

Callahans Beach Reconstruction Project

► Following Hurricane Ida in 2021, Hayduk Engineering was called in by the Town of Smithtown Parks Department to assess storm-related damage. As a result of the storm, the beach access stairs had collapsed and a large section of adjacent sidewalk also collapsed, due to erosion and undermining. Further investigation determined that the

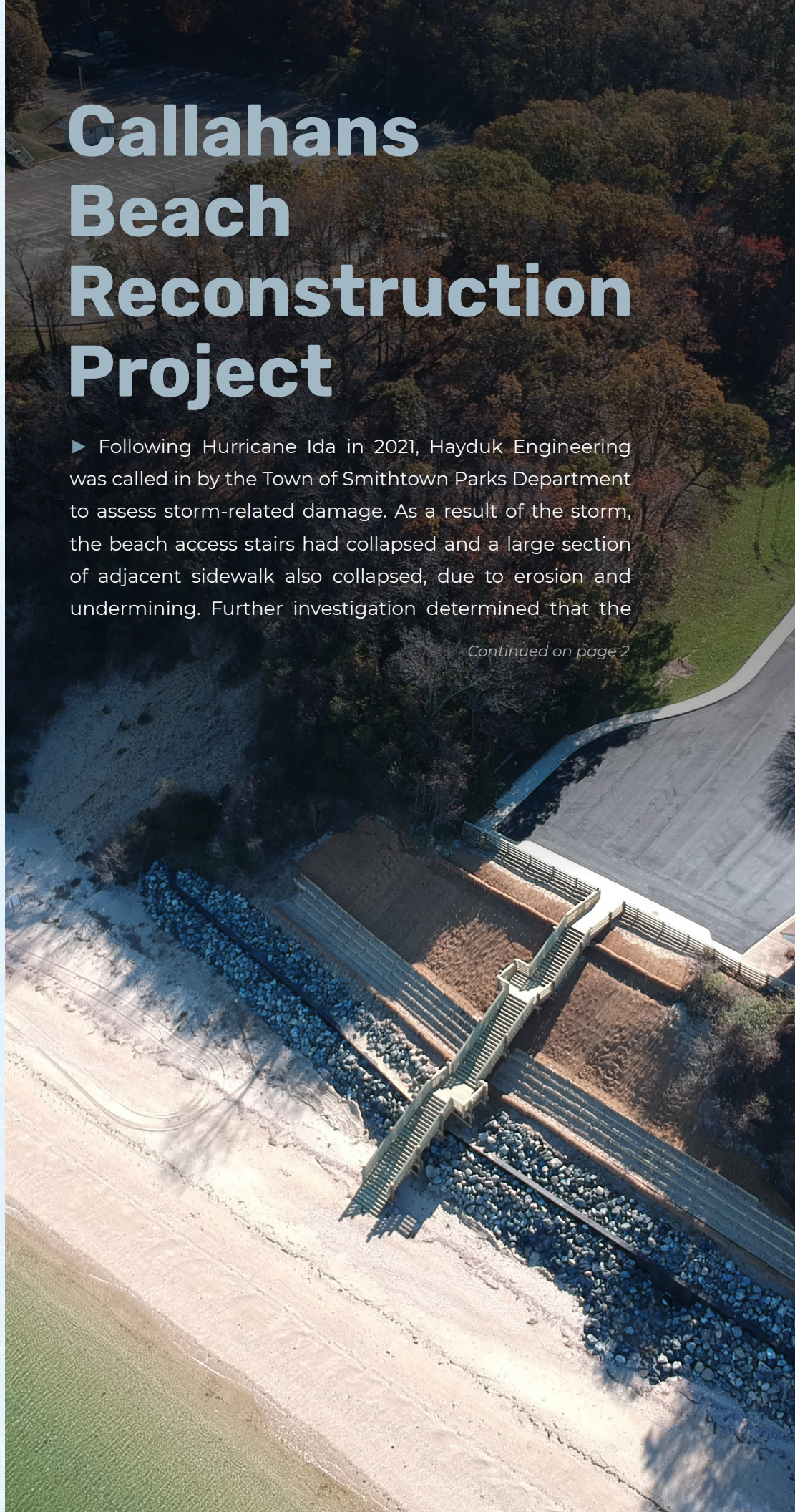
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Winter 2024 NEWSLETTER

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Reconstruction
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St. James WWTP
Rehabilitation**



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existing stormwater conveyance system was undersized to convey the 10- and 100-year storms without surcharging over the surface, and there was insufficient inlet capacity to evacuate stormwater from the surface and into the underground pipe network. In addition, there was evidence of significant erosion along the 1,000 LF shoreline of the park, which abuts the Long Island Sound. The difference in grade from the upper bluff down to the beach is approximately 90', with slopes in excess of 75% in some areas.

Hayduk Engineering designed a new stormwater conveyance system, comprised of 15 stormwater leaching pools, all new 24" diameter stormwater piping and structures, a Cascade Separator Stormwater Treatment Unit, and



Figure 1 - Damage following 2021 Hurricane Ida

replacement of the stormwater outfall. To address the erosion issue, HE, along with subconsultant GEI Consultants, Inc., designed a new shoreline stabilization system consisting of armor stone, a steel sheet pile bulkhead, timber terraces with native plantings, and erosion control matting and plantings above. A new timber pile staircase to replace the existing damaged staircase was also

designed, along with the adjacent sidewalk and paved area. The project was broken into 2 phases for budgeting

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purposes, and ultimately only Phase 1 progressed.

The construction of Phase 1 is complete as of November 2023. Hayduk Engineering provided Construction Phase Services including progress meetings with the Contractor, preparation and distribution of meeting minutes, review and processing of submittals and shop drawings, review and processing of Contractor's requests for information and change orders, performing periodic site inspections for progress of the construction and conformance with Contract Documents, reviewing and processing of Contractor's payment requests, and conducting a final punch list and closeout of the project. HE staff worked closely with the Town of Smithtown on this project from conception to completion. ■



Figure 2 - Callahans Beach Access Before Construction



Figure 3 - Callahans Beach Access After Construction

LONG ISLAND
BUSINESS NEWS
**Best Places
to Work**

Hayduk Engineering
listed as one of the
**Best Places to Work
on Long Island** by
Long Island Business
News for 2023, our
4th year in a row!



Welcome
Peter A. Scully,
Director of Business Development!

Former long time New York State DEC Regional Director Peter A. Scully has joined the management team at Hayduk Engineering, LLC. Scully, of Stony Brook, served as DEC 's Long Island Regional Director from 2003 until 2015, and served more recently as Deputy County Executive for Suffolk County, where he was dubbed the County's "Water Quality Czar".

"With his broad experience in public policy issues related to both solid waste and wastewater management, Peter Scully brings a skill set that will enable our firm to serve clients even more effectively," said company founder Stephen G. Hayduk. "As Deputy County Executive, Peter successfully advanced the largest expansion of sewers the Long Island region has seen in more than 50 years. That success built upon decades of work on solid waste projects and other environmental issues. I know Peter's expertise will benefit Hayduk Engineering's client base immensely."

Prior to serving as DEC Regional Director, Scully served as Deputy Supervisor of the Town of Brookhaven and as President of the Islip Resource Recovery Agency and Commissioner of Environmental Control, where he was responsible for the successful capping and closure of the Blydenburgh Landfill, designated a National Priority List Superfund site by USEPA, and charged with overhauling Islip's solid waste operations in the wake of the Long Island Garbage Barge saga. In 1994, he was nominated by the Majority Leader of the New York State Senate and appointed by then Governor Mario Cuomo to the New York State Solid Waste Management Board, created under the New York State Solid Waste Management Act of 1988 to advise the Governor and State Legislature on solid waste issues.

"I am proud to join this family-owned firm, founded by a Vietnam Veteran, which has established itself as a trusted provider of engineering services to both private sector clients and agencies on all levels of government," said Peter A. Scully. "In this new role, I look forward to continuing my work to protect the environment, and to improve water quality."

SD 28 Fairfield @ St. James WWTP Rehabilitation



► Fairfield at St. James is an existing planned retirement community located along Moriches Road in Saint James, NY. The 55+ community was constructed in the 1970's and is comprised

of approximately 654 units with a community center. The community was originally constructed with a privately owned and operated Wastewater Treatment Plant (WWTP) that only serviced the Fairfield at St. James community, with a design capacity of 70,000 gallons per day. The ownership and operation of the WWTP was taken over by Suffolk County in the 1980's and a new Sewer

District was formed; Suffolk County Sewer District #28 – Fairfield at St. James.

The WWTP is aged and in need of significant

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repairs and improvements. In addition, the nearby Saint James downtown area along Lake Avenue is seeking a connection to a WWTP to allow for some redevelopment of the area. A few years ago, the Town of Smithtown decided to install a dry interceptor sewer along Lake Avenue as part of a water main repair and roadway rehabilitation project in anticipation of a potential connection to a proposed WWTP at the former Gyrodyne property. Upon further discussions between the Town and the County, the alternative to connect to Sewer District #28 was proposed, thus the genesis of this project.

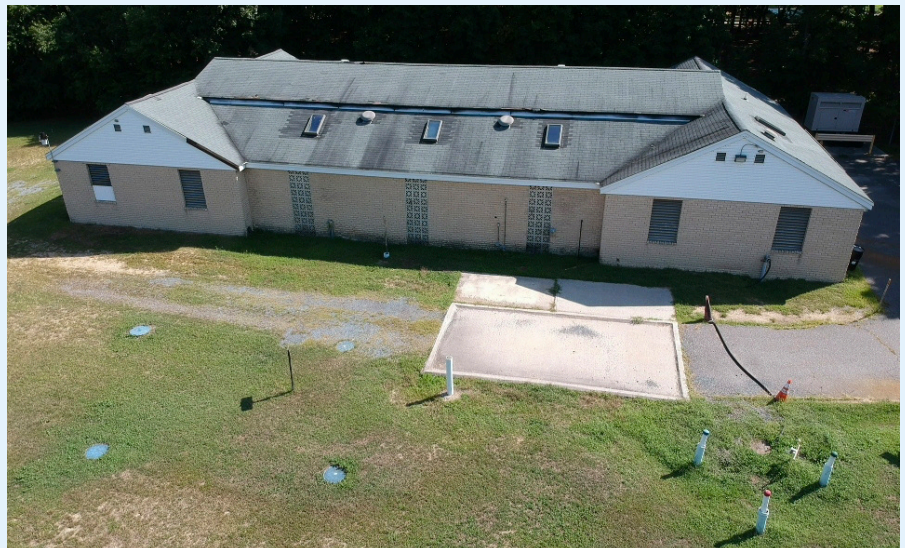
Hayduk Engineering (HE) was retained by Suffolk County Department of Public Works (SCDPW) to assess the condition of the existing WWTP facilities, analyze the potential for expanding the facility, and then design the proposed improvements to the WWTP. The first step in the process for the HE Team included preparing a alternatives analysis report, which included field work and laboratory testing to determine the condition of the existing steel tanks, building foundation and super structure, electrical systems, roof system, ventilation systems, and wastewater flow rates and loading conditions at the WWTP. Following the data collection and condition assessment, the HE Team prepared dynamic

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*Hayduk Engineering hosted a Thanksgiving Food Drive to benefit Lighthouse Mission, to help those in need. **Thank you to everybody who contributed**, the food drive was a tremendous success!*



process models of the existing WWTP and evaluated three (3) different process upgrade options, including a Sequencing Batch Reactor (SBR), Modified Ludzack Ettinger (MLE), and Membrane Biological Reactor (MBR). The dynamic process models determined that with a MBR process upgrade to the WWTP, we could achieve a potential expanded design flow at the facility to 250,000 gpd, which provides ample capacity for the proposed Lake Avenue sewer connection in addition to the existing flow rates from the Fairfield at St. James community. MBR treatment facilities are known to provide a very high quality wastewater effluent as well, which introduces environmental benefits to the project.



The proposed MBR upgrade includes re-purposing the existing steel tanks inside the building to use as formwork for pouring new cast-in-place concrete tanks within, a complete renovation of the building, the complete reconstruction of the leaching system, and an

expansion of the building to contain the new process equipment and tanks. The scope of the project now also includes a 6,000 LF sewer

extension of the Lake Avenue interceptor sewer to connect to the SD 28 WWTP. If the construction of the project is funded, this will be the first MBR facility owned and operated by SCDPW. The project is currently in the Engineering Design Report phase. ■

► We're Hiring

Hayduk Engineering is seeking to fill a limited number of key management-level and senior engineering positions in our Civil/Site, Transportation, Wastewater Engineering Divisions, as well as several bridge and tunnel inspection and construction inspection positions. Please contact Stephen A. Hayduk, P.E. at sah@haydukengineering.com for more information.

► Promotions

Sara Sciotto, P.E. promoted to Director of Transportation.

Daniel J. Stahl, P.E. promoted to Senior Engineer

Nadgee Gonzalez-Garcia, I.E. promoted to Project Engineer

Nicholas R. Diers, I.E. promoted to Project Engineer

Kyle Dittmar, I.E. promoted to Staff Engineer II

► New Hires

Peter A. Scully
Director of Business Development

Len LaSala, P.E.
Sr. Engineer – Civil/Site

Tyler Burke, P.E.
Sr. Engineer – Civil/Site

Rich Falco, P.E.
Project Manager – Civil/Site

Anthony Beck, I.E.
Staff Engineer II – Transportation

Denesh Hamnauth
Staff Engineer - Transportation

Jean Davilus
Assistant Team Leader

Brittnie Graves
Billing Coordinator



► We've Moved!

Due to our continued growth, we relocated to a larger office in a more geographically-central location to best serve our clients and staff.

Our new address is

**2150 Smithtown Avenue, Suite 8
Ronkonkoma, NY 11779**

► Recent Contract Designations

Prime

AutoZone at West Babylon

Civil/site engineering services

Yaphank Hotel

Civil/site engineering services

180 Deer Park Avenue Mixed Use Development

Civil/site engineering services

Town of Brookhaven – Mastic Beach Sewer Feasibility Study

Wastewater engineering services

Town of Southampton - Riverside Sewer Project Consultation Services

Wastewater engineering services

Sub

NYS Dept. of Transportation D041138 Region 11 ITS Maintenance

Transportation engineering services

PANYNJ – Traffic Engineering Term Agreement

Transportation engineering services

PANYNJ – Traffic Planning Call-In

Transportation engineering services

NCDPW South Shore Water Reclamation Facility Aeration Facilities

Civil/site engineering services

NYSDOT – D038315 Route 17 Paving

Construction inspection services

NYS Thruway Authority D214935 Bridge Inspections Term Contract

Transportation engineering services



HaydukEngineering.com 631-476-0600