

## Polk Transportation Planning Organization Consultant Services Authorization (CSA)

<b>Firm</b>	AECOM Technical Services, Inc.
<b>Master Agreement No.</b>	TPO-20-1009-01
<b>CSA No.</b>	TPO-20-1009-01-12
<b>Project Name</b>	2025 Sidewalk Inventory and Improvement
<b>Project Description</b>	Evaluate existing sidewalk infrastructure, identify gaps, develop prioritized improvement recommendations.
<b>Project Exhibits and Attachments</b>	Exhibit "A" – Scope of Services Exhibit "B" – Fee Schedule (Master Agreement) Exhibit "C" – Reimbursable Cost Schedule Exhibit "D" – Insurance Documents
<b>Duration (in days)</b>	Six months from the Notice to Proceed
<b>Compensation</b>	Not to exceed \$49,998
<b>Special Contract Conditions</b>	See Scope of Services for details
<b>Insurance Requirements</b>	Professional Liability
<b>Liquidated Damages</b>	See Master Agreement No. TPO-20-1009-01
<b>Budget Source/Availability</b>	Polk TPO's Adopted FY 2024/25 – 2025/26 Unified Planning Work Program (UPWP) Task 3.2 FHWA funds

IN WITNESS WHEREOF, the parties hereto have executed this CSA on this 28th day of August 2025.

ATTEST:

POLK TRANSPORTATION PLANNING  
ORGANIZATION:

\_\_\_\_\_  
Ryan Kordek, TPO Director

\_\_\_\_\_  
Commissioner Trish Pfeiffer  
TPO Chairwoman

Approved by the TPO Attorney as to  
Form and legal sufficiency:

\_\_\_\_\_  
Heather Bryan, TPO Attorney

ATTEST:

\_\_\_\_\_  
AECOM Technical Services, Inc.

\_\_\_\_\_  
Corporate Secretary

\_\_\_\_\_  
Authorized Corporate Officer

SEAL

\_\_\_\_\_  
Printed Name and Title

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## **SCOPE OF SERVICES**

### **SIDEWALK INVENTORY AND IMPROVEMENT**

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#### **Introduction**

The Polk Transportation Planning Organization (TPO) has established a performance target in its 2040 Long Range Transportation Plan to achieve 100% sidewalk coverage within one mile of all public elementary, middle, and high schools in Polk County. This initiative supports the TPO's broader objective of enhancing livable communities and ensuring equitable mobility for all residents. To advance this goal, the TPO seeks consultant services to evaluate existing sidewalk infrastructure, identify gaps, and develop prioritized improvement recommendations.

#### **Description of Services**

##### **Task 1. Project Initiation and Data Collection**

- Conduct a kickoff meeting with TPO staff to confirm project scope, schedule, and deliverables.
- Collect and review existing GIS data, school locations, and relevant planning documents

##### **Task 2. Sidewalk Inventory Using Remote Sensing and Machine Learning**

AECOM will apply contemporary remote sensing techniques and machine learning (ML) methodologies to delineate and map sidewalks across Polk County. This automated approach reduces the need for extensive field data collection while ensuring a comprehensive and cost-effective inventory.

#### ***Data Availability:***

Polk County has 0.5-ft spatial resolution color infrared (CIR) and RGB aerial imagery from 2023, provided by FDOT. The imagery will be acquired in .tif format and stored on a secure cloud environment (e.g., Microsoft Azure or Google Cloud) or an on-premise server, based on file size and processing needs.

#### ***Methodology Overview:***

##### **1. Aerial Imagery Acquisition:**

Download and store the 2023 CIR and RGB aerial imagery on a suitable platform.

##### **2. Training/Testing Data Generation:**

Hand-digitize representative sidewalk polygons under varying conditions (e.g., shadow, tree cover). Training data may be refined iteratively during model development.

### **3. Image Segmentation and Feature Extraction:**

Segment imagery into image objects at multiple scales and extract predictive variables such as mean pixel value, standard deviation, GLCM texture, etc.

### **4. Model Development:**

- a) Analyze predictor distributions and correlations
- b) Compare classification algorithms (e.g., CNNs, SVMs, decision trees, semantic segmentation)
- c) Tune hyperparameters for top-performing models
- d) Conduct k-fold cross-validation and compute accuracy metrics (OA, Kappa, Producer's/User's Accuracy)
- e) Perform ensemble analysis (if applicable) to strengthen predictions and generate uncertainty maps

### **5. QA/QC and Manual Edits:**

Review and correct erroneous classifications using uncertainty metrics. Manually delineate missing sidewalks in areas obscured by trees, shadows, or buildings. Areas too uncertain for interpretation will be flagged.

### **6. Final Data Preparation:**

Deliver a geodatabase containing polyline centerlines of all detected sidewalks, with an attribute field indicating QA/QC status or flagged uncertainty.

### **Key Assumptions:**

- Sidewalks are paved with linear features between 3 and 15 feet wide, located within the public right-of-way or within 50 feet of it.
- The publicly owned area is defined as the land outside parcel boundaries per Polk County Property Appraiser data ([link](#)).
- Areas beyond a 100-foot buffer from public land will be masked out to optimize processing.
- Crosswalks, paved shoulders, and buried/overgrown sidewalks (with less than 3 feet visible) will be excluded.
- AECOM's ML model is proprietary; however, all required outputs will be provided for implementation, QA, and integration.

## **Task 3. Gap Analysis and Prioritization**

- Identify sidewalk gaps within one mile of each public school
- Develop a prioritization framework based on student population, connectivity and crash data
- Select the top twenty schools with the most critical sidewalk needs

#### **Task 4. Planning-level Improvement Recommendations**

- Develop conceptual sidewalk improvement recommendations for each of the twenty prioritized schools.
- Each recommendation will be suitable for future project scoping, grant applications, or inclusion in the TPO's Transportation Improvement Program (TIP).
- Deliverables may include proposed segment locations, estimated lengths, and planning-level cost estimates.

#### **Task 5. Final Report**

- Prepare a comprehensive report detailing the project's methodology, analysis results, prioritization process, and planning recommendations.
- Report will be delivered in both PDF and Word format.

#### **Task 6. Meetings and Field Reviews**

- Kickoff Meeting: to confirm scope, schedule, and data needs.
- Monthly Progress Meetings: virtual or in-person check-ins with TPO staff.
- Field Reviews: as needed to validate sidewalk conditions or verify remote sensing results.

#### **Timeline**

The project will be completed within 6 months from the notice to proceed. A detailed project schedule will be developed during Task 1 and will include key milestones for data acquisition, analysis, draft deliverables, and final reporting.

#### **Deliverables**

##### **1. Geospatial Sidewalk Inventory**

- A **countywide** polyline feature class representing sidewalk centerlines, derived from ML classification and manual QA/QC.
- The inventory will include **all sidewalks within Polk County**, covering the entire roadway network including the RND network and other public roadways, as visible in the aerial imagery.
- Attributes to include flagged uncertainty areas.
- Format: ESRI File Geodatabase (GDB) and Shapefile (SHP).

##### **2. Sidewalk Gap Analysis Around Schools**

- GIS layer and tabular summary identifying sidewalk coverage and gaps **within a 1-mile buffer of each public school** in Polk County.

- This analysis will be based on the countywide sidewalk inventory developed in Deliverable 1.
- Coverage statistics per school, with flags for schools below target.

### **3. Prioritization of Top Twenty Schools**

- Ranked list of 20 schools with the most critical sidewalk deficiencies.
- Accompanied by justification tables summarizing key prioritization metrics.

### **4. Conceptual Improvement Recommendations**

- GIS shapefiles and maps showing proposed sidewalk segments near each priority school.
- Planning-level table including:
  - School name
  - Recommended segment locations and lengths
  - Estimated construction cost
  - Planning notes (e.g., ROW constraints, uncertainty)

### **5. Final Report**

- Full summary of methods, findings, prioritization, and recommendations.
- Delivered in both PDF and Word format.

## **Proposed Project Hours and Fee**

See Appendix below for proposed project hours and fee.

## Appendix - Proposed Project Hours and Fee

## EXHIBIT B 1

[illegible]

AECOM for FY 2025-26

**EXHIBIT "B"  
PROFESSIONAL SERVICES FEE SCHEDULE**

Polk TPO 20-1000-01 Amendment 1

Polk TPO

	<u>Range of Direct Labor Rates</u>		<u>Range of Hourly Billing Rates</u>	
Senior Program Specialist/Principal	\$80.00	\$160.00	\$223.20	\$446.40
Project Manager	\$50.00	\$110.00	\$138.60	\$308.90
Chief Engineer	\$70.00	\$135.00	\$186.30	\$376.66
Senior Engineer	\$60.00	\$100.00	\$167.40	\$279.00
Engineer	\$35.00	\$65.00	\$97.65	\$181.35
Engineering Technician	\$20.00	\$60.00	\$55.80	\$167.40
Chief Planner	\$65.00	\$115.00	\$181.35	\$320.85
Senior Planner	\$50.00	\$85.00	\$139.50	\$237.15
Project Planner	\$35.00	\$55.00	\$97.65	\$163.45
Planner	\$25.00	\$45.00	\$69.75	\$125.55
Community Outreach Specialist	\$30.00	\$55.00	\$83.70	\$163.45
Senior Landscape Architect	\$55.00	\$95.00	\$153.45	\$265.05
Landscape Architect	\$35.00	\$65.00	\$97.65	\$153.45
Senior Architect	\$55.00	\$95.00	\$153.45	\$265.05
Architect	\$35.00	\$65.00	\$97.65	\$181.35
Chief Geologist	\$40.00	\$70.00	\$111.60	\$185.30
Geologist	\$30.00	\$45.00	\$83.70	\$125.65
Utility Coordinator	\$40.00	\$75.00	\$111.60	\$209.25
Scientist	\$50.00	\$75.00	\$139.50	\$209.25
Environmental Specialist	\$30.00	\$55.00	\$83.70	\$153.45
GIS Analyst	\$20.00	\$60.00	\$55.80	\$167.40
Graphic Design/Creative Imaging	\$30.00	\$75.00	\$83.70	\$209.25
Document Production Specialist	\$25.00	\$50.00	\$69.75	\$139.50
Administration and Clerical	\$20.00	\$40.00	\$55.80	\$111.60

**Fran McAskill**  
**Director**  
**Procurement Division**



330 West Church Street  
P.O. Box 9005, Drawer AS05  
Bartow, Florida 33831-9005  
Phone: (863) 534-6757  
Fax: (863) 534-6789  
www.polk-county.net

**EXHIBIT C**

**Board of County Commissioners**

**REIMBURSABLE COST SCHEDULE**

1. **Reproduction Cost**
  - A. **Regular Copying**

	Single Side	Double Sided
8 ½ x 11 (black & white).....	\$ 0.15/page	\$ 0.25/sheet
8 ½ x 11 (color).....	\$ 0.30/page	\$ 0.40/sheet
8 ½ x 14 (black & white).....	\$ 0.15/page	\$ 0.25/sheet
8 ½ x 14 (color).....	\$ 0.30/page	\$ 0.40/sheet
11 x 17 (black & white).....	\$ 0.25/page	\$ 0.35/sheet
11 x 17 (color).....	\$ 0.40/page	\$ 0.50/sheet
9 ½ x 24 Single Side Only.....	\$ 1.00/page	
17 x 22 Single Side Only.....	\$ 2.00/page	
18 x 24 Single Side Only.....	\$ 2.00/page	
24 x 36 Single Side Only.....	\$ 3.00/page	
30 x 30 Single Side Only.....	\$ 5.00/page	
32 x 34 Single Side Only.....	\$ 5.00/page	
Other sizes-per square inch.....	\$ 0.03/page	
Compact Digital Disk .....	\$ 6.00/disk	
  - B. **Blueprint Copy**..... \$10.00/page
2. **Subcontractor Services** Actual Costs
3. **Special Consultants** Actual costs
4. **Computer Services** Non-reimbursable
5. **Travel Expenses** In accordance with Chapter 112.061, F.S.;  
and further defined in the Polk County Employee Handbook.
6. **Postage, Fed Express, UPS** Actual Costs
7. **Pre-approved Equipment**  
(includes purchase and rental of equipment used in project) Actual Costs



## EXHIBIT D



# CERTIFICATE OF LIABILITY INSURANCE

 DATE (MM/DD/YYYY)  
 04/01/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Marsh Risk & Insurance Services CA License #0437153 633 W. Fifth Street, Suite 1200 Los Angeles, CA 90071 Attn: LosAngeles.CertRequest@Marsh.Com CN101348554-STND-GAUE-25-26		<b>CONTACT</b> NAME: Marsh J.U.S. Operations PHONE: 888-986-4664 (A/C, N/A, Ext): E-MAIL: LosAngeles.CertRequest@marsh.com ADDRESS:		<b>FAX</b> (A/C, N/A, No): 212-948-0533	
<b>INSURED</b> AECOM AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Suite 700 Tampa, FL 33607		<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>	
12 2026		INSURER A: ACE American Insurance Company		22667	
		INSURER B: N/A		N/A	
		INSURER C: Illinois Union Insurance Co		27960	
		INSURER D:			
		INSURER E:			
		INSURER F:			

## COVERAGES

## CERTIFICATE NUMBER:

LOS-002761004-15

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFF. DATE (MM/DD/YYYY)	POLICY EXP. DATE (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	HDO G48971714	04/01/2025	04/01/2026	EACH OCCURRENCE \$ 3,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 3,000,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 3,000,000 GENERAL AGGREGATE \$ 3,000,000 PRODUCTS - COM/OP AGG \$ 3,000,000
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	ISA H11370494	04/01/2025	04/01/2026	COMBINED SINGLE LIMIT (Ea accident) \$ 3,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY <input type="checkbox"/> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NM) If yes, describe under DESCRIPTION OF OPERATIONS below	WLR C72792300 (AOS)	04/01/2025	04/01/2026	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 3,000,000 E.L. DISEASE - EA EMPLOYEE \$ 3,000,000 E.L. DISEASE - POLICY LIMIT \$ 3,000,000
C	<input type="checkbox"/> ARCHITECTS & ENG. <input type="checkbox"/> PROFESSIONAL LIAB.	EON G21654693 005	04/01/2025	04/01/2026	Per Claim/Agg 2,000,000 Defense Included

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 Re: AECOM Project No.: 04191899.2025. Client Ref #: Planning Support Services Contract TPO-20-1009.

Polk Transportation Planning Organization, the County, and the Florida Department of Transportation are named as additional insured for GL & AL coverages, but only as respects work performed by or on behalf of the named insured and where required by written contract. Waiver of Subrogation is applicable where required by written contract with respect to GL and WC. —See Additional Page—

## CERTIFICATE HOLDER

 Polk Transportation Planning  
 Organization (TPO)  
 330 W. Church St  
 Bartow, FL 33830

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Marsh Risk & Insurance Services*

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AGENCY CUSTOMER ID: CN101348564

LOC #: Los Angeles



## ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Marsh Risk & Insurance Services	NAMED INSURED AECOM AECOM Technical Services, Inc. 7650 West Courtney Campbell Causeway Suite 700 Tampa, FL 33607
POLICY NUMBER	
CARRIER	NAIC CODE
EFFECTIVE DATE:	

### ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Contractual Liability is included in the General Liability coverage. Severability Of Interest/Cross Liability is Included for General Liability coverage. XCU is Included for General Liability coverage.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

### COMMERCIAL GENERAL LIABILITY COVERAGE PART

#### SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
Any Owner, Lessee or Contractor whom you have agreed to include as an additional insured under a written contract, provided such contract was executed prior to the date of loss.	All locations where you are performing ongoing operations for such additional insured pursuant to any such written contract.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:**

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

**C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we

will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
Any person or organization whom you have agreed to include as an additional insured under a written contract, provided such contract was executed prior to the date of loss	All locations where you perform work for such additional insured pursuant to any such written contract.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

**B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
  2. Available under the applicable limits of insurance;
- whichever is less.

This endorsement shall not increase the applicable limits of insurance.