#### **FACT SHEET**

41703 Concord-Hopkinton, I-89 Bridge Painting 41706 Concord-Ashland, I-93 Bridge Painting

<u>Proposed work</u>: The Department proposes with low-bid contracts to paint state-owned steel beam bridges in Concord on I-89 and I-93. The work will meet environmental protection and lead-bearing paint removal regulations. All steel beams will be repainted.

<u>Site 1</u> is I-89 NB, SB over NH 13 (Clinton Street) at Exit 2. (photo 1, 2) Site 2 is Hoit Road over I-93 NB, SB at Exit 17. (photo 4, 5)

<u>Time Frame</u>: The projects are scheduled to advertise in Sept 2020; the work is anticipated during 2021 with completion by December 2021. Lane closures are limited to 8-10 weeks at each site.

<u>Traffic Impacts</u>: See *Traffic Control Supplemental Info sheets* (attached)

- The Contractor is required to work from a lane-closure work-zone.
- Site 1- There are no impacts to I-89 traffic.
- <u>Site 1</u>- NH 13 (Clinton St) will maintain two-way traffic (one lane each direction) on NH 13 at all times while providing a lane-closure work zone. NH 13 lane closures are restricted to <u>night</u> hours (8pm-6am) for 8-10 weeks during period April 1 thru December 1. Lanes to be cleared after each work shift.
- <u>Site 2</u> I-93 lane closures are restricted to <u>night</u> hours (9pm-6am) for 8-10 weeks during period Apr 1-Dec 1 (NB Sun pm thru Fri am; SB Mon pm thru Fri am). Maintain one lane traffic (min.).
- <u>Site 2</u> I-93 Close off ramps during the night closure of the low-speed lane at SB Exit 17E and NB Exit 17.
- <u>Site 2</u> Hoit Rd will maintain two WB lanes and one EB at all times while closing the EB right lane as a work zone 24/7 protected with concrete barrier.
- Site 2 Hoit Rd will reduce speed limit from 45 mph to 35 mph.
- Site 2 Add stop sign on SB Exit 17E Ramp at Hoit Road EB.

<u>Containment</u>: All lead-bearing paint chips, abrasive debris, and dust generated during paint removal operations will be contained and collected within air-tight, sealed enclosures to protect the environment, the public, and adjacent properties (photos 3, 6).

<u>Work Hours</u>: Work involving Interstate lane closures is required during <u>night</u> hours (I-89 8pm-6am; I-93 9pm-6am). Work involving noise on other spans is limited to daytime hours (7am-7pm).

<u>Painting</u>: All steel bridge beams will be blast cleaned and repainted with three coats of a non-lead, high-performance paint used on many NH bridges. The finish color will be dark brown. Contractors are pre-qualified and certified for large industrial and lead-containing paint removal projects. All work is subject to full-time Department quality assurance inspection and approval.













**41703** Bundle 3 / Site 1 / Bridge 1-2

Concord I-89 over Clinton St at Exit 2

(MM 2.10)









### Site 1 Bridge 1-2

3-span bridge:

at Exit 2

Br No 182/055 I-89 NB over NH 13, Clinton St Br No 181/055 I-89 SB over NH 13, Clinton St

I-89 Traffic: 23,533 NB/ 24,601 SB vpd (2019)

NH 13 Speed: 35 mph NH 13 Traffic: 6,067 EB/5,794 WB vpd (2019)

NH 13 Travel width 6-12-12-6 (3 lanes)

NH 13 Pavement width 48 ft

Sidewalk (span 1 & 3): 4 ft

Bridge width (o-o) NB, SB: 117'-10"

44 ft / 54 ft / 44 ft = 142 ft

#### Proposed Work

- -Use truck-mounted rapid deployment over NH 13 pavement (span 2) in lane-closure work zone.
- -Locate support vehicles on NH 13.
- -NH 13 clear lanes at the end of the work shift.
- -Spans 1- Use suspended platform (stays 24/7).
- -Spans 3- Use suspended platform (stays 24/7).

#### Traffic

- -I-89 No impact to traffic.
- -NH 13 maintain one lane each WB, EB traffic.
- -NH 13 maintain sidewalk opposite closure.

# NH 13 Lane closures:

-Lane closures are restricted to night hours (8 pm-6 am) during period April 1 to Dec 1.

#### Duration:

-Overall duration of lane closures: 6-8

#### 6-8 wks

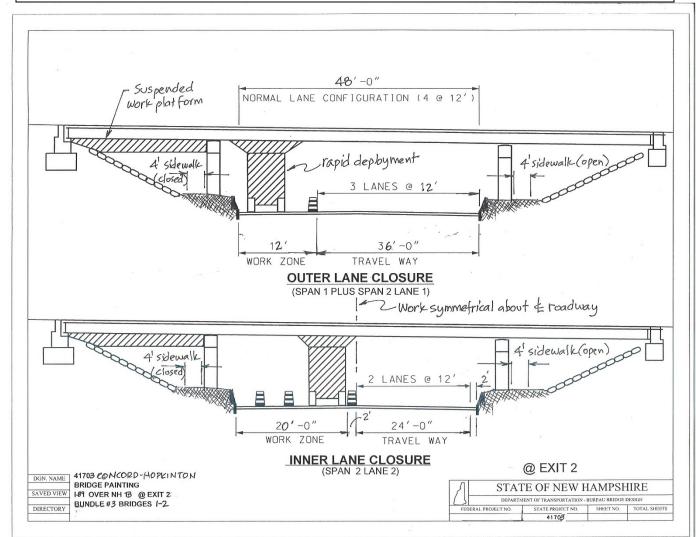
#### Channel traffic:

-Use drums, cones, flaggers, officers



(sample photo of proposed)

41703 Bundle 3 / Site 1 / Bridge 1-2 Concord I-89 over Clinton St at Exit 2 (MM 2.10)





(Similar work at I-93 Exit 23 Meredith (2020))

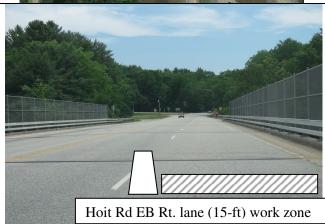
**41703** Bundle 3 / Site 1 / Bridge 1-2 Concord I-89 over Clinton St at Exit 2 (MM 2.10) East of bridges West of bridges

(MM 44.58)

**41706** Bundle 6 / Site 1 / Bridge 1 Concord Hoit Road over I-93 at Exit 17 Exit 17 D XTRAMART







Site 1 Bridge 1

at Exit 17

Hoit Road over I-93 NB, SB Br No 041/123 I-93 Traffic 24,248 NB / 24,447 SB vpd (2019) I-93 Speed / Hoit Rd: 65 mph / 45 mph Hoit Rd Traffic: 10,785 vpd (2019) Hoit Rd Travel width (four 12-ft lanes) = 48 ft Hoit Rd Shoulders: 5'-6" Hoit Rd Pavement width 59-ft Bridge width (out-to-out): 62.5 ft 5-span bridge: 35.5 / 60 / 60 / 60 / 35.5 = 251 ft

## Proposed Work

-Use truck-mounted rapid deployment over I-93 pavement (span 2, 4) in lane-closure work zone. -I-93 clear lanes at the end of the work shift.

- -Other spans- suspended platforms (stays 24/7)
- -Support units on overpass EB Rt. lane (24/7)
- -May locate support vehicles in SW infield (X)
- -May locate support vehicles in median (span 3) Traffic
- -I-93 maintain one lane traffic (min.)
- -Hoit Rd maintain two lanes WB and one EB.
- -Hoit Rd work zone reduce speed to 35mph

## I-93 lane closures:

- -I-93 NB, SB lane closures are restricted to night hours (9 pm-6 am) for 8-10 wks during period Apr 1-Dec 1:
- -NB Sunday pm thru Friday am;
- -SB Monday pm thru Friday am
- -Close off-ramps with closure of low-speed lane at SB Exit 17E & NB Exit 17. Detour to next exit.

## Channel traffic:

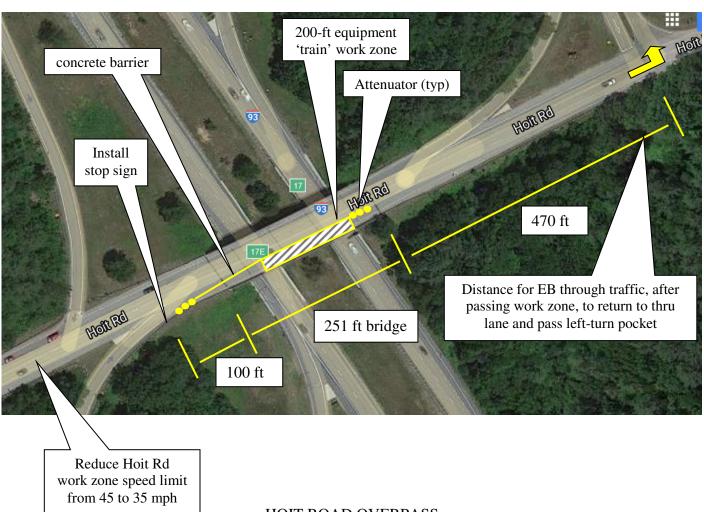
-Use drums, cones, flaggers, officers, attenuator -Concrete barrier for 24/7 Hoit Rd EB right lane closure with attenuator both ends -Add stop sign on SB Exit 17E Ramp at Hoit Rd EB



Rapid Deployment on Interstate-Support vehicles on overpass EB Rt. lane (24/7)



41706 Bundle 6 / Site 1 / Bridge 1 Concord Hoit Road over I-93 at Exit 17 (MM 44.58)



**HOIT ROAD OVERPASS**