

June 15, 2023

Henry Schoenhoff  
City of Aurora Planning Department  
15151 E. Alameda Parkway, Suite 2300  
Aurora, CO 80012

**RE:    *Initial Submission Review – Fine Parking – Master Plan  
Amendment Application Number: DA-1964-03  
Case Numbers: 2014-7003-01***

Dear Henry Schoenhoff,

Thank you for the comments on June 2, 2023, for the above-mentioned project. In an effort to address your comments concisely and simplify your review of the Master Plan, we have summarized your comments and our responses below.

## **COMMENT RESPONSE LETTER: MASTER PLAN COMMENTS**

### **SUMMARY OF KEY COMMENTS FROM ALL DEPARTMENTS**

- From planning, ensure applicable elements of existing conditions and natural features maps identified on Page 11 of the master plan manual are included on the combined existing conditions and natural features map.
- From transportation planning, in the PIP cross-section, Jackson Gap Way shall have 10' sidewalk and curbside landscaping.
- From civil engineering, ensure the PIP matches the master drainage plan. The water quality ponds that serve the respective planning areas should be included in each narrative that they serve. For example, how is water quality/detention provided for PA-2? It cannot be assumed that another planning area will build the ponds first.
- From traffic engineering, in the TIS, on Page 88, peak hour of generation is more conservative, update or provide justification for why this is being used (typ. all).
- From Aurora Water, advisory: by listing these slopes, these will be used as a minimum for civil plan review. If a flatter slope is provided in the civil plans then a circular worksheet will be required at that time to confirm d/D.
- From public art, update total acreage and rates.
  - *Response: Key comments have been addressed.*

### **PLANNING DEPARTMENT COMMENTS**

#### **1. Community Questions, Comments and Concerns**

##### **1A. No comments..**

- *Response: Acknowledged.*

## 2. Completeness and Clarity of the Application

**2A.** Remove all references to “Framework Development Plan,” including in sheet titles. This is a Master Plan Amendment.

■ *Response: References to Framework Development Plan have been removed.*

**2B.** Remove all references to “Contextual Site Plans.” These are simply referred to as “site plans.” Fees are due prior to the second submission. \$18,303 is outstanding.

■ *Response:*

## 3. Tab 3: Context Map

**3A.** See redline comments.

■ *Response: Redline comments have been addressed.*

**3B.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

■ *Response: References to “Framework Development Plan Amendment” have been replaced with “Master Plan Amendment.”*

## 4. Tab 4: Site Analysis Narrative

**4A.** See redline comments.

■ *Response: Redline comments have been addressed.*

**4B.** Ensure applicable elements of existing conditions and natural features maps identified on Page 11 of the [master plan manual](#) are included on the combined existing conditions and natural features map.

■ *Response: Of the required items, all are shown on the combined natural features and existing conditions maps except, the 100-year floodplain areas, historical or archeological sites, environmental hazards, boundaries of existing jurisdictions, wildlife habitats, existing vegetation, significant views of the front range, and geological hazards because these are not applicable to the site.*

**4C.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

■ *Response: References to “Framework Development Plan Amendment” have been replaced with “Master Plan Amendment.”*

## 5. Tab 8: Land Use Map

**5A.** See redline comments.

■ *Response: Redline comments have been addressed.*

**5B.** Make dashed lines for streets solid or revise the legend to show dashed lines for street classifications.

■ *Response: Legend has been revised.*

**5C.** Remove extra cell above PA-1A.

- *Response: Cell has been removed.*

**5D.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.” Correct legend.

- *Response: References to “Framework Development Plan Amendment” have been replaced with “Master Plan Amendment.”*

**6. Tab 9: Open Space, Circulation, and Neighborhood Map**

**6A.** See redline comments.

- *Response: Redline comments have been addressed.*

**6B.** Make dashed lines for streets solid or revise the legend to show dashed lines for street classifications. .

- *Response: Redline comments have been addressed.*

**6C.** Remove extra cell above PA-1A. .

- *Response: Cell has been removed.*

**6D.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.” .

- *Response: References to “Framework Development Plan Amendment” have been replaced with “Master Plan Amendment.”*

**7. Tab 10: Urban Design Standards**

**7A.** List current zoning on Page 10.1.

- *Response: Current zoning listed – Airport District (AD).*

**7B.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

- *Response: Replaced “Framework Development Plan” with “Master Plan” (typical)*

**7C.** Remove all references to “Contextual Site Plans.” These are simply referred to as “site plans.”

- *Response: Verbiage edited.*

**7D.** Show updated land uses on Monument Location Map on Page 10.4.

- *Response: Page 10.4 has been updated to reflect current land uses.*

**7E.** Remove pages that are not applicable.

- *Response: Based on discussions with Henry Schoenhoff, non-applicable tabs are to remain in Master Plan Amendment in order to keep the same number of sheet tabs.*

**8. Tab 11: Landscape Standards**

**8A.** Submit the complete tab (11 pages) from the original mylar submission, including the revised first page submitted with this submission.

- *Response: Mylar pages have been included in tab 11 along with the first page revised.*

**8B.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

- *Response: Reference language has been replaced to Master Plan Amendment.*

**9. Tab 12: Architectural Design Standards**

**9A.** List current zoning on Page 12.1.

- *Response: Current zoning listed – Airport District (AD).*

**9B.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

- *Response: Replaced “Framework Development Plan” with “Master Plan” (typical)*

**9C.** Remove all references to “Contextual Site Plans.” These are simply referred to as “site plans.”

- *Response: Verbiage edited.*

**9D.** Remove pages that are not applicable.

- *Response: Based on discussions with Henry Schoenhoff, non-applicable tabs are to remain in Master Plan Amendment in order to keep the same number of sheet tabs.*

**10. Tab 14: Existing Slope Map**

**10A.** See redline comment.

- *Response: Redline comment has been addressed.*

**10B.** Replace reference to “Framework Development Plan Amendment” to “Master Plan Amendment.”

- *Response: Reference language has been replaced to Master Plan Amendment.*

**11. Landscaping Issues**

**(Kelly Bish / 303-739-7189 / kbish@auroragov.org / Comments in bright teal)**

**11A.** No comments.

- *Response: Acknowledged.*

**12. Transportation**

**(Tom Worker-Braddock / 303-739-7340 / tworker@auroragov.org / Comments in bright teal)**

**12A.** See redline comment.

- *Response: Redline comment addressed.*

**12B.** In the PIP cross section, Jackson Gap Way shall have 10’ sidewalk and curbside landscaping.

- *Response: Sidewalk to remain 5' per EDN #216082.*

**REFERRAL COMMENTS FROM OTHER DEPARTMENTS AND AGENCIES****13. Civil Engineering**

**(Julie Bingham / 303-739-7403 / [jbingham@auroragov.org](mailto:jbingham@auroragov.org) / Comments in green)**

**13A.** See redline comments.

- *Response: Redline comments have been addressed.*

**13B.** Comments 13C-13M from the PIP.

- *Response: Comments have been addressed.*

**13C.** Match ROW width with cross-section.

- *Response: ROW has been updated to 107.0' for Powhaton Road.*

**13D.** Add that additional offsite improvements may be required to meet traffic and life safety needs.

- *Response: Line has been added.*

**13E.** Ensure that the water quality ponds are reflected in the narratives on the next sheet for each planning area.

- *Response: Water quality ponds have been reflected for each planning area.*

**13F.** Correct headers.

- *Response: Headers have been corrected.*

**13G.** Ensure the PIP matches the master drainage plan. The water quality ponds that serve the respective planning areas should be included in each narrative that they serve. For example, how is water quality/detention provided for PA-2? It cannot be assumed that another planning area will build the ponds first.

- *Response: The PIP matches the master drainage plan.*

**13H.** These planning areas (PA-1A/1B) require 58th and Powhaton improvements.

- *Response: Improvements have been added to the planning area.*

**13I.** Include the required street improvements for each planning area to develop independently in this area.

- *Response: Correct Street improvements have been added to each planning area.*

**13J.** 58th Ave is a requirement of PA-4 and PA-5.

- *Response: 58<sup>TH</sup> Ave has been added to the planning areas.*

**13K.** The Jackson Gap sidewalk adjacent to PA-5 is a requirement of PA-5.

- *Response: Jackson Gap Way has been added to PA-5.*

**13L.** No improvements are required for Jackson Gap adjacent to the Fine Airport Parking site.

- *Response: Jackson Gap way has been updated.*

**13M.** Powhatan should be built up to the north.

- *Response: Powhatan has been updated.*

**13N.** Comments 13M-13R from the Urban Design Standards.

- *Response: Comments have been addressed.*

**13O.** Add: walls over 30" shall be required to have railing.

- *Response: Added verbiage above.*

**13P.** Add: lights in the public ROW shall meet COA standards.

- *Response: Added verbiage above.*

**13Q.** Powhatan classification on Page 10.4 does not match the PIP.

- *Response: Map has been modified to match PIP.*

**13R.** Public streetlights shall meet COA standards.

- *Response: Added verbiage above.*

#### **14. Traffic Engineering**

**(Carl Harline / 303-739-7584 / charline@auroragov.org / Comments in amber)**

**14A.** See redline comments.

- *Response: Redline comments have been addressed.*

**14B.** Comments 14C-14F from Tab 8, Land Use Matrix.

- *Response: Land use matrix comments have been addressed.*

**14C.** Title acreage table.

- *Response: Title has been added.*

**14D.** Add E 56 Ave ROW acreage.

- *Response: Since there is no additional dedication, E 56<sup>th</sup> Ave was not included.*

**14E.** Align controls for E 56 Ave intersections with Tab 9, Open Space, Circulation, and Neighborhood Map.

- *Response: Controls have been aligned.*

**14F.** Define intersection controls.

- *Response: Intersection controls have been defined.*

**14G.** Comments 14H-14K from Tab 9, Open Space, Circulation, and Neighborhood Map.

- *Response: Comments have been addressed.*

**14H.** Title acreage table.

- *Response: Title has been added.*

**14I.** Add E 56 Ave ROW acreage.

- *Response: Since there is no additional dedication, E 56<sup>th</sup> Ave was not included.*

**14J.** Align controls for E 56 Ave intersections with Tab 8, Land Use Matrix.

- *Response: Controls have been aligned.*

**14K.** Define intersection controls.

- *Response: Controls have been defined.*

**14L.** Comments 14M-14O from the Tab 13, PIP.

- *Response: Comments have been addressed.*

**14M.** Refer to “Ultimately Signalized Intersection” as “Future Signalized Intersection.”

- *Response: Intersection has been changed accordingly.*

**14N.** In the legend, distinguish between proposed access points and existing intersections.

- *Response: Proposed and existing access points have been*

**14O.** Define intersection controls.

- *Response: Intersection controls have been defined.*

**14P.** Comments 14Q-14I from the TIS.

- *Response: Comments have been addressed.*

**14Q.** Correct typos.

- *Response: Typos have been corrected.*

**14R.** PA-5 does not appear to be accounted for anywhere in this report but is included as part of the other documents.

- *Response: PA-5 is included in the background traffic volumes. The project traffic volumes associated with PA-5 and Porteos Industrial were directly added to the background traffic volumes. For example, at intersection #1 the AM northbound through existing volumes is 94. With a 2% annual growth = 1.06 growth factor the 2025 background NBT traffic volumes is 100. Then the PA-5 project traffic is 65. Therefore, the reported NBT traffic volume is shown as 165.*

**14S.** Revise number of accesses.

- *Response: The number of accesses has been revised to match the figures and analysis.*

**14T.** Revise 3.1, Existing Study Area.

- *Response: The existing study area description has been updated and corrected.*

**14U.** Existing and future conditions need to be separate so justification can be provided for future conditions based on analysis.

- *Response: The future conditions are reported in the NEATS Refresh document or will match the existing cross-sections that are constructed today. This section simply states what is being planned by the City of Aurora from their long-range roadway plans. The analysis did determine if these ultimate roadway conditions will be needed and stated if the ultimate cross-section is not needed operationally within the operational analysis section. However, this section has been moved to the operational analysis section.*

**14V.** Revise speed limit under 3.2.

- *Response: The posted speed limit has been corrected. The 40mph posted speed limit is shown for Powhatan Road, south of 64th Avenue in the southbound direction.*

**14W.** Remove extra logo on Page 18.

- *Response: Extra logo removed.*

**14X.** On Page 22, AM/PM pass by assumptions differ per ITE. PM assumptions shouldn't be applied to AM peak.

- *Response: The project traffic has been updated and the intersection analysis has been revised to not account for pass-by for the retail during the morning peak hour.*

**14Y.** On Page 24, revise intersection labels.

- *Response: The intersection # label has been updated.*

**14Z.** On Page 24, if E 64 Ave and Powhatan Rd are being evaluated, distribution needs to show/include those intersection legs.

- *Response: The viewport has been extended to show the 64th & Powhatan intersection.*

**14AA.** On Page 27, trips do not appear to have been adjusted according to Figure 7.

- *Response: Project trips have been updated.*

**14BB.** On Page 34, provide movement LOS.

- *Response: The movement LOS is provided in Appendix E. However, the movement LOS has been provided in this table.*

**14CC.** On Page 35 and 37, provide LOS by movement.



- *Response: The movement LOS is provided in Appendix E. However, the movement LOS has been provided in this table.*

**14DD.** Table 9 is missing accesses G, H, and I.

- *Response: Access G, H, and I have been included in the table.*

**14EE.** On Page 42, include all abbreviation definitions (C, T, DL, etc).

- *Response: These abbreviations have been included at the bottom of the table.*

**14FF.** On Page 46, add blue line to legend.

- *Response: These blue lines have been changed to green because all the accesses are private roadways.*

**14GG.** On Page 47, add turning movements to legend.

- *Response: 'T' has been added to the legend.*

**14HH.** On Page 48, the report indicates signal is warranted here.

- *Response: The comment was meant for this intersection. Therefore, this intersection has been revised to match the report text and signalization is included.*

**14II.** On Page 88, peak hour of generation is more conservative, update or provide justification for why this is being used (typ. all).

- *Response: The typical peak hour of traffic occurs between 7am to 9am during the morning and 4pm to 6pm during the afternoon. This is a nationally standard procedure.*

*For this reason, ITE has trip generation data that aligns with these peak hours for the morning and afternoon. Using the peak hour generator rates would need to be applied to the morning peak hour that the land use generates the most trips and that hour is unknown. The intention of the intersection analysis is to study the highest one hour during the morning and afternoon. Applying the peak hour generator to the morning peak hour intersection counts is an incorrect application. This is because the peak hour of the generator falls outside of the morning and afternoon peak hours of adjacent street traffic. Additionally, the hours outside of the peak hour of adjacent street traffic is less than the one hour between 7am to 9am.*

## 15. Fire / Life Safety

(Erick Bumpass / 303-739-7627 / [ebumpass@auroragov.org](mailto:ebumpass@auroragov.org) / Comments in blue)

**15A.** No comments.

- *Response: Acknowledged.*

## 16. Aurora Water

(Casey Ballard / 303-739-7382 / [cballard@auroragov.org](mailto:cballard@auroragov.org) / Comments in red)

**16A.** See redline comments.

- *Response: Redline comments have been addressed.*

**16B.** Comments 16C-16J from the Master Utility Plan.

- *Response: Master Utility Plan comments have been addressed.*

**16C.** Advisory: By listing these slopes, these will be used as a minimum for civil plan review. If a flatter slope is provided in the civil plans then a circular worksheet will be required at that time to confirm d/D.

- *Response: Acknowledged.*

**16D.** Include the size of this water main. The existing main here is 12 inches.

- *Response: Existing water main size has been added to plans.*

**16E.** This main within the 60th Ave alignment is 16 inches.

- *Response: Existing water main size has been added to plans.*

**16F.** Sanitary sewer routing is missing the estimated population, which is used to determine the peak factor. The peak factor is based on the design point and not individual planning areas.

- *Response: Calculations for peak factor have been updated to show estimated population.*

**16G.** See the example routing schematic.

- *Response: A routing schematic has been added.*

**16H.** Why are all the water lines listed in the Active Scenario Average Day Sheet six inches?

- *Response: Pipe sizes have been changed to 12 inches.*

**16I.** The flows on the Active Scenario: Max Day + Fire Flow Sheet should include the fire demand to show velocity and head loss.

- *Response: Fire flow demand has been added to the junction tables. A fire flow results table has also been added for the max day + fire flow scenario.*

**16J.** Label the project site on the infrastructure improvements map.

- *Response: Project site has been labeled.*

## **17. Public Art**

**Roberta Bloom / 303-739-6747 / [rbloom@auroragov.org](mailto:rbloom@auroragov.org)**

**17A.** See redline comments.

- *Response: Redline comments have been addressed.*

**17B.** Update total acreage.

- *Response: Total acreage has been updated.*

**17C.** Update rate.

- *Response: Rates have been corrected.*

**17D.** Replace reference to “Contextual Site Plan” with “Site Plan.”

- *Response: Text has been updated.*

**17E.** Replace reference to “Framework Development Plan Amendment” with “Master Plan Amendment.”

- *Response: References to “Framework Development Plan Amendment” have been replaced with “Master Plan Amendment.”*

## **18. USDA APHS Wildlife Services**

**303-328-9041 / USDA APHIS Wildlife Services on behalf of the Denver International Airport’s Wildlife Hazard Management Program**

**18A.** Please see the attached letter.

## **UNITED STATES DEPARTMENT OF AGRICULTURE**

To Whom It May Concern,

In support of safe air operations at Denver International Airport (DEN), the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (WS) is providing review and comments this project.

The project is located within 5-miles of Denver International Airport’s arrival, departure, and circling airspace. The Federal Aviation Administration (FAA) provides guidance for construction that is known to attract wildlife hazardous to aviation safety. Wildlife Services recommends all project planners and contractors review Advisory Circular 150/5200-33C (Hazardous Wildlife Attractions On or Near Airports, dated February 21, 2020). Development plans should be designed to not create a wildlife attractant within separation criteria outlined in Advisory Circular 150/5200-33C.

The Advisory Circular 150/5200-33C provides guidance on mitigating wildlife attractants specifically in Chapter 2 – Land-Use Practices on or Near Airports that Potentially Attract Hazardous Wildlife. Specific subject matter for this project is referenced below, however may require additional details from AC 150/5200-33C depending on the completeness of the project design.

- **2.3 Water Management Facilities.** Drinking water intake and treatment facilities, storm water and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, ponds and fountains for ornamental purposes, and ponds that result from mining activities often attract large numbers of potentially hazardous wildlife. Development of new open water facilities within the separation criteria identified in Paragraphs 1.2 through 1.4 should be avoided to prevent wildlife attractants. If necessary, land-use developers and airport operators may need to develop management plans, in compliance with local and state regulations, to support the operation of storm water management facilities on or near all public-use airports to ensure a safe airport environment. The FAA recommends these plans be developed in consultation with a Qualified Airport Wildlife Biologist, to minimize hazardous wildlife attractants
- **2.3.2 New Stormwater Management Facilities.** The FAA recommends that storm water management systems located within the separations identified in Paragraphs 1.2 through 1.4

be designed and operated so as not to create above-ground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and to remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep sided, rip-rap or concrete lined, narrow, linear-shaped water detention basins. When it is not possible to place these ponds away from an airport's aircraft operations area (but still on airport property), airport operators may use physical barriers, such as bird balls, wire grids, floating covers, vegetation barriers (bottom liners), or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. Caution is advised when nets or wire grids are used for deterring birds from attractants. Mesh size should be < 5 cm (2") to avoid entangling and killing birds and should not be made of a monofilament material. Grids installed above and across water to deter hazardous birds (e.g., waterfowl, cormorants, etc.) are different than using a small mesh covering but also provides an effective deterrent. Grid material, size, pattern and height above water may differ on a case-by-case basis. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, a review by a Qualified Airport Wildlife Biologist should be conducted, prior to approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages the use of underground storm water infiltration systems because they are less attractive to wildlife.

- 2.3.1.2 Where possible, airport operators should modify stormwater detention ponds to allow a maximum 48-hour detention period for the design storm. The combination of open water and vegetation is particularly attractive to waterfowl and other hazardous wildlife. Water management facilities holding water longer than 48 hours should be maintained in a manner that keeps them free of both emergent and submergent vegetation. The FAA recommends that airport operators avoid or remove retention ponds and detention ponds featuring dead storage to eliminate standing water. Detention basins should remain totally dry between rainfalls. Where constant flow of water is anticipated through the basin, or where any portion of the basin bottom may remain wet, the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat. Drainage basins with a concrete or paved pad should be maintained to prevent or remove any sediment build-up to prevent vegetation growth.
- 2.3.1.3 When it is not possible to drain a large detention pond completely, airport operators may use physical barriers, such as bird balls, wire grids, pillows, or netting, to deter birds and other hazardous wildlife. When physical barriers are proposed, airport operators must evaluate their use, effectiveness and maintenance requirements. Airport operators must also ensure physical barriers will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office.
- 2.3.1.4 The FAA recommends that airport operators encourage off-airport stormwater treatment facility operators to incorporate appropriate wildlife hazard mitigation techniques into stormwater treatment facility operating practices when their facility is located within the separation criteria specified in Paragraphs 1.2 through 1.4.

- 2.3.2 New Stormwater Management Facilities. The FAA recommends that storm water management systems located within the separations identified in Paragraphs 1.2 through 1.4 be designed and operated so as not to create above-ground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and to remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep sided, rip-rap or concrete lined, narrow, linear-shaped water detention basins. When it is not possible to place these ponds away from an airport's aircraft operations area (but still on airport property), airport operators may use physical barriers, such as bird balls, wire grids, floating covers, vegetation barriers (bottom liners), or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. Caution is advised when nets or wire grids are used for deterring birds from attractants. Mesh size should be < 5 cm (2") to avoid entangling and killing birds and should not be made of a monofilament material. Grids installed above and across water to deter hazardous birds (e.g., waterfowl, cormorants, etc.) are different than using a small mesh covering but also provides an effective deterrent. Grid material, size, pattern and height above water may differ on a case-by-case basis. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, a review by a Qualified Airport Wildlife Biologist should be conducted, prior to approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages the use of underground storm water infiltration systems because they are less attractive to wildlife.
- 2.3.3 Existing Wastewater Treatment Facilities. The FAA recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport.
  - 2.3.3.1 The FAA recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport.
  - 2.3.3.2 Where required, a wildlife management plan will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should encourage wastewater treatment facility operators to incorporate measures, developed in consultation with a Qualified Airport Wildlife Biologist, to minimize hazardous wildlife attractants. Airport operators should also encourage those wastewater treatment facility operators to incorporate these mitigation techniques into their standard operating practices. In addition, airport operators should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.
- 2.3.4 New Wastewater Treatment Facilities. The FAA recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in Paragraphs 1.2 through 1.4. Appendix 1 defines wastewater treatment facility as "any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes." The definition includes any pretreatment involving the reduction or elimination of pollutants prior to introducing such pollutants into a treatment facility. When a wastewater treatment facility is proposed within the separation criteria, the airport operator, project proponent, and local jurisdiction should discuss the proposed project location with regard to its location near the airport and the separation distances identified in Paragraphs 1.2 through 1.4. If possible, a more suitable location for the proposed facility should be

identified. If no other suitable location exists, FAA recommends that the proposed facility plans be reviewed by a Qualified Airport Wildlife Biologist to identify measures to avoid or reduce the facility's potential to attract hazardous wildlife. If appropriate measures cannot be incorporated to reduce potential wildlife hazards, airport operators should document their opposition in a letter to the local jurisdiction.

The land-use types specifically outlined above should be followed as a recommendation by WS on behalf of DEN. Additionally, storm water and waste water treatment facilities may require more specific wildlife exclusion to prevent an attraction to hazardous wildlife. In addition to FAA recommendations, WS recommends the continued communication and monitoring of wildlife with WS and DEN to identify and properly manage wildlife potentially hazardous to aircraft operating at DEN.

Additionally, the FAA has also issued a CertAlert 98-05 (Grasses Attractive to Hazardous Wildlife) which is further used in support of AC 150/5200-33C. Specifically, CertAlert 98-05 states:

- Airport Operators should ensure that grass species and other varieties of plants attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grasses.

Denver International Airport currently operates under an FAA approved 2021 Wildlife Hazard Management Plan (WHMP). Any grass or vegetation species not currently listed in the WHMP approved seed mixes are not to be used at DEN. DEN requires a seed purity analysis of 0.01% pure live seed for each species utilized, which reduces filler materials and undesirable weed seeds, as well as accompanying seeding bag tags during onsite re-seeding. Below is the most recent (August 2021) approved seed mixes from the WHMP.

This project vaguely mentions landscaping within the area specified. Any additional landscaping plans should be reviewed and approved by USDA prior to initiation of landscape construction as this area is within the 5-mile separation criteria outlined in FAA AC 150/5200-33C. As mentioned above any grasses that are on the Denver International Airports approved WHMP are acceptable to plant. Any vegetation, such as trees or shrubs, will only be approved on a case by case basis, but at a minimum must not include any species that produce large seeds or fruits and are planted and maintained in a manner that does not create an overlapping, continuous canopy.

(Continued on the next page)



## Appendix H: Denver International Airport Approved Grass Species and Sample Submittal Documentation

### Grasses for Aircraft Operating Area and Landside Use:

#### Dry/Upland Grasses

Scientific Name	Common Name	Soil Conditions	lbs PLS/acre*	%of mix**
Pascopyrum smithii	Western Wheatgrass	Universal Upland	3.75	25.00
Agropyron cristatum	Crested Wheatgrass	Universal Upland	3.75	25.00
Buchloe dactyloides	Buffalograss	Universal Upland	3	20.00
Elymus trachycaulus	Slender Wheatgrass	Non-Saline Upland	2.25	15.00
Bouteloua gracilis	Blue Grama	Non-Saline Upland	1.5	10.00
Sporobolus airoides	Alkali Sacaton	Saline Upland	0.75	5.00
	<b>TOTAL</b>		<b>15</b>	<b>100</b>

#### Wet/Drainage Grasses

Scientific Name	Common Name	Soil Conditions	lbs PLS/acre*	%of mix**
Panicum virgatum	Switchgrass	Non-Saline Upland/Pond	2.5	25.00
Elymus lanceolatus	Steambank Wheatgrass	Non-Saline Upland	2	20.00
Puccinellia distans	Alkaligrass	Saline Upland	2	20.00
Puccinellia airoides	Nuttall Alkaligrass	Saline Upland	2	20.00
Carex nebrascensis	Nebraska sedge	Non-Saline Pond	0.7	7.00
Juncus balticus	Baltic Rush	Non-Saline Pond	0.4	4.00
Scirpus paludosus	Alkali Bulrush	Saline Pond	0.4	4.00
	<b>TOTAL</b>		<b>10</b>	<b>100</b>

\* PLS means Pure Live Seed; rates shown are for drill seeding, if broadcast, rates should be doubled.

\*\* Percent by seed number

\*\*\* Wetland mixes to be used only where wetland hydrology exists.

■ *Response: Acknowledged.*

We appreciate your review and approval of the site plan. Please contact me at 303-974-3625 or [Brad.Cooney@Kimley-Horn.com](mailto:Brad.Cooney@Kimley-Horn.com) should you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'Brad Cooney', with a stylized flourish at the end.

Brad Cooney, PE

Project Manager