

**Kansas Citys, Missouri and Kansas  
Flood Risk Management Feasibility Study**

**Engineering Appendix to the Final Feasibility Report**

**Chapter A-8**

**ACCESS ROADS**

**CID-KS UNIT**



**CHAPTER 8  
ACCESS ROADS  
CID-KS UNIT**

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**CHAPTER 8  
ACCESS ROADS  
CID-KS UNIT**

**A-8.1 ACCESS ASSOCIATED WITH EXISTING LEVEE**

The Central Industrial District Unit is a highly developed commercial area with a significant road network. Contractor access into the area from the east or west is primarily via I-670, I-70, Central Avenue, or Kansas Avenue. Access from North and South primarily depends on City street access. Five bridges may be used to cross the Kansas River to get to the CID-KS levee unit. These include I-635, Highway 169, I-670, Central Avenue Bridge, and James Street Bridge. Bridge load limits and clearances will be included during design of plans and specifications.

Direct access to the site will be via the existing city street network. The main artery running east-west is I-670 via exit 1B. Kaw Valley Drainage District (KVDD) will provide access during and after construction to the levee at the landward ramps listed in Table 1: Construction Access Points

**Table 1: Construction Access Points**

<b>Access Point</b>	<b>Station</b>	<b>Roads</b>	<b>Private/Public</b>	<b>Direction of travel once access to levee is gained</b>
A	17+00	via Market Street	Public	Downstream/Upstream
B	27+00	via N James Street	Public	Upstream
C	57+00	via Central Ave	Public	Downstream/Upstream
D	78+00	via I-670 Right of Way/Union Pacific Railroad	Private	Upstream
E	133+00	Right of Way Via W 25 <sup>th</sup> Street	Public/Private	Upstream

Public access to these ramps is available over city streets and roadways except where noted. Coordination with the KVDD has shown that each access is maintained and usable for the project. The borrow area is located approximately 12 miles to the west of the site and is accessible via the public road system. Temporary work area easements will be needed for location of construction trailers, contractor staging areas, and may also be needed for temporary construction roads.

Temporary aggregate construction roads will be constructed along the levee. These roads have little value for permanent use after construction is completed. They will be removed and replaced by permanent parking or seeded for turf establishment. Use of construction roads as permanent access to the levee is not viable since the current access is via existing ramps, which will be modified to accommodate any raise.

It is assumed that the city will require a road repair bond from the contractor in the amount of \$500,000. The bond will be held by the city to use for any damages caused by the contractor's construction equipment. It is also assumed a full-time street sweeper will be required during the earth hauling operations. Inspections of the contractor's access route will be conducted prior to the start of construction and periodically during construction to determine the extent of any damage caused by the contractor. Costs are included in the estimate (see Cost Engineering chapter of the appendix) for cleaning and repair of existing roads.

## A-8.2 TURNOUTS

According to EM 1110-2-1913, turnouts should be provided on one-lane access roads on levees at intervals of approximately 2500 feet, provided there are no ramps within the reach. All reaches have an existing ramp less than or approximately 2500 feet except between approximate stations 27+00 to 57+00. However, a staging area will be constructed at station 40+00, which could double a turnout. Considering where all the access ramps are located, the requirement for turnouts has been met.

## A-8.3 PRIVATE ROADS AND ACCESS

When the levee is raised landward of the existing centerline, some private roads and access will be impacted. These roads and access will need to be reestablished if real estate interests are present. Table 2: Access Impacts and Action, lists the known impacts and proposed remedies.

**Table 2: Access Impacts and Action**

Access Point	Station	Roads	Impact	Action
A	17+00	via Market Street	None	None
B	27+00	via N James Street	None	None
C	57+00	via Central Ave	Removed during construction	Reestablish access to public street
D	78+00	via I-670 Right of Way/Union Pacific Railroad Right of Way	Removed during construction	Reestablish access
E	133+00	Via W 25 <sup>th</sup> Street	None	None

## A-8.4 HAUL ROUTES

Haul Routes most likely taken by the contractor are listed in Table 3, Haul Routes. Routes coincide with access points listed in Table 1. All haul routes are via local, state, or federal highway systems. There are no hospitals, schools, or places of worship immediately along these projected haul routes. There is one place of worship and two schools that are located approximately 1, 2, and 3 blocks, respectively, located off the projected haul route.

**Table 3: Haul Routes**

<b>Access Point</b>	<b>Station</b>	<b>Constructed Portion of Levee</b>	<b>Distance from borrow to Access Point (miles)</b>	<b>Approx Time from borrow to Access Point (minutes)</b>
A	17+00	From station 17+00 to station 0+00	12.4	25
		From station 17+00 to station 27+00	12.4	25
B	27+00	From station 27+00 to station 57+00	11.7	23
C	57+00	From station 57+00 to station 78+00	11.2	23
		From station 57+00 to station 27+00	11.2	23
D	78+00	From station 78+00 to station ????	11.7	24