

JC ENGINEERING, Inc.

Civil & Environmental Engineering

2854 Cranberry Highway
East Wareham, Massachusetts 02538
Ph. 508-273-0377 – Fax 508-273-0367

February 28, 2022

Re: Notice of Intent at 39 Phillips Road, Sagamore (Bourne), MA
Beach Access Narrative

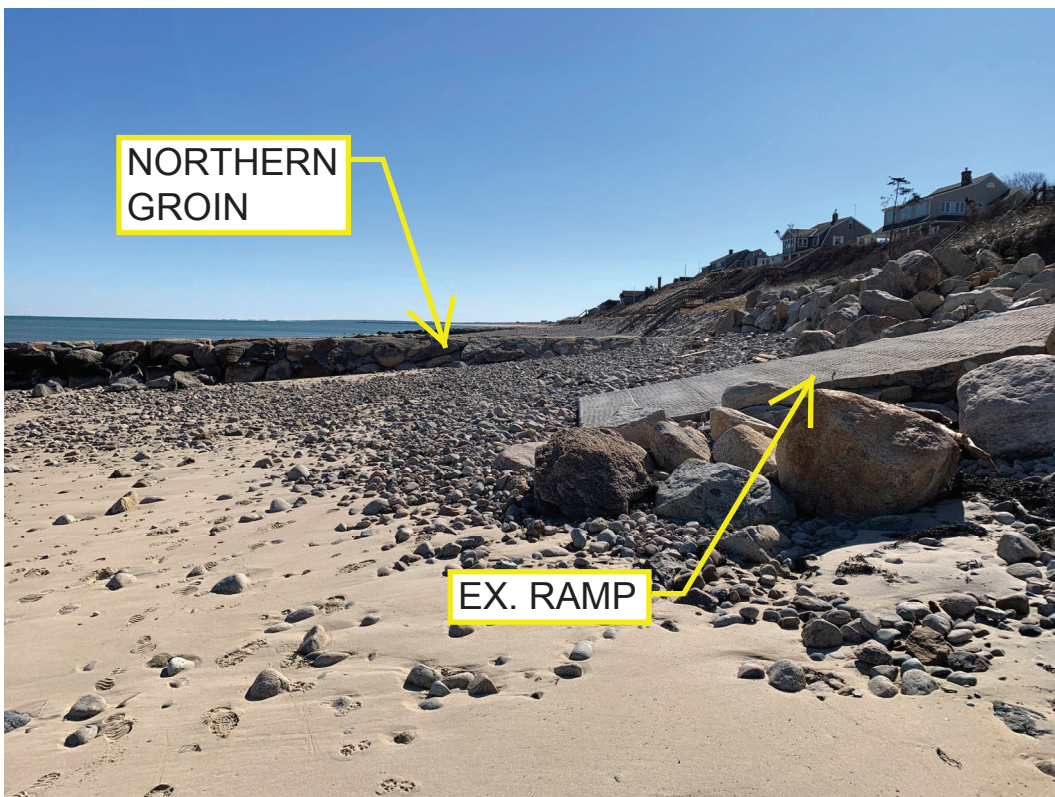
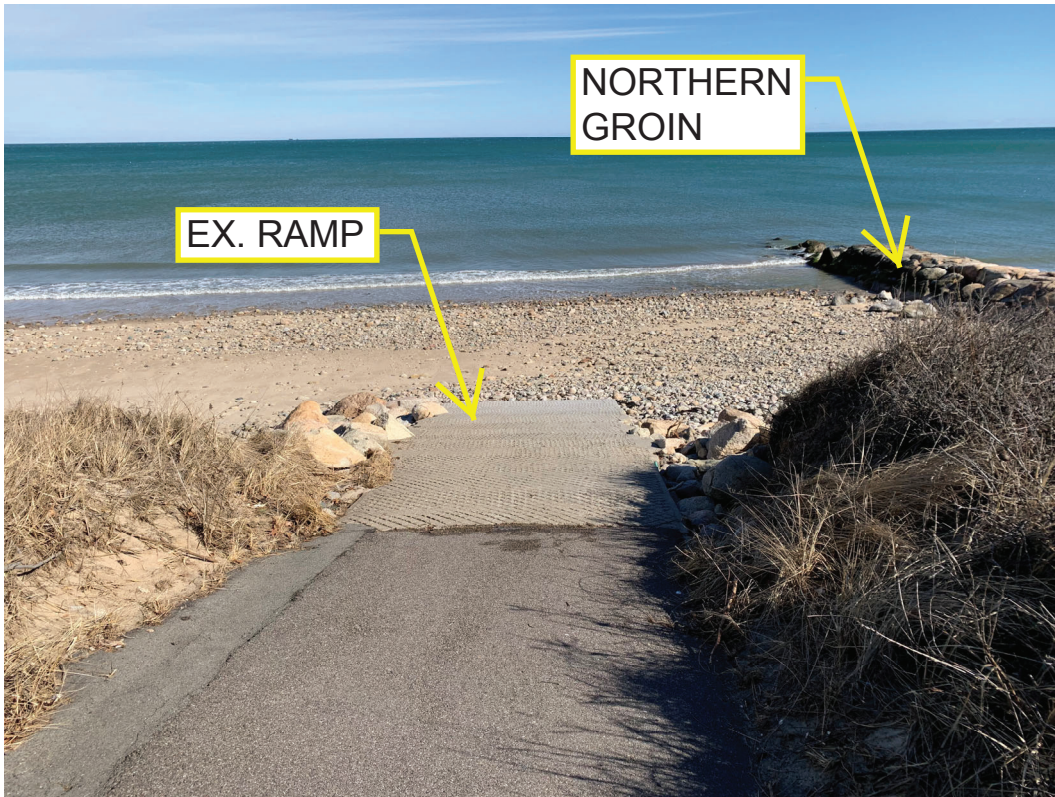
Access

Access to construct the dune restoration will be from an existing ramp located at the Standish Road Beach Parking Area. This ramp is situated about 580 feet northwest of the locus property. Construction equipment will traverse from the ramp and continue over the sand and cobble beach to gain access to the locus property. This access route will be over land owned by the Town of Bourne, so the appropriate approvals from the Selectman will be obtained before the access ramp and beach are used for construction equipment. All equipment will be removed during any anticipated storm events.

The anticipated construction equipment needed to transport and construct the dune nourishment will include a rubber tired rock truck and an excavator. The rock truck will transport the sand while the excavator will place and shape the dune nourishment to the elevations shown on the Proposed Site Plan. Both of these construction vehicles are suited to drive over the cobble beach, as they both have either wide tires or tracks that can easily travel over the approximately 10" diameter and smaller cobbles.

The access route will required travel over two stone groins. The location of the ramp and groins in relationship to #39 Phillips Road can be seen on the attached Aerial Map. The level of the cobble beach on the north side of both groins are approximately level with the top of the groins closest to the adjacent stone revetments. The level of the beach on the south side of the groins varies between 2 and 4 feet below the top of the groin, therefore imported sand compatible with the existing beach sand will be dumped in these locations to provide for a smooth transition over the groins. Matting will also be placed over the top of the groins to ensure the groins are not damaged. The attached soil analysis shows the gradation of the existing beach sediments that will be used by the contractor to prepare sand for the dune nourishment. The access between the ramp and the revetment is to be restored upon completion of the construction. As the material needed to be placed in the area of the groins will be compatible with the existing beach sediments, the sand fill can remain and will eventually supply sediment to the beach.

The following pictures show the condition of the beach access as of February 19, 2022.







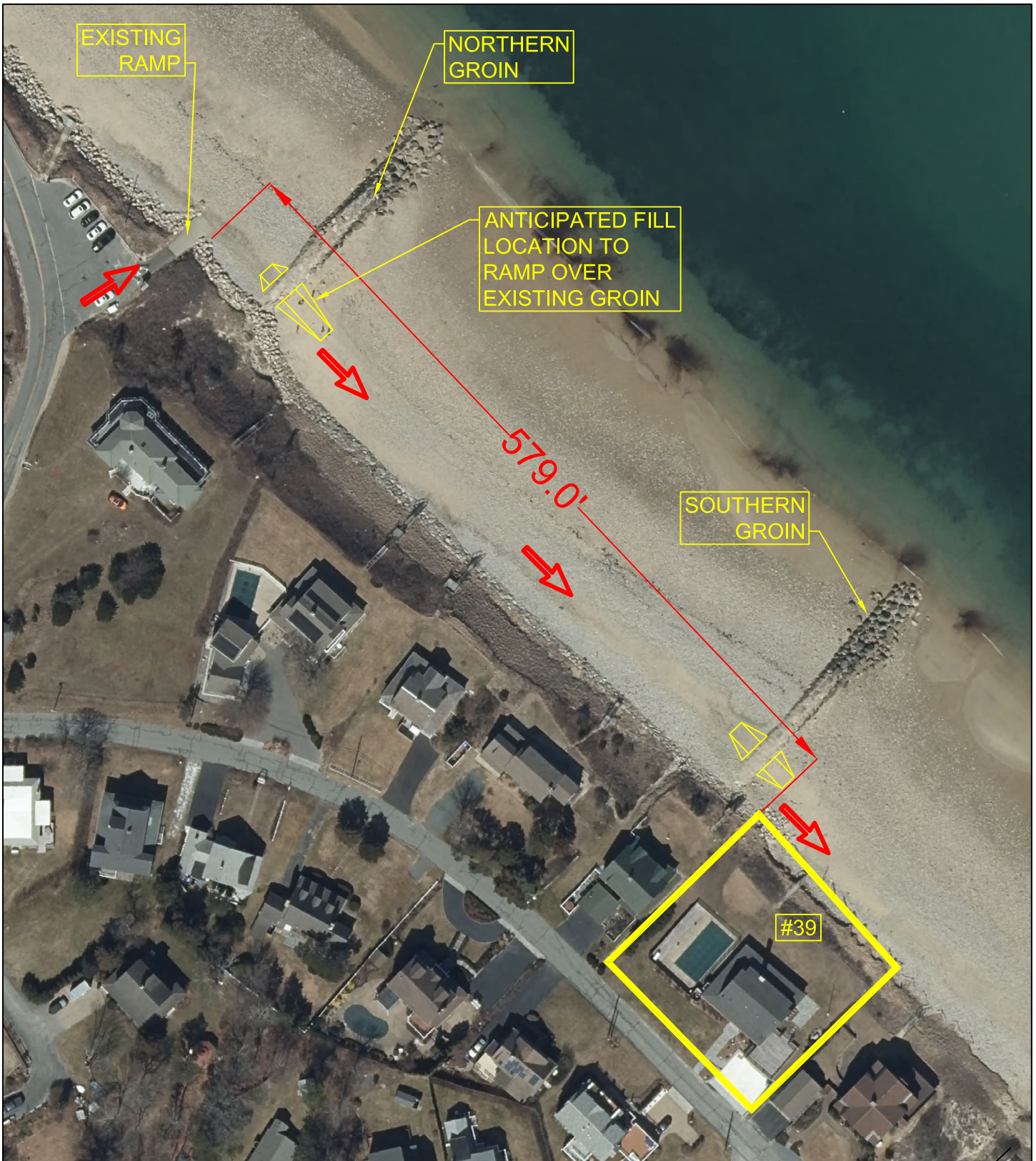




Southern Groin – facing north – fill required on southern side



Northern Groin – facing north – fill required on southern side



AERIAL MAP

39 PHILLIPS ROAD
SAGAMORE BEACH, MA

SOURCE: 2021 MASSGIS AERIAL

SCALE: 1" = 100'

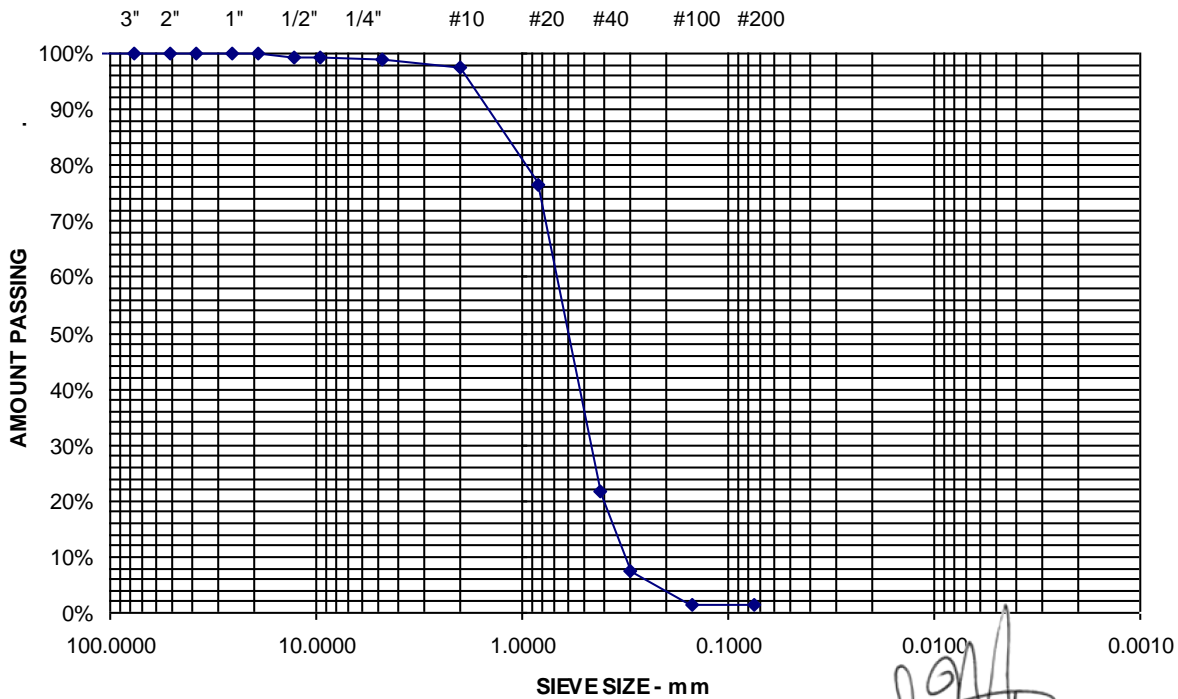
PREPARED BY:
JC ENGINEERING, INC.
2854 CRANBERRY HIGHWAY
EAST WAREHAM, MA 02538
(508) 273-0377

DATE: 2/28/22

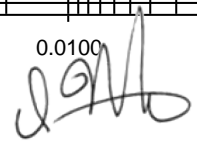
Project Name EAST WAREHAM MA - 2022 LABORATORY TESTING SERVICES
 Client J.C. ENGINEERING, INC.
 Material Type SAND
 Material Source 39 PHILLIPS RD, BOURNE

Project Number 22-0192
 Lab ID 4785T
 Date Received 2/21/2022
 Date Completed 2/23/2022
 Tested By RYAN HANSEN-BROWN

<u>STANDARD</u> <u>DESIGNATION (mm/μm)</u>	<u>SIEVE SIZE</u>	<u>AMOUNT PASSING (%)</u>	<u>SPECIFICATIONS (%)</u>
150 mm	6"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	100	
25.0 mm	1"	100	
19.0 mm	3/4"	100	
12.5 mm	1/2"	99	
9.5 mm	3/8"	99	
4.75 mm	No. 4	99	
2.00 mm	No. 10	97	
850 μm	No. 20	77	
425 μm	No. 40	22	
300 μm	No. 50	8	
150 μm	No. 100	1	
75 μm	No. 200	1.3	



Comments



Derek Mello