

ATTACHMENT C

Summary of mitigation actions taken to avoid and minimize wetland impacts.

Mitigation Requirement	Proposed Mitigation Action
Avoid the impact by not taking a certain action or parts of an action.	<p>Avoid fill in wetlands and Miller Creek by designing the runway to meet the minimum operational, engineering, safety, and maintenance standards.</p> <p>Locate, where feasible, permanent stormwater detention ponds in uplands. Avoid excavation within 50 ft of Category II and III wetlands in Borrow Area 3.</p> <p>Avoid wetlands in Borrow Area 1 where practical.</p> <p>Construct retaining walls at the northwest end of the runway to reduce impacts to Miller Creek and Category II wetlands (Wetlands 8, 9, and A1) located at the north end of the project.</p> <p>Install a retaining wall near the west-central portion of the embankment to reduce impacts to Category II Wetlands 18 and 37 and avoid relocating a second segment of Miller Creek.</p>
Minimize the impact by limiting the degree or magnitude of the action.	<p>Place a retaining wall near the southwest end of the runway to reduce impact to a Category II wetland (Wetland 44).</p> <p>Design Borrow Areas 1 and 3 with a 150- to 200-ft setback from Des Moines Creek to minimize potential impact to the stream and its buffers.</p> <p>Implement stormwater pollution prevention plans (SWPPPs) prior to any construction project.</p> <p>Maintain hydrology to wetlands by directing seepage water from the embankment to wetlands downslope of the embankment.</p> <p>Provide water quantity and water quality mitigation to protect aquatic habitat in Miller Creek from stormwater impacts during operation.</p>
Avoid the impact by not taking a certain action or parts of an action.	<p>Construct retaining walls to support relocated South 154th Street and avoid permanent fill in Wetlands 3 and 4.</p>
Minimize the impact by limiting the degree or magnitude of the action.	<p>Construct retaining walls to support relocated South 154th Street and reduce permanent fill and minimize temporary impacts in Wetland 5.</p> <p>Implement SWPPPs prior to any construction project.</p> <p>Provide water quantity and water quality mitigation to protect wetlands and other receiving waters from stormwater impacts during operation.</p>
Avoid the impact by not taking a certain action or parts of an action.	<p>Design the SASA footprint to avoid relocation of Des Moines Creek.</p> <p>Temporary impacts to Des Moines Creek and Wetland 52 are not anticipated.</p>
Minimize the impact by limiting the degree or magnitude of the action.	<p>Design the SASA to avoid direct impacts to forested wetland (Wetland 52) that provides groundwater discharge functions.</p>

Mitigation Requirement	Proposed Mitigation Action
Reduce the impact over time by preservation and maintenance actions during the life of the action.	Design water quantity and water quality mitigation to protect wetlands from stormwater impacts.
On-site Borrow Source Areas	
Avoid the impact by not taking a certain action or parts of an action.	Do not propose excavation in Wetlands 3-6 and 10 located north of the existing runways. Redesign development areas within Borrow Areas 1 and 3 to avoid excavation of 12 wetlands (Wetlands B1, B4, B5, B6, B7, B9, B10, B15a, B15b, 29, 30, and 48).
Minimize the impact by limiting the degree or magnitude of the action.	Establish a 150- to 200-ft buffer between Borrow Area 1 and Des Moines Creek to avoid impacts to stream hydrology and riparian buffers. Follow a TESC Plan to eliminate siltation reaching wetlands or Des Moines Creek from excavation activities. Establish final surface grades in Borrow Area 1, and construct interceptor swale system in Borrow Area 3, to direct surface water runoff and groundwater seepage to wetlands near borrow areas, and minimize and avoid indirect hydrology impacts. Maintain BMPs throughout the operating period to ensure adjacent wetlands will be protected from adverse construction-related activities.