

## Dredging Inspection Field Report

### Site Observations

Date: 10/26/2021 Field Engineer: Mike Triano  
 Weather Conditions: Breezy, Overcast Temperature: 80s  
 Wood Project Number: 2402210005.01.01 Client: Isle of Palms  
 Contractor: Branch Diversified (BDI) Foreman Onsite: N/A

Item	Observations	Photo
<b>Crew Size &amp; Location</b>	<p><b>**All Barges are located in the Southern Canals**</b></p> <p>30' x 80' barge, moored off to the large ~ 50' X 100'+ Hopper barge in the intracoastal. The 30' X 80' Barge is used to unload the smaller barges. The ~ 50' X 100'+ Hopper barge is used to transport material to DMMA. Both Barges are located east of Baseline 1 in the Intracoastal: Southern IOP.</p> <p>One 20' Wide push barge actively dredging Baseline 3 – South IOP            One 20' Wide push barge actively dredging Baseline 5 – South IOP            26' Thruster Barge actively dredging baseline 7 – North IOP            Two Tugs pushing 20' Wide barges back and forth from Baseline 3 and 5 – South IOP.</p> <p>One large tug moving large Hopper barges to the DMMA            One additional 30' X 80" "MD-80" Barge utilized to off-load smaller barges staged near the mouth of Baseline 1 in the intracoastal.            20' aluminum boat used to travel to and from the site – out of service as of 10/26/2021</p>	<p>Photo: N/A</p> <p>See Map</p>
<b>Equipment on Site</b>	Same as Crew size, 3 mechanical dredges (excavators)	Photos: N/A
<b>Work Completed</b>	<p>Majority of Northern IOP Canals. *</p> <p>Portions of Baseline 1, 2, 3, 4 and 5 Southern IOP Canals</p> <p><u>BDI advised dredging occurs in two phases: on the way in for access &amp; removal of top layer of sediment and on the way out for getting canal to specified grade. This is true for all canals that barges cannot initially access.</u></p>	See Map
<b>Work Underway</b>	Actively Dredging Baseline 3 & 5 South IOP. Actively Dredging Baseline 7 North IOP	See Map
<b>Materials on Site</b>	Stored in ~100'+ X 50' Hopper barge and One 30' x 80' barge "MD-80". Both barges are moored in the intracoastal. East of Baseline 1: South IOP.	Photo: N/A
<b>Manatee Observer</b>	All crew on barges were advised to keep eye out for Manatees - signs posted on northern and southern canals.	Photos: N/A
<b>Turbidity Monitoring</b>	0830 Background Reading: 10.4 NTU 1200 Monitoring Reading: 13.7 NTU 1645 Monitoring Reading: 12.8 NTU	Photos: 1



<b>Dewatering</b>	Lance advised dewatering does not occur - drain holes are located in bottom of containers. Lance advised inner canals are mixing zones and therefore sediment/water returning to canals are not of concern.	
<b>Dredging</b>	Mechanical	
<b>Offloading Location</b>	Large ~50' -100'+ Hopper barge and 30' X 80' "MD-80" Barge – east of Baseline 1: Southern IOP.  Advised that trips to Reed Island DMMA are taken once these large barge sare full, that usually occurs once a day.	Photo: N/A
<b>Posted Permit</b>	Permits are not posted. BDI was provided with additional copies.	
<b>Other...</b>	See Additional Comments Below	

\*BDI will return to Canals to clean up survey identified high spots - Information gathered via Email & Telephone\*

## Additional Notes

### Projected Schedule:

- BDI indicated that Baselines 1, 2, 3, 4, and 5 in the southern IOP canals will be focus while touching up high spots in northern canals. Baseline 7 currently being re-visited.
- Lance mentioned BDI will be tentatively completed with the project mid-November.

### Anticipated Obstacles to Meeting Schedule:

- Equipment malfunctioning / no operator to dig / Barges at Idle.
- Narrow spots in the canals between boat docks.
- Displaced material causing contractor to re-work areas to correct high spots.

### Engineer's Notes:

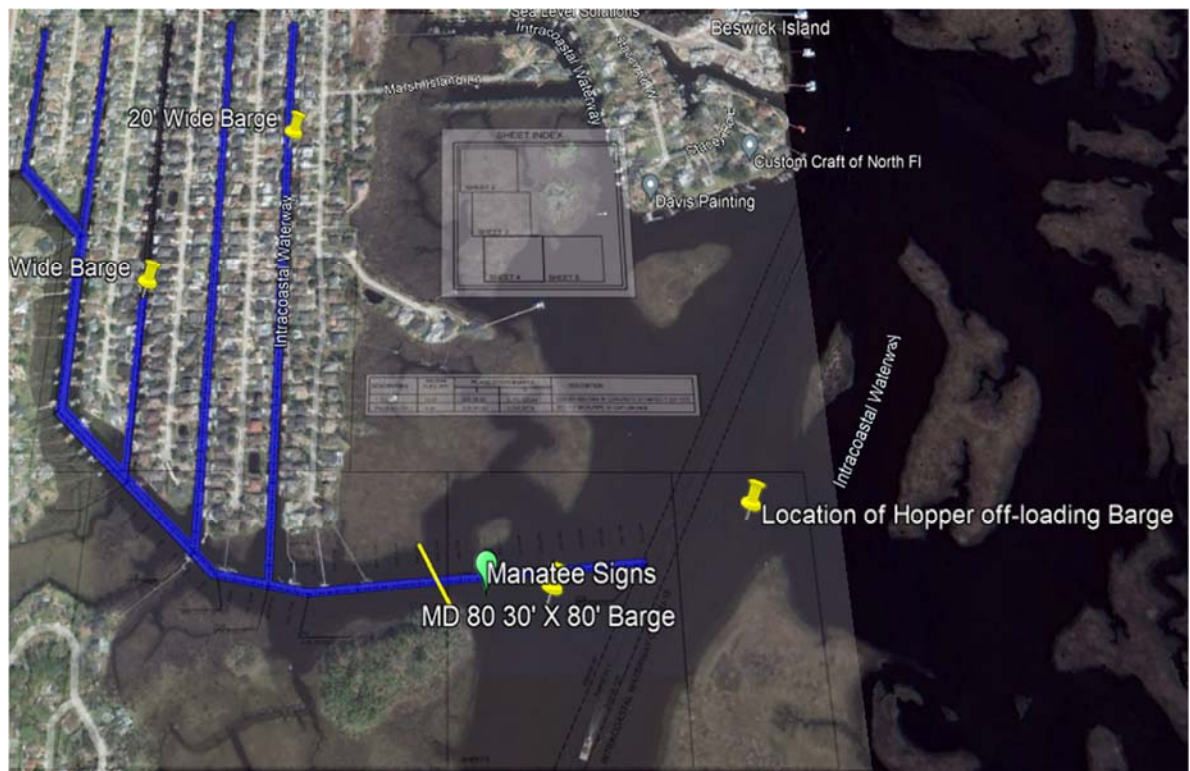
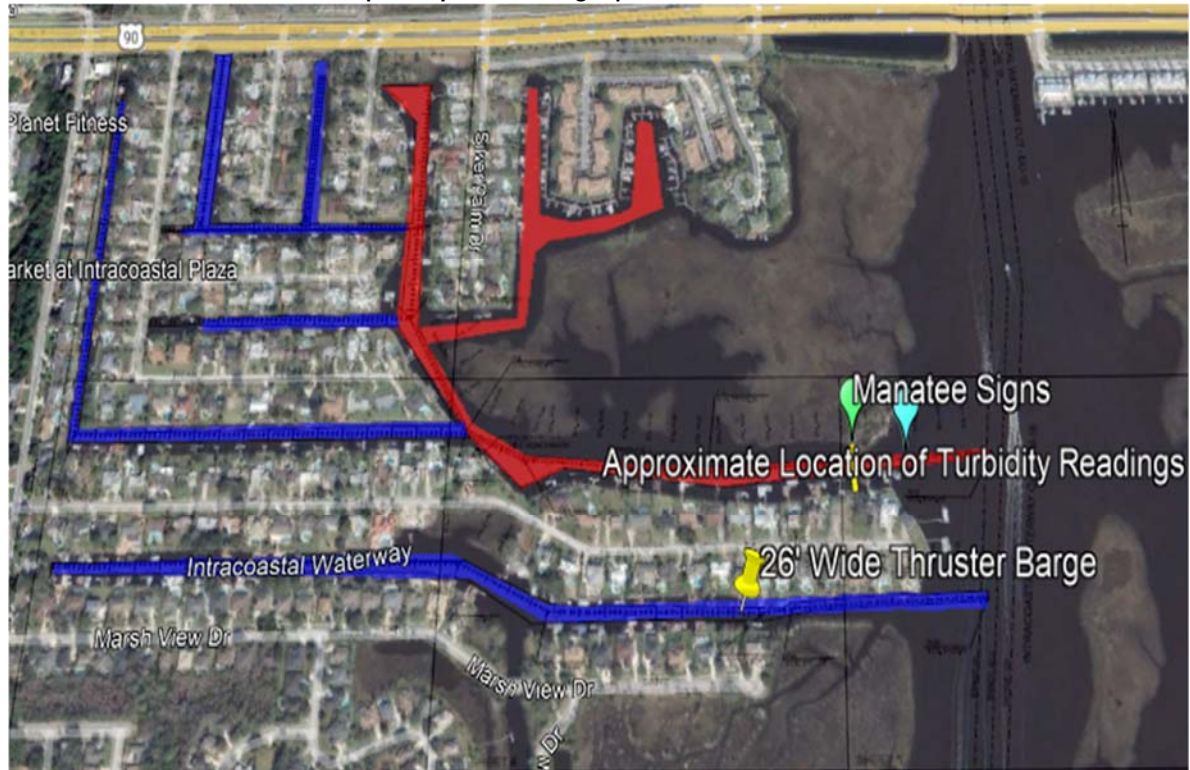
- Lance Young indicated that the skiff should be repaired by the end of next week and would be back in operation the following for in person inspections.
- Wood is looking into other options including riding with Arc Survey / land based to conduct in person inspections – awaiting approval.
- Information regarding barge locations and turbidity are shared via telephone and email.

Field Engineer Signature:

Date: 10/28/2021

Maps: Red is completed Work Blue is Work to be completed

\*BDI will return to Canals to clean up survey identified high spots



## Photograph Log:

<p><b>1. WEATHER AND WATER OBSERVATIONS:</b></p> <p>Atmospheric Conditions: Wind Speed: <u>5</u> mph          Wind Direction: W <u>  </u>, E <u>  </u>, N <u>  </u>, S <u>  </u>          NW <u>  </u>, NE <u>  </u>, SW <u>  </u>, SE <u>  </u>          Weather Condition: Rain <u>  </u>, Clear <u>  </u>, Cloudy <u>  </u></p> <p>Water Conditions:          Tide Stage: Low <u>  </u>, Medium <u>  </u>, High <u>  </u>          Water Current: <u>  </u> mph          Water Direction to: W <u>  </u>, E <u>  </u>, N <u>  </u>, S <u>  </u>          NW <u>  </u>, NE <u>  </u>, SW <u>  </u>, SE <u>  </u>          Harbor seas: Calm <u>  </u> (little or no waves)          Moderate <u>  </u> (waves 1' to 2' high)          Rough <u>  </u> (waves &gt; 2' high)</p> <p><b>2. BACKGROUND SAMPLES:</b>          Location Taken: _____ Time of Sample: _____ Date: _____</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 33%;"></th> <th style="width: 33%;">Surface Sample</th> <th style="width: 33%;">Mid-Depth Sample</th> <th style="width: 33%;">Bottom Sample</th> </tr> </thead> <tbody> <tr> <td>Sample No.:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Analysis Date:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Analysis Time:</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Turbidity (NTU)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Comments (if any): _____</p> <p><b>3. MONITORING SAMPLES (taken every 4 hours):</b>          Location Taken: _____ Time of Sample: _____ Date: _____</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 33%;"></th> <th style="width: 33%;">Surface Sample</th> <th style="width: 33%;">Mid-Depth Sample</th> <th style="width: 33%;">Bottom Sample</th> </tr> </thead> <tbody> <tr> <td>Sample No.:</td> <td><u>10.1d</u></td> <td><u>11.1d</u></td> <td><u>12.1d</u></td> </tr> <tr> <td>Analysis Date:</td> <td><u>10/26/21</u></td> <td><u>10/26/21</u></td> <td><u>10/26/21</u></td> </tr> <tr> <td>Analysis Time:</td> <td><u>8:00a</u></td> <td><u>12:00p</u></td> <td><u>4:45p</u></td> </tr> <tr> <td>Turbidity (NTU)</td> <td><u>10.4</u></td> <td><u>13.7</u></td> <td><u>12.8</u></td> </tr> </tbody> </table> <p>Comments (if any): _____</p>		Surface Sample	Mid-Depth Sample	Bottom Sample	Sample No.:				Analysis Date:				Analysis Time:				Turbidity (NTU)					Surface Sample	Mid-Depth Sample	Bottom Sample	Sample No.:	<u>10.1d</u>	<u>11.1d</u>	<u>12.1d</u>	Analysis Date:	<u>10/26/21</u>	<u>10/26/21</u>	<u>10/26/21</u>	Analysis Time:	<u>8:00a</u>	<u>12:00p</u>	<u>4:45p</u>	Turbidity (NTU)	<u>10.4</u>	<u>13.7</u>	<u>12.8</u>	<p><b>Photo 1:</b> 10/26/2021 Turbidity Monitoring form.</p>
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