

1 **FINDING OF NO SIGNIFICANT IMPACT**
2 **B-21 DEPOT MAINTENANCE ACTIVATION**
3 **TINKER AIR FORCE BASE (AFB), OKLAHOMA**
4

5 Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the
6 National Environmental Policy Act (NEPA), Title 23 United States Code § 327; Title 40 of the Code of Federal
7 Regulations (CFR) Sections (§ §) 1500-1508; and the United States Air Force (USAF) Environmental Impact
8 Analysis Process (EIAP), 32 CFR § 989, the USAF has prepared an Environmental Assessment (EA) to identify and
9 evaluate potential effects of establishing specialized facilities and logistics support for the B-21 depot
10 maintenance activation at Tinker Air Force Base (AFB), Oklahoma.

11 **Purpose of and Need for the Proposed Action (EA §1.3, page 1-4):** Tinker AFB currently performs depot
12 maintenance on the KC-46A, KC-135, B-1B, B-2, B-52, and E-3 aircraft and has been designated the Technology
13 Repair Center for all bomber repair. As part of the strategic source of repair (DSOR) process, the USAF
14 determined depot maintenance activities for B-21 aircraft will occur at Tinker AFB. Although Tinker's mission
15 includes a depot maintenance program for B-1, B-2, and B-52 aircraft, existing depot maintenance facilities are
16 inadequate to meet the B-21 maintenance needs. Furthermore, these facilities will continue to support B-1 and
17 B-2 depot maintenance for the next ten years. Therefore, the purpose of the Proposed Action is to establish
18 specialized facilities and logistics support required to conduct B-21 depot maintenance operations for
19 approximately 100 aircraft establishing the USAF B-21 fleet. The need for the action is to support the DSOR
20 decision on the B-21 depot maintenance program made by the USAF in a memorandum dated September 30,
21 2013.

22 **DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

23 **Selection Criteria for Alternative Sites (EA §2.2, pages 2-2 to 2-4):** The location for the proposed B-21 depot
24 maintenance bed down had to meet the following criteria to be considered a reasonable alternative:

- 25 • Cannot affect existing or future planned depot maintenance operations of the KC-46A, KC-135, B-1B, B-
26 2, B-52, E-3 and the Navy E-6. All existing missions must continue without interruption or risk of mission
27 failure.
- 28 • Construction footprint adjacent to or within close proximity (within five minutes) with existing taxiway
29 and ramp areas to the maximum extent possible.
- 30 • Large enough to house a 600,000-square foot (SF) area of primary facilities required to support B-21
31 depot maintenance activities in a contiguous campus setting with sufficient space for expansion. Total
32 acreage is estimated at 75 acres.
- 33 • Utilities should be accessible and provide sufficient capacity to support the proposed operations.
- 34 • Allow efficient application of force protection measures and comply with anti-terrorism/force protection
35 (ATFP) requirements. Any land acquisition must include sufficient buffer space around the entire
36 perimeter of property. New construction near installation boundaries must include appropriate setbacks
37 under ATFP rules.

38 The USAF initially considered four main areas at Tinker AFB: Defense Logistics Agency (DLA) site; Maintenance,
39 Repair, and Overhaul Technology Center (MROTC) site; Burlington Northern Santa Fe (BNSF) railyard site; and

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1 East Side Reuse site (EA Figure 2-1, page 2-3). Two sites were dismissed from further review after screening. The
2 BNSF site would have interfered with the current/future KC-46 mission, the B-21 mission, or both. The East Side
3 Reuse site would have precluded the ability to continue with the existing maintenance of the B-1 fleet. The USAF
4 carried forward the DLA and MROTC sites for further review.

5 **Alternative 1 – DLA Site (EA §2.4, pages 2-5 to 2-11):** This site is currently used as the DLA storage area. Under
6 Alternative 1, the area would be redeveloped to accommodate the B-21 depot maintenance mission (EA Figure
7 2-2, page 2-7). Approximately 242,710 SF of existing facility space would be demolished including the DLA
8 warehouse storage building. Construction would consist of aircraft environmental shelters, new pavements for
9 aircraft apron, vehicle parking, taxiway connection, engine test run-up pad, and other supporting infrastructure.
10 Two existing facilities, Building 11 and Building 9201, would be renovated to create administrative office space
11 and a B-21 parts warehouse (approximately 340,000 SF of interior space). As part of the action, a new DLA
12 warehouse storage building would be constructed to replace the existing building displaced by the B-21 bed
13 down. The new 200,000 SF DLA storage warehouse would be sited on approximately 4.6-acre vacant grassy lot
14 in the southwest corner of the installation. Total construction would disturb approximately 78.6 acres and
15 increase impervious surfaces by 30 acres resulting in approximately 74 acres of developed and impervious
16 surfaces.

17 Alternative 1 would include an estimated increase of 800 personnel to support B-21 depot maintenance
18 operations at full end state. It is assumed there would be an increase of up to 1,200 personnel during any
19 overlap in the B-1 and B-21 missions. These numbers represent a mix of civilian and active duty personnel and
20 include 1.5 dependents living off-installation in existing available housing.

21 An estimated twelve B-21 aircraft would be serviced each year at Tinker AFB based on fleet size. Maintenance
22 operations would include overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies, and the
23 testing and reclamation of equipment as necessary. The B-21 aircraft will operate within military training routes
24 and other existing airspace areas already designated for military use into and out of Tinker AFB. No changes to
25 airspace configurations are proposed or would be required with this action. Up to five B-21 takeoffs and landings
26 or ten operations per month would occur during hours from 7:00 a.m. to 10:00 p.m. Engine test run-ups would
27 occur for approximately 11 hours per month based on the B-21 monthly throughput.

28 Connection to existing utilities on Tinker AFB would be required for new facilities. Trenching and rerouting
29 would occur in areas already disturbed with pavements, maintained pre-disturbed open space (i.e., grassy
30 medians or other open areas), or existing buildings. A 750-kilowatt generator would be installed to supply
31 backup power in case of power outage.

32 **Alternative 2 – MROTC Site (EA §2.5, pages 2-11 to 2-14):** The MROTC site is located on the east side of Tinker
33 AFB, both within and outside the installation boundary. The site is approximately 133 acres and owned by
34 Oklahoma Industries Authority (OIA). Approximately 48 acres have been developed and include hangar space,
35 an administrative area and an aircraft operations ramp. OIA leases the property to the MROTC Development
36 Partner, who in turn has subleased to Boeing for a period of 17 years, which expires in 2023. The USAF currently
37 leases facility space from Boeing to preform various depot maintenance activities. Bed down of the B-21 mission

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1 would require acquisition of the parcel currently leased by USAF along with acquisition of an additional 80 acres
2 for security buffer to the east. Oklahoma City is proposing permanent closure of Douglas Boulevard and a
3 portion of South East 59th Street, both adjacent to the MROTC site, in a separate non-USAF action. While the
4 city's road closure proposal is not part of Alternative 2, the closure of these roads would create synergy between
5 the MROTC site and the five main facilities located along Tinker's flight line.

6 Under Alternative 2, the USAF would reuse existing hangars, expand aircraft-parking ramp, and construct an
7 engine test run-up area; approximately 28 acres total in new construction (EA Figure 2-6, page 2-13). Existing
8 pavement would be demolished. As discussed under Alternative 1, Buildings 11 and 9201 would be renovated in
9 order to create administrative office space and a B-21 parts warehouse. Personnel number increases would be
10 same as in Alternative 1 along with aircraft maintenance and operations, flight testing, and utility requirements.

11 **No Action Alternative (EA §2.6, page 2-14):** CEQ and USAF NEPA regulations require analyses include the "No
12 Action" alternative even if, by law, USAF must implement the Proposed Action. In the case of the B-21 depot
13 maintenance activation, the No Action Alternative provides a baseline of the environmental conditions existing
14 at Tinker AFB and provides a benchmark, enabling the USAF decision maker to compare the magnitude of
15 environmental effects between all the alternatives. Under the No Action Alternative, the B-21 aircraft would not
16 be brought to Tinker AFB for depot-level maintenance operations. USAF would not construct or demolish any
17 facilities or infrastructure at the installation and nor would any property acquisitions occur.

18 **ENVIRONMENTAL CONSEQUENCES**

19 Environmental analysis focused on the following resource areas: air quality; biological resource; geology and
20 soils; hazardous materials and wastes; health and safety; infrastructure, utilities, and transportation; noise;
21 socioeconomics and environmental justice; cultural resources; water resources; and land use. Biological and
22 water resources were determined to result in significant impacts to vegetation, migratory birds, and wetland
23 areas for Alternative 1; and surface waters / floodplain areas for both Alternatives 1 and 2. Potential significant
24 impacts would be mitigated to less than significant by the mitigation measures identified within the EA and
25 outlined in this finding of no significant impact (FONSI). Airspace management was dismissed from further
26 analysis because the proposed depot maintenance activation would have no measurable effect on airspace.

27 **Air Quality (EA § 3.1, pages 3-1 to 3-7):** Tinker AFB is located within Oklahoma County, which has been
28 designated as in attainment for all criteria pollutants by U.S. Environmental Protection Agency (USEPA). Tinker
29 AFB is a major air source and currently operates under a Title V permit. Emissions are primarily from aircraft
30 maintenance operations associated with the use of solvents, paint stripping, surface coating, jet engine testing,
31 fuel tanks, boilers, and emergency generators.

32 Implementation of either alternative will have short- and long-term, minor effects on air quality. Short-term
33 effects are due to fugitive dust and equipment exhaust generated by heavy equipment during construction.
34 Long-term effects are associated with increases in aircraft maintenance operations, ground support equipment,
35 vehicular traffic, and facility heating. A conformity determination is not required for areas in attainment;
36 however, the USAF evaluated the potential air quality impacts associated with the Proposed Action using the Air

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1 Conformity Applicability Model Report. Air emissions were determined for both alternatives to be below *de*
2 *minimis* thresholds (EA Table 3-3 on page 3-4 and Table 3-6 on page 3-6). Based on this analysis, there will be no
3 significant impacts to air quality with implementation of the Proposed Action.

4 **Biological Resources (EA § 3.2, pages 3-7 to 3-23):** Tinker AFB and the surrounding suburban area are heavily
5 urbanized with limited unimproved open space. Over 300 vertebrate species are documented on base. A list of
6 federally listed species was obtained from the U.S. Fish and Wildlife Service (USFWS) Information for Planning
7 and Consultation (IPaC) system as well as the 2019 Tinker AFB Integrated Natural Resources Plan. Six federally
8 listed endangered or threatened species have the potential to occur on Tinker AFB within the vicinity of both
9 alternatives; however, no suitable habitat occurs within or near these areas.

10 To promote natural resources, Tinker AFB has created a Green Infrastructure (GI) network, defined as “an
11 interconnected network of waterways, wetlands, woodlands, grasslands, and other natural areas of base-wide
12 significance”. Benefits include pollution control, increased military readiness by providing natural environments
13 for training, reduction of potential property damage in the event of a 100-year flood event, enhancing the
14 natural aesthetics of the base, increasing the wellness of base personnel by providing green areas for relaxation
15 and recreation, and providing undisturbed habitat to wildlife on base. Based on the 2014 Tinker AFB INRMP, the
16 GI area covers approximately 1,033 acres or 21 percent of the total base land area (EA Figure 3-2, page 3-13). Of
17 the two locations, the DLA site has the most GI with 36 acres of regulated area, accounting for 3.5 percent of the
18 base’s GI; there is no GI within the DLA warehouse relocation area. The MROTC site does not contain any GI,
19 although there are 12.7 acres identified as off base GI.

20 Implementation of Alternative 1 would cause a permanent loss of 43 acres of undeveloped area (12 acres of
21 mixed riparian forest, 23 acres of native/nonnative grasslands, and 8 acres of improved turf areas) while
22 Alternative 2 would cause a loss of 76 acres. Most of Alternative 2’s loss surrounds landscaped turf comprised of
23 nonnative grasses. Both alternatives would have long-term, direct, negligible impacts on wildlife from the
24 conversion of open space to pavement; these areas provide suitable foraging habitat for various songbirds,
25 raptors, reptiles, amphibians, and mammals. Although individuals may be affected, it would not impact regional
26 population viability or cause a downward trend in regional species populations because additional habitat is
27 present to support these species. Short-term, direct, negligible impacts on vegetation would include
28 sedimentation and crushing of adjacent non-target vegetation during construction, demolition, and renovation
29 activities from heavy equipment and construction personnel. Additionally, routine maintenance of any
30 remaining or landscaped vegetation would occur to reduce the risk of fire and encroachment of noxious weeds
31 in and adjacent to the campus. Concerning impacts to the GI, 3.5 percent would be lost with implementation of
32 Alternative 1. Although this is a small overall percentage, this loss will be mitigated through incorporation of
33 new natural areas into the installation GI network. Alternative 2 includes 12.7 acres of mapped off-base GI,
34 which will be lost during construction of the proposed maintenance facilities. Although not considered
35 significant, this loss represents a minor, long-term impact on vegetation and potential habitat.

36 Land clearing associated with construction for both alternatives will occur outside the central Oklahoma
37 breeding season for migratory birds (i.e., clearing only 1 August – 1 April). If, despite this effort, migratory birds
38 were to nest within the construction site and present a conflict to construction activities, then Tinker AFB will

1 obtain a Relocation Permit from the USFWS authorizing removal of nests, eggs, or birds by a qualified biologist.
2 Because of the impacts from B-21 construction, Tinker AFB is consulting with USFWS under Section 7 of the
3 Endanger Species Act. An informal consultation letter was sent to USFWS with a determination the action will
4 have no effect on threatened or endangered species with incorporation of the above mitigations. All B-21
5 aircraft operations associated with Proposed Action are to be covered under an USAF- wide Programmatic
6 Biological Opinion currently being developed with USFWS for airfield flight operations across 32 USAF
7 installations in the Continental United States, including Tinker AFB.

8 **Measures to Mitigate Vegetation and Migratory Bird Impacts for Alternative 1 (EA §3.2.3, pages 3-18 to 3-19):**

9 To mitigate for the loss of 12 acres of riparian forest and loss of habitat for migratory birds, a higher quality
10 woodland habitat with similar or high quality native species would be created on Tinker AFB or off base. Four
11 potential on base and one potential off base riparian mitigation areas have been identified (EA Figure 3-11, page
12 3-84 in the EA). Tinker AFB would prioritize on base sites before off base mitigation is pursued. Some of the
13 riparian mitigation options in these areas will require further hydraulic and hydrologic study and design to
14 determine feasibility to serve as viable riparian habitat mitigation locations. Additionally, personnel are to follow
15 the installation's noxious weed and invasive species management protocols to reduce the spread of these
16 species.

17 **Geology and Soils (EA § 3.3, pages 3-23 to 3-27):** Demolition and construction activities associated with the
18 Proposed Action would reduce soil productivity and increase erosion and sedimentation potential. An erosion
19 and sediment control plan will be implemented during and following site development to contain soil runoff on-
20 site and reduce impacts. Re-vegetation of the area will occur once construction is completed to minimize long-
21 term soil erosion and sedimentation rates.

22 Under Alternative 1, approximately 3.29 acres in the central portion of the DLA site and 3.37 acres at the DLA
23 warehouse site are considered prime farmland soil. The USAF is not required to adhere to prime farmland
24 protection policies in support of national defense. The loss of 3.29 acres is not considered significant since the
25 area is surrounded by military operations and cannot be farmed. As for the 3.37 acres for the DLA warehouse,
26 this site currently supports a hay agricultural lease. Implementation of Alternative 1 would require the USAF to
27 terminate this lease. None of the soils at the MROTC site has been identified as prime farmland. Overall, there
28 would be no significant impacts to soil resource with implementation of the Proposed Action.

29 **Hazardous Materials and Wastes (EA § 3.4, pages 3-27 to 3-34):** Daily operations at Tinker AFB utilize
30 hazardous materials and petroleum products such as liquid fuels, pesticides, oils, lubricants, coolants, batteries,
31 cleaners, hydraulic fluids, adhesives, paints, and solvents. The use of these materials results in the generation
32 and storage of hazardous wastes and used petroleum products. Construction will generate negligible to minor
33 quantities of hazardous wastes. Contractors are responsible for the disposal of hazardous wastes in accordance
34 with federal and state laws. Additional quantities of hazardous materials and petroleum products would be
35 required for the B-21 aircraft maintenance. These quantities would be similar and proportional to those
36 currently used to service other aircraft at Tinker AFB. Tinker AFB has sufficient delivery, storage, and disposal
37 capacity to accommodate the increased waste streams. The Tinker Oil and Hazardous Substance Integrated
38 Contingency Plan; Storm Water Pollution Prevention Plan; and Hazardous Waste Management Plan will be

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1 amended, as needed, for any new hazardous material, hazardous waste, or petroleum product capabilities.
2 Based on this analysis, there are no significant impacts to this resource with implementation of the Proposed
3 Action.

4 Two environmental contamination sites coincide within both alternatives. A 6-acre landfill was used to dispose
5 of general refuse and small industrial waste quantities. A cap was constructed over the landfill to prevent direct
6 access and to reduce surface water infiltration minimizing metal and organic compounds migrating to
7 groundwater. Land use restrictions prohibit the construction of new buildings on top of the cap. This landfill
8 coincides with the east-central portion of the DLA site. The East Groundwater Management Unit monitors
9 groundwater along the southeast quadrant of Tinker AFB for contaminants originating from multiple sources
10 including this landfill. Groundwater use restrictions are imposed on the site. Site closure is expected in 2027. The
11 East Groundwater Management Unit coincides with the majority of the DLA site and the westernmost portion of
12 the MROTC site. Several groundwater plumes are within the DLA site, and the easternmost edge of an adjacent
13 groundwater plume is within the MROTC site. No environmental contamination has been documented at the
14 buildings proposed for renovation or the new DLA warehouse site. While the DLA site partially coincides with a
15 landfill and the East Groundwater Management Unit, these contamination sites will not impede site
16 development. No buildings will be constructed on top of the landfill; however, automobile parking or airfield
17 pavement might be constructed and are permissible types of development. Because the East Groundwater
18 Management Unit bans the use of groundwater for drinking purposes, all proposed facilities will be connected
19 to the installation's existing potable water distribution system. The plumes of East Groundwater Management
20 Unit are expected to naturally attenuate by 2027 and may no longer exist when proposed construction begins in
21 FY 2025. Groundwater monitoring wells within the footprint of construction will be closed, filled, and replaced,
22 as needed. Only the westernmost portion of the MROTC site coincides within East Groundwater Management
23 Unit. While the groundwater plume occupies a small portion of the MROTC site, it does not impede
24 development under Alternative 2.

25 Short-term, minor impacts from toxic substances would occur from demolition and renovation of existing
26 buildings potentially containing asbestos, lead-based paints and Polychlorinated biphenyls. Surveys for these
27 substances will be completed, as necessary, and material removed by a certified contractor to reduce potential
28 exposure to, and release of, these substances. Long-term, there will be a positive benefit with removal of these
29 toxic material with implementation of the Proposed Action.

30 **Health and Safety (EA § 3.5, pages 3-34 to 3-39):** Operation and maintenance activities conducted on Tinker
31 AFB are performed in accordance with applicable USAF safety regulations, published USAF Technical Orders, and
32 standards prescribed by USAF Occupational Safety and Health requirements (AFSOH). To minimize safety risks,
33 all applicable safety regulations, AFOSH and Occupational Safety and Health Act safety standards, and
34 management procedures will be followed during all phases of construction activities. At full operational
35 capacity, an additional 800 military and civilian personnel will be required to support B-21 depot maintenance
36 operations. Air Force personnel will be required to adhere OSHA and AFSOH procedures for the B-21 as
37 currently required for all other depot maintenance operations. Because a bomber maintenance mission exists

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1 on the installation, transition to the B-21 will not present any new flight safety issues. Based on this analysis,
2 there are no significant impacts to this resource with implementation of the Proposed Action.

3 **Infrastructure, Utilities, and Transportation (EA § 3.6, pages 3-39 to 3-51):** Tinker AFB has existing electrical,
4 natural gas, communications, potable water, wastewater, and solid waste systems, as well as aircraft and vehicle
5 parking and transportation networks. Impacts during construction will include service interruptions experienced
6 when extending or rerouting existing utility lines, the use of water for dust suppression, and a temporary
7 increase solid waste generation. Long-term impacts include an increased demand on utilities from new facilities
8 and increased personnel. Additionally, localized, short- and long-term transportation impacts are expected from
9 an increase in construction and personnel vehicles accessing Tinker AFB. Based on this analysis, there are no
10 significant impacts to this resource with implementation of the Proposed Action.

11 **Noise (EA § 3.7, pages 3-51 to 3-62):** Existing noise on and adjacent to the installation include military and
12 civilian aircraft overflights, road traffic, and other maintenance operations. All construction activities for both
13 alternatives fall within the installation's property boundary, collocated with other existing noise-compatible
14 activities, and end with completion of the construction phase. The nearest off-installation residential area is
15 approximately 4,500 feet east of the proposed MROTC site, and heavy equipment noise would barely be audible
16 at this distance. Increases in maintenance activities will constitute a minor change in the existing noise footprint
17 but will remain on base. Analysis determined the 65-A-weighted decibel day-night sound level contour remains
18 unchanged for both alternatives. The contour continues to extend approximately four miles from both ends of
19 the installation's main north-south runway, and one-half mile from the ends of the second runway. Based on
20 this analysis, there are no significant impacts to this resource with implementation of the Proposed Action.

21 **Socioeconomics and Environmental Justice (EA § 3.8, pages 3-62 to 3-70):** Tinker AFB was Oklahoma's largest
22 single-site employer for fiscal year 2019. Implementation of either alternative will result in short-term, beneficial
23 impacts on the region's economy through the purchase of construction materials and providing employment for
24 construction personnel during project activities. It is assumed the B-21 maintenance personnel will live in and
25 commute within the Oklahoma City region. The increase in personnel will not affect the ability of any public
26 services, transportation or infrastructure to support the community. Additionally, employment of an estimated
27 800 personnel will increase the number of jobs Tinker AFB provides to the community, along with beneficial,
28 long-term statewide economic impact.

29 There are no environmental justice communities present within Alternative 1; however, Alternative 2 is near
30 several environmental justice populations, one of which includes a higher percentage of children. While the
31 nearest off-base residential area is approximately 4,500 feet east of the proposed MROTC site, heavy equipment
32 noise would barely be audible and the area would be fenced to prevent unauthorized personnel in the work
33 area. As a result no components of Alternative 2 will result in any disproportionately high or adverse human
34 health or environmental effects on low income, minority, children, or elderly populations.

35 **Cultural Resources (EA § 3.9, pages 3-70 to 3-75):** Several architectural surveys and building assessments were
36 completed on Tinker AFB from 1992 through 2016, including an assessment of the Cold War missions and
37 associated building alterations. None of the facilities proposed for demolition or renovation under both

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1 alternatives are considered eligible for listing on the National Register of Historic Places (NRHP). Additionally,
2 there are no aboveground resources requiring inventory or evaluation within the area off-installation currently
3 proposed as part of the MROTC site. Of the 5,603 acres comprising Tinker AFB, archaeological inventory has
4 occurred on 1,922 acres, and 3,681 acres are disturbed land; therefore, 100 percent of Tinker AFB property has
5 been surveyed for archaeological resources. No known eligible archaeological sites are within the area of
6 potential effect either alternative. Additionally, no properties of traditional cultural or religious significance have
7 been identified at Tinker AFB. Tinker AFB respectively initiated Section 106 consultation with the Oklahoma
8 State Historic Preservation Officer and federally recognized tribes. The Oklahoma SHPO concurred with the no
9 adverse effect determination for the undertaking in a letter dated September 8, 2020. Tribal consultations were
10 initiated on May 20, 2020. No responses have been received at this time.

11 **Water Resources (EA § 3.10, pages 3-75 to 3-88):** Tinker AFB and surrounding properties are located within the
12 Lower North Canadian Watershed. Surface water features near Tinker AFB include Crutch Creek, Soldier Creek,
13 Kuhlman Creek, Elm Creek, and Hog Creek. Surface water features within the MROTC site consist of a single
14 intermittent stream. A section of East Crutch Creek is located within Alternative 1. There is an area (0.69 mile)
15 of jurisdictional waters of the U.S. along the northern and western portion of the proposed DLA site and 2.98
16 acres of jurisdictional freshwater forested wetland falling within its boundaries. Several storm water detention
17 ponds, totaling 6 acres are considered non-jurisdictional. This accounts for 9.67 acres of water features within
18 the DLA site. Alternative 2 does not have any jurisdictional or non-jurisdictional wetland features. A 0.20-mile
19 long segment of Soldier Creek, an intermittent stream, runs through the north portion of the MROTC site.

20 **Measures to Mitigate Wetlands Impacts for Alternative 1 (EA §3.10.3, pages 3-86 to 3-87):** For the loss of
21 jurisdictional wetlands under Alternative 1, permitting would be required with the U.S. Army Corp of Engineers
22 (USACE), Tulsa District, in compliance with Section 404/401 of the Clean Water Act (CWA). Tinker AFB would
23 place first priority on mitigating wetland losses through utilization of available mitigation banks. Specific
24 mitigation banks and compensatory mitigation ratios would be determined during the permit process according
25 to USACE, Tulsa District rules. If mitigation banks are not available at the time of the permitting process, Tinker
26 AFB would prioritize wetland mitigation by creating new wetlands other suitable areas. Three potential on-base
27 locations include Sites 5, 6, and 7. All three sites are forested. Site 5 is a confirmed jurisdictional stream and Site
28 7 may also be a jurisdictional stream. All three sites could potentially fulfill mitigation ratios determined through
29 the USACE permitting process. If the USACE determines these three on-base are not adequate, then Tinker AFB
30 would seek to find appropriate wetland mitigation sites off-base, and likely downstream along Crutch Creek.
31 Best management practices would be put in place to mitigate impacts from increased storm water and sediment
32 runoff due to construction activities that may indirectly affect the Greenway wetland's quality.

33 Approximately 36.5 acres of Alternative 1 are located within the 100-year floodplain, and approximately 0.46
34 acre falls within the 500-year floodplain. Only 5.5 acres of Alternative 2 are located within the 100-year
35 floodplain. Based on the purpose and need for the B-21 Maintenance Depot Campus, the only the DLA site and
36 MROTC site meet B-21 siting requirements. Existing storm water detention ponds on the east and west side of
37 Alternative 1 would be removed and converted to impervious surfaces. The loss of these basins along with the
38 creation of new impervious surface result in an increase runoff volume. This volume increase requires offset

1 measures be designed to avoid significant storm water related impacts to the surrounding area and Crutcho
2 Creek Basin. The largest increase of water surface would occur near the confluence of East Crutcho Creek and
3 Crutcho Creek. The 100-year runoff volume would also increase with implementation of Alternative 1. To
4 mitigate these impacts to the floodplain with implementation of Alternative 1, the USAF would do the following:

5 **Measures to Mitigate Storm Water and Floodplain Impacts for Alternative 1 (EA §3.10.3, pages 3-82 to 3-85):**

6 Tinker AFB would offset 70-acre feet of storm water discharge by creating new storm water detention offsite.
7 Proposed detention sites would be prioritized in the following order of preference (EA Figure 3-11, page 3-84):

8 Proposed Detention Pond 1: Water would be piped to an existing pond potentially requiring the existing outflow
9 to be modified. There is an estimated six feet of freeboard on the pond; however, the pond would likely be
10 enlarged as this pond is also supports the detention basin for the KC-46A campus. Calculations would determine
11 volume capacity.

12 Proposed Detention Pond 2: This pond would be enlarged, dammed, and outfitted with proper outflow
13 structures and other items such as basin trickle channels to ensure this area does not hold standing water after
14 flooding subsides. The site would be designed to ensure it does not become a bird attractant.

15 Proposed Detention Pond 3: Approximately 8 acres consists of an established prairie mitigation area for the KC-
16 46A project. Therefore, if this site is used, the prairie lost would have to be mitigated elsewhere. This would
17 require re-evaluation of the mitigations for the KC-46C

18 New offsite storm water best management practices would be consistent with those described in Annex D to the
19 2016 Tinker AFB Storm Water Management Plan and would be incorporated into the site design to mitigate
20 storm water runoff, promote ground infiltration, and reduce the potential for erosion and storm water
21 contamination.

22 Development under Alternative 2 will result in an increase in the 100-year runoff volume and require measures
23 to offset the additional volume. Additional storm water features will be designed into the project to manage the
24 additional discharge. Although Alternative 2 will result in removal of existing storm water features, no net
25 increase in discharge rate will occur with implementation of the proposed storm water features. Proper grading
26 techniques, implementation of standard best management practice and erosion and sediment controls will
27 minimize the transport of sediment to nearby surface waters.

28 **Measures to Mitigate Storm Water and Floodplain Impacts for Alternative 2 (EA §3.10.3, page 3-87):** Only 5.5
29 acres of the MROTC site is located within the 100-year floodplain. The USAF recognizes implementation of
30 Alternative 2 has the potential to adversely affect storm water and floodplains occurring on and in the vicinity of
31 Tinker AFB. New storm water detention would be created at the MROTC site to offset for the increase in
32 impervious surface and the loss of existing detention capacity. Detention Pond 8 (EA Figure 3-11, page 3-84)
33 would be located along the existing drainage at the north east corner of the MROTC campus. Post-construction
34 runoff determinations would be made to determine the detention pond size and capacity needed to mitigate
35 storm water runoff. Construction would require elevation of the land above the 100-year and 500-year
36 floodplain and require a permit to construct within a floodplain.

1 **Land Use (EA § 3.11, pages 3-88 to 3-94):** The DLA site falls within the Airfield Planning District while the
2 proposed B-21 parts warehouse renovation site falls within the North Planning District. The proposed DLA
3 warehouse site and administrative space site fall within the Depot Planning District. The existing land use for
4 Alternative 1 is designated as industrial land use. The parcel containing the existing MROTC site is within the
5 Depot Planning District. Land uses at and around the MROTC site is designated as industrial, institutional,
6 undeveloped, and agricultural land uses. B-21 construction and follow-on operations will be consistent with
7 existing and planned land use development and will not require re-designation. Based on this analysis, there are
8 no significant impacts to land use with implementation of the Proposed Action.

9 **PUBLIC REVIEW / INTERAGENCY COORDINATION**

10 Early public notice detailing the Proposed Action would occur within wetlands and/or floodplains was published
11 in *The Oklahoman* on March 21, 2020 to solicit public concern; no comments were received. A notice of
12 availability was published in *The Oklahoman* on November 2, 2020 inviting the public to review the draft EA and
13 draft FONSI for a 30-day comment period. Copies were posted to the Tinker AFB public facing website for
14 download and review. The public comment period closed on December 2, 2020.

15 **MITIGATION MEASURES**

16 Tinker AFB is responsible for ensuring mitigations are fully funded, in place, and being carried out as identified
17 above and within §§ 3.2.3 and 3.10.3 of the EA. In addition, Tinker AFB will prepare a Mitigation and Monitoring
18 Plan (MMP). The MMP will be developed within 90-days subsequent to this document and include regulatory
19 permitting requirements as they become available along with an anticipated mitigation schedule and
20 completion date(s). Tinker AFB and its contractors will to adhere to all applicable permitting and best
21 management practices in accordance with federal, state, and/or local regulatory requirements during
22 implementation of the Proposed Action. The MMP is a living document and as such will be updated by Tinker
23 AFB throughout the life of the project.

24 **FINDING OF NO SIGNIFICANT IMPACT**

25 Implementation of Alternative 1 will have a greater impact on wetland and floodplain resources (approximately
26 2.98 acres of jurisdictional wetland and 37 acres of floodplains) when compared against Alternative 2, which
27 only effect 5.5 acres of floodplains. While there is no practicable alternative available to avoid affecting
28 floodplains all together, I find implementation of Alternative 2 will avoid impacts to wetlands all together and
29 have a reduced impact to the Crutch Creek floodplain basin. Based on my review of the facts and analysis as
30 summarized above and contained within the EA, I find the proposed decision to implement Alternative 2 –
31 MROTC Site will not have a significant impact on the natural or human environment with mitigations in place. An
32 environmental impact statement is not required. In addition, I find the mitigations in place to elevate facilities
33 above the floodplain along with inclusion of properly designed storm water detention basins includes all
34 practicable measures to minimize harm to the floodplain. This analysis fulfills NEPA, the President’s Council on
35 Environmental Quality 40 CFR §§1500 – 1508, the Air Force regulation 32 CFR §989, Executive Order 11988,
36 *Floodplain Management*, and Executive Order 11990, *Protection of Wetlands*.

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Date

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