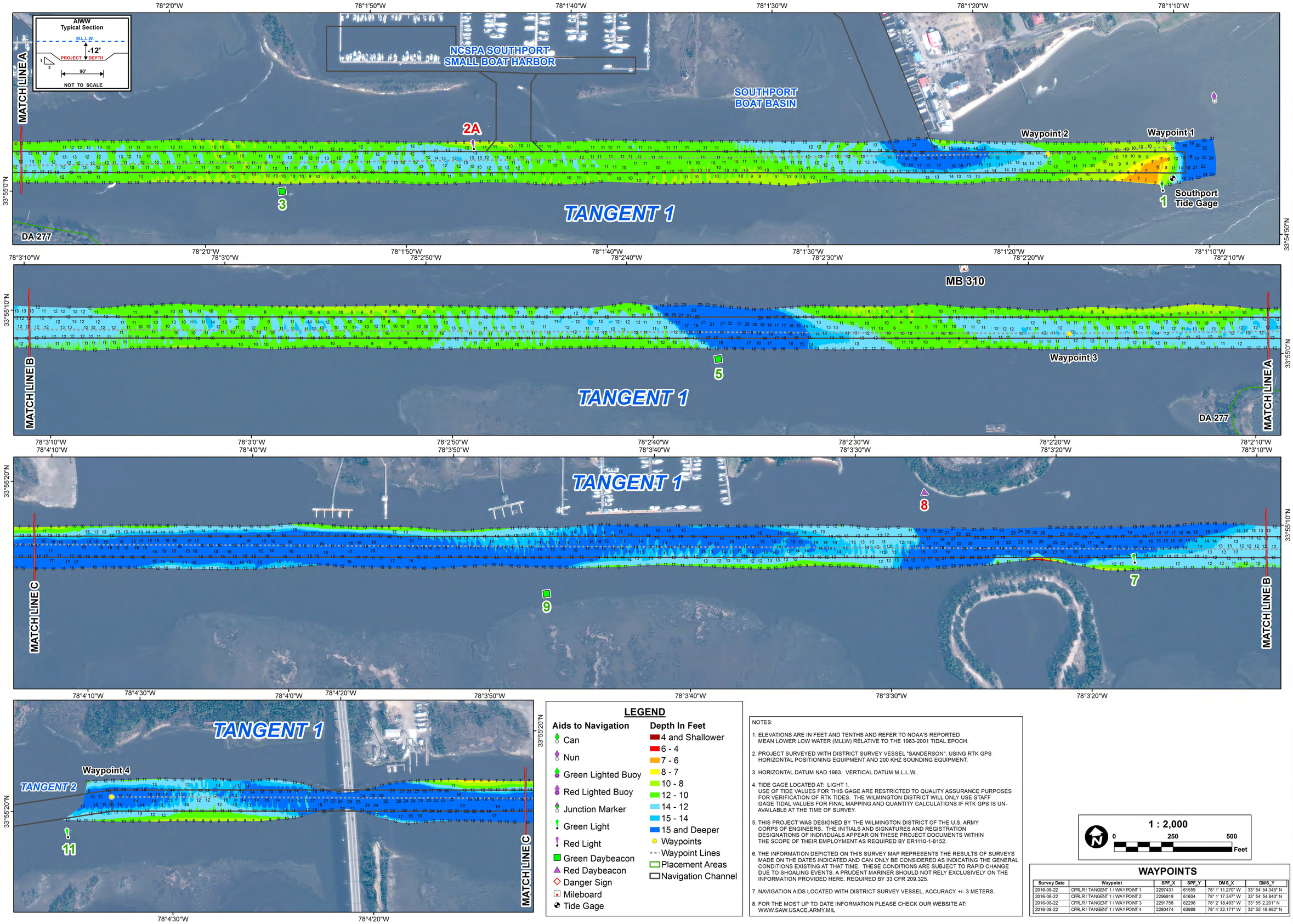

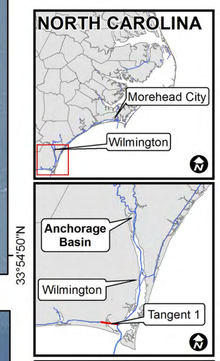

US Army Corps of Engineers
Wilmington District

LEGEND

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
- 4 and Shallower
- 6 - 4
- 7 - 6
- 8 - 7
- 10 - 8
- 12 - 10
- 14 - 12
- 15 - 14
- 15 and Deeper
- Waypoints
- Waypoint Lines
- Placement Areas
- Navigation Channel

NOTES:

1. ELEVATIONS ARE IN FEET AND TENTHS 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 "SANDERSON", 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: LIGHT 1. 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 UN-AVAILABLE 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.SAW.USACE.ARMY.MIL

1 : 2,000
0 250 500 Feet

WAYPOINTS

Survey Date	Waypoint	SPF_X	SPF_Y	DMS_X	DMS_Y
2016-08-22	CFRLR / TANGENT 1 / WAYPOINT 1	2297431	61559	78° 1' 11.270" W	33° 54' 54.345" N
2016-08-22	CFRLR / TANGENT 1 / WAYPOINT 2	2296919	61604	78° 1' 17.347" W	33° 54' 54.840" N
2016-08-22	CFRLR / TANGENT 1 / WAYPOINT 3	2291758	62298	78° 2' 18.493" W	33° 55' 2.201" N
2016-08-22	CFRLR / TANGENT 1 / WAYPOINT 4	2280474	63988	78° 4' 32.171" W	33° 55' 19.982" N

Surveyed By: JBD, WJC
Mapped By: SGD
Filename: IW_01_T01_20160822.mxd
Survey Date: August 22-23, 2016
Map Date: August 25, 2016
Map Scale: 1:2,000
Imagery Date: January 29, 2016
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HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
WILMINGTON, NORTH CAROLINA

Atlantic Intracoastal Waterway
Cape Fear River to Little River

TANGENT 1

SOUTHPORT, NORTH CAROLINA