

CECW-CE

Regulation
No. 1110-1-8170

28 April 2017

Engineering and Design
POLICIES FOR USING THE USACE SURVEY MONUMENT ARCHIVAL AND
RETRIEVAL TOOL (U-SMART) FOR PROJECT CONTROL AND BOUNDARY
MONUMENTATION

1. Purpose. This regulation establishes U.S. Army Corps of Engineers (USACE) policies for storing, managing, and archiving control/boundary points used in surveying for planning, engineering, design, construction, operations and maintenance, and other USACE related mapping activities. Its purpose is to mandate the use of U-SMART to store, manage, and archive all USACE project control points to ensure project control is properly connected to the National Spatial Reference System (NSRS) per ER 1110-2-8160, support USACE continued work with sea level change initiatives, and allow for easy access for others.
2. Applicability. This regulation applies to all USACE commands having responsibility for the planning, engineering and design, operation, maintenance, construction, and related real estate and regulatory functions of military construction, civil works, and environmental restoration projects. This regulation also applies to control/boundary points collected or established by hired-labor personnel, construction contractors, and Architect-Engineer (A-E) contractors.
3. Distribution. This regulation is approved for public release; distribution is unlimited.
4. References.
 - a. ER 1110-2-8160, Policies for Referencing Project Evaluation Grades to Nationwide Vertical Datums
 - b. EM 1110-1-1002, Survey Markers and Monumentation
 - c. EM 1110-2-6056, Standards and Procedures for Referencing Project Evaluation Grades to Nationwide Vertical Datums
5. Policy. U-SMART will be used to store, manage, and archive control points used to establish horizontal and vertical positioning and boundary points for all USACE projects throughout their lifecycle. The use of U-SMART provides consistent documentation for project control points and connection to the NSRS through each phase of a project. The same control points will be used for all project phases (to include Feasibility, Preconstruction Engineering and Design (PED), planning engineering and design, construction and operations and maintenance phases) of a project to provide consistency and continuity unless a strong business case is documented. U-SMART will be used to document the required minimum three project control points with at

least one control point in the NSRS. When linking control to the appropriate project listed in the Corps Project Notebook (CPN), any legacy datum connections and water level gauge ties should also be included. For new projects, coordination with the district Geospatial Data & Systems POC is necessary to include the project in CPN. U-SMART will also be used to store, manage, and archive locations of boundary monuments used to mark USACE real property boundaries. Survey data used to establish these boundary monuments will be associated or linked to these points within U-SMART.

6. Implementation. Newly established or existing monumented control used to provide horizontal and or vertical positions and boundary points will be entered into U-SMART. New control points can be entered via a web interface or pdf form depending on the user's assigned role. See Table 1 for user roles. Existing control/boundary points already in U-SMART can be linked to the respective project. When an existing NSRS point is associated to a USACE project it is labeled as a Primary Project Control Point. Other control points that are part of the same project but are not part of the NSRS are labeled as Local Project Control Points. Once a control point is added to U-SMART, associated survey data used to establish this point or collected relative to this control point should be linked or added under the associated documents tab for the point. All of the control points added to U-SMART are made available to others within the district and to the general public. A District Control Point Manager, as defined in Table 1, may determine that some control points should not be released to the public and can label them in the tool as For Internal Use Only (FIUO). FIUO labeled control points are only available to USACE users after CAC login. Boundary monuments used to mark real property boundaries are added to U-SMART similar to adding project control points. Coordinates associated with boundary monuments are for mapping purposes only. Boundary monuments added to U-SMART must include information in the description field that this monument is used to mark a real property boundary. Survey data, including field notes, used to establish or re-establish these boundary monuments should be attached or linked to these points within U-SMART under the associated documents tab.

- a. User Roles. There are five basic roles in U-SMART as defined in Table 1.

Role	Authentication	Privilege(s)
Public Read-Only	None	Read-Only access to U-SMART
Public Contractor (working for a District)	Username / Password	Submit Control Points (via web interface or bulk load only)
District Control Point Manager	CAC	Submit, Link to a Project, Approve, Archive, Edit, Add, and Delete Control Points
District User Administrator	CAC	Manages users within a district including access for contactors
District Super User	CAC	All District Control Point Manager and User Administrator Functions

Table 1: User Roles for U-SMART

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b. Access to U-SMART. U-SMART is available to users via the public URL: <http://usmart.usace.army.mil>. USACE users can log in with CAC Authentication by selecting the CAC Login button. District users that require access to U-SMART as a District Control Point Manager should coordinate with their District User Administrator or District Super User. See list of District Super Users on the Surveying and Mapping SharePoint site: (<https://cops.usace.army.mil/sites/EC/SM/Lists/USMART%20District%20POCs/AllItems.aspx>). Those just wanting to view and download data do not need to request access. District Super Users and District User Administrator can establish usernames and passwords for contractors to load data directly into U-SMART.

c. For more details on using U-SMART, see the U-SMART User Manual on the Home tab of the U-SMART web site (<http://usmart.usace.army.mil>) and the U-SMART Support section on the Survey and Mapping Community of Practice SharePoint site: <https://cops.usace.army.mil/sites/EC/SM/default.aspx>.

7. Proponency and Responsibility. The HQUSACE proponents for this regulation are the Engineering & Construction Community of Practice (CoP) (CECW-CE), the Operations & Regulatory CoP (CECW-CO), Planning and Policy Division (CECW-P) and Real Estate (CEMP-CR). Program or Project Managers leading designated project delivery teams are responsible for assuring the requirements in this regulation are implemented, periodically assessed, and budgeted.

8. Technical Support. Detailed technical guidance and assistance may be obtained by contacting the U-SMART helpdesk (usmart@usace.army.mil) or from the Army Geospatial Center Survey Engineering and Mapping Technical Center of Expertise.

FOR THE COMMANDER:



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