
Determination of Special Exception
Executive Committee

August 31, 2017

BZA-1957 ROGERS GROUP, INC.:

Petitioner is seeking a special exception to permit a mining operation (SIC 14) in the A and Flood Plain zones. Mining would be active for 50-60 years; the proposed hours of operation are Monday through Friday 6:00am to 6:00pm with occasional Saturdays and Sundays and sometimes up to 24 hours per day. The proposed hours of operation for blasting are normally between 10AM and 2PM once every week and sometimes twice a week. The 524 acre property is located along the Wabash River, just northeast of the unincorporated town of Americus at 8032 Old State Road 25 North in Washington 3 & 10(N½ & W ½)24-3. (UZO 3-2)

BACKGROUND:

In any BZA action, the Board must make findings of facts that support its decision based on its staff's report. Aiding staff's opinion and recommendation is the determination whether a special exception would or would not substantially adversely affect the community's *Comprehensive Plan*. This determination is made by the Executive Committee of the Area Plan Commission, and is generally procedural. Special exception requests that are filed are vetted by staff and typically there are no questions. In this pending action, however, given the prolonged impact (proposed 50-60 years of active mining); sensitive environmental issues (in the flood plain of the Wabash River as well as concern regarding wildlife and habitats); disturbance of a known archaeologically and historically significant river valley that has supported human civilization for thousands of years; and the potentially disruptive nature of the request (blasting, extraction and crushing) to the largely residential and agricultural surrounding area, staff was prompted to closely evaluate this request.

The adopted *Comprehensive Plan* uses two methods of ensuring the identification of superior and prime farmland:

1. The decision-making model was formulated specifically to discourage developmental potential in highly productive farmland; and
2. The quarter- interval scoring system was used to further distinguish farmland that is best from farmland that is very good.

Eight factors most likely to influence land use were developed through a series of pretests of efficiency and accuracy of the decision-making model. These factors take into account issues of resource management, environmental protection and land use economics:

1. Soil productivity: the relative ability of a given soil type to yield crops;
2. Soil limitations: the relative ability of a given soil type to withstand various kinds of development;
3. Tendency to flood (or Floodplain environments): whether or not a given soil type is regularly subject to ponding or stream or river flooding;
4. Forestation: a simple reference to the presence or absence of significant numbers of trees;
5. Sanitary sewer availability: relative access to a trunk line known to have excess capacity;
6. Accessibility: a measure of proximity to major and minor roadways and their intersections;
7. Railroad and airport proximity: a distance measure to these major transportation facilities and their area of influence; and
8. Current and expected use: a generalized indication of how land is being used in the present, including all major development projects currently in the drawing-board stage or for which some form of official approval has been granted.

A value from +2 to -1 was assigned to each specific interaction between factor and potential use category (Residential, Agricultural, Industrial, Commercial and Open Space). The range of values corresponds to the range of interactions as follows:

+2 = highly desirable
+1 = more than acceptable
0 = neutral or not applicable or just acceptable, and
-1 = usually not acceptable

The interaction between soil productivity and potential land use was shaped by the adopted goal of the Plan to preserve prime agricultural farm land. Thus, high productivity greatly enhances Agricultural land use potential (+2), while the conversion of such land is discouraged (-1). Using the Plan's Land Use Potential Decision-Making Model, the site scored the maximum score of 4 points for both open space and agricultural uses but only scored a -1 out of a possible 12 for its potential as an industrial site.

The *Comprehensive Plan's* Land Use Plan is clear when it comes to introducing industrial uses in rural, agricultural areas. Under "Environmental Considerations" (*Comprehensive Plan*, Volume 2, Land Use Plan, Introduction), Goal I, Objectives 1 and 3: "protect sensitive environmental areas" and preserve prime agricultural lands". The presence of the Wabash River's floodplain on this property already speaks to environmental sensitivity relative to Objective 1. Concerning Objective 3, two contributing factors in determining whether certain agricultural land is both prime and worth preserving are the productivity of the soils (and their associated limitations) and an area's tendency to flood due to being a floodplain.

Floodplains are lands bordering rivers and streams that normally are dry but are covered with water during floods. Buildings or other structures placed in floodplains can be damaged by floods. They also can change the pattern of water flow and increase flooding and flood damage on adjacent property by blocking the flow of water and increasing the width, depth, or velocity of flood waters. Floodplains are some of the most valuable ecosystems on earth. Typically located next to rivers, streams and coasts, they are nature's best defense against destructive floods. Floodplains provide essential habitat for wildlife, improve water quality, and protect human communities.

A key component of floodplains is maintaining and protecting the valuable services that floodplains provide people and nature. When inundated with water, floodplains act as natural filters, removing excess sediment and nutrients, which can degrade water quality and increase treatment costs. Degradation of water quality due to the loss of floodplain habitat can be noted along smaller rivers and at-scale at large river basins. At the largest of scales are hypoxic or "Dead" zones, which are areas in bays or gulfs where little life exists due to excess nutrients carried by rivers.

Outside of a river's main channel, water flow is slowed and has more time to seep into the ground where it can replenish underground water sources (or aquifers), which serve as a primary source of water for many communities and which are critical for irrigation that grows much of the world's crops. Floodplains are home to some of the most biologically rich habitats on Earth. They provide spawning grounds for fish and critical areas of rest and foraging for migrating waterfowl and birds. Many outdoor recreational activities – like fishing, hunting, camping, hiking, wildlife watching and boating – are made possible by or greatly enhanced by the natural processes of rivers and healthy floodplains. Combined, these recreational activities account for billions of dollars in economic activity in the United States and are important sources of income for most nations around the globe.

Clearly, the main factors contributing to this site's future land use potential were being in a floodplain (and having a high tendency to flood) and its extremely high soil productivity according to the U.S. Department of Agriculture, Soil Conservation Service's Soil Survey. As a result of this scoring, the site was classified as a "Select Agricultural Production" area in the Phased Land Use Plan.

Another important component of the *Comprehensive Plan* is the "Multi-Hazard Mitigation Plan". This section of the *Comprehensive Plan* specifically calls for the prohibition of structures in hazard areas such as floodplains. The three mitigation goals, found in Section 5.1 of the plan, include:

Prevention

- Manage the development of land and construction of buildings to reduce the impact of hazards on people and property; and

- Continue to prohibit construction of homes and other structures in known hazard areas, such as the floodplain.

Natural Resource Protection

- Continue to preserve and maintain the function of existing natural resources to reduce the impact of hazards to people and property.

Structural Control Projects

- Prohibit structural control projects and remove existing structures in the floodplain so that it can function as naturally as possible.

Floodplain areas (or areas with a high tendency to flood) that are allowed to develop in a non-agricultural manner pose a threat to life and property and place higher risks on emergency responders. By discouraging the industrial development of an area inside a floodplain, we believe the very highest ideals of the *Comprehensive Plan* and Unified Zoning Ordinance, relative to securing public safety and promoting the general welfare, are being respected.

RECOMMENDATION:

Given the goals of the *Comprehensive Plan*, the proposed future for this property and its low probability as an industrial site, staff has determined that this request **WILL** substantially adversely affect the adopted *Comprehensive Plan for Tippecanoe County*.