



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240010
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-18
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT5_12 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Bear Creek **Quality of Mark:** Fair
Flood Elevation: **10.46 FT** **Location:** Outside
Flooding Type: Wave height
Mark Address: 695 bridge crossing bear creek
Description of Mark: 12' above shoreline

Type of Line: Debris line

Description of Physical Structure: N/A

Closest City: **County:** Baltimore **State:** Maryland

Flaggers: cannon **Company/Agency:** Dewberry

Flagging Date: 9/27/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 10/1/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2379 **Easting:** 1,470,967

Longitude: -76.4431 **Northing:** 569,840

Approx. First Floor Elevation (Based on Measurement from Mark): N/A

Approx. Distance to Shoreline: 1200 FT

Comments:

Dedbris line of poor quality, may actually be wave action.



DSCN0032.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240010
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-19
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT5_13 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: North Point Creek **Quality of Mark:** Fair
Flood Elevation: **7.23 FT** **Location:** Outside
Flooding Type: Surge
Mark Address: 2601 Boulevard
Description of Mark: 3 ft above ground

Type of Line: Eyewitness account

Description of Physical Structure: swimming pool

Closest City: **County:** Baltimore **State:** Maryland

Flaggers: cannon **Company/Agency:**
Flagging Date: 9/26/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS
Survey Date: 10/1/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

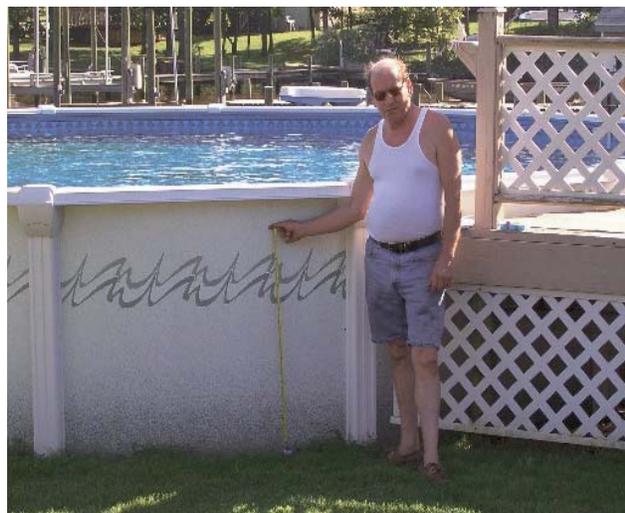
Latitude: 39.2282 **Easting:** 1,473,822

Longitude: -76.4396 **Northing:** 566,215

Approx. First Floor Elevation (Based on Measurement from Mark): 4.23 FT

Approx. Distance to Shoreline: 10 FT

Comments:



DSCN0033.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240010
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-20
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT5_14 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Patapsco River **Quality of Mark:** Fair
Flood Elevation: **7.14 FT** **Location:** Outside
Flooding Type: Surge
Mark Address: 9600 N. Point Rd.
Description of Mark: 3 feet from ground

Type of Line: Eyewitness account

Description of Physical Structure: concrete building

Closest City: **County:** Baltimore **State:** Maryland

Flaggers: cannon **Company/Agency:** Dewberry

Flagging Date: 9/26/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/30/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2027 **Easting:** 1,471,034

Longitude: -76.4461 **Northing:** 558,913

Approx. First Floor Elevation (Based on Measurement from Mark): 4.14 FT

Approx. Distance to Shoreline: 470 FT

Comments:



DSCN0036.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240010
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-21
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT5_15 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Back River **Quality of Mark:** Poor
Flood Elevation: **7.6 FT** **Location:** Shoreline under bridge
Flooding Type: Surge
Mark Address: 695 Bridge west side
Description of Mark: 12' above shoreline

Type of Line: Debris line
Description of Physical Structure: N/A

Closest City: **County:** Baltimore **State:** Maryland

Flaggers: cannon **Company/Agency:** Dewberry
Flagging Date: 9/27/2003

Surveyors: Thigpen, Walker **Company/Agency:** Greenhome & O'Mara, Inc.
Survey Date: 10/30/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83
Latitude: 39.3025 **Easting:** 1,453,831
Longitude: -76.5006 **Northing:** 595,237

Approx. First Floor Elevation (Based on Measurement from Mark): N/A

Approx. Distance to Shoreline: 10 FT

Comments:



DSCN0038.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-22
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_1 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Fair
Flood Elevation: **7.62 FT** **Location:** Outside wall
Flooding Type: Surge
Mark Address: Southwest Corner of Pratt and Gay Streets
Description of Mark: next to stairs that go up to the walkway that crossed Pratt Street

Type of Line: Mud line

Description of Physical Structure: concrete building

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/25/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

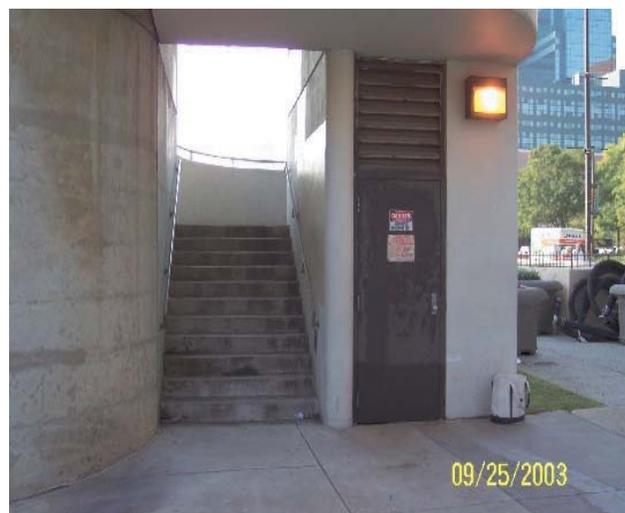
Latitude: 39.2866 **Easting:** 1,425,563

Longitude: -76.6089 **Northing:** 587,813

Approx. First Floor Elevation (Based on Measurement from Mark): 5.87 FT

Approx. Distance to Shoreline: 220 FT

Comments:



Balt1-2.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-23
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_2 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Fair
Flood Elevation: **7.45 FT** **Location:** Outside building wall
Flooding Type: Surge
Mark Address: Clipper City Boat Tours Light St., half way between Hooters and Science Center
Description of Mark: west side of the ticket booth for Clipper City tours

Type of Line: Mud line/personal account

Description of Physical Structure: wood shed

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/25/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2832 **Easting:** 1,422,733

Longitude: -76.6117 **Northing:** 587,801

Approx. First Floor Elevation (Based on Measurement from Mark): 5.7 FT

Approx. Distance to Shoreline: 10 FT

Comments:



Balt1-3.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-24
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_3 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Fair
Flood Elevation: **5.8 FT** **Location:** Outside building wall
Flooding Type: Surge
Mark Address: Parking lot adjacent to Rusty Scupper
Description of Mark: north side of wall at entrance to parking garage

Type of Line: Mud line

Description of Physical Structure: concrete wall

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/25/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2816 **Easting:** 1,425,563

Longitude: -76.6072 **Northing:** 587,813

Approx. First Floor Elevation (Based on Measurement from Mark): 5.47 FT

Approx. Distance to Shoreline: 110 FT

Comments:



balt3-8.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-25
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_4 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Poor
Flood Elevation: **7.38 FT** **Location:** Fence
Flooding Type: Surge
Mark Address: 800 block of Key Highway across from American Visionary Art Museum
Description of Mark: the fence line that borders the east side of the parking lot

Type of Line: Debris line

Description of Physical Structure: N/A

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/25/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2799 **Easting:** 1,425,579

Longitude: -76.6052 **Northing:** 584,171

Approx. First Floor Elevation (Based on Measurement from Mark): 3.21 FT

Approx. Distance to Shoreline: 10 FT

Comments:



Balt4-10.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-26
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_5 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Good
Flood Elevation: **7.44 FT** **Location:** Inside wall transferred outside
Flooding Type: Surge
Mark Address: National Aquarium
Description of Mark: on the left outside wall adjacent to the Pier 3 security entrance

Type of Line: Mud line

Description of Physical Structure: concrete building

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/28/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2849 **Easting:** 1,425,563

Longitude: -76.6083 **Northing:** 587,813

Approx. First Floor Elevation (Based on Measurement from Mark): 5.27 FT

Approx. Distance to Shoreline: 70 FT

Comments:



Balt5-14.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-27
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_6 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Good
Flood Elevation: **7.88 FT** **Location:** Protected outside wall
Flooding Type: Surge
Mark Address: 1000 Fell Street
Description of Mark: at Henderson Wharf hotel main entrance, left at doors if facing hotel

Type of Line: Mud line

Description of Physical Structure: brick building

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2798 **Easting:** 1,431,242

Longitude: -76.5892 **Northing:** 584,196

Approx. First Floor Elevation (Based on Measurement from Mark): 5.3 FT

Approx. Distance to Shoreline: 150 FT

Comments:



Balt6-17.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-28
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_7 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Good
Flood Elevation: **7.72 FT** **Location:** Inside wall
Flooding Type: Surge
Mark Address: 1710 Thames Street/Recreation Pier City Building
Description of Mark: inside wall parking area of city building southwest side

Type of Line: Mud line

Description of Physical Structure: brick building

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Blackwell, Chrimer **Company/Agency:** URS

Survey Date: 9/28/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2816 **Easting:** 1,428,394

Longitude: -76.5924 **Northing:** 587,825

Approx. First Floor Elevation (Based on Measurement from Mark): 5.47 FT

Approx. Distance to Shoreline: 30 FT

Comments:



Balt7-19.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project

COMM. NO. 240087

TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-29

CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_8 **Mark Type:** Coastal

Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003

Flooding Source: Middle Branch **Quality of Mark:** Poor

Flood Elevation: **21.52 FT** **Location:** Fence

Flooding Type: Wave height

Mark Address: 2035 Kloman Street

Description of Mark: next to old railroad bridge along fence line

Type of Line: Debris line

Description of Physical Structure: N/A

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Pavlis, Ireton **Company/Agency:** URS

Survey Date: 9/29/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2650 **Easting:** 1,419,932

Longitude: -76.6277 **Northing:** 580,504

Approx. First Floor Elevation (Based on Measurement from Mark): 21.19 FT

Approx. Distance to Shoreline: 120 FT

Comments:

Debris line of poor quality. Mark may be due wave action, which accounts for the exceptionally high flood elevation recorded at this location.



Balt8-20.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-30
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_9 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Inner Harbor **Quality of Mark:** Fair
Flood Elevation: **9.95 FT** **Location:** Outside wall of trash can
Flooding Type: Wave runoff
Mark Address: Fort McHenry
Description of Mark: trash can along walkway, next to seawall, just south of orange construction fence

Type of Line: Mud line

Description of Physical Structure: seawall

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Pavlis, Ireton **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2629 **Easting:** 1,434,090

Longitude: -76.5782 **Northing:** 580,567

Approx. First Floor Elevation (Based on Measurement from Mark): N/A

Approx. Distance to Shoreline: 10 FT

Comments:



Balt9-22.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-31
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT8_10 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: **Quality of Mark:** Good
Flood Elevation: **7.6 FT** **Location:** Inside wall transferred outside
Flooding Type: Surge
Mark Address: 2601 Cannery Avenue
Description of Mark: 27 inches above sidewalk at corner of garage door

Type of Line: Mud line

Description of Physical Structure: metal garage

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Fike **Company/Agency:** URS

Flagging Date: 9/26/2003

Surveyors: Pavlis, Ireton **Company/Agency:** URS

Survey Date: 9/27/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2311 **Easting:** 1,436,974

Longitude: -76.5614 **Northing:** 569,654

Approx. First Floor Elevation (Based on Measurement from Mark): 5.35 FT

Approx. Distance to Shoreline: 140 FT

Comments:



Balt10-22.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240010
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-32
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT9_8 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Gunpowder River **Quality of Mark:** Fair
Flood Elevation: **7.9 FT** **Location:** Road sign
Flooding Type: Surge
Mark Address: 13107 Greenbank Rd
Description of Mark: 21.5" from top point of road sign

Type of Line: Mud line
Description of Physical Structure: wood house
Closest City: Oliver Beach **County:** Baltimore **State:** Maryland

Flaggers: Ryan Carroll **Company/Agency:** Dewberry
Flagging Date: 10/7/2003

Surveyors: Thigpen, Walker **Company/Agency:** Greenhome & O'Mara, Inc.
Survey Date: 10/15/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83
Latitude: 39.3682 **Easting:** 1,498,951
Longitude: -76.3410 **Northing:** 617,378

Approx. First Floor Elevation (Based on Measurement from Mark): 6.1 FT

Approx. Distance to Shoreline: 210 FT

Comments:

water in this neighborhood was on the order of 5-8 feet deep.



DSCN0085.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-33
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT9_9 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Patapsco River **Quality of Mark:** Poor
Flood Elevation: **7.6 FT** **Location:** bridge abutment
Flooding Type: Surge
Mark Address: Potee Street/Hanover Street Bridge over Patapsco River
Description of Mark: 14.5" from concrete foundation below abutment

Type of Line: Debris line

Description of Physical Structure: concrete bridge abutment

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Ryan Carroll **Company/Agency:** Dewberry
Flagging Date: 10/7/2003

Surveyors: Thigpen, Walker **Company/Agency:** Greenhome & O'Mara, Inc.
Survey Date: 10/15/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2479 **Easting:** 1,422,795

Longitude: -76.6123 **Northing:** 573,232

Approx. First Floor Elevation (Based on Measurement from Mark): 6.4 FT

Approx. Distance to Shoreline: 130 FT

Comments:

mark transferred from debris line on ground to abutment.



DSCN0089.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.



PROJECT FEMA-1492-DR-MD High Water Mark Survey Project
COMM. NO. 240087
TYPE High Water Mark Survey **PREL.** 10/05/2003 **FINAL** 11/20/2003 **SHEET** B-34
CONTENTS Individual Historical High Water Mark Survey Report

Historical Mark: UNIT9_12 **Mark Type:** Coastal
Flood Event: Hurricane Isabel **Date of Flood:** 09/19/2003
Flooding Source: Curtis Creek/Marley Creek **Quality of Mark:** Fair
Flood Elevation: **7.4 FT** **Location:** outside wall/door
Flooding Type: Surge
Mark Address: 6211 Pennington Ave (A. Smith & Sons Shipyard)
Description of Mark: 10.25" above top of concrete slab at top of entrance steps

Type of Line: Debris line

Description of Physical Structure: concrete building

Closest City: Baltimore **County:** Baltimore **State:** Maryland

Flaggers: Ryan Carroll **Company/Agency:** Dewberry

Flagging Date: 10/7/2003

Surveyors: Thigpen, Walker **Company/Agency:** Greenhorne & O'Mara, Inc.

Survey Date: 10/15/2003 **Survey Type:** N/A

Projection: Maryland **Vertical Datum:** NAVD 88 **Horizontal Datum:** NAD 83

Latitude: 39.2090 **Easting:** 1,431,359

Longitude: -76.5837 **Northing:** 558,700

Approx. First Floor Elevation (Based on Measurement from Mark): 6.5 FT

Approx. Distance to Shoreline: 60 FT

Comments:

shipyard owner witnessed Hurricanes Connie and Hazel-said Isabel storm surge was approx 3' higher than those 2 storms.



DSCN0093.jpg

Survey Certification: Coastal High Water Mark location survey is certified to 0.25 feet vertically and 10 feet horizontally with a 95% accuracy level.