

# **Board of Public Works & Safety and Stormwater Board**

Regular Meeting Agenda

## 2:00 p.m. May 24, 2021

Goshen Police & Court Building, 111 East Jefferson Street, Goshen, Indiana

To access online streaming of the meeting, go to <a href="https://goshenindiana.org/calendar">https://goshenindiana.org/calendar</a>

Call to Order by Mayor Jeremy Stutsman		
Appro	val of Minutes – None	
Appro	val of Agenda	
(1)	Wastewater Treatment Improvements – Change Order #2, JN: 2019-0025A	
(2)	E. Lincoln Ave. Sidewalk and Alley Closure for Painting – A. Greaser, LaCasa	
(3)	Downtown Main Street Closure for Summer Block Party – A. Nesbitt	
(4)	Agreement with Brunk Real Estate: Materials Discharge	
(5)	Accept Deed of Dedication of Right-of-way: 300 Steury Ave	
(6)	Greene Rd. Closure for Paving, JN: 2021-0002	
(7)	9th St Vehicles Blocking Mailbox	
(8)	Sign Request: Canal St. Neighborhood	
(9)	Sign Request: Leroy and 12 <sup>th</sup>	

Resolution 2021-15: Goshen Gov't Operations Climate Action Plan

(10)



(11) Parking Surface Variance Request: Keystone RV
 (12) Building Commissioner Order: 221 W. Wilden Ave
 Privilege of the Floor

Approval of Civil City and Utility Claims

Adjournment



# Engineering Department CITY OF GOSHEN

204 East Jefferson Street, Suite I • Goshen, IN 46528-3405

Phone (574) 534-2201 • Fax (574) 533-8626 • TDD (574) 534-3185 engineering@goshencity.com • www.goshenindiana.org

# **MEMORANDUM**

TO: Board of Works Public and Safety

FROM: Engineering

RE: WWTP IMPROVEMENTS PROJECT – CHANGE ORDER NO. 2

(JN: 2019-0025A)

DATE: May 24, 2021

Donohue and Associates has kept a log of project changes for the Wastewater Treatment Plant (WWTP) Improvements Project to date and has prepared a change order at the request of the Engineering Department. The change order includes a total of 6 changes to the project, all additional costs. The changes include the following:

- Replacement of two existing butterfly valves in the aeration system that were deemed unsuitable for reuse for \$7,565.00
- Replacement of existing conduit and wiring to the grit pumps after construction exposed the poor condition of the existing conduit and wiring for \$7,723.00
- Removal of steel plates in the primary clarifiers and replacement with poured in place concrete walls after it was determined that the existing conditions did not match the design or record drawings for \$18,356.00
- Addition of omitted handrail replacement in the primary clarifiers for \$965.00
- Upgrading the provided local control stations for Raw Sewage Pump Nos. 1-4 after it was determined the provided control stations were not suitable for the environment for \$5.815.00
- Addition of conduit and electrical wiring to power the primary clarifier control panels after the original was removed with the old handrail for \$2,021.00

The change order is for a cost increase of \$42,445.00, which raises the total project cost to \$19,095,728.00. This change order is an increase of 0.2% and increases the total changes to date to 0.56%. The change order adds no time to the project schedule. The Engineering Department has reviewed this change order and recommends its approval.

Requested motion: Move to approve Change Order No. 2 in the amount of \$42,445.00, with no change to the project schedule.

#### CHANGE ORDER NO. 2

CHANGE ORDER DATE OF ISSUANC	E May 12, 2021	COMMENCEMENT CONTRACT TIME	OF
OWNER	City of Goshen, Indiana		CITY PROJECT NO. 2019-0025A
CONTRACTOR	Kokosing Industrial		
PROJECT	Wastewater Treatment Plant Improvemen	ts – Project A	ENG. PROJECT NO. 13503
ENGINEER	Donohue & Associates, Inc.		

#### YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES IN THE CONTRACT DOCUMENTS:

#### **DESCRIPTION:**

- 1. Provide 16 inch butterfly valves for Blower 3 and 4 intake piping per RFP No. 15 dated February 12, 2021 (\$7.565.00).
- 2. Provide new grit pump electrical wiring to run new conduit and new terminals and pull / junction boxes per RFP No. 18 dated March 5, 2021 (\$7,723.00).
- 3. Remove the steel plate between Primary Clarifiers No. 1 and 2, No. 3 and 4, and No. 5 and 6, and replace with a recessed concrete wall for the attachment of the new clarifier equipment head shaft per RFP No. 22 dated March 24, 2021 (\$18,356.00).
- 4. Provide hand rail for concrete stairs at the primary clarifiers per RFP No. 20 dated March 30, 2021 (\$965.00).
- 5. Provide NEMA 7 local control stations for Raw Sewage Pumps Nos. 1 through 4 and return / restock the NEMA 4X control stations per RFP No. 25 dated May 6, 2021 (\$5,815.00).
- 6. Provide power to the primary clarifier control panels and equipment due to the existing conduit being removed with the handrail and the need to provide new conduit and 480 volt wiring to the pull box per RFP No. 26 dated May 6, 2021 (\$2,021.00).

#### REASON FOR CHANGE ORDER:

- 1. The plans showed that the existing valves were to be salvaged and reused, but the existing valves were only 10-inch in size and not the required 16-inch. Existing valves were covered in insulation that inhibited verification of valve size with record drawings.
- 2. The existing electrical wiring was found to be in poor condition and could not be reused.
- 3. The recessed wall section between the clarifiers where the equipment head shaft is supported was found to be a steel plate instead of a recessed concrete wall as shown on the drawings and past record drawings
- 4. Stairs were not shown on drawings or past record drawings.
- 5. NEMA 7 control stations are required per the area classification of the raw sewage pump room.
- 6. The existing conduit was removed as part of the handrail replacement.

#### ATTACHMENTS:

- 1. February 12, 2021 RFP No. 15 from Donohue & Associates to Kokosing Industrial for providing 16-inch butterfly valves for Blower No. 3 and 4 intake.
- 2. March 12, 2021 Proposed Change Order No. 20 from Kokosing Industrial to Donohue & Associates for providing the 16-inch butterfly valves for the blowers.
- 3. March 5, 2021 RFP No. 18 from Donohue & Associates to Kokosing Industrial for providing new wiring and conduit for grit pump.
- 4. April 23, 2021 Proposed Change Order No. 23 from Kokosing Industrial to Donohue & Associates for the grit pump wiring.
- 5. March 24, 2021 RFP No. 22 from Donohue & Associates to Kokosing Industrial for removing the steel plate and providing the recessed concrete wall between Primary Clarifiers No2. 1 and 2, 3 and 4, and 5 and 6.
- 6. April 6, 2021 Proposed Change Order No. 23 from Kokosing Industrial to Donohue & Associates for replacing the steel plates with concrete recessed walls
- 7. March 30, 2021 RFP No. 20 from Donohue & Associates to Kokosing Industrial for providing handrail at the primary clarifier stairs.

- 8. April 22, 2021 Proposed Change Order No. 24 from Kokosing Industrial to Donohue & Associates for the handrail at the primary clarifier stairs.
- 9. May 6, 2021 RFP No. 25 from Donohue & Associates to Kokosing Industrial for providing NEMA 7 local control stations for Raw Sewage Pumps Nos. 1 through 4.
- 10. May 7, 2021 Proposed Change Order No. 29 from Kokosing Industrial to Donohue & Associates for providing NEMA 7 local control stations for Raw Sewage Pumps Nos. 1 through 4.
- 11. May 6, 2021 RFP No. 26 from Donohue & Associates to Kokosing Industrial for providing power to the primary clarifier control panel and equipment.
- 12. May 7, 2021 Proposed Change Order No. 30 from Kokosing Industrial to Donohue & Associates for providing the wiring and conduit for the primary clarifiers.

CHANGE IN CONTRACT PRICE
Original Contract Price:
\$ 18,989,000.00
Net increase (decrease) from previous Change Orders:
\$ 64,283.00
Net increase (decrease) of this Change Order:
\$42,445.00
Revised Contract Price:
\$ 19,095,728.00

h			
CHANGE IN CONTRACT TIMES			
Original Contract Times: (a	lays or dates)		
Substantial Completion:	579 Calendar Days		
Ready for Final Payment:	621 Calendar days		
Net increase (decrease) fro	m previous Change Orders: (days)		
Substantial Completion:	0		
Ready for Final Payment: 0			
Net increase (decrease) of	this Change Order: (days)		
Substantial Completion:	0		
Ready for Final Payment:	0		
Revised Contract Times: (days or dates)			
Substantial Completion:	579 Calendar Days		
Ready for Final Payment:	621 Calendar Days		

CONTRACTOR agrees that this Change Order includes any and all costs associated with or resulting from the change ordered herein, including all impacts, delays, and accelerated costs. Other than the dollar amount and time allowance listed above, there shall be no other dollar or time compensation as a result of this Change Order.

THIS DOCUMENT SHALL BECOME AN AMENDMENT TO THE CONTRACT AND ALL STIPULATIONS AND COVENANTS OF THE CONTRACT SHALL APPLY HERETO.

RECOMMENDED:	APPROVED:	ACCEPTED:
By:	By: OWNER (signature)	By:CONTRACTOR (signature)
ENGINEER (signature)	Date:	Date:

Date: 5/12/2021

TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 015
	Kokosing Industrial Inc.	DATE: <u>2/12/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
	,	J
		PROJECT NO.: <u>13503-A</u>
Speci	fication Reference:	
Drawi	ing Reference: 135-M-1	Drawing Date:
Attacl	nments:	_
decrea	•	f this request a proposal showing increase, shall be accompanied by a breakdown showing nead and profit.
DESC	CRIPTION OF PROPOSAL CHANGE COVI	ERED BY THIS REQUEST:
Provid	de two (2) new 16-inch butterfly valves for th	e valves shown being installed on 135-M-1.
REAS	SON FOR CHANGE: The valves to be salvage	ged and reused for Blower 3 and 4 intake were
not 16	5-inch as shown (and required) and were onl	y 10-inch and therefore not usable in the new
design	<u>1.</u>	
SPEC	IAL INSTRUCTIONS: Refer to RFI 044.	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORK e issued.	TO PROCEED WITH THE ABOVE WORK X. Upon approval, a Contract Change Order
YOU	R PROPOSAL DUE DATE: 3/1/2021	2/12/2021
	By: Greg Garnes, P.E., Project Manager	
	Greg Garnes, P.E., Project Manager	Date



3862 N COMMERCIAL PKWY | GREENFIELD IN 46140 PHONE 317.891.1136

March 12, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A - RFP 015 - Blower Valves

Dear Mr. Garnes,

This letter is in response to the Request for Proposal 015 dated February 12, 2021. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Seven Thousand Five Hundred Sixty-Five Dollars (\$7,565)**. Kokosing has evaluated this change and does not foresee any schedule impact associated with the proposed modifications, contingent on authorization to proceed with this work is given within 7 calendar days of this proposal letter. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review as well as the quote we received for the new valve materials.

Proposal Clarifications and Assumptions.

- This proposal includes furnishing two new 16" Pratt Model HBF!-125-160-8788-ADP Wafer Style Valves as specified on the quotation received from FloSource, Inc. dated March 12, 2021.
- This proposal includes labor and material to install two new spline drives with applicable
  mounting hardware to allow the existing AUMA actuators to be mounted to the new butterfly
  valves.
- 3. The valve lead time is 4-6 weeks from release. These valves will need to be released by no later than March 19, 2021 to not impact the installation date on the current schedule.















Please feel free to contact me with any questions or concerns regarding this proposal.

Sincerely,

Matt Cordial

Project Manager



# PROPOSED CHANGE ESTIMATE

20

Project; Goshen WWTP Improvements - Proj	ject A			
KII Job Number 25338	D <sub>ate</sub> : <u>12-Mar-21</u>			· · · · · · · · · · · · · · · ·
DESCRIPTION:  RFP 015 - Two (2) New Butterfly va	Ives for Blower 3 and 4.			
The Property of the Control of the C	500	Cost	Fee	Total
A. LABOR:	Subtotal A: \$	274.52 \$	41.18 \$	315.70
B. EQUIPMENT:	Subtotal B: \$	- \$	- \$	
C: MATERIAL:	Subtotal C: \$	6,189.00 \$	928.35 \$	7,117.35
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	18.14 \$	- \$	18.14
E. SUBCONTRACTOR:	Subtotal E: \$	- \$	- \$	-
F: INSURANCE/BOND	Subtotal F: \$	113.72 \$	- \$	113.72
GRAND T	TOTAL (A+B+C+D+E+F):	6,595	970	7,565





Valves, Actuation, Instrumentation

Water Controls Group

RFV 1

135.00 lot

Mooresville, IN phone: 765/342-1360 toll free: 800/752-5959 fax: 765/342-1361 www.flosource.com

March 12, 2021

TO: Kokosing

Attn: Matt Cordial

dmc@kokosing.biz m. (614) 425-9221

Subj: Goshen Blower Intake

Valves quoted in accordance with Donohue Specification 15280-4 A Type V110
The products offered in the following proposal are compliant with the EPA American Iron and Steel (AIS)
Requirements of the Consolidated Appropriations Act of 2014 and further Continuing Appropriations Act 2015:

#### Replace Existing 10" Valves

(2) 16" Pratt Industrial butterfly valve Mod HBF!-125-160-8788-ADP \_\_\_\_\$ 2218.00 ea Wafer style butterfly valve, Ductile body, Nickel Aluminum disc, Stainless Steel shaft, EPDM seats and seals (250°F), worm gear with handwheel op wt: 140 lbs ea

ADD for new spline drive, boring, machining and fabricating mounting Hardware \_\_\_\_\$ 809.00 ea

Estimated Freight to jobsite total f.o.b. Pratt factory and FloSource Moresville Whse

Field Service Estimating 1-trips, ½ -day at 1200.00/day

Shipment 4- 6weeks

Thank you,

Tim N. Colley tcolley@flosource.com m. 317/445-9144 FIELD SERVICES ARE NOT INCLUDED IN THE KOKOSING QUOTATION. ACCORDING TO FLOSOURCE, THIS IS NOT NECESSARY FOR THIS INSTALLATION. IF REQUESTED, THIS CAN BE ADDED FOR AN ADDITIONAL COST.

c.c. Water Controls Group wcg@flosource.com



TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 018
	Kokosing Industrial Inc.	DATE: <u>3/5/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
		PROJECT NO.: <u>13503-A</u>
Speci	fication Reference:	
Draw	ing Reference: 115-EN-1,2	_ Drawing Date:
Attacl	hments: Marked up drawings noted above.	
decrea		f this request a proposal showing increase, shall be accompanied by a breakdown showing nead and profit.
DESC	CRIPTION OF PROPOSAL CHANGE COVI	ERED BY THIS REQUEST:
	e submit a proposal on the grit pump electrica pull / junction boxes.	l wiring to run new conduit and new terminals
REAS	SON FOR CHANGE: Existing electrical wir	ing was found to be in poor condition and not
to be	reused.	
SPEC	TAL INSTRUCTIONS: See attached drawin	g mark-up.
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORK e issued.	TO PROCEED WITH THE ABOVE WORK K. Upon approval, a Contract Change Order
YOU	R PROPOSAL DUE DATE: 3/19/2021	
	By:Greg Garnes, P.E., Project Manager	3/5/2021
	Greg Garnes, P.E., Project Manager	Date



April 23, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A – RFP 018 – Grit Pump Raceways and Wire. REV 1

Dear Mr. Garnes,

This letter is in response to the Request for Proposal 018 dated March 5, 2021. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Seven Thousand Seven Hundred Twenty-Three Dollars (\$7,723)**. Kokosing has evaluated this change and does not foresee any schedule impact associated with the proposed modifications, contingent on authorization to proceed with this work is given within 14 calendar days of this proposal letter. Kokosing is further providing a voluntary deduct to utilize the existing grit pump equipment pads, and provide only slight modifications to the existing pads to match the new pumps instead of removing/replacing the existing pads in their entirety. Reusing and reworking the existing grit pump pads would provide a **CREDIT** to the above-mentioned price totaling **Three Thousand Ninety-Six Dollars (\$3,096)**. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review as well as the quote received from Martell Electric for the proposed scope of work.

#### RFP 018 Modified Pricing - \$7,723

#### Voluntary Grit Pump Pad Removal/Replacement Credit - \$3,096

Proposal Clarifications and Assumptions.

 Furnish and install new stainless-steel raceway support systems and hardware for 6 new galvanized rigid raceways for 120V and 480 V power. Each pump will have two dedicated raceways installed for pump power and control wiring.















- 2. All new raceways are to be ran from the existing pull box in the northwest corner of the grit pump room. All conduits will be ran along the existing walls and ceiling space in this room. Splices will be made with insulated splice blocks inside the existing junction box location.
- 3. The existing pump raceways will be abandoned in place.
- 4. Kokosing has provided a voluntary deduct to reuse the existing three grit pump concrete pads. The existing pads look to be in good shape and work with the layout of the new pumps. Kokosing will have to provide slight modifications to the existing pump pads to make them work with the new pump base plates, but the existing pads would remain in place as part of this credit. This credit, if accepted, should be deducted from the RFP 018 Modified Pricing noted above.

Please feel free to contact me with any questions or concerns regarding this proposal.

Sincerely,

Matt Cordial Project Manager





Project: Goshen WWTP Improvements - Project	Date: 23-Apr-21			
DESCRIPTION:  RFP 018 - Grit Pump Wiring and Races	ways. REV 1			-
A. LABOR:	Subtotal A: \$	Cost 37.72 \$	Fee 5.66	Total \$ 43.38
B. EQUIPMENT:	Subtotal B: \$	- \$	520 J	\$ -
C: MATERIAL:	Subtotal C: \$	- \$	-	\$ -
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	- \$	- [	\$ -
E. SUBCONTRACTOR:	Subtotal E: \$	7,204.00 \$	360.20	\$ 7,564.20
F: INSURANCE/BOND	Subtotal F: \$	115.85 \$	e ]	\$ 115.85
GRAND TO	)TAL (A+B+C+D+E+F):	7,358	366	7,723

4601 CLEVELAND ROAD SOUTH BEND, IN 46628 PHONE: 574-271-5000 FAX: 574-271-5400

kokosing 6

3862 N. Commercial Parkway | Greenfield, Indiana 46140

T. 317.891.1136

WWW.KOKOSINGINDUSTRIAL.COM

Lead with Safety!

Attn: Matt Cordial

Project: 20-051 Martell COP-4R1

4-23-21

RE: Goshen WWTP RFP-18, RFI-051

#### **Change Order Proposal**

Matt,

Please find the following pricing for the electrical scope of work associated with RFI-051 and as indicated in RFP-18. This work will include all abor and material to install new stainless steel raceway support systems and hardware for 6 new galvanized rigid raceways for 120volt and 480 power and control wiring to each of the 3 grit pumps. Work will include new wire from junction box at the lower grit pump level. Splices will be made with insulated splice blocks inside that junction box location and new wire will extend from the junction box to the new pumps.

Total: \$7204 (seven thousand two hundred four dollars and no cents).

Should you require any additional information please do not hesitate to contact me.

#### MARTELL ELECTRIC, LLC

Respectfully submitted

Mike Koczan
Project Manager
Martell Electric, LLC.
mkoczan@martellelectric.com
Phone 574-271-5000



## **Change Order Proposal Summary**

Date: 4-23-21

**Project:Goshen WWTP** 

**Customer: Kokosing** 

Proposal Number: RFP-18 Martell COP#4 Revised

Description of Work:Provide and install new stainlees steel supports, raceways, and wiring for the grit pumps as described in RFI-051

## **Summary of Costs:**

Scope of Work Labor Hours:	47.18
combined labor rate for foreman/ journeyman	
Total Hours:	47.18
Labor Cost Per Hour:	\$79.65
Total Labor Cost:	\$3,757.89
Material Cost:SS strut, hardware,boxes, wire, raceways	\$2,996.46
Tax on Material (0%):	\$0.00
Total Material Cost:	\$2,996.46
Equipment Cost:	\$0.00
Total Material, Equipment, Expenses:	\$2,996.46
OH and Profit (%15)	\$449.47
Total Costs:	\$7,203.82

Prices good for 30 Days from the above date:

INNOVATIVE ELECTRICAL SOLUTIONS

# Goshen WWTP RFP-18 grit pump rewire repipe Job Number: 20191602

#### **Extension By Section**

Item #	Description	Quantity	Price	U	Ext Price	Labor Hr	U	Ext Lab Hr
	4	1-23-21 revision -	-					
1345	1" GRC Elbow	12	564.82	С	67.78	0.36	Е	4.32
1702	1" Myers Hub	12	17.98	Ε	215.76	0.28	Ε	3.36
1832	1" GRC Coupling	12	192.79	С	23.13	0.08	Ε	0.96
2372	1" Unistrut Strap	30	51.24	С	15.37	6.00	С	1.80
2684	#12 XHHW CU Stranded Wire	880	227.23	М	199.96	5.50	М	4.84
2685	#10 XHHW CU Stranded Wire	330	222.03	М	73.27	5.00	М	1.65
2686	#8 XHHW CU Stranded Wire	330	355.90	М	117.45	5.00	М	1.65
16546895	Red Wirenuts	24	67.06	М	1.61	1.75	М	0.04
16546912	#14-12-10 Wire Termination Labor	27	0.00	Е	0.00	0.10	Е	2.70
16546913	#8-6 Wire Termination Labor	9	0.00	Е	0.00	0.15	Е	1.35
16551627	1" GRC	220	301.34	С	662.95	3.75	С	8.25
16553899	3/8" X 2-1/2" Concrete Anchor	10	77.94	С	7.79	14.00	С	1.40
16553970	UNISTRUT NEOPRENE END CAPS	6	3.20	Е	19.20	0.10	Е	0.60
16554171	3/8-16-1 1/2" SS BOLT	30	1.07	Е	32.10	0.05	Е	1.50
16554173	3/8" SS LOCK WASHER	30	0.42	Е	12.60	0.02	Е	0.60
16554176	3/8" SS SPRING NUT	30	4.50	Е	135.00	0.03	Е	0.90
16554189	SS FLAT T (4 HOLE) BRACKET	6	32.65	Е	195.90	0.10	Е	0.60
16554312	6x6x4" Hinged Cover J-Box Stainless Steel 304 Type4	3	171.51	Е	514.53	0.88	Е	2.64
16555445	BURNDY ONE SIDED TWO WIRE UNITAP SPLICE (	9	18.04	Е	162.36	0.25	Е	2.25
165125510	BLACK TAPE (SUPER 33)	1	3.50	Е	3.50	0.17	Е	0.17
2339393538	Stainless Steel Slotted Strut (1-5/8")	50	10.43	Е	521.50	10.00	С	5.00
2339393547	3/8" Stainless Steel Flat Washer	30	0.49	Е	14.70	0.02	Е	0.60
	4-23-21 revision Total				2,996.46			47.18
	Job Total				2,996.46			47.18

<sup>\*</sup> Target, Labor column 2

#### Mike Koczan

From: Matt Cordial <dmc@kokosing.biz>
Sent: Monday, March 8, 2021 9:14 AM

To: Mike Koczan

Cc:Kyle Vanderford; Jeff ProwantSubject:Goshen WWTP - RFP 018

**Attachments:** Request for Proposal No. 18.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Mike,

Attached is the official RFP for the new wire and conduit feeds to the grit pumps. Please let us know if you have any questions regarding the scope to be priced. As noted last week, they want a proposal to run new conduit and wire overhead to each new grit pump. They want you to tie into the existing wires at the pull box in the NW corner of the grit pump room.

Thanks,





#### MATT CORDIAL, LEED AP

**PROJECT MANAGER** 

3862 N. COMMERCIAL PARKWAY | GREENFIELD, IN 46140 O. 317.891.1136 | C. 614.425.9221 <u>WWW.KOKOSINGINDUSTRIAL.COM</u>

**ZERO AT-RISK BEHAVIORS** 



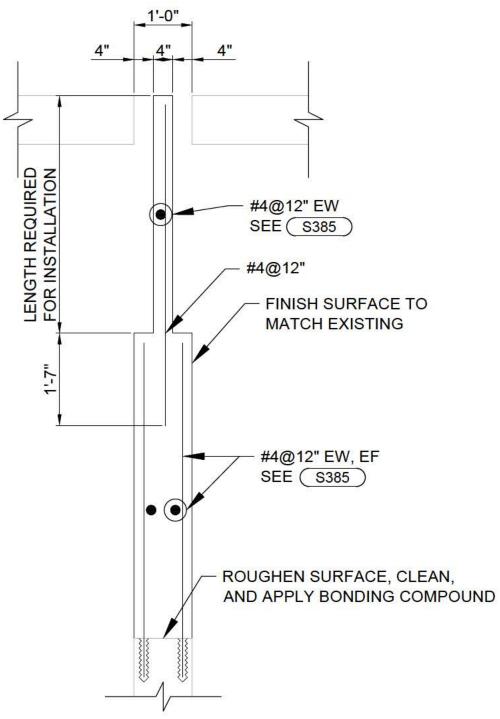
TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 018
	Kokosing Industrial Inc.	DATE: <u>3/5/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
		PROJECT NO.: <u>13503-A</u>
Speci	fication Reference:	
Draw	ing Reference: 115-EN-1,2	_ Drawing Date:
Attacl	hments: Marked up drawings noted above.	
decrea		f this request a proposal showing increase, shall be accompanied by a breakdown showing nead and profit.
DESC	CRIPTION OF PROPOSAL CHANGE COVI	ERED BY THIS REQUEST:
	e submit a proposal on the grit pump electrica pull / junction boxes.	l wiring to run new conduit and new terminals
REAS	SON FOR CHANGE: Existing electrical wir	ing was found to be in poor condition and not
to be	reused.	
SPEC	TAL INSTRUCTIONS: See attached drawin	g mark-up.
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORK e issued.	TO PROCEED WITH THE ABOVE WORK K. Upon approval, a Contract Change Order
YOU	R PROPOSAL DUE DATE: 3/19/2021	
	By:Greg Garnes, P.E., Project Manager	3/5/2021
	Greg Garnes, P.E., Project Manager	Date

RFI/CONTRACT CLARIFICATION / INTERPRETATION REQUEST			
Clarification Request No. 051	Date: 3/1/2021		
Contractor: Kokosing Industrial, Inc.	Specification Section / Drawing No.:  Drawing: 115-EN-1		
Project: City of Goshen, WWTP Improvements, Project A	Diawing. 113-EN-1		
Contract: 13503A			
This is a request for a clarification / interpretation on the following:  Plan note #1 on drawing 115-EN-1 states "Re-use existing power circuit conduit and wiring from source to hear."  Kokosing has demoed Grit Pump #3 and noticed that the existing wire appears to have been submerged in water and currently has water damage. Please confirm if this wire is acceptable to re-use and or if you would like Kokosing to provide a cost proposal to replace the wire.  Attached are picture of the existing wire.			
Prepared By: Kyle Vanderford	Date Response Needed: 3/8/2021		
Response:  Please submit a proposal on the grit pump electrical v pull / junction box.	viring to run new conduit and new terminals at the		
Prepared By: Greg Garnes	Date: 3/5/2021		
Response Returned to Contractor On: 3/5/2021			

cc:	City of Goshen:	

Kokosing Industrial Inc. 3862 N. Commercial Parkway Greenfield, IN 46260	DATE: 3/24/2021 PROJECT NAME: WWTP Improvements Project A  PROJECT NO.: 13503-A
· · · · · · · · · · · · · · · · · · ·	Project A  PROJECT NO.: 13503-A
Greenfield, IN 46260	PROJECT NO.: 13503-A
Specification Reference:	
Drawing Reference: 120-M-2	Drawing Date:
Attachments: Answered RFI 57	
Please submit within fourteen calendar days of decrease, or no change in contract price. Proposal quantities, cost of material, equipment, labor, over	shall be accompanied by a breakdown showing
DESCRIPTION OF PROPOSAL CHANGE COV	ERED BY THIS REQUEST:
Please submit a proposal on the primary clarifier reattached RFI 57.	ecessed wall improvements as detailed in
REASON FOR CHANGE: Clarifier walls only	have steel plates instead of concrete recessed
walls which are needed to attach the new clarifier of	equipment head shaft.
SPECIAL INSTRUCTIONS: See attached drawin	ng mark-up.
THIS REQUEST DOES NOT AUTHORIZE YOU NOR STOP PREVIOUSLY SCHEDULED WORK will be issued.	
YOUR PROPOSAL DUE DATE: 4/7/2021	
By:	3/24/2021
Greg Garnes, P.E., Project Manager	r Date

RFI/CONTRACT CLARIFICATION / INTERPRETATION REQUEST			
Clarification Request No. 057  Contractor: Kokosing Industrial, Inc.  Project: City of Goshen, WWTP Improvements, Project A  Contract: 13503A  This is a request for a clarification / interpretation on the following:  Drawing 120-M-2 shows the North Head Shaft for the new Primary Clarifier Equipment to be installed in a 4" recessed concrete wall. The approved Chain and Flight submittal accounted for the noted 4" recess and showed Head Shaft to be anchored to the wall with concrete anchors. During the demo of Primary Tank #5 and #6 it wa			
discovered that the 4" recessed wall is actually a deteriorated concrete wall to match what was shown on the drawings and provide a wall detail showing the required reinforcing.	in the submittal. If this is the desired solution, please		
Prepared By: Kyle Vanderford  Response:	Date Response Needed: 3/19/2021		
Response:  The proposed solution is acceptable. Please find the wall section detail with required reinforcing attached.			
Prepared By: Carl Erickson	Date: 3/24/2021		
Response Returned to Contractor On: cc: City of Goshen:			



NOTE: LAP #4 BARS A MINIMUM OF 1'-0"

# **RFI 57 WALL SECTION DETAIL**



April 6, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A – PCO 025 – RFI 057 – Primary Clarifier Head Sprocket Wall Plate Replacement.

Dear Mr. Garnes,

This letter is in regards to the response received in RFI 057 regarding the replacement of the existing steel plates at the head sprockets in the Primary Clarifiers. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Eighteen Thousand Three Hundred Fifty-Six Dollars** (\$18,356). Kokosing has begun incorporating these changes into the scope of work as required to meet the equipment installation requirements and mitigate any delays to the current schedule of work at these tanks. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review.

Proposal Clarifications and Assumptions.

- 1. This proposal includes cutting and removing the existing steel plates between Clarifier 5 & 6, 3 & 4, and 1 & 2, as well as the installation of new concrete walls at all three locations.
- 2. The new concrete walls are to be in accordance with the details provided in the response to RFI 057. These new walls take the place of the existing ½" thick steel plates in the clarifiers noted in clarification item 1.
- All work is to be performed during normal business hours. No overtime has been included. Each plate is to be replaced while the respective clarifier tanks are out of service and drained.















Please feel free to contact me with any questions or concerns regarding this proposal.

Sincerely,

Matt Cordial

Project Manager

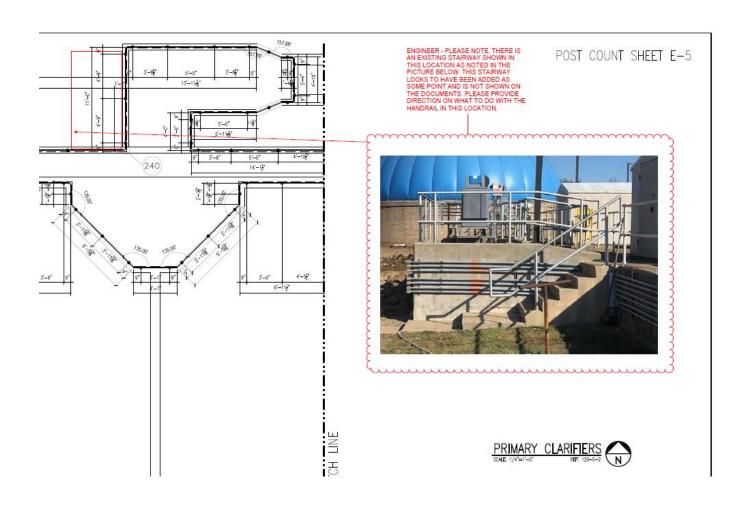




Project: Goshen WWTP Improvements - Project				
KII Job Number 25338	D <sub>ate</sub> : 6-A <sub>pr</sub> -21			16
DESCRIPTION:  RFI 057 - Remove Existing Steel Plates  provided in the response to RFI 057.	and replace with concrete v	valls in accordan	ce with the detai	ils
A. LABOR:	Subtotal A: \$	Cost 11,262.17 \$	Fee 1,689.33 \$	T <sub>otal</sub> 12,951.50
B. EQUIPMENT:	Subtotal B: \$	1,020.00 \$	153.00 \$	1,173.00
C: MATERIAL:	Subtotal C: \$	1,889.70 \$	283.46 \$	2,173.16
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	1,782.58 \$	- \$	1,782.58
E. SUBCONTRACTOR:	Subtotal E: \$	- \$	- \$	-
F: INSURANCE/BOND	Subtotal F: \$	275.34 \$	- \$	275.34
GRAND TO	ΓAL (A+B+C+D+E+F):	16,230	2,126	18,356

10:	Matteria Industrial Inc	-	1
	Kokosing Industrial Inc. 3862 N. Commercial Parkway	DATE: <u>3/30/202</u>	: WWTP Improvements
	Greenfield, IN 46260	FROJECT NAME	Project A
	Greenfield, IIV 40200		110ject 11
		PROJECT NO.: _	13503-A
Speci	fication Reference:		
Draw	ing Reference: Submittal 05520-02 Metal Rai	ilings D	rawing Date:
Attacl	hments: Marked up drawings		
decrea	e submit within fourteen calendar days case, or no change in contract price. Proposal ities, cost of material, equipment, labor, over	shall be accompanied	
DESC	CRIPTION OF PROPOSAL CHANGE COV	ERED BY THIS RE	QUEST:
	e submit a proposal to provide handrail for the own on attached photo and submittal excerpt.	-	o at the primary clarifiers
REAS	SON FOR CHANGE: Provide new railing co	onsistant with the nev	v railing being provided fo
the pr	imary clarifiers.		
SPEC	TAL INSTRUCTIONS: See attached drawing	ng, photo and notes.	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WOR e issued.		
YOU	R PROPOSAL DUE DATE: 4/14/2021  By: Greg Garnes, P.E., Project Manage		
	By:		3/30/2021
	Greg Garnes, P.E., Project Manage	r	Date

#### HANDRAIL FOR STAIRS AT PRIMARY CLARIFIERS





April 22, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A – RFP 020 – Additional Handrail at Primary Clarifier REV 1

Dear Mr. Garnes,

This letter is in response to the Request for Proposal 020 dated March 30, 2021. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Nine Hundred Sixty-Five Dollars (\$965)**. Kokosing has evaluated this change and does not foresee any schedule impact associated with the proposed modifications, contingent on authorization to proceed with this work is given within 14 calendar days of this proposal letter. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review.

Proposal Clarifications and Assumptions.

- 1. This scope of work includes adding handrail to one side of the existing concrete stair at the primary clarifiers as noted in the Request for Proposal.
- 2. All materials are to match the currently specified and submitted materials on the project.
- 3. All work is to be performed during normal business hours.

Please feel free to contact me with any questions or concerns regarding this proposal.

Sincerely,

Matt Cordial Project Manager















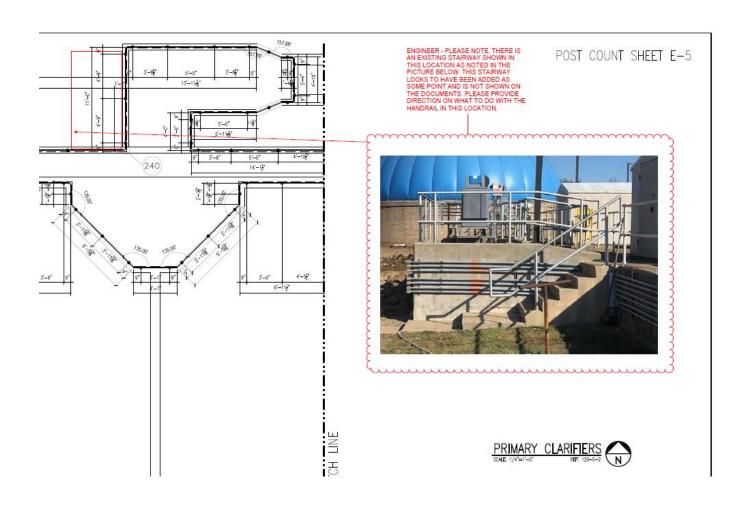




KII Job Number 25338	Date: April 22, 2021 REV 1			
DESCRIPTION:  RFP 020 - Additional Stair Railing at Prin  Furnish and Install a new handrail to ma		shown in RFP (	020.	
A. LABOR:	Subtotal A: \$	Cost 203.61 \$	Fee 30.54 \$	Total 234.15
B. EQUIPMENT:	Subtotal B: \$	- \$	- \$	
C: MATERIAL:	Subtotal C: \$	600.00 \$	90.00 \$	690.00
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	26.38 \$	- \$	26.38
E. SUBCONTRACTOR:	Subtotal E: \$	- \$	- \$	-
F: INSURANCE/BOND	Subtotal F: \$	14.48 \$	- \$	14.48
GRAND TOT	AL (A+B+C+D+E+F):	844	121	965

10:	Matteria Industrial Inc	-	1
	Kokosing Industrial Inc. 3862 N. Commercial Parkway	DATE: <u>3/30/202</u>	: WWTP Improvements
	Greenfield, IN 46260	FROJECT NAME	Project A
	Greenfield, IIV 40200		110ject 11
		PROJECT NO.: _	13503-A
Speci	fication Reference:		
Draw	ing Reference: Submittal 05520-02 Metal Rai	ilings D	rawing Date:
Attacl	hments: Marked up drawings		
decrea	e submit within fourteen calendar days case, or no change in contract price. Proposal ities, cost of material, equipment, labor, over	shall be accompanied	
DESC	CRIPTION OF PROPOSAL CHANGE COV	ERED BY THIS RE	QUEST:
	e submit a proposal to provide handrail for the own on attached photo and submittal excerpt.	-	o at the primary clarifiers
REAS	SON FOR CHANGE: Provide new railing co	onsistant with the nev	v railing being provided fo
the pr	imary clarifiers.		
SPEC	TAL INSTRUCTIONS: See attached drawing	ng, photo and notes.	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WOR e issued.		
YOU	R PROPOSAL DUE DATE: 4/14/2021  By: Greg Garnes, P.E., Project Manage		
	By:		3/30/2021
	Greg Garnes, P.E., Project Manage	r	Date

#### HANDRAIL FOR STAIRS AT PRIMARY CLARIFIERS



TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 025
	Kokosing Industrial Inc.	DATE: <u>5/6/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
		PROJECT NO.: <u>13503-A</u>
Specif	fication Reference: 13481	
Drawi	ng Reference: 009-N2-03	Drawing Date:
Attach	nments:	
decrea	· · · · · · · · · · · · · · · · · · ·	this request a proposal showing increase, hall be accompanied by a breakdown showing lead and profit.
DESC	RIPTION OF PROPOSAL CHANGE COVE	ERED BY THIS REQUEST:
Pump	e submit a proposal to provide NEMA 7 raw s Nos. 1, 2, 3 and 4. Please also provide a rest as that were provided.	ewage pump control stations for Raw Sewage ocking credit for the NEMA 4X control
	ON FOR CHANGE: <u>Proposed control stationage</u>	ns need to be NEMA 7 rated to accommodate
SPEC	IAL INSTRUCTIONS:	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORK e issued.	TO PROCEED WITH THE ABOVE WORK L. Upon approval, a Contract Change Order
YOUI	R PROPOSAL DUE DATE: 5/20/2021	
	By:	5/6/2021
	Greg Garnes, P.E., Project Manager	Date



3862 N COMMERCIAL PKWY | GREENFIELD IN 46140 PHONE 317.891.1136

May 7, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A – RFP 025 – NEMA 7 Raw Sewage Control Stations

Dear Mr. Garnes,

This letter is in response to the Request for Proposal 025 dated May 6, 2021. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Five Thousand Eight Hundred Twenty-One Dollars (\$5,821).** Due to the lead time associated with the requested NEMA 7 control stations, this change will have an impact on the planned performance of work for the Headworks Building. We are requesting this change be approved by no later than May 12, 2021 or sooner to mitigate further delays. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review.

Proposal Clarifications and Assumptions.

- This proposal includes the removal and replacement of the currently specified NEMA 4X control stations for the Raw Sewage Pumps (4 stations total), and replaces them with NEMA 7 control stations. The lead time associated with the NEMA 7 stations is 4 to 6 weeks.
- Kokosing has excluded any costs associated with critical path delays, extended bypassing, or production delays associated with this change. Kokosing reserves its right to modify this proposal for applicable critical path delays if materials are not approved for release by the approval date noted above.
- 3. All work is to be performed during normal business hours.

Please feel free to contact me with any questions or concerns regarding this proposal.















Sincerely,

Matt Cordial

Project Manager





Project: Goshen WWTP Improvements - Project KII Job Number 25338	A  Date: 7-May-21			
DESCRIPTION:  RFP 025 - NEMA 7 Control Stations for	RS Pumps			
A. LABOR:	Subtotal A: \$	Cost \$	Fee	\$ Total
B. EQUIPMENT:	Subtotal B: \$	- \$	38	\$ ¥
C: MATERIAL:	Subtotal C: \$	- \$	X=0	\$ E
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	- \$	376	\$ 5
E. SUBCONTRACTOR:	Subtotal E: \$	5,461.00 \$	273.05	\$ 5,734.05
F: INSURANCE/BOND	Subtotal F: \$	87.32 \$	<u></u>	\$ 87.32
GRAND TOT	ΓAL (A+B+C+D+E+F):	5,548	273	5,821



May 6, 2021

RE: Goshen WWTP

Dear Mr. Vanderford,

Thank you for the opportunity to quote the parts and labor associated with RFP-025 for the Goshen WWTP project. The cost for the new control stations is \$6,401.00. The cost for the original control stations is \$1,352.00. There is a 30% restocking fee for the original control stations (\$406.00). The total cost for the new control stations, less the restocking fee, is **\$5,461.00**. This price includes following:

### • Local Control Station, Quantity of Four (4):

- o Enclosure, pushbutton-station, type 7
- o Pilot light, 30mm, push-to-test
- o Pushbutton, 30mm, quantity of two (2)
- o Selector switch, 30mm, 2 position
- o Freight

Allow four (4) to six (6) weeks for delivery.

Payment Terms: Net 30 days; equipment PO only

This quote is valid for 60 days.

Please call with any questions or comments.

Sincerely,

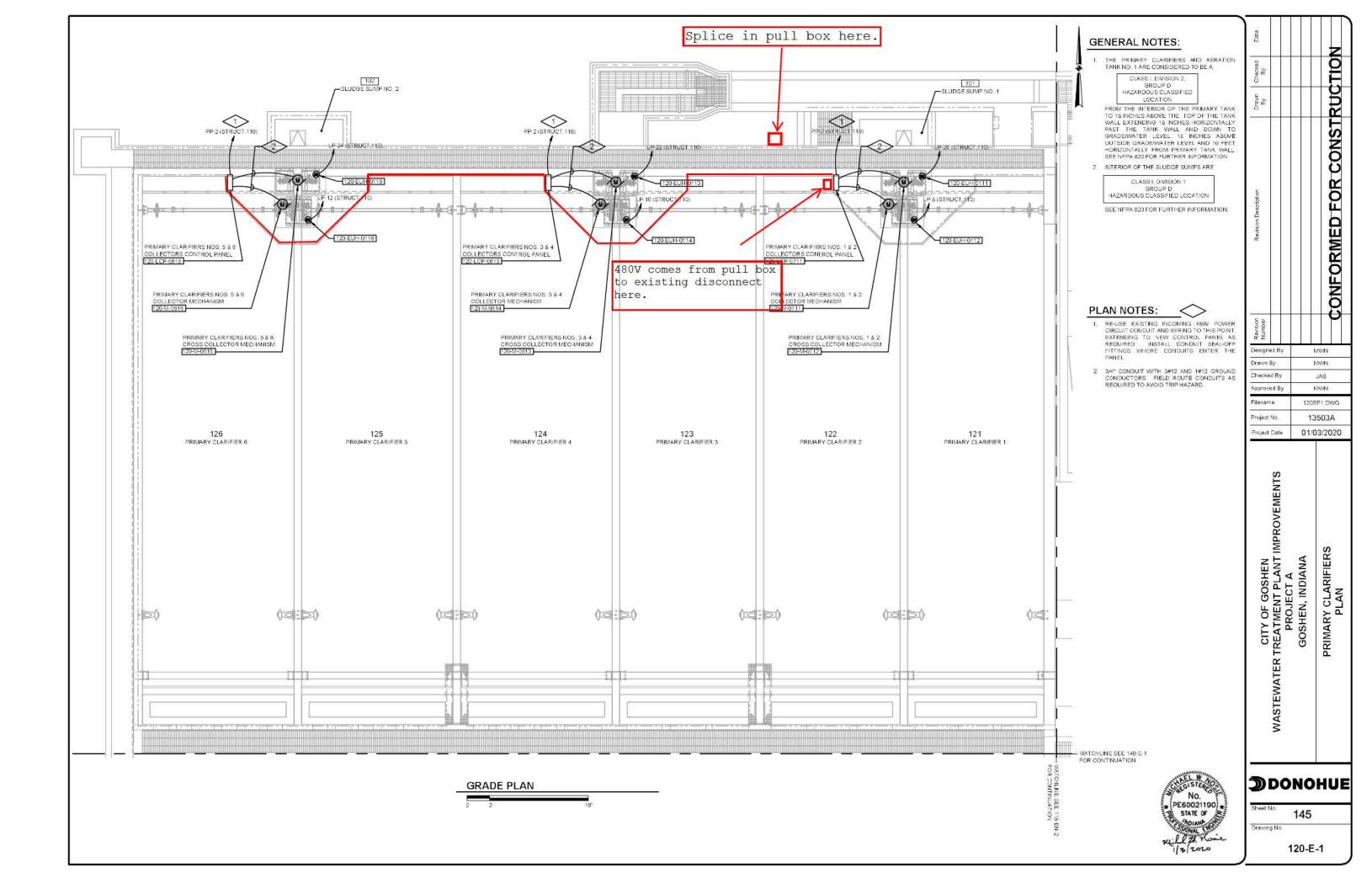
Nathen Burkhart Toric Engineering

## CITY OF GOSHEN

## REQUEST FOR PROPOSAL

TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 026
	Kokosing Industrial Inc.	DATE: <u>5/6/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
		Ü
		PROJECT NO.: <u>13503-A</u>
Speci	fication Reference:	
Draw	ing Reference: <u>007-E-6, 120-E-1</u>	Drawing Date:
Attacl	hments: RFI 69	
decrea		f this request a proposal showing increase, shall be accompanied by a breakdown showing head and profit.
DESC	CRIPTION OF PROPOSAL CHANGE COV	ERED BY THIS REQUEST:
	e provide a proposal to provide power to the pound to the answered RFI 69 material.	primary clarifier control panels and equipment
REAS	SON FOR CHANGE: Existing wiring in	the field was different than shown on the
<u>drawi</u>	ngs.	
SPEC	TAL INSTRUCTIONS:	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORI e issued.	J TO PROCEED WITH THE ABOVE WORK K. Upon approval, a Contract Change Order
YOU	R PROPOSAL DUE DATE: 5/20/2021	
	By:Greg Garnes, P.E., Project Manager	5/6/2021
	Greg Garnes, P.E., Project Manager	Date

RFI/CONTRACT CLARIFICATION	/ INTERPRETATION REQUEST
Clarification Request No. 069  Contractor: Kokosing Industrial, Inc.  Project: City of Goshen, WWTP Improvements, Project A	Date: 04/29/2021 Specification Section / Drawing No.: Sheet 58 – One Line Diagram
Contract: 13503A  This is a request for a clarification / interpretation on the following the contract of the	lowing:
Please reference the specified existing power feeds for Prinexisting 480V feeds are to be utilized to power the new codiagram on sheet 58 of the documents, Clarifier 1,2, and Clarifier 4, 5,6 are to be fed from circuits 1,3,5 with 100A Electrician, the existing equipment is actually powered by feed is daisy chained in sequence from one set of clarifiers to reflect the 100AF feeds noted on sheet 58, or should other the existing power supply? Please advise.	mary Clarifiers 1-6. According to sheet 145, note 1, the ntrol panels and motors. When referencing the one line 3 are to be fed from circuits 2,4,6 with a 100AF and F, all from Panel PP-1 in Headworks. According to the one 30A 3 Phase feed for all six clarifiers. The existing to the next. Should the existing power feeds be modified
Prepared By:	Date Response Needed:
Response:  Sheet 58 (007-E-6) refers to the two circuits feeding Prima the primary clarifier drives that are to be replaced.  Existing 3P-30A circuit breaker in existing 480V power Primary Clarifiers 1-6 to be re-used. Existing wire and conclocated on primary clarifier structure to be re-used. Splice in 1"C.) to each Clarifier drive's local control panel (120-LCP-	panel (located in Headworks electrical room) feeding duit from existing 480V power panel to existing pullbox a existing pullbox and extend circuit (3#10, 1-#10 GRD,
See attached mark-up of drawing 120-E-1 for approximate conduit routing.  Approximate distance of conduit run: 110'.	7
conduit routing.	7





3862 N COMMERCIAL PKWY | GREENFIELD IN 46140 PHONE 317.891.1136

May 7, 2021

Gregory Garnes, P.E., BCEE Senior Wastewater Engineer/Project Manager Donohue & Associates, Inc. 101 West Ohio Street, Suite 820 Indianapolis, IN 46204

RE: Goshen Wastewater Treatment Plant Improvements Project A – RFP 026 – Primary Clarifier Feeder Modifications

Dear Mr. Garnes,

This letter is in response to the Request for Proposal 026 dated May 6, 2021. Kokosing has evaluated this request and is submitting a proposal for the cost impacts associated with this modification. Kokosing proposes to perform the requested modifications for **Two Thousand Twenty-One Dollars (\$2,021)**. These modifications need to be made prior to the completion of work at Clarifier 5 and 6. Startup for this equipment is scheduled for the week of May 24, 2021. In order to maintain the current project schedule, Kokosing must have approval to proceed with these modifications by no later than May 12, 2021. Attached to this proposal letter, you will find a cost breakdown for the work included in this proposal for your review.

Proposal Clarifications and Assumptions.

- No temporary power provisions have been included for the startup of Clarifier 5 and 6 as part of
  this proposal. If Kokosing is required to temporarily connect the motors for the equipment startup
  at Clarifier 5 and 6, additional costs will be submitted for your review.
- 2. All work is to be performed during normal business hours.

Please feel free to contact me with any questions or concerns regarding this proposal.

Sincerely,

Matt Cordial

Project Manager







AN EQUAL OPPORTUNITY EMPLOYER











KII Job Number 25338	Date: 7-May-21			
DESCRIPTION:  RFP 026 - Primary Clarifier Power Feed	er Modifications			
A. LABOR:	Subtotal A: \$	Cost 37.72 \$	Fee 5.66 \$	Total 43.38
B. EQUIPMENT:	Subtotal B: \$	- \$	- 9	-
C: MATERIAL:	Subtotal C: \$	- \$	:-0	-
D: SUPPLEMENTAL CONSUMABLES/TOOLING:	Subtotal D: \$	- \$	- 9	-
E. SUBCONTRACTOR:	Subtotal E: \$	1,854.13 \$	92.71	1,946.84
F: INSURANCE/BOND	Subtotal F: \$	30.31 \$	- [	30.31
GRAND TOT	TAL (A+B+C+D+E+F):	1,922	98	2,021



## **Change Order Proposal Summary**

Date: 5-6-21

Project:Goshen WWTP

**Customer:Kokosing** 

Proposal Number: Martell COP#10 RFP#26 RFI69

Description of Work: Splice existing 480 volt wires in existing pullbox and extend in 1" GRC to each clarifier drive's local control panel, as indicated in RFI69 response

## **Summary of Costs:**

Scope of Work Labor Hours:	10.52
Clean Up, Safety, Coordination (15% of Manhours):	
Total Hours:	10.52
Labor Cost Per Hour:	\$79.65
Total Labor Cost:	\$837.92
Material Cost:	\$774.37
Tax on Material (0%):	
Total Material Cost:	\$774.37
Equipment Cost:	\$0.00
Total Labor, Material, Equipment, Expenses:	\$1,612.29
OH and Profit (%15)	\$241.84
Total Costs:	\$1,854.13

Prices good for 30 Days from the above date:

INNOVATIVE ELECTRICAL SOLUTIONS

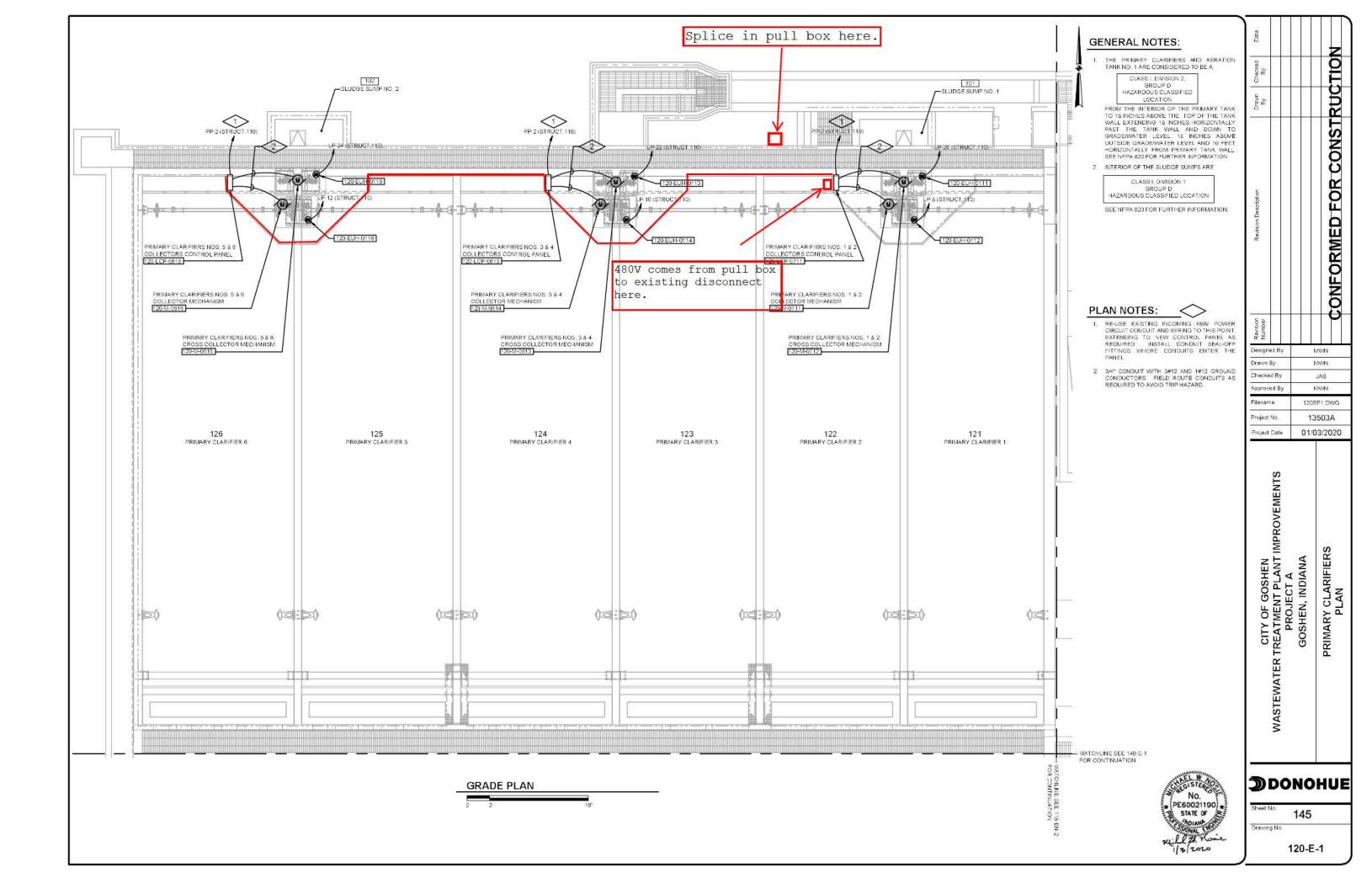
## Goshen WWTP RFP#26 primary clarifier wiring change

### Job Number: 20191649 Extension By Phase

Description	Quantity	Price	U	Ext Price	Labor Hr	U	Ext Lab Hr
01	Raceway, Fittings &	Boxes					
1" Locknut	4	30.05	С	1.20	0.08	Ε	0.32
1" Plastic Bushing	2	15.95	С	0.32	0.08	Ε	0.16
1" T Condulet w/Cover & Gasket	2	23.51	Е	47.02	0.69	Е	1.38
1" Myers Hub	3	17.98	Ε	53.94	0.28	Е	0.84
1" Cut & Thread	7	0.00	Е	0.00	0.18	Е	1.26
1" 1-Hole Strap	13	16.46	С	2.06	2.29	С	0.29
1" GRC	100	598.01	С	598.01	3.75	С	3.75
01 Raceway, Fittings & Boxes Total				702.55			8.00
	02 Wire & Cable						
#10 THHN CU Stranded Wire	420	170.99	М	71.82	6.00	М	2.52
02 Wire & Cable Total				71.82			2.52
Job Total				774.37			10.52
	01  1" Locknut  1" Plastic Bushing  1" T Condulet w/Cover & Gasket  1" Myers Hub  1" Cut & Thread  1" 1-Hole Strap  1" GRC  01 Raceway, Fittings & Boxes Total  #10 THHN CU Stranded Wire  02 Wire & Cable Total	01 Raceway, Fittings & I  1" Locknut  1" Plastic Bushing  2 1" T Condulet w/Cover & Gasket  2 1" Myers Hub  3 1" Cut & Thread  7 1" 1-Hole Strap  13 1" GRC  01 Raceway, Fittings & Boxes Total  02 Wire & Cable  #10 THHN CU Stranded Wire  02 Wire & Cable Total	01 Raceway, Fittings & Boxes  1" Locknut				

<sup>\*</sup> Target, Labor column 2

RFI/CONTRACT CLARIFICATION	/ INTERPRETATION REQUEST
Clarification Request No. 069  Contractor: Kokosing Industrial, Inc.  Project: City of Goshen, WWTP Improvements, Project A	Date: 04/29/2021 Specification Section / Drawing No.: Sheet 58 – One Line Diagram
Contract: 13503A  This is a request for a clarification / interpretation on the following the contract of the	lowing:
Please reference the specified existing power feeds for Prinexisting 480V feeds are to be utilized to power the new codiagram on sheet 58 of the documents, Clarifier 1,2, and Clarifier 4, 5,6 are to be fed from circuits 1,3,5 with 100A Electrician, the existing equipment is actually powered by feed is daisy chained in sequence from one set of clarifiers to reflect the 100AF feeds noted on sheet 58, or should other the existing power supply? Please advise.	mary Clarifiers 1-6. According to sheet 145, note 1, the ntrol panels and motors. When referencing the one line 3 are to be fed from circuits 2,4,6 with a 100AF and F, all from Panel PP-1 in Headworks. According to the one 30A 3 Phase feed for all six clarifiers. The existing to the next. Should the existing power feeds be modified
Prepared By:	Date Response Needed:
Response:  Sheet 58 (007-E-6) refers to the two circuits feeding Prima the primary clarifier drives that are to be replaced.  Existing 3P-30A circuit breaker in existing 480V power Primary Clarifiers 1-6 to be re-used. Existing wire and conclocated on primary clarifier structure to be re-used. Splice in 1"C.) to each Clarifier drive's local control panel (120-LCP-	panel (located in Headworks electrical room) feeding duit from existing 480V power panel to existing pullbox a existing pullbox and extend circuit (3#10, 1-#10 GRD,
See attached mark-up of drawing 120-E-1 for approximate conduit routing.  Approximate distance of conduit run: 110'.	7
conduit routing.	7

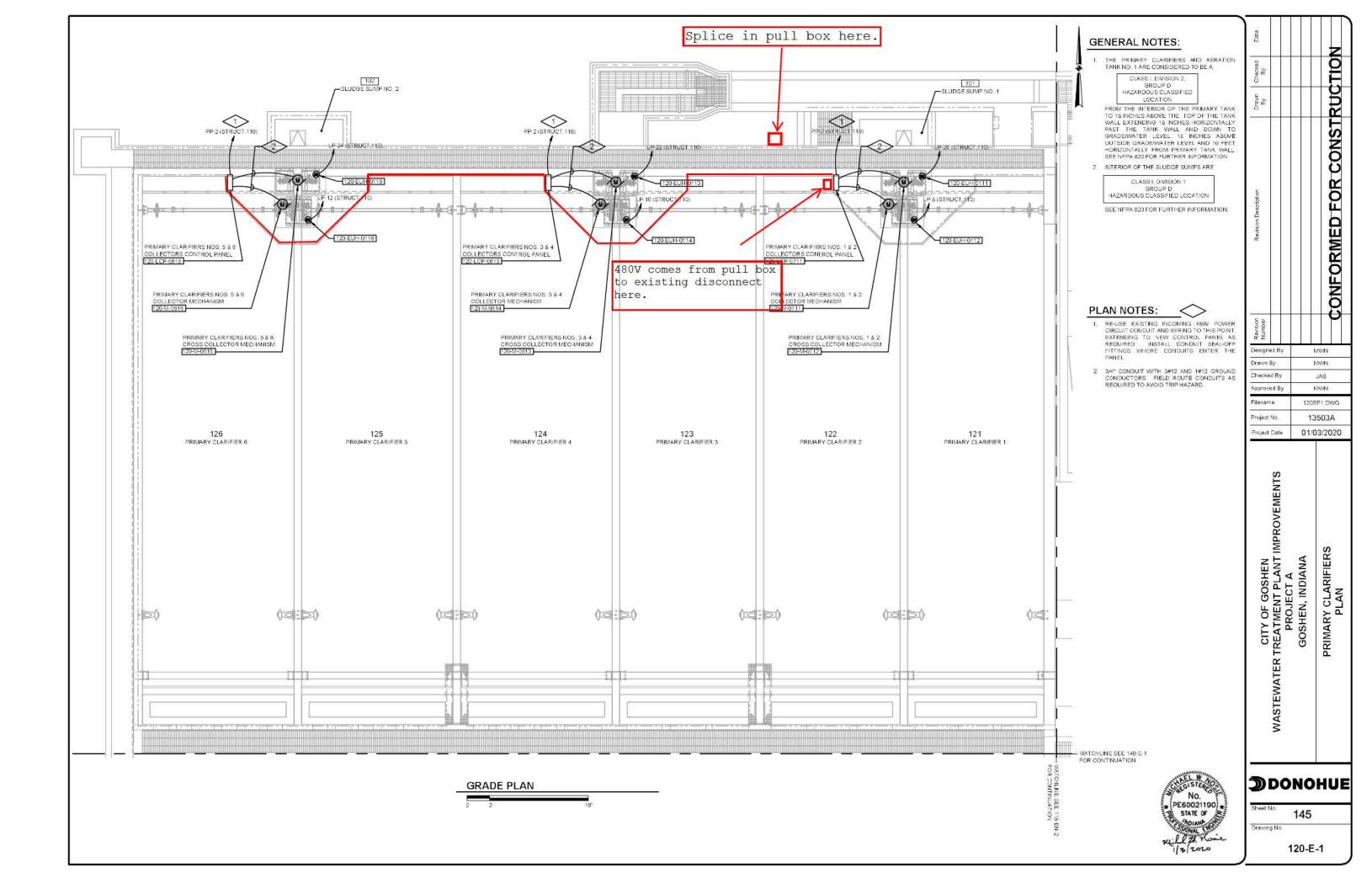


## CITY OF GOSHEN

## REQUEST FOR PROPOSAL

TO:	Matt Cordial	REQUEST FOR PROPOSAL NO.: 026
	Kokosing Industrial Inc.	DATE: <u>5/6/2021</u>
	3862 N. Commercial Parkway	PROJECT NAME: WWTP Improvements
	Greenfield, IN 46260	Project A
		Ü
		PROJECT NO.: <u>13503-A</u>
Speci	fication Reference:	
Draw	ing Reference: <u>007-E-6, 120-E-1</u>	Drawing Date:
Attacl	hments: RFI 69	
decrea		f this request a proposal showing increase, shall be accompanied by a breakdown showing head and profit.
DESC	CRIPTION OF PROPOSAL CHANGE COV	ERED BY THIS REQUEST:
	e provide a proposal to provide power to the pound to the answered RFI 69 material.	primary clarifier control panels and equipment
REAS	SON FOR CHANGE: Existing wiring in	the field was different than shown on the
<u>drawi</u>	ngs.	
SPEC	TAL INSTRUCTIONS:	
NOR	REQUEST DOES NOT AUTHORIZE YOU STOP PREVIOUSLY SCHEDULED WORI e issued.	J TO PROCEED WITH THE ABOVE WORK K. Upon approval, a Contract Change Order
YOU	R PROPOSAL DUE DATE: 5/20/2021	
	By:Greg Garnes, P.E., Project Manager	5/6/2021
	Greg Garnes, P.E., Project Manager	Date

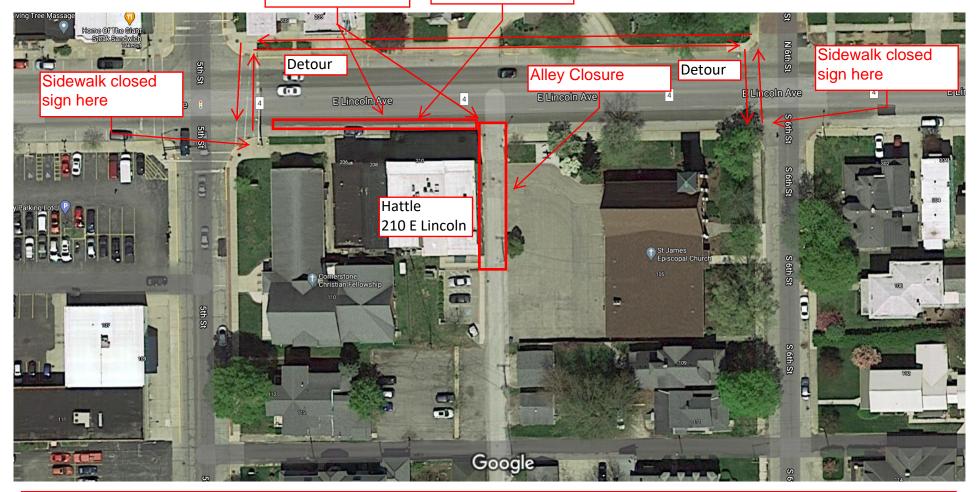
RFI/CONTRACT CLARIFICATION	/ INTERPRETATION REQUEST
Clarification Request No. 069  Contractor: Kokosing Industrial, Inc.  Project: City of Goshen, WWTP Improvements, Project A	Date: 04/29/2021 Specification Section / Drawing No.: Sheet 58 – One Line Diagram
Contract: 13503A  This is a request for a clarification / interpretation on the following the contract of the	lowing:
Please reference the specified existing power feeds for Prinexisting 480V feeds are to be utilized to power the new codiagram on sheet 58 of the documents, Clarifier 1,2, and Clarifier 4, 5,6 are to be fed from circuits 1,3,5 with 100A Electrician, the existing equipment is actually powered by feed is daisy chained in sequence from one set of clarifiers to reflect the 100AF feeds noted on sheet 58, or should other the existing power supply? Please advise.	mary Clarifiers 1-6. According to sheet 145, note 1, the ntrol panels and motors. When referencing the one line 3 are to be fed from circuits 2,4,6 with a 100AF and F, all from Panel PP-1 in Headworks. According to the one 30A 3 Phase feed for all six clarifiers. The existing to the next. Should the existing power feeds be modified
Prepared By:	Date Response Needed:
Response:  Sheet 58 (007-E-6) refers to the two circuits feeding Prima the primary clarifier drives that are to be replaced.  Existing 3P-30A circuit breaker in existing 480V power Primary Clarifiers 1-6 to be re-used. Existing wire and conclocated on primary clarifier structure to be re-used. Splice in 1"C.) to each Clarifier drive's local control panel (120-LCP-	panel (located in Headworks electrical room) feeding duit from existing 480V power panel to existing pullbox a existing pullbox and extend circuit (3#10, 1-#10 GRD,
See attached mark-up of drawing 120-E-1 for approximate conduit routing.  Approximate distance of conduit run: 110'.	7
conduit routing.	7



Traffic Cones and caution tape at work site

Sidewalk closure

Closure needed week of 3/29 - 4/1/2021



Lacasa is requesting sidewalk and alley closure around our property at 210 E Lincoln (The Hattle) starting Monday June 7th for 5 days. This is required for Cornerstone Painting contractor to paint the exterior of the building, using ladders and a lift.

Requested by:

Alan Greaser, VP Asset Management

Lacasa Inc.

202 N Cottage Ave

Goshen, IN 46528

574-533-4450 ext. 22

alan.greaser@lacasainc.net



# City Clerk-Treasurer CITY OF GOSHEN

202 South Fifth Street, Suite 2 • Goshen, IN 46528-3714

Phone (574) 533-8625 • Fax (574) 533-9740 clerktreasurer@goshencity.com • www.goshenindiana.org

24 May 2021

**To:** Board of Public Works & Safety

**From:** Adam Scharf, City Clerk-Treasurer

**Re:** Downtown Main Street Closure for Summer Block Party

Adrienne Nesbitt will request closure of Main St. from Lincoln Ave. to Jefferson St. from 8am until 6pm on June 26<sup>th</sup> for a summer block party.

### **Suggested Motion:**

Approve the closure of Main St. from Lincoln Ave. to Jefferson St. from 8am until 6pm on June 26<sup>th</sup> for a summer block party.



#### **CITY OF GOSHEN LEGAL DEPARTMENT**

City Annex 204 East Jefferson Street, Suite 2 Goshen, Indiana 46528-3405

Phone (574) 537-3820 • Fax (574) 537-3817 • TDD (574) 534-3185 www.goshenindiana.org

May 18, 2021

**To:** Board of Public Works and Safety

From: Brandy L. Henderson

**Subject:** Agreement with Brunk Real Estate LLC regarding discharge of materials

Brunk Plastic Services owned and operated by Real Estate LLC is currently, or has in the recent past, discharged plastic materials into Rock Run Creek from storm sewer infrastructure and stormwater swales in violation of Goshen City Code Title 5 Article 7, Chapter 3 "Discharge Prohibitions".

The City and Brunk have reached an agreement that includes Brunk ceasing any and all further discharge of waste materials into Rock Run Creek and the City's storm sewer. The agreement also implements several provisions that Brunk must comply with within one (1) year of the executed agreement. Finally, the agreement implements a fine of \$2,500.00 for each violation of this agreement until Brunk brings these violations into compliance.

Suggested motion: Move that the City enters into the agreement with Brunk Real Estate, LLC that includes a cease order regarding the discharge of waste materials, compliance of various provisions with in a one-year timeframe, and fines for each violation of these provisions if not complied to.

#### AGREEMENT REGARDING DISCHARGE OF MATERIALS

This agreement is entered into by and between the City of Goshen, through its Board of Stormwater Management, hereinafter referred to as the City and Brunk Real Estate LLC hereafter referred to as Brunk.

Whereas Brunk is currently, or has in the recent past, discharged plastic materials into Rock Run Creek from storm sewer infrastructure and stormwater swales in violation of Goshen City Code Title 5 Article 7, Chapter 3 "Discharge Prohibitions".

Whereas Brunk is currently, or has in the recent past, discharged contact-cooling water, storm water, surface water, or industrial process water into a water course or City's storm sewer.

Whereas plastic materials are prohibited from being discharged into Rock Run Creek, a storm sewer infrastructure and stormwater swales that include plastic pellets, fibers, and visible grind associated with all Brunk operations, storage, material transfer, and material transport activities.

It is agreed by the City and Brunk as follows:

- 1. Brunk will cease all plastic discharge into Rock Run Creek storm sewer infrastructure or stormwater swales from properties owned and/or operated by Brunk.
- 2. Brunk agrees to submit A Notice of Intent for Industrial Stormwater Permit Coverage to the Indiana Department of Environmental Management (IDEM) within sixty (60) days of the execution of this agreement by the parties.
- 3. Brunk will provide City a copy of their Indiana Department of Environmental Management (IDEM) Rule 6 Industrial Stormwater Permit and its associated Stormwater Pollution Prevention Plan (SWPPP) any update of the SWPPP.
- 4. Brunk and City will jointly confirm that all floor drains connect to approved sand/oil water separation or other containment before discharging the floor drains to the City's sanitary sewer system. Any floor drains that are not so connected must be permanently taken off-line and concreated over or otherwise plugged.
- 5. Brunk agrees to comply with the terms of this agreement within one year after Brunk's submittal of a Notice of Intent for coverage under the Indiana Department of Environmental Management's Rule 6 Industrial Stormwater Permit by the implementation deadline of the SWPPP under their Rule 6 Industrial Stormwater Permit.
- 6. It is mutually agreed that Brunk will pay a \$2,500.00 fine for each violation of this agreement until Brunk brings such violations into compliance.

City of Goshen Board of Stormwater Management	
Jeremy Stutsman, Mayor	
Michael Landis, Member	
Mary Nichols, Member	
Date:	
Brunk Real Estate, LLC	
	ve operational responsibility for all Brunk entities c Services. I have the authority to bind Brunk Real ment by my signature alone.
Larry Berkowski, Member	
Date:	



### **CITY OF GOSHEN LEGAL DEPARTMENT**

City Annex 204 East Jefferson Street, Suite 2 Goshen, Indiana 46528-3405

Phone (574) 537-3820 • Fax (574) 537-3817 • TDD (574) 534-3185 www.goshenindiana.org

May 24, 2021

To: Board of Public Works and Safety

From: Shannon Marks

**Subject:** Acceptance of Deed of Dedication of Public Right-of-Way at 300 Steury Avenue

It is recommended that, on behalf of the City of Goshen, Indiana, the Board of Public Works and Safety accept from Lam Corporation, the attached Deed of Dedication of public right-of-way located at 300 Steury Avenue. This additional right-of-way will be used to improve the radius of the S-curve on Steury Avenue.

### **Suggested Motion:**

Move to accept the Deed of Dedication of public right-of-way located at 300 Steury Avenue from Lam Corporation, and authorize the Mayor to execute the Acceptance.

### DEED OF DEDICATION

THIS INDENTURE WITNESSETH, that **Lam Corporation**, an Indiana corporation, (hereinafter referred to as Grantor), dedicates public right-of-way to the **City of Goshen**, **Indiana**, a municipal corporation and political subdivision of the State of Indiana, whose mailing address is 202 South Fifth Street, Goshen, Indiana 46528, for no consideration, the real estate as depicted upon the attached Right-of-Way Parcel Plat being a part of the real estate more commonly known as 300 Steury Avenue, Goshen, Indiana, and more particularly described as follows, to-wit:

A PART OF THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 36 NORTH, RANGE 6 EAST, CITY OF GOSHEN, ELKHART TOWNSHIP, ELKHART COUNTY, INDIANA AND BEING A PART OF THE PARCEL OF LAND CONVEYED TO LAM CORPORATION, AN INDIANA CORPORATION AS DESCRIBED AND RECORDED IN THE OFFICE OF THE RECORDER OF ELKHART COUNTY IN INSTRUMENT NUMBER 2010-07710, ALSO BEING A PART OF LOTS NUMBER ONE HUNDRED TWENTY-NINE (129) THROUGH ONE HUNDRED THIRTY-ONE (131), INCLUSIVE, OF THE UNRECORDED PLAT OF HASTING'S LINCOLN AVENUE ADDITION TO THE CITY OF GOSHEN AS DEPICTED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT AS THE LAM CORPORATION, AN INDIANA CORPORATION PARCEL, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A MAG NAIL MARKING THE INTERSECTION OF THE CENTERLINE OF EAST LINCOLN AVENUE WHERE THE SAME IS INTERSECTED BY THE EAST LINE OF SAID QUARTER SECTION; THENCE ON AN ASSUMED BEARING OF NORTH 00 DEGREES 09 MINUTES 03 SECONDS EAST ALONG THE EAST LINE OF SAID QUARTER SECTION, A DISTANCE OF 657.76 FEET TO A 5/8 INCH REBAR MARKING THE SOUTHEAST CORNER OF A PARCEL OF LAND CONVEYED TO CARL W. BONTRAGER AS DESCRIBED AND RECORDED IN THE OFFICE OF THE RECORDER OF ELKHART COUNTY IN INSTRUMENT NUMBER 98 037835, ALSO BEING THE SOUTHEAST CORNER OF LOT NUMBER ONE HUNDRED EIGHTY-THREE (183) OF THE UNRECORDED PLAT OF HASTING'S LINCOLN AVENUE ADDITION; THENCE SOUTH 89 DEGREES 36 MINUTES 51 SECONDS WEST ALONG THE SOUTH LINE OF SAID BONTRAGER PARCEL, A DISTANCE OF 431.58 FEET TO A 5/8 INCH REBAR MARKING THE SOUTHWEST CORNER OF SAID BONTRAGER PARCEL AND SAID LOT NUMBER ONE HUNDRED EIGHTY-THREE (183); THENCE NORTH 00

DEGREES 16 MINUTES 00 SECONDS EAST ALONG THE WEST LINE OF SAID BONTRAGER PARCEL, ALSO BEING THE EASTERLY LINE OF FORMER HASTINGS STREET AS SHOWN ON SAID UNRECORDED PLAT, A DISTANCE OF 547.60 FEET TO THE SOUTHEAST CORNER OF THE RIGHT OF WAY OF STEURY AVENUE (FORMERLY CENTER STREET) A SIXTY (60) FOOT WIDE RIGHT OF WAY AS DEDICATED IN THE OFFICE OF THE RECORDER OF ELKHART COUNTY IN DEED RECORD VOLUME 193, PAGE 120; THENCE SOUTH 89 DEGREES 04 MINUTES 00 SECONDS WEST ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 60.01 FEET TO A 5/8 INCH REBAR; THENCE SOUTH 00 DEGREES 23 MINUTES 41 SECONDS WEST ALONG THE EAST LINE OF A PARCEL OF LAND CONVEYED TO GONZALO ALBA AS DESCRIBED AND RECORDED IN THE OFFICE OF THE RECORDER OF ELKHART COUNTY IN INSTRUMENT NUMBER 2006 15561, A DISTANCE OF 122.00 FEET TO A 3/4 INCH IRON PIPE MARKING THE SOUTHEAST CORNER OF SAID ALBA PARCEL; THENCE SOUTH 89 DEGREES 04 MINUTES 00 SECONDS WEST, A DISTANCE OF 146.00 FEET TO AN 1/2 INCH IRON PIPE MARKING THE SOUTHWEST CORNER OF SAID ALBA PARCEL; THENCE NORTH 00 DEGREES 16 MINUTES 00 SECONDS EAST, A DISTANCE OF 122.00 FEET TO AN 1/2 INCH IRON PIPE MARKING THE NORTHWEST CORNER OF SAID ALBA PARCEL AND POINT NUMBER "601" AS DESIGNATED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT, THE POINT ON BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 89 DEGREES 04 MINUTES 00 SECONDS WEST ALONG THE SOUTH RIGHT OF WAY LINE OF AFORESAID STEURY AVENUE, A DISTANCE OF 144.98 FEET TO A RAILROAD SPIKE MARKING THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF STEURY AVENUE (FORMERLY CENTER STREET) AND THE RIGHT OF WAY LINE OF STEURY AVENUE (FORMERLY VERNON STREET) AND POINT NUMBER "600" AS DESIGNATED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT; THENCE SOUTH 00 DEGREES 18 MINUTES 40 SECONDS EAST ALONG THE EAST LINE OF SAID STEURY AVENUE RIGHT OF WAY, A DISTANCE OF 94.37 FEET TO POINT NUMBER "604" AS DESIGNATED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT; THENCE NORTHEASTERLY ALONG THE ARC OF A 125.00 FOOT RADIUS CURVE TO THE RIGHT, CONCAVE TO THE SOUTHEAST, A DISTANCE OF 146.54 FEET, BEING SUBTENDED BY A LONG CHORD WITH A BEARING OF NORTH 49 DEGREES 32 MINUTES 02 SECONDS EAST AND A DISTANCE OF 138.29 FEET TO THE POINT OF TANGENCY OF SAID CURVE AND POINT NUMBER "603" AS DESIGNATED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT; THENCE NORTH 83 DEGREES 07 MINUTES 06 SECONDS EAST, A DISTANCE OF 39.51 FEET TO THE WEST LINE OF AFORESAID ALBA PARCEL AND POINT NUMBER "602" AS DESIGNATED ON THE ATTACHED RIGHT OF WAY PARCEL PLAT; THENCE NORTH 00 DEGREES 16 MINUTES 00 SECONDS EAST ALONG THE WEST LINE OF SAID ALBA PARCEL, A DISTANCE OF 2.25 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION CONTAINING 3,533 SQUARE FEET OR 0.081 OF AN ACRE, MORE OR LESS, BEING SUBJECT TO ALL EASEMENTS, RESTRICTIONS AND PUBLIC RIGHTS OF WAY OF RECORD.

Part of Parcel No. 20-11-10-177-025.000-015

The undersigned represents and certifies that such person is a duly authorized representative of Grantor and has been fully empowered to execute this Deed of Dedication on behalf of Grantor; that the Grantor has full capacity to dedicate the real estate described; and that all necessary action for making this dedication of public right-of-way has been taken.

IN WITNESS WHEREOF, the undersigned has executed this Deed of Dedication on 5-/221, 2021.

, zoz	(#00)		
		Lam Cor	poration, an Indiana corporation
		Ву:	an All
		Printed:	MAURICE C. YILL
		Title:	CFO
STATE OF INDIANA	)		
COUNTY OF ELKHART	) SS: )		
Before me, the undersigned NAURICE C. MILLER	Notary Public, on A	1AY 12	, 2021, personally appeared of Lam Corporation, an
Indiana corporation, being kr	nown to me or whose	identity has bee	en authenticated by me to be the person e person's voluntary act for the purpose
	BARBARA J BATTLES Notary Public - Seal State of Indiana	Printed N	ame: BARBARA J. BATTLES

Prepared by Larry A. Barkes, Attorney No. 3568-20, City of Goshen Legal Department, 204 East Jefferson Street, Suite 2, Goshen, Indiana 46528, (574) 537-3820.

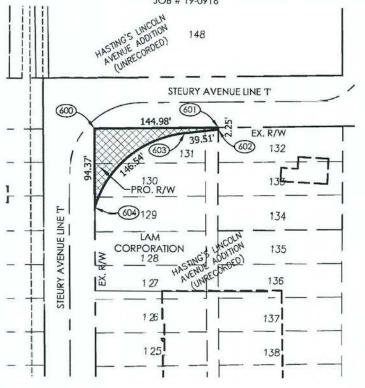
Elkhart County My Commission Expires Jul 26, 2023 Notary Public of ELKHART County, Indiana My Commission Expires: 7-26-2023

Commission Number: NP0669032

I affirm, under the penalties for perjury, that I have taken reasonable care to redact each social security number in this document, unless required by law (Larry A. Barkes).

### RIGHT-OF-WAY PARCEL PLAT

PREPARED BY ABONMARCHE CONSULTANTS, INC. FOR ELKHART COUNTY, INDIANA JOB # 19-0916



NOTE: SEE LOCATION CONTROL **ROUTE SURVEY FOR** ADDITIONAL POINTS.\*

STATIONS AND OFFSETS CONTROL OVER BOTH NORTH & EAST COORDINATES AND BEARINGS & DISTANCES.

COORDINATE CHART (U.S. SURVEY FEET)					
POINT	CENTERLINE	STATION	OFFSET	NORTHING	EASTING
600	Т	24+33.26	7.64' R	9935.2551	9709.2359
601	Т	25+90.13	30.00' R	9937.6167	9854.1926
602	Т	25+90.08	32.25' R	9935.3709	9854.1821
603	Т	25+50.79	36.34' R	9930.6372	9814.9592
604	Т	23+27.00	30.00' R	9840.8859	9709.7481

LAND SURVEYOR'S STATEMENT

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS PLAT, TOGETHER WITH THE "LOCATION CONTROL ROUTE SURVEY" RECORDED AS DOCUMENT NO. 2015-25690 IN THE OFFICE OF THE RECORDER OF ELKHART COUNTY, INDIANA, (INCORPORATED HEREIN AND MADE A PART HEREOF BY REFERENCE) COMPRISE A ROUTE SURVEY, EXECUTED IN ACCORDANCE WITH INDIANA ADMINISTRATIVE CODE 865 IAC 1-12 (RULE 12).

#### AREAS OF TAKING



= PROPOSED RIGHT OF WAY, ±0.081 ACRE

SCALE: 1" = 100"

PROJECT #: 19-0916

PARCEL: RIGHT OF WAY TAKING - PROPOSED

KEY #: 20-11-10-177-025.000-015

**GRANTOR: LAM CORPORATION, AN INDIANA** 

CORPORATION

**GRANTEE: CITY OF GOSHEN, INDIANA** 

OWNER: LAM CORPORATION

N/A

PARCEL ROAD: STEURY AVENUE

COUNTY: ELKHART

SECTION: 10

TOWNSHIP: 36 NORTH

RANGE: 6 EAST PROJECT: 2019-0916

N/A

DES. NO .: N/A

CODE:

DRAWN BY: DAJ CHECKED BY: GCS QA/QC BY: GCS

DATE: 12-28-2020 DATE: 12-28-2020 DATE: 12-28-2020

100

WARRANTY DEED INSTRUMENT NO. 2010-07710

TAX KEY NO .: 20-11-10-177-025.000-015

TAKING: 0.081 ACRE±

**IABONMARCHE** 

## **ACCEPTANCE**

the Goshen Board of Public Works and Safety, acknowledges and Safety acknowledges acknowledges and Safety acknowledges acknowledges acknowledges acknowledge acknowledges acknowledges acknowledges acknowledges acknowledge acknowledges acknowledges acknowledges acknowledges acknowledge ac	ion and political subdivision of the State of Indiana, by nowledges the receipt of this Deed of Dedication from accepts the dedication of public right-of-way on
	Jeremy P. Stutsman, Mayor
STATE OF INDIANA ) SS: COUNTY OF ELKHART )	
Before me, the undersigned Notary Public, on P. Stutsman, Mayor of the City of Goshen, Indiana, State of Indiana, on behalf of the Goshen Board of I	, 2021, personally appeared Jeremy a municipal corporation and political subdivision of the Public Works and Safety, being known to me or whose son who acknowledged the execution of the foregoing
	Shannon Marks, Notary Public Resident of Elkhart County, Indiana Commission Number NP0685467 My Commission Expires May 17, 2024



204 East Jefferson Street, Suite I . Goshen, IN 46528-3405

Phone (574) 534-2201 • Fax (574) 533-8626 • TDD (574) 534-3185 engineering@goshencity.com • www.goshenindiana.org

# **MEMORANDUM**

TO:

Board of Works Public and Safety

FROM:

Engineering

RE:

ASPHALT PAVING PROJECT

(JN: 2021-0002)

DATE:

May 24, 2021

Niblock will be performing work to mill and pave on Greene Road. The work will require a road closure between Plymouth Avenue and Berkey Avenue. Niblock will maintain open access for the Intermediate School and residents on Greene Road. The closure will occur June 1 to June 11, 2021.

Requested motion: Move to approve the Greene Road closure between Plymouth Avenue and Berkey Avenue for the milling and paving improvements on Tuesday June 1 to Friday June 11, 2021.

## <u>City of Goshen</u> <u>Board of Works & Safety</u>

Jeremy Stutsman, Mayor	
Mike Landis, Board Member	
Mary Nichols, Board Member	



204 East Jefferson Street, Suite I . Goshen, IN 46528-3405

Phone (574) 534-2201 • Fax (574) 533-8626 • TDD (574) 534-3185 engineering@goshencity.com • www.goshenindiana.org

## **MEMORANDUM**

TO:

Board of Public Works

FROM:

Engineering

RE:

9TH STREET - VEHICLES BLOCKING MAILBOX

DATE:

5/21/2021

The resident of 433 N 9th Street has previously submitted a complaint to the Police Department regarding the neighboring residence intentionally and repeatedly parking in front of her mailbox. The USPS has skipped delivery to the residence on numerous occasions as a result of the blocked mailbox. The resident states that the police officer she spoke with suggested they inquire with the City about having the curb painted yellow and a "No Parking" sign be posted as well.

The Engineering Department recommends against the use of pavement markings and signs to address matters such as these to avoid setting this as precedence for such matters.

This request was considered at the May 20 Traffic Commission meeting and the commission members voted unanimously against supporting the requested pavement markings and signs.



204 East Jefferson Street, Suite I . Goshen, IN 46528-3405

Phone (574) 534-2201 • Fax (574) 533-8626 • TDD (574) 534-3185 engineering@goshencity.com • www.goshenindiana.org

## **MEMORANDUM**

TO:

Board of Public Works

FROM:

Engineering

RE:

SIGN REQUEST - CANAL ST NEIGHBORHOOD

DATE:

5/21/21

The Engineering Department has received a request for the placement of "Children at Play" signs along Alley 141 as well as stop signs at the intersection of Alley 141 with Alley 224. These alleys run perpendicular to each other within the neighborhood bounded by Plymouth Avenue on the north, Wilson Avenue on the east, and Canal Street on the south and west. The resident states that there are several homes with children along the Alley 141 and that the intersection with Alley 224 poses a safety issue due to the limited sight distance.

Regarding the use of the "Children at Play" sign, it is the position of the Engineering Department to avoid the use of these signs for traffic calming purposes. The installation of these signs for the purpose of traffic calming has been shown to rarely accomplish the intended results and may result in a false sense of security from the parents and children along the corridor. While stop signs are not required in alleyways, the City has installed them on occasion. Stop control at this intersection could be considered due to the limited sight distance as a result of the relative proximity of the structure on the northeast corner to the intersection.

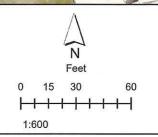
At the May 20 Traffic Commission, the requests were considered, and the commission members voted unanimously to support neither the stop sign nor the "Children at Play" sign request.



The City of Goshen's Digital Data is the property of the City of Goshen and Elkhart County, Indiana. All graphic data supplied by the city and county has been derived from public records that are constantly undergoing change and is not warranted for content or accuracy. The city and county do not guarantee the positional or thematic accuracy of the data. The cartographic digital files are not a legal representation of any of the features depicted, and the city and county disclaim any sumption of the legal status they represent. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, shall be expressly excluded. The data represents an actual reproduction of data contained in the city's or county's computer files. This data may be incomplete or inaccurate, and is subject to modifications and changes. City of Goshen and Elkhart County cannot be held liable for errors or omissions in the data. The recipient's use and reliance upon such data is at the recipient's risk. By using this data, the recipient agrees to protect, hold harmless and indemnify the City of Goshen and Elkhart County and its employees and officers. This indemnity covers reasonable attorney fees and all court costs associated with the defense of the city and county arising out of this disclaimer.

## Sign Request Canal St Neighborhood

Date: 5/19/2021 Drawn by: JSC



## The City of Goshen

Department of Public Works & Safety Office of Engineering

204 East Jefferson Street, Goshen, Indiana 46528 Phone: 574-534-2201 Fax: 574-533-8626



204 East Jefferson Street, Suite I • Goshen, IN 46528-3405

Phone (574) 534-2201 • Fax (574) 533-8626 • TDD (574) 534-3185 engineering@goshencity.com • www.goshenindiana.org

# **MEMORANDUM**

TO:

Board of Public Works

FROM:

Engineering

RE:

LEROY STREET & 12TH STREET

DATE:

5/21/21

The Engineering Department has received a request for the placement of a "Cross Traffic Does Not Stop" sign on the post below the stop sign on the private drive from Goshen College at the south side of the intersection of Leroy and 12th. The layout of the private drive gives the impression to drivers that this is a standard "T" intersection and the drivers are expecting vehicles on the perpendicular leg (Leroy) to stop at the intersection.

As the stop sign is on the private drive, it is not administered by the City of Goshen. However, as the stop sign does sit within the public right-of-way, the City does have the ability to approve the placement of the sign. As this technically is not a public road intersection, a warrant would not be met for the placement of a stop sign along the Leroy approach. Engineering notes that, in addition to the sign, the College should consider revising the alignment and geometry to that of a standard private drive approach.

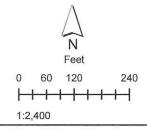
This request was considered at the May 20 Traffic Commission meeting. Commission members voted unanimously to support the City allowing the placement of the requested sign within the right-of-way and also provided unanimous support for the City to manufacture the sign for Goshen College.



The City of Goshen's Digital Data is the property of the City of Goshen and Elkhart County, Indiana. All graphic data supplied by the city and county has been derived from public records that are constantly undergoing change and is not warranted for content or accuracy. The city and county do not guarantee the positional or thematic accuracy of the data. The cartographic digital files are not a legal representation of any of the features depicted, and the city and county disclaim any sumption of the legal status they represent. Any implied warranties, including warranties of merchantability or fitness for a particular purpose, shall be expressly excluded. The data represents an actual reproduction of data contained in the city's or county's computer files. This data may be incomplete or inaccurate, and is subject to modifications and changes. City of Goshen and Elkhart County cannot be held liable for errors or omissions in the data. The recipient's use and reliance upon such data is at the recipient's risk. By using this data, the recipient agrees to protect, hold harmless and indemnify the City of Goshen and Elkhart County and its employees and officers. This indemnity covers reasonable attorney fees and all court costs associated with the defense of the city and county arising out of this disclaimer.

## Sign Request Leroy/12th Intersection

Date: 5/19/2021 Drawn by: JSC



## The City of Goshen

Department of Public Works & Safety Office of Engineering

204 East Jefferson Street, Goshen, Indiana 46528 Phone: 574-534-2201 Fax: 574-533-8626



### **CITY OF GOSHEN LEGAL DEPARTMENT**

City Annex 204 East Jefferson Street, Suite 2 Goshen, Indiana 46528-3405

Phone (574) 537-3820 ● Fax (574) 537-3817 ● TDD (574) 534-3185 www.goshenindiana.org

May 24, 2021

**To:** Board of Public Works and Safety

**From:** Shannon Marks

**Subject:** Resolution 2021-15 – City of Goshen Government Operations Climate Action Plan

Resolution 2021-15 is to adopt the provisions of the Government Operations Climate Action Plan that has been developed by the Environmental Resilience Department for the City of Goshen.

### Suggested Motion:

Move to pass and adopt Resolution 2021-15 – City of Goshen Government Operations Climate Action Plan.

### **RESOLUTION 2021-15**

### City of Goshen Government Operations Climate Action Plan

WHEREAS the City of Goshen Common Council adopted Resolution 2019-19 which called for, *inter alia*, City government operations to achieve a net-zero carbon dioxide emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

WHEREAS the City of Goshen Environmental Resilience Department has developed a Government Operations Climate Action Plan (a copy of which is attached hereto) that includes nine major carbon dioxide emission reduction strategies.

WHEREAS the City of Goshen seeks to build a city government that: 1) operates with fiscal responsibility, 2) tends a healthy and sustainable ecosystem, and 3) cares equitably for its employees and city residents.

NOW, THEREFORE, BE IT RESOLVED by the Goshen Board of Public Works and Safety that the City of Goshen Government Operations Climate Action Plan is hereby found to contain worthy goals and strategies to reduce the carbon dioxide emissions by the City's government operations.

BE IT FURHTER RESOLVED that the Goshen Board of Public Works and Safety hereby adopts the provisions of the City of Goshen Government Operations Climate Action Plan.

PASSED and ADOPTED by the Goshen Board of 2021.	Public Works and Safety on
	Jeremy P. Stutsman, Mayor
	Michael A. Landis, Board Member

Mary Nichols, Board Member

# **CITY OF GOSHEN**

CLIMATE ACTION PLAN FOR GOVERNMENT OPERATIONS



#### SUMMARY

### **04.** ACKNOWLEDGEMENTS

This page contains a listing of many of the people and organizations that worked to make this effort a reality.

### 05. ABBREVIATIONS

This page lists the abbreviations that are used in this document.

#### **06.** LETTER FROM MAYOR JEREMY P. STUTSMAN

The letter by Mayor Jeremy P. Stutsman is followed by the the signature page from the City of Goshen Public Board of Works & Safety and Stormwater Board authorizing the adoption of the Plan..

### 08. EXECUTIVE SUMMARY

The Executive Summary summaries the nine strategies and each set of goals.

### 16. INTRODUCTION

The Introduction is a brief statement by Aaron Sawatsky-Kingsley that introduces the purpose of the Government Operations Climate Action Plan.

# 18. INTRODUCTION TO CLIMATE CHANGE

These pages take a look at the data being collected on carbon and explain how carbon in the atmosphere affects climate.

# 20. GOSHEN EXPERIENCES HISTORIC FLOODING

This section explores local consequences of climate change.

#### 22.

### GOSHEN TAKES ACTION ON CLIMATE CHANGE

This section documents the history of the Climate Action activities in the City of Goshen.

#### **24.** THE INVENTORY

The Inventory quantifies overall emissions data for the City of Goshen Government Operations.

#### **26**.

### DISTRIBUTION OF ENERGY AND EXPENSES

This section details the financial footprint of the City's energy usage.

### 28. FMISSIONS FORECAST

This section outlines the emissions forecast for the business-as-usual model and the forecast with planned reductions.

# 30. MITIGATION AND ADAPTATION

This section discusses the importance and differences between mitigation and adaptation practices to reduce the impact of climate change.

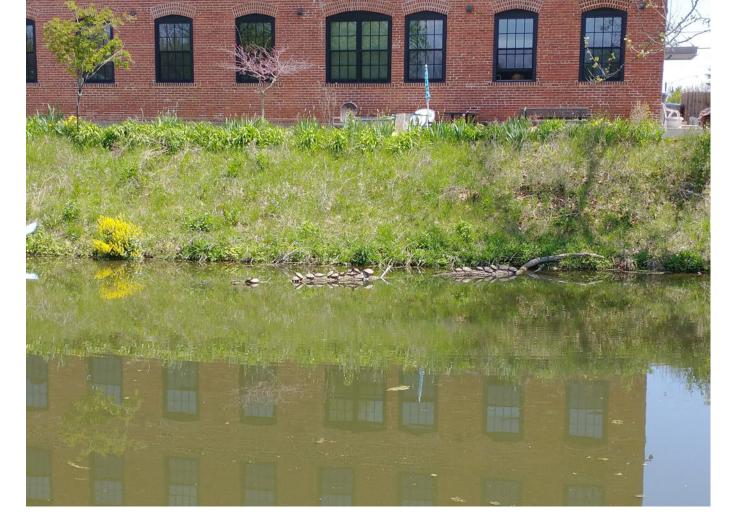
# **32.**EMISSIONS REDUCTION STRATEGIES

This section is a brief introduction to the process of selecting and vetting possible emissions reduction strategies.

# 34. STRATEGY #1 ENERGY MANAGEMENT OF BUILDINGS AND FACILITIES

This section focuses on energy consumed in building and facilities and target goals for reduction.





#### 38. STRATEGY #2 SOLID WASTE MANAGEMENT

This section examines solid waste emissions, expenses, and proposes strategies to reduce waste.

#### **42.**

#### STRATEGY #3 SUSTAINABLE TRANSPORTATION

This section discusses transportation needs and challenges in emissions reductions.

#### 44.

#### STRATEGY #4 SUSTAINABLE INFRAS-TRUCTURE

This section discusses infrastructure challenges as a result of climate change.

#### 46. STRATEGY #5

### UTILITY PROCESSES

This section discusses the utility's constant need to innovate and the challenges associated with emissions reductions.

#### 48.

#### STRATEGY #6 SUSTAINABLE LAND USE

This section discusses the need for an ecosystem approach to developing climate change mitigation and adaptation policies.

### **52.**

### STRATEGY #7 TREE CANOPY

This section discusses the importance the tree canopy goal and the challenges that climate change brings in preparing for a changing urban forest, especially through species migration.

#### **54.** STRATEGY #8

### SUSTAINABLE ENERGY

This section is a brief introduction to the concept of developing municipal owned sustainable energy systems.

#### 55. STRATEGY #9 EDUCATION

This section focuses on the importance of education for leadership and staff to provide the culture and inspiration to innovate city systems as needed to keep pace with a changing climate.

### **56.** EQUITY

This section documents the importace of equity in developing solutions that will affect climate action outcomes.

#### ACKNOWLEDGEMENTS

#### MAYOR

JEREMY P. STUTSMAN

#### CLFRK-TRFASURFR

ADAM SCHARF

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#### SPECIAL THANKS



Special thanks to all the City employees who participated in JOSDED focus groups and surveys. Their participation was instrumental in sharing and vetting ideas

and identifying areas that could be improved. Their continued participation will be important in making successful fiscal and emissions reductions.



This plan was developed with support from the Resilience Cohort, a program offered by the Environmental Resilience Institute (ERI). ERI is an initiative of Indiana University as a part of the Environmental Grand Challenge.



This plan was developed with support from ICLEI USA partnership

with the Resilience Cohort.

#### ABBREVIATIONS

#### **ABBREVIATION TERM**

**BAU** business-as-usual CAP climate action plan

 $CO_2e$ carbon dioxide equivalent

**EPA** Environmental Protection Agency

EV electric vehicle

gram g

**GHG** greenhouse gas emissions

GW gigawatt GWh gigawatt hours

**GWP** global warming potential

**HVAC** heating, ventilation, and air conditioning

kg kilogram kW kilowatt

kWh kilowatt hour

1 liter lb pound

LED light-emitting diode

**LEED** Leadership in Energy & Environmental Design

**LFG** landfill gas

**LGOP** Local Governmental Operations Protocol

CH<sub>4</sub> methane MG million gallons

million British thermal units **MMBTU** 

MT metric ton

 $MTCO_2e$ metric tons of carbon dioxide equivalent

MW megawatt

**NIPSCO** Northern Indiana Public Service Organization

 $N_2O$ nitrous oxide parts per million ppm PV photovoltaic

**SMP** sustainability master plan VFD variable frequency drives **WCP** water conservation plan

#### To Members of Goshen City Council and the Goshen Community,

Almost 200 years ago, Goshen was founded with a name which many people recognized as synonymous with prosperity and abundance. Situated in a landscape of rich soils, vibrant forests, and plentiful water, Goshen thrived. Today, we continue to thrive, mixing industrial ingenuity, with digital dynamism, while growing quality of life which is rooted in our natural setting.

As there have always been, there are challenges which our community has to face. Climate change is a challenge unlike any other. It is unique because it is so large – climate effects nearly every aspect of our lives, in subtle ways and in obvious ways – and because it is widespread, effecting nearly every place on earth in different ways. We face the dual challenge of mitigating these changes (lessening their impacts) and adapting to these changes.

We are working hard to understand how the changing climate will affect us in Goshen, and how we should prepare. This Local Government Operations Climate Action Plan for the City of Goshen is our first attempt to name the challenge before us and to describe how we want to meet the challenge. We know that our understanding of the climate challenge will change over time, and this will require that our responses also change and adapt. This fluid reality may be one of the trickiest dynamics of climate change. For that reason, it is important to understand that this Climate Action Plan is a living document, intended to be reviewed and revised.

The challenges in this document are real, and intend to move our operations to net zero emissions by 2035: from reimagining the way we manage grounds and landscaping, to shifting our vehicles away from fossil fuels toward electricity; from auditing and inventorying the energy we use in our offices and buildings, to investing in solar and renewable energy; from planting and caring for trees, to finding humane operating efficiencies. Making these adaptations will stretch us and require patience and creativity. Above all, it will take all of us, working together to build a city government which does these 3 essential tasks: 1) operate with fiscal responsibility, 2) tend a healthy and sustainable ecosystem, and 3) care equitably for our employees and our residents.

This Climate Action Plan for Goshen's government operations is our opportunity to respond to our youth, who asked us in the 2019 Youth Environmental Resolution to "work to achieve carbon neutrality by 2035 and take all appropriate actions to do so". We want to engage this Climate Action Plan for ourselves, and especially for those who come after us. With this plan we seek to demonstrate that meeting the challenges of climate change will ensure that Goshen continues to be a place of prosperity

With hope for the future,

Mayor Jeremy P. Stutsman

(This letter was appropriately finalized on Thursday, April 22, 2021, Earth Day)

#### **RESOLUTION 2021-15**

#### City of Goshen Government Operations Climate Action Plan

WHEREAS the City of Goshen Common Council adopted Resolution 2019-19 which called for, *inter alia*, City government operations to achieve a net-zero carbon dioxide emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

WHEREAS the City of Goshen Environmental Resilience Department has developed a Government Operations Climate Action Plan (a copy of which is attached hereto) that includes nine major carbon dioxide emission reduction strategies.

WHEREAS the City of Goshen seeks to build a city government that: 1) operates with fiscal responsibility, 2) tends a healthy and sustainable ecosystem, and 3) cares equitably for its employees and city residents.

NOW, THEREFORE, BE IT RESOLVED by the Goshen Board of Public Works and Safety that the City of Goshen Government Operations Climate Action Plan is hereby found to contain worthy goals and strategies to reduce the carbon dioxide emissions by the City's government operations.

BE IT FURHTER RESOLVED that the Goshen Board of Public Works and Safety hereby adopts the provisions of the City of Goshen Government Operations Climate Action Plan.

PASSED and ADOPTED by the Goshen 2021.	Board of Public Works and Safety on
	Jeremy P. Stutsman, Mayor
	Michael A. Landis, Board Member
	Mary Nichols, Board Member

# CITY OF GOSHEN LOCAL GOVERNMENT OPERATIONS CLIMATE ACTION PLAN

# THE 2021 GOSHEN CLIMATE ACTION PLAN FOR LOCAL GOVERNMENT OPERATIONS IS THE CITY'S FIRST ATTEMPT TO REUCE ITS IMPACT ON THE GLOBAL CLIMATE CRISIS.

Greenhouse gases are essential to life on Earth. These gases provide a shield from the Sun's solar radiation, and they help the Earth retain some of that heat, allowing the planet to exist at a temperature suitable for life to thrive. However, human activity – specifically the releasing of ancient carbon dioxide into the atmosphere by burning fossil fuels – is contributing greenhouse gases at an increasing rate. As a result, the Earth is warming faster than it would naturally, which poses hazards to all life on Earth.

A 2020 study of Goshen's greenhouse gas emissions calculated that 9,396 metric tons of carbon dioxide equivalents were released into the atmosphere by government operations in 2019.

The 2021 Goshen Climate Action Plan for Local Government Operations is the City's first attempt to reduce its impact on the global climate crisis. This plan is also an attempt to curb the climate change impacts that threaten the City and local community. At its

heart, this plan is offered as a map toward equity for all of Goshen's residents, now and into the future, human and non-human alike. Seeking a more fully humane community is in the deepest interest of all.

To achieve these goals, the Environmental Resilience Department presents nine major Emission Reduction Strategies. Each strategy comprises unique programs and goals that will need implementation. After implementation, monitoring efforts should occur to evaluate this plan's efficacy. When sections of this plan appear to be lacking or ineffective, the City should alter its course of action to achieve more desirable outcomes. The sum of these efforts combined with added efforts in future revisions are expected to achieve net-Zero emissions by 2035 and increase resiliency across the City and community.

### NET-ZERO BY 2035

The Youth Environmental Resolution (i.e., Resolution No. 2019-19) asks for creation of a Climate Action Plan and reduction of emissions to net-zero by 2035. The resolution is non-binding but was passed with bi-partisan support, 6-0, in April 2019. The unique nature of the resolution – crafted and submitted by Goshen high school students and supported by other youth and children of the Goshen community – fills it with an extra-legal urgency and gravity.

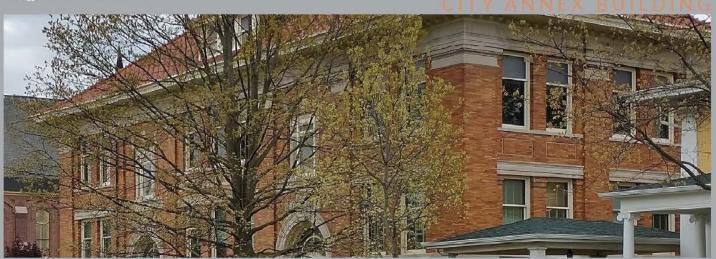
Resolution No. 2019-19 also calls for setting short term

benchmark goals to track progress towards the main target. By the end of 2026, the City will aim for a 30% reduction of electricity consumption in buildings, a 20% reduction in natural gas consumption in buildings, and 25% reduction in gasoline consumption by the City's fleet.

# EMISSIONS REDUCTION STRATEGIES

### STRATEGY #1 ENERGY MANAGEMENT OF BUILDINGS

A fundamental component of reducing emissions is to reduce energy consumption. The energy used to power government operations (lights, air conditioners, heaters, printers, computers) originates from electricity and natural gas. Energy consumption, consequently, results in the emission of greenhouse gases. Reducing energy can reduce emissions. Reducing energy also has monetary benefits. Initial research indicates that the City can expect to save \$65,000 per year in Buildings & Facilities. These anticipated savings result from the goals below.



- GOAL 1: CONDUCT ENERGY AUDITS ON ALL CITY BUILDINGS AND FACILITIES BY 2024.
- GOAL 2: DEVELOP A HEATING AND COOLING POLICY RELEVANT TO EACH CITY OPERATED BUILDING BY 2022.
- GOAL 3: EVALUATE LANDSCAPING AROUND CITY BUILDINGS AND, WHERE NEEDED, DEVELOP A PLAN TO MAXIMIZE SHADE PRODUCTION.
- GOAL 4: DESIGN NEW FACILITIES WITH EFFICIENT BUILDING AND ENERGY SYSTEMS.
- GOAL 5: EXPLORE TELECOMMUTING AND ALTERNATIVE WORK SCHEDULES TO REDUCE RESOURCE CONSUMPTION.

### STRATEGY #2 SOLID WASTE MANAGEMENT

The City of Goshen generates two primary forms of solid waste: trash generated by City employees throughout the workday and green waste (leaves and brush) picked up curbside and composted or chipped at the Goshen Environmental Center. The decomposition of these products either in a landfill or in a composting pile generates carbon dioxide.

Lifetime emissions of any product include creating, collecting or extraction of raw materials, fabrication, transportation, use, and disposal of a product. Using less can reduce all of these emissions, but reducing one or more of the components in the lifetime emissions sequence can make a difference. An example of this is when the City purchases items made locally, there is a reduction in lifetime emissions. When green waste is composted on the property where it is generated, there are no emissions generated to take it to the Environmental Center.

#### SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: REVIEW GREEN WASTE PROCESSES TO INNOVATE REDUCTIONS IN GHG EMISSIONS.
- GOAL 2: STOCK REUSABLE PLATES AND CUTLERY; BUY 20% OR BETTER POST-CONSUMER OR BIODEGRADABLE FOOD SERVICE ITEMS WHEN POSSIBLE.
- GOAL 3: EVALUATE AND IMPLEMENT COMPOST OPPORTUNITIES.
- GOAL 4: DEVELOP AND ADOPT POLICY FOR WASTE MANAGEMENT PROTOCOL, INCLUDING FOR REGULAR WASTE AND "UNIVERSAL" WASTE (E-WASTE, FLUORESCENT BULBS, ETC.).
- GOAL 5: EVALUATE CONSUMABLE PRODUCTS USING FINANCIAL AND ENVIRONMENTAL COST-BENEFIT ANALYSES.
- GOAL 6: EVALUATE CURRENT WASTE REMOVAL AND RECYCLING CONTRACTS FOR BEST MANAGEMENT PRACTICES.

#### RESIDENTIAL RECYCLING



# STRATEGY #3 SUSTAINABLE TRANSPORTATION

Many greenhouse gases are emitted from typical transportation activities. The largest percentage of Goshen's government transportation emissions come from heavy equipment, large trucks, and police operations, with smaller emission amounts from other regular operations. These combined activities resulted in 1,505 MTCO<sub>2</sub>e. Increasing sustainable transportation is crucial to reducing Goshen's government emissions.

#### SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: FUND THE ADOPTION OF ENERGY EFFICIENT LIGHT-DUTY VEHICLES (INCLUDING HYBRID-ELECTRIC AND ELECTRIC) TO REDUCE EMISSIONS BY 25% BY 2026.
- GOAL 2: DEVELOP AND IMPLEMENT GASOLINE EMISSIONS REDUCTION STRATEGY FOR EACH DEPARTMENT, RESULTING IN EMISSIONS REDUCTION OF 25% OR MEAN FUEL ECONOMY OF 27 MPG BY 2026.
- GOAL 3: DEVELOP STRATEGIC PLAN FOR MUNICIPAL FLEET ELECTRIC VEHICLE CHARGING STATIONS.
- GOAL 4: DEVELOP AN EDUCATION AND AWARENESS CAMPAIGN TO ENCOURAGE EMPLOYEE BICYCLE COMMUTING.
- GOAL 5: WORK TO ACHIEVE "SILVER STATUS" AS A BICYCLE FRIENDLY COMMUNITY.

#### CITY OF GOSHEN PUBLIC EV CHARGING STATION



### STRATEGY #4 SUSTAINABLE INFRASTRUCTURE

Pursuing emission reduction goals reveals complex hurdles that require new or improved infrastructure. These supporting systems (roads, streetlights, stormwater, wastewater, and water infrastructure) require on-going maintenance and replacements. A changing climate will require revisions of policies and standards, such as designing to heavier spring rainfall loads and increase in freeze-thaw events during the winter. Introduction and maintenance of green infrastructures – designed to take advantage of natural systems - will help mitigate impacts from increased precipitation and heat



#### SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: CONVERT MORE THAN 95% OF STREETLIGHTS, PARKING LIGHTS, AND TRAFFIC SIGNALS TO LED BY 2025.
- GOAL 2: EVALUATE AND REVISE DEVELOPMENT STANDARDS TO MEET THE CHALLENGES OF CLIMATE CHANGE IMPACTS.
- GOAL 3: DEVELOP AND TRAIN A GREEN INFRASTRUCTURE MAINTENANCE CREW.
- GOAL 4: INCREASE THE MILES OF "COMPLETE STREETS" TO INCREASE SAFE, LOW-EMISSIONS, HIGH ACCESS TRAVEL.

# STRATEGY #5 UTILITY PROCESSES

The Goshen Water and Wastewater Utility utilizes electricity and natural gas to pump groundwater for water treatment and distribution of drinking water throughout the City and collect and process wastewater. The Utility generates fifty-eight (58) percent of all MTCO<sub>2</sub> emissions in government operations, with most of that energy used to power pumps.

The Utility uses approximately 7,345,718 kWh of electricity and 156,108 therms of natural gas annually, generating 5,480

MTCO<sub>2</sub> emissions.

Currently, the WWTP is undergoing expansion and efficiency improvements. As a result of those improvements, the wastewater treatment plant is expected to save 1,321,000 kWh annually, equating to 858 MTCO $_2$ . That is a twenty-one (21) percent reduction in emissions at the wastewater treatment plant and a 9.1% reduction of MTCO $_2$  in overall city emissions.

#### SUMMARY OF THE PROGRAM AND GOALS

 GOAL 1: CONTINUE TO ENCOURAGE AND SUPPORT PROFESSIONAL LEARNING OPPORTUNITIES, EVALUATING NEW STRATEGIES AND KNOWLEDGE SHARING.

# STRATEGY #6 SUSTAINABLE LAND USE THROUGH RESILIENT ECOSYSTEMS AND BIODIVERSITY

Protecting and enhancing ecosystems will be a critical factor in the natural environment's success in and around Goshen. Yet, this task is complex and must go beyond individual species to have a meaningful impact. Supporting ecosystems and biodiversity at large will ensure Goshen continues to enjoy

the intrinsic value and economically measurable benefits that the natural environment provides. Preserving floodplain and wetlands and adopting a flood resilience plan responsive to climate science are critical characteristics of sustainable land use.

- GOAL 1: DEVELOP OR UPDATE LONG-TERM LAND-USE PLANS FOR CITY-OWNED PROPERTY.
- GOAL 2: INCORPORATE CANOPY GOAL OBJECTIVES AND APPLY APPROPRIATE TREE MAINTENANCE PRACTICES ON ALL CITY PROPERTIES AND RIGHTS-OF-WAY.
- GOAL 3: DEVELOP CITY-WIDE LANDSCAPE MAINTENANCE POLICIES ON FERTILIZER, IRRIGATION, MOWING, AND OTHER PRACTICES, AIMED AT BEST SUSTAINABLE USE.
- GOAL 4: INCORPORATE LONGER-TERM CLIMATE PROJECTIONS AS PART OF LAND USE PLANNING.
- GOAL 5: COLLABORATE WITH SPECIALISTS TO DEVELOP AND IMPLEMENT A FLOOD RESILIENCE PLAN.





# STRATEGY #7 TREE CANOPY

Urban forestry is the practice of managing and caring for tree populations in urban settings to improve the built environment. The Goshen Urban Tree Canopy Goal (2019) spelled out an ambitious goal for the City to increase its urban forest from 22% ground cover to 45% by 2045. Similarly, the goal intends to diversify the City's tree species and adapt to climate change.

- GOAL 1: DEVELOP AN INTERNAL POLICY TO PROTECT CURRENT CITY-OWNED FORESTS.
- GOAL 2: UPDATE URBAN TREE CANOPY ASSESSMENT EVERY 5 YEARS.
- GOAL 3: COLLABORATE WITH LANDOWNERS TO PROMOTE LONG-TERM PROTECTION OF FORESTED LAND.
- GOAL 4: UPDATE TREE ORDINANCE, INCLUDING POLICY IN SUPPORT OF THE CANOPY GOAL.





### STRATEGY #8 SUSTAINABLE ENERGY

Another key component to reducing emissions from local government operations is to invest in sustainable energy sources. Currently, the City acquires most of its energy from NIPSCO. However, NIPSCOs energy production will continue to generate greenhouse gas emissions for 35% of the energy supplied beyond its commitment to convert to clean energy. By making sustainable energy investments, the City can develop greater energy source diversity and increase its long-term sustainability while reducing

emissions. Converting to clean energy also can result in cost savings as well

This would allow the City to directly invest in renewable energy. The addition of approximately 5 megawatts of alternative (solar) energy generation would meet the electricity needs of the City if that electricity could be net metered. By making these investments, the City will reduce emissions and save money.

#### SUMMARY OF THE PROGRAM AND GOALS

- GOAL 1: DEVELOP A 5-YEAR PLAN TO BEGIN INCORPORATING ENERGY GENERATION AT SELECT SITES.
- GOAL 2: IDENTIFY BUILDINGS AND PROPERTIES THAT COULD BE USED FOR RENEWABLE ENERGY INSTALLATION.
- GOAL 3: EVALUATE INVESTING PUBLIC FUNDS IN LOCAL RENEWABLE ENERGY PROJECTS (SUCH AS SOLAR UNITED NEIGHBORS)

# STRATEGY #9 EDUCATION

Since education is essential to this plan's ability to achieve its desired results, professional development will play a foundational role in meeting Net Zero Emissions by 2035. Every employee must understand why the City initiated a Climate Action Plan to reduce emissions. Furthermore, voluntary meetings focused on

environmental topics can provide an additional opportunity to educate employees and the community. The latter can help reduce emissions and build a more resilient Goshen.

- GOAL 1: DEVELOP AND IMPLEMENT EMPLOYEE TRAINING ON GREEN INFRASTRUCTURE, LOW-IMPACT DEVELOPMENT, AND CLIMATE CHANGE MITIGATION AND ADAPTATION PRACTICES.
- GOAL 2: INVOLVE FRONT-LINE EMPLOYEES IN PROBLEM-SOLVING PROCESSES RELATED TO THE REDUCTION OF GHG EMISSIONS.
- GOAL 3: PROVIDE FLEXIBLE HOURS FOR EMPLOYEES TO PARTICIPATE IN EDUCATIONAL PROGRAMS SUCH AS INDIANA MASTER NATURALISTS, TREE

# INTRODUCTION

EMISSIONS TELL US WHERE NEED TO SEARCH FOR BETTER, COST-SAVING OPERATING OPTIONS. REDUCING EMISSIONS WILL SAVE THE CITY MONEY.

AARON SAWATSKY KINGSLEY

f there ever was such a thing as an "old normal," we won't be going back to it. The new normal is one of change and adaptation. On the one hand, cultural and technological change is something that we have become fairly used to over the twentieth century and into the twenty-first century. On the other hand, large-scale changes, which we don't have much control over, and which require difficult choices, are not a part of our preferred reality.

Climate change is a large-scale set of forces that will increasingly require difficult decisions from us during this century. Anticipating the impacts of climate change ahead of time, doing what we can to mitigate those impacts now, and setting into motion now adaptations to those impacts, will allow us to keep open the broadest set of decisions in the future. This Government Operations Climate Action Plan for the City of Goshen is designed to give us the best options.

In 2019, the Youth Environmental Resolution was unanimously adopted by the Common Council in a 6-0 vote. While non-binding, the Resolution called for, among other things, government

operations to achieve a net-zero emissions goal by 2035 and to create a Climate Action Plan for the City of Goshen.

This plan is the result of the insistence and aspirations of Goshen's youth. Goshen completed its first greenhouse gas emissions inventory in 2019 (assessing 2017 data) and the second inventory in 2020 (assessing 2019 data). This emissions data forms the Climate Action Plan's backbone – it tells us where we are currently, which informs what we need to do to meet our goal: net-zero emissions by 2035.

In 2019, City government operations emitted 9,396 metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>e – an equation used to express the heattrapping potential of different greenhouse gases in terms of carbon dioxide, the most plentiful of these gases). This number is maybe interesting to compare to other communities, but ultimately each community is unique, and comparisons are relatively meaningless. However, it is meaningful to us in Goshen in that it tells us what our emissions are, and because of the inventory detail, we know where they are coming from.

This detail is laid out carefully in the following document, but the highlights

are these: Water and Wastewater Utility Processes - 5,480 MTCO<sub>2</sub>e; Buildings and Facilities - 1,410 MTCO<sub>2</sub>e; Vehicle Fleet - 1,505 MTCO<sub>2</sub>e; Environmental Center operations – 349 MTCO<sub>2</sub>e; Street Lighting – 652 MTCO<sub>2</sub>e.

These emissions cost us money in at least two broad categories. Emissions cause and exacerbate climate change which can cost us money in the form of the many economic disruptions it creates, from weather disasters to crop failure to environmental degradation to human distress and violence. Emissions also cost us money because they directly reflect the energy we buy and use (electricity, natural gas, gasoline, diesel, etc.), especially the inefficient ways we use it. Emissions tell us where we need to search for better, cost-saving operating options. Reducing emissions will save us money.

Not all of the emissions from our government operations can be easily reduced. The largest portion of our emissions – Water and Wastewater Utility Processes (58%) – is a very tricky set of emissions. Water and wastewater have to be treated, no way around that. While we are finding ways to reduce energy consumption in significant ways related to these essential operations, water and

wastewater treatment will likely always be a large source of our emissions.

The Climate Action Plan lays out goals and strategies for reducing various sectors of our emissions, All of these reductions will take effort, cooperation, willingness to adapt, and funding. Cost-benefit analyses show that spending money to reduce emissions ultimately saves us real dollars in fuel costs. For example, an analysis of a \$5000investment in energy-saving retrofits at the Rieth Interpretive Center could save \$4,700 annually in energy costs. Upgrading the boiler-heating system at the Police Department will yield a \$30,180 savings over the 20 year lifetime of the new unit. Investment in cleaner electric and hybrid-electric vehicles has similar returns.

This Climate Action Plan proposes that by 2026, we aim to reduce our government operation emissions by 40%. While the strategies outlined below can help us achieve this first step in our overall goal of net-zero emissions, this document does not dictate the process that "should" be implemented to reach the goal. It is up to the various Departments to choose their path to GHG reduction. Likewise, it is up to the Mayor to support these efforts and the Goshen City Council to provide appropriate funding levels to enable Departments to reach those goals. Furthermore, it is important to note that we are at the beginning of a long process; as we work to reduce emissions and increase efficiencies, we will discover trends and technologies which this Plan could not anticipate.

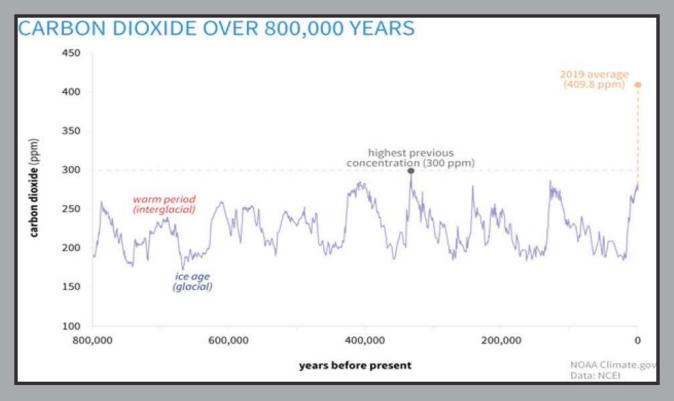
It's also important to note that the primary supplier of electricity and natural gas for our operations, NIPSCO, is in the process of eliminating its coal-generators and replacing them with 65% renewable energy generation. These changes alone will reduce our emissions by close to 40% by 2028. This is a significant

development, making our task, in some ways easier.

However, this news should not make us complacent. The work which is in front of us, in many ways, is to reduce the most pernicious, most difficult sets of emissions, such as those generated by cleaning our water and wastewater. To that end, this document will need to be a living and breathing document, reviewed and updated regularly, along with our regular emissions inventories. As stated above, adapting to change is our new normal, and even this Climate Action Plan will have to reflect this reality.

# CLIMATE CHANGE

THE LAST TIME THE ATMOSPHERIC CO<sub>2</sub> AMOUNTS WERE AS HIGH AS 400 WAS MORE THAN 3 MILLION YEARS AGO, WHEN THE TEMPERATURE WAS 3.6°-5.4°F HIGHER THAN DURING THE PRE-INDUSTRIAL ERA, AND SEA LEVEL WAS 50-80 FEET HIGHER THAN TODAY.



arbon is essential to life on Earth. Carbon is an element that is required to form complex molecules and DNA. All living things and those made from previously living things are all made from carbon, prompting the phrase "carbon life-form." We build homes, power our vehicles, clothe ourselves with carbon; we even eat carbon. Although carbon is integral to life on the planet, the modern human relationship with carbon goes well beyond life-sustaining uses.

Carbon atoms are continually moving from the atmosphere to Earth and then back into the atmosphere in a carbon cycle process. Surface carbon moves in a relatively fast cycle (over a period of decades or centuries); rock-bound and deep-ocean bound carbon moves in a much slower cycle (100 thousands to 100 millions of years). Carbon in the slow cycle is often trapped in the decomposed bodies of ancient lifeforms, and may be transformed into such fossil fuels as coal, oil, and natural gas through a combination of pressure, heat, and epoch-scale periods of time.

Carbon in our atmosphere is part of the surface carbon cycle. It exists in the atmosphere in the form of carbon dioxide. Along with water vapor and other trace gases, carbon dioxide absorbs heat that would otherwise be lost into space, allowing the Earth to hold a steady 60-degree average temperature instead of near zero. It is for this reason that these gases are termed "greenhouse gases" (GHGs) - their ability to insulate and stabilize temperature is similar to the function of a greenhouse. The balance these GHGs provide has enabled the relatively moderate climate of the 20th century and the climate that life on Earth has adapted to over at least the last 800,000 years.

The surface carbon cycle has maintained a balance of 200-300

ppm CO<sub>2</sub> in the atmosphere for the last 800,000 years, based on the measurement of air bubbles trapped in mile-thick ice cores and other evidence. Even during the ice age cycles of the past one million years, carbon dioxide never exceeded 300 ppm. To add perspective to these measurements, before the industrial revolution began in the mid-1700s, the global average amount of carbon dioxide was about 280 ppm.

The burning of fossil fuels (from the slow carbon cycle) is causing a rapid rise in carbon dioxide in the atmosphere as it is added to the surface carbon cycle. Fossil fuels like coal and oil contain ancient carbon that plants pulled out of the atmosphere through photosynthesis millions of years ago. As humans burn fossil fuels, large amounts of carbon stored in the ground over millions of years are being converted to atmospheric carbon dioxide in a span of a few hundred years. While plants, such as trees, and oceans are able to absorb some of this newly re-introduced carbon dioxide, significant amounts of it concentrate in our atmosphere.

As carbon dioxide concentrations increase in our atmosphere, the greenhouse heat-trapping capacity of the atmosphere also increases. This increase in heat is compounded by the fact that a warmer atmosphere also holds more water vapor. Water vapor further amplifies heat and produces larger precipitation events (https://www.earthobservatory.nasa.gov/features/CarbonCycle/ page1.php ). Large precipitation events can result in flooding.

In 1958, the United States began atmospheric carbon observations at the the Mauna Loa Volcanic Observatory (https:// www.esrl.noaa.gov/gmd/ccgg/trends/mlo.html ). In that year, the global atmospheric carbon dioxide concentration had risen to 315 ppm. In 2014, the global daily average carbon dioxide concentration

surpassed 400 ppm for the

first time on record.



Given the current trends, Climatologists estimate if fossil fuels continue to meet the bulk of global energy demand, atmospheric carbon dioxide concentration is projected to exceed 900 ppm by the end of this century. The last time the atmospheric CO2 amounts were as high as 400 was more than 3 million years ago, when the temperature was 3.6°-5.4°F higher than during the pre-industrial era, and sea level was 50-80 feet higher than today.

### GOSHEN EXPERIENCES HISTORIC FLOODING

In February 2018, after receiving over 5 1/2 inches of rainfall in two days, the Elkhart River rose to 12.53 feet, 6.53 feet above the flood "action" stage. The City of Goshen experienced the largest flood in recorded history, causing several injuries, extensive property damage, and displaced businesses that resulted in a local state of emergency declaration.

While flooding is not new to the City, this event was the worst on record. Rain events in Indiana are becoming heavier and with greater intensity, on average. The reality of increased flooding illustrates just one example of the impacts a changing climate can have on communities across the Midwest.

Elkhart County is expected to see the number of extreme heat events (highs 90°F or greater and nights with lows 68°F or greater) per year increase. Between 1971 and 2000, Elkhart county experienced 21 extreme heat events per year, on average. Yet, by the 2050s, Elkhart County will see between 58 and 72 extreme heat events per year, on average (Environmental Resilience Institute 2020). Further evidence of this is observable by assessing recent years' heat events. For example, in 2019, Goshen experienced 26 extreme heat waves, and in 2020, it experienced at least 29 (National Centers for Environmental Information 2020).

These extreme heat waves have profound impacts. As the

Indiana Climate Change Impacts Assessment describes, extreme heat can lead to an increased number of heat-related illnesses, hospitalization, and medical costs. Likewise, extreme heat reduces crop yields, essentially counteracting improved harvests from longer growing seasons. Longer growing seasons "also increase (the) growth of less desirable plants like ragweed and create favorable conditions for some invasive species." Furthermore, reducing cold temperatures means potential disease-carrying mosquitoes, ticks, and forest pests will expand their range and remain active for longer portions of each year (Purdue Climate Change Research Center 2018).

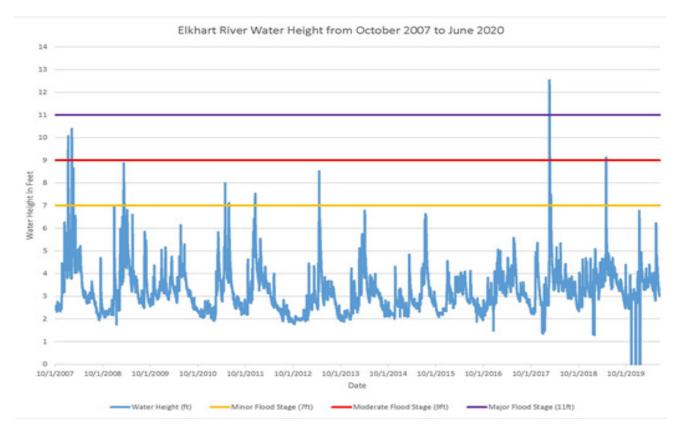
As temperatures increase, the number of extreme precipitation events per decade (daily precipitation of two inches or greater) will increase in Elkhart County from ten events per decade to eleven or twelve per decade by the 2050s (Environmental Resilience Institute 2020). Yet, while this increase alone is not staggering, the change in timing warrants greater attention. The Purdue Climate Change Research Center (2018) finds that "winters and springs are likely to be much wetter by mid-century, while expected changes in summer and fall precipitation are less certain." Extreme precipitation events in late winter and early spring increase Goshen's flood risk when soils are likely saturated or frozen, meaning less water infiltrates the ground and more becomes runoff.

2018 FLOODING ON PIKE STREET, GOSHEN, INDIANA



PHOTOGRAPHER: ANDREW KAUFFMAN

# WATER HEIGHT AND FLOOD STAGES ON THE ELKHART RIVER 2007-2019



#### WHEN THE WATER RISES IN GOSHEN

### In 2018, Goshen firefighters went door to door in the middle of the night to resuce residents from the rising flood waters.

When the Elkhart River rises above five feet, outlying areas including ditches and streams (including Rock Run Creek, Horn and Leedy Ditch, East Wilden) begin flooding.

The Elkhart River officially reaches flood stage at 6 feet: it overflows its banks to inundate the wetlands between the Goshen Dam pond and the Elkhart River, a large part of Shanklin Park, and Mullet Park.

As the Elkhart River reaches eight feet, Rogers Park and Oakridge Park become inundated. Creekside Estates Mobile Home Park begins to flood; flooding now begins to affect businesses and close roads.

At nine feet, the flooded river cuts off access to Trinity Square businesses, such as Kroger.

In 2018, the river rose to inundate Kroger Grocery, Linway Plaza and home on Denver Avenue and Huron Street. Four of the five bridges were innodated, effectively cutting the city in half. Goshen firefighters went door to door in the middle of the night to resuce residents from the rising flood waters.

# GOSHEN TAKES ACTION ON CLIMATE CHANGE

Soon after the 2018 flood, Mayor Stutsman established the Mayor's Environmental Advisory Committee to guide on environmental issues. Around the same time, Goshen High School students spearheaded the Youth Environmental Resolution (2019-19), which called for a climate action plan. Recognizing a need to focus on climate issues in great detail, the City acted to support the measure, including establishing a new department – the Department of Environmental Resilience – to pioneer this plan.

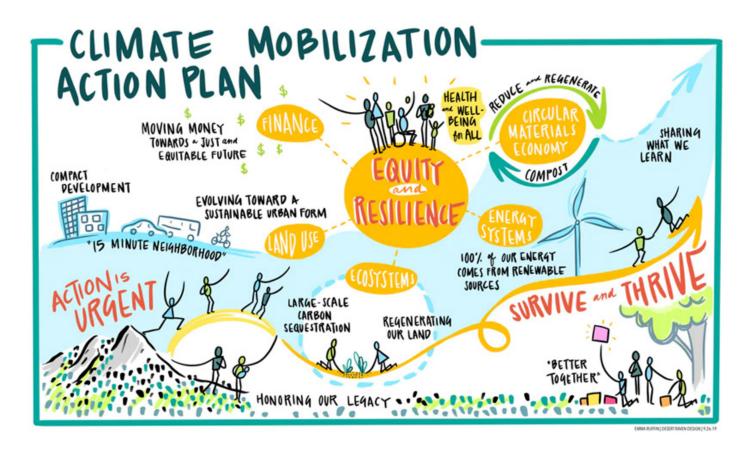
In the Spring of 2019, by a vote of 6 to 0, the Common Council and Mayor Stutsman passed the non-binding resolution 2019-19 to create and implement a Climate Action Plan by 2021.

In the Summer of 2019, the City partnered with I.U.'s Environmental Resilience Institute to collect and analyze energy consumption data, leading to the first-ever emissions inventory of 2017 of both the community and city government data.

In the fall of 2019, the Mayor, supported by City Department Heads, proposed the Department of Environmental Resilience.

January 2020, the Environmental Resilience Department began operations, with the first major project being to develop a Climate Action Plan for Goshen City Government Operations. Again, the City partnered with I.U.'s Environmental Resilience Institute to work through the process of the creation of a Climate Action Plan.

Throughout 2020, the Environmental Resilience Department worked with other Departments to compile data, update emissions calculations, develop realistic strategies, and sought feedback from employees, Department Heads, the Mayor's Environmental Action Committee, and the I.U. Environmental Resilience Institute to generate a plan for reducing emissions from city operations.



# MAKING PLANS IN THE STATE OF INDIANA

Climate Action Planning and the active reduction of emissions has become a global operation of global proportions in an attempt to avoid the worst of these impacts.

By improving preparedness, planning for impacts, and reducing the emission of heat-trapping gases, the City (referring to the local government) is working toward a resilient future. While the City is a regional leader, it is not alone in its efforts in Indiana. Fifteen other municipalities are working on developing and implementing climate action. Indianapolis, South Bend, Bloomington, and Zionsville have already published climate action plans.

### NET-ZERO BY 2035

The 2021 City of Goshen Operations Climate Action and Mitigation Plan aims to develop emissions reduction goals projected five years forward to 2026, where tested practices currently exist that will allow the City to reduce emissions in a logical,

pragmatic approach. These goals will be the first step in moving toward the overarching goal of net-zero government operations emissions by 2035. The Climate Action Plan will serve as a living document. It will need to be revised and updated to incorporate new strategies as new insights technologies become available and as new practices are adopted.

In developing this plan, the Department of Environmental

- Bloomington
- Carmel
- Elkhart
- Evansville
- Fishers
- Fort Wayne
- Gary
- Goshen
- Indianapolis
- Lafayette
- Michigan City
- Richmond
- South Bend
- West Lafayette
- Zionsville



Resilience compiled many forms of data (such as energy and fuel use records) with other Departments' assistance. It then used real-world scenarios to develop strategies to reduce greenhouse gases in City operations.

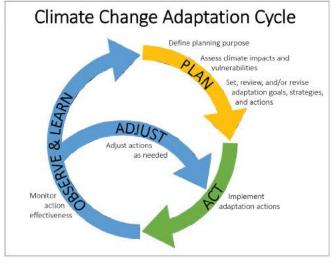
Where strategies exist to reduce greenhouse gases, the Environmental Resilience Department has proposed a proportionate goal as a part of a multistep process to attain net-zero emissions for City operations by 2035. In some

cases, there were no obvious or proven solutions to reducing GHGs; therefore, more in-depth review will be needed.

The Department of Environmental Resilience is committed to supporting other Departments through this process. The Department has established target goals for multiple categories that will be important to achieve if the City is to reach net-zero by 2035.

It is important to note that this document does not dictate the process

to be implemented to reach the goal. Instead, the document outlines possible paths City Departments can take in choosing the best routes to GHG emissions reduction. The Mayor's support and Goshen City Council funding approval will be needed to meet each Department's goals. Support from elected officials will be critical as City policies, practices, and standards are adapted to meet the Climate Action Plan's goals.

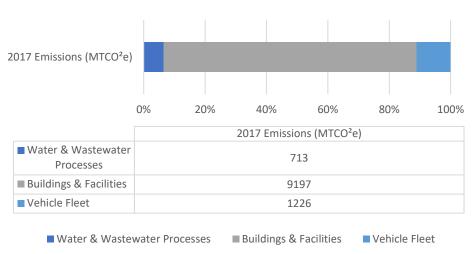


# THE INVENTORY

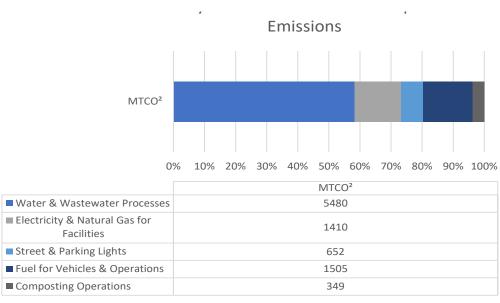
The Climate Action Plan is being written with the benefit of having two separate inventories in two different years. Having two inventories has enabled both comparison and improvement based on experience. The Department had the opportunity to learn and improve the second inventory and set up the data for long-term monitoring.

#### **2017 INVENTORY**

#### 2017 MTCO₂e Goshen Government Emissions



#### **2019 INVENTORY**



The 2017 inventory of Goshen Government Operations was the first study of the Goshen City government's emissions.

It measured 11,136 metric tons of carbon dioxide equivalents (MTCO2e). Carbon Dioxide Equivalent includes all greenhouse gases but reports their warming potential in terms of carbon dioxide, the most common greenhouse gas. Table 1 illustrates the emissions sectors and activities. Of this, total electricity use contributed 73 percent of emissions, natural gas at 9 percent, emissions from the vehicle fleet in gasoline and diesel use totaled 11 percent, and wastewater treatment effluent comprised the remaining 7 percent of emissions. The determination was made to include solid waste emissions, a contracted service that includes Goshen residential waste, in the Community inventory. The inventory did not include emissions from the environmental center or flared methane at the wastewater

The 2017 emissions inventory provided a solid starting point for identifying local government emissions; though it did not provide a detailed accounting of energy usage over time, energy costs, or a system to continue to track both emissions and costs, it layed the foundation for building an even more robust inventory.

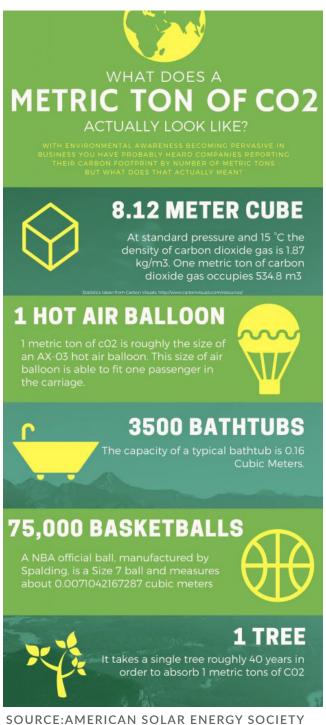
treatment facility.

The 2019 inventory includes an accounting of all City energy accounts and purchases and tracking of materials and

services and assets that contribute to emissions both positive and negative. This allowed the identification of emissions by energy type, source, user, and expenses and provided a way to track each variable.

Between the two inventories, there was a difference in total emissions. A significant reduction in emissions of 1,739 MTCO<sub>2</sub>e is recorded over the two inventory years. This reduction is due to NIPSCO's efforts to decarbonize their power generation by increasing their percentage of clean energy over coal power plants. Other more minor differences occurred when categorizing emissions and choosing which emissions should be included in the survey for Government Operations versus those that would be considered Community emissions

In both the 2017 and 2019 inventories, the City followed the Local Government Protocol to quantify and report greenhouse gas emissions developed in partnership and adopted by the California Air Resources Board, California Climate Action Registry, ICLEI Local Governments for Sustainability, and the Climate Registry. The protocol provides a structure for determining which GHG emissions would be characterized as "Government Operations" and which would be "Community" emissions.

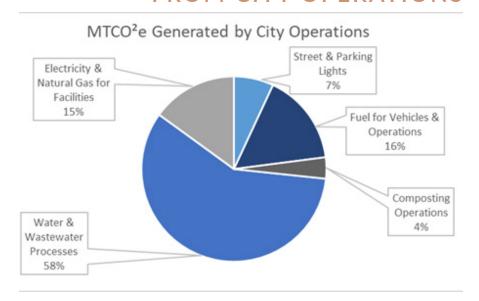


# DISTRIBUTION OF ENERGY AND EXPENSES

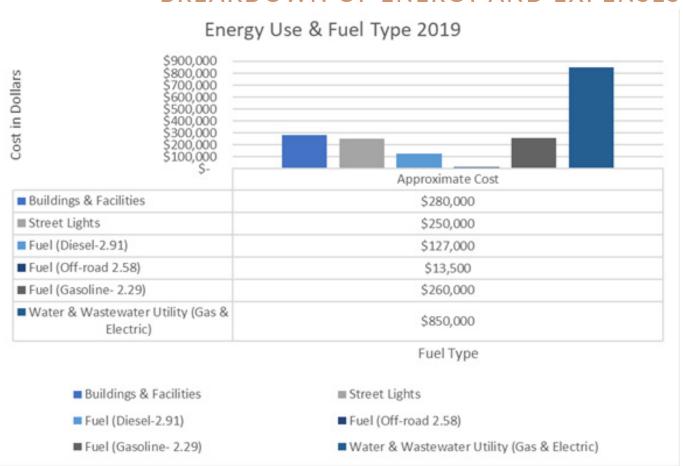
CITY OF GOSHEN
2019 ENERGY EXPENSES

he City spends approximately \$1.8 million annually on energy; this purchase generated approximately 9,396 MTCO<sub>2</sub>e in 2019. That includes electricity and natural gas utilized in city facilities (Buildings and Facilities - 15%), the processing, distribution, and collection of water and wastewater (Water Utility and Wastewater Utility combined - 58%), fuel for operations (Vehicle Fleet - 16%), composting operations at the Goshen Environmental Center (Environmental Center - 4%), and Electricity for street and parking lights (Street Lights - 7%).

### TOTAL EMISSIONS FROM CITY OPERATIONS



#### BREAKDOWN OF ENERGY AND EXPENSES



# EMISSIONS FORECAST

## BUSINESS AS USUAL AND STRATEGIC REDUCTIONS FORECAST SCENARIOS

he 2019 inventory was then used to create a Business as Usual (BAU) graph to trend the GHG emissions for the City if the City did nothing to reduce GHG emissions. The BAU graph accounts for significant GHG reductions that NIPSCO is undertaking as it converts to green power generation. That reduction affects GHG emissions until 2028.

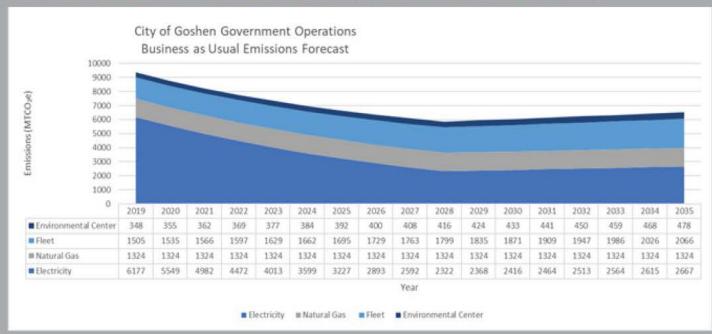
As a part of standard operations, the City's energy consumption and GHG emissions do not stay constant. Factors such as growth, changing temperatures, changing city policies all affect GHG emission trends.

The electricity consumption, City Fleet, and the Environmental Center were all increased by 2% per year to reflect these trends. The natural gas consumption has remained relatively constant and was not increased in the BAU model. Based on NIPSCO's reductions and the City's

energy trends, the lowest GHG emissions will occur in 2028 and will begin trending upward.

If NIPSCO's decarbonization of electrical power is evaluated without increases due to BAU, NIPSCO will decrease GHG emissions from electricity usage from 6,177 MTCO<sub>2</sub>e in 2019 to 1,968 MTCO<sub>2</sub>e in 2028. That is a 68% decline in GHG emissions from electricity. This number does not take into account the growth forecast model.

#### EMISSIONS IN A BUSINESS AS USUAL SCENARIO

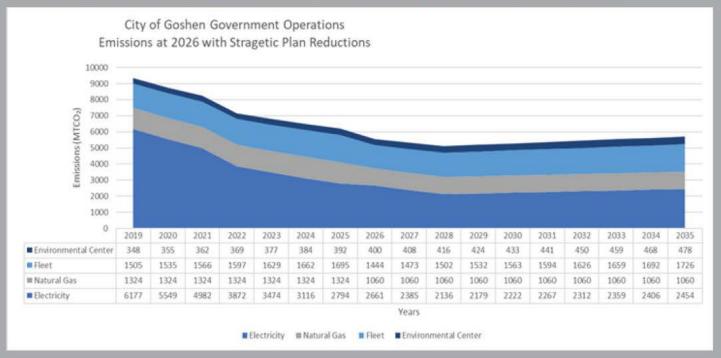


A second forecast was created taking into account proposed 2026 benchmark reductions in this Climate Action Plan. These benchmarks are comprised of a 30% reduction in electric consumption in buildings, 20% reduction in natural gas in buildings, and 25% reduction in gasoline

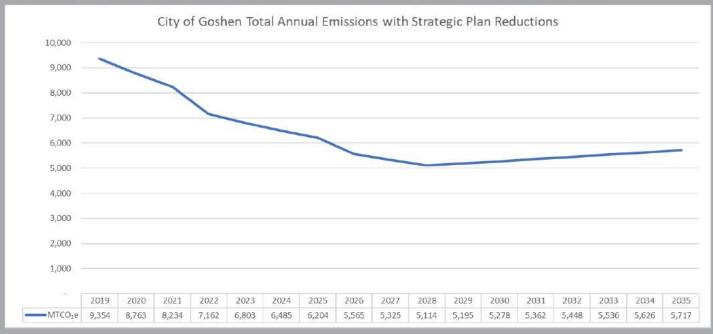
consumption across the vehicle fleet. The current wastewater energy efficiencies under construction now are factored in also as a 2022 drop in electricity. The NIPSCO emissions reductions are also factored into this forecast.

Similar to the BAU graph, emissions in the second forecast begin to rise again after 2028. This indicates that further reductions will need to be in place by or before that date in order to remain on schedule for a target of zero emissions by 2035.

#### TOTAL EMISSIONS WITH PLANNED REDUCTIONS



#### TOTAL EMISSIONS WITH PLANNED REDUCTIONS



# MITIGATI ADAPTAT

Mitigation actions reduce emissions to help reduce climate changes.

Adaptation actions help the City and its residents adapt to a changing climate. Both activities are essential in building a resilient Goshen.

itigation is action aimed at reducing the impacts of climate change. The primary impacts of climate change are increases in temperature and increasingly unpredictable precipitation – periods of heavy precipitation resulting in possible flood scenarios, and periods of drought. Mitigative efforts seek to directly and indirectly reduce the greenhouse gas emissions that human activity produces, which are causing changes in our climate, resuling in temperature and precipitation impacts.

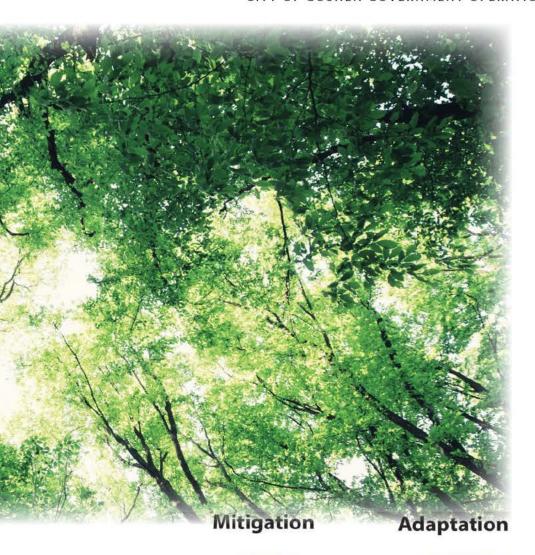
Mitigation is the adoption of technologies and behaviors that reduce greenhouse gas emissions. Sustainable energy production through solar and wind generation is mitigation; driving an electric vehicle is mitigation; refusing plastic packaging is mitigation. These are just a few examples of technologies and behaviors that mitigate climate change

impacts.

Adaptation refers to actions which are intended to help us live with the impacts of climate change. Since a certain amount of temperature rise is projected to manifest over the coming decades due to the large amount of greenhouse gas emissions already concentrated in our atmosphere, we can predict that our cities and towns will become warmer than in the past, our waterways will experience more flooding, and there will be changes in the flora and fauna that live in our ecosystems.

Adaptive actions help us prepare for these changes by recognizing that old patterns and habits may no longer serve us well. Capturing and holding more stormwater on site is adaptation; identifying community cooling centers is adaptation; low water-input landscaping (xeriscaping) is adaptation; moving structures out of floodways is adaptation. These are a few examples of actions that help us adapt to climate change impacts.

Some actions blend mitigation and adaptation very seamlessly. In order to cool urban settings, tree planting, from homes and neighborhoods to parking lots and commercial/industrial districts, is an important adaptive strategy. But trees also double as a mitigation strategy because of their ability to sequester carbon dioxide, removing it from the atmosphere. Properly insulating buildings so that



they use less energy to stay warm in the winter and cool in the summer is an obvious way to mitigate emissions. But insulating is also a critical adaptive strategy, helping to manage life with rising summer temperatures.

Most of the proposed strategies in Goshen's government operations climate action plan are intended to reduce emissions toward the stated goal of net-zero emissions by 2035, and are therefore mitigative. There are some which are clearly adaptive as well, and some which blend both adaptation and mitigation, such as the Canopy Goal and flood preparation. By identifying and adopting both mitigation and adaptation strategies, the climate action plan strengthens our current and future resilience.

Sustainable transportation
Energy conservation
Building code changes to Building code changes to improve efficiency
Add renewable energy
Reduce uncanopied hard surface areas
Drain hard surfaces to vegetated areas instead of directly to waterways
Improve fuel efficiency
Capture and use digester gas
Continue to utilize water distribution leak detection

Geothermal
Solar thermal
Building design for
natural ventilation
Tree planting & care
Local food production
Reduce solid waste
Compost vegetative
waste
Water conservation
Green roofs or
cool roofs

Infrastructure upgrades:

Storm sewer system, Flood
resilience, Wellhead protection,
Electric vehicle charging network,
Sustainable transportation
network
Residential programs:
downspout disconnection,
Health programs: West Nile,
Lyme disease, Shade policy,
Cooling centers, Smog alerts,
Indoor air quality, Health index
Emergency & Business continuity
planning
Help for vulnerable people

# EMISSIONS REDUCTION STRATEGIES

The work of inventorying our energy consumption and the associated emissions, and then proposing reductions against projected consumption is sobering. The Climate Action Plan's stated 5-year benchmark goals for 2026 (30% reduction of electricity consumption in buildings, 20% reduction in natural gas consumption in buildings, and 25% reduction in gasoline consumption by the City's fleet) will net only about 746 fewer MTCO2e than a donothing, business-as-usual approach. With the proposed reductions, in addition to the reduced emissions from NIPSCO's electric generation, the overall emissions reduction in government operations is about 45% from 9,396 MTCO2e to 5,114 MTCO2e - by 2028.

On the surface this looks encouraging. However, NIPSCO's reductions make up the majority of these decreases (3,536 MTCO2e) over the same period. Furthermore, looking at the projections, the City's emissions begin to climb again by 2029 in spite of the first round of reductions. Taken together, this means that while the initial proposals are good, they are not nearly good enough to set the City on the path to the larger stated goal of net-zero emissions by 2035. Solar energy production is the best bet - and it is a good one - to reduce operational electric emissions in a significantly meaningful way. The technology exists (along with the solar hours), as well as the facilities (Wastewater Treatment Plant) which could receive solar installations that result in critical electric emissions reductions and long-term costsavings. Solar energy is not a silver bullet, but investing in solar has never been more profitable.

The emissions reductions strategies which follow are challenging. They include the initial 2026 benchmarks. They also include strategies which can – if implemented with sustained effort, cooperation and funding, not to mention careful monitoring – propel the City toward zero emissions. This work comes with a hefty financial cost. If the City understands that this is the right thing to do, it will make the adjustments to operations, to behaviors, and to culture in order to meet the challenge. Understanding the necessity of the work is the essential ingredient.



- 1. DEVELOP REDUCTION TARGETS FOR EMISSIONS CATEGORIES WHERE THERE IS A CLEAR PATH FOR SUCCESS THROUGH TECHNOLOGY OR BEHAVIOR CHANGE, RELATIVE EASE OF IMPLEMENTATION, POSITIVE COST-BENEFIT RATIO, AND PRESUMPTION OF CITY AND PERSONNEL DISCIPLINE TO ACCOMPLISH THE WORK.
- 2. DETERMINE EMISSIONS CATEGORIES THAT WILL REQUIRE ADDITIONAL DATA AND DEVELOP A TIMELINE FOR ACCUMULATING THE DATA AND WORKING TO CREATE SITE-SPECIFIC STRATEGIES AND THEIR CORRESPONDING COSTBENEFIT RATIO.
- 3. DETERMINE WHICH EMISSIONS CATEGORIES OR STRATEGIES SHOULD BE RE-EVALUATED LATER DUE TO UNCLEAR PATHS TO SUCCESS. THESE INCLUDE LACK OF AVAILABLE TECHNOLOGY, CURRENT PROJECTION YIELDS HIGH COST AND LOW BENEFIT, PERCEIVED DIFFICULTY IN DEVELOPING BUY-IN FOR BEHAVIOR CHANGES, OR OTHER OBSTACLES.
- 4. IDENTIFY STRATEGIES TO ANTICIPATE AND LESSEN LOCAL CLIMATE CHANGE IMPACTS ON PEOPLE, LIVING THINGS, PROPERTIES, AND OPERATIONS BASED ON INFORMATION FROM INDIANA'S UNIVERSITIES AND CLIMATE CHANGE SCIENTISTS.

# STRATEGY #1 ENERGY MANAGEMENT OF BUILDINGS AND FACILITIES

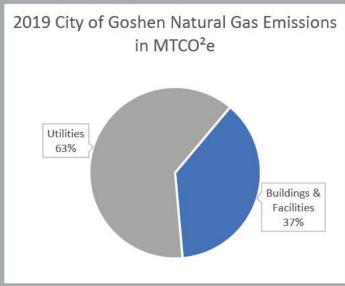
Energy Management is a fundamental component of all climate action plans. The City of Goshen utilizes electricity and natural gas for heating and cooling buildings, powering lights, equipment, computers, and the processes involved with drinking water treatment and distribution and wastewater collection and treatment. In 2019, the City used almost 2.5 million kWh of electricity powering city facilities and outdoor lighting, such as street lights and parking lights. That equated to emissions totaling 1,421.7 MTCO<sub>2</sub>. Approximately fifteen percent of those emissions were generated by City facilities, ten percent by street lights, and seventy-five percent by utility processes.

The City has been converting lighting to LED for several years. Beginning in 2020, NIPSCO began converting NIPSCO owned street lights to LED which will also save the City money. That savings in not included in the estimates in this section. The CAP recommends a review of street lighting policies and accounts to better evaluate long term plans and savings in this area.

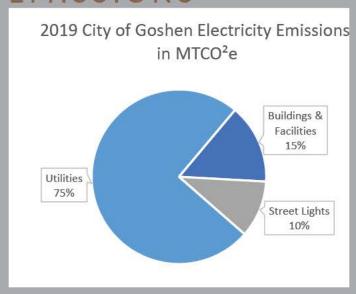
A 2015 energy report conducted by the U.S. Department of Energy (DOE) concluded that commercial buildings could reduce their energy consumption by twenty-one (21) percent if they employed all "energy star" equipment. They could reduce their consumption by forty-seven (47) percent if buildings utilized best and cost-effective technologies and fifty-nine (59) percent savings if all equipment operating at its theoretical efficiency limit.

Some city buildings have already had some upgrades completed, such as Central Garage, the Annex Building, City Hall, and Central Fire Station; however, building efficiency in almost all cases can be improved. Reductions in energy consumption result in cost savings and reduced emissions. The goal for emissions reduction in City buildings is thirty (30) percent in electricity and a twenty (20) percent in natural gas by 2026. Reductions at this level generally require only small investments or behavior change and net a larger financial reward. The savings from these reductions would result in upwards of \$65,000 annually. A case study on the Reith Center can be found on the Environmental Resilience Page of the website.

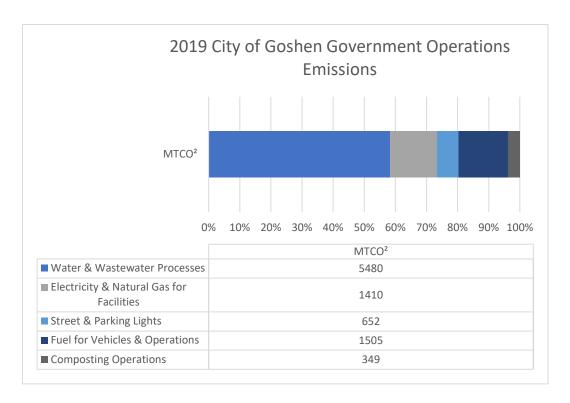
### 2019 GAS EMISSIONS



# 2019 ELECTRICITY EMISSIONS



### 2019 GOSHEN GOVERNMENT EMISSIONS

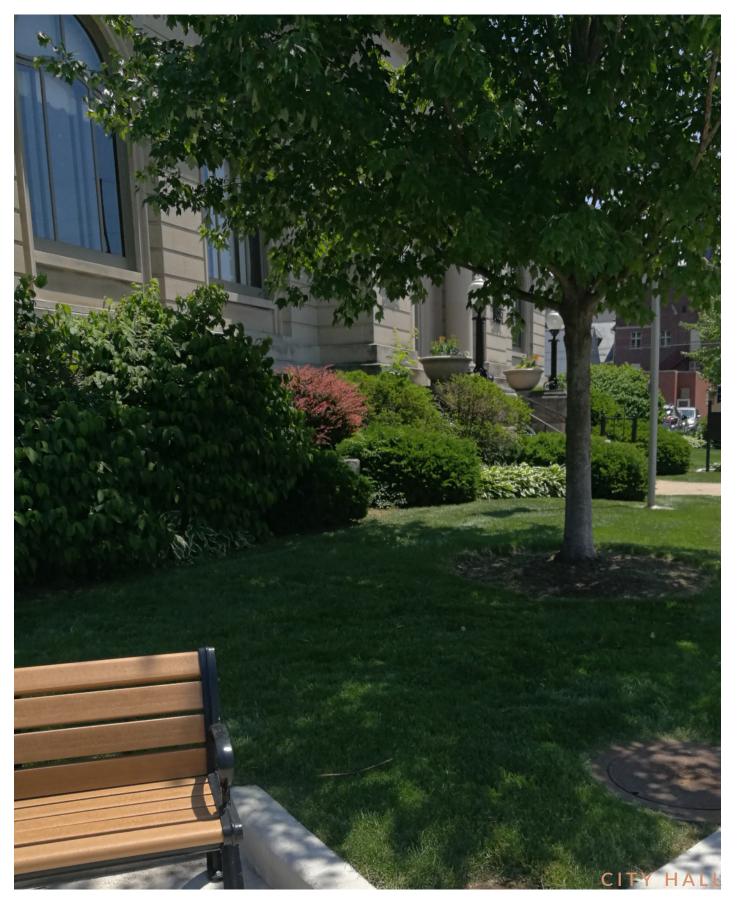


The savings from these reductions would result in upwards of \$65,000 annually. Reductions at this level generally require only small investments or behavior change to net a larger financial reward.



### STRATEGY #1 ENERGY MANAGEMENT

Co-Bene lits																
	Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
10	Energy Management	Increase Efficiency of Building Systems and Technologies and Reduce resource consumption (energy & water) Electricity 30%, Natural Cas 20%, Water 30% by 2026.	1.1	Perform energy consumption and water audit within each building/facility to determine the efficiency of components, appliances, mechanicals, envelope tightness, and evaluate workspace concerns. Generate a work plan for improvements to maximize return on investments based on available budgets and working toward Climate Action Plan goals.	1st - 3rd Years	~	1			<b>~</b>	Environmental Resilience is compiling information from a multi-department effort (Engineering, Building, Etc) to provide coordination, develop	variable	Regular annual maintenance	\$65,000 +		About 30% of a home's heating energy is lost through windows. In cooling seasons, about 76% of sunlight that falls on standard double-pane windows enters to become heat. https://www.blueaccounling.org/article/daptive-management-and-collaborative-adaptive-management.
			1,2	Develop mechanisms for all departments and/or building managers to be aware of and responsible for energy consumption and resutling costs.	2nd to 4th years	1				1	reports, summarize presented strategies, track progress. A management team could provide overall financial review and	Staff Time	Staff Time			
ement			1.3	Develop a heating and cooling policy relevant to each specific building. Replace thermostats with "smart" thermostats (appropriately managed) where applicable.	2nd - 3rd Years	~				1	leadership toward the adoption of practices.	Staff Time	Staff Time	Can save up to 10% on energy costs  Maintain Excellent Public Facilities, NE-8: Encourage Sustainable Living and	Thermostats that adjust to use less cooling and heating when buildings are empty can save 10% of energy costs	
Energy Manage			1.4	Establish city-wide employee teams will participate with feedback and champion improvements to their workplace operations.	Quarterly	~	~			~	Environmental Resilience with assistance from all Departments	Staff Time	Staff Time		Business Practices, E-6: Enc ourage business practices that have positive	
M			1.5	Evaluate landscaping around city buildings and, where needed, develop a plan to co-plant fast-growing with slow-growing trees (free shepherding) to maximize shade production to meet canopy goals and realize energy savings.	1st Year - On-going	1	<b>~</b>	1	1	1	Environmental Resilience in consultation with Facility Managers	Minimal	Regular annual maintenance	Can save up to 5 50% on summer cooling costs		Building cooling expenses can be reduced by 5-50% where a tree canopy and smart landscaping design is implemented (energy.gov)
		Construction of New Buildings	1.6	Design new city facilities using the most efficient building & energy systems, 30 year (or the life of the specific accessory) payback period to prevent the future costs associated with retrofits. Design and construct to easily allow for the addition of solar systems at a later date. Model environmental resilience.	Immediate	1	~		<b>√</b>	1	Engineering / Environmental Resilience	Designed with a 30 year or less payback				
		Evaluate benefits (if any) to off-site working	1.7	Evaluate and adopt, if & where feasible, alternative work schedules to improve facility efficiency, including open hours, workplace schedules, in-person and online services to balance openness, accessibility, efficiency, costs, etc. Explore remote-work options and remove barriers to remote-work where needed, such as digitizing records.	Annual Review	<b>~</b>	<b>~</b>			~	All Departments	undetermined	undetermined	undete mined		



# STRATEGY #2 SOLID WASTE MANAGEMENT

## In 2019, residential trash picked up at the curb equaled over one ton per household at a cost of \$1.4 million.

The City of Goshen generates two primary forms of solid waste: trash generated by City employees throughout the workday and green waste (leaves and brush) picked up curbside and composted or chipped at the Goshen Environmental Center. The decomposition of these products either in a landfill or in a composting pile generates carbon dioxide.

The emissions generated from operations at the Goshen Environmental Center total 349 MTCO<sub>2</sub>e. These emissions are a natural process of decomposition. As any living thing decomposes it will generate carbon dioxide. The reason that these emissions are included in the CAP is that the material is quantified and placed on public property where it is stored and turned as it develops into a viable product for reuse.

The waste from City operations is co-mingled with the community's residential waste when picked up and taken to the landfill. As the owner, the Elkhart County Landfill reports the emissions from landfilled waste annually to the Indiana Department of Environmental Management (IDEM).

The City has significant influence over the community's waste generation by managing the contract for waste pickup, prompting the Environmental Resilience Department to include the solid waste data in this report. However, the overall emissions count is not included as a part of the overall Government Operations emissions. This area of emissions is significant, totaling 8,292 MTCO<sub>2</sub>e and will be addressed in both the Government

Operations Climate Action Plan and a Community Climate Action Plan should that be developed in the future.

In 2019, the contracted waste hauler picked up 11,824 tons of solid waste from approximately 10,600 households and from some government operations. It is estimated that approximately 3.7% of solid waste was due to City Operations. City operations generated approximately 425 tons, and residents generated 11,398 tons, over one ton per household (ton equals 2,000 lbs). Disposal costs were \$1.3 million for 2019, up from \$809,000 in 2015, with a 15% increase in tonnage per household during that time.



#### COMMUNITY RESIDENTIAL SOLID WASTE

In 2019, the contracted waste hauler picked up 11,824 tons of solid waste from approximately 10,600 households and from some government operations. It is estimated that approximately 3.7% of solid waste was due to City Operations. City operations generated approximately 425 tons, and residents generated 11,398 tons, over one ton per household (ton equals 2,000 lbs).

Disposal costs were \$1.3 million for 2019, up from \$809,000 in 2015, with a 15% increase in tonnage per household during that time.

Some material is being diverted from the landfill. There is five drop-off recycling centers in Goshen placed there by the Elkhart County

Currently approximately 1,140 households pay for private curbside recycling. Those households capture approximately 456,000 pounds of material annually that can be sold and reused as a part of the local economy.

Based on national statistics and the number of local dropoff sites, an additional ten percent of households also may be contributing to dropoff recycling sites diverting an additional 425,000 pounds, making the total solid waste diverted approximately 881,000 pounds. This is an important number when looking at the total landfilled amount of 12,694 tons (25,388,000 pounds) in 2020. If the solid

waste numbers are combined, the Goshen community reclaimed just 3.4% of the material entering the landfill.

Typical municipal residential solid waste is 48% recyclable or 12,186,240 lbs of the possible 25,388,000 pounds. Reducing solid waste entering the landfill by 48% would save almost \$675,000 and divert 12,186,240 pounds of material into the local and regional economy. It would also cut solid waste emissions in half.

#### GOSHEN SOLID WASTE STATISTICS

	Solid Waste Statistics City of Goshen														
	*Residential	Total Tons	Charges	perton	Total Charges	0.0000000000000000000000000000000000000	ons Broker tomer -See	Control of the Contro	lbs per	\$ per	Percentage change in				
Year	Households	per Year Collected	Pickup and Transport	Landfill Tipping Fees	peryear	Utility Tons	Civil City Tons	Residenti al Tons	household peryear	household per year	weight by per household				
2021	10,706														
2020	10,646	12,694	\$ 92.15	\$ 18.60	\$ 1,405,861	203	254	12,237	2,299	\$ 127.17	7%				
2019	10,600	11,824	\$ 92.15	\$ 18.60	\$ 1,309,508	189	236	11,398	2,151	\$ 118.97	15%				
2018	10,553	10,242	\$ 92.15	\$ 18.60	\$ 1,134,302	164	205	9,873	1,871	\$ 103.51	-1%				
2017	10,513	10,377	\$ 62.99	\$ 18.60	\$ 847,329	166	208	10,003	1,903	\$ 77.62	4%				
2016	10,473	9,937	\$ 62.99	\$ 18.60	\$ 810,792	159	199	9,579	1,829	\$ 74.55	0%				
2015	10,433	9,924	\$ 62.99	\$ 18.60	\$ 809,745	159	198	9,567	1,834	\$ 74.74	3%				
2014	10,393	9,602	\$ 62.99	\$ 18.60	\$ 783,451	154	192	9,256	1,781	\$ 72.59	2%				
2013	8,710	9,428	\$ 62.99	\$ 18.60	\$ 769,253	151	189	9,089	2,087	\$ 85.05					



#### SOLID WASTE MANAGEMENT

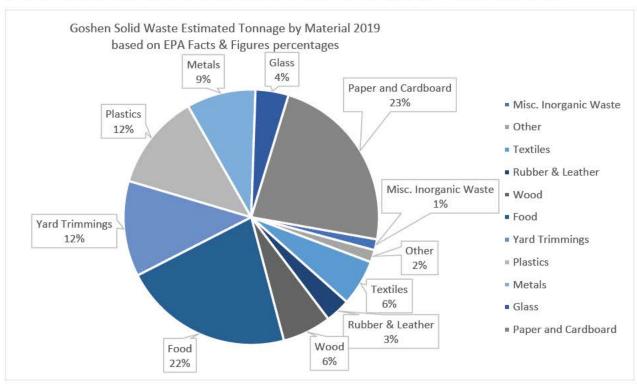
#### SOLID WASTE GOALS

The City is working on specific goals to reduce the trash in City operations. Solid waste characterization and audit studies will need to be developed for City operations in the future but are not yet prioritized in the specified strategies due to a lack of poor existing metrics.

Also, the City will be developing a public education campaign on the topic of

solid waste. The campaign will inform on how solid waste impacts our community and our local budget. It will also highlight recycling is an essential part of our local economy that not only diverts material from the landfill but reclaims a valued commodity for use in local and regional businesses, supporting jobs and products made in Indiana. The education campaign will also highlight local businesses that provide products that reduce waste, provide less packaging, and open up new choices for persons wanting to reduce their volume of landfilled trash.

#### TYPICAL MUNICIPAL SOLID WASTE



# CITY OF GOSHEN GOVERNMENT OPERATIONS CLIMATE ACTION PLAN 2021

#### STRATEGY #2 SOLID WASTE MANAGEMENT

	Emissions Category	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timeline	Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Su <u>g</u> ested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes	
	Solid Waste - Green Waste Management	Review practices and promote Innovation to reduce GHG when providing services for Green Waste.	2.1	Review Green Waste processes and methods and look for ways to innovate that will reduce CHGs and improve systems, including employee communication.	Annual Review	~				<b>~</b>	Engineering and Street Departments	to be determined	to be determined	to be determined	Goshen Comprehensive Plan 2025, C-8 Efficient & Effective Street Department Services, NE- 7 Use best practices to reduce and dispose of solid waste.		
Solid Waste Management			2.2	Stock & increase the use of reusable dishware & shverware. Buy 20% post-consumer waste or greater when possible (no Styrofoam or non-biodegradable products).	1st Year - On-going	1			1	<b>\</b>	Could be someone in the building or a team that looks to continue to	Minimal	Minimal	Reduction of solid waste			
Solid Waste			2.3	Evaluate (survey need) and implement compost (organics waste) opportunities a cross applicable municipal departments.	2nd Year - On-going	1	(e )		1	>	improve practices around recycling. Maybe a team would meet quarterly.	Minimal	Minimal	entering landfill.	Goshen		
		Improve efficiency and reduce waste	2.4	Develop and adopt a city-wide policy that outlines waste management protocols for government operations, including regular waste and "universal" (c-waste, fluorescent bulbs, etc.) waste.	Ist Year	1	1	1	1	>	Invite multi-department	Creation of Training materials or posters	Minimal	indirect savings	practices to reduce and	It is illegal to send "universal" waste to the landfill. https://www.in.gov/idem/recycle/2384.ht m	
			2.5	Evaluate consumable products by Financial and Environmental CBAs, develop an "approved" list used for most purchasing, and streamline on a city-wide basis.	2nd Year	1	1	1	1	<b>\</b>	participation in brainstorming and policy development to determine City needs and values.	Would require centralized purchasing, lack storage and dedicated staff.	unknown	to be determined	dispose of solid waste		
			2.6	Evaluate current waste removal and recycling contracts regarding best mana gement practices.	2nd Year - On-going	1				1		to be determined	to be determined	to be determined			

# STRATEGY #3 SUSTAINABLE

TRANSPORTATION

Approaching net-zero will require a plan that reduces fleet emissions and still maintains City services.

The 2019 inventory of Goshen's governmental operations reveals approximately sixteen percent of the City's emissions from the direct burning of fossil fuels, gasoline, diesel, and off-road diesel in transportation and equipment. The total emissions from fossil fuel combustion in governmental operations are second only to the emissions generated in water and

wastewater processing operations (Figure

2 2019 Goshen MTCO2e Emissions

Generated).

The City's vehicle fleet includes passenger vehicles such as sedans and SUVs, light-duty and heavy-duty trucks, and off-road equipment such as loaders, mowers, and generators. While acknowledging that this is a substantial source of emissions, it is critical to understand that the City's work necessitates vehicles and equipment.

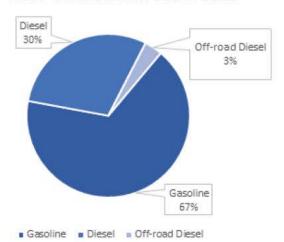
Approaching net-zero will require a plan that reduces fleet emissions and still maintains City services. It will also require additional regulation substantial investment by the vehicle industry. Fuel efficiency is nonexistent in heavyduty options. This will prohibit reducing emissions in the vehicles classified as heavy-duty and critical to the City's operations.

There is a complete fuel analysis located in the Appendix.

The City used approximately 162,000 gallons of fuel in 2019. Gasoline made up

#### FLEET EMISSIONS

#### Fleet Generated MTCO2 in 2019



the majority of those gallons at sixty-seven percent. Diesel use was thirty percent, and off-road diesel was just three percent.

The gasoline-powered vehicles consist of sedans, SUVs, light-duty trucks (F150s),



and heavy-duty trucks (F250s, F350s, F550s). The diesel-powered vehicles consist of heavy-duty trucks (fire trucks, ambulances, International and Volvo trucks, sewage vacuum trucks, sweepers, and others). Off-road equipment would include equipment such as loaders, bobcats, and mowers. These distinctions are essential to understand as fuel use is examined.

Options in Reducing the Fleet's Carbon Footprint

There are options in reducing

opportunity to experiment with greener transportation, such as bicycling and walking. Not all departments can employ this strategy, and those that can, typically cannot in all situations. Still, a successful walking and bicycling program could equate to a small but relevant percentage.

Increasing fuel economy is another effective way to reduce emissions and fuel consumed. The City has successfully used hybrids, both Toyota and Ford, for the Building and Engineering Departments for a decade; however, these departments are

- Municipalities have traditionally given preference to American made vehicles:
- Fuel efficient vehicle options on the market have lagged, especially for police vehicles, which comprised the bulk of the gasoline fleet emissions;
- Adoption of new technology requires both drivers and technical support to adapt or add additional training;
- New technologies can be expensive, require additional equipment, new maintenance requirements, or have

	a stigma of
	being unproven
	technology; and
ar	•Budget
15	considerations.
12	Sedans
16	are the largest
11	group of
15	vehicles in the
	fleet (Table 1);

emissions from	Break	down of Ga	soline - I	Powered	Fleet	
the vehicle fleet.	Dicar	down or da	JOIIIIC I	OWCICU	Ticct	
These options	Vehicle Description	Number of	Highest	Lowest	Median	Median
provide long-	verilicie Description	Vehicles	MPG	MPG	MPĠ	Vehicle Year
term costs	All Vehicles	175	54	5	18	2015
savings to	Sedans	60	54	16	19	2012
the City. The	SUVS	43	44	14	19	2016
three apparent	Lgt Trucks	31	24	13	19	2011
options are:	Heavy Trucks	40	14.5	5	8	2015
• D.::						

Drive

less. For example, the mean 2019 police vehicle mileage was 11,115 miles per vehicle, highest mileage at 26,904 miles and lowest at 1,377 miles;

- Increase the fuel economy of vehicles in the fleet. The mean for all city vehicles was 18 miles/gallon and sedans and SUVs were 21 miles/gallon, and
- Transition to vehicles that use a fuel type that releases fewer emissions, such as electric.

The first option in reducing emissions is merely driving fewer miles. This can be done through department policy or encouraging behavior changes, such as encouraging employees to combine trips and rideshare. This also includes remedies such as an idling policy, proposed by the Fleet Manager in 2019, to reduce wasted fuel from vehicles sitting with the engine running. Reducing miles can also be an

not the city's heaviest fuel users. Utilizing hybrids in departments where the vehicles are driven more miles per year would positively impact fuel consumption.

Current United States fuel economy standards for 2022 are 50.24 mpg (small footprint passenger vehicles), 37.59 mpg (larger passenger vehicles), 40.31 mpg (smaller footprint light-trucks), 26.02 mpg (larger light-trucks). These are the average automaker fleet economy targets (further information on US fuel economy standards can be found in the appendix under Fleet Analysis). They include all vehicles in the manufacturer's fleet and both city and highway mileage. These targets do not reflect the current fuel economy of the City's fleet due in part to the age of the fleet but also due to the traditional evaluation criteria used to purchase vehicles, including;

however, they are the oldest with the exception of light trucks according to the calculated median of 2012. The Median fuel economy for all vehicles is a mere 18 mpg (City). This fuel economy is not atypical for American municipal fleets. They are replete with low-mpg options, especially in fleets comprised of a majority of police vehicles. Vehicles marketed as Police Interceptor vehicles have traditionally been American-made and sold on features, not gas mileage. For example, the 2019 inventory had seven 2019 Dodge Chargers, with a fuel economy of just 19 mpg for city mileage (30 mpg highway). Transitioning appropriate police vehicles to hybrid and fully electric as technologies advance can significantly reduce fleetrelated emissions.

# STRATEGY #4 Indicated in the state of the st

Indiana is expected to have an increase in the number of freeze and thaw events in the winter increasing stress on local infrastructure.

Climate changes will also affect infrastructure demands and maintenance practices. According to Purdue University Indiana Climate Change Impact Assessment, Indiana has already warmed 1.2°F, and that warming is accelerating, with an expected 5-6°F increase by midcentury and consistently more warming by the end of the century.

The number of extreme heat events (defined as a high of 90° F or more, combined with a low of 68° or more) is projected to rise from an average of twenty-one currently to between fifty-eight and seventy-two events per year.

The State will also see a continued increase in rainfall intensity and average annual rainfall. Annual average rainfall has increased by 5.6 inches since 1895, and more rain is falling in higher intensity downpours.

These changes will add heat stress to infrastructures such as roads, sidewalks, and bridges. Increased rainfall will bring a greater likelihood of flooding, especially localized flooding on streets where water pools before entering storm sewers. Additional rainfall and increased intensities will test sewer capacities and increase pollution from urban and agricultural runoff.

Increased heat and stormwater will create an opportunity for constructing green spaces to dissipate urban heat sinks and absorb rain events. Such green infrastructure provides value by reducing load within built stormwater systems and by providing ambient cooling.

Training city staff to care for green infrastructure will represent a new and critical capacity for the City to accept. As with other imporatant infrastructure (streets, for example), techniques, skills, and schedules for maintenance of green infrastructure will need to be developed and deployed in order for these nature-based systems to work as effectively as possible.

The City can continue to look for ways to complement a variety of emission-cutting behaviors by looking for opportunities for "road diets" – shrinking the size of our roadways. Doing so reduces material and maintenance costs (and associated emissions), reduces traffic emissions, and can increase non-motorized transportation.

Balancing infrastructure (including green infrastructure) and utility needs will be an ongoing point of discussion. Increasing the number of trees in the community is a vital part of adapting to climate change, and yet street right-of-way – a prime site for trees – is increasingly crowded with other infrastructural needs. State legislation, as well as local interest, will play a part in the manner in which sustainable infrastructure is created.



# CITY OF GOSHEN GOVERNMENT OPERATIONS CLIMATE ACTION PLAN 2021

#### STRATEGY #4 SUSTAINABLE INFRASTRUCTURE

	,	71					C	o-Ben	efits						w :	10-
	Emissions Category	Target Gouls	Action #	Actionable Hems (not all-inclusive)	Review Timeline	Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Suggested Responsibility	Initial Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
		Reduce energy and emissions from	4.1	Convert > 95% of street and parking lights & traffic signals to LED technology by 2026.	lst - 5th Year	1				1	All Departments who	to be determined	Staff Time	to be determined		ļ
		street lights or eliminate where feasible.	4.2	I de ntify, map & evaluate possible reductions or eliminations, incl. the number of parking lamps on public properties.	2nd - 3rd Year	<b>V</b>				1	operate street and parking lights documented by En vironmental Resilience	to be determined	to be determined	\$200+ annually per LED pole eliminated		
frastructure	TOP TOP Infrastructure	Review infrastructure standards and maintenance practices every three years to reflect current mitigation practices.	4.3	Evaluate and revise standards where climate change projections, such as increased winter freeze/thaw and higher intensity rainfall, create weaknesses in infrastructure. Consider revisions to require reasonable emissions reductions and low impact measures to adapt to climate impacts.	3rd - 5th Year	1			1	<b>V</b>	Engineering & Street Departments	to be determined	to be determined			
I		Develop capacity to maintain green infrastructure.	4.4	Develop and deploy maintenance skills, techniques and schedules for green infrastructure installations across the city.	3rd - 5th Year	~		1	1	<b>~</b>	Representatives of various Departments coordinated by Environmental Resilience	to be determined	to be determined	to be determined		
		Develop a culture of walking and biking as proven by the use of walking areas and local surveys.	4.5	Increase the number of miles of "Complete Streets" to enable safe, convenient, and efficient travel and access for users of all ages and abilities regardless of their mode of transportation.	0	~	~			<b>~</b>	Representatives of various Departments coordinated by Environmental Resilience	to be determined	to be determined	Quality of Place		

## STRATEGY #5 UTILITY PROCESSES

The Utilities are in a constant state of innovation due to the frequency of new regulations and the need to provide ongoing upgrades.

The Goshen Water and Wastewater Utility consume electricity and natural gas to pump groundwater for water treatment and distribution of drinking water throughout the City and collect and process wastewater. These Utilities generate fifty-eight (58) percent of all the MTCO<sub>2</sub> emissions in Goshen's government operations, with most of that energy used to power pumps and heat water.

The combined Utilities use approximately 7,345,718 kWh of electricity and 156,108 therms of natural gas annually, generating 5,545 MTCO<sub>2</sub> emissions (not including emissions related to nitrous oxide, currently under review). The Wastewater Treatment Plant (WWTP) is the primary user of energy, with the wastewater treatment process at sixty-two percent of electricity and seventy percent of natural gas.

The Utilities are consistently in a state of innovation due to the frequency of new regulations and the need to provide ongoing upgrades to maintain the Utilities as critical infrastructure in the community. These needs are balanced with the necessity to provide clean drinking water and wastewater services to the community at an affordable cost.

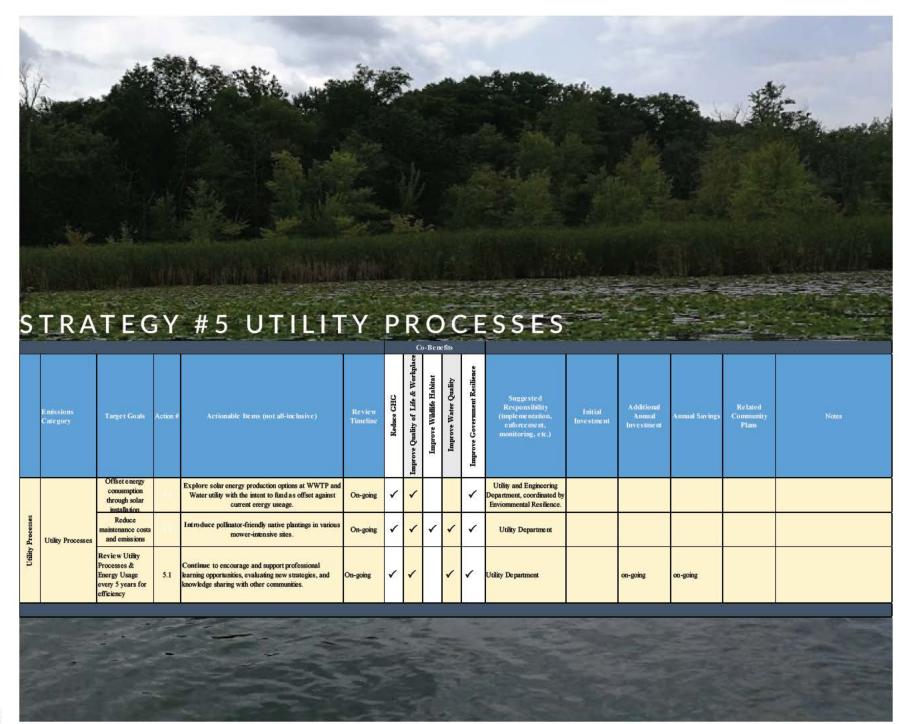
These needs have resulted in consistent upgrades and efficiency improvements over the years, such as the stormwater detention facility and adoption of Supervisory Control and Data Acquisition systems. Upgrades to the facilities are expensive, and as of 2021, it is hard to identify more upgrades that could yield significant energy and emissions savings with an adequate payback timeline.

Currently, the WWTP is undergoing expansion and efficiency improvements, set for completion in December, 2021. With these improvements, the wastewater treatment plant is expected to reduce energy consumption by 1,321,000 kWh annually, equating to 858 MTCO<sub>2</sub>. This is a twenty-one percent reduction in emissions from the WWTP and a 9.6% reduction of MTCO<sub>2</sub> in overall City government emissions.

Beyond these current improvements, and some speculation about the ability to co-generate electricity from WWTP methane, the City's best option for mitigating Utility emissions may be through offsets, such as construction of solar arrays which either directly benefit Utility facilities, or which directly benefit other City operations. While there is significant cost involved in such

construction, solar is nevertheless a sound investment in the near and long term. Even in a more extended return-on-investment scenario, solar energy production benefits can be considered a worthy deposit on social and ecological health.

The critical nature of the water and wastewater utilities to the basic health and well-being of the Goshen community, combined with the facts that they a) require an extraordinary amount of energy to function and b) are an essential safeguard of ecosystem integrity, make them in many ways the centerpiece of any meaningful work toward City government emissions reductions.



#### STRATEGY #6

### SUSTAINABLE LAND USE THROUGH RESILIENT ECOSYSTEMS AND BIODIVERSITY

Only a small amount of the 3.5 million gallons per day of groundwater pumped out of the ground for drinking water will return to the earth as groundwater.

#### LAND MANAGEMENT

Land Management encompasses all of the naturally occurring animate and inanimate members of our ecosystem. These occupants of the ecosystem play critical roles in the health of Goshen's human economy. Learning new ways to live with and appreciate these non-human members of our community is necessary for our social systems' ongoing health and wealth. Land management, in the context of this Climate Action Plan, means developing better ways for people to live within our means and encouraging our ecosystem to expand and flourish.

An essential part of better land management will be a comprehensive inventory of City-owned land. Such an inventory will describe how the land is currently used, what the land type is, what kinds of flora and fauna are present, how vegetation is currently managed, and what kind of long-range plans exist for the land. With such an inventory completed, current management practices can be compared to best sustainable management practices, and a plan developed to move land management in a direction that increasingly limits emissions and other pollutants, conserves water, and increases

biodiversity and canopy. Our goal will be to work towards mowing less, installing and managing more native grasses, forbs, and trees, and using less fertilizers and irrigation.

Preserving floodplain and adopting a flood resilience plan which is responsive to climate science are key characteristics of sustainable land use in Goshen. A Flood Resilience Plan commissioned in late 2020 will set the stage for ongoing discussion and progress toward key goals, such as enhancing floodway property already managed by Goshen Parks and developing an efficient process for purchasing vulnerable floodway real estate when available. Incorporating Goshen's Urban Tree Canopy Goal of 45 percent tree-shade by 2045 will also play an important role in land management decisions on city property. More details of this plan are outlined in the Tree Canopy section.

#### PRESCRIBED BURN AT GOSHEN COLLEGE



#### WATER CONSERVATION

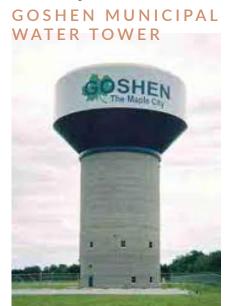
Land management in Goshen will require the conservation of such natural phenomena as groundwater, surface water (i.e rivers, creeks, ditches), trees, healthy soil, and clean air. Drinking water in Goshen is sourced from groundwater. The Water Utility's average production is 3.5 million gallons per day, with a maximum production capacity of about 10 million gallons per day. Only a very small amount of that water will become groundwater again. Remaining water returns to the atmosphere through evaporation, becoming a part of a living organism, being aspirated into the air, or flowing to the wastewater treatment plant and then the Elkhart River. Groundwater is recharged by precipitation, but only about onequarter of all the water falls will become groundwater. Reducing the consumption of water preserves groundwater stores. Saving water also reduces energy use and

emissions

Protecting ground- and surface water from pollution is an important aspect of conserving our water. Urban pollution typically comes in the form of phosphorus, nitrates, and soil sediment. (Industrial pollutants can present different toxins). The primary sources are vegetative (yard) waste, soil runoff, and fertilizer, none of which are so different from agricultural pollution except in concentrations: urban areas are connected to storm sewers. Storm sewers carry yard waste, soil, and fertilizer from all over the City and deposit them into the waterways in a potent mix. Once in our waterways, these pollutants can manifest long-lasting consequences for humans and non-humans alike.

Freshwater is likely to be an increasingly precious resource in this century. We live in a region that has abundant freshwater access at the current moment. Planning for

its continued safety and abundance will be critical as human populations shift due to climate change.

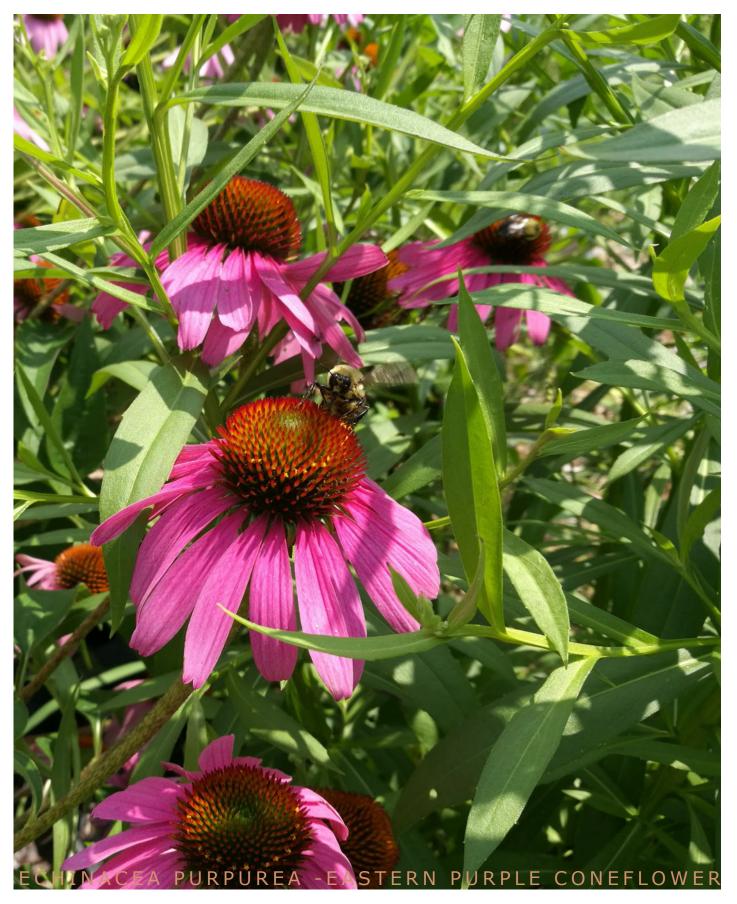


#### POLLINATOR PLANTINGS COULD BE A LAND MANAGEMENT TOOL FOR REDUCING MOWING AND DEVELOPING POLLINATOR CORRIDORS IN THE CITY



### STRATEGY # 6 SUSTAINABLE LAND USE THROUGH RESILIENT ECOSYSTEMS AND BIODIVERSITY

14							C	o-Ben	e fits							
	Ontissions Ontegory	Target Goals	Action #	Actionable Items (not all-inclusive)	Review Timetine	Reduce CHC	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Suggested Responsibility (implementation, enforcement, monitoring, etc.)	Initial Investment	Additional Annual Investment	Annual Savings	Rélated Community Plans	Notes
5.0		Reduce resources used in	6.1	Develop a plan to implement "most resilient" conservation practices for City-owned and maintained vegetated spaces.	2nd - 3rd year and on- going	1	1	1	1	1	All Departments.	Based on lower than special sp	Protection of species and ecosystem diversity		https://turf.purdue.edu/time-to-wate https://www.extension.purdue.edu/e edia/ay/ay-7-w.pdf	
	Land use and Maintenance Practices	maintenance while still proving for iscal "green" spaces and protecting natural habitat. Evaluate bi- annually.	6.2	Incorporate Canopy Goal objectives and apply appropriate tree maintenance on City properties and right of-ways	1st Year - on going	1	1	1	1	1	Recommendations workgroup of persons representing multiple Departments -	Minimal	Tree Maintenance, possible utility costs.	Energy, stormwater retention.	Purdue University Extension	
			6.3	Develop city-wide maintenance policies on fertilizer, irrigation, mowing, prescribed burning, salting, and other maintenance practices that meet the needs of different property types and "uses." Review Noxious Weed ordinance.	2nd Year and on-going	1	1	1	1	1	Environmental Resilience will compile and organize	Staff Time	less annual maintenance costs	\$ personnel, equipment (mowing), fertilizer, and watering.		
	& Species	Protect ecosystems, habitats, and species diversity.	6.4	Develop a plan to monitor and publicly share the quality of water, land, and air resources. Including developing a comprehensive list of local & migratory flora & fauna, including invasives (air, water, & land), identify their habitats, food sources, stressors. Species diversity gains & losses can act as an indicator of land, air, water health.	2nd - 5th Year		<b>V</b>	1	1	~	Department Representation coordinated by Environmental Resilience		to be determined	Promote Goshen, create a better quality of place.	Goshen Parks Master Plan 2019-2023, Resource Strategies, Goshen Comprehensive	
	3,	aproxis unicasy.	6,5	Identify, map, and grade existing ecosystems on public lands. Evaluate habitat diversity, duplication, and connectivity to support species survival.	2nd - 5th Year	1	1	1	1	~		to be determined		Protection of species and ecosystem diversity	Plan 2025 2025, C-12, NE-1, NE- 2, NE-3, NE-4	
	Ordinances	Review ordinances every three years to reflect the most	6.6	Incorporate longer term climate projections as a part of City-owned land use planning and development. Explore the use of existing ordinances to further align private development with clima te projections.	1st - 2nd Year, 5 year reviews	1		1	1	1	Many Departments	Staff Time	Staff Time	Practices provide habitat for species that are struggling to survive, including		y Climate Change Research Center, tesilience Institute, Comprehensive F 2025, NE-8
2		current mitigative practices.	6.7	Deve lop updated research to support existing science- based policies that are currently successful in other communities.	2nd Year, 5 year reviews	1		1	1	1		Staff Time	Staff Time	bees & butterflies.	25	**************************************
	U. 000 000	Enhance Flood Resilience to	6.8	Collaborate with specialists to develop and implement a flood resilience plan including smart growth approaches, specific land-use policies, and a process to audit, update, and revise the City's plans, policies, and regulations.	1st Year and on-going	1	1	1	1	1	All City Departments	\$ 50,000	to be determined	Reduced flooding, improved infrastructure	Professional Consulting Services, Goshen Comprehen sive	Impacts on infrastructure- design & maintenance
	Rood Resilience	reduce losses from flooding.	6.9	Preserve, enhance, and acquire existing floodplain	On-going	1	1	1	~	~	Engineering, Planning, Utility Departments	as appropriate, to be determined	as appropriate, to be determined	Reduced flooding, improved infrastructure	Plan 2025, C-10, C-11, NE- 1, NE2, NE 3, NE-5, NE-6	



# STRATEGY #7 TREE CANOPY

The sugar maple has thrived in the Goshen area, but Goshen will increasingly be on the southern fringe of this tree's ideal habitat as climate changes

The 2019 Goshen Urban Tree Canopy Goal will increase our urban forest from twenty-two percent coverage (2013 data) to forty-five percent by 2045. Urban forest management will care for this increasing population of trees to improve the built environment. Additionally, the City intends to diversify tree species in order to reflect the changing migratory patterns of trees in the Goshen region due to a changing climate. An example of this is the sugar maple. This tree species has thrived in the Goshen area, but Goshen will increasingly be on the southern fringe of this tree's ideal habitat as the climate changes.

Adopting policies and practices to support the canopy goal on City-owned property can have a two-fold impact on our Climate Action Plan and the emissions it seeks to reduce. First, increased tree canopy can directly reduce emissions by lowering energy consumption, especially in summer months when airconditioning is employed. Trees can also reduce winter heating needs by blocking freezing windchills. Goshen's public tree inventory calculates that public trees saved \$408,000 in energy consumption costs in 2020. Additionally, tree canopy captures significant amounts of precipitation,

keeping more than 16 million gallons of stormwater (2020) out of our sewer system, some of which would be treated, causing the release of emissions.

Secondly, trees offset greenhouse gases: by sequestering greenhouse gases, trees allow the City to deduct emissions from the total gases that are released into the atmosphere. Greenhouse gas emissions are a product of the activities that support Goshen's essential services. The City cannot realistically achieve Net Zero Emissions by 2035 without offsetting some of those emissions. Our inventoried public trees (roughly 14,000) offset 1207 MTCO<sub>2</sub>e in 2020 – 80 percent of 2019 Goshen City government-operated vehicle emissions (1505 MTCO<sub>2</sub>e). This is a significant contribution to our overall goal of achieving zero emissions. As the City leads

#### SNOWY OWL LIKE THE ONE THAT VISITED THE GOSHEN AIRPORT IN DECEMBER 2020.



#### TREE CANOPY

the canopy goal effort toward 45 percent city-wide, we can continue to plant and care for trees to increase the important emissions offset which they contribute.

Achieving 45% canopy will require substantial planting in private property beyond the jurisdiction of the City. Nevertheless, the City will need to play its part in planting trees where feasible. With potential state-level legislation, a growing issue is continued crowding of rights-of-way with various underground

infrastructure (water, sewer, gas, electricity, telecom). Such crowding becomes prohibitive for trees and other green infrastructure. This is an issue which the City may need to address in order to accomplish the aims of the Canopy Goal.

It is important to recognize that while an increase in tree canopy will provide substantial benefits, there is also some increase in cost. More trees will produce more leaves and debris over the years. Goshen residents have an important opportunity to assist the City toward the combined goals of the Canopy Goal and the Climate Action Plan by willingly adopting a culture of on-site leaf management (mulching, composting, etc) where possible, as well as woody debris management. Doing so will reduce the labor and emissions associated with this task. The City can engage the community on this and other related Canopy issues.

#### STRATEGY # 7 TREE CANOPY

į							С	o-Ben	efits							
	Emissions Category	Target Goals	Action i	Actionable Items (not all-inclusive)	Review Time line	Reduce GHG	Improve Quality of Life & Workplace	Improve Wildlife Habitat	Improve Water Quality	Improve Government Resilience	Suggested Responsibility	lnitfal Investment	Additional Annual Investment	Annual Savings	Related Community Plans	Notes
			7.1	Develop an internal policy to protect current city-owned forests.	1st Year	1	1	1	1	1	Environmental Resilience with others		a part of flood n development			
nagement			7.2	Update Urban Tree Canopy Assessment every five years to track progress toward 45% goal and to monitor the integrity of existing forested land. Maintain public tree inventory.		1	1	1	1	1	Environmental Resilience	\$ 15,000	\$ 3,000.00		Goshen Comprehensive Plan 2025, NE-	
& Land Ma	III. P.	Urban Forestry - Increase the Tree	7.3	Collaborate with landowners, promote long-term protection of forested land.	1st Year	~	1	1	1	1	Environmental Resilience	Environmental Resilience Staff Time	Environmental	bene fits in stormwater retention, lower energy costs, improved quality	4: Maintain, grow- and promote Goshen's urban forest program. Goshen Parks	
rvatio		Canopy to 45% by 2045.	7.4	Identify, map, and grade city-owned forested land.	1st - 2nd Year	1	1	1	1	1			to be determined		Master Plan 2019-2023,	
Сопзе	949		7.5	Identify needs and opportunities to increase acreage of forested land.	On-going	1	1	1	✓	1		to be determined	to be determined	ambient temperatures.	Urban Forestry Division. Goshen	
Resource			7.6	Update the tree ordinance including policy in support of the canopy goal.	1st Year	<b>~</b>	1	~	1	✓	Environmental Resilience with others	Can be done resilience plan	as part of flood n development.		Division. Goshen_ Urban Tree Canopy Goal 2019	

# STRATEGY #8 SUSTAINABLE ENERGY

By making investments in green energy, the City can develop greater energy independence and offset a portion of its own emissions.

Developing the City's own sustainable energy source will be an important component to attaining some energy independence from both the purchase and delivery of energy through market fluctuation and long-term increases in the cost of that energy. By making sustainable energy investments, the City can develop greater energy independence and offset a portion of its own emissions.

Currently, the City acquires over 99% of its energy from NIPSCO. NIPSCO is aggressively working toward generating sixty-five (65) percent of its electricity from renewable sources by 2028. Solar has become cost-effective and NIPSCO is currently interested in making large investments in clean energy sources. The City's government operations could meet its electricity needs with the addition of approximately 5.5 megawatts of energy generation if that electricity could be net metered. Given the current regulatory environment and the cost-benefit of large solar installations, is now a favorable time to invest in energy infrastructure.

The City could also look to develop community partners in the shared investment of energy projects.



## > 2 Ш Z ш Improve Water Quality Improve Wildlife Habitat SUSTAINAB prove Quality of Life & Workpla Keduce CHC $\infty$ # LΑ

## STRATEGY #9 EDUCATION

The question will be, are we willing to form a different view and establish new practices to save money, reduce energy consumption, and reduce emissions?

Effective employee education is vital to the City's success in meeting emissions reduction targets. Many of the policies and behaviors that will reduce emissions are not currently a part of American cultural norms. The program's success depends on employees' and leaders' ability to objectively look at policies and practices with a critical eye and separate norms from factual information to determine best practices that both get the job done and are good for the environment, which sustains our community.

For example, many can probably agree, given adequate information, that lawn care practices which resemble vacuuming and cleaning a living room are not healthy for the living things in and visitors to the lawn. The question will be, are we willing to form a different view and establish new practices to save money, reduce energy consumption, and reduce emissions?

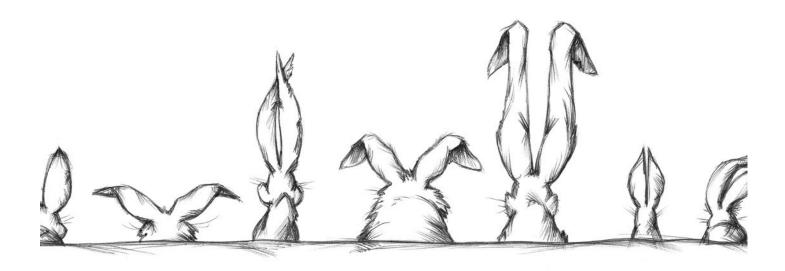
Emissions reduction is often a solitary job with one small success by one individual employee at a time. That makes it critical for every employee to understand why their participation in this Climate Action Plan is necessary to achieve emissions reductions. It will be the efforts of many people that equate to success. As we are willing to try new things, take the small steps, and then work into larger ones, the City will succeed.



Şī	Notes				
	Related Community Plans		Goshen Comprehensive Plan 2025, C-5:	Expand Opportunities for Hiclong kerming	
	Annual Saviages	\$1,500 Employee	Employee Development	Employee Development	Employee Development
	Additional Amual Investment	005'1\$	0	0	
	Initial Investment	Staff time	0	0	
	Suggested Responsibility		Environmental Resilience with assistance and participation from all Departments	2	
	Improve Covernment Resilience	`	>	>	>
	Improve Water Quality		^		
Z	tendari shibii V svorquri  vrilanO reteW svorquri		<i>&gt; &gt;</i>		
0	Improve Quality of Life & Worlsplace	>		>	>
_	Reduce CHC	>	>		
CATION	Review Timeline	1st Year and on-going	1st Year and on-going	1st Year	1st Year and on-going
STRATEGY # 9 EDUC	Actionable Hems (not all-inclusive)	Develop and implement employee training on green infrastructure, low-impact development, climate action mitigation, and adaptarion practices. Implement pre and post surveys, when possible.	Include front line employees in problem solving processes involving reduction of GHG and development and implementation of mitigative practices.	When appropriate, provide flexible hours to allow employees to participate in other environmental education programs, such as Indiana Master Naturalists, 1st Year Master Gardenes, Tree Sewards, etc. Create guiding policy on what kinds of education are sanctioned.	Continue employee newsletters promoting environmental and climate awareness. Develop other moleia sources (video) for internal awareness ra king.
$\succ$	Acton#	9.1	9.2	9.3	9.4
TEG	Target Goals A	Develop eco- literacy across all	city staff. Work to ensure employees can identify emissions reduction	strategies and the ir benefits.	
TRA	Emis sions Cuté gory				
S			поде	Educ	

## EQUITY

Climate change will impact all of us in Goshen, but it will especially affect those already the most vulnerable and underserved.



ne of the most important aspects and outcomes of creating and following a climate action plan is equity. Equity is a term that sounds a lot like "equality" and certainly has a similar aim, but equity has to do with the structures and systems that allow equality to either flourish or fail. An oversimplified example might be to imagine that all the households in Goshen are allocated an equal amount of clean water each day - this sounds fair; but there is an equity problem because not all households have the same number of residents, meaning that some people actually receive more clean water and some receive less. Of course, we intend to solve this problem by allowing each household to pay an equal rate for as much water as they need. What if there is an equity issue regarding the funds necessary to pay for equal access to clean water?

Our government operations climate action plan seeks to move us towards equity – that is, towards operations that benefit all people in an equitable fashion. That's a really high bar, and just like many of the goals in this plan, equity will not be met quickly or necessarily with ease. This is in part because we are used to thinking about "equal" – which is a lot

easier to measure and distribute than equity. Equity means putting the resources where they are most needed, which does not always mean equal distribution. For example, flood relief funds should go to those who experience flood damage, not to those who are high and dry.

How might a focus on equity within the context of this climate action plan change the nature of our government operations? If cost savings and reduction in greenhouse gas emissions are the metrics of success for our plan, then equity - an appropriate distribution of resources - should become an instinctive partner in working toward that success. In fact, there are ways in which we do this instinctively already - sharing equipment, sharing work hours, sharing funds, even sharing sick hours. We should understand that reducing our energy consumption, for instance, is part of what it means to equitably distribute resources appropriately: energy which we don't use saves us money; the money can be used effectively for some other service; the energy can be used effectively for some other service; the other service benefits a broader swath of our public in incremental (but accumulative) ways; the service itself can be targeted equitably, brought to residents whose need is greatest; the reduced emissions from lower energy consumption incrementally (and accumulatively) reduce the impacts of climate change, in Goshen and far away, which further conserves an array of resources, which can be equitably allocated.

Climate change will impact all of us in Goshen, but it will especially affect those already the most vulnerable and underserved – the people for whom equity matters most. At its heart, responding to climate change is about equity. The essential mission of the City is to serve our residents well. This climate action plan will help us do so by allocating our resources in an increasingly equitable manner to offer optimal services that build quality of life for all of us.



Land Surveying · Civil Engineering · Planning · Architecture · Project Funding · GIS · Environmental · Renewable Energy · Landscape Architecture

May 20, 2021

City of Goshen
Board of Works and Safety and Stormwater Board
202 South Fifth Street
Goshen, IN 46528

Attn: Board of Public Works Members

RE: KEYSTONE RV (JN:2021-2010) - VARIANCE REQUEST FOR RECYLED ASPHALT SURFACE FOR AN EMPLOYEE PARKING LOT

Keystone RV Is seeking to add a new employee parking lot at 2442 E Kercher Road. These new improvements include stormwater drainage improvements, landscaping, and additional employee parking. All of this work is intended to improve the operational efficiency of the site.

Keystone RV is requesting to deviate from the City of Goshen standards by not paving the new employee parking area with new asphalt and allowing for installation of recycled asphalt surface to be used as the final driving surface. The project site is located west of Sourwood Drive with access to the site coming from the west end of Linden Drive. This request would be similar to the existing Dutchmen Manufacturing facilities parking lot located at 2142 Caragana Court and pictured in the images below.





The recycled asphalt surface will be installed by a loader placing material in piles which will be graded to final grade and then rolled with a roller to allow the existing material to bond together and form a durable hard surface. City Ordinance 5110.3(D) states all areas for parking and maneuvering are required to be paved or improved in conformance with the standards established by the board of works. Keystone RV understands this ordinance and is requesting to allow for the employee parking at 2442 E Kercher Road to be a recycled asphalt surface as they have had good success with using this surface for employee parking at their other facility.

Keystone RV is asking for relief from the board of works as the required parking areas of a durable, hard surface for the employee parking lot identified in this variance request would be unrealistic, excessive, and inconsistent with the aesthetic appeal of the surrounding development.

Enclosed please find the overall site plan sheet C201 which shows the proposed area to have the recycled asphalt employee parking area.

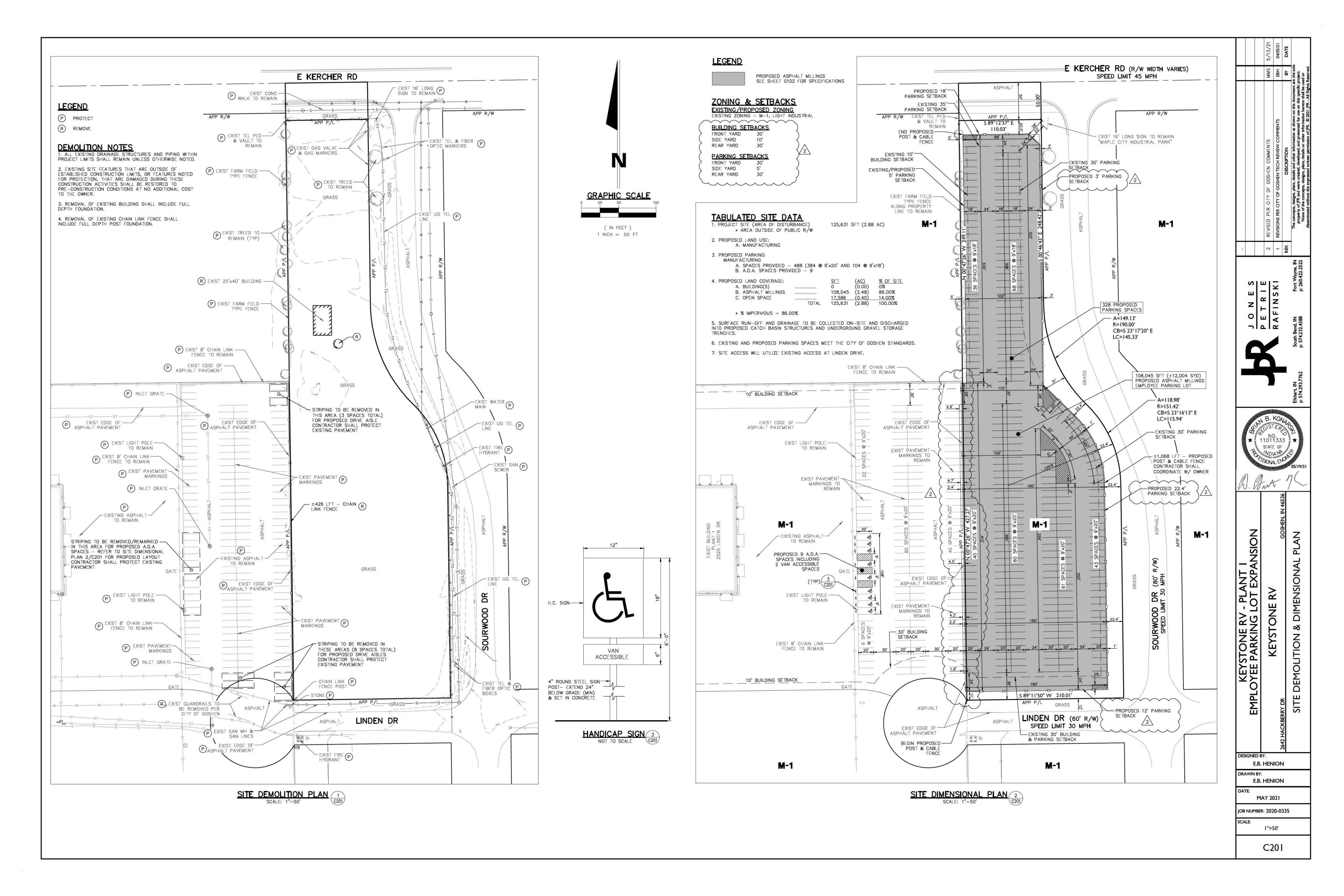
A representative from Jones Petrie Rafinski and Keystone RV will be present at the meeting to answer any questions, as necessary.

Sincerely,

Matt Schuster,

**Director of Site Development Services** 

**Enclosures** 



#### ORDER OF THE CITY OF GOSHEN BUILDING COMMISSIONER

April 22, 2021

#### CERTIFIED MAIL, RETURN RECEIPT REQUESTED

To: Ron Davidhizar

203 Middlebury Street Goshen, IN 46528

RE: Premises at 221 W. Wilden Avenue, Goshen, Indiana

You are notified as a person holding a substantial property interest in the real estate at 221 W. Wilden Avenue, Goshen, Indiana, that the building at this location is in violation of the Goshen City Code as set forth in more detail below.

The Goshen Building Department inspected the subject real estate on November 18, 2020. Violations of the Neighborhood Preservation Ordinance (Minimum Housing Ordinance) were cited. The Goshen Building Department attempted to reinspect the real estate on March 1, 2021 and April 1, 2021 but Mr. Davidhizar was not present at the premises and the real estate could not be reinspected.

The real estate is unsafe within the meaning of Indiana Code § 36-7-9-4 in that one or more buildings or structures on the real estate are in an impaired structural condition that makes it unsafe to a person and vacant and not maintained in a manner that would allow human habitation, occupancy, or use under the requirements of Goshen City Code Title 6, Article 3, Chapter 1.

The following violations of Section 6, Article 3, Chapter 1 of the Goshen City Code were cited by the Goshen Building Department inspector and have not been satisfactorily repaired or remedied:

- 1. Structure is filled with broken glass, trash, dead animals, and animal feces (violation of Section 6.3.1.6 (b) (1)).
- Windows and exterior doors missing or broken leaving property open and not secured (violation of Section 6.3.1.1(ff)).
- 3. Paint throughout property is chipping and peeling (violation of Section 6.3.1.1(g)).
- 4. Holes and cracks in the foundation are compromising the structural strength and weather resistance. (violation of Section 6.3.1.1(b)).
- 5. The walls within the property are damaged or removed and floors are collapsed or the flooring is missing. (violation of Section 6.3.1.1(b)).
- 6. The ceiling tile is missing and potions of ceiling has collapsed. Debris and insulation from missing ceiling throughout property (violation of Section 6.3.1.1 (b)).
- 7. The furnace and duct work are not in working order (violation of Section 6.3.1.3(e)).
- 8. The electrical wiring has been cut throughout the structure and the electrical panel is damaged from the cut wires (violation of Section 6.3.1.1(x)).
- 9. The windows and glass sliding door are broken or the glass is missing and there is broken glass inside the dwelling (violation of Section 6.3.1.1. (d)).

#### ORDER OF THE CITY OF GOSHEN BUILDING COMMISSIONER

RE: Premises at 221 W. Wilden, Goshen

Page 2

April 22, 2021

10. The garage is open and unsecured and the soffit is collapsing (violation of Section 6.3.1.1. (b)).

These violations make the premises at 221 W. Wilden Avenue, Goshen unsafe and the general condition of the house and garage warrants removal.

You are ordered to demolish and remove the unsafe building by July 1, 2021.

In the event that you fail to comply with this Order, the City of Goshen may take action to demolish the property and will bill you for the costs of such work, including, the actual cost of the work performed and an amount equal to the average processing expense the City will incur in pursuing this matter. Such amounts can become a lien upon the real estate and can ultimately be enforced in the same manner as any other judgment.

You are further notified that a hearing will be held before the Goshen Board of Public Works and Safety on Monday, May 24, 2021 at 2:00 p.m. (local time), or soon thereafter, for the purpose of reviewing the Order of the City of Goshen Building Commissioner. This hearing will be held at the Goshen Police & Court Building in the Court Room/Council Chambers at 111 East Jefferson Street, Goshen, Indiana.

You have the right to appear at this hearing with or without counsel, to present evidence, cross-examine opposing witnesses and present arguments. Should you fail to appear at the time set for the hearing, the hearing will be conducted in your absence. The Goshen Board of Public Works and Safety will have the right to affirm, rescind or modify this Order.

Indiana Code § 36-7-9-27 requires that if you transfer your interest or any portion of your interest in the unsafe buildings affected by this Order to another person, you must supply the other person with full information regarding this Order prior to transferring that interest or agreeing to transfer that interest. Within five (5) days after transferring or agreeing to transfer a substantial property interest in the unsafe buildings, you must also supply Community Development Director Mark Brinson with the full name, address and telephone number of the other person taking a substantial property interest in the unsafe buildings and/or premises, along with written copies of the agreement to transfer the interest or copies of the document actually transferring the interest. Mr. Brinson's office is located at 204 East Jefferson Street, Suite 2, Goshen, Indiana 46528, or you may contact him at (574) 537-3824. Should you fail to comply with these provisions, then you may be liable to the City of Goshen for any damage that the City of Goshen may suffer in the event that judgment is entered against the City by the other person to whom the transfer was made.

This Order of the City of Goshen Building Commissioner is issued on April 22, 2021

City of Goshen Building Department

Mark Brinson

Community Development Director

ORDER OF THE CITY OF GOSHEN BUILDING COMMISSIONER

RE: Premises at 221 W. Wilden, Goshen

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April 22, 2021

#### CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing Order of the City of Goshen Building Commissioner for the premises at Address, Goshen, Indiana, was served by sending a copy by certified mail, return receipt requested and by regular first-class mail to the last known address of the following persons to be notified on 2021:

To:

Ron Davidhizer

203 Middlebury Street Goshen, IN 46528

Carla Newcomer

Paralegal

City of Goshen Legal Department 204 East Jefferson Street, Suite 2 Goshen, Indiana 46528

lewcomer