

# **Environmental Services Report**

## **AESA24-0004/Harris Ranch Industrial**

### **City Council District #3**

The applicant, Aimee Bissett of 97 Land Company, on behalf of the owner, Drew Feagin, representing Urban Logistics Realty, has requested an Alternative Environmentally Sensitive Areas (AESA) Plan to allow for modifications to Environmentally Sensitive Areas located on the subject property. The ESAs will be removed to allow for appropriate detention to serve the industrial development. The detention basin will be designed to recreate ecological services offered by the existing ESAs.

Denton designates and provides regulations that limit land-disturbing activities to protect water quality, provide habitat, provide critical wildlife corridors, and other ecological services that are offered by ESAs. Properties are assessed for ESA, including a review of the official ESA map. As part of the development process the applicant determines if the areas meet the ecological standards of being an ESA.

If a property owner wishes to disturb an ESA beyond the limited encroachments authorized by right within Section 7.4 of the Denton Development Code approval of an AESA Plan must first be obtained. Approval of an AESA Plan requires two public hearings, the first at the Planning and Zoning Commission for a recommendation and the second at the City Council for ultimate action.

#### **EXISTING ENVIRONMENTALLY SENSITIVE AREAS:**

An Environmentally Sensitive Areas Field Assessment (ESA24-0013) confirmed Stream DF-2, as it traverses the subject project, is not supported by a Riparian Buffer, however, two successional on-channel dams have created shallow emergent wetlands, totaling 1.92 acres across the subject property, all of which is part of this request.

*(continued on next page)*

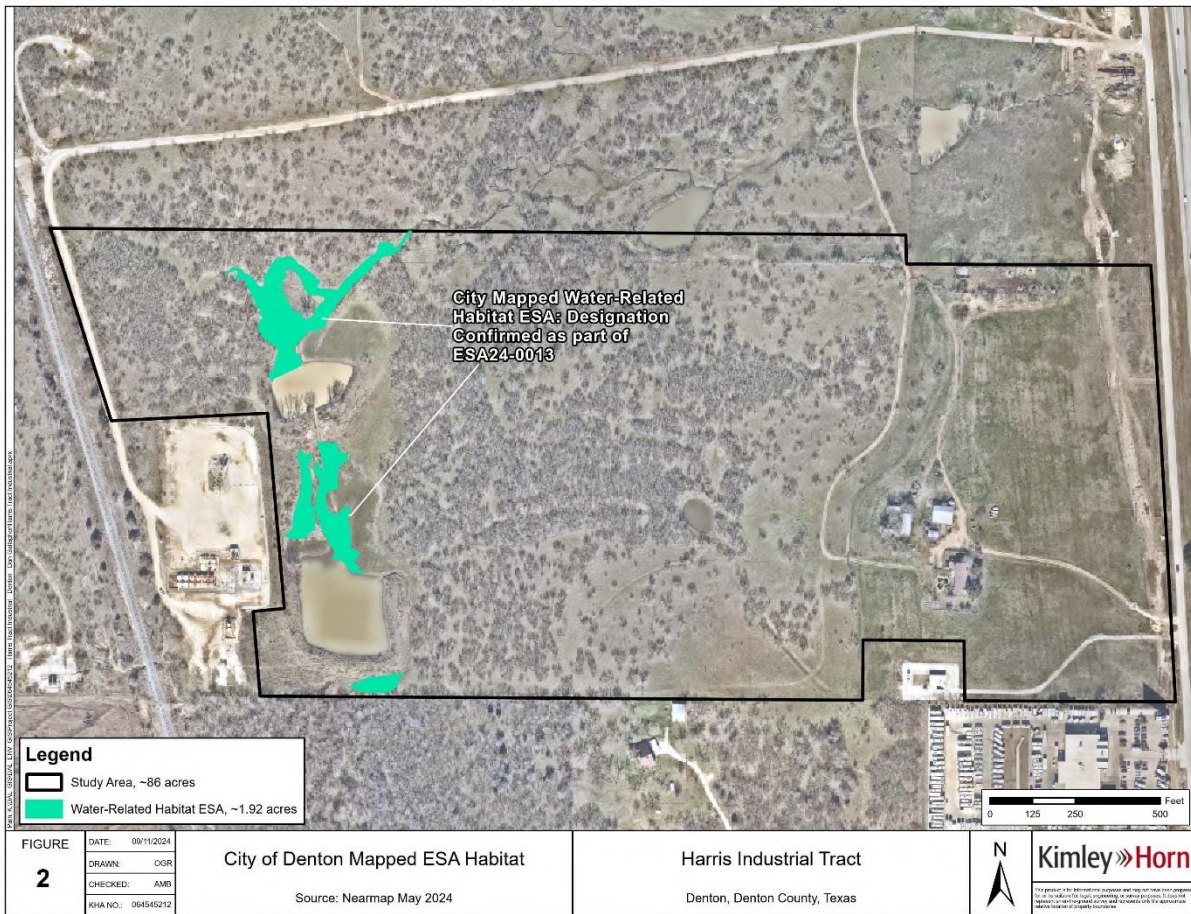


Figure 1: Existing Water-Related Habitats.

**PROPOSED DEVELOPMENT:**

84.14 acres of land is proposed to be graded and prepared for industrial warehouse buildings, with associated utilities, roads, and parking lots. Stormwater will generally follow the topography of the land to the existing ponds and associated Water-Related Habitats. It will be necessary to revise and widen the existing features to create sufficient detention and meet City of Denton drainage and flood control criteria.

**PROPOSED MITIGATION PLAN:**

In exchange for the removal of 1.92 acres of Water-Related Habitat the applicant is proposing to expand the resulting detention to create a wet pond detention, or detention that is designed to contain water year-round. Then, through a set of pond design features the applicant is proposing to create wetland ecological functions:

- A forebay will be installed at each inlet into the pond. Forebays are structures that are designed to receive the initial discharge into the detention area. The structure slows down flow and traps sediment and particulate pollutants. A perpetual pond maintenance plan will include a schedule for removing accumulated sediment from these structures.
- Varied habitat depths create the ability to plant a variety of wetland plants, which in turn creates habitat diversity and leads to a higher functioning feature. The pond design includes shallow shelves, an island and a transition zone to a deep-water habitat.
- The varied habitat depths will allow for the introduction of a wider variety of grasses and forbs (flowering plants). The applicant has selected a variety of seed mixes and root stock for planting and a landscape plan prepared based on the expected hydrologic needs of the plants.
- A perpetual maintenance plan is intended to provide clear guidance on how to ensure the feature continues to provide habitat and ecological functions.

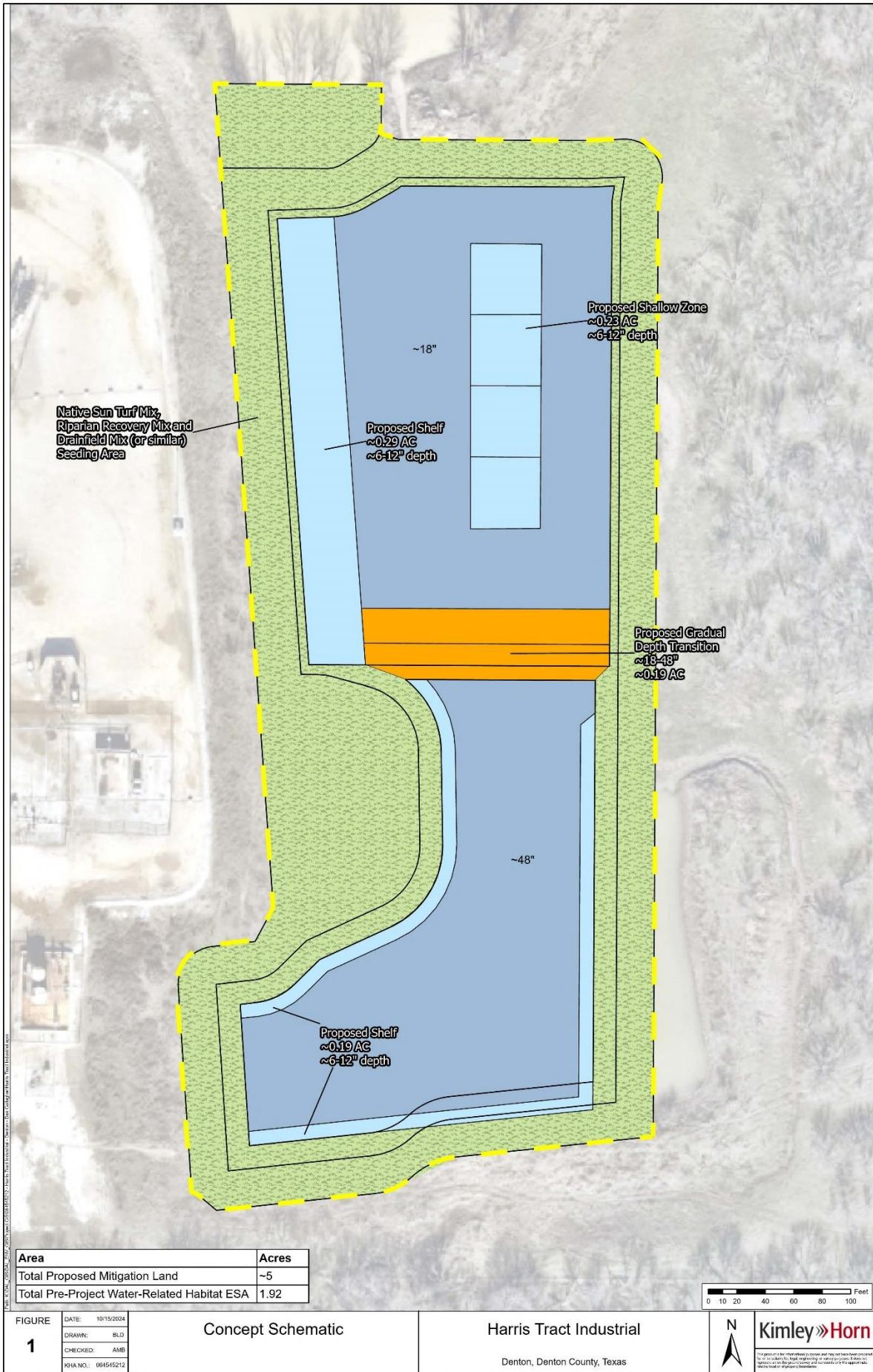


Figure 2: Proposed created Water-Related Habitat.

## **CONSIDERATIONS:**

Section 2.8.4 of the Denton Development Code provides the criteria for approval of an Alternative ESA Plan. The criteria are listed below, and a full analysis provided.

### ***Mitigation goals are obtained by creating, expanding, and/or improving ESAs.***

The current Water-Related Habitat has limited vegetation and wildlife. The AESA Plan aims to expand and improve the area's ecological functions. The new AESA land is expected to support a wider variety of native plants valuable to water quality and habitat. This aligns with the ESAs' goals of preserving natural and ecological resources.

1.92 acres of Water-Related Habitat will be removed and a total of 5 acres will be installed for an overall increase of 3.08 acres.

### ***Mitigation goals are obtained by preserving ESAs above the minimum requirements, exchanges between different types of ESAs, installing pollution prevention controls, and/or implementing best management practices or any other approaches that result in the improvement of the environment being impacted.***

The design of this project follows many of the standard practices of wetland creation. One of the expected elevated functions resulting from the AESA Plan is improved water quality. An established wetland can intercept and sequester pollutants suspended in stormwater runoff from urbanized land. Nutrient pollutants are taken up at a higher rate by wetland plants in comparison to a dry detention facility and sediment can be trapped and held by vegetation roots within the basin.

The AESA Plan includes a maintenance plan that shall be memorialized by adoption of this ordinance. Staff is recommending a condition of the ordinance that the AESA maintenance be included in the Stormwater Facility Maintenance Agreement (SWFMA). The SWFMA is a standard drainage document to be filed with the creation of a drainage easement placed over the detention/AESA feature.

### ***Areas offered as mitigation are linked to existing or planned open space or conserved areas to provide an overall open space system.***

The created AESA feature will result in on-channel detention on the headwaters of Stream DF-2, which continues south until its confluence with Dry Fork of Hickory Creek near the Denton Municipal Airport. It is expected that the land on which this AESA feature will be situated will have connectivity to ESAs continuing to support and protect the waterway and its waters through the stream segment.

### ***Development is arranged for maximizing access and utilization of the ESAs by citizens. Areas offered as mitigation are placed either in a lot or lots that incorporate a permanent conservation easement, a preserved habitat, restrictive covenants, or such other legal mechanism to allow for the long-term conservation of said areas. Such legal mechanisms shall limit any future land disturbing activity or construction within the ESAs, shall run with the land, and shall be binding upon all successors and assigns of the current owner.***

The wet detention may be viewable by the development and accessible by certain types of wildlife, such as migratory birds. However, due to the nature of the industrial development it is not feasible to permit access and utilization of the resulting created ESA by citizens.

The created ESA will be placed in a drainage easement. The accompanying SWFMA will include specifics to maintain the wet detention's ecological functions.

### ***The alternative ESA plan shall demonstrate that the property owner's alternative proposal results in a high-quality development meeting the intent of the standards in this DDC.***

By creating a dual purpose for required detention serving the development, the proposed project maximizes the use of space and results in a greater ability to provide improve water quality leaving the overall site, as well as creating a diverse habitat in what is typically a single-function structure, serving to address water quantity.

## **RECOMMENDATION:**

The Planning and Zoning Commission recommends **approval** [5-0] of the request with the conditions presented by staff that will be placed in the ordinance.

1. Land disturbances within Environmentally Sensitive Areas are limited to the Property described on **Exhibit “A”** and depicted on the map provided on **Exhibit “B”**.
2. Grading for the AESA Plan, described in **“Exhibit “C”** and depicted on the map provided on **Exhibit “D”** shall immediately commence upon permission from the City to clear and grade land for the development.
3. All improvements described in **Exhibit “E”** shall commence prior to the issuance of the first building permit, or during the next appropriate growing season with a date certain provided by the applicant and upon written approval from the Director of Environmental Services and Sustainability.
4. Vegetation established as a part of the approved AESA Plan shall continue to be monitored and repaired for a minimum of three (3) years starting at the time of the initial planting and until the conditions of the plan have been met. Any plants that are removed, destroyed, or die within that minimum three (3) year period are required to be replaced by the Property Owner/developer to achieve a minimum rate of survival as described in the AESA Plan. Upon receipt of the third annual report City of Denton staff will perform an inspection and, upon confirmation the conditions of this plan have been met, issue a letter of acceptance.
5. All perpetual maintenance activities in the AESA Plan shall be included in a Stormwater Facility Maintenance Agreement for this development.
6. The Property Owner retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the AESA Property, and the responsibility to implement and enforce the requirements of the AESA Plan, and cure any defaults of the AESA Plan.