

MANSON CULTURE

• WE TAKE CARE OF PEOPLE FIRST AND ALWAYS

• WE TAKE CARE OF OUR EQUIPMENT

• WE DO GOOD WORK

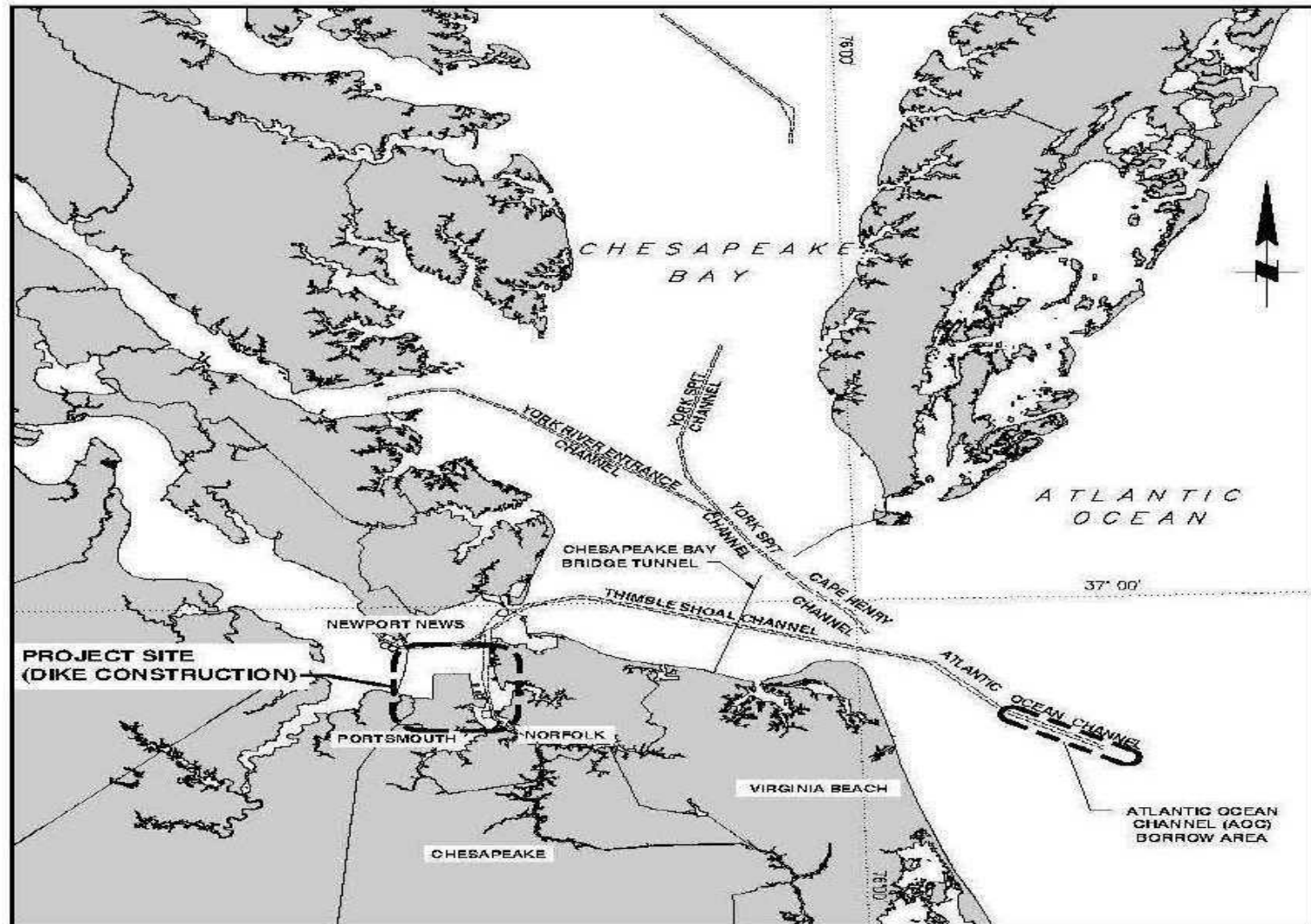
• WE STRIVE TO MEET BUDGET AND SCHEDULE REQUIREMENTS



CRANEY ISLAND DIKE FILL

- Challenges and Lessons Learned
- Applications in Louisiana

PROJECT OVERVIEW



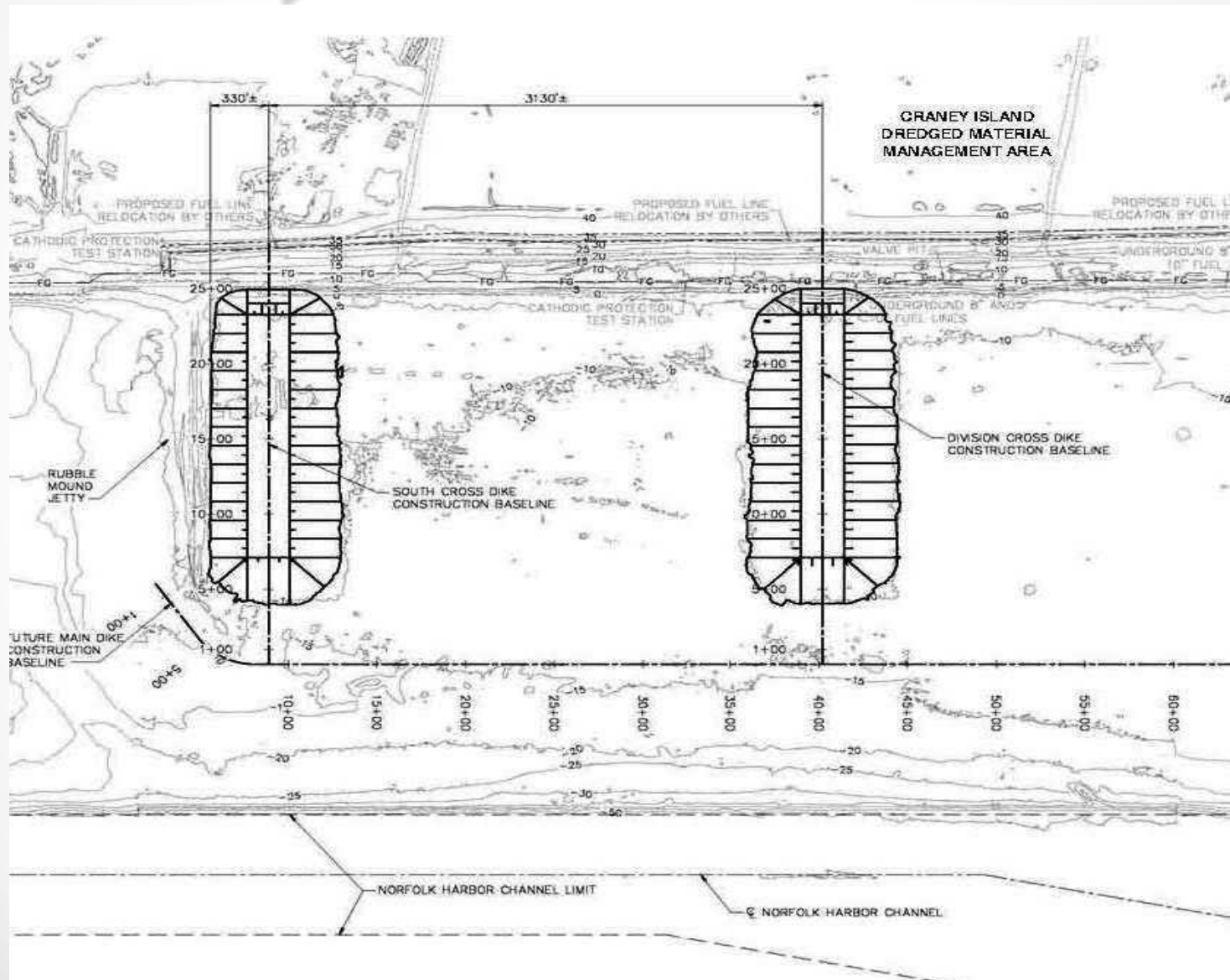
VICINITY MAP

5 2.5 0 5
SCALE IN MILES

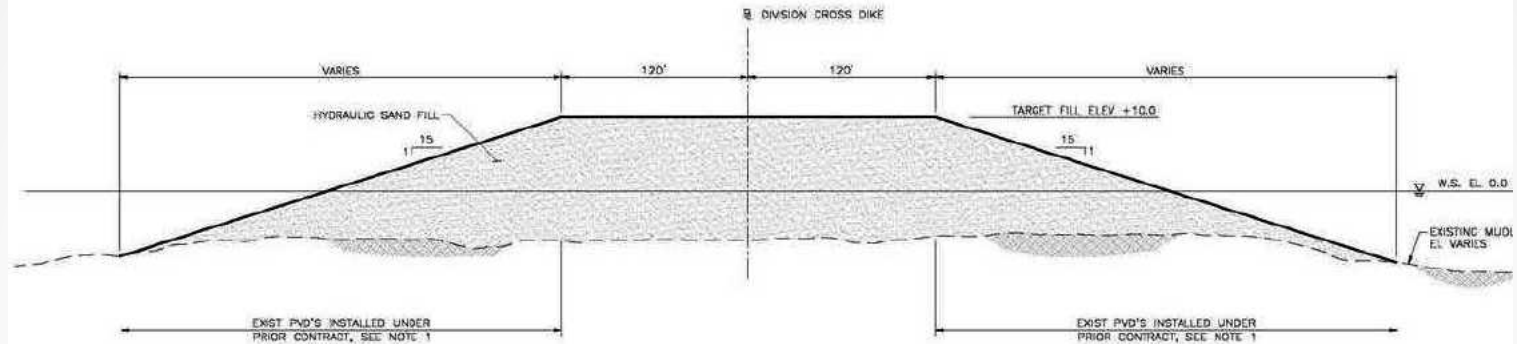
The map illustrates the Craney Island Eastward Expansion (CIEE) Project Site, which is shaded in gray. The project area is situated between the James River to the west and Willoughby Bay to the east. Key geographical features include the Newport News Channel, Norfolk Harbor Channel, and the Elizabeth River. The project area is labeled "CRANEY ISLAND DREDGED MATERIAL MANAGEMENT AREA (CIDMMA)". Surrounding areas include Newport News to the north, Portsmouth to the south, and Norfolk to the east. Major roads such as I-64, I-84, and various state highways (e.g., State Hwy 167, State Hwy 165, State Hwy 164, State Hwy 163, State Hwy 162, State Hwy 161, State Hwy 160, State Hwy 159, State Hwy 158, State Hwy 157, State Hwy 156, State Hwy 155, State Hwy 154, State Hwy 153, State Hwy 152, State Hwy 151, State Hwy 150, State Hwy 149, State Hwy 148, State Hwy 147, State Hwy 146, State Hwy 145, State Hwy 144, State Hwy 143, State Hwy 142, State Hwy 141, State Hwy 140, State Hwy 139, State Hwy 138, State Hwy 137, State Hwy 136, State Hwy 135, State Hwy 134, State Hwy 133, State Hwy 132, State Hwy 131, State Hwy 130, State Hwy 129, State Hwy 128, State Hwy 127, State Hwy 126, State Hwy 125, State Hwy 124, State Hwy 123, State Hwy 122, State Hwy 121, State Hwy 120, State Hwy 119, State Hwy 118, State Hwy 117, State Hwy 116, State Hwy 115, State Hwy 114, State Hwy 113, State Hwy 112, State Hwy 111, State Hwy 110, State Hwy 109, State Hwy 108, State Hwy 107, State Hwy 106, State Hwy 105, State Hwy 104, State Hwy 103, State Hwy 102, State Hwy 101, State Hwy 100, State Hwy 99, State Hwy 98, State Hwy 97, State Hwy 96, State Hwy 95, State Hwy 94, State Hwy 93, State Hwy 92, State Hwy 91, State Hwy 90, State Hwy 89, State Hwy 88, State Hwy 87, State Hwy 86, State Hwy 85, State Hwy 84, State Hwy 83, State Hwy 82, State Hwy 81, State Hwy 80, State Hwy 79, State Hwy 78, State Hwy 77, State Hwy 76, State Hwy 75, State Hwy 74, State Hwy 73, State Hwy 72, State Hwy 71, State Hwy 70, State Hwy 69, State Hwy 68, State Hwy 67, State Hwy 66, State Hwy 65, State Hwy 64, State Hwy 63, State Hwy 62, State Hwy 61, State Hwy 60, State Hwy 59, State Hwy 58, State Hwy 57, State Hwy 56, State Hwy 55, State Hwy 54, State Hwy 53, State Hwy 52, State Hwy 51, State Hwy 50, State Hwy 49, State Hwy 48, State Hwy 47, State Hwy 46, State Hwy 45, State Hwy 44, State Hwy 43, State Hwy 42, State Hwy 41, State Hwy 40, State Hwy 39, State Hwy 38, State Hwy 37, State Hwy 36, State Hwy 35, State Hwy 34, State Hwy 33, State Hwy 32, State Hwy 31, State Hwy 30, State Hwy 29, State Hwy 28, State Hwy 27, State Hwy 26, State Hwy 25, State Hwy 24, State Hwy 23, State Hwy 22, State Hwy 21, State Hwy 20, State Hwy 19, State Hwy 18, State Hwy 17, State Hwy 16, State Hwy 15, State Hwy 14, State Hwy 13, State Hwy 12, State Hwy 11, State Hwy 10, State Hwy 9, State Hwy 8, State Hwy 7, State Hwy 6, State Hwy 5, State Hwy 4, State Hwy 3, State Hwy 2, State Hwy 1) are marked. A north arrow is located in the top right corner.

A horizontal scale bar with markings at 1, .5, and 0. Below the bar is the text "SCALE IN MILES".

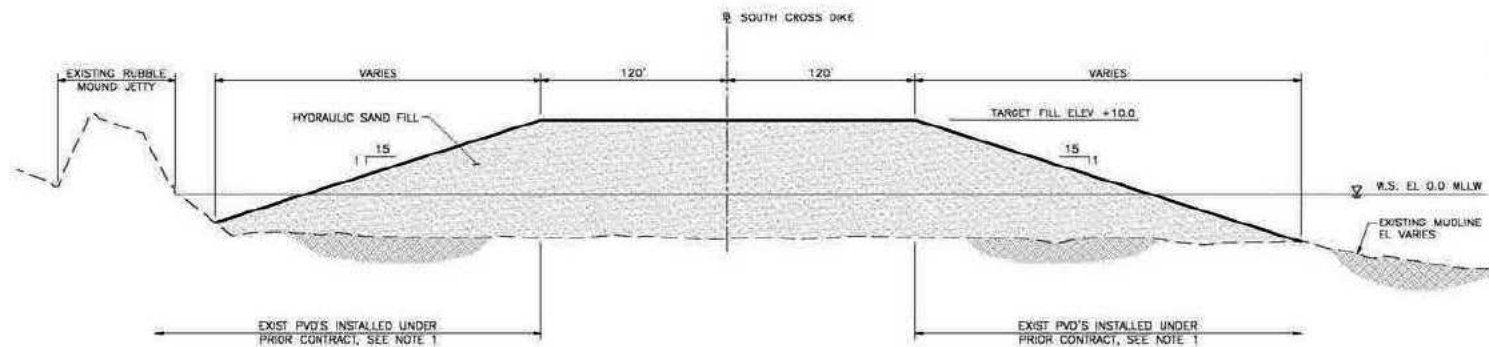
PROJECT OVERVIEW



PROJECT OVERVIEW



C1 SECTION - DIVISION CROSS DIKE
D-131 HORIZONTAL SCALE: 1"=40', VERTICAL SCALE: 1"=8'



A1 SECTION - SOUTH CROSS DIKE
D-121 HORIZONTAL SCALE: 1"=40', VERTICAL SCALE: 1"=8'

CRITERIA

- Fill to be placed in 2' lifts
- Waiting Period Between Lifts
- Fill from -10' to + 10'
- Work only between December and March

CHALLENGES

- Uneven Fill Bottom
- Very Soft Subsurface
- Tidal Range
- Floatation
- Transition from Wet to Dry

INITIAL FILL



INITIAL FILL



INITIAL FILL



INITIAL FILL



POST INITIAL FILL



EMERGENT FILL



EMERGENT FILL



EMERGENT FILL



POST EMERGENT FILL



DRY PLACEMENT



DRY PLACEMENT



03/23/2013

FINAL PRODUCT



FINAL PRODUCT



BACKUS AERIAL PHOTOGRAPHY

THE REAL ACHIEVEMENT



LOUISIANA APPLICATIONS

- Port Expansion (Millennium Port)
- Barrier Island Restoration
- Wetlands Restoration
- Beneficial Uses from Miss. River
- Oil Spill Berms

CAUTIONS

- Consider Safety on Project First
- Watch Tolerances
- Review Constructability
- Be Flexible
- For the Good of the Project,
Partner with the Contractor!

QUESTIONS?

