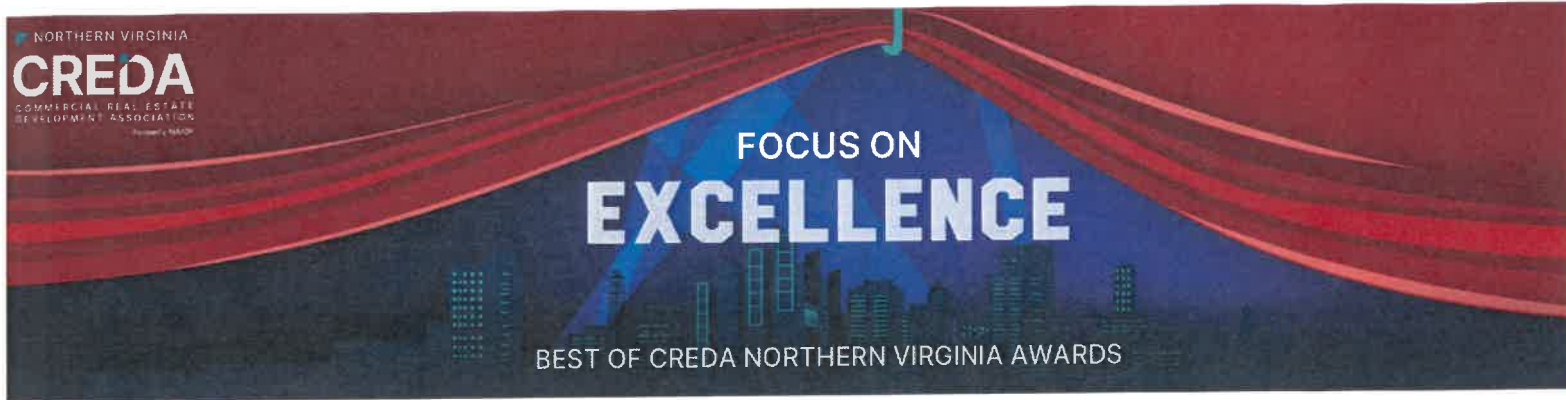




2026 Sample Entry— Innovation District Pump Station

Submitted by: Hickok Cole

Entry is easy to read with excellent graphics. The photos on the last page relate to the site plan giving the judges context.

Sample entry has hard costs redacted. Cost is a key factor for the judges; please make sure this information is included in your submission.

2025 NAIOP Northern Virginia Awards | Focus on Excellence
Community Enrichment_Innovation District Pump Station

Project Size	Hard Construction Cost per SF	Location	Completion
7,800 SF		Alexandria, VA	April 2024



Overall Concept

The Pump Station for the new Innovation District transforms essential infrastructure into a community destination. Rather than a hidden utility, the facility is seamlessly integrated into North Potomac Yard Park as both a public amenity and educational feature. What could have been a bare-bones structure taking up valuable park space is reimagined as a welcoming place where trails, play areas, and green spaces come together as an inviting hub for learning, gathering, and connecting.

Design

The basic architectural program of this public utility project required a large rectangular box, rising 20 feet above grade (at its shortest point) and digging over 40 feet below grade to house massive pipes and pump equipment. The challenge to make this bulky utilitarian box into a community amenity was achieved with the following design solutions:

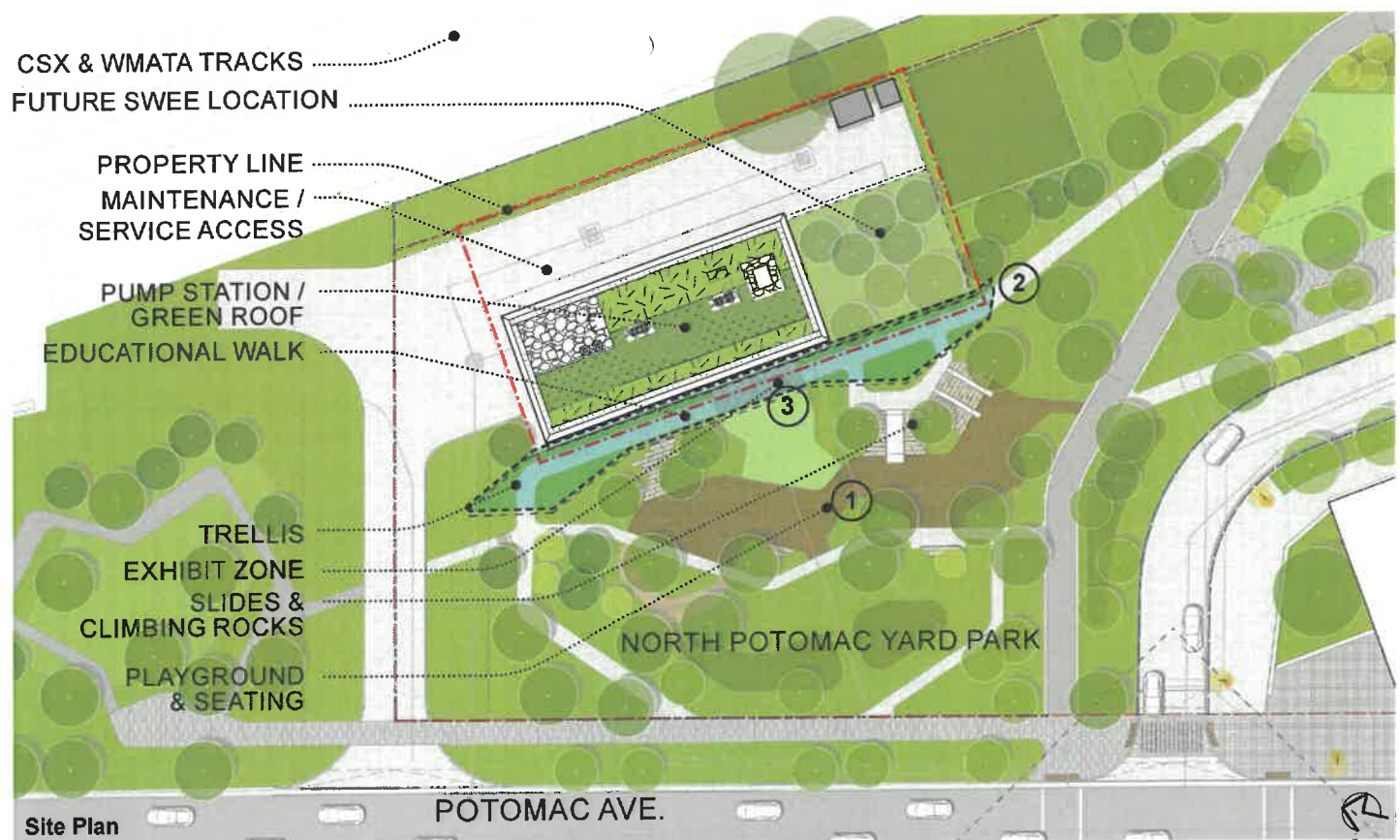
- **Integration into the Landscape:** The landscape architects and building architects closely collaborated to integrate the Pump Station into the landscape of the park. Using site planning strategies such as berms, pedestrian walkways, lush planting, and playground equipment combined with green roofs and a trellis, the design team successfully transformed the utility into a park amenity.
- **Bulk Reduction:** Much of the building's bulk was minimized through the use of berms, allowing the team to successfully integrate the building into the landscape and provide a means to get creative with integrated playground equipment, such as slides and large block climbing stairs that flow seamlessly into additional play structures.

- **Visual Intrigue:** The building itself is clad with overlapping biased metal panels to create an inexpensive yet interesting and eye-catching texture against its surroundings. The park pathway system was reworked and redesigned with a covered trellis to lead visitors to the pump station educational exhibit and to further connect them with the environment.
- **Interactive Nature:** The pavilion offers flexible community space and interactive displays on sustainable wastewater management. This innovative design harmonizes infrastructure with public amenities, enhancing the park's utility and educational value while maintaining aesthetic appeal.

Innovation

Adaptations to site constraints and innovative technologies were employed in the development of this project, including planning for future expansion to take advantage of the latent heat in the sewage system:

- **Public Utility as a Public Amenity:** At the heart of the pavilion is an interactive educational center focused on sustainable wastewater management. Visitors explore how water is treated, reused, and conserved within the park's ecosystem through engaging displays, presented equitably in English and Spanish languages in an approachable manner with tactile models and visualizations.
- **Sustainability Framework:** "Envision," the sustainability program managed by the Commonwealth of Virginia, was required. This is the state equivalent of LEED for civil infrastructure projects. Building features related to this program include a green roof to capture storm water and reduce solar reflectance. Light pollution was minimized by thoughtful detailing of recessed lighting.
- **Futureproofing for Sustainability:** Sanitary Wastewater Energy Exchange (SWEE) is planned for Phase II, with space allocated for building expansion. This innovative technology will extract heat energy from the sewage wastewater. The trellis was designed to cover the addition to continue the sense of integration into the landscape.



Achievement of Goals

The ultimate success of this project is understood when children and families utilize this community amenity on a daily basis and engage with the interactive exhibits explaining the function as a sustainable wastewater management facility. Many challenges were addressed and overcome throughout this project:

- **Complex Stakeholder Involvement:** As a public utility provided by a private developer, there were many invested parties involved in the project, including the client, contractors, a wastewater treatment authority, and several city review agencies. The overall design solution spans across multiple scope areas involving different designers, different stakeholders, and is funded from different sources.
- **Intricate Construction Management:** Multiple contractors contributed to the integrated completion of this project, all with different scopes and responsibilities, including the building and pump equipment contractor, and the landscape, playground, and trellis contractor. High levels of collaboration across firms were required to deliver this project.
- **Complicated Approval Process:** Alexandria's Development Special Use Permit (DSUP) and Board of Architectural Review (BAR) process required compliance with a high level of design expectations based on the design guidelines created by the team and approved by the city.
- **Practical Considerations for Success:** Because this is a public building, anti-graffiti and high-durability materials were required, along with approval of the colored slats of the trellis. All educational exhibit content needed to be displayed in both English and Spanish in an equitable way within all elements, including interactive experiences.

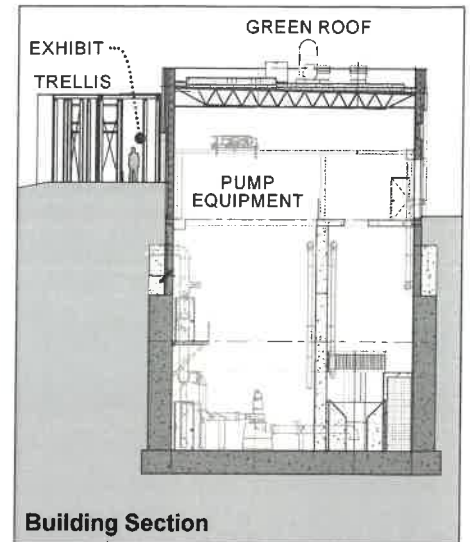


Park Amenity - Playground & Seating

North Potomac Yard Innovation District - Phase I Context Plan



The pump station was required based on the future demands of the planned Innovation District. Sited at the entrance to North Potomac Yard Park, the design team seized on the opportunity to transform the utilitarian structure into an educational and recreational destination that enriches the community.



Building Section



Integration into the Landscape



Path Under Trellis



Educational Exhibits



Interactive Exhibits Under Trellis