

U R B A N D E S I G N A S S O C I A T E S

P R A I R I E T R A I L P A T T E R N B O O K



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Design Guidelines for a Mixed-Use Community

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Colonial Revival house in Uptown Ankeny



Victorian house in Sherman Hills



Arts & Crafts house in Polk County



New residential street lined with Arts & Crafts and European Romantic houses

PRAIRIE TRAIL IS A NEW MIXED-USE COMMUNITY in Ankeny, Iowa based on New Urbanist design principles. The 1,031-acre project will be developed on the site of the Iowa State University research farm in the center of Ankeny. The plan of Prairie Trail takes its cues from towns in central Iowa, such as Winterset, Pella, Newton, Adel and the historic neighborhoods in Ankeny and Des Moines. A major feature of Prairie Trail is a new town center for Ankeny with a traditional Iowa town square as its focal point. The new neighborhoods of Prairie Trail will exemplify the inherited character of the best Iowa towns, including walkable tree-lined streets, local parks and playgrounds, interconnected blocks, and a mix of housing types. The streets of Prairie Trail will range from gracious boulevards with planted medians to intimate neighborhood streets and rear alleys. A rich network of trails and bike paths will connect the neighborhoods to each other, to the town center, to local and regional park amenities and to the adjacent campus of the Des Moines Area Community College (DMACC). Lastly, Prairie Trail has been designed with the highest standards of environmental sustainability, including state-of-the-art stormwater retention systems, preservation of wetlands and natural features, and use of native plants.

Overview of Prairie Trail





Arts & Crafts houses in Des Moines



Downtown Adel



Victorian townhouses



A Colonial Revival house in Des Moines



A traditional neighborhood in Des Moines



Aerial view of Winterset, Iowa



A Victorian house in a Sherman Hill streetscape

Iowa Towns

THE CHARACTER OF VILLAGES and small towns in the region provides precedents for the neighborhood design of Prairie Trail. The design of the town center in Prairie Trail draws on the commercial centers of villages like Winterset and Adel. These precedents combine the small-scale character and softness of a residential street address with commercial uses. The traditional treatment of sidewalks, landscape and building character will be reflected in the design for the streets and parks throughout the new village. The neighborhoods of Prairie Trail are also drawn from these small towns and villages in Iowa. The character found in Prairie Trail neighborhoods features front lawns raised above the street, often with a sloped lawn or short wall. Small-scale wrought iron fences and hedges reinforce the pattern of a separation between the public street and the front yard. Many neighborhoods will have a mix of cottages combined with larger houses. The palette of architectural styles features the romantic periods of domestic architecture documented in pattern books and catalogs used by builders in this region during

the late 1800s and early 1900s.

Regional Precedents





A European Romantic precedent in Des Moines



A Colonial Revival precedent in Highland Park



A Victorian precedent in Newton



An Arts & Crafts precedent in Des Moines



A street elevation illustrating the four proposed styles in Prairie Trail

Prairie Trail Architecture

The Architecture of Prairie Trail

Prairie Trail European Romantic Prairie Trail Colonial Revival Prairie Trail Victorian

Prairie Trail Arts & Crafts ing is part of this vocabulary.

Houses designed in this style have roots in the country's interpretation of English and European cottages around the first quarter of the twentieth century. Houses designed in this Romantic style became hallmark images for aspiring homeowners. Many of these houses were built as interpretations of the original stone or stucco precedents found in England using accents of cut shingles and clapboard siding. There are many brick and stone examples with half-timbered accents as well. Houses are generally simple, elegant forms with asymmetric compositions and a variety of casement or double-hung windows.

These houses have roots in the Colonial and Classical traditions of the region. Later Colonial Revival houses derived their forms from more expressive Classical motifs featuring Ionic and Doric order columns and entablatures on the porches; deep eaves and cornices; and a wide variety of house massing types as well as window and door elements. The regional adaptation of Colonial Revival features a more relaxed composition of windows and doors.

Victorian houses came into vogue in the latter half of the nineteenth century and signified a change in the way that houses were designed and built. Industrialization and balloon framing techniques made more complex forms and more elaborate details available to the masses. The Prairie Trail Victorian house will feature the simple but elegant Carpenter Gothic and Italianate variations of this style found throughout the region.

Arts & Crafts houses were based on the English tradition of summer cottages and became popular in this country in the late nineteenth century. Deep eaves, robust porch elements and shaped rafter tails are signature elements of this language. Windows tend to be wide in proportion and combined to take advantage of the light in living areas. An asymmetric composition and mass-



How To Use This Pattern Book



A typical 50-foot-lot diagram



Illustrative main body massing

A key component of carrying out the vision for Prairie Trail is the publication of this Prairie Trail Pattern Book that establishes requirements and guidelines for neighborhood character, building design and landscape elements. Three key aspects of house and lot design are addressed:

- Community Patterns define the lotting patterns for the neighborhoods;
- Architectural Patterns establish the four architectural styles for the community, illustrate neighborhood character, and define the standard elements; and In Addition, Town Center Patterns establish standards for mixed-use buildings, civic buildings, retail buildings, office buildings, parking structures, and multifamily housing;
- Landscape Patterns set the plant palettes and minimum landscape standards for the community.

The Pattern Book is designed to be used in the following six-step process.

Step 1 Select the lot type

Match the proposed lot dimensions to the lot type descriptions in the Community Patterns section. The lot descriptions include the required minimum setbacks for the front, side, and rear yards for each lot type.

Step 2 Identify the shape and size of the house

The example on page A5 depicts the typical massing pieces for houses in Prairie Trail: the main body, the porch, and side or rear wings. The basic mass of the house will determine the general location of the programmatic elements. Each architectural style - Colonial Revival, European Romantic, Arts & Crafts, and



A sample house plan



Illustrative window and door placement diagram



Illustrative window elevation



Step 3 Select the window and door style/details

One page of typical window and door compositions for each of the four architectural styles for Prairie Trail is provided in the Architectural Patterns section. The drawings include typical window and door proportions, trim details, and special window or door elements. Window and door spacing is related to both the shape and the style of the house. These elements must be taken into consideration when designing the house elevations.

Step 4 Make a decision about porches

Porches are important to the character of each house. The massing of the front porch is specific to the house type and varies from one architectural style to another. The suggested location and design elements of porches on Prairie Trail houses can be found on the designated page within each style in the Architectural Patterns section.

Step 5 Consider the design possibilities and choose appropriate materials

Elevation drawings composed using elements described in the Pattern Book can be found on the last page of each style in the Architectural Patterns section. These elevations illustrate a sampling of the multiple design possibilities that can be achieved using the Pattern Book. These pages also provide a list of acceptable materials from which to choose.



Illustrative porch elevation



Illustrative garden landscaping



Illustrative house elevations

How To Use This Pattern Book

Step 6 Enhance the house with landscaping

Refer to the Landscape Patterns section for guidance regarding the selection of landscape elements including fences, walls, paving materials, and appropriate plant types.











A Prairie Trail House Simple, dignified massing with porche and rear wing added.



Elements of the Prairie Trail House The main body is the largest and most visible

element with the most specific design requirements. Side or rear wings, porches, and outbuildings provide a menu of options for the homebuilder.



Key Facades of the Prairie Trail House

The principal elevations of the Prairie Trail house are facades facing streets and lanes. These facades must conform to the compositional and key element guidelines found within each of the architectural style sections.

Illustrative Main Body Massing Types



Gable L with Hip Roof House



Gable L House





Side Wings



Front Gable House with

Key Components of the House

PRAIRIE TRAIL HOUSES WILL CREATE the backdrop for each neighborhood. The houses will define the character of the space and reflect the individual composition of the private realm behind the porch or front door. In these traditional neighborhoods, the front portion of the house is the most public and must be responsive to the character of the neighborhood and the adjacent houses. The front yard landscaping, the setbacks from the street, the size and placement of the house on the lot, and the front porch are all shared elements that form the public realm.

The houses in Prairie Trail are based on the vernacular architecture of Iowa, using regional house types with style elements applied. The house types are defined by the character and shape of the main body and wings that are added to increase the internal space.

streets and lanes.

Principal Elements

Prairie Trail houses include the following principal elements:

The **Main Body** of the house, which is the principal mass and includes the front door.

Side or Rear Wings, which are one or two stories high and connected to the main body. These optional additions are smaller than the main body and are set back from the front facade. One-story side wings should never exceed half the width of the house, and two-story wings should not exceed one third of the width

Houses on Lots

Side Gable House

The patterns described in this book apply primarily to facades facing

of the house. Wings should never be built flush to the front facade. Side wings should be set back from the front facade no less then the width of the wing.

Porches create exterior living space. Possibilities include full-facade front porches, wraparound porches, porticos, and side porches. Some architectural styles also have inset porches.

Outbuildings are optional structures that include carports, detached garages, storage buildings, and carriage houses.

