

HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor
**Cutoff
& Range A**

NORTH CAROLINA

Cutoff

Survey Date: 31 October & 04 - 05 November 2024
Map Date: 06 November 2024
Imagery Date: 27 April 2024
© 2024 Maxar Technologies
Scale: 1:3,000
File Name: MC_03_RGA_20241104_CS
Surveyed by: JAJ,RW
Mapped by: k7opnkms
Processed by: k7opnkms

200 100 0 200 400 600 800
Feet

1. ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.

2. PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BEAUFORT" USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.

3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM MLLW.

4. TIDE GAGE LOCATED AT DUKE MARINE LAB. USE OF THE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.

5. THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER110-1-8152.

6. THE INFORMATION DEPICTED ON THIS SURVEY 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. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325

7. NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.

8. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAV.USACE.ARMY.MIL

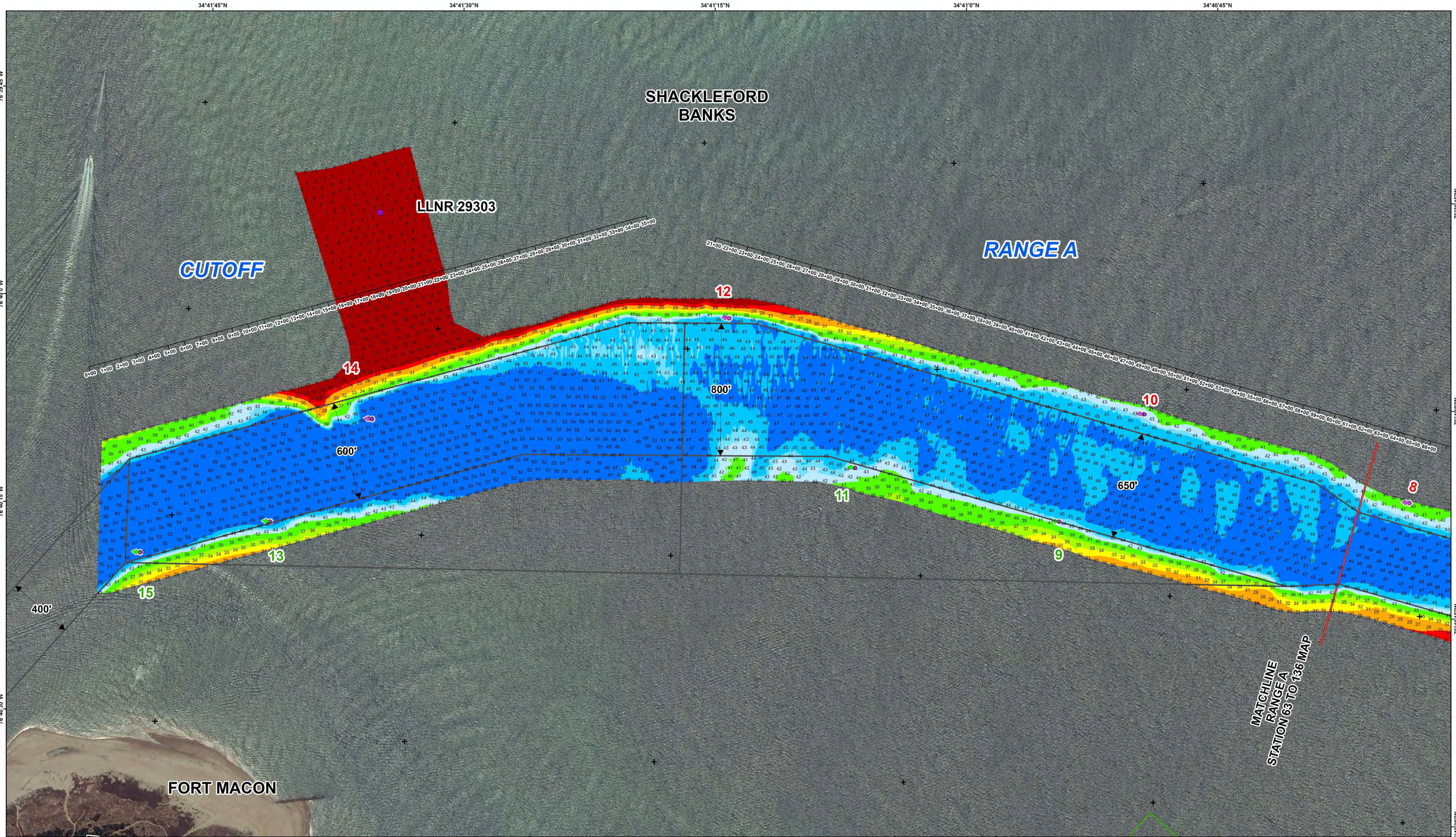
TYPICAL SECTION
MLLW
-45' & -47'
PROJECT
DEPTH
Varies
NOT TO SCALE

Aids to Navigation
Can
Nun
Green Lighted Buoy
Red Lighted Buoy
Junction Marker

Green Light
Red Light
Green Daybeacon
Red Daybeacon
Danger Sign
Mileboard
Tide Gage

Depth In Feet
20-25
25-32
32-35
35-38
38-42
42-44
44-45
45-47
47 and Deeper

Matchlines
Placement Areas
Navigation Channel



HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor

Cutoff & Range A

NORTH CAROLINA

Cutoff

Survey Date: 13 & 14 August 2024
Map Date: 16 August 2024
Imagery Date: 27 April 2024
© 2024 Maxar Technologies
Scale: 1:3,000
File Name: MC_03_RGA_20240814_CS
Surveyed by: JAJ,RW
Mapped by: k7opnkms
Processed by: k7opnkms

200 100 0 200 400 600 800
Feet

1. ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
2. PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BEAUFORT" USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM MLLW.
4. TIDE GAUGE LOCATED AT DUKE MARINE LAB. USE OF THE VALUES FOR THIS GAUGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAUGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
5. THIS PROJECT WAS DESIGNED BY THE WILMINGTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152.
6. THE INFORMATION DEPICTED ON THIS SURVEY 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. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325.
7. NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.
8. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAN.USACE.ARMY.MIL

TYPICAL SECTION

NOT TO SCALE

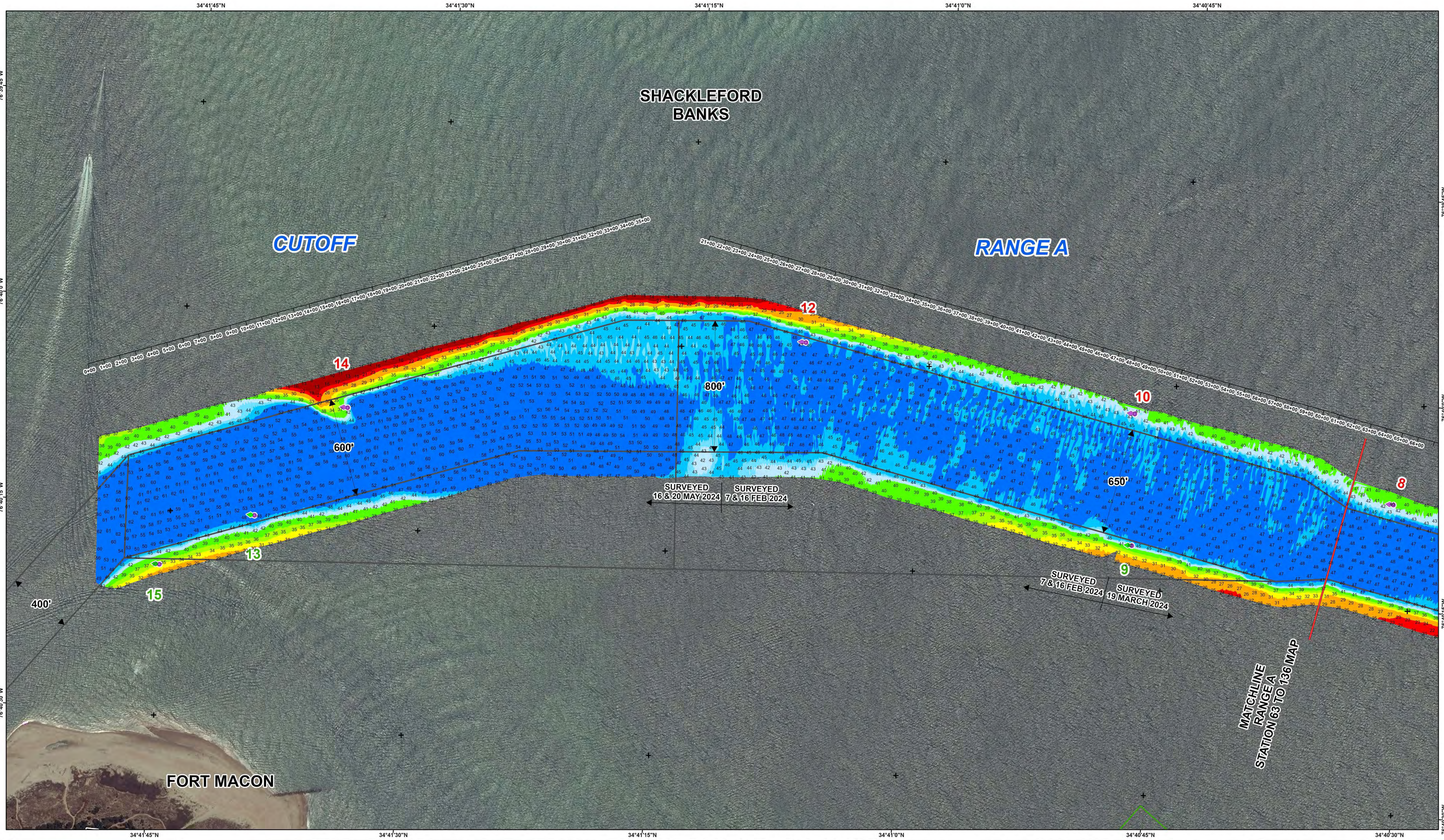
Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gauge

Depth In Feet

20 - 25 32 - 35 38 - 42 44 - 45 47 and Deeper

Matchlines
Placement Areas
Navigation Channel



HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor

Cutoff & Range A

Survey Date: 7 & 16 Feb, 19 March, 16 & 20 May 2024
Map Date: 21 May 2024
Imagery Date: 27 April 2024
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Scale: 1:3,000
File Name: MC_03_RGA_20240516_CS
Surveyed by: JAC,RW
Mapped by: k7opnkms
Processed by: k7opnkms

1. ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.
2. PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BEAUFORT" USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.
3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.
4. TIDE GAGE LOCATED AT DUKE MARINE LAB. USE OF THE VALUES FOR THIS SPACE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.
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6. THE INFORMATION DEPICTED ON THIS SURVEY 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. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325.
7. NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.
8. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: WWW.SAV.USACE.ARMY.MIL

TYPICAL SECTION

NOT TO SCALE

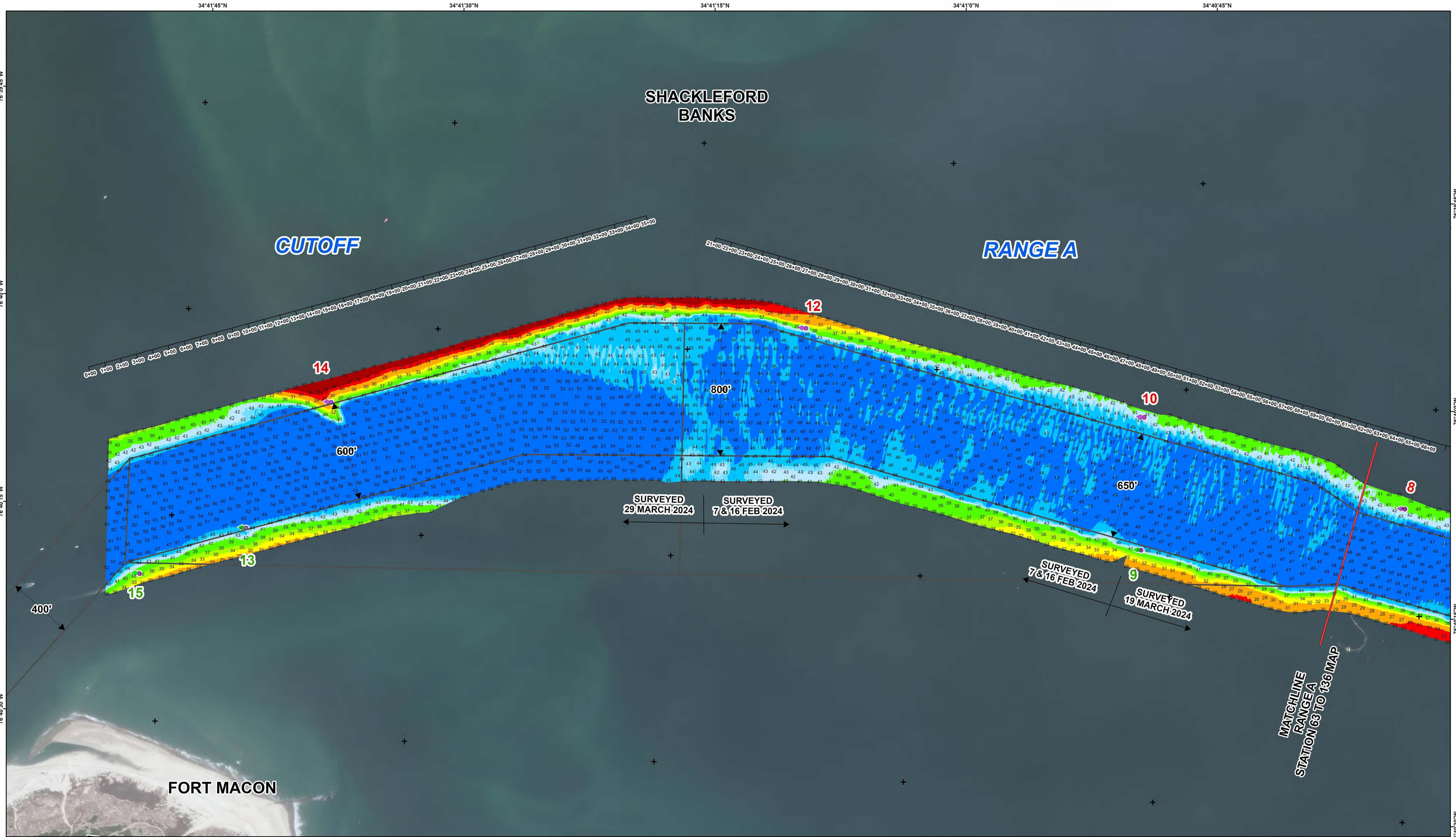
Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage

Depth In Feet

20 and Shallower

Matchlines



HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor

Cutoff & Range A

NORTH CAROLINA

Survey Date: 29 March 2024
Map Date: 01 April 2024
Imagery Date: 15 March 2024
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Scale: 1:3,000
File Name: MC_03_RGA_20240329_CS
Surveyed by: JAJ, RW
Mapped by: k7opnkms
Processed by: k7opnkms

200 100 0 200 400 600 800
Feet

1. ELEVATIONS ARE IN FEET AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) RELATIVE TO THE 1983-2001 TIDAL EPOCH.

2. PROJECT SURVEYED WITH DISTRICT SURVEY VESSEL "BEAUFORT", USING RTK GPS HORIZONTAL POSITIONING EQUIPMENT AND 200 KHZ SOUNDING EQUIPMENT.

3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM MLLW.

4. TIDE GAGE LOCATED AT DUKE MARINE LAB. USE OF TIDE VALUES FOR THIS GAGE AREA ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.

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7. NAVIGATION AIDS LOCATED WITH DISTRICT SURVEY VESSEL. ACCURACY +/- 3 METERS.

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TYPICAL SECTION

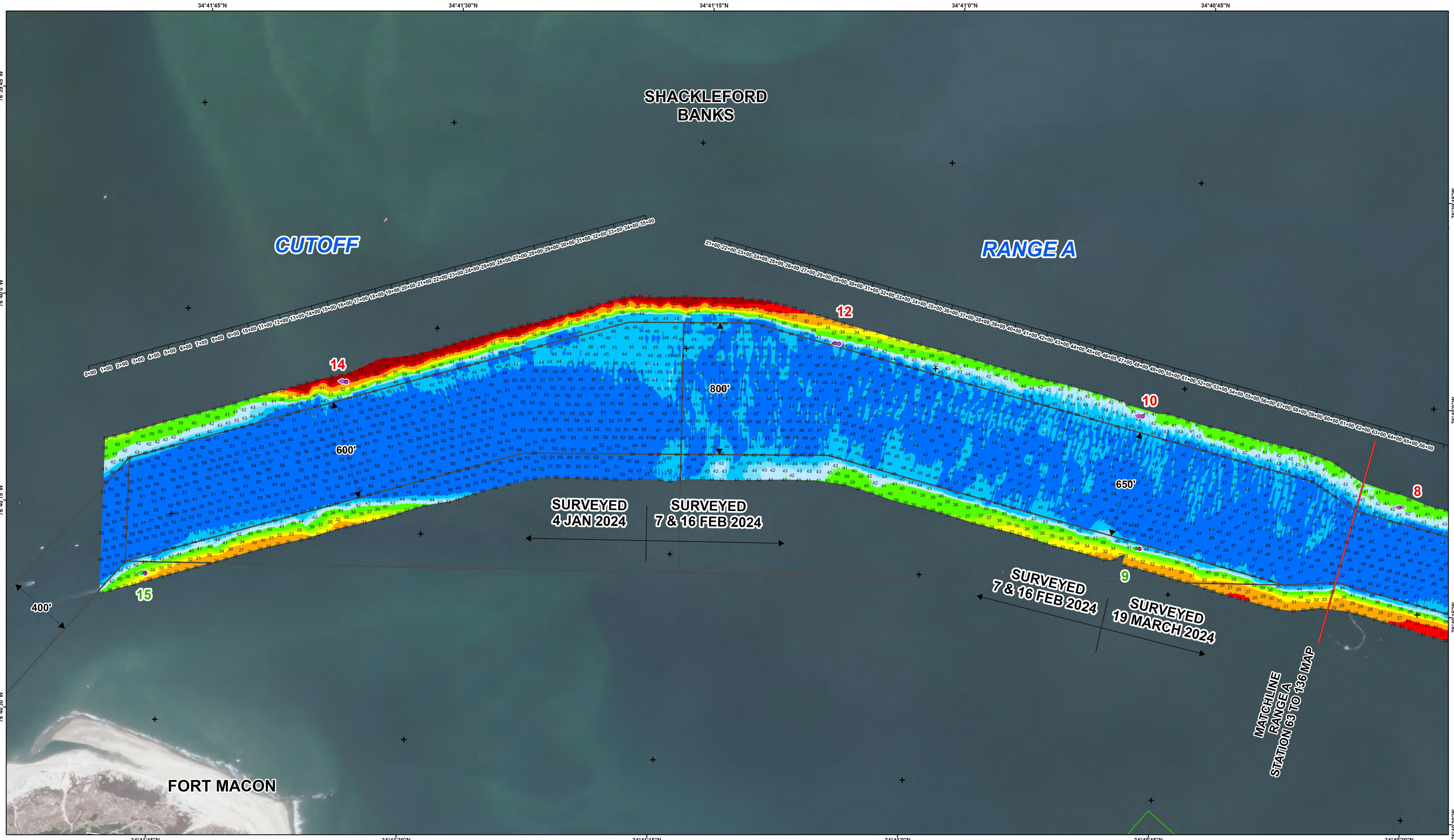
1 3
PROJECT DEPTH
Varies
NOT TO SCALE

Aids to Navigation

- Can
- Nun
- Green Lighted Buoy
- Red Lighted Buoy
- Junction Marker
- Green Light
- Red Light
- Green Daybeacon
- Red Daybeacon
- Danger Sign
- Mileboard
- Tide Gage
- Matchlines
- Navigation Channel

Depth In Feet

20 and Shallower
20-25
25-32
32-35
35-38
38-42
42-44
44-45
45-47
47 and Deeper



HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor

Cutoff
& Range A

NORTH CAROLINA

Survey Date: 4 Jan, 7 & 16 Feb, 19 Mar 2024
Map Date: 22 March 2024
Imagery Date: 15 March 2024
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Scale: 1:3,000
File Name: MC_03_RGA_20240319_AD
Surveyed by: JAJ,RWA
Mapped by: k7opnagf
Processed by: k7opnagf

200 100 0 200 400 600 800

Feet

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3. HORIZONTAL DATUM NAD 1983. VERTICAL DATUM M.L.L.W.

4. TIDE GAGE LOCATED AT DUKE MARINE LAB. USE OF TIDE VALUES FOR THIS GAGE ARE RESTRICTED TO QUALITY ASSURANCE PURPOSES FOR VERIFICATION OF RTK TIDES. THE WILMINGTON DISTRICT WILL ONLY USE STAFF GAGE TIDAL VALUES FOR FINAL MAPPING AND QUANTITY CALCULATIONS IF RTK GPS IS UNAVAILABLE AT THE TIME OF SURVEY.

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TYPICAL SECTION

Aids to Navigation

Can

Nun

Green Lighted Buoy

Red Lighted Buoy

Junction Marker

Green Light

Red Light

Green Daybeacon

Red Daybeacon

Danger Sign

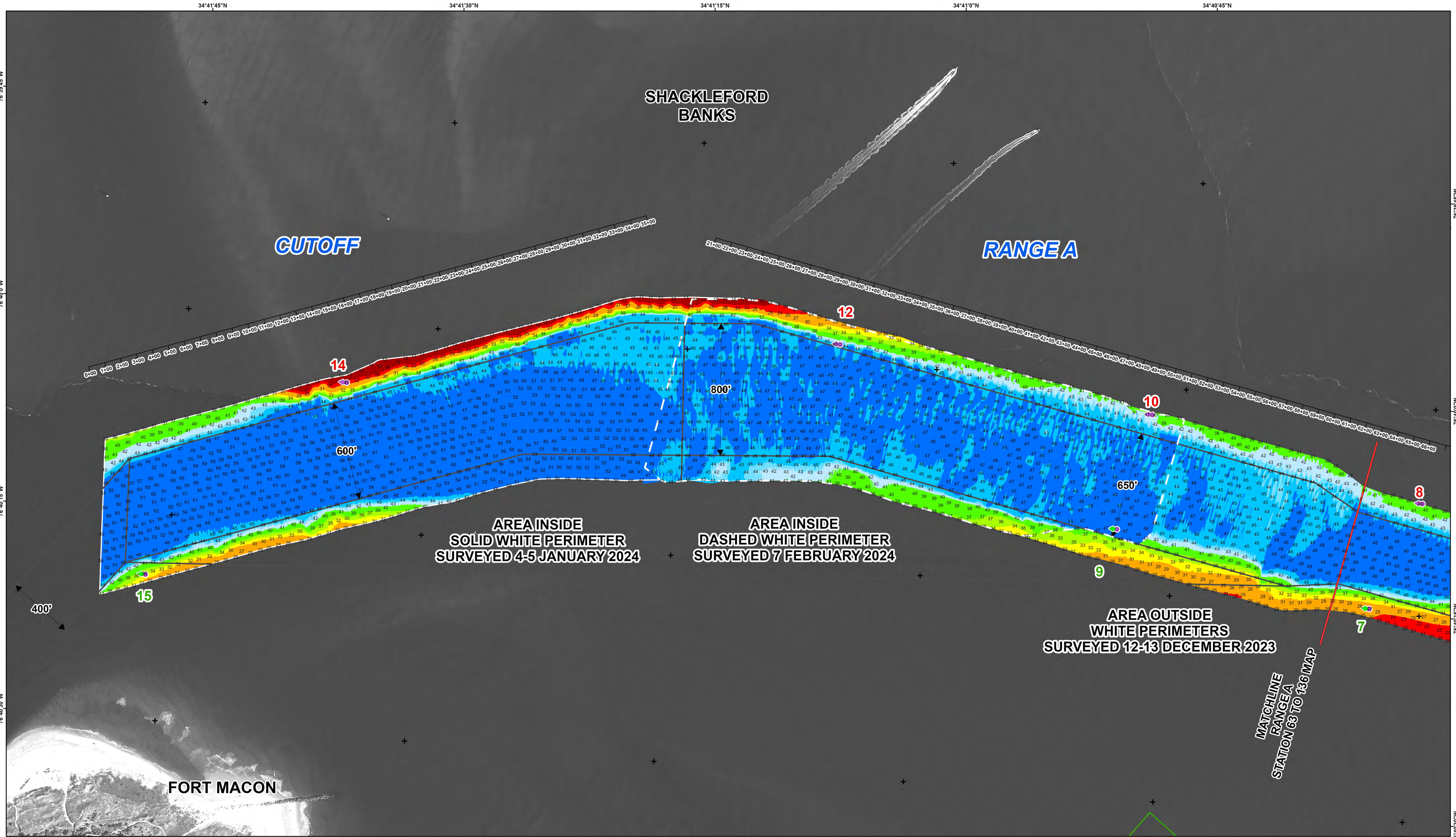
Mileboard

Tide Gage

Depth In Feet

Matchlines

Navigation Channel



HYDROGRAPHIC SURVEY

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor

Cutoff & Range A

Survey Date: 12-13 Dec 2023; 4-5 Jan & 7 Feb 2024
Map Date: 08 February 2024
Imagery Date: 24 December 2023
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Scale: 1:3,000
File Name: MC_03_RGA_20240207_AD
Surveyed by: JAJ,RWA
Mapped by: k7opnagf
Processed by: k7opnagf

200 100 0 200 400 600 800
Feet

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TYPICAL SECTION

NOT TO SCALE

Aids to Navigation

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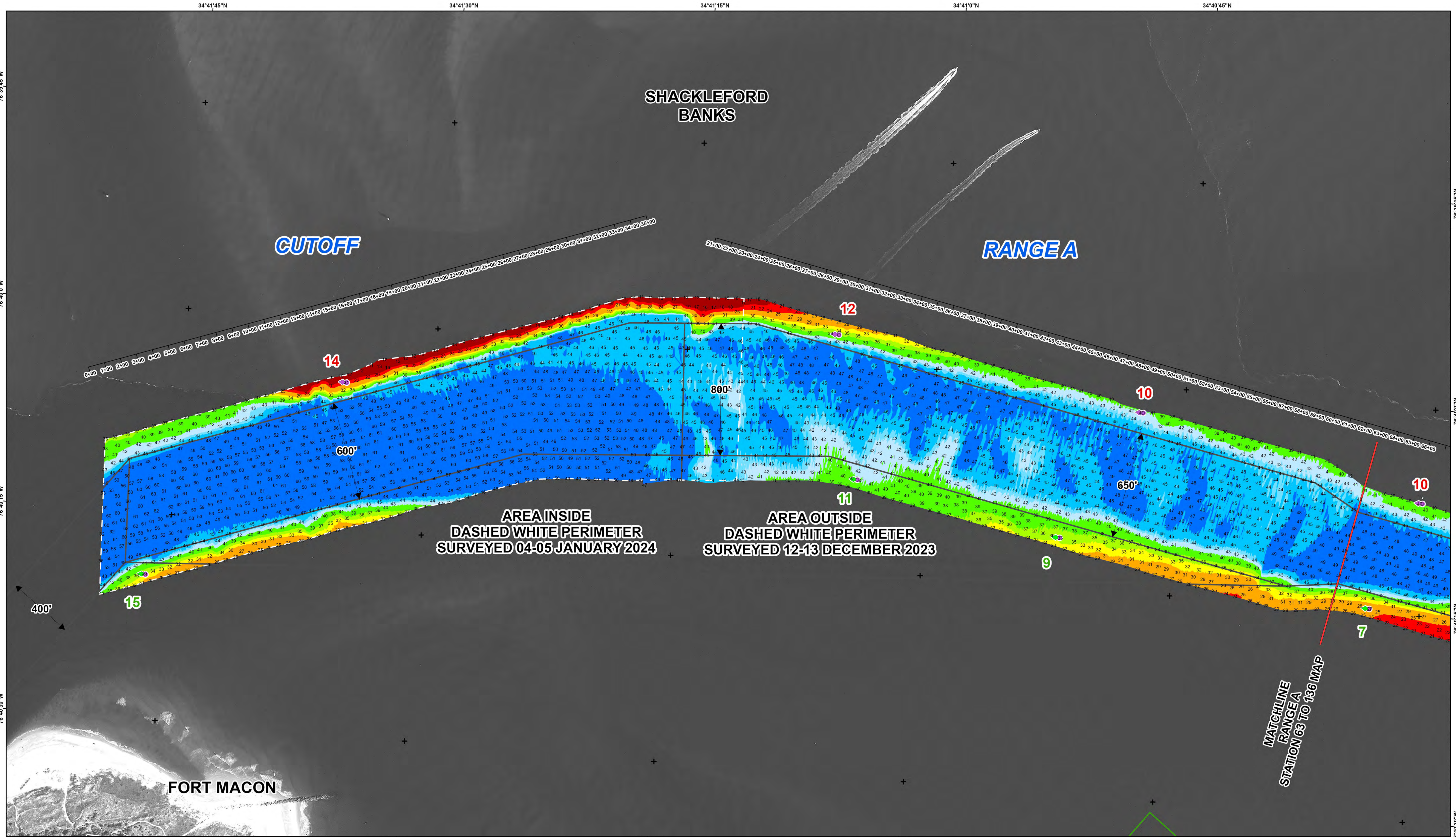
Depth In Feet

20 and Shallower

Matchlines

Navigation Channel

Placement Areas



HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA
Morehead City Harbor
**Cutoff
& Range A**

Survey Date: 12-13 December 2023 & 04-05 January 2024
Map Date: 08 January 2024
Imagery Date: 24 December 2023
© 2023 Maxar Technologies
Scale: 1:3,000
File Name: MC_03_RGA_20240104_AD
Surveyed by: JAJ,RWA
Mapped by: k7opnagf
Processed by: k7opnagf

200 100 0 200 400 600 800

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TYPICAL SECTION
M.L.L.W.
-45' & -47'
PROJECT
DEPTH
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