

CECW-PA

MEMORANDUM FOR MAJOR SUBORDINATE COMMANDS AND DISTRICT
COMMANDS

SUBJECT: Policy Guidance Letter No. 37, Cost Sharing of Interior Drainage Facilities

1. References:

- a. EM 1110-2-1413, 15 January 1987, Hydrologic Analysis of Interior Areas.
- b. Policy Guidance Letter No. 16, 24 May 1989, Clarification of Policy on Relocations at Flood Control Projects.
- c. ER 1105-2-100, 28 December 1990, Planning Guidance.

2. Need for Policy:

a. Review of recent reports and experience with local cooperation agreements (LCA's) demonstrate uncertainty about the classification of interior drainage facilities as construction; lands, easements, rights-of-way, relocations, and dredged material disposal areas (LERRD); or, betterments. Proper classification is critical because of the obligation to provide project sponsors with comprehensive cost sharing and crediting information as the basis for LCA's.

b. Specific areas of concern are as follows:

- (1) Reference 1b has been erroneously interpreted as requiring classification of all interior drainage facilities as LERRD.
- (2) Adequate information is often not available in report documents for making a clear distinction between features needed for the local storm drainage system and features needed for flood control.
- (3) Cost sharing and crediting implications appear to be influencing the scope of interior drainage facilities, and their classification as construction or LERRD.

3. Purpose:

The purpose of this guidance is to supplement reference 1b with definitions of interior drainage features, and to provide more explicit guidance on the classification of facilities as construction, LERRD or betterments. This guidance will be incorporated into ER 1105-2-100.

4. Definitions:

The following definitions are intended to provide a background describing the "minimum" facilities concept. Use of the minimum facilities concept (covered in reference 1a) is required for interior drainage analyses. This approach should help in defining the separation between features that are LERRD and non-Federal responsibilities, from cost shared construction facilities.

a. Interior Areas: An interior area is the area protected from direct riverine, lake or tidal flooding, by levees, floodwalls, dunes, or seawalls. The separation

between interior and exterior areas provided by such structures is referred to as the line-of-protection.

b. Interior Drainage: Although line-of-protection projects reduce flooding from exterior sources, they may also aggravate existing drainage problems resulting from rainfall or snowmelt runoff impacting the interior area. Interior drainage is normally passed through the line-of-protection by gravity outlets when the interior water levels are higher than water levels of the exterior (gravity conditions). When exterior water levels are higher than the interior outlets (blocked gravity conditions), the interior drainage must be stored and/or diverted and/or pumped over or through the line-of-protection. Under blocked gravity conditions, local storm drainage systems (in pipes or drainage ways) will no longer function and the runoff will reach the line-of-protection as overland flow. Interior drainage analyses are complex because the drainage may involve a combination of storm water, overland, and sanitary flows.

c. Minimum Facilities: The minimum facilities concept is the basis for interior drainage facility planning. Minimum interior drainage facilities are defined as the measures required to provide interior drainage relief such that during low exterior stages (gravity conditions), the local storm drainage system will function essentially as it did without the line-of-protection in Place to accommodate the flows from the storm water system design storm. Minimum facilities may also include higher storm water design standards than accommodated by the local storm water system if these higher standards are mandated by validly promulgated Federal, state or local regulations. If, for example, a community has to modify an existing storm water system to meet current State standards, the minimum facilities for the line-of protection project should accommodate the current standard.

d. Residual Interior Flooding: With the line-of-protection project in place, interior flooding will occur when storm events exceed the minimum facility under both gravity and blocked conditions. Interior drainage analyses must examine residual interior flooding. Measures to alleviate interior flooding may be recommended as integral elements of the basic line-of-protection project, when incrementally justified by flood damage reduction benefits. Selection of the appropriate solution must be based on maximizing project net benefits. Measures to solve residual interior flooding may include larger capacity outlets, diversion structures, pressure conduits, excavated detention storage, ponding areas, pumping plants and nonstructural solutions.

e. Locally Preferred Plan: Where a project sponsor requests interior drainage features which differ from the Federally-supportable plan, as described in the preceding subparagraphs, such features may be included as the locally preferred plan. The sponsor may want increased pumping capacity in lieu of added LER for a ponding area, or other facilities based upon development goals other than national economic development. Elements of a locally preferred plan are

sometimes described as “betterments.” Paragraph 5-16d of reference 1c provides further guidance.

5. Cost Sharing Policy:

a. Interior Drainage Facilities: Cost sharing of interior drainage facilities must be established independent of design considerations. All costs of minimum facilities as described herein, as well as incrementally justified facilities to solve residual flooding are part of the total project cost. Total project costs are then subdivided into construction costs to be shared between the Federal government and non-Federal sponsor; and, LERRD costs which are assigned to the non-Federal sponsor, and credited toward the sponsors’ share of total project costs. If there is a locally preferred plan (element), resulting in incremental costs which are greater than those associated with the justified and recommended plan, all of the incremental costs are entirely non-Federal, not part of the total project cost, and not creditable to the non-Federal share of project costs.

b. Relocations: Relocations are a non-Federal responsibility under the LERRD requirements, in accord with the Water Resources Development Act of 1986 (WRDA 86). Classification of modifications/ alterations of existing facilities for storm water or sanitary flows as “relocations” requires a finding that all of the following conditions are met: (1) the project-caused impact to the existing system, or any part thereof, rises to the level of a taking under the Fifth Amendment; (2) the owner of the system has a legal right under the Fifth Amendment for just compensation in real property relating to the ongoing operation of the system; (3) the system is publicly owned either by the sponsor or a third party public entity; and (4) it is necessary to continue the operation of the system for public health and/or safety reasons. When all four criteria are met, just compensation is generally provided through the provision of a substitute facility with all costs assigned to the local sponsor. If one or more of the above criteria are not met, the modification is not a relocation and the costs, if otherwise justified, are assigned as construction, with any LERRD for the modification assigned to the non-Federal sponsor.

c. Combined Facilities: Interior drainage facilities are to be designed in the most cost efficient manner, using appropriate engineering, economic, and environmental criteria. There may be efficiencies in a combined solution to handle relocations, minimum facilities, residual interior flooding and items which may be part of the locally preferred plan. Costs of combined facilities must be apportioned on a fair share basis, using flow volumes or discharges or other appropriate criteria. Reports must document the basis used to apportion the costs of combined facilities. The costs of combined facilities are part of the total project cost, except for any costs assigned to locally preferred plans (betterments), which are entirely nonfederal. Total project costs are then assigned as construction to be shared between the Federal government and non-Federal interests, or as LERRD which are non-Federal responsibilities.

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