

**Oregon Department of Transportation**

Delivery & Operations Division/

Engineering & Technical Services

7163 ­‑ Geotechnical Engineering,

Engineering Geology & Hazmat Section

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**DATE: Tuesday, November 14, 2023**

**TO:** Susan C. Ortiz, P.E., G.E.

State Geotechnical Engineer

**FROM:** Sophie Brown, P.E. Phone: 503-509-4538

Senior Retaining Wall Engineer

ODOT Geotechnical Engineering, Engineering Geology and Hazmat

**SUBJECT:** Proposed Revision to Geotechnical Design Manual

To Appedix 16-A, 16-B, 16-C, 16-D and referencing sections

**Problem Statement:**

The GDM developed a very extensive and laborious submittal and review process for preapproval of proprietary retaining walls in 2009; this was an update to a less formal process used in the previous Retaining Structures Manual. The extensive submittal information that is required in the GDM required review times of 6-9 months and significant work by the requesting manufacturers. In several cases, this work did not result in approval of the system. Also, much of the submittal information was already contained in a Highway Innovative Technology Evaluation Center (Hitec) report but, but still needed duplication in the manufacturer’s submittal to ODOT. The Hitec evaluation program was started more than 20 years ago; it has been phased out and is being replaced by the Highway Innovations, Developments, Enhancements and Advancements (IDEA) program developed by FHWA administered by the Geo-Institute of the ASCE.

The goal of the IDEA program is to foster further innovation with proven earth retention system (ERS) technology, encourage the development of new technologies, and improve the methods by which the technologies are delivered to projects on the ground. The IDEA program is intended to provide a consistent framework to propose changes to standard practice that owners may take advantage of by expanding ERS innovations in their projects. Towards this goal, the IDEA Program has been developed to provide guidance for three tasks: 1) the technical evaluation of earth retaining systems; 2) the use of reports of evaluations by transportation agencies; and 3) archiving and maintenance of reports of evaluations. IDEA does not approve or certify submittals, it provides a consistent framework checklist for the review submittal process and evaluates and reports findings for consistency with AASHTO LRFD as well as notes system innovations that are reviewed by subject matter experts. States are then responsible to review the IDEA report findings and determine if supplemental review criteria is needed for their consideration to accept or not accept the wall systems.

**Proposal:**

Remove the current preapproval process in the GDM and prepare a replacement for next year’s update.

**Analysis / Research / Other Supporting Data:**

None

Attached:

* PDF markup indicationg proposed change.

**Geotechnical Engineering, Engineering Geology & HazMat Section Response:**

Accepted for consideration as submitted

Accepted for consideration as noted

Proposal tabled, see Remarks

Proposal not accepted, see Remarks

**Remarks:**

[Enter Remarks here]



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