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Ohio River Navigation Charts

Foster, Kentucky, to New Martinsville, West Virginia

U.S. Army Corps
Of Engineers
Huntington District

January 2014



BUILDING STRONG®

U.S. COAST GUARD INFORMATION

The following information is furnished for the guidance and assistance of those persons required by law to report to, or who otherwise desire to contact, United States Coast Guard (USCG) officials. USCG units are under the operational and administrative control of:

Eighth USCG District	Tel - (504) 589-6625	24 Hour Command Center
Hale Boggs Federal Building	Tel - (504) 589-2994	Aids to Navigation Branch
501 Magazine Street	Tel - (504) 589-2965	Bridge Branch
New Orleans, LA 70130-3396		

Commanding Officer	Tel - (502) 799-5400	
USCG Sector Ohio Valley (SOHV)	Fax - (502) 779-5402	
Romano L. Mazzoli Federal Building, Room 4090		
600 Dr. Martin Luther King, Jr. Place		
Louisville, KY 40202-2230		

USCG Marine Safety Detachment	Tel - (513) 921-9033	
USCG Marine Safety Office		
3653 River Road		
Cincinnati, OH 45204-1095		

Commanding Officer	Tel - (304) 733-0198	
USCG Marine Safety Unit		
95 Peyton Street		
Barboursville, WV 25504		

Commanding Officer	Tel - (270) 442-1621	
USCG Marine Safety Unit		
225 Tully Street		
Paducah, KY 42003		

After duty hours and on non-duty days, marine accidents and deficiencies in aids to navigation may be reported to the following:

Commander	24 Hour Command Center
USCG Sector Ohio Valley (SOHV)	Tel - (502) 779-5422
Romano Mazzoli Federal Building, Room 421	Fax - (502) 779-5402
600 Dr. Martin Luther King, Jr. Place	Tel - (800) 253-7565
Louisville, KY 40202-2230	

**Report oil or chemical spills To the National Response Center (Toll-free) 1-800-424-8802
or to the nearest USCG Marine Safety Office at the numbers listed above.**

OHIO RIVER NAVIGATION CHARTS

HUNTINGTON DISTRICT
FOSTER, KY TO NEW MARTISVILLE, WV
REVISED January 2014

TABLE OF CONTENTS

U.S. Coast Guard Information	Inside Cover
Table of Contents	Sheets 1 - 2
General Notes	Sheet A
Warning to Pleasure Boaters and Fisherman	Sheet B
Regulations	Sheet C - H
River and Harbor Act of 1899	Sheet I - J
Tabular Chart Index	Sheet K
Navigation Chart Index Sheet	Sheet L
Legend	Sheet M
Navigation Charts	Charts 122 - 181
Tributary Charts	Charts 146A – 172C
Commercial Docks	Pages 1 - 29
Recreational Docks	Pages 30 - 48

THESE CHARTS INCLUDE KNOWN NAVIGATIONAL FEATURES, AVAILABLE DATA, AND INFORMATION AS OF THE DATE SHOWN ABOVE. MAJOR CHANGES ARE PUBLISHED IN “NOTICE TO NAVIGATION INTERESTS”. CHART REVISIONS ARE ANTICIPATED AT TWO-YEAR INTERVALS. ANY INFORMATION CONCERNING CHANGES, CORRECTIONS, OR ADDITIONS TO THIS CHART BOOK SHOULD BE ADDRESSED TO:

U.S. ARMY CORPS OF ENGINEERS
CELRH-OR-TW
502 EIGHTH STEET
HUNTINGTON, WV 25701

PERMITS - JURISDICTION

In the administration of laws enacted by Congress for the protection and preservation of navigation and the navigable waters of the United States, the U.S. Army Corps of Engineers exercises jurisdiction over the Ohio River and several of its tributary streams. Work or structures in, under, or over the Ohio River or any navigable tributary, between the limits of the ordinary high water lines on both banks of the stream require prior authorization. Inquiries regarding permits for such work or structures should be addressed to:

Chief, Regulatory Branch
 U.S. Army Engineer District, Huntington
 Attn: CELRH-RD
 502 Eighth Street
 Huntington, WV 25701-2070

Inquires may be made by telephone.

For Kentucky and Ohio:
 (304) 399-5210

For West Virginia:
 (304) 399-5710

VERTICAL CLEARANCE

Vertical clearances under bridges and aerial crossings are shown on their respective charts at normal pool stage and at 1913 and 1937 high water (H.W.) stages.

Existing clearances may be determined at open river stages, with reasonable accuracy, by the method outlined in "EXAMPLE" below:

EXAMPLE: B&O Railroad Bridge, Parkersburg, WV

CHART 170

(All Clearances are in Feet)

Parkersburg Gage:

1913 H.W. Reading	59.0
Existing Reading	48.8
Difference	10.2

B&O Railroad Bridge:

1913 H.W. Clearance	31.7
Existing Clearance	41.9

H.W. READINGS

Upper Gage Readings <i>(All Readings are in Feet)</i>	
<i>*1913, **1937</i>	
Willow Island Dam	*39.00
Marietta, OH	*59.63
Parkersburg, WV	*59.00
Belleville Dam	*40.00
Racine Dam	*44.50
Mason, WV ~ Pomeroy, OH	*65.80
Point Pleasant, WV	**62.72
Robert C. Byrd Dam	**46.80
Old Dam 28	**69.37
Ashland, KY	**74.00
Greenup Dam	**47.30
Portsmouth, OH	**74.20
Maysville, KY	**75.30
Capt. Anthony Meldahl Dam	**46.80

OHIO RIVER NAVIGATION CHARTS

Revised January 2014

NAVIGATION CHARTS AND NOTICES

Navigation charts for the OHIO RIVER, within the limits of the HUNTINGTON DISTRICT, are available on our website at:

www.lrh.usace.army.mil/missions/navigation

for viewing and printing. Spiral-bound books are also available for purchase on the U.S. Government Printing Office website:

<http://bookstore.gpo.gov>.

Notice to Navigation Interests, containing data on channel conditions and location of dredges, are issued as occasions demand and may be viewed on our website at:

www.lrh.usace.army.mil/missions/navigation.

Requests to be placed on the Notice to Navigation Interests email mailing list may be made on the navigation website listed above. Requests to be added to the postal mailing list may be obtained by writing to:

U.S. Army Corps of Engineers
Attn: CELRH-OR-TW
502 Eighth Street
Huntington, WV 25701-2070

MILE POINTS

Mile points are shown on the charts at one mile intervals beginning with Mile 438.0 at Foster, KY.

Charts of the Ohio River are as follows:

PITTSBURGH DISTRICT: MILE 000.0 – 127.2

HUNTINGTON DISTRICT: MILE 127.2 – 438.0

LOUISVILLE DISTRICT: MILE 438.0 – 981.0

BUOYS

Buoys used to mark channels in the Mississippi River System conform to the standard lateral system of buoys on the Western Rivers of the United States. Generally, the unlighted buoys in the Ohio River are equipped with radar reflectors. All buoys are equipped with reflective material. Buoys on the left descending side of the channel reflect red. Buoys on the right descending side of the channel reflect green.

Buoys are set to mark maximum navigation channel available considering channel alignment, the prevailing river stage, and obstructions. Due to ever-changing environmental conditions, the location and number of buoys on-site do not necessarily coincide with these charts.

The locations of printed buoys are approximate. The height of the highest fixed points Buoys should always be given as wide a berth in passing as possible consistent with the length and width of vessel or tow and width of the bend or crossing.

Buoys should always be used with caution. They may be carried off position by high water, accumulation of drift, ice, or sunk by collision or other causes. When carried off position, destroyed, or removed to prevent loss, buoys are replaced at the earliest opportunity.

Navigation lights and daybeacons are also shown in approximate locations. For additional information on lights, daymarks, daybeacons, and buoys, see the U.S. Coast Guard Light List, COMDTINST M16502, current edition.

FEDERAL MOORING BUOYS

Federal mooring buoys are for emergency use only, except where noted. These buoys shall not be used for recreational use or fleeting operations. Vessels using emergency buoys shall contact the nearest downstream lock upon mooring and again after departure.

DAMS

On the various parts of the locks and dams are shown in feet above the zero of the pass sill gage. Exceptions are noted on pages facing the page containing the dam to which they apply.

WARNING:
TO PLEASURE BOATERS AND FISHERMAN
WHO NAVIGATE ON THE OHIO RIVER

Areas immediately upstream and downstream of the navigation dams in the Huntington District have been designated **Restricted Areas**. See the Legend (Sheet K) for symbols that mark Restricted and Danger Areas.

In recent years, there have been several **boating accidents and fatalities** as a result of vessels, particularly small fishing craft, operating too closely to navigation structures. Most of these accidents have occurred when boats approach too near the downstream side of a gated dam. Powerful reverse currents, commonly called **backlash**, draw boats in an upstream direction into the dam where there are capsized or smashed against the structure. Furthermore, an additional hazard exists in the vicinity of the lock discharge structures, which are located adjacent to the downstream river wall of the lock chamber. When the water in the locks is released during each locking operation, **sudden turbulent boils** are created which can capsize a boat venturing too near. This turbulence becomes more severe as the downstream pool falls to lower elevations.

On the upstream side of the dam, there is a **strong undertow** created by the flow of water through the gated section of the dam. Boats approaching too closely from the upstream side are in danger of being **lodged against the dam or capsized** by the undertow.

The nature of these river conditions emphasizes the serious danger to boaters and fishermen who operate their craft near either the upstream or downstream side of a dam. Vessel operators who enter these areas risk their lives and property and often preclude necessary gate operations of the locks and dams. Fishermen often fish in the tail waters below the dam gates because the fishing is good. They must understand, however, that fishing from a boat in these **waters can be fatal**.

To supplement the **restricted areas**, the remaining area downstream of each dam, extending to the end of the long wall has been established as a **Danger Area**. All boaters and fishermen are urged to wear **Personal Floatation Devices (PFDs)** within this area, since these waters are frequently turbulent. Vessel operators should also heed the **warning**

sirens which indicate that project personnel will be increasing flow from the dam or releasing water within the lock discharge areas. These sirens will be operated for a period of 30 seconds, after which, there will be a 3-minute delay prior to a release of water.

Navigators should become fully aware of the **Restricted and Danger Area boundaries** prior to operating their craft within the vicinity of a lock and dam facility. The **Restricted Areas** are shown in the current publication of the U.S. Army Corps of Engineers, Huntington District, "Ohio River Navigation Charts; Foster, KY to New Martinsville, WV." Navigators should also observe all **warning signs** or **marker buoys** located within the area of each locks and dam structure. The marker buoys are illustrated with reflective orange bands and waterway symbols, and black wording on the white background. Buoys with the words "**KEEP OUT**" have, as their symbol, a cross enclosed within a diamond. Buoys designated as "**DANGER DAM**" are denoted with a diamond symbol.

The **regulations** pertaining to the **Restricted Areas** are contained within the U.S. Army Corps of Engineers' "Regulations Prescribed by the Secretary of the Army for Ohio River, Mississippi River above Cairo, IL and their tributaries; Use, Administration, and Navigation" (Blue Book). These regulations are as follows:

33 CFR 207.300 "(s) Restricted Areas at Locks and Dam. All waters immediately above and below each dam, as posted by the respective District Engineers, are hereby designated as Restricted Areas. No vessel or other floating craft shall enter any such Restricted Areas at any time. The limits of the restricted areas at each dam will be determined by the responsible District Engineer and marked by signs and/or flashing red lights installed in conspicuous and appropriate places."

Lockmasters will enforce adherence to these regulations, and, if required, solicit **aid from local law enforcement officers**. In the interest of the public safety, please tell other boaters or fishermen about the dangers of boating near lock and dam structures.

**REGULATIONS PRESCRIBED BY THE SECRETARY OF THE ARMY
FOR THE OHIO RIVER ABOVE CAIRO, IL AND ITS TRIBUTARIES
USE, ADMINISTRATION, AND NAVIGATION**

Section 7 of the River and Harbor Act of August 8, 1917

“That it shall be the duty of the Secretary of War to prescribe such regulations for the use, administration, and navigation of the navigable waters of the United States as in his judgment the public necessity may require for the protection of life and property, or of operations of the United States in channel improvement, covering all matters not specifically Delegated by law to some other executive department. Such regulations shall be posted, in conspicuous and appropriate places, for the information of the public; and every person and every corporation which shall violate such regulations shall be deemed guilty of a misdemeanor and on conviction thereof in any district court of the United States within whose territorial jurisdiction such offense may have been committed, shall be punished by a fine not exceeding \$500, or by imprisonment (in the case of a natural person) not exceeding six months, in the discretion of the court.” In pursuance of the law above quoted, the following regulations were prescribed to govern the use, administration, and navigation of the Ohio River above Cairo, IL and its tributaries.

Use, Administration, and Navigation

207.300 Ohio River, above Cairo, IL, and their tributaries; use, administration, and navigation.

a) Authority of Lockmasters

The lockmaster shall be charged with the immediate control and management of the lock, and of the area set aside as the lock area, including the lock approach channels. He shall see that all laws, rules, and regulations for the use of the lock and lock area are duly complied with, to which end he is authorized to

give all necessary orders and directions in accordance therewith, both to employees of the Government and to any and every person within the limits of the lock or lock area, whether navigating the lock or not. No one shall cause any movement of any vessel, boat, or other floating thing in the lock or approaches except by or under the direction of the lockmaster or his assistants. In the event of an emergency, the lockmaster may depart from these regulations as he deems necessary. The lockmasters shall also be charged with the control and management of federally constructed mooring facilities.

b) Safety Rules for Vessels Using Navigation Locks

The following safety rules are hereby prescribed for vessels in the locking process, including the act of approaching or departing a lock:

(1) Tows with flammable or hazardous cargo barges, loaded or empty

(i) Stripping barges or transferring cargo is prohibited.

(ii) All hatches on barges used to transport flammable or hazardous materials shall be closed and latched, except those barges carrying a gas-free certificate.

(iii) Spark-proof protective rubbing fenders (“possums”) shall be used.

2) All Vessels

(i) Leaking vessels may be excluded from locks until they have been repaired to the satisfaction of the Lockmaster.

(ii) Smoking, open flames, and chipping or other spark producing activities are prohibited on deck during the locking cycle.

(iv) Tow speeds shall be reduced to a rate of travel such that the tow can be stopped by checking should mechanical difficulties develop. Pilots should check with the individual lockmasters concerning prevailing conditions. It is also recommended that pilots check their ability to reverse their energies prior to beginning an approach. Engines shall not be turned off in the lock until the tow has stopped and been made fast.

(v) U.S. Coast Guard Regulations require all vessels to have on board life saving devices for prevention of drowning. All crew members of vessels required to carry work vests (life jackets) shall wear them during a lockage, except those persons in an area enclosed with a handrail or other device which would reasonably preclude the possibility of falling overboard. All deckhands handling lines during locking procedures shall wear a life jacket. Vessels not required by Coast Guard Regulations to have work vests aboard shall have at least the prescribed life saving devices, located for ready access and use if needed. The lockmaster may refuse lockage to any vessel which fails to conform to the above.

c) Reporting of Navigation Incidents

In furtherance of increased safety on waterways the following safety rules are hereby prescribed for all navigation interests:

(1) Any incident resulting in uncontrolled barges shall immediately be reported to the nearest lock. The report shall include information as to the number of loose barges, their cargo, and the time and location where they broke loose. The lockmaster or locks shall be kept informed of the Progress being made in bringing the barges under control so that he can initiate whatever actions may be warranted.

**REGULATIONS PRESCRIBED BY THE SECRETARY OF THE ARMY
FOR THE OHIO RIVER ABOVE CAIRO, IL AND ITS TRIBUTARIES
USE, ADMINISTRATION, AND NAVIGATION**

(2) Whenever barges are temporarily moored at other than commercial terminals or established fleeting areas, and their breaking away could endanger a lock, the nearest lock shall be so notified, preferably the downstream lock.

(3) Sunken or sinking barges shall be reported to the nearest lock both downstream and upstream of the location in order that other traffic passing these points may be advised of the hazards.

(4) In the event of an oil spill, notify the nearest lock downstream, specifying the time and location of the incident, type of oil, amount of spill, and what recovery or controlling measures are being employed.

(5) Any other activity on the waterways that could conceivably endanger navigation or a navigation structure shall be reported to the nearest lock.

(6) Whenever it is necessary to report an incident involving uncontrolled, sunken or sinking barges, the cargo in the barges shall be accurately

d) Precedence at Locks

(1) The vessel arriving first at a lock shall normally be first to lock through, but precedence shall be given to vessels belonging to the United States. Licensed commercial passenger vessels operating on a published schedule or regularly operating in the "for hire" trade shall have precedence over cargo tows and like craft. Commercial cargo tows shall have precedence over recreational craft, except as described in paragraph (f).

(2) Arrival posts or markers maybe established above and/or below the locks. Vessels arriving at or opposite such posts or markers will be considered as having arrived at the locks within the meaning of this paragraph. Precedence may be established visually or by radio communication. The lockmaster may prescribe such departure from the normal order of precedence as in his judgment is warranted to achieve best lock utilization.

e) Unnecessary Delay at Locks

Masters and pilots must use every precaution to prevent unnecessary delay in entering or leaving locks. Vessels failing to enter locks with reasonable promptness when signaled to do so shall lose their turn. Rearranging or switching of barges in the locks or in approaches is prohibited unless approved or directed by the lockmaster. This is not meant to curtail "jackknifing" or set-overs where normally practiced.

f) Lockage of Recreational Craft

In order to fully utilize the capacity of the lock, the lockage of recreational craft shall be expedited by locking them through with commercial craft, provided that both parties agree to joint use of the chamber. When recreational craft are locked simultaneously with commercial tows, the lockmaster will direct, whenever practicable, that the recreational craft enter the lock and depart while the tow is secured in the lock. Recreational craft will not be locked through with vessels carrying volatile cargoes or other substances likely to emit toxic or explosive vapors. If the lockage of recreational craft cannot be accomplished within the time required for three other lockage of recreational craft shall be made.

Recreational craft operators are advised that many locks have a pull chain located at each end of the lock which signals the lockmaster that lockage is desired.

g) Simultaneous Lockage of Tows with Dangerous Cargoes

Simultaneous lockage of other tows with tows carrying dangerous cargoes or containing flammable vapors normally will only be permitted when there is Agreement between the lockmaster and both vessel masters that the simultaneous lockage can be executed safely. He shall make a separate decision each time such action seems safe and appropriate, provided:

(1) The first vessel, or tow in, and the last vessel, or tow out, are secured before the other enters or leaves.

(2) Any vessel or tow carrying dangerous cargoes is not leaking. III) All masters involved have agreed to the joint use of the lock chamber.

h) Stations While Awaiting Lockage

Vessels awaiting their turn to lock shall remain sufficiently clear of the structure to allow unobstructed departure for the vessel leaving the lock. However, to the extent practicable under the prevailing conditions, vessels and tows shall position themselves so as to minimize approach time when signaled to do so.

i) Stations While Awaiting Access Through Navigable Pass

When navigable dams are up or are in the process of being raised or lowered, vessels desiring to use the pass shall wait outside the limits of the approach points unless authorized otherwise by the Lockmaster.

**REGULATIONS PRESCRIBED BY THE SECRETARY OF THE ARMY
FOR THE OHIO RIVER ABOVE CAIRO, IL AND ITS TRIBUTARIES
USE, ADMINISTRATION, AND NAVIGATION**

j) Signals

Signals from vessels shall ordinarily be by whistle; signals from locks to vessels shall be by whistle, another sound device, or visual means.

When a whistle is used, long blasts of the whistle shall not exceed 10 seconds and short blasts of the whistle shall not exceed 3 seconds. Where a lock is not provided with a sound or visual signal installation, the lockmaster will indicate by voice or by the wave of a hand when the vessels may enter or leave the lock. Vessels must approach the locks with caution and shall not enter nor leave the lock until signaled to do so by the lockmaster.

The following lockage signals are prescribed:

1) Sound Signals by Means of a Whistle These signals apply at either a single lock or twin locks.

(i) Vessels desiring lockage shall on approaching a lock give the following signals at a distance of not more than one mile from the lock:

(a) If a single lockage only is required: One long blast of the whistle followed by one short blast.

(b) If a double lockage is required: One long blast of the whistle followed by two short blasts.

(ii) When the lock is ready for entrance, the lock will give the following signals:

(a) One long blast of the whistle indicates permission to enter the lock chamber in the case of a single lock or to enter the landward chamber in the case of twin locks.

(b) Two long blasts of the whistle indicates permission to enter the riverward chamber in the case of twin locks.

(iii) Permission to leave the locks will be indicated by the following signals given by the lock:

(a) One short blast of the whistle indicates permission to leave the lock chamber in the case of a single lock or to leave the landward chamber in the case of twin locks.

(b) Two short blasts of the whistle indicates permission to leave the riverward chamber in the case of twin locks.

(iv) Four or more short blasts of the lock whistle delivered in rapid succession will be used as a means of attracting attention, to indicate caution, and to signal danger. This signal will be used to attract the attention of the captain and crews of vessels using or approaching the lock or navigating in its vicinity and to indicate that something unusual involving danger or requiring special caution is happening or is about to take place. When this signal is given by the lock, the captains and crew of vessels in the vicinity shall immediately become on the alert to determine the reason for the signal and shall take the necessary steps to cope with the situation.

(2) Lock Signal Lights At locks where density of traffic or other local conditions make it advisable, the sound signals from the lock will be supplemented by signal lights. Flashing lights (showing a one-second flash followed by a two-second eclipse) will be located on or near each end of the land wall to control use of a single lock or of the landward lock of double locks. In addition, at double locks,

interrupted flashing lights (showing a one-second flash, a one-second eclipse and a one-second flash, followed by a three-second eclipse) will be located on or near each end of the intermediate wall to control use of the riverward lock. Navigation will be governed as follows:

Red Light – Lock cannot be made ready immediately. Vessel shall stand clear. Amber Light – Lock is being made ready. Vessels may approach but under full control. Green Light – Lock is ready for entrance. Green and Amber Lights – Lock is ready for entrance but gates cannot be recessed completely. Vessel may enter under full control and with extreme caution. III) Radio Communication VHF-FM radios, operating in the FCC authorized Maritime Band, have been installed at all operational locks. Radio contact may be made by any vessel desiring passage. Commercial tows are especially requested to make contact at least one half hour before arrival in order that the pilot may be informed of current river and traffic conditions that may affect the safe passage of his tow.

All locks monitor 156.8 MHZ (Ch. 16) and 156.65 MHZ (Ch. 13) and can work 156.65 MHZ (Ch. 13) and 156.7 MHZ (Ch. 14). Ch. 16 is the authorized call, reply and distress frequency, and locks are not permitted to work on this frequency except in an emergency involving the risk of immediate loss of life or property. Vessels may call and work Channel 13, without switching, but are cautioned that vessel to lock traffic must not interrupt or delay Bridge to Bridge traffic which has priority at all times.

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FOR THE OHIO RIVER ABOVE CAIRO, IL AND ITS TRIBUTARIES
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k) Rafts

Rafts to be locked through shall be moored in such manner as not to obstruct the entrance of the lock, and if to be locked in sections, shall be brought to the lock as directed by the lockmaster. After passing the lock the sections shall be reassembled at such distance beyond the lock as not to interfere with other vessels.

l) Entrance to and Exit from Locks

In case two or more boats or tows are to enter for the same lockage, their order of entry shall be determined by the lockmaster. Except as directed by the lockmaster, no boat shall pass another in the lock. In no case will boats be permitted to enter or leave the locks until directed to do so by the Lockmaster. The sides of all craft passing through any lock shall be free from projections of any kind which might injure the lock walls. All vessels shall be provided with suitable fenders, and shall be used to protect the lock and guide walls until it has cleared the lock and guide walls.

m) Mooring

(1) At Locks

(i) All vessels when in the locks shall be moored as directed by the lockmaster. Vessels shall be moored with bow and stern lines leading in opposite directions to prevent the vessel from “running” in the lock. All vessels will have one additional line available on the head of the tow for emergency use.

The pilothouse shall be attended by qualified personnel during the entire locking procedure. When the vessel is securely moored, the pilot shall not cause movement of the propellers except in emergency or unless directed by the lockmaster. Tying to lock ladders is strictly prohibited.

(2) Outside of Locks

(i) No vessels or other craft shall regularly or permanently moor in any reach of a navigation channel. The approximate centerline of such channels is marked as the sailing line on Corps of Engineers navigation charts. Nor shall any floating craft, except in an emergency, moor in any narrow or hazardous section of the waterway. Furthermore, all vessels or other craft are prohibited from regularly or permanently mooring in any section of navigable waterways which are congested with commercial facilities or traffic unless it is moored at facilities approved by the Secretary of the Army or his authorized representative. The limits of the congested areas shall be marked on Corps of Engineers navigation charts. However, the District Engineer may authorize in writing exceptions to any of the above if, in his judgment, such mooring would not adversely affect navigation and anchorage.

(ii) No vessel or other craft shall be moored to railroad tracks, to riverbanks in the vicinity of railroad tracks when such mooring threatens the safety of equipment using tracks, to telephone poles or power poles, or to bridges or similar structures used by the public.

(iii) Except in case of great emergency, no vessel or craft shall anchor over revetted banks of the river, and no floating plant other than launches and similar small craft shall land against banks protected by revetment

except at regular commercial landings. In all cases, every precaution to avoid damage to the revetment works shall be exercised. The construction of log rafts along matted or paved banks or the tying up and landing of log rafts against such banks shall be performed in such a manner as to cause no damage to the mattress work or bank paving. Generally, mattress work extends out into the river 600 feet from the low water line.

(iv) Any vessel utilizing a federally constructed mooring facility (e.g. cells, buoys, anchor rings) at the points designated on the current issue of the Corps navigation charts shall advise the lockmaster at the nearest lock that from point by the most expeditious means.

n) Draft of Vessels

No vessels shall attempt to enter a lock unless its draft is at least three inches less than the least depth of water over the guard sills or over the gates sills if there be no guard sills. Information concerning controlling depth over sills can be obtained from the lockmaster at each lock or by inquiry at the office of the district engineer of the district in which the lock is located.

o) Handling Machinery

No one but employees of the United States shall move any lock machinery except as directed by the lockmaster. Tampering or meddling with the machinery or other parts of the lock is strictly forbidden.

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USE, ADMINISTRATION, AND NAVIGATION**

p) Refuse in Locks

Placing or discharging refuse of any description into the lock, on lock walls or esplanade, canal or canal bank is prohibited.

q) Damage to Locks or Other Work

To avoid damage to plant and structures, connected with the construction or repair of locks and dams, vessels passing structures in the process of construction or repair shall reduce their speed and navigate with special caution while in the vicinity of such work. The restrictions and admonitions contained in these regulations shall not affect the liability of the owners and operators of floating craft for any damage to locks or other structures caused by the operation such craft.

r) Trespass on Lock Property

Trespass on locks or dams or other United States property pertaining to the locks and dams is strictly prohibited except in those areas specifically permitted. Parties committing any injury to the locks and dams or to any part thereof will be responsible therefore. Any person committing a willful injury to any United States property will be prosecuted. No fishing will be permitted from lock walls, guide walls, or guard walls of any lock or from any dam, except in areas designated and posted by the responsible District Engineer as fishing areas. Personnel from commercial and recreational craft will be allowed on the lock structure for legitimate business reasons; e.g., crew changes emergency phone calls, etc.

s) Restricted Areas at Locks and Dams

All water immediately above and below each dam, as posted by the respective District Engineers, are hereby designated as restricted areas. No vessel or other floating craft shall enter any such restricted area at any time. The limits of the restricted areas at each dam will be determined by the responsible District Engineer and marked by signs and/or flashing red lights installed in conspicuous and appropriate places.

t) Statistical Information

(1) Masters of vessels shall furnish to the lockmaster such statistics of passengers or cargo as may be requested.

(2) The owners or masters of vessels sunk in the navigable waters of the United States shall provide the appropriate District Engineer with a copy of the sunken vessel report furnished to the U.S. Coast Guard Marine Inspection Office in accordance with Code of Federal Regulations Title 33 Subpart 64.10-1.

u) Operations during High Water and Floods in Designated Vulnerable Areas

Vessels operating on these waters during periods when river stages exceed the level of "ordinary high water," as designated on Corps of Engineers navigation charts, shall exercise reasonable care to minimize the effect of their bow waves and propeller washes on river banks; submerged or partially submerged structures or habitations; terrestrial growth such as trees and bushes; and manmade amenities that may be present.

Vessels shall operate carefully when passing close to Levees and other flood protection works, and shall observe minimum distances from banks which may be prescribe from time to time in Notices to Navigation Interests. Pilots should exercise particular care not to direct propeller wash at river banks, levees, revetments, structures or other appurtenances subject to damage from wave action.

v) Navigation Lights for Use at All Locks and Dams

(1) At locks at all fixed dams and at locks at all movable dams when the dams are up so that there is no navigable pass through the dam, the following navigation lights will be displayed during hours of darkness:

(i) Three green lights visible through an arc of 360 degrees arranged in a vertical line on the upstream end of the river (guard) wall unless the intermediate wall extends farther upstream. In the latter case, the lights will be placed on the upstream end of the intermediate wall.

(ii) Two green lights visible through an arc of 360 degrees arranged in a vertical line on the downstream end of the river (guard) wall unless the intermediate wall extends farther downstream. In the latter case, the lights will be placed on the downstream end of the intermediate wall.

(iii) A single red light, visible through an arc of 360 degrees on each end (upstream and downstream) of the land (guide) wall.

**REGULATIONS PRESCRIBED BY THE SECRETARY OF THE ARMY
FOR THE OHIO RIVER ABOVE CAIRO, IL AND ITS TRIBUTARIES
USE, ADMINISTRATION, AND NAVIGATION**

(2) At movable dams when the dam has been lowered or partly lowered so that there is an unobstructed navigable pass through the dam, the navigation lights indicated in the following paragraphs will be displayed during hours of darkness until lock walls and weir piers are awash.

(i) Three red lights visible through an arc of 360 degrees arranged in a vertical line on the upstream end of the river (guard) wall.

(ii) Two red lights visible through an arc of 360 degrees arranged in a vertical line on the downstream end of the river (guard) wall.

(iii) A single red light visible through an arc of 360 degrees on each end (upstream and downstream) of the land (guide) wall.

(3) After lock walls and weir piers are awash they will be marked as prescribed in paragraph (x) below.

(4) If one or more bear traps or weirs are open or partially open, and may cause a set in current conditions at the upper approach to the locks, this fact will be indicated by displaying a white circular disk 5 feet in diameter, on or near the light support on the upstream end of the land (guide) wall during the hours of daylight, and will be indicated during hours of darkness by displaying a white (amber) light vertically under and 5 feet below the red light on the upstream end of the land (guide) wall.

x) Buoys at Movable Dams

(1) Whenever the river (guard) wall of the lock and any portion of the dam are awash, and until covered by a depth, the limits of the navigable pass through the dam will be marked by buoys located at the upstream and downstream ends of the river (guard) wall, and by a single buoy over the end or ends of the portion or portions of the dam adjacent to the navigable pass over which project depth is not available. A red nun-type buoy will be used for such structures located on the left-hand side (facing downstream) of the river and a green can-type buoy for such structures located on the right-hand side. Buoys will be lighted, if practicable.

(2) Where powerhouses or other substantial structures projecting considerably above the level of the lock wall are located on the river (guard) wall, a single red light located on top of one of these structures maybe used instead of river wall buoys prescribed above until these structures are awash, after which they will be marked by a buoy of appropriate type and color (red nun or green can buoy) until covered by a depth of water equal to the project depth. Buoys will be lighted, if practicable.

y) Vessels to Carry Regulations

A copy of these regulations shall be kept at all times on board each vessel regularly engaged in navigating the rivers to which these regulations apply. Copies may be obtained from any lock office or District

Engineer's office on request. Masters of such vessels are encouraged to have on board copies of current edition of appropriate navigation charts.

EFFECTIVE 31 JULY 1975

EXTRACT FROM THE RIVER AND HARBOR ACT OF 1899

SECTION 15

That it shall not be lawful to tie up or anchor vessels or other craft in navigable channels in such a manner as to prevent or obstruct the passage of other vessels or craft; or to sink, or permit or cause to be sunk, vessels or other craft in navigable channels; or to float loose timber and logs, or to float what is known as sack rafts of timber and logs in streams or channels actually navigated by steamboats in such manner as to obstruct, impede, or endanger navigation. And whenever a vessel, raft, or other craft is wrecked and sunk in a navigable channel, it shall be the duty of the owner, lessee, or operator of such sunken craft to immediately mark it with a buoy or beacon during the day and a lighted lantern at night, and to maintain such marks until the sunken craft is removed or abandoned, and the neglect or failure of the said owner, lessee, or operator to do so shall be unlawful; and it shall be the duty of the owner, lessee, or operator of such sunken craft to commence the immediate removal of the same, and prosecute such removal diligently, and failure to do so shall be considered as an abandonment of such craft, and subject the same to removal by the United States as hereinafter provided for (30 St. 1152; 33 U.S.C. §409).

SECTION 16

That every person and every corporation that shall violate, or that shall knowingly aid, abet, authorize, or instigate a violation of the provisions of sections thirteen, fourteen, and fifteen of this act shall be guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding twenty-five hundred dollars nor less than five hundred dollars, or by imprisonment (in the case of a natural person) for not less than thirty days nor more than one year, or by both such fine and imprisonment, in the discretion of the court, one-half of said fine to be paid to the person or persons giving information which shall lead to conviction (30 Stat. 1153; 33 U.S.C. §411). And any and every master, pilot, and engineer, or person or persons acting in such capacity, respectively, on board of any boat or vessel who shall knowingly engage in towing any scow, boat, or vessel loaded with any material specified in section thirteen of this Act to any point or place or deposit or discharge in any harbor or navigable water, elsewhere than within the limits defined and permitted by the Secretary of War, or who shall willfully injure or destroy any work of the United States contemplated in section fourteen of this Act, or who shall willfully obstruct the channel of any waterway in the manner contemplated in section fifteen of this Act, shall be deemed guilty of a violation of this Act, and shall upon conviction be punished as hereinbefore provided in this section, and shall also have his license revoked or suspended for a term to be fixed by the judge before whom tried and convicted. And any boat, vessel, scow, raft, or other craft used or employed in violating any of the provisions of sections thirteen, fourteen, and fifteen of this Act shall be liable for the pecuniary penalties specified in this section, and in addition thereto for the amount of the damages done by said boat, vessel, scow, raft, or other craft, which latter sum of the harbor or waterway in which the damage occurred, and said boat, vessel, scow, raft, other craft may be proceeded against summarily by way of libel in any district court of the United States having jurisdiction thereof (30 Stat. 1153; 33 U.S.C. §412).

SECTION 19

(a) That whenever the navigation of any river, lake, harbor, sound, bay, canal, or other navigable waters of the United States shall be obstructed or endangered by an sunken vessel, boat, watercraft, raft, or other similar obstruction, and such obstruction has existed for a longer period than thirty days, or whenever the abandonment of such obstruction can be legally established in a less space of time, the sunken vessel, boat watercraft, raft, or other obstruction shall be subject to be broken up, removed, sold, or otherwise disposed of by the newspaper established nearest to the locality of the obstruction requiring the removal thereof; AND PROVIDED ALSO, That the Secretary of War may, in his discretion, at or after the time of giving such notice, cause sealed proposals to be solicited by public advertisement, giving reasonable notice of less than ten days, for the removal of such obstruction as soon as possible after the expiration of the above specified thirty days' notice, in case it has not in the meantime been so removed, these proposals and contracts, at his discretion, to be conditioned that such vessel, boat, watercraft, raft, or other obstruction, and all cargo and property contained therein, shall become the property of the contractor, and the contract shall be awarded to the bidder making the proposition most advantageous to the United States; PROVIDED, that such bidder shall give satisfactory security to execute the work; PROVIDED FURTHER, That any money received from the sale of any such wreck, or from any contractor for the removal of wrecks, under this paragraph shall be covered into the Treasury of the United States (30 Stat. 1154; 33 U.S.C. § 414).

EXTRACT FROM THE RIVER AND HARBOR ACT OF 1899

(b) The owner, lessee, or operator of such vessel, boat, watercraft, raft, or other obstruction as described in this section shall be liable to the United States for the cost of removal or destruction and disposal as described which exceeds the costs recovered under subsection (a). Any amount recovered from the owner, lessee, or operator of such vessel pursuant to this subsection to recover costs in excess of the proceeds from the sale or disposition of such vessel shall be deposited in the general fund of the Treasury of the United States.

SECTION 20

(a) That under emergency in the case of any vessel, boat, watercraft, raft, or similar obstruction, sinking or grounding, or being unnecessarily delayed in any Government canal or lock, or in any navigable waters mentioned in section nineteen, in such manner as to stop, seriously interfere with, or specifically endanger navigation, in the opinion of the Secretary of War, or any agent of the United States to whom the Secretary may delegate proper authority, the Secretary of War or any such agent shall have the right to take immediate possession of such boat, vessel, or other watercraft, or raft, so far as to remove or to destroy it and to clear immediately the canal, lock, or navigable waters aforesaid of the obstruction thereby caused, using his best judgment to prevent any unnecessary injury; and no one shall interfere with or prevent such removal or destruction; PROVIDED, That the officer or agent charged with the removal or destruction of an obstruction under this section may in his discretion give notice in writing to the owners of any obstruction requiring them to remove it; AND PROVIDED FURTHER, That the expense of removing any such obstruction as aforesaid shall be a charge against such craft and cargo; and if the owners thereof fall or refuse to reimburse the United States for such expense within thirty days after notification, then the officer or agent or aforesaid may sell the craft or cargo, or any part thereof that may not have been destroyed in removal, and the proceeds of such sale shall be covered into the Treasury of the United States (30 Stat. 1154; 33 U.S.C. §415).

(b) The owner, lessee, or operator of such vessel, boat, watercraft, raft, or other obstruction as described in this section shall be liable to the United States for the cost of removal or destruction and disposal as described which exceeds the costs recovered under subsection (a). Any amount recovered from the owner, lessee, or operator of such vessel pursuant to this subsection to recover costs in excess of the proceeds from the sale or disposition of such vessel shall be deposited in the general fund of the Treasury of the United States.

U.S. ARMY CORPS OF ENGINEERS

OHIO RIVER

HUNTINGTON DISTRICT

CHART NO.	RIVER MILE	FEATURES / LOCALITY	CHART NO.	RIVER MILE	FEATURES / LOCALITY	CHART NO.	RIVER MILE	FEATURES / LOCALITY
CAPTAIN ANTHONY MELDAHL LOCKS & DAM POOL			GREENUP LOCKS & DAM POOL			BELLEVILLE LOCKS & DAM POOL		
122	438.0 – 433.0	Big Snag Creek Bar, Captain Anthony Meldahl Locks and Dam, Chilo OH	145	322.1 – 316.8	Ashland KY, Catlettsburg KY	166	206.9 – 202.1	Belleville Locks and Dam
123	433.0 – 428.0	Locust Creek, Bull Skin Creek	146	317.5 – 312.5	Kenova WV, Big Sandy River	167	202.1 – 196.3	Hockingport OH, Hocking River, Mustapha Island
124	428.0 – 422.8	Augusta KY, Higginsport OH	147	312.5 – 307.3	Huntington WV, Chesapeake OH	168	196.3 – 190.7	Little Hocking River, Newberry Island
125	422.8 – 417.6	Dover KY	148	307.3 – 302.3	Proctorville OH, Guyandotte River	169	190.7 – 185.6	Belpre OH, Blennerhassett Island
126	417.9 – 412.7	Ripley OH, Eagle Creek	149	302.3 – 297.2	Proctorville OH, Nine Mile Creek	170	185.6 – 180.4	Parkersburg WV, Little Kanawha River
127	412.7 – 407.2	Maysville KY, Aberdeen OH	150	297.2 – 292.4	Athalia OH, Miller OH	171	180.6 – 175.6	Vienna WV, Halfway Island, Muskingum Island
128	407.2 – 402.9	Little Three Mile Creek, Cabin Creek	151	293.0 – 286.9	Crown City OH	172	175.6 – 170.5	Marietta OH, Muskingum River
129	403.7 – 397.9	Crooked Creek, Isaacs Creek	152	288.0 – 281.8	Glennwood Station	173	170.8 – 165.8	Marietta (Kerr) Island, Little Muskingum River
130	398.5 – 393.2	Manchester OH, Manchester Island	ROBERT C. BYRD LOCKS & DAM POOL			WILLOW ISLAND LOCKS & DAM POOL		
131	393.5 – 388.1	Concord KY, Brush Creek Island	153	281.9 – 277.0	Robert C. Byrd Locks and Dam	174	166.5 – 160.8	Willow Island Locks and Dam
132	388.1 – 383.2	Rome OH	154	277.0 – 271.4	Raccoon Creek	175	160.8 – 155.7	Lower Brothers Island, Middle Brothers Island
133	383.4 – 378.2	Quick Run Creek, Salt Lick Creek	155	271.6 – 266.6	Gallipolis OH, Gallipolis Island	176	155.8 – 150.4	St. Marys WV, Middle Island, Grape Island
134	379.2 – 372.6	Vanceburg KY, Buena Vista OH	156	266.9 – 261.6	Point Pleasant WV, Kanawha River	177	150.4 – 145.0	Bens Run WV
135	372.6 – 367.5	Kinniconnick Creek	157	261.8 – 256.8	York Station WV, Eight Mile Island	178	145.0 – 140.0	New Matamoras OH, Grandview Island
136	368.0 – 362.9	Quincy KY, Pond Run	158	256.8 – 251.7	Middleport OH	179	140.0 – 135.2	Sistersville WV, Wells Island
137	362.9 – 357.7	Turkey Creek, Old Lock 31	159	251.7 – 244.9	Pomeroy OH, Mason WV	180	135.2 – 129.8	Paden City WV, Williamson Island
138	358.7 – 352.9	Portsmouth OH, Bonanza Bar	160	244.9 – 239.2	Racine OH	181	129.8 – 126.4	Hannibal Locks and Dam
139	352.9 – 346.7	Sciotoville OH, Little Scioto Bar	RACINE LOCKS & DAM POOL			OHIO RIVER TRIBUTARY RIVERS		
140	346.7 – 341.6	Burkes Point Bar	161	239.4 – 232.6	Racine Locks and Dam, Letart Island	146A – 146D	0.0 – 9.4	Big Sandy River
GREENUP LOCKS & DAM POOL			162	232.6 – 227.3	Millwood WV, Mill Creek	170A – 170C	0.0 – 7.6	Little Kanawha River
141	341.6 – 336.6	Greenup Locks and Dam	163	227.5 – 219.7	Willow Grove WV, Ravenswood WV	172A – 172C	0.0 – 5.9	Muskingum River
142	336.6 – 331.7	Greenup KY, Little Sandy River	164	219.7 – 214.5	Buffington Island			
143	331.7 – 326.8	Ironton OH, Russell KY	165	214.5 – 206.9	Long Bottom OH, Shade River			
144	327.2 – 322.1	Ashland KY, Coal Grove OH						

U.S. Navigation Lights

Daymarks

Mile Board

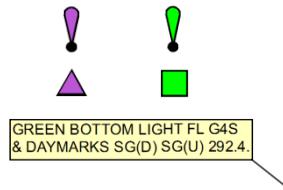
Buoys:

Can (Green)

Nun (Red)

Junction (Red/Green)

Hazard (Lighted)



Land Above Project Pool

Water, with Less Than 9' Depth at Project Pool

Water, with 9' or More Depth at Project Pool



Arrival Point for Lockage

Sailing Line & Mile Marker

Ordinary High Water Elevation

Flow

Ferry Crossing

Aerial Crossing

Pipeline Crossing

Cable Crossing

Dike

Conveyor

Wreck

Restricted Area

Fleeting Area

No Anchorage/Caution Area

Underwater Rock

Gages

Commercial Docks

Mooring Cells

Mooring Buoys

Federal Mooring Cells

Ties (Tri/Quad)

Intake

Outfall Pipe

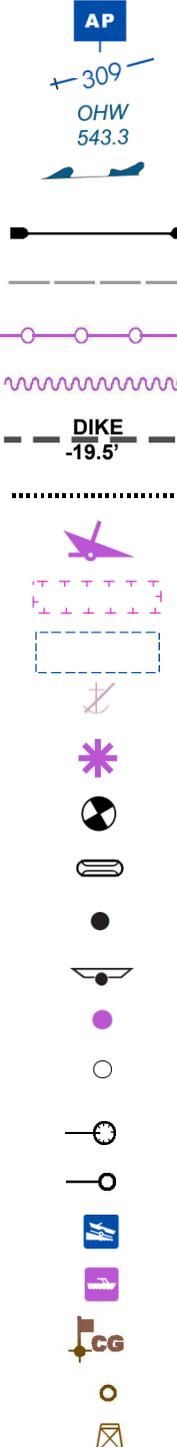
Launching Ramp

Dock or Marina

U.S. Coast Guard Station

Tank

Tower



CHARACTERISTICS OF NAVIGATION LIGHTS

Lights in the Eighth Coast Guard District show simple characteristics, allocated by color or other features to the left and right descending banks, see examples below:

Left Descending Bank

- F.W. Fixed White
- F.R. Fixed Red
- FL(2)W5s Group Flashing White
(2 flashes every 5 sec.)
- FL(2)R5s. Group Flashing Red
(2 flashes every 5 sec.)

Right Descending Bank

- F.W. Fixed White
- F.G. Fixed Green
- FL W4s Flashing White
(flash every 4 sec.)
- FL G4s Flashing Green
(flash every 4 sec.)

DAYMARK DESCRIPTIONS

There are many standard designations for the appearance and purpose of all daymarks used in the U.S. Waterways System. Below is a description for daymarks used on the Ohio River, miles 438 – 127 and its tributaries. For all other daymark, buoy, or navigation light descriptions on the Kanawha River that are not shown here, refer to the most current United States Coast Guard Light List for the Mississippi River System by visiting: <http://www.navcen.uscg.gov/pubs/lightlists/2008volume5.pdf>.

Designations:

1. First letter – Shape or purpose
S: Square used to mark the port (left) side of channels when proceeding from seaward.
T: Triangle used to mark the starboard (right) side of channels when proceeding from seaward.
2. Second letter – Key Color
G – Green R – Red

Descriptions:

- SG: Square green daymark with a green reflective border.
- TR: Triangular red daymark with a red reflective border.
- (U): Situated Up
- (D): Situated Down

Example: GREEN BOTTOM LIGHT FL G4S & DAYMARKS SG(D) SG(U) 292.4.

Description:
This daymark has a green light that flashes every 4 seconds (FL G4S), on a square green daymark that is situated both downstream and upstream [SG(D) SG(U)], on the right descending bank, at mile 292.4.

OHIO RIVER TRIBUTARY NAVIGATION CHARTS



BIG SANDY RIVER
MILE 0.0 - 9.4
OHIO RIVER MILE 317.2
PROJECT POOL GREENUP DAM ELEVATION 515.0

146A - 146D



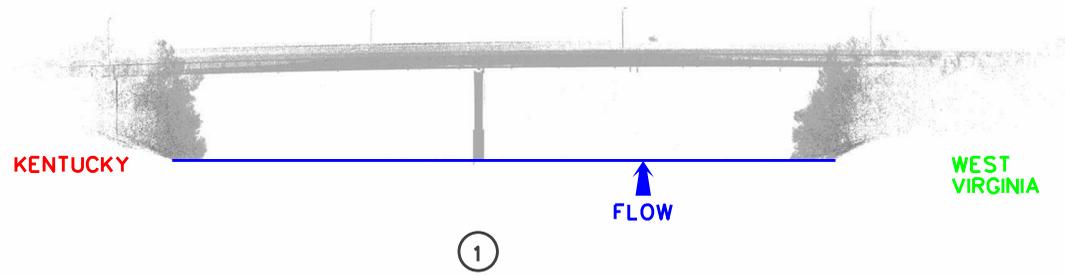
LITTLE KANAWHA RIVER
MILE 0.0 - 7.6
OHIO RIVER MILE 184.5
PROJECT POOL BELLEVILLE DAM ELEVATION 582.0

170A - 170C

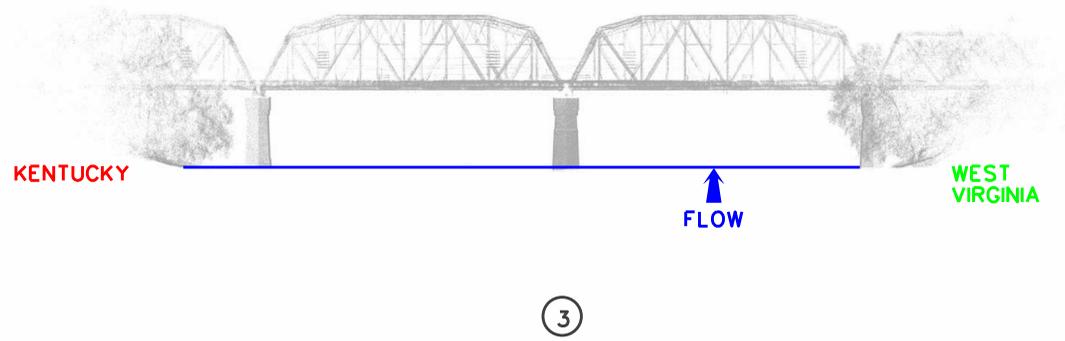


MUSKINGUM RIVER
MILE 0.0 - 5.9
OHIO RIVER MILE 172.3
PROJECT POOL BELLEVILLE DAM ELEVATION 582.0

172A - 172C



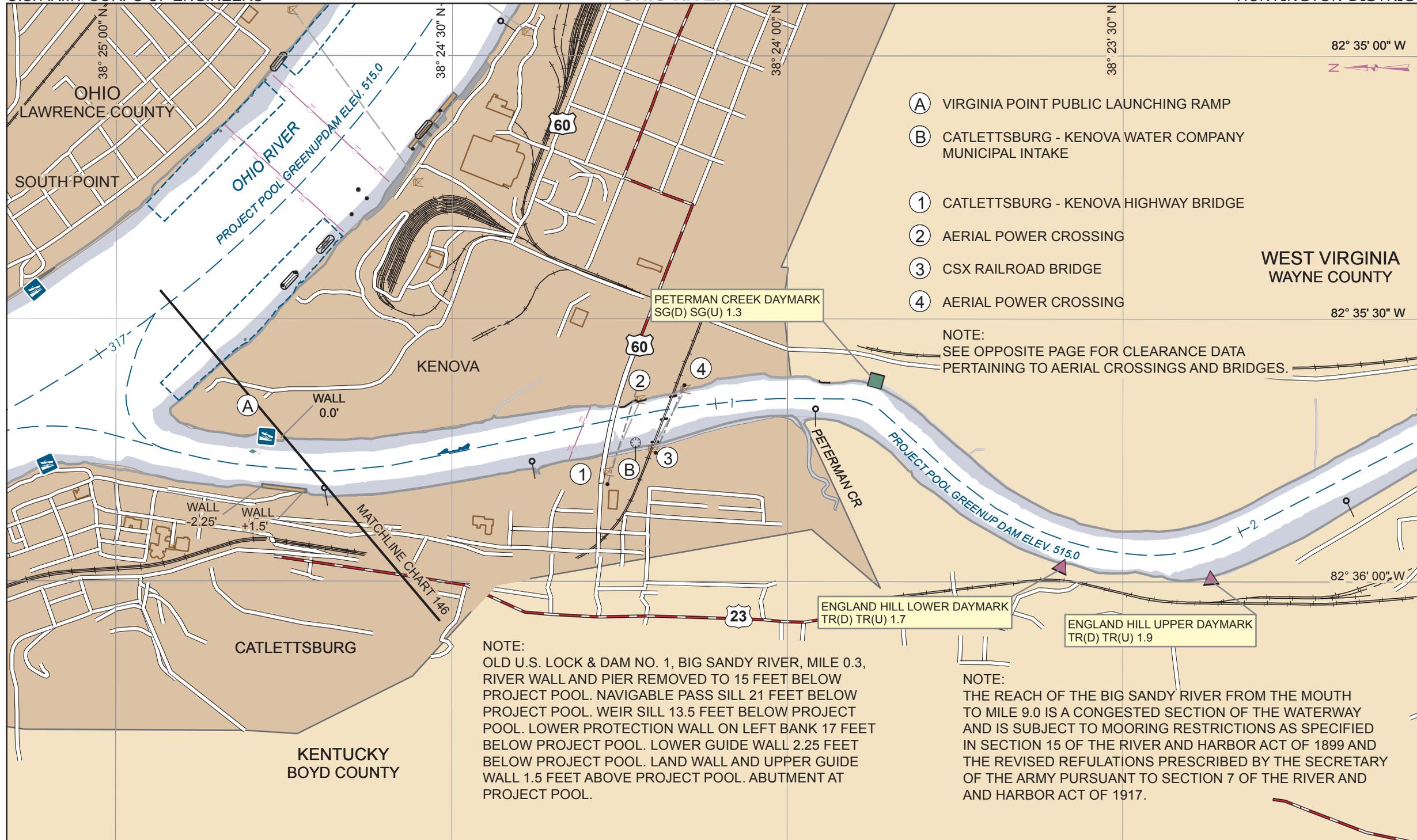
0.8 (1) CATLETTSBURG - KENOVA HIGHWAY BRIDGE
 CHANNEL SPAN
 ELEVATION OF LOW STEEL 578.0'
 VERTICAL CLEARANCE AT POOL STAGE 63.0'
 VERTICAL CLEARANCE - 1937 H.W. 13.7'
 HORIZONTAL CLEARANCE 200'

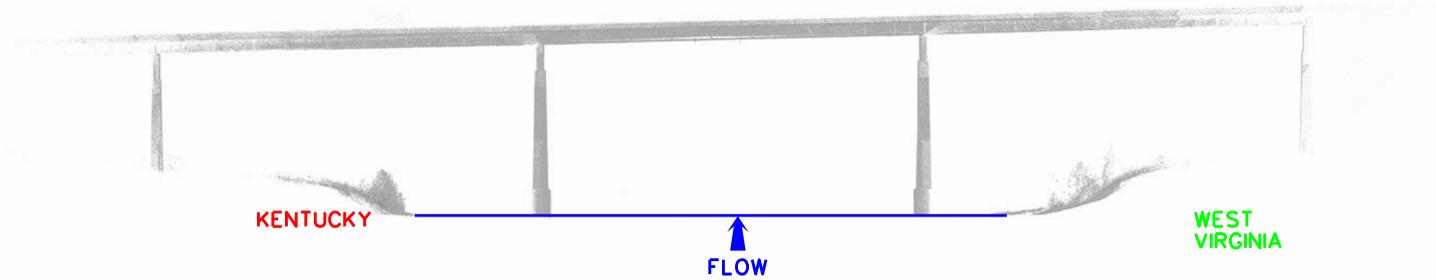


0.8 (2) AERIAL POWER CROSSING
 ELEVATION LOW POINT OF SAG 585.3'
 VERTICAL CLEARANCE AT POOL STAGE 70.3'
 VERTICAL CLEARANCE - 1937 H.W. 27.3'

0.9 (3) C&O RAILROAD BRIDGE
 CHANNEL SPAN
 ELEVATION OF LOW STEEL 564.6'
 VERTICAL CLEARANCE AT POOL STAGE 49.6'
 VERTICAL CLEARANCE - 1937 H.W. 6.6'
 HORIZONTAL CLEARANCE 178'

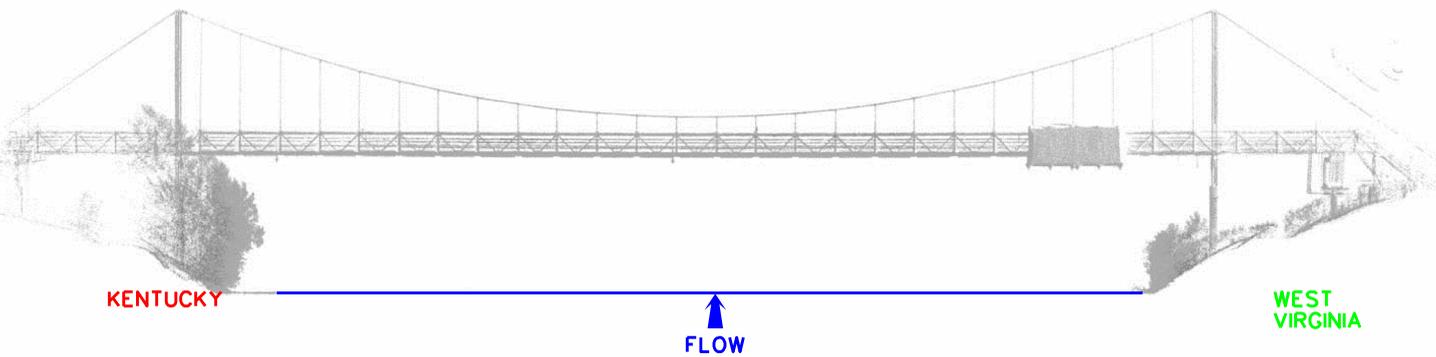
0.9 (4) AERIAL TELEPHONE CROSSING
 ELEVATION LOW POINT OF SAG 579.0'
 VERTICAL CLEARANCE AT POOL STAGE 64.0'
 VERTICAL CLEARANCE - 1937 H.W. 21.0'





①

2.6	① INTERSTATE 64 TWIN BRIDGES	
	CHANNEL SPAN	
	ELEVATION OF LOW STEEL	616.9'
	VERTICAL CLEARANCE AT POOL STAGE	101.9'
	VERTICAL CLEARANCE - 1937 H.W.	58.9'
	HORIZONTAL CLEARANCE	215'

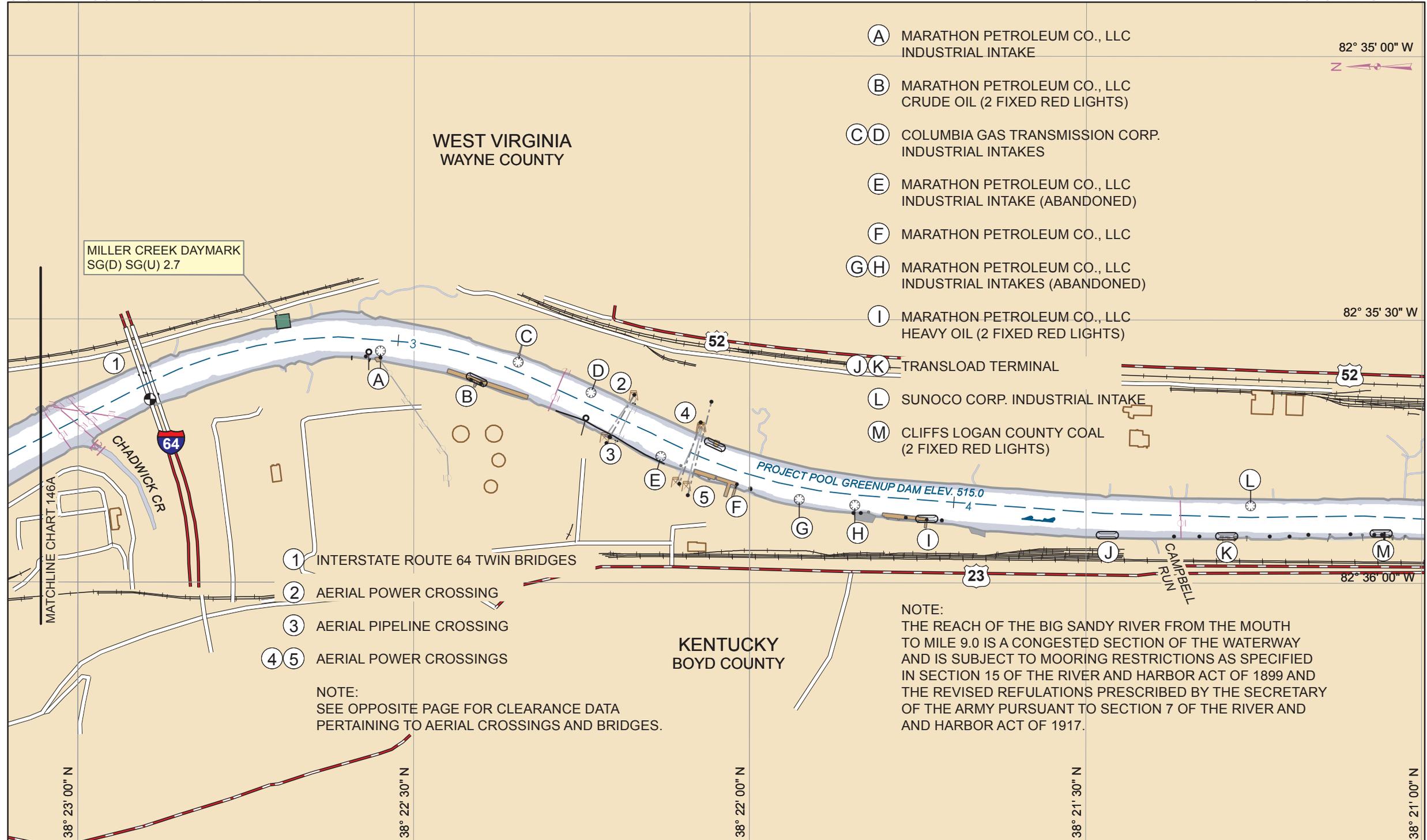


③

3.5	③ MARATHON / ASHLAND INC. PIPELINE BRIDGE	
	CHANNEL SPAN	
	ELEVATION OF LOW STEEL	566.9'
	VERTICAL CLEARANCE AT POOL STAGE	51.9'
	VERTICAL CLEARANCE - 1937 H.W.	9.4'
	HORIZONTAL CLEARANCE	388'

3.6	④ AERIAL POWER CROSSING	
	ELEVATION LOW POINT OF SAG	590.0'
	VERTICAL CLEARANCE AT POOL STAGE	75.0'
	VERTICAL CLEARANCE - 1937 H.W.	32.0'

3.6	④ AERIAL POWER CROSSING	
	ELEVATION LOW POINT OF SAG	586.0'
	VERTICAL CLEARANCE AT POOL STAGE	71.0'
	VERTICAL CLEARANCE - 1937 H.W.	28.0'



- (A) MARATHON PETROLEUM CO., LLC INDUSTRIAL INTAKE
- (B) MARATHON PETROLEUM CO., LLC CRUDE OIL (2 FIXED RED LIGHTS)
- (C)(D) COLUMBIA GAS TRANSMISSION CORP. INDUSTRIAL INTAKES
- (E) MARATHON PETROLEUM CO., LLC INDUSTRIAL INTAKE (ABANDONED)
- (F) MARATHON PETROLEUM CO., LLC
- (G)(H) MARATHON PETROLEUM CO., LLC INDUSTRIAL INTAKES (ABANDONED)
- (I) MARATHON PETROLEUM CO., LLC HEAVY OIL (2 FIXED RED LIGHTS)
- (J)(K) TRANSLOAD TERMINAL
- (L) SUNOCO CORP. INDUSTRIAL INTAKE
- (M) CLIFFS LOGAN COUNTY COAL (2 FIXED RED LIGHTS)

- 1 INTERSTATE ROUTE 64 TWIN BRIDGES
- 2 AERIAL POWER CROSSING
- 3 AERIAL PIPELINE CROSSING
- 4 5 AERIAL POWER CROSSINGS

NOTE:
SEE OPPOSITE PAGE FOR CLEARANCE DATA
PERTAINING TO AERIAL CROSSINGS AND BRIDGES.

NOTE:
THE REACH OF THE BIG SANDY RIVER FROM THE MOUTH
TO MILE 9.0 IS A CONGESTED SECTION OF THE WATERWAY
AND IS SUBJECT TO MOORING RESTRICTIONS AS SPECIFIED
IN SECTION 15 OF THE RIVER AND HARBOR ACT OF 1899 AND
THE REVISED REFULATIONS PRESCRIBED BY THE SECRETARY
OF THE ARMY PURSUANT TO SECTION 7 OF THE RIVER AND
AND HARBOR ACT OF 1917.

82° 35' 00" W
Z

82° 35' 30" W

82° 36' 00" W

38° 23' 00" N

38° 22' 30" N

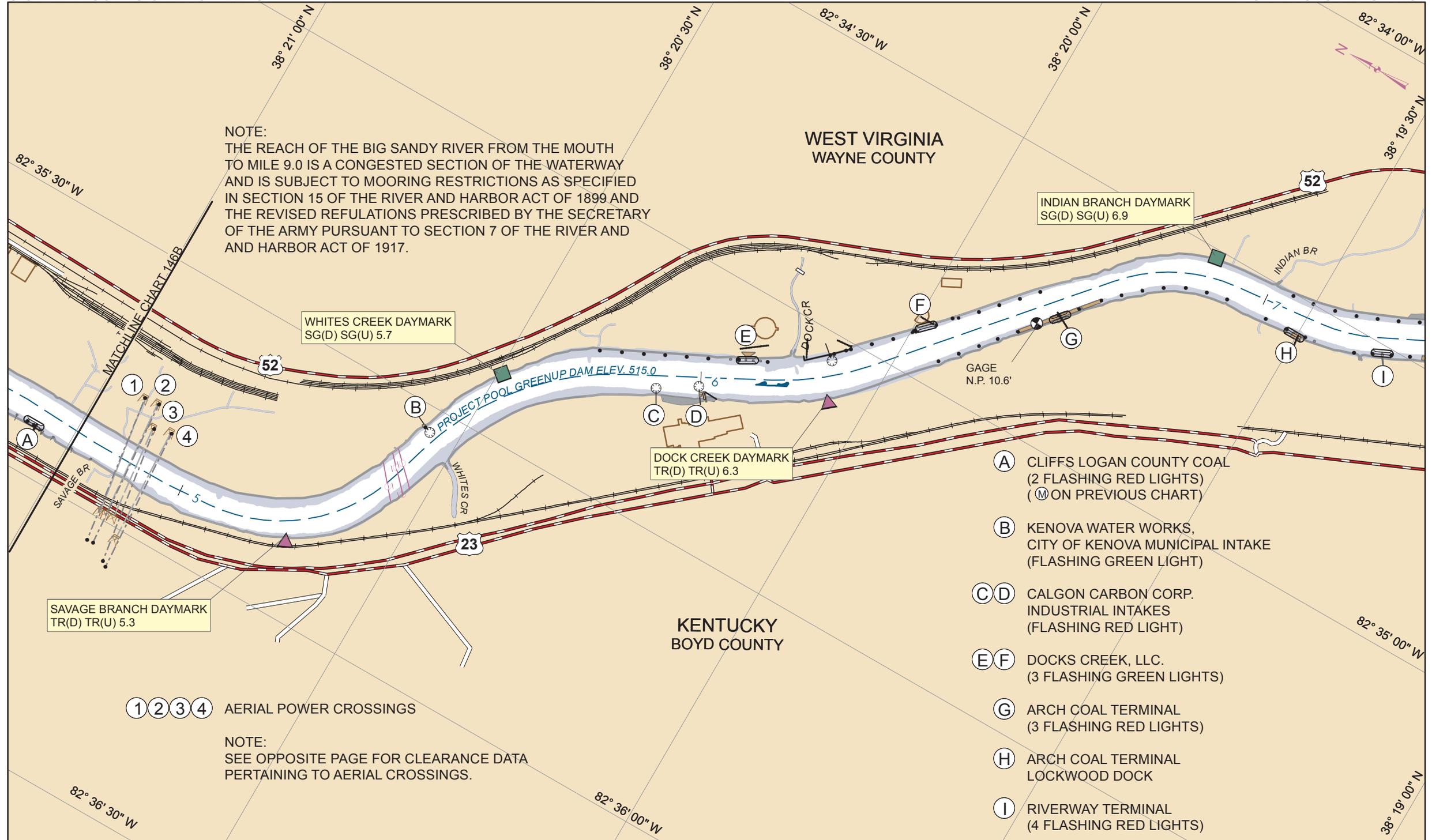
38° 22' 00" N

38° 21' 30" N

38° 21' 00" N

4.7	①	<p>AERIAL POWER CROSSING</p> <p>ELEVATION LOW POINT OF SAG VERTICAL CLEARANCE AT POOL STAGE VERTICAL CLEARANCE - 1937 H.W.</p>	<p>605.0' 90.0' 47.0'</p>
4.8	②	<p>AERIAL POWER CROSSING</p> <p>ELEVATION LOW POINT OF SAG VERTICAL CLEARANCE AT POOL STAGE VERTICAL CLEARANCE - 1937 H.W.</p>	<p>650.0' 135.0' 92.0'</p>
4.8	③	<p>AERIAL POWER CROSSING</p> <p>ELEVATION LOW POINT OF SAG VERTICAL CLEARANCE AT POOL STAGE VERTICAL CLEARANCE - 1937 H.W.</p>	<p>628.0' 113.0' 70.0'</p>
4.9	④	<p>AERIAL POWER CROSSING</p> <p>ELEVATION LOW POINT OF SAG VERTICAL CLEARANCE AT POOL STAGE VERTICAL CLEARANCE - 1937 H.W.</p>	<p>634.0' 119.0' 76.0'</p>

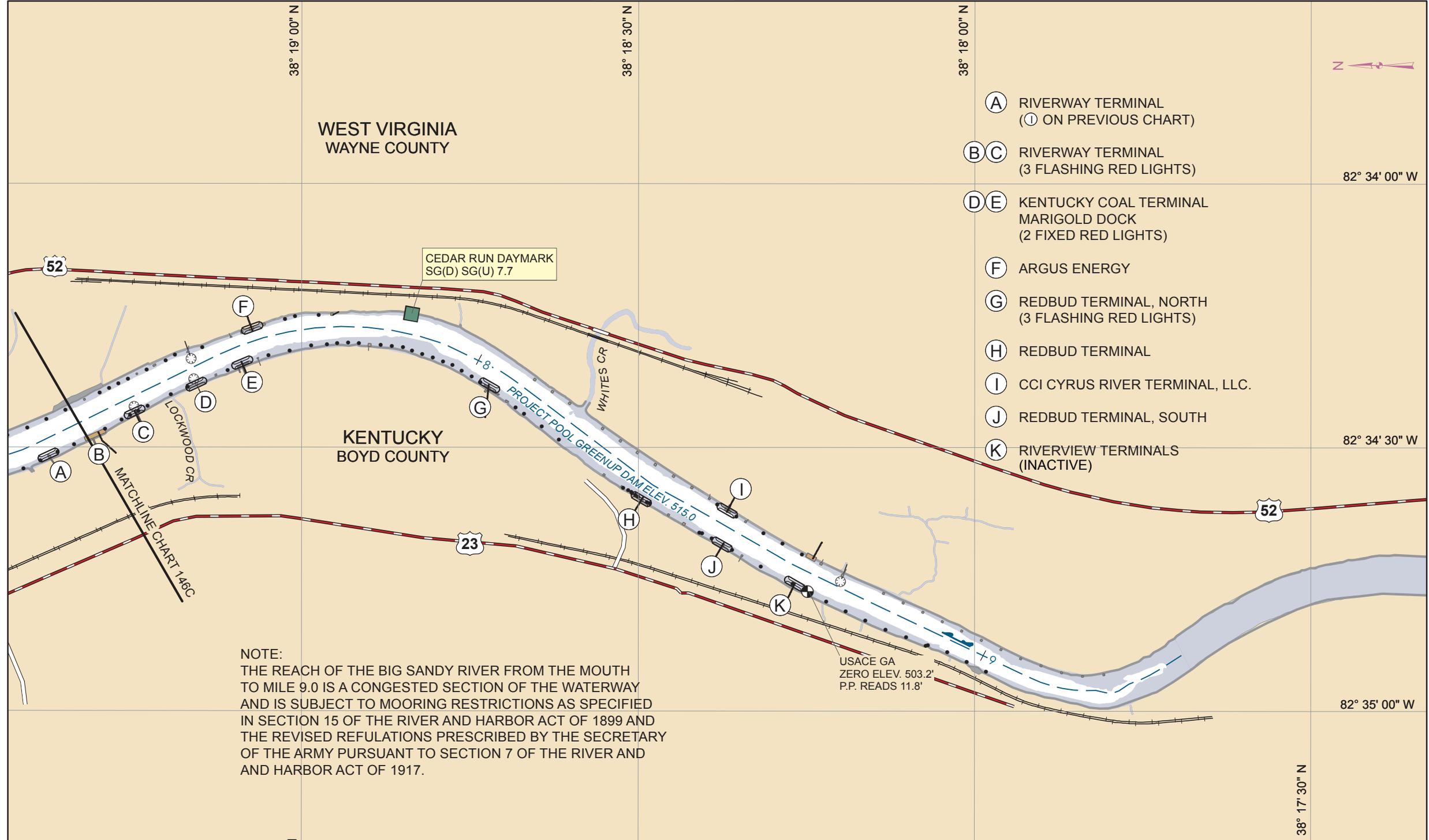
NOTE:
 THE REACH OF THE BIG SANDY RIVER FROM THE MOUTH TO MILE 9.0 IS A CONGESTED SECTION OF THE WATERWAY AND IS SUBJECT TO MOORING RESTRICTIONS AS SPECIFIED IN SECTION 15 OF THE RIVER AND HARBOR ACT OF 1899 AND THE REVISED REGULATIONS PRESCRIBED BY THE SECRETARY OF THE ARMY PURSUANT TO SECTION 7 OF THE RIVER AND HARBOR ACT OF 1917.



1 2 3 4 AERIAL POWER CROSSINGS

NOTE:
 SEE OPPOSITE PAGE FOR CLEARANCE DATA
 PERTAINING TO AERIAL CROSSINGS.

- (A) CLIFFS LOGAN COUNTY COAL (2 FLASHING RED LIGHTS) (M ON PREVIOUS CHART)
- (B) KENOVA WATER WORKS, CITY OF KENOVA MUNICIPAL INTAKE (FLASHING GREEN LIGHT)
- (C) (D) CALGON CARBON CORP. INDUSTRIAL INTAKES (FLASHING RED LIGHT)
- (E) (F) DOCKS CREEK, LLC. (3 FLASHING GREEN LIGHTS)
- (G) ARCH COAL TERMINAL (3 FLASHING RED LIGHTS)
- (H) ARCH COAL TERMINAL LOCKWOOD DOCK
- (I) RIVERWAY TERMINAL (4 FLASHING RED LIGHTS)



WEST VIRGINIA

WEST VIRGINIA

FLOW

① ②

WEST VIRGINIA

WEST VIRGINIA

FLOW

③

WEST VIRGINIA

WEST VIRGINIA

FLOW

④

WEST VIRGINIA

WEST VIRGINIA

FLOW

⑥

①

B&O RAILROAD BRIDGE

0.1

CHANNEL SPAN

ELEVATION OF LOW STEEL	622.2'
VERTICAL CLEARANCE AT POOL STAGE	40.2'
VERTICAL CLEARANCE - 1913 H.W.	1.3'
HORIZONTAL CLEARANCE	285'

②

JULIANA STREET HIGHWAY BRIDGE

0.1

CHANNEL SPAN

ELEVATION OF LOW STEEL	626.9'
VERTICAL CLEARANCE AT POOL STAGE	44.9'
VERTICAL CLEARANCE - 1913 H.W.	6.0'
HORIZONTAL CLEARANCE	300'

③

FIFTH STREET HIGHWAY BRIDGE

0.8

CHANNEL SPAN

ELEVATION OF LOW STEEL	623.1'
VERTICAL CLEARANCE AT POOL STAGE	41.1'
VERTICAL CLEARANCE - 1913 H.W.	2.2'
HORIZONTAL CLEARANCE	310'

④

EAST STREET HIGHWAY BRIDGE

1.4

CHANNEL SPAN

ELEVATION OF LOW STEEL	624.8'
VERTICAL CLEARANCE AT POOL STAGE	42.8'
VERTICAL CLEARANCE - 1913 H.W.	3.9'
HORIZONTAL CLEARANCE	280'

⑤

AERIAL POWER CROSSING

1.7

ELEVATION LOW POINT OF SAG	652.2'
VERTICAL CLEARANCE AT POOL STAGE	70.2'
VERTICAL CLEARANCE - 1913 H.W.	31.3'

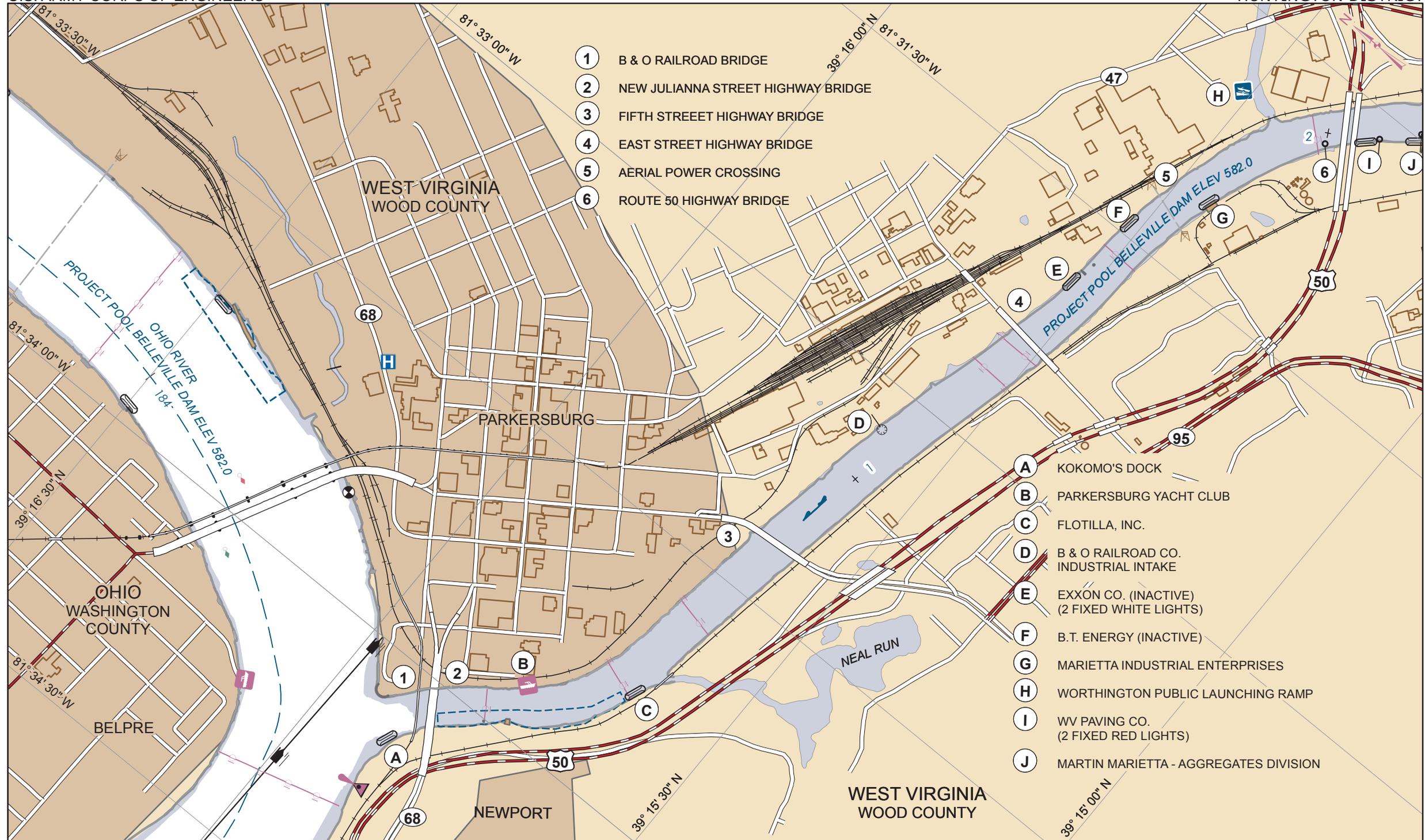
⑥

ROUTE 50 HIGHWAY BRIDGE

2.0

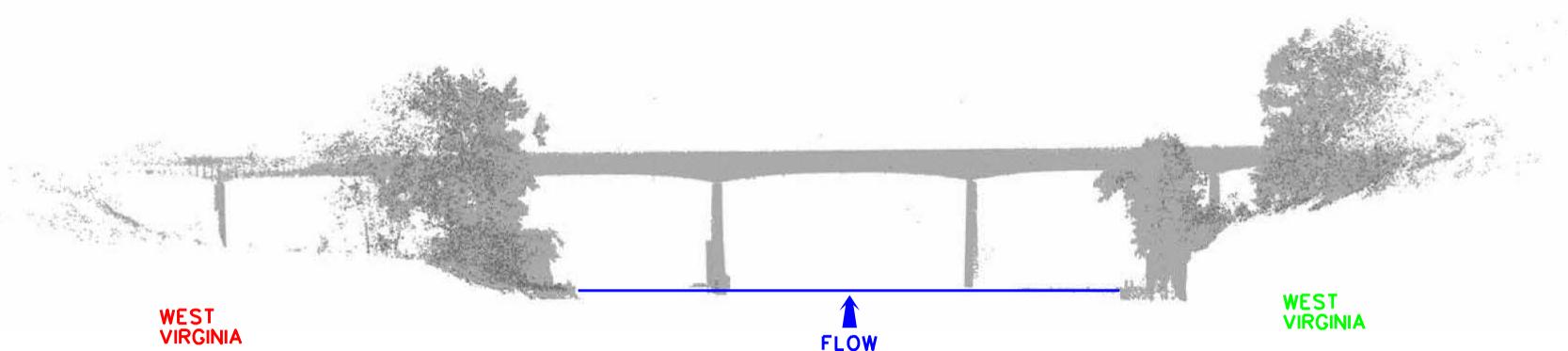
CHANNEL SPAN

ELEVATION OF LOW STEEL	630.1'
VERTICAL CLEARANCE AT POOL STAGE	48.1'
VERTICAL CLEARANCE - 1913 H.W.	9.2'
HORIZONTAL CLEARANCE	344'



- 1 B & O RAILROAD BRIDGE
- 2 NEW JULIANNA STREET HIGHWAY BRIDGE
- 3 FIFTH STREET HIGHWAY BRIDGE
- 4 EAST STREET HIGHWAY BRIDGE
- 5 AERIAL POWER CROSSING
- 6 ROUTE 50 HIGHWAY BRIDGE

- A KOKOMO'S DOCK
- B PARKERSBURG YACHT CLUB
- C FLOTILLA, INC.
- D B & O RAILROAD CO. INDUSTRIAL INTAKE
- E EXXON CO. (INACTIVE) (2 FIXED WHITE LIGHTS)
- F B.T. ENERGY (INACTIVE)
- G MARIETTA INDUSTRIAL ENTERPRISES
- H WORTHINGTON PUBLIC LAUNCHING RAMP
- I WV PAVING CO. (2 FIXED RED LIGHTS)
- J MARTIN MARIETTA - AGGREGATES DIVISION



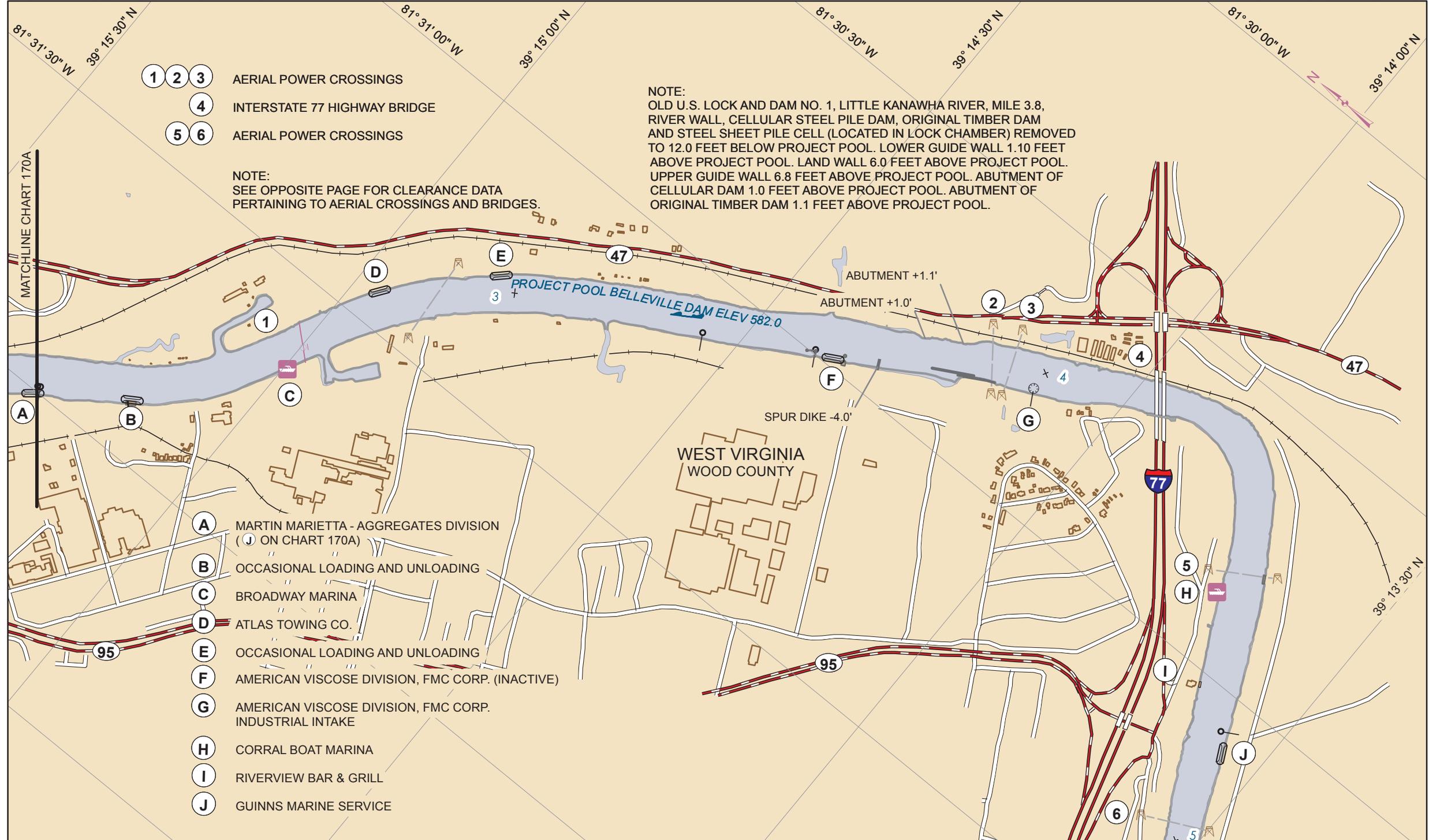
2.8	①	AERIAL POWER CROSSING	
		ELEVATION LOW POINT OF SAG	643.9'
		VERTICAL CLEARANCE AT POOL STAGE	61.9'
		VERTICAL CLEARANCE - 1913 H.W.	23.0'
3.8	②	AERIAL POWER CROSSING	
		ELEVATION LOW POINT OF SAG	644.0'
		VERTICAL CLEARANCE AT POOL STAGE	62.0'
		VERTICAL CLEARANCE - 1913 H.W.	23.1'
3.9	③	AERIAL POWER CROSSING	
		ELEVATION LOW POINT OF SAG	640.5'
		VERTICAL CLEARANCE AT POOL STAGE	58.5'
		VERTICAL CLEARANCE - 1913 H.W.	19.5'
4.2	④	INTERSTATE 77 HIGHWAY BRIDGE	
		CHANNEL SPAN	
		ELEVATION OF LOW STEEL	634.7'
		VERTICAL CLEARANCE AT POOL STAGE	52.7'
		VERTICAL CLEARANCE - 1913 HIGH WATER	10.2'
		HORIZONTAL CLEARANCE	106.0'
4.5	⑤	AERIAL POWER CROSSING	
		ELEVATION LOW POINT OF SAG	637.0'
		VERTICAL CLEARANCE AT POOL STAGE	50.0'
		VERTICAL CLEARANCE - 1913 H.W.	11.0'
4.9	⑥	AERIAL POWER CROSSING	
		ELEVATION LOW POINT OF SAG	620.8'
		VERTICAL CLEARANCE AT POOL STAGE	38.8'
		VERTICAL CLEARANCE - 1913 H.W.	0.2'

WEST
VIRGINIA

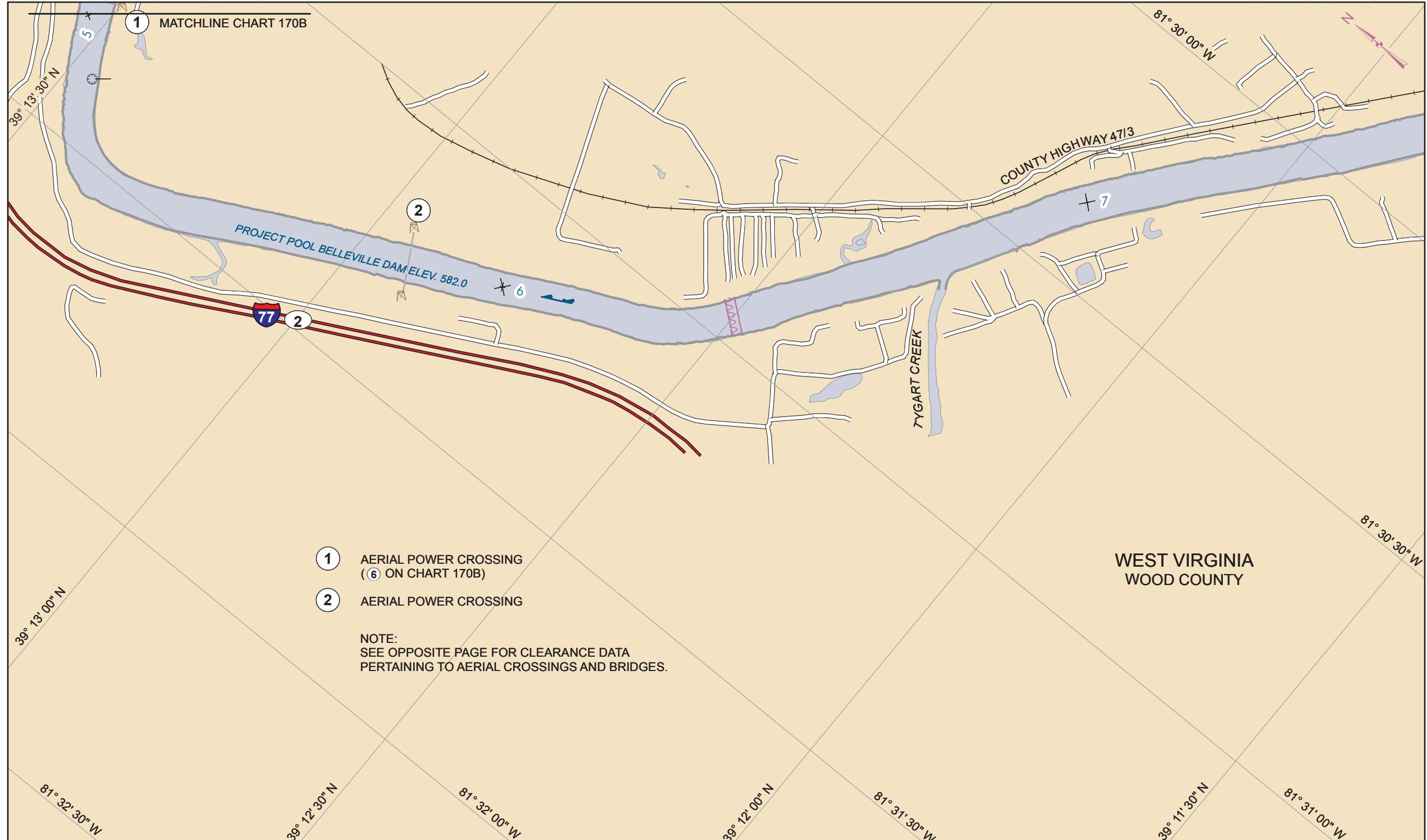
FLOW

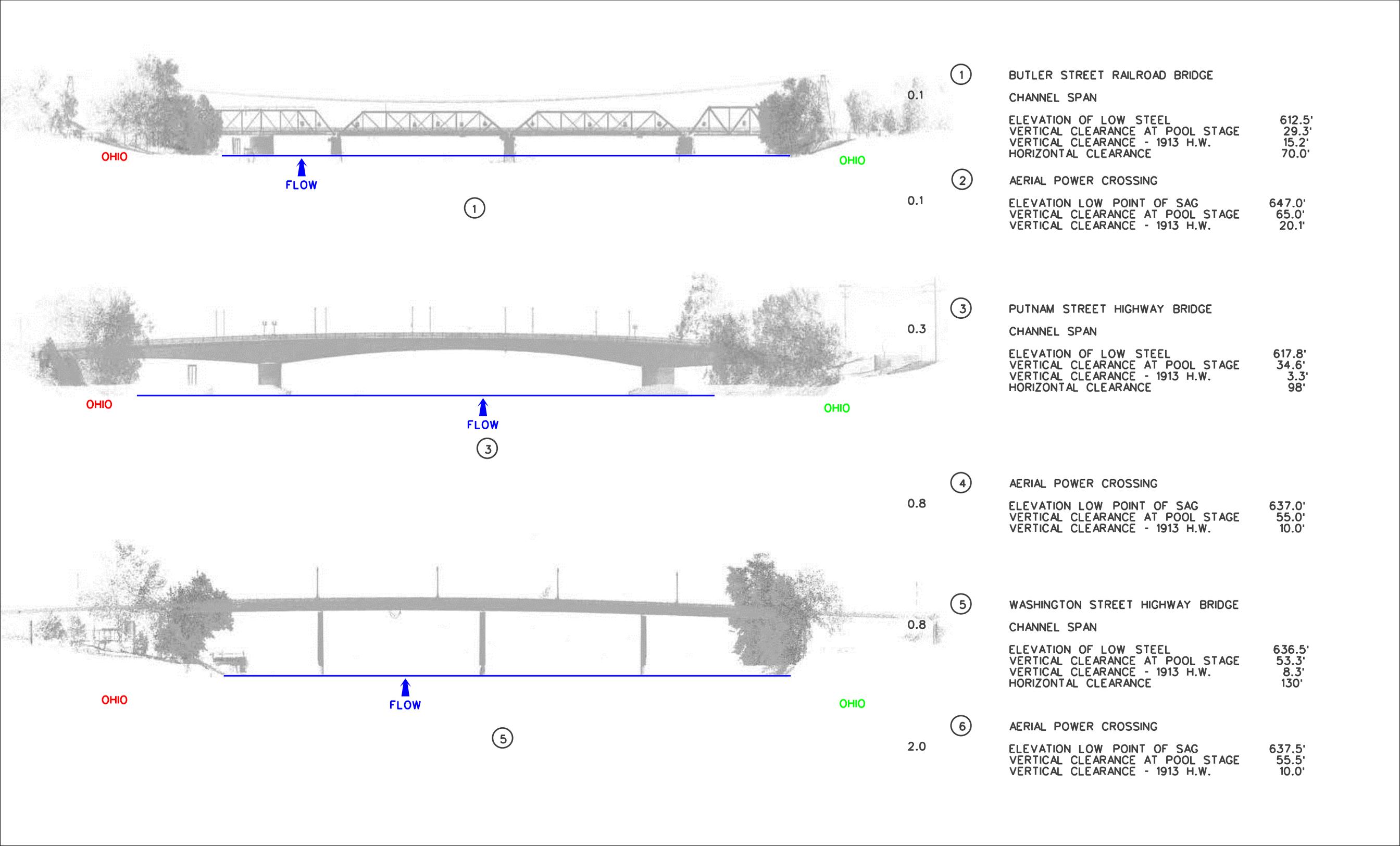
WEST
VIRGINIA

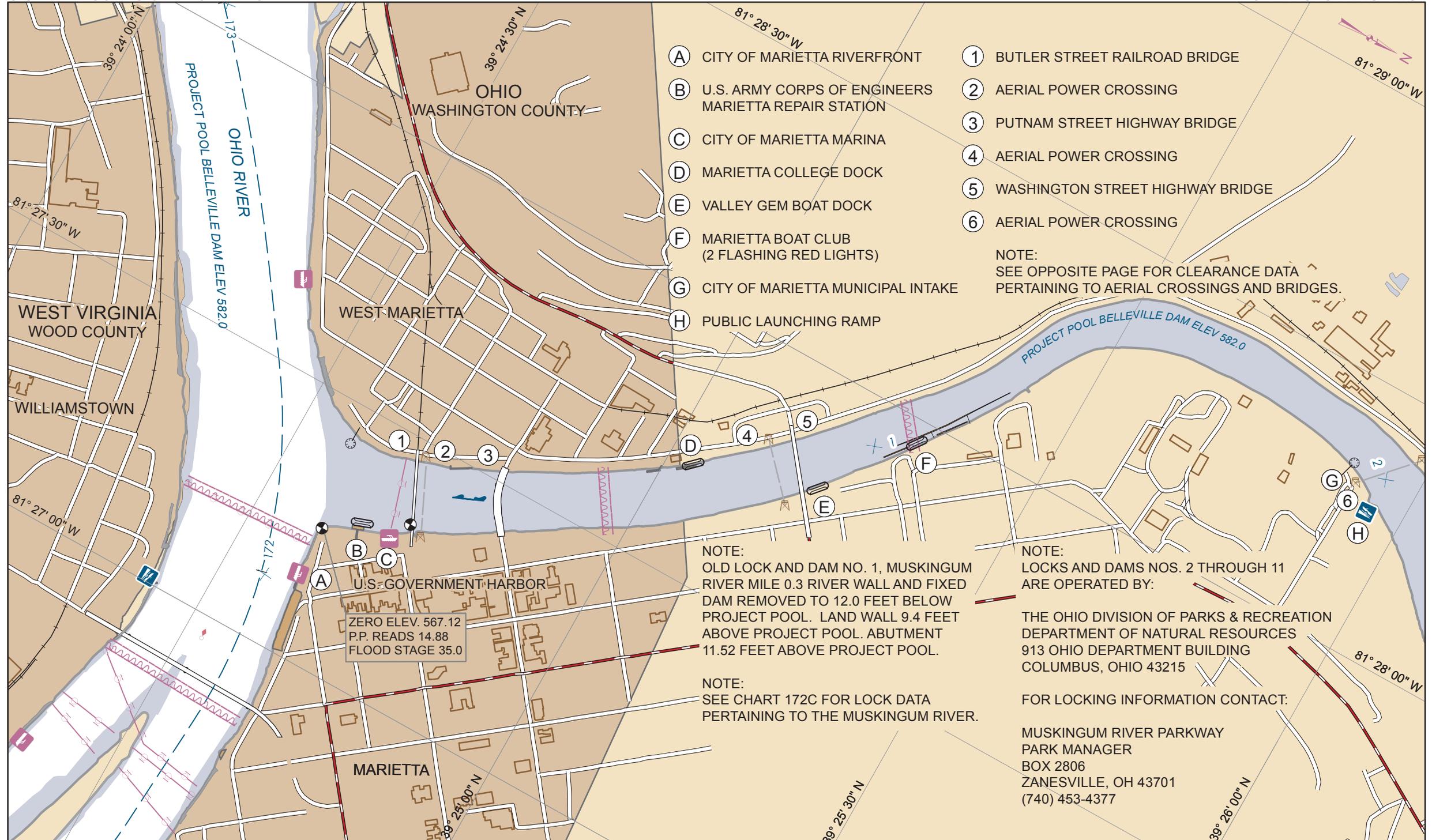
④



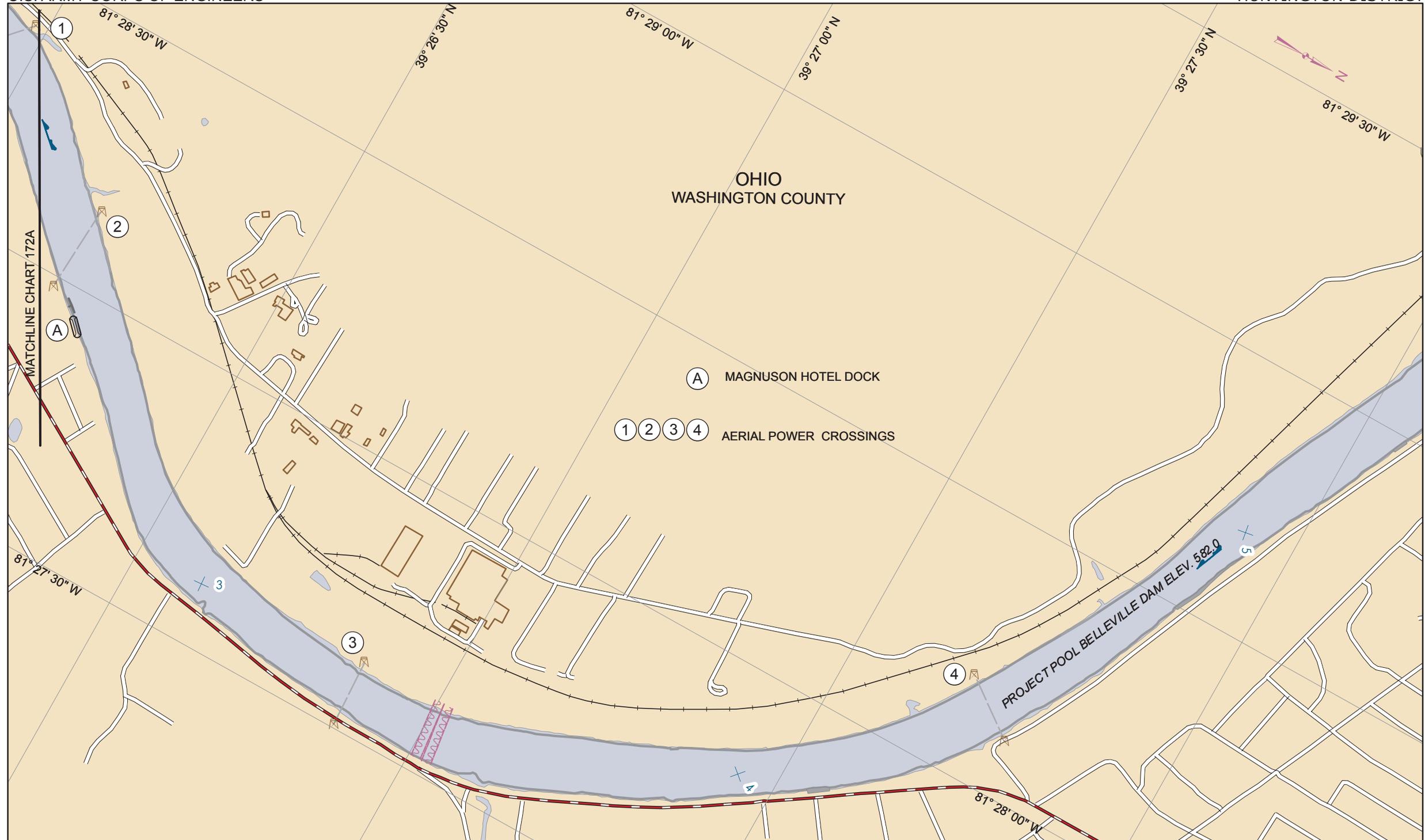
	①	AERIAL POWER CROSSING	
4.9		ELEVATION LOW POINT OF SAG	620.8'
		VERTICAL CLEARANCE AT POOL STAGE	38.8'
		VERTICAL CLEARANCE - 1913 H.W.	0.2'
	②	AERIAL POWER CROSSING	
5.9		ELEVATION LOW POINT OF SAG	627.7'
		VERTICAL CLEARANCE AT POOL STAGE	45.7'
		VERTICAL CLEARANCE - 1913 H.W.	6.7'

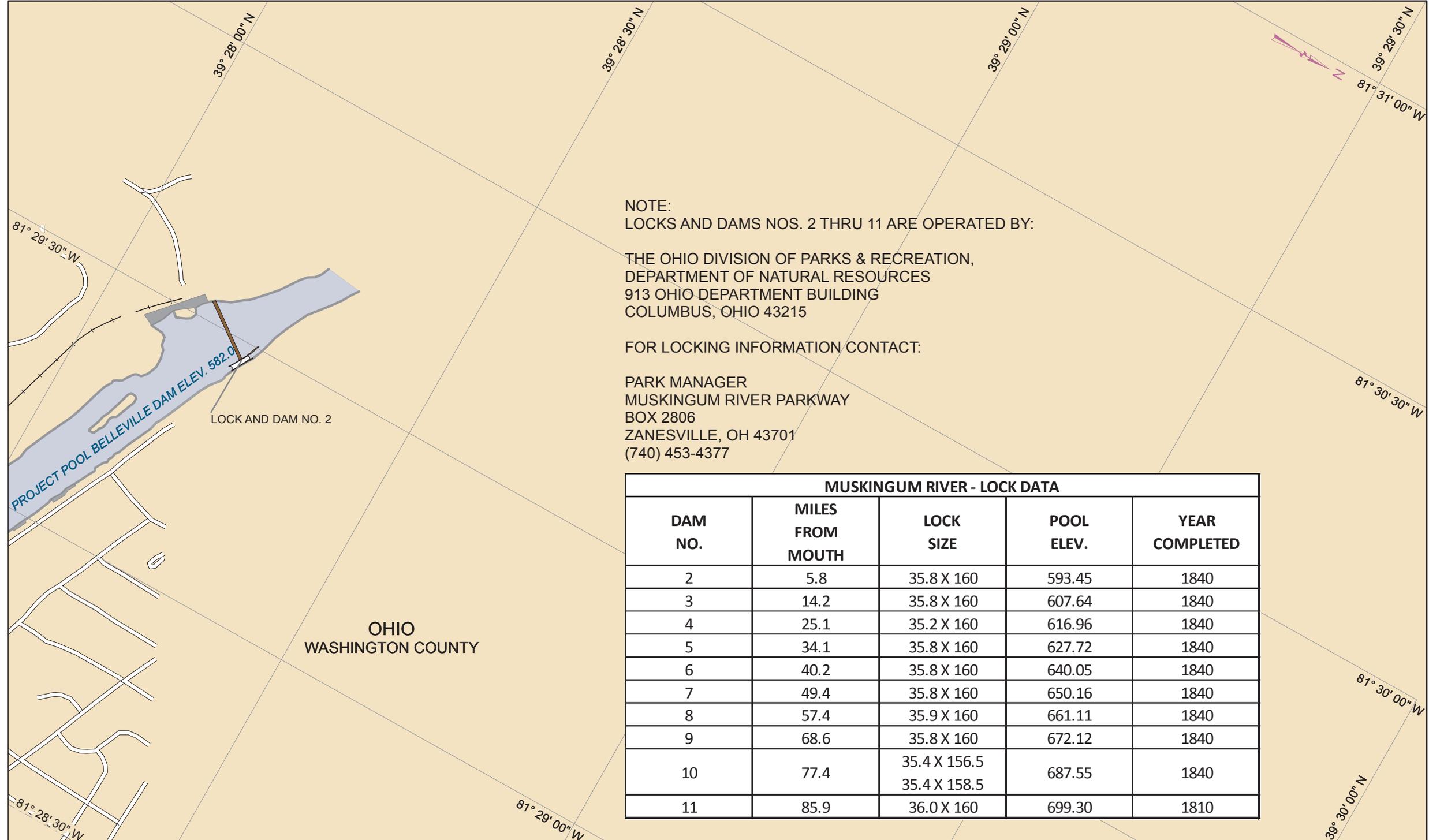






	①	AERIAL POWER CROSSING	
2.0		ELEVATION LOW POINT OF SAG	637.5'
		VERTICAL CLEARANCE AT POOL STAGE	55.5'
		VERTICAL CLEARANCE - 1913 H.W.	10.0'
	②	AERIAL POWER CROSSING	
2.4		ELEVATION LOW POINT OF SAG	640.2'
		VERTICAL CLEARANCE AT POOL STAGE	58.2'
		VERTICAL CLEARANCE - 1913 H.W.	12.6'
	③	AERIAL POWER CROSSING	
3.4		ELEVATION LOW POINT OF SAG	648.0'
		VERTICAL CLEARANCE AT POOL STAGE	66.0'
		VERTICAL CLEARANCE - 1913 H.W.	20.5'
	④	AERIAL POWER CROSSING	
4.5		ELEVATION LOW POINT OF SAG	663.0'
		VERTICAL CLEARANCE AT POOL STAGE	81.0'
		VERTICAL CLEARANCE - 1913 H.W.	34.5'





NOTE:
LOCKS AND DAMS NOS. 2 THRU 11 ARE OPERATED BY:

THE OHIO DIVISION OF PARKS & RECREATION,
DEPARTMENT OF NATURAL RESOURCES
913 OHIO DEPARTMENT BUILDING
COLUMBUS, OHIO 43215

FOR LOCKING INFORMATION CONTACT:

PARK MANAGER
MUSKINGUM RIVER PARKWAY
BOX 2806
ZANESVILLE, OH 43701
(740) 453-4377

MUSKINGUM RIVER - LOCK DATA

DAM NO.	MILES FROM MOUTH	LOCK SIZE	POOL ELEV.	YEAR COMPLETED
2	5.8	35.8 X 160	593.45	1840
3	14.2	35.8 X 160	607.64	1840
4	25.1	35.2 X 160	616.96	1840
5	34.1	35.8 X 160	627.72	1840
6	40.2	35.8 X 160	640.05	1840
7	49.4	35.8 X 160	650.16	1840
8	57.4	35.9 X 160	661.11	1840
9	68.6	35.8 X 160	672.12	1840
10	77.4	35.4 X 156.5 35.4 X 158.5	687.55	1840
11	85.9	36.0 X 160	699.30	1810

APPENDIX RIVER TERMINALS

	OHIO RIVER COMMERCIAL DOCKS	1-21
	OHIO RIVER TRIBUTARY COMMERCIAL DOCKS	22 - 23
	BIG SANDY RIVER COMMERCIAL DOCKS	24 - 26
	OHIO RIVER PRIVATE DOCKS	27 - 38
	OHIO RIVER TRIBUTARY PRIVATE DOCKS	39 - 45

Big Sandy River Commercial Docks

Mile	Location	Facility Name	Commodities	Shelter	Facilities	Rail	Remarks
3.2L	Catlettsburg, KY	Marathon Petroleum Co., LLC (Crude Oil Dock) (606) 921-6159	Petroleum Off/Spec	Operator Shed	Pipeline	None	Steel mooring cells.
3.6R	Kenova, WV	Ashland Oil, Inc. (Neal Plant)	Chemicals	None	None	None	Steel mooring cells - INACTIVE.
3.7L	Catlettsburg, KY	Marathon Petroleum Co., LLC (Chemical Dock) (606) 921-6161	Chemical and Petroleum	Shed	Pipeline	None	Steel mooring cells.
3.9L	Catlettsburg, KY	Marathon Petroleum Co., LLC (Heavy Oil Dock) (606) 921-6160	Fuel oil Asphalt	Shed	Pipeline	None	Steel mooring cells.
4.5L	Catlettsburg, KY	Transload Terminal (606) 739-5189	Coal	Shed	Conveyor	CSX	Steel pipe tri-ties.

Big Sandy River Commercial Docks

Mile	Location	Facility Name	Commodities	Shelter	Facilities	Rail	Remarks
4.7L	Catlettsburg, KY	Cliffs Logan County Coal Terminals LLC (304) 583-5943	None	None	Conveyor	CSX	Steel pipe tri-ties - INACTIVE.
5.5R	Kenova, WV	Kenova Water Works Day Time: (304) 453-2205 City Hall: (304) 453-1631 Police 24 hrs: (304) 453-5555	Water	None	None	None	Municipal Water Intake.
6.1L	Catlettsburg, KY	Calgon Carbon Corp. (606) 739-8681 # 0	None	None	None	None	Industrial Water Intake.
6.1R	Kenova, WV	Docks Creek, LLC. (304) 453-6161	Coal/ Hydrogen Nitrate and Slag	None	Crane	NS RR	Steel pipe tri-ties.
6.3R	Kenova, WV	Docks Creek, LLC. (304) 453-6161	Coal/ Hydrogen Nitrate and Slag	None	Crane	NS RR	Steel pipe tri-ties.
6.6L	Catlettsburg, KY	Arch Coal Terminal (606) 739-8499	Coal	Shed	Conveyor	None	Tri ties, mooring cells.

Big Sandy River Commercial Docks

Mile	Location	Facility Name	Commodities	Shelter	Facilities	Rail	Remarks
7.1L	Catlettsburg, KY	Arch Coal Terminal (Lockwood Dock) (606) 739-8499	Coal	None	Conveyor Crane		Tri ties, mooring cells.
7.2L	Catlettsburg, KY	Riverway Terminal (606) 739-4116	Coal	None	None	None	Steel pipe tri-ties.
7.4L	Catlettsburg, KY	Riverway Terminal (606) 739-4116	Coal	None	Conveyor	None	Steel pipe tri-ties.
7.6R	Kenova, WV	Argus Energy (Wayne County) (304) 453- 2914	Coal	None	Conveyor	None	Steel pipe tri-ties.
7.6L	Catlettsburg, KY	Kentucky Coal, Terminal (304) 526-0732 (304) 526-0731	Coal	Shed	Conveyor	None	Steel pipe tri-ties and quad ties.
8.0L	Catlettsburg, KY	Red Bud North (606) 739-0411	Coal	Shed	Conveyor	None	Steel pipe tri-ties.
8.4L	Catlettsburg, KY	Red Bud Terminal (606) 739-0411	Coal	Shed	Conveyor	None	Steel pipe tri-ties.

Big Sandy River Commercial Docks

Mile	Location	Facility Name	Commodities	Shelter	Facilities	Rail	Remarks
8.5R	Kenova, WV	CCI Cyrus River Terminal, LLC Day time: (304) 781-1235 After hours: (304) 840-1998	Coal	Shed	Conveyor	None	Steel pipe tri-ties.
8.6L	Catlettsburg, KY	Red Bud South (606) 739-0411	Coal	Shed	Conveyor	None	Steel pipe tri-ties.
8.9L	Catlettsburg, KY	Riverview Terminals	Fleeting Service	None	None	None	Steel pipe tri-ties - INACTIVE.

Ohio River Tributary Recreational Docks

Mile	Facility Name	Fuel	Restaurant	Groceries	Overnight Mooring	Lodging	Remarks
0.2L	Holiday Point Marina (740) 354-9779	Yes	Yes	Yes	Yes	No	Refreshments, restroom, shower, electric and water. Service Department
<u>LITTLE SANDY RIVER</u>							
0.3L	Public Access Site (606) 473-7441 Greenup Locks	No	No	No	No	No	Launching ramp and parking
0.4L	Sandy Cove Marina Phone number not available	No	No	No	No	No	Repair facilities, restrooms, campsites and refreshments.
<u>POND RUN</u>							
0.1L	Worthington Boat Club Phone number not available	No	No	No	No	No	(Inactive)
<u>STORMS CREEK</u>							
0.3L	Ironton Boat Dock Phone number not available	Yes	No	No	Yes	No	Parking and restrooms.
<u>ICE CREEK</u>							
0.2R	Public Access Site Phone number not available						
<u>BIG SANDY RIVER</u>							
0.2R	City of Kenova Public Access Site Virginia Point (304) 453-1571 City Hall Virginia Point (304) 453-5555 Police	No	No	No	No	No	Parking and restrooms.

Ohio River Tributary Recreational Docks

Mile	Facility Name	Fuel	Restaurant	Groceries	Overnight Mooring	Lodging	Remarks
<u>HOCKING RIVER</u>							
5.9L	Public Access Site Coolville (740) 378-6110 Belleville Lock	No	No	No	No	No	Launching ramp and parking.
1.0L	Rivers Bend Marina Phone number not available	Yes	No	Yes	Yes	No	Launching ramp, camping and refreshments.
<u>LITTLE KANAWHA RIVER</u>							
0.1R	City of Parkersburg (304) 424-8559	No	No	No	No	No	Launching ramp, parking and restrooms.
0.3L	Flotilla Inc. Phone number not available						
1.9R	Worthington Marina Phone number not available						
2.6L	Dockside marina Phone number not available						
4.5L	Adventure Pursuit Phone number not available	None	None	None	None	None	Recreational Site (Handicap Facility)

Ohio River Tributary Recreational Docks

Mile	Facility Name	Fuel	Restaurant	Groceries	Overnight Mooring	Lodging	Remarks
4.6L	Corral Boat Marina and Camp Grounds Phone number not available	Yes	Yes	No	Yes	No	Refreshments, camping, shower, and restroom.
4.7R	Guinns Marine Service (304) 464-5705						
<u>MUSKINGUM RIVER</u>		LOCKS AND DAMS ARE OPERATED AND MAINTAINED BY THE DIVISION OF PARKS, DEPARTMENT Resources, State of Ohio (740) 453-4377					
14.2L	Lowell, Lock #3 (740) 896-2296	No	No	No	Yes	No	Canal lock and Restrooms
5.8L	Devola, Lock #2 (740) 373-8603	No	No	No	No	No	Historical and Restrooms
2.5L	Best Western (740) 374-7211	No	No	No	Yes	Yes	Hotel guests only
2.0L	Publice Launching Ramp Phone number not available						
1.1L	Marietta Boat Club (740) 374-9066	Yes	No	No	Yes	No	Restrooms
0.9L	Indian Acres Park Phone number not available	No	No	No	Yes	No	Ramp and Restrooms

Ohio River Tributary Recreational Docks

Mile	Facility Name	Fuel	Restaurant	Groceries	Overnight Mooring	Lodging	Remarks
0.7L	Campus Martius Ohio River and W. P. Snyder Museums Phone number not available	No	No	No	Yes	No	Historical and Restrooms
0.7L	Valley Gem Sternwheeler (740) 373-7862	No	No	No	No	No	Packet Boat and Restrooms
0.5R	Marietta College Dock (740) 374-2233						
0.2L	Becky Thatcher Sternwheeler / Showboat Phone number not available						
0.1L	Marietta Harbor (740) 374-3600	Yes	No	No	Yes	No	Marina and Restrooms
0.0L	Lafayette Hotel (740) 373-5522	No	No	No	Yes	No	Historical and Restrooms
	<u>Middle Island</u>						
0.01	Public Launching Ramp Phone number not available						
0.04	City of St. Mary's Launching Ramp (304) 684-2401 City Hall	No	No	No	No	No	Back channel Middle Island Launching ramp, parking and restrooms

Requests for maps or information should be addressed to:

U.S. Army Engineer District, Pittsburgh

200 William S. Moorhead Federal Building,
100 Liberty Avenue
Pittsburgh, PA 15222-4186
Phone: (412) 395-7500
Fax: (412) 644-2811
<http://www.lrp.usace.army.mil/nav/nav.htm>

Areas of Operation:

Ohio River Mile 0 – 127, Allegheny River, Monongahela River

Requests for maps or information should be addressed to:

U.S. Army Engineer District, Huntington

502 Eighth Street
Huntington, WV 25701
Phone: (304) 399-5353
Fax: (304) 399-5159
<http://www.lrh.usace.army.mil/navigation>

Areas of Operation:

Ohio River Mile 127 – 437, Kanawha River, Big Sandy River

Requests for maps or information should be addressed to:

U.S. Army Engineer District, Louisville

600 Martin Luther King Place
Louisville, KY 402002
Phone: (502) 315-6766
<http://www.lrl.usace.army.mil/optm/default.asp?mycategory=41>

Areas of Operation:

Ohio River Mile 437-981, Green River Mile 0-108

Requests for maps or information should be addressed to:

U.S. Army Engineer District, Nashville

P.O. Box 1070
Nashville, TN 37202-1070
Phone: (615) 736-7161
<http://www.lrn.usace.army.mil/>

Areas of Operation:

Cumberland River Mile 0 – 381, Tennessee River Mile 0 – 652,
Hiwassee River Mile 0 – 22, Clinch River Mile 0 – 62,
Tenn-Tombigbee Waterway Mile 444.5 - 450

Additional marine mapping products can be found at:

U.S. Army Topographic Engineering Center

7701 Telegraph Road
Alexandria, VA 22315-3864
Phone: (703) 428-6600
<http://www.tec.army.mil/echarts/>

REPORT OIL AND CHEMICAL SPILLS ANY TIME TO THE NATIONAL RESPONSE CENTER AT:
(TOLL FREE) 1-800-424-8802, (DIRECT) 202-267-2675, (ONLINE) <http://www.nrc.uscg.mil>