

**RESOLUTION DIRECTING WORK TO MOTT MACDONALD
FOR PROFESSIONAL ENGINEERING SERVICES FOR
THE ADAMS STREET BAR SCREEN REPLACEMENT**

MOTIONED BY: VELAZQUEZ
SECONDED BY: GARDINER

WHEREAS, the North Hudson Sewerage Authority (hereinafter "Authority") is a public body, duly formed under the Sewerage Authorities law, constituting Chapter 138 of the Laws of New Jersey of 1946, as amended (Chapter 14A of Title 40 of the New Jersey Statutes Annotated) and possesses the powers set forth therein; and

WHEREAS, Mott MacDonald has been selected under resolution 19-092 to provide engineering services for various capital projects required throughout its service area that must be performed in order to maximize the performance of its waste water treatment facility, the capacity of its combined sewer system and/or to comply with its New Jersey Pollution Discharge Elimination System (NJPDES) permit; and

WHEREAS, Hatch Mott MacDonald has submitted a proposal (Exhibit "A") to provide Professional Engineering Services for the Adams Street Bar Screen Replacement Project; and

WHEREAS, the Facilities Review Board has considered this request and recommends the approval of the full Board.

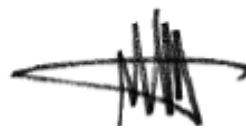
NOW THEREFORE, BE IT RESOLVED that the Authority, as recommended by the Facilities Review Board, directs Mott MacDonald to provide Professional Engineering Services for the Adams Street Bar Screen Replacement Project as outlined in Exhibit "A" and shall be compensated in an amount not to exceed \$39,000.

DATED: OCTOBER 15, 2020

RECORD OF COMMISSIONERS' VOTE

	YES	NO	ABSENT
Commissioner Soares	x		
Commissioner Kappock	x		
Commissioner Marotta	x		
Commissioner Gardiner	x		
Commissioner Friedrich	x		
Commissioner Sanchez			x
Commissioner Velazquez	x		
Commissioner Roque	x		
Commissioner White			x

**THIS IS TO CERTIFY THAT THIS RESOLUTION WAS DULY ADOPTED BY THE
NORTH HUDSON BOARD OF COMMISSIONERS ON OCTOBER 15, 2020.**



SECRETARY



Fredric J. Pocci, PE, Authority Engineer
North Hudson Sewerage Authority
1600 Adams Street
Hoboken, New Jersey 07030

**Proposal for Professional Engineering Services
Adams Street Wastewater Treatment Plant
Preliminary Facility's Screen Replacement**

Our Reference
507101715

October 7, 2020

Dear Mr. Pocci:

Mott MacDonald
111 Wood Ave. South
Iselin, NJ 08830
United States of
America

The North Hudson Sewerage Authority (NHSA) has expressed concerns regarding the Adam's Street Wastewater Treatment Plant's Preliminary Facility's existing screening system's inability to capture and remove rags and other similar debris from influent sewage to prevent disruption to treatment processes.

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Mott MacDonald therefore conducted a preliminary site inspection on Thursday, July 23rd, 2020, to evaluate constructability for the upgrade of the Preliminary Facility's three (3) existing mechanical screening units including replacement of slide gates for channel isolation.

Mott MacDonald is pleased to submit this proposal to provide Professional Engineering Services in support of the upgrade of the Preliminary Facility's three (3) mechanical screens. The following presents the history, condition, and recommendation for the work required to upgrade this critical facility's screening system.

PROJECT UNDERSTANDING

The NHSA's Adam's Street Wastewater Treatment Plant Preliminary Facility has observed an influx of rags and other similar debris since the onset of the COVID-19 pandemic and associated stay-at-home orders. It is also our understanding that the Preliminary Facility's screening system has been unable to capture and remove many rags and other similar debris and the consequence has been disruption to downstream treatment processes. The NHSA has solicited a preliminary quotation to upgrade the three bar screens to reduce the clear spacing between each bar to nominally 1/2", thereby improving the screens' ability to remove rags and other similar debris, but the inability to isolate the influent sewage channel for each screens prevents the work from being completed. This proposal therefore offers design services to prepare Contract drawings and specifications for the upgrade of the three bar screens and replacement of sluice gates as necessary to isolate the influent sewage channel for each screen.



SCOPE OF WORK

Mott MacDonald’s scope of work detailed below is based upon our understanding of the necessary upgrade of the Preliminary Facility’s three (3) bar screens’ rake fields and associated replacement of six (6) slide gates. The following description of services is therefore complete to the best of our understanding of the work necessary in light of the information and history developed.

Mott MacDonald will prepare contract front end, drawings, and technical specifications in CSI 16 Division format to detail the upgrade of the three (3) bar screens and the replacement of the six (6) slide gates in the Preliminary Facility.

Upgrades for each of the three existing Vulcan Bar Screens Factory Model #5273 shall entail replacing existing screen fields with new type 304 stainless steel bar racks nominally 41” wide by 84” long, constructed of 3/8” by 2.5” rectangular profile extruded bars with 1/2” clear spacing between each bar. The screen upgrades shall also include replacement of rake tooth sections with 3/4” thick plates cut to fit the new bar racks. For each of the screens, the construction contractor will gain access for performing the upgrades by constructing temporary bulkheads to isolate the channel, dewatering the channel, replacing the existing slide gate and frame assemblies, performing the upgrades, and then restoring flow through the channel. Startup, testing, and commissioning of the screens after completion of each gate will also be specified.

The replacement of the six (6) slide gates will generally entail saw cutting existing concrete slabs, providing temporary structural supports as necessary where existing slabs are removed, removal and replacement of self-contained existing slide gate and frame assemblies, and replacement of the two removed slab sections with grating to improve future maintenance access. Design of temporary works including but not necessarily limited to temporary bulkheads for isolation of influent sewer channels shall not be provided under this proposal and shall instead be the responsibility of construction contractor means and methods. Operators for the new slide gates shall be specified in order to be compatible with the requirements of the NHSA’s gate operating tool(s). These compatibility requirements will need to be communicated to Mott MacDonald by the NHSA.

Cost Proposal

Upon authorization, Mott MacDonald anticipates completion of the proposed design phase services within 8-weeks including 2 interim design review meetings with the NHSA and 1 final design review meeting. Our proposed engineering budgets to perform the tasks required for this work are noted below. We propose to perform these services under a reimbursable not-to-exceed format.

Task	Description	Estimated Cost
1	Field Investigation / Survey	\$5,600
2	Contract Drawings	\$16,000
3	Contract Specifications	\$13,500
4	Cost Estimates	\$1,900
5	Meetings	\$2,000
Total		\$39,000



ASSUMPTIONS

1. Mott MacDonald's proposal is limited to design phase services and does not include costs for bid or construction phase services.
2. Mott MacDonald's proposed field investigation and survey services shall be limited to the level of effort required to generate base plans for existing conditions as necessary for development of Drawings for proposed construction.
3. Mott MacDonald assumes that repair, replacement, and/or upgrade of existing motors for the three bar screens is not required to accommodate the decreased bar spacing.
4. Mott MacDonald's proposal does not include the development of a hydraulic model to evaluate any impacts from modification of the screening system.
5. Mott Macdonald assumes that at least one (1) screen and channel can be taken offline for a sufficient duration to perform the anticipated construction without prohibitively impacting plant capacity or operations.

We hope that this proposal meets with your satisfaction. If you have please do not hesitate to contract me.

Very Truly Yours,

Mott MacDonald

A handwritten signature in blue ink, appearing to read 'Kevin P. Wynn'.

Kevin P. Wynn, P.E.
Vice President
+1 973 912 2537
kevin.wynn@mottmac.com