

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Office of the Planning Director Prince George's County Planning Department 14741 Governor Oden Bowie Drive Upper Marlboro, Maryland 20772 TTY: (301) 952-4366 www.mncppc.org/pgco 301-952-3595

February 27, 2015

Ms. Lizabeth Montgomery GSFC NEPA Program Manager NASA Goddard Space Flight Center Code 250, Building 26, Room N250 8800 Greenbelt Road Greenbelt, MD 20771

> RE: Draft Environmental Assessment/NASA Goddard Instrument Development Facility Area Development Plan (MR-1502A)

Dear Ms. Montgomery:

The Prince George's County Planning Department appreciates the opportunity to comment on the Draft Environmental Assessment (EA) to determine the potential environmental impacts of the Instrument Development Facility (IDF) Area Development Plan on the NASA Goddard Space Flight Center (GSFC) site. The first phase of this project would involve the demolition of several existing buildings and the construction of a 4,645-square-meter (50,000-square-foot) IDF that would include laboratory and office space to accommodate 100 staff persons. M-NCPPC staff would like to submit comments on the environmental impacts of the proposed action and alternatives discussed in the Draft EA.

Staff has evaluated the project and is prepared to submit the following comments and the enclosed supporting memorandum:

- According to the Draft EA, minor, short-term increases in ambient noise and vibration levels
 would result from the demolition of buildings on- and off-site, and with the construction of the
 proposed IDF facilities. It is suggested that construction activities would include the use of
 equipment exhaust mufflers, and be limited to working hours (i.e., between 7:00 a.m. and 5:00
 p.m.) and to designated routes that contain a limited number of residential or sensitive structures
 in order to incur the least disturbance to nearby residents.
- Reduction of three forms of light pollution is recommended. Uplight, glare, and light trespass are
 encouraged to be implemented to the fullest extent practicable in the design of this project. Light
 pollution should be directed away from adjoining woodlands to the west and south of the site.
 The use of downward facing full cut off, fully shielded, and partially shielded lamps that help
 direct light down and prevent it from escaping from the site are encouraged. Automatic light shut
 offs should also be considered where practicable to ensure that lights are not left on after work
 hours or when they are not needed.
- The construction phase of the proposed action could affect localized air quality through airborne
 dust and other pollutants generated during demolition, drilling and removal of the existing
 foundations, and the excavation process. In addition, short-term impacts on soils would be

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Heritage and Wildlife Service, M-DNR. Decline and/or mortality of trees to remain could occur due to significant critical root zone (CRZ) disturbance, tree limb damage, changes in soil moisture, and soil compaction as a result of grading. Some terrestrial wildlife may be temporarily displaced from their typical edge habitats during operations and other construction related activities.

Finally, enclosed is a memorandum that includes the full evaluations and comments summarized above from the Environmental Planning Section of the Countywide Planning Division. Thank you again for allowing us the opportunity to comment on this project. If you should have any questions or need additional information, please contact Fatimah Hasan, Planner Coordinator, Special Projects Section, Countywide Planning Division, at 301-952-3580 or via email at Fatimah.Hasan@ppd.mncppc.org.

Sincerely,

Flew V. Pliet
Fern V. Piret
Planning Director

Enclosure

c: Redis C. Floyd, Clerk of the Council, Prince George's County Council
 Derick Berlage, Chief, Countywide Planning Division
 Maria Martin, Planning Supervisor, Special Projects Section, Countywide Planning Division
 Fatimah Hasan, Planner Coordinator, Special Projects Section, Countywide Planning Division
 Christine Osei, Mandatory Referral Project Manager, Special Projects Section, Countywide Planning
 Division

Katina Shoulars, Planning Supervisor, Environmental Planning Section, Countywide Planning Division Marc Juba, Planner Coordinator, Environmental Planning Section, Countywide Planning Division

Countywide Planning Division Environmental Planning Section 14741 Governor Oden Bowie Drive Upper Marlboro, Maryland 20772 TTY: (301) 952-4366 www.mncppc.org/pgco

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February 27, 2015

MEMORANDUM

TO:

Fatimah Hasan, Planner Coordinator, Special Projects Section

VIA:

Katina Shoulars, Supervisor, Environmental Planning Section

FROM:

Marc Juba, Senior Planner, Environmental Planning Section

SUBJECT:

MR-1502A Draft Environmental Assessment/NASA Goddard

The Environmental Planning Section has reviewed the information submitted by the applicant, for a proposed National Aeronautics and Space Administration (NASA) Instrument Development Facility Area Development Plan also known as the Water Tower Redevelopment Site.

The proposal was evaluated to determine the potential for significant adverse impacts on environmental resources, including but not limited to air quality, noise and vibration, light, geology and soils, water resources, and biological resources. The following commentary is based on a review of the information provided by the applicant and an interpretation of aerial photographs and maps. A site visit was not conducted. The following comments are provided for your consideration.

Proposed Activity or Action

Five separate site layout alternatives were evaluated in a draft environmental assessment for this site by NASA, submitted with this application. Of the five alternative layouts, the Science and Engineering Corridor Alternative layout was selected by NASA for review with this application.

This preferred alternative proposes to implement an Area Development Plan (ADP) to redevelop approximately 10-acres within its Goddard Space Flight Center (GSFC) Greenbelt campus. A phased redevelopment of this site is proposed involving both the demolition of existing buildings onsite within the Water Tower Redevelopment Site, and off-site elsewhere on the GSFC Greenbelt campus. Per the ADP, four distinct but connected facilities would be proposed on the Water Tower Redevelopment site using a slightly larger footprint than that of the existing facilities currently at that location. The operations of buildings demolished at other locations on the GSFC Greenbelt campus will be moved to and consolidated at the new proposed facilities onsite.

The following actions are proposed under each of the four phases:

The first phase would include the demolition of several existing buildings. Some of the buildings (16, 16A, 16B, and 86) are onsite within the 10-acre Water Tower Redevelopment Site, while other buildings (17, 84, and 86; and the buildings in Area 400) are located outside of the 10-acre site at separate areas of the GSFC Greenbelt campus. Construction activities within this phase

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issue to air pollution sources after the source has begun to operate. In this case, this permit is for air emissions from the overall campus operations primarily from fuel-burning equipment, electro-chemical plating, surface coating, and gasoline filling stations.

According to Table 3-4 of the environmental assessment the annual emissions for GSFC in 2012 were 22 tpy (tons per year) for NO_x , 3 tpy for VOCs, 32 tpy for SO_2 , 1 tpy for PM_{10} , and 1tpy for $PM_{2.5}$.

Geology and Soils: The site is mostly developed with a combination of buildings and paved surfaces. An area of approximately 0.08 acres of woodlands occupies the southwestern corner of the site. No existing topographical information was submitted with this application. Utilizing M-NCPPC contour information provided by PGAtlas for the site, it appears that the highest elevation of the site is at the base of the existing water tower at approximately 236 feet in elevation. The site slopes downwards in all directions from this highpoint. Much of the developed portion of the site is gently sloping with the topography becoming steeper off-site to the east, south, and west.

The draft environmental assessment indicates that only two soil types are found within the Water Tower Redevelopment Site; however, according to the U.S. Department of Agriculture (USDA) Web Soil Survey, the site is actually composed of three soil types. These soils include: Urban land-Beltsville complex (UrbB), 0-5 percent slopes; Urban land-Russett-Christiana complex (UrrB), 0-5 percent slopes; and Christiana-Downer complex, 10-15 percent slopes. No Marlboro Clays are located onsite according to PGAtlas; however, approximately 2/3rds of the site is associated with Christiana complexes.

According to the draft environmental assessment, Building 27 located onsite currently serves as the central vehicle maintenance, repair, and fueling area for the campus. This area previously housed underground storage tanks that have been formally closed and currently houses active aboveground storage tanks. Building 27B, which is also onsite, historically housed Class C explosives. This building is currently used for storage of environmental field activities. GSFC also possesses small unidentified quantities of radioactive material on the campus, which may or may not have been stored within the site. Although an environmental site assessment conducted in 2010 reported that there were no known releases of hazardous substances and petroleum products on or near the site, no subsequent studies have been conducted to date. Therefore the possibility exists for soil contamination within this area from accidental spillage of chemicals from subsequent operations of these two buildings.

The draft environmental assessment also indicates that a historic trichloroethene (TCE) plume is present between 70 to 80 feet below the ground surface onsite in the shallow unconfined Upper Patapsco Aquifer. The report indicates that it is unlikely that the near surface soils onsite are contaminated as a result of the TCE groundwater plume. The report states that past remediation efforts have eliminated risks associated with both groundwater and soil pollution, and that the site is above the fringe of the plume. However, the report indicates that a very small potential for soil vapor intrusion might still remain.

Water Resources: The site currently straddles two watersheds. Half of site drains to the northeast into the Upper Beaverdam Creek sub-watershed, which is part of the Anacostia watershed that flows into the Potomac River Basin. This area is not associated with a stronghold watershed. The other half of the site is located in a stronghold watershed that drains to the southwest into the Baldhill Branch sub-watershed, which is part of the Western Branch Watershed that flows into the Patuxent River Basin.

The majority of the site is currently comprised of impermeable surfaces. Stormwater is currently conveyed off-site to detention ponds that are subsequently released into each of the sub-watersheds associated with the site.

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Based on available information, construction impacts will include demolition, drilling and removal of the existing foundations; dust hazards and vibrations from the excavation process on- and off-site.

The potential exists for existing soil contamination resulting from previous operations onsite, and also due to the proximity of the site to a historic TCE groundwater plume. Groundwater and soil monitoring is highly recommended prior to and during construction. Any areas onsite that are identified with contaminated soil should be remediated or disposed of according to Maryland Department of the Environment and the United States Environmental Protection Agency guidelines.

Water Resources: No permanent adverse effects on water resources would be expected from implementing the proposed action. All construction is required to be conducted in accordance with erosion control and stormwater runoff laws and regulations to prevent any adverse effects on water quality. National Pollutant Discharge Elimination System (NPDES) Permits for Stormwater Associated with Construction Activities would be obtained as well as the approval from the Maryland Department of the Environment (MDE) of a Stormwater Management Plan before any construction activity would begin. In accordance with the Clean Water Act, any project that involves the filling of wetlands or waters would require Section 401/404 nontidal wetland permits from MDE and/ or the U.S. Army Corps of Engineers.

All phases of development would also have to be managed in accordance with the Goddard Procedural Requirement (GRP) 8000.5C, Water Management; and the 2007 Energy Independence and Security Act (EISA). The proposed stormwater management infrastructure would include the construction of a stormwater management facility in the vicinity of the proposed parking lot, storm drains and grassy swales, and the use of cisterns for the facility. According to the draft environmental assessment, these strategies would provide better quality and detention than the existing stormwater management strategies on-site that were originally developed in the 1960s.

According to the draft environmental report, long-term, minor, beneficial impacts would be expected to result from the expected net decrease of impervious surfaces on-site with the new site layout, and off-site with the demolition of existing facilities.

Biological Resources: Approximately 0.08 acres of woodland clearing is proposed onsite. This site is subject to the Maryland-Department of Natural Resources Forest Conservation Act requirements, and not to the County's TCP Requirements of the Woodland Conservation Ordinance. No forest interior dwelling species (FIDS) will be directly affected, as no FIDS habitat is located on, or immediately adjoining the site. No rare, threatened or endangered species are known to exist within the vicinity of the site according to the Sensitive Species Protection Review Area (SSPRA) based on a review of the SSPRA GIS layer prepared by the Heritage and Wildlife Service, M-DNR. Decline and/or mortality of trees to remain could occur due to significant critical root zone (CRZ) disturbance, tree limb damage, changes in soil moisture, and soil compaction as a result of grading. Some terrestrial wildlife may be temporarily displaced from their typical edge habitats during operations and other construction related activities.

Conclusion

Thank you for the opportunity to comment on the Water Tower Redevelopment Site. If you have questions regarding these comments, please contact the Environmental Planning Section at 301-952-3650.

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