



Homeland
Security



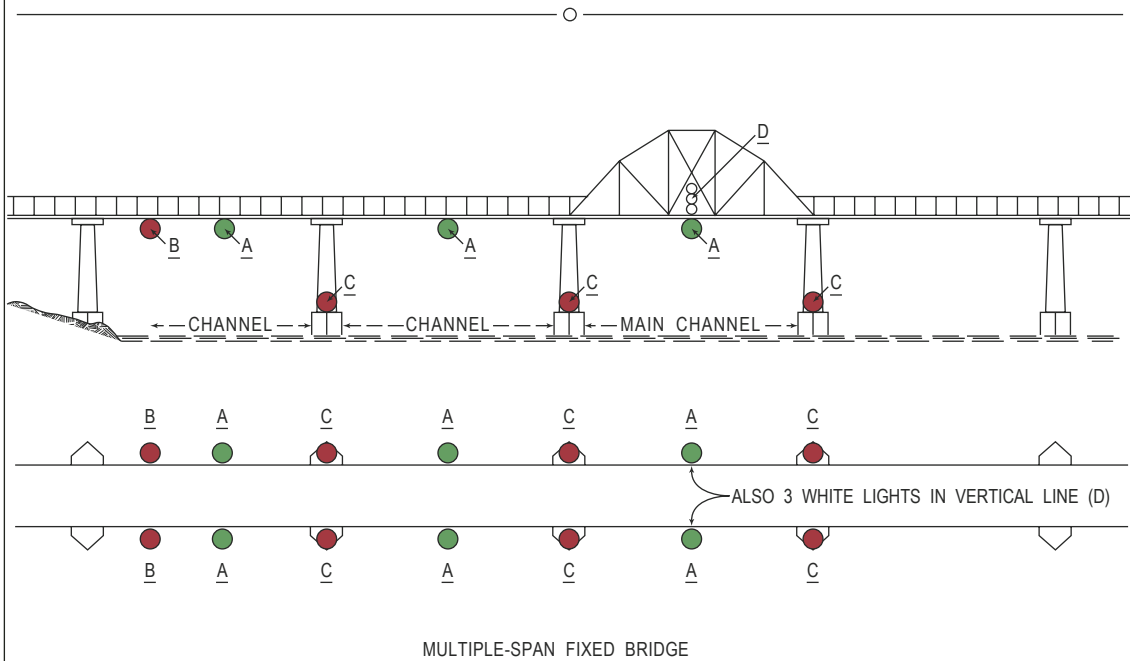
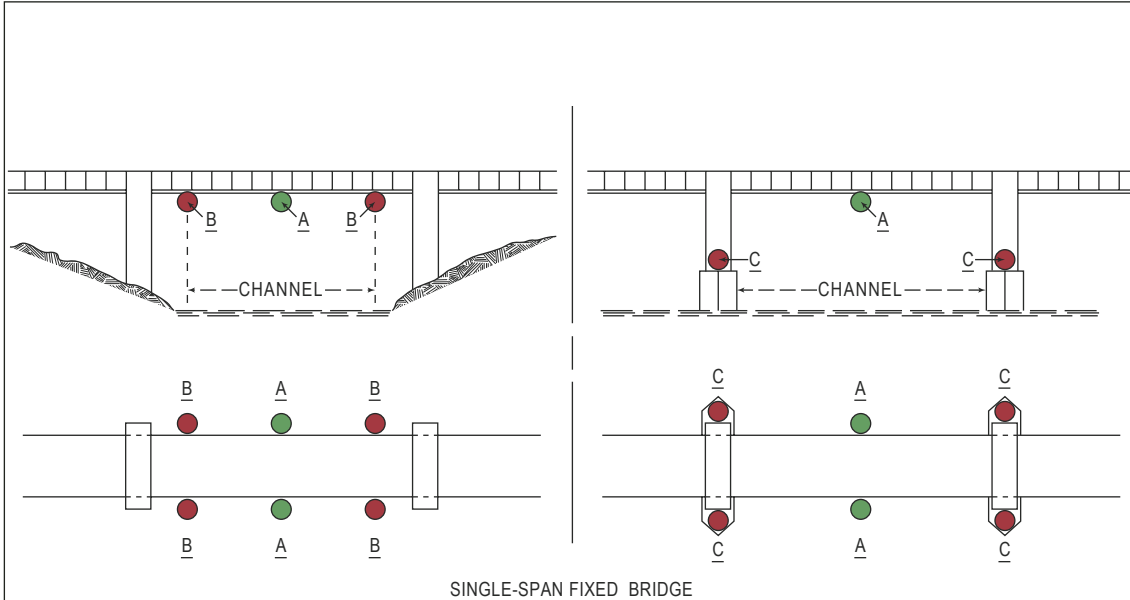
UNITED STATES COAST GUARD
OFFICE OF BRIDGE ADMINISTRATION




**BRIDGE LIGHTING
AND
OTHER SIGNALS**



DEPARTMENT OF HOMELAND SECURITY
 UNITED STATES COAST GUARD
 BRIDGE ADMINISTRATION DIVISION
 MINIMUM LIGHTING FOR FIXED BRIDGES
 33 CFR 118.65




LIGHT COLORS AND HORIZONTAL ARCS OF VISIBILITY

A  CHANNEL CENTER 360° GREEN (180° GREEN ON BRIDGES LIGHTED PRIOR TO JAN 1, 1947, UNTIL LIGHTS ARE REPAIRED OR REPLACED).

B  CHANNEL MARGIN 6180° RED

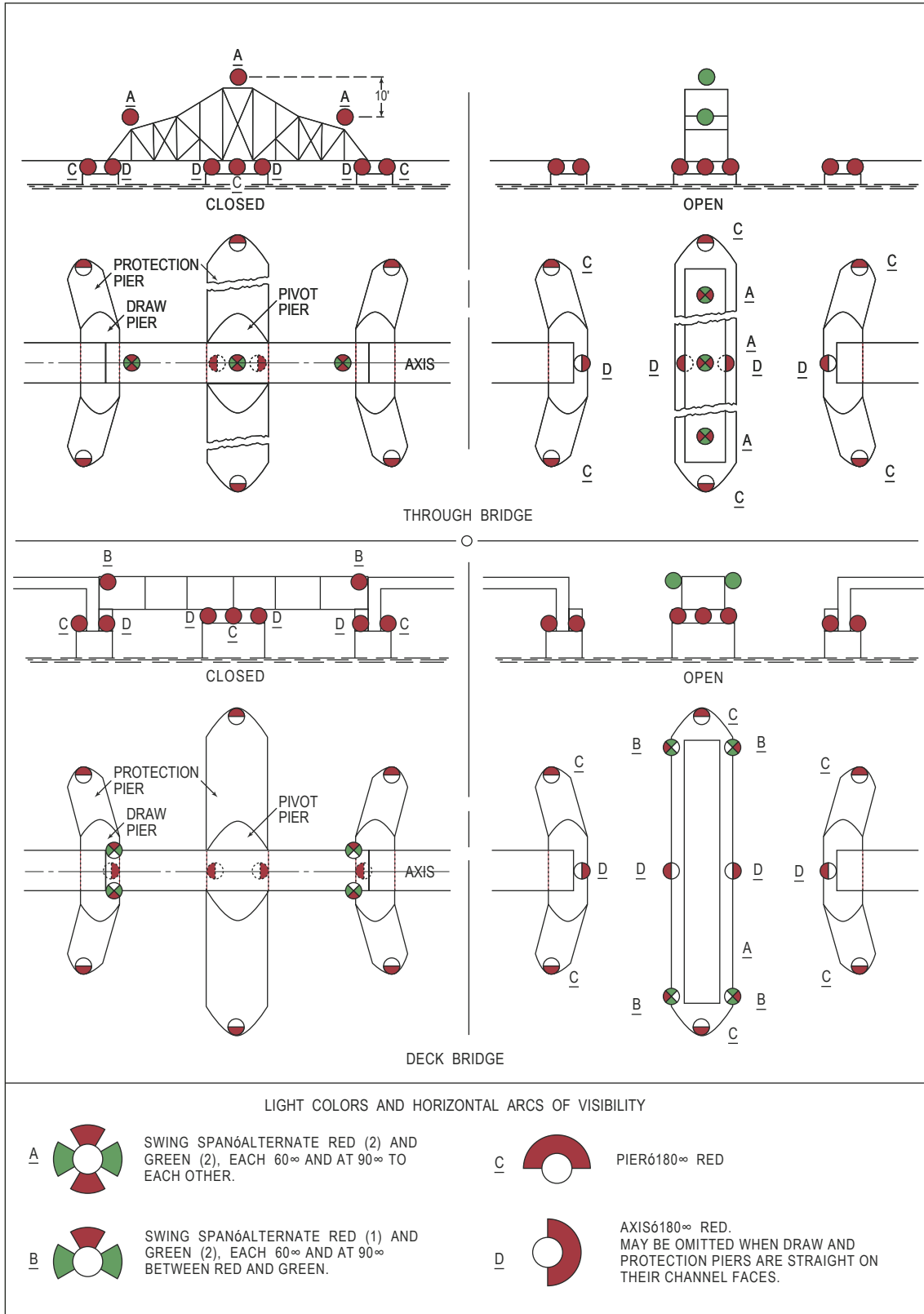
C  PIER 6180° RED

D  MAIN CHANNEL - 180° WHITE, 3 LIGHTS IN VERTICAL LINE (60° - 6180° ON BRIDGES LIGHTED PRIOR TO JAN. 1, 1953, UNTIL LIGHTS ARE REPAIRED OR REPLACED).



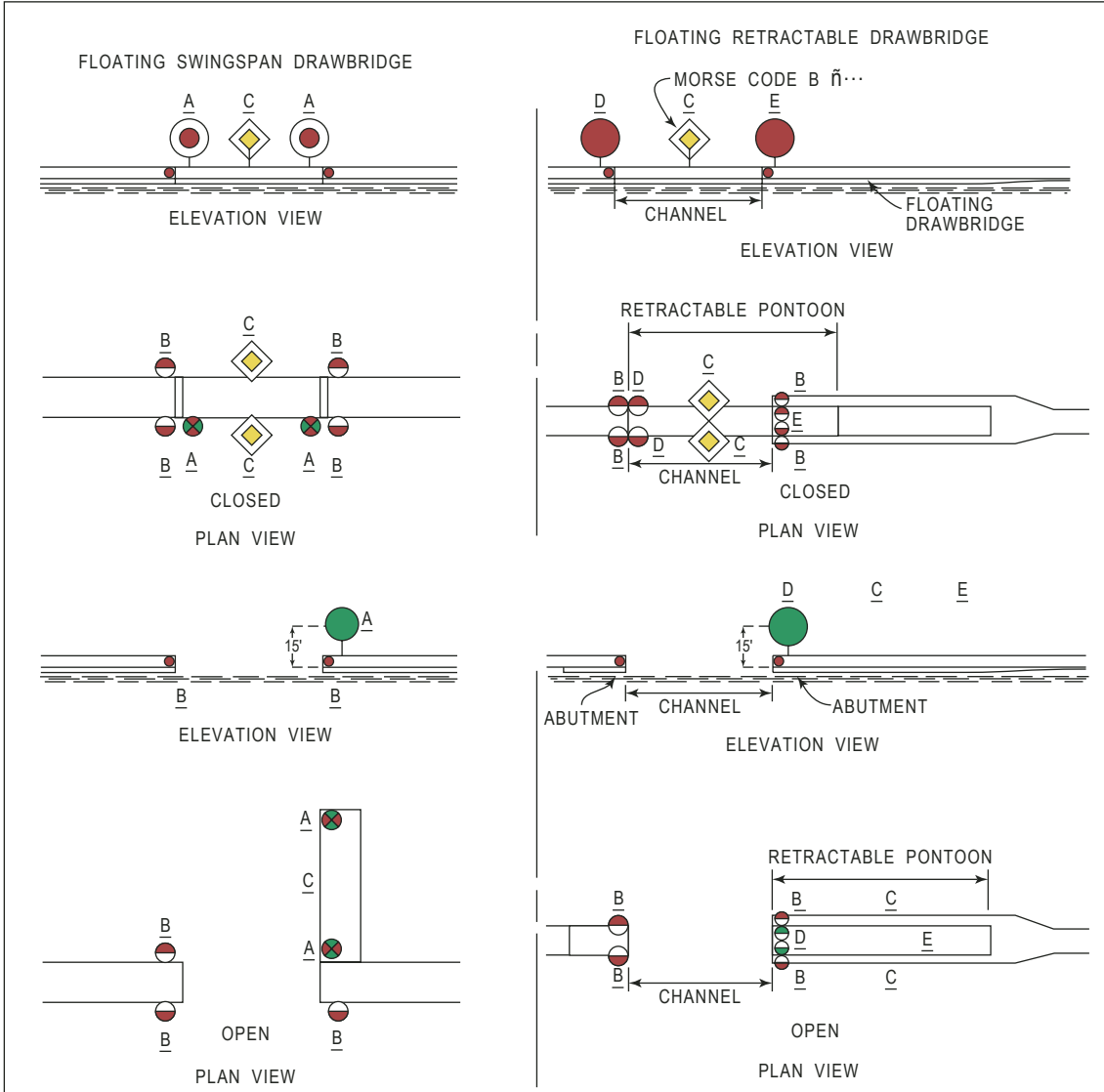
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 UNITED STATES COAST GUARD
 BRIDGE ADMINISTRATION DIVISION

MINIMUM LIGHTING FOR DOUBLE-OPENING SWING BRIDGES
 33 CFR 118.70










DEPARTMENT OF HOMELAND SECURITY
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 BRIDGE ADMINISTRATION DIVISION
 MINIMUM LIGHTING FOR SINGLE-OPENING DRAWBRIDGES
 33 CFR 118.75

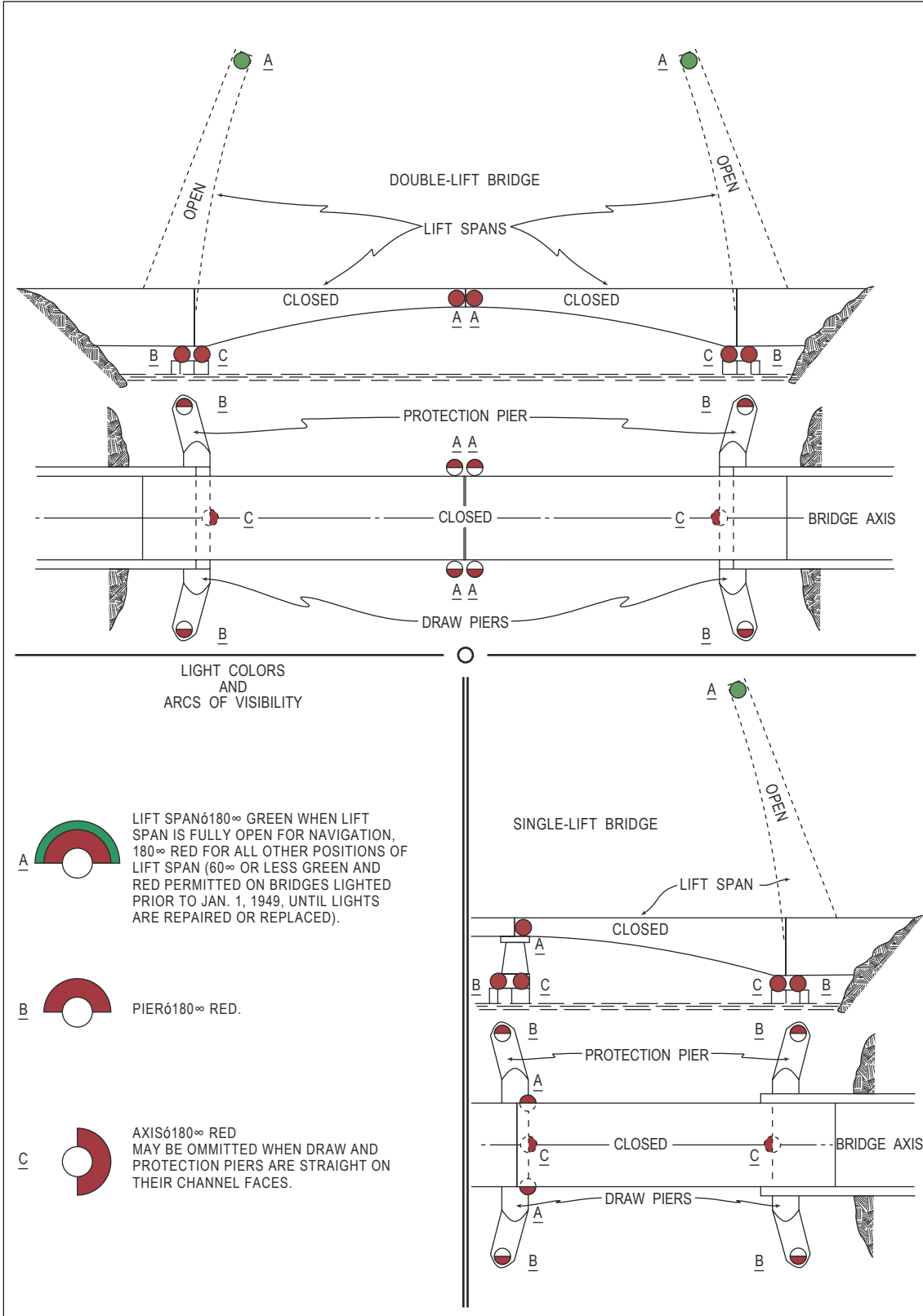


LIGHT COLORS AND HORIZONTAL ARCS OF VISIBILITY

- | | |
|--|---|
| <p>A </p> <p>DRAW SPAN
 δALTERNATE RED (2) AND GREEN (2), EACH 60° AND AT 90° TO EACH OTHER.</p> | <p>B </p> <p>PIER OR ABUTMENT
 δ180° RED</p> |
| <p>C </p> <p>AT CENTERLINE OF THE NAVIGATION CHANNEL DRAWSPAN OF FLOATING DRAWBRIDGES, DIAMOND IN SHAPE, YELLOW IN COLOR WITH HIGH INTENSITY RETROREFLECTIVE MATERIAL BORDER AND MAY EXHIBIT A MORSE CODE B YELLOW LIGHT. THE MARK SHALL NOT BE VISIBLE WHEN THE DRAWSPAN IS IN THE OPEN POSITION.
 (33 CFR 118.110(c)).</p> | <p>D </p> <p>RETRACTABLE PONTOON
 δDRAWSPAN CLOSED
 δ180° RED
 δDRAWSPAN OPEN
 δ180° GREEN</p> <p>E </p> <p>RETRACTABLE PONTOON
 δDRAWSPAN CLOSED
 δ180° RED
 δDRAWSPAN
 δLIGHT OFF</p> |

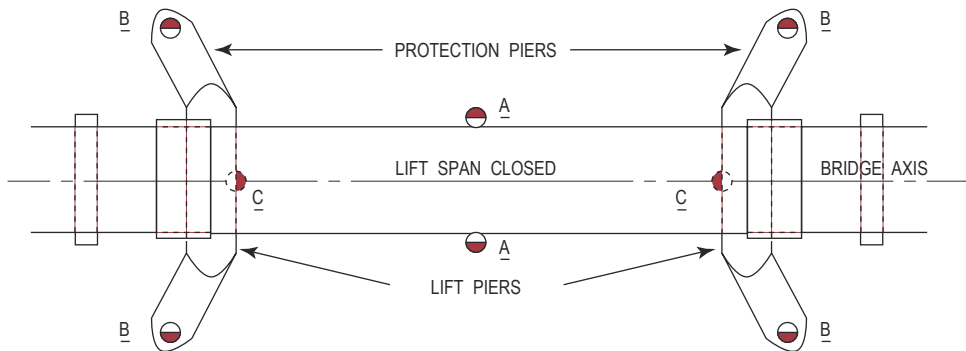
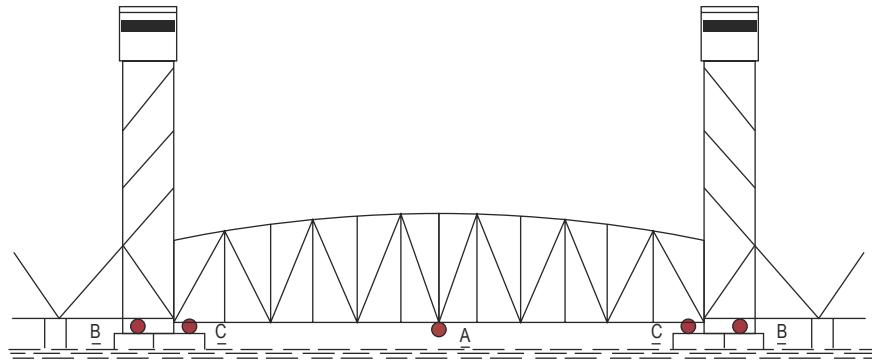
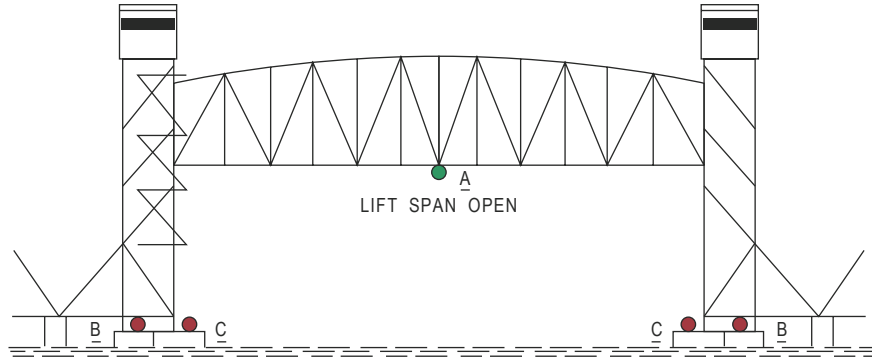


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 MINIMUM LIGHTING FOR BASCULE BRIDGES
 33 CFR 118.80





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 MINIMUM LIGHTING FOR VERTICAL LIFT BRIDGES
 33 CFR 118.85



LIGHT COLORS AND HORIZONTAL ARCS OF VISIBILITY



A LIFT SPAN 6360° GREEN WHEN LIFT SPAN FULLY OPEN FOR NAVIGATION, 180° RED FOR ALL OTHER POSITIONS OF LIFT SPAN (180° GREEN AND RED PERMITTED ON BRIDGES LIGHTED PRIOR TO JAN 1, 1949, UNTIL LIGHTS ARE REPAIRED OR REPLACED).

C



PIER 6180° RED

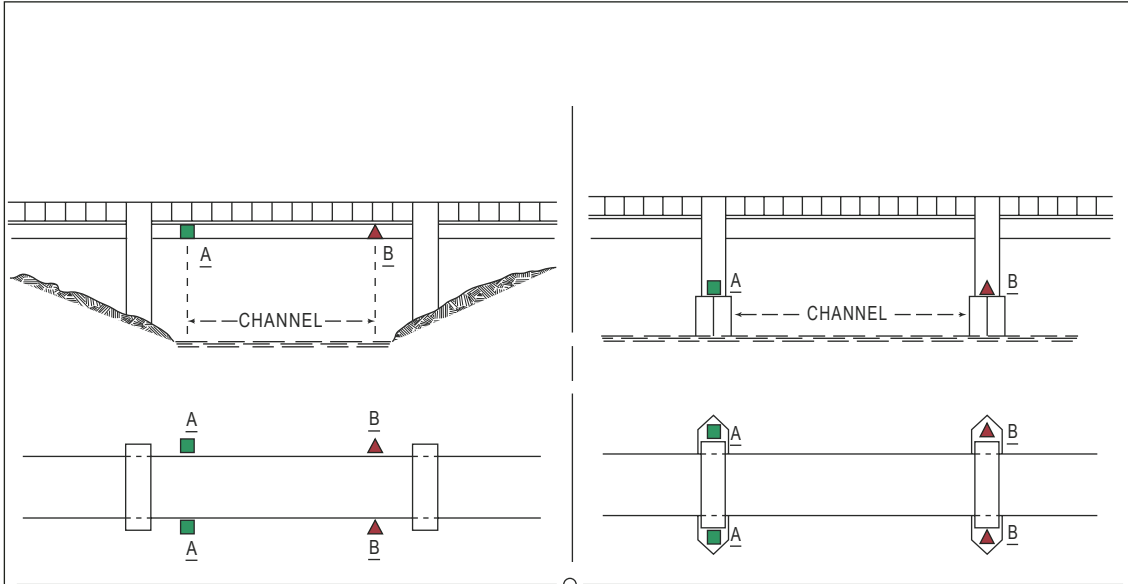
D



AXIS 6180° RED. MAY BE OMITTED WHEN LIFT AND PROTECTION PIERS ARE STRAIGHT ON THEIR CHANNEL FACES.



DEPARTMENT OF HOMELAND SECURITY
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RETROREFLECTIVE PANELS ON BRIDGE PIERS
33 CFR 118.100



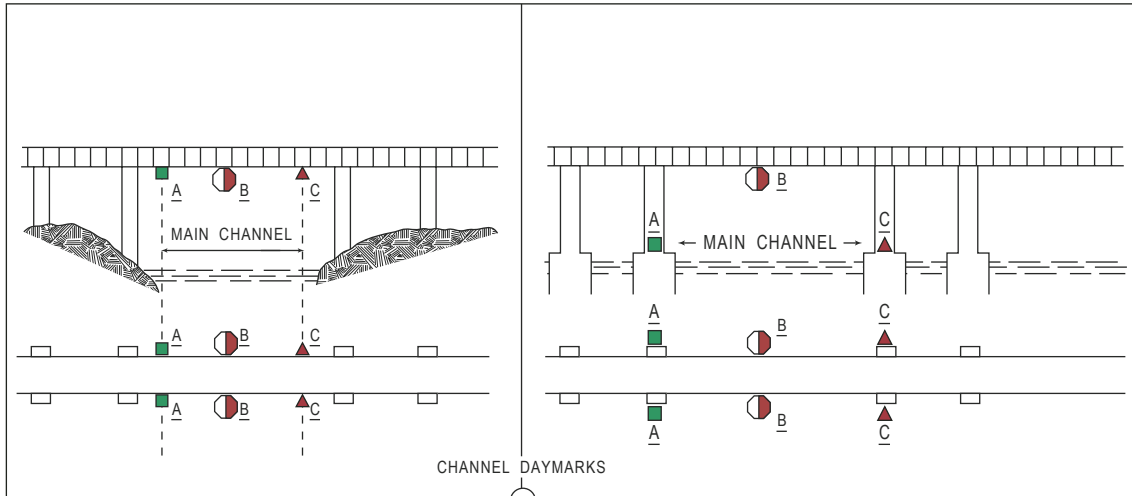
PANEL SIZE AND COLORS

- A GREEN SQUARE RETROREFLECTIVE PANELS SHALL BE USED. THE PANELS SHALL BE AT LEAST 36 SQUARE INCHES IN AREA TO PROVIDE A NOMINAL NIGHTIME VISIBILITY DISTANCE OF AT LEAST ONE-HALF MILE.
- B RED TRIANGULAR RETROREFLECTIVE PANELS SHALL BE USED. THE PANELS SHALL BE AT LEAST 36 SQUARE INCHES IN AREA TO PROVIDE A NOMINAL NIGHTIME VISIBILITY DISTANCE OF AT LEAST ONE-HALF MILE.

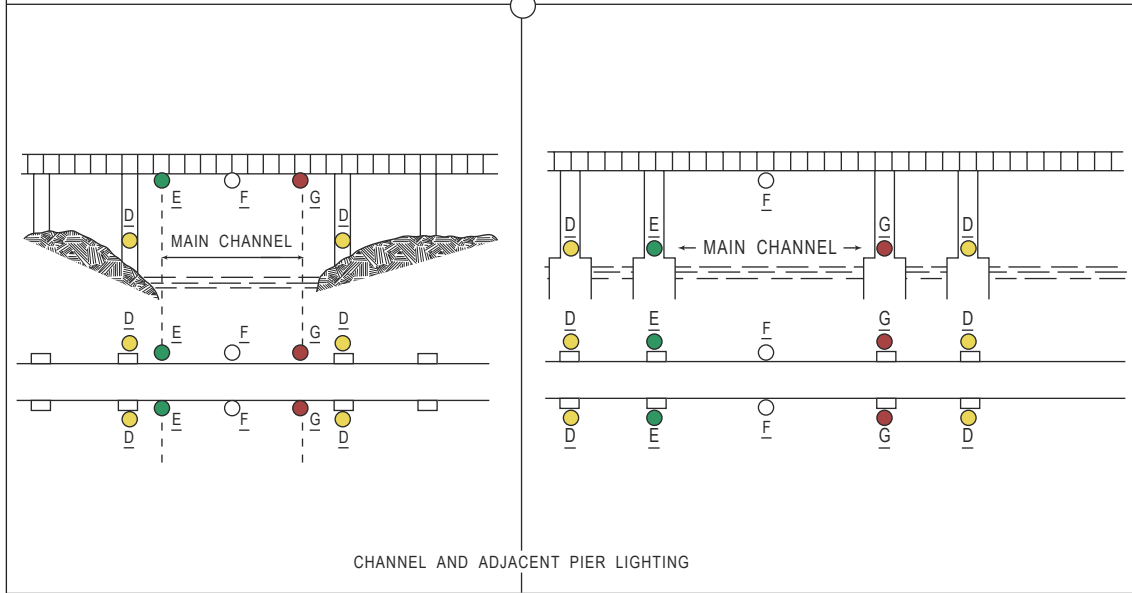
NOTE: RETROREFLECTIVE PANELS MAY ALSO BE REQUIRED OR AUTHORIZED AS A BACK UP FOR BRIDGE LIGHTING (SEE 33CFR 118.100(b)).



DEPARTMENT OF HOMELAND SECURITY
 UNITED STATES COAST GUARD
 BRIDGE ADMINISTRATION DIVISION
 DAYMARKS AND LATERAL LIGHTING ON BRIDGES
 33 CFR 118.110



CHANNEL DAYMARKS



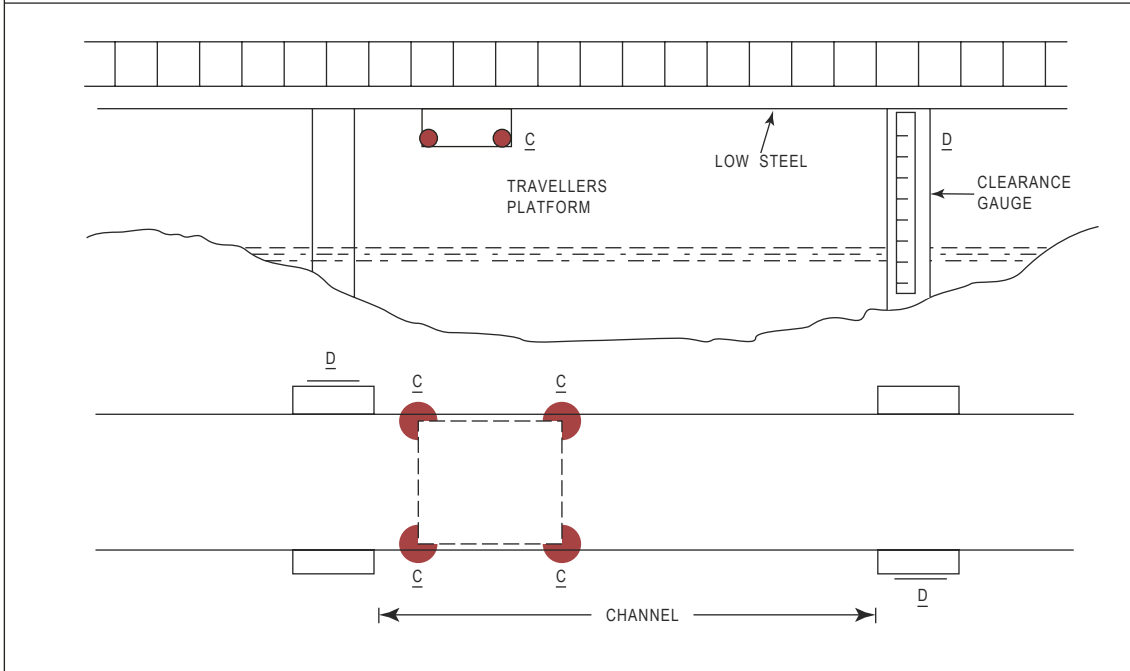
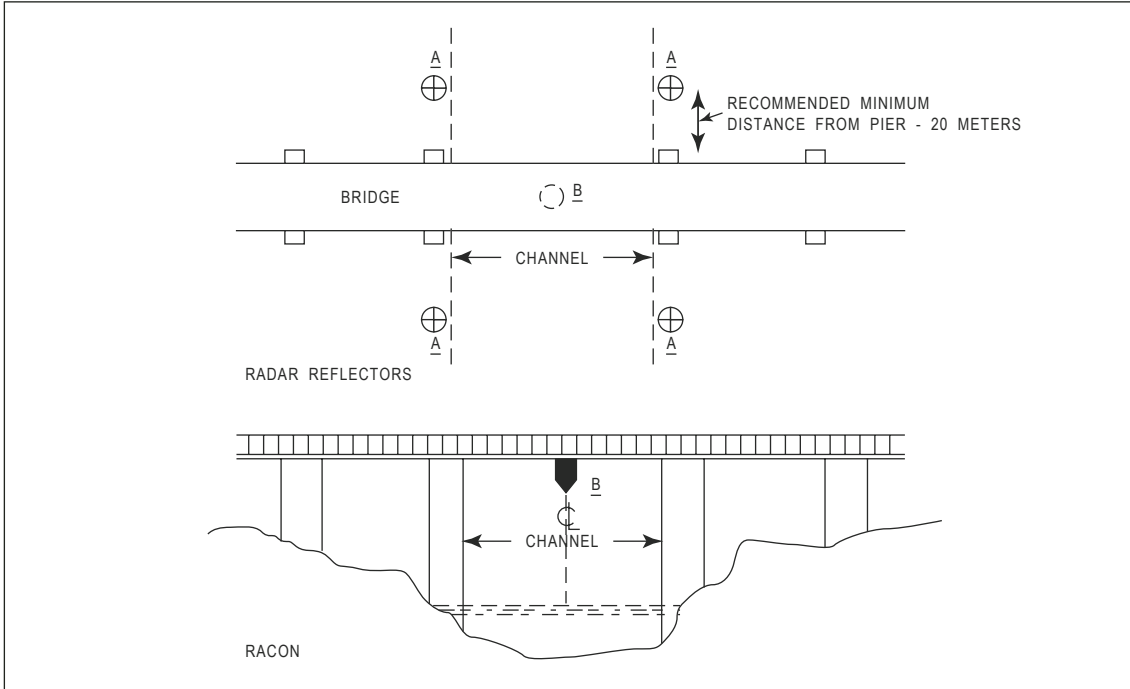
CHANNEL AND ADJACENT PIER LIGHTING

LIGHT AND PANEL COLORS AND HORIZONTAL ARCS OF VISIBILITY

- | | |
|---|--|
| <p><u>A</u> ■ CHANNEL MARGIN OR PIER GREEN SQUARE PANEL. MAY BE LIGHTED</p> <p><u>B</u> ◐ SAFE WATER MARK OCTAGONAL IN SHAPE AT CENTERLINE OF CHANNEL WITH RETROREFLECTIVE WHITE BORDER. MAY BE LIGHTED</p> <p><u>C</u> ▲ CHANNEL MARGIN OR PIER RED TRIANGULAR PANEL. MAY BE LIGHTED</p> <p><u>D</u> ● ADJACENT PIER FIXED YELLOW LIGHT ONLY</p> | <p><u>E</u> ◑ CHANNEL MARGIN OR PIER QUICK FLASHING, FLASHING, ISOPHASE OR OCCULTING GREEN LIGHT</p> <p><u>F</u> ◑ MAIN CHANNEL CENTERLINE OCCULTING WHITE LIGHT ONLY</p> <p><u>G</u> ◑ CHANNEL MARGIN OR PIER QUICK FLASHING, FLASHING, ISOPHASE OR OCCULTING RED LIGHT</p> |
|---|--|



DEPARTMENT OF HOMELAND SECURITY
 UNITED STATES COAST GUARD
 BRIDGE ADMINISTRATION DIVISION
 RADAR REFLECTORS AND RACONS 33 CFR 118.120
 TRAVELLER PLATFORMS 33 CFR 118.150
 CLEARANCE GAUGES 33 CFR 118.160

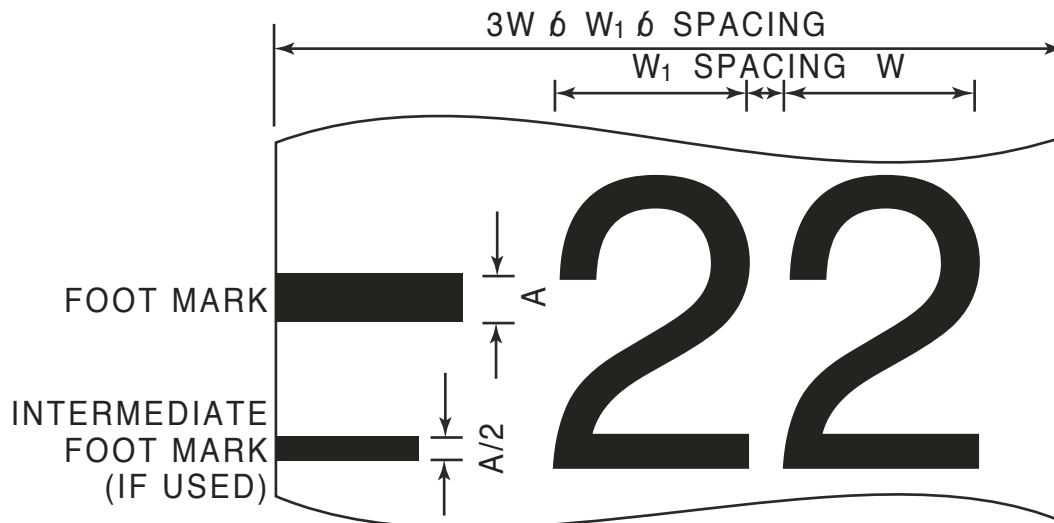
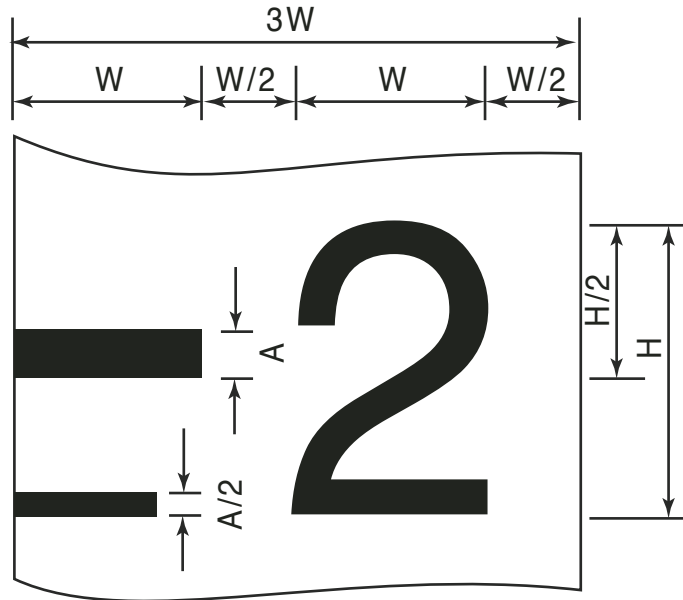


SIGNAL LOCATIONS, LIGHT COLORS AND HORIZONTAL ARCS OF VISIBILITY

- A ⊕ RADAR REFLECTOR (ON STAKES, BUOYS)
LOCATED AT THE EDGES OF A NAVIGATION CHANNEL
- B ⬇ RACON, LOCATED AT THE CENTERLINE OF A BRIDGE CHANNEL
- C ● QUICK FLASHING RED LIGHTS ON EACH LOWER CORNER
- D — GAUGE SCALED IN FEET FROM LOW STEEL. MUST COMPLY WITH 33 CFR 118.160, VERTICAL CLEARANCE GAUGES



DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
BRIDGE ADMINISTRATION DIVISION
STANDARD BRIDGE CLEARANCE GAUGE
33 CFR 118.160



LEGEND

NOTE: SIZE, TYPE AND SPACING OF NUMERALS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION "STANDARD ALPHABET FOR HIGHWAY SIGNS"

W WIDTH OF WIDEST SINGLE NUMERAL EXCLUDING NUMERAL 4

H HEIGHT OF NUMERAL PRESCRIBED FOR DISTANCE VISIBILITY

A WIDTH OF STROKE



DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD
BRIDGE ADMINISTRATION DIVISION
HEIGHT AND VERTICAL SPACING
FOR CLEARANCE GAUGE NUMERALS
33 CFR 118.160

