NOTES:

1. A bypass switch shall be installed to override each timing interval in case of a malfunction.

2. "STOP HERE ON RED" is omitted in Type I operation and "TRAFFIC SIGNALS" are omitted in Type II operation.

3. The time between beginning of flashing yellow on "Drawbridge Ahead" sign and the clearance of traffic signal to red, or beginning of flashing red should not be less than the travel time of a passenger car, from the sign location to the stop line, traveling at the 85 percentile approach speed.

4. Beginning of operation of drawbridge gates shall not be less than 15 seconds after steady red or 20 seconds after flashing red (actual time may be determined by the bridge tender).

5. Time of gate lowering and raising is dependent upon gate type.

6. Time of bridge opening is determined by the bridge tender.

7. Each gate shall be operated by a separate switch.

8. On each approach (Type II), all four red signals shall be on the same two circuit flashers, with the top two signals on one circuit, and the two bottom signals on the alternately flashing circuit.

9. A Drawbridge Ahead sign is required for both types of signal operation. However, a flashing beacon shall be added to the sign when physical conditions prevent a driver traveling at the 85% approach speed from having continuous view of at least one signal indication for approximately 10 seconds.

10. Requirements on gate installation are contained in Section 41 of the "Manual on Uniform Traffic Control Devices".

11. "In accordance with Traffic Engineering Manual (Traffic Number 750-000-005) Section 2, "Slippery When Wet" signs shall be placed in advance of all movable and nonmovable steel deck bridges." * Field conditions may require adjustment of this standard distance.

LEGEND:

1. TRAFFIC SIGNALS
2. DRAWBRIDGE SIGN
3. DRAWBRIDGE AHEAD SIGN
4. STOP HERE ON RED SIGN
5. ENTRANCE GATE
6. EXIT GATE
7. 24" THERMOPLASTIC STOP BAR
8. DRAWBRIDGE AHEAD SIGN
9. FLASHING BEACON
10. GROUNDED SUPPORT MOUNTED
11. MONOTUBE SUPPORT MOUNTED
12. MAST ARM MOUNTED
13. VARIABLE TIME

SEQUENCE CHART

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<th>SIGNAL SWITCH</th>
<th>FLASHER/BEACON</th>
<th>DRAWBRIDGE AHEAD SIGN</th>
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TIMING

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<td>(See Note 3)</td>
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Note: Operation during bridge preemption.
**Traffic Control Devices for Movable Span Bridge Signals**

**DESCRIPTION:**

- **REVISED INDEX 11/01/17**
- **REVIEW 03/32 PM**
- **LAST REVIEW 01/01/17**

**STANDARD PLANS**

**FY 2018-19**

**FIGURE - A**

**MONOTUBE SUPPORT MOUNTING**

- **Axial Wall Angle Holes**
- **Hex Bolt Nuts & Lock Washers**
- **1/4" Dia. Holes**
- **3/8" x 3" Hi-Tensile Steel Clamps**
- **1/2" x 3/4" x 3/4" Angle**
- **1/2" x 1/2" Slotted Holes In Sign Mounting Angle**
- **Pole Clamp With Wire Entrance**

**FIGURE - B**

**SIGN PANEL MOUNTING ASSEMBLY**

**FIGURE - C**

**STOP HERE ON RED**

- **12" Signal Head With Visor**
- **Sign No. H10-6**
- **Pole Mounting Bracket With Stainless Steel Bands**
- **12" Signal Head (12')**
- **Lens With Visor**
- **1/2" Nipple**
- **Pole Clamp With Wire Entrance**

**FIGURE - D**

**FIGURE - E**

**FIGURE - F**

**BRIDGE MOUNTING DETAILS NOT SHOWN**

- **Wire Entrance Pole Clamp With Grommet**
- **1" ID Rubber Grommet**
- **Pole Clamp With Wire Entrance**
- **Bridge Mounting Details Not Shown**

**FIGURE - G**

**DRAW BRIDGE AHEAD**

- **13" Signal Head With Visor**
- **Flasher Cabinet Location When Required**
- **Pole Mounting Details Not Shown**
- **4" O.D. Aluminum pedestal, 0.188 Wall Thickness, Alloy 6061-T6**
- **PVC Conduit Pull Box**
- **1" PVC Conduit**
- **Crushed Rock**
- **Not Shown**

*Measured from the bottom of the sign to the near edge of the pavement. Horizontal distance between edge of the pavement and inside edge of sign will vary with condition at job site.*
DESCRIPTION:

REVISED

STD

FY 2018-19

STANDARD PLANS

TRAFFIC CONTROL DEVICES FOR
MOVABLE SPAN BRIDGE SIGNALS

INDEX

508-T01

SHEET

3 of 3

1. 12 volt flashing red lights shall be mounted on gate arm and shall operate in the flashing mode only when gate arm is in the lower position or in the process of being lowered. The number of lights shall vary accordingly to length of the gate arm.

2. Alternating 16" pattern of fully reflectorized red and white stripes.