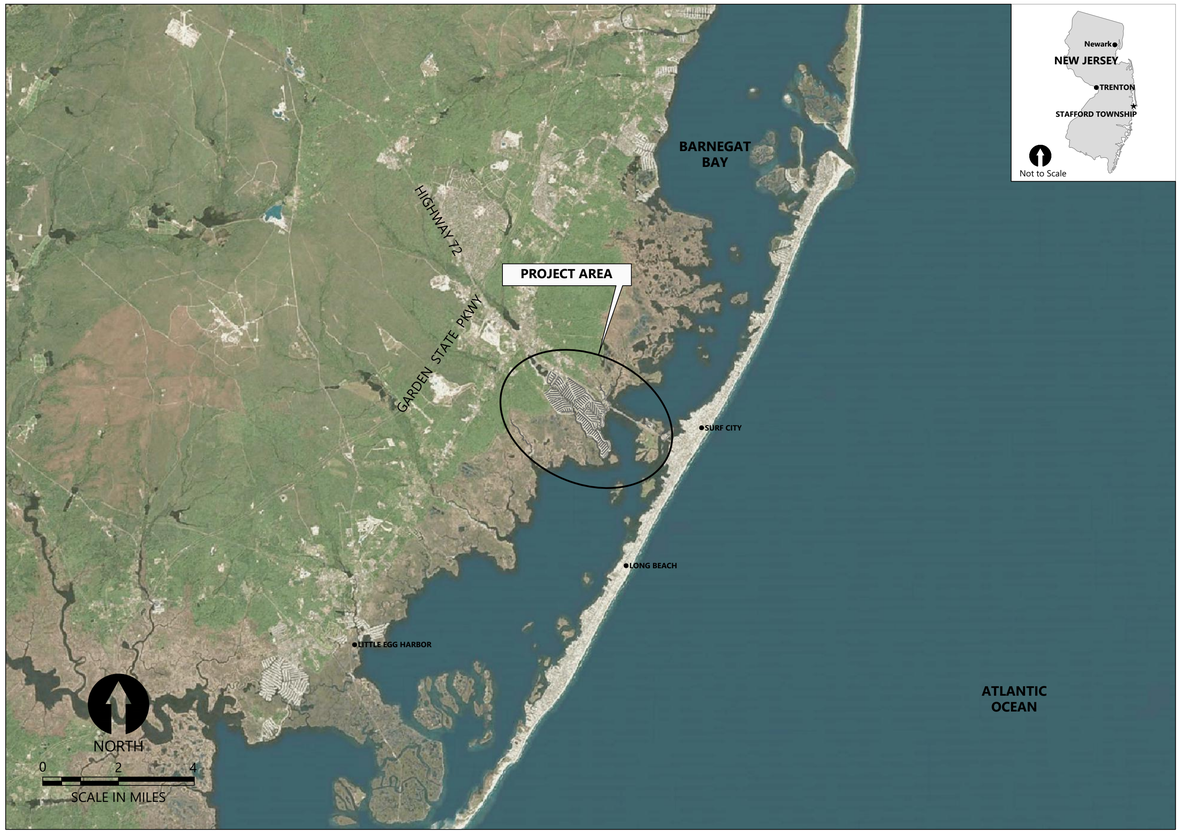
STAFFORD TOWNSHIP, NEW JERSEY

MAINTENANCE DREDGING PROJECT

VICINITY MAP



DRAWING INDEX		
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2	G1	GENERAL NOTES
3	G2	SHEET LAYOUT
4	D1	BEACH HAVEN 1 WEST DREDGING
5	D2	BEACH HAVEN 1 WEST & BEACH HAVEN 4 WEST DREDGING
6	D3	BEACH HAVEN 1 WEST DREDGING (CHANNEL)
7	D4	BEACH HAVEN 3 WEST & JENNIFER LANE DREDGING
8	D5	BEACH HAVEN 2 WEST DREDGING
9	D6	CEDAR RUN DREDGING
10	D7	MUD CITY NORTH, MUD CITY SOUTH, AND SELMA DRIVE DREDGING
11	D8	MILL CREEK 1 AND MILL CREEK 2 DREDGING
12	D9	CLEAR BONNET DREDGING
13	D10	BONNET ISLAND DREDGING
14	C1	DREDGE CROSS-SECTIONS A-A' THROUGH F-F'
15	C2	DREDGE CROSS-SECTIONS G-G' THROUGH J-J'
16	S1	EXISTING OUTFALL DREDGING TYPICAL DETAIL

NOTES:

1. HORIZONTAL DATUM: NEW JERSEY STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET
2. VERTICAL DATUM: MEAN LOW WATER (MLW)

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:10:42 -04'00'

STATE OF NEW JERSEY
RAM K. MOHAN
No. GE49100
LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

COVER SHEET

T1

SHEET # 1 OF 16

K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-001 COVER.dwg T1

May 04, 2022 8:27am rpetrie

SOURCE: HYDROGRAPHIC SURVEY CONDUCTED BY ACT ENGINEERS BETWEEN JULY 9-23, 2020. LOCATION MAP AERIAL IMAGERY BY BING MAPS, DATED 2020. STORMWATER OUTFALL MAPPING PROVIDED BY ACT ENGINEERS.

HORIZONTAL DATUM: NEW JERSEY STATE PLANE, NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET

VERTICAL DATUM: MEAN LOW WATER (MLW).

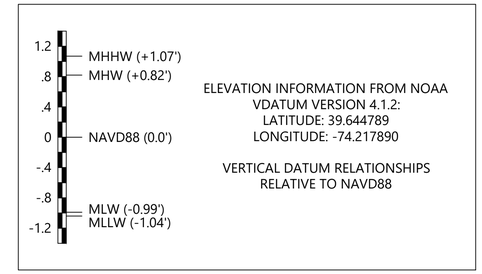
DREDGING DESIGN NOTES:

1. DEPTH OF PROPOSED DREDGING IN ALL AREAS IS TO ELEVATION -6.00' MLW.
2. LIMITS OF PROPOSED DREDGING AREAS INCLUDE 5-FOOT OFFSET FROM BULKHEADS.
3. UNLESS OTHERWISE NOTED, LIMITS OF PROPOSED DREDGING AREAS INCLUDE 25-FOOT OFFSET FROM VEGETATED SHORELINE AND BEACH SHORELINE.
4. DUE TO LACK OF AVAILABLE DATUM CONVERSION INFORMATION WITHIN THE STAFFORD TOWNSHIP BACK BAY, INCLUDING CEDAR RUN, MUD CITY, AND BEACH HAVEN WEST PROPOSED REMOVAL AREAS, THE NOAA VDATUM CONVERSION TOOL WAS USED TO CONVERT BATHYMETRIC ELEVATIONS BETWEEN NAVD88 AND MLW. THE NOAA VDATUM CONVERSION TOOL VERTICAL UNCERTAINTIES ARE DESCRIBED HERE: https://vdatum.noaa.gov/docs/est_uncertainties.html.
THE MAXIMUM UNCERTAINTY WITHIN NEW JERSEY COASTAL EMBAYMENTS IS BETWEEN 9.0 AND 9.2 CM (3.54 IN. AND 3.62 IN.).

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)
- SAV DENSE: (80-100% COVER)
- SAV MODERATE: (40-80% COVER)
- SAV SPARSE: (10-40% COVER)

STAFFORD TOWNSHIP BACK BAY VERTICAL DATUM:



SURVEY NOTES:

1. HORIZONTAL DATUM IS THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NJSPCS, NAD83), U.S. SURVEY FOOT, AND THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. PHYSICAL FEATURES OUTSIDE THE SITE HAVE NOT BEEN COMPLETELY SHOWN.
3. THE LOCATIONS AND/OR EXISTENCE OF ANY UNDERGROUND UTILITY SERVICE LINES NOT SHOWN WERE NOT VISIBLE AT THE TIME OF THE SURVEY AND ARE UNKNOWN.
4. UNDERGROUND ENCROACHMENTS, IF ANY HAVE NOT BEEN SHOWN.
5. NO STATEMENT IS BEING MADE OR IMPLIED HEREON, NOR SHOULD IT BE ASSUMED OR CONSTRUED THAT ANY STATEMENT IS BEING MADE BY THE FACT THAT NO EVIDENCE OF TOXIC WASTE IS PORTRAYED HEREON.
6. UNDERGROUND UTILITIES SHOWN HEREON WERE LOCATED FROM MARK-OUTS PRESENT AT THE TIME OF SURVEY. NO STATEMENT IS BEING MADE OR IMPLIED HEREON NOR SHOULD IT BE ASSUMED OR CONSTRUED THAT ANY STATEMENT IS BEING MADE AS TO THE ACCURACY AND/OR COMPLETENESS OF SAID MARK-OUTS.
7. DATUMS WERE ESTABLISHED ON SITE USING GPS OBSERVATIONS.
8. THE FIELD SURVEY WAS CONDUCTED FROM 7/9/20 THROUGH 7/23/20 BY ACT ENGINEERS, INC.
9. GEOID12B AND NOAA TIDAL EPOCH 1983-2001 WERE USED. SOUNDING ELEVATIONS (IN FEET AND TENTHS).
10. THE HYDROGRAPHIC INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
11. THIS MAP SHOULD NOT BE USED FOR NAVIGATION PURPOSES.
12. SUBMERGED AQUATIC VEGETATION (SAV) DATA FROM RUTGERS UNIVERSITY CENTER FOR REMOTE SENSING AND SPATIAL ANALYSIS. LATHROP, RICHARD AND SCOTT HAAG. "ASSESSMENT OF SEAGRASS STATUS IN THE BARNEGAT BAY - LITTLE EGG HARBOR ESTUARY SYSTEM: 2003 AND 2009". MAY 2011.

NO.	AREA	DRAWING SHEET	DESIGN VOLUME (CY)
1	BEACH HAVEN WEST 1 (AREA 1-CHANNEL)	D1	91,361
2	BEACH HAVEN WEST 1 (AREA 2A)	D1	30,329
3	BEACH HAVEN WEST 1 (AREA 2B)	D1	129,403
4	BEACH HAVEN WEST 2 (AREA 1)	D4	14,025
5	BEACH HAVEN WEST 2 (AREA 2)	D4	17,805
6	BEACH HAVEN WEST 2 (AREA 3)	D5	23,261
7	BEACH HAVEN WEST 3 (AREA 1)	D4	12,274
8	BEACH HAVEN WEST 3 (AREA 2)	D4	19,372
9	BEACH HAVEN WEST 4 (AREA 1)	D4	36,398
10	BEACH HAVEN WEST 4 (AREA 2)	D2	55,360
11	CEDAR RUN	D6	16,162
12	MUD CITY NORTH	D7	47,994
13	MUD CITY SOUTH	D7	10,354
14	JENNIFER LANE BAYFRONT	D4	38,640
15	SELMA DRIVE BAYFRONT	D7	19,306
16	MILL CREEK BAYFRONT (AREA 1)	D8	12,067
17	MILL CREEK BAYFRON (AREA 2)	D8	48,467
18	CLEAR BONNET	D9	40,871
19	BONNET ISLAND	D10	42,887
		TOTAL VOLUME:	**706,336**

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:12:41 -04'00'

STATE OF NEW JERSEY · RAM K. MOHAN · No. GE49100 · LICENSED PROFESSIONAL ENGINEER

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

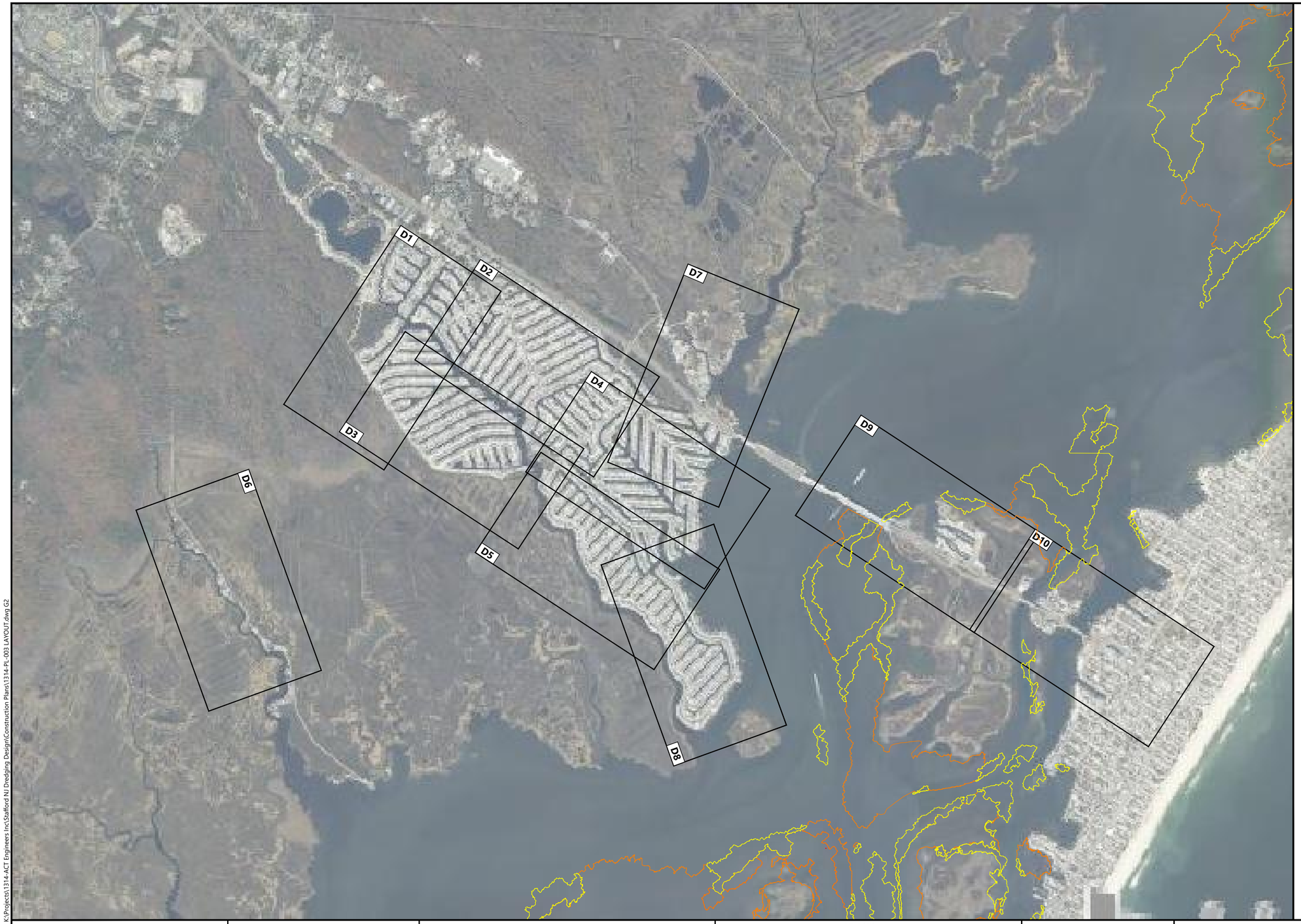
STAFFORD TOWNSHIP MAINTENANCE DREDGING

GENERAL NOTES

G1

SHEET # 2 OF 16

May 04, 2022 8:27am rpetrie K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-003 LAYOUT.dwg G1



LEGEND:

- SAV DENSE: (80-100% COVER)
- SAV MODERATE: (40-80% COVER)
- SAV SPARSE: (10-40% COVER)

NOTES:

1. SUBMERGED AQUATIC VEGETATION (SAV) DATA FROM RUTGERS UNIVERSITY CENTER FOR REMOTE SENSING AND SPATIAL ANALYSIS. LATHROP, RICHARD AND SCOTT HAAG. "ASSESSMENT OF SEAGRASS STATUS IN THE BARNEGAT BAY - LITTLE EGG HARBOR ESTUARY SYSTEM: 2003 AND 2009". MAY 2011.

NORTH

0 1200 2400

SCALE IN FEET

NOTES:

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2. VERTICAL DATUM: MEAN LOW WATER (MLW)

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ONE INCH

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K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-003 LAYOUT.dwg G2

May 04, 2022 8:27am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

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Date: 2022.05.05 15:13:10 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

REVISIONS				
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CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

SHEET LAYOUT

G2

SHEET # 3 OF 16

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

1. DREDGING SHALL TERMINATE AT LEAST 25-FEET FROM THE EDGE OF EXISTING MARSH OR VEGETATED SHORELINE UNLESS OTHERWISE NOTED. OFFSET FROM SHORELINE TO BE VERIFIED IN THE FIELD PRIOR TO START OF DREDGING ACTIVITY.

NORTH

0 200 400

SCALE IN FEET

NOTES:

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May 04, 2022 8:27am rpetrie

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ACT ENGINEERS

Ram Mohan

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Date: 2022.05.05 15:13:36 -04'00'

STATE OF NEW JERSEY · RAM K. MOHAN · No. GE49100 · LICENSED PROFESSIONAL ENGINEER

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

BEACH HAVEN 1 WEST DREDGING

D1

SHEET # 4 OF 16

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400

SCALE IN FEET

NOTES:

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ONE INCH

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May 04, 2022 8:27am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

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Date: 2022.05.05 15:13:59 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

BEACH HAVEN 1 WEST & BEACH HAVEN 4 WEST DREDGING

D2

SHEET # 5 OF 16

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

1. DREDGING SHALL TERMINATE AT LEAST 25-FEET FROM THE EDGE OF EXISTING MARSH OR VEGETATED SHORELINE UNLESS OTHERWISE NOTED. OFFSET FROM SHORELINE TO BE VERIFIED IN THE FIELD PRIOR TO START OF DREDGING ACTIVITY.

NORTH

0 200 400

SCALE IN FEET

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D3

May 04, 2022 8:27am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:14:29 -04'00'

STATE OF NEW JERSEY
RAM K. MOHAN
No. GE49100
LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

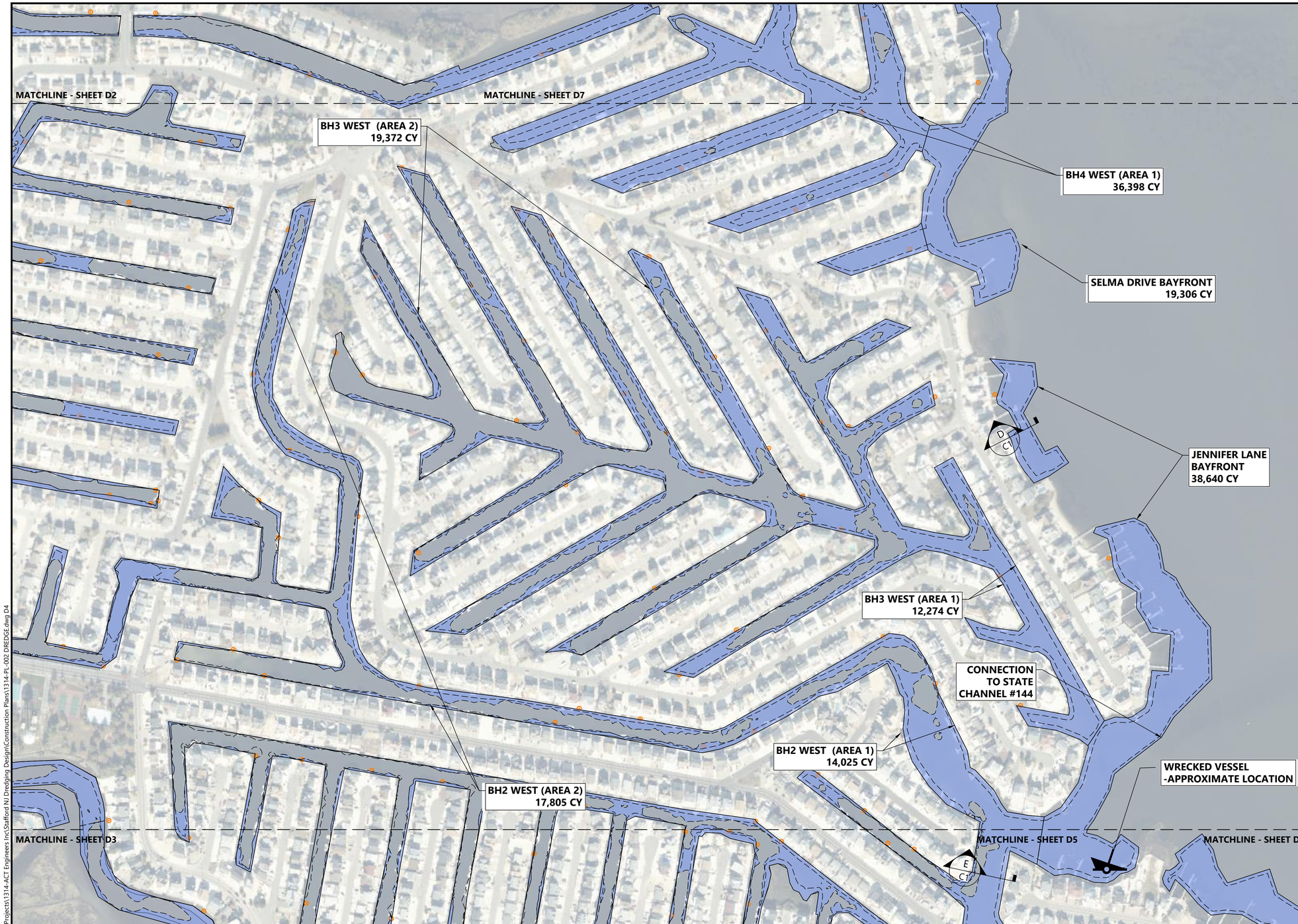
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

BEACH HAVEN 1 WEST DREDGING (CHANNEL)

D3

SHEET # 6 OF 16



LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400

SCALE IN FEET

NOTES:

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ONE INCH

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K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D4

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

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Date: 2022.05.05 15:14:56 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

REVISIONS

REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
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SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

BEACH HAVEN 3 WEST & JENNIFER LANE DREDGING

D4

SHEET # 7 OF 16

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400

SCALE IN FEET

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K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D5

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

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Date: 2022.05.05 15:15:39 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

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DESIGNED BY: T. MERRITTS
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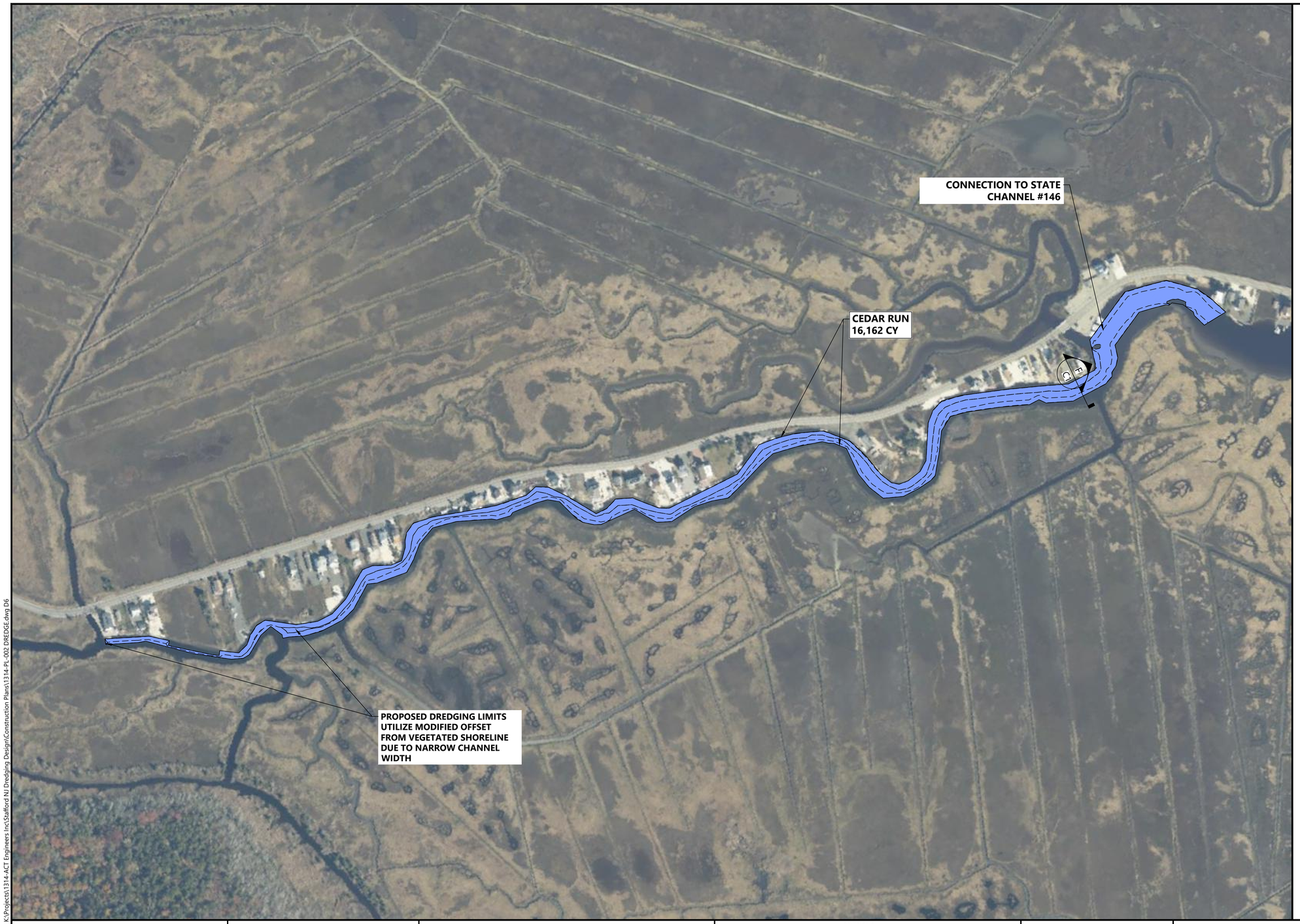
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

BEACH HAVEN 2 WEST DREDGING

D5

SHEET # 8 OF 16



LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400
SCALE IN FEET

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH
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K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D6

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:16:04 -04'00'

STATE OF NEW JERSEY · RAM K. MOHAN · No. GE49100 · LICENSED PROFESSIONAL ENGINEER

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APPROVED BY: R. MOHAN
SCALE: AS NOTED
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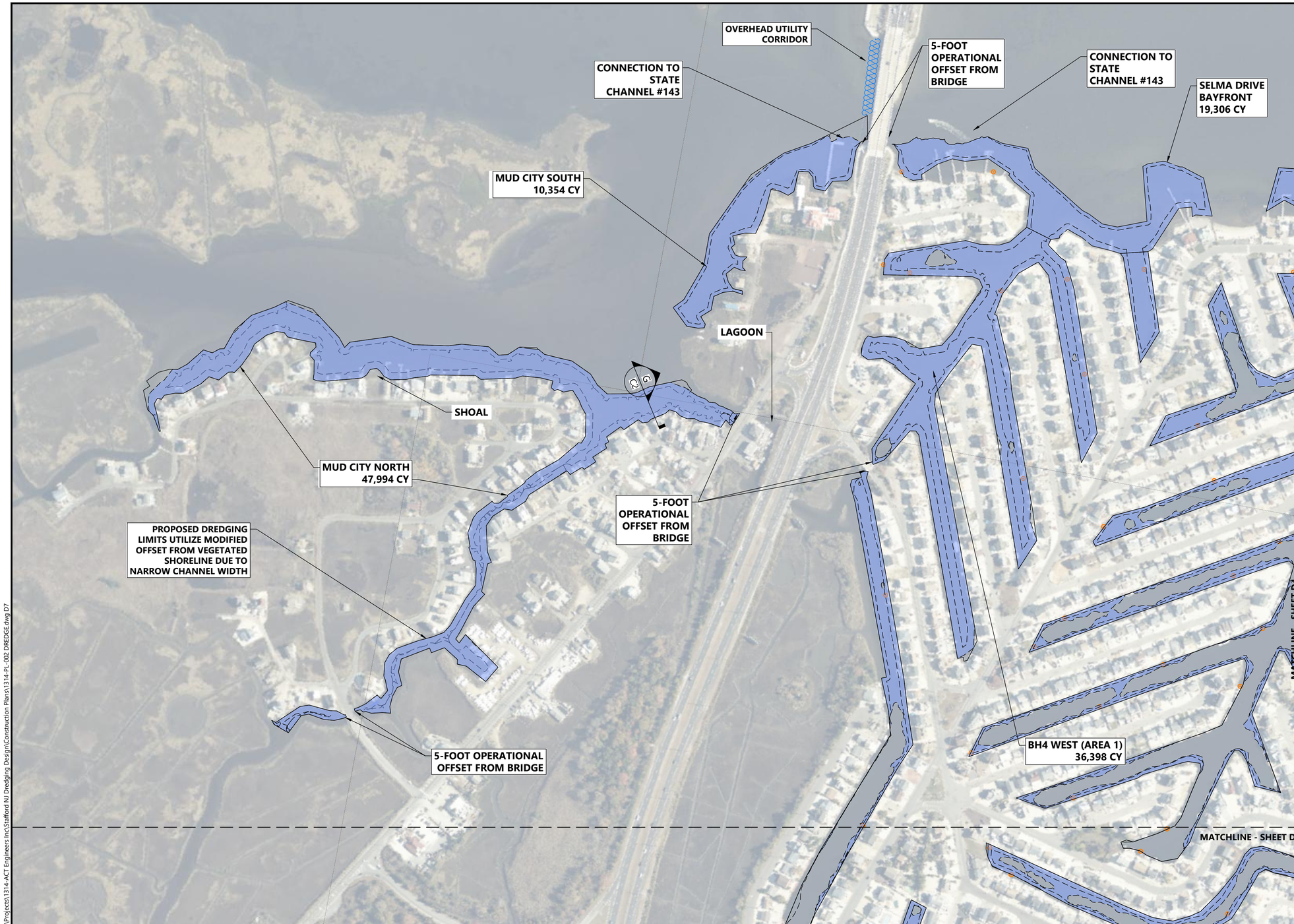
STAFFORD TOWNSHIP MAINTENANCE DREDGING

CEDAR RUN DREDGING

D6

SHEET # 9 OF 16



LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- OVERHEAD UTILITY CORRIDOR
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400
SCALE IN FEET

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ONE INCH
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K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D7

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

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STATE OF NEW JERSEY
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STAFFORD TOWNSHIP MAINTENANCE DREDGING

MUD CITY NORTH, MUD CITY SOUTH, AND SELMA DRIVE DREDGING

D7

SHEET # 10 OF 16

LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL - APPROXIMATE
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)

NOTES:

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NORTH

0 200 400
SCALE IN FEET

NOTES:

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2. VERTICAL DATUM: MEAN LOW WATER (MLW)

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D8A
May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan
Digitally signed by Ram Mohan
Date: 2022.05.05 15:17:18 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

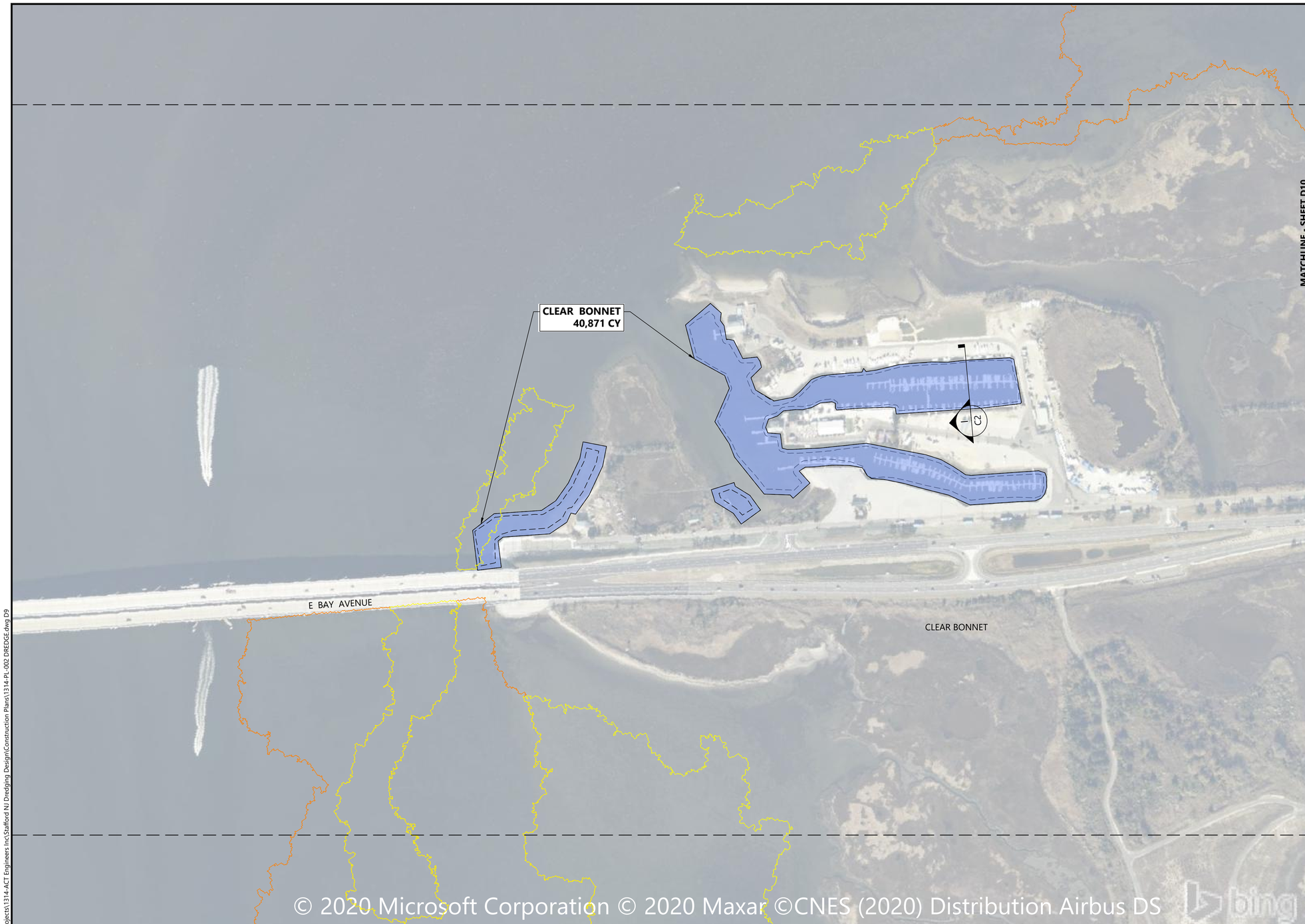
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

MILL CREEK 1 AND MILL CREEK 2 DREDGING

D8

SHEET # 11 OF 16



LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)
- SAV DENSE: (80-100% COVER)
- SAV MODERATE: (40-80% COVER)
- SAV SPARSE: (10-40% COVER)

NOTES:

1. SUBMERGED AQUATIC VEGETATION (SAV) DATA FROM RUTGERS UNIVERSITY CENTER FOR REMOTE SENSING AND SPATIAL ANALYSIS. LATHROP, RICHARD AND SCOTT HAAG. "ASSESSMENT OF SEAGRASS STATUS IN THE BARNEGAT BAY - LITTLE EGG HARBOR ESTUARY SYSTEM: 2003 AND 2009". MAY 2011.
2. DREDGING SHALL TERMINATE AT LEAST 25-FEET FROM THE EDGE OF EXISTING MARSH OR VEGETATED SHORELINE UNLESS OTHERWISE NOTED. OFFSET FROM SHORELINE TO BE VERIFIED IN THE FIELD PRIOR TO START OF DREDGING ACTIVITY.

NORTH

0 200 400

SCALE IN FEET

NOTES:

1. HORIZONTAL DATUM: NEW JERSEY STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET
2. VERTICAL DATUM: MEAN LOW WATER (MLW)

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ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D9

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:18:14 -04'00'

STATE OF NEW JERSEY RAM K. MOHAN No. GE49100 LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

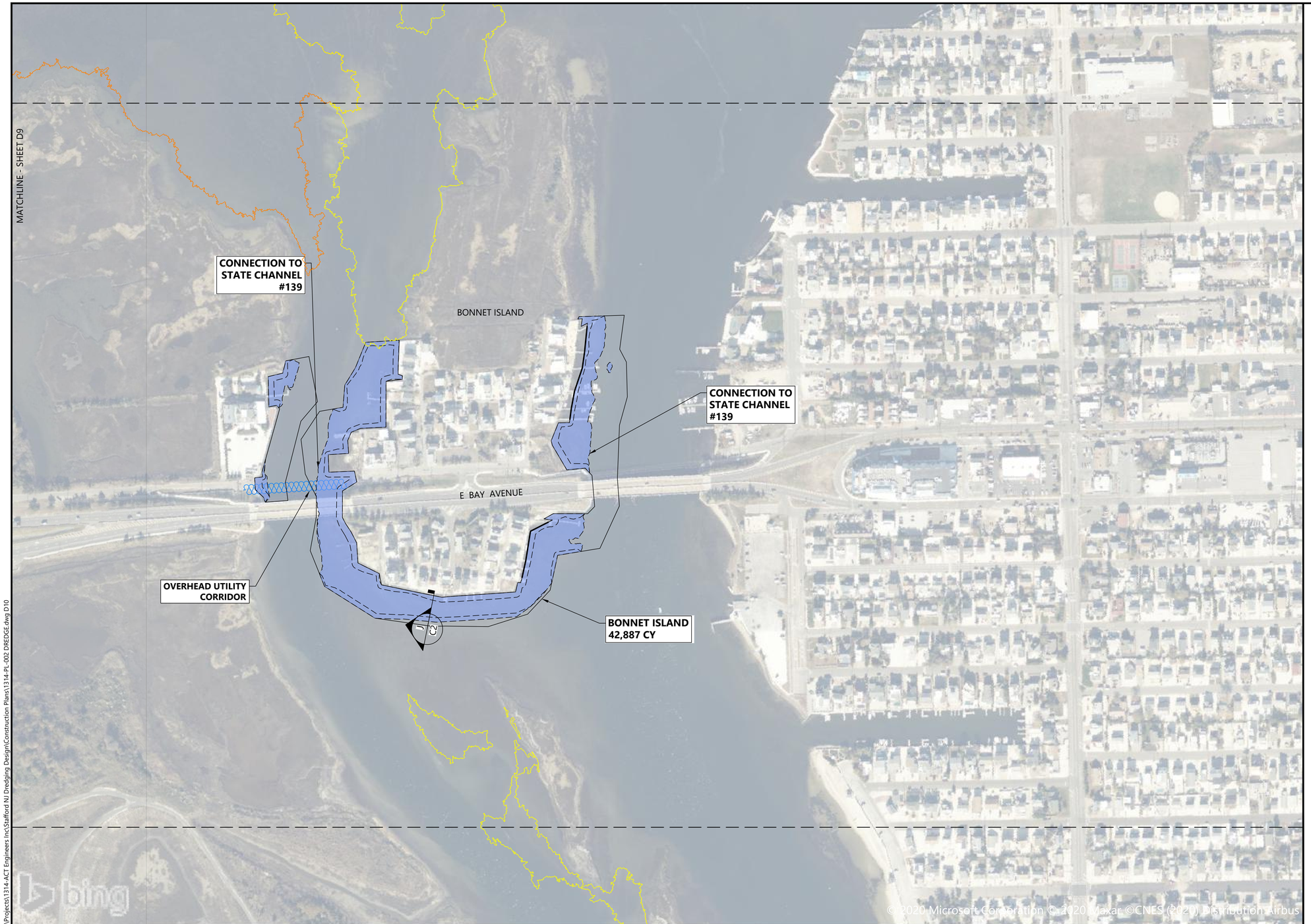
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

CLEAR BONNET DREDGING

D9

SHEET # 12 OF 16



LEGEND:

- PROPOSED DREDGING TOE OF SLOPE (-6' MLW)
- PROPOSED DREDGING TOP OF SLOPE (VARIED ELEV.)
- STORMWATER OUTFALL
- WRECKED VESSEL - APPROXIMATE
- PROPOSED DREDGING AREA (CURRENTLY SHALLOWER THAN -6' MLW)
- SAV DENSE: (80-100% COVER)
- SAV MODERATE: (40-80% COVER)
- SAV SPARSE: (10-40% COVER)

NOTES:

1. SUBMERGED AQUATIC VEGETATION (SAV) DATA FROM RUTGERS UNIVERSITY CENTER FOR REMOTE SENSING AND SPATIAL ANALYSIS. LATHROP, RICHARD AND SCOTT HAAG. "ASSESSMENT OF SEAGRASS STATUS IN THE BARNEGAT BAY - LITTLE EGG HARBOR ESTUARY SYSTEM: 2003 AND 2009". MAY 2011.
2. DREDGING SHALL TERMINATE AT LEAST 25-FEET FROM THE EDGE OF EXISTING MARSH OR VEGETATED SHORELINE UNLESS OTHERWISE NOTED. OFFSET FROM SHORELINE TO BE VERIFIED IN THE FIELD PRIOR TO START OF DREDGING ACTIVITY.

NORTH

0 200 400

SCALE IN FEET

NOTES:

1. HORIZONTAL DATUM: NEW JERSEY STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET
2. VERTICAL DATUM: MEAN LOW WATER (MLW)

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ONE INCH

AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY

K:\Projects\1314-ACT Engineers Inc\Stafford NJ Dredging Design\Construction Plans\1314-PL-002 DREDGE.dwg D10

May 04, 2022 8:28am rpetrie

ANCHOR QEA

ACT ENGINEERS

Ram Mohan

Digitally signed by Ram Mohan
Date: 2022.05.05 15:18:43 -04'00'

STATE OF NEW JERSEY — RAM K. MOHAN — No. GE49100 — LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

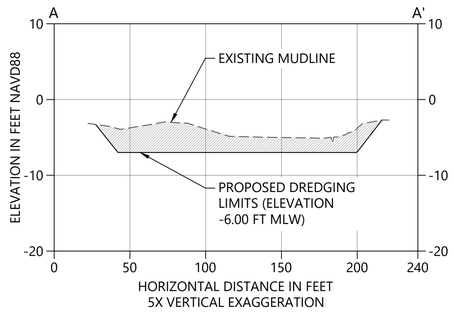
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

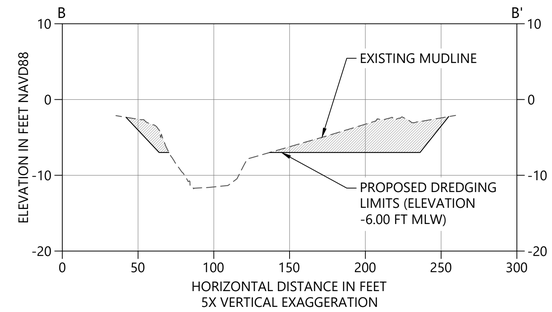
BONNET ISLAND DREDGING

D10

SHEET # 13 OF 16



A / D1 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'



B / D2 SECTION
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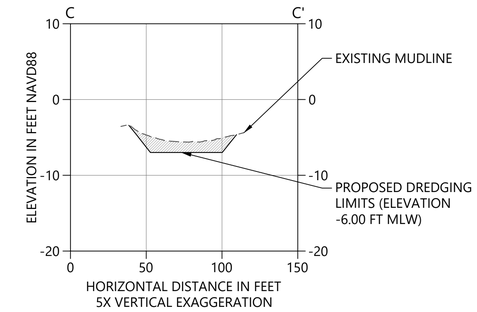
VERTICAL SCALE: 1" = 10'



C / D3 SECTION
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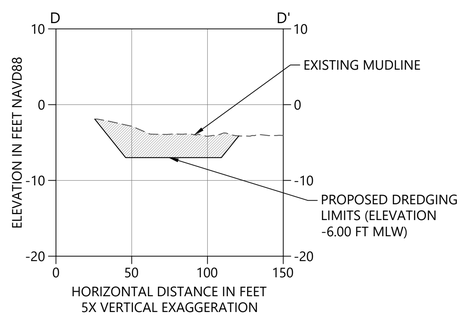
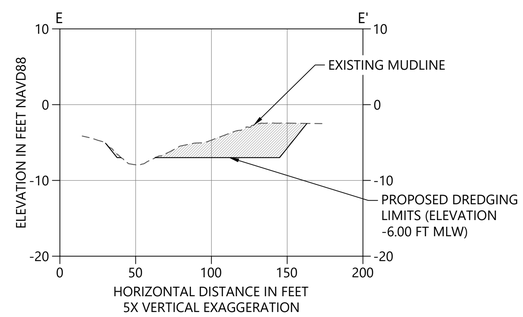
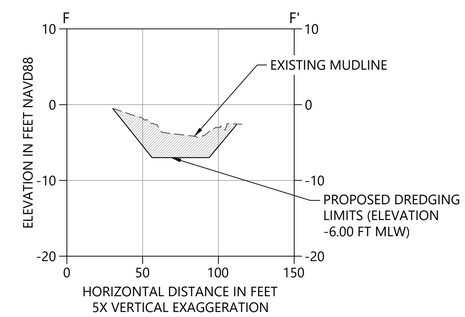
VERTICAL SCALE: 1" = 10'



D / D4 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'



E / D5 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'



F / D6 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'

NOTES:

1. HORIZONTAL DATUM: NEW JERSEY STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH
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ANCHOR QEA

ACT ENGINEERS

Ram Mohan
Digitally signed by Ram Mohan
Date: 2022.05.05 15:19:14 -04'00'

STATE OF NEW JERSEY · RAM K. MOHAN · No. GE49100 · LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

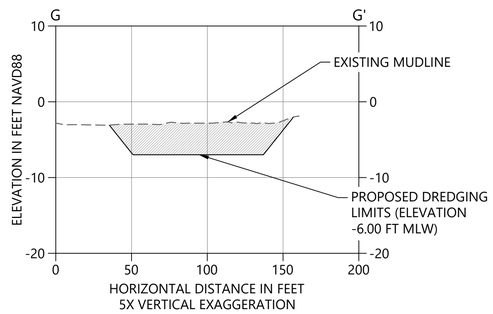
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

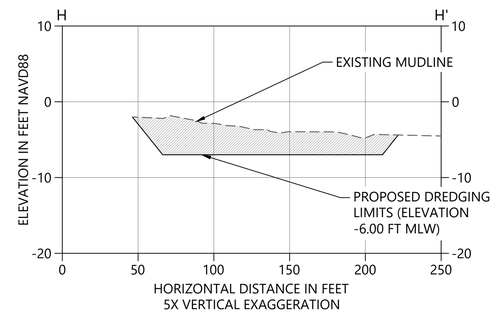
DREDGING CROSS-SECTIONS A-A' THROUGH F-F'

C1

SHEET # 14 OF 16



G / D7 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'



H / D8 SECTION
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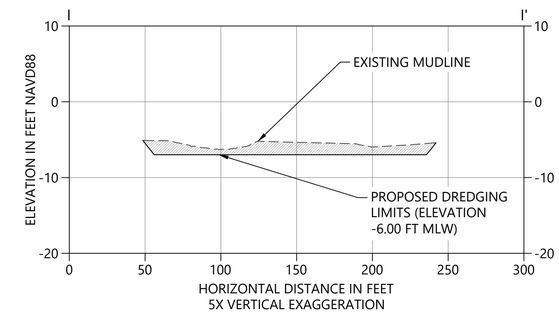
VERTICAL SCALE: 1" = 10'



I / D9 SECTION
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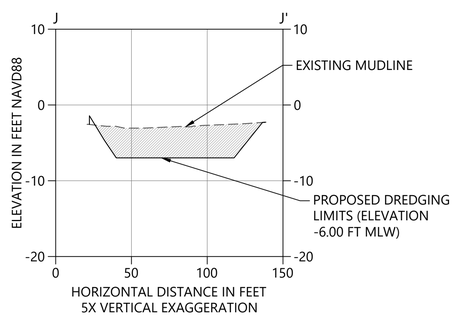
VERTICAL SCALE: 1" = 10'



J / D10 SECTION
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 10'

NOTES:

1. HORIZONTAL DATUM: NEW JERSEY STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83), U.S. SURVEY FEET
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

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ONE INCH
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ANCHOR QEA

ACT ENGINEERS

Ram Mohan
Digitally signed by Ram Mohan
Date: 2022.05.05 15:19:50 -04'00'

STATE OF NEW JERSEY · RAM K. MOHAN · No. GE49100 · LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

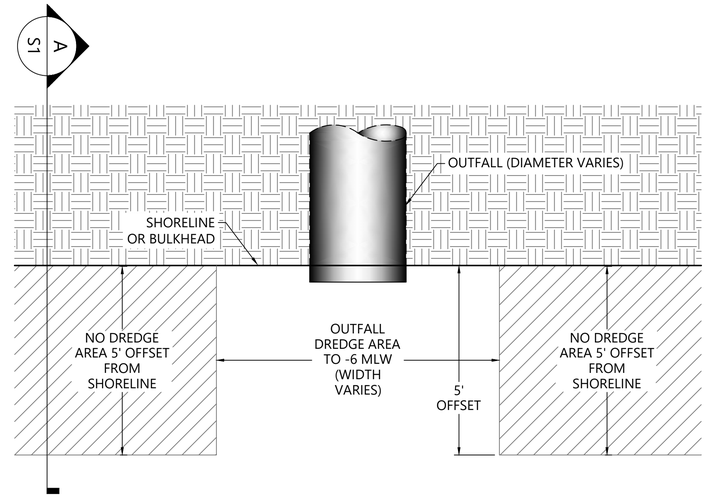
DESIGNED BY: T. MERRITTS
DRAWN BY: M. PRATSCHNER/R. PETRIE
CHECKED BY: R. MOHAN
APPROVED BY: R. MOHAN
SCALE: AS NOTED
DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

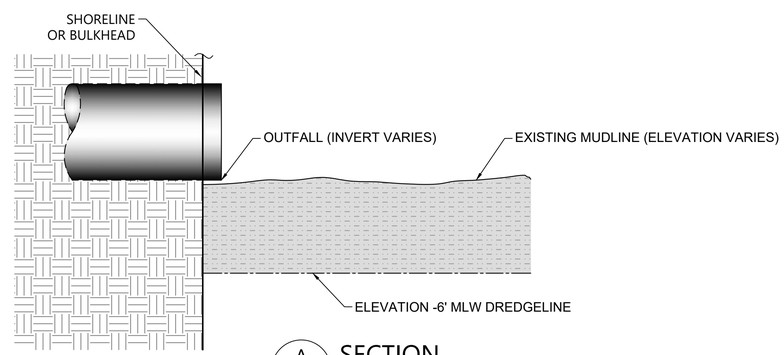
DREDGING CROSS-SECTIONS
G-G' THROUGH J-J'

C2

SHEET # 15 OF 16



1 / - OUTFALL DREDGE AREA PLAN (TYP.)
SCALE: N.T.S.



A / S1 SECTION
SCALE: N.T.S.

PLAN INTENDED TO BE VIEWED IN COLOR, ADJACENT BLOCK IS "BLUE"

ONE INCH
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ANCHOR QEA

ACT ENGINEERS

Ram Mohan
Digitally signed by Ram Mohan
Date: 2022.05.05 15:20:25 -04'00'

STATE OF NEW JERSEY
RAM K. MOHAN
No. GE49100
LICENSED PROFESSIONAL ENGINEER

REVISIONS				
REV	DATE	BY	APP'D	DESCRIPTION

DESIGNED BY: T. MERRITTS
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DATE: MAY 2022

STAFFORD TOWNSHIP MAINTENANCE DREDGING

EXISTING OUTFALL DREDGING TYPICAL DETAIL

S1

SHEET # **16** OF **16**