

DRAFT

**2025 AMENDED TRANSPORTATION
CAPITAL IMPROVEMENTS PLAN**

Adams Township Transportation Impact Fee Ordinance
Adams Township, Butler County, Pennsylvania



Prepared for:
ADAMS TOWNSHIP
Mars, Pennsylvania

Prepared by:
TRANS ASSOCIATES ENGINEERING CONSULTANTS, INC.
Pittsburgh, Pennsylvania

January 2025

DRAFT

**2025 AMENDED TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township Transportation Impact Fee Ordinance
Adams Township, Butler County, Pennsylvania**

In accordance with Section 12 of Ordinance #118 (Adams Township Impact Fee Ordinance) and Section 504-A of Article V-A of the Pennsylvania Municipalities Planning Code, the Adams Township Impact Fee Advisory Committee has recommended to the Board of Supervisors that the Township's Transportation Capital Improvements Plan (TCIP) and impact fee per trip be amended, based on the completion, addition, deletion and modification of certain projects on the TCIP. The proposed amendments to the TCIP were presented and approved by the Impact Fee Advisory Committee at a public hearing on January __, 2025. Minutes from this public hearing are included in the Appendix. [*Shaded text to be included in final document*]

This amendment presents and highlights only those parts of the TCIP that have been revised since the original TCIP dated December 19, 2006 was approved by the Board of Supervisors on January 8, 2007.

The following sections of this report detail the modifications to transportation capital improvement projects including the costs and implementation schedule for mitigation of existing deficiencies, deficiencies caused by pass-through traffic and deficiencies caused by new development traffic.

An update of the Roadway Sufficiency Analysis, originally adopted by the Adams Township Board of Supervisors on December 11, 2006, was prepared for selected intersections and is referenced in the description of several of the modified projects.

A. Modifications to the Transportation Capital Improvement Projects

The TCIP approved in 2007 had transportation capital improvement projects addressing the following three conditions:

- Existing capacity deficiencies;
- Capacity deficiencies caused by pass-through traffic; and
- Capacity deficiencies caused by new development traffic.

In accordance with Section 504-A (e) of Article V-A, the TCIP established two Transportation Service Areas (TSAs). A map depicting the two TSAs established is presented on **Exhibit 1**. Each project was assigned a project number ending with a suffix depending on which TSA or TSAs the project is located in. Thus, a project with an E-suffix is located in the Eastern TSA, a project with a WE-suffix is located in both the Western and Eastern TSA, and a project with a W-suffix is located in the Western TSA. A project location map is presented on **Exhibit 2**. Project numbers, locations and descriptions are summarized on **Exhibit 3**.

The following describes the projects being modified as part of this amendment.

1. Transportation Capital Improvements to Mitigate Existing and Pass-Through Deficiencies

The TCIP approved in 2007 included no projects to mitigate deficiencies caused by either existing or pass-through traffic.

2. Transportation Capital Improvements to Mitigate New Development Traffic

Project 1-WE - This project is the construction of northbound and southbound left turn lanes on Mars Valencia Road and signalization of the Mars Valencia Road and Camp Trees Road/Downieville Road intersection. The construction year of the project has been moved forward from 2010 to 2033 with increases in project costs due to inflation. There was no change in the amount of impact fee funding towards the project.

Project 2-W - This project is the signalization of the Myoma Road and Crider Road intersection. The construction year of the project has been moved forward from 2027 to 2039. Project costs were adjusted with a lower inflation rate resulting in reduced project cost. There was a corresponding adjustment in the amount of impact fee funding towards the project.

Project 3-W - This project is the construction of an eastbound left turn lane on Peters Road, the construction of a northbound left turn lane on Myoma Road, and signalization of the Myoma Road and Peters Road intersection. The construction year of the project has been moved forward from 2012 to 2026 with increases in project costs due to inflation. There was no change in the amount of impact fee funding towards the project.

Project 4-W - This project is the construction of an eastbound left turn lane on Myoma Road and signalization of the Myoma Road and Callery Road intersection. This project is being eliminated due to significantly lower traffic volumes in the update to the Roadway Sufficiency Analysis (RSA) than those projected in the original RSA. The Western TSA impact fee funding is being dispersed to other projects.

Project 5-W - This project is the construction of a westbound left turn lane on Union Church Road, construction of a northbound right turn lane and a southbound left turn lane on Mars-Evans City Road, and signalization of the Mars-Evans City Road and Union Church Road intersection. Per analyses performed in the RSA Update, this project is being modified to eliminate the westbound left turn lane on Union Church Road, the northbound right turn lane on Mars-Evans City Road, and the signalization of the Mars-Evans City Road and Union Church Road intersection. An additional northbound left turn lane on Mars-Evans City Road at Callery Road and signalization of that intersection is now recommended. The year of construction has been moved forward from 2008 to 2029 and the cost have been adjusted for the modified project and due to inflation. There was no change in the amount of impact fee funding towards the project.

Project 6-E - This project is the construction of a southbound left turn lane on Three Degree Road and the signalization of the Three Degree Road and Davidson Road intersection. This project was modified to only include the realignment of Davidson Road to form a plus intersection along Three Degree Road with Doc's Way. The project was completed in 2023 and the costs reflect the actual impact fees expended. The remainder of the Eastern TSA impact fee funding is being dispersed to other projects. Further improvements at this intersection include a future roundabout. (See Project 7-E)

Project 7-E - This project is new to the TCIP. This project is the construction of a roundabout at the Three Degree Road and Davidson Road/Doc's Way intersection. It includes Eastern TSA impact fee funding.

Project 8-W - This project is new to the TCIP. This project is the modification of the traffic signal at the Route 228 and Mars Valencia Road intersection to include protected/permitted northbound/southbound signal phases. It includes Western TSA impact fee funding.

Project 9-WE - This project is new to the TCIP. This project is the installation of a fiber interconnect system along Route 228 at 10 intersections including detection and controller upgrades at selected intersections. It includes both Western and Eastern TSA impact fee funding.

The modifications, deletions and additions to the projects including construction year, total project costs and funding are shown in red on **Exhibit 3**, 2025 Amended Transportation Capital Improvements Plan. Amended project summaries including a breakdown of project costs and funding, and concept-level plans are included in the Appendix.

B. Impact Fee Derivation

Due to significant changes in the TCIP relative to the amount of proposed impact fee funding, the current balance in the Western and Eastern TSA Impact Fee funds, and the number of trips on which impact fees have been assessed to date, the following methodology was applied in determining projected impact fees per trip to provide adequate funding levels for the proposed projects.

The approximate number of trips on which impact fees were paid to date was based on the impact fee revenue to date in each TSA divided by the current impact fee per trips as follows:

- Western TSA: \$586 / PM peak hour trip
- Eastern TSA: \$533 / PM peak hour trip

The approximately number of assessed trips from 2007 to 2024, 1,644 in the Western TSA and 872 in the Eastern TSA, represent about 28 percent and 32 percent of the trips projected in each TSA in the original 2006 Land Use Assumptions Report, respectively.

Next, the projected amount of impact fees that would be needed to fund the amended TCIP projects was determined. This was calculated by subtracting the current impact fee balances plus interest for each TSA from the total projected impact fees funding projects in the Western and Eastern TSAs. Costs expended for preparation of the original Roadway Sufficiency Analysis and impact fee funding committed towards Project 6-E were subtracted.

Lastly, the recommended impact fee per TSA was calculated based on the projected impact fees needed to complete the amended TCIP projects, divided by the projected trips in each TSA. The projected trips were reduced to the number of assessed trips from 2007 to 2024. This reduced number appears to be more realistic than the original projections from the 2006 Land Use Assumptions Report. These calculations are as follows:

- Western TSA: $\$1,831,263 / 1,644 \text{ projected trips} = \$1,114 / \text{PM peak hour trip}$
- Eastern TSA: $\$1,230,211 / 872 \text{ projected trips} = \$1,411 / \text{PM peak hour trip}$

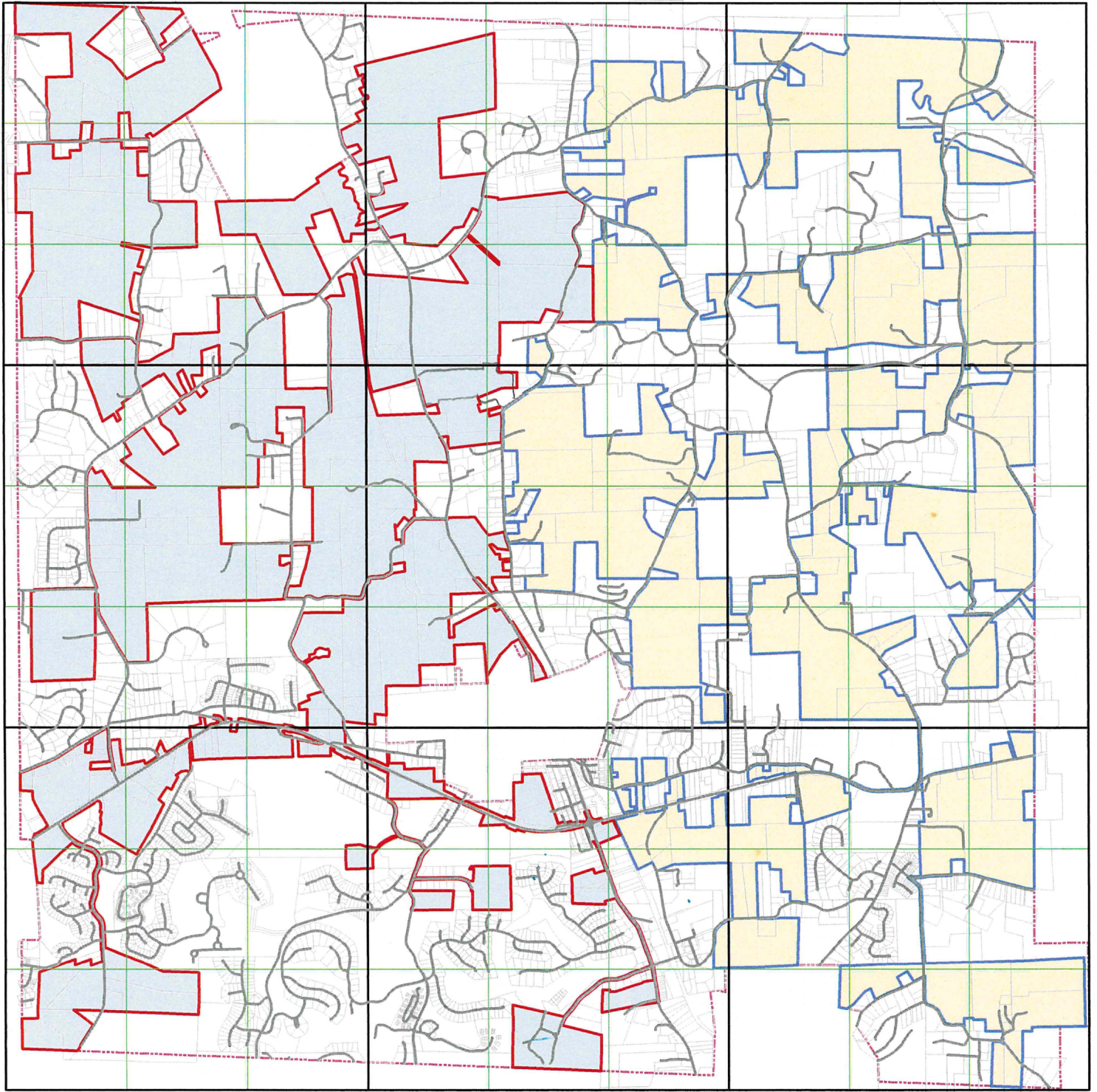
Therefore, a change in the impact fee per trip is recommended as follows:

Western TSA: Increase from \$586 per PM peak hour trip to \$1,114 per PM peak hour trip

Eastern TSA: Increase from \$533 per PM peak hour trip to \$1,411 per PM peak hour trip

Costs, revenues, interest, and trips per TSA are provided for the aforementioned calculations in the lower portion of **Exhibit 3**, 2025 Amended Transportation Capital Improvements Plan.

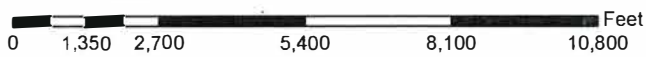
Exhibits



Transportation Service Area

■ - TSA-1 (Eastern)

■ - TSA-2 (Western)



SCALE: N.T.S.



4955 Steubenville Pike, Twin Towers Suite 400
 Pittsburgh, Pennsylvania 15205, 412-490-0630

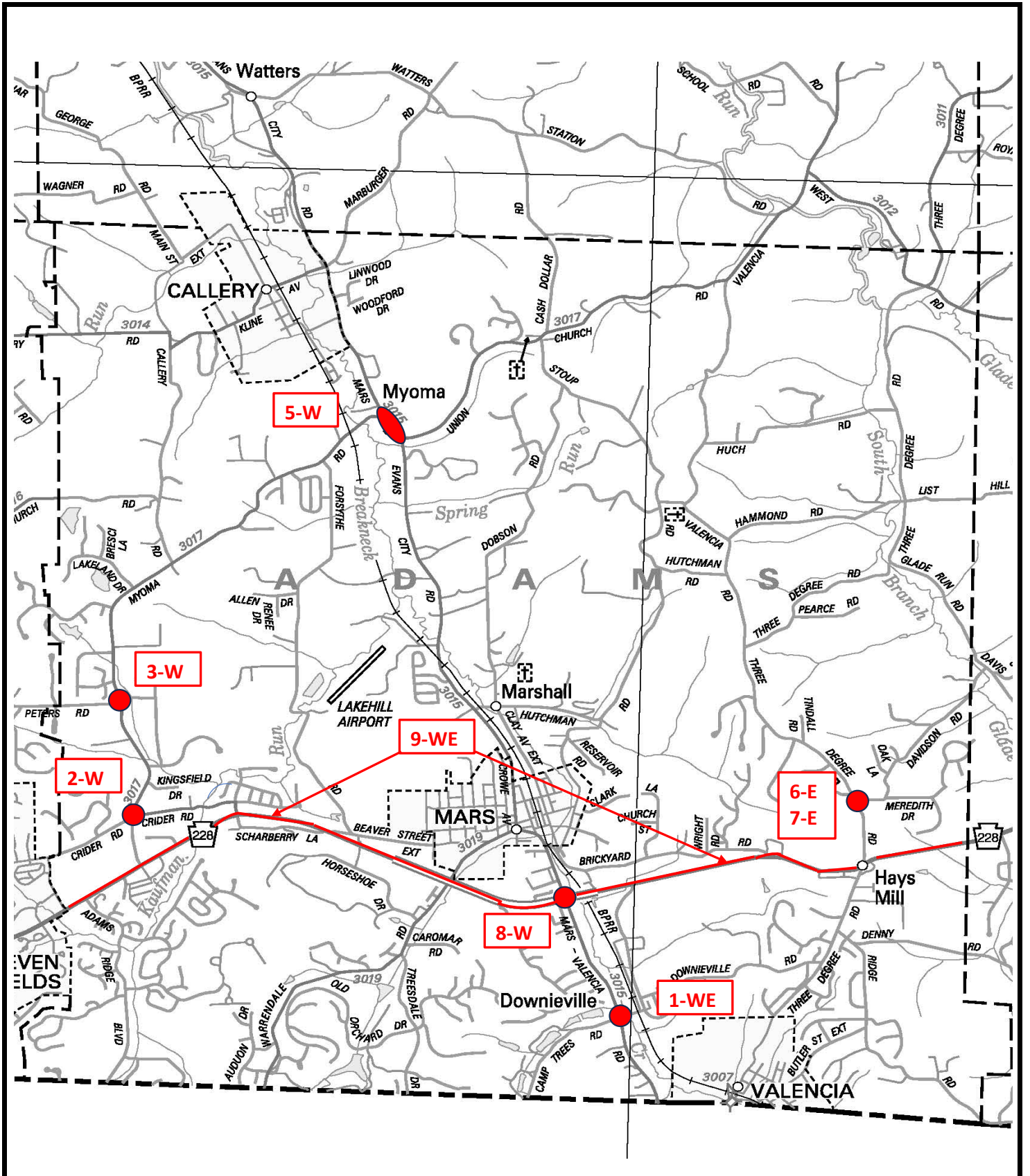
PROJECT NO. ADAMS00-24007
 PROJECT: Adams Township, Butler Pennsylvania
 Impact Fee Traffic Study

TITLE: Transportation Service Areas

EXHIBIT

1

D.B. ZTS
 C.B. REG
 REV. _____



SCALE: N.T.S.



Twin Towers Suite 400 / 4955 Steubenville Pike
Pittsburgh, Pennsylvania 15205 / (412) 490-0630

| | |
|-------------|--|
| PROJECT NO: | adams00-24007 |
| PROJECT: | Adams Township Transportation Capital Improvements Plan (TCIP) |
| TITLE: | Project Location Map |

| | |
|----------|---|
| EXHIBIT | 2 |
| D.B. ZTS | |
| C.B. REG | |
| REV. | |

EXHIBIT 3

DRAFT 2025 AMENDED TRANSPORTATION CAPITAL IMPROVEMENTS PLAN SUMMARY

Adams Township, Butler County, Pennsylvania

| Map No. ⁽¹⁾ | Project No. | Location | Description of Project | Const. Year | Total Project Cost (Dollars) ⁽²⁾ | Total Project Cost Per TSA (Dollars) ⁽²⁾ | Other Funding (Dollars) ⁽³⁾ | Impact Fee (Dollars) | Comments |
|------------------------|----------------|---|--|-------------|---|---|--|----------------------|---|
| 1 | 1-WE | Mars Valencia Road and Camp Trees Road/Downieville Road | Construct northbound and southbound left turn lane on Mars Valencia Road and install traffic signal control (new development traffic deficiencies) | 2033 | 2,851,347 | 1,425,673 | 950,167 | 475,506 | TSA-W Impact Fees |
| | | | | | | 1,425,673 | 950,167 | 475,506 | TSA-E Impact Fees |
| 2 | 2-W | Myoma Road and Crider Road | Install traffic signal (new development traffic deficiency) | 2039 | 468,328 | 468,328 | 234,164 | 234,164 | |
| 3 | 3-W | Myoma Road and Peters Road | Construct a eastbound left turn lane on Peters Road, northbound left turn lane on Myoma Road, and install traffic signal (new development traffic deficiencies). | 2026 | 1,915,504 | 1,915,504 | 776,669 | 1,138,835 | |
| 4 | 4-W | Myoma Road and Gallery Road | Construct eastbound left turn lane on Myoma Road and install traffic signal (new development deficiencies) | 2015 | 1,247,268 | 1,247,268 | 623,634 | 623,634 | Project eliminated based on updated analysis |
| 5 | 5-W | Mars-Evans City Road and Union Church Road/Myoma Road | Widen Mars-Evans City Road to provide back to back left turn lanes for Myoma Road and Union Church Road and install a traffic signal at Myoma Road. | 2029 | 2,342,889 | 2,342,889 | 1,453,833 | 889,056 | Project revised based on updated analysis |
| 6 | 6-E | Three Degree Road and Davidson Road | Realign Davidson Road opposite Doc's Way. (new development traffic deficiencies) | 2023 | 439,560 | 439,560 | 0 | 439,560 | Project completed in 2023 |
| 6 | 7-E | Three Degree Road and Davidson Road | Install a roundabout | 2039 | 1,524,796 | 1,524,796 | 1,143,597 | 381,199 | |
| 7 | 8-W | Route 228 and Mars Valencia Road | Modify Mars Valencia Road signal indications to protected/permitted | 2026 | 17,060 | 17,060 | 8,530 | 8,530 | |
| 8 | 9-WE | Route 228 Signal Interconnect | Install fiber interconnect and selected detection and controller upgrades to 10 signals along Route 228 | 2030 | 375,230 | 288,190 | 144,095 | 144,095 | |
| | | | | | | 87,040 | 43,520 | 43,520 | |
| | | | TSA-W Totals | | | \$6,457,643 | \$3,567,458 | \$2,890,186 | |
| | | | TSA-E Totals | | | \$3,477,069 | \$2,137,284 | \$1,339,785 | |
| | | | TSA-W Engineering Costs for RSA Preparation | | | | | \$42,840 | |
| | | | TSA-E Engineering Costs for RSA Preparation | | | | | \$19,660 | |
| | | | TSA-W New P.M. Peak Hour Trips | | | | | 5,839 | Based on 2006 Land Use Assumptions Report |
| | | | TSA-E New P.M. Peak Hour Trips | | | | | 2,706 | |
| | | | Existing TSA-W Impact Fee Per Trip | | | | | \$586 | |
| | | | Existing TSA-E Impact Fee Per Trip | | | | | \$533 | |
| | | | TSA-W Impact Fees Assessed | | | | | \$963,633 | As of 9/30/2024 |
| | | | TSA-E Impact Fees Assessed | | | | | \$464,675 | |
| | | | TSA-W Interest Accrued | | | | | \$150,502 | Interest per TSA not reported. Based on proportion of impact fees assessed per TSA on \$223,076 total interest. |
| | | | TSA-E Interest Accrued | | | | | \$72,574 | |
| | | | TSA-W Impact Fees + Interest - Expenditures (Current Balance) | | | | | \$1,101,763 | Includes expenditure of \$12,372 for engineering |
| | | | TSA-E Impact Fees + Interest - Expenditures (Current Balance) | | | | | \$129,234 | Includes expenditure of \$408,015 for Project 6-E |
| | | | TSA-W Impact Fees Needed to Complete Program | | | | | \$1,831,263 | TSA Impact Fees budgeted minus current balance plus RSA preparation |
| | | | TSA-E Impact Fees Needed to Complete Program | | | | | \$1,230,211 | |
| | | | TSA-W P.M. Peak Hour Assessed Trips (Estimated) | | | | | 1,644 | Equals Impact Fees assessed divided by \$586 |
| | | | TSA-E P.M. Peak Hour Assessed Trips (Estimated) | | | | | 872 | Equals Impact Fees assessed divided by \$533 |
| | | | TSA-W Remaining P.M. Peak Hour Trips | | | | | 4,195 | |
| | | | TSA-E Remaining P.M. Peak Hour Trips | | | | | 1,834 | |
| | | | TSA-W Remaining P.M. Peak Hour Trips Reduced to Equal Estimated Trips Already Assessed | | | | | 1,644 | |
| | | | TSA-E Remaining P.M. Peak Hour Trips Reduced to Equal Estimated Trips Already Assessed | | | | | 872 | |
| | | | Proposed TSA-W Impact Fee Per Trip | | | | | \$1,114 | |
| | | | Proposed TSA-E Impact Fee Per Trip | | | | | \$1,411 | |

Notes:

- (1) See Exhibit 2 for project location map.
- (2) Total project cost includes construction, engineering and inspection, if applicable. Project costs are future values for the construction year shown.
- (3) Other funding includes Township general funds, developer contributions or State and/or Federal participation (projects are not currently part of the Southwestern Pennsylvania Commission's current Transportation Improvement Program (TIP)).

Revisions shown in red.

Appendix

PROJECT SUMMARY (2025 AMENDED)
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

PROJECT NO: 1-WE
LOCATION: Mars-Valencia Road (S.R. 3015) and Camp Trees Road/Downieville Road
DEFICIENCY: Future Capacity Deficiency caused by New Development

PROJECT DESCRIPTION: Construct Northbound and Southbound Left Turn Lanes on Mars-Valencia Road and Install Traffic Signal Control.

PROPOSED CONSTRUCTION YEAR: 2033

TOTAL COST: (2006) \$1,304,000

TOTAL COST: (2033) \$2,851,347 With 2.94% annual inflation compounded = X 2.187

PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

| | | | | | |
|-------------------------|----|-----------------------------|----|--------------------------------|------|
| <u>Existing Traffic</u> | 0% | <u>Pass-Through Traffic</u> | 0% | <u>New Development Traffic</u> | 100% |
| Future Traffic | | Future Traffic | | Future Traffic | |

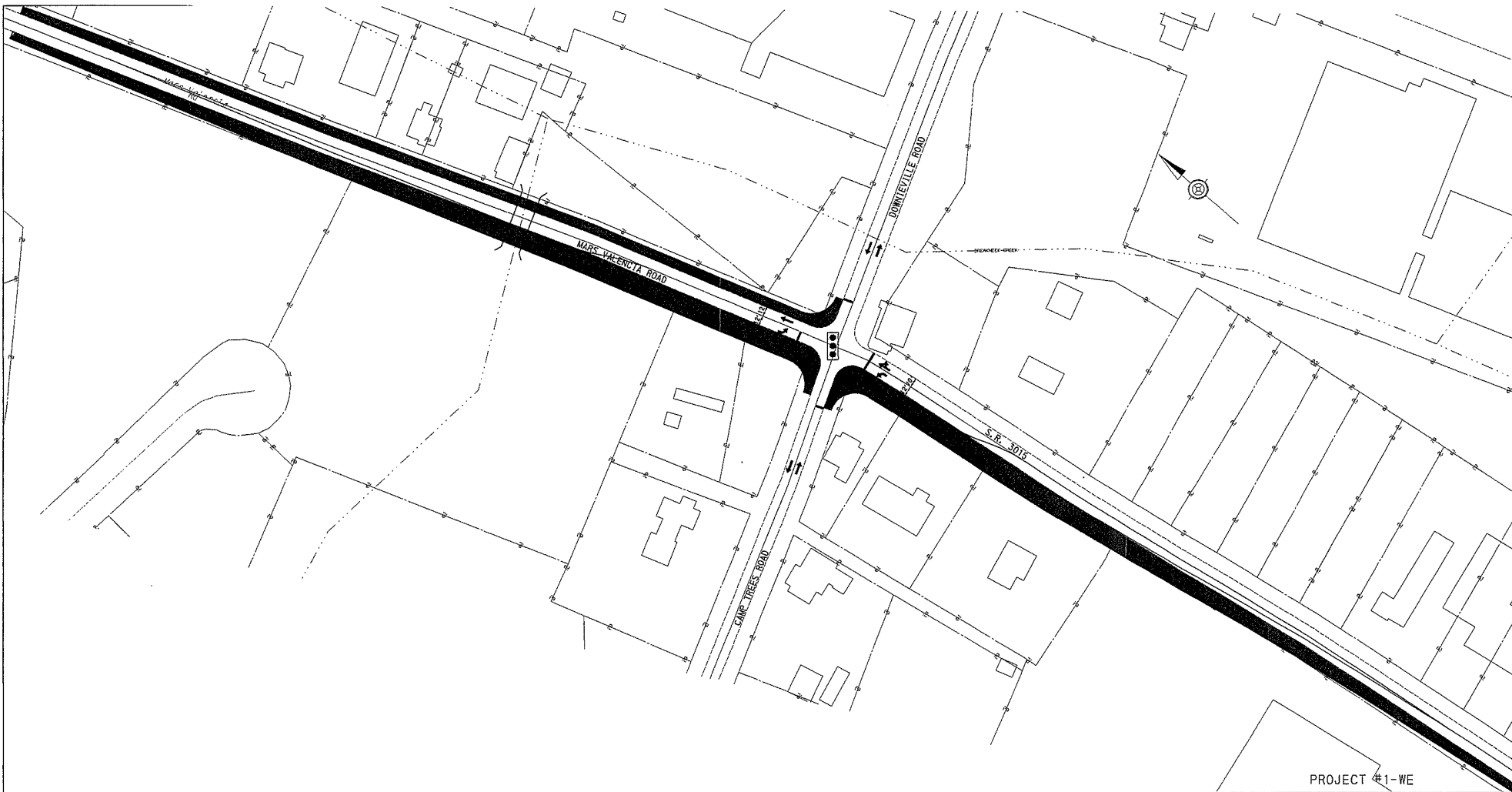
COST ATTRIBUTABLE TO: (See comments)
Existing: \$0 Pass-Through: \$0 New Development: \$2,851,347

| COST SUMMARY: | | PROPOSED FUNDING: | |
|-------------------------------|--------------------|--------------------------|--------------------|
| Engineering (Inc. Inspection) | \$285,135 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$1,900,335 |
| Utility Relocation | \$0 | Adams Township | \$0 |
| Construction | \$2,281,077 | Impact Fees - TSA-E | \$475,506 |
| Contingency | \$285,135 | Impact Fees - TSA-W | \$475,506 |
| TOTAL | \$2,851,347 | TOTAL | \$2,851,347 |

PROJECT SCHEDULE:





| | |
|----------------------|------|
| Secure Funding | 2031 |
| Complete Engineering | 2032 |
| Acquire Right-of-Way | N/A |
| Begin Construction | 2033 |

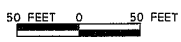
COMMENTS:
Intersection forecasted to operate at LOS F during A.M. and P.M. peak hours



PROJECT #1-WE

LEGEND

-  - WIDENING
-  - EXISTING EDGE OF TRAVELED WAY
-  - PROPOSED SIGNALIZED INTERSECTION
-  - PROPOSED BRIDGE



| REV. | DATE | DESCRIPTION | P.M. | OPEI |
|-----------|--------------|-------------|--------------------------|------|
| DESIGNED | KPK 12/10/06 | PROJECT NO. | adams00 - 06026 | |
| DRAWN | KPK 12/10/06 | PROJECT: | ADAMS TOWNSHIP | |
| CHECKED | JMD 12/15/06 | | TRAFFIC IMPACT FEE STUDY | |
| REVISED | | TITLE: | CONCEPT IMPROVEMENT PLAN | |
| APPROVED | | | FOR MARS VALENCIA ROAD, | |
| PROJ.MGR. | JMD | | CAMP TREES ROAD AND | |
| OPERATOR | | | DOWNIEVILLE ROAD | |



PROJECT SUMMARY (2025 AMENDED)
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

| | | | |
|--|--|--|------------------|
| PROJECT NO: | 2-W | | |
| LOCATION: | Myoma Road (S.R. 3017) and Crider Road | | |
| DEFICIENCY: | Future Capacity Deficiency caused by New Development | | |
| PROJECT DESCRIPTION: | Install Traffic Signal Control | | |
| PROPOSED CONSTRUCTION YEAR: | 2039 | | |
| TOTAL COST: | (2006) | \$150,000 | |
| TOTAL COST: | (2039) | \$390,273 With 2.94% annual inflation compounded = X 2.602 | |
| PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES: | | | |
| <u>Existing Traffic</u> Future Traffic | 0% | <u>Pass-Through Traffic</u> Future Traffic | 0% |
| | | <u>New Development Traffic</u> Future Traffic | 100% |
| COST ATTRIBUTABLE TO: (See comments) | | | |
| Existing: | \$0 | Pass-Through: | \$0 |
| | | New Development: | \$390,273 |
| COST SUMMARY: | | PROPOSED FUNDING: | |
| Engineering (Inc. Inspection) | \$39,027 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$234,164 |
| Utility Relocation | \$0 | Adams Township | \$0 |
| Construction | \$390,273 | Impact Fees | \$234,164 |
| Contingency | \$39,027 | Other | \$0 |
| TOTAL | \$468,328 | TOTAL | \$468,328 |
| PROJECT SCHEDULE: | | | |
| Secure Funding | 2039 | | |
| Complete Engineering | 2039 | | |
| Acquire Right-of-Way | N/A | | |
| Begin Construction | 2039 | | |
| COMMENTS: | | | |
| Intersection forecasted to operate at LOS F during P.M. peak hour. | | | |

PROJECT SUMMARY (2025 AMENDED)
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

PROJECT NO: 3-W
LOCATION: Myoma Road (S.R. 3017) and Peters Road
DEFICIENCY: Future Capacity Deficiency caused by New Development

PROJECT DESCRIPTION: Construct Eastbound Left Turn Lane on Peters Road, Northbound Left Turn Lane on Myoma Road and Install Traffic Signal Control

PROPOSED CONSTRUCTION YEAR: 2026

TOTAL COST: (2006) \$1,073,000

TOTAL COST: (2026) \$1,915,504 With 2.94% annual inflation compounded = X 1.785

PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

| | | | | | |
|-------------------------|----|-----------------------------|----|--------------------------------|------|
| <u>Existing Traffic</u> | 0% | <u>Pass-Through Traffic</u> | 0% | <u>New Development Traffic</u> | 100% |
| Future Traffic | | Future Traffic | | Future Traffic | |

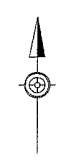
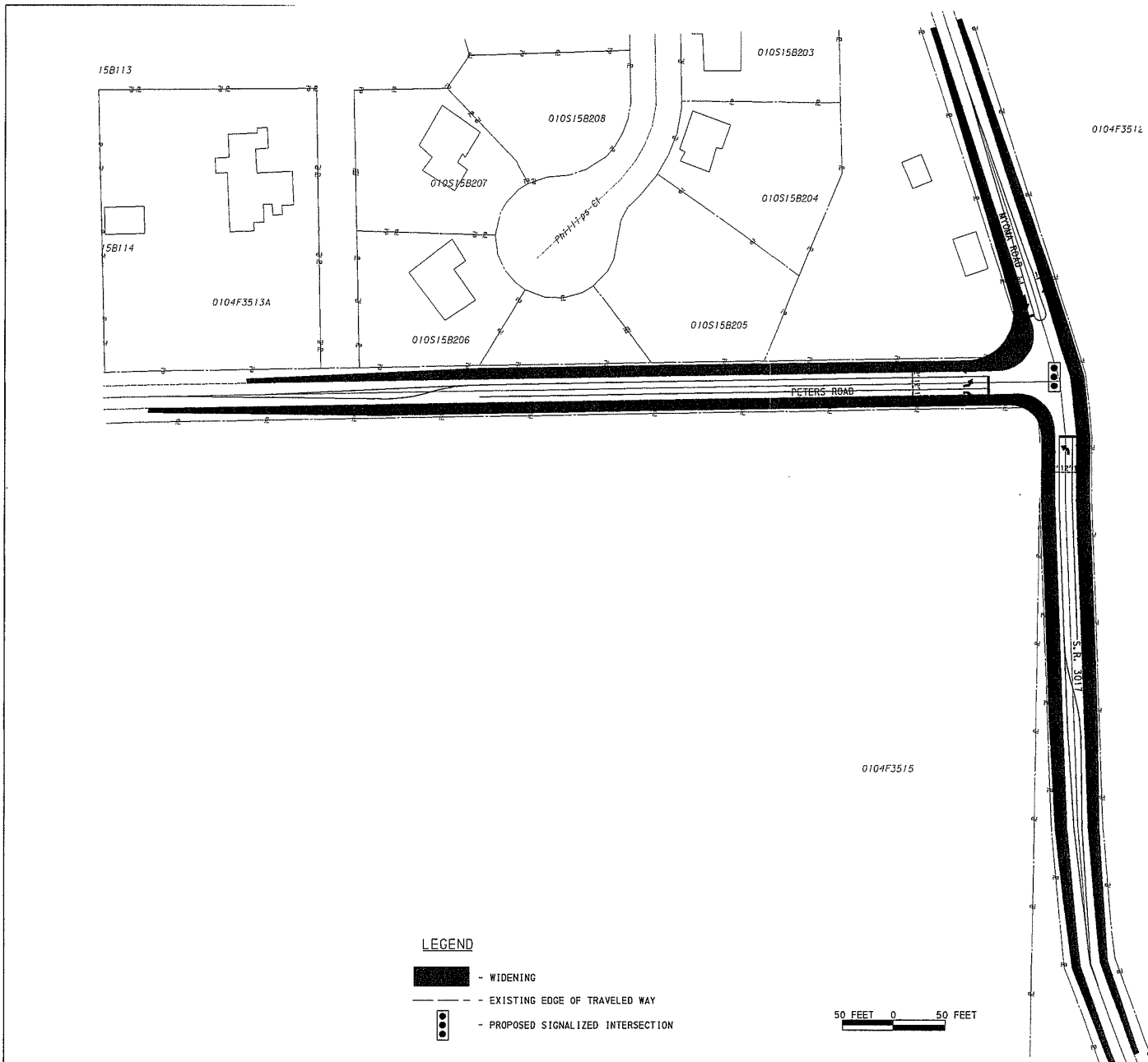
COST ATTRIBUTABLE TO: (See comments)
Existing: \$0 Pass-Through: \$0 New Development: \$1,915,504

| COST SUMMARY: | | PROPOSED FUNDING: | |
|-------------------------------|--------------------|--------------------------|--------------------|
| Engineering (Inc. Inspection) | \$191,550 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$776,669 |
| Utility Relocation | \$0 | Adams Township | \$0 |
| Construction | \$1,532,403 | Impact Fees | \$1,138,835 |
| Contingency | \$191,550 | Other | \$0 |
| TOTAL | \$1,915,504 | TOTAL | \$1,915,504 |

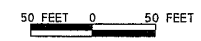
PROJECT SCHEDULE:

| | |
|----------------------|------|
| Secure Funding | 2025 |
| Complete Engineering | 2026 |
| Acquire Right-of-Way | N/A |
| Begin Construction | 2026 |

COMMENTS:
Intersection forecasted to operate at LOS F during A.M. and P.M. peak hour.



- LEGEND**
- WIDENING
 - EXISTING EDGE OF TRAVELED WAY
 - PROPOSED SIGNALIZED INTERSECTION



PROJECT #3-W

| REV. | DATE | DESCRIPTION | P.M. | OPE |
|-----------|--------------|--------------------------------|------|-----|
| DESIGNED | KPK 12/10/06 | PROJECT NO. adams00 - 06026 | | |
| DRAWN | KPK 12/10/06 | PROJECT: ADAMS TOWNSHIP | | |
| CHECKED | JMD 12/15/06 | TRAFFIC IMPACT FEE STUDY | | |
| REVISED | | | | |
| APPROVED | | TITLE: | | |
| PROJ.MGR. | JMD | CONCEPT IMPROVEMENT PLAN | | |
| OPERATOR | | FOR MYOMA ROAD AND PETERS ROAD | | |



PROJECT SUMMARY (2025 AMENDED)
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

| | |
|--------------------|---|
| PROJECT NO: | 5-W |
| LOCATION: | Mars-Evans City Road (S.R. 3015) and Union Church Road (S.R. 3017)/Myoma Road |
| DEFICIENCY: | Future Capacity Deficiency caused by New Development |

PROJECT DESCRIPTION: Widen Mars-Evans City Road to provide back to back left turn lanes for Myoma Road and Union Church Road and install a traffic signal at Myoma Road.

PROPOSED CONSTRUCTION YEAR: 2029

TOTAL COST: (2024) \$2,026,893

TOTAL COST: (2029) \$2,342,889 With 2.94% annual inflation compounded = X 1.156

PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES:

| | | | | | |
|-------------------------|----|-----------------------------|----|--------------------------------|------|
| <u>Existing Traffic</u> | 0% | <u>Pass-Through Traffic</u> | 0% | <u>New Development Traffic</u> | 100% |
| Future Traffic | | Future Traffic | | Future Traffic | |

COST ATTRIBUTABLE TO: (See comments)
Existing: \$0 Pass-Through: \$0 New Development: \$2,342,889

| COST SUMMARY: | | PROPOSED FUNDING: | |
|-------------------------------|--------------------|--------------------------|--------------------|
| Engineering (Inc. Inspection) | \$157,413 | Federal | \$0 |
| Right-of-Way Acquisition | \$138,920 | PennDOT | \$1,453,833 |
| Utility Relocation | \$23,118 | Adams Township | \$0 |
| Construction | \$1,789,149 | Impact Fees | \$889,056 |
| Contingency | \$234,289 | Other | \$0 |
| TOTAL | \$2,342,889 | TOTAL | \$2,342,889 |

PROJECT SCHEDULE:

| | |
|----------------------|------|
| Secure Funding | 2028 |
| Complete Engineering | 2029 |
| Acquire Right-of-Way | 2029 |
| Begin Construction | 2029 |

COMMENTS:
Myoma Road approach operates at LOS F during P.M. peak hour. Left turn lane warrants met for Mars-Evans City Road at both Myoma Road and at Union Church Road.

PLOTTED: 12/17/2024

| | | | | |
|-----------------|-----------|-------|---------|-------|
| DISTRICT | COUNTY | ROUTE | SECTION | SHEET |
| 10-0 | BUTLER | 3015 | - | OF 2 |
| ADAMS TOWNSHIP | | | | |
| REVISION NUMBER | REVISIONS | DATE | BY | |
| | | | | |

PROJECT #5 - W



FILE NAME: P:\adams00\24007 TIF Committee Update\design\Prelim Concept Sheet.dgn

0 25 50 FEET

| REV | DATE | DESCRIPTION | PM | OPER |
|----------|-------------|-------------------------------------|----|------|
| DESIGNED | BCJ 6/26/24 | PROJECT NO ADAMS00 - 24007 | | |
| DRAWN | BCJ 6/26/24 | PROJECT: ADAMS TOWNSHIP | | |
| CHECKED | TVO | TRANSPORTATION CAPITAL IMPROVEMENTS | | |
| REVISED | | PLAN UPDATE | | |
| APPROVED | - | TITLE: | | |
| PROJ MGR | REG 12/7/24 | CONCEPTUAL IMPROVEMENT PLAN | | |
| OPERATOR | - | MARS-EVANS CITY ROAD AND | | |
| | | UNION CHURCH ROAD/MYOMA ROAD | | |



PROJECT SUMMARY (2025 AMENDED)
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

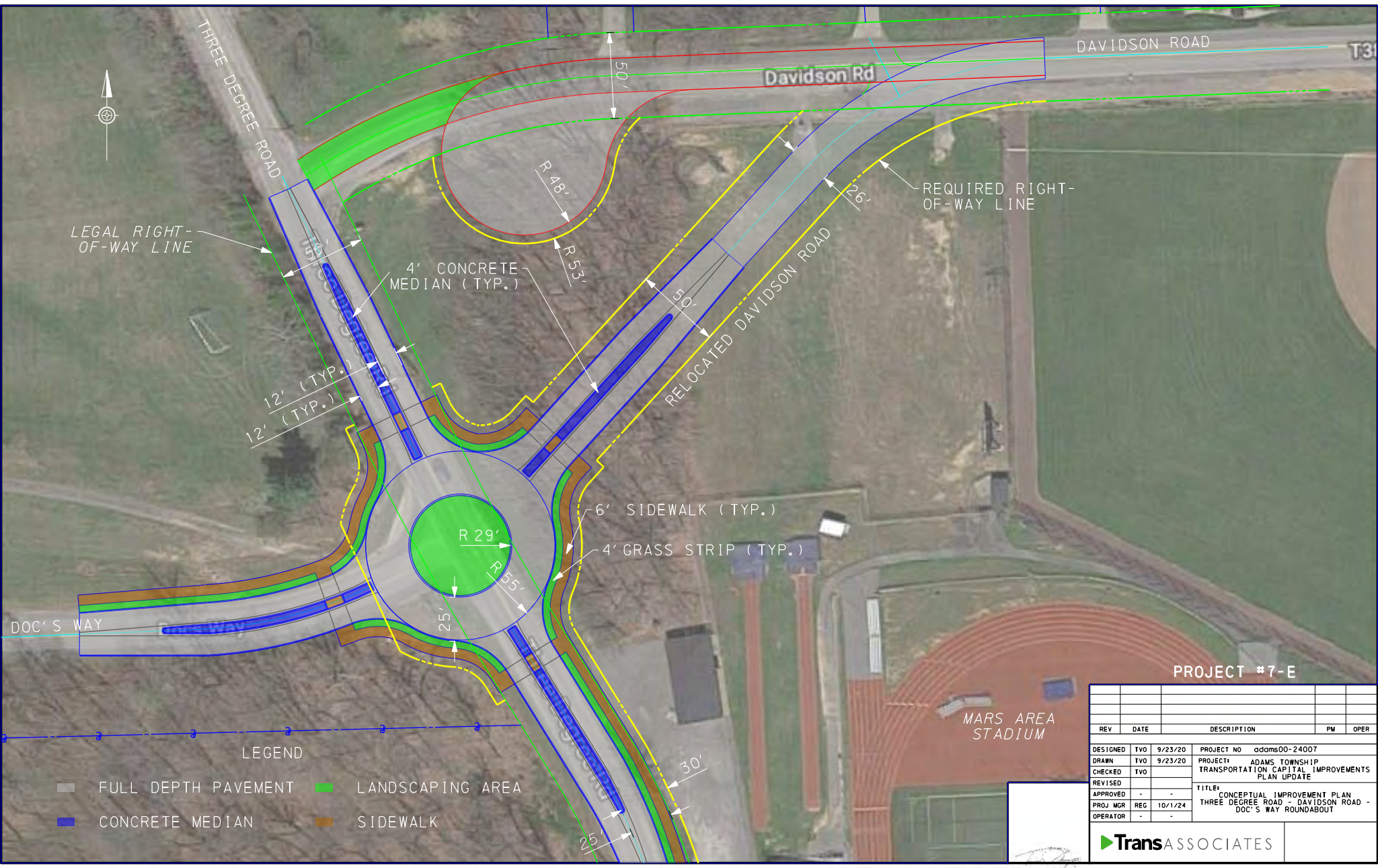
| | | | |
|--|---|---|------------------|
| PROJECT NO: | 6-E | | |
| LOCATION: | Three Degree Road (S.R. 3007) and Davidson Road | | |
| DEFICIENCY: | Future Capacity Deficiency caused by New Development | | |
| PROJECT DESCRIPTION: | Realign Davidson Road opposite Doc's Way. Install pedestrian beacons. | | |
| PROPOSED CONSTRUCTION YEAR: | 2023 | | |
| TOTAL COST: | (2023) | \$439,560 | |
| TOTAL COST: | (2023) | \$439,560 With 5.0% annual inflation compounded = X 1.000 | |
| PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES: | | | |
| <u>Existing Traffic</u> Future Traffic | 0% | <u>Pass-Through Traffic</u> Future Traffic | 0% |
| | | <u>New Development Traffic</u> Future Traffic | 100% |
| COST ATTRIBUTABLE TO: (See comments) | | | |
| Existing: | \$0 | Pass-Through: | \$0 |
| | | New Development: | \$439,560 |
| COST SUMMARY: | | PROPOSED FUNDING: | |
| Engineering (Inc. Inspection) | \$52,122 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$0 |
| Utility Relocation | \$0 | Adams Township | \$0 |
| Construction | \$347,478 | Impact Fees | \$439,560 |
| Contingency | \$39,960 | Other | \$0 |
| TOTAL | \$439,560 | TOTAL | \$439,560 |
| PROJECT SCHEDULE: | | | |
| Secure Funding | 2022 | | |
| Complete Engineering | 2022 | | |
| Acquire Right-of-Way | 2022 | | |
| Begin Construction | 2022 | | |
| COMMENTS: | | | |
| Intersection forecasted to operate at LOS F during A.M. peak hour. | | | |

PROJECT SUMMARY
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

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| PROJECT NO: | 7-E | | |
| LOCATION: | Three Degree Road and Davidson Road/Doc's Way | | |
| DEFICIENCY: | Future Capacity Deficiency caused by New Development | | |
| PROJECT DESCRIPTION: | Replace intersection with a roundabout | | |
| PROPOSED CONSTRUCTION YEAR: | 2039 | | |
| TOTAL COST: | (2021) | \$905,100 | |
| TOTAL COST: | (2039) | \$1,524,796 With 2.94% annual inflation compounded = X 1.685 | |
| PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES: | | | |
| <u>Existing Traffic</u> Future Traffic | 0% | <u>Pass-Through Traffic</u> Future Traffic | 0% |
| | | <u>New Development Traffic</u> Future Traffic | 100% |
| COST ATTRIBUTABLE TO: | | | |
| Existing: | \$0 | Pass-Through: | \$0 |
| | | New Development: | \$1,524,796 |
| COST SUMMARY: | | PROPOSED FUNDING: | |
| Engineering (Inc. Inspection) | \$130,730 | Federal | \$0 |
| Right-of-Way Acquisition * | \$0 | PennDOT | \$0 |
| Utility Relocation | \$0 | Adams Township | \$1,143,597 |
| Construction | \$1,241,586 | Impact Fees | \$381,199 |
| Contingency | \$152,480 | Other | \$0 |
| TOTAL | \$1,524,796 | TOTAL | \$1,524,796 |
| PROJECT SCHEDULE: | | | |
| Secure Funding | 2038 | | |
| Complete Engineering | 2038 | | |
| Acquire Right-of-Way | 2038 | | |
| Begin Construction | 2039 | | |
| COMMENTS: | | | |
| Intersection forecasted to operate at LOS F during A.M. peak hour. | | | |
| * Right-of-Way assumed to be dedicated by Mars Area School District. | | | |

PLOTED: 10/22/2024

FILE NAME: P:\adams\001993 Three Degree Rd Roundabout Client copy changed from 09/20/24\Figures\1098_20 Layout Figure Revised.dgn



LEGAL RIGHT-OF-WAY LINE

DAVIDSON ROAD

Davidson Rd

REQUIRED RIGHT-OF-WAY LINE

4' CONCRETE MEDIAN (TYP.)

RELOCATED DAVIDSON ROAD

6' SIDEWALK (TYP.)

4' GRASS STRIP (TYP.)

DOC'S WAY

PROJECT #7-E

MARS AREA STADIUM

LEGEND

- FULL DEPTH PAVEMENT
- LANDSCAPING AREA
- CONCRETE MEDIAN
- SIDEWALK

| REV | DATE | DESCRIPTION | PM | OPER |
|----------|-------------|--|--|------|
| DESIGNED | TVO 9/23/20 | PROJECT NO | adams00-24007 | |
| DRAWN | TVO 9/23/20 | PROJECT | ADAMS TOWNSHIP TRANSPORTATION CAPITAL IMPROVEMENTS PLAN UPDATE | |
| CHECKED | TVO | | | |
| REVISED | | | | |
| APPROVED | - | TITLE | CONCEPTUAL IMPROVEMENT PLAN | |
| PROJ MGR | REG 10/1/24 | THREE DEGREE ROAD - DAVIDSON ROAD - DOC'S WAY ROUNDABOUT | | |
| OPERATOR | - | | | |

TransASSOCIATES

PROJECT SUMMARY
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

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| PROJECT NO: | 8-W |
| LOCATION: | Route 228/Mars-Evans City Road |
| DEFICIENCY: | Additional delays due to protected/prohibited signal phasing |

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| PROJECT DESCRIPTION: | Replace protected/prohibited phasing on Mars-Evans City Road approaches with protected/permitted phasing |
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| PROPOSED CONSTRUCTION YEAR: | 2026 |
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| TOTAL COST: | (2024) | \$16,100 |
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| TOTAL COST: | (2026) | \$17,060 With 2.94% annual inflation compounded = X 1.060 |
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| PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES: | | | |
| <u>Existing Traffic</u> | 0% | <u>Pass-Through Traffic</u> | 0% |
| Future Traffic | | Future Traffic | |
| | | <u>New Development Traffic</u> | 100% |
| | | Future Traffic | |

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|------------------------------|-----|------------------|----------|
| COST ATTRIBUTABLE TO: | | | |
| Existing: | \$0 | Pass-Through: | \$0 |
| | | New Development: | \$17,060 |

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|-------------------------------|-----------------|--------------------------|-----------------|
| COST SUMMARY: | | PROPOSED FUNDING: | |
| Engineering (Inc. Inspection) | \$6,000 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$0 |
| Utility Relocation | \$0 | Adams Township | \$8,530 |
| Construction | \$11,060 | Impact Fees | \$8,530 |
| Contingency | \$0 | Other | \$0 |
| TOTAL | \$17,060 | TOTAL | \$17,060 |

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| PROJECT SCHEDULE: | |
| Secure Funding | 2026 |
| Complete Engineering | 2026 |
| Acquire Right-of-Way | |
| Begin Construction | 2026 |

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| COMMENTS: |
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PROJECT SUMMARY
TRANSPORTATION CAPITAL IMPROVEMENTS PLAN
Adams Township, Butler County, Pennsylvania

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| PROJECT NO: | 9-WE |
| LOCATION: | Route 228 Signal Interconnect |
| DEFICIENCY: | Will promote improved coordination/communication between signals and decrease delays. |

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| PROJECT DESCRIPTION: | Install fiber interconnect and selected detection and controller upgrades to 10 signal along Route 228. |
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| PROPOSED CONSTRUCTION YEAR: | 2030 |
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| TOTAL COST: | (2024) | \$315,350 |
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| TOTAL COST: | (2030) | \$375,230 With 2.94% annual inflation compounded = X 1.18988 |
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| PROPORTION OF FUTURE PEAK HOUR TRAFFIC VOLUMES: | | | | | |
| <u>Existing Traffic</u> | 0% | <u>Pass-Through Traffic</u> | 0% | <u>New Development Traffic</u> | 100% |
| Future Traffic | | Future Traffic | | Future Traffic | |

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| COST ATTRIBUTABLE TO: | | | |
| Existing: | \$0 | Pass-Through: | \$0 |
| | | New Development: | \$375,230 |

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| COST SUMMARY: | | PROPOSED FUNDING: | |
| Engineering (Inc. Inspection) | \$42,836 | Federal | \$0 |
| Right-of-Way Acquisition | \$0 | PennDOT | \$0 |
| Utility Relocation | \$0 | Adams Township | \$187,615 |
| Construction | \$332,394 | Impact Fees | \$187,615 |
| Contingency | \$0 | Other | \$0 |
| TOTAL | \$375,230 | TOTAL | \$375,230 |

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| PROJECT SCHEDULE: | |
| Secure Funding | 2030 |
| Complete Engineering | 2030 |
| Acquire Right-of-Way | |
| Begin Construction | 2030 |

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| COMMENTS: |
| Cost per Transportation Service Area: TSA-W: \$288,190 TSA-E: \$87,040 |