

# WASHINGTON NATIONALS BALLPARK

24 POTOMAC AVE SE, WASHINGTON DC 20003



## Project Overview

- Function – A Major League Baseball Ballpark
- Occupancy Team – MLB's The Washington Nationals
- Total project cost – \$611 million
- Size – 1.2 million square feet
- Stadium Seating – 41,000 fans
- Dates of construction – June 2006 through April 2008
- Project delivery method – Fast-tracked design-build

## Project Team

- Owner – DC Sports Commission
- General Contractor – Clark/Hunt/Smoot
- Architects:
  - Exterior – HOK / D & P Architects
  - Interior – Bowie Gridley
  - Landscape – Peter Liu Associates, Inc
- Structural Engineers – Restl/Thronton-Tomasetti
- Mechanical Engineers – ME Engineers
- Electrical Engineers – JVP
- Plumbing Engineers – SIM-G
- Civil Engineers – Delon Hampton & Associates
- Food Service – S3 Consultants
- Code Consultants – Howie Engineers

## Structural System

- Multiple independent systems to shorten construction time
- Concrete Framing - Foundations, Main Concourse, part of the Club Level
- Steel Framing - Club Level and above
- Deep foundation system - 14" Steel H-piles
- Building Envelope - Pre-cast concrete with masonry back-up curtain wall and storefront glazing systems as well as metal panels with masonry back-up
- Roofing systems - Combination of many types including a parapeted built-up roof with scupper and leader drainage, and sheet metal decking with scupper and leader



## Architecture

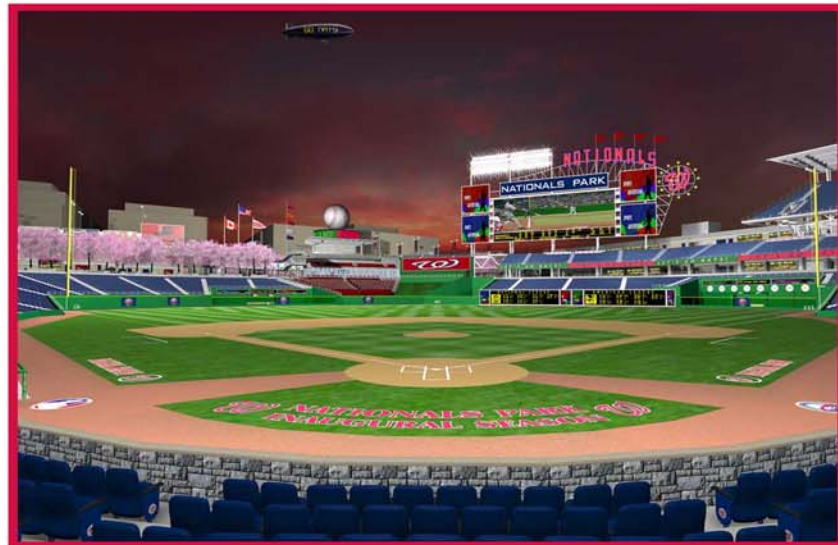
- The ballpark is an open concourse baseball stadium with conditioned premium spaces.
- Major national model codes - International Building Code 2003 (incl. ANSI) supplemented by ADAAG
- LEED Certified

## Mechanical System

- Peak Cooling Load - 2,000 tons
- Peak Loads - (2) 800 ton water cooled chillers
- Off peak loads - (1) 400 ton water cooled chiller
- Air conditioned spaces will have Variable Air Volume Air Handling Units with VAV Boxes

## Electrical System

- 13.2kV conduits feeding transformers
- Step down transformers to 4160 volt
- Unit substations - Dry type transformers rated for 2500/3330kVa, 4, 160 volt. 3-phase delta primary and a 480/277 volt wye secondary
- Transformers feed a 400 amp switchboard rated - 277/480 volt, 3 phase, 4-wire



**MATTHEW T. MOORE | CONSTRUCTION MANAGEMENT**

CPEP: [www.engr.psu.edu/ae/thesis/portfolio/2008/mtm213](http://www.engr.psu.edu/ae/thesis/portfolio/2008/mtm213)