The objective is to create a master plan to generate public interest and funding to promote future park development. Gibson County Park Board will receive 200 total acres of land from Richard and Gwen Hopkins. This land will be converted from agricultural use to a community park.

Statement of the Problem:

The Hopkins Family Park Master Plan

Background:

- Land has been in the Hopkins’ family since 1865
- Family will no longer be farming after this generation
- Hopes to leave a legacy for generations to come, encourage outdoor activities, and foster family engagements
- University of Evansville has designed for 40 of the 200 acres
- Additional 160 acres have been designed by Purdue’s team through a master plan

Alternative Solutions & Solution Evaluation:

- Flowchart from Prophetstown State Park was mimicked to guide the master plan creation
- This process was completed from August 2015 to April 2016
- Conducted county survey to collect desired amenities
- Utilized Facebook page, county newspaper, and flyers

Table 1. Parcel evaluation, decision matrix

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Location</th>
<th>Importance</th>
<th>Value</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1</td>
<td>High</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>P2</td>
<td>2</td>
<td>Medium</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>P3</td>
<td>3</td>
<td>Low</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>P4</td>
<td>4</td>
<td>None</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 2. Amenity evaluation, decision matrix

<table>
<thead>
<tr>
<th>Amenity</th>
<th>Importance</th>
<th>Value</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees</td>
<td>High</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Picnic Areas</td>
<td>Medium</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Restrooms</td>
<td>Low</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Trails</td>
<td>Low</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Constraints:

There were several constraints to the design that encouraged the use of iteration, engineering skills, and use of outside resources:

- Limited funding for establishing park
- Distance between Purdue University and site location
- Integration of designs with another team
- Implementation of community desires and visitor desires

Global/Societal Impact & Sustainability:

- Encourages physical activity to promote healthier lifestyles
- Fosters community engagement and unity
- Creates opportunities for jobs through tourism
- Teaches the importance of environmental stewardship
- Introduces wetlands, prairies, and forested areas
- Stores and filters runoff
- Removes urban and agricultural pollutants
- Increases carbon mitigation to reduce greenhouse gas emissions

Final Design:

- Final design was based on GIS data including: watershed delineation, digital elevation models, soil types, frequent flooding areas, slopes, oil and gas pipelines, electric power facilities and powerlines, LIDAR elevation data, topographic maps, wetlands, streams, land cover, and land use
- Master plan is a 50 page document synthesizing this data to best determine the placement of park amenities
- Key amenities
  - Fifty native trees of Indiana
  - Splash pad and playscapes
  - Restrooms and shelterhouses
  - Camping
  - 5 miles of trails
  - Sports fields
  - Wetlands
  - Picnic areas

Sponsor:
Gibson County Park Board

Technical Advisor:
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Amanda Montgomery

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Dr. Bernie Engel

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