Elkhart County proposal

Setbacks	Road	120 ft. from centerline if major 75 ft. from centerline if county road 50 ft. from centerline if named
	Residence	200 ft. between fence and nonparticipating residential building
	Property line	50 ft. between fence and nonparticipating property line

Public comment

Solar farms are ugly, don't want my home to be surrounded on 3 sides

Setback between fence and nonparticipating property line should be at least 500 ft.

Agree with the 2,000 ft. between fence and a nonparticipating residential building suggested at a previous meeting
Solar installations are not like other buildings, like a 500-by-500 manufacturing building
These are hundreds if not thousands of acres
Last year's proposed installation was 850 acres, a Noble County proposal is over 3,000 acres, the installation in Starke County is 13,000 acres
A Kentucky study shows that neighboring property values decline 7 to 30 percent, in spite of 300 ft. or 500 ft. setbacks, so it is more than a matter of aesthetics

A solar farm is quiet and innocuous, not obtrusive or noxious
Some don't like the way they look but there is no reason to make the setback that far
Numbers can be used to kill the economic viability of solar, enable solar by making the numbers small enough

No, solar farms are innocuous until you are personally affected by them and your own property value is on the line

Approximately 6 attendees agreed with the 2,000 ft. suggestion

Solar farms take valuable farm property and make it idle, but farming would at least be possible within a 2,000 ft. setback

A 2,000 ft. setback on 640 acres leaves only 9 usable acres, with about 630 acres wasted

The current proposed setbacks make sense, it’s hog farms and other similar uses that impact property values, not solar installations

A 2,000 ft. setback area is still part of the area controlled by the solar operator, it will not be farmed and will be wasted space

No, the landowner can reach an agreement with the operator that would allow farming within the setback

1,000 acres of metal and equipment will cause a 30 percent decrease in property values that no one is interested in

Elkhart County proposal

Height	25 ft. maximum panel height

Public comment

25 ft. is way too high, 15 ft. at most

How high are the solar installations above the Baugo school parking areas?
15 ft., so not higher than 25 ft.

15 ft. height does not prohibit use for covered parking

General consensus of 15 ft. maximum height for a commercial installation

Elkhart County proposal

Buffering	Class III, strictest in zoning ordinance, adjacent to parcels zoned R or A

Public comment

Are the various berms seen throughout the county generally required? Required if the use that has to be screened is across from a residence? Was the CR 40 berm a requirement?
The CR 40 berm may have been a city offering, the result of an agreement between the city and neighbors

RV transport lots usually have berms, are those required or optional?
They are an option the developer can choose

Berms make sense when commercial solar will be across from a residential use

Berms should extend to screen a solar installation from all bordering property, not only residential property, not only right across from a house

Prefer trees and shrubs to berms, more natural
Grass is not the best planting even though people like it, trees don't need the mowing and maintenance that grass needs

An ordinance should prohibit the planting of invasives, which propagate into neighboring farms where farmers have to fight them off

State law already prohibits planting of invasives

An ordinance should require the planting of natives, which are lower maintenance, are better for the county, and provide habitat for species in this area

Within 15 years landlocked projects become wild, land not already covered with habitat will have to be maintained, preferably by mowing, to keep invasives out

Elkhart County proposal

Fencing	Entire perimeter Solar side of buffering required 6 ft. minimum height

Public comment

Chain-link or similar required?
Not determined yet

Barbed wire allowed?
Several opposed to barbed wire

Do not allow barbed wire, avoid a prison look, and make 6 ft. the maximum ht., not the minimum ht.
Additional supporters of 6 ft. maximum ht.

Do developers ever want barbed wire?
The planning staff has not run into developers wanting barbed wire

Developers may like barbed wire but could also do without it

Can deer jump 6 ft.?

The acreage of last year's proposal had a wooded area within it, and the fence would have made the wooded area inaccessible to wildlife
The developer did little to respond to this concern

How do you allow access to wildlife but deny it to humans?
That is a zoning challenge, we want wildlife access

If a solar development is all fenced in, where do the animals go, how do they pass from field to field?

Elkhart County proposal

Noise	Not audible from a nonparticipating parcel zoned R or A

Public comment

If someone does hear something from a nonparticipating parcel, how is that addressed?
The planning department receives complaints
Common isolated noise issues, like music and parties, would have to be addressed by the sheriff
Permanent noise issues would be addressed through zoning

Impose a dB limit

Trees and barriers will help with noise

The limit should be 70 dB

Where is noise level measured?
At a property line, not all the way back to a house

Elkhart County proposal

Lighting	Downcast

Public comment

The current proposal does not require lighting, but if lighting is used, it must be downcast with no spillover onto adjoining properties

Is light reflection by panels covered in this category?

Consider prohibiting lighting altogether

An AEP facility in St. Joseph County has just one entrance light and no others

Elkhart County proposal

Signage	1 sign only Operator name and contact info

Public comment

Limit to 1 lighted sign?
Lighted will probably not be allowed

Are we talking about just a small sign, the type that is at the end of a fence?
Yes

Is no maximum size proposed?
No maximum size is suggested right now
The current maximum size for a freestanding sign in the A-1 zone is 8 sq. ft., but for this ordinance a reasonable maximum to consider is 32 sq. ft. per sign

Elkhart County proposal

Agreements	Removal (decommissioning) after end of project or 12 months' abandonment Bond Site restoration Road impact Infrastructure maintenance and repairs

Public comment

There should be a road impact agreement

Is the aggregate used to build roads considered impermeable under the stormwater partnership agreement?
If the roads are impermeable, they probably fall under the stormwater partnership fee schedule
Your rate is $225 per acre for a commercial property, and these solar properties are sometimes 100s of acres

Unknown, but we have asked the stormwater board attorney if commercial solar developments would be taxed for ERUs
It is an open question to work on

Bonds will fall under the Board of County Commissioners

Bonds should be reviewed every 5 years to make sure the cost of decommissioning doesn't outpace the bond and make sure the funds are there
Periodic increases should be done if needed, because costs change and there is the possibility of inadequate funds
We do not want decommissioning to cost more than the bond

5-year reviews of bonds do appear in other Indiana counties' solar ordinances

To avoid allowing equipment to end up in a landfill, we should give the landfill the right of refusal and hope that recycling will become available within the next 30 years

When companies say they recycle panels, it sounds like they tear them apart and dispose of the heavy metals
But some companies ship them to 3rd-world nations
Giving someone else our unrecyclables puts a burden on those 3rd-world nations

Other public comment

Some fire service personnel are concerned about battery fires onsite

Excerpts from a Benton fire department statement:
The Benton fire department is not able to handle emergencies at a commercial solar development
The department is 100 percent volunteer and 22 of 30 positions are filled
It was not able to respond to all calls in 2021
The average time of employment is 9.8 years
The department may not have any responders at all at the end of a 30-year solar lifespan
Solar installations contain hazardous materials, fires can release dangerous gases, and the water runoff from extinguishing solar-installation fires is toxic
The developments contain semi-trailer-size batteries
Batteries are made of different materials and carry an explosion risk, and battery fires require special extinguishing foam
Traditional firefighting tactics in solar developments are not applicable
There is risk of electric shock and delays in response while waiting for specialists to arrive
Access is a concern because of the size of the facilities
The average weight of a fire truck is 20 to 30 tons, and access roads may not be able to handle that much weight
Access roads may be affected by rain
Grass and other vegetative cover may result in more grass fire calls than the department already gets during the fall
The USDOT emergency response guide contains information about specific hazardous materials and how to evacuate in cases of fires involving specific materials like cadmium
If materials like that are involved, the recommended evacuation radius is a half mile
If large-scale solar is allowed,
Require an employee onsite 24/7 to disconnect power and make sure roads are accessible and who has ready contact with a hazmat team
Require that specialized hazmat equipment already be onsite and ready
Require yearly training for surrounding fire departments including a facility tour
Require that inside access roads be built for safe travel of fire apparatus
Require that battery storage and substations be at least 2,000 ft. from any abutting property
Require that expenses incurred beyond normal firefighting activity be reimbursed by the operator
Solar installations are not a source of pollution-free green energy but multiacre utilities that pose hazards

There are 7 superfund sites in Elkhart County already
Fires create problems with clean-up, the solar company needs to have its own fire responders to address emergencies quickly
Disconnected panels are still hot, still producing
Benton fire responders are often called into other townships and cities already
Benton can't afford to train its personnel for additional hazard types, someone else should be responsible for those

Solar installations should be considered no different from Forest River facilities, which have materials like fiberglass, glue, and other chemicals
There was a Forest River fire recently that threatened surrounding subdivisions, was that fire considered during last year's solar project?
Commercial solar risks are no different from factory risks

Batteries could be located in one place only, and it could be required that the road to them be paved
The greatest potential for fire is at the batteries

Concrete containment for batteries could be required

The small buildings used by phone companies are battery containment facilities

Are fire department personnel trained to handle fires for small solar facilities?

The solar company should pay for the additional training, equipment, and certification needed for even small solar-site fires

Benton Township doesn't even have the personnel to train, if training were available

Batteries should be a minimum of 2,000 ft. from any residence

Is impact on drainage being considered?
There is a 75 ft. right-of-way on either side of a ditch, and existing mutual drains (12 in. tile) that go through a solar facility should have the same right-of-way requirement

We don’t want stakes driven through these tiles

Battery units are usually self-contained with their own built-in fire suppression systems
They shut themselves off
Consider requiring not only self-containment but built-in fire suppression for batteries

Solar companies should pay for the testing of all wells within a 1 mi. radius of a development for contamination from batteries and chemicals
This would establish a preconstruction baseline
If there is the possibility of an issue, retesting can be done
The Board of County Commissioners can choose who does the testing
Then, if there is contamination, the company would have to provide clean water
There is already groundwater contamination and well monitoring in Goshen

An ordinance is not for the county, it should be for the people around a development
An ordinance for a development of hundreds or thousands of acres needs to look dramatically different from one for a smaller development

Require preconstruction soil samples showing nutrient content, then require retesting at the end of the project for comparison

Test well water initially then test annually, do not wait until there is an emergency

The primary chemical concern is zinc leaching from galvanized materials

Cyanide also leaches from galvanized materials

Require soil samples annually, soil samples will show levels of metals if they are leaching into the groundwater

Any new project should require notification of owners of all property within a 5 mi. radius of the development area

During last year’s project, residents were told that all power was going to Pennsylvania and New York
Why destroy our land to produce power for another state?

Any new solar project should be able to power 19,000 Elkhart County homes

A solar company should have ownership of waste and ownership of emergency response

Will the planning department look at solar installations differently from other commercial or industrial projects?
The department is creating new standards using guidance from the model solar ordinance and other counties' solar ordinances, and some of the proposed standards, like setbacks, are more stringent than those of other counties

Solar development should be given a unique label, it should not be called typical industrial development