The Cedar Rapids Czech & Slovak Heritage Fairytale Trail

Submitted to:
The National Czech & Slovak Museum and Library

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1 Introduction

Cedar Rapids, Iowa is home to the National Czech and Slovak Museum, which seeks to connect people from every background to Czech and Slovak history and culture. The city is currently home to many Czech residents, some descendants from immigrants seeking to build a better life for themselves in America. The National Czech and Slovak Museum wishes to celebrate the rich culture and history of Czech immigrants and the area they settled by creating a Heritage Trail around the NewBo and Czech Village neighborhoods. The inspiration for the trail stems from a storybook written by Peter Sís, an acclaimed and internationally recognized children’s storybook author from Brno, Czech Republic. Along the trail, residents and visitors will discover historical markers marking significant sites, shopping, dining, natural amenities, art displays and playgrounds. The storybook’s whimsical components will be incorporated throughout the journey, contributing to a strong sense of place and encouraging connections to the local Czech and Slovak heritage.

The intention of the Czech & Slovak Heritage Fairytale Trail (or FTT) is to create a unique family-friendly attraction that will not only be an amenity for Cedar Rapids residents, but will also be a regional, national and international destination. The trail is unique because it is the only urban historic trail in Iowa, and because it is designed around a children’s storybook.¹ This approach to engaging the public with local history and culture through literature will contribute meaningfully to the Eastern Iowa Corridor celebration of literature – most noted through Iowa City’s designation as a UNESCO City of Literature. By incorporating a storybook into this new historic trail, Cedar Rapids will create a new family-friendly and locally-relevant amenity, increase awareness of the unique history of the Czech Village and New Bo district, increase foot traffic in this part of Cedar Rapids, strengthen the corridor’s reputation as a historically important literary destination, and add to local outdoor opportunities for physical activity.

¹ Some nature trails incorporate children’s story books, e.g., in Rock Falls, Illinois and Beverly Hills, California. While these trails include children’s story books (e.g., One Duck Stuck, the Very Hungry Caterpillar), they do not seek to connect trail route and signage contents to local history or culture.
## 2 The Fairytale Trail (FTT): General concept

Over the past several years, the leadership of the Czech and Slovak Museum has developed the idea of a local trail linked to a storybook. The trail we propose, named the “Fairytale Trail” (FTT) will be inspired by a storybook written by Peter Síš. It will most likely involve a story of a Czech girl named Marie, an orphan in bohemia that immigrates to Cedar Rapids. She may bring a little suitcase with all of her possessions, the most important of which is a book of Czech fairytales from her Babi (grandmother). She does not speak the language and creates a fairytale village to feel more comfortable in her new home. She identifies important places in the neighborhood with fairytale figures and stories. When she comes to know the language and the city, her imaginary fairytale figures turn to stone.

The goal of this trail is to bring each chapter of the storybook to life. By tying landmarks in NewBo and Czech Village with storybook references, the trail will guide visitors through a rich history and create a strong sense of place, enhancing the educational experience and encouraging connection to Czech and Slovak heritage. With an anchor playground near the clock tower at the museum’s entrance, it aims to further include physical activity and kid-friendly amenities, with the goal of increasing children’s activity and counteract the growing rate of obesity. Linn county is not immune to this concern where, “on average, 37% of kindergarteners... are overweight or at risk of becoming overweight based on BMI, with some elementary schools having upwards of 57% of their current 2010 kindergarteners considered overweight or obese” (linncounty.org).

Essential features of the trail will include the tie-in with the storybook, a playground at the Czech and Slovak museum, public art inspired by the book that is enduring and appealing to all ages, urban rejuvenation that makes the most of flood mitigation plans, and a branded experience that declares Cedar Rapids as a premiere destination to bring a family to experience the rich history and culture of Czech and Slovak heritage. The proposed design elements and features along the trail (e.g., crossings, intersection markings, playgrounds, signage, material etc.) incorporate best practices and existing regulations to protect public safety and welfare.

The Czech and Slovak Fairytale Trail comprises two sub-trails. The first is a short route intended for pedestrian use. It is 2.3 miles long (about a 45 minute walk). The second route adds 2.2 miles, for a total length of 4.5 miles (about a 90 minute walk). It is intended for pedestrian and bicycle use. The shorter pedestrian trail use existing sidewalks, while the longer trail will take advantage of existing and future bike trails, bike lanes, and bike racks.
3 Neighborhood Context

3.1 History and current redevelopment

The Czech and NewBo neighborhoods are rich in the history of the Czech and Slovak immigrants who settled in these areas during the mid- to late-19th century. Early immigrant communities settled as farmers, later coming to settle in the Cedar Rapids area for work in the meatpacking plants. Sinclair meatpacking plant, the largest, hired predominantly immigrants. Many of the NewBo and Czech Village neighborhoods businesses were Czech and Slovak-owned or employed immigrants. These businesses include a deli, grocery store, bakery, several theaters and social clubs, banks, a newspaper company, a Czech language school, a fire station, bars, restaurants, and much more. While many of the original commercial buildings remain to this day, many others have been lost to redevelopment and to floods.

The Czech museum first got its start as a Czech Fine Arts Foundation in 1974, founded by Czech Americans to preserve their heritage and culture. Overtime, the foundation collected enough documents and artifacts to open a small museum within a house. By 1983, the museum had outgrown its location and expanded to a 2,200 square foot immigrant home. Soon, that space wouldn’t be big enough either. The current National Czech and Slovak Museum and Library broke ground in 1993, with a dedication by President Bill Clinton, Czech President Václav Havel, and Slovakian President Michal Kováč.

The Flood of 2008 had a significant impact on both the museum and the NewBo and Czech Village neighborhoods, which sustained heavy damages. The combination of heavy snow cover and significant amount of rain through the spring saturated the soil, running off of tiling drains in agricultural fields. In Cedar Rapids, the Cedar River crested at 31.12 feet (19 feet above flood stage) and affected 10 square miles of downtown. The neighborhoods were inundated to the second floor of most buildings. The Czech Museum lost many documents and artifacts in the flood (Figure 1).

![Figure 2: Czech Museum Flooded (2008)](https://www.cgsi.org/news/2006/08/13/national-czech-and-slovak-museum-...
Some buildings in Czech Village and NewBo were bought out and torn down; only a few were renovated. The contents of the Czech Museum were temporarily moved to several different sites throughout the city. The museum building was moved 480 feet from the original site, rotated 90 degrees, and elevated above the flood plain. To protect the neighborhoods of Czech Village and NewBo, levees and floodwalls along the river are currently being constructed.

The flood impact has been long-lasting. Much of the revitalization that has occurred within each of the neighborhoods has happened in the last five years, with more planned for the future. Future plans include a new park east of the Czech Village (Figure 3) and a new pedestrian bridge (Figure 4) along an old railroad bridge. We integrate these future developments into the Fairytale Trail as they provide opportunities to commemorate the immigrant communities that once lived there.

![Figure 3: Proposed Park](http://cms.revize.com/revize/cedarrapids/Public%20Works/Flood%20Control%20System/FCS_Open%20House%20Presentation_1.25.18_Final.pdf)

![Figure 4: Sleeping Giant pedestrian bridge](http://.cms.revize.com/revize/cedarrapids/Public%20Works/Flood%20Control%20System/FCS_Open%20House%20Presentation_1.25.18_Final.pdf)

The floodwalls could provide opportunities for murals and public art, but we do not focus on these opportunities in this document. For information on levee design within the neighborhoods, see the Overview of the Cedar River Flood Control System.²

3.2 Existing trails

There are several existing trails within Cedar Rapids downtown district that the Fairytale Trail could be incorporated into or connected with: the Ellis Trail, the Cedar Lake Loop Trail, and the Cedar River Trail. Each of these trails are paved and accessible via a downtown interchange within a half mile of the New Bo district. The Ellis trail is single tread-way corridor accessible via the west side of the 2nd Avenue Bridge and it spans 2.6 miles north along the west side of the Cedar River. The Cedar River Loop Trail is accessible along the Cedar River trail. The loop is a single tread-way trail that is 1.6 miles long. The most connected of these trails is the Cedar River trail, where there are several north and south access points at Sokol Park, 12th avenue, 14th avenue along the river. This trail totals to 13 miles in length and a section of the trail will be included in the long loop of Czech and Slovak walking and biking trail.

Each of these trails are paved and separated trails. We recommend that the FTT consistently incorporates the same type of trail features and design when connecting to already-established trails.
4 Background research: existing urban historic trails in the US

The inspiration for the trail design elements stems in part from our research on other historic trails in the United States, including the Boston Freedom Trail in Boston, MA and the Barbary Coast Trail in San Francisco, CA. The trails were researched for their purpose, significance, destinations, design elements, and outcomes and success. Table 1 below summarize the trails that were researched.

Overall, we found that most established trails have trail markers in the pavement so that people can easily follow the route, and physical markers for major sites of interest. Other trails rely strictly on guided and self-guided tours, relying strictly on virtual and/or paper maps.

Table 1. Existing urban historic trails in the US

<table>
<thead>
<tr>
<th>Trail and location</th>
<th>Features: Elements and Design</th>
<th>Evidence of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbary Coast Trail, San Francisco, California</td>
<td>• 3.8 miles long&lt;br&gt;• Commemorates historical sites during the period of the Gold Rush through the SF Earthquake and Fire (1849-1906)&lt;br&gt;• Over 20 historic sites, 5 museums, historic sailing ships, and exciting amenities&lt;br&gt;• Route marked by bronze medallions embedded in the sidewalk</td>
<td>• Highly rated on Trip Advisor&lt;br&gt;• Bronze medallions can be sponsored by a patron, which contributes to upkeep and support of the trail</td>
</tr>
<tr>
<td>San Francisco African American Freedom Trail, San Francisco, California</td>
<td>• Showcases significant contributions to the African American Freedom struggle of the 1800s&lt;br&gt;• Over 400 features connected to African American history&lt;br&gt;• 3 Categories: Cool dining; Cool culture; Important event sites&lt;br&gt;• Brochure, map and list of sites.&lt;br&gt;• Not marked physically into the urban landscape</td>
<td>• Recognized by the State of California and the San Francisco Board of Supervisors&lt;br&gt;• The trail may be expanded state-wide</td>
</tr>
<tr>
<td>Location</td>
<td>Highlights</td>
<td>Foundation</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Boston Freedom Trail, Boston, Massachusetts | • 2.5 mile path  
• 16 historically significant sites  
• Smartphone app and self-guided tours  
• Emanate the traditional colonial, government power aesthetic popular in the 18th century  
• Tall trees provide shade on the sidewalk.  
• Route marked by bronze medallions and brick-and-stone linear path marking  
• Interwoven into downtown Boston with business men and women, tourists, shoppers, and city residents crossing paths | Supported by the Freedom Trail Foundation and the Freedom Trail Foundation Preservation Fund.        |
| Boston Black Heritage Trail, Boston, Massachusetts | • 14 individual locations make up the trail  
• Professional guided tour, self-guided tour with $0.99 audio, and virtual tour.  
• Marked by “Black Heritage Trail” signs on lampposts (no content on these signs, no markings in the sidewalks) | Guided tour helpful for navigating to different sites, learning about site histories  
More detailed signs would help individuals taking self-guided tours                                                                                     |
| Philadelphia Constitutional Walking Tour, Philadelphia, Pennsylvania | • Connects 20 revolutionary-era sites, primarily buildings, 1.25 miles.  
• Extends out to 13 additional sites  
• Walkers can use free maps or audio tour, or a guided tour  
• No markers in the landscape | Marked increase in visitors to minor sites that are now linked to major sites, e.g., the Liberty Bell, Independence Hall |
| DC Neighborhood Heritage Trail, Washington, D.C | • Variety of trails promote specific neighborhoods in DC  
• Unified signage. Large signs provide information on sites’ history with photos, maps, text.  
• App-based maps available for many of the trails  
• Trails intended to be self-guided and self-paced to encourage walkers to stop in local restaurants and shops | Variety of funding sources  
An estimated 10,000 people walk the trails each year  
Successful promotion of neighborhood tourism                                                                                                           |
5 Fairytale Trail: Route, Points of interest, brochure and online App

The trail is designed with two routes that connect to each other. The short pedestrian-route (2.3 miles, about 45 minute walk) links the Check Village to New Bo along existing sidewalks. The longer route adds 2.2 miles, for a total length of 4.5 miles (about a 90 minute walk). It can be used by pedestrians and cyclists, takes advantage of local bike trails, and includes the new planned pedestrian bridge and the new park planned for “Mt. Trashmore” into the route so that visitors can get a scenic view of New Bohemia.

The map below (Figure 10) shows the locations of trail amenities which include the trail head, sites of interest, bike racks and water fountains. Points of interest, marked in red, include existing historical buildings and past locations such as the Sinclair plant. We also include other features proposed by our team, including a playground, murals and sculptures.

This map can be used for a brochure (Figure 9) that could be provided to visitors at the Czech and Slovak Museum and/or at the trailhead kiosk near the playground. The brochure would also include the list of sites of interest, presented below.

We created an interactive map Fairytale Trail using ESRI’s free Story Map software to supplement the trail map, on-the-ground trail markers and signs, as well as playgrounds and sculptures proposed (described in detail below).

The interactive map can be accessed by users via computer or mobile devices. During their walk, they will be able to swipe through the highlighted points of interest and see photos, descriptions and historical explanations for each site.
Figure 10 Fairy Trail Map
The Story Map is easy to set up and modify. Instructions are provided by ESRI and the application can be improved overtime by adding newer photos and more historical information for each location. In addition, hosting the map on ESRI’s site is free and will be a great asset to the museum. Included here is the link to the interactive map https://www.arcgis.com/apps/MapTour/index.html?appid=1dc4cd7c0f14436094e7d3b38e077108

The interactive map provided online already include photos of the destination points identified during our site visit with the help of local historian Mark Hunter, as well as basic descriptions of each site. The text and images can be changed and updated over time.
Table 2. Points of interest along the Fairytale Trail (with exact location for mapping purposes)

<table>
<thead>
<tr>
<th>NAME</th>
<th>Address</th>
<th>Lat</th>
<th>Long</th>
</tr>
</thead>
<tbody>
<tr>
<td>Museum (trail starting point)</td>
<td>1400</td>
<td>41.9660812</td>
<td>-91.6619501</td>
</tr>
<tr>
<td>Sykora Bakery</td>
<td>73 16th</td>
<td>41.9647621</td>
<td>-91.6607927</td>
</tr>
<tr>
<td>Village meat market and Café</td>
<td>92 16th</td>
<td>41.9644791</td>
<td>-91.6616276</td>
</tr>
<tr>
<td>Czech cottage (was Ted’s pharmacy)</td>
<td>100 16th</td>
<td>41.9641357</td>
<td>-91.6619406</td>
</tr>
<tr>
<td>Old family house:</td>
<td>77 16th</td>
<td>41.9646443</td>
<td>-91.6609066</td>
</tr>
<tr>
<td>Old Store</td>
<td>87 16th</td>
<td>41.9644278</td>
<td>-91.661532</td>
</tr>
<tr>
<td>Grocery store</td>
<td>1910 3rd</td>
<td>41.9595359</td>
<td>-91.6701318</td>
</tr>
<tr>
<td>Little Bohemia:</td>
<td>1317 3rd St</td>
<td>41.968881</td>
<td>-91.6570741</td>
</tr>
<tr>
<td>Bohemian language newspaper CR Listy:</td>
<td>1121 3rd St</td>
<td>41.9703561</td>
<td>-91.6586244</td>
</tr>
<tr>
<td>Wenceslaus Catholic Church</td>
<td>1224 5th St</td>
<td>41.9714132</td>
<td>-91.6546268</td>
</tr>
<tr>
<td>Social clubs:</td>
<td>1202 3rd St</td>
<td>41.9702856</td>
<td>-91.6576622</td>
</tr>
<tr>
<td>CSPS:</td>
<td>1103 3rd St</td>
<td>41.9707341</td>
<td>-91.6590841</td>
</tr>
<tr>
<td>Movie theaters Ideal:</td>
<td>200 14th</td>
<td>41.9680181</td>
<td>-91.6576295</td>
</tr>
<tr>
<td>Fire Hose Co:</td>
<td>1111 3rd St</td>
<td>41.9705975</td>
<td>-91.6588575</td>
</tr>
<tr>
<td>Czech language School</td>
<td>925 2nd St</td>
<td>41.9711623</td>
<td>-91.661305</td>
</tr>
<tr>
<td>Cherry building:</td>
<td>329 10th</td>
<td>41.9719891</td>
<td>-91.6587432</td>
</tr>
<tr>
<td>New Bo market:</td>
<td>1100 3rd St</td>
<td>41.9710588</td>
<td>-91.6577381</td>
</tr>
<tr>
<td>Mosaics sidewalk adds:</td>
<td>1202 3rd St</td>
<td>41.9702856</td>
<td>-91.6576622</td>
</tr>
<tr>
<td>“new” Iowa Savings Bank:</td>
<td>1201 3rd St</td>
<td>41.9696508</td>
<td>-91.6584419</td>
</tr>
<tr>
<td>“Old” Iowa savings bank:</td>
<td>1125 3rd St</td>
<td>41.9702052</td>
<td>-91.658466</td>
</tr>
<tr>
<td>Geonetic: 415 12th Ave SE, Cedar Rapids, IA 52401</td>
<td>415 12th</td>
<td>41.9710436</td>
<td>-91.6561065</td>
</tr>
<tr>
<td>Sinclair meatpacking building site</td>
<td></td>
<td>41.9687303</td>
<td>-91.654435</td>
</tr>
<tr>
<td>3rd/13th ave: historic buildings moved from other locatio</td>
<td></td>
<td>41.9691313</td>
<td>-91.6574991</td>
</tr>
<tr>
<td>Monroe Park between 2nd and 3rd just SE of Bottleworks condos (where 10th st ends)</td>
<td>41.97135671</td>
<td>41.9601169</td>
<td></td>
</tr>
<tr>
<td>Tower and playground</td>
<td></td>
<td>41.96598621</td>
<td>-91.6602764</td>
</tr>
<tr>
<td>Historic boulder at Sokol Park</td>
<td></td>
<td>41.96582667</td>
<td>-91.6598741</td>
</tr>
<tr>
<td>Train tracks CR line at 16th st</td>
<td></td>
<td>41.96646496</td>
<td>-91.6602443</td>
</tr>
</tbody>
</table>
6 Trail Design

6.1 Surrounding physical features

The FTT trail placement must address several features of its physical surroundings:

First, part of the FTT will be located in the Cedar River floodway. Thus, concrete or asphalt surfacing is preferred over aggregates, as aggregates wash away when flooded. Also, it is recommended to maintain the trail at grade to reduce the disruption of the floodway, and to avoid installing in any support services (bike racks, drinking water fountains, trail markers etc.) in areas not protected by floodwalls or levees.

Second, the FTT is intended to include and highlight scenic, cultural, historical and recreational amenities. Interpretive signage at historic sites and viewpoints are an important component of the trail. The signage should include wayfinding, information about the site of interest, ties to the book, and be ADA accessible, including for vision-impaired people.

Third, the FTT is designed to run adjacent to commercial and residential properties. A working relationship with adjacent landowners and businesses should be established at the beginning of the trail planning process. Commercial property owners may desire direct access to the trail. They may also be asked to contribute financially to the construction of the trail or to the installation of the signs near their businesses.

Finally, as the FTT could also be used as a bike trail, for this, AASHTO Guide for the Development of Bicycle Facilities can be used as primary guidelines for facility design. Possible bicycle facilities include paved shoulders, wide curb lanes, bicycle lanes, and separated bicycle paths. For sections that are not able to accommodate bikes lanes, such as 13th Avenue in Czech Village, there will be bike racks available to park bikes and use the sidewalk as a pedestrian route.

6.2 Amenities: Trailhead, Access points, Rest areas, Bike racks

The trailhead - the designated primary access point for the trail - will be located at the National Czech and Slovak Museum and Library for both the long and short routes of the FTT. It will include maps, drinking water fountains (for humans and pets), parking, bike racks, and restrooms if feasible. Other access points will offer additional connections between the trail and various points of interest, such as parks, other trails and roadways. These access points should include wayfinding maps with “you are here” markers for users entering the FTT without having seen the trailhead. All trailheads and access points should have ADA accessible pathways, and all facilities should be designed according to ADA guidelines.

Rest Areas provide places to stop and rest along the trail route. These areas should include seating, signage of the whole trail system with “you are here” markers, drinking water fountains and restroom facilities if possible. Rest areas are, ideally, located after prolonged uphill slopes and every half hour of travel time. The main rest area along the FTT will be at the
top of “Mt. Trashmore” overlook. The redesign of Mt. Trashmore into a new park is not in the purview of this report. We refer to the City of Rapids for more information on this park design.

Bike racks are necessary along the long route of the trail and where the Fairytale Trail intersects with existing bike trail, i.e., where cyclists are invited to explore the pedestrian sections of the trail. Within NewBo and Czech Village, there are several bike rack locations that already exist, including 12 along 3rd St. SE, several in front of NewBo City Market, a large bike rack in front of Kickstand on 14th St. SE, and 8 bike racks along 16th St. SW. However, for a cohesive trail, several more bike racks are necessary, which include next to the playground outside of the Czech and Slovak Museum, at the top of Mt. Trashmore, and within the new park that is proposed east of 16th St. SW. If there are added amenities in Sinclair Park in the future, more bike racks would be necessary at that location as well.

A lot of creativity can go into the new bike racks along the trail. For instance, the bike next to the playground outside of the Czech and Slovak museum could be made into a dragon, such as the sketch rendering below, or into a lion, to complement the Bridge of Lions. Dero, a bike rack company based out of St. Paul, MN, could be consulted about possible custom bike racks. They specialize in creative designs, such as shapes of bats, alligators, lions, elk, and dinosaurs. Examples of some of their many custom designs are below (Figure 12).

![Figure 12: Proposed custom bike racks](http://moonshineink.com/mountain-life/bike-rack-art-comes-truckee)

https://www.dero.com/product/custom-racks/
6.3 Multi-Use Trail Design

To the extent possible, the Fairytale Trail will use existing sidewalks and trails. This is entirely the case on the short route through the Czech Village and New Bo districts. However, the long route will require the construction of new trail segments, especially in the new Sokol Park, in the new park planned for “Mt Trashmore,” and along the planned new pedestrian bridge.

6.3.1 Guidelines for new trail sections

The FTT will be a single-treadway trail, meaning that it is planned to accommodate pedestrians, bicyclists, joggers, strollers, in-line skaters etc. on one unique trail. As a multi-use trail, its design must consider the design guidelines for each type of use, and implement the most stringent guidelines. Design consideration for various modes are presented in Table 3 and the figures 13 below.

Given these guidelines, we recommend that the portions of the FTT that are multi-use single-treadway trail should have a width of 10-12 feet for two-way bicycle traffic. The clear zone on either side of the trail will be 2-feet of graded area. Asphalt and concrete are the preferred types of material, with the trail marking imbedded within (see Trail Markers in Section 5 below). For the trail, the slope cannot exceed a 5% grade.3

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3 Reference to AASHTO (American Association of State Highway and Transportation Officials) and Iowa DOT Trail Design Guidelines are recommended for further specification.
<table>
<thead>
<tr>
<th>Components</th>
<th>Pedestrian Trail</th>
<th>Sidewalks</th>
<th>Bicycle Trails</th>
<th>On-Road Bicycle Facilities</th>
</tr>
</thead>
</table>
| Clear Trail Width           | 5 feet           | Minimum 5 feet in width in residential areas and 6 to 8 feet in commercial areas | - Two-way bicycle trail: 10-12 feet  
- One-way bicycle trail: 6 feet | - Min 4 feet  
- Widened curb lanes: 14 feet  
- Desirable width and width adjacent to parking: 5 feet |
| Clear Zones                 | Not necessary    | Minimum 2-ft graded area on each side of the trail, graded at a max. slope of 6:1 | Following design standards of the roadway                       |                                                        |
| Vertical Clearance          | Minimum: 8 feet  | Minimum: 8 feet                         | Following design standards required by the roadway itself             |                                                        |
| Trail Surface               | Asphalt, concrete or granular | Firm, stable and resistant to slipping | Asphalt or concrete are the preferred surfaces | Following design standards required by the roadway itself |
| Drainage                    | 2% cross-slope   | 2% cross-slope                          | 2% cross-slope                                                      | Bicycle-compatible drainage inlets                        |
| Alignment                   | Not necessary    | - Typical curve radius: approximately 100 feet  
- Visibility on horizontal curves based on stopping sight distance | Following design standards required by the roadway itself             |                                                        |
| Profile                     | Recommended that no more than one-third of the total trail length exceed 8.3 percent | - Maximum recommended grade is 5 percent | Following design standards required by the roadway itself   |                                                        |
| Edge Protection             | Not required, but if provided should be at least 4 inches | - Fencing where safety is a concern  
- Fences should be at least 42 inches high  
- Rub-rails with fencing is required | Following design standards required by the roadway itself |                                                        |

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4 Iowa Trails 2000. Link: [https://iowadot.gov/iowabikes/trails/chapter-four-design-guidelines/section-3-use-modes](https://iowadot.gov/iowabikes/trails/chapter-four-design-guidelines/section-3-use-modes)
Figure 13: Trail dimensions profile, alignment, cross-slope, crowning and drainage swale
6.3.2 Guidelines for the trail along sidewalks and for bike lanes

Where the trail uses sidewalks, the sidewalks are either already paved, or slated for future construction (e.g., near St. Wenceslaus Church). This part of the trail will be in accordance with Cedar Rapids zoning restrictions. Permanent sidewalks are required to be larger than 4 feet in width, ideally at least 5 feet for two people to walk comfortably side by side.

For the FTT long route, bike lanes are a necessary part of the trail that will complement the designated pedestrian portions of sidewalk. These bike lanes will be in close proximity to roadway traffic throughout the NewBo neighborhood and Czech Village neighborhood. Bike lanes need to be designated along a roadway with “striping, signing, and pavement markings for the preferential or exclusive use of bicyclists” (AASHTO), Figure 14.

Some bike lanes already exist, e.g., along 3rd St. SE, and 16th St. SW Bridge of Lions. We advise that these bike lanes be expanded to include more portions of the neighborhoods that overlap with the FTT trail. Specific roads where bike lanes should be added include: 14th Ave SE, 16th Ave SW through Czech Village, 5th St. SE, 12th Ave SE, and 2nd St. SE.

The minimum width of a bike lane should be 5 feet, and lanes should be near the curb or parking lane along the road. If there are gutters along the road, there needs to be a minimum of 1 to 2 feet between the bike lane and the curb. To enhance safety along busier streets such as 12th Ave SE, a wider bike lane is recommended, and could include small barriers, such as plastic bollards, to prevent bike and car crossovers.

Figure 14. Bike lane location and designs
6.4 Guidelines for crossings and intersection designs

The greatest potential safety hazards to trail users are intersections of trails with roadways, railroads and other trails. The best way to increase safety is to increase visibility to both trail users and motorized vehicles. There are two types of crossings: at-grade and grade-separated. At-grade crossings are appropriate where motorized traffic volumes are low or local conditions prohibit grade separation. The FTT is likely to use at-grade crossings in most sections. The FTT long loop will use the planned Bridge of Giants. It is a planned bridge with bike and pedestrian trails, currently in the fundraising stage of the project development. This document does not provide further details about this part of the FTT. However, when the bridge will be constructed the city will need to look at the grade-separated crossing guidelines.

At-Grade Crossings

- **Crossing Layout:** The trail should cross the railroad tracks and roadways at right angles to support visibility.

- **Sight Lines:** The trail should be such that the motorists and trail users are able to see each other at roadway crossings. A motorist needs to be able to stop in time if a trail user is in the road, and a trail user needs to be able to judge his or her ability to cross the street safely. Installing stop signs could be a possible solution to that.

- **Signage, striping and signals are used to announce the crossing for both trail users and motorists, and should be employed in varying degrees depending on the functional classification and traffic volume of the roadway to be crossed. Signage should be placed outside the recommended clear zones for both trails and roadways. Striping refers to markings painted on the pavement, either on the roadway or on the trail. Signals include regulatory traffic lights, such as flashing yellow warning lights, stoplights, stop signs or pedestrian crossing signals.**

- **On-Road Bicycle Facilities at Intersections:** On-road bike facilities share the roadways, and are thus regulated by the traffic control devices at intersections.

- **Railroad Crossings:** The Czech trail will cross railways and as with roadway crossings, trails should cross railroads at right angles, if possible and signage for trail users to look for trains should be provided.

- **Guidelines for roadway crossing are different based on general functional classifications of roads and roadway volumes. All roadway crossings should include the following items: clear sightlines, flush transitions between the trail and the roadway and a 3 foot strip of detectable warnings (i.e. truncated domes) for ADA requirement.**
Figure 16, Crossing Layout for Collector Road and Railroad
The traffic volume of each intersection will determine the necessary signage. For the pedestrian walkway at 301-399 12th Ave SE, it would be necessary to include to include a clear sign on both sides and distinctive street paint to warn cars of an intersection. For high traffic volume intersections, electronic stop and walk signs will be necessary (Figure 17).

Where the trail crosses intersections, we recommend clear markings, such as brick mosaic or painted patterns, imbedded in the pavement. To tie Czech heritage in with the trail design, it would be unique and creative to make these crosswalks distinctive with traditional Czech patterns, and/or patterns from Peter Sís’ book. Examples of some ideas that feature paint and mosaic patterns are featured below. If a painted or brick pattern is implemented, it is recommended to stay within a set color scheme, namely, traditional Czech colors of red, blue, white, and marigold yellow (Figure 18).

Figures 19-20 present what such intersections might look like. Figure 19 presents existing intersections. In Figure 20, we propose a dragon-themed crossing. The intersections that should receive these distinctive treatments include: 16th Ave SW and Inspiration Pl SW, 16th Street SW pedestrian walkway that is North of Sykora Bakery leading to the park, 301-399 12th Ave SE, 10th Ave and 3rd St. SE, and 12th Ave. and 3rd St. SE.
Figure 19: Cross Walk Designs
https://commons.wikimedia.org/w/index.php?curid=57071571b
http://www.healthylompoc.org/lompoc-seeks-designs-for-next-creative-crossings-project/

Figure 20. Proposed Crossing near Czech Museum
7 Trail Markers

Trail Markers designate trail routes physically in the streetscape. Markers include a combination of signs, plaques, and pathways to follow. This allows users to follow the trail via wayfinding pathways and markers, and discover educational materials (text, photos, drawings) that point out significant sites and storybook passages along the way. Signs and plaques for the FTT are outlined in section 6. Here, we describe two possible pathway designs.

7.1 Proposed Design 1: Brick or painted linear pathway

The first proposed linear pathway design is modeled after the Boston Freedom Trail (Figure 21). This trail uses bricks laid in concrete to create one continuous pathway for users to follow. If possible (e.g., at the time of sidewalk construction and repair), the brick could be imbedded in concrete, making the trail durable and easy to follow.

If this is not possible, a painted strip could be laid on the sidewalk. Paint (with sand additives for non-slip surface) can be used but needs to be reapplied regularly. Durable Liquid Pavement Markings are more durable alternatives (e.g., epoxy or Methyl Methacrylate resin, with various costs and drying times). Thermoplastic can also be used and allow shapes (e.g., brick shapes, directional arrows) to be precut. See the guidelines of the National Association of City Transportation Officials (NACTO) for guidance on colored pavement painting options.5

Along the route, the Boston Freedom Trail incorporates large bronze medallions embedded in a square of concrete. The Barbary Coast Trail similarly uses bronze medallions to indicate the path. These medallions feature the names of sponsors who have donated to the trail’s upkeep. The FTT could incorporate something similar in nature (Figure 22).

5 https://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/colored-pavement-material-guidance/
7.2 Proposed Design 2: Paw prints

The second proposed design for a trail pathway is inspired by the Bridge of Lions. The pathway could follow lion paw prints that are impressed into the concrete sidewalk and trail. This could be finished by filling the impression with a clear outdoor epoxy resin. Filling the indentations would prevent people from tripping over the imprints. Below are ideas for what the lion paw prints could look like, and an example of a homemade table that used epoxy resin to fill hand prints.

As above, this is easier installed when constructing and repairing sidewalks. Alternatively, the paw prints could also be painted with colored nonslip paint, or, better thermoplastic could be ordered and installed in precut shapes (Figure 23).

Figure 23: Trail Paw Prints
https://i.pinimg.com/originals/78/4c/12/784c126170a7ca3055876bf246c157d2.jpg
http://animalia-life.club/other/real-lion-paw-print.html
http://www.aonesupplyco.com/ANIMAL%20TRACK%20CONCRETE%20STAMPS%201.htm
8 Signage and Public Information

8.1 Trailhead kiosk
At the trailhead near the playground at the Czech Museum, an informative kiosk will provide a large map showing the two routes, the overall synopsis of the trail and information about points of interest along the trail. It should also direct users to the online app available for the Trail. This kiosk can include a brochure holder with single sheet brochures including information about the FTT, the trail map, the app, each stop and historic sites along the trail to guide adventurers on their tour.

The overall aesthetics and design principles for the informative sign panels need to appeal to all ages and create a sense of wonderment and yearning to explore and learn about Czech Village and NewBo. To make a stronger and more appealing statement, it could incorporate features like a turret, a dragon, or another iconic image from the book. Ideally, it would be painted with the same color scheme as the trail (red, blue, white, and/or marigold yellow).

8.2 On-Trail signage
Beyond this unique kiosk, about 30 interpretive signs will be strategically positioned along the trail, marking all buildings and parks of interest. Additional signs will be added as sculptures and other trail features are added over time. The typical size of these signs is 2’ by 3’ or 24” by 36”. Standard sign sizes from manufacturers are also available in these dimensions. We are proposing 2’ by 3’ signs.

Elements that will be include on the signs posted at each stop include historical images, historical details of the site, details of Marie and her story, fairy tale themed artistic renderings from Peter Sís’ book, a map with the trail and “you are here” pointer, and a QR code that can be used to get more information about the site and can be connected to the online app.

8.3 ADA Requirements for Kiosk and Signs
- Kiosk and signs must be located on smooth, level, and hard exhibit pads for easy ADA access and mobility.
- The kiosk must be accessible on all sides.
- The recommended height of bottom of kiosk and sign panel from the ground is 30 inches with the first line of text no higher than 60 inches from the ground (except for rail-mounts).
- Sign panels must be set at a 30 to 45-degree angle.
8.4 Sign Format Examples

Sign base styles vary, Figure 25 presents examples that are feasible for the FTT. More styles are provided along with cost estimates in the Appendix. Depending upon the location of the historic site, the FTT may successfully incorporate multiple styles of bases. The most common sign base type is the single post, which is currently used by the City of Cedar Rapids for its historic trail.

Figures 25: Sign Examples
We propose a sign format and base shape designed to look like an open fairytale book (Figure 26). The signs will contain images, maps and text in English and Czech languages.
9 Public arts and family-friendly opportunities

Public art is an important tool for communities to express their cultural, historical and social identities. Public art can take many different forms, from traditional to modern and from passive to interactive. The FTT is a great catalyst to incorporate multidimensional public art into the Czech Village / New Bohemia District. Public art, including murals, traditional or fiberglass statues, and even non-traditional playgrounds will make the trail dynamic and unique.

The Czech Village / New Bohemia Main District serves a niche that is culturally, historically and economically significant. The FTT will weave together local historic landmarks, amenities, culture, arts, food, entertainment and business attractions into a coherent and truly unique amenity. The trail will make the community an even more prominent regional destination. To support this vision, the following addresses four concepts for integrating public art and creative playgrounds into the trail.

9.1 Inspiration and themes
We draw the esthetic inspiration for the public art and playground concepts from four iconic images: giants, castles, dragons and lions, and from two fundamental elements of the Czech-Slovak migration to Cedar Rapids: migrants and their homes.

Giants: The Golem story is set in the 16th century when the Jewish people of Prague lived in constant fear of attacks. A local Rabbi created Golem, a giant, to protect the Jews. As Golem grew bigger, the Rabbi promised to destroy it, but according to legend, Golem was brought back to life by the Rabbi’s son and might still be protecting Prague today.

Lions: The significance of lions is not lost in Czech Village or Cedar Rapids. The lion part of the Czech Republic’s coat of arms. The rulers of Bohemia, originally donned a St. Wenceslas flaming eagle on the coat of arms, but changed it to a lion in the 12th century to symbolize Emperor Frederick’s valor. The lion then only had one tail. The King of Bohemia, Charles IV, a notable figure in Bohemian history, chose the two-tailed lion version for his coat of arms. Legend says that the lion helped warrior Bruncvik’s fight a nine-headed dragon.

Cedar Rapids already showcases lions in its history and built environment. The Iowa Bank and Trust Building at 1201 Third St. SE, has lions along its cornice. Howard and Margaret Hall, who owned a pet lion, purchased several buildings on 16th street NE in the 1920s. The Bridge of the Lions, built in 1989 to replace a 1910 concrete bridge, is another example of Cedar Rapids’

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6 http://www.prague.net/golem
7 http://www.myczechrepublic.com/prague/history/prague_legends.html
8 http://www.thegazette.com/subject/life/books/iowa-authors/czech-history-a-tough-people-make-cedar-rapids-their-home-20160313
historical relationship with lions. With lions a recurring theme in the Czech and New Bo Village area, using lion paw prints to mark the whole trail would be very applicable (Figure 23).

**Castles:** Castles are usually the setting of enchanted landscapes filled with knights in shining armor, fairytales, and intimidating dragons. Connecting legend and medieval history, castles are appreciated by all age groups, and could provide a strong theme for a playground.

**Dragons:** The adventures of Bruncvik and his legendary sword are a symbol of hope in Czech culture. Bruncvik and his lion fought many enemies including dragons. Incorporating dragon aesthetics into playgrounds, public art or even street crossings (Figure 20), can foster a sense of adventure for trail users.

**Migrants:** Cedar Rapids has a rich history of occupation before the first European’s settlers arrived in the 19th century. Native Americans including the Sioux, Crows, Blackfeet, Sauk and Fox lived in the Northern Plains. However, these Native American groups encountered adversity such as land restriction and forced exodus as European migrants occupied their land.

Czech and Slovak immigrants settled in Cedar Rapids in the 19th century, many employed by the Sinclair meatpacking plant opened in 1871. The Czech Village and NewBo district are places that tell the story of these migrants. However, we should not forget today’s immigrants, who come to Cedar Rapids for industrial jobs, e.g., Tyson Foods. These immigrants can be represented in the urban landscape through strategically placed sculptures.

**Homes:** The 2008 flood damaged many buildings that held historic, communal, and personal value. With this damage, the stories of immigrants and the community of Cedar Rapids have been somewhat lost. To highlight and commemorate the history of migration to Cedar Rapids in an elegant, interactive and artistic way, we propose to recreate the frames of selected old houses, called ‘Ghost Houses.’

**Toys/Treasures:** The storybook character Marie can be used to engage children with the trail. By incorporating small toy elements or a treasure hunt within the trail (around sculptures, parks and/or in business storefronts), children will have something whimsical to keep them interested, while adults focus on the neighborhood history.

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12 https://www.brucemore.org/history/people/hall/
16 Beyond the Catholic eastern European presence, Muslims from the Beqaa Valley (today’s Lebanon and Syria) also migrated to the area at the end of the 19th century. Cedar Rapids hosts the National Muslim Cemetery, the Mother Mosque of America dedicated in 1934, and another mosque built in 1972.
17 https://en.wikipedia.org/wiki/Cedar_Rapids,_Iowa
Ultimately, the final playground and public art theme(s) will be determined by Peter Sís designs and his narrative for the storybook. No matter the outcome, any of the themes highlighted above illustrate unique components of Czech culture or legends and can be used in dynamic ways to strengthen the playground and/or public art component of the FTT.

### 9.2 Concept 1: Playful Castles, Dragons and Lions

Developing a unique playground at the trailhead at the Clock Tower will be an important and attractive asset for the trail (Figure 27). This location can also symbolize the giant or mythical creature "protecting" the museum, as in the Golem legend.

![Figure 27, Proposed Playground Site](image)

The playground must comply with current regulatory practices (see Cedar Rapids’ Parks and Recreations’ guidelines for playground orders and installations). Playground regulations often leads to “cookie cutter” designs. That is not what we want for the FTT.

For a unique family-friendly attraction, we propose a castle or dragon-themed playground surrounded by benches. This will attract and connect visitors to the Czech-Slovak culture, bring families to the trailhead, and encourage them to explore both the National Czech and Slovak Museum and Library, and the FTT. Zachary’s Playground at Hawk Ridge Park in Lake Saint Louis, Missouri (Figure 28), is an example of a well-received castle-themed playground. In partnership with the non-profit Unlimited Play, the city of Lake St. Louis and the St Charles Development Disabilities Resource Board (DDRB) developed this unique and accessible playground. It has become a special and inclusive amenity for children of all ages and abilities.¹⁸

¹⁸ [https://unlimitedplay.org/playground/zacharys-playground/](https://unlimitedplay.org/playground/zacharys-playground/)
Inspired by Irish castles, Craighead Forest Park in Jonesboro, Arkansas developed another castle-themed playground so children can use their imagination to explore medieval worlds (Figure 28). Landscape Structures19 developed this unique playground, providing various activities for kids ages 5 to 12 to enjoy. The company also offers a wide variety of themes that can accommodate the needs of different communities. Dragon-themes playgrounds are also available (Figure 29). See Appendix for additional resources about other companies that can develop unique castle or dragon-themed playgrounds.

In addition, images of a giant, lion or dragon can be integrated into the soft surfacing around the playground, creating a unique play area. Companies such as SurfaceAmerica\textsuperscript{20} can create different shapes in playground surfacing. The images below illustrate the variety of creative surfacing that can be executed (Figure 30a, b, c).

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{figure30a}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{figure30b}
\caption{Watkins Regional Park, Upper Marlboro, Maryland Image Source: https://sonntagrec.com/products/unique-designs/custom-theme/}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{figure30c}
\caption{Virtriturf Product Image Source: http://www.sierrawinds.com/safe_fall_materials.html}
\end{figure}

\textsuperscript{20} https://www.surfaceamerica.com/product/playground-surfacing/playbound-poured-in-place/
9.3 Concept 2: Giants (or dragons, or lions) on City Walls

Eclectic and culturally-relevant art fits well into the current aesthetics of New Bohemia. The Golem, lion and dragon imagery, or imagery from Peter Sís’ illustrations for his book can be used as family-friendly connections to Czech-Slovak culture along the FTT (Figures 31a, b).

Murals are a relatively inexpensive way to achieve visually-striking results. The design and labor for wall murals can be donated. This can be done with a local arts program with Cedar Rapids schools or colleges, UI Art Share, or IISC Programs.

The reference art used in this section for the sake of illustration is by Ella and Pitr of Paris, France.21

Murals
Table 4 below, identifies buildings well-suited for unique murals. Since the Bohemian Commercial Historic District is a recognized site on the National Register for Historic Places, certain approvals need to be obtained prior to the development of wall murals on historic buildings. The Cedar Rapids Historical Preservation Commission and property owner will need to approve the design and development of murals. See the Historic Preservation Chapter of the Cedar County municipal code for more information regarding the approval process.

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21 http://globalstreetart.com/ella-pitr
### Table 4: Potential Mural Sites

<table>
<thead>
<tr>
<th>Address</th>
<th>Property Owner or Deed Holder</th>
<th>Contact Information</th>
<th>Parcel Number</th>
<th>Use</th>
<th>National Register of Historic Places</th>
<th>Mural Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1221 3&lt;sup&gt;rd&lt;/sup&gt; St SE</td>
<td>Joeseph R Vondracek</td>
<td>2320 Creekside DR, Hiawatha IA, 52233</td>
<td>14284-04008-00000</td>
<td>Warehouse</td>
<td>Secondary – Non-Contributing</td>
<td>North (Front) of the building</td>
</tr>
<tr>
<td>1202 3&lt;sup&gt;rd&lt;/sup&gt; St SE</td>
<td>2025 Development Group LLC</td>
<td>1950 Boyson RD, Hiawatha, IA 52233</td>
<td>14284-01001-00000</td>
<td>Commercial</td>
<td>Primary Key - Contributing</td>
<td>East and West side of the building</td>
</tr>
<tr>
<td>1125 3&lt;sup&gt;rd&lt;/sup&gt; St SE</td>
<td>Jelinek Companies LLC</td>
<td>1125 3&lt;sup&gt;rd&lt;/sup&gt; ST SE, Cedar Rapids, IA</td>
<td>14284-02013-00000</td>
<td>Commercial</td>
<td>Primary - Contributing</td>
<td>East side of the building</td>
</tr>
<tr>
<td>1121 3&lt;sup&gt;rd&lt;/sup&gt; St SE</td>
<td>“”</td>
<td>“”</td>
<td>“”</td>
<td>Primary Key - Contributing</td>
<td>West side of the building</td>
<td>“”</td>
</tr>
</tbody>
</table>

Continuing with this great place-making strategy, transforming an underused structure, for example 1221 3<sup>rd</sup> St SE, or highlighting the neighborhoods cultural significance with a beautiful piece of art will strengthen the aesthetics of the New Bohemia neighborhood. Not only would it be a nice addition to the Cedar Rapids Storybook Trail, but residents and visitors —whether or not they are following the FTT- will appreciate this public art.
9.4 Concept 3: Sculptures: They all Turned into Stone and Ghosts

The story of Marie's migration from Bohemia to Cedar Rapids may end with creatures turning into stone because she no longer needs them to be comfortable in her new home. Marie's creatures are likely reminiscent of the creatures, people, and stories she heard growing up in Bohemia. Examples include the two-tailed lion on the Bohemian coat of arms or dragons images of Charles IV.

Fiberglass (or bronze) statues of Marie's creatures can be placed at many points along the trail. For example, a lion could be placed in the new Sokol park (Figure 32) or at the 16th ave gazebo in the Czech Village. These statues could be life-sized or taller (6-12ft). Tall (8-12ft) lions or giants could also be placed along the Bridge of Lions or along the Bridge of Giants to recreate the profile of Charles Bridge in Prague (Figure 33).

Figure 32, Proposed Statues in the new Sokol Park

Figure 33, Statues on Charles Bridge for scale

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22 https://www.britannica.com/place/Bohemia
Because we want people to be able to interact with these statues, making them out of durable, low cost and safe material like fiberglass is advisable. Fiberglass can be treated to look like stone. Statues would have signs near them that reference their relation to Bohemian culture and Marie's story.

Sculptures of immigrants (Maries’ Neighbors) could also be placed at various sites along the walking trail to give a face to Czech-Slovak immigrants to Cedar Rapids. The sculptures produced by the Lundeen family\textsuperscript{23} are known for depicting life-like humans engaged in everyday activities, such as sitting on benches or walking. Incorporating sculptures of the people Marie might have known in Bohemia and Cedar Rapids as she grew up can create an interesting atmosphere as visitors walk by and interact with the statues. These statues could also depict people of the various cultures who made the Czech-Slovak Village their home. Statues can be made from fiberglass and made to look like bronze or stone. Approximate cost are between 500 to $1,000 depending on the size and surfacing of sculpture.

\textsuperscript{23} http://www.lundeensculpture.com/
Figure 35, Statues shown on the map include: freed black man James Bradley\(^2\), American Royalty at Gray Building Tallahassee Florida\(^2\), Classic Life Size by Lundeen\(^2\), Afternoon in The Park by Lundeen\(^2\), Jake Swigert by Lundeen\(^2\), and Departure by Lundeen\(^2\).

\(^2\) [Link to statue of James Bradley](https://www.gettyimages.co.uk/detail/photo/statue-of-james-bradley-black-man-freed-via-high-res-stock-photography/103582518)
\(^2\) [Link to American Royalty at Gray Building Tallahassee Florida](https://www.floridamemory.com/items/show/17031)
\(^2\) [Link to Classic Life Size by Lundeen](http://www.lundeensculpture.com/gallery/#bwg1/34)
\(^2\) [Link to Afternoon in The Park by Lundeen](http://www.lundeensculpture.com/gallery/#bwg1/11)
\(^2\) [Link to Jake Swigert by Lundeen](https://www.aoc.gov/art/national-statuary-hall-collection/john-swigert-jr)
\(^2\) [Link to Departure by Lundeen](https://www.flickr.com/photos/echoprintsphotography/13300972843/in/set-72157622104546140)
<table>
<thead>
<tr>
<th>Address</th>
<th>Property Owned by</th>
<th>Potential Sculpture (life size, ~6ft) (cite)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>14th Ave and 4th street (near meat packing factory)</td>
<td>Cedar Rapids</td>
<td>Meat packing workers: 3 to 5 (~600 each)</td>
<td>History of migration related to Meat packing factory in Cedar Rapids</td>
</tr>
<tr>
<td>2250 A St SW, Cedar Rapids, IA 52404 (near walking bridge)</td>
<td>Cedar Rapids</td>
<td>Dragon: 1 or 2 (~650 each)</td>
<td>A creature from Maria’s story, guiding the bridge</td>
</tr>
<tr>
<td>20th Ave and B St. (new park)</td>
<td>Cedar Rapids</td>
<td>Lion: 1 (~650)</td>
<td>A creature from Maria’s story, welcoming people to the park</td>
</tr>
<tr>
<td>415 12th Ave SE, Cedar Rapids, IA 52401 (near Geometric)</td>
<td>Cedar Rapids</td>
<td>Charles IV: 1 (~600)</td>
<td>A creature from Maria’s Story, guiding people towards the end of the tail</td>
</tr>
<tr>
<td>1400 Inspiration Pl SW, Cedar Rapids, IA 52404 (outside Museum)</td>
<td>Cedar Rapids</td>
<td>People in Czech and Bohemian clothing: 2 or 3 (~600 each)</td>
<td>History of Czech and Bohemian People visualized through statues. Tells story of migration</td>
</tr>
</tbody>
</table>
9.5 Concept 4: Ghost Houses of Immigrants

Many historic homes in Cedar Rapids have been destroyed and/or removed following the 2008 flood. “Ghost houses” that reproduce the general frame or outline of the original building, usually to scale, can be used very effectively to commemorate culturally significant buildings that are no longer here. Notable example of Ghost House include: Franklin Court at the Independence National Historical Park in Philadelphia and the Ghost Frame of St. Mary’s City in Maryland (see Figure 36). We propose to highlight important buildings that have been lost with ghost houses, ideally located on the very same plots of land where the home was located (e.g., in the new Sokol park), and potentially including gardens or flowerbeds.

Figure 36, Ghost House include: Franklin Court at the Independence National Historical Park in Philadelphia, Ghost Frame of St. Mary’s City in Maryland

Along the FTT, these ghost houses could stand alone or host mini gardens and/or benches where visitors could sit and reflect on the histories of the previous generations of immigrants. The idea of a ghost house with a garden (which we call a “Garden Ghost House”) would be an innovative way to tell the story of Czech-Slovak immigrants while also creating enjoyable places for people to sit, enjoy art, and reflect on the changing built and social environment of the area. 'Garden Ghost Houses' should incorporate local native plants requiring low maintenance (Figure 37).

Figure 37. Potential ghost house with garden and lion sculpture in new Sokol Park
Table 6: Potential Ghost House Locations

<table>
<thead>
<tr>
<th>Address</th>
<th>Name</th>
<th>Property Owned by</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1605 A St SW, Cedar Rapids, IA 52404</td>
<td>Sokol Park</td>
<td>Cedar Rapids</td>
<td>Place of park goers to enjoy</td>
</tr>
<tr>
<td>21st Ave and B St.</td>
<td>New Park</td>
<td>Cedar Rapids</td>
<td>Reminiscent of houses that were removed for the park to tell story of migration</td>
</tr>
<tr>
<td>10th Ave and 2nd St SE</td>
<td>Park near Czech language school</td>
<td>Cedar Rapids</td>
<td></td>
</tr>
<tr>
<td>1401-1699 3rd St SE Cedar Rapids, IA 52401</td>
<td>Area near Meat packing factory</td>
<td>Cedar Rapids</td>
<td>Reminiscent for what was once part of meat factory. Tells story of migration with meat factory workers</td>
</tr>
</tbody>
</table>

These Ghost Houses can be paired with statues of children, families, immigrants and meatpacking plant workers to tell the story of the role of Sinclair for the development of Cedar Rapids and the immigration of Czech-Slovaks, and/or the role of the Monroe and Czech language schools for the preservation of the Czech-Slovak culture in Cedar Rapids.

![Figure 38, Proposed Locations for Ghost Houses (i.e. House Gardens) sources: ^30^ 31](image)

9.6 Concept 5: Marie’s Treasure Hunt

Small statuettes of traditional Czech toys, a set of dolls representing Marie’s family or townsfolk, or lions or dragons could be placed along the shorter trail near statues or business storefront windows to create a whimsical Treasure Hunt. If the lion theme is chosen, the lions on the Bank and Trust bank building could be part of the Treasure Hunt.

The figures would be incorporated into the existing streetscape, listed on a companion brochure, or on the online app, and/or on a separate website providing riddles and hints about their locations.

The treasure hunt would provide entertainment for children while adults engage with the historic details on the signs. Plastic or stuffed versions of the toys could be sold as souvenirs. The treasure hunt would help emphasize the kid-friendly nature of the trail, and could provide more tie-ins with the companion story book. The statuettes would ideally be cast out of bronze and would be around seven inches tall.

Marie’s Treasure Hunt is inspired by the “Mice on Main” in Greenville, SC. The nine bronze mice were derived from the nine illustrated mice in the children’s book Goodnight Moon, though now the Mice on Main have their own story book that explains their individual personalities and their journey onto Main Street. Many of the local businesses have posters that list the clues; the full experience comes with purchasing the book (and maybe a little toy mouse of your own) at the Mast General Store.

The Treasure Hunt would also provide an opportunity to involve local businesses. Businesses along the trail route could sponsor a statuette to be placed in their storefront window or on their building’s façade, which would attract trail walkers. This could both generate funding for the trail’s initial construction and would allow businesses that are not historic to be involved in the trail.
10 Conclusion

Creating the Czech and Slovak Fairytale Trail will provide a diverse, interesting, educational and visually appealing regional amenity for Cedar Rapids. This destination and niche-driven recreation trail includes creative place-making features that highlight the community’s rich culture. With this trail, residents and visitors will celebrate Czech heritage, explore the Czech people’s journey of immigration, understand the importance of historic preservation, and learn about Czech legends.

Combining physical activity with this level of cultural expression is something that is truly unique to the region, and maybe even the world. As mentioned above, unique crosswalks, public art, and wayfinding signage will strengthen the unique economic and social life fostered in the New Bohemia and Czech village districts. Most importantly, the proposed trail and accompanying app will support the flood mitigation, bridge, and Mt Trashmore development projects occurring in the area.

The app and maps are not unique per se, but the link of the Fairytale Trail with a children’s book is an innovative concept. It can modernize the concept of historic trails by making them children and family-friendly. The many sites highlighted along the trail can tell and connect many stories: Peter Sis’ story, Czech/Bohemian story, Migrants’ stories, Cedar Rapid’s story etc.

The FTT can therefore be a trail families return to, experiencing something slightly different each time while also spending time outdoors, increasing physical activity and increasing knowledge of Cedar Rapids’ history.
## Appendices

### Potential Business partners

<table>
<thead>
<tr>
<th>List of business with window fronts for Fairytale Scavenger Hunt</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business</strong></td>
<td><strong>Address</strong></td>
</tr>
<tr>
<td>Sykora Bakery</td>
<td>73 16th Ave SW, Cedar Rapids, IA 52404</td>
</tr>
<tr>
<td>Village meat market and Café</td>
<td>92 16th Ave SW, Cedar Rapids, IA 52404</td>
</tr>
<tr>
<td>Czech cottage (was Ted’s pharmacy)</td>
<td>100 16th Ave SW, Cedar Rapids, IA 52404</td>
</tr>
<tr>
<td>Old family house</td>
<td>77 16th ave SW</td>
</tr>
<tr>
<td>Old Store</td>
<td>87 16th ave SW</td>
</tr>
<tr>
<td>Czech Village/New Bohemia Main Street District</td>
<td>1107 3rd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Grocery store</td>
<td>1910 3rd st</td>
</tr>
<tr>
<td>Great American popcorn company</td>
<td>1121 3rd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Little Bohemia</td>
<td>1317 3rd St SE, Cedar Rapids, IA 52401 (16th and 3rd)</td>
</tr>
<tr>
<td>CSPS</td>
<td>1103 3rd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Movie theaters Ideal</td>
<td>200 14th ave SE</td>
</tr>
<tr>
<td>Kickstand</td>
<td>203 14th Ave SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Fire Hose Co</td>
<td>1111 3rd St SE</td>
</tr>
<tr>
<td>Czech language School</td>
<td>925 2nd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Bottleworks Loft Condominium</td>
<td>905 3rd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>Cherry building</td>
<td>329 10th Ave SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>New Bo market</td>
<td>1100 3rd St SE, Cedar Rapids, IA 52401</td>
</tr>
<tr>
<td>The Create Exchange</td>
<td>98 16th Ave SW, Cedar Rapids, IA 52404</td>
</tr>
<tr>
<td>Monroe Park</td>
<td>Between 2nd and 3rd St. SE, South of Bottleworks Condos</td>
</tr>
<tr>
<td>Gazebo across from Lion Bridge Brewing</td>
<td>16th St. SW, Cedar Rapids, IA</td>
</tr>
</tbody>
</table>
## Public Art Design Ideas and Pricing

<table>
<thead>
<tr>
<th>Playground</th>
<th>Location: National Czech Museum and Library</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features to Consider</strong></td>
<td><strong>Estimated Cost</strong></td>
</tr>
</tbody>
</table>
| Unique playground surfacing (poured rubber playground) | $8 - $14 per square foot\(^{32}\) | ADA requirements | - Safe and unique play area  
- Attractive amenity for families and children |
| Playground Equipment | $100K - $119K\(^{33}\) | Public Playground Safety Handbook\(^{34}\) |  |
| Benches | $253 each\(^{35}\) | |  |

<table>
<thead>
<tr>
<th>Wall Murals</th>
<th>Location: See Table 1 for all possible locations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features to Consider</strong></td>
<td><strong>Estimated Cost</strong></td>
</tr>
</tbody>
</table>
| Design Concept (labor and supplies could be donated) | $10 – 20 per square foot | The Czech Bohemia Design Manual | - Beautified vacant parcels  
- Align with Czech Bohemia Overlay District Goals |

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\(^{32}\) [https://www.adventureturf.com/poured-rubber-playground-cost/](https://www.adventureturf.com/poured-rubber-playground-cost/)


\(^{34}\) [https://www.cpsc.gov/PageFiles/122149/325.pdf](https://www.cpsc.gov/PageFiles/122149/325.pdf)

### Statues

Location(s):
- Park between 17th and 21st street
- along walking path
- former landfill
- near future bridge entrance on the Solid Waste Agency side
- near National Czech and Slovak museum and Library
- near African American Museum of Iowa
- between Geometric and St. Wenceslaus Church

### Features to Consider

<table>
<thead>
<tr>
<th>Design Concept</th>
<th>Estimated Cost</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Stone Statue</td>
<td>Depends on company, size and material</td>
<td>- Provide interactive piece for part of the story book to be told</td>
</tr>
<tr>
<td>Fiberglass statues</td>
<td>Bronze: approx. $125,000 if custom-made by Lundeen</td>
<td>- Provide interactive piece for Czech, Bohemian, and Slovak history to be told</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Beautify park area</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide interactive opportunity for children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Provide location for visitor pictures</td>
</tr>
</tbody>
</table>

### Possible companies

- FAST Company
- Cowpainters
- Chicago Fiberglass Works
### Ghost houses and gardens
Possible Location(s): Sinclair Plant site, new Sokol Park

<table>
<thead>
<tr>
<th>Features to Consider</th>
<th>Estimated Cost</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Concept</td>
<td>Could rely on donated labor (e.g., Boy Scout projects)</td>
<td>+ Beautify vacant places along walking trail with trees and plants native to Iowa</td>
</tr>
<tr>
<td>Structure Material</td>
<td></td>
<td>+ Provide seating areas for people to enjoy</td>
</tr>
<tr>
<td>Wood building house</td>
<td>$5.17-$12.47 per 8ft to 16 ft Weather Shield Wood Beam(^{36})</td>
<td>+ Provide interactive location for all ages to enjoy</td>
</tr>
<tr>
<td>Paint for wood beams</td>
<td>+$15 per gallon Behar White Exterior Barn and Fence Paint(^{37})</td>
<td>+ Tell the story of historic housing that is no longer in Cedar Rapids/in the historic houses original piece of land</td>
</tr>
<tr>
<td>Native tree and prairie grass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bench(es)</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

### Additional Playground Resources

<table>
<thead>
<tr>
<th>Company</th>
<th>Theme</th>
<th>Web Link</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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\(^{36}\) [https://www.homedepot.com/p/WeatherShield-2-in-x-4-in-x-16-ft-2-Prime-Ground-Contact-Pressure-Treated-Lumber-253920/206967809](https://www.homedepot.com/p/WeatherShield-2-in-x-4-in-x-16-ft-2-Prime-Ground-Contact-Pressure-Treated-Lumber-253920/206967809)


\(^{39}\) [https://howmuch.net/costs/tree-install](https://howmuch.net/costs/tree-install)
## Interpretive Signs and Sign Materials

<table>
<thead>
<tr>
<th>Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Estimated cost of a 2’ x 3’ sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vinyl- (usually 3M products)</td>
<td>Can be made very large (up to 52” x over 100 feet long). Is thin and lightweight, so can be laminated in plastic, and then mounted on plywood, metal, acrylic, or other substrates.</td>
<td>Not very durable. Best for temporary displays (2-3 years, although some warranties are for 5). May bubble in very hot climates. (1/8” thick)</td>
<td>$165-200</td>
</tr>
<tr>
<td>Fiberglass Embedment -</td>
<td>Resistant to shattering, weathering, fading, and graffiti. Excellent colors and resolution. Warranties are generally for 10 years.</td>
<td>May need to occasionally buff with sandpaper or car polish. Edges not as attractive as high-pressure laminate. (1/8” thick)</td>
<td>$200-300</td>
</tr>
<tr>
<td>(digital output encapsulated in clear fiberglass)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Pressure Laminate -</td>
<td>Resistant to shattering, weathering, fading, and graffiti. Excellent colors and resolution. Warranties come anywhere from 10-20 years.</td>
<td>Can be scratched or damaged but takes a lot of effort. Panels .5” thick can be mounted without frames. (1/8” thick)</td>
<td>$300-400</td>
</tr>
<tr>
<td>(digital output encapsulated in clear plastic resin)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anodized Aluminum -</td>
<td>Very durable, low maintenance, impervious to harsh weather. Attractive for recognition plaques, and designs with line drawings.</td>
<td>Can be scratched. Colors are very limited (can’t easily do photographs or illustrations.) Can’t do really large signs. (1/8” thick, color)</td>
<td>$450-600</td>
</tr>
<tr>
<td>(gold, bronze, or silver-toned etched metal)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: United States Forest Service
## Interpretive Sign Base Examples

<table>
<thead>
<tr>
<th>Type (24” x 34”)</th>
<th>Example</th>
<th>Estimated Cost (without panel)</th>
<th>Installation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single metal post frameless, can support various sign sizes</td>
<td><img src="Image1" alt="Example Image" /></td>
<td>$431.97</td>
<td>Can be installed on concrete or put directly into the ground</td>
</tr>
<tr>
<td>Single metal post framed, can support various sign sizes</td>
<td><img src="Image2" alt="Example Image" /></td>
<td>$360.97</td>
<td>Can be installed on concrete or put directly into the ground</td>
</tr>
<tr>
<td>Upright metal framed option, can support various sign sizes</td>
<td><img src="Image3" alt="Example Image" /></td>
<td>$1,122.59</td>
<td>Can be installed on concrete or put directly into the ground</td>
</tr>
</tbody>
</table>
Upright metal framed option, can support various sign sizes

$584.86
Can be installed on concrete or put directly into the ground

Cantilever metal dual, can support various sign sizes

$535.94
Can be installed on concrete or put directly into the ground

Cantilever metal dual post with supports more centrally located, can support various sign sizes

$520.63
Can be installed on concrete or put directly into the ground

Rail mounted, can support various sign sizes

N/A
Can be installed on metal or wood rails
<table>
<thead>
<tr>
<th>Description</th>
<th>N/A</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanging metal wall mounted sign, can support various sign sizes</td>
<td>N/A</td>
<td>Dependent upon building material being mounted to</td>
</tr>
<tr>
<td>Building mounted</td>
<td>Dependent upon building material being mounted to</td>
<td></td>
</tr>
<tr>
<td>Hanging sign on metal post, can support various sign sizes</td>
<td>N/A</td>
<td>Can be installed on concrete or put directly into the ground</td>
</tr>
</tbody>
</table>

Source: [http://store.envirosigns.com/](http://store.envirosigns.com/)

Potential sign and base providers:
- Gopher Signs [https://www.gophersign.com/](https://www.gophersign.com/)
- EnviroSIGNS [https://envirosigns.com/](https://envirosigns.com/)
Guidelines to develop sign content

Communication
- What message do we want to convey?
- What audience are we targeting?
- What considerations do we need to meet for people with disabilities?
- Will a brochure or something similar need to accompany our signs?

Design
- Who will draw our illustrations?
- Who will take our photographs, or what sources do we have to obtain them?
- What artwork or photo credits to we need to give, or are there copyright issues to consider?
- What resolution size and file format do our photos need to be in?
- Do we want to use black and white or color?
- Who will design the layout of our sign?

Sign Information
- Where will we get our information?
- What information credits or source listings do we need to give, or are there copyright issues to consider?
- How will we identify what notable features, topics, places etc. should be featured by a sign?
- Are there local organizations or groups that could help?
- What text do we want to include?

Sign Installation
- Who will install our signs?
- Are there any regulations we need to consider, such as road right of ways, etc.?
- Where will we install the signs?
- What will the sign be affixed to (existing wall, new post, etc.)?
- Is a frame needed?
- Will drivers have room to park if they pull in near our sign, will walkers be able to see the sign from the trail, etc.?
- How much traffic do we expect the sign to receive?
- Who is responsible for maintenance after the sign is installed?

Printing
- What company will we use to print the sign?
- What file format do they need the sign to be in?
- Of what material does our sign need to be composed?
- How long do we expect our sign to last or be used?
- Do we anticipate vandalism?