

Wulfert Channel & Dinkins Bayou Dredging Project

Sanibel City Council

June 12, 2025



Project Timeline

- April 2, 2024 - Public Comment about issues at Wulfert Channel.
- Initial discussions with Lee County about dredging plans and survey information.
- USACE Nationwide Permit pre-application meeting.
- October 9-10, 2024 - Hurricane Milton - Window opens for emergency permitting for dredging.
- Property owners express concerns about dredging needs in Dinkins Bayou and Sunset Bay.

Project Timeline

- Survey of Dinkins Bayou and Sunset Bay.
- March 5, 2025 - City receives emergency maintenance dredging permit from USACE. Permit expires September 1, 2025.
- April 11, 2025, City submits emergency maintenance dredge application for Dinkins Bayou and Sunset Bay. No permit received.
- May 6, 2025 - Discussion with City Council.
- June 3, 2025 - Tabled Initial Resolution to declare intent to create a special assessment district for maintenance dredging and directed staff to complete amendments to Resolution and place on the June 12, 2025 meeting agenda for consideration.

Project Timeline

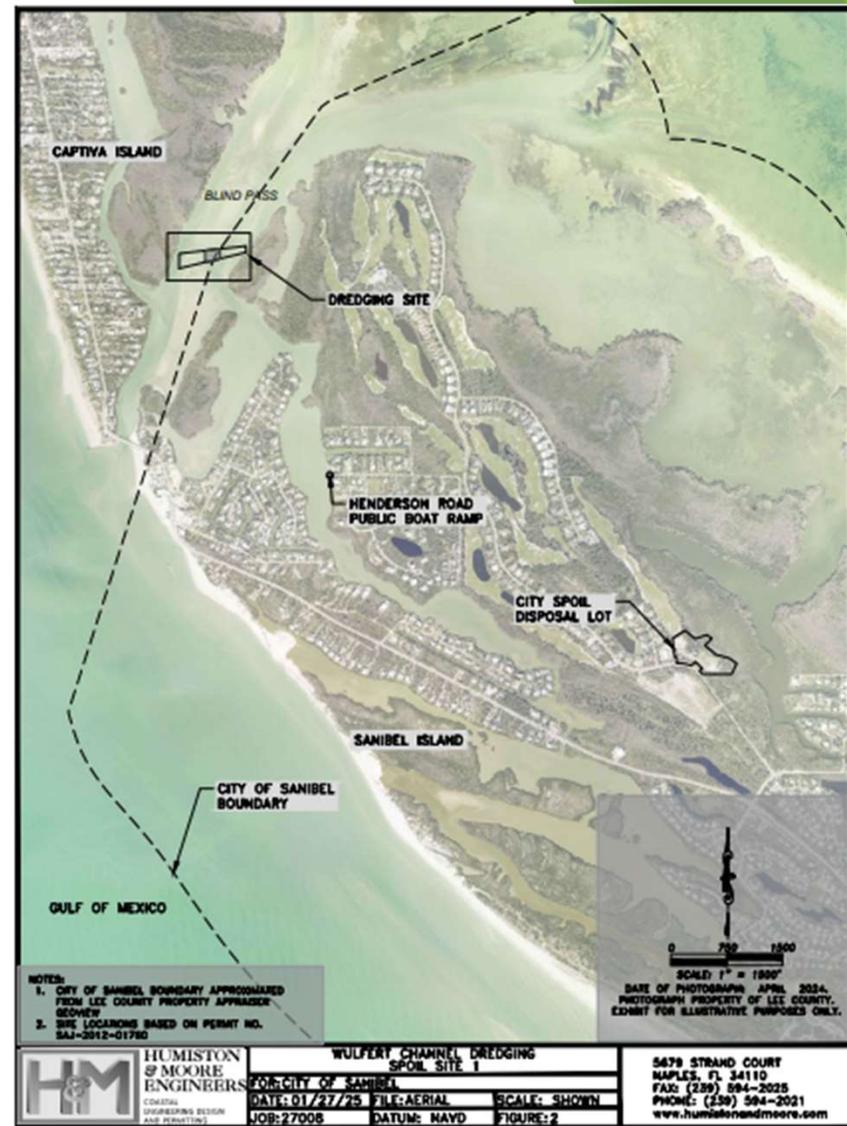
- June 12, 2025 - Consider Initial Resolution to declare intent to create a special assessment district for maintenance dredging. Two options are provided:
 - Declare intent to create the Wulfert Channel and Dinkins Bayou Area Dredging Assessment District. This area includes Wulfert Channel, Dinkins Bayou, and Sunset Bay, as discussed with the City Council on June 3, 2025. One time assessment.
 - Declare intent to create the Wulfert Channel Area Dredging Assessment District. This area includes Wulfert Channel only. One time assessment.

Section 5. Single assessment to be authorized. This Assessment District shall be established as a one time, single capital improvement and service assessment district which shall provide a funding source for the dredging of the Wulfert Channel and Dinkins Bayou Area. It is specifically determined and found by the City Council that this one time capital improvement and service assessment district is necessary, appropriate, and the best method by which to address the need for the as-needed survey, dredging, and disposal of dredge material for the Wulfert Channel and Dinkins Bayou Area, with the single assessment of the costs described herein to be made in 2025 against the properties benefited thereby.

Section 5. Single assessment to be authorized. This Assessment District shall be established as a one time, single capital improvement and service assessment district which shall provide a funding source for the dredging of the Wulfert Channel Area. It is specifically determined and found by the City Council that this one time capital improvement and service assessment district is necessary, appropriate, and the best method by which to address the need for the survey, dredging, and disposal of dredge material for the Wulfert Channel Area, with the single assessment of the costs described herein to be made in 2025 against the properties benefited thereby.

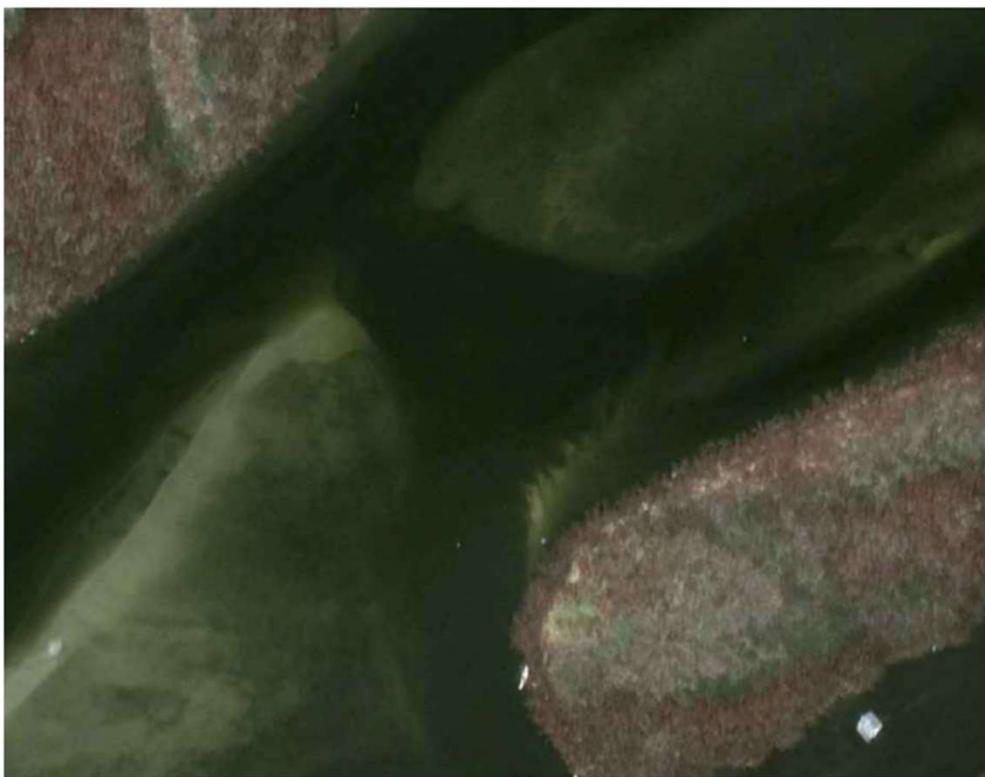
Wulfert Channel

- ▶ USACE Emergency Permit Issued March 5, 2025
- ▶ Objective: Restore safe navigation to pre-storm condition
- ▶ Work must be completed by September 1, 2025
 - ▶ 6/3/2025 USACE provided clarification that work must be started (contract award + mobilization or staging) prior to the deadline and then must be completed within 1-year



Wulfert Channel

Post Ian



GOOGLE EARTH, 10/02/2022

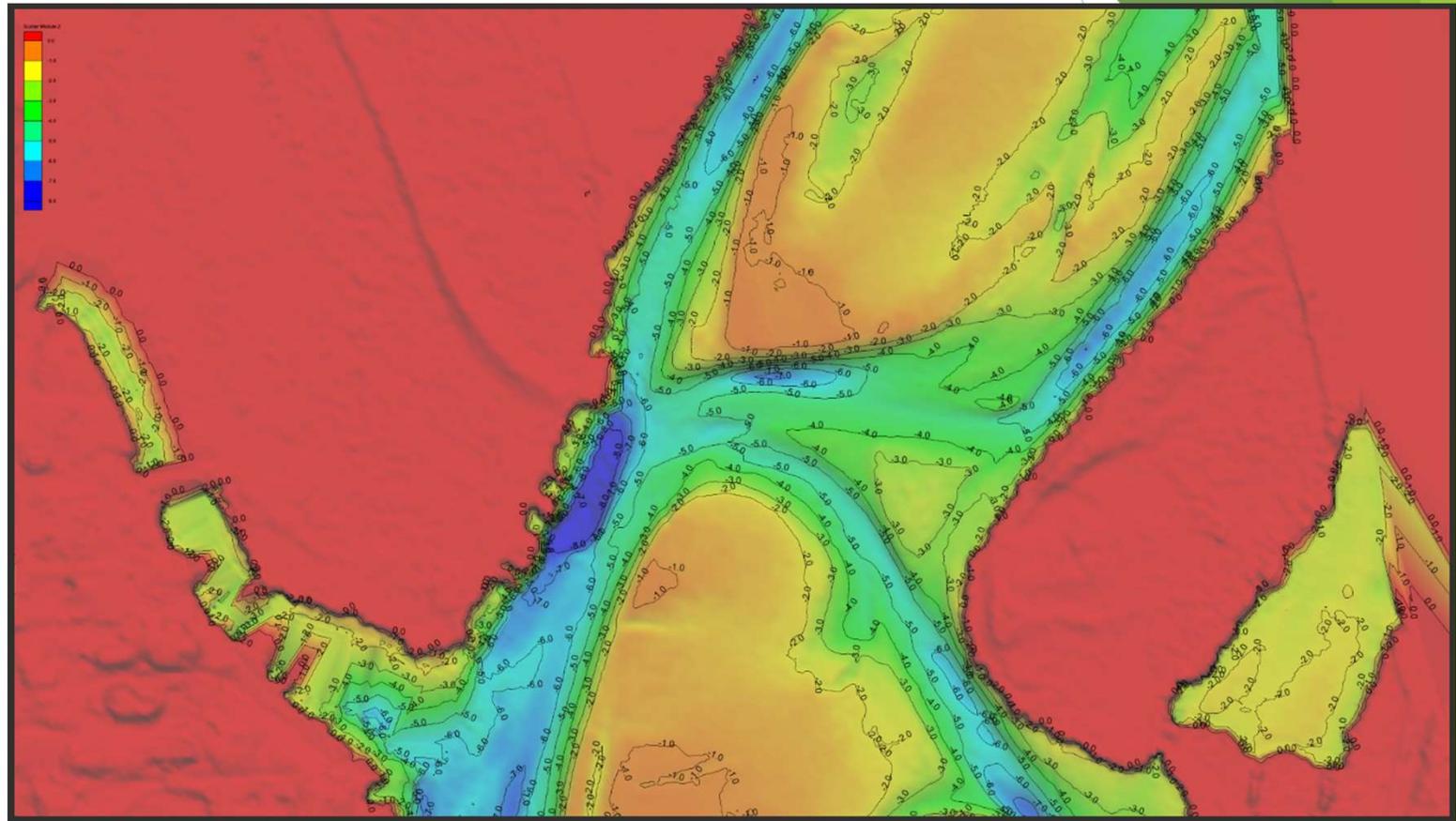
Post Milton



NOAA, 10/12/2024

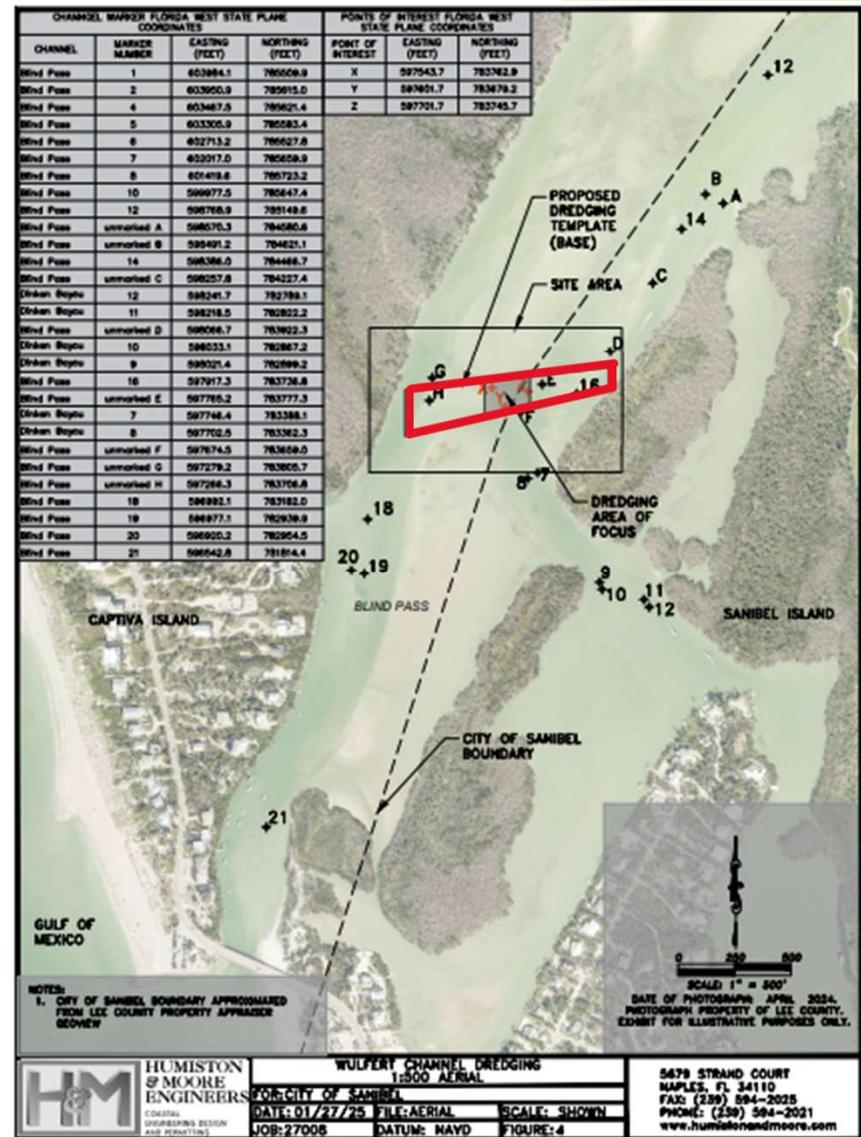
Wulfert Channel-Survey Data

- ▶ Blind Pass Inlet Surveys
 - ▶ July 2022, Lee County (Pre-lan)
 - ▶ October 2023, Lee County (Post-lan)
 - ▶ February 2025, City of Sanibel, Hans Wilson & Associates (Post-Milton)
- ▶ 2022 USACE Post-lan LIDAR



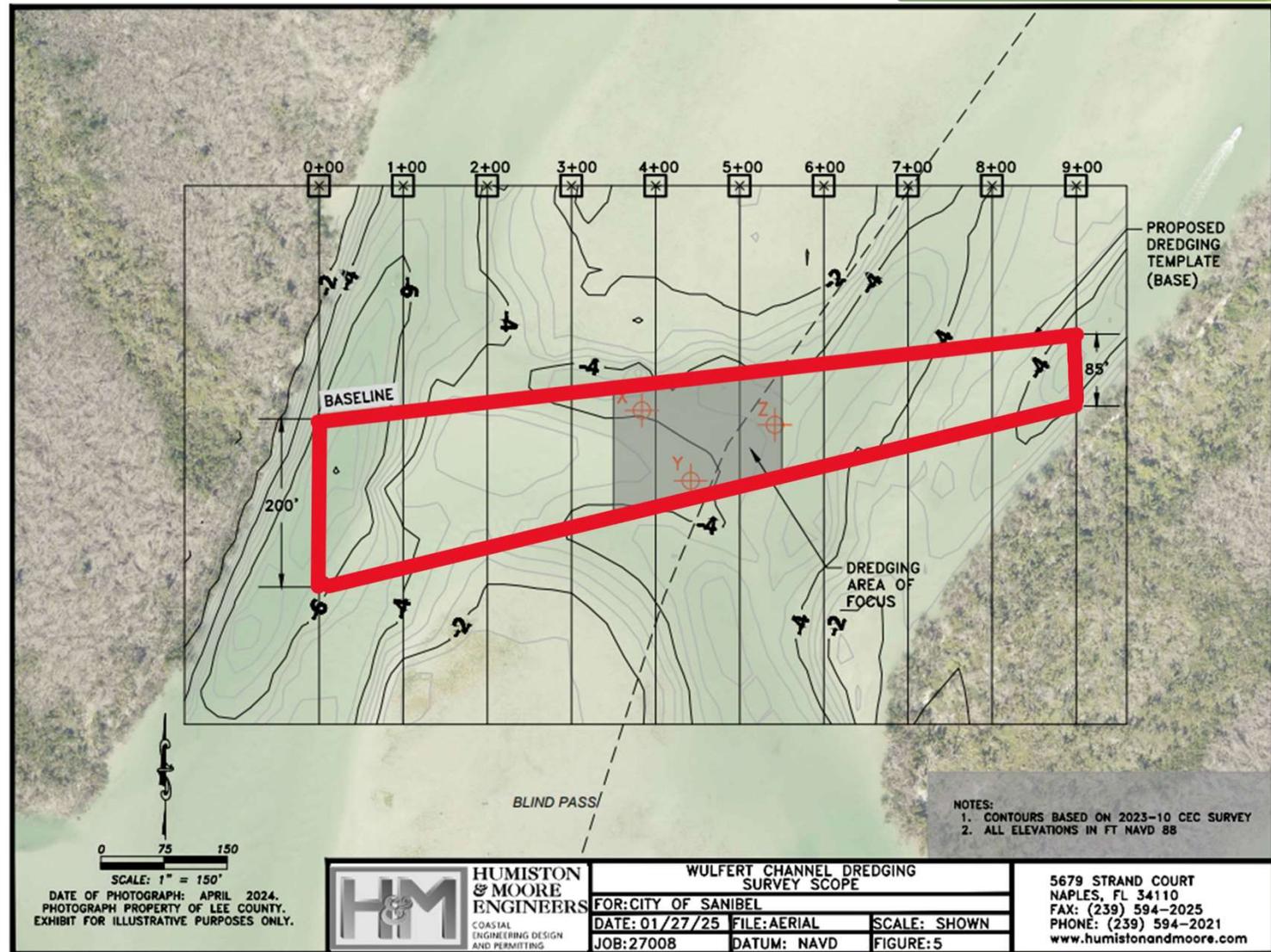
Wulfert Channel

- ▶ Proposed assessment is based on dredging the area within the polygon labeled “proposed dredging template” shown in **RED**
- ▶ This includes, but is not limited to, the smaller gray-shaded area labeled “dredging area of focus”
 - ▶ Coordinates X, Y, Z were provided to the City to designate the area of greatest concern



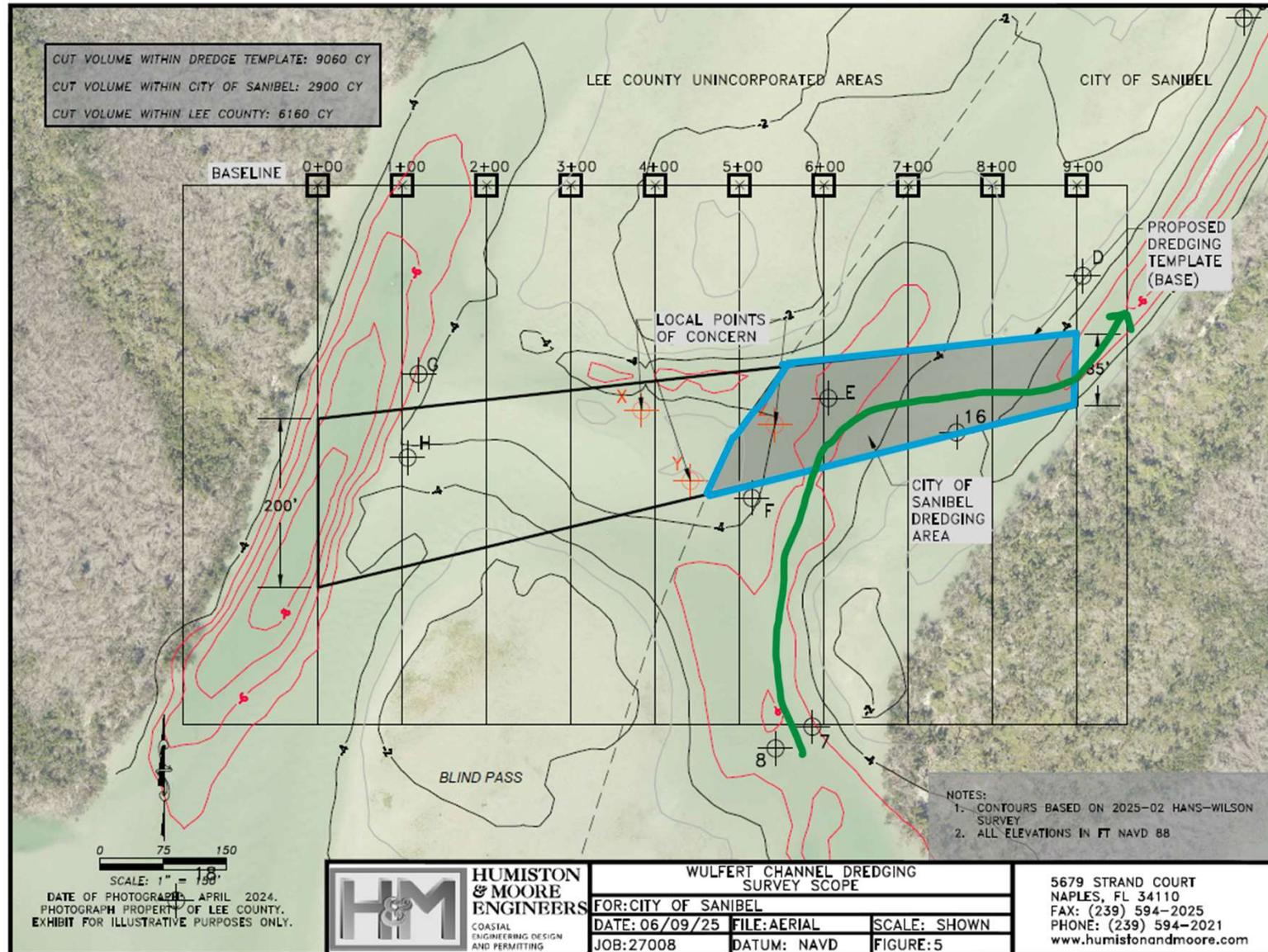
Wulfert Channel

- ▶ Proposed assessment is based on dredging the area within the polygon labeled “proposed dredging template” shown in **RED**
- ▶ Dredge depth:
 - ▶ -6.0' NAVD
- ▶ Dredge volume:
 - ▶ 9,250 cubic yards



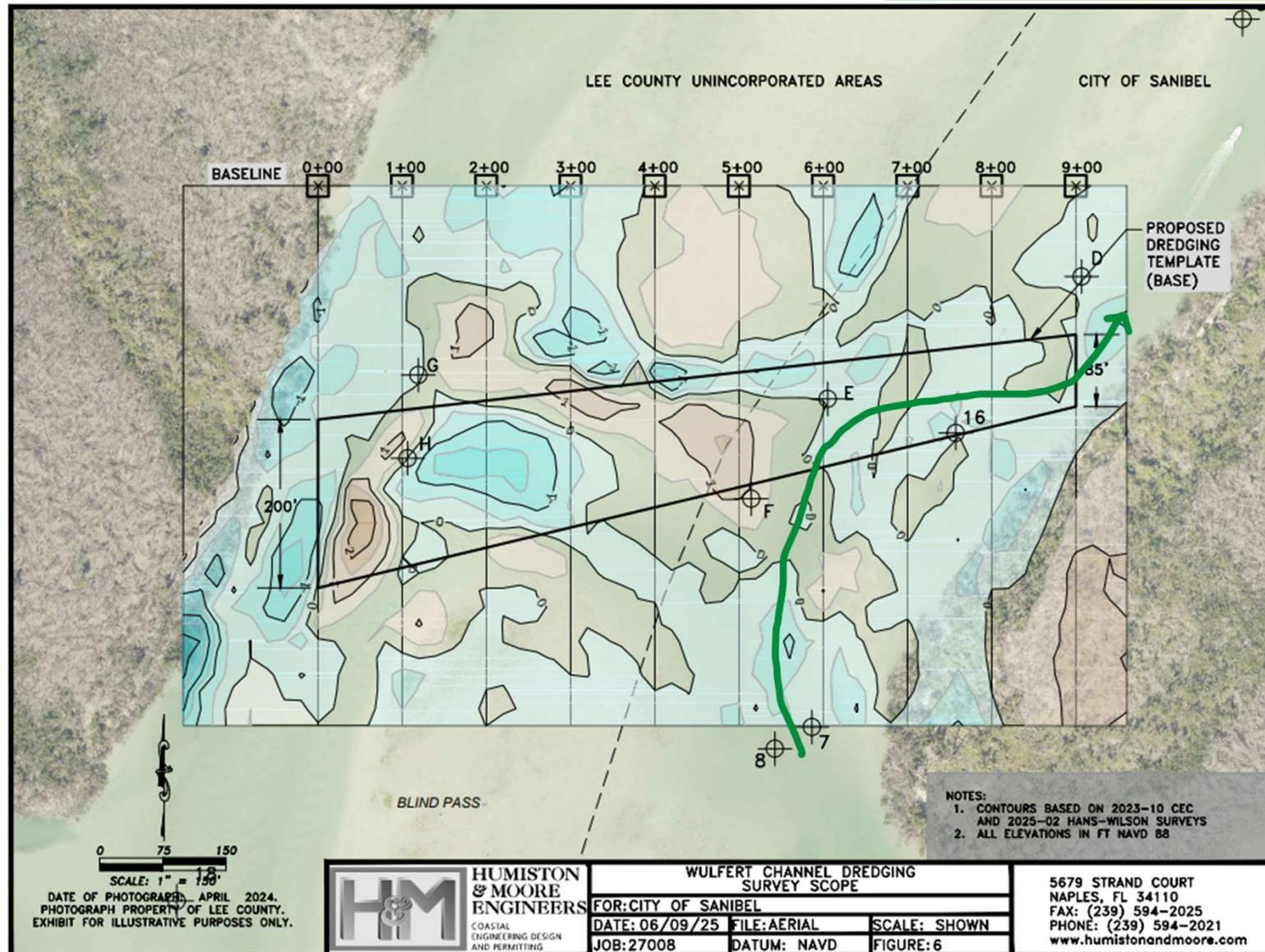
Wulfert Channel

- ▶ Reduced template to include only the area within the City's municipal boundary shown in blue
- ▶ Would improve navigation from Dinkins Bayou to Pine Island Sound
- ▶ Dredge depth:
 - ▶ -6.0' NAVD
- ▶ Dredge volume:
 - ▶ 2,900 cubic yards



Wulfert Channel

- ▶ Elevation change from October 2023 (Post-Ian) to February 2025 (Post-Milton)
- ▶ Areas of accretion (more shallow) are shaded in peach
- ▶ Areas of scour (deepening) are shown in blue
- ▶ Areas of no change are shown in green



Wulfert Channel

- ▶ Spoil will be offloaded into water-tight dump trucks at the Henderson Road boat ramp
- ▶ Transported to Wulfert wastewater treatment plant for dewatering



EXHIBIT A

**Wulfert Channel and
Dinkins Bayou
Proposed
Assessment Area**

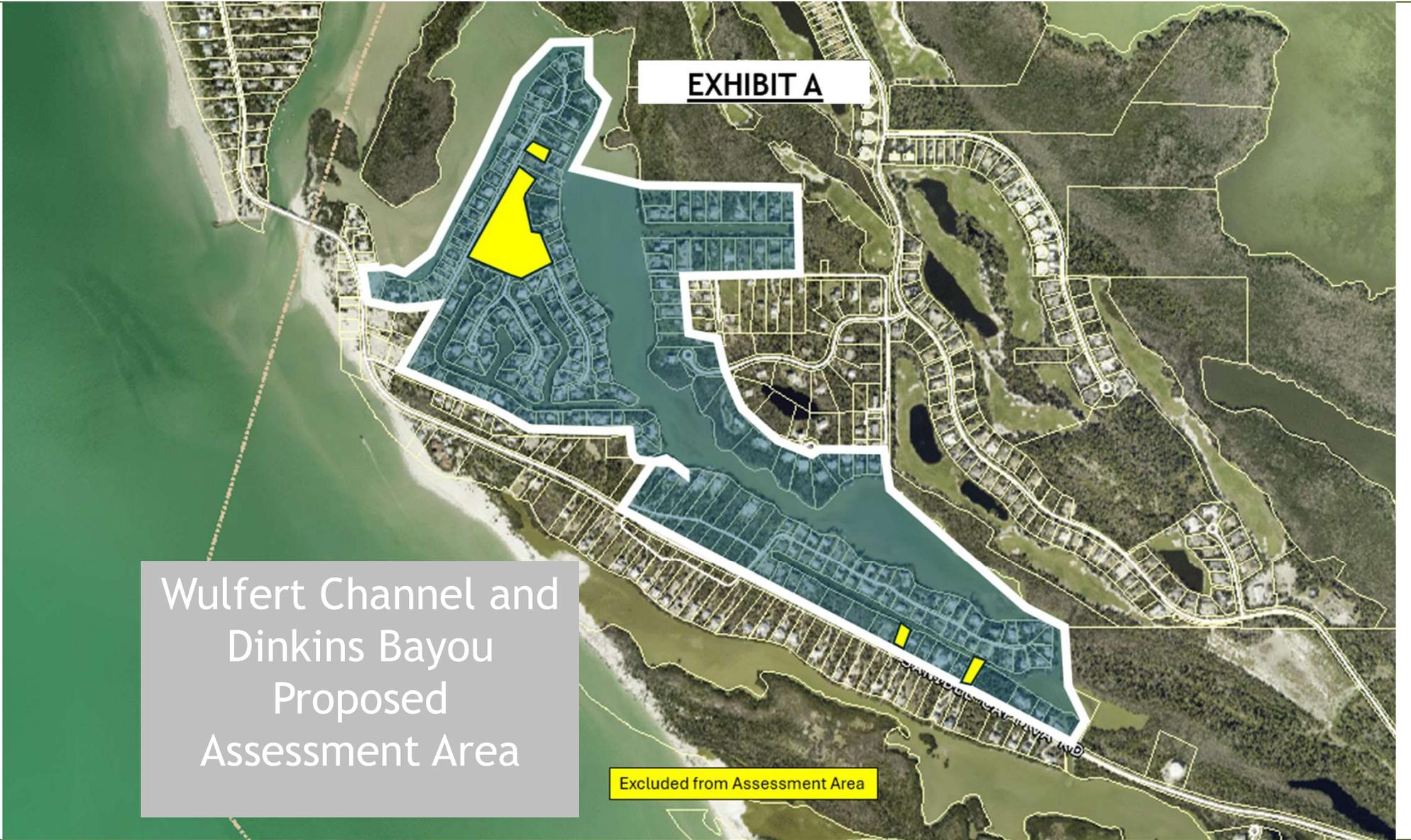
Excluded from Assessment Area



EXHIBIT A

Wulfert Channel and
Dinkins Bayou
Proposed
Assessment Area

Excluded from Assessment Area



Wulfert Channel and Dinkins Bayou Assessment District Dredging Project

Item	Unit	Unit Cost	Quantity	Cost
Permit Survey/Plans - Wulfert (Revised)	Each	9,065.00	1	9,065.00
Permit Survey/Plans - Dinkins (Revised)	Each	9,182.50	1	9,182.50
Mobilization Wulfert and Dinkins	Each	45,000.00	1	45,000.00
Dredge Survey/Staking - Wulfert	Each	15,000.00	1	15,000.00
Dredge Survey/Staking - Dinkins	Each	40,000.00	1	40,000.00
Dredging - Wulfert (Revised)	CY	100	2,900	290,000.00
Dredging - Dinkins (Revised)	CY	90	2,350	211,500.00
Dredging - Dinkins (Revised)	CY	100	11,190	1,119,000.00
Dredge Material Hauling - To WWTF - Wulfert/Dinkins (Revised)	CY	15	16,440	246,600.00
Dredge Material Hauling - Off Island - Wulfert/Dinkins (Revised)	CY	15	16,440	246,600.00
Total				2,231,947.50

Item		Cost	
Total Project cost		\$2,231,947.50	
City Share - 33.33%		\$ 743,908.10	
Private Property Share - 66.67%		\$1,488,039.40	
Cost per parcel – 196 parcels (\$1,488,039.40.36/196)		\$7,592.04	

Revised Wulfert Channel and Dinkins Bayou Area Dredging Assessment District Payment Options

	Assessment	Year 1 Payment	Balance	4.5% interest	Balance	Year 2 Payment	Balance	4.5% Interest	Balance	Year 3 Payment	Balance	4.5% Interest	Balance	Year 4 Payment	Balance	4.5% Interest	Year 5 Payment	Total Payment	
Resident Payment Option 1-year Payment	7,592.04	7,592.04	0.00																7,592.04
Resident Payment Option - 2-year Payment	7,592.04	3,796.02	3,796.02	170.82	3,966.84	3,966.84	0.00												7,762.86
Resident Payment Option - 3-year Payment	7,592.04	2,530.68	5,061.36	227.76	5,289.12	2,644.56	2,644.56	119.01	2,763.57	2,763.57									7,938.81
Resident Payment Option - 4-year Payment	7,592.04	1,898.01	5,694.03	256.23	5,950.26	1,983.42	3,966.84	178.51	4,145.35	2,072.67	2,072.67	93.27	2,165.94	2,165.94					8,120.05
Resident Payment Option - 5-year Payment	7,592.04	1,518.41	6,073.63	273.31	6,346.95	1,586.74	4,760.21	214.21	4,974.42	1,658.14	3,316.28	149.23	3,465.51	1,732.76	1,732.76	77.97	1,810.73		8,306.77

Revised Wulfert Channel Area Dredging Assessment District Payment Options

	Assessment	Year 1 Payment	Balance	4.5% interest	Balance	Year 2 Payment	Balance	4.5% Interest	Balance	Year 3 Payment	Balance	4.5% Interest	Balance	Year 4 Payment	Balance	4.5% Interest	Balance	Year 5 Payment	Balance	4.5% interest	Balance	Year 6 Payment		
Resident Payment Option 1-year Payment	7,592.04	7,592.04	0.00																					
Resident Payment Option - 2-year Payment	7,592.04	3,796.02	3,796.02	170.82	3,966.84	3,966.84	0.00																	
Resident Payment Option - 3-year Payment	7,592.04	2,530.68	5,061.36	227.76	5,289.12	2,644.56	2,644.56	119.01	2,763.57	2,763.57														
Resident Payment Option - 4-year Payment	7,592.04	1,898.01	5,694.03	256.23	5,950.26	1,983.42	3,966.84	178.51	4,145.35	2,072.67	2,072.67	93.27	2,165.94	2,165.94										
Resident Payment Option - 5-year Payment	7,592.04	1,518.41	6,073.63	273.31	6,346.95	1,586.74	4,760.21	214.21	4,974.42	1,658.14	3,316.28	149.23	3,465.51	1,732.76	1,732.76	77.97	1,810.73	1,810.73						
Resident Payment Option 6-year Payment	7,592.04	1,265.34	6,326.70	227.76	6,554.46	1,310.89	5,243.57	235.96	5,479.53	1,369.88	4,109.65	184.93	4,294.58	1,431.53	2,863.05	128.84	2,991.89	1,495.95	1,495.95	67.32	1,563.26	1,563.26		
Resident Payment Option - 7-year Payment	7,592.04	1,084.58	6,507.46	256.23	6,763.69	1,127.28	5,636.41	253.64	5,890.05	1,178.01	4,712.04	212.04	4,924.08	1,231.02	3,693.06	166.19	3,859.25	1,286.42	2,572.83	115.78	2,688.61	1,344.31		
Resident Payment Option - 8-year Payment	7,592.04	949.01	6,643.04	273.31	6,916.35	988.05	5,928.30	266.77	6,195.07	1,032.51	5,162.56	232.32	5,394.88	1,078.98	4,315.90	194.22	4,510.12	1,127.53	3,382.59	152.22	3,534.80	1,178.27		
Resident Payment Option - 9-year Payment	7,592.04	843.56	6,748.48	303.68	7,052.16	881.52	6,170.64	277.68	6,448.32	921.19	5,527.13	248.72	5,775.85	962.64	4,813.21	216.59	5,029.80	1,005.96	4,023.84	181.07	4,204.92	1,051.23		
Resident Payment Option - 10-year Payment	7,592.04	759.20	6,832.84	307.48	7,140.31	793.37	6,346.95	285.61	6,632.56	829.07	5,803.49	261.16	6,064.65	866.38	5,198.27	233.92	5,432.19	905.36	4,526.82	203.71	4,730.53	946.11		

Year 6 Payment	Balance	4.5% Interest	Balance	Year 7 Payment	Balance	4.5% Interest	Balance	Year 8 Payment	Balance	4.5% Interest	Balance	Year 9 Payment	4.5% Interest	Year 10 Payment	Total Paid
															7,592.04
															7,762.86
															7,938.81
															8,120.05
															8,306.77
1,563.26															8,436.85
1,344.31	1,344.31	60.49	1,404.80	1,404.80											8,656.41
1,178.27	2,356.54	106.04	2,462.58	1,231.29	1,231.29	55.41	1,286.70	1,286.70							8,872.33
1,051.23	3,153.69	141.92	3,295.60	1,098.53	2,197.07	98.87	2,295.94	1,147.97	1,147.97	51.66	1,199.63	1,199.63			9,112.23
946.11	3,784.43	170.30	3,954.72	988.68	2,966.04	133.47	3,099.52	1,033.17	2,066.34	92.99	2,159.33	1,079.66	48.58	1,128.25	9,329.26

EXHIBIT A

Wulfert Channel
Proposed
Assessment Area

Excluded from Assessment Area

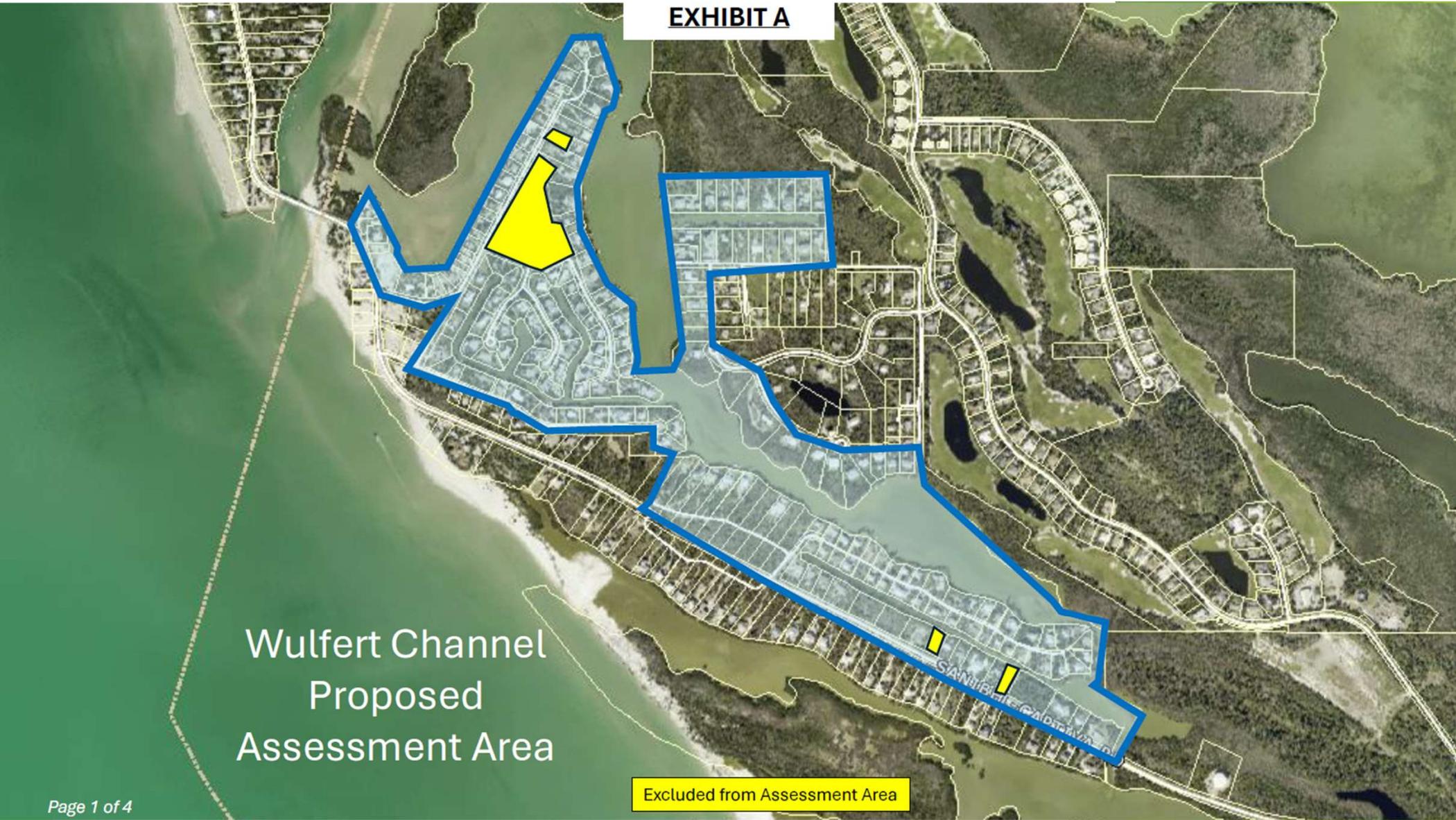
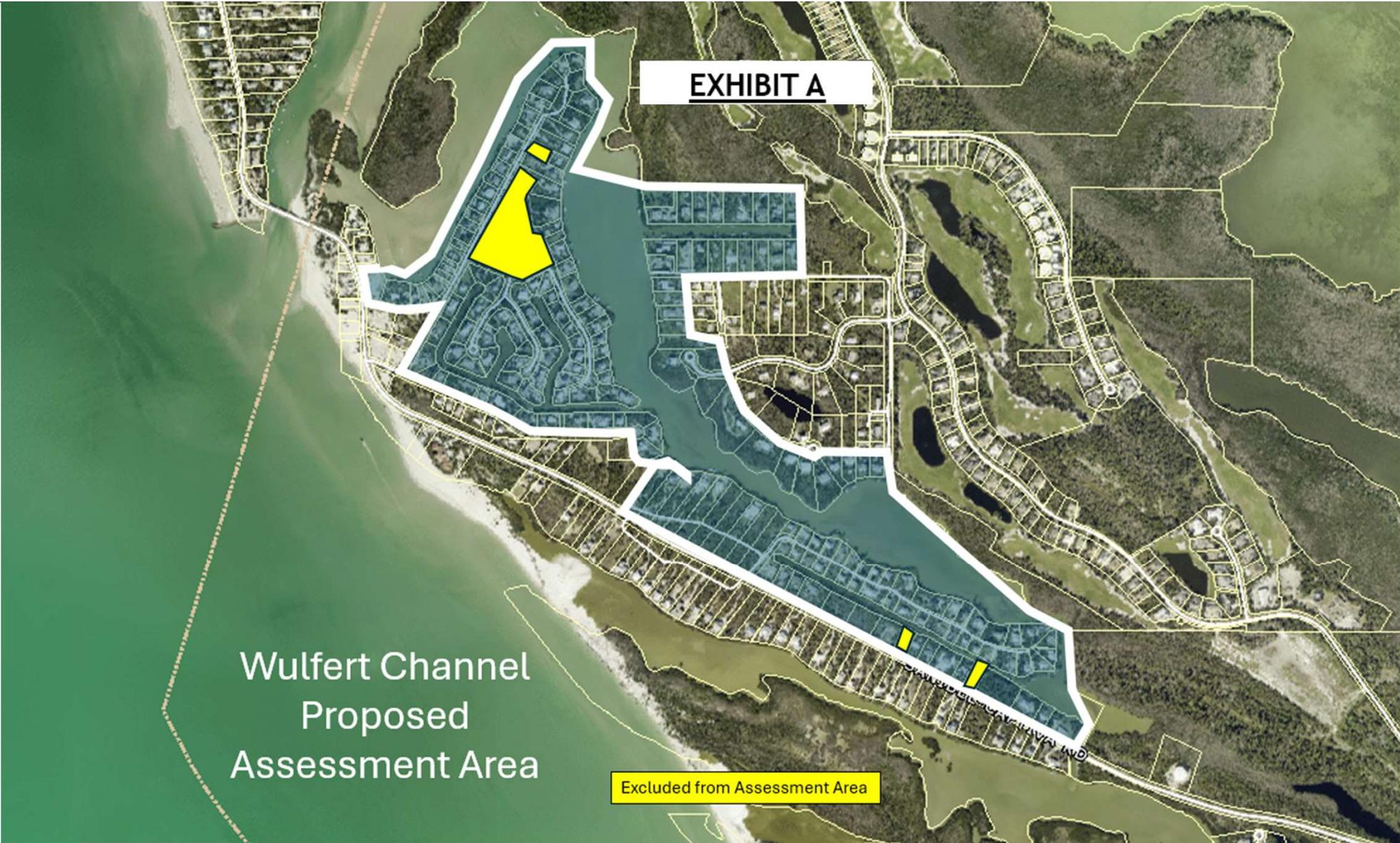


EXHIBIT A

Wulfert Channel
Proposed
Assessment Area

Excluded from Assessment Area



Revised Wulfert Channel Assessment District Dredging Project

Item	Unit	Unit Cost	Quantity	Cost
Permit Survey/Plans - Wulfert (Revised)	Each	9,065.00	1	9,065.00
Mobilization	Each	45,000.00	1	45,000.00
Dredge Survey/Staking	Each	15,000.00	1	15,000.00
Dredging - Wulfert (Revised)	CY	100	2,900	290,000.00
Dredge Material Hauling - To WWTF (Revised)	CY	15	2,900	43,500.00
Dredge Material Hauling - Off Island (Revised)	CY	15	2,900	43,500.00
Total				446,065.00
City Share - 33.33%				148,673.46
Private Property Share - 66.67%				297,391.54
Total				446,065.00

Item		Cost	
Total Project cost		\$446,065.00	
City Share - 33.33%		\$ 148,673.46	
Private Property Share - 66.67%		\$297,391.54	
Cost per parcel – 196 parcels (\$297,391.54/196)		\$1,517.30	

Revised Wulfert Channel Area Dredging Assessment District Payment Options

	Assessment	Year 1 Payment	Balance	4.5% interest	Balance	Year 2 Payment	Balance	4.5% Interest	Balance	Year 3 Payment	Balance	4.5% Interest	Balance	Year 4 Payment	Balance	4.5% Interest	Year 5 Payment	Total Payment
Resident Payment Option 1-year Payment	1,517.30	1,517.30	0.00															1,517.30
Resident Payment Option - 2-year Payment	1,517.30	758.65	758.65	34.14	792.79	792.79	0.00											1,551.44
Resident Payment Option - 3-year Payment	1,517.30	505.77	1,011.53	45.52	1,057.05	528.53	528.53	23.78	552.31	552.31								1,586.60
Resident Payment Option - 4-year Payment	1,517.30	379.33	1,137.98	51.21	1,189.18	396.39	792.79	35.68	828.46	414.23	414.23	18.64	432.87	432.87				1,622.82
Resident Payment Option - 5-year Payment	1,517.30	303.46	1,213.84	54.62	1,268.46	317.12	951.35	42.81	994.16	331.39	662.77	29.82	692.60	346.30	346.30	15.58	361.88	1,660.14

Revised Wulfert Channel Area Dredging Assessment District Payment Options

	Assessment	Year 1 Payment	Balance	4.5% interest	Balance	Year 2 Payment	Balance	4.5% Interest	Balance	Year 3 Payment	Balance	4.5% Interest	Balance	Year 4 Payment	Balance	4.5% Interest	Balance	Year 5 Payment	Balance	4.5% interest	Balance	Year 6 Payment		
Resident Payment Option 1-year Payment	1,517.30	1,517.30	0.00																					
Resident Payment Option - 2-year Payment	1,517.30	758.65	758.65	34.14	792.79	792.79	0.00																	
Resident Payment Option - 3-year Payment	1,517.30	505.77	1,011.53	45.52	1,057.05	528.53	528.53	23.78	552.31	552.31														
Resident Payment Option - 4-year Payment	1,517.30	379.33	1,137.98	51.21	1,189.18	396.39	792.79	35.68	828.46	414.23	414.23	18.64	432.87	432.87										
Resident Payment Option - 5-year Payment	1,517.30	303.46	1,213.84	54.62	1,268.46	317.12	951.35	42.81	994.16	331.39	662.77	29.82	692.60	346.30	346.30	15.58	361.88	361.88						
Resident Payment Option 6-year Payment	1,517.30	252.88	1,264.42	45.52	1,309.94	261.99	1,047.95	47.16	1,095.11	273.78	821.33	36.96	858.29	286.10	572.19	25.75	597.94	298.97	298.97	13.45	312.42	312.42		
Resident Payment Option - 7-year Payment	1,517.30	216.76	1,300.54	51.21	1,351.75	225.29	1,126.46	50.69	1,177.15	235.43	941.72	42.38	984.10	246.02	738.07	33.21	771.29	257.10	514.19	23.14	537.33	268.66		
Resident Payment Option - 8-year Payment	1,517.30	189.66	1,327.64	54.62	1,382.26	197.47	1,184.79	53.32	1,238.11	206.35	1,031.76	46.43	1,078.19	215.64	862.55	38.81	901.36	225.34	676.02	30.42	706.44	235.48		
Resident Payment Option - 9-year Payment	1,517.30	168.59	1,348.71	60.69	1,409.40	176.18	1,233.23	55.50	1,288.72	184.10	1,104.62	49.71	1,154.33	192.39	961.94	43.29	1,005.23	201.05	804.18	36.19	840.37	210.09		
Resident Payment Option - 10-year Payment	1,517.30	151.73	1,365.57	61.45	1,427.02	158.56	1,268.46	57.08	1,325.54	165.69	1,159.85	52.19	1,212.04	173.15	1,038.89	46.75	1,085.65	180.94	904.70	40.71	945.42	189.08		

Year 6 Payment	Balance	4.5% Interest	Balance	Year 7 Payment	Balance	4.5% Interest	Balance	Year 8 Payment	Balance	4.5% Interest	Balance	Year 9 Payment	4.5% Interest	Year 10 Payment	Total Paid
															1,517.30
															1,551.44
															1,586.60
															1,622.82
															1,660.14
															1,698.14
312.42															1,686.14
268.66	268.66	12.09	280.75	280.75											1,730.02
235.48	470.96	21.19	492.16	246.08	246.08	11.07	257.15	257.15							1,773.17
210.09	630.28	28.36	658.64	219.55	439.09	19.76	458.85	229.43	229.43	10.32	239.75	239.75			1,821.12
189.08	756.33	34.03	790.37	197.59	592.78	26.67	619.45	206.48	412.97	18.58	431.55	215.78	9.71	225.49	1,864.49

Questions and City Council Discussion



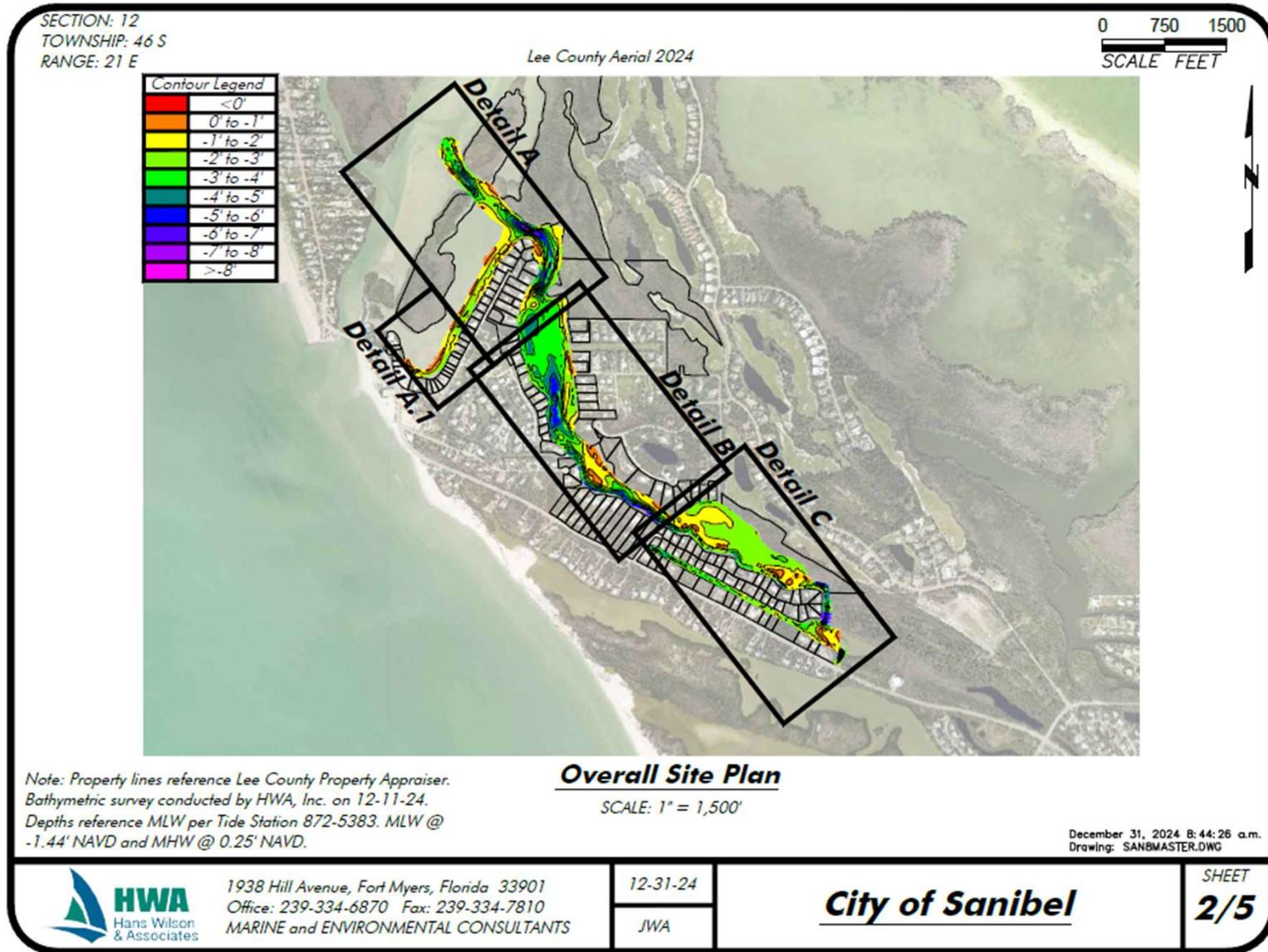


Dinkins

Bayou

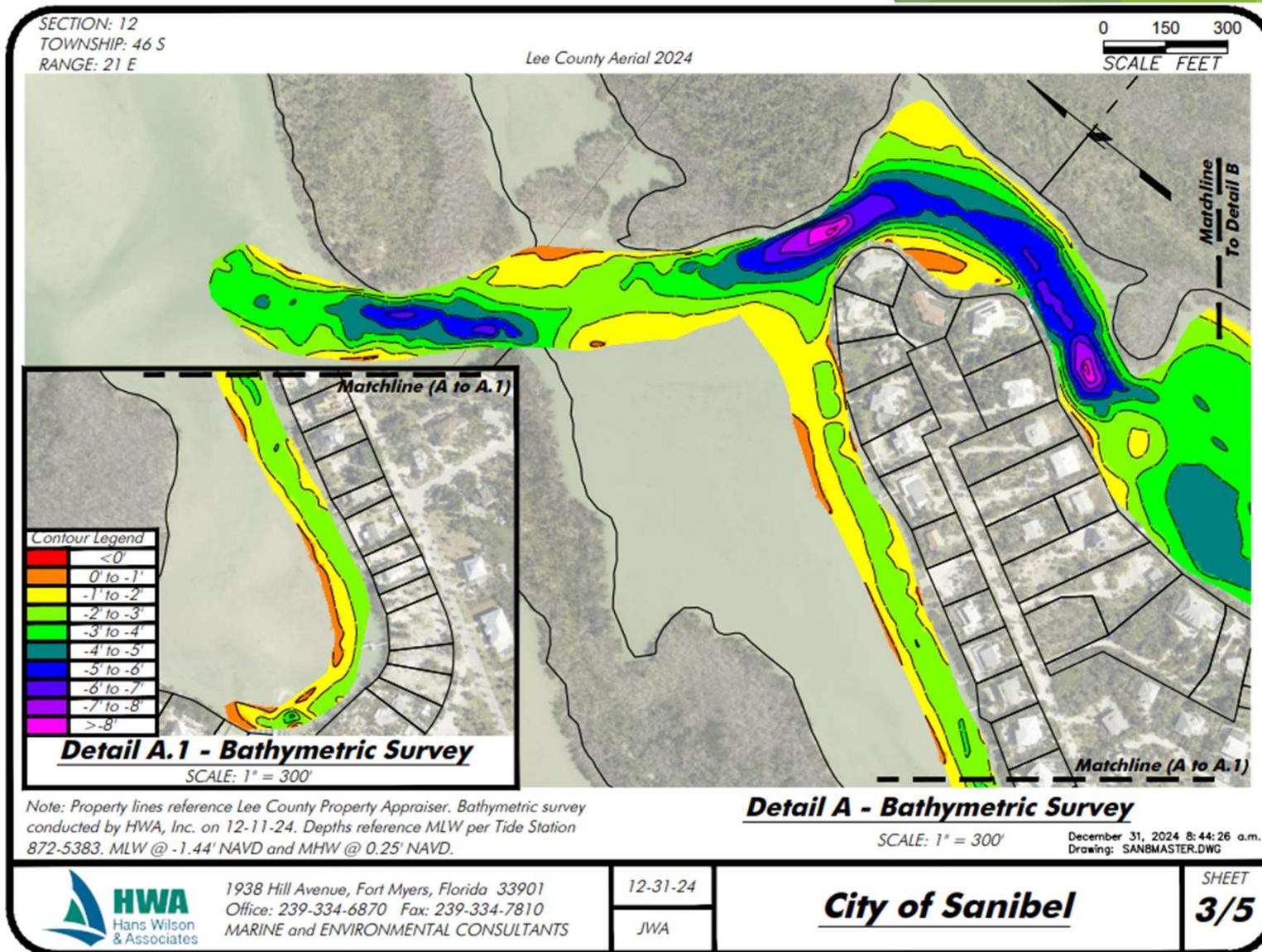
Including
Sunset Bay Channel
Pine Tree Drive Canal

- ▶ 2024 Post-Milton Bathymetric Survey
- ▶ Previous survey in 2009; 2014 dredge project limited to area shown in Detail C
- ▶ 2024 Project includes areas in shown in Detail A/A.1, B, and C



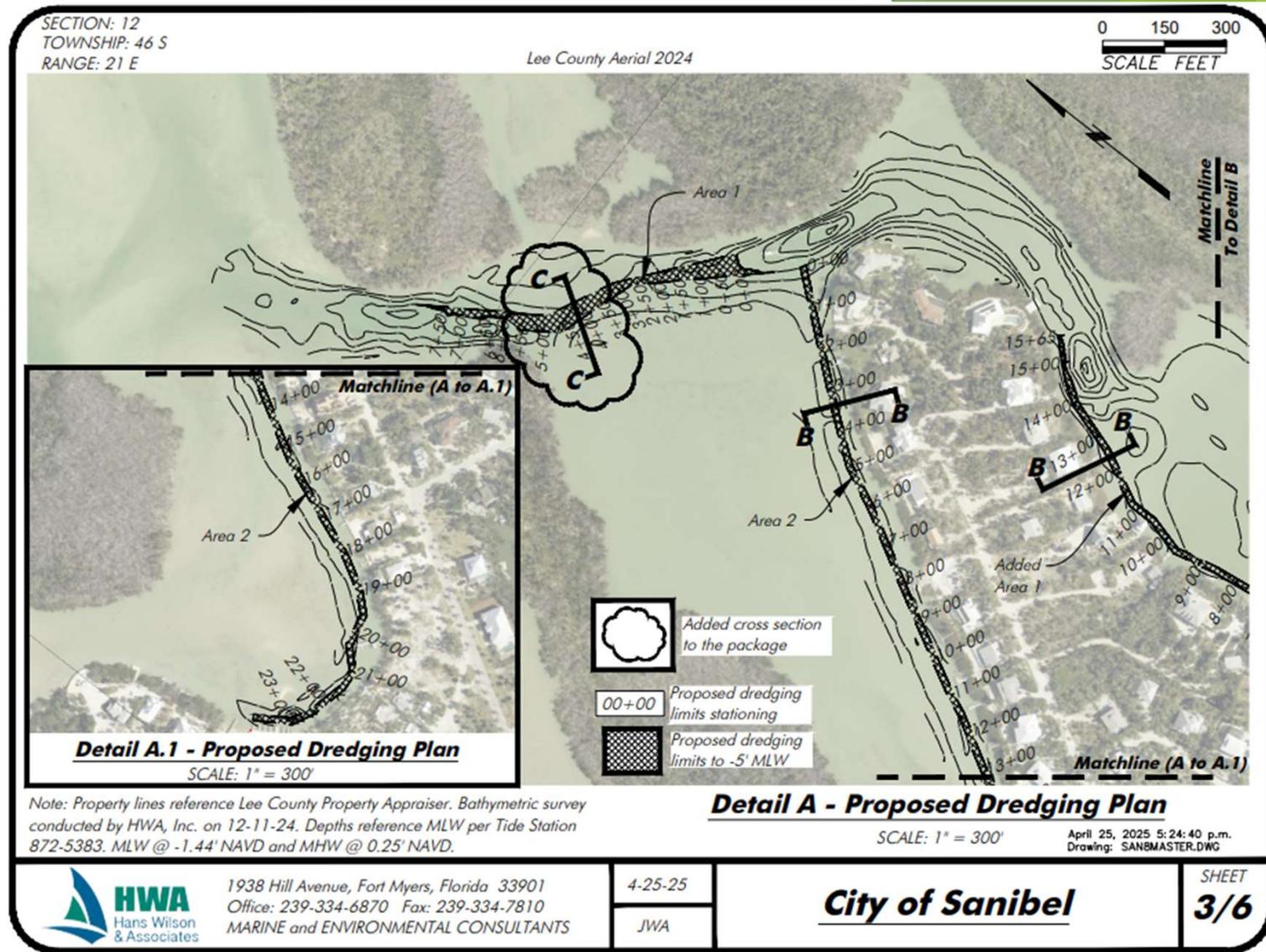
Dinkins Bayou- Detail A/A.1

- ▶ 2024 Bathymetric Survey
- ▶ Areas shown in red, orange, yellow, & green are SHALLOW (5' or less MLW)
- ▶ Areas shown in blue, purple, & violet are DEEP (5' or greater MLW)



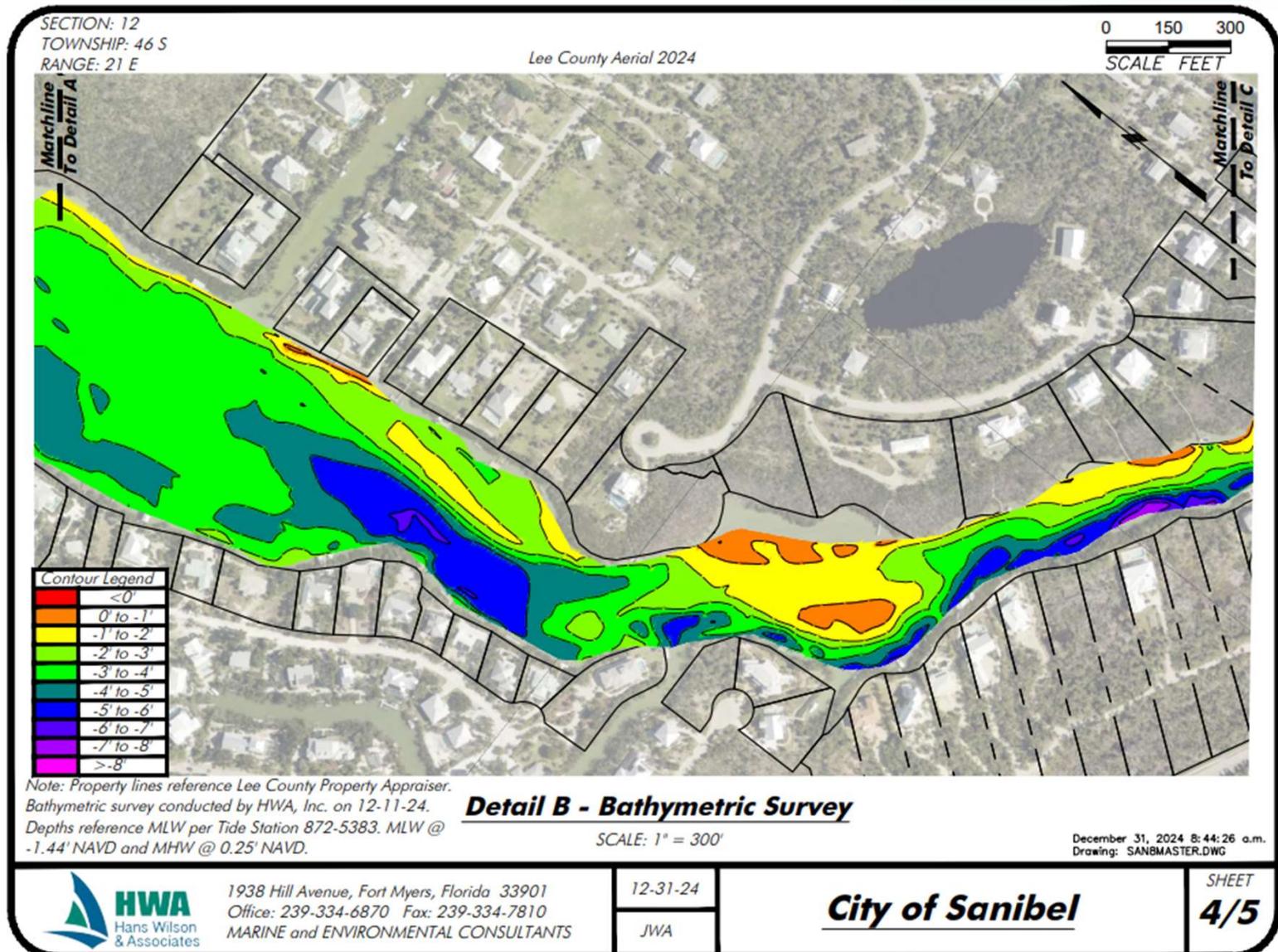
Dinkins Bayou Detail A/A.1

- ▶ Proposed dredging plan includes only a small portion of the area that was surveyed, shown in crosshatch
- ▶ Area 1, Area 2, Added Area 1
- ▶ Each “Area” has a cross-section detail
 - ▶ A-A
 - ▶ B-B
 - ▶ C-C
 - ▶ D-D



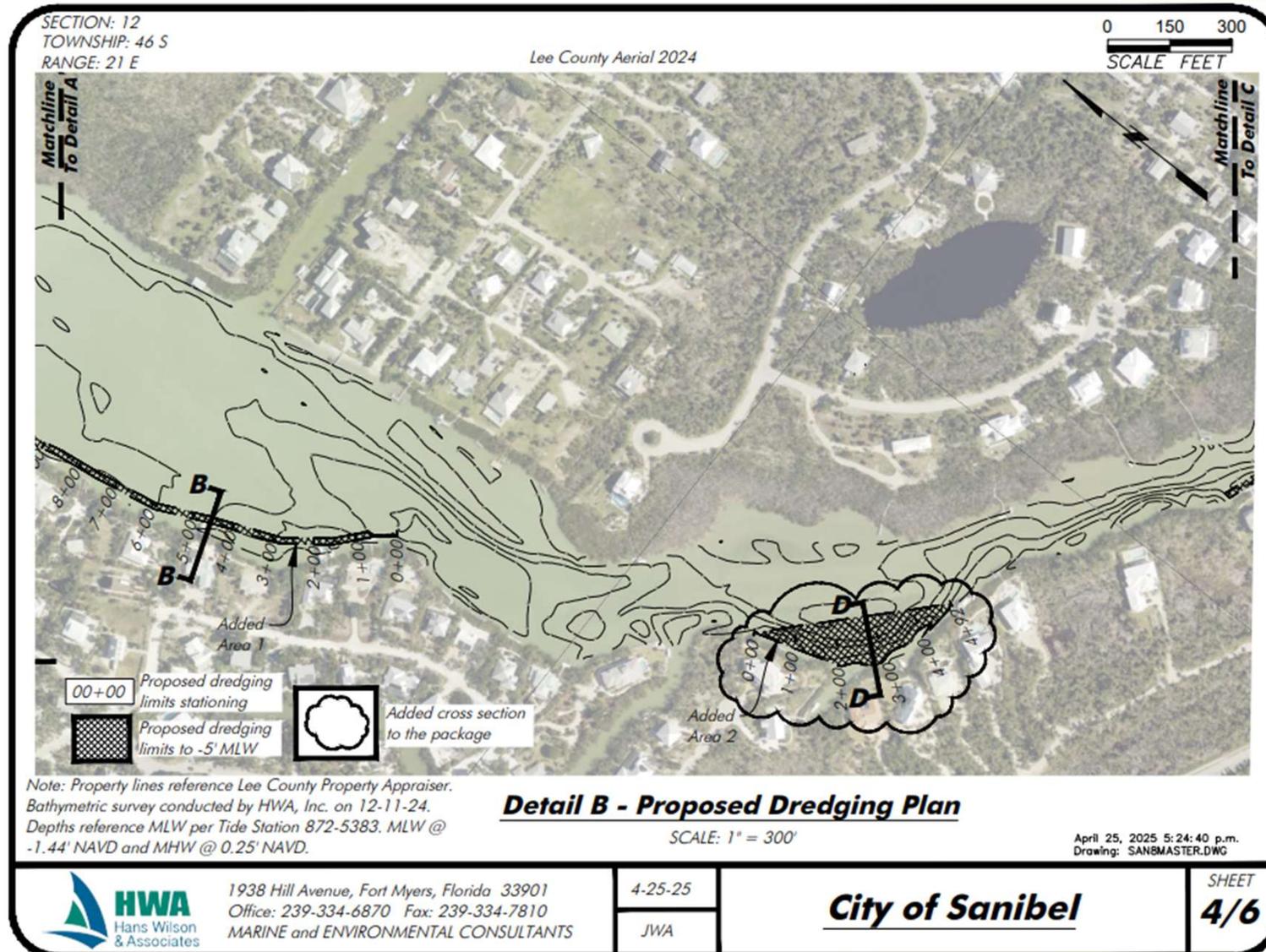
Dinkins Bayou Detail B

- ▶ 2024 Bathymetric Survey
- ▶ Areas shown in red, orange, yellow, & green are SHALLOW (5' or less MLW)
- ▶ Areas shown in blue, purple, & violet are DEEP (5' or greater MLW)



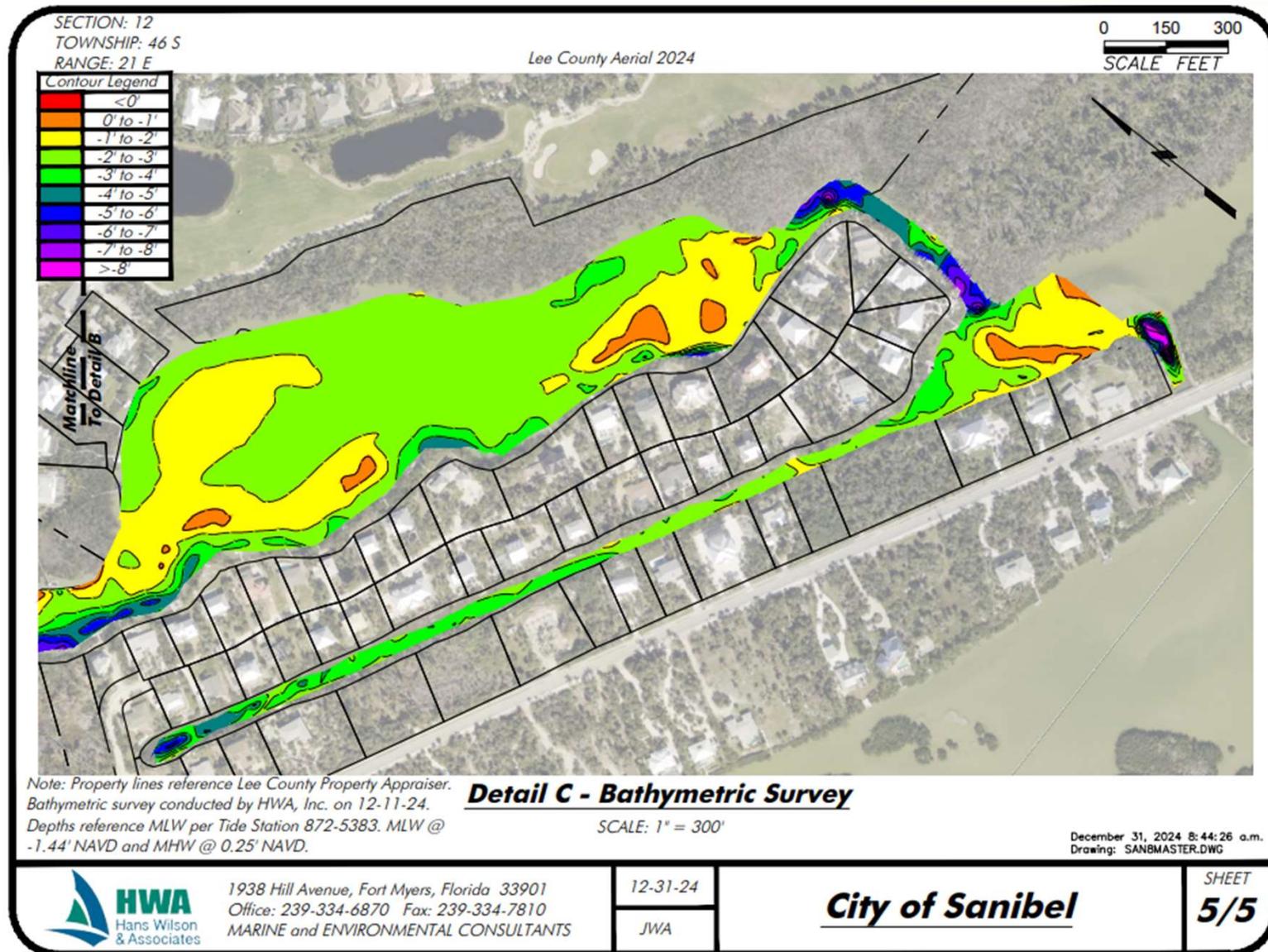
Dinkins Bayou Detail B

- ▶ Proposed dredging plan includes only a small portion of the area that was surveyed, shown in crosshatch
- ▶ Added Area 1, Added Area 2
- ▶ Each “Area” has a cross-section detail
 - ▶ A-A
 - ▶ B-B
 - ▶ C-C
 - ▶ D-D



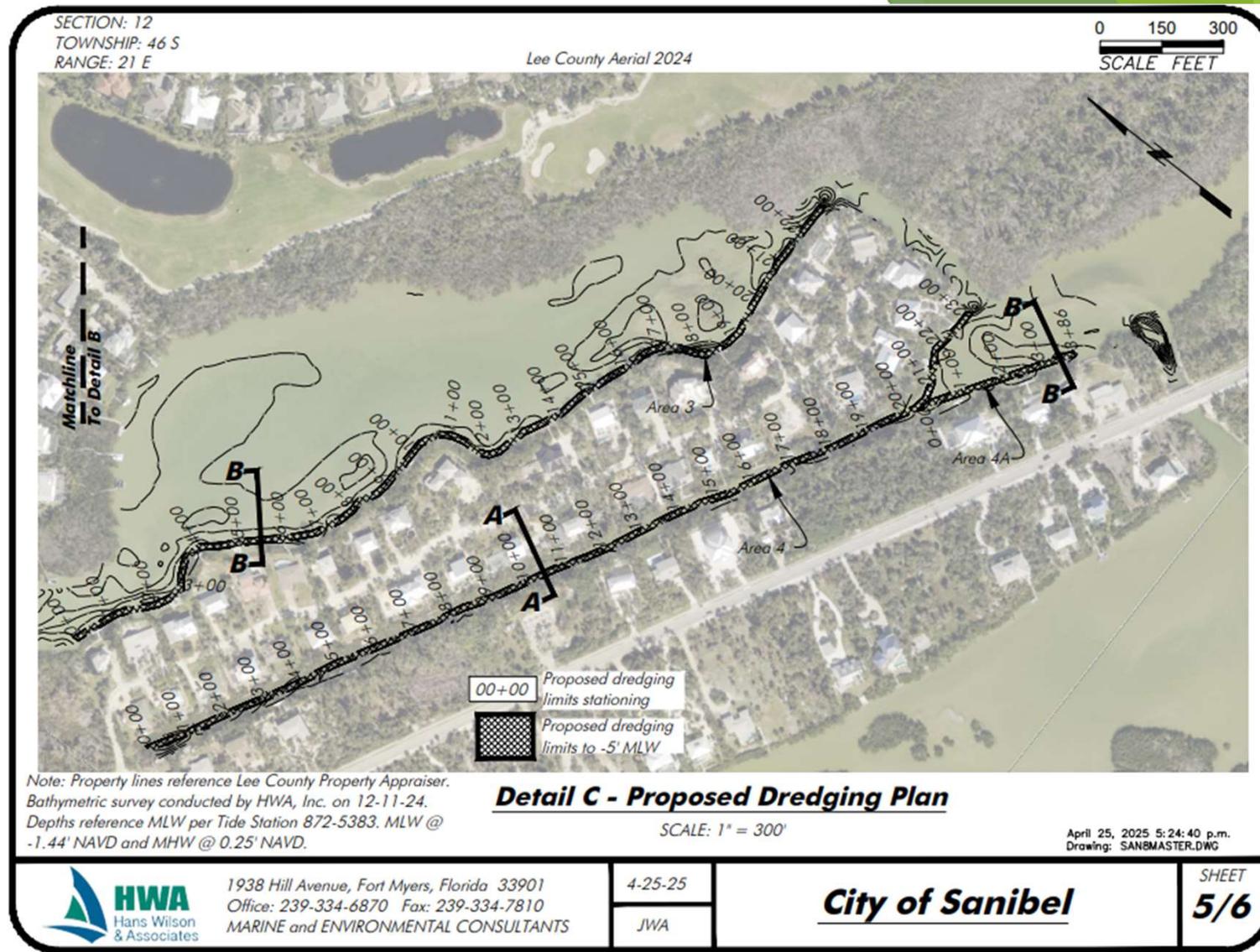
Dinkins Bayou Detail C

- ▶ 2024 Bathymetric Survey
- ▶ Areas shown in red, orange, yellow, & green are SHALLOW (5' or less MLW)
- ▶ Areas shown in blue, purple, & violet are DEEP (5' or greater MLW)



Dinkins Bayou Detail C

- ▶ Proposed dredging plan includes only a small portion of the area that was surveyed, shown in crosshatch
- ▶ Areas 3, 4, and 4a
- ▶ Each “Area” has a cross-section detail
 - ▶ A-A
 - ▶ B-B
 - ▶ C-C
 - ▶ D-D



Summary

Dinkins Bayou Dredge Volumes

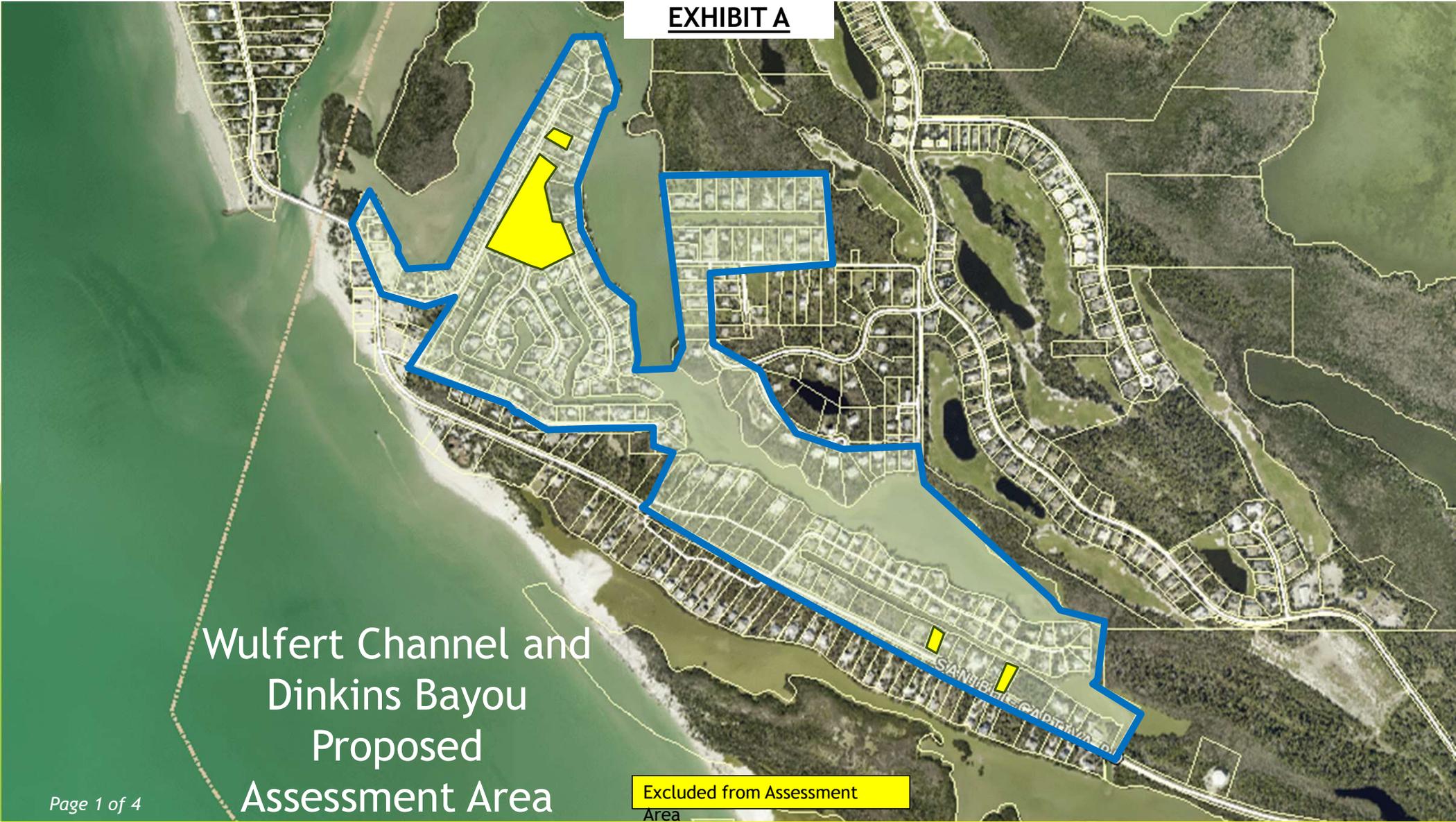
Detail Sheet	Area Name	Description	Cross Section	Total Volume (CY)
Detail A	Area 1	Dinkins Entrance	C-C	1,173
Detail A.1	Area 2	Sunset Bay Channel	B-B	3,359
Detail A/B	Added Area 1	Dinkins-West	B-B	1,177
Detail B	Added Area 2	Dinkins-Center	D-D	2,664
Detail C	Area 3	Dinkins-East	B-B	2,318
Detail C	Area 4	Pine Tree Canal	A-A	2,275
Detail C	Area 4a	Clam Bayou Culvert	B-B	574
TOTAL				13,540

- ▶ Spoil will be offloaded into water-tight dump trucks at the Henderson Road boat ramp
- ▶ Transported to Wulfert wastewater treatment plant for dewatering

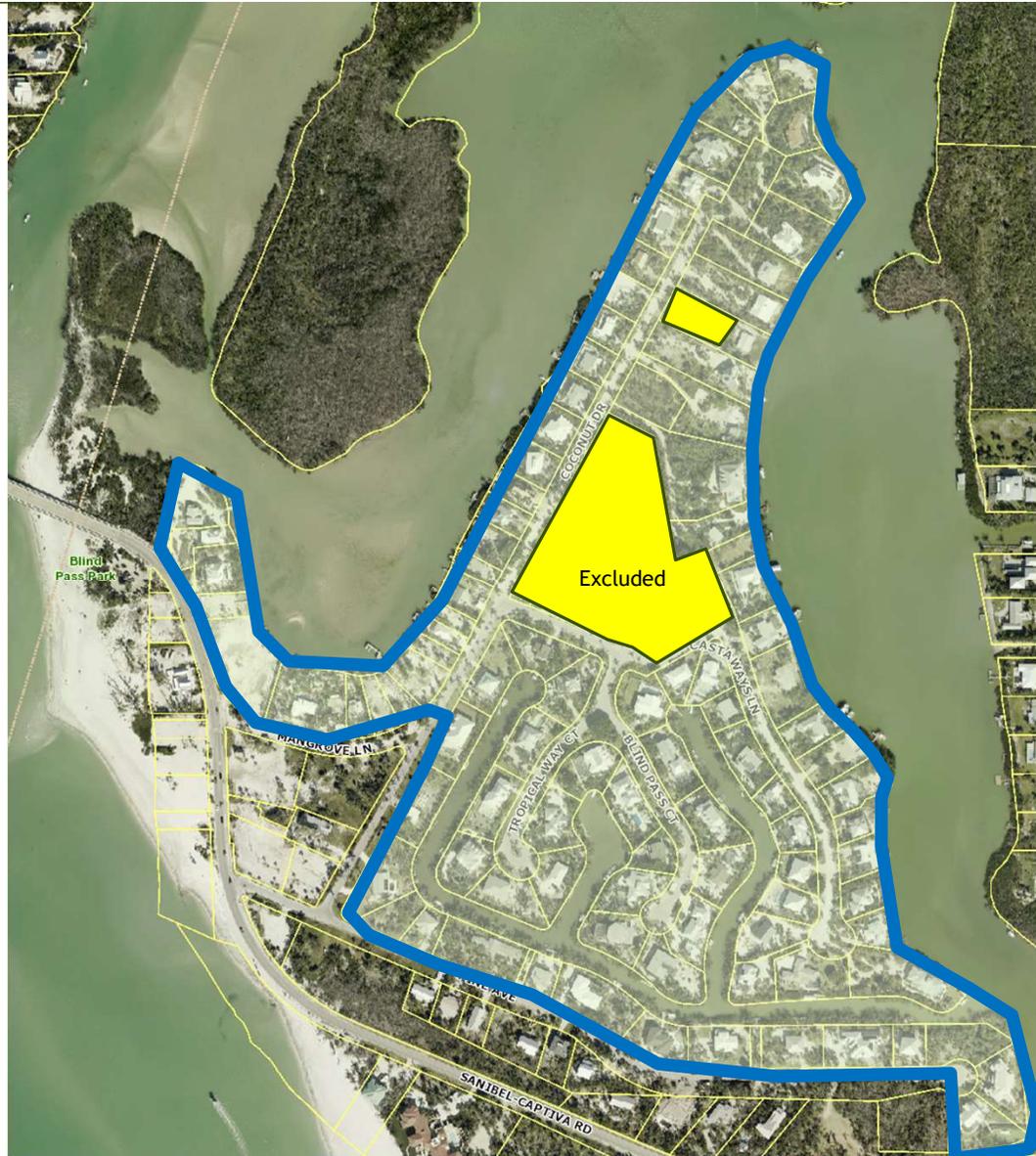
EXHIBIT A

**Wulfert Channel and
Dinkins Bayou
Proposed
Assessment Area**

Excluded from Assessment
Area



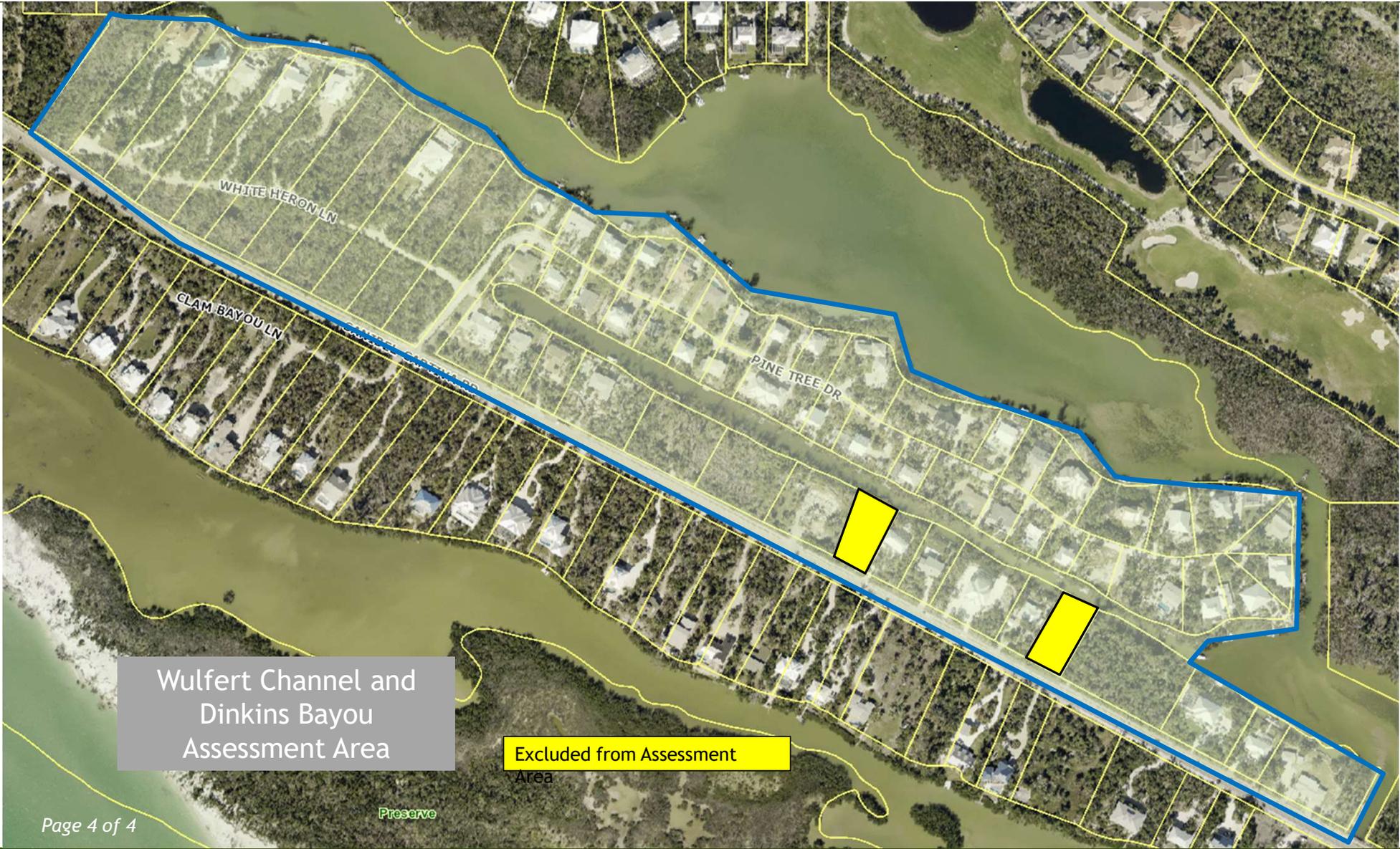
Wulfert Channel and Dinkins Bayou Assessment Area



Excluded from Assessment Area

Wulfert Channel and
Dinkins Bayou
Assessment Area





Wulfert Channel and
Dinkins Bayou
Assessment Area

Excluded from Assessment
Area

Preserve