

FINDING OF NO SIGNIFICANT IMPACT

NAME OF PROPOSED ACTION: May Branch, Fort Smith, Arkansas.

PURPOSE AND NEED FOR THE PROPOSED ACTION. The Little Rock District, U.S. Army Corps of Engineers proposes to reduce flood damages along May Branch in Fort Smith, Arkansas. The need for additional channel capacity or some other type of flood reduction measures along May Branch has been evident since the construction of the Fort Smith Levee and Floodwall including the P Street Pump Station in 1951.

ALTERNATIVES. The following alternatives were evaluated in detail in the attached Environmental Assessment (EA):

Alternative Alignments: A1, A2, B1, B2, C1, C2, D1, and D2. Six downstream and two upstream alignments were developed (route cost shown in parenthesis). The upstream and downstream alignments were combined to make 12 alternatives. Upstream alignments were D1 (\$2,520,000) and D2 (\$2,680,000). Downstream, the six alignments were A1 (\$10,990,000), A2 (\$10,950,000), B1 (\$11,430,000), B2 (\$10,290,000), C1 (\$10,090,000), and C2 (\$14,220,000). All 12 alignments were assumed to have the same flow capacity characteristics and channel bottom widths. Costs were estimated for those quantities that would be different for each alignment. Thus, the 12 alignments would equally alleviate the flooding problems with the reestablishment of a channel that also would provide some minor increase in environmental quality. All the plan alignments have few environmental impacts with most being either minor or temporary over the no build alternative. Alignment C1 at the lowest differential cost of \$10,090,000 and alignment D1 at a lowest differential cost of \$2,520,000 were combined to make the chosen alignment.

Route C1/D1 had the lowest cost, the least number of relocations, and the fewest environmental impacts to make it the chosen route. The C1/D1 alignment extends from the Arkansas River to Clayton Expressway through the Fort Smith Levee and thence north and east to roughly parallel North P Street following a path to 13th Street. It continues to the east along the north side of Martin Luther King Park, crosses May Avenue, and continues along the north side of the Arkhola plant, where it turns south. It crosses North O Street and continues a southward path following the existing storm sewer alignment to Park Avenue.

Alternative Channel Widths: C-10, C-50, C-100, C-200, and C-10/C-100: To optimize channel width sizing, additional plans were formulated using the C1/D1 alignment. The final plans were formulated: C-10, C-50, C-100, and C-200 to maintain generally the 10-, 50-, 100-, and 200-year flood within channel. These plans incorporated the flow capacity of the existing P Street Storm Drain from Short L Street to the P Street pump station. Each of these plans was economically justified. The recommended plan is a combination plan using the C-100 sizing for the first two downstream reaches that extend upstream to Midland Avenue. The upstream reaches assumed the Plan C-10 sizing upstream to Park Avenue.

Plan C-100/C-10's culvert through the levee and the first railroad spur are sized at 2-10x10-foot boxes. The culverts through the next set of railroad lines are five 10x10-foot boxes. The channel has a maximum bottom width of 24 at its downstream end. The channel depths are 9 feet at Grand; at O Street, it is 14 feet deep; at 6th Street, it is approximately 16 feet deep; and at the levee, it is around 17 feet deep. Bridges are planned at Clayton Expressway, 6th Street, and the Arkhola plant. The channel is concrete lined with vertical sides for 405 feet between the Arkhola plant and the hill behind in Reach Three. In the upstream most 140 feet of Reach Three and for another 1,060 feet into Reach Four, the channel is concrete lined with 2H: 1V sides slopes. The remaining channel side slopes are 3H: 1V with 2 feet of riprap of varying heights. The slope above the riprap is turfed. The five railroad crossings would use culverts, as would the six road crossings at Midland Blvd, Greenwood Ave, N. O Street, Grand Ave, Kinkead Ave, and Park Ave.

No Action: Under this alternative, frequent flooding will continue to cause appreciable damage along May Branch. Street intersections would act as detention basins after curb and drop inlets have reached capacity, and excess runoff would flow between buildings and across low-lying lands along North P Street. A storm event greater than a 10-year event would exceed the capacity of the storm sewer system. The Fort Smith Levee/Floodwall with the P Street pump station would protect lower portions of the basin from high stages on the Arkansas River. When runoff exceeds the pumps' capacity, the excess could overflow the limited capacity of the sump area.

During the planning process, an array of alternatives was considered. Some of these alternatives were eliminated for further consideration. These included nonstructural measures such as flood proofing measures and relocations. Because of insufficient flood warning times, flood-proofing measures would not be practicable. The acceptable nonstructural measure has already been accomplished by the city and the Federal Emergency Management Agency; thus, this alternative was not pursued further.

Structural measures initially considered early in the process included detention ponds, parallel storm sewer, additional pump capacity, and relief openings through the levee and railroad tracks with a connecting channel. The flood protection offered by the detention basins was found to be negligible and the plan was not considered further. The parallel storm sewer would be more costly than an open channel and was not considered further. The changed hydrology and hydraulics analysis for the feasibility phase negated the need for additional pump capacity. The concept for the relief-opening plan was the basis for the channel plans formulated.

ANTICIPATED ENVIRONMENTAL IMPACTS:

Consideration of the effects disclosed in the EA, and a finding that they are not significant, is necessary in order to prepare a FONSI. This determination of significance is required by 40 CFR 1508.13. Additionally, 40 CFR 1508.27 defines significance as it relates to consideration of environmental effects of a direct, indirect or cumulative nature.

Criteria that must be considered in making this finding are addressed below, in terms of both context and intensity. The significance of both short and long-term effects must be viewed in several contexts: society as a whole (human, national); the affected region; the affected interests; and the locality. The context for this determination is primarily local, as shown in Figure 1 of the EA. The context for this action is not highly significant geographically, nor is it controversial in any significant way. Consideration of intensity refers to the magnitude and intensity of impact, where impacts may be both beneficial and adverse. Within this context, the magnitude and intensity of impacts resulting from this decision are not significant. The determination for each impact topic is listed below.

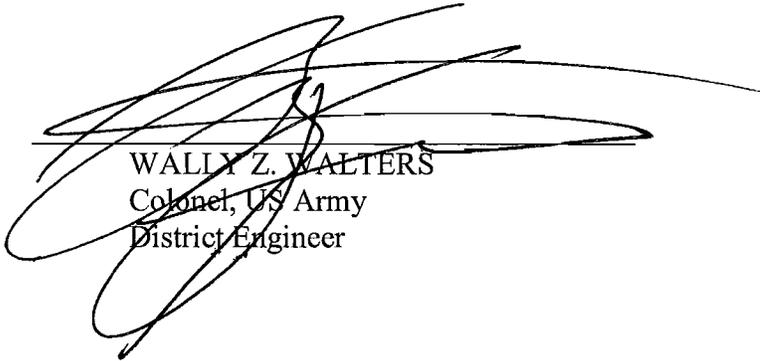
1. **The degree to which the action results in both beneficial and adverse effects. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.** The EA indicates that the Proposed Action would have beneficial effects such as reduction in flood damages and a minimal increase in environmental quality as compared to the No Action alternative that would have no impacts. There would be adverse construction activity related effects from implementation of Alternative C1/D1, alignment and C-100/C-10, channel width, (Proposed Action) or all the other alignment and channel width alternatives but these would be minor in intensity and construction related only. The Proposed Action will have the least number of building relocations, 15. The other 11 Alternative alignments combinations have building relocations that range in number from 17 to 25.
2. **The degree to which the action affects public health or safety.** The Proposed Action will protect public health by alleviating flooding problems by construction of a channel. No adverse effects to public health or safety will result from the Proposed Action. Under existing conditions, no hazardous materials are identified on the project site. Implementing the Proposed Action would not create hazardous conditions affecting public health or safety.
3. **The degree to which the action affects unique characteristics of the potentially affected area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** No such unique characteristics or resources have been identified in the project area of the Proposed Action. Alternative Routes A1 and A2 would disturb up to 6 acres of wetlands. Alternative Routes B1, B2, C1, C2, D1, and D2 would disturb no acres of wetlands.
4. **The degree to which effects on the quality of the human environment are likely to be highly controversial.** The project will benefit the public therefore the Little Rock District, Corps of Engineers does not regard this activity as controversial, and the public response to the EA was favorable.

5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The Proposed Action has a low degree of uncertainty involving the impacts of this action. The reestablishment of an open channel will engender short-term construction related impacts. It will alleviate flood damages and minimally improve biological processes in the longer term.
6. **The degree to which the action may establish a precedent for future actions with significant impacts.** The action is unlikely to cause future actions with significant impacts. The flood plain is considered to be fully developed and the open areas created with the FEMA buyout of flooded properties preclude any development not compatible as an open area.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** Cumulative effects analyses for the physical and biological resources that would potentially be affected are present in the EA. Cumulative effects on these resources focus on disturbed soils and habitat relating to construction activities involved in the Proposed Action. The Proposed Action would not result in any cumulative impacts concerning any reasonably foreseeable action in the project area.
8. **The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.** No significant impacts would occur with the Proposed Action or any of the other Alternatives.
9. **The degree to which the action may adversely affect an endangered or threatened species or its critical habitat.** No endangered or threatened species are in the project area.
10. **Whether the action threatens a violation of Federal, State or local law or requirements imposed for the protection of the environment.** No such violations will occur. Permits from other jurisdictional agencies such as NPDES permits from the Arkansas Department of Environmental Quality are necessary and will be obtained prior to any construction activities. Continued coordination with regulatory agencies will be ongoing to ensure compliance with all Federal, state, regional, and local regulations and guidelines

CONCLUSIONS:

The impacts identified in the prepared EA have been thoroughly discussed and assessed. No impacts identified in the EA would cause any significant adverse effects to the human environment. Therefore, due to the analysis presented in the EA and comments received from a 30-day public review period that began on July 28, 2006, and ended on September 6, 2006, it is my decision that the preparation of an Environmental Impact Statement (EIS) as required by the National Environmental Policy Act (NEPA) is unwarranted and a "Finding of No Significant Impact" (FONSI) is appropriate. The signing of this document indicates the Corps final decision of the proposed action as it relates to NEPA. The EA and FONSI will be held on file in the Planning and Environmental Office for future reference. Consultation with regulatory agencies will be ongoing to ensure compliance with all Federal, state, regional and local regulations and guidelines.

20 Sept 2006
Date



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