Regional Categorical Permission Alteration Description – 23. Trails, Roads, and Ramps

The Regional Categorical Permission covers the installation, modification, and replacement of access ramps, roads, trails, and associated paving, lighting, signage, and so forth within the federal project easement. In preparation for construction of roads or trails, the levee crown should not be excavated beyond minimal stripping. The stripped crown should be proof rolled to check for imperfections before placing aggregate for the trail or road subbase. If excessive rutting occurs, that part of the trail must be removed and replaced with suitable material from an appropriate borrow location. To facilitate construction, all vegetation must be removed from the levee crown to a width two feet beyond the intended trail or road width. The total area of construction for ramps must not exceed 5 acres and the total length of trails or roads must not exceed 5 miles.

Generally, roads and trails are topped with asphalt, but other surfaces may be acceptable. For roads or trails on the levee crown, the structural section must consist of a minimum of 6 inches of aggregate base beneath 2 inches of asphalt concrete pavement, or equivalent. The crown must have a minimum 2 percent transverse slope to drain surface water away from the levee crown. Water must not be allowed to pond at or near the levee.

Ramps, roads, and trails should resist levee loading or heave and be cost-effective to maintain. They should be appropriate for all intended uses by bicyclists, pedestrians, people in wheelchairs, maintenance, flood-fighting vehicles, and so forth. They must be able to withstand the weight of the heaviest piece of flood-fighting, maintenance, or operation equipment expected to be used on the levee.

Pavement must not cover or conceal any structures necessary for operation or maintenance of the federal project (e.g., survey monuments, valves, relief wells). If covering these components is unavoidable, approved casings must be used to allow access.

Ramps that extend from the levee toe to the levee crown should be keyed into the existing levee to create a continuous well-integrated soil mass. Ramps must be designed to drain water away from the levee embankment. All areas that are keyed in should match the slope of the embankment and consist of approved material compacted to 95 percent of the maximum density at moistures between 2 percent less than (-2%) and 3 percent more than (+3%) optimum moisture content obtained from ASTM D698 (the USACE preferred method), or, alternately, 90 percent of the maximum density at moistures between 2 percent less than (-2%) and 3 percent more than (+3%) of optimum moisture content obtained from ASTM D1557. Loose-lift thickness should be limited to 6 inches for all work on the levee.

Regional Categorical Permission Alteration Checklist – 23. Trails, Roads, and Ramps

Note: The following checklist is intended for planning purposes only, and includes information that USACE reviewers look for when considering a Section 408 request for trails, roads and ramps under the Regional Categorical Permission. To be reviewed under the Regional Categorical Permission, the proposed project must adhere to all requirements of the Regional Categorical Permission, including the full alteration description (see previous page). The plans and narrative project description should reflect this information.

1.	☐ New Construction ☐ Replacement ☐ Modification ☐ Authorize Existing
2.	If excessive rutting occurs, that part of the trail will be removed and replaced with suitable material from an appropriate borrow location: Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
3.	All vegetation will be removed from the levee crown to a width two feet beyond the intended trail/road width: Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
4.	Maximum total area of construction for ramps is 5 acres: Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
5.	Maximum total length of trails or roads is 5 miles: Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
6.	Any trails/roads/ramps on the levee crown? Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
7.	Any work within the levee crown? Yes ☐ No ☐ • If yes, the structural section of the road or trail will consist of a minimum of six inches of aggregate base beneath two inches of asphalt concrete pavement, or equivalent: ☐ • If yes, the levee crown will have a minimum 2% transverse slope: ☐ • If yes, the alteration is designed such that water will not pond at or near the levee: ☐ • If yes, ramps must be designed to drain away from the levee embankment: ☐ • If yes, the alteration will be able to withstand the weight of the heaviest piece of operation, maintenance or flood-fighting equipment expected to be used on the levee: ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]
8.	Pavement will not cover or conceal any structures necessary for operation or maintenance of the federal project or, if covering these components is unavoidable, approved casings will be used to allow access: Yes ☐ N/A ☐ Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.] Comment: [Click to enter rationale, explanation, unique situation, etc.]

9.	Hydraulic blockage calculation ≥1%?	Yes ☐	No ☐	N/A ☐
	Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.]			
	Comment: [Click to enter rationale, explanation, unique situation, etc.]			
10.	Hydraulic model used for hydraulic analysis?	Yes ☐	No ☐	N/A ☐
	Reference: [Click to enter document source. Example – plan sheet (p. 4), specs, report.]			
	Comment: [Click to enter rationale, explanation, unique situation, etc.]			

– For Official Use Only below this line –

[*Comment*]

RCP Eligibility Review

Yes	No	Add'l. Info Requested			
☐	☐	☐	Environmental Reviewer:		Date: Click date
☐	☐	☐	Engineering Reviewer:		Date: Click date