

Design/Build Potomac Yard Metrorail Station

Alexandria, VA

Owner Information

Washington Metropolitan Area Transit
Authority (WMATA)
600 5th Street NW
Washington D.C. 20001

Project's Contract No.: FQ16146

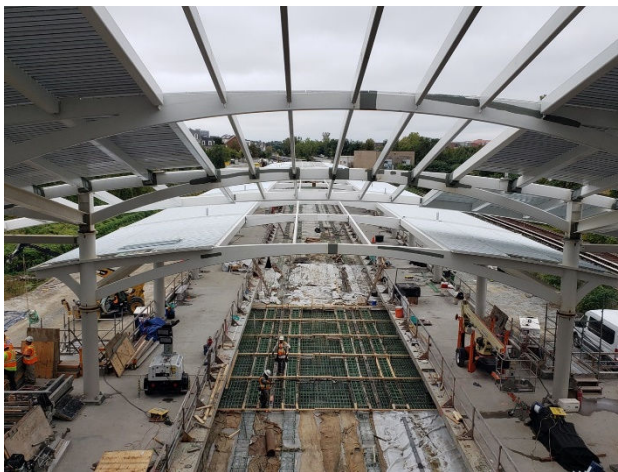
Contact Name & Phone No.:

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Project Information

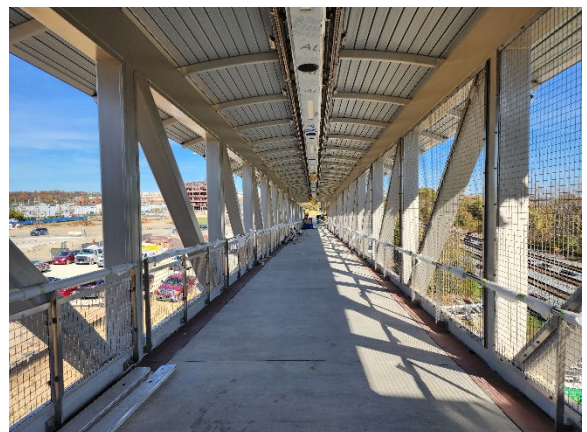
Type & Size: Design/Build, new station construction including: concrete platforms; structural steel; architectural glass; track work; elevators and escalators; site/ground improvement via area surcharge.

Contract Amount - \$273,667,623; Lead Designer: ARUP, - Contact: Mr. Chad Corsten, PE, Design Manager, 1120 Connecticut Ave NW, Washington DC (202) 729-8220.



Scope: The project consists of the Design and Construction of the Potomac Yard Metrorail Station on a former railroad freight yard in the City of Alexandria. This brand-new station for WMATA is on the Blue and Yellow lines, and is being constructed along a 3.1 mile stretch of active CXS tracks, which when completed, will be the cornerstone for the future mix-use development of the area. The station will measure 700 lf and consists of several elements including, but not limited to, mezzanine, side platform (2-600ft), below-platform service rooms, and interior station lighting. New track, as well as its associated traction power, train control, signals, and amber light systems; furnishings, including furniture, appliances, Kiosk and signage, pedestrian access bridges, and entry pavilion are also included in the scope of work.

The pedestrian bridges (continuous steel through-truss structures) provide safe access between the entrance pavilions and the station, spanning over active CSX and WMATA rail lines. Extensive coordination with Railroad personnel was required to develop a bridge design and construction approach which minimized impacts on railroad operations during construction, and also during future maintenance activities; thereby providing long-term economic benefits for the Owner. The through-truss solution resolves the grading and clearance challenges over the railway by minimizing the depth of structure below the walkway surface. It also provides convenient and efficient support for the temporary erection shields over the rail tracks, facilitating the safe installation of the decks, cladding



Potomac Yard Constructors, A Joint Venture
**Halmar International LLC &
Schiavone Construction Co. LLC**

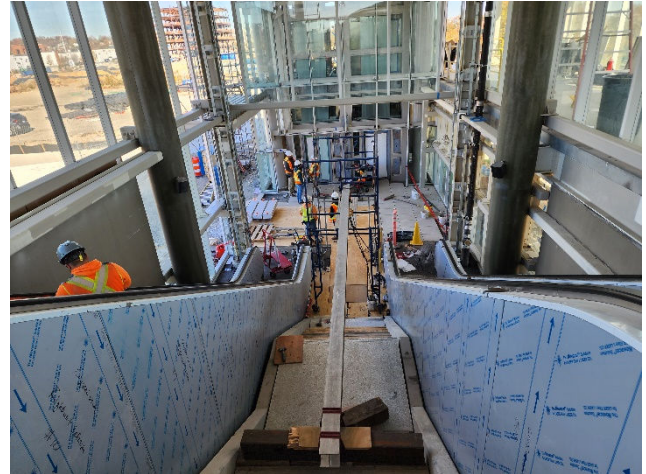
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and finishes. The lightweight steel trusses minimize foundation loads and thus the required size and/or number of piles, reducing the risk of disturbing the tracks during construction. A pile load test plan was developed and implemented to ensure that estimated capacities were achieved or exceeded.

Escalators and Elevators were required for the station to achieve ADA compliance. In addition to elevators, ingress/egress ramps and emergency ramps were constructed to comply with ADA requirements. A total of ten (10) elevators were installed, (2) in South Pavilion, (2) in North Pavilion, (6) in the station.

Other ADA provided features included:

- The South Pavilion Entrance was constructed across the street from the Institute for the Blind. Provisions for the sight impaired were included in the design to permit safe passage throughout the station.
- WMATA provided an app for impaired travelers
- Braille placards on signage



The project summary is the approximate 100,000-square foot project includes:

- A Metrorail station with two 600-foot long platforms
- An entry pavilion at the Potomac Yard Area
- A 200-foot pedestrian/bicycle bridge to the North Pavilion
- Sitework including survey and grading
- Subsurface exploration and testing
- Utility installation
- HVAC including plumbing
- Trackwork and associated systems
- Station Finishes including roofing, siding and architectural treatments
- Elevators and escalators
- A landscaped approach to the Potomac Greens neighborhood
- A new AC switchgear room
- The re-alignment of the Metrorail tracks through the new station
- Construction engineering and temporary protection systems
- Commissioning of equipment and rail systems
- Design-Builder will self-perform 30% of the work

Construction Duration and Award Amount: Construction Start: 9/25/18; Substantial Completion (Station Grand Opening): 5/19/23; Final Completion: 12/23; Original Contract Amount \$213,714,000.

