

Draft Final Integrated Interim Response Feasibility Report and Environmental Assessment

NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY

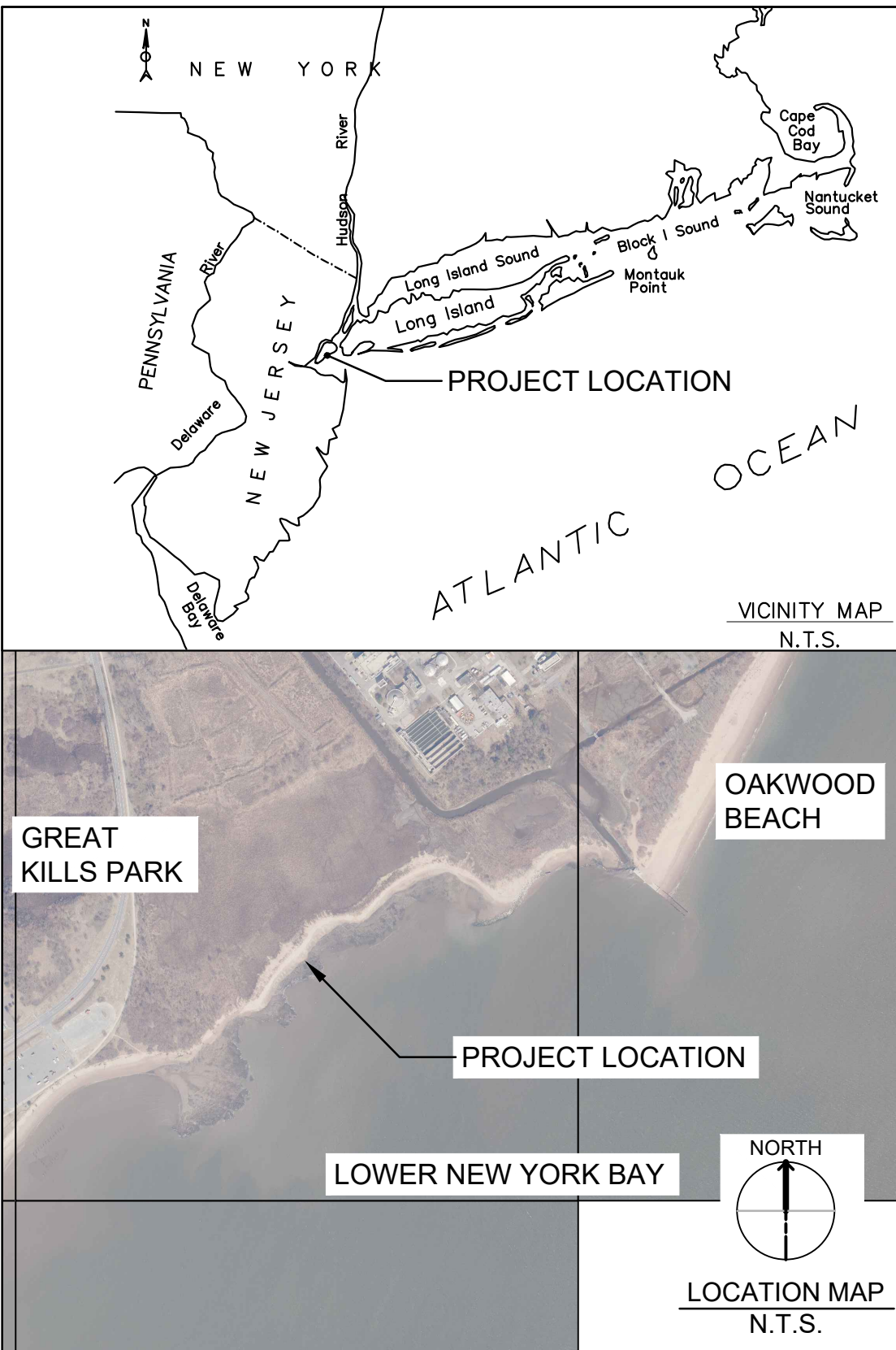
APPENDIX B1 OAKWOOD BEACH ACTIONABLE ELEMENT

March 2026



NEW YORK DISTRICT

NEW YORK / NEW JERSEY
HARBOR AND TRIBUTARIES STUDY (HATS)
ACTIONABLE ELEMENTS
OAKWOOD BEACH, NEW YORK



INDEX

SHEET NO.	DESCRIPTION
G-001	COVER SHEET
G-002	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
V-101	EXISTING CONDITIONS
V-102	GEOTECHNICAL DATA LOCATIONS
C-101	WETLAND FEATURES
C-102	DUNE NOURISHMENT AND REEF - PLAN VIEW
C-301	DUNE NOURISHMENT AND REEF - SECTION VIEW 1 OF 2
C-302	DUNE NOURISHMENT AND REEF - SECTION VIEW 2 OF 2
C-501	REEF GRADATION DETAILS

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U.S. ARMY CORPS OF ENGINEERS NEW YORK DISTRICT 26 FEDERAL PLAZA, ROOM 2037 NEW YORK, NY 10278	DESIGNED BY: DRAWN BY: CHECKED BY:	ISSUE DATE:
W.F. BAIRD & ASSOCIATES 60 BROAD ST., 24TH FLOOR, SUITE 2429 NEW YORK, NY 2949	SUBMITTED BY:	
	SOLICITATION NO.: CONTRACT NO.:	
	SIZE: ANSI/D	HATS, G-001 DWG

NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES
COASTAL AND STORM RISK MANAGEMENT FEASIBILITY STUDY

GENERAL
COVER SHEET

SHEET ID

G-001

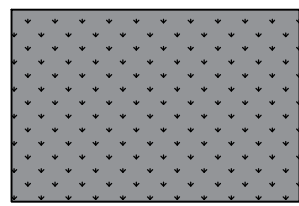
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(FEBRUARY 2026)

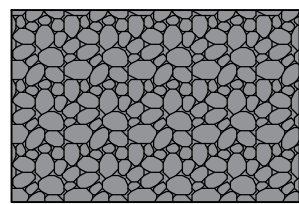
GENERAL NOTES

1. EXISTING TOPOBATHY SOURCE IS TAKEN FROM 2020 USACE NAN TOPOBATHY LIDAR DEM: NEW JERSEY AND NEW YORK.
2. ALL DIMENSIONS ARE LISTED IN FEET UNLESS OTHERWISE NOTED.
3. AERIAL IMAGERY IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. IMAGE OBTAINED FROM GOOGLE EARTH. IMAGERY DATE 2024.
4. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983 (NAD83).

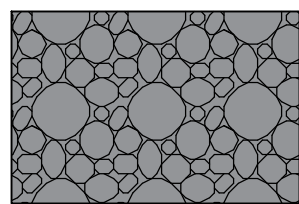
HATCH LEGEND



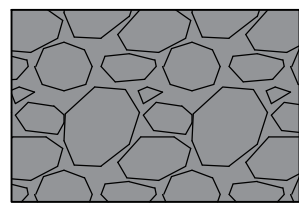
DUNE NOURISHMENT



20-150 lb REEF STONES



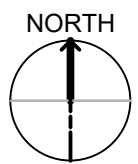
250-1500 lb REEF STONES



0.75 - 2.5 ton REEF STONES

SYMBOLS

EL. 10.50' PROPOSED
ELEVATION IN FEET



NORTH ARROW

—5— MAJOR CONTOUR

— -1 — — MINOR CONTOUR

MEAN LOW WATER LINE

MEAN HIGH WATER LINE

 WATER LINE PROFILE

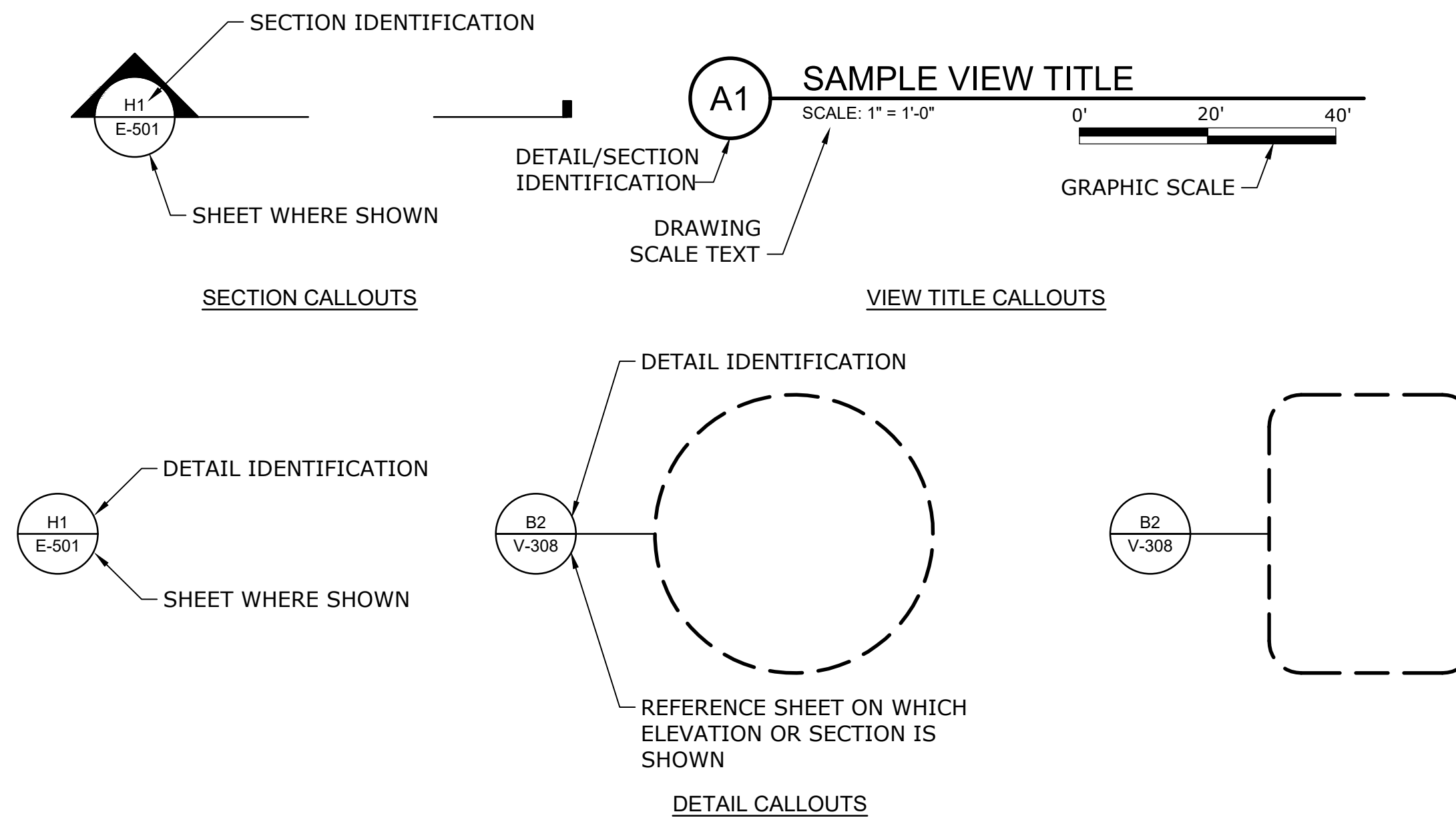
----- HABITAT DELINEATION

 BOREHOLE

ABBREVIATIONS

DEM	DIGITAL ELEVATION MODEL
EL	ELEVATION
HATS	HARBOR AND TRIBUTARIES STUDY
HORIZ	HORIZONTAL
MHW	MEAN HIGH WATER
MLW	MEAN LOW WATER
NAN	USACE NEW YORK DISTRICT
NAD83	1983 NORTH AMERICAN DATUM
NAD88	1988 NORTH AMERICAN VERTICAL DATUM
NAVE	UNITED STATES ARMY CORPS OF ENGINEERS
VERT	VERTICAL

CROSS-REFERENCE LEGEND



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
P	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20
N	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15	N16	N17	N18	N19	N20
M	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20
K	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	K12	K13	K14	K15	K16	K17	K18	K19	K20
J	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	J11	J12	J13	J14	J15	J16	J17	J18	J19	J20
H	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20
G	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16	G17	G18	G19	G20
F	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20
E	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20
D	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20
C	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20
B	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20
A	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20

LOCATION SHEET
(SEE NOTE)

NOTE:
LETTER AND NUMBER COMBINATION INDICATE IDENTIFICATION OF SECTION, DETAIL OR VIEW.
IDENTIFICATION IS BASED ON THE LOCATION ON THE SHEET WHERE SHOWN. WHEN REFERENCING DRAWING
INFORMATION BETWEEN SHEETS BOTH THE IDENTIFICATION AND THE SHEET ARE QUOTED TOGETHER - EITHER
IN CALLOUT FORMAT AS SHOWN ABOVE OR IN THE FORM "VIEW NO./SHEET NO." (A1/S-101).



US Army Corps
of Engineers®

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WYBARS & ASSOCIATES 60 BROADWAY, 11 FLOOR, SUITE 2429 NEW YORK, NY 10049	SUBMITTED BY:	
	SPEC. ANS/D	HATS, G-002 DWG

NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES
COASTAL AND STORM RISK MANAGEMENT FEASIBILITY STUDY

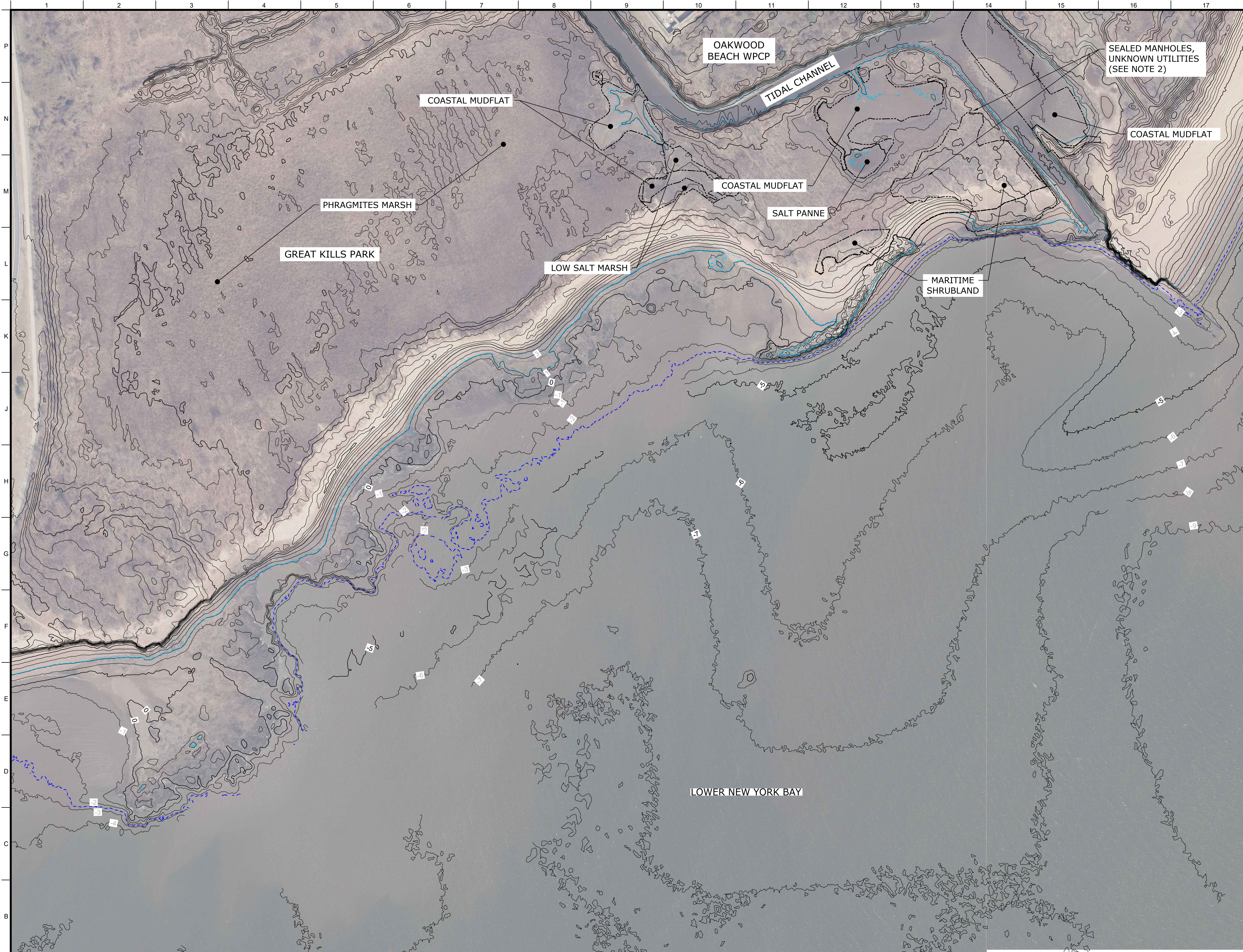
CIVIL
GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
PLAN VIEW

SHEET ID

G-002

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(FEBRUARY 2026)



GENERAL SHEET NOTES

- EXISTING TOPOBATHY SOURCE IS TAKEN FROM 2020 USACE NAN TOPOBATHY LIDAR DEM: NEW JERSEY AND NEW YORK.
- EXISTING CONDITION SOURCE IS TAKEN FROM : CITY OF NEW YORK, ENVIRONMENTAL PROTECTION, BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS, ON CALL - 14, TASK 28, OAKWOOD BEACH HABITAT RESTORATION, EXISTING CONDITIONS - OVERALL, DRAWING NUMBER C-03 DATED AUGUST 2020.
- AERIAL IMAGERY IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. IMAGE OBTAINED FROM GOOGLE EARTH. IMAGERY DATE 2024.

LEGEND

- EXISTING ROCK GROIN
- MEAN LOW WATER LINE
- MEAN HIGH WATER LINE
- HABITAT DELINEATION
- SEALED MANHOLE

US Army Corps of Engineers

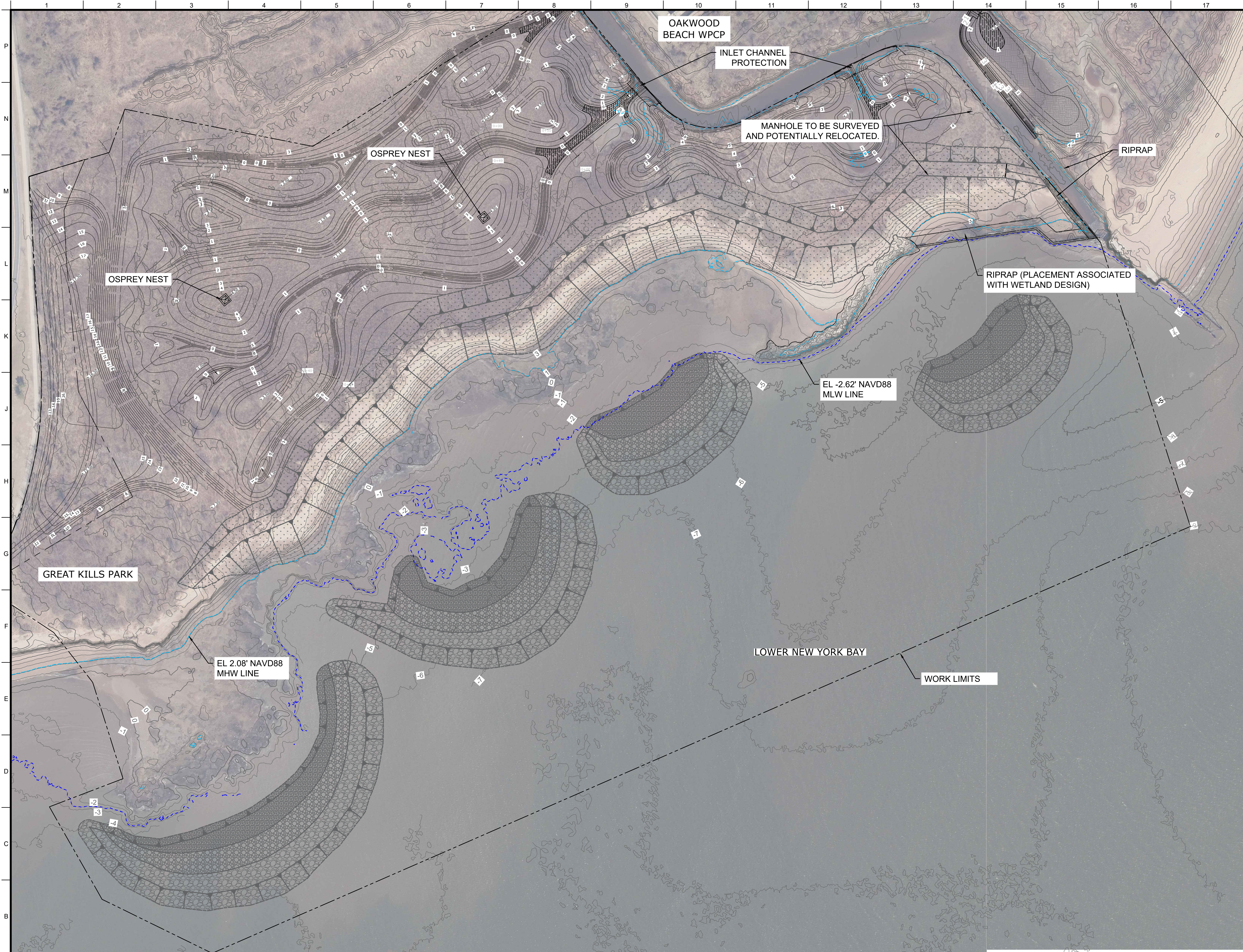
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U.S. ARMY CORPS OF ENGINEERS	NEW YORK DISTRICT	DRAWN BY:	SOLICITATION NO.:
26 FEDERAL PLAZA, ROOM 2037	NEW YORK, NY 10278	A. LAGUMBAYAN	
CHECKED BY:		CONTRACT NO.:	
WF BAIRD & ASSOCIATES			
60 BROAD ST., 24TH FLOOR, SUITE 2429			
NEW YORK, NY 10049			
SIZE:		HATS V-101.DWG	
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NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES
COASTAL AND STORM RISK MANAGEMENT FEASIBILITY STUDY

CIVIL
EXISTING CONDITIONS
PLAN VIEW

SHEET ID

V-101



GENERAL SHEET NOTES

1. EXISTING TOPOBATHY SOURCE IS TAKEN FROM 2020 USACE NAN TOPOBATHY LIDAR DEM: NEW JERSEY AND NEW YORK.
2. WETLAND FEATURE IS TAKEN FROM OAKWOOD BEACH HABITAT RESTORATION DESIGN STATEN ISLAND, NY – NYCDEP BUREAU OF ENVIRONMENTAL PLANNING AND ANALYSIS, AUGUST 2020.
3. CADD FILE FOR WETLAND CONTOURS WAS RETRIEVED FROM SHAPEFILE FOR NYCDEP HABITAT RESTORATION DESIGN PROVIDED TO AE BY USACE NAN.

LEGEND

- 20-150 lb REEF STONES (SHORE PROTECTION FEATURE)
- 250-1500 lb REEF STONES (SHORE PROTECTION FEATURE)
- 0.75 - 2.5 ton REEF STONES (SHORE PROTECTION FEATURE)
- DUNE NOURISHMENT (SHORE PROTECTION FEATURE)
- EXISTING ROCK GROIN
- MEAN LOW WATER LINE
- MEAN HIGH WATER LINE
- WORK LIMITS
- SEALED MANHOLE
- COIR FIBER MAT
- OSPREY NEST
- WETLAND CONTOUR LINES
- SPOT ELEVATION

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NEW YORK DISTRICT
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NEW YORK, NY 10278

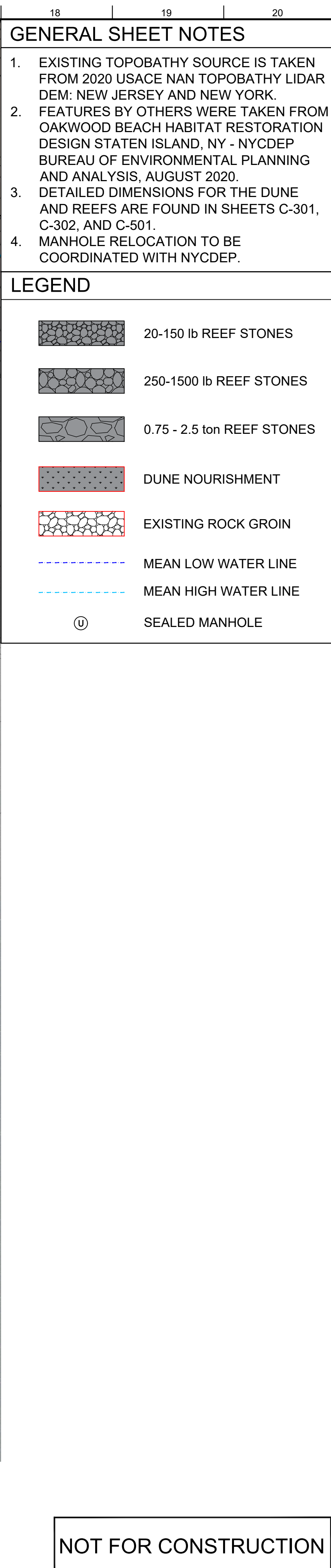
WF BAIRD & ASSOCIATES
1724TH FLOOR, SUITE 2429
60 BROAD ST., NEW YORK, NY 10049

NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES
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CIVIL
WETLAND FEATURES
PLAN VIEW

SHEET ID

C-101

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(FEBRUARY 2026)

