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

How do these compare with setbacks for normal manufacturing uses?

If setbacks for primary and accessory uses are already established, why make solar setbacks more restrictive?

1 farm bureau representative:

2,000 ft. between fence and a nonparticipating residence

500 ft. between fence and a nonparticipating property line

That is too restrictive for the property owner / operator

All other setbacks are less, for instance the setback between a manufacturing building and the property line of an adjacent residential use

How does 2,000 ft. compare with 1 mile?

A half mile is excessive, how many buildings might already be within that half mile?

A buyer of a house near an existing manufacturing zone has different expectations from a buyer of a house near a large agricultural zone

The second buyer assumes there will be no manufacturing uses after they buy

Elkhart County rezones from A to M frequently How how do these solar setbacks compare with those of nearby counties?

A 2,000 ft. setback is government overreach and opens the county to an assertion by courts of doing exclusionary zoning

What are the setbacks for power company transformer stations and substations? If they are not "structures," then no setbacks apply

Should include a berm requirement, but the berm does not necessarily have to be fully encompassing

Comment through DPS email:

About the farm bureau's proposed 2,000 ft. setbacks, here's the math

If someone owned a full square mile, 640 acres, that would leave a 1,280 × 1,280 square in the center, which equals 37.6 acres, or about 6% of the land, left to build panels on

I think there a lot of things out there more extreme than a solar array

The fact is, the companies wanting to build these 10-acre-plus structures want to be close to major transmission lines, which severely limits where they will be built

While I agree that there are places in the US with more unproductive farmland that might be better suited for such projects, those places are also not likely to have transmission lines running across them either An overlay zone over transmission lines might be a way to manage the larger arrays

Height

25 ft. maximum panel height

Public comment

Most researched counties have a 15 ft. maximum

Is parking under the arrays possible?

Are concurrent ag uses possible?

Buffering

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

Public comment

Can the wall-landscape buffer be in the required setback or does it have to be out of it? Should a berm be required in front of everything (first thing seen from an adjacent property) but not necessarily on all sides?

1 opponent read from the comprehensive plan:

"Protect from conflicting land uses, rural character and vistas should be protected, impose the tighter standards of special use permits, impose the stringent standards of use variances, human activity takes away from the experience of being in the country"

The commercial solar installation in St. Joseph County just off the toll road is at many different elevations, as seen from the toll road, which means a berm could be effective when viewing an installation from one location but not as effective from another

Is a berm being suggested because trees aren't expected to survive? No, it's being suggested as a barrier that trees can't provide

How is buffer area maintenance enforced?

Rank vegetation is not covered by the zoning ordinance, it's in a separate ordinance; the zoning ordinance does say buffers must be maintained; there are limited resources for enforcement but we do respond to complaints and most companies respond well

Is the purpose of a berm for noise?
If it isn't for noise, vegetation can be used effectively as a visual barrier instead of a berm

Can planting of invasive species be prohibited?

There are state standards governing avoidance of invasives

Fencing

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

Public comment

Concern about barbed wire?

Whitetail deer can jump 8 to 9 ft.

Concern about wildlife getting in but not being able to get back out

Concern about movement of wildlife, create wildlife corridors, do not section off the possibility of movement

Prefer not to see barbed wire, unaesthetic

What are the maintenance standards for fencing? Some unmaintained fences in the county look terrible

Will fencing type be in another ordinance or this one, and what type will it be? Chain-link, plastic?

Require wildlife corridors only at a certain development size threshold? Not required if less than a certain number of acres?

Wildlife can cause \$5,000 of agricultural production damage per year Deer will damage plastic fencing

We don't want deer traversing a solar development, it's dangerous for them and other wild grazing animals, they chew on cables

Businesses will do what they need to do to protect their investments

What is the purpose of fencing? Safety, security, keeping people out, added visual barrier (with slats)

Could a neighbor's existing privacy fence exempt a solar development berm, buffer, or additional fence for the length of the existing privacy fence?

Noise

Not audible from a nonparticipating parcel zoned R or A

Public comment

The current proposal is that noise be kept onsite Planning & Development will not measure, it's the Sheriff

"Not audible" sounds vague

Humming and buzzing may only be audible on the site

The county does have a dB standard but it is for residential areas only, not business areas

Is it possible to add the Sheriff's standard to the proposed solar ordinance?

The noise standard does not apply to ag machinery, ag machinery is exempt

Is noise expected in a commercial solar installation? Minimal but some

Would the substation be the main noise source? Equipment hums more as it ages

Lighting

Downcast

Public comment

Should the ordinance specify that lighting is not actually required? Yes, and if the operator is including lighting, downcast will be required

Signage

1 sign only Operator name and contact info

Public comment

Should be nonilluminated

Should have a size maximum

Can we assume there will only be 1 entrance? If not, require 1 sign at every entrance?

Should we allow an LED sign that displays production, how much the development is giving back, and other things?

What are the sign requirements for other utilities? Keep out, owner name, emergency contact?

There should be a safety sign at every entrance, but OSHA may already require that

There should be a safety sign at the substation, in addition to the entrances

1 sign might not be enough for emergency contact Consider requiring 1 emergency-contact sign at every certain number of ft. along a road

For a single solar development that jumps across roads: How does the fencing requirement work? For tier-system acreage, is it total acreage only?

Agreements

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

Public comment

Bonding will be with the Board of County Commissioners Road impact will be with the highway department Maintenance and repairs requires further investigation

How will site restoration be addressed?

There is at least 1 Indiana county that says 6 months' disuse equals abandonment (not 12)

At what point in the process are these agreements reached?

At the time of building permits or just before, but after the overlay is established

Some control of these will be with the county council, not the commissioners

Require recycling at the end of the project rather than landfilling? Should add that the landfill has the right to refuse the material

If it's unwise to landfill here, it's unwise to landfill anywhere

Removal of equipment and what happens to the equipment does have to be covered, even if it's not by the zoning ordinance as a land use matter

80 to 90 percent of solar equipment is recyclable, little goes to waste

The county doesn't require other business types to recycle at the end of a project, does it? Are other businesses required to recycle or demonstrate specific handling of hazardous waste? That is done by the state, not locally

Emergency management:

Project owners should be responsible for emergency management, but this might fall under maintenance and repair

Does the monitoring of groundwater fall under the Board of County Commissioners?

Recommendation through DPS email:

- 1) For any large-scale solar installations greater than or equal to 10 acres in size, the owner/operator of the project bears the cost of <u>recycling</u> all solar panel and battery waste from the site for the duration of the project Landfilling of this waste should be prohibited
- 2) The current project owner is responsible for any onsite emergency response to the site of the solar installation These responsibilities include any regulatory notifications, emergency response coordination, training, clean-up, remediation, and penalties
- If onsite personnel are not available 24/7/365, a contract with a professional emergency response service must be in place for rapid emergency response for the duration of the project until decommissioned and removed

Other public comment

Should require testing and monitoring of wells in the area and in the site Should require testing for leaching and other disturbance, then the operator would be responsible

Is this related to MS4 (stormwater program management)?

Do not permit commercial solar on prime ag ground Do permit commercial solar according to the 10-acre tier level on marginal ag ground

Excerpts from a report that an opponent read from:
Projects may be sold to public utilities, which may be tax exempt
Stated economic benefit is misleading
Prime farm ground is already producing, if taken out of production, it's gone for good
Indiana is the only state whose farm ground is over 50 percent prime
Agricultural activities contribute \$42 billion (per year?) to Indiana's economy
In the US, 31 million acres of land per year is converted from ag use to another use
There is a disproportionate amount of development on ag land versus other kinds of land
The best land for intensive food production is now less than 17 percent of total land in the continental US
After a solar project, Madison County lost \$82 million in revenue, instead of gaining a promised \$24 million

We must concentrate on what is good for Elkhart County
We must put something in place so we keep control, not the state
It is recommended that we find common ground, these solar developments are coming
Families still own the land, and they have the right to use the land as they wish

Ag land is desirable in Elkhart County and surrounding counties
Farmers write checks every year that benefit the local economy
Ag land productivity is perennial
Elkhart County is in the top 3 counties in Indiana for agricultural sales every year
Don't reduce that by encouraging solar farms

Solar-based electricity is better than ethanol-based Do not impose stricter regulations just on the basis of whims

Solar production on ag land is just a different type of production: the production of renewable energy Some solar farms are including pollinator species and are thus "farming" biodiverse vegetation

Although 30 years out of agricultural production is a long time, other competitors for the same property could take the land out of production forever if it is used for other purposes

If the land is out of production for 30 years, but there are native plantings during that time, we are giving the land a restorative sabbatical

A 30-year commitment is much less of a commitment than some other long-term reductions of production A solar installation is very different from turning land over permanently to a residential subdivision or a manufacturing building, which is clearly forever

There will be a decommissioning plan, so projects will have a definite end

Nothing grows in the shade

How do we keep invasives out of an area intended for pollinators?

Can animals graze under arrays practically?

Private mutual drains have to be protected during construction

For a commercial solar petition, make sure normal notification of neighboring property owners is done

The county attorney has said that property value guarantees absolutely should not be required, they open the county to too much liability