Mt. Adams Slope Stabilization System
Maintenance, Inspection, and Monitoring
Two Phase, Scope of Services

Project Identification: HAM-Mt. Adams Inspection FY 27-29 - PID 116645

Consultant: _____
Project Manager: _____
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PHASE 1

This agreement will be entered into for a period of three years beginning in July 2026. Maintenance, Inspection, and Monitoring will begin in September 2026. Inspection and Monitoring will be divided into separate tasks as outlined in this Scope of Services. Inspections are to be performed in September and March each year. Monitoring of the slope will be performed biannually at both the September and March inspection intervals.

This contract will be for the maintenance, inspection, and monitoring of the Mt. Adams hillside, retaining walls, and monitoring instrumentation. The procedures and frequency for the maintenance, inspection, and monitoring are set forth in the Maintenance, Inspection, and Monitoring Manual, Volume 1, Part II, III, and IV and as amended in this Scope of Services. A copy of Volume 1 is available for download at the following ftp site:

ftp.dot.state.oh.us - /pub/Districts/D08/Programmatics/2026-May/Mt Adams/

Volume 2 of the manual contains equipment information and will be provided by the Ohio Department of Transportation (ODOT) to the selected consultant later.

The anchorage tunnel to be inspected as part of this contract is a confined space controlled by forced air ventilation. Entry into the space is allowed only through compliance with a confined space permit program meeting all applicable State and Federal Regulations. Entry procedures are listed in the Maintenance, Inspection, and Monitoring Manual, Volume 1, Section 4. There have been no reports of hazardous atmospheric conditions since the original construction of the anchorage tunnel.

The following table details the inspections that will need to be completed as part of this contract.

Table 1: - Mt. Adams Inspection Activities				
INSPECTION AREA	**INSPECTION TASKS**	**DESCRIPTION**	**MINIMUM QUALIFICATIONS OF INSPECTOR**	**FREQUENCY OF WORK PERFORMED**
Buttress Fill Area	2.1 - GROUND SURFACE INSPECTION 2.2 - DRAINAGE FACILITY INSPECTION	Visual inspection of the ground surface in the buttress fill area including the physical conditions of Van Meter and Monastery street pavements; inspection of gutters, catch basins and other drainage facilities located within the buttress fill area (This will include flow estimates of drain discharges)	The lead inspector shall be a registered Professional Engineer in the State of Ohio.	Yearly during the September inspection period.
Cylinder Pile Wall	3.1 - CONCRETE INSPECTION 3.1.1 - Wall Railing Concrete 3.1.2 - Cap Beam Concrete 3.1.3 – Cast-in-place Facing 3.2- GROUND SURFACE INSPECTION 3.3 - TENDON BEARING ASSEMBLY INSPECTION 3.3.1 - Bearing Plate Contact for Tunnel and Rock Anchor Tendons 3.3.2 - Bearing Assembly Hardware 3.3.3 - Grease Cap Removal and Inspection 3.4 - DRAINAGE FACILITY INSPECTION 3.4.1 - Vertical drains 3.4.2 - Horizontal Drain Discharge at MH 19	Visual inspection of the concrete components that make up the cylinder pile wall; an inspection of the ground surface in the first 25 ft. down slope of the wall; inspection of the bearing plates and bearing assemblies; removal of 5 grease caps for inspection of the tendons; inspection of the vertical and horizontal drainage tiles to verify they are functioning. Document cracks in the cast-in-place facing.	The lead inspector shall be a registered Professional Engineer in the State of Ohio.	Yearly during the September inspection period. Perform Section 3.1.3 inspection following completion of existing project that is installing the new cast-in-place facing.
Anchorage Tunnel	4.1 - INSPECTION OF INSTALLED EQUIPMENT 4.1.1 - Power and Light Check 4.1.2 - Gas Detection System Check 4.1.3 - Ventilation Fan Operation 4.1.4 - Manlift Operation 4.1.5 - Safety Equipment 4.1.6 - Communications Equipment 4.1.7 - Misc. Equipment 4.2 - CONCRETE INSPECTION 4.2.1 - Access Shaft Liner Concrete 4.2.2 - Tunnel Liner Concrete/Shotcrete 4.2.3 - Tunnel Invert Concrete 4.2.4 - Anchor Block Concrete 4.3 - TENDON BEARING ASSEMBLY INSPECTION 4.3.1 - Bearing Plate Contact for Tunnel Tendons 4.3.2 - Bearing Assembly Hardware 4.3.3 - Grease Cap Plug Check	Inspect and perform periodic maintenance of the equipment installed (i.e. the manlift, electrical system, gas detection system, and other miscellaneous equipment); inspection of the concrete components of the anchorage tunnel; inspection of the bearing plates and bearing assemblies; removal of 6 or 7 grease caps for inspection of the tendons; check for accumulated water in the grease caps; inspect vertical and sidewall drains in the tunnel and access shaft (This will include flow estimates of drain discharges). Flush the anchorage tunnel floor to remove sediment buildup.	The lead inspector for the concrete, tendon bearing assembly, and drainage facility inspection shall be a registered Professional Engineer in the State of Ohio. The lead inspector for the equipment inspection shall be an Engineering Technician. The manlift shall be inspected and maintained by a Certified Elevator Inspector.	Yearly during the September inspection period or as required by the Manufacturer. Item 4.14 shall be checked monthly. Item 4.3.3 shall be performed during both the Mach and September inspection.

Table 1: - Mt. Adams Inspection Activities - Continued				
INSPECTION AREA	**INSPECTION TASKS**	**DESCRIPTION**	**MINIMUM QUALIFICATIONS**	**FREQUENCY OF WORK**

			OF INSPECTOR	PERFORMED
	4.3.4 - Grease Cap Removal and Inspection 4.4 - DRAINAGE FACILITY INSPECTION 4.4.1 - Vertical and Sidewall drains 4.4.2 - Sidewall Drains in Access Shaft 4.4.3 - Tunnel Discharge Drain at MH 17			
Areas Above and Below Cylinder Pile Wall	5.1 - GROUND SURFACE INSPECTION 5.2 - RETAINING WALL AND RELATED STRUCTURE INSPECTION 5.3 - TIEDOWN REACTION BLOCK INSPECTION 5.4- DRAINAGE FACILITY INSPECTION	Visual inspection of the slopes above and below the pile wall including streets, ground surface and concrete slope protection; visual inspection of 7 retaining walls; visual inspection of elevated structures at Monastery St., Ramp L, and Sixth St.; visual inspection of 50 tiedown anchors and the surrounding ground; inspection of gutters, catch basins and other drainage facilities located within the areas above and below the pile wall	The lead inspector shall be a registered Professional Engineer in the State of Ohio.	Each 6 months with inclinometer readings
River Flood Inspection	6.1 - SLUICE GATE OPERATION 6.2 - POST-FLOOD INSPECTION	Close sluice gate in the event of Ohio River flooding, and monitor water depth in tunnel. Perform Post-Flood Inspection if authorized.	The lead inspector shall be a registered Professional Engineer in the State of Ohio.	As needed based on flood events. Grease and inspect sluice gate during the March and September inspections.

The procedures and frequency for the surveillance monitoring are set forth in the Maintenance, Inspection, and Monitoring Manual, Volume 1, Part III and IV.

The following is a table detailing the surveillance monitoring required as part of this contract:

Table 2 – Mt. Adams Surveillance Monitoring Activities				
Monitoring Area	**Type of Instrumentation**	**Number of Locations**	**Minimum Qualifications of Inspector**	**Inspection Frequency**
Inclinometers	Inclinometer casings	49 installations are present (14 are actively monitored)	The lead inspector shall be an Engineering Technician.	**Every 6 weeks**
Piezometers	Piezometer casings	5 each	The lead inspector shall be an Engineering Technician.	Every 6 months (Sept. and March)
Cylinder Pile Wall and Anchorage Tunnel	CP-31, CP-90 hydraulic load cells	1 load cell each cylinder pile	The lead inspector shall be an Engineering Technician.	Yearly during the March inspection period.
	EDM Cap Beam Target Measurements	74 wall points and 5 reference points form 8 control points.	The lead inspector shall be a registered Professional Surveyor in the State of Ohio.	Yearly during the March inspection period.
	Tunnel anchor block measurements	25 blocks, 6 points each block	The lead inspector shall be an Engineering Technician	Yearly during the March inspection period.
Survey Data (all survey to be an extension of the previous survey activities)	Four Street Survey	Surface Points along four city streets	The lead inspector shall be a registered Professional Surveyor in the State of Ohio.	Yearly during the March inspection period.
	Five Survey Line Measurements	Five Lines between Baum and Kilgour St.	The lead inspector shall be a registered Professional Surveyor in the State of Ohio.	Yearly during the March inspection period.
	Ramp P Measurements	Four extensometer points and two EDM Points	The lead inspector shall be a registered Professional Surveyor in the State of Ohio for the EDM Points. The lead inspector shall be an Engineering Technician for the extensometer measurement.	Yearly during the March inspection period.

Inspection and surveillance monitoring shall be performed at the frequency noted in Tables 1 and 2. The frequency may be modified as necessary to accommodate items of concern that would require more frequent examination. Obtain inspection photos during the inspection and monitoring activities. All photos shall be date stamped and included in the inspection report with the appropriate location referenced.

A single yearly inspection report shall be prepared after the March inspection activities. The single yearly report shall incorporate both the inspection and monitoring activities performed during the prior fiscal year. The single yearly inspection report shall be completed and submitted to the District on July 31 of each fiscal year. The first report is due July 31, 2027. The monitoring data obtained on the 6-month interval shall be submitted to the district immediately after completion (electronically via PDF format) as well as incorporated into the final yearly report. Upload the reports and inclinometer data to the Office of Geotechnical Engineering GEOMS database.

The report shall document the results of the inspection and monitoring activities as detailed in the Maintenance, Inspection, and Monitoring Manual, Volume 1. A Registered Professional Engineer in the State of Ohio shall prepare the report. In order to maintain consistency in the

reports, the consultant shall be required to format the report and include similar documentation to that of the most recent report received and accepted by ODOT. One (1) hard copy as well as an electronic copy (PDF) of the report shall be provided to the district. The electronic PDF document shall be in color such that all color graphics and photographs are presented in color.

Inspection and Monitoring Schedule: The following inspection and monitoring report cycle shall be followed:

July 1 to December 31 - Visual Inspection and Monitoring

The inspection will occur during the month of September. The report for this cycle will in the yearly inspection report due July 31 of following year.

January 1 to June 30 - Visual Inspection and Monitoring

The inspection will occur during the month of March. The report for this cycle will be due by July 31.

Meetings: 3 Total

- a transition meeting at project kick off
- a closeout meeting at the end of the contract)
- a meeting to discuss monitoring upgrades

Repair / Replacement of Equipment: Refer to Maintenance, Inspection, & Monitoring Manual Volume 2 of 2. Repair and replacement will occur as necessary during the contract period.

Additional Requirements:

1) The consultant shall notify the ODOT Project Manager if additional inspections or monitoring are needed other than what is specified in the Scope of Services or any of the Manuals. Upon acceptance of the consultant's recommendation, the district will provide the consultant with a letter of authorization to proceed.

2) Keys will be provided to ODOT by the consultant whenever there is a change in locks.

3) Any routine maintenance items found by the consultant and/or ODOT and miscellaneous equipment costs are the responsibility of the consultant to repair and correct. ODOT authorization is required prior to commencing with any maintenance exceeding $1500 in estimated costs. A separate part of the agreement will be established to fund the routine maintenance items and miscellaneous equipment costs.

4) Recent inspection reports have been posted on the ODOT FTP site.

5) At the end of each contract there will be a transition to the next contract. The consultant will provide ODOT with all documentation and data in electronic format, i.e. CD, spreadsheets, etc. If the prime consultant uses a sub-consultant, the sub will provide any documentation and data in electronic format to the prime consultant.

6) The consultant will include in the cost proposal their Mobilization Costs.

7) Following the September 2026 inspection, the Consultant is to evaluate the current methods of monitoring and develop recommendations, with estimated costs to upgrade monitoring of the Mt. Adams system. Submit the report for monitoring upgrade on or before December 1, 2026. Schedule a meeting with the district following the report to discuss the recommendations, costs and timeline for implementation. All or a portion of the recommended upgrades may be added as a modification to this contract.

8) The Sluice gate shall be operated and lubricated with a multi-purpose, all weather grease every 6 months.

9) The consultant shall have the entire length of the vertical drains and the tunnel drainage line cleaned annually in the late spring. Cleaning shall be accomplished using the recently installed water connection along the length of the tunnel.

10) The consultant shall provide the ODOT Project Manager with a written summary of each Anchorage Tunnel Entry. The summary shall include the dates and times of entry, persons entering the confined space, purpose for entering, any hazards confronted or created during entry operations. The Anchorage Tunnel Entry shall be included in the yearly summary report.

11) The consultant shall create and maintain a record of gas detection levels each time the access shaft is entered. A copy of the record shall be kept in the anchorage tunnel. A copy of the current record shall be included in the annual report.

12) The consultant shall ensure that proper equipment calibration and service schedules recommended by the manufacturer are adhered to for all equipment used in inspection and monitoring of the Mt. Adams Slope Stabilization System.

13) The consultant shall coordinate the annual Manlift certification with the State Department of Commerce.

14) The consultant shall include recommendations for maintenance, repair, and rehabilitation of the Mt. Adams Slope Stability System and appurtenances by an ODOT Let contract. The recommendations shall be submitted along with the Annual Inspection Report. An estimated cost to repair by contract shall be included with the recommendation for each item identified.

15) Consultant shall coordinate backflow prevention testing and report on a yearly basis to Cincinnati Water Works.

General Comments:

The agreement will commence on or near July 1, 2026, and will end August 31, 2030. The only tasks to be completed during July of 2029 will be final report preparation and one closeout/transition meeting.

All aspects of the proposal shall conform to the Specification for Consulting Services. Controlling Board approval is required.

PHASE 2

If authorized, the consultant shall prepare contract plans for the repair of the recommended items made under Phase 1 and Additional Requirements. The preparation of the contract plans will be in accordance with ODOT's Project Development Process. ODOT will provide a detailed scope of service for the completion of this work. The consultant shall submit a price proposal after the receipt of the Detailed Scope of Services from ODOT. A separate project and PID will be generated in the event a set of repair plans becomes necessary.

Completion Date for Phase 2: To Be Determined

ELECTRONIC SUBMITTALS IN PDF FORMAT

The Consultant shall provide an electronic copy of all formal submittals (reports, plans, pertinent correspondence, etc.), PDF format at the time of submission. Provide each report as a text searchable document with appropriate table of content links for each section and figure. The electronic copy is in addition to the requested hard copies and any other form of electronic documents that may be required (OpenRoads files, etc.).

Provide electronic plan submission in accordance with the latest edition of the ODOT Guidelines for Electronic Design Deliverables. Review of plans will be performed by the District utilizing Bluebeam Revu. Design consultant shall utilize Bluebeam Revu in responding to the plan review comments.

CONTRACT

This agreement is between the Consultant and the State.

Contract Parts: The contract between the consultant and the state shall be divided into the following parts:

Part 1: FY27 inspection, maintenance and monitoring in accordance with Phase 1
Part 2: FY28 inspection, maintenance and monitoring in accordance with Phase 1
Part 3: FY29 inspection, maintenance and monitoring in accordance with Phase 1
Part 4: Maintenance and Repair Funds
Part 5: If Authorized, Post Flood Inspection

Software: Word, Excel, OpenRoads, Bluebeam, Estimator

Date Price Proposal Due: _____

The Cost Proposal must comply with the *Requirements for Consultant Price Proposal*; this includes the cost summary spreadsheet.

Submit the Cost Proposal as follows:

Submit **electronically only** the spreadsheet in Excel to lee.matthes@dot.ohio.gov. This includes the Prime Consultant spreadsheet as well as all sub consultants. All spreadsheets will be in the same format. When submitting the cost proposal, outline the hours proposed for each task with a narrative. Include in the narrative an assumption of anticipated direct costs as well as maintenance costs.

Comments

The consultant will be required to immediately communicate any change in project management, cost, scope or schedule to the ODOT Project Manager. The consultant and ODOT will develop a working schedule for the project. The consultant will be required to produce a recovery schedule if the project falls behind the agreed working schedule.

The prime consultant and all sub consultants that will be working within the R/W must apply for a permit in our District Permit Department (513) 933-6577 and the City of Cincinnati DOTE for work within City R/W.

See below link for further information:
ftp.dot.state.oh.us - /pub/Districts/D08/Programmatics/2026-May/Mt Adams/