

# **SOLAR TEXT AMENDMENT**

## **7:00 PM PUBLIC HEARING**

to consider a proposed text amendment to Chapter 50 of the 2019 Detroit City Code, Zoning, altering the permissibility of solar generation stations providing exemption language, establishing an overlay and creating standards to regulate this use

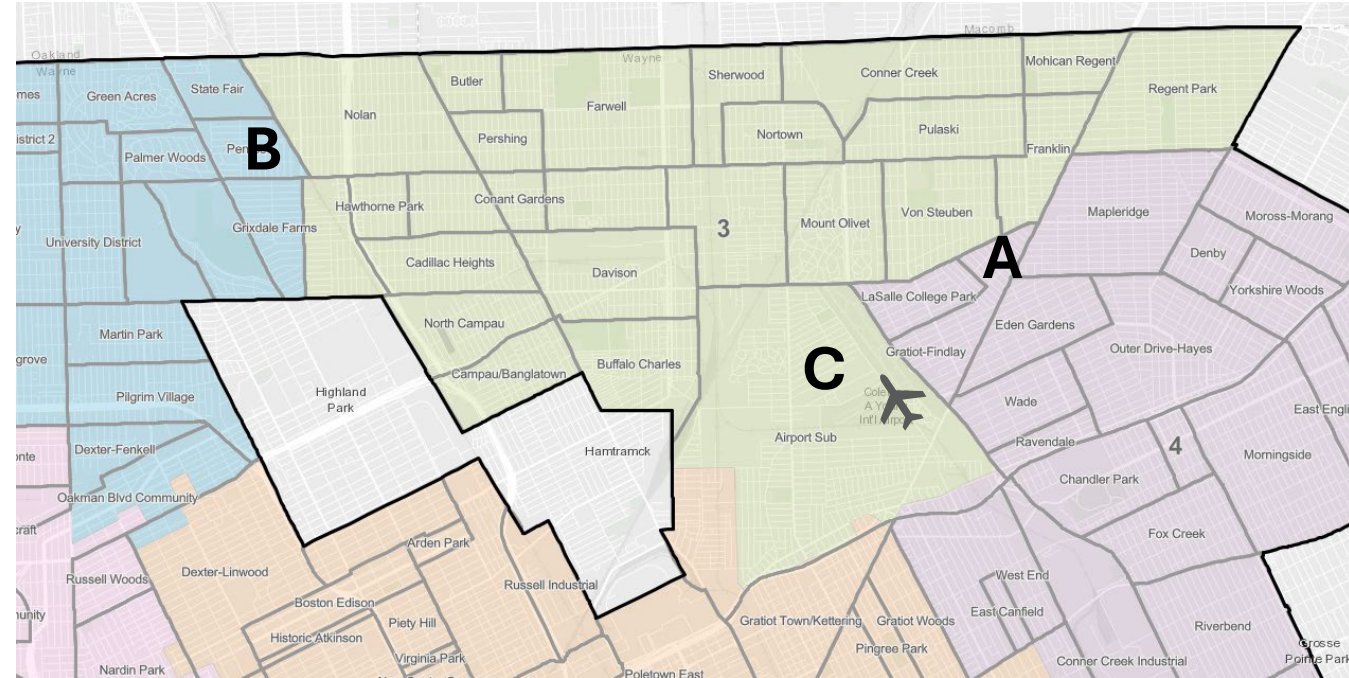
# Presentation Outline

1. Introduction
2. 2024 Solar Initiative Approvals & Maps (CPC)
3. Current ZO & O'Shea Solar Park
4. Policy Background & Addressing Zoning
5. Amd Part 1 – Solar Initiative
6. Amd Part 2 – Nonindustrial Districts & Overlay
7. Screening Standards & General Provisions (PDD)
8. Community Engagement (in-progress)

# 2024 “Solar Initiative” Approvals

July 30 Formal City Council approved:

1. Resolution of Necessity (ph. 1)
  - A. Gratiot-Findlay**
  - B. State Fair (Penrose)**
  - C. Van Dyke-Lynch (Airport Sub)**
2. Contract for DTE to provide solar energy
3. Contract for Lightstar Renewables
4. Solar Equity Fund (future)



Resolution of Necessity (public uses/purposes):

“WHEREAS, the City finds that the Solar Initiative is a governmental function”

**21. This Honorable Body hereby declares the Solar Initiative is a governmental function and essential service.**



# Current Zoning Ordinance & O'Shea

## 2016 Amendments

- Prior to 2016, ZO was silent on solar/wind
- Parallel amendments submitted:
  - Map rezoned former playfield to PR
  - Text added “Solar generation station” as a CU in PR, also permitted via PD
  - >1 ac., ground-mounted, Principal Use
- **Text amendment was specific to O'Shea and not intended to be comprehensive**
- **Staff report states the permissibility of facilities should be expanded in future**



Source: <https://graham.umich.edu/activity/17755>

# Policy Background

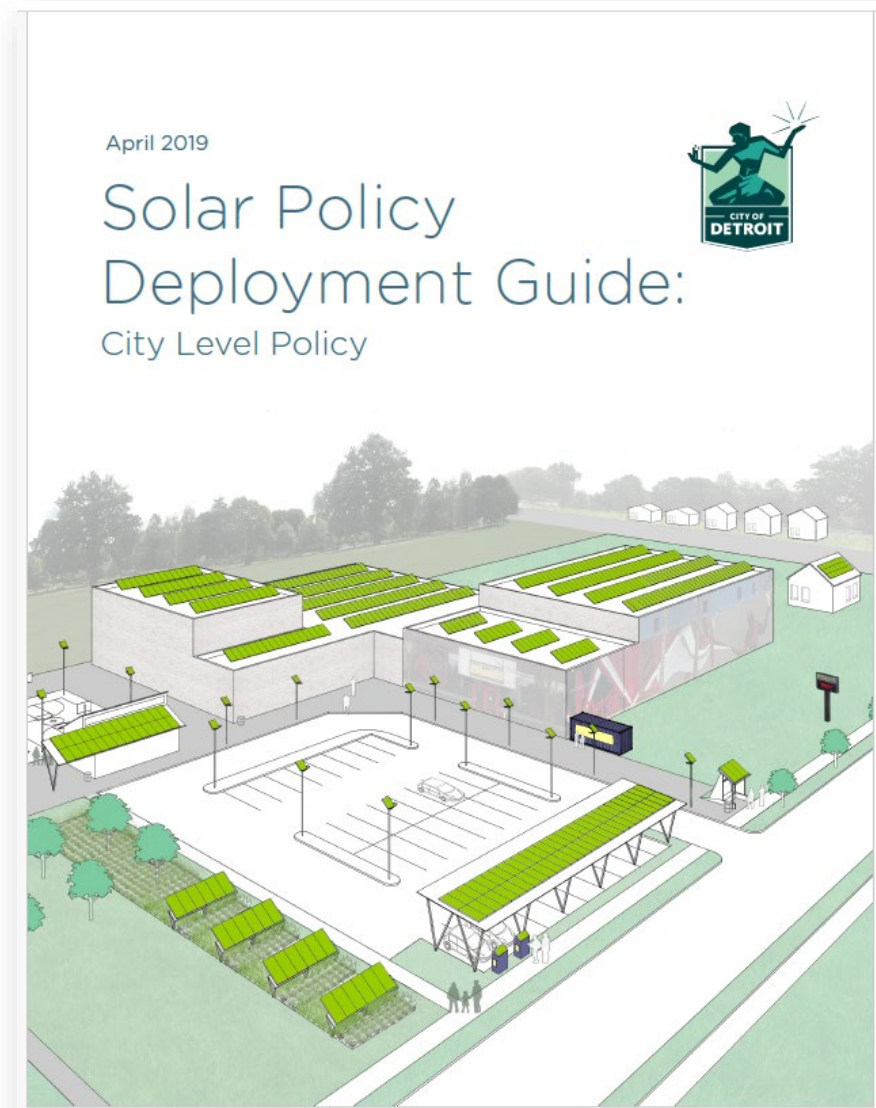
## 2019 City Solar Policy Deployment Guide

- Recommendation 2: Amend ZO to promote solar energy systems**
  - “Many cities allow in a variety of districts”
  - ZO should expressly permit when accessory

## Zone Detroit Drafts

- In-progress ZO update effort would expand renewable energy uses (variety of districts)

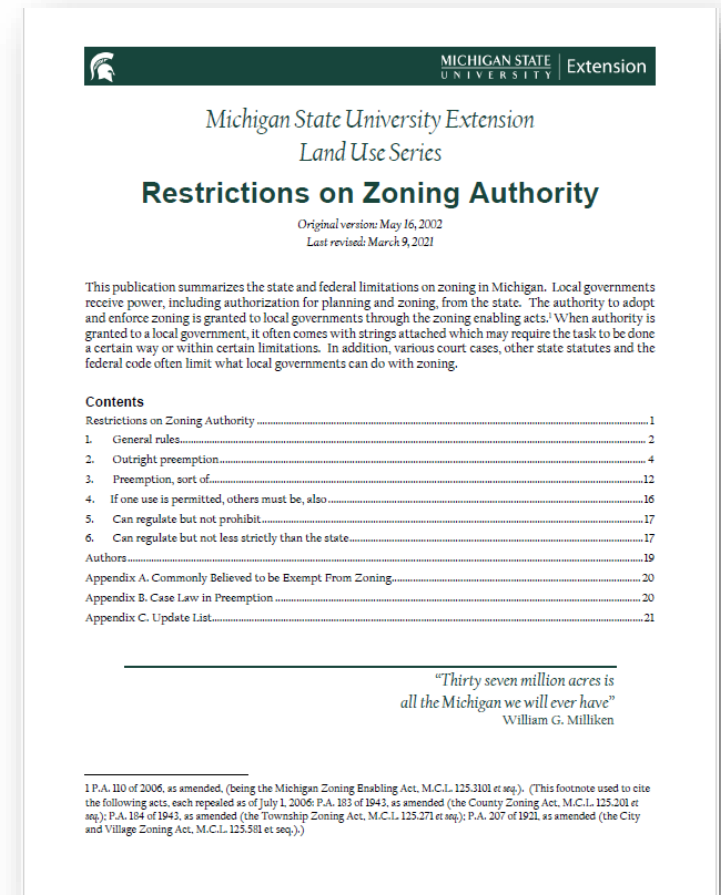
Use Category Specific Use	RESIDENTIAL								BUSINESS			MIXED USE				INDUSTRIAL				SPECIAL									
	R1	R1A	R1B	R2	R2A	R2B	R3	R4	R6	B2	B4	B6	MX0	MX1	MX2	MX5	I0	I2	I3	I4	CIV	PR	MKT	RVR	CAS	PC	P1		
General religious assembly																													
0-4,000 SF	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
4,001-50,000 SF	C	C	C	C	C	C	P	P	P	P	P	P	-	P	P	P	P	C	-	-	-	-	-	-	P	-	C	P	-
50,000+ SF	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Utility Service																													
Utilities, basic	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	-	P	-
Utilities, major	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-	-	C	-
Commercial solar																													
0-2 acres	-	-	P*	-	-	P*	P*	P*	P*	P*	P*	P*	-	-	-	-	P*	P*	P*	C*	P*	C*	-	C*	-	-	-	-	
2+ acres	-	-	P*	-	-	P*	C*	C*	C*	C*	C*	P*	-	-	-	-	P*	P*	P*	C*	C*	C*	-	-	-	-	-	-	
Commercial wind	-	-	P*	-	-	P*	C*	C*	C*	C*	C*	C*	-	-	-	-	P*	P*	P*	C*	-	-	-	-	-	-	-	-	
Electric or gas substation	-	-	-	-	-	-	-	-	C*	C*	C*	C*	C*	C*	C*	C*	P*	P*	P*	P*	P*	P*	C*	C*	-	-	-	-	



# Addressing the Solar Initiative in Zoning

The courts have recognized that a local government may expressly exempt certain government projects or functions from its zoning ordinance by writing the exemptions into the zoning ordinance. (MSUE Land Use Series; Restrictions on Zoning Authority)

- The Administration and Councilmember Benson have requested an amendment ratifying the exemption for city solar projects from the ZO
- Given City Council’s July approval that the project is a governmental function and an essential service
- **Part 1 of the proposed amendment**





# Pt. 1 Addressing the Solar Initiative

- CPC staff has provided draft exemption language within Article 1
- Intended to address the Solar Initiative and future solar stations with qualifications:
  1. Developed by or on behalf of the City
  2. Located on City or City agency owned land
  3. Approved by City Council resolution
- **Requiring adoption of a resolution ensures there is adequate City Council support**

8 **ARTICLE I. INTRODUCTORY PROVISIONS**

9 **Sec. 50-1-3. Applicability and jurisdiction.**

10 (a) The provisions of this chapter shall apply to all land within the City, including land owned

11 by local, County, state, or federal agencies, except where such land is determined to be

12 exempt from local zoning regulations.

13 (b) The development of solar generation stations by or on behalf of the City, located on land

14 owned by the City or a City agency, and approved by City Council through adoption of a

15 resolution, shall be considered an essential government function exempt from this chapter.

# Pt. 2 Amendment

For nonexempt solar stations:

- Councilmember Benson has also requested that a solar overlay district be drafted with new design standards for solar stations
- City Council members have also stated that they view solar stations as an industrial use
- The second part of the amendment (beyond Article I) seeks to address these to goals

Proposed development paths

**Industrial Districts:** By-right with Development Standards

**Nonindustrial Districts:** Overlay with Development Standards





# Pt. 2 Industrial Districts

- Remove Solar generation station as a Conditional Use in the PR District (structures in parks)
- Add Solar generation station as a By-right use in the M1 – M5 Industrial Districts
- Add design and development standards to Article 14

1 Sec. 50-12-50. Utility, basic.

2 Regulations regarding basic utility uses are as follows:

Use Category	Specific Land Use	Residential						Business						Industrial					Special and Overlay										Standards General (Art. XII, Div. 2) Specific (Art. XII, Div. 3)			
		R 1	R 2	R 3	R 4	R 5	R 6	B 1	B 2	B 3	B 4	B 5	B 6	M 1	M 2	M 3	M 4	M 5	P D	P 1	P C	P C A	T M	P R	W 1	M K T	S D 1	S D 2		S D 4	S D 5	
Utility, basic	Electric transformer station					C	C	C	C	C	R	R	R	R	R	R	L					R	R			C	C	C	R		Section 50-12-192	
	Gas regulator station					C	C	C	C	C	R	R	R	R	R	R	L					R	R			C	C	C	R		Section 50-12-192	
	Residential-area utility facilities, public	C	C	C	C												L						R									Section 50-12-192
	Solar generation station																R	R	R	R	R	L										Section 50-12-192
	Telephone exchange building					C	C	C	C	C	R	R	R	R	R	R	L						R	R			C	C	R		Section 50-12-192	
	All other																L						R						C		Section 50-12-192	

# Pt. 2 Nonindustrial Districts

- Add Solar Station Overlay Areas
  - Overlay = Area designated by CC with a boundary defined in the ZO for each station
  - Addition of O'Shea Solar Station Overlay Area would replace the removed by-right in PR
- Same design and development standards

General benefits of zoning overlays:

- Proactively indicate where desired
- Overlay is more limiting than CU
- Establishing, or expanding would require a text amendment



Source: <https://graham.umich.edu/activity/17755>



# Pt. 2 Additional Standards (Ind/Overlay)

- Add design and development standards to replace current specific use standards
- Add that urban gardens or urban farms may be permitted as an accessory use
- Require site plan review (currently unclear) and additional SPR submittal requirements
- Add performance guarantee option
- Amend and add definitions: >1 acre replaced with >2 Megawatts for Principal use



Source: <https://www.agrisolarclearinghouse.org/case-study-jacks-solar-garden/>

# Pt. 2 Additional Standards (Ind/Overlay)

- Massing and cross-access
  - Consideration of public access network
  - Provide through access a min. of every 1,320 ft
- Height maximum of 20 ft (arrays and wiring)
- Minimum setback of 15 ft (solar arrays)
- Anti-glare and reflection provisions
- Noise maximums adjacent to dwellings
- Screening requirements adjacent to streets or zoning districts (P&DD)

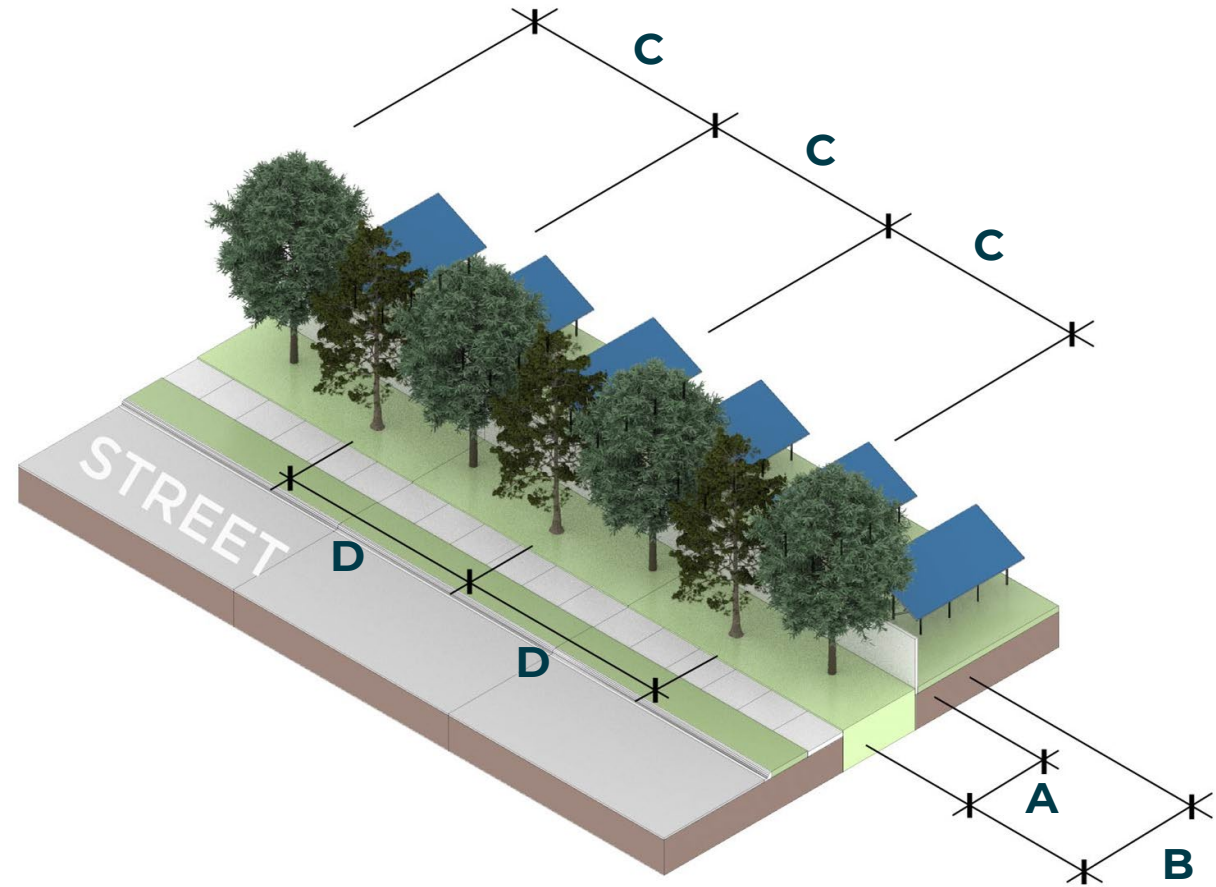




# STREET EXAMPLE

MINIMUM DESIGN GUIDELINES:

ROADS, RESIDENTIAL, SPECIAL, AND BUSINESS DISTRICTS BUFFER



A – Buffer Depth: 10' (15'/12')

B - Solar Equipment Setback: 15'

C - 1 Deciduous Shade Every 25'

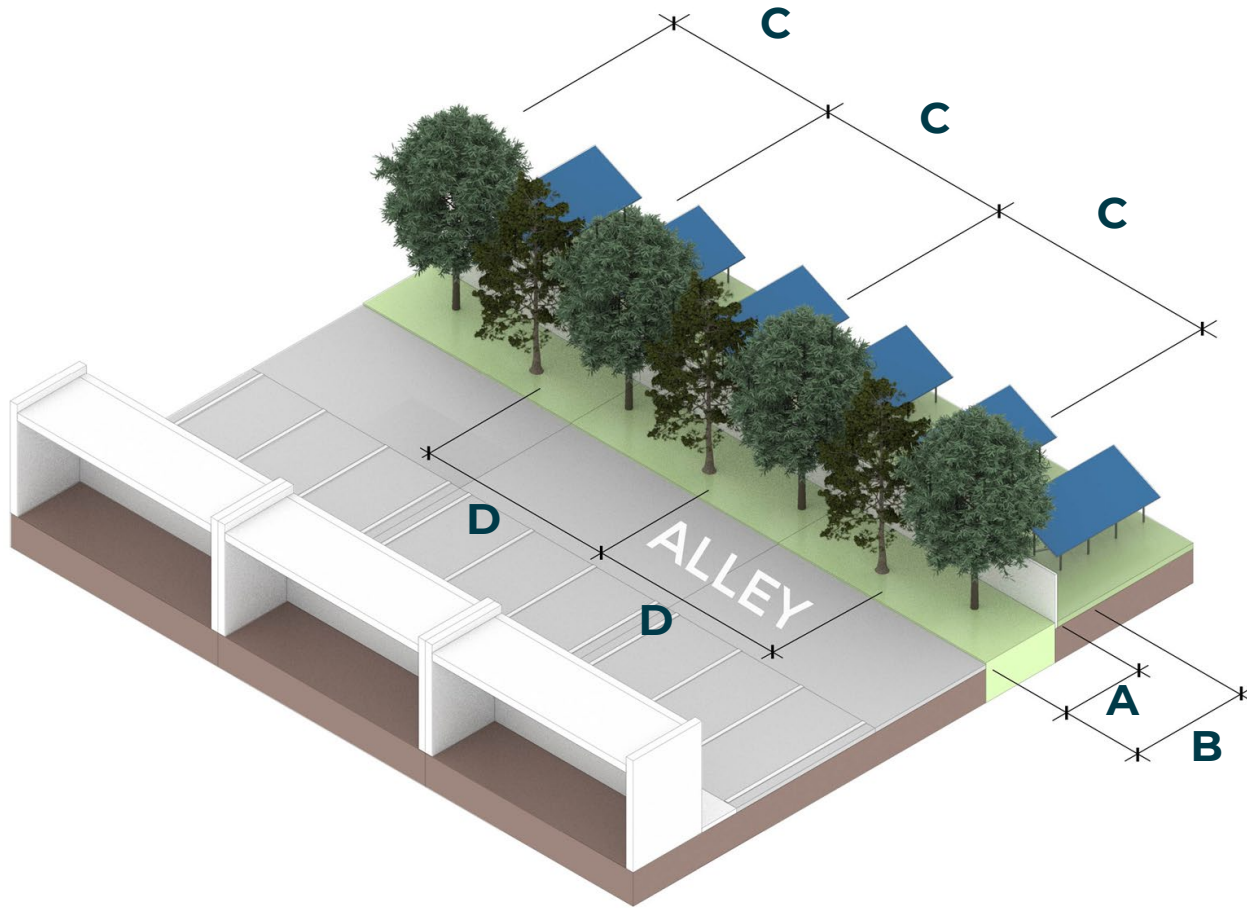
D - 1 Evergreen Tree Every 25'

Fence Max: 8'

# ALLEY EXAMPLE

## MINIMUM DESIGN GUIDELINES:

### ROADS, RESIDENTIAL, SPECIAL, AND BUSINESS DISTRICTS BUFFER



A - Buffer Depth: 10'

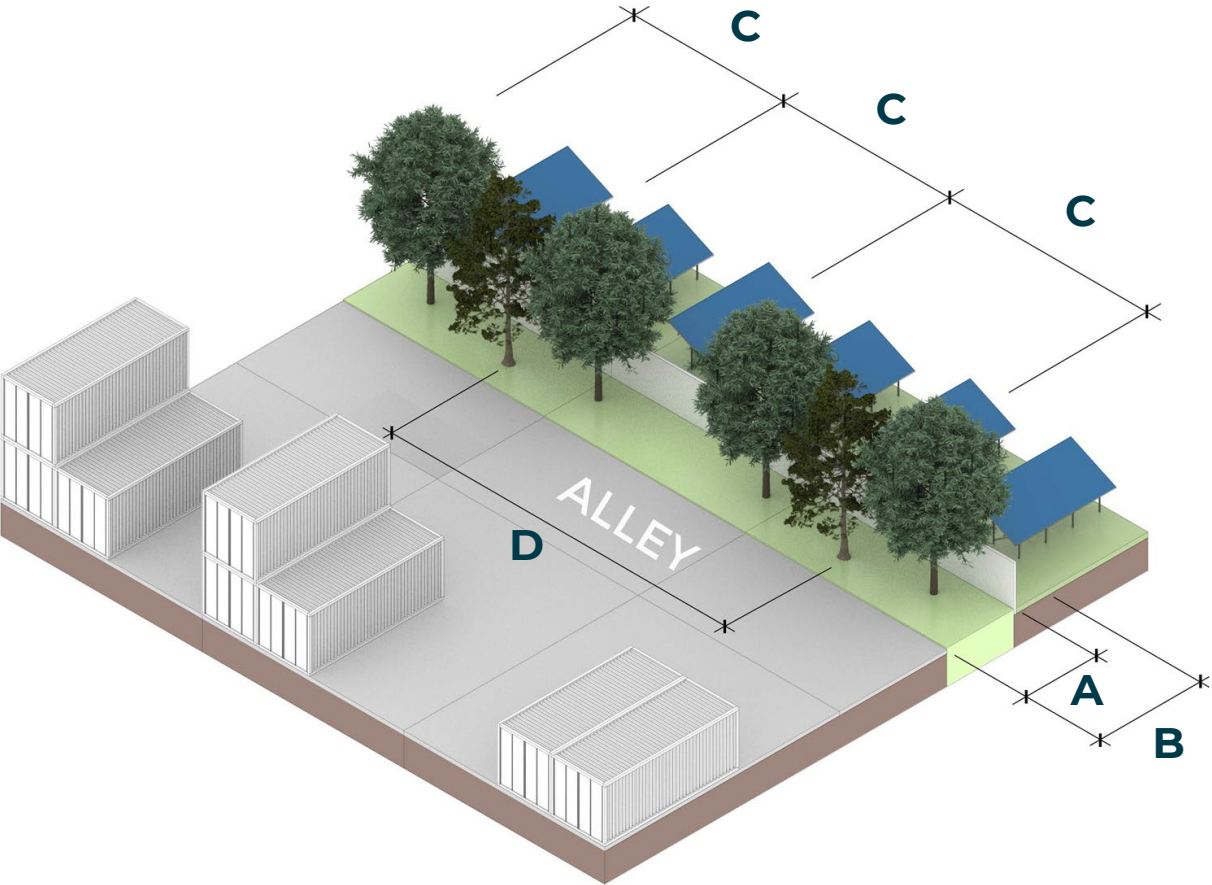
B - Solar Equipment Setback: 15'

C - 1 Deciduous Shade Tree Every 25'

D - 1 Evergreen Tree Every 25'

Fence Max: 8'

# MINIMUM DESIGN GUIDELINES: INDUSTRIAL, RR, FREEWAY OR RAMP BUFFER



- A - Buffer Depth: 10'
- B - Solar Equipment Setback: 15'
- C - 1 Deciduous Shade Tree Every 25'
- D - 1 Evergreen Tree Every 50' (40')
- Fence Max: 10'

# General provisions

- Chain link fence is prohibited.
- All ground treatment within the above setback areas shall be in accord with Sec. 50-14-326 (max 25% mulch, 10% rocks) and 50-14-327 (landscaping installed according to sound nursery practices and maintained).



# **CITY SOLAR PROJECT: COMMUNITY ENGAGEMENT UPDATE**

## **3 Meetings for Each Solar Project Community**

- 1. Design Your Solar Project (Fence, Buffer, Groundcover) and Meet the Developer**
- 2. Refine the Design and Learn About Energy Efficiency Upgrades**
- 3. Finalize Design and Learn About Energy Efficiency Upgrades**

# DESIGN GUIDELINES

## What's Your Type?



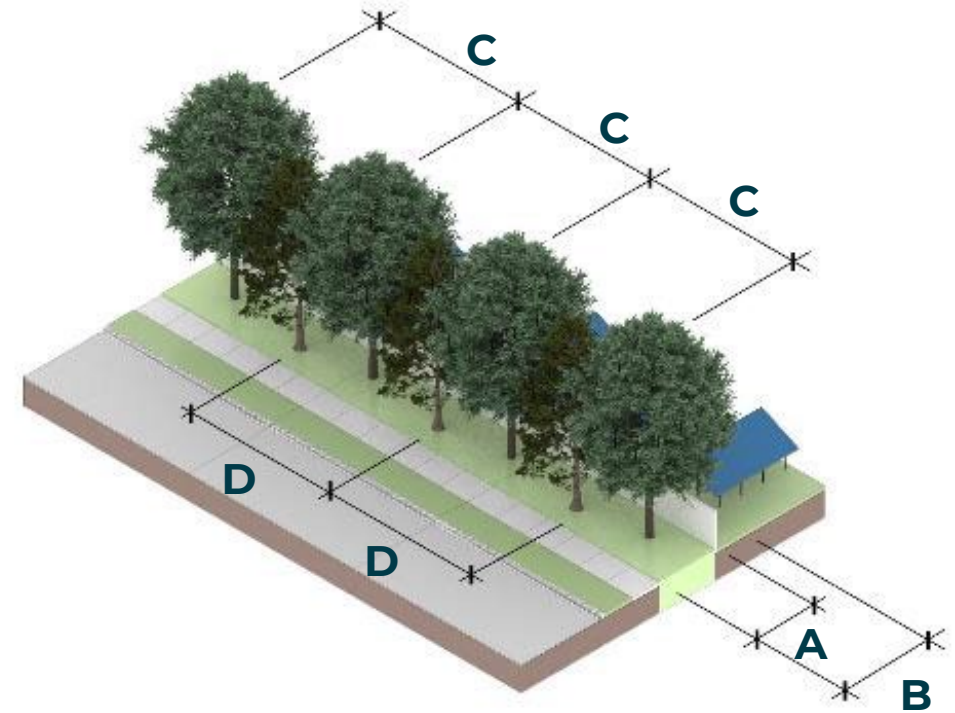
**FENCING**



**LANDSCAPE BUFFERS**



**GROUND COVER**



**A** - Buffer Depth: 10'

**B** - Solar Equipment Setback: 15'

**C** - 1 Deciduous Shade Every 25'

**D** - 1 Evergreen Tree Every 25'

Fence Max: 8'





# SOLAR PROJECT COMMUNITY ENGAGEMENT



# QUESTIONS



**Honeybee Hive Partnership at O'Shea Solar**

DTE & Bees in the D partnered to bring bee hives on site in 2021

Honeybees are important pollinators and benefit the local ecosystem, gardens, and farming

~100 jars of honey is created by the bees each year and collected by bees in the D