

# Nature Center and Conservation Area Design

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### **Project Overview**

The Jefferson County Nature Center and Conservation Area is located at Jefferson Co Park Dr, Fairfield, IA 52556. This project will provide a multi-use lodge dedicated to outdoor education that doubles as a rentable community event space and features a nature playscape. It also includes two year-round cabins available for multi-family rental. These new additions to the park create an integrative space for all members of the community as well as potential visitors. Our team prepared a construction plan set, a proposal outlining our qualifications, design services, key project constraints, and a detailed cost estimate to demonstrate the project's feasibility.

### Site Design

The design includes added parking and improved access to existing roads and to new cabins. Drainage was a key focus in our site design, guided by the Statewide Urban Design and Specifications Manual. We used permeable pavers to reduce runoff, curb cuts to direct flow into the rain gardens, and storm drains for overflow management.

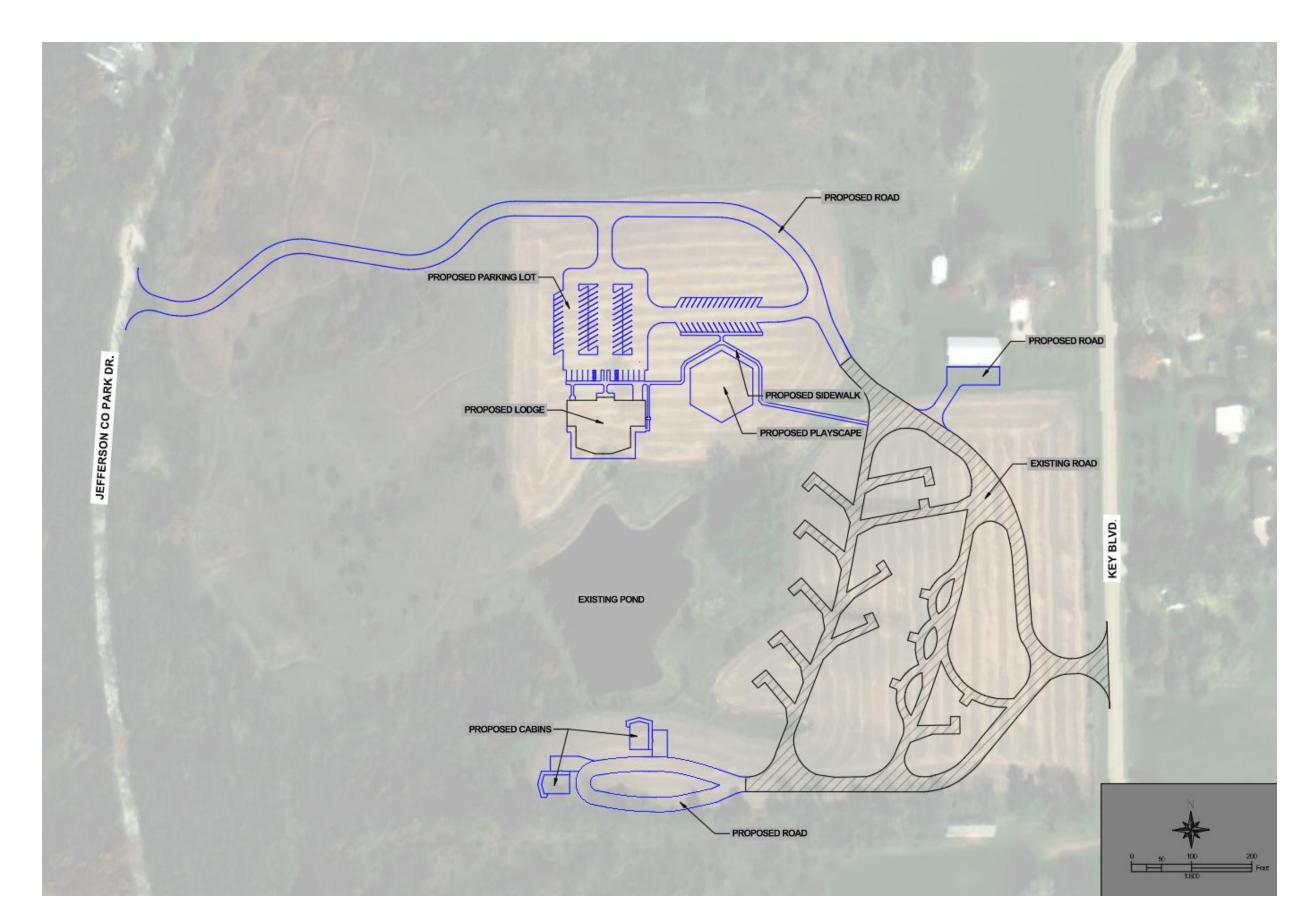


Figure 1. Proposed Site Design



Figure 2. Multi-Use Lodge Model



Figure 3. Year-Round Cabin Model

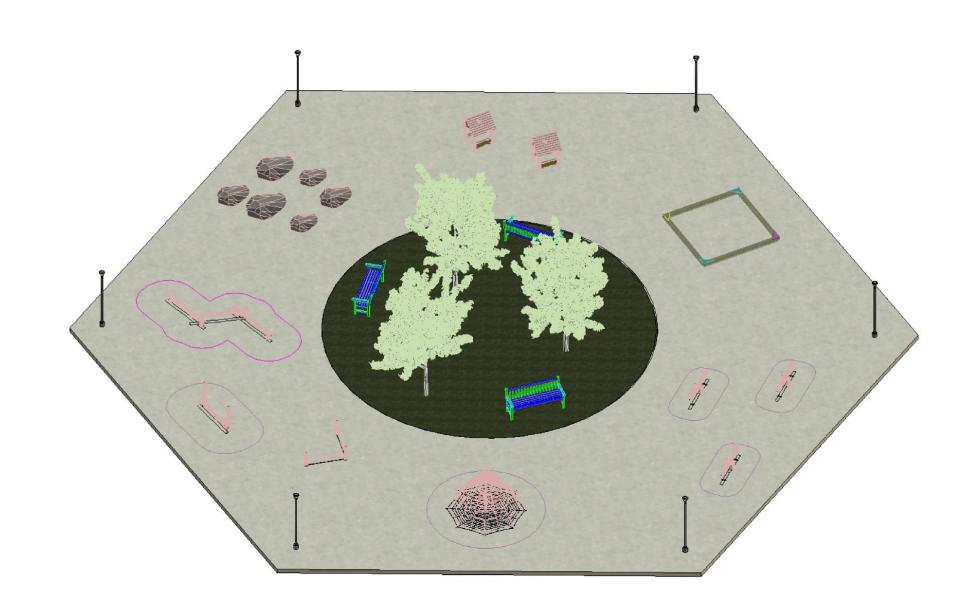


Figure 4. Nature Playscape Model

#### Multi-Use Lodge

The lodge is a versatile event space designed to accommodate over 300 guests, featuring a spacious kitchen area to support catering needs and a built-in classroom area for educational programs or breakout sessions. In addition to the main floor, the lower level includes a secondary smaller event space. Large south-facing windows offer views of the existing pond, while a wraparound deck and a basement walkout patio provide inviting outdoor gathering areas and scenic overlooks.

#### **Year-Round Cabins**

Two identical cabins were designed, each with two bedrooms, one bathroom, a living area, kitchen, and storage on the first floor, plus a basement with additional living space and a mechanical closet. The cabins include a wraparound porch with an ADA ramp, a walkout concrete patio, and large windows to highlight park views.

## **Nature Playscape**

The nature playscape includes six zones with durable hard acacia wood elements and bark mulch for safe, natural play. A tree-shaded central area with wooden park benches offers seating for parents and caregivers and includes native grasses which improve drainage and support surrounding wildlife. The design blends safety, nature, and durability. It encourages nature exploration and family interaction in a comfortable outdoor environment.

#### References

Statewide Urban Design and Specifications (SUDAS), International Building Code (IBC), ASCE Standards, Iowa Public Works Service Bureau (PWSB), and RSMeans Construction Cost Data.