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Appendix B
Soil Map Units in Project Corridor

Exhibit B-1

Summary of Soil Map Units in Project Corridor

Map Unit Symbol	Soil Map Unit	Counties	Parent Material	Soil Area (Acres)
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded	Mc, Fu	loess over a paleosol formed in till	271.7
259D2	Assumption silt loam, 10 to 18 percent slopes, eroded	Mc	loess over a paleosol formed in till	56.9
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded	Mc, Fu	paleosol formed in till	72.3
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded	Mc, Fu	paleosol formed in till	265.5
3070A	Beaucoup silty clay loam, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	58.0
3334A	Birds silt loam, 0 to 2 percent slopes, frequently flooded	Mc	alluvium	13.3
1334A	Birds silt loam, undrained, 0 to 2 percent slopes, frequently flooded	Mc	alluvium	244.6
3634A	Blyton silt loam, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	172.3
134C2	Camden silt loam, 5 to 10 percent slopes, eroded	Fu	loess over outwash	232.0
134D2	Camden silt loam, 10 to 18 percent slopes, eroded	Fu	loess over outwash	124.3
134E2	Camden silt loam, 18 to 25 percent slopes, eroded	Fu	loess over outwash	114.5
257	Clarksdale silt loam	Pe	loess	1621.0
257A	Clarksdale silt loam, 0 to 2 percent slopes	Mc, Fu	loess	3080.5
257B	Clarksdale silt loam, 2 to 5 percent slopes	Mc	loess	417.2
9257A	Clarksdale silt loam, terrace, 0 to 2 percent slopes	Fu	loess	24.0
45	Denny silt loam	Pe	loess	8.5
45A	Denny silt loam, 0 to 2 percent slopes	Mc, Fu	loess	260.1
239	Dorchester Silt Loam	Pe	calcareous alluvium	25.3
386B	Downs silt loam, 1 to 5 percent slopes	Pe	loess	439.4
7075B	Drury silt loam, 2 to 5 percent slopes, rarely flooded	Fu	local silty alluvium	14.2
75C2	Drury silt loam, 5 to 10 percent slopes, eroded	Fu	local silty alluvium	92.4
536	Dumps, mine	Fu		158.4
249A	Edinburg silty clay loam, 0 to 2 percent slopes	Mc	loess	26.1
119C2	Elco silt loam, 5 to 10 percent slopes, eroded	Mc	loess over paleosol formed in till derived from clayey shale	178.7
119D2	Elco silt loam, 8 to 15 percent slopes, eroded	Pe	loess over paleosol formed in till derived from clayey shale	331.6
119D2	Elco silt loam, 10 to 18 percent slopes, eroded	Mc, Fu	loess over paleosol formed in till derived from clayey shale	1176.1
119E	Elco silt loam, 15 to 20 percent slopes	Pe	loess over paleosol formed in till derived from clayey shale	72.1
119E2	Elco silt loam, 18 to 25 percent slopes, eroded	Mc, Fu	loess over paleosol formed in till derived from clayey shale	370.8
567B2	Elkhart silty clay loam, 2 to 5 percent slopes, eroded	Fu, Pe	loess	717.2
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded	Pe	loess	227.0
567C2	Elkhart silt loam, 5 to 10 percent slopes, eroded	Fu	loess	8.6
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	Fu, Pe	loess	320.9
280D2	Fayette silt loam, 10 to 15 percent slopes, eroded	Pe	loess	49.3
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded	Mc, Fu	loess	689.5
280E	Fayette silt loam, 15 to 30 percent slopes	Pe	loess	100.0
280E2	Fayette silt loam, 18 to 25 percent slopes, eroded	Fu	loess	154.4
280F	Fayette silt loam, 18 to 35 percent slopes	Mc	loess	34.2
6C2	Fishhook silt loam, 5 to 10 percent slopes, eroded	Mc	loess over paleosol formed in till	76.5
6D2	Fishhook silt loam, 10 to 18 percent slopes, eroded	Mc	loess over paleosol formed in till	38.0
675B	Greenbush silt loam, 2 to 5 percent slopes	Mc, Fu	loess	2104.4
8D	Hickory silt loam, 8 to 15 percent slopes	Pe	till/loess	31.2
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded	Mc, Fu	till/loess	725.4
8E	Hickory silt loam, 15 to 30 percent slopes	Pe	till/loess	138.8
8E2	Hickory loam, 18 to 25 percent slopes, eroded	Fu	till/loess	2739.7
8F	Hickory silt loam, 18 to 35 percent slopes	Mc	till/loess	643.0
8F	Hickory silt loam, 25 to 35 percent slopes	Fu	till/loess	7520.7
8G	Hickory loam, 30 to 50 percent slopes	Pe	till/loess	17.0
8G	Hickory silt loam, 35 to 60 percent slopes	Mc, Fu	till/loess	2015.0
3077A	Huntsville silt loam, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	226.4
43	Ipava silt loam	Pe	loess	4865.7
43A	Ipava silt loam, 0 to 2 percent slopes	Mc, Fu	loess	22004.6
43B	Ipava silt loam, 2 to 5 percent slopes	Mc	loess	657.5
43B2	Ipava silt loam, 2 to 5 percent slopes, eroded	Mc	loess	1250.6

Exhibit B-1

Summary of Soil Map Units in Project Corridor

Map Unit Symbol	Soil Map Unit	Counties	Parent Material	Soil Area (Acres)
470C2	Keller silt loam, 5 to 10 percent slopes, eroded	Mc	loess over paleosol formed in till	89.9
242A	Kendall silt loam, 0 to 2 percent slopes	Fu	loess over outwash	6.1
17	Keomah silt loam	Pe	loess	893.2
17A	Keomah silt loam, 0 to 2 percent slopes	Mc, Fu	loess	3361.8
17B	Keomah silt loam, 2 to 5 percent slopes	Mc, Fu	loess	70.6
9017A	Keomah silt loam, terrace, 0 to 2 percent slopes	Mc, Fu	loess	73.5
9017B	Keomah silt loam, terrace, 2 to 5 percent slopes	Mc	loess	5.5
451	Lawson silt loam	Pe	alluvium	8.8
3451A	Lawson silt loam, 0 to 2 percent slopes, frequently flooded	Mc, Fu	alluvium	2524.6
871B	Lenzburg silty loam, 1 to 7 percent slopes	Fu	mine spoil or earthly fill	4133.4
871D	Lenzburg silty clay loam, 7 to 20 percent slopes	Fu	mine spoil or earthly fill	2362.5
871G	Lenzburg silty clay loam, 20 to 60 percent slopes	Fu	mine spoil or earthly fill	3880.3
876B	Lenzwheel silt loam, 1 to 7 percent slopes	Fu	mine spoil or earthly fill	1795.7
876D	Lenzwheel silty clay loam, 7 to 20 percent slopes, eroded	Fu	mine spoil or earthly fill	1277.4
876G	Lenzwheel silty clay loam, 20 to 60 percent slopes	Fu	mine spoil or earthly fill	995.8
7081A	Littleton silt loam, 0 to 2 percent slopes, rarely flooded	Fu	alluvium	17.6
549E	Marseilles silt loam, 15 to 30 percent slopes	Pe	loess over residuum weathered from clayey shale	112.9
549F	Marseilles silt loam, 18 to 35 percent slopes	Fu	loess over residuum weathered from clayey shale	583.2
549G	Marseilles silt loam, 30 to 60 percent slopes	Pe	loess over residuum weathered from clayey shale	344.5
549G	Marseilles silt loam, 35 to 60 percent slopes	Fu	loess over residuum weathered from clayey shale	513.9
570B	Martinsville loam, 2 to 5 percent slopes	Fu	outwash	28.0
630C3	Navlys silty clay loam, 5 to 10 percent slopes, severely eroded	Fu	loess	566.6
3415A	Orion silt loam, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	383.2
8415A	Orion silt loam, 0 to 2 percent slopes, occasionally flooded	Fu	alluvium	15.4
2802B	Orthents-urban land complex, undulating	Pe	loamy earth spread deposits	85.0
801B	Orthents, silty, undulating	Fu	mine spoil or earthly fill	290.6
802B	Orthents loamy, undulating	Mc	mine spoil or earthly fill	36.2
86B	Osco silt loam, 2 to 5 percent slopes	Mc, Fu	loess	4550.0
86B2	Osco silt loam, 2 to 5 percent slopes, eroded	Mc	loess	1878.5
86C2	Osco silt loam, 5 to 10 percent slopes, eroded	Mc, Fu	loess	1979.8
406	Paxico silt loam, frequently flooded, brief duration	Pe	alluvium	21.2
865	Pits, gravel	Fu		29.4
199B	Plano silt loam, 2 to 5 percent slopes	Fu	loess over outwash	8.5
7430B	Raddle silt loam, 2 to 5 percent slopes, rarely flooded	Fu	local silty alluvium	132.9
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded	Mc, Fu	alluvium	75.1
872B	Rapatee silty clay loam, 2 to 5 percent slopes	Fu	mine spoil or earthly fill	543.7
279B	Rozetta silt loam, 1 to 5 percent slopes	Pe	loess	1028.8
279B	Rozetta silt loam, 2 to 5 percent slopes	Mc, Fu	loess	10373.1
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded	Mc, Fu, Pe	loess	9544.1
279C3	Rozetta silty clay loam, 5 to 10 percent slopes, severely eroded	Fu	loess	145.0
279D2	Rozetta silt loam, 10 to 18 percent slopes, eroded	Mc	loess	116.6
9279B	Rozetta silt loam, terrace, 0 to 2 percent slopes	Fu	loess	206.4
9279B	Rozetta silt loam, terrace, 2 to 5 percent slopes	Mc	loess	104.7
9279C	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded	Fu	loess	208.2
9279C2	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded	Mc	loess	18.1
16	Rushville silt loam	Pe	loess	17.0
16A	Rushville silt loam, 0 to 2 percent slopes	Fu	loess	22.3
68	Sable silty clay loam	Pe	loess	2227.2
68A	Sable silty clay loam, 0 to 2 percent slopes	Mc, Fu	loess	9516.8
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	Mc, Fu	alluvium	498.8
274E2	Seaton silt loam, 18 to 25 percent slopes, eroded	Fu	loess	0.9
274F	Seaton silt loam, 18 to 35 percent slopes	Fu	loess	21.5
274G	Seaton silt loam, 35 to 60 percent slopes	Fu	loess	7.8

Exhibit B-1

Summary of Soil Map Units in Project Corridor

Map Unit Symbol	Soil Map Unit	Counties	Parent Material	Soil Area (Acres)
243B	St. Charles silt loam, 2 to 5 percent slopes	Fu	loess over outwash	16.0
19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded	Pe	loess	929.3
19D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded	Pe	loess	236.5
19D3	Sylvan silty clay loam, 10 to 18 percent slopes, severely eroded	Fu	loess	211.6
19E3	Sylvan silty clay loam, 15 to 20 percent slopes, severely eroded	Pe	loess	19.0
36B	Tama silt loam, 1 to 5 percent slopes	Pe	loess	362.1
36C2	Tama silt loam, 5 to 10 percent slopes, eroded	Pe	loess	120.2
3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	49.3
3404A	Titus silty clay, 0 to 2 percent slopes, frequently flooded	Fu	alluvium	36.0
533	Urban land	Pe		40.8
605D2	Ursa silt loam, 10 to 18 percent slopes, eroded	Mc	paleosol developed in till	29.1
3333A	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	Mc, Fu	alluvium	1749.5
W	Water	Mc, Fu, Pe		3263.9
7037B	Worthen silt loam, 2 to 5 percent slopes, rarely flooded	Fu	silty valley side alluvium	19.0

Pe - Peoria County, Fu - Fulton County, Mc - McDonough County

Source: Data developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, and was obtained from the Soil Data Mart, April 2006.

Exhibit B-2

Ten Most Prevalent Soil Map Units in Project Corridor

43A - Ipava silt loam (22,004.6 acres), is a gently sloping (0 to 2 percent) somewhat poorly-drained soil on broad ridges in uplands. Ipava silt loam soils, as they pertain to the study area, are found throughout Fulton and McDonough Counties along drainage ways in the uplands.

279B - Rozetta silt loam (10,373.1 acres), is a gently to moderately sloping (2 to 5 percent) moderately well-drained soil developed on loess deposits on broad ridgetops and side slopes in the upland areas, and in some stream terraces. Rozetta Silt Loam soils, as they pertain to the project study area, are generally found in McDonough and Fulton counties along the margins of drainageways in upland areas.

279C2 - Rozetta silt loam (9,544.1 acres), is a gently to moderately sloping (5 to 10 percent) moderately well-drained soil developed on loess deposits on broad ridgetops and side slopes in the upland areas, and in some stream terraces. Rozetta Silt Loam soils, as they pertain to the project study area, are generally found in all three counties along the margins of drainageways in upland areas.

68A - Sable silty clay loam (9,516.8 acres), is a gently sloping (0 to 2 percent) poorly drained soil developed on loess on broad flats and in shallow depressions and drainageways in uplands areas. Sable Silty Clay Loam soils in the project study area are found in low-lying areas in McDonough and Fulton Counties, but mostly in McDonough County

8F - Hickory silt loam (7,520.7 acres), is a strongly sloping (25 to 35 percent) well drained soil developed in loamy glacial till or loess on side slopes in uplands and often in wooded areas. Hickory Silt Loam (8F) soils, as they pertain to the project study area, are found mostly in Fulton County along drainageways in upland areas.

43 - Ipava silt loam (4,865.7 acres), is a nearly level, somewhat poorly-drained soil on broad ridges in uplands. Individual areas are irregular in shape and range from 3 to 2,000 acres in size. Ipava silt loam (43) soils, as they pertain to the study area, are found throughout Peoria County along drainage ways in the uplands.

86B - Osco silt loam (4,550 acres), is a gently to moderately sloping (2 to 5 percent) well-drained soil developed on loess deposits of knolls and side slopes along drainageways. Osco Silt Loam soils in the project area are found primarily in Fulton and McDonough counties.

871B - Lenzburg silty loam (4,133.4 acres), is a gently to moderately sloping (1 to 7 percent) well drained soil developed in cast material from strip-mining. Lenzburg Silty Clay Loam soils, as they pertain to the project study area found in Fulton County in surface-mined areas nearby Cuba and Canton.

871G - Lenzburg silty clay loam (3,880.3), is a strongly sloping (20 to 60 percent) well drained soil developed in cast material from strip-mining. Lenzburg Silty Clay Loam soils, as they pertain to the project study area found in Fulton County in surface-mined areas nearby Cuba and Canton.

17A - Keomah silt loam (3,361.8 acres), is a gently sloping (0 to 2 percent) somewhat poorly drained soil formed in loess on broad ridgetops in the uplands. Keomah Silt Loam soils, as they pertain to the project study area, are found mostly in McDonough and Fulton Counties along drainageways.

Source: Data developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, and was obtained from the Soil Data Mart, April 2006.

Exhibit B-3

Highly Erodible Soils in the Project Corridor

Soil Map Unit Name		Soil Area (Acres)
567C2	Elkhart silt loam, 5 to 10 percent slopes, eroded	8.6
8G	Hickory loam, 30 to 50 percent slopes	17.0
9279C2	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded	18.1
19E3	Sylvan silty clay loam, 15 to 20 percent slopes, severely eroded	19.0
605D2	Ursa silt loam, 10 to 18 percent slopes, eroded	29.1
8D	Hickory silt loam, 8 to 15 percent slopes	31.2
280F	Fayette silt loam, 18 to 35 percent slopes	34.2
6D2	Fishhook silt loam, 10 to 18 percent slopes, eroded	38.0
280D2	Fayette silt loam, 10 to 15 percent slopes, eroded	49.3
119E	Elco silt loam, 15 to 20 percent slopes	72.1
7C3	Atlas silty clay loam, 5 to 10 percent slopes, severely eroded	72.3
6C2	Fishhook silt loam, 5 to 10 percent slopes, eroded	76.5
470C2	Keller silt loam, 5 to 10 percent slopes, eroded	89.9
75C2	Drury silt loam, 5 to 10 percent slopes, eroded	92.4
280E	Fayette silt loam, 15 to 30 percent slopes	100.0
549E	Marseilles silt loam, 15 to 30 percent slopes	112.9
279D2	Rozetta silt loam, 10 to 18 percent slopes, eroded	116.6
36C2	Tama silt loam, 5 to 10 percent slopes, eroded	120.2
8E	Hickory silt loam, 15 to 30 percent slopes	138.8
279C3	Rozetta silty clay loam, 5 to 10 percent slopes, severely eroded	145.0
119C2	Elco silt loam, 5 to 10 percent slopes, eroded	178.7
9279C	Rozetta silt loam, terrace, 5 to 10 percent slopes, eroded	208.2
19D3	Sylvan silty clay loam, 10 to 18 percent slopes, severely eroded	211.6
567C2	Elkhart silty clay loam, 5 to 10 percent slopes, eroded	227.0
134C2	Camden silt loam, 5 to 10 percent slopes, eroded	232.0
19D3	Sylvan silty clay loam, 10 to 15 percent slopes, severely eroded	236.5
7D3	Atlas silty clay loam, 10 to 18 percent slopes, severely eroded	265.5
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded	271.7
280C2	Fayette silt loam, 5 to 10 percent slopes, eroded	320.9
119D2	Elco silt loam, 8 to 15 percent slopes, eroded	331.6
549G	Marseilles silt loam, 30 to 60 percent slopes	344.5
630C3	Navlys silty clay loam, 5 to 10 percent slopes, severely eroded	566.6
8F	Hickory silt loam, 18 to 35 percent slopes	643.0
280D2	Fayette silt loam, 10 to 18 percent slopes, eroded	689.5
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded	725.4
19C3	Sylvan silty clay loam, 5 to 10 percent slopes, severely eroded	929.3
119D2	Elco silt loam, 10 to 18 percent slopes, eroded	1176.1
876D	Lenzwheel silty clay loam, 7 to 20 percent slopes, eroded	1277.4
86C2	Osco silt loam, 5 to 10 percent slopes, eroded	1979.8
871D	Lenzburg silty clay loam, 7 to 20 percent slopes	2362.5
279C2	Rozetta silt loam, 5 to 10 percent slopes, eroded	9544.1

Source: Data developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, and was obtained from the Soil Data Mart, April 2006.

Exhibit B-4

Hydric Soils in the Project Corridor

Soil Map Unit	Name	Soil Area (Acres)
45	Denny silt loam	8.5
199B	Plano silt loam, 2 to 5 percent slopes	8.5
3334A	Birds silt loam, 0 to 2 percent slopes, frequently flooded	13.3
7075B	Drury silt loam, 2 to 5 percent slopes, rarely flooded	14.2
16	Rushville silt loam	17.0
406	Paxico silt loam, frequently flooded, brief duration	21.2
16A	Rushville silt loam, 0 to 2 percent slopes	22.3
239	Dorchester Silt Loam	25.3
249A	Edinburg silty clay loam, 0 to 2 percent slopes	26.1
865	Pits, gravel	29.4
3404A	Titus silty clay, 0 to 2 percent slopes, frequently flooded	36.0
802B	Orthents loamy, undulating	36.2
3284A	Tice silty clay loam, 0 to 2 percent slopes, frequently flooded	49.3
3070A	Beaucoup silty clay loam, 0 to 2 percent slopes, frequently flooded	58.0
3074A	Radford silt loam, 0 to 2 percent slopes, frequently flooded	75.1
1334A	Birds silt loam, undrained, 0 to 2 percent slopes, frequently flooded	244.6
45A	Denny silt loam, 0 to 2 percent slopes	260.1
259C2	Assumption silt loam, 5 to 10 percent slopes, eroded	271.7
36B	Tama silt loam, 1 to 5 percent slopes	362.1
386B	Downs silt loam, 1 to 5 percent slopes	439.4
3107A	Sawmill silty clay loam, 0 to 2 percent slopes, frequently flooded	498.8

Hydric soils were determined by the Natural Resources Conservation Service using specific criteria identified by the National Technical Committee for Hydric Soils (NTCHS). Source: Data developed by the U.S. Department of Agriculture, Natural Resources Conservation Service, and was obtained from the Soil Data Mart, April 2006.