

# **Public Notice**

U.S. Army Corps of Engineers Baltimore District ATTN: CENAB-OP-R P.O. Box 1715 Baltimore, MD 21203

Date: 3 March 2011 Special Public Notice# 11-17

**Subject:** Minimum Setbacks for Structures along Federally Authorized Navigation Channels Within the U.S. Army Corps of Engineers Baltimore District Civil Works Boundaries

**Purpose:** The purpose of this public notice is to advise interested parties of the minimum setbacks for structures along federally authorized navigation channels within the Baltimore District Civil Works Boundary. A copy of this District setback guidance is attached and also available at: <a href="http://www.nab.usace.army.mil/Regulatory/publications.htm">http://www.nab.usace.army.mil/Regulatory/publications.htm</a>

**Applicability:** This District guidance applies to all permit applications received after the date of this memorandum, pursuant to Section 10 of the Rivers and Harbors Act, 33 U.S.C. 403, and to Section 404 of the Clean Water Act, where applicable, for the construction and placement of docks, piers, and other structures along federally authorized navigation channels within the Baltimore District Civil Works Boundaries.

**General Information:** In accordance with Section 10 of the Rivers and Harbors Act of 1899, the Corps has the authority to regulate any obstruction not affirmatively authorized by Congress to the navigable capacity of waters of the United States. The Baltimore District has always used setback criteria for structures proposed along Federally authorized navigation channels. The publication of these current setback guidelines by this special public notice will better inform prospective applicants of the minimum setback distances and information required for structures proposed along federally authorized navigation channels. Prospective applicants may use these setback guidelines to develop project designs that minimize potential navigation conflicts and damages during future maintenance dredging of these federally-authorized navigation channels and facilitate the Corps' permit application evaluation process.

It is requested that you communicate this information concerning the proposed work to any persons know by you to be interested and not being known to this office, who did not receive a copy of this notice.

If you have any questions concerning this matter, please contact **Ms. Beth E. Bachur** of this office by email at <u>beth.bachur@usace.army.mil</u> or by telephone at 410-962-4336.

WILLIAM P. SEIB Chief, Regulatory Branch



DEPARTMENT OF THE ARMY BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS P.O. BOX 1715 BALTIMORE, MD 21203-1715

CENAB-OP-R

09 February 2011

## MEMORANDUM FOR RECORD

SUBJECT: U.S. Army Corps of Engineers, Baltimore District, Setback Guidance for Structures along Federally Authorized Channels

1. <u>PURPOSE</u>: This memorandum establishes the U.S. Army Corps of Engineers, Baltimore District, (Corps) guidance regarding setbacks for structures along federally authorized navigation channels within the Baltimore District Civil Works Boundary. In accordance with Section 10 of the Rivers and Harbors Act of 1899 (R&HA Section 10), the Corps has the authority to regulate any obstruction not affirmatively authorized by Congress to the navigable capacity of waters of the United States. The purpose of this guidance is to advise the manner in which the Baltimore District intends to exercise its authority under R&HA Section 10 to maintain the navigable capacity of federally authorized navigation channels within the Baltimore District Civil Works Boundary by minimizing potential hazards to navigation and impediments to maintenance dredging created by structures along the edge of the navigational channel. The intent of this guidance is to equitably manage the construction of individual structures along the Federal channels so that, to the extent practicable, riparian property owners have direct access to the navigable waterway while simultaneously maintaining the waterways and the public's rights to safe navigation.

2. <u>DEFINITIONS</u>: The following terms are defined for the purpose of this memorandum (refer to Appendices A: Diagrams Depicting Some of the Terms Used in This Setback Guidance, B: Condition Federal Navigation Project USACE-Baltimore, and C: Parameters for Horizontal or Bathymetric Surveys for additional clarification).

a. <u>Bathymetric Survey</u> – A survey designed to present an accurate, measurable descriptions of the submerged terrain. The survey must clearly describe the water depth at specific locations with respect to mean lower low water elevation. See Appendix C for more information on this requirement.

b. <u>Channel</u> – The waterways listed in Appendix B that are part of a federally authorized navigation project. The channel refers to the area between the design edges. Please see the Baltimore District Navigation webpage at: http://www.pab.usace.army.mil/Navigation/index.html for more information

http://www.nab.usace.army.mil/Navigation/index.html for more information.

c. <u>Channelward</u> – Those points which are closest to the channel edge and furthest beyond mean high water (MHW) (see Appendix A).

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d. <u>Commercial Traffic</u> – Any maritime vessel carrying commerce (e.g., grains, coal, petroleum, cargo, containers, building materials, sand and gravel, dredged material, etc.).

e. <u>Currently Serviceable</u> – A structure is considered to be currently serviceable if it is usable and not degraded or damaged as to essentially require reconstruction.

f. <u>Design Depth</u> – The depth to which the Corps has been authorized to maintain the Federal channel by the enabling legislation for that Federal project. The design depth defines the depth parameter of the area between the design edges of the Federal channel with respect to mean lower low water elevations (see Appendix A).

g. <u>Design Edge</u> – The surveyed edges of a Federal channel the Corps has been authorized to maintain by the enabling legislation. The distance between the design edges defines the width of the Federal channel (see Appendix A).

h. <u>Mean High Water (MHW)</u> – The average elevation of high water in coastal areas is defined as the MHW. For precise determination, the MHW must be established by survey with reference to the available tidal datum, preferably averaged over a period of 19 years. The National Oceanic and Atmospheric Administration's National Ocean Service keeps tidal datum records at a network of gage stations along the coast. The specific 19 year period used for calculating mean high water and mean low water, called the National Tidal Datum Epoch (NTDE), incorporates a number of the astronomical cycles which cause variations in tide levels. Less precise methods may be used only where an estimate is needed of the line reached by the mean high water. Estimates of mean high water may be made through observation of the "apparent shoreline" which is determined by reference to physical markings, lines of vegetation, or changes in type of vegetation.

i.<u>Mean Low Water (MLW)</u> – The average elevation of low water in coastal areas is defined as the MLW. Precise determination of the location of the MLW line uses the same approach as the MHW.

j. <u>Mean Lower Low Water (MLLW)</u> – The average of the lower low water height of each tidal day observed over the National Tidal Datum Epoch (NTDE). The present NTDE is 1983 through 2001 and is actively considered for revision every 20 to 25 years.

k. <u>Multi-slip Structure</u> – All structures, both residential and commercial, that provide access to the water for multiple (greater than two) watercraft. These types of structures include, but are not be limited to, commercial marinas, private multi-family docks, community piers, boat ramps, dry storage facilities, etc.

l. <u>Near Design Edge</u> - The design edge of the federally authorized navigational channel which is closest to the work/site (see Appendix A).

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m. <u>Setback</u> – A distance measured horizontally from the established near design edge of the channel to the most channelward point of any proposed or existing structure (see Appendix A).

n. <u>Side Slope</u> – The inclined area located adjacent to and outside of the established design edges of the Federal channel going from the design depth at the near design edge to the top edge of slope(see Appendix A).

o. <u>Structures</u> – Any pier, boat dock, boat ramp, floating dock, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, mooring pile, mooring buoy, aid to navigation, davit, or any other obstacle or obstruction.

p. <u>Top Edge of Slope</u> – This is a reference point determined by multiplying the design depth of the channel by the ratio of the slope. For this document, the slope ratio is considered to be 3:1. The resulting value is the distance from the design edge of the channel to a point considered to be the top of the side slope for that channel. For example, if the design depth of a channel is 10 feet, then the top edge of slope is considered to be 30 feet landward of design edge (see Appendix A).

q. <u>Terminal Platform</u> - A terminal platform is that part of a structure located at or near the channelward terminus of the structure which is designed to securely load and/or unload a vessel or conduct other water dependent activities. Terminal platforms may also be used for other non-water dependent activities.

r. <u>Latitude and Longitude Coordinates</u> - Coordinate system by which the position or location of any place on the Earth's surface can be determined and described. Latitude is a measurement of location north or south of the Equator. Lines of latitude are known as parallels, or parallels of latitude. Longitude is a measurement of location east or west of the prime meridian, which passes through Greenwich, Eng. The combination of meridians of longitude and parallels of latitude establishes a grid by which exact positions can be determined: for example, a point described as 40° N, 30° W is located 40° of arc north of the Equator and 30° of arc west of the Greenwich meridian. These coordinate points are used to determine the horizontal distance from those points to the near design edge of the Federal channel. See Appendix C for more information on the parameters required for horizontal surveys.

3. <u>APPLICABILITY</u>: This guidance supersedes any previous structure setback guidance issued by the Corps' Baltimore District. This guidance applies to all permit applications received after the date of this memorandum, pursuant to Section 10 of the River and Harbor Act, 33 U.S.C. 403, and to Section 404 of the Clean Water Act, where applicable, for the construction and placement of docks, piers, and other structures along federally authorized navigation channels

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within the Baltimore District Civil Works Boundaries. See Appendix B for a list of federally authorized navigation channels within the Baltimore District Civil Works Boundary. Also, please see the Baltimore District navigation website at:

http://www.nab.usace.army.mil/Navigation/index.html for more information on federally authorized navigation channels in the Baltimore District. This guidance may be modified as necessary to ensure the navigable capacity of the federally authorized waterways listed in Appendix B. This guidance does not create any rights or obligations. Nothing in this guidance shall limit the ability of the Corps to issue, modify, suspend, revoke, or deny any individual permit or general permit nor shall this guidance limit the Corps' ability to exercise its enforcement authority under the Rivers and Harbors Act of 1899.

#### 4. GENERAL INFORMATION:

a. All applications seeking authorization for the construction of structures along federally authorized navigation channels within the Baltimore District Civil Works Boundary will indicate the mooring locations of vessels expected to use the structure. A minimum vessel beam width of 10 feet will be applied to establish the setback distance of the structure when mooring to the channelward side of the terminus of the structure is proposed and no mooring pilings are included in the application. A larger beam width may be utilized if information is provided or obtained which indicates larger vessels may be docked at the structure.

b. All applications seeking authorization for the construction of structures to be located along federally authorized navigation channels within the Baltimore District Civil Works Boundary will be required to supply latitude and longitude coordinates for the most channelward points of the proposed structure and any existing nearby structures. Currently, the latitude and longitude coordinates must be determined utilizing the current 1983-2001 NTDE. The Corps may require an updated NTDE to be used in the future. A public notice will be issued for any modification to this policy. Additionally, all approved projects will be required to submit as-built latitude and longitude coordinates for review and approval by the Corps' Regulatory Branch. See Appendix C for further information regarding the required parameters for submittal of latitude and longitude coordinates in a horizontal survey.

c. All applications seeking authorization for the construction of structures to be located along federally authorized navigation channels within the Baltimore District Civil Works Boundary will be required to supply a bathymetric survey of the location of the structure. The survey must show actual water depths referenced to MLLW and clearly identify the 3-foot depth contour. See Appendix C for further information regarding the requirements associated with a bathymetric survey.

5. <u>SETBACK GUIDANCE</u>: Appendix B provides a list of federally authorized navigation channels maintained under the Baltimore District, which includes the channel's width, depth, and required setback from the edge of channel.

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## a. FEDERAL CHANNELS LESS THAN OR EQUAL TO 15 FEET IN DEPTH

(1) For channels with no commercial barge traffic: a minimum clearance of three times the authorized depth, rounded up to the nearest 5 feet, shall be maintained between the authorized channel toe and any structures. In no case will the setback be less than 25 feet. EXAMPLE: If the authorized channel depth is 8 feet the setback would be 3 X 8 = 24 rounded up to 25 feet.

(2) For channels with commercial barge traffic: a minimum clearance of 100 feet shall be maintained between the authorized channel toe and any structure.

## b. FEDERAL CHANNELS GREATER THAN 15 FEET IN DEPTH

(1) A minimum clearance of three times the authorized depth, rounded up to the nearest 5 feet, shall be maintained between the authorized channel toe and any structures. EXAMPLE: If the authorized channel depth is 17 feet, the setback would be  $3 \times 17 = 51$  rounded up to 55 feet.

(2) For Baltimore Harbor and Channels project a minimal clearance of 125 feet shall be maintained between the channel toe and any structures in accordance with project authorization. See the Baltimore District navigation website at: <u>http://www.nab.usace.army.mil/Navigation/index.html</u> for more information on federally authorized navigation channels in the Baltimore District.

c. <u>BENDS IN THE NAVIGATION CHANNEL</u>: Bends are especially dangerous for vessels, especially those pushing barges. Large vessels negotiating turns may require additional clearance to safely navigate through bends in shallow-draft channels. These additional setback clearances for structures on bends may be established on a case-by-case basis.

d. <u>MINIMUM DEPTH BELOW FEDERAL CHANNELS</u> – A minimum vertical clearance of 10 feet shall be maintained from the top of any cable, encasement, utility, or pipeline below the authorized depth of the channel.

e. <u>REQUIRED SPECIAL CONDITION OF DEPARTMENT OF THE ARMY PERMITS</u> <u>INVOLVING SECTION 10 OF THE RIVERS AND HARBORS ACT OF 1899</u> – The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without any expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

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#### 6. VARIANCES TO SETBACK GUIDANCE:

a. Variances to the setback guidance in Section 5 must be requested as part of a permit application and will be considered if warranted by special site considerations. All applicants requesting a variance to the setback guidance must provide justification for the allowance of the potential impact to both the navigable capacity of the channel and the Government's ability to maintain the channel. The information supplied to provide justification may include, but not limited to, the actual water depth at MLLW, the presence of submerged vegetation, public health and safety issues, and the proposed use of the structure. These proposals will be compared against the navigational characteristics of the channel including future maintenance dredging and the vessel traffic in that section of the waterway. A variance to the setback may be granted should it be determined that the structure does not pose an unacceptable risk or impact to safe navigation.

b. When it is determined that the proposed activity would conflict with the Federal project's congressionally authorized purposes, established limitations or restrictions, or that it would limit an agency's ability to provide the necessary operation and maintenance functions, the Corps will notify the applicant of their determination. This notification shall state that the Corps is without administrative authority to approve such a change without specific Congressional action to dissolve the Federal interest or to modify the project.

#### 7. EXISTING STRUCTURES:

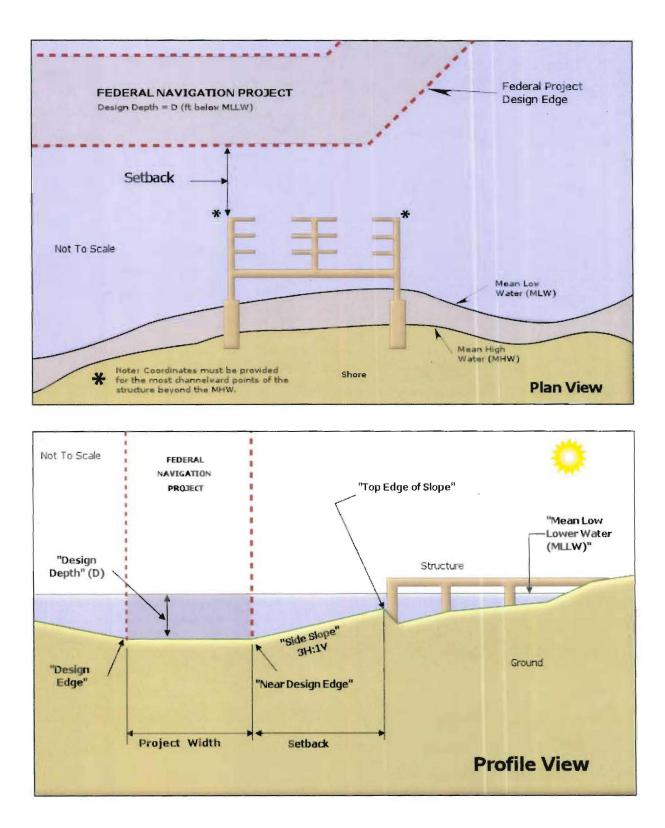
a. Previously authorized, currently serviceable structures may be repaired or rehabilitated, in accordance with their Department of the Army authorization, such that they maintain the authorized footprint and do not extend beyond their authorized distance from the near design edge of the Federal channel. The Corps will make the determination of whether an existing structure is currently serviceable.

b. In the event that a previously authorized, currently serviceable structure is destroyed by an act of nature or other sudden event, or an applicant proposes to modify an existing, currently serviceable structure, a new application will be required which will be reviewed under the setback guidance in effect at the time of the request. It is possible that any authorized reconstruction will not be the same size or design as the original structure.

DAVID E. ANDERSON COL, EN Commanding

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# Appendix A: Diagrams Depicting Some of the Terms Used in This Setback Guidance



# Appendix B - Condition Federal Navigation Project USACE-Baltimore 16 Nov 2010

Federal Navigation Channel Project	Authorized Depth (ft)	Authorized Width (ft)	Setback from the edge of the channel (ft)
Accotink, VA	5	40	25
Anacostia River, MD	6	80	25
Annapolis Harbor, MD	15	100	45
Aquia Creek, VA	6	100	25
Back Creek, AA County, MD	8	100	25
Black Walnut Harbor, MD	6	60	25
Bonum Creek, VA	6	60	25
Branson Cove, VA	7	60	25
Breton Bay, MD	10	150	30
Broad Creek, MD	6	100	25
Broad Creek River, DE	8	70	25
Cambridge Harbor, MD	25	150	75
Cambridge Harbor, MD	12	150	40
Chester River, MD	6	60	25
Chester River, MD	7	75	25
Choptank River, MD	12	100	40
Claiborne Harbor, MD	14	100	45
Corsica River, MD	8	100	25
Crisfield Harbor, MD	12	266	40
Crisfield Harbor, MD	10	100	30
Crisfield Harbor, MD	10	100	30
Crisfield Harbor, MD	7	100	25
Crisfield Harbor, MD	7	60	25
Cypress Creek, MD	7	75	25
Duck Point Cove, MD	6	60	25
Elk & Little Elk Rivers, MD	7	80	25
Fishing Bay, MD	6	60	25
Fishing Bay, MD	6	60	25
Fishing Bay, MD	6	60	25
Fishing Bay, MD	7	100	25
Goose Creek, MD	6	60	25
Herring Bay & Rockhold Creek, MD	7	60	25
Herring Creek, MD	7	60	25
Honga River & Tar Bay, MD		60	25
Honga River & Tar Bay, MD	7	60	25
Island Creek, MD	8	75	25
Island Creek, St George Is, MD	5	50	25
Knapps Narrow, MD	9	75	30
La Trappe River, MD	8	75	25
Little Creek, MD	7	60	25
Little Wicomico River, VA	8	150	25

# Appendix B - Condition Federal Navigation Project USACE-Baltimore 16 Nov 2010

Federal Navigation Channel Project	Authorized Depth (ft)	Authorized Width (ft)	Setback from the edge of the channel (ft)
Lower Machodoc Creek, VA	9	150	30
Lower Thorofare, MD	7	60	25
Lowes Wharf, MD	7	60	25
Madison Bay, MD	6	60	25
Manokin River, MD	6	60	25
Middle River, MD	10	200	30
Monroe Bay & Creek, VA	8	100	25
Muddy Hook & Tyler Coves, MD	6	60	25
Muddy Hook & Tyler Coves, MD	6	60	25
Nan Cove, MD	6	40	25
Nanticoke River, MD	7	60	25
Nanticoke River at Bivalve, MD	7	60	25
Nanticoke River, DE & MD	12	100	40
Neabsco Creek, VA	6	100	25
Neale Sound, MD	7	100	25
Neavitt Harbor, MD	6	60	25
Nomini Bay & Creek, VA	9	150	30
Northeast River, MD	7	60	25
Occoquan Creek, VA	6	150	25
Ocean City Harbor & Inlet, MD	10	200	30
Ocean City Harbor & Inlet, MD	6	75	25
Ocean City Harbor & Inlet, MD	6	150	25
Parish Creek, MD	8	50	25
Patuxent River, MD	10	100	30
Pocomoke River, MD	7	100	25
Potomac River at Alexandria, VA	24	100	75
Potomac River below Washington	24	200	75
Potomac River at Lower Cedar Pt.	10	150	30
Potomac River at Mt. Vernon, VA	10	150	30
Queenstown Harbor, MD	10	200	30
Rhodes Point to Tylerton, MD	6	50	25
Rhodes Point to Tylerton, MD	6	50	25
Rock Hall, MD	8	100	25
Shad Landing State Park, MD	6	60	25
Shallow Creek, MD	5	50	25
Slaughter Creek, MD	7	100	25
Smith Creek, MD	12	150	40
St. Catherine Sound, MD	6	100	25
St. George Creek, MD	7	60	25
St. Jerome Creek, MD	7	100	25
St. Michaels, MD	6	50	25
St. Patrick's, MD	7	60	25

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Federal Navigation Channel Project	Authorized Depth (ft)	Authorized Width (ft)	Setback from the edge of the channel (ft)
St. Peters Creek, MD	6	60	25
Susquehanna River, MD	15	200	45
Tilghman Island, MD	6	60	25
Town Creek, MD	10	100	30
Tred Avon, MD	12	150	40
Tuckahoe River, MD	8	50	25
Twitch Cove & Big Thorofare	7	60	25
Twitch Cove & Big Thorofare	7	60	25
Twitch Cove & Big Thorofare	7	60	25
Tyaskin Creek, MD	9	120	30
Upper Machodoc Creek, VA	6	100	25
Upper Thorofare, MD	9	100	30
Warwick River, MD	10	100	30
Washington Harbor, DC	24	200	75
Wicomico River, MD	14	150	100
Wicomico River, MD	6	60	100
Baltimore Harbor and Channels	50		125 Minimum
Anchorages	45		125 Minimum
42'	42		125 Minimum

## Appendix C – Parameters for Horizontal or Bathymetric Surveys:

Horizontal Surveys:

- 1. All surveys must be designed to present an accurate, measurable description of the most channelward points of a structure, proposed or existing. These coordinate points are used to determine the horizontal distance from those points to the near design edge of the Federal channel.
- 2. Any point provided in the survey shall be located with a minimum accuracy of +/- 1-foot horizontal.
- 3. A signed statement from the surveyor or survey firm, which includes a statement of the degree of accuracy of the survey, shall be included with any application for a permitted structure.

Bathymetric Surveys:

1. All bathymetric surveys must be designed to present an accurate, measurable description of the submerged terrain. The survey must clearly describe the water depth at specific locations with respect to mean lower low water elevation.

2. The survey should be of sufficient detail to determine the landward most area where water depth would be adequate to moor a vessel.

3. Soundings shall be provided in MLLW datum and have an accuracy of +/-0.5 foot vertical. Horizontal accuracy shall be +/-6 feet.

4. Surveys should be conducted perpendicular to the near bottom edge of the federal channel and should cover the distance between the highwater mark and the near design edge of the federal channel.

5. Survey lines should be a minimum of 50' apart and soundings should be taken 10' apart along these survey lines. This survey should cover all areas that will be affected by new or rehabilitated structures.

6. Acoustic (fathometer) or mechanical (lead line/sounding pole) soundings will be acceptable if the accuracy requirements described above can be verified.

7. Surveyed points should be plotted in plan view.