

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

ITEM 2307-30: Approving the Selection of Urban Engineers, Inc. for the Local Safety Program Design Assistance Technical Study

PROPOSAL

At its July 10, 2023, meeting, the Technical Advisory Committee recommended that the Policy Board approve the selection of Urban Engineers, Inc. in association with T&M Associates, Richard Grubb & Associates, Inc. (DBE), Imperial Traffic & Data Collection (DBE), KMA Consulting Engineers, Inc., (DBE) for the Local Safety Program Design Assistance technical study.

BACKGROUND

The Request for Proposal (RFP) for the technical study was issued on Tuesday, May 2, 2023, with proposals due on Thursday, May 25, 2023.

For this technical study, SJTPO was seeking qualified firm(s) to assist Cumberland County and the Cities of Bridgeton, Millville, and Vineland to advance a series of roadway safety projects that were developed as a part of the Cumberland County Bicycle and Pedestrian Safety Action Plan and approved for advancement through the federal Highway Safety Improvement Program (HSIP)-funded Local Safety Program.

The Notice of Availability for this Request for Proposals was sent to 294 contacts. A total of five (5) proposals were received. Proposals were reviewed and scored by the TAC-designated Consultant Selection Committee with representatives from Cumberland County, the City of Vineland, and SJTPO. Proposals were evaluated based on the technical approach, staff and firm qualifications, and DBE participation. Scores for each reviewer were converted to ranks, which were then averaged amongst all reviewers.

The top three firms were interviewed with **Urban Engineers, Inc.**, emerging as the top-ranked firm, in association with subconsultants T&M Associates, Richard Grubb & Associates, Inc. (DBE), Imperial Traffic & Data Collection (DBE), KMA Consulting Engineers, Inc., (DBE).

The scope of work and the associated project costs were reviewed and negotiated. A revised separated cost for each project location has been provided with a total project cost of **\$2,365,682.40 with 27.14 percent DBE participation** by cost, whereas the DBE/ESBE goal was 13.23%. The total cost is broken down for each project location and for Preliminary Engineering and Final Design services as follows:

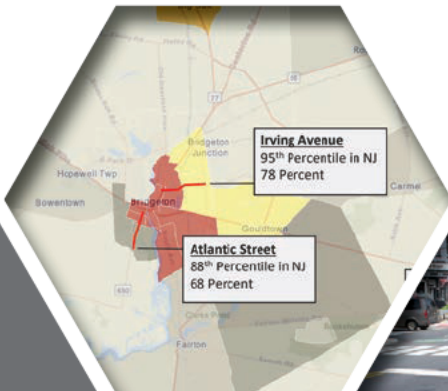
- *3rd Street, City of Millville* \$596,451.99 (\$386,836.22 PE / \$209,615.77 FD)
- *High Street, City of Millville* \$596,106.56 (\$387,080.96 PE / \$209,025.60 FD)
- *East Avenue, City of Vineland* \$461,252.13 (\$306,850.95 PE / \$154,401.18 FD)
- *Irving Avenue and Atlantic Street, City of Bridgeton* \$711,871.72 (\$416,952.47 PE / \$294,919.25 FD)

SJTPO will submit the final cost and scope to NJDOT and FHWA for review and approval. As a result, SJTPO hopes to issue Notice to Proceed in September 2023. As this effort is funded through the NJDOT-administered Highway Safety Improvement Program, the budget is flexible and separately authorized by NJDOT. The project work is however identified as Task 24/405 within SJTPO's FY 2024 UPWP. A separate Task Order and authorization will be initiated for each project, initially for Preliminary Engineering services and then modified later to include Final Design Services.



Local Safety Program Design Assistance Technical Proposal

May 25, 2023



SUBMITTED TO:

Alan Huff, Program Manager
Safety Initiatives & Public Outreach
South Jersey Transportation Planning
Organization
782 South Brewer Road, Unit B6
Vineland, New Jersey 08361



SUBMITTED BY:

Urban Engineers, Inc.
220 Lake Drive East
Suite 300
Cherry Hill, New Jersey 08002



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856.663.5550

May 25, 2023

Alan Huff, Program Manager – Safety Initiatives & Public Outreach
South Jersey Transportation Planning Organization
782 South Brewster Road, Unit B6
Vineland, NJ 08361

Re: Local Safety Program Design Assistance

Dear Mr. Huff:

Urban Engineers (Urban) is excited about the opportunity to provide local safety program design assistance to the SJTPO to deliver five (5) important safety improvement projects for Cumberland County and the cities of Millville, Bridgeton, and Vineland. We have assembled a team with the recent relevant experience to complete this project on or ahead of schedule, and offer the SJTPO the following:

An Experienced Project Manager and Supporting Team – Our proposed Project Manager, **Steve Locke, PE** has more than 30 years of professional engineering experience in managing and delivering transportation projects following the federal project delivery process. Mr. Locke has successfully delivered Federal Local Aid projects in the SJTPO region including the recently completed SJTPO Pilot Roundabout project, the Woodbine Roundabout. He has completed training on Federal Aid Requirements, LPA Stewardship and Grant Management for Federal Aid Projects, and previously served as an NJDOT Local Aid Project Manager. Mr. Locke is supported by an experienced team focused on pedestrian, bicycle, and multi-modal improvements. Our key staff includes **Mr. William Patton, PE**, who will lead the design effort, and **Mr. Daniel Hutton, AICP, PP, RSP**, who will lead community involvement and bicycle/pedestrian improvements.

Strong Local Team: – The Urban Team includes **T&M Associates (T&M)**, a firm familiar with the region and experienced in similar corridor improvement projects including the 2020 ASHE NJ Project of the Year Washington Street Redesign Project in Hoboken, NJ. T&M's staff will be led by **Peter Drinkwater, PE** who has delivered multiple local safety program-funded projects through NJTPA. Mr. Drinkwater will be supported by an experienced staff including **Tejal Patel, PE, CME, LEED-AP**, former Camden County Senior Highway Engineer and project manager for the Conceptual Roadway Safety Design of Chestnut Avenue. Additional teaming partners include the following three certified DBE/ESBE firms who will allow the team to meet or exceed the 13.23% participation goal:

- **Richard Grubb & Associates, Inc. (RGA)** will lead the cultural resource tasks.
- **Imperial Traffic & Data Collection (Imperial)** will lead the traffic data collection tasks.
- **KMA Consulting Engineers, Inc., (KMA)** will lead the survey/base mapping tasks.

Knowledge of the Federal Aid Local Lead Process – Urban has successfully delivered more than 25 projects through the Local Lead Federal Aid Process over the past several years. Urban and T&M fully understand the work and schedule requirements to secure project approvals for federal funding authorization.

Urban has reviewed SJTPO's Standard Contract Boilerplate Agreement (Exhibit I) and accepts it with no changes.

As one of only a few firms in NJ that have an ISO Certified **Quality Management System**, Urban is committed to offering quality, cost-effective, and timely services and we are excited about the possibility of serving as your engineer on this important project. If you have any questions about this proposal, please contact our Project Manager, **Steven B. Locke, PE** by phone at **(856) 663-5550 x1511**, or by email at sblocke@urbanengineers.com.

Very truly yours,
URBAN ENGINEERS, INC.

Gary T. Etter, PE
Vice President & New Jersey Regional Manager

Steven B. Locke, PE
Project Manager & Highway Practice Leader

A. Narrative

Project Understanding

Urban Engineers (Urban) in partnership with T&M Associates (T&M) are pleased to respond to the South Jersey Transportation Planning Organization's (SJTPO) request for consultant support to assist SJTPO and the Project Sponsors in developing individual design plans for four projects, which include five separate corridors in Millville, Vineland, and Bridgeton. The primary objective of these projects is to provide safety improvements through the design and implementation of multi-modal and traffic calming solutions. The projects were identified as part of the **Cumberland County Bicycle and Pedestrian Safety Action Plan**, as developed for SJTPO by Urban Engineers. Using a strategic, data-driven approach to prioritize locations with the greatest safety needs, these top candidate corridors were selected for further evaluation. Within the effort, Urban provided engineering analysis and design support to develop the concepts aimed at implementing countermeasures with demonstrated safety benefits for the screened locations. The project corridors include:

1. **3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements, City of Millville**
2. **High Street Pedestrian Safety Improvements, City of Millville**
3. **East Avenue Pedestrian Safety Improvements, City of Vineland**
4. **Bridgeton Pedestrian Safety Improvements, City of Bridgeton**
 - a. **Atlantic Street Pedestrian Safety Improvements**
 - b. **Irving Avenue Pedestrian Safety Improvements**

The Urban Team has extensive experience with providing multi-modal solutions in environments that require traffic calming and safety countermeasures. We have worked on a variety of projects from conceptual design through final design and construction and we have provided designs for NJDOT, Metropolitan Planning Organizations (MPOs), as well as several municipalities and counties. Urban is currently working on several Federally Funded safety countermeasure projects including a Concept Development Study for NJDOT for improvements to all Mid-Block crosswalks in the central region, a road diet design project with the North Jersey Transportation Planning Authority (NJTPA) on Main Street in Manville, and numerous multi-modal roadway repurposing design projects for Cape May County. T&M Associates is also currently performing engineering services for **NJTPA's FY 2016-2017, 2018, and 2020 Local Safety Engineering Assistance Program**, performing the Preliminary Engineering and Final Design on 10 projects with safety improvements similar to those included in this contract. T&M also has a similar NJDOT Concept Development safety improvement projects underway, in addition to several ongoing Camden County and Cape May County roadway safety improvement projects.

The four proposed projects have been selected under the Local Safety Program through the federal authorization process for design and construction. The Local Safety Program is a federally funded program established by SJTPO, in conjunction with NJDOT, using Federal Highway Administration's (FHWA) Highway Safety Improvement Program (HSIP) funds. We will submit the final federal authorization package for submission to District 4 Local Aid prior to the August 2028 date indicated in the RFP. The design schedule enclosed demonstrates our work plan to achieve the milestones required. Urban has successfully delivered several projects using the federal local-lead process, including the Local Scoping projects of **Commissioner's Pike Phase III** in Alloway Township, Salem County; **Commissioner's Pike Phase IV** in the Townships of Pilesgrove and Upper Pittsgrove, Salem County; the Scoping and Final Design of the **Resurfacing of Almond Road from Centerton Road (CR 553) to the Salem/Cumberland County Boundary** in Pittsgrove Township, Salem County; and the Final Design of a **Roundabout located in the Borough of Woodbine at the intersection of Woodbine-Ocean View Road (CR 550) and Dennisville-Petersburg Road (CR 610)**. Additionally, Urban is currently designing two roundabouts identified for the SJTPO Roundabout Pilot program through **SJTPO's FY19 Local Safety Program Design Assistance Program**. Both roundabout projects are in the Township of Pittsgrove, in Salem County. The first is located at the Five Point intersection of **Porchtown Road (CR 613), Upper Neck Road (CR 690) and Lawrence Corner Road (CR 621)** and the second project is at the Six Point intersection of **Garden Road (CR 674), Parvin Mill Road (CR 645) and Alvine Road (CR 655)**. Our familiarity with the process will allow Urban to commit

to a schedule that includes submissions well in advance of NJDOT/SJTPO's local-lead timeline for project authorization.

Conceptual Design Approach

SJTPO's ongoing safety programs are working towards a future with zero roadway fatalities and serious injuries. The concept development process was focused on supporting the guiding principles of the **Safe System Approach**, recently adopted by the USDOT. The Safe System approach has been embraced by the transportation community as an effective way to address and mitigate the risks inherent in our complex transportation system. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur. The four projects included as part of this RFP represent SJTPO's commitment to this goal.

Within the **Cumberland County Bicycle and Pedestrian Safety Action Plan**, Urban developed concepts, identified safety issues at the location and implemented appropriate countermeasures that addressed the specific crash history and context of each corridor. Particular attention was given to the most vulnerable road users, bicyclists, and pedestrians. Wherever possible FHWA Proven Safety Countermeasures were proposed, as they have shown through research to be effective in reducing roadway fatalities and serious injuries. Transportation agencies throughout the country are encouraged to consider widespread implementation of the 28 countermeasures identified by the FHWA. Conceptual designs were crafted to be consistent with best practices in safety design by use of AASHTO, NACTO, MUTCD standards and guidance from **NJDOT's Complete Streets Design Guide** and FHWA. It is worth noting that significant updates to AASHTO documents and the MUTCD are anticipated to be released in the near future. The Urban Team is aware of this and will design all elements of the project to the most-current standards.

As part of the design phase, the Urban Team will evaluate site conditions, determine regulatory constraints and other relevant factors, and communicate a work program that best serves the County, local communities, and stakeholders. Our goal aligns with SJTPO, focused on providing meaningful safety improvements to the project sites in Millville, Bridgeton, and Vineland.

3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements, City of Millville

3rd Street/Wheaton Avenue, also designated as County Route 555, serves as a residential street and a north-south connector between Millville and Vineland. The project area experiences high speeds inconsistent with the adjacent land use and density within Millville's Center City neighborhood. The network crash screening identified this section of 3rd Street/Wheaton Avenue as the sixth highest ranked crash location in Cumberland County and the second highest location in the City of Millville. Predominant crash types recorded within the project area include right-angle, rear-end, and struck parked vehicles. There were also four pedestrian crashes, three of which resulted in injury (one serious injury).

The identified deficiencies included non-conforming ADA curb ramps, insufficient illumination at intersections, failure of vehicles to stop for pedestrians in crosswalks, high speeds, poor sight lines at skewed intersections, high numbers of vehicle conflict points, long distances between marked crosswalks, and a lack of pavement markings.

3rd Street, classified as an Urban Local Street, is a two-lane, 40-ft wide undivided roadway with a posted speed limit of 25 mph. The roadway has no striped shoulders but does provide for on-street parking on both sides of the road. Sidewalks are present along the length of 3rd Street on both sides of the road. The project limits along 3rd Street begin at Main Street (Route NJ 49) and extend 0.76 miles to G Street. There are two signalized intersections along 3rd Street located at Main Street (Route NJ 49) and Broad Street (CR 552 Spur), and eight unsignalized intersections, which are all stop-controlled on the minor street/cross street approaches. 3rd Street forms a T-intersection at G Street and is stop-controlled on the 3rd Street approach. The ADT along



3rd Street is listed as approximately 3,500.

Wheaton Avenue, classified as an Urban Minor Arterial, is a two-lane, 22-ft wide undivided roadway with a posted speed of 25 mph. The roadway has no shoulders or provisions for on-street parking. Sidewalks are present along the length of Wheaton Avenue on both sides of the road. The limits of the project along Wheaton Avenue begin at 3rd Street and extend 0.29 miles to G Street. Wheaton Avenue runs diagonally between 3rd Street to 4th Street from D Street to G Street within the project limits. There is one existing signalized intersection along Wheaton Avenue at 4th Street/G Street and four unsignalized intersections.

Proposed improvements are intended to slow vehicular traffic through the corridor, reduce conflict points, and mitigate the highest-ranking crash types present. Design elements include the following:

- **Curb Extensions** – Installing ADA compliant curb extensions at existing intersections throughout the corridor to reduce pedestrian exposure, calm traffic, and decrease turning speeds. This countermeasure provides a traffic calming effect that has a Crash Modification Factor (CMF) of up to a 32% reduction in all crashes.
- **New Traffic Pattern** – Rerouting traffic circulation to 3rd Street and localizing Wheaton Avenue as a one-way northbound roadway by closing the intersection of 3rd Street/Wheaton Avenue, closing Wheaton Avenue between F Street and G Street, and changing the circulation of 4th Street to provide one-way access to the signalized intersection with G Street. This rerouting concept was selected in close consultation with the City of Millville and Cumberland County. This improvement provides a traffic calming effect that has a CMF of up to a 32% reduction in all crashes by decreasing conflict points of problematic skewed intersection on Wheaton Avenue. This section of Wheaton Avenue recorded 42 right-angle crashes out of a total of 72 crashes.
- **High Visibility Crosswalks** – Providing high visibility crosswalks will improve pedestrian safety corridor wide. High visibility crosswalks have been shown to provide a safety benefit of reducing pedestrian injury crashes by up to 40%.
- **Better Delineation** – Improving parking delineation and lane delineation with edge lines and parking stall markings will help to define the intended areas within the roadway section. One 11-ft lane and one 9-ft shoulder/parking lane is proposed in each direction along 3rd Street. Curb extensions also provide the additional benefit of channelizing parking lanes, buffering on-street parked vehicles, and designating areas of no-parking. Wheaton Avenue, reconfigured as a one-way road, will be striped to provide one 14-ft lane and one 8-ft left shoulder/parking lane. Intersections along Wheaton Avenue are proposed to be all-way stop controlled with pavement markings and signs. Shoulder lines throughout the corridor will be painted using 6-in wide white stripes for increased visibility.

In addition to the planned work shown on the current concept, designs will also:

- Evaluate stormwater patterns and revise stormwater structures due to the introduction of curb extensions.
- Provide inlet components conforming to the latest stormwater management regulations. Existing inlets to remain and any proposed inlets will be provided with bicycle safe grates. Eco-friendly curb pieces will be provided on all B-inlets.
- Provide milling and paving of the roadway surface throughout the corridor.
- Refine the geometry of intersection curb returns by checking the turning radii of the design vehicle at all intersections utilizing curb extensions, at the intersections impacted by the 3rd Street/Wheaton Ave traffic rerouting, and the right turn from G Street WB to Wheaton Avenue NB.
- Restripe G Street to provide an EB shoulder and a WB left turn lane at the intersection of G Street and 3rd Street.
- Provide ADA improvements throughout the corridor, where required.
- In support of the proposed traffic rerouting concept, traffic data will be collected as follows:
 - ▶ Collect 12-hour count data at Wheaton Street & G Street to assist with updating signal timings due to the rerouted traffic concept.
 - ▶ Collect 12-hour count data at 3rd Street & G Street to confirm that rerouted traffic volumes do not



warrant the installation of a traffic signal.

- Provide Raised Pavement Markers (RPMs) (Bi-Directional, Amber Lens) along roadway centerline stripe.
- Evaluate lighting at pedestrian crossings and design equipment upgrades as needed to provide the required illuminance levels and lighting patterns.

Concurrent project:

- There is a concurrent project along Broad Street using CMAQ funding with planned ADA improvements and signal equipment upgrades at the intersection of 3rd Street and Broad Street. It is the intent of this scope of work related to the ***3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements*** project to maintain the new work planned at the intersection. We will investigate the need/benefit of adjusting signal phasing to provide a ***Leading Pedestrian Interval (LPI)***.

High Street Pedestrian Safety Improvements, City of Millville

High Street serves as the downtown central business district of Millville and is an important north-south connector between Millville and Vineland. The project area experiences high speeds inconsistent with the adjacent land use and density associated with the downtown business district environment. The network crash screening identified this section of High Street as the second highest ranked crash location in Cumberland County and the highest location in the City of Millville. Predominant crash types recorded within the project area include right-angle, rear-end, and sideswipe. There were eleven pedestrian crashes, nine of which resulted in injury and four crashes involved bicyclists, all of which resulted in injury.

The identified deficiencies included non-conforming ADA curb ramps, insufficient illumination at intersections, failure of vehicles to stop for pedestrians in crosswalks, high speeds, long distances between marked crosswalks, and problems negotiating left-turn movements at intersections.

High Street, classified as an Urban Major Collector, is a two-lane, undivided roadway with a posted speed of 25-mph south of Foundry Street and 35-mph north of Foundry Street. The project limits begin at Main Street (Route NJ 49) and extend 1.12 miles to approximately 700-ft north of Harrison Avenue. The roadway is 44-ft wide from Main Street (Route NJ 49) to Powell Street, 40-ft wide from Powell Street to Foundry Street, and 64-ft wide from just north of Foundry Street to north of Harrison Avenue. High Street has no striped shoulder from Main Street to Foundry Street but does generally provide on-street parking on both sides of the road. North of Foundry Street, High Street has striped shoulders and provisions for on-street parking along the southbound side. Sidewalks are present along the length of High Street on both sides of the road. There are four signalized intersections within the project limits located at Main Street (Route NJ 49), Mulberry Street, Broad Street, and Harrison Avenue and there are nine unsignalized intersections, which are all stop-controlled on the minor street/cross street approaches. The ADT along High Street ranges from approximately 5,200 in the southern portion of the project to 11,500 in the northern portion of the project.

Proposed improvements are intended to slow vehicular traffic through the corridor and mitigate the highest-ranking crash types present. Design elements include the following:

- **Curb Extensions** - Installing ADA compliant curb extensions at existing intersections throughout the corridor to reduce pedestrian exposure, calm traffic, and decrease turning speeds. This countermeasure provides a traffic calming effect that has a CMF of up to a 32% reduction in all crashes. South of Depot Street, materials will be specified to match the existing color and patterns of the brick sidewalk and concrete borders.
- **Mid-Block Crossing** - Providing a mid-block crosswalk with ADA compliant curb extensions, MUTCD recommended pedestrian signage, and a solar powered side mounted RRFB to improve pedestrian safety at a hot spot crash location between Depot Street and Powell Street. RRFBs are a proven safety countermeasure, can reduce pedestrian crashes by up to 47%, and have shown to increase yielding to pedestrians by up to 98%.
- **High Visibility Crosswalks** - Providing high visibility crosswalks will improve pedestrian safety corridor

wide. High visibility crosswalks have been shown to provide a safety benefit of reducing pedestrian injury crashes by up to 40%.

- **Better Delineation** – Improving parking delineation and lane delineation with edge lines and parking stall markings will help to define the intended areas within the roadway section. South of Foundry Street, one 11-ft lane and one 9 or 11-ft shoulder/parking lane is proposed in each direction along High Street. Curb extensions also provide the additional benefit of channelizing parking lanes, buffering on-street parked vehicles, and designated areas of no parking. Shoulder lines throughout the corridor will be painted using 6-in wide white stripes for increased visibility.
- **Two-Way Left Turn Lane** – Providing a 16-ft wide dual left-turn lane from Foundry Street to north of Harrison Avenue with intersection curb extensions will help to align motorists, shorten pedestrian crossing distances, provide traffic calming, improve driveway access, and reduce rear-end and right-angle crashes. The addition of a dual left-turn lane has shown to have a crash reduction of 20% for all crashes. In this portion of High Street north of Foundry Street, the repurposed roadway typical section will also be striped to provide one 12-ft lane and one 8-ft shoulder in each direction. Portions of the southbound side will also be striped to provide on-street, 8-ft wide, parallel parking.

In addition to the planned work shown on the current concept, designs will also:

- Evaluate stormwater patterns and revise stormwater structures due to the introduction of curb extensions.
- Evaluate the inclusion of bike lanes and or bicycle facilities in collaboration with Project Sponsors.
- Provide inlet components conforming to the latest stormwater management regulations. Existing inlets to remain and any proposed inlets will be provided with bicycle safe grates. Eco-friendly curb pieces will be provided on all B-inlets.
- Provide milling and paving of the roadway surface throughout the corridor.
- Refine the geometry of intersection curb returns by checking the turning radii of the design vehicle at all intersections utilizing curb extensions.
- Provide channelized left turn slots (11-ft lane adjacent to a 4-concrete island) on the High Street approaches to the intersection of Harrison Avenue in place of the 16-wide dual left-turn lane. We will evaluate the need to incorporate traffic signal upgrades to accommodate the repurposed typical section and lane configurations approaching the signalized intersection. In support of this evaluation, collect traffic data as follows:
 - ▶ Collect 6-hour count data (AM/MID/PM Peak) at High Street & Harrison Avenue.
- Provide ADA compatible curb ramps with detectable warning surfaces at the intersections throughout the corridor, where required.
- Collect additional traffic data as follows:
 - ▶ Collect 12-hour count data at High Street & Vine Street. Local stakeholders have requested investigating adding a traffic signal at this intersection and removing the traffic signal control at the intersection of High Street with Mulberry Street.
 - ▶ Collect 12-hour count data at High Street & Mulberry Street. Local stakeholders have requested investigating the removal of the traffic signal control at this intersection and adding a traffic signal at the intersection of High Street with Vine Street.
- Provide RPMs (Bi-Directional, Amber Lens) along roadway centerline stripe.
- Evaluate lighting at pedestrian crossings and design equipment upgrades as needed to provide the required illuminance levels and lighting patterns.

Concurrent project:

- There is a concurrent project along Broad Street using CMAQ funding with planned ADA improvements and signal equipment upgrades at the intersection High Street and Broad Street. It is the intent of this scope of work related to the **High Street Pedestrian Safety Improvements** project to maintain the new work planned at the intersection.

East Avenue Pedestrian Safety Improvements, City of Vineland

East Avenue serves a residential neighborhood but is also an important north-south connector providing access to downtown Vineland. The project area experiences high speeds inconsistent with the adjacent land use and density associated with the surrounding residential environment. The network crash screening identified this section of East Avenue as the third highest ranked crash location in Cumberland County and the second highest location in the City of Vineland. Predominant crash types recorded within the project area include right-angle, rear-end, and sideswipe. There were four pedestrian crashes, all of which resulted in injury.

The identified deficiencies included non-conforming ADA curb ramps, insufficient illumination at intersections, high speeds, lack of marked crosswalks, lack of sidewalk/pedestrian facilities, and problems negotiating turning movements at 4-way stop controlled intersections.

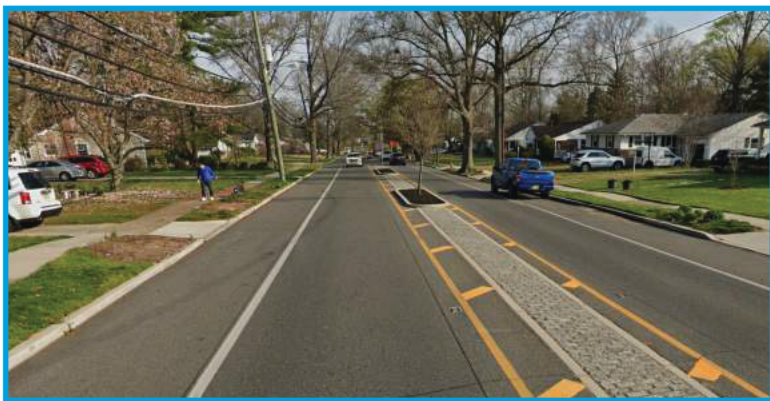
East Avenue, classified as an Urban Major Collector, is a two-lane, undivided roadway with posted speeds of 30-mph south of Chestnut Avenue and 35-mph north of Chestnut Avenue. Within the 35-mph posted portion of the project, there is a school zone speed posting of 25-mph from Michigan Avenue to Grape Street related to the Cunningham Academy School. The project limits begin at Walnut Road and extend 0.96 miles to Elmer Street. The roadway is 36-ft wide south of Chestnut Avenue and 32-ft wide north of Chestnut Avenue. East Avenue has a striped shoulder from Walnut Road to Chestnut Avenue and no striped shoulders north of Chestnut Avenue. Sidewalks are present on both sides of the road north of Chestnut Avenue. South of Chestnut Avenue, the presence of sidewalk is more sporadic with gaps along the northbound side from Florence Avenue to north of Washington Avenue and on both sides of the road south of Humbert Avenue. There is one signalized intersection within the project limits located at Chestnut Avenue and twelve unsignalized intersections, which are all stop-controlled on the minor street/cross street approaches. The intersection with Walnut Road at the southern project limit is four-way stop controlled. The ADT along East Avenue ranges from approximately 5,250 in the southern portion of the project to 7,700 in the northern portion of the project.

[Proposed improvements](#) are intended to slow vehicular traffic through the corridor, improve pedestrian mobility, and mitigate the highest-ranking crash types present. Design elements include the following:

- **Gateway** - Providing a gateway treatment using a traffic calming median island on the northern leg of the Walnut Road and East Avenue intersection and transverse rumble strips in the southern leg approach. These traffic calming treatments are designed to indicate the change in the approaching environment from a 45-mph section of roadway to a higher density residential neighborhood with a posted speed of 30-mph. The median island will also be designed to have portions depressed, with a textured and colored surface, in front of driveways. The full height island section presents the opportunity for plantings and potentially a City of Vineland welcome sign.

Median Island with Depressed Curb

Grove St in Haddonfield, NJ demonstrates a successful example of a median island with depressed curb.



- **Four-Way Stop Improvements** - Doubling up of Stop Signs and providing an Overhead Red Flashing Beacon on East Avenue approaching the intersection of Walnut Road from the south and along Walnut Road approaching East Avenue from both directions. This safety countermeasure is intended to reduce the right-angle crashes at this intersection. Doubling up Stop Signs has been shown to reduce rear-end and right-angle crashes between 8% and 19%.
- **New Sidewalk** - Providing a continuous sidewalk along both sides of the entirety of the corridor from Walnut Road to Elmer Street. This proven safety countermeasure has been shown to reduce pedestrian crashes between 65% and 89%. Buffered sidewalks will be provided wherever feasible and ADA compliant sidewalk crossings will be utilized at driveway openings. Sidewalks will continue at 2% across the driveway



frontages and driveway apron grades will be adjusted. Cheek walls/landscape walls will be designed where necessary to minimize impacts to the adjacent property frontages.

- **Mid-Block Crossing** – Providing a new mid-block crosswalk with ADA compliant curb extensions, MUTCD recommended pedestrian signage, and a solar powered side mounted RRFBs to improve pedestrian safety at a hot spot crash location between Florence Avenue and Washington Avenue. A mid-block crosswalk with curb extensions provides a shorter crossing distance for pedestrians. RRFBs are a proven safety countermeasure that can reduce pedestrian crashes by up to 47% and have shown to increase yielding to pedestrians by up to 98%. This treatment also seeks to address the pedestrian safety needs and mobility in proximity to the Regency Court and Spring Garden apartments, while providing traffic calming to the corridor.
- **High Visibility Crosswalks** – Replacing existing crosswalks with high visibility crosswalks. High visibility crosswalks are a proven safety countermeasure with a pedestrian crash injury reduction of up to 40%.
- **Edgelines** – Painting a 6" wide shoulder line is proposed through the entirety of the corridor. Wider edge lines are a proven safety countermeasure and provide a safety benefit for all roadway facility types while increasing driver perception of the travel lane.
- **Bus Pullout Bay** – Providing a 12-ft wide bus turn-out in front of the Cunningham Academy School to separate loading from the live travel lane while providing safer facilities for student drop-off and pick-up. This feature was designed in coordination with the Vineland School District. The design at this location includes eliminating the roadway centerline offset that currently exists in front of the school (between E. Almond Street and E. Montross Street). The adjoining typical section (one 11-ft lane and one 5-ft shoulder in each direction) will be continued across the school frontage. In-street R1-6C signage will be provided at the crosswalks adjacent to the school.
- **Improving Signage** – Providing MUTCD Advanced Warning signs and pavement marking text to alert approaching conditions.

In addition to the planned work shown on the current concept, designs will also:

- Evaluate stormwater patterns and revise stormwater structures due to the introduction of curb extensions, median islands, and bus turn-out.
- Provide inlet components conforming to the latest stormwater management regulations. Existing inlets to remain and any proposed inlets will be provided with bicycle safe grates. Eco-friendly curb pieces will be provided on all B-inlets.
- Provide milling and paving of the roadway surface throughout the corridor.
- Provide ADA compatible curb ramps with detectable warning surfaces at the intersections throughout the corridor, where required.
- Provide RPMs (Bi-Directional, Amber Lens) along roadway centerline stripe.
- Evaluate lighting at pedestrian crossings and design equipment upgrades as needed to provide the required illuminance levels and lighting patterns.

Concurrent project:

- There is a concurrent project along Chestnut Avenue using SS4A Grant funding to implement a Road Diet along the Chestnut Avenue corridor. Upgrades and safety improvements are being planned at the intersection of East Avenue and Chestnut Street through that project. It is the intent of this scope of work related to the **East Avenue Pedestrian Safety Improvements** project to maintain the new work planned at the intersection and to coordinate the designs to provide a cohesive union of the separate construction projects. Conceptual designs for Chestnut Avenue have been developed and have been presented to the Vineland community by T&M, who are included in the Urban Team. ***Both T&M and Urban's knowledge and experience with both corridors will provide greater cohesion and design efficiency between the separate projects.***

Bridgeton Pedestrian Safety Improvements, City of Bridgeton

This project includes two separate corridor locations within the City of Bridgeton. The projects are located along Atlantic Street and Irving Avenue.

Atlantic Street Pedestrian Safety Improvements, City of Bridgeton

Atlantic Street serves a quiet residential neighborhood while providing access to important arterials in Bridgeton and is often used to bypass Fayette Street. The project is within an area designated as the Glen View District by the Bridgeton Historical Society. The Cumberland County Jail is located just north of the project limits in the block between Vine Street (CR 697) and Broad Street (Route NJ 49). The project area experiences high speeds inconsistent with the adjacent residential land use and density. The network crash screening identified this section of Atlantic Street as the tenth highest ranked crash location in Cumberland County and the second highest location in the City of Bridgeton. Predominant crash types recorded within the project area include struck parked vehicle, right-angle, and pedestrian. There were five pedestrian crashes, all of which resulted in injury.

The identified deficiencies included non-conforming ADA curb ramps, insufficient illumination at intersections, high speeds, lack of marked crosswalks, lack of pavement delineation, and offset geometry at the intersection of Atlantic and Vine Streets.

Atlantic Street, classified as an Urban Major Collector, is a two-lane, 34-ft wide undivided roadway with a posted speed of 25-mph south of Chestnut Avenue and 35-mph north of Chestnut Avenue. The project limits begin at Harvard Avenue and extend 0.84 miles to Vine Street (CR 697). Atlantic Street has no striped shoulder and mostly no striped centerline throughout the project limits. There is a double yellow stripe along the roadway centerline for one block between Hampton Street and Vine Street. Buffered sidewalks are present on both sides throughout the project limits. There are no signalized intersections within the project limits and twelve unsignalized intersections, which are all stop-controlled on the minor street/cross street approaches. The ADT along Atlantic Street is approximately 1,800 vehicles.

Proposed improvements are intended to slow vehicular traffic through the corridor, provide lane delineation, and mitigate the highest-ranking crash types present. Design elements include the following:

- **New Centerline Striping** - Painting of a centerline double yellow stripe on Atlantic Street. This treatment will delineate pavement, reduce speeding and incidences of struck parked vehicles, and has been shown to decrease crashes from 14% to 24%.
- **New Edgelines** - Painting a 6" wide shoulder line is proposed through the entirety of the corridor. Wider edge lines are a proven safety countermeasure and provide a safety benefit for all roadway facility types while increasing driver perception of the travel lane. On-street parallel parking is permitted within the shoulder for most of the corridor. The striped shoulder will also help to delineate the parking area from the traveled way.
- **High Visibility Crosswalks** - Replacing existing crosswalks with high visibility crosswalks. High visibility crosswalks are a proven safety countermeasure with a pedestrian crash injury reduction of up to 40%.
- **Curb Extensions** - Providing detached curb extension treatments on each approach to the Atlantic Street and Vine Street intersection. Case studies have shown that these traffic calming treatments can reduce travel speeds by 3 to 4 mph and increase awareness and overall safety corridor wide.
- **New Intersection Configuration** - Providing new striping, pavement markings and a depressed island with a textured and colored surface at the intersection of Woodland Drive to realign and channelize the intersection footprint. This design will have the effect of reducing pedestrian exposure by shortening the pedestrian crossing width. It will also have the benefit of aligning approach vehicles perpendicular to Atlantic Street and the crosswalk.
- **Parking Compliance** - Paint "NO PARKING" zones 25' from all marked crosswalks along Atlantic Street in accordance with Title 39. This will enhance compliance with statutory regulations and provide improved sight distance of pedestrian crossings.
- **All-Way Stop Condition** - Converting the Atlantic Street/Vine Street intersection to an All-Way Stop and



Doubling up of Stop Signs. Converting a 2-Way Stop to a 4-Way Stop has been shown to decrease all crashes by up to 60%.

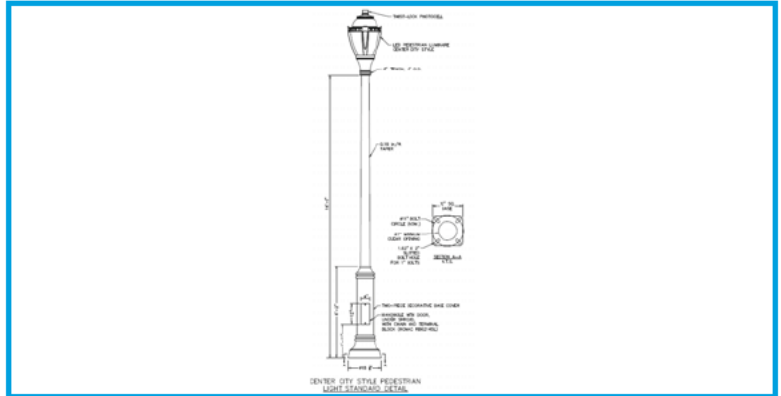
- Collect additional traffic data as follows:
 - ▶ 12-hour traffic count data at Atlantic Street & Vine Street to confirm that volumes meet the guidance for the use of multi-way stops provided in the MUTCD.

In addition to the planned work shown on the current concept, designs will also:

- Evaluate stormwater patterns and revise stormwater structures due to the introduction of detached curb extensions.
- Provide inlet components conforming to the latest stormwater management regulations. Existing inlets to remain and any proposed inlets will be provided with bicycle safe grates. Eco-friendly curb pieces will be provided on all B-inlets.
- Provide milling and paving of the roadway surface throughout the corridor.
- Provide ADA compatible curb ramps with detectable warning surfaces at the intersections throughout the corridor, where required.
- Provide RPMs (Bi-Directional, Amber Lens) along roadway centerline stripe.
- Evaluate lighting at pedestrian crossings and design equipment upgrades as needed to provide the required illuminance levels and lighting patterns.

Pedestrian Lighting Detail Example

Urban has extensive experience in pedestrian-scaled lighting plans and lighting analysis.



Irving Avenue Pedestrian Safety Improvements, City of Bridgeton

Irving Avenue serves a mostly residential area with other mixes in land uses along the corridor, including a gas station, textile company, strip mall shopping plaza, restaurants, a medical complex between Magnolia Avenue and Manheim Avenue, and a market/deli across from Ewing Street. The project area experiences high speeds inconsistent with the adjacent land use and density associated with the developed environment. Predominant crash types recorded within the project area include struck parked vehicle, right-angle, and rear-end. There were nine pedestrian crashes, all of which resulted in injury.

The identified deficiencies included non-conforming ADA curb ramps, insufficient illumination at intersections, high speeds, lack of marked crosswalks, lack of continuous sidewalk/pedestrian facilities, lack of pavement delineation and defined parking, and sight lines around sharp horizontal curves.

Irving Avenue, classified as an urban minor arterial, is a two-lane, undivided 36-ft wide roadway with posted speeds of 25-mph west of Manheim Avenue (CR 669) and 35-mph east of Manheim Avenue. The project limits begin at Pearl Street (Route NJ 77) and extend 1.07 miles to Burlington Road (CR 638). Irving Avenue has no striped shoulders but does provide on-street parking on both sides of the road in designated areas throughout the corridor. Sidewalks are present on both sides of the road west of Manheim Avenue. East of Manheim Avenue, sidewalks are present along the westbound side of the roadway and are generally absent along the eastbound side. There are three signalized intersections within the project limits located at Pearl Street (Route NJ 77), Manheim Avenue (CR 669), and Burlington Road (CR 638) and fourteen unsignalized intersections, which are all stop-controlled on the minor street/cross street approaches. There is also a railroad crossing located between Railroad Avenue and Magnolia Avenue. The ADT along Irving Avenue ranges from approximately 6,500 to 6,700.

Much of the curbing along Irving Avenue is bluestone curb. The design intends to avoid impacting the existing bluestone curb as much as possible. Detached traffic calming devices are being proposed to minimize impacts to this existing architectural roadside feature.

Proposed improvements are intended to slow vehicular traffic through the corridor and mitigate the highest-ranking crash types present. Design elements include the following:

- **New Median Island** – Providing a traffic calming median island between Bank Street and East Avenue. This design technique seeks to calm traffic and slow speeds in advance of a location with a higher pedestrian crossing demand to the shopping plaza. Portions of the media island will be designed as a depressed median with a textured and colored surface in front of driveways and adjacent to the Walnut Street intersection to accommodate access and turning movements. An RRFB indicated mid-block pedestrian crosswalk through an ADA compliant median island will also be provided across Irving Avenue between Church Street and East Avenue to address the pedestrian safety needs and crossing demand to the shopping plaza.

Rectangular Rapid Flashing Beacon (RRFB) Example

Urban is working with NJDOT to improve all mid-block crosswalks in the Central Region.



- An RRFB is a proven safety countermeasure with a pedestrian crash reduction of up to 47%. A median pedestrian island is also a proven safety countermeasure with a pedestrian crash reduction of up to 46%.
- **Curb Extensions** – Providing detached curb extensions at the intersection corners of Bank Street and East Avenue provides a chicane effect when coupled with the median island treatment between them. These corner extensions define geometric points of deflection requiring the driver to steer laterally out of the normal travel path, resulting in reduced speeds. Providing detached curb extension treatments west of Nixon Avenue and at the intersection with Railroad Avenue on Irving Avenue in combination with a median island and gore pavement markings between them will create a chicane style traffic calming effect through the horizontal curve. Case studies have shown that these traffic calming treatments can reduce travel speeds by 3 to 4 mph and increase awareness and overall safety. The median island also has the benefit of separating the paths of oncoming vehicles around the horizontal curve and the intersection. This safety improvement is designed to reduce the potential for head-on or sideswipe crashes.
 - **Mid-Block Crossing** – Implementing a mid-block pedestrian crossing at the midpoint between the closely spaced intersections of York Street and Lakeview Avenue provides a single point north-south pedestrian connectivity at Irving Avenue. Detached curb extensions approaching the pedestrian crossing provide a traffic calming effect are designed to accommodate a landing area within the island at the bottom of the curb ramp. This reduces pedestrian exposure and shortens the crossing distance.
 - **Improving Crossing** – Providing a pedestrian crossing at the eastern corner of Magnolia Avenue across Irving Avenue adjacent to a horizontal curve. The design improves pedestrian connectivity at a difficult location between the parking lot and the medical complex which it services. Detached curb extensions approaching the pedestrian crossing provide a traffic calming effect in the form of a choker and are designed to accommodate a landing area within the island at the bottom of the curb ramp. This reduces pedestrian exposure and shortens the crossing distance, slows traffic, and improves visibility. The islands provide additional pedestrian refuge closer to the traveled way, improving sight lines through the inside of the horizontal curve for both the drivers and the pedestrians.
 - **Better Delineation** – Improving parking delineation and lane delineation with edge lines and parking stall markings to delineate parking lanes/stalls and travel lanes. Irving Avenue will be striped to provide one 10-ft (traffic calming) lane and one 8-ft shoulder/parking lane in each direction. Pavement markings and detached curb extensions also provide the additional benefit of channelizing parking lanes, buffering



on-street parked vehicles, and designated areas of no parking. Shoulder lines throughout the corridor will be painted using 6-in wide white stripes for increased visibility. Wider edge lines are a proven safety countermeasure and provide a safety benefit for all roadway facility types while increasing driver perception of the travel lane.

- **High Visibility Crosswalks** - Replacing existing crosswalks with high-visibility crosswalks. High visibility crosswalks are a proven safety countermeasure with a pedestrian crash injury reduction of up to 40%.
- **New Sidewalk** - Providing a sidewalk along both sides of Irving Avenue, where required per ADA, and between Pearl Street and Burlington Road where none currently exists. Walkways or sidewalks are a proven safety countermeasure with a pedestrian crash reduction from 65% to 89%. The sidewalk extension along the westbound side is intended to tie into the exiting sidewalk/ADA ramp at the northwestern corner (unless the newly constructed ADA ramp proves to be substandard). The sidewalk on the eastbound side is proposed to terminate at the southwestern corner of the intersection using split style ADA curb ramps. The project is proposing a new crosswalk on Irving Avenue on the western leg of the intersection but is not planning any new crosswalk markings on the other legs of the intersection. It is also the intent of this scope not to upgrade traffic signal equipment at the intersection with Burlington Road which is within County jurisdiction.
- **New Pedestrian Crossing** - Providing a pedestrian crossing of Irving Avenue at Ewing Street and providing missing sidewalk connections from Rogers Street to Burlington Road. The existing front-in parking spaces for the Bridgeton Market Deli at this location are encroaching upon the roadway ROW. The design proposes to relocate the existing parking to on-street parallel parking spaces delineated and contained within a curbed parking bump-out. This creates a space for a pedestrian crossing aligned with the western corner of Ewing Street. Providing the missing sidewalk along the EB side of Irving Avenue in front of the open undefined access at the Bridgeton Market Deli, requires channelizing and defining the access point. Paving and restriping of the parking lot are proposed to mitigate the impacts.
- **Improve Signage** - Providing MUTCD Advanced Warning signs and pavement marking text to alert approaching conditions.

In addition to the planned work shown on the current concept, designs will also:

- Evaluate stormwater patterns and revise stormwater structures due to the introduction of curb extensions, median islands, and bus turn-out.
- Provide inlet components conforming to the latest stormwater management regulations. Existing inlets to remain and any proposed inlets will be provided with bicycle safe grates. Eco-friendly curb pieces will be provided on all B-inlets.
- Provide milling and paving of the roadway surface throughout the corridor.
- Provide ADA compatible curb ramps with detectable warning surfaces at the intersections throughout the corridor, where required.
- Provide ADA improvements at the signalized intersection of Irving Avenue with Manheim Avenue, including upgrading push buttons to current ADA/MUTCD standards and providing ADA compliant curb ramps with detectable warning surfaces.
- Evaluate adjustment of signal timings to provide a Leading Pedestrian Interval (LPI) at the intersection of Irving Avenue & Manheim Avenue (CR 669). In support of this evaluation, collect additional traffic data as follows:
 - ▶ Collect 6-hour count data (AM/MID/PM Peak) at Irving Avenue & Manheim Avenue (CR 669).
- Provide RPMs (Bi-Directional, Amber Lens) along roadway centerline stripe.
- Evaluate lighting at pedestrian crossings and design equipment upgrades as needed to provide the required illuminance levels and lighting patterns.



Project Approach

The projects will utilize FHWA HSIP funds. Therefore, all documents will conform to the NJDOT Federal-Aid requirements and must be approved by NJDOT prior to the award of the construction contract. The Urban Team will utilize the knowledge gained from working on similar federally funded projects to assist the Project Sponsors and SJTPO with the preparation of the documents required to secure the federal funds for the project. We will use a project management strategy which that satisfies the scope of work and SJTPO's goals for the projects. The scope of work will include performing coordination and public outreach, surveying/base mapping, preliminary engineering, preparation of a CED, utility coordination, environmental documentation and securing regulatory permits, Right-of-Way (ROW) documentation, final design and contract document preparation, obtaining proposed construction approvals, and design support services during the advertisement for bids.

Our project approach will produce regulatory compliant designs. Although the Urban Team has extensive experience preparing contract documents for clients, it is our identification and resolution of prospective issues that creates value and cost savings for clients.

Project Management Strategy

The Urban Team will implement a project management strategy that emphasizes focus on scope, schedule and budget to help deliver our projects in an organized manner, on-time and within budget. Since a change to any one of these components can affect the others both positively and negatively, there needs to be a balanced approach to triple constraint management. We have selected a **Project Manager, Steve Locke, PE**, for this assignment who has a proven track record to efficiently manage the scope, schedule, and budget for his assignments. His leadership will enhance this project in the following ways:

Scope – Avoid scope creep and maintain scope intent, to keep project costs aligned with the effort. Our Project Manager and Project Engineers periodically review the original project scope to monitor if the project is being progressed as intended, and to identify possible scope creep to communicate any issues to the Client in a timely manner.

Schedule – Manage the critical path. For this assignment, CED approval, permitting, and utility coordination are the drivers. The Urban Team has the resources to produce an effective, efficient, and accelerated schedule while paying close attention to critical path tasks.

The project will be designed using a schedule established to meet the timetable for federal authorization. To secure federal authorization of construction, we will deliver all required submissions well in advance of NJDOT Local Lead timeline for authorizing the project. We have the available resources to complete the project and, if needed, additional resources/staff to expedite the project. The Urban Team will meet or exceed the August 2028 FD Completion for all four projects as demonstrated in the enclosed design schedule.

Budget – One of the best ways to meet a budget is to complete the project on or ahead of schedule. We will continuously monitor budgets for changes and recommend corrective actions as needed. Additionally, Urban manages project budgets by calculating the Cost to Complete (CTC) at key milestones. First, we calculate the cost of completing all remaining project work (design, plans, specs, etc.). The CTC is then added to the cost spent to date to determine the total projected cost. Calculating the CTC provides many benefits, including determining the true percent complete, identifying scope creep, determining resources required to meet the schedule, and identifying risks to overall project costs so mitigation can be employed before it is too late.

Commitment to Quality Management – Urban's commitment to Quality Management will add value and is evident by our investment in establishing a Quality Management System (QMS) that is ISO 9001:2015-certified, the world's most recognized and comprehensive QMS for providing consulting engineering services. Our written QMS recognizes that it is our responsibility to provide quality engineering services and documents and not to rely on the Client to provide a detailed review of our work. As such, we accept responsibility for resolving project issues in a timely manner and quickly addressing any quality issues that might cause a delay or increased projects costs during design or during construction to avoid change orders and construction delays.



Task 1 – Coordination & Public Outreach

The Urban Team is intimately familiar with these projects and understands how beneficial they will be to the health, safety, mobility, and economic outcomes of the communities in which they are located. Upon Notice to Proceed (NTP), Urban's priority will be to build off the success of the **Cumberland County Bike-Ped Safety Action Plan** by continuing a robust, successful, and equitable public outreach program that communicates the benefits of these projects and provides accessible means for the public to provide meaningful input and feedback at appropriate touchpoints. Having worked with the Project Sponsors, the Urban Team is well-aware of the challenges that come with engaging the public in these communities and is uniquely positioned, based on our experience, to craft a public outreach approach that avoids pitfalls and yields results by leveraging local relationships and implementing strategies tailored to the communities.

Approach/Public Outreach Strategy

As part of the public outreach strategy Urban advocates for the development of a well thought out, properly executed Public Involvement Action Plan (PIAP). This PIAP will explicitly note strategies, tools, and techniques that will be deployed to achieve public involvement and engagement of Environmental Justice (EJ) communities throughout the entire project process. This PIAP will be developed at the outset of the project and will be provided to SJTPO and Project Sponsors for their review and approval. The PIAP serves as a "living document" and will be reassessed periodically throughout the project phases, from design through to construction, to determine if the methods of communication and support tools are meaningful and effective. The PIAP will specifically include performance metrics and a timeframe for evaluation to ensure the consistent evaluation of its success and effectiveness. We will utilize the **NCHRP 08-105: Measuring the Effectiveness of Public Involvement in Transportation Planning and Project Delivery** as a guide. The six key indicators for measuring the effectiveness of public involvement are Influence and Impact, Transparency and Clarity, Timing, Inclusion, Targeted Engagement, and Accessibility. Through the use of these indicators, Urban will pursue continuous, meaningful, equitable, and accessible public involvement.

Public Outreach Toolbox

Environmental Justice/Disadvantaged Communities – The project sites are located almost entirely within census tracts designated as Historically Disadvantaged (USDOT Equitable Transportation Community Explorer). Through our previous work/demographic analysis we know that the residents within these census tracts rank within the highest percentiles in the state for lack of broadband access, zero-vehicle households, low-income, and limited English proficiency. Therefore, an equity focused approach to public involvement must be prioritized and carefully crafted. In October 2022, the USDOT released a compilation of successful public outreach strategies to promote equitable involvement in transportation decision-making. We consider this report **Promising Practices for Meaningful Public Involvement in Transportation Decision-Making (2022)** to be a valuable document filled with best practices in equitable public outreach from across the nation. The Urban Team will provide a comprehensive list of strategies, tools, and techniques that focus on engaging EJ communities and recommend tailored approaches in the PIAP that best fit the communities of Bridgeton, Millville, and Vineland.

Zero-Vehicle Households – Owning a vehicle should not be a necessary hurdle to provide input on the projects. It is important to gather input from all members of the community and those without vehicles offer a unique perspective on how they travel through the project areas.



TOOLBOX SOLUTIONS

- ▶ Public outreach meetings will be held within walking distance from project sites to accommodate those without vehicles.
- ▶ Surveys will be distributed digitally and can therefore be completed from anywhere.
- ▶ A project website can be provided to share information with the general public.



Low-Income – Through both research and our experience we have learned that low-income residents often do not have the time or bandwidth to attend traditional public meetings (i.e., occur during evening hours on weekdays). To address this inequity, the Urban Team will look to deploy the following strategies, tools, and techniques:



TOOLBOX SOLUTIONS

- ▶ Schedule some public meetings on weekends
- ▶ Partner with community organizations/municipalities to hold public meetings at planned events
- ▶ Have childcare services available during public meetings

Limited English Proficiency (LEP) – The majority of linguistically isolated households within the project areas are Spanish speaking. Spanish language accommodations will be provided for all public outreach events and public facing project materials. The Urban Team has multiple bilingual Spanish speaking staff members that will be in attendance and supporting this effort. To address this inequity, the Urban Team looks to deploy the following strategies, tools, and techniques:



TOOLBOX SOLUTIONS

- ▶ Multilingual transcription of videos
- ▶ Spanish voiceovers of videos
- ▶ Bilingual staff present at all public outreach events
- ▶ Partnerships with community organizations to improve outreach to their residents/community
- ▶ Identification of community representatives to serve as partners in the public outreach process and increase trust between the project Team and community

Lack of Broadband Access – Virtual public involvement strategies alone will likely not achieve meaningful participation and input during this project. To address this inequity, the Urban Team will look to deploy of the following strategies, tools, and techniques:



TOOLBOX SOLUTIONS

- ▶ In-person meetings (to be recorded and posted to SJTPO website for extended comment period)
- ▶ Pop-ups/Tabeling
- ▶ Attendance/presentations at existing community meetings
- ▶ Any online surveys may also include paper copies with envelopes and prepaid postage for the burden-free return of completed surveys
- ▶ Public information materials such as post cards or brochures can be distributed to further share project information
- ▶ Public involvement volunteers can be utilized to reach community members that may not receive emails or see the project website.

General Tools/Strategies

- Surveys
- Site Visits
- Focus Groups
- Social Media
- Public Meetings/Public Information Centers
- Elected Officials Briefings
- Project Website/Webpage
- Informational Materials (i.e., flyers, renderings, 3D animations, etc.)



Innovative Outreach Tools/Strategies

Tool	Summary
Pop-up Events	Engaging community members where they are; at 1) well attended events, 2) in popular public spaces. Often include a table with materials and staff present. Successful pop-up events include games, prizes, and other items to engage the public and create conversation.
Paid Outreach	Viewership of social media posts, informational materials, videos, project updates etc. can be greatly increased by use of paid marketing campaigns/advertisements via Facebook, Instagram, YouTube, TikTok, etc.
Participation Incentives	Monetary stipends, prizes, or raffles to increase participation and interest from general public. Participation incentives, such as money or gift cards can also be used to compensate public stakeholders who contribute to interviews, videos, or meetings.
Community Partners	Representatives from the community who speak about and champion the project. Can be used to reach groups of the community that are less likely to participate in the project process.
One-on-one Interviews	One-on-one conversation about a specific topic with a community leader or individual representing an organization with an interest in the project. Urban has conducted one-on-one interviews with affected property owners to build trust and gain buy-in on proposed improvements that impact properties as part of the SJTPO's FY19 Local Safety Design Assistance Program.
Electronic Contact Management System	Electronic system for managing contact lists (i.e. Constant Contact, MailChimp). Urban is utilizing Constant Contact to maintain and grow SJTPO Countywide Local Safety Plans stakeholder database and to identify potential holes in our outreach by tracking who is opening the email correspondence.

3D Renderings and Graphics (ex. High Street)

Provide greater illustration of design details to public



Participation Incentives

Utilized by VTC's POET Team for NJTPA outreach



Community Stakeholders

An important first step in an effective public engagement program is to identify key stakeholders or partners. The Urban Team will build on our existing contact database, developed as part of **SJTPO's Countywide Local Road Safety Plans**, to maximize the potential outreach for this project. These stakeholders will include SJTPO, Cumberland County, local officials, regulatory agencies, community organizations, and special interest stakeholders. Special interest stakeholders could be potentially affected property owners including residents, businesses, schools, and emergency services as examples. The Urban Team has a professional working relationship with many of the key stakeholders for this project through our previous work in Cumberland County and ongoing work in these communities.

We have identified the following community organizations to engage and partner with to increase participation and meaningful involvement from the public. Their specific role in the public outreach strategy will be to assist the project team in determining the best methods of engaging their community and to provide insight into events that may be valuable for the project team to attend and solicit meaningful input and feedback from the public.

Organization	Contact	Email	Municipality
Gateway Community Action Partnership	Cassandra Avila Hernandez	cavilahernandez@gatewaycap.org	Bridgeton
Puerto Rican Action Council	Ralph Padilla	ralphpadilla@pracnj.com	Bridgeton, Millville, Vineland
Boys & Girls Club of Vineland	Chis Volker	cvolker@vinelandbgc.org	Vineland
United Advocacy Group	Rich Nichols	richols@unitedadvocacygroup.org	Bridgeton
Holly City Development Corp.	Heather Santoro	hsantoro@hollycitydevelopment.org	Millville
Glasstown Arts District	Marianne Lods	marianne@glasstownartsdistrict.com	Millville

Meetings/Progress Check-ins

The Urban Team will conduct kickoff meetings with the Project Sponsors, SJTPO, and NJDOT-Local Aid to discuss and formalize the developed baseline schedules. We will coordinate extensively with SJTPO and the Project Sponsors, which include Cumberland County, and the Cities of Bridgeton, Millville, and Vineland, throughout the project duration. The Urban Team anticipates that all public, stakeholder, and governing body outreach meetings will be conducted in-person. However, if desired or appropriate, meetings can be conducted fully virtual or include virtual options.

Anticipated meetings are as follows:

- Project Kick-off Meetings with Project Sponsors, SJTPO, and NJDOT Local Aid
- Initial Field Visit with Project Sponsors and SJTPO
- Concept Review Meeting at the completion of base mapping
- Public Information Centers/Public Meetings (5 Total, 1 for each corridor)
- Stakeholder Meetings (4 Total, 1 for each project)
- Governing Body Meetings (4 Total, 1 for each project)
- Pre-Final Review
- Pre-PS&E Review
- PS&E Comments Review



Urban will provide minutes of meetings and email summaries of all conversations. Urban will also provide project status updates every two weeks either by email or through virtual Teams meeting, as determined. The status updates will describe tasks completed in the past two weeks and upcoming tasks in the next four weeks, list any delays that affect the schedule of the project, indicate any assistance that will be needed from stakeholders in the coming weeks and will provide updates on the status of DBE participation.

Task 1 – Deliverables:

- Public Outreach Strategy/ Public Involvement Action Plan (PIAP)
- Public Outreach
- Meeting and Discussion Summaries
- Bi-weekly Check-ins
- Public Notice/Advertisement Documents
- Attendance Sheets
- Public Facing Materials (in English and Spanish)

Task 2 – Surveying / Base Mapping

In support of the Preliminary Engineering the initial action items of data collection, field surveying and base mapping will be progressed upon notice to proceed.

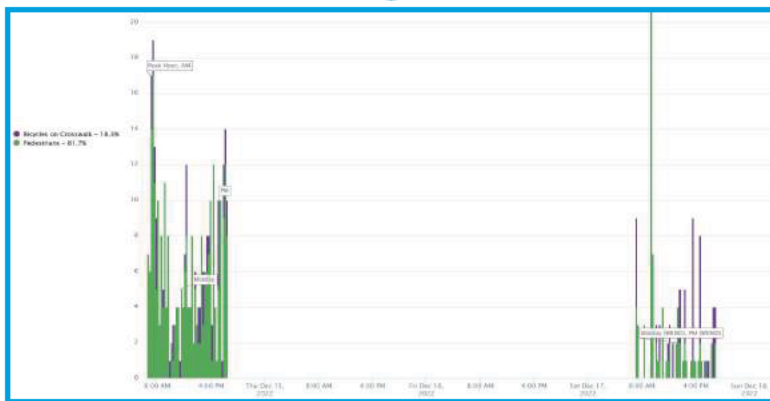
Data Collection

As discussed in the project understanding, the following traffic counts will be performed as part of evaluating proposed improvements and/or in support of the design effort:

- **Wheaton Street and G Street** - 12-hour count to provide data to assist with updating signal timings.
- **G Street and 3rd Street** - 12-hour count to evaluate the need for signalization with re-routed CR 555 traffic.
- **High Street and Vine Street** - 12-hour count to evaluate if the traffic volumes meet signal warrants.
- **High Street and Mulberry Street** - 12-hour count to evaluate if the traffic volumes meet signal warrants for potential signal removal.
- **High Street and Harrison Avenue** - 6-hour count to provide data to assist with evaluating signal phasing and timings.
- **Irving Avenue and Manheim Avenue** - 6-hour count to provide data to assist with evaluating LPI.
- **Atlantic Street & Vine Street Collect** - 12-hour count to confirm that volumes meet the guidance for the use of multi-way stops provided in the MUTCD.

Miovision Data Collection

Miovision traffic counts were used to count the number of bicycles and pedestrians in the project locations.



Survey/ Base Mapping/ ROW Mosaic

KMA will provide the surveying and base mapping activities for each of the project corridors. Their ground survey will utilize equipment with the latest technologies to perform an efficient, accurate survey for the bases of each design. Survey tasks will include establishing primary control benchmarks, ground survey, creating the baseline, developing the ROW Mosaic and preparing base maps.

Survey Control - KMA will establish a Primary Control Network utilizing the horizontal datum of the New Jersey State Plane Coordinate System in the North American Datum of 1983 and the latest adjustment, currently NAD83 (2011). This Primary Control Network will also be tied to the North American Vertical Datum of 1988 (NAVD 88). The network will be established by GNSS-RTN methods following the procedures for Class RT1 accuracy, modified for a time length of 300 epochs per five minutes. The network will be further controlled by utilizing NGS high-order points identified by NJDOT – Geodetic Survey located near the project for the purpose of aerial photography targeting within the project limits. The primary control will consist of semi-permanent and uniquely identifiable Intervisible GNSS-RTN pairs of control points as a reference from which all supplemental surveying will commence. The standards of accuracy shall be in accordance with the National Geodetic Survey's Publication ***"Classification, Standards of Accuracy, and General Specifications for Geodetic Control Networks"***. It is understood that the work shall be performed in English units (US Survey Feet). A survey control baseline will be established with control points set approximately every 500 feet along the project length for each roadway. It is assumed that the following number of controls will be established for each roadway.

- **3rd Street/Wheaton Avenue** - 11 control points
- **High Street** - 11 control points
- **East Avenue** - 15 control points
- **Atlantic Street** - 9 control points
- **Irving Avenue** - 12 control points

A vertical control network will be established over the horizontal primary control network as stated above by using digital differential leveling.

KMA will prepare a Survey Project Report detailing the primary control network established for the project. The report will be prepared in accordance with the NJDOT Survey Manual procedures and guidelines and provisions of Article 44 of the NJDOT procedures manual. The report, including a narrative and tie sketches, will be prepared, and submitted for review and approval. Upon approval of the Survey Project Report, we will submit final copies which will be signed and sealed by a Professional Licensed NJ Land Surveyor.

All surveying tasks will be performed in accordance with the ***NJDOT Survey Manual*** procedures and guidelines. All survey control will be established in accordance with the ***"Quality Assurance Checklist – Survey Services Unit"*** of the NJDOT procedures manual unless otherwise specified.

Topographic Survey - KMA field surveyors will perform an on-site field survey of each project corridor. This effort will include the identification of existing features including surface and subsurface utilities. KMA will call for a utility mark-out prior to the fieldwork and will locate any painted marks placed by others indicating the existence of underground utilities.

The following tasks will be performed as part of the topographic surveys:

- Cross sectional data at 50-foot intervals, roadway centerline intersections, driveway centerlines and any high and or/low points along roadway will be obtained.
- Cross sectional data will include crown, edge of pavement (EOP), grade differences at uncurbed EOP, top and bottom of curb, edges of sidewalk, and at 5-foot intervals to a point 20 feet beyond the EOP, curb or edge of sidewalk whichever is encountered.
- All topographic features within 20 feet of EOP will be surveyed which includes EOP, curbs, sidewalks, driveways, fences, walls, trees with caliper greater than six (6) inches, utility poles, junction boxes, signs.
- Rim elevations, grate elevations of all storm drainage and sanitary sewer structures, including water



valves and gas valves within the project limits will be obtained.

- Property corners if found any during the survey.
- Any miscellaneous features found in the project site.

KMA will also perform field survey for the purpose of the design of ADA pedestrian improvements at specific locations in the project corridor. For the purpose of this proposal, about 40 corners for 3rd Street and Wheaton Avenue roadway, 30 corners for High Street, 30 corners for East Avenue and 10 corners each for Irving Avenue and Atlantic Street are assumed based on the information we have received for the RFP.

It is anticipated that supplemental survey data (shots) will consist of top and bottom of curb at all ramps in the subject intersections/locations. For ramps on straight sections of curb, survey data will be collected up to a 15-ft distance on each side of the ramp. For ramps located on curves, survey shots will be obtained from the tangent point of the curb and a distance of 15-ft in both directions along the curb line. Elevation shots will also be obtained as needed to define the topography away from the curblane (i.e., tie in with sidewalks and other features). It is assumed that no traffic control will be needed based on the location of the project for the survey.

Prepare Base Maps – Upon completion of the topographic survey data collection, base maps will be developed which will depict in detail the required existing topography along with mainline and secondary road baselines and baseline information. Base maps will be prepared and submitted in accordance with Article 51 of the NJ Standard Terms and Condition of Agreement.

KMA will compile all conventional survey information collected in the field and prepare the DTM based on the data gathered. The final DTM will be quality checked to ensure complete and accurate mapping.

We will review the final base mapping, check coordinates, and alignment data against physical features, and we will adjust data as necessary to ensure complete and accurate mapping. Base maps will conform to NJDOT's Sample Plans and CADD files will conform to NJ Standard Terms and Condition of Agreement contained in Article 51.

Quality Assurance Quality Control (QA/QC) – KMA will conduct a thorough QA/QC review of the final base map deliverables. KMA will provide a Quality Control and Quality Assurance Checklist and Certification to be included in the Survey Control Report.

Baselines & ROW Mosaics – In addition to the survey activities discussed above, KMA will develop the mainline and secondary road baselines, baseline information and existing right of way deed search results. This data will be provided in accordance with Article 51 Standards and Procedures and current NJDOT CADD Standards.

During the PE Phase, KMA will develop a ROW/Deed mosaic utilizing record plans, tax maps, and a preliminary property records search to obtain the most recent deeds on record within the project limits. KMA will contract with a Title Company to perform the title searches. KMA will compile and organize the information received from the Title Company and review the deeds for completeness and check that there is a complete legal description for each requested parcel. KMA's Title Company will also provide a title summary document and "run sheets" for each extended search. KMA will plot the deeds obtained by the title search company. Utilizing the deeds and monumentation recovered in the field, an existing ROW/Deed mosaic map will be prepared. This will serve as the base for the ROW plans.

Task 2 – Deliverables:

- Base Mapping (including ROW/Deed mosaic) in MicroStation format, at a scale of 1" = 30'.



Task 3 – Preliminary Engineering

The Urban Team will begin the assignment by meeting with SJTPO and Project Sponsors to discuss the concepts developed and to identify the key issues that will be part of progressing the concepts into preliminary engineering designs.

Field Verification/ADA Compliance Review

Each project corridor will begin with a post-survey field verification and Americans with Disability Act (ADA) compliance review. The Urban Team is well-suited to perform these assessments as we have conducted ADA compliance assessments for thousands of ramps and miles of sidewalk on an abundant number of projects in the South Region and all over the State of New Jersey.

Prepare 30% Design Plans

After completion of the compliance review, 30% Design Plans will be prepared to establish the initial design layout of the proposed safety improvements along the corridor, including locations needing ADA improvements. The designs will be drawn to indicate the locations of proposed construction, including curb, sidewalks, curb ramps, traffic signal and RRFB foundations, and preliminary drainage/stormwater management (SWM) layout. An initial identification of potential utility conflicts will be indicated (*see Task 4*). Plans will be submitted to the Project Sponsors for an interim review.

Prepare 60% Design Plans

The Urban Team will detail the designs, determine proposed grades and cross slopes, and establish final limits of paving, grading and disturbance. ADA curb ramp grading details will be prepared. Construction stations and offsets will be provided. Pay items will be established (no quantities). Utility impacts will be coordinated with the companies and conflict resolutions will progress (*see Task 4*). Drainage/SWM calculations and designs will progress, and the relevant reports will be prepared (*see Drainage/SWM Section in Task 3*). Needed drainage improvements, including new drainage inlets/manholes, reset or reconstructed inlets/manholes, drainage pipes (materials, sizes and locations), and proposed pipe inverts will be indicated on the plans.

Traffic Engineering Facilities – Using the results of the data collected (*see Task 2*) and in support of the ADA curb ramp designs, Traffic Engineering Facility Locations will be determined. This activity is performed to a level of detail necessary to identify ROW needs and utility conflicts (aerial and underground). Elements involved include preliminary signing, lighting warrant analysis report, and lighting design layout. A traffic assessment of the construction staging will also be performed to determine potential traffic impacts and, if needed, to develop potential mitigation measures.

Construction Staging/Detour – Maintenance and Protection of Traffic (MPT) during construction is a critical issue. Coordination is imperative for a successful project. The Urban Team will coordinate with the Project Sponsors and SJTPO to establish a construction schedule that will efficiently complete the work, while minimizing disruption to the adjacent property owners and local traffic.

During construction, a moderate amount of vehicular, pedestrian and bicycle traffic can be expected along each corridor. Coupled with the type of work planned for these corridors, a full road closure and detour is not practical or recommended. Partial (one-way) detours, staged construction, flagging operations, and work zone length restrictions are all possible construction staging approaches which can be used individually or in combination to produce efficient work zones that safely manage all road users. Each of the projects' work

ADA Compliance Assessment

Urban completed an ADA Compliance Assessment for NJDOT's South Region.



types and site restrictions are unique, and as a result, we will prepare Maintenance and Protection of Traffic (MPT) designs uniquely suited for each corridor.

Work types like curb, sidewalk, ADA curb ramps, and other items constructed behind the curb (like signal equipment foundations) can be staged first, independently of other items, utilizing daily lane shifts and parking restrictions. Traffic calming countermeasures such as bump-outs, chokers, or medians need to be coordinated carefully since they narrow the pavement available for staging purposes. These items can often be completed using flagging operations or partial detours. Similarly, milling and final paving operations can be performed either under flagger control or detour to maximize paving areas and assure proper joint placement. When preparing MPT designs for corridors, another technique which is often successfully implemented is to specify the allowable length of work that is permissible at any given time, to minimize active work zones and their impacts to all road users. Designs will be cognizant of the density present along most of the project corridors and will maintain access to driveways and side roads during construction activities. Also, due to the residential nature of the project environments, MPT design will strive to minimize or avoid the need for night work, in consideration of the adverse effects construction noise can have on the community.

Our construction staging strategies will maximize: (1) Safety for motorists, bicyclists, ADA, and pedestrians, (2) Safety of construction and inspection personnel, (3) Contractor work areas / shielding / clear zones / material storage locations, (4) Traffic flow through work zone and along detour routes, and (5) EMS and school bus access. Our construction staging strategies will minimize: (1) Construction stages/contract durations, (2) Conflicts with seasonal constraints (holidays, summer, cultural events, and snow removal), (3) Environmental impacts, (4) Impacts to daily commuters, transit, and school buses, and (5) Impacts to local business and residents (access, noise).

The Urban Team recommends obtaining Project Sponsors and/or stakeholder consensus for the construction staging concepts and potential detour routes very early in the process to reduce surprises and help obtain project support. This early stakeholder engagement fosters cost-effective designs with reduced durations, eliminates rework, and promotes innovation. The Urban Team will work with the Project Sponsors and SJTPO to find agreeable MPT solutions while maintaining the desired construction window. MPT plans will be prepared in accordance with the ***FHWA's Manual on Uniform Traffic Control Devices (MUTCD)***, including lane shift and taper rates, construction sign types and locations, and traffic control device placement and spacing. Plans will also provide pedestrian and bicycle detours where needed. We will use our senior construction professionals for constructability reviews to evaluate the staging for conformance with current construction methods and recommend improvements to compress schedules and reduce road user costs.

Main Street, Borough of Manville

Urban designed several curb extensions on Main St in Manville to improve the safety for all road users.



Deliverable: 60% Design Plan Submission

Design Plans will be prepared and submitted for review by NJDOT Local Aid/BEPR, Project Sponsors, SJTPO and any other required agencies. Included with this submission will be an anticipated listing of non-standard items and items that may require special provisions to be prepared. A preliminary cost estimate will also be prepared.

Anticipated plans include the following:



- Cover Sheet
- Estimate-Distribution of Quantities (Pay Items only)
- Typical Sections
- Construction Legend
- Construction Plans
- Drainage and Soil Erosion & Sediment Control Plans
- ADA Curb Ramp Details
- Environmental Plans
- Profiles
- Ties
- Grades
- Traffic Control and Staging Plans
- Highway Lighting Plans (As required)
- Traffic Signing and Striping Plans

Drainage/Stormwater Management Documents

The Urban Team strives for permittable drainage designs, suitable for Categorical Exclusion Documentation (CED) approval, that comply with NJDEP stormwater management (SWM), wetland, and flood hazard rules. We propose the following cost-effective approach: (1) Save and maintain as much of the existing drainage system as possible, (2) Upgrade while being cognizant to minimize impacts to ROW and subsurface utilities, (3) If basins are necessary, use existing ROW as available, and (4) Advance drainage issues concurrently with the environmental process to identify permits early and eliminate surprises.

We will begin by conducting site visits of the project area and obtaining maps and data for SWM rules compliance. Jurisdiction is based on total project disturbance exceeding one (1) acre or the proposed impervious coverage increasing by more than $\frac{1}{4}$ acre. If either is exceeded, the project is defined as a major project and is subject to the SWM Rules. Map information is captured from the Federal, (NOAA, USGS, others) State (NJDOT, NJDEP, others), and local municipality levels. This information is captured electronically as GIS data and managed with ArcGIS. This allows for the generation of drainage areas that can provide a seamless transition into the Hydrologic & Hydraulic (H&H) and SWM analysis as necessary. We will draw upon these resources to perform SWM calculations and to assess spread, hydrologic and hydraulic, pipe size, and routing requirements. We provide inlet and curb opening details that comply with agency guidance and determine if soils testing is necessary to establish soil permeability and the seasonal water table. If a non-structural strategy is not feasible, structural Best Management Practices (BMP) will be evaluated. Our hydraulic designs will comply with the NJDEP Flood Hazard Area Rule, NJDEP SWM Rules, BMPs, and Soil Erosion & Sediment Control Standards.

The drainage system will be modified as necessary to accommodate the proposed roadway improvements. Since the project includes the installation of curb extensions, grading and drainage improvements will be closely correlated to ensure stormwater runoff is properly collected and removed from low points created by the curb extension installation. An analysis of the existing drainage system will be performed to determine current capacity, and the extent of gutter spread into travel lanes to provide design recommendations. The existing drainage pipe system will be analyzed for the 10-year and 25-year storm events. **Tasks will include:**

- Develop existing inlet drainage areas, runoff coefficients and times of concentration.
- Calculate runoff rates to inlets.
- Analyze existing pipe capacities.
- Analyze spread into shoulder and travel lane based on existing drainage system and topography.
- Identify existing areas of inadequate drainage system capacity for the 10-year and 25-year storm events.
- Identify existing areas of excessive spread for 10-year and 25-year storm events.

Based on the results of this analysis, the Urban Team will develop solutions to minimize ponding and spread by proposing measures ranging from the regrading of roadside areas within the ROW to the addition of new stormwater inlets and piping. **Proposed drainage improvements may include:**

- Review existing roadside grading and examine potential minor grading modifications which would alleviate roadway ponding.
- Calculate required pipe sizes and inlet locations to address areas of inadequate drainage system capacity and excessive spread where regrading. The drainage collection system will be designed in



accordance with NJDOT design criteria. A hydraulic grade line analysis will be performed, and the pipes sized to provide free flow for the design storm event where possible.

- Develop plans showing new/extended pipe runs, reset or reconstructed inlets, new inlets and/or manholes, new headwalls to accommodate roadway grade increases and scour protection measures at outfalls. The plans showing the drainage system design will include size, shape and location of inlets, manholes, pipes and SWM BMPs, which require detailed coordination with the existing utilities. Efforts will be made to minimize utility relocations.
- This proposal anticipates that no structures conveying State regulated waters will be impacted by these improvements.

This proposal anticipates that the proposed improvements will not create additional impervious coverage in excess of 0.25 acre, or land disturbance of over one (1) acre; therefore, the project will not require adherence to NJDEP stormwater management regulations at NJAC 7:8.

Deliverable: Stormwater Documents – The following documents will be prepared in support of the project's drainage and stormwater management designs as needed and appropriate for each project location:

- SWM Report
- Non-Structural Strategies Report
- Stormwater Maintenance Plan & Budget
- Legal Description for Deed Restricted SWM Facilities
- Drainage Calculations

Green Stormwater Infrastructure (GSI) Example

T&M included GSI rain gardens in curb extensions on Washington Street "Complete Streets" Redesign



Prepare Full CED and Concept Plans

Based on the project need, environmental considerations, and the information provided in the RFP, the projects should not individually or cumulatively have significant environmental impacts. Therefore, the National Environmental Policy Act (NEPA) document classification is anticipated to be a Categorical Exclusion.

The Urban Team will work to help expedite preparation of a CED suitable for submission and approval. We will work with the NJDOT, providing the necessary information and supporting documents required to submit and receive approval of the CED.

The Urban Team will perform a review of readily available on-line sources, combined with a field view, to identify site resources and potential regulatory permitting requirements for the proposed improvements. We will prepare the National Environmental Policy Act (NEPA) Categorical Exclusion Documentation (CED) as part of the Preliminary Engineering (PE) and activities identified during Final Design (FD) phases.

The evaluation will include the following tasks: 1) desktop research of various data sources, including NJ GeoWeb (various, including wetlands, historic sites, hazardous materials, and Threatened and Endangered [T&E] species), Federal Emergency Management Agency (FEMA) (floodplains), U.S. Fish & Wildlife Service (USFWS) Wetland Mapper, and USFWS NJ Field Office (Information for Planning and Consulting [IPaC] program for T&E species); 2) a site visit to confirm site conditions; 3) wetland delineation if required; 4) identification of potential permit applications; and 5) preparation of the CED.

We will perform a hazardous waste environmental screening of the area within the project limits to identify potentially contaminated soil and or groundwater that would be encountered during the LSPDA construction activities based on available published information. If required, the Hazardous Waste Screening Report will include recommendations for further investigation and/or sampling. We anticipate that there will be less than 200 CY of soil disturbance for each project and therefore soil sampling will not be conducted as a portion of the environmental screening. If more than 200 CY of soil disturbance occurs, the project will be required to enter into the New Jersey Department of Environmental Protection's (NJDEP's) Linear Construction Program and soil sampling will be conducted at that time.

The proposed roadway improvement projects require compliance with Section 106 of the National Historic Preservation Act (36CFR800), which seeks to minimize potential harm to historic properties, defined as buildings, structures, objects, districts, archaeological sites, etc., that are either eligible for listing in or are listed in the National Register of Historic Places (NR). These projects' proposed roadway improvements will be located within the existing pavement and will not require completion of an eligibility/effects document. We will prepare a screening of existing historic property information for inclusion in the project's Section 106 documentation. We will work with NJDOT to prepare the Area of Potential Effect (APE) and initiate consultation documentation for the SJTPO to provide to the New Jersey Historic Preservation Office (NJHPO) under 36CR 800.3(c)3. The documentation will include an inventory of known historic properties present in the project area and an application of the Criteria of Adverse Effect (36CFR800.5a) for historic properties if present. The cultural resource professionals preparing the documentation will meet or exceed the Secretary of the Interior's Professional Qualification Standards (36CFR61) for Archeology and/or Architectural History.

Based on the results of our desktop analysis for wetlands, we will conduct field investigations to delineate the wetlands and to prepare permit applications where necessary.

The foregoing is based on the anticipated scope of improvements at this time per the information furnished in the RFP. However final determination of required permits will be made based on the design developed during Preliminary Engineering (PE) and comments received on that submission. Our Final Design (FD) scope may need to be revised at that time in accordance with the final identification of the permit requirements.

Our assumptions are as follows:

- No Green Acres encumbered properties will be impacted and thus no analysis will be required.
- We do not anticipate the need for Section 4(f) documentation.
- We assume all work will be contained within the existing ROW, unless noted above.
- We anticipate a CED document will be sufficient for meeting NEPA documentation requirements.
- No detailed noise analyses will be required.
- Sampling will not be completed within the project area as we anticipate less than 200 CY of material will be disturbed for the safety improvements.
- No specific threatened or endangered species studies are anticipated or included within this scope of work.
- If permits are required, the applicant will provide the required application fees.
- It is assumed that the project will have no effect on historic properties given the limited disturbance beyond the existing pavement.

Deliverable: Full CED Document and Concept Plans

The full CED document will be prepared and submitted to NJDOT Local Aid/BEPR along with the 60% Plans described previously.



Task 3 – Deliverables:

- Design Plans
 - ▶ 30% for Project Sponsors
 - ▶ 60% to Local Aid/BEPR for CED Approval
- Drainage & Stormwater Documents
 - ▶ 30% for Project Sponsor
 - ▶ 60% to Local Aid/BEPR
- Full CED and Concept Plans for NJDOT Local Aid/BEPR review

Task 4 – Utility Coordination

Utility Company Identification and Coordination – Successful identification, verification and timely relocation of overhead and underground utilities are vital for project success. Early coordination leads to prompt delivery of design documents and helps avoid unforeseen conflicts once construction begins. The Urban Team has excellent relationships with NJ utility companies, working in regular partnership to deliver projects to construction. We can draw from lessons learned to avert potential problems.

The Urban Team will identify the utility companies that have facilities present within the project limits of each project corridor. Each identified company will subsequently be provided preliminary base mapping, a proposed scope of work, and a request to indicate the type, size, material, and age of their facilities. We will also request any information regarding potential constraints that could affect the design, construction staging and/or construction scheduling. Example constraints could include seasonal outage restrictions, clearance requirements, easement and/or ROW requirements, long lead-time materials, and possible future build plans. This compiled information will become the Utility Master Plan.

Identify Utility Conflicts – With a Utility Master Plan and a project footprint in place, utility impacts can be identified. The calculation of cost should be considered with the determination of impacts. Designs will attempt to avoid identified conflicts. Where conflicts are unavoidable, we will coordinate resolutions with the companies. Initial concepts developed have identified a few potential utility pole conflicts. Additional conflicts will be identified during the design process.

- **East Avenue** – Two utility pole relocations have been identified in front of the Cunningham Academy School due to the construction of the bus turn-out.
- **Irving Avenue** – Two utility pole relocations have been identified at the Bridgeton Market Deli across from Ewing Street due sidewalk installation and driveway construction.
- **Wheaton Avenue** – The potential exists for utility pole and aerial facilities to be relocated out of the vacated portion of Wheaton Avenue between F Street and 4th Street/G Street.
- **G Street/4th Street** – The potential exists for utility pole relocations at the intersection. The proposed concept shifts traffic to the WB curblane on G Street. Offsets from the curb to the face of utility poles will need to be checked for clearances minimums. The right turn from WB G-Street to Wheaton may also require widening or a channelized turn lane due to the skewed nature of the existing intersection. Provisions for this turning movement will likely require utility poles to be relocated at this corner.

Conduct Subsurface Utility Engineering (SUE) – During Preliminary Engineering, SUE will be performed where more details are needed to determine the exact location of an underground utility. KMA will perform subsurface utility engineering, utility identification/designation and utility test holes, to determine the exact location (vertical and horizontal) of underground utilities (gas, electric, sanitary sewer, water, and telecommunication lines) in areas of the project where there are potential utility conflicts.



KMA will designate underground utilities at the identified conflict locations and the immediate vicinity of each. Utility designation will confirm/augment the NJ One Call utility mark outs through use of appropriate surface methods, including GPR and/or pipe locators. Utility designation at each location will encompass an area twenty-five (25) feet beyond the proposed conflict area in all directions. KMA will use GPS to survey the designated utility lines.

A total of ten (10) utility test holes per project are assumed for this proposal. The locations of utility test holes are currently unknown and will be determined during the Preliminary Engineering phase. SUE work will include:

- Coordinating traffic control with local authorities and providing traffic control for lane and/or shoulder closures; it is assumed that traffic control (crash truck) will not be required for all test holes.
- The use of the vacuum excavation method to excavate test holes.
- Locating, identifying, measuring, and sketching each utility.
- Compiling, reviewing and summarizing test pit results.
- Preparing deliverables and conducting quality reviews.

Update Base Mapping – After the initial coordination effort, base mapping will be updated to include any redlined drawings provided by the companies indicating locations of their facilities. Base mapping will be updated again if SUE is required. Once a location is identified through SUE, base maps will be updated to indicate the SUE located facilities and the design can be refined toward a resolution of the conflict. The goal of these projects will be to avoid utility relocations. However, if relocations are required, the amount of utility work necessary will be minimized.

Prepare Utility Relocation Plans – Utility Relocation Plans will be developed as needed in coordination with the utility owners in a format acceptable to the Project Sponsors. Relocation accommodations will be coordinated with the companies in a timeline corresponding to the ROW Plans, as new or relocated poles and the adjoining guying could require Utility Easements of ROW takings. Preparation of ROW documents for any required utility easements of fee parcels will be included in Task 6 – ROW Documentation. Once approved, final utility accommodations will be incorporated into the contract plans and contract documents.

Task 4 – Deliverables:

- Utility Relocation Plans

Task 5 – Environmental Documentation/Permitting

Urban will assist SJTPO and the Project Sponsors to minimize project impacts consistent with regulatory standards and assess regulated impacts by site inspection, map plans, and report preparation. We will prepare Engineering Plans to depict the information for the CED assessment and permits. Urban will create a "Major Development" Assessment Plan identifying added impervious coverage, total disturbance, and relevant "watercourse" crossings as it relates to NJDEP and Flood Hazard jurisdiction, and will delineate wetlands, as applicable. We will investigate State and Federal Threatened and Endangered Species including coordinating with the Federal IPAC program to obtain an IPAC report and investigate the State Landscape 3 version GIS database for State species, to be used for preparing the CED document.

The Urban Team has handled cultural resource issues based on existing documented known historic sites, and the redevelopment of a previously developed site that customarily excludes archaeological studies. We can provide the cultural resource "letter format" process for SJTPO to submit to the Agency for this effort. Our review shows that the project does not materially influence any parkland area.



The Urban Team will perform a review of readily available on-line resources, combined with a field inspection, to identify sensitive resources and potential permitting requirements for the proposed safety improvements. We will prepare the National Environmental Policy Act (NEPA) Categorical Exclusion Documentation (CED) as part of the Preliminary Engineering phase.

The evaluation will include the following tasks: 1) desktop research of various data sources, including NJ GeoWeb (various, including wetlands, historic sites, hazardous materials, and Threatened and Endangered [T&E] species), Federal Emergency Management Agency (FEMA) (floodplains), U.S. Fish & Wildlife Service (USFWS) Wetland Mapper, and USFWS NJ Field Office for T&E species; 2) a site visit to confirm site conditions; 3) wetland delineation, 4) identification of permit applications; and 5) preparation of the CED. We anticipate a CED document will be sufficient for meeting NEPA documentation requirements. Lastly, we will coordinate meetings with NJDOT-BEPR and NJDEP to advance CED approval.

The Urban Team will assess NJDEP permits, prepare permit applications, and prepare a Soil Erosion and Sediment Control plan if required.

Task 5 – Deliverables:

- Permits are currently not anticipated. At the conclusion of Preliminary Engineering, permitting needs will be evaluated and confirmed.

Task 6 – ROW Documentation

It is desirable to avoid Right-of-Way (ROW) takings with the proposed design. Performing an Impact Assessment is critical. ROW impacts are a primary driver in determining solutions. Based upon the scope of work associated with these projects, the proposed design will strive to avoid the need to acquire ROW and will minimize the need to obtain easements.

Initial concepts developed have identified a few areas where easements may be required. Additional areas will be identified during the design process.

- **Wheaton Avenue** – The potential exists for ROW involvement associated with the vacation of Wheaton Avenue between F Street and 4th Street/G Street.
- **East Avenue** – The potential for Permanent Sidewalk Easements exist along the southbound side of East Avenue from Walnut Street to Humbert Avenue due to the construction of new sidewalk.
- **East Avenue** – The potential for Permanent Sidewalk Easements exist at the intersections of Humbert Avenue, Florence Avenue, and Washington Avenue for ADA Ramp construction, sidewalk reconstruction and grading.
- **East Avenue** – The potential for Permanent Sidewalk Easement exists at the choker/midblock pedestrian crossing location between Florence Avenue and Washington Street for the reconstruction of sidewalk.
- **East Avenue** – The potential for Temporary Construction Easements exist to relocate the owner's fences on two properties along the southbound side of East Avenue, north of Catherine Street.
- **Irving Avenue** – The potential for a Temporary Construction Easement (or a Temporary Site Mitigation Work Easement) exists to modify the driveway to the parking lot, construct sidewalk, resurface the parking lot, and restripe the parking spaces in the parking lot of the Bridgeton Market Deli.

The Urban Team will map existing rights-of-way by drawing upon information available from road returns, tax maps, USGS maps and property deed information for use in establishing a preliminary assessment of right-of-way impacts and easements. ROW and roadway baselines can then be set utilizing any found monumentation. Should



the proposed work require easements for work beyond the existing ROW line, we will assist the Project Sponsors and SJTPO by preparing Parcel maps (General Parcel Plan, Individual Parcel Maps, and Legal Descriptions) for properties that require work outside the ROW. These maps will clearly depict the impacts in sufficient detail to be used to communicate with the property owner. ROW documents will comply with the ROW Design Guidelines set forth by the Project Sponsor. For these purposes, we will assume 25 easements will be required for the project.

Task 6 – Deliverables:

- Parcel Maps
- Deed Descriptions
- Right of Entry Agreements

Task 7 – Final Design (Contract Documents/PS&Es)

The Urban Team will finalize all design details in accordance with the relevant industry standards (*AASHTO – A Policy on Geometric Design of Highways and Streets, AASHTO Roadside Design Guide, NJDOT Roadway Design Manual, NJ Complete Streets Policy, City of Vineland Complete Streets Policy, MUTCD*) and prepare final contract plans and documents. We will submit final design plans to NJDOT Local Aid, Project Sponsors, Cumberland County, SJTPO and any other required agencies. Included with this submission will be calculations for contract quantities. Standard NJDOT Pay Items will be used wherever feasible. Approval for the use of specialty items will be required by the Project Sponsors.

Prepare Final Design Plans

The final construction plans will include:

- Cover Sheet
- Estimate-Distribution of Quantities
- Typical Sections
- Plan Sheet Index (PSI)
- Construction Legend
- Construction Plans
- Drainage and Soil Erosion & Sediment Control Plans
- ADA Curb Ramp Details
- Profiles
- Ties
- Grades
- Traffic Control and Staging Plans
- Highway Lighting Plans (As required)
- Traffic Signing and Striping Plans
- Cross Sections (Including Earthwork Summary)
- Construction Details

Prepare Construction Documents

In addition to the final plans, specifications (including the federal bid requirements) engineer's estimate, and construction schedules will be prepared for each project location.

- **Specifications** – The Urban Team will prepare detailed specifications utilizing the appropriate Local Aid inputs, the latest Standard Inputs, and the latest Baseline Document Changes (BDC) to the NJDOT 2019 Standard Specifications for Road and Bridge Construction.
- **Cost Estimates** – The ability to accurately estimate construction costs, with consideration of current market conditions, is an essential component of the project's success. Our Cost Estimating Practice has performed pricing for projects in various stages of design, from conceptual to final. We utilize a "contractor-type" approach for our detailed estimates, incorporating labor productivities, current material prices, and construction equipment rates suited to the project-specific site conditions and staging requirements. We understand and incorporate the cost impacts of work performed in active highway



environments. The resulting cost estimate more closely predicts the real-world contractor bid.

- **Construction Schedule** – A Critical Path Model (CPM) construction schedule will be prepared. The Urban Team has a staff of certified professional schedulers with extensive experience in preparing schedules for construction projects in New Jersey.

A Pre-PS&E Submission, including Plans, Specifications, Engineer's Estimate, and Construction Schedule will be prepared and submitted to Project Sponsors for each corridor prior to submission to NJDOT-Local Aid. Comments from the review will be addressed and resolved. An in-person or Teams meeting can be scheduled to expedite the comment resolution. Resolved comments will be incorporated into the contract documents and a full PS&E will be submitted to NJDOT-Local Aid for review. NJDOT-Local Aid comments will be resolved and incorporated and presented back to the Project Sponsors. Upon resolution of all comments, final bid documents ready for public bidding will be prepared, to include four (4) sets of PS&E documents (2 copies for each Project Sponsor and 2 copies for NJDOT-Local Aid). An electronic copy of the plans will also be provided to the Project Sponsors and SJTPO. Copies of the bid documents will be prepared per request of the Project Sponsor (maximum of 25 sets of plans).

Prepare Stormwater Documents

Stormwater Management – Stormwater Management Plans will be prepared and submitted in PDF and electronic formats (to be determined by the Project Sponsors) and four (4) hard copies per corridor. Finalized versions of the relevant reports prepared as part of Task 3 (Preliminary Engineering, Drainage/Stormwater Management Documents) will be submitted. All design documents and calculations will comply with stormwater management rules.

Soil Erosion and Sediment Control – Should construction activities exceed 5,000 SF, a Soil Erosion and Sediment Control application and plans will be prepared and submitted to the Cumberland-Salem County Conservation District for approval. Any conditions of approval will be documented in the contract plans.

Other Documents

As relevant to each project location, other documentation will be prepared and submitted in conformance with Local Aid requirements. Other documents could include the following:

- **Approved Design Justifications** – According to the 2019 NJDOT Design Exception Manual (DEM), the project corridors do not meet the requirements for the preparation and approval of a formal Design Exception Report. However, controlling substandard design elements (CSDE) present in any of the project corridors will be identified and documented in the form of a design justification as outlined in Section 5.3 of the DEM. The justification will be prepared by the designer, approved by the facility owner, and submitted to the Division of Local Aid and Economic Development District Office. The justification will indicate the substandard design feature, the proposed construction (intent of the project), and the reasons for not satisfying the standard. A review of current crash data will be made to ensure the design feature(s) in question is not a contributing factor to known crashes. Approved design justifications will be submitted with the Designer's Certification as part of the PS&E Submission.
- **Highway Occupancy Permit (HOP)** – Any detour requiring use of a State roadway will need an approved HOP. We will prepare the application and supporting documentation and coordinate the HOP approval.
- **Approved Environmental Documentation/Certified Permits**
- **Utility Certifications**
- **Designer's Certification and Fact Sheet**
- **Local Aid Federal PS&E Review Checklist**



Task 7 – Deliverables:

- Final Engineering Design Plans
- Construction Documents
- Stormwater Documents
- Other Documents (Reports, Forms, and Permits)

Task 8 – Bid Construction

Advertisement and Bidding

The Urban Team will attend a pre-bid meeting and provide support during the construction bidding phase. We will provide assistance responding to bidders' questions and develop/issue any necessary addenda.

Analyze Construction Bids and Recommend Award

The Urban Team will analyze bid proposals from the two apparent low bidders. We will review the bid packages to determine competitiveness in accordance with the most current procedures and recommend award or rejection to the Project Sponsors.

Construction Management and Inspection (CM/CI)

Urban's CM/CI and Constructability staff provide additional in-house expertise and support.



B. Staffing Plan

Local Safety Program Design Assistance
Staffing Plan - Technical Proposal

Staff Name	Title	Hours per Task								TOTAL HOURS	PERCENT OF TOTAL HOURS	
		Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction			
												1
Urban Engineers, Inc.												
Steve Locke	PROJECT MANAGER	218	12	173	4	8	6	32	4	457	41.8%	
Scott Diehl	DEPARTMENT MANAGER	16		24				14		54		
William Patton	SENIOR PROJECT ENGINEER	132	24	423	24	12	20	248	12	895		
R. Bradley Tombs	SENIOR ENV. SCIENTIST	16		176	4	328		28		552		
Jay Etzel	SENIOR PROJECT ENGINEER			104				64	8	176		
Justin DiBiase	ENGINEER	40	12	654	8	20	8	270	8	1020		
Rob Macioce	ENGINEER			340	8			84		432		
Dane Greene	ENGINEER				176			96	16	288		
Jason Vopeleus	ENGINEER	20	12	1114	8	28	16	446	8	1652		
Dan Hutton	PLANNER	535								535		
Danielle Baer	JUNIOR PLANNER	535								535		
William Fahber	SURVEYOR		48	24			232	80		384		
Urban Engineers, Inc. Subtotal		1512	108	3032	232	396	282	1362	56	6980		
T&M												
Donato DiZuzio	Principal-in-Charge	2		4				4		10	21.6%	
Peter Drinkwater	Project Manager	160	4	31	2		4	31	4	236		
Kris Krzyston	Practice Lead			48		22				70		
Paul Cinko	Senior Engineer	10		26	12			36	2	86		
Bruce Klein	Senior Engineer	10		35				52	3	100		
Tejal Patel	Senior Engineer	36		18			12	6	3	75		
Timothy Morris	Senior Engineer	8		16		12		20	3	59		
Michael West	Senior Engineer			22			8	23	2	55		
Ericka Naklicki	Senior Engineer			120		76				196		
David Jacobs	Senior Engineer			42				50	2	94		
Ralph Squillante	Principal Engineer		12	90	24		14	166	16	322		
Yiu Kwan Hui	Project Engineer			42		40	0	40	8	130		
Brandon McCloskey	Project Engineer			140			0	122	8	270		
Christopher DaChille	Project Engineer	12		116			0	188		316		
Julianna Seddio	Staff Engineer			72		40	0	76		188		
Joseph Vitale	Staff Engineer	44	16	310	64		0	312	12	758		
Melissa Barnes	Environmental Scientist			320		164	0			484		
Frank Canizzo	Engineering Tech		4	38			0	32		74		
Yanira Otero	Administrative Assistant	16		9	24	14		16	3	82		
T&M Subtotal		298	36	1499	126	368	38	1174	66	3605		
KMA, Inc. (DBE FIRM)												
John Eric Henson	PROJECT MANAGER		90		24					114	29.8%	
Naji Khoury	SENIOR ENGINEER		180		48					228		
Hareesh Daggupati	SENIOR ENGINEER		260		96					356		
Godfrey Joyner	ENGINEER		360		160					520		
Thomas McCollum	ENGINEER		80							80		
Frank Whittaker	CHIEF SURVEYOR		184		32					216		
Stephen Richardson	CADD/DRAFTER		600		144					744		
Said Diab	PARTY CHIEF		830		360					1190		
Brian Corley	FIELD TECH		830		360					1190		
Eric Robertson	FIELD TECH		180		160					340		
KMA, Inc. Subtotal		0	3594	0	1384	0	0	0	0	4978		
RGA, Inc. (DBE FIRM)												
Richard Grubb	Vice President (PIX)					5				5	6.5%	
Paul McEachen	Prin. Sr. Archaeol. I (PVIII)					25				25		
Allee Davis	Prin. Sr. Archit. Hist. II (PVII)					29				29		
Ilene Grossman-Bailey	Sr. Archaeol. I (PVI)					270				270		
Chelsea Troppauer	Sr. Arch. Historian II (PV)					76				76		
Allison Gall	Archaeologist I (PIV)					25				25		
Lauren Dunkle	Architect. Historian II (PIII)					482				482		
Patricia McEachen	Drafter I (ET-III)					120				120		
Cathy Smyrski	Technical Editor (PV)					60				60		
RGA, Inc. Subtotal		0	0	0	0	1092	0	0	0	1092		
Imperial (DBE FIRM)												
Lindsey Klein	PRINCIPAL		6							6		0.3%
Michael Klein	FIELD MANAGER		4							4		
Staff	FIELD TECH		32							32		
Staff	ADMIN		10							10		
Imperial Subtotal		0	52	0	0	0	0	0	0	52		
Total Hours		1810	3790	4531	1742	1856	320	2536	122	16707	100.0%	

NOTE: DBE/ESBE (KMA, RGA and Imperial) Percentage = 36.6% of Total Hours



C. Project Schedule

SJTPO RFP: Local Safety Program Design Assistance

Project Schedule

	Scope Task Item	2023				2024											
		SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	Project Coordination & Public Outreach																
	Notice to Proceed September 25 and Bi-Weekly Status Updates																
	Project Kickoff Meeting																
	Coordination Meetings																
	Stakeholder and Public Presentations																
2	Survey/Base Mapping																
	Data Collection and Review																
	Field Survey																
	Basemapping																
	Existing Right of Way/Deed Mosaic																
3	Preliminary Engineering (60% Complete Plans)																
	Design Plans (30% and 60% Plan Submission)																
	ADA Compliance Review																
	Stormwater Documents																
	Preliminary Cost Estimate																
	Prepare Full CED w/60% Plans																
4	Utility Coordination																
	Utility Company Identification and Coordination																
	Identify Utility Conflicts																
	Perform Subsurface Investigations																
	Update Base Mapping																
	Prepare Utility Relocation Plans																
5	Environmental Documentation/Permitting																
	Project Screening/Field Visits																
	Determine Outside Agency Permitting and Approvals																
	Prepare Plans, Notifications, and Applications																
	Submit Permit Applicatoin																
6	ROW Documentation																
	Prepare ROW Mapping																
	Prepare Legal Descriptions																
7	Final Design (Contract Documents/PS&Es)																
	Finalize Design Plans																
	Prepare Specifications / Cost Estimate / Construction Schedule																
	Prepare Design Exception Report																
	ADA Ramp Compliance Documentation / Technically Infeasible Forms																
	Prepare Soil Erosion Permits / HOP for Possible Detours																
	Prepare Final Stormwater Documentation																
	Complete Local Aid Federal PS&E Review Checklist																
8	Bid Construction																
	Design Support Services																

Legend

★ Submission

■ NJDOT/SJTPO & Sponsor/County Review



SJTPO RFP: Local Safety Program Design Assistance
Project Schedule

	Scope Task Item	2025												2026											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	Project Coordination & Public Outreach																								
	Notice to Proceed September 25 and Bi-Weekly Status Updates																								
	Project Kickoff Meeting																								
	Coordination Meetings																								
	Stakeholder and Public Presentations																								
2	Survey/Base Mapping																								
	Data Collection and Review																								
	Field Survey																								
	Basemapping																								
	Existing Right of Way/Deed Mosaic																								
3	Preliminary Engineering (60% Complete Plans)																								
	Design Plans (30% and 60% Plan Submission)																								
	ADA Compliance Review																								
	Stormwater Documents																								
	Preliminary Cost Estimate																								
	Prepare Full CED w/60% Plans																								
4	Utility Coordination																								
	Utility Company Identification and Coordination																								
	Identify Utility Conflicts																								
	Perform Subsurface Investigations																								
	Update Base Mapping																								
	Prepare Utility Relocation Plans																								
5	Environmental Documentation/Permitting																								
	Project Screening/Field Visits																								
	Determine Outside Agency Permitting and Approvals																								
	Prepare Plans, Notifications, and Applications																								
	Submit Permit Applicatoin																								
6	ROW Documentation																								
	Prepare ROW Mapping																								
	Prepare Legal Descriptions																								
7	Final Design (Contract Documents/PS&Es)																								
	Finalize Design Plans																								
	Prepare Specifications / Cost Estimate / Construction Schedule																								
	Prepare Design Exception Report																								
	ADA Ramp Compliance Documentation / Technically Infeasible Forms																								
	Prepare Soil Erosion Permits / HOP for Possible Detours																								
	Prepare Final Stormwater Documentation																								
	Complete Local Aid Federal PS&E Review Checklist																								
8	Bid Construction																								
	Design Support Services																								

Legend

★ Submission

■ NJDOT/SJTPO & Sponsor/County Review




SJTPO RFP: Local Safety Program Design Assistance

Project Schedule

	Scope Task Item	2027												2028											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	MAY	SEP	OCT	NOV	DEC
1	Project Coordination & Public Outreach																								
	Notice to Proceed September 25 and Bi-Weekly Status Updates																								
	Project Kickoff Meeting																								
	Coordination Meetings																								
	Stakeholder and Public Presentations																								
2	Survey/Base Mapping																								
	Data Collection and Review																								
	Field Survey																								
	Basemapping																								
	Existing Right of Way/Deed Mosaic																								
3	Preliminary Engineering (60% Complete Plans)																								
	Design Plans (30% and 60% Plan Submission)																								
	ADA Compliance Review																								
	Stormwater Documents																								
	Preliminary Cost Estimate																								
	Prepare Full CED w/60% Plans																								
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	Project Screening/Field Visits																								
	Determine Outside Agency Permitting and Approvals																								
	Prepare Plans, Notifications, and Applications																								
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	Prepare ROW Mapping																								
	Prepare Legal Descriptions																								
7	Final Design (Contract Documents/PS&Es)																								
	Finalize Design Plans																								
	Prepare Specifications / Cost Estimate / Construction Schedule																								
	Prepare Design Exception Report																								
	ADA Ramp Compliance Documentation / Technically Infeasible Forms																								
	Prepare Soil Erosion Permits / HOP for Possible Detours																								
	Prepare Final Stormwater Documentation																								
	Complete Local Aid Federal PS&E Review Checklist																								
8	Bid Construction																								
	Design Support Services																								

Legend

-  Submission
-  NJDOT/SJTPO & Sponsor/County Review



South Jersey Transportation Planning Organization
Cities of Bridgeton, Millville, and Vineland
County of Cumberland

Principal-In-Charge
Gary T. Etter, PE

Project Manager
Steven B. Locke, PE*

QA/QC
William P. McGarrigel, PE

3rd Street (City of Millville), High Street (City of Millville), East Avenue (City of Vineland)

Project Leader
William Patton, PE*

Roadway Design

Justin DiBiase, PE, PTOE*
Jason Vopelius, PE

Traffic Engineering

Scott Diehl, PE, PTOE, RSP₁*
Jay Etzel, PE

Utility Engineering

Dane Greene, PE

Bicycle/Pedestrian Design

Daniel Hutton, AICP, PP, RSP₁*

Lighting

Rob Macioce, PE, PTOE

Stormwater Management

R. Bradley Tombs*

Environmental/Permitting

R. Bradley Tombs*

Irving Avenue/Atlantic Street (City of Bridgeton)

Project Leader
Peter Drinkwater, PE* (2)

Roadway Design

Paul Cinko, PE* (2)
Michael West, PE (2)

Traffic Engineering

Bruce Klein, PE, PTOE* (2)
Brandon McCloskey, PE, PTOE (2)

Utility Engineering

Ralph Squillante, PE (2)

Bicycle/Pedestrian Design

Tejal Patel, PE, CME, LEED AP* (2)

Lighting

David Jacobs (2)

Stormwater Management

Timothy Morris, PE (2)

Environmental/Permitting

Kristopher Krzyston* (2)

Contract-Wide Services

Survey & ROW Engineering

Frank Whittaker, PLS* (1)
William Fahber, PLS

Subsurface Utility Engineering (SUE)

Hareesh Daggupati, PE (1)

Community Involvement

Daniel Hutton, AICP, PP, RSP₁*
Danielle Baer, AICP

Data Collection

Lindsey B. Klein (4)

Cultural Resources

Paul McEachen, RPA* (3)

Cost Estimating

Moses Gaster, CEP

Constructability Reviews

Charles Bassano, PE, PP, CME

CPM Scheduling

Keith Shuster, PSP

Legend

- * Resume Included
- (1) KMA
- (2) T&M Associates
- (3) Richard Grubb & Associates, Inc.
- (4) Imperial Traffic & Data Collection, LLC.

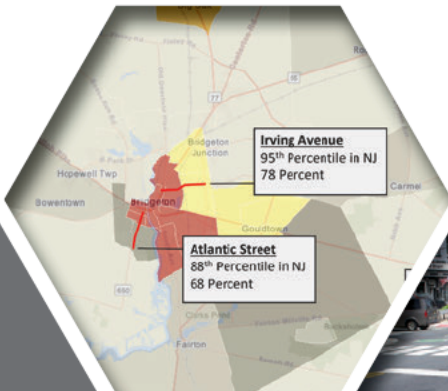




Local Safety Program Design Assistance

Cost Proposal

June 27, 2023



SUBMITTED TO:

Alan Huff, Program Manager
Safety Initiatives & Public Outreach
South Jersey Transportation Planning
Organization
782 South Brewer Road, Unit B6
Vineland, New Jersey 08361



SUBMITTED BY:

Urban Engineers, Inc.
220 Lake Drive East
Suite 300
Cherry Hill, New Jersey 08002



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
MULTIPLE PROJECTS
CITIES of VINELAND, MILLVILLE and BRIDGETON
CUMBERLAND COUNTY

Date: June 27, 2023

Client: South Jersey Transportation Planning Organization

TOTAL CONTRACT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL FEE	TOTAL PE	TOTAL FD
Urban Engineers, Inc.	50.82%	\$ 1,202,167.73	\$ 720,456.66	\$ 481,711.07
T&M, Inc.	22.04%	\$ 521,427.17	\$ 286,386.73	\$ 235,040.44
KMA (DBE/ESBE Firm)	23.24%	\$ 549,717.56	\$ 398,507.27	\$ 151,210.29
RGA (DBE/ESBE Firm)	3.58%	\$ 84,783.09	\$ 84,783.09	\$ -
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.32%	\$ 7,586.85	\$ 7,586.85	\$ -
TOTALS	100.00%	\$ 2,365,682.40	\$ 1,497,720.60	\$ 867,961.80

DBE Percentage = 27.14%

DBE/ESBE Goal = 13.23%



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
MULTIPLE PROJECTS - Preliminary Engineering
CITIES of VINELAND, MILLVILLE and BRIDGETON
CUMBERLAND COUNTY

Date: June 27, 2023

Client: South Jersey Transportation Planning Organization

TOTAL CONTRACT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL PE
Urban Engineers, Inc.	48.10%	\$ 720,456.66
T&M, Inc.	19.12%	\$ 286,386.73
KMA (DBE/ESBE Firm)	26.61%	\$ 398,507.27
RGA (DBE/ESBE Firm)	5.66%	\$ 84,783.09
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.51%	\$ 7,586.85
TOTALS	100.00%	\$ 1,497,720.60

DBE Percentage = 32.77%

DBE/ESBE Goal = 13.23%



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
MULTIPLE PROJECTS - Final Design
CITIES of VINELAND, MILLVILLE and BRIDGETON
CUMBERLAND COUNTY

Date: June 27, 2023

Client: South Jersey Transportation Planning Organization

TOTAL CONTRACT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL FD FEE
Urban Engineers, Inc.	55.50%	\$ 481,711.07
T&M, Inc.	27.08%	\$ 235,040.44
KMA (DBE/ESBE Firm)	17.42%	\$ 151,210.29
RGA (DBE/ESBE Firm)	0.00%	\$ -
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$ -
TOTALS	100.00%	\$ 867,961.80

DBE Percentage = 17.42%

DBE/ESBE Goal = 13.23%

Preliminary Engineering Costs By Project



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE

3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements - Preliminary Engineering

CITY of MILLVILLE

CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE		TOTAL PE FEE
Urban Engineers, Inc.	66.69%	\$	257,970.34
T&M, Inc.	7.08%	\$	27,399.97
KMA (DBE/ESBE Firm)	21.06%	\$	81,469.29
RGA (DBE/ESBE Firm)	4.43%	\$	17,145.86
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.74%	\$	2,850.76
TOTALS	100.00%	\$	386,836.22

DBE Percentage = 26.23%

DBE/ESBE Goal = 13.23%

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$35,959.99	\$5,635.82	\$189,936.43	\$7,375.74	\$19,062.34	\$0.00	\$0.00	\$0.00
T&M								
T&M, Inc.	\$0.00	\$0.00	\$15,939.07	\$0.00	\$11,460.91	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$81,469.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$17,145.87	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$2,850.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$35,959.99	\$89,955.88	\$205,875.50	\$7,375.74	\$47,669.12	\$0.00	\$0.00	\$0.00

Notes:

DBE Percentage = 26.23%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
High Street Pedestrian Safety Improvements - Preliminary Engineering
CITY of MILLVILLE
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL PE FEE
Urban Engineers, Inc.	66.71%	\$ 258,215.08
T&M, Inc.	7.08%	\$ 27,399.97
KMA (DBE/ESBE Firm)	21.05%	\$ 81,469.29
RGA (DBE/ESBE Firm)	4.43%	\$ 17,145.86
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.74%	\$ 2,850.76
TOTALS	100.00%	\$ 387,080.96

DBE Percentage = **26.21%**

DBE/ESBE Goal = **13.23%**

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

High Street Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$35,959.99	\$5,635.82	\$190,181.18	\$7,375.74	\$19,062.34	\$0.00	\$0.00	\$0.00
T&M								
T&M, Inc.	\$0.00	\$0.00	\$15,939.07	\$0.00	\$11,460.91	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$81,469.29	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$17,145.87	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$2,850.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$35,959.99	\$89,955.88	\$206,120.25	\$7,375.74	\$47,669.12	\$0.00	\$0.00	\$0.00

Notes:

DBE Percentage = 26.21%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
East Avenue Pedestrian Safety Improvements - Preliminary Engineering
CITY of VINELAND
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL PE FEE
Urban Engineers, Inc.	56.64%	\$ 173,806.90
T&M, Inc.	8.93%	\$ 27,399.98
KMA (DBE/ESBE Firm)	29.15%	\$ 89,444.44
RGA (DBE/ESBE Firm)	5.28%	\$ 16,199.63
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$ -
TOTALS	100.00%	\$ 306,850.95

DBE Percentage = **34.43%**

DBE/ESBE Goal = **13.23%**

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

East Avenue Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$36,709.99	\$5,635.82	\$105,023.00	\$7,375.74	\$19,062.34	\$0.00	\$0.00	\$0.00
T&M								
T&M, Inc.	\$0.00	\$0.00	\$15,939.07	\$0.00	\$11,460.91	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$89,444.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$16,199.63	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$36,709.99	\$95,080.27	\$120,962.07	\$7,375.74	\$46,722.89	\$0.00	\$0.00	\$0.00

Notes:

DBE Percentage = 34.43%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
Bridgeton Pedestrian Safety Improvements - Preliminary Engineering
CITY of BRIDGETON
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL PE FEE
Urban Engineers, Inc.	7.31%	\$ 30,464.34
T&M, Inc.	48.97%	\$ 204,186.81
KMA (DBE/ESBE Firm)	35.05%	\$ 146,124.25
RGA (DBE/ESBE Firm)	8.22%	\$ 34,291.74
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.45%	\$ 1,885.33
TOTALS	100.00%	\$ 416,952.47

DBE Percentage = 43.72%

DBE/ESBE Goal = 13.23%

Local Safety Program Design Assistance
Total Cost Per Task - Cost Proposal - City of Bridgeton

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$30,464.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
T&M								
T&M, Inc.	\$32,610.18	\$5,088.32	\$150,327.73	\$2,630.97	\$13,529.61	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$146,124.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$34,291.73	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$1,885.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$63,074.52	\$153,097.89	\$150,327.73	\$2,630.97	\$47,821.34	\$0.00	\$0.00	\$0.00

Notes:

DBE Percentage = 43.72%

Subtotal per firm includes Cost per Task and Direct Expenses

Final Design Costs By Project



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements - Final Design
CITY of MILLVILLE
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE		TOTAL FD FEE
Urban Engineers, Inc.	81.97%	\$	171,813.20
T&M, Inc.	0.00%	\$	-
KMA (DBE/ESBE Firm)	18.03%	\$	37,802.57
RGA (DBE/ESBE Firm)	0.00%	\$	-
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$	-
TOTALS	100.00%	\$	209,615.77

DBE Percentage = 18.03%

DBE/ESBE Goal = 13.23%

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

3rd Street and Wheaton Avenue Traffic Calming and Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$25,600.33	\$0.00	\$0.00	\$6,624.82	\$8,785.81	\$18,526.69	\$108,203.89	\$4,071.68
T&M								
T&M, Inc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$0.00	\$0.00	\$37,802.58	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$25,600.33	\$0.00	\$0.00	\$44,427.40	\$8,785.81	\$18,526.69	\$108,203.89	\$4,071.68

Notes:

DBE Percentage = 18.03%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
High Street Pedestrian Safety Improvements - Final Design
CITY of MILLVILLE
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL FD FEE
Urban Engineers, Inc.	81.91%	\$ 171,223.03
T&M, Inc.	0.00%	\$ -
KMA (DBE/ESBE Firm)	18.09%	\$ 37,802.57
RGA (DBE/ESBE Firm)	0.00%	\$ -
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$ -
TOTALS	100.00%	\$ 209,025.60

DBE Percentage = 18.09%

DBE/ESBE Goal = 13.23%

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

High Street Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$25,652.86	\$0.00	\$0.00	\$6,541.38	\$6,780.57	\$19,802.14	\$108,841.65	\$3,604.44
T&M								
T&M, Inc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$0.00	\$0.00	\$37,802.58	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$25,652.86	\$0.00	\$0.00	\$44,343.96	\$6,780.57	\$19,802.14	\$108,841.65	\$3,604.44

Notes:

DBE Percentage = 18.09%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
East Avenue Pedestrian Safety Improvements - Final Design
CITY of VINELAND
CUMBERLAND COUNTY

DATE: June 26, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL FD FEE
Urban Engineers, Inc.	75.52%	\$ 116,598.60
T&M, Inc.	0.00%	\$ -
KMA (DBE/ESBE Firm)	24.48%	\$ 37,802.58
RGA (DBE/ESBE Firm)	0.00%	\$ -
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$ -
TOTALS	100.00%	\$ 154,401.18

DBE Percentage = 24.48%

DBE/ESBE Goal = 13.23%

Local Safety Program Design Assistance

Total Cost Per Task - Cost Proposal

East Avenue Pedestrian Safety Improvements

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$20,899.79	\$0.00	\$0.00	\$3,832.49	\$5,045.10	\$7,047.56	\$76,169.22	\$3,604.44
T&M								
T&M, Inc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KMA, Inc.								
KMA, Inc.	\$0.00	\$0.00	\$0.00	\$37,802.58	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$20,899.79	\$0.00	\$0.00	\$41,635.08	\$5,045.10	\$7,047.56	\$76,169.22	\$3,604.44

Notes:

DBE Percentage = 24.48%

Subtotal per firm includes Cost per Task and Direct Expenses



LOCAL SAFETY PROGRAM DESIGN ASSISTANCE
Bridgeton Pedestrian Safety Improvements - Final Design
CITY of BRIDGETON
CUMBERLAND COUNTY

DATE: June 27, 2023

CLIENT: South Jersey Transportation Planning Organization

TOTAL PROJECT COST

COMPANY	TOTAL FEE PERCENTAGE	TOTAL FD FEE
Urban Engineers, Inc.	7.49%	\$ 22,076.24
T&M, Inc.	79.70%	\$ 235,040.44
KMA (DBE/ESBE Firm)	12.82%	\$ 37,802.57
RGA (DBE/ESBE Firm)	0.00%	\$ -
Imperial Traffic & Data Collection (DBE/ESBE Firm)	0.00%	\$ -
TOTALS	100.00%	\$ 294,919.25

DBE Percentage = **12.82%**

DBE/ESBE Goal = **13.23%**

Local Safety Program Design Assistance
 Total Cost Per Task - Cost Proposal - City of Bridgeton

Company	Total Cost per Task							
	Coordination & Public Outreach	Surveying/Base Mapping	Preliminary Engineering (60% Complete Plans)	Utility Coordination	Environmental Documentation/Permitting	ROW Documentation	Final Design (Contract Documents/PS&E's)	Bid Construction
	1	2	3	4	5	6	7	8
Urban Engineers, Inc.								
Urban Engineers, Inc.	\$22,076.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
T&M								
T&M, Inc.	\$27,923.96	\$0.00	\$0.00	\$13,061.21	\$14,787.46	\$7,649.89	\$161,152.98	\$10,464.96
KMA, Inc.								
KMA, Inc.	\$0.00	\$0.00	\$0.00	\$37,802.58	\$0.00	\$0.00	\$0.00	\$0.00
RGA, Inc.								
RGA, Inc. Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Imperial								
Imperial Subtotal	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals	\$50,000.20	\$0.00	\$0.00	\$50,863.79	\$14,787.46	\$7,649.89	\$161,152.98	\$10,464.96

Notes:

DBE Percentage = 12.82%

Subtotal per firm includes Cost per Task and Direct Expenses

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION

RESOLUTION 2307-30: Approving the Selection of Urban Engineers, Inc. for the Local Safety Program Design Assistance Technical Study

WHEREAS, the South Jersey Transportation Planning Organization (SJTPO) is the Metropolitan Planning Organization (MPO) designated under Federal law for the southern region of New Jersey including Atlantic, Cape May, Cumberland, and Salem Counties; and

WHEREAS, the Fiscal Year 2024 SJTPO Unified Planning Work Program contemplated Federal Highway Administration Highway Safety Improvement Program (HSIP) funds for Local Safety Program Design Assistance Technical Study; and

WHEREAS, the Notice of Availability of Requests was sent to 294 contacts on May 2, 2023; and

WHEREAS, the Request for Proposal (RFP) announcement and supplemental materials were also posted on the publicly accessible SJTPO website and the State of New Jersey Business Opportunities website; and

WHEREAS, five (5) proposals were received; and

WHEREAS, the SJTPO Technical Advisory Committee (TAC), at the May 8, 2023 meeting, vested consultant selection authority in the consultant selection committee consisting of one representative from Cumberland County, City of Vineland, and SJTPO, who reviewed and evaluated the proposals in accordance with SJTPO's published criteria; and

WHEREAS, the top three firms were interviewed in accordance with the Brooks Act; and

WHEREAS, the Consultant Selection Committee recommends Urban Engineers, Inc. in association with T&M Associates, and with Richard Grubb & Associates, Inc., Imperial Traffic & Data Collection, and KMA Consulting Engineers, Inc. serving as the Disadvantaged Business Enterprise (DBE) firms; and

WHEREAS, the SJTPO TAC, at their July 10, 2023 meeting, endorsed the recommendation of the Consultant Selection Committee and the selection of Urban Engineers, Inc. as the Consultant for the Local Safety Program Design Assistance Technical Study at a total project cost of \$2,365,682.40; and

WHEREAS, the project work will be funded through the NJDOT-administered Highway Safety Improvement Program, and is identified as Task 24/405 within SJTPO's FY 2024 UPWP; and

WHEREAS, a separate Task Order and authorization will be initiated for each project, initially for Preliminary Engineering services and then modified later to include Final Design Services.

NOW THEREFORE BE IT RESOLVED, that the Policy Board of the South Jersey Transportation Planning Organization hereby approves the above selection for the Local Safety

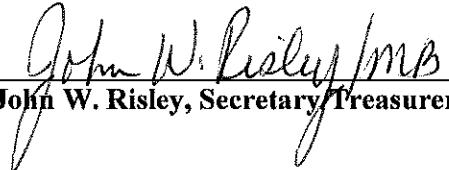
Program Design Assistance Technical Study, with a maximum fee of \$2,365,682.40 and 27.14 percent DBE participation; and

BE IT FURTHER RESOLVED, that the Policy Board authorizes the Executive Director to execute the scope of work and cost modifications to the original contract amount, provided that funding is available and such modifications have been approved by the SJTPO and NJDOT.

BE IT FURTHER RESOLVED, that the Policy Board requests that the South Jersey Transportation Authority execute the appropriate contractual arrangements with the consultant on behalf of the SJTPO.

Certification

I hereby certify that the foregoing is a correct and true copy of a resolution adopted by the Policy Board of the South Jersey Transportation Planning Organization at its meeting of July 24, 2023.



John W. Risley, Secretary/Treasurer