTACHMENT A**

**COASTAL ZONE MANAGEMENT ACT  
CONSISTENCY CERTIFICATION**

**RUNWAY 4-22 MODIFICATIONS PROJECT  
COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY CERTIFICATION**

This document provides the Commonwealth of Virginia with the Metropolitan Washington Airports Authority's (the Authority) Consistency Certification and necessary data and information under CZMA Section 307(c)(3)(A) and 15 CFR Part 930, sub-part D, for the Runway 4-22 Modifications Project at Ronald Reagan Washington National Airport (DCA), Arlington County, Virginia.

***Certification:***

The Authority certifies that the proposed activity complies with the enforceable programs of Virginia's Coastal Resources Management Program (VCP) and will be conducted in a manner consistent with the VCP.

***Necessary Data and Information:***

1. The proposed action that is the subject of this certification includes modifications to Runway 4-22 and the re-opening of an existing but inactive public parking lot at DCA. The purpose of the proposed action is to offset the loss of 350-400 parking spaces due to the construction of another proposed project at DCA – the addition of new parking decks atop the existing Garages A and B/C. To offset the loss of parking spaces, the Authority will re-open, on a temporary basis, an existing but inactive paved parking lot south of Runway 4-22. Because the inactive parking lot lies within the runway safety area of Runway 4-22, modifications to the runway are also needed. Proposed modifications to the runway include line painting, adjusting fences, and relocating lights (i.e., Runway End Identifier Lights and Visual Approach Slope Indicators). In addition some minor restoration of the existing inactive parking lot pavement would be required to make it suitable for auto parking. This CZMA certification addresses the re-opening of the parking lot and the runway modifications. The project is described in the Runway 4-22 Modifications Draft Form C Environmental Assessment (EA).
2. The project site is located in Arlington County which is located within Virginia's Designated Coastal Zone Management Area.

The proposed Runway 4-22 Modifications project will incorporate a number of actions that will take place in an area that has been previously disturbed and developed. Specific activities include relocating and relamping runway lighting and the refurbishing/construction of public parking spaces to replace those lost during public parking garage expansion.

3. An evaluation of the probable effects of the proposed actions in relation to the enforceable policies of the Virginia Coastal Resources Management Program is provided below:

a. Tidal and Non-Tidal Wetlands

The purpose of the wetlands management program is to preserve tidal wetlands and non-tidal wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.

There are no tidal wetlands or non-tidal wetlands located on the project site.

b. Fisheries Management

The Fisheries Management Program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities.

There are no commercial or recreational fishery activities at DCA. The proposed action would not impact the fishery resources in the Potomac River.

c. Subaqueous Lands Management

The management program for subaqueous lands established conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards.

There are no state-owned bottom lands within the project area at DCA.

d. Dunes Management

Dune protection is intended to prevent the destruction or alteration of primary dunes.

There are no primary dunes that are within the project site at DCA.

e. Non-Point Source Pollution Control

The Department of Conservation and Recreation (DCR) administers Virginia's Erosion and Sediment Control Law, which requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth.

The Authority's erosion and sediment control program requires any project that involves excavation, landfilling or disturbance of the ground to include erosion and sediment control measures in accordance with the Virginia Erosion and Sediment Control Law and General Criteria, including the *Virginia Erosion and Sediment Control Handbook*. Individuals who are certified by DCR as Program Administrators, Inspectors and Plan Reviewers administer the Authority's program. In addition, the Authority has in place a Stormwater Pollution

Prevention Plan (SPPP) under its VPDES permit that includes all major tenants as co-permittees.

The proposed project will not require excavation, landfilling or disturbance of the ground. The project has two main construction activities - repaving an existing but unused parking lot and cutting grooves into the existing asphalt for the electrical conduit for parking lot lighting.

Additional non-point source pollution control is achieved through the VCP Coastal Lands Management Program discussed below and in Paragraph (i). The Coastal Lands Management program is a state-local cooperative program administered by the Chesapeake Bay Local Assistance Department and localities in Tidewater Virginia including Arlington County.

All construction and subsequent operational activities at DCA is under restrictions embodied in DCA's Virginia Pollutant Discharge Elimination System (VPDES) stormwater discharge permit, as well as pertinent State guidance such as the *Northern Virginia BMP Handbook* and *Virginia Stormwater Management Handbook*. In addition to the management of stormwater runoff via existing and future temporary facilities, each applicable separate construction project is required to have individual erosion and sediment control plans approved by the Authority's Building Codes/Environmental Department.

The land disturbance from the proposed project will be below the threshold for which an erosion and sediment control plan would be required since the construction activities are not expected to disturb the underlying soil. In the event that unanticipated soil disturbance would be needed for the proposed project, then construction activities will be under the restrictions identified in DCA's VPDES stormwater discharge permit, as well as pertinent state guidance such as the *BMPs Handbook* and the *Virginia Stormwater Management Handbook*. In addition to the management of stormwater runoff, the construction aspects of the project will then be required to have an individual erosion and sediment control plan.

f. Point Source Pollution Control

VDEQ regulates discharges into state waters through the Virginia Pollutant Discharge Elimination System (VPDES) and Virginia Pollution Abatement permits. The latter are accomplished through the implementation of the National Pollutant Discharge Elimination System permit program established pursuant to Section 402 of the federal Clean Water Act.

All discharges at DCA are covered by the airport's VPDES permit. Since the proposed project involves repaving an existing but unused parking lot, there will be no new point source discharge.

g. Shoreline Sanitation

The Virginia Department of Health regulates the installation of septic tanks, sets standards, concerning soil types suitable for septic tanks, and specifies minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth.

The project does not include the installation of a septic tank.

h. Air Pollution Control

VDEQ implements the federal Clean Air Act and its Amendments to provide a legally enforceable State Implementation Plan (SIP) for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS).

Total direct and indirect emissions for the proposed project are well below *de minimis* standards and are not large enough to be regionally significant. At these emissions levels, air quality impact modeling is not required under General Conformity because it is assumed that the emissions will not cause a violation or delay in attainment of the applicable NAAQS. Because total direct and indirect emissions from the proposed project are well below *de minimis* standards and are not regionally significant the project can be presumed to conform to the applicable SIP.

i. Coastal Lands Management

The Chesapeake Bay Local Assistance Department regulates activities in Chesapeake Bay Resource Management Areas (RMAs) and Resource Protection Areas (RPAs) within 84 localities in Virginia's coastal zone including Arlington County through a state-local cooperative program established pursuant to the Chesapeake Bay Preservation Act. All of Arlington County is designated a Chesapeake Bay Preservation Area and is legislated in Arlington County's Chesapeake Bay Preservation Ordinance, Chapter 61. According to the Arlington County map of RPAs, DCA is within an adopted RPA.

Project activities include the repaving of an existing but unused parking lot and cutting grooves into the existing asphalt for the electrical conduit for parking lot lighting. All project activities occur on previously developed/paved areas. Even though the proposed project is located within an RPA there will be no change to the function of the RPA at DCA as a result of project activities. The Runway 4-22 Modifications project is consistent with The Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management regulations, implemented by the "Chesapeake Bay Preservation Ordinance" in the Code of the County of Arlington.

By this certification that the Runway 4-22 Modifications Project at Ronald Reagan Washington National Airport is consistent with the Virginia Coastal Resources Management Program, Virginia is notified that it has 6 months from the receipt of this letter and accompanying information in which to concur with or object to the Metropolitan Washington Airports

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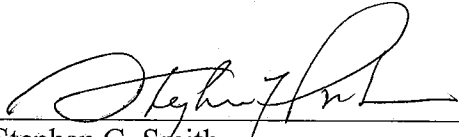
Authority's certification. Pursuant to 15 CFR section 930.63 (b), if Virginia has not issued a decision within 3 months following commencement of State agency review, it shall notify the Authority and the Federal Aviation Administration of the status of the matter and the basis for further delay. The State's concurrence, objection, or notification of review status shall be sent to:

Mr. William C. Lebegern  
Metropolitan Washington Airports Authority, MA-32  
West Building Room 155  
Ronald Reagan Washington National Airport  
Washington, D.C. 20001

and

Ms. Jennifer Mendelsohn  
Federal Aviation Administration  
Washington Airports District Office  
23723 Air Freight Lane, Suite 210  
Dulles Virginia 20166

CERTIFIED BY

  
\_\_\_\_\_  
Stephan G. Smith  
Deputy Vice President for Engineering

12/5/07  
Date

## **ATTACHMENT B**

### **COMMENTS RECEIVED REGARDING THE DRAFT ENVIRONMENTAL ASSESSMENT**

**(to come)**