



Pamela Scott. *Capital Engineers: The U.S. Army Corps of Engineers in the Development of Washington, D.C., 1790-2004.* Alexandria: U.S. Army Corps of Engineers, 2005. 306 pp.

Reviewed by Alan H. Lessoff (Department of History, Illinois State University)
Published on H-DC (November, 2006)

Building Managers for the Nation's City

Among its many lessons, the Katrina disaster in New Orleans underscored the oddness of the practice in the United States of assigning civil engineering duties to the Army Corps of Engineers. Surely most national governments have consigned public works to a state civil engineering bureaucracy. The Army Corps' unusual place in the nation's public works is not a manifestation of the militarist tendencies of the twentieth-century United States, but a relic of the hesitant, ambivalent character of the early nineteenth-century federal government. Until the Civil War, West Point offered the only sophisticated engineering training in the United States. Proposals for a national university in Washington, D.C., repeatedly ran aground upon anticentrist attitudes. Nothing like the French Ecole Polytechnique was conceivable in the United States. President Thomas Jefferson supported the 1802 establishment of the Corps of Engineers with the understanding that this elite corps would, in addition to its military tasks, carry out peacetime civil engineering tasks. Over the next half-century, the Corps' responsibilities spread from fortifications and mapmaking to harbors, navigation, and flood control, as the New Orleans calamity reminded us.

Engineer officers acquired technical and administrative duties in Washington in fits and starts until the 1850s. The Corps' influence expanded more rapidly after the 1852 commencement of the Washington Aqueduct, the city's first large-scale public works project overseen by army engineers. Over the next quarter-century, Congress and the president progressively placed all of Washington's civil engineering under bureaus managed

by the Corps. Congress finished this concentration of oversight in 1878, when the bill that made permanent the District of Columbia Board of Commissioners assigned supervision of the capital's streets, sewers, and other municipal works to an active-duty Engineer Commissioner. For the next half-century, Corps of Engineers officers exerted comprehensive control over the District of Columbia's public buildings, parks, and other public places; the city's bridges, riverfront, and landfill projects; the city's municipal engineering; utilities and buildings regulation; and street extension and subdivision processes. Given the notorious fragmentation of municipal authority in the United States, Washington may have had the country's most coherent system of public works and environmental management. Without a doubt, Washington represents the most significant example of federal management of a city's physical environment, as well as the key example in the modern world of military oversight of a national capital.

Capital Engineers began as an update of a 70-page booklet published in 1979 by the Corps' historical division: *A City for the Nation: The Army Engineers and the Building of Washington, D.C., 1790-1967*, by writer and historian Albert E. Cowdrey. As William C. Baldwin, current director of the Corps' Office of History, notes in his preface, the quarter-century since Cowdrey's publication has seen "the tremendous growth of interest and research in the history of Washington, D.C." (p. ix). Historians can now offer thorough discussion of events, themes, and personalities that Cowdrey could only recount in a suggestive way. Moreover, the fading of sour memories of

the last decades of the discredited Board of Commissioners, combined with the recent rebound of much of the physical city, may allow a more appreciative examination of the city's planners and builders, both civilian and military. Thus, while passages from Cowdrey's book survive here and there, in organization, research, and tone architectural historian Pamela Scott and her collaborators in the Corps' history office have produced a new work, attractively presented, with dozens of photographs, maps, plans, and sidebars.

As Scott notes, much of the idea for a Corps of Engineers with civil as well as military duties came from a 1784 proposal by expatriate French engineer Peter Charles L'Enfant, who envisioned himself as the head of an agency with responsibility, as he wrote, for "all military and civil building, the maintenance of the Roads bridges and Every Kind of work at the public charge" (p. 3). Perpetually insubordinate and disgruntled, L'Enfant hardly offered a role model for a disciplined engineer corps, despite the grandeur and symbolic power of his 1792 plan for Washington. Except for bridge work, Corps involvement in the federal city remained sporadic until 1852, when the unexpected death of the engineer charged with planning Washington's water supply led to the appointment of Montgomery Meigs, at the time a thirty-six-year-old lieutenant. An unforgettable personality, Meigs nurtured the habit of placing engineer officers in charge of Washington's civil engineering projects. Prickly, righteous, and self-promoting, Meigs nevertheless displayed a remarkable combination of unimpeachable rectitude, engineering skill, aesthetic sensibility, and managerial ability in his simultaneous oversight of the Washington Aqueduct, the U.S. Capitol extension, and the extension of the General Post Office. Promoted to U.S. Quartermaster General during the Civil War, Meigs remained a major influence in Washington's civil engineering, public works, and architecture through the 1870s and 1880s, when, as a retired general, he designed and supervised the striking, red brick Pension Building, now the National Building Museum.

The Civil War enhanced the prestige of the entire U.S. military, including the Corps. The war meanwhile discredited Washington's antebellum elites, who, in pro-northern, Unionist eyes, now seemed provincial and unenterprising at best and dangerously pro-southern at worst. Inspired by the notion of a Washington "worthy of the nation"—an attractive, functional capital that could compare favorably with American commercial cities such as New York or Philadelphia and with foreign capitals such as Paris or Berlin—the Reconstruction-

era government turned to the Corps to plan and implement the buildings and infrastructure projects that marked Washington's emergence as a modern city. After a half-dozen years under Interior Department oversight, the Washington Aqueduct reverted to Army Corps control in 1867. That same year, Congress replaced the civilian Commissioner of Public Buildings and Grounds, an office traditionally filled by someone well connected in Washington society, with an Officer in Charge of Public Buildings and Grounds. The Corps would retain day-to-day management of the federal property in Washington until 1933, when the District's federal lands were transferred to the National Park Service.

The first two Public Buildings Officers drawn from the Engineer Corps, Majors Nathaniel Michler (served 1867-71) and Orville E. Babcock (served 1871-77), seemed to justify this reliance, with qualifications. Michler's reports brought together current thinking on the range of infrastructure issues facing Washington. For example, the major first proposed setting aside the Rock Creek valley and surrounding land for a park. Ideas published by Michler for narrowing and paving Washington's broad streets and avenues reappeared in the street-paving and tree-planting program undertaken in 1871-74 by Alexander Shepherd's Board of Public Works. As Ulysses S. Grant's personal secretary and White House manager, Babcock arranged federal cooperation with Shepherd's Territorial government on the momentous Comprehensive Plan of Improvements. Babcock, whose penchant for skullduggery also embroiled him in the Santo Domingo and Whiskey Ring affairs, occupied a central place in the revelations of mismanagement and influence-peddling that brought down the Territorial government in 1874 and that prompted the appointment of federal commissioners, initially on a provisional basis. Yet Babcock's accomplishments, as Scott stresses, were proportionate to his notoriety. His beautification of dozens of neglected squares and triangles owned by the federal government complemented Shepherd's embellishments of the streets.

Babcock's involvement in the Shepherd scandal did not dissuade the Congressional Republican leadership and the Grant Administration from relying on another politically connected engineer, Lieutenant Richard L. Hoxie, to manage Washington's municipal engineering after abolition of the Board of Public Works in June 1874. Hoxie proceeded to incur the hostility of congressional Democrats and anti-Grant Republicans by using federally backed bonds to complete unfinished territorial-era projects and to replace Shepherd's slipshod and defective pavements and sewer lines. Even so, congressmen re-

mained persuaded that engineer officers, if permanently given charge of Washington's municipal public works, would not "be burdened with politics" (p. 114). Upon its establishment in 1878, the office of Engineer Commissioner became the fourth distinct Corps-managed bureau dealing with Washington, along with the Public Buildings office, the Aqueduct, and the Washington Engineer District, which oversaw Potomac River improvements, including the reclamation of the 621 acres of riverfront flats between 1882 and 1897 that made possible creation of Potomac Park.

Having traced the growth of Corps oversight of the federal district, Scott provides an impressive review of the engineers' projects in the city through the 1930s, when activities began spinning off to civilian-managed agencies. Scott discusses both the routine operations of the Corps' Washington bureaus and special projects ranging from the Washington Monument and the Library of Congress to the McMillan Reservoir, the Lincoln Memorial, the Arlington Memorial Bridge, the Federal Triangle, and the Pentagon.

By the start of the twentieth century, civilian professionals—civil engineers, architects, landscape designers, city planners, housing and social service experts—were insisting on a greater role in planning, building, and managing Washington. In most instances, as Scott reveals, civilian professionals and military engineers complemented one another with little friction. Yet relations between the professionals and the engineer officers could grow contentious, especially when the civilians premised their assertion of authority on alleged shortcomings in the army engineers' training, knowledge, or aesthetic standards. The episode best known to Washington historians surrounded the often hostile rivalry that pitted the Public Buildings Office under Colonel Theodore Bingham (served 1897-1903) and his immediate successors against the Beaux Arts-inspired architects and landscape designers who served on the McMillan Commission of 1901-02, directed the White House extension of the early twentieth century, and dominated the Commission of Fine Arts after its establishment in 1910.

Before World War I, engineer officers assigned to Washington frequently remained devoted to the nineteenth-century ideal of the unspecialized engineer-architect who was cultivated enough to design structures and competent enough to erect them. After World War I, engineers such as Public Buildings Officer Ulysses S. Grant III (the Civil War hero's grandson) seemed more

accepting of the distinction drawn by architect Charles McKim in 1904. Architects *supervised* projects, McKim suggested, while engineers *superintended* them. Like many of his predecessors, Grant, who was the last Corps engineer to serve as Public Buildings officer for a substantial term (1926-33), had a large personality and obvious talents. Yet he confined his hectoring to contractors on the Arlington Bridge and couples necking in the District's parks. He seems to have worked comfortably in a managerial position alongside architects such as Edward H. Bennett (architectural director of the Federal Triangle) and McKim, Mead, & White (designer of the Arlington Bridge). Grant pushed for creation of the National Capital Park and Planning Commission, in which the Corps was only one interest alongside architects, planners, and Congress.

By the time the last engineer commissioner, General Robert Mathe, ceded authority in 1967, the Corps' role in Washington's governance had shrunk to a relic. The only large-scale municipal works over which the Corps retained control was the Aqueduct, and even that—along with management of the Potomac and Anacostia rivers—fell under the Baltimore Engineer District after the abolition of the separate Washington District in 1961. Relative to its earlier visibility and initiative, the Corps had only a secondary role in Washington's post-World War II battles over urban renewal, freeways, and the subway (Metro). By the late twentieth century, the Corps seemed to have reverted to the sporadic influence it had in Washington before Meigs, with responsibility for assorted public places, such as Arlington Cemetery; for certain military building projects; and for miscellaneous projects such as the Korean War Memorial and the renovation of the Kennedy Center.

Capital Engineers reflects the high standards of the Corps' history office and Scott's huge knowledge of Washington's architectural and planning history. In addition to a clear narrative backed by thorough notes and bibliography, Scott offers useful explanations of specific projects from the Capitol and White House extensions to the Grant Memorial, the Government Printing Office, and the District's many bridges, both extant and destroyed. Specialists should watch for errors of detail. For example, Richard Hoxie never served as Engineer Commissioner. He served as city engineer under the provisional board of commissioners of 1874-78 and then for six years as assistant engineer commissioner under the permanent commission (pp. 73-74, 113-14). The Board of Public Works began the filling of the Washington Canal, which was completed under the Engineer Commission-

ers after 1878 (p. 110).

A more significant problem than these errors is the lack of sustained analysis of the Corps as a municipal engineering agency and as a participant in urban politics and policymaking. While recognizing the “autocratic” nature of Washington’s commission government, informed observers during the Progressive Era such as Frederic Howe believed that the capital enjoyed more systematic and professional management of its public works and services than typical American cities. This book, however, does not delve into what difference the Corps made for Washington’s public works and physical environment. What might civilian engineers have done differently? For the last generation, American urban historians have generally accepted Jon Teaford’s argument that during the late 1800s, municipal engineering and public works management became more professional and gained immunity from erratic political meddling, even in machine-dominated cities. Did the example of the Corps in Washington further the professionalization of public works across the United States or, indeed, influence it in any tangible way? [1]

Nor does *Capital Engineers* confront the anomaly of active-duty military engineers serving as civil governors over the residents of a large American city. From the start, critics of the 1878 government act suggested that assigning an active-duty officer as Engineer Commissioner compounded the error of appointed city government. However well intentioned and gifted, the engineers were still military officers ruling citizens to whom they had no direct accountability. During House of Representatives debate over the 1878 act, Congressman Jacob Cox (R-Ohio) asserted that an army engineer “is unaccustomed to civil administration.... His methods will be different, his ideas of rule and subordination will be different, his relations to his equals and inferiors will not and cannot be those demanded by our political life.”[2] During the ninety years of the position’s existence, individual engineer commissioners showed laudable responsiveness to District residents and sensitivity to local politics. The actions of individuals, however, could not prevent the Corps overall or the Engineer Commissioner in particular from sharing in the sense that became widespread in Washington, especially after World War I, that municipal rule by appointed commissioners was tainted from the start and was becoming creakier and less legitimate by the decade.

Finally, the book touches only in allusive ways upon the racial politics that entangled the Corps at Washing-

ton. To an inescapable extent, the abolition of home rule in 1874-78 and thus the creation of the Engineer Commissioner reflected the collapse of Reconstruction and the nationwide retreat from civil rights. Thereafter, engineer officers engaged in the city’s management were agents of an alliance committed to the exclusion of African Americans from the capital’s municipal governance—whatever their personal feelings were on the matter. Most occupants of the Engineer Commissioner’s office and the Public Buildings office stayed away from explicit support for systematic racism, and some officers were openly favorable to civil rights and black progress. Yet some officers took positive action to accommodate racism. For example, Ulysses S. Grant III, of all people, attempted to segregate the capital’s picnic places and beaches. As the federal contribution to Washington’s municipal budget diminished during the first decades of the twentieth century and as the House’s Committee on the District of Columbia fell under the control of reactionary Southern Democrats with no positive program for the city, Washington’s unelected system became hard to rationalize on financial or good-government grounds, as supporters had done before World War I. Increasingly, the Corps found itself in the position of making a manifestly deplorable system work.

Room still exists, therefore, for an analysis of the Engineers Corps in Washington as an episode in urban politics, public administration, and federal urban policy. Given the Corps’ gradual removal from ongoing responsibility for the federal district, *Capital Engineers* recounts a story that is mostly in the past. As in other American cities and the capitals of other countries, Washington’s public works are now mostly the purview of civilian engineers, planners, and assorted experts and professionals. Yet the Katrina disaster showed that even after three decades of federal retreat from direct involvement with cities, the question of how national institutions such as the Corps of Engineers deal with urban public works and the urban environment remains relevant. As a definitive narrative text and bibliographic resource on the Army Corps in Washington, *Capital Engineers* will serve as a useful tool for urban scholars investigating what the American national state has meant and still means to the country’s cities.

Notes

[1]. Howe quoted in Alan Lessoff, *The Nation and Its City: Politics, “Corruption,” and Progress in Washington, D.C., 1861-1902* (Baltimore: The Johns Hopkins University Press, 1994), 268; Jon Teaford, *The Unheralded*

Triumph: City Government in America, 1870-1900 (Baltimore: The Johns Hopkins University Press, 1984). [2]. Quoted in Lessoff, *The Nation and Its City*, 178-179.

If there is additional discussion of this review, you may access it through the network, at:

<https://networks.h-net.org/h-dc>

Citation: Alan H. Lessoff. Review of Scott, Pamela, *Capital Engineers: The U.S. Army Corps of Engineers in the Development of Washington, D.C., 1790-2004*. H-DC, H-Net Reviews. November, 2006.

URL: <http://www.h-net.org/reviews/showrev.php?id=12587>

Copyright © 2006 by H-Net, all rights reserved. H-Net permits the redistribution and reprinting of this work for nonprofit, educational purposes, with full and accurate attribution to the author, web location, date of publication, originating list, and H-Net: Humanities & Social Sciences Online. For any other proposed use, contact the Reviews editorial staff at hbooks@mail.h-net.msu.edu.