

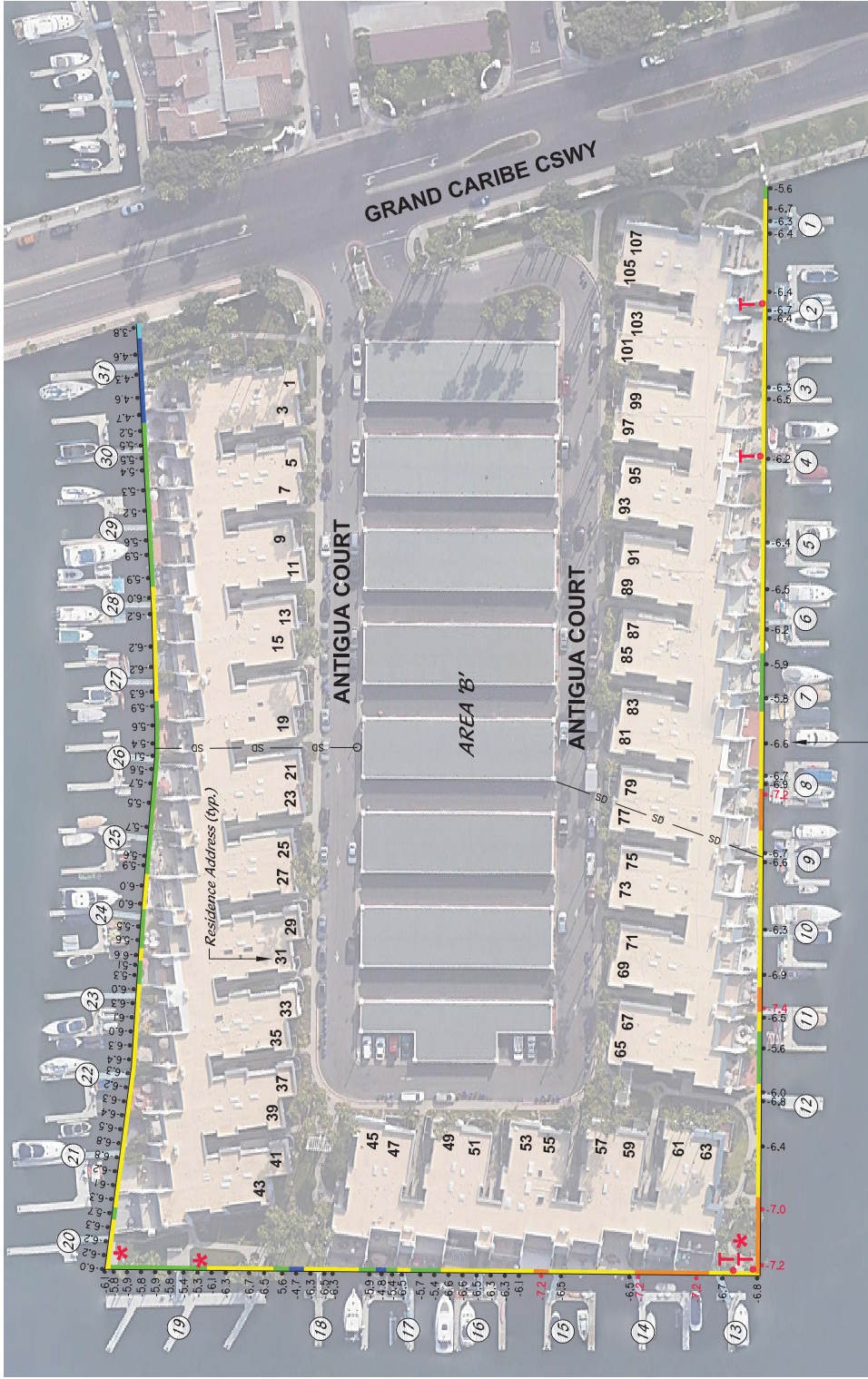
## **APPENDIX B**

**Coronado Cays HOA (including  
Antigua Court & Kingston Court)**



APPROX. SCALE: 1"=80'

SOURCE: GOOGLE INC., JUNE 9, 2021  
 GOOGLE EARTH [SOFTWARE],  
 IMAGERY DATE: 11-17-2018  
 AVAILABLE FROM: <http://www.google.com/>



**LEGEND**

2021 BERM SURVEY

Elevation Datum:  
MSL, ft

- -2 to -3
- -3 to -4
- -4 to -5
- -5 to -6
- -6 to -7
- -7 to -8
- -8 to -9
- < -9

2021 Reading of berm elevation (typ.)

**LEGEND (2021 BULKHEAD SURVEY)**

- 8.2 ● APPROXIMATE LOCATION & ELEVATION (MSL) OF BERM MEASUREMENT
- 7.2 ● BERM ELEVATION FALLING WITHIN CAUTIONARY ZONE
- SO — STORM DRAIN
- T TALLUS OBSERVED AT PANEL JOINT DURING UNDERWATER INSPECTION
- \* POSSIBLE VOID/LOSS OF GROUND OBSERVED DURING SURFACE SURVEY

AREA	SHEET PILE LENGTH	CAUTIONARY	SERIOUS
B	20.0 FT. (including Cap)	-7 TO -8 MSL	< -8 MSL

Elevation of top of Pile Cap: 7.1' MSL

If present, elevation of architectural cap varies.



TERRACOSTA CONSULTING GROUP  
 3890 MURPHY CANYON ROAD, SUITE 200  
 SAN DIEGO, CA 92131 (858) 973-8900  
 PROJECT NUMBER  
 T2904.070.001

PROJECT NAME  
 CORONADO CAYS BULKHEADS  
 ANTIGUA COURT (CORONADO CAYS HOA)

FIGURE NUMBER  
**B-1**

Field Survey Dates: May 18, 19, & 20, and June 25, 2021

APPROX. SCALE: 1"=80'

SOURCE: GOOGLE INC., JUNE 9, 2021  
 GOOGLE EARTH [SOFTWARE],  
 IMAGERY DATE: 11-17-2018  
 AVAILABLE FROM: <http://www.google.com/>



**LEGEND**

2021 BERM SURVEY

Elevation Datum:  
MSL, ft

- 2 to -3
- 3 to -4
- 4 to -5
- 5 to -6
- 6 to -7
- 7 to -8
- 8 to -9
- < -9

AREA	SHEET PILE LENGTH 20.0 FT (including cap)	CAUTIONARY	SERIOUS
B		-7 TO -8 MSL	< -8 MSL

Elevation of top of Pile Cap: 7.1' MSL

**LEGEND (2021 BULKHEAD SURVEY)**

- 5.2' APPROXIMATE LOCATION & ELEVATION (MSL) OF BERM MEASUREMENT
- 7.2' BERM ELEVATION FALLING WITHIN CAUTIONARY ZONE
- SD STORM DRAIN
- T TALLIES OBSERVED AT PANEL JOINT DURING UNDERWATER INSPECTION
- \* POSSIBLE VOID/LOSS OF GROUND OBSERVED DURING SURFACE SURVEY

2021 Reading of berm elevation (typ.)



TERRACOSTA CONSULTING GROUP 3805 MURPHY CANYON ROAD, SUITE 200 SAN DIEGO, CA 92131 858.973.8900	FIGURE NUMBER <b>B-2</b>
CORONADO CAYS BULKHEADS <b>KINGSTON COURT (CORONADO CAYS HOA)</b>	PROJECT NUMBER T2904.070.001

# CORONADO CAYS BULKHEADS

## Antigua Court

Project Number T2904.070.001

ADDRESS / LOCATION	BERM ELEV. (MSL)	OBSERVATION / COMMENTS
SW corner S of Lot 107	-5.6	
CL open space	-6.7	4" drain 5' S of GW, pile is offset
S side GW 1	-6.3	
Lot 107 N side GW 1	-6.4	Cracking and spalling 1 panel N of GW 1
Lot 105 CL	-6.4	
Lot 105 S side GW 2	-6.7	Spalling at joint, Panel S of GW 2
Lot 103 N side GW2	-6.4	Horizontal crack in 2nd panel S of GW, vertical crack at joint; 2" wide joint at Lot 103 has small talus pile; no surface observation possible on private property
Lot 101 S side GW 3	-6.3	Spalling at top of panels, approx 4 panels S of GW 3 and 3 panels N of GW 3
Lot 99 1 panel N of GW 3	-6.5	Spalling panel
Lot 97 S side GW 4 (1 joint S)	-6.2	Lot 97 small talus, abundant growth, 1" opening in joint; no surface observation possible on private property
Lot 93 S side GW 56	-6.4	Vertical crack
Lot 89 between GW 5&6	-6.5	
Lot 87 N side GW 6	-6.2	Spalling Panel S side GW 6
Lot 85 between GW 6&7	-5.9	Large cracks 1&2 panels S of GW 7
Lot 85 S side GW 7	-5.8	
Lot 81 between GW 7&8	-6.6	Cracks/spalling, panel under GW 8 and 2 panels south of GW 8
Lot 81 S side GW 8	-6.7	
Lot 79 N side GW 8	-6.9	Cracks, 1 panel N of GW 8
Lot 79 2 panels N of GW 8	-7.2	
Lot 77 S side GW 9	-6.7	Cracks, 2&3 panels S of GW 9, cracked panel under GW 9
Lot 75 N side GW 9	-6.6	
Lot 73 S side GW 10	-6.3	Cracked panel, 1 panel S of GW 10
Lot 69/71 PL	-6.9	
Lot 69 S side GW 11	-7.4	
Lot 67 N side GW 11	-6.5	
Lot 67 between GWs 11&12	-5.6	
Lot 65 S side GW12	-6.0	
N side GW 12	-6.8	
4 panels N of GW 12 (W wall)	-6.4	Cracked panels
5 panels S of NW corner	-7.0	Cracked panel, 3 panels S of NW corner
1 panel S of NW corner	-7.2	
N side NW corner	-6.8	Small talus pile 6" wide x 3" high; opening at joint. Settlement of concrete sidewalk panels observed at bulkhead corner; possible void; crack and offset in panels approx. 8' behind bulkhead
Lot 63, 1 Panel (10'), W side GW 13		Small talus pile 6" wide x 3" high
W side GW 13	-6.7	
Lot 63 2 panels E of GW 13	-7.2	
Lot 61 W side GW 14	-7.2	
Lot 59 E side GW 14	-6.5	
Lot 57 W side GW 15	-6.5	
Lot 55 E side GW 15	-7.2	

# CORONADO CAYS BULKHEADS

## Antigua Court

Project Number T2904.070.001

PL of Lots 55/53	-6.1	7" cap
Panel 1 E of PLLots 55/53	-6.3	7" cap
Panel 2 E of PLLots 55/53	-6.3	7" cap
GW 16	-6.5	7" cap
10' E of GW 16	-6.6	7" cap
20' E of GW 16	-6.6	7" cap
30' E of GW 16	-5.4	7" cap
40' E of GW 16	-5.7	7" cap
GW 17	-6.5	7" cap
10' E of GW 17	-5.4	7" cap
20' E of GW 17	-4.8	7" cap
Panel 10' W of PL Lots 47/45	-5.9	7.5" cap
Panel 12' W of GW 18	-6.3	7.5" cap
HOA PL Panel 1 W of GW 18	-6.5	5" cap
Panel 10' E of of GW 18	-6.3	5" cap
Panel 20' E of GW 18	-4.7	5" cap
Panel 30' E of GW 18	-5.6	5" cap; rust spot; 4" cored hole. NOTE: PVC pipe inside has dropped 1-1/2"
Panel 40' E of GW 18	-6.5	5" cap
Panel 50' E of GW 18	-6.7	5" cap
Panel 30' W of GW 19	-6.3	5" cap
Panel 20' W of GW 19	-6.1	5" cap
Panel 10' W of GW 19	-5.3	5" cap; spalling W of joint. Wide joint but looks solid; ~10' wide area of settlement 6" below cap in grassy area behind pilecap. Probe in that location extended to 4' deep, where as in other grassy areas, 1' deep probe possible
Panel W of GW 19	-5.4	5" cap
Panel 1 E of GW 19	-5.8	5" cap; wide joint; abundant growth at joint, no talus (diver observed)
Panel 2 E of GW 19	-5.9	5" cap; Cored 4" dia hole right of joint, PVC pipe tight
26' W of NE corner	-5.8	5" cap
16' W of NE corner	-5.9	5" cap; settling of grassy area behind bulkhead
6' W of NE corner	-5.8	5" cap
NE corner (N Wall)	-6.1	S/B 7.1; 5" cap. Vertical cracks, rust; spalling; wide joint, 1/2" settlement of sidewalk behind bulkhead observed; no talus observed.
Panel 1 S of corner	-6.0	
Panel 2 S of corner	-6.2	5" cap
GW 20	-6.2	7-1/4" cap
10' S of GW 20	-6.3	7-1/4" cap
20' S of GW 20	-5.7	7-1/4" cap
30' S of GW 20	-6.3	8" cap; spalling and rust staining
20' N of GW 21	-6.1	8" cap
10' N of GW 21	-6.2	7-1/2" cap
GW 21	-6.8	7-1/2" cap
10' S of GW 21	-6.8	7-1/2" cap
20' S of GW 21	-6.5	8" cap
30' S of GW 21	-6.4	8" cap

# CORONADO CAYS BULKHEADS

## Antigua Court

Project Number T2904.070.001

20' N of GW 22	-6.3	1.5" to 2" wide joints
10' N of GW 22	-6.2	8" cap
GW 22	-6.3	8" cap
10' S of GW 22	-6.4	8" cap
20' S of GW 22	-6.3	7" cap
30' S of GW 22	-6.0	7" cap
20' N of GW 23	-6.1	7" cap
N of GW 23	-6.3	6" cap;
S of GW 23	-6.0	6" cap; spalling S of GW, hairline cracks and rust staining
20' S of GW 23	-5.3	6" cap; 1" panel offset
30' S of GW 23	-5.1	7" cap
PL at Lots 29/31	-6.6	Panels offset at PL
Middle of Lot 29	-5.6	
5' N of GW 24	-5.5	
5' S of GW 24	-6.0	
5' N of PL Lot 25/27	-6.0	1" offset in panel at joint; hairline cracks and rust staining
Middle of Lot 25	-5.9	
8' N of GW 25	-5.6	
10' S of GW 25	-5.7	
Lot 23		Minor spalling under pile cap
N side of Lot 21/23 PL	-5.5	Hairline cracks and rust staining
Middle of Lot 21	-5.7	
8' N or Lot 19/21 PL		Spalling and minor cracking
N of GW 26	-5.6	
S of GW 26	-5.1	
Middle of Lot 19	-5.4	
N side of Lot 17/19 PL	-5.6	Panel joint is tight at the top of panel and has >1" gap at water line; hairline cracks and rust staining
Middle of Lot 17	-5.9	Minor spalling common on Lot 17 below the pile cap
3' N of GW Lot 27	-6.3	
10' S of GW 27	-6.2	Vertical panel crack and spalling
N side of Lot 13/15 PL		Panel joint has no gap at top, and >1" gap at waterline; hairline cracks & rust staining
5' N of GW 28	-6.2	
5' S of GW 28	-6.0	Spalling under pile cap, vertical panel cracks
5' N OF Lot 9/11 PL	-5.9	Vertical panel cracks; spalling
8' S of Lot 9 PL	-5.9	
10' N of GW 29	-5.6	
Lot 7/9 PL		Cracked panel joint and minor spalling
Middle of Lot 7	-5.2	Panel joint is approximately 1 1/4" wide at the top and 3/8" wide at waterline. Panel is offset approximately 1/2" and broken at the top
Lot 5/7 PL	-5.3	Minor cracking and spalling; spalling N of GW, hairline cracks and rust
5' S of Lots 5/7 PL		Panel joint is rotated approximately 3/4" at the top
10' N of GW 30	-5.4	Horizontal and vertical panel cracking, spalling, and rust stains

# CORONADO CAYS BULKHEADS

## Antigua Court

Project Number T2904.070.001

N side of GW 30	-5.5	Panel joint widens to >2.5 " at top of panel and tapers to >1/4" at waterline. Minor horizontal cracking approximately 2 to 3 feet below pile cap
6' S of GW 30	-5.5	
Middle of Lot 3	-5.2	
Lots 1/3 PL	-4.7	Minor horizontal cracking near mid panel
15' N of Lot 1/HOA PL	-4.6	Minor spalling, minor cracking common between Lot 1 and Lot 29
N side of GW 31	-4.3	Spalling under GW
10' S of GW 31	-4.6	4" area drain
At Grand Caribe Causeway	-3.8	Minor spalling on bulkhead panel

# CORONADO CAYS BULKHEADS

## Kingston Court

Project Number T2904.070.001

ADDRESS / LOCATION	BERM ELEV. (MSL)	OBSERVATION / COMMENTS
Lots 3-13 12' S of North corner	-5.4	
Lots 3-13 22' S of N corner	-5.5	
Lots 3-13 32' S of N corner	-5.2	Vertical crack bleeding rust
Lots 3-13 42' S of N corner	-4.8	Spalling, vertical crack
Lots 3-13 52' S of N corner	-4.8	
Lots 3-13 Angle Point/GW 1	-4.5	Vertical crack with rust
Lots 3-13 10' S of Angle Pt.	-4.5	
Lots 3-13 20' S of Angle Pt.	-4.5	
Lots 3-13 30' S of Angle Pt.	-4.6	Vertical cracks, spalling
Lots 3-13 40' S of Angle Pt.	-4.7	
Lots 3-13 50' S of Angle Pt.	-4.8	
Lots 3-13 GW 2	-4.8	Crack in panel under GW
Lots 3-13 10' S of GW 2	-4.8	
Lots 3-13 20' S of GW 2	-4.8	Vertical crack
Lots 3-13 30' S of GW 2	-4.7	Spalling, small vertical crack
Lots 3-13 40' S of GW 2	-4.7	
Lots 3-13 50' S of GW 2	-5.0	1/2" offset in joint; crack in panel
Lots 3-13 55' S of GW 2	-5.0	
Lots 3-13 GW 3	-5.1	Large spall
Lots 3-13 1st Panel S of GW		Crack in panel
Lots 3-13 N side GW 3	-5.2	Spalling panel N side GW 3, rust 1 panel S of GW 3
Lots 3-13 N side of GW 4		1st and 2nd panel joint is very wide; void possibly detected around electrical panel during surface survey
Lots 3-13 S side GW 4	-4.9	Storm drain outlet under GW 4; ; talus on S side of GW
Lots 17-29 N side GW 5	-5.3	
Lots 17-29 S side GW 5	-5.7	
Lots 17-29 corner between GW 5&6	-6.2	1" Sidewalk panel/pilecap offset observed at surface survey
Lots 17-29 S side GW 6	-6.0	Spalling and rust, 1, 2 and 3 panels S of GW 6
Lots 17-29 midway between GW 6&7		Large vertical crack; 1" wide joint observed between pilecap and sidewalk during surface survey, with possible void below
Lots 17-29 N side GW 7	-5.7	
Lots 17-29 1 panel S of GW 7	-4.9	
Lots 17-29 corner between GW 7&8	-4.4	Possible void at corner behind pileaster
Lots 17-29 N Side GW 8	-5.7	
Lots 17-29 between GWs 8 and 9	-6.1	



# CORONADO CAYS BULKHEADS

## Kingston Court

Project Number T2904.070.001

PL at GW 9 cul de sac		Soil detected in wide joint during boat survey; approximately 30' long area of settlement (1-3/4" offset between pilecap and sidewalk) observed during surface survey. Possible voids below sidewalk.
Lots 17-29 S side GW 9	-5.5	Crack 1 Panel S of GW 9
Lots 35-45 E wall S dock	-5.1	
Lots 35-45 3 Panels N of SE corner	-4.5	Noted installation of two diagonal tierods; new concrete sidewalk noted during surface survey
Lots 35-45 SE corner N side	-5.4	
Lots 35-45 SE corner S side	-6.1	Horizontal cracks observed on most panels of southerly bulkhead; 1.5" opening at joint; small talus pile; diagonal tie rods holding center panels together
Lots 35-45 E side GW 10 (S wall)	-6.0	
Lots 35-45 between GWs 10 & 11	-5.0	Horizontal cracking and spalling 1st and 2nd panel E of GW 2
Lots 35-45 W side GW 11	-4.8	Cracked panel; talus pile 10' W of GW 11; no surface settlement observed
Lots 35-45 E side GW 12	-5.5	Spalling at joint
Lots 35-45 E side GW 13	-4.8	Spalling at joint, storm drain outlet on W side of GW 13
Lots 49-59 W side GW 13	-4.7	
Lots 49-59 W side GW 14	-5.8	
Lots 49-59 between GWs 14 & 15	-6.0	Joint spalling 1 panel W of GW 14
Lots 49-59 E side GW 15	-5.7	
Lots 49-59 E side GW 16	-5.0	Spalling 4 panels from SW corner
5th panel from S corner		Significant cracks
Lots 49-59 S side SW corner	-5.3	
Lots 49-59 10' E of corner		Sidewalk settlement observed behind pilecap with gap behind cap. Possible void
Lots 49-59 W side SW corner	-6.3	
Lots 49-59 4 panels N of SW corner	-5.2	Spalling at joint; sidewalk panel with rough texture, sounds hollow, possible void
6 Panels N of SW Corner		1.25" joint opening; small talus
Lots 49-59 8 panels N of SW corner	-6.0	Spalling Joints
Lots 49-59 S side GW 17 W wall	-5.8	Badly cracked panels 4-5 panels south of GW 12, cracked panel S of GW 17; cracked pile cap
Lots 65-73 between GW 17 & 18	-6.0	
Lots 65-73 S side GW 18	-5.1	1.5" opening at joint; small talus pile; no surface settlement observed
Lots 65-73 N side GW 18	-5.6	
Lots 65-73 S side GW 19	-5.7	Panels cracked between GW 19 & 20;
Lots 65-73 N side GW 19		1.5" to 2" opening at joint; small talus pile; no surface settlement observed
Lots 65-73 S side GW 20	-5.4	

# CORONADO CAYS BULKHEADS

## Kingston Court

Project Number T2904.070.001

Lots 65-73 N side GW 21	-5.2	Offset panel
Lots 77-87 S side GW 22	-5.9	1.5" to 2" opening at joint; small talus pile; surface settlement observed between sidewalk and pilecap, sidewalk cracked
1st Joint N of GW 22		1" opening at joint; 1.5'w x 5" high talus pile; 1/4" sidewalk settlement behind pilecap
15' N of GW 22		2" offset in joint; 1.5'w x 5" high talus pile; surface settlement observed between sidewalk and pilecap, sidewalk cracked
Lots 77-87 between GWs 22 & 23	-6.0	Cracked panel 4 panels S of GW 23
Lots 77-87 GW 23	-5.0	Cracking and offset panel south of GW 23;
S of GW 24		1" opening at joint; 1' wide x 3" high talus pile; no surface settlement observed
Lots 77-87 10' N of GW 24	-5.3	
Lots 77-87 20' N of GW 24	-5.7	Vertical crack, 1" panel offset at joint
Lots 77-87 30' N of GW 24	-5.8	
Lots 77-87 25' S of GW 25	-5.2	Vertical hairline cracks
Lots 77-87 10' S of GW 25	-4.7	1st joint N of GW has 1"x 1.5" offset; 2nd joint N of GW has 2"x 1.5" offset
Lots 77-87 GW 25	-4.4	Storm drain outlet to the south of GW
50' S of GW 26		1"-1.5" opening at joint, 2.5" offset; 1' wide x 3" high talus pile; no surface settlement observed, sidewalk cracking
20' S of GW 26		1" opening at joint, 1.5" offset; 1' wide x 5" tall talus pile; no surface settlement observed, sidewalk cracking
Lots 91-101 GW 26	-4.3	Panel cracked across from dock 25, vertical crack 1 panel right of GW 26, offset panel 3 panels south of GW
Lots 91-101 GW 27	-4.9	Panel Spalling
Lots 91-101 GW 27 dock 2	-5.2	
Lots 91-101 GW 28	-5.1	Cracked panel
NW Corner		2" to 2.5" opening at corner; 1' wide x 4" high talus pile; no surface settlement observed

# Antigua Court

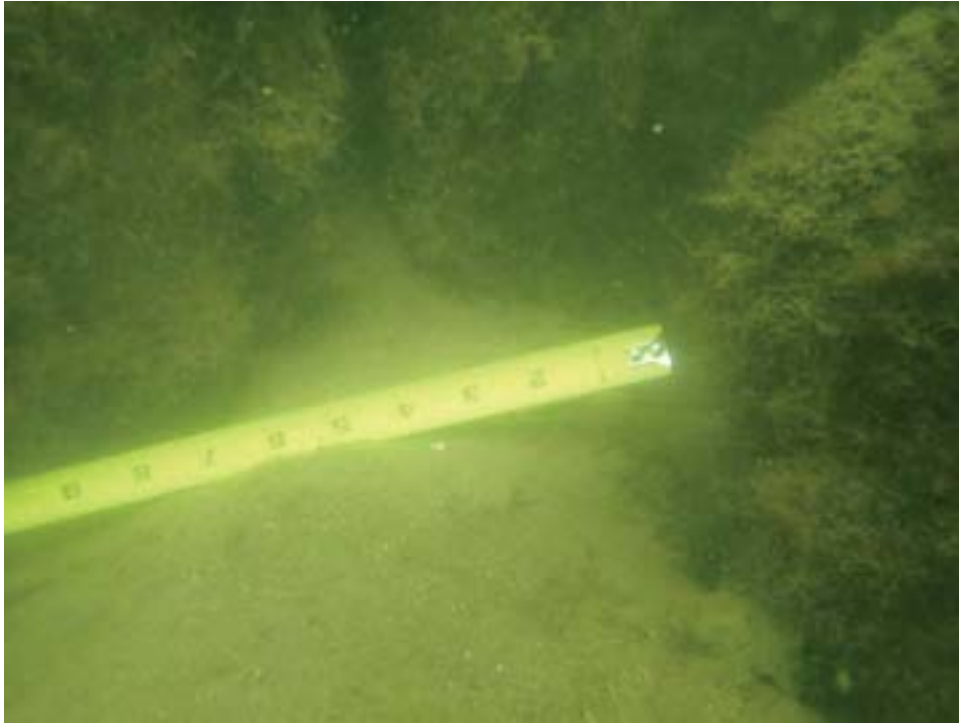


Photo 1: Antigua Court. Talus pile just south of Gangway 2 (joint approx.. 10 feet southerly of gangway).



Photo 2: Antigua Court. Talus pile just south of Gangway 2 (joint approx.. 10 feet southerly of gangway).

# Antigua Court



Photo 3: Antigua Court. Talus pile just south of Gangway 4. Although not visible in photo, joint width is 1 inch.



Photo 4: Antigua Court. Checking for voids under sidewalk at common area, northwest corner of Antigua Court.

# Antigua Court

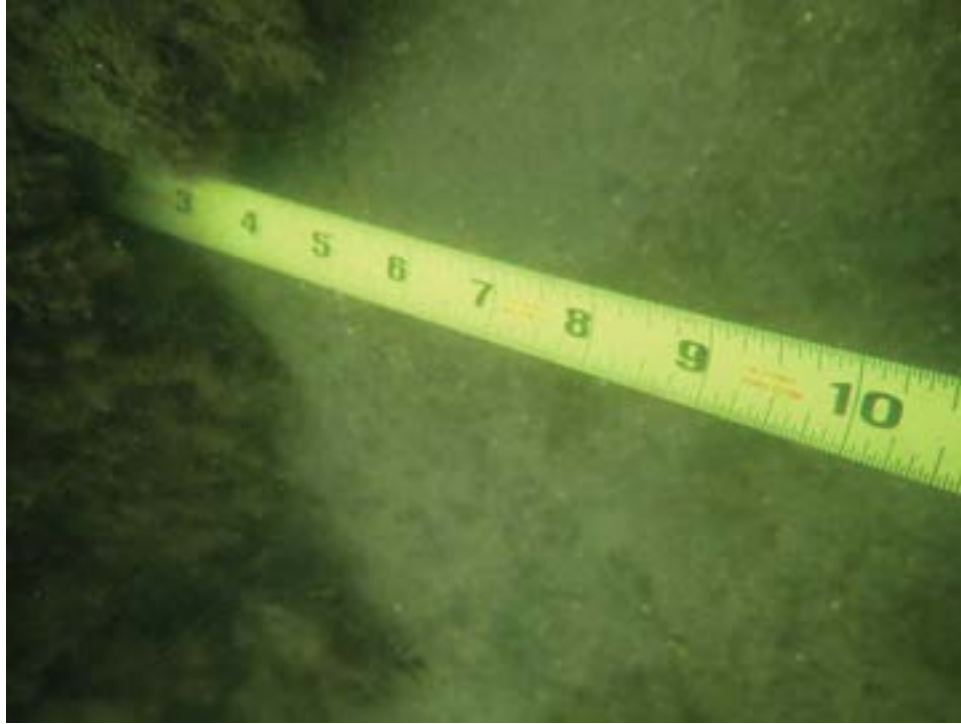


Photo 5: Antigua Court.  
6-inch-high talus pile at northwest corner joint



Photo 6: Antigua Court.  
6-inch-high talus pile at northwest corner joint

# Antigua Court



Photo 7: Antigua Court.  
6-inch-high talus pile at northwest corner joint



Photo 8: Antigua Court, 20 feet east of northwest corner.  
6-inch-high talus pile.

# Antigua Court



Photo 9: Antigua Court, 20 feet east of northwest corner.  
6-inch-high talus pile.



Photo 10: Antigua Court. Note grass area experiencing settlement.  
Also note handle of 4 foot probe, indicating loose soil behind bulkhead.

# Antigua Court



Photo 11: Antigua Court.

Note two penetrations (arrows) in bulkhead below area experiencing settlement.



Photo 12: Antigua Court. Checking for voids under sidewalk at common area, northeast corner of Antigua Court.



# Antigua Court



Photo 13: Antigua Court, northeast corner (north wall). Vertical cracks, rust, spalling, wide joint, talus observed.



Photo 14: Antigua Court, Lot 25/27, 5-feet north of P/L.

# Antigua Court



Photo 15: Antigua Court, South Side, Lot 19/21.  
14-inch storm drain under gangway at P/L.



Photo 16: Antigua Court, Lot 11, 5 feet south of P/L.  
Spalling under pile cap.

# Antigua Court



Photo 17: Antigua Court, Lot 5, 5 feet south of P/L.  
Panel joint is rotated approximately 0.75 inch at the top.



Photo 18: Antigua Court, Lot 3/5 P/L, north side of gangway.  
Panel joint widens to >2.5 inches at top of panel and tapers to >0.25 inch at waterline.  
Minor horizontal cracking approximately 2 to 3 feet below pile cap.

## Antigua Court



Photo 19: Antigua Court at Grand Caribe causeway.  
Vertical cracking, minor spalling on bulkhead panel.