

4.21 Cultural, Historic and Archaeological Resources

4.21.1 Existing Conditions

4.21.1.1 Background

A *Hackensack Meadowlands Archaeological and Historical Sensitivity and Impact Evaluation* completed in 1994 by Grossman and Associates Inc. provided a detailed examination of the cultural, historic, and archaeological resources of the Hackensack Meadowlands as part of the preparation of the Special Area Management Plan Draft Environmental Impact Statement for the Hackensack Meadowlands District (*USEPA and USACE 1995*); (*Grossman and Associates, 1994*). This study has been reviewed and accepted as a cultural resources management tool by several federal and state regulatory agencies, including the New Jersey State Historic Preservation Office (SHPO). These sources formed the basis for further study and verification for a redevelopment project at the Continental Airlines Arena site, and serve as secondary source data for this study as well.

The archaeological record of the area comprises five major periods of cultural history. The Paleo-Indian Period (c. 10,000-8000 BC) is the time of the earliest known human occupation of this area. The Archaic Period (c. 8000-1000 BC) is a period characterized by hunter-gatherer cultures closely attuned to the natural environment and responsive to evolving post-glacial habitats and climate. At the beginning of the Woodland Period (1000 BC-1600 AD), New Jersey's Native Americans began to make earthenware pottery, and later in this period they adopted horticulture, whose introduction made new sources of food available to them. The Contact-Early Historic Period (AD 1600-c.1700) was the time when Native Americans continued to dominate the region, but when extensive contacts between native peoples and European settlers, traders, and travelers occurred. The Post-Contact Period (1700-Present) represents the period of expanding agriculture and economic development in the region.

During the 17th and 18th centuries, the Hackensack Meadowlands were mostly undeveloped. Early colonial settlements grew up on the surrounding higher, better-drained ground. With the establishment of settlements nearby, colonists began to exploit the rivers, creeks, marshes, and swamps of the lowland. Throughout the Colonial period, and continuing well into the nineteenth century, large portions of the Meadowlands served as common lands associated with neighboring towns and villages. Colonists used them for grazing land, hay meadows and woodlots. The regional transportation network was poorly developed, and boats probably provided the principal means of travel. A few trails apparently crossed different sections of the Meadowlands, but these were little more than modest improvements on earlier Native American footpaths.

As the United States became industrialized, the Meadowlands were transformed in the nineteenth and twentieth centuries from undeveloped wetlands to an increasingly complex mosaic of wild lands and altered terrain. Beginning in the early nineteenth century, several roads and railroads

were built across the Meadowlands. Among other effects, the road and railroad embankments modified the flow of water through the wetlands.

Probably the most significant development in this portion of the Meadowlands in the late 18th and early 19th centuries was the eastern extension of the Hamburg and Paterson Turnpike (original segment completed 1809). Built about 1816, the extension of this turnpike road traversed the Meadowlands from northwest to southeast to connect the former terminus at Aquackanonk Landing (Passaic) with Jersey City. Less than two decades later, one of New Jersey's first railroads, the Paterson and Hudson River Rail Road (opened 1832), now NJ TRANSIT's Bergen County Line, was built across the Meadowlands somewhat parallel to and south of the turnpike.

In the early 1850s, the turnpike was succeeded by the Paterson and New York Plank Road (generally known as Paterson Plank Road), which was, like its predecessor, a toll road and which either occupied or closely paralleled the alignment of the old turnpike. At 15 miles in length, the Paterson Plank Road was the longest of several plank roads to be built in New Jersey around the middle of the nineteenth century. Unlike earlier turnpike roads, which were constructed solely of crushed stones, gravel, sand, and earth, plank roads featured a road surface of sawn lumber. Log stringers were laid end to end on various types of fill foundations, including those of earlier turnpikes. Plank decking was then attached to the logs at right angles and covered with a thin layer of gravel to reduce wear. It was soon discovered, however, that even with the protective covering, the planking wore out rapidly, so only a few such roads were constructed, and their surfacing was generally soon converted to more durable materials.

The Hamburg and Paterson Turnpike and its successor, the Paterson Plank Road, were situated within the Meadowlands Railroad and Roadway Improvement Project study area, parallel to a portion of the proposed railroad alignment. Their former location is approximated by the present-day alignment of Paterson Plank Road.

Other modifications to the Meadowlands included schemes dating as far back as the early 1800s to drain them to create agricultural land and, in the early decades of the twentieth century, construction of an extensive system of ditches to control mosquitoes. As the twentieth century progressed, NJ Route 3 and the eastern and western spurs of the NJ Turnpike were constructed on massive earth fills during the 1928, 1949-1950, and 1968-1971 periods, respectively (*NJSEA, 1978*). Diversion of freshwater from the upper reaches of the Hackensack River from the erection of the Oradell Dam in 1922 reduced the influx of fresh water into the estuary. Lowlands were also turned into fill areas to create sites for commercial and industrial facilities, as well as for the disposal of solid wastes.

4.21.1.2 Archaeological Resources

The Meadowlands Sports Complex was examined during the early 1970s for the development of the Sports Complex and construction of Giants Stadium and Meadowlands Racetrack and, later in that decade, for the Brendan Byrne (now Continental Airlines) Arena. In 1972, an EIS for Giants Stadium and the Sports Complex described the site as containing wetlands, streams, ditches,

dikes, woodland, and trash landfills (*Jack McCormick & Associates, 1972*). Portions of the site along Route 20 (known as NJ Route 120 today) contained industrial buildings and parking lots. No specific discussion is provided, however, concerning known archaeological resources or areas of archaeological sensitivity on the tract.

In October 1975, the USACOE completed an EIS for a permit to construct embankment and other facilities along Berry's Creek for the Sports Complex (*USACOE, 1975*). The USACE concluded that there were no registered historic properties or historic landmark sites on the site or in the vicinity of the site. The NJDEP provided comments to the USACOE noting that there were no known locally significant historic sites or structures in the area of the Project. The New Jersey State Archaeologist reported no known archaeological sites in the Project area. At the time that study was conducted, however, cultural resources preservation law, including Section 106 of the National Historic Preservation Act, mandated only that project impacts to historic properties actually listed in the National Register of Historic Places be considered. There was no requirement or standard that *potentially eligible* properties be considered, as there is today.

The Meadowlands Railroad and Roadway Improvement Project study area was studied for cultural resources in 1995 and 1996 as part of the NJ Route 120 Relocation Project proposed by NJDOT at that time. A Stage IA Cultural Resource Investigation to identify archaeological sites and historic buildings and structures that could potentially be affected by the then-proposed project was conducted in 1995 (*LBA 1995a*). This investigation included background research at various libraries and historical repositories, as well as a field reconnaissance survey. The project area was also investigated for cultural resources in October of 2004, including a review of maps and files at the State Historic Preservation Office.

Relying in part on the Grossman and Associates study of the archaeological potential of the Meadowlands (*Grossman and Associates, 1994*), the NJ Route 120 investigation showed that preservation of sites in places such as the current Sports Complex is highly unlikely because of the extent of terrain disturbance required to erect large buildings, parking facilities, and roadway infrastructure (*LBA, 1995*). Moreover, the presence of thick blankets of modern fill and the extent of muck soils of indefinite thickness render available site identification procedures deeply problematic in such settings. The SHPO concurred with the findings of the 1995 study and concluded that no historic properties were present in the NJ Route 120 project area.

4.21.1.3 Historic Architectural Resources

Several historic structures surveys and project studies that include review of historic architectural resources have been completed in the Project study area and vicinity. Sources on historic architectural resources include the Bergen County Historic Sites Survey of 1980-81 and the Hudson County Master Plan, as well as information on file at the NJMC and SHPO. One historic structure has been documented within one mile of the complex. This is the eastbound NJ Route 3 Grace Street Bridge over the Hackensack River (*NJMC, 2003*). The bridge is situated outside the Meadowlands Railroad and Roadway Improvement Project study area.

The Meadowlands Sports Complex, the major architectural/cultural feature in the study area, is located on 739 acres of the Hackensack Meadows in the eastern section of East Rutherford. It occupies a large portion of the land between the Paterson Plank Road at the north, the Hackensack River at the east, NJ Route 3 at the south, and Berry's Creek at the west. The meadowlands are tidal marshlands. Some of the acreage remains in an undeveloped state; however, most of it is developed. There are several lagoons. The complex has three large-scale major structures (racetrack, stadium and arena), and a number of ancillary structures. Construction for the racetrack and stadium was in progress in the spring of 1975. These facilities opened in 1976. Subsequently other structures have been and are being added.

The Meadowlands Racetrack occupies 150 acres and opened on September 1, 1976. It contains a one-mile combination track for both standard and thoroughbred racing. The grandstand has six levels of enclosed seating and open seating, with a total seating capacity of 35,000. The Pegasus Restaurant, added to the grandstand in existing space, was designed by the Grad Partnership and won the NJ Society of Architects award in 1979. Ancillary structures include pari-mutuel betting facilities, 12 barns with stabling capacity for 1,300 horses, five two-story dormitories, and a training track.

The NY Giants Football Stadium, dedicated on October 10, 1976, is a 78,000-seat stadium, oval in plan, primarily suited for football but can be adapted for other events.

The Meadowlands (now Continental Airlines) Arena was built three years later on a 67-acre site east of NJ Route 120. It was a winner of a "Museum Exhibit" classification from the NJ Society of Architects in 1979. The arena is an oblong 475 feet long and 408 feet wide, 110 feet in height with only 80 feet visible above grade level. Its roof trusses span 478 feet.

According to the February 2003 revision of the SHPO National Register listings for Bergen County, none of the aforementioned resources is currently listed in the National or State Registers of Historic Places, nor have any of them been determined eligible for listing (*SHPO 2003*). An earlier study done in 1995 of proposed improvements to NJ Route 120 included a brief review of the potential eligibility of the Meadowlands Sports Complex for the National Register of Historic Places (*LBA, 1995*); however, this study concluded that the Sports Complex was not eligible because of age.

4.21.2 No-Action Alternative

It is anticipated that cultural, historic and archaeological conditions under the No-Action Alternative will be similar to existing conditions.

4.21.3 Preferred Alternative Impacts

Review of SHPO files and secondary source data demonstrates that the proposed Meadowlands Railroad and Roadway Improvement Project study area contains no archaeological or architectural resources that have been listed in or determined eligible for listing in the State or National Registers of Historic Places. The available information also suggests that there are no zones of sensitivity within the project area that are likely to contain unidentified resources. Therefore, the proposed Project would not have any direct impacts on cultural, historic or archaeological resources. Based upon SHPO reviews of previously proposed undertakings in and around the project area, the proposed transportation improvements would have no effect on cultural, historic or archaeological resources. Consultation with the SHPO regarding the Meadowlands Railroad and Roadway Improvement Project is ongoing.

4.21.4 Mitigation

No mitigation is necessary at this time.