

# NILES-BUCHANAN-CASS AREA TRANSPORTATION STUDY TECHNICAL ADVISORY COMMITTEE and POLICY COMMITTEE MEETING

Tuesday, January 24, 2023

1:30 pm

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**In Person:** Niles District Library  
620 E Main St, Niles, MI 49120

**Web:** <https://us06web.zoom.us/j/9489277047?pwd=RzkydIFacGFHNkVWeURpak1kSEcxUT09>

**Audio:** Call in Number: 1 (312) 626-6799  
Meeting ID: 948 927 7047  
Passcode: 000619

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## AGENDA

1. Call to Order and Roll Call
2. Changes to the Agenda
3. Public Comment
4. Approve Minutes from the November 22, 2022 Meeting *Action* pg. 2
5. Staff Report
6. Local Agency Updates
7. Transit Updates
8. MDOT Updates pg. 5
9. Recommendation for Utilizing NATS Unprogrammed FY 2023 STBG & CRP funds *Action*
  - Subcommittee Recommendation pg. 6-7
  - Subcommittee Meeting Minutes pg. 8-10
  - Project Descriptions pg. 11
  - Summary of the Options Presented pg. 12-13
  - Public Comments Received pg. 14-19
  - Buchanan's Engineers Estimate pg. 20-24
10. Privilege of the Floor or Public Comment
11. Adjournment

Comments can be sent prior to the meeting to Brandon Kovnat at [kovnatb@swmpc.org](mailto:kovnatb@swmpc.org) or calling (269) 925-1137 x 1524. For questions about accessibility or to request accommodations, please contact Kim Gallagher at (269) 925-1137 x 1518 or by email at [gallagherk@swmpc.org](mailto:gallagherk@swmpc.org)

**NILES BUCHANAN CASS AREA TRANSPORTATION STUDY (NATS)**  
**Joint Technical Advisory Committee (TAC) & Policy Committee Minutes**  
**November 22, 2022, Niles District Library & via Zoom**

NATS MEMBER ORG./POSITION	MEMBERS (2022)	TAC	POL	J	F	M	A	M	J	J	A	S	O	N	D
Berrien Co. Board of Commissioners (1)	Michael Majerek		x	V	V		V	V			V		V	V	
Berrien Co. Board of Commissioners (2)	(Vacant)		x	A											
Berrien Co. Community Dev. Dept.	Dan Fette	x		A	A		A	A			A		A	A	
Berrien Co. Planning Commission	Eric Lester, M.D.		x	V	V		V	V			V		A		
Berrien Co. Road Dept. (Policy)	(Vacant)		x	A	A										
Berrien Co. Road Dept. (TAC)	Kevin Stack	X		A	A		A	IP			A		V	IP	
Bertrand Township	Butch Payton	x	x	V	V		IP	IP			IP		V	IP	
Buchanan Township	Lynn Ferris	x	x	A	A		A	A			IP		IP	A	
Cass Co. Board of Commissioners (1)	Robert Benjamin		x	A	A		A	IP			A		A	A	
Cass Co. Board of Commissioners (2)	Roseann Marchetti		x	P	IP		IP	IP			IP		IP	IP	
Cass Co. Planning Commission	(Vacant)	x													
Cass Co. Road Comm. (Policy)	Sandra Seanor		x	A	V		IP	IP			IP		A	IP	
Cass Co. Road Comm. (TAC)	Joe Bellina (TAC Chair)	x		A	V		A	IP			A		IP	IP	
City of Buchanan	Don Ryman		x	A	A		A	IP			A		V	A	
City of Buchanan	Heather Grace	x		A	A		A	A			IP		A	A	
City of Niles (1)	Georgia Boggs		x	A	A		A	A			A		A	A	
City of Niles (2)	Serita Mason		x	V	V		V	V			A		V	A	
City of Niles (3)	Jessica Nelson		x	A	A		A	A			A		A	A	
City of Niles Community Dev. Director	(Vacant)	x											A		
City of Niles Dial-A-Ride Transit	Pepper Miller	x	x		V		IP	A			A		A	IP	
City of Niles Public Works Dir./Airport	Joe Ray	x		V	V		A	A			A		V	IP	
Howard Township	Bill Kasprzak	x	x	P	IP		A	IP			IP		IP	A	
Kinexus	(Vacant)	x													
Mason Township	Doug Feters	x	x	A	A		A	A			A		A	A	
MDOT - Bureau of Trans. Planning	Jim Sturdevant	x	x	V	V		V	IP			IP		V	IP	
MDOT - Southwest Region	Josh Grab	x	x	P	IP		IP	IP			IP		IP	V	
MDOT - Southwest Region (Alternate)	(Vacant)	Alt	Alt	A	A		A	A			A				
MDOT - Transportation Service Center	Jonathon Smith	x	x	V	V		A	V			V		V	V	
Milton Township	Susan Flowers	x	x	A	A		A	A			IP		VA	A	
Niles Charter Township	Richard Cooper (P. Ch.)	x	x	P	IP		IP	IP			IP		A	IP	
Ontwa Township	Dawn Bolock	x	x	P	A		A	A			V			IP	
Pokagon Band of Potawatomi Indians	(Vacant)	x	x										A		
Village of Edwardsburg	Dennis Peak	x	x	A	A		A	A			A		A	A	
Federal Highway Administration	Andy Pickard	NV	NV	A	A		A	A			A		A	A	
Federal Transit Administration	Susan Weber	NV	NV	A	A		A	A			A		A	A	
EGLE - Air Quality	Breanna Bukowski	NV		A	A		A	A			A		A	A	
MDOT - Modeling	Jon Roberts	NV		A	A		A	A			A		A	A	
MDOT - Office of Passenger Trans.	Fred Featherly	NV		A	V		A	A			A		A	V	
Michiana Area Council of Governments	Caitlin Stevens	NV	NV	A	A		A	A			A		A	A	
Southwest Michigan Planning Comm.	Kim Gallagher	x	x	P	IP		IP	IP			A		IP	IP	
Southwest Michigan Planning Comm.	Brandon Kovnat	NV	NV	P	IP		IP	IP			IP		IP	IP	

P. Ch.: Policy Chair; Alt: Alternate; NV: Non-voting; P: Present in Person; V- Present virtually; A: Absent.

Others Present virtually: Richard Bayus, MDOT; Don Mayle, MDOT

Other Present in Person: Suzannah Deneau, Wight man and Associates

Minutes  
Niles-Buchanan-Cass Area Transportation Study  
Joint Technical Advisory Committee and Policy Committee Meeting  
Tuesday, November 22, 2022

1. **Call to Order and Roll Call**

Technical Advisory Committee chair, Joe Bellina, called the meeting to Order at 1:40 pm. Kim Gallagher took roll call.

2. **Changes to the Agenda**

None.

3. **Public Comment**

None.

4. **Approve Minutes from the October 25, 2022 Meeting**

**Motion** to approve the minutes from the October 25, 2022 Joint NATS Technical Advisory Committee and Policy Committee Meeting. Made by Jim Sturdevant and seconded by Roseann Marchetti. **Motion approved.**

5. **Local Agency Project Updates**

Gallagher said that Buchanan and the Berrien County Road Department had submitted updated costs for their projects which will be discussed later in the meeting

Stack said that the Bertrand Road project was designed, and they are ready to submit the GI package. Stack mentioned that MDOT appears to be working much faster on NEPA approvals than in the past, with the Road Department has just received a NEPA approval in eight weeks.

Bellina said that realigning Gumwood Rd. to make a four-way roundabout would cost approximately \$1.3 million. This would be on top of the approximately \$727,000 cost of the roundabout itself. Bellina added that the roundabout portion did not have any cost increase. The Cass County Road Commission board members are meeting with the property owner in early December to discuss ROW. They will not be discussing specific costs though. The Cass County Road Commission plans to obligate the project in 2023 and construct it in FY 2024.

6. **Transit Updates**

Ray said that the preventive maintenance project is a resurfacing of Dial A ride's parking lot. He had asked if there were any rules he needed to follow since this was FTA funding. Featherly responded that there were several FTA rules which he could help the city with.

7. **MDOT Updates**

**There was a correction to the slide; the US-12 repairs from M-139 to Leet riad will be constructed in 2023**

8. **MDOT Project Amendment**

Smith presented the amendment to increase the ROW cost for the FY 2023 signal upgrades in the NATS area. The increase is due to inflation.

**Motion** for the Technical Advisory Committee to recommend that the Policy Committee approve the amendment to the MDOT project, as contained in the meeting packet. Made by Joe Ray and seconded by Kevin Stack. **Motion approved.**

**Motion** for the Policy Committee to approve the recommendation from the Technical Advisory Committee. Made by Jim Sturdevant, and seconded by Sandra Seanor. **Motion approved.**

9. **FY 2023 Funding Discussion**

Gallagher reminded the NATS committees that at the October NATS meeting staff had announced that there would be a large increase to FY 2023 funding but that the exact amount wasn't finalized yet. On November 1, 2022, MDOT told SWMPC that the FY 2023 STBG target for NATS is \$1,420,553. Currently, NATS has \$604,000 in STBG programmed, leaving an FY 2023 balance of \$816,553. NATS also has \$78,873 in carbon Reduction Program (CRP) funds. Both the FY 2023 STBG and CRP will expire (be lost to NATS) if not obligated in FY 2023.

Gallagher explained a proposal to replace the CMAQ funding on the Buchanan Front Street Signal with CRP & STBG funds. This would free up CMAQ funds that would be used outside of the NATS area. The Technical Advisory Committee said they wanted to have a plan for using the entire balance before taking any further action, and declined to vote on the Buchanan Signal CMAQ proposal. Gallagher proposed holding a NATS subcommittee meeting to discuss the proposal and any other options for utilizing the remaining FY 2023 STBG balance. The Subcommittee was scheduled for Tuesday, December 13<sup>th</sup> at 1 PM.

10. **Local Agency Project Amendment**

**Motion** from the Technical Advisory Committee to table the funding request to swap CMAQ for STBG for the Buchanan signal project. Made by Richard Cooper and seconded by Dawn Bolock. **Motion approved.** Since the proposal was tabled, no further motion was made by the Policy Committee.

11. **The privilege of the Floor or Public Comment**

None.

12. **Adjournment**

The Meeting was adjourned at 2:20 pm. The next NATS Technical Advisory and Policy Committee meeting will be on Tuesday, January 24, 2023, at 1:30 PM.

Minutes compiled by Brandon Kovnat SWMPC Transportation Planner

# MDOT 2023 PROJECT UPDATES

Contact: Jon Smith, MDOT Engineer [SmithJ29@michigan.gov](mailto:SmithJ29@michigan.gov)

Project	Phase	Estimated Cost	Update
US-12 from Galien Twp. west of Mayflower Rd. –Shoulder Rehabilitation.	CON	\$10,185,000	Design (PE) in progress. Plan completion May 2023 for October 2023 letting. Construction in 2024.
US-31 N from US-12 to Berrien Twp. – HMA Overlay.	CON	\$19,000,000	Design (PE) in progress. Project to be turned in 10/7/22 for December 2022 letting. Construction in 2023.
M-51 from Chestnut Ln. to M-60BR – Interchange reconstruction and asphalt resurfacing	CON	\$26,000,000	Design (PE) in progress. Plan completion February 2023 for July 2023 letting. Construction in 2024.
US-12 from M-139 to Leet Rd, – Concrete Pavement Repairs on	CON	\$6,100,200	Design (PE) in progress. Project to be turned in 10/7/22 for December 2022 letting. Construction in 2023.
Signal Modernizations	ROW	\$30,000	Design (PE) in progress. Plan completion June 2023 for December 2023 letting. Construction in 2024.
M-139 from US-12 to M-140 – Mill and HMA Overlay	PE & ROW	\$1,270,700	Design (PE) will begin in FY 2023. This is PE phase only, currently programed CON phase year.
US-12 from Mayflower Road to M-139 – HMA Overlay	PE	\$422,000	Design (PE) will begin in FY 2023. Construction in 2026.

# Recommendation for Utilizing the Unprogrammed NATS FY 2023 STBG and CRP Funds

Made be the NATS Subcommittee at the meeting on January 11, 2023

The following is a list of the projects that requested funding at the January 11, 2023 NATS Subcommittee meeting. The list includes the description of the project followed by the recommendation voted on by the subcommittee. The full recommendations from the subcommittee can be seen in the tables page 7 followed by the minutes from the meeting.

## **Gumwood Realignment – Cass County Road Commission**

The Cass County Road Commission requested STBG funding to reconstruct & realign Gumwood Road. The project would be built in conjunction with a 3-leg roundabout at Gumwood Rd. and Redfield Rd., which was awarded an HSIP grant. The realignment adds a fourth leg to the roundabout which will create a single four-way roundabout at Gumwood and Redfield.

**Subcommittee recommendation:** Award \$339,282 in NATS STBG for the realignment of Gumwood. *Note: this is the same amount of additional STBG as recommended for Buchanan.*

## **Front Street Reconstruction & Front & Oak Signal Replacement – City of Buchanan**

During the 2020-2023 Call for Projects, NATS awarded the city of Buchanan \$300,000 of STBG funds for the reconstruction of Front Street. This would have covered 54% of their \$560,747 estimated cost. The City of Buchanan has requested to add new elements to this project. With inflation and these new items, the revised estimate for the project is \$1,611,000.

In January 2019, the City of Buchanan was awarded \$287,341 in Berrien CMAQ funding to replace the traffic signal at Front and Oak Street. On November 7, 2022, the Berrien CMAQ committee voted to reallocate this CMAQ funding, with the assumption that the funds would be replaced by a combination of NATS STBG & CRP funding.

**Subcommittee recommendation:** Award an additional \$339,282 in NATS STBG and \$78,783 in NATS CRP to the city of Buchanan. This will replace the original \$287,341 CMAQ award for the signal replacement, with an additional \$130,813 for the front Street reconstruction. *Note: this is the same amount of additional STBG as recommended for the Cass County Road Commission. For accounting reasons, the \$339,282 in STBG will be added to the Front Street reconstruction, with the signal replacement only using CRP and local funds.*

## **Bertrand Road – Berrien County Road Commission**

During the 2020-2023 Call for Projects, NATS awarded the Berrien County Road Department \$304,000 to resurface Bertrand Rd. This would have covered 56% of their \$540,00 estimated cost. Due to inflation, the current cost estimate has risen to \$592,952.

**Subcommittee recommendation:** Award an additional \$137,990 in NATS STBG to Bertrand Road. *Note: this gives the Road Department a total STBG funding equal to 81.85% of the project's original cost estimate.*

**Fiscal Year 2023 NATS STBG Funds**

Project	Currently in TIP			Revised			Change in STBG
	Estimate	Federal STBG	Match	New Estimate	Recommended STBG	Match	
<b>STBG Allocation</b>		\$1,420,553			\$1,420,553		
Gumwood Realignment Cass County Road Commission	NA	\$0	\$0	\$1,164,000	\$339,282	\$824,719	+\$339,282
Front Street Reconstruction City of Buchanan	\$560,747	\$300,000	\$260,747	\$1,611,000	\$639,282	\$971,719	+\$339,282
Bertrand Rd. Berrien County Road Department	\$540,000	\$304,000	\$236,000	\$592,952	\$441,990	\$150,962	+\$137,990
<b>Total Programmed</b>		\$604,000			\$1,420,553		\$816,553
<b>Balance</b>		\$816,553			\$0		

**Fiscal Year 2023 CMAQ and CRP funds**

Project	Currently in TIP			Revised			Change in Federal Funding
	Estimate	Federal CMAQ	Match	New Estimate	Recommended CRP	Match	
<b>CRP Allocation</b>					\$78,783		
Front Street Signal Replacement City of Buchanan	\$369,189	\$287,341	\$81,848	\$400,000	\$78,783	\$321,217	-\$208,558
<b>Balance</b>					\$0		

Minutes  
 Subcommittee of the Niles-Buchanan-Cass Area Transportation Study  
 Wednesday, January 11, 2023  
 Niles City Hall

**Attendance**

	<b>Name</b>	<b>Representing</b>
<b>Subcommittee Members</b>	Kevin Stack	Berrien County Road Department
	Joe Ray	City of Niles
	Pepper Miller	Niles Dial A Ride
	Joe Bellina	Cass County Road Commission
	Heather Grace	City of Buchanan
	Richard Cooper	NATS Policy Committee Chair
<b>Others Present</b>	Kim Gallagher	Southwest Michigan Planning Commission
	Brandon Kovnat	Southwest Michigan Planning Commission
	Rich Murphy	City of Buchanan
	Michael Swartz	City of Buchanan
	Peter Agostino	Richard & Patricia Geberth
	Kathleen Agostino	Richard & Patricia Geberth
	Richard Geberth	Richard & Patricia Geberth
	Patricia Geberth	Richard & Patricia Geberth

**Call to Order and Roll Call**

Joe Ray Called the Meeting to Order at 9 am. Kim Gallagher took Roll Call.

**Overview of the Purpose of the Meeting**

Ray announced that for the current Fiscal year of 2023, NATS has unprogrammed STBG funds of \$816,533 and unprogrammed CRP funds of \$78,783. The purpose of the meeting is for the subcommittee to create a recommendation on how to program these funds, which will then be voted on by the NATS Technical Advisory Committee and NATS Policy Committee.

Kevin Stack added that the only project eligible to use the FY 2023 CRP funding is the signal replacement in the City of Buchanan. He suggested that the subcommittee recommend that the \$78,783 be allocated for the signal and that for the rest of the meeting, they only discuss STBG funding.

**Changes to the Agenda**

None.

**Discussion of the Options for Utilizing the Remaining NATS Federal FY 2023 Funds**

Ray asked each agency to briefly describe the projects they were requesting funding for (*project descriptions on included on page 11*).

Joe Bellina, chief engineer for the Cass County Road Commission gave an explanation of Proposed Gumwood Realignment. He said that the current situation at Gumwood Rd. and Redfield Rd. with the two offset intersections is dangerous. In 2014, the Road Commission hired the engineering firm CESO to study options for improving traffic flow and safety at these intersections. Based on the [CESO engineering study](#), the Road Commission chose to realign Gumwood Road and create a single four-way roundabout. The Road Commission received an FY 2023 Highway Safety Improvement Program (HSIP) grant from MDOT, through a statewide competitive process, to build a three-leg roundabout at the eastern intersection of Gumwood and Redfield. Bellina requested as much funding as possible to build the fourth leg of the roundabout, which will complete their plan for the intersection.

Heather Grace, city manager for the City of Buchanan, gave an explanation of the Buchanan Front Street project. Since the original application, the City realized that because they had to remove Front Street and replace the water utilities, this was the perfect opportunity to update the streetscaping as well. The current estimate for the Front Street reconstruction is partially due to inflation and partially due to an underestimation of the work needed when the application was originally submitted in 2018. Grace requested as much funding as possible for the project. Mike Swartz, the engineer from Prein & Newhoff who is designing the project for Buchanan, announced that the Grade Inspection (GI) package was submitted to MDOT earlier in the week.

Kevin Stack, Engineering Supervisor for the Berrien County Road department explained that the estimate for Bertrand Road had increased by about \$50,000 since the initial application was submitted in 2018. The only change to the proposed work is to increase the shoulder width by 1 ft. This would create 5 ft. shoulders that if continued into Cass County would create a non-motorized connection from the Path on Gumwood Road to the Indian Michigan River Valley Trail.

Stack presented several options for dividing the \$816,533 in FY 2023 STBG funding between the City of Buchanan, the Cass County Road Commission, and the Berrien County Road Department (***descriptions of these options are included on pages 12-13***).

### **Public Comment**

Richard Gerbeth introduced himself as the owner of the 50-acre property on the northeast corner of Gumwood & Redfield. The realignment of Gumwood Road would be built through the middle of his property and require taking 15 acres from him. He stated that the project would destroy years' worth of his conservation efforts. By bringing the road traffic closer to their home the project would harm his wife's health, due to her sensitivity to certain pollutants.

Peter Agostino, the attorney representing Richard and Patricia Gerbeth, summarized the points from his written comments, which had asked to be distributed to the subcommittee prior to the meeting (***please see public comments on pages 14- 19 and the [CESO engineering study](#)***).

Richard Murphy discussed the tremendous community support there was in Buchanan for the Front Street project.

### **Privilege of the Floor / Subcommittee Discussion**

Several subcommittee members expressed concerns about the ability of the Gumwood Realignment to receive MDOT approval in FY 2023, and that NATS would lose the funding.

Several subcommittee members agreed with the assessment of the safety issues on Gumwood and said that some type of improvement was crucial. Subcommittee members also asked about the option to build two separate roundabouts as an alternative.

Bellina acknowledged the public comments about the Gumwood project, and he further explained why a single four-way roundabout is the only option the Road Commission is pursuing.

Several subcommittee members brought up the increased costs for the Front Street reconstruction. They noted that the engineers estimate (***estimate is included on pages 20-24***) included what appeared to be unnecessary decorative items. They believe that NATS funding is intended for, and should only be used for, work that is necessary for improving the transportation system; NATS should not fund other utilities or expensive decorative pavers.

**Subcommittee Vote on the Recommendation for FY 2023 funding**

Joe Ray reminded the subcommittee that they were being asked to vote on a recommendation for how to use NATS unprogrammed FY 2023 STBG funds and the FY 2023 CRP funding. This Recommendation will be sent to the NATS Technical Advisory Committee and Policy Committee, who will vote on it at January 24, 2023, NATS meeting (*descriptions of these options are included on pages 12-13*).

**Motion to recommend Option 3.** Introduced by Kevin Stack. No second. **Motion failed.**

**Motion to recommend Option 6.** Introduced by Joe Bellina, with a second from Richard Cooper.

Name	Representing	Vote
Kevin Stack	Berrien County Road Department	No
Joe Ray	City of Niles	No
Pepper Miller	Niles Dial A Ride	No
Joe Bellina	Cass County Road Commission	Yes
Heather Grace	City of Buchanan	No
Richard Cooper	NATS Policy Committee Chair	Yes

**Motion Failed.**

**Motion to recommend Option 5.** Introduced by Heather Grace. No second. **Motion failed.**

Swartz, on behalf of Buchanan, suggested a new option he named Option 5b. which would be:

Project	Total STBG Funding
Bertrand Rd.	\$485,331
Front St.	\$761,273
Gumwood Rd.	\$173,930

**Motion to recommend Option 5b,** introduced by Heather Grace. No second. **Motion failed.**

**Motion to recommend Option 1.** Introduced by Joe Bellina. No second. **Motion failed.**

**Motion to recommend Option 2.** Introduced by Joe Bellina, with a second by Kevin Stack.

Name	Representing	Vote
Kevin Stack	Berrien County Road Department	Yes
Joe Ray	City of Niles	Yes
Pepper Miller	Niles Dial A Ride	Yes
Joe Bellina	Cass County Road Commission	Yes
Heather Grace	City of Buchanan	No
Richard Cooper	NATS Policy Committee Chair	Yes

**Motion Passed.**

The meeting was adjourned at 10:57 AM.

*Minutes Compiled by Brandon Kovnat, SWMPC Transportation Planner*

# NATS SUBCOMMITTEE

## FY 2023 Funding Discussion

### FY 2023 Local Agency Projects in the NATS TIP – as currently approved by MDOT

Agency	Project	Federal Fund Source	Federal	Local	Total
Buchanan	Front St. Reconstruction	NATS STBG	\$300,000	\$260,747	\$560,747
Berrien CRD	Bertrand Rd. Resurfacing	NATS STBG	\$304,000	\$236,000	\$540,000
Buchanan	Front St Signal	CMAQ	\$287,341	\$81,848	\$369,189
Cass CRC	Gumwood Rd. Roundabout	HSIP	\$581,672	\$145,418	\$727,090

### FY 2023 Funding Balance

	NATS STBG	NATS CRP
FY 2023 Target	\$1,420,553	\$78,873
Currently Programed	\$604,000	\$0
<b>Balance</b>	<b>\$816,553</b>	<b>\$78,873</b>

### Gumwood Realignment

The Cass County Road Commission is requesting NATS STBG funds to realign Gumwood Road. This will create a four-way roundabout at Refined Road, with the roundabout funded with an approved 2023 HSIP grant.

<u>Cost for realignment</u>	<u>NEPA/SHPO</u>	<u>GI Submittal</u>
\$1,164,000	No	No

### Buchanan Front Street Reconstruction

Full reconstruction of Front Street from Red Bud Trl. To Oak St. The project includes Replacement of the sewer and watermain, Curb and sidewalk upgrades to meet ADA standards, removal and replacement of the storm sewer, replacement of drainage structures, pavement markings, permanent signage, and appurtenances

<u>Revised Cost</u>	<u>NEPA/SHPO</u>	<u>GI Submittal</u>
\$1,611,000	Yes	Mid-January

### Buchanan Front Street Signal

The Buchanan Front Street Signal was awarded \$287,341 in CMAQ in 2019. On November 7, 2022 the Berrien CMAQ Committee voted to use these CMAQ funds for a path along Red Arrow Highway, with an assumption that Buchanan would replace this with NATS CRP and STBG funding.

<u>Revised Cost</u>	<u>NEPA/SHPO</u>	<u>GI Submittal</u>
\$400,000	Yes	Mid-January

### Bertrand Road Resurface

HMA trench and widen, adding shoulders between M-51 to Cass County line.

<u>Revised Cost</u>	<u>NEPA/SHPO</u>	<u>GI Submittal</u>
\$592,952	yes	yes

NATS FY 2023 Funding Options  
 Submitted by Kevin Stack, Berrien County Road Department

Option 1

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$420,176	\$743,824	\$420,176
Buchanan	Front Street	\$1,611,000	\$515,046	\$1,095,954	\$215,046
Berrien CRD	Bertrand Road	\$592,952	\$485,331	\$107,621	\$181,331
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Bertrand Rd. Awards the maximum federal based on current estimate (81.85% of \$592,952)
2. Front St. Awards the maximum federal based on the original estimate + 10%
3. Gumwood Rd. Awards the remaining STBG after steps 1 & 2

Option 2

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$339,281	\$824,719	\$339,281
Buchanan	Front Street	\$1,611,000	\$639,282	\$971,718	\$339,282
Berrien CRD	Bertrand Road	\$592,952	\$441,990	\$150,962	\$137,990
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Bertrand Rd. Awards the maximum federal based on the original estimate (81.85% of \$540,000)
2. Front St. Awards 50% of the balance after step 1 plus the original STBG of \$300,000
3. Gumwood Rd. Awards 50% of the balance after step 1

Option 3

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$250,000	\$914,000	\$250,000
Buchanan	Front Street	\$1,611,000	\$685,222	\$925,778	\$176,664
Berrien CRD	Bertrand Road	\$592,952	\$485,331	\$107,621	\$181,331
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Bertrand Rd. Awards the maximum federal based on the current estimate (81.85% of \$592,952)
2. Gumwood Rd. Awards \$250,000
3. Front St. Award the remaining STBG after steps 1 & 2

NATS FY 2023 Funding Options  
 Submitted by Kevin Stack, Berrien County Road Department

Option 4

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$0	\$1,164,000	\$0
Buchanan	Front Street	\$1,611,000	\$935,222	\$675,778	\$426,664
Berrien CRD	Bertrand Road	\$592,952	\$485,331	\$107,621	\$181,331
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Gumwood Rd. **Not funded**
2. Bertrand Rd. Awards the maximum federal based on the current estimate (81.85% of \$592,952)
3. Front St. Award the remaining STBG after step 2

Option 5

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$264,606	\$899,394	\$264,606
Buchanan	Front Street	\$1,611,000	\$851,947	\$759,053	\$551,947
Berrien CRD	Bertrand Road	\$592,952	\$304,000	\$288,952	\$0
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Bertrand Rd. No increase (keeps award at \$304,000)
2. Front St. Add \$287,341 to replace the lost CMAQ funds, then add 50% the remaining amt.
3. Gumwood Rd. 50% of the amt after \$287,341 is given to Buchanan

Option 6

	Project	Total Estimate	Total STBG	Match	Additional STBG
	<b>Allocation</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
Cass CRC	Gumwood Realignment	\$1,164,000	\$408,267	\$755,733	\$408,267
Buchanan	Front Street	\$1,611,000	\$708,267	\$902,733	\$408,267
Berrien CRD	Bertrand Road	\$592,952	\$304,000	\$288,952	\$0
	<b>Total</b>		<b>\$1,420,553</b>		<b>\$816,533</b>
	<b>Balance</b>		<b>\$0</b>		<b>\$0</b>

1. Bertrand Rd. No increase (keeps award at \$304,000)
2. Front St. 50% of the \$816,533 initial balance added to the current STBG of \$300,000
3. Gumwood Rd. 50% of the \$816,533 initial balance



Edward W. Hardig

Michael J. Anderson  
Peter J. Agostino  
Scott M. Keller  
Michael P. Misch\*\*

Frank J. Agostino, of Counsel  
James E. Burke, of Counsel

Gaylen W. Allsop, Retired

\* Also Licensed in IL  
+ Also Licensed in MI

Bernard E. Edwards, Jr.  
Loris P. Zappia  
Tracey S. Schafer  
Stephanie L. Nemeth+  
Eli A. Wax  
Rachel Luken  
Shanon A. Buari  
Myra R. Reid  
Alexandra K. Keller  
Jill D. Manges

December 8, 2022

Niles-Buchanan Area Transportation Study  
Southwest Michigan Planning Commission  
376 West Main Street - Suite 130  
Benton Harbor, MI 49022-3651

Fax: 269.925.0288  
Email: [gallagherk@swmpc.org](mailto:gallagherk@swmpc.org)  
[kovnatb@swmpc.org](mailto:kovnatb@swmpc.org)

Re: Gumwood – Redfield Roundabout proposal, Milton Township

Dear Members of NATS Committees,

I am writing to ask that you deny a request for spending, or at least suspend making a decision on funding of the above referenced project. This is a road project that involves slashing through a 50 acre wooded lot located in Milton Township, and currently occupied by Richard and Patricia Gerbeth, both in their eighties, and the creators and conservators of the nature preserve which their property has become over decades of hard work, planting, nurturing and caring for their land and the wildlife that lives there.

The project in question is being pushed by the Cass County Road Commission, and calls for installing a roundabout at the east intersection of Gumwood and Redfield, with a leg cutting across the Gerbeth property at an angle, to connect up with Gumwood north of the current west intersection of Gumwood and Redfield. (Gumwood has two legs that intersect with Redfield.) I am attaching a drawing showing the proposed work.

The result of the proposed road is to take away nearly 4 acres of land from the Gerbeths, and to separate their property into 2 parcels, one of 11 acres and one of 35 acres. This

Anderson • Agostino & Keller, P.C.

131 S. Taylor Street South Bend, IN 46601 574.288.1510 office 574.288.1650 fax [www.aaklaw.com](http://www.aaklaw.com)

taking presents a number of problems which can be avoided with a common-sense approach.

Decisions on road projects are reviewed by a number of boards whose members are not only road engineers. The reason is so that ordinary people can apply common-sense policy concerns to the decision making process when it comes to roads. The deference that might be given to engineers on how a road is constructed once a decision is made on where to locate it is not the same deference that should be given to engineers on where to locate the road. In fact, board members have an obligation to consider a variety of policy concerns that impact such decisions, to look at a bigger picture. In other words, they should look at the impact on current property owners, the impact on the environment, and the impact on total dollars spent, to name a few concerns that go beyond engineering.

Looking at the big picture requires a common-sense approach that accounts for all the impacts of such decisions by the board. That common-sense approach suggests a less expensive alternative for addressing traffic concerns at the two intersections of Redfield and Gumwood—two roundabouts. This approach saves taxpayer dollars and minimizes the amount of property that needs to be taken from the Gerbeths and others.

This common-sense approach also has the least impact on traffic flow at the intersection of U.S. 12 and Gumwood, north of the western intersection of Redfield and Gumwood, compared to the single leg approach. No proposed solution has been presented for what happens at U.S. 12 and Gumwood after traffic flow to that intersection is no longer interrupted by two points of slowing down traffic which currently exist at the two separate intersections of Gumwood and Redfield. Having two roundabouts provides for a slower flow of traffic, which is better for all safety concerns.

This common-sense approach avoids the following problems:

1. Pollution and environmental impacts affecting the health of the Gerbeths. Patricia Gerbeth has a health condition that makes her hypersensitive to pollutants. The proposed roadway brings the car and traffic pollution much closer to her house than currently exists. In addition, there would be increased noise pollution much closer to the Gerbeth's residence.
2. Increased cost to local government units—really the taxpayers--for compensation of a larger than necessary taking; half an acre vs. 4 to 15 acres. (Property value in eminent domain proceeding can be as high as \$250,000 per acre or more, based on best use).
3. Direct impact on wildlife. A road cutting through what is basically a forested area can cause a variety of impacts on local wildlife, including the obvious increased risk of harm to motorists and animals as a result of vehicle strikes. Vehicle strikes can result in a significant impact on wildlife populations and can be one of the leading causes of mortality to large animals. The Gerbeth

property is home to deer, turkey, possums, raccoons, coyote, fox, and many other animals.

4. Indirect impact on wildlife. A roadway cutting through the property will change the behavior of animals to their detriment. Animals may move to avoid traffic noise, increasing their vulnerability to predation by other animals. Roads can be a physical barrier to some animals. Burrowing animals are especially vulnerable, as they are unable to navigate across the road due to the dry surface or the compacted subsoil. There are a variety of causes for why animals avoid roads; these behaviors can be grouped into two categories: avoidance of vehicles in general and merely the avoidance of road-based emissions, such as fumes or noises.
5. Water Quality. One of the most significant impacts of roads near wooded areas is on water quality, through both catastrophic and chronic sources of water pollution, primarily from sediment.
6. Noxious weeds. Roads can be vectors for the spread of diseases or noxious weeds. They can both directly and indirectly harm terrestrial wildlife.
7. Increased danger. Cutting the Gerbeth property in two separate parcels creates the obvious danger of vehicle strikes of people—fellow citizens--related to accessing the separated parcels.
8. Breach of Agreement with Department of Agriculture. How in the future are the Gerbeths going to carry out their duties per their contract with the Department of Agriculture to manage Invasive Plant Species in their Conservation Reserve, which will be across a very busy road from the main Reserve? Will the Cass County Road Commission provide a bridge crossing or a tunnel under the new road?

There certainly does not appear to be evidence that an appropriate group of professionals such as foresters, pest experts, hydrologists, geologists, or wildlife biologists have helped to develop a plan to reach a balance for these impacts. We can't just rely on a drawing by a road engineer to answer these questions and reach that balance.

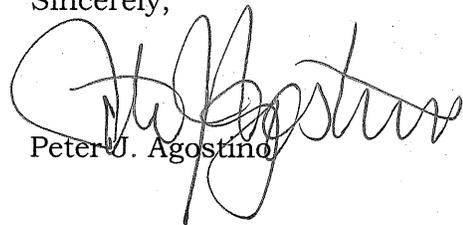
Reaching that balance is why boards reviewing selection of road projects are not made up solely of engineers. Engineers have their role; but this does not mean that other roles should be ignored. The role of bringing to bear common-sense to balance the impacts of a roadway must not be dismissed, nor should it be performed perfunctorily. Undoubtedly, the response might be, "We have an opportunity to spend money that we might not have in the future and we can't afford to wait." You can't simply make a decision to spend money that has such a detrimental impact just because you have the money. Rather, you must ask, "Can we afford to ignore the impacts of spending money

to put in a road that has such impacts?" Shouldn't we be asking, "Can we reach a better balance?"

The answer is yes, and that is by denying the current project and pushing forward the two roundabout solution. Patricia and Richard Gerbeth agree to a two roundabout solution; this involves less taking of their property, less impact on the wildlife, and costs less. A better solution for all.

Thank you for your consideration of these points.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter J. Agostino". The signature is fluid and cursive, with a large initial "P" and "A".

Peter J. Agostino



## SPENDING ON GUMWOOD/REDFIELD PROJECT IN CURRENT FORMAT SHOULD STOP

One simple rule which should guide selection among competing requests for taxpayer dollars is that we should not gamble taxpayer dollars on poorly designed solutions which cost more than other reasonable solutions and which have an uncertain future.

The current Gumwood/Redfield Roundabout proposal violates this simple rule. In its current form it is not a financially wise choice because it is more expensive than another reasonable alternative, based on the 2014 CESO Study relied upon to justify the project (CESO report attached); it ignores the significant findings of the CESO study; and it is filled with uncertainty due to the amount of right of way acquisition needed and the cost for doing so, for it involves the taking of the greatest amount of property--15 acres, and unnecessary destruction of a nature preserve which has been in the making for nearly four decades.

1. The CESO study contains the following significant findings:

(1) a two roundabout solution is less expensive, costing 61.6% of the cost of a single roundabout which ends with a wasteful slashing of a parcel in two pieces (Section 9 Cost Analysis, Page 44 – Single Roundabout - \$879,132.04 vs. Two Roundabouts – \$541,959.55)

(2) the two roundabout solution has 18 advantages (Table 6, pages 21-22 of CESO Study) versus only 14 advantages for the single roundabout (Table 5, pages 18-19 of the Study).

(3) the traffic flow capacity occurs at a safer pace with the two roundabouts design versus the one roundabout (Table 7, page 24 of the Study)

(4) the two roundabout involves far less taking of property for right of way (figure 8 - .2 acres vs. Figure 7 – 7.8 acres)

2. There is no rational basis for disregarding these findings which in fact support the two roundabouts solution. The only difference cited in support of a single roundabout approach is elimination of a slight jog; a one-line observation that provides no additional context with respect to traffic flow, safety, cost, or other consideration, and does not include analysis of why the jog could not be corrected with a two roundabouts solution. The “jog” reference is not sufficient to override the other more significant findings, especially when considering the increased cost and greater negative effect of land taking resulting from the single roundabout.

3. The cost difference is even greater in today’s dollars because the 2014 cost study was based on a loss of 7 acres vs. a plan today involving a loss of nearly 15 acres. And the land cost in 2014 was based on a 7500 per acre cost (See right of way estimate in CESO engineer’s Opinion of Costs) vs. current market values for the land of at least 100,000 per acre based on residential development happening across the street.

Reviewing the CESO study leads to one true conclusion: the actual findings support a two roundabouts solution; to ignore the findings and cling to a one-line “jog” reference is to rely on a half-truth—NOT A GOOD PRACTICE.

Spending decisions by government agencies should be based on prudent selection of the most cost-effective alternative: that solution is two roundabouts. It is unwise, uncertain, and wasteful to spend money for single roundabout.

For these reasons, the request for dollars for the Gumwood/Redfield single roundabout should be denied.

Respectfully submitted, Peter J. Agostino

## Estimate of Probable Cost

Owner:  
City of Buchanan

Project Title:  
Project - Downtown Infrastructure - Front Street Estimate

Date:  
November 2022

Project #:  
2221049

Item No.	Description	Quantity	Unit	Unit Price	Total Amount	Participating				Non-Participating			
						Traffic Light MDOT #206618		Front Street MDOT #206394		NP-USDA-RD (San/WM)		NP-Local (furniture / irrigation / landscaping)	
						Quantity	Total	Quantity	Total	Quantity	Total	Quantity	Total
<b><u>Front Street - From West limit to Red Bud (West Crosswalk)</u></b>													
1	Mobilization, Max 10%	1	LSUM	\$277,000.00	\$277,000.00	0	\$32,800.00	0	\$130,400.00		\$68,500.00		\$45,300.00
2	Dr Structure, rem	23	Ea	\$900.00	\$20,700.00	0	\$0.00	23	\$20,700.00		\$0.00		\$0.00
3	Curb and Gutter, Rem	2,100	Ft	\$7.00	\$14,700.00	0	\$0.00	2,100	\$14,700.00		\$0.00		\$0.00
4	Sidewalk Rem	1,420	Syd	\$11.00	\$15,620.00	50	\$550.00	1,370	\$15,070.00		\$0.00		\$0.00
5	Machine Grading, Modified, Front	8.3	Sta	\$5,500.00	\$45,650.00	0.00	\$0.00	8.30	\$45,650.00		\$0.00		\$0.00
6	Subgrade Undercutting, Type II	250	Cyd	\$22.00	\$5,500.00	50	\$1,100.00	200	\$4,400.00		\$0.00		\$0.00
7	Erosion Control, Inlet Protection, Fabric Drop	26	Ea	\$125.00	\$3,250.00	0	\$0.00	26	\$3,250.00		\$0.00		\$0.00
8	Subbase, CIP	1,600	Cyd	\$15.00	\$24,000.00	0	\$0.00	1,600	\$24,000.00		\$0.00		\$0.00
9	Aggregate Base, 8 inch	2,400	Syd	\$18.00	\$43,200.00	0	\$0.00	2,400	\$43,200.00		\$0.00		\$0.00
10	Sewer, Cl III, 15 inch, Tr Det B	10	Ft	\$55.00	\$550.00	0	\$0.00	10	\$550.00		\$0.00		\$0.00
11	Sewer, Cl III, 18 inch, Tr Det B	398	Ft	\$75.00	\$29,850.00	0	\$0.00	398	\$29,850.00		\$0.00		\$0.00
12	Sewer, Cl III, 30 inch, Tr Det B	225	Ft	\$125.00	\$28,125.00	0	\$0.00	225	\$28,125.00		\$0.00		\$0.00
13	Sewer, Cl III, 36 inch, Tr Det B	250	Ft	\$130.00	\$32,500.00	0	\$0.00	250	\$32,500.00		\$0.00		\$0.00
14	Sewer, Cl IV, 12 inch, Tr Det B	238	Ft	\$45.00	\$10,710.00	0	\$0.00	238	\$10,710.00		\$0.00		\$0.00
15	Dr Structure Cover, Adj, Case 1, Modified	25	Ea	\$650.00	\$16,250.00	0	\$0.00	25	\$16,250.00		\$0.00		\$0.00
16	Dr Structure Cover, Type B	13	Ea	\$1,150.00	\$14,950.00	0	\$0.00	13	\$14,950.00		\$0.00		\$0.00
17	Dr Structure Cover, Type K	12	Ea	\$1,150.00	\$13,800.00	0	\$0.00	12	\$13,800.00		\$0.00		\$0.00
18	Dr Structure, 24 inch dia	9	Ea	\$2,000.00	\$18,000.00	0	\$0.00	9	\$18,000.00		\$0.00		\$0.00
19	Dr Structure, 48 inch dia	8	Ea	\$3,000.00	\$24,000.00	0	\$0.00	8	\$24,000.00		\$0.00		\$0.00
20	Dr Structure, 60 inch dia	5	Ea	\$4,500.00	\$22,500.00	0	\$0.00	5	\$22,500.00		\$0.00		\$0.00
21	Dr Structure, 72 inch dia	1	Ea	\$6,000.00	\$6,000.00	0	\$0.00	1	\$6,000.00		\$0.00		\$0.00
22	Sewer, SDR 35, PVC, 4 inch, Tr Det B	1,060	Ft	\$50.00	\$53,000.00	0	\$0.00	1,060	\$53,000.00		\$0.00		\$0.00
23	Sewer Tap, 4 inch	32	Ea	\$200.00	\$6,400.00	0	\$0.00	32	\$6,400.00		\$0.00		\$0.00

24	HMA Surface, Rem	4,550	Syd	\$6.50	\$29,575.00		0	\$0.00	4,550	\$29,575.00		\$0.00	\$0.00
25	HMA, 3C, Modified	430	Ton	\$90.00	\$38,700.00		0	\$0.00	430	\$38,700.00		\$0.00	\$0.00
26	HMA, LVSP, Modified	220	Ton	\$90.00	\$19,800.00		0	\$0.00	220	\$19,800.00		\$0.00	\$0.00
27	Conc Pavt, Nonreinf, 8 inch, Table Top, color	830	Syd	\$85.00	\$70,550.00		0	\$0.00	830	\$70,550.00		\$0.00	\$0.00
28	Conc Pavt, Nonreinf, 8 inch, Parking Stalls	370	Syd	\$75.00	\$27,750.00		0	\$0.00	370	\$27,750.00		\$0.00	\$0.00
29	Driveway, Nonreinf Conc, 6 inch	60	Syd	\$50.00	\$3,000.00		0	\$0.00	60	\$3,000.00		\$0.00	\$0.00
30	Pavt, Clay Brick Pavers, Crosswalks	1,350	Sft	\$50.00	\$67,500.00		0	\$0.00	1,350	\$67,500.00		\$0.00	\$0.00
31	Curb and Gutter, Conc, Det F4	1,950	Ft	\$22.00	\$42,900.00		175	\$3,850.00	1,775	\$39,050.00		\$0.00	\$0.00
32	Curb and Gutter, Conc, Header (in Road, 9 inch)	830	Ft	\$25.00	\$20,750.00		0	\$0.00	830	\$20,750.00		\$0.00	\$0.00
33	Curb and Gutter, Conc, Flat Bands (in sidewalk, 6	1,300	Ft	\$20.00	\$26,000.00		0	\$0.00	1,300	\$26,000.00		\$0.00	\$0.00
34	Driveway Opening, Conc, Det M	920	Ft	\$22.00	\$20,240.00		0	\$0.00	920	\$20,240.00		\$0.00	\$0.00
35	Sidewalk, Conc, 4 inch	8,215	Sft	\$4.00	\$32,860.00		0	\$0.00	8,215	\$32,860.00		\$0.00	\$0.00
36	Sidewalk, Conc, 6 inch	530	Sft	\$6.00	\$3,180.00		0	\$0.00	530	\$3,180.00		\$0.00	\$0.00
37	Sidewalk Ramp, Clay Brick Pavers	540	Sft	\$16.00	\$8,640.00		240	\$3,840.00	300	\$4,800.00		\$0.00	\$0.00
38	Sidewalk, Clay Brick Pavers, Rem/Salv	5,850	Sft	\$5.50	\$32,175.00		865	\$4,757.50	4,985	\$27,417.50		\$0.00	\$0.00
39	Sidewalk, Clay Brick Pavers, Place Salv	3,510	Sft	\$15.00	\$52,650.00		0	\$0.00	3,510	\$52,650.00		\$0.00	0 \$0.00
40	Sidewalk, Clay Brick Pavers, Place New	8,110	Sft	\$25.00	\$202,750.00		0	\$0.00	8110	\$202,750.00		\$0.00	\$0.00
41	Sidewalk, Clay Brick Pavers, DWP	220	Sft	\$27.00	\$5,940.00		100	\$2,700.00	120	\$3,240.00		\$0.00	\$0.00
42	Pavt Mrkg, Ovly Cold Plastic, 18 inch, Stop Bar	125	Ft	\$10.00	\$1,250.00		50	\$500.00	75	\$750.00		\$0.00	\$0.00
43	Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Syr	1	Ea	\$150.00	\$150.00		0	\$0.00	1	\$150.00		\$0.00	\$0.00
44	Pavt Mrkg, Ovly Cold Plastic, Thru and Lt Turn A	1	Ea	\$250.00	\$250.00		0	\$0.00	1	\$250.00		\$0.00	\$0.00
45	Pavt Mrkg, Waterborne, 4 inch, White	310	Ft	\$0.50	\$155.00		0	\$0.00	310	\$155.00		\$0.00	\$0.00
46	Pavt Mrkg, Waterborne, 4 inch, Yellow	1,320	Ft	\$0.10	\$132.00		0	\$0.00	1,320	\$132.00		\$0.00	\$0.00
47	Traffic Control	1	LSUM	\$200,000.00	\$200,000.00		0.20	\$40,000.00	0.80	\$160,000.00		0.00	\$0.00 0.00 \$0.00
48	Cable, Rem	250	Ft	\$2.00	\$500.00		250	\$500.00		\$0.00		\$0.00	\$0.00
49	Conduit, DB, 1, 1 1/2 inch	100	Ft	\$20.00	\$2,000.00		100	\$2,000.00		\$0.00		\$0.00	\$0.00
50	Conduit, DB, 1, 3 inch	150	Ft	\$28.00	\$4,200.00		150	\$4,200.00		\$0.00		\$0.00	\$0.00
51	Conduit, DB, 3, 3 inch	50	Ft	\$60.00	\$3,000.00		50	\$3,000.00		\$0.00		\$0.00	\$0.00
52	Cable, Equipment Grounding Wire, 1/C#6	300	Ft	\$3.00	\$900.00		300	\$900.00		\$0.00		\$0.00	\$0.00
53	Cable, Equipment Grounding Wire, 1/C#12	4,000	Ft	\$3.00	\$12,000.00		4,000	\$12,000.00		\$0.00		\$0.00	\$0.00
54	Hh, Round, 3 foot dia	1	Ea	\$3,000.00	\$3,000.00		1	\$3,000.00		\$0.00		\$0.00	\$0.00
55	Hh, Round	3	Ea	\$2,000.00	\$6,000.00		3	\$6,000.00		\$0.00		\$0.00	\$0.00
56	Controller and Cabinet, Rem	1	Ea	\$400.00	\$400.00		1	\$400.00		\$0.00		\$0.00	\$0.00
57	Controller and Cabinet, Digital Type	1	Ea	\$20,000.00	\$20,000.00		1	\$20,000.00		\$0.00		\$0.00	\$0.00

58	Controller Fdn, Base Mtd	1	Ea	\$3,000.00	\$3,000.00		1	\$3,000.00		\$0.00		\$0.00		\$0.00
59	Cable, Sec, 600V, 1, 3/C#6	300	Ft	\$10.00	\$3,000.00		300	\$3,000.00		\$0.00		\$0.00		\$0.00
60	Cable, P.J., 600V, 1, 7/C#12	4,000	Ft	\$5.00	\$20,000.00		4,000	\$20,000.00		\$0.00		\$0.00		\$0.00
61	Light Pole and Luminaire	22	Ea	\$3,500.00	\$77,000.00		0	\$0.00		\$0.00		22	\$77,000.00	\$0.00
62	Light Pole Fdn	22	Ea	\$1,500.00	\$33,000.00		0	\$0.00		\$0.00		22	\$33,000.00	\$0.00
63	Fdn, Rem	24	Ea	\$2,200.00	\$52,800.00		0	\$0.00		\$0.00		24	\$52,800.00	\$0.00
64	Lighting Control Panel	1	Ea	\$14,000.00	\$14,000.00		0	\$0.00		\$0.00			\$0.00	1 \$14,000.00
65	Pedestal, Alum	4	Ea	\$1,200.00	\$4,800.00		4	\$4,800.00		\$0.00			\$0.00	\$0.00
66	Pedestal, Fdn	4	Ea	\$1,200.00	\$4,800.00		4	\$4,800.00		\$0.00			\$0.00	\$0.00
67	Pushbutton and Sign	8	Ea	\$900.00	\$7,200.00		8	\$7,200.00		\$0.00			\$0.00	\$0.00
68	Span Wire	1	Ea	\$1,200.00	\$1,200.00		1	\$1,200.00		\$0.00			\$0.00	\$0.00
69	Span Wire, Rem	1	Ea	\$300.00	\$300.00		1	\$300.00		\$0.00			\$0.00	\$0.00
70	Strain Pole, Steel, 6 Bolt, 30 foot	4	Ea	\$9,000.00	\$36,000.00		4	\$36,000.00		\$0.00			\$0.00	\$0.00
71	Strain Pole Fdn, 6 Bolt	4	Ea	\$6,000.00	\$24,000.00		4	\$24,000.00		\$0.00			\$0.00	\$0.00
72	TS, Span Wire Mtd, Rem	2	Ea	\$200.00	\$400.00		2	\$400.00		\$0.00			\$0.00	\$0.00
73	TS, One Way Span Wire Mtd (LED)	8	Ea	\$1,500.00	\$12,000.00		8	\$12,000.00		\$0.00			\$0.00	\$0.00
74	TS, Pedestrian, One Way Bracket Arm Mtd (LED)	8	Ea	\$1,500.00	\$12,000.00		8	\$12,000.00		\$0.00			\$0.00	\$0.00
75	TS, Pedestrian, One Way Pedestal Mtd (LED) Co	8	Ea	\$1,500.00	\$12,000.00		8	\$12,000.00		\$0.00			\$0.00	\$0.00
76	TS, Pedestrian, Two Way Bracket Arm Mtd (LED)	4	Ea	\$1,700.00	\$6,800.00		4	\$6,800.00		\$0.00			\$0.00	\$0.00
77	TS, Pedestrian, Two Way Pedestal Mtd (LED) Co	4	Ea	\$1,700.00	\$6,800.00		4	\$6,800.00		\$0.00			\$0.00	\$0.00
78	Pedestal, Pushbutton, Alum	1	Ea	\$1,000.00	\$1,000.00		1	\$1,000.00		\$0.00			\$0.00	\$0.00
79	Serv Disconnect	1	Ea	\$2,000.00	\$2,000.00		1	\$2,000.00		\$0.00			\$0.00	\$0.00
80	Casing	4	Ea	\$300.00	\$1,200.00		4	\$1,200.00		\$0.00			\$0.00	\$0.00
81	Hemispherical Video Detection Camera	2	Ea	\$10,000.00	\$20,000.00		2	\$20,000.00		\$0.00			\$0.00	\$0.00
82	Hemispherical Video Detection System	1	Ea	\$25,000.00	\$25,000.00		1	\$25,000.00		\$0.00			\$0.00	\$0.00
83	Luminaire	2	Ea	\$1,500.00	\$3,000.00		2	\$3,000.00		\$0.00			\$0.00	\$0.00
84	Bracket, Truss, with 6 Foot Arm	2	Ea	\$1,200.00	\$2,400.00		2	\$2,400.00		\$0.00			\$0.00	\$0.00
85	TS Uninterruptible Power System	1	Ea	\$9,000.00	\$9,000.00		1	\$9,000.00		\$0.00			\$0.00	\$0.00
86	Hydrant, Rem	2	Ea	\$800.00	\$1,600.00			\$0.00		\$0.00		2	\$1,600.00	\$0.00
87	Water Shutoff, Adj, Case 1, Modified	30	Ea	\$400.00	\$12,000.00			\$0.00		\$0.00		30	\$12,000.00	\$0.00
88	Water Shutoff, Adj, Case 2	33	Ea	\$50.00	\$1,650.00			\$0.00	33	\$1,650.00			\$0.00	\$0.00
89	Gate Box, Adj, Case 1	8	Ea	\$400.00	\$3,200.00			\$0.00	8	\$3,200.00			\$0.00	\$0.00
90	Water Main, 10 inch	65	Ft	\$100.00	\$6,500.00			\$0.00		\$0.00		65	\$6,500.00	\$0.00
91	Water Main, 12 inch	635	Ft	\$110.00	\$69,850.00			\$0.00		\$0.00		635	\$69,850.00	\$0.00

92	Water Main, 12 inch, Directional Drill	135	Ft	\$150.00	\$20,250.00		\$0.00		\$0.00		135	\$20,250.00		\$0.00
93	Water Main, 8 inch	80	Ft	\$90.00	\$7,200.00		\$0.00		\$0.00		80	\$7,200.00		\$0.00
94	Water Main, 8 inch, Directional Drill	80	Ft	\$130.00	\$10,400.00		\$0.00		\$0.00		80	\$10,400.00		\$0.00
95	Water Service, 1 inch	2,000	Ea	\$25.00	\$50,000.00		\$0.00		\$0.00		2,000	\$50,000.00		\$0.00
96	Water Main, 10 inch Sleeve	1	Ea	\$2,500.00	\$2,500.00		\$0.00		\$0.00		1	\$2,500.00		\$0.00
97	Water Main, 10 inch Valve & Box	2	Ea	\$3,000.00	\$6,000.00		\$0.00		\$0.00		2	\$6,000.00		\$0.00
98	Water Main, 10 inch 45 deg Bend	2	Ea	\$800.00	\$1,600.00		\$0.00		\$0.00		2	\$1,600.00		\$0.00
99	Water Main, 12 inch Valve & Box	5	Ea	\$3,500.00	\$17,500.00		\$0.00		\$0.00		5	\$17,500.00		\$0.00
100	Water Main, 12 inch x 12 inch x 10 inch Tee	1	Ea	\$1,200.00	\$1,200.00		\$0.00		\$0.00		1	\$1,200.00		\$0.00
101	Water Main, 12 inch x 12 inch x 6 inch Tee	2	Ea	\$1,000.00	\$2,000.00		\$0.00		\$0.00		2	\$2,000.00		\$0.00
102	Water Main, 12 inch x 12 inch x 8 inch Tee	2	Ea	\$1,100.00	\$2,200.00		\$0.00		\$0.00		2	\$2,200.00		\$0.00
103	Water Main, 12 inch x 8 inch Reducer	1	Ea	\$800.00	\$800.00		\$0.00		\$0.00		1	\$800.00		\$0.00
104	Water Main, 5 inch Hydrant	2	Ea	\$5,000.00	\$10,000.00		\$0.00		\$0.00		2	\$10,000.00		\$0.00
105	Water Main, 8 inch 45 deg Bend	4	Ea	\$600.00	\$2,400.00		\$0.00		\$0.00		4	\$2,400.00		\$0.00
106	Water Main, 8 inch Sleeve	2	Ea	\$2,500.00	\$5,000.00		\$0.00		\$0.00		2	\$5,000.00		\$0.00
107	Water Main, 8 inch Valve & Box	1	Ea	\$2,000.00	\$2,000.00		\$0.00		\$0.00		1	\$2,000.00		\$0.00
108	Water Main, 8 inch x 6 inch Reducer	1	Ea	\$400.00	\$400.00		\$0.00		\$0.00		1	\$400.00		\$0.00
109	Water Main, Cut & Plug, 4 inch	1	Ea	\$1,500.00	\$1,500.00		\$0.00		\$0.00		1	\$1,500.00		\$0.00
110	Water Main, Cut & Plug, 6 inch	1	Ea	\$1,700.00	\$1,700.00		\$0.00		\$0.00		1	\$1,700.00		\$0.00
111	Water Main, Cut & Plug, 8 inch	1	Ea	\$1,900.00	\$1,900.00		\$0.00		\$0.00		1	\$1,900.00		\$0.00
112	Water Main, Cut & Plug, 10 inch	1	Ea	\$2,100.00	\$2,100.00		\$0.00		\$0.00		1	\$2,100.00		\$0.00
113	Sanitary Sewer, 12 inch	215	Ft	\$180.00	\$38,700.00		\$0.00		\$0.00		215	\$38,700.00		\$0.00
114	Sanitary Sewer, 12 inch, CIPP	98	Ft	\$225.00	\$22,050.00		\$0.00		\$0.00		98	\$22,050.00		\$0.00
115	Sanitary Sewer, 15 inch	261	Ft	\$200.00	\$52,200.00		\$0.00		\$0.00		261	\$52,200.00		\$0.00
116	Sanitary Sewer, 8 inch	255	Ft	\$150.00	\$38,250.00		\$0.00		\$0.00		255	\$38,250.00		\$0.00
117	Sanitary Sewer, Lateral, 6 inch	1,155	Ft	\$45.00	\$51,975.00		\$0.00		\$0.00		1,155	\$51,975.00		\$0.00
118	Sanitary Drop Manhole, 48 inch Dia	1	Ea	\$5,500.00	\$5,500.00		\$0.00		\$0.00		1	\$5,500.00		\$0.00
119	Sanitary Manhole, 48 inch Dia	7	Ea	\$4,500.00	\$31,500.00		\$0.00		\$0.00		7	\$31,500.00		\$0.00
120	Sanitary Sewer, 8 inch x 6 inch Wye	11	Ea	\$1,000.00	\$11,000.00		\$0.00		\$0.00		11	\$11,000.00		\$0.00
121	Sanitary Sewer, 12 inch x 6 inch Wye	12	Ea	\$1,200.00	\$14,400.00		\$0.00		\$0.00		12	\$14,400.00		\$0.00
122	Sanitary Sewer, 15 inch x 6 inch Wye	12	Ea	\$1,500.00	\$18,000.00		\$0.00		\$0.00		12	\$18,000.00		\$0.00
123	Ornamental Aluminum Fence	189	Ft	\$110.00	\$20,790.00		\$0.00		\$0.00			\$0.00	189	\$20,790.00
124	Planter Curb	873	Ft	\$55.00	\$48,015.00		\$0.00		\$0.00			\$0.00	873	\$48,015.00
125	30" dia Planter Pot	6	Ea	\$1,100.00	\$6,600.00		\$0.00		\$0.00			\$0.00	6	\$6,600.00

126	4' Bench	8	Ea	\$2,100.00	\$16,800.00		\$0.00		\$0.00		\$0.00	8	\$16,800.00
127	4' Bench, Backless	10	Ea	\$1,900.00	\$19,000.00		\$0.00		\$0.00		\$0.00	10	\$19,000.00
128	42" dia Planter Pot	8	Ea	\$1,300.00	\$10,400.00		\$0.00		\$0.00		\$0.00	8	\$10,400.00
129	5' Tree Grate	18	Ea	\$1,800.00	\$32,400.00		\$0.00		\$0.00		\$0.00	18	\$32,400.00
130	6' Bench	8	Ea	\$2,100.00	\$16,800.00		\$0.00		\$0.00		\$0.00	8	\$16,800.00
131	6' Bench, Backless	2	Ea	\$2,100.00	\$4,200.00		\$0.00		\$0.00		\$0.00	2	\$4,200.00
132	Bike Rack	12	Ea	\$700.00	\$8,400.00		\$0.00		\$0.00		\$0.00	12	\$8,400.00
133	Dog Waste Container	7	Ea	\$650.00	\$4,550.00		\$0.00		\$0.00		\$0.00	7	\$4,550.00
134	Litter Receptacle	11	Ea	\$2,200.00	\$24,200.00		\$0.00		\$0.00		\$0.00	11	\$24,200.00
135	Columns	4	Ea	\$5,000.00	\$20,000.00		\$0.00		\$0.00		\$0.00	4	\$20,000.00
136	Columns with Art	2	Ea	\$8,000.00	\$16,000.00		\$0.00		\$0.00		\$0.00	2	\$16,000.00
137	Decorative Intersection Art	2	Ea	\$5,000.00	\$10,000.00		\$0.00		\$0.00		\$0.00	2	\$10,000.00
138	Landscaping	1	LSUM	\$100,000.00	\$100,000.00		\$0.00		\$0.00		\$0.00	1	\$100,000.00
139	Irrigation	1	LSUM	\$80,000.00	\$80,000.00		\$0.00		\$0.00		\$0.00	1	\$80,000.00
	2022 Total				\$3,045,032.00		\$359,997.50		\$1,434,104.50		\$753,475.00		\$497,455.00
	2023 - Inflation 6% - TOTAL				\$3,227,900.00		\$381,600.00		\$1,520,200.00		\$798,700.00		\$527,400.00
	<b>2024 - Inflation 6% - TOTAL</b>				<b>\$3,421,800.00</b>		<b>\$404,500.00</b>		<b>\$1,611,500.00</b>		<b>\$846,700.00</b>		<b>\$559,100.00</b>