



Destination Lighting

Best Practices

Local Road Safety Workshops
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Goal of a Destination Light

Shine like a beacon to identify an upcoming intersection



LEDs have advantages

Energy providers switching over to LED luminaires to take advantage of:

- Energy savings
- Longer life
- Reduced maintenance

ENERGY SAVINGS

A 1-to-1 retrofit saves
50-70% per fixture.



LEDs produce 2-3x more
light per watt than HIDs.



LEDs are over 50%
more energy-efficient.



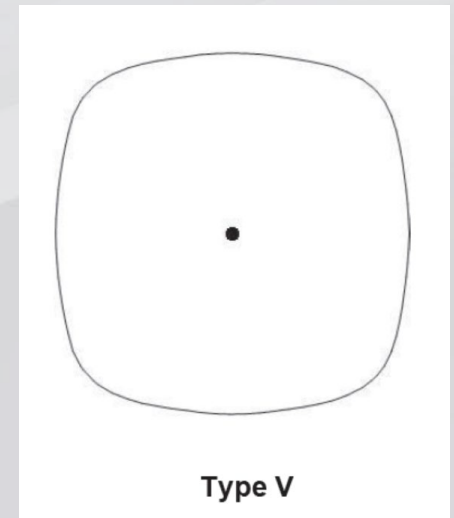
LEDs as Destination Lighting

LEDs very directional – not visible from far away



Destination Lighting Specifications

- Developed specifications for LED lights that produce a “glowing ball” effect
 - Drop lens to disperse light
 - Type V distribution pattern
 - Minimum output 5300 lumens
 - Color temperature similar to HPS
- Specs can be shared with energy providers



Destination Lighting Specifications

- Three preferred luminaires that meet specs:
 - GE, AEL, Eaton
- All commercially available in Iowa



What about solar?



- No off-the-shelf option meeting specs
- Potential drawbacks:
 - Additional maintenance
 - Clean panels once/year
 - Battery bank / connections
 - Battery bank – sized to power all night
 - Cost
- Still consider where necessary

Destination Lighting Best Practices

- Poles
 - Wood most common
 - Use crashworthy pole/base if within clear zone
- Mounting
 - Recommended MH = 25-35 feet
 - Use 4-8 foot mast arm
 - Aim mast arm toward center of intersection
 - Flexible, depends on local standards

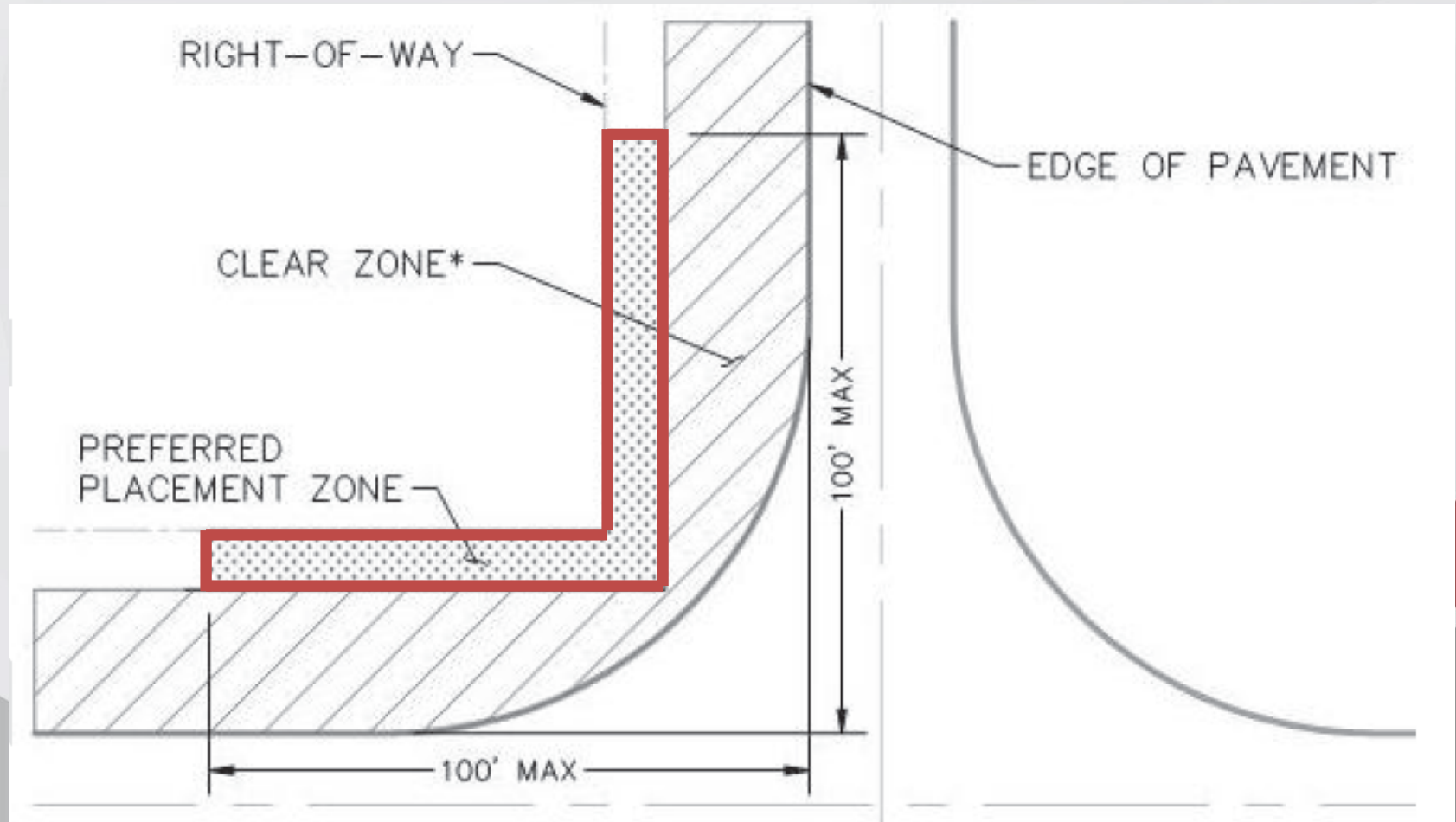
Destination Lighting Best Practices

- Use existing poles whenever possible
 - If within approx. 100 feet of intersection
 - Saves cost of new pole
 - One less fixed object



Destination Lighting Best Practices

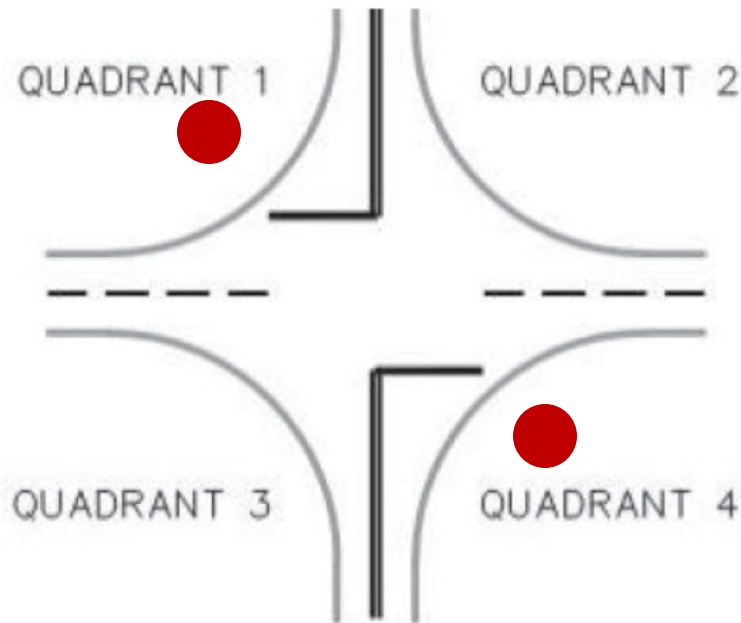
Place new poles within “Preferred Placement Zone”



Destination Lighting Best Practices

Preferred quadrant of intersection

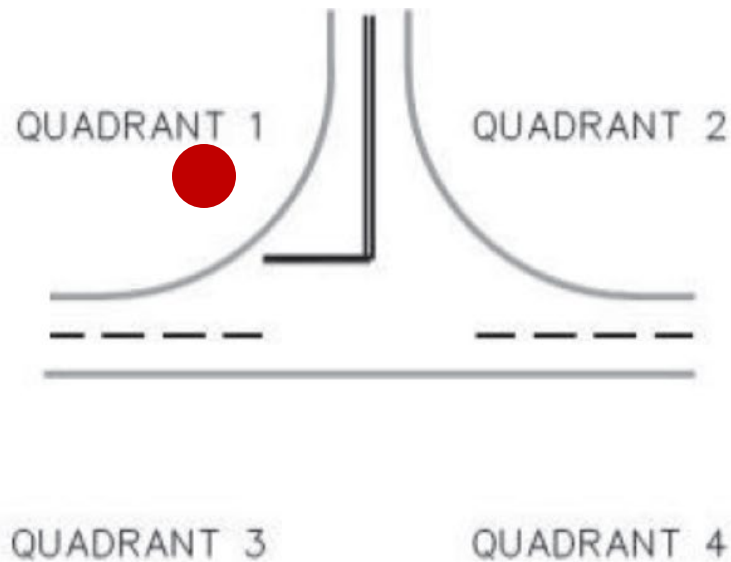
4-LEGGED STOP CONTROL ON MINOR
APPROACH



Destination Lighting Best Practices

Preferred quadrant of intersection

3-LEGGED INTERSECTION



Project Status/Future

- Project has remaining funds
- Seeking no-cost time extension
- Potential work:
 - Draft county policy for installation locations
 - Recommend changes to current DOT policy
 - Other ideas?

THANK YOU!!!

QUESTIONS?