| Inspector:                                      | Miller,Jason                                      |                                   | Structure Number                  |  | 1808192  |                        |  |  |  |
|---|---|-----------------------------------|-----------------------------------|--|--|------------------------|--|--|--|
| Inspection Date: 10/25/2023                     |   |                                   | Facility Carried:                 | S MA   | 1ARGINAL RD (CR7   |                        |  |  |  |
| Ohio Bridge Ins                                 |   | <u>CUY-(</u>                      | 00090-181                         | <u>5 (1808192)</u>   |  |                        |  |  |  |
| 2: DistrictDistr 16000 - CL<br>ict<br>12        | EVELAND (CUY                                      | ′ county)                         | 5A: Inventory Ro                  | oute 1   | 14708  |                        |  |  |  |
| 225 Routine Main A/B                            | 01 - State Highwa<br>04 - City or Munic<br>Agency |                                   | 7: Facility On<br>6: Feature Ints | S MARGIN<br>IR-90 (S. M  | AL RD (CR7<br>IARGINAL)                                      |                        |  |  |  |
|   | 01 - State Highwa                                 | ay Agency /                       | 9: Location                       | .38 E. OF J  | ICT. US-6  |                        |  |  |  |
| 220: Inv. Location DIST                         | RICT 12   |                                   | Lat, Lon                          | Lat, Lon 41.516135 ,-81.675466   |  |                        |  |  |  |
|   | Condition   |                                   | Structure Type                    |  |  |                        |  |  |  |
| 58: Deck  | 8 - Very Goo                                      | od Condition                      | 43: Bridge T                      | ype 4 - Ste  | eel continuous   |                        |  |  |  |
| 58.01 Wearing Surface                           | 7 - Good (1%                                      | 6 distress)                       |                                   | 02 - S   | tringer/Multi-be   | am or Girder           |  |  |  |
| 58.02 Joint                                     | 7- Good (no                                       | leaking)                          |                                   |  | t Applicable   |                        |  |  |  |
| 59: Superstructure                              | 7 - Good Co                                       |                                   | 45: Spans M                       | ain / Approa   | ich 4  | / 0                    |  |  |  |
| 59.01 Paint & PCS                               | 5 - Fair (10-1                                    |                                   | 107: Deck T                       | •  | 1 - Concrete C   |                        |  |  |  |
| 60: Substructure                                | 6 - Satisfact                                     | ory Condition                     | 408: Compo                        |  | Y - Composite  |                        |  |  |  |
| 61: Channel                                     | Ν   |                                   | 414A Joint T                      | • ·  | 8 - Elastomeri   | c Strip Seal           |  |  |  |
| 61.01 Scour                                     | N - Not App                                       |                                   | 414B: Joint                       |  | N - None   | Concrete               |  |  |  |
| 62: Culverts<br>67.01 GA                        | N - Not Appl                                      | licable                           | 108A: Weari                       | ng Surface   | 1 - Monolithic<br>(concurrently p<br>deck)<br>N- Not Applica | placed with structural |  |  |  |
|   |   |                                   | 422: WS Dat                       | e  | 10/01/2013   |                        |  |  |  |
|   | Appraisal   |                                   | 423: WS Thi                       |  | 1.0  |                        |  |  |  |
| Sufficiency Rating                              | 87.3  | SD/FO 2 - FO                      | 482: Protect                      |  | A - EEU  |                        |  |  |  |
| 36: Rail, Tr, Gd, Term Sto                      |   | 1 1<br>present desirable criteria | 483' PCS D                        | 483: PCS Date 10/01/1987   |  |                        |  |  |  |
| 72: Approach Alignment<br>113: Scour Critical   | 453: Bearing                                      | Type 1                            | 2 - Rockers &                     | Bolsters   |  |                        |  |  |  |
| 71: Waterway Adequacy                           | 455: Bearing                                      | Type 2                            | N - None                          |  |  |                        |  |  |  |
|   | N - Not Appli                                     |                                   | 528: Foundn                       | : Abut Fwd   |  | ace Reinforced         |  |  |  |
|   | Geometric   |                                   | ]<br>533: Foundr                  | · Abut Rear  |  | s (Other diameter)     |  |  |  |
| 48: Max Span Length (ft)                        |   | 68.0                              | 555. T bundin                     | . Abut Near  | Concrete Piles   | s (Other diameter)     |  |  |  |
| 49: Structure Length (ft)                       | N. 4 (f4)   | 230.0                             |                                   | 536: Foundn: Pier 1 2 - Cast-in-Place Reinforce<br>Concrete Piles (Other dian<br>539: Foundn: Pier 2 0 - Other |  |                        |  |  |  |
| 52: Deck Width, Out-To-C<br>424: Deck Area (sf) | Dut (ft)  | 31.0<br>7130                      | 539: Foundn                       |  |  |                        |  |  |  |
| 424. Deck Alea (SI)                             |   | 7130                              |                                   | Age  | and Service  | <u>}</u>               |  |  |  |
| 32: Appr Roadway Width                          | (ft)  | 24.0                              | 27: Year Bui                      | lt/ 106 Reha   | b 1959 .   | / 2012                 |  |  |  |
| 51: Road Width, Curb-Cu                         | rb (ft)   | 28.0                              | 42A: Service                      | On   | 1 - Highway  |                        |  |  |  |
| 50A: Curb/SW Width: Lef                         | t (ft)  | 0                                 | 42B: Service                      | Under  | 1 - Highway,<br>pedestrian                                   | , with or w/out        |  |  |  |
| 50A: Curb/SW Width: Rig                         | ht (ft)   | 0                                 | 28A: Lanes                        |  | 02   |                        |  |  |  |
| 34: Skew (deg)                                  |   | 7                                 | 28B: Lanes                        |  | 08   |                        |  |  |  |
| 33: Bridge Median                               |   | 0 - No median                     | 19: Bypass I                      | ength  | 2  |                        |  |  |  |
| 54B: Min Vert Underclear                        |   | 15.54                             | 29: ADT                           | (0()   | 978  |                        |  |  |  |
| 336A: Min Vert Clrnce IR                        | . ,   | 99                                | 109: % Truc                       | KS (%)   | 4  |                        |  |  |  |
| 336B: Min V Clr IR Non-C                        | Cardinal (ft)                                     | 0                                 |                                   | Insp   | pections   |                        |  |  |  |
| 578: Culvert Length (ft)                        |   | 0                                 |                                   |  | Months   |                        |  |  |  |
|   | Load Postin                                       | g                                 | 90: Routine                       | -  |  | 10/25/2023             |  |  |  |
| 41: Op/Post/Closed                              | 92A: FCM In                                       | -                                 | 0                                 |  |  |                        |  |  |  |
| 70: Posting 5 - Equal t                         | 92B: Dive In                                      | •                                 | 0                                 | 06/05/2012   |  |                        |  |  |  |
| 70.01: Date                                     |   |                                   | 92C: Specia                       | -  |  | 06/05/2012             |  |  |  |
| 70.02: Sign Type                                | 150   |                                   | 92D: UBIT Ir                      | -  | 0  |                        |  |  |  |
| 734: Percent Legal (%)                          | 92E: Drone Insp. N 0                              |                                   |                                   |  |  |                        |  |  |  |
| 704: Analysis Date                              | 07/01/2013  | n (IE) noting survey of a lit     |                                   | Miller,Jason   |  |                        |  |  |  |
|   |   | or (LF) rating reported by        | 1                                 |  |  |                        |  |  |  |

Inspector:

Miller,Jason

Structure Number:

Facility Carried:

1808192 S MARGINAL RD (CR7

Inspection Date: 63: Analysis Method 10/25/2023 rating factor (RF) method using MS18 loading.

| Inspector:       | Miller, Jason | Structure Number: | 1808192            |
|------------------|---------------|-------------------|--------------------|
| Inspection Date: | 10/25/2023    | Facility Carried: | S MARGINAL RD (CR7 |

|  | Environment  | Total<br>Quantity   | Units    | Condition<br>State 1 | Condition<br>State 2 | Condition<br>State 3 | Condition<br>State 4 |  |  |
|--|--|---------------------|----------|----------------------|----------------------|----------------------|----------------------|--|--|
| 12-Reinforced Concrete Deck                  | 3 - Mod.   | 7130                | sq. ft.  | 6880                 | 250                  | 0                    | 0                    |  |  |
|  | CS2 - A few tra  | nsverse cra         | icks.    |                      |                      |                      |                      |  |  |
| 805-Wearing Surface - Monolithic<br>Concrete |  | 5520                | sq. ft.  | 5420                 | 100                  | 0                    | 0                    |  |  |
|  | CS2 - Area of s<br>propagating fro   |                     |          |                      | ane. Transve         | erse cracks, r       | nany                 |  |  |
| 107-Steel Open Girder/Beam                   | 3 - Mod.   | 904                 | ft.      | 800                  | 79                   | 25                   | 0                    |  |  |
|  | CS2 - Surface r  | rust.               |          |                      |                      |                      |                      |  |  |
|  | CS3 - Areas of   | pack rust &         | sheetin  | g to lower fla       | anges & a fev        | v beam ends          |                      |  |  |
| 515-Steel Protective Coating                 |  | 8280                | sq. ft.  | 0                    | 7205                 | 1000                 | 75                   |  |  |
|  | CS2 - Chalking<br>CS3 - Areas of<br>flanges.<br>CS4 - A few are  | blistered &         | bubbling | g coats. Crac        | 0                    |                      | lower                |  |  |
| 205-Reinforced Concrete Column               | 3 - Mod.   | 9                   | each     | 8                    | 1                    | 0                    | 0                    |  |  |
|  | Collision damage to westbound median wall encasing P2 columns. P2C3 exposed to traffic.<br>CS2 - Collision scrapes to P1C1.  |                     |          |                      |                      |                      |                      |  |  |
| 521-Concrete Protective Coating              |  | 966                 | sq. ft.  | 950                  | 0                    | 0                    | 16                   |  |  |
|  | CS4 - PCS is in  | effective.          |          |                      |                      |                      |                      |  |  |
| 215-Reinforced Concrete<br>Abutment          | 3 - Mod.   | 63                  | ft.      | 51                   | 5                    | 7                    | 0                    |  |  |
|  | CS2 - A few, m<br>CS3 - Wide hor   |                     |          |                      |                      | w rebar.             |                      |  |  |
| 521-Concrete Protective Coating              |  | 252                 | sq. ft.  | 240                  | 0                    | 0                    | 12                   |  |  |
|  | CS4 - PCS is ineffective.  |                     |          |                      |                      |                      |                      |  |  |
| 234-Reinforced Concrete Pier Cap             | 3 - Mod.   | 107                 | ft.      | 84                   | 15                   | 7                    | 1                    |  |  |
|  | <ul> <li>CS2 - A few cracks. A few shallow spalls. Delams to forward face of P1, a face of P2 and forward face of P3.</li> <li>CS3 - Spalls with exposed rebar to rear face of P2 below bays 1 &amp; 2. Spatexposed rebar to bottom edge of P3.</li> <li>CS4 - Spall with 360° exposed rebar to rear face of P2, below left fascia.</li> </ul> |                     |          |                      | all with             |                      |                      |  |  |
|  | CS4 - Spall with   | · · ·               |          |                      | ,                    | 1                    | 1                    |  |  |
| 521-Concrete Protective Coating              | CS4 - PCS is in  | 1107<br>neffective. | sq. ft.  | 1084                 | 0                    | 0                    | 23                   |  |  |
| 300-Strip Seal Expansion Joint               | 3 - Mod.   | 48                  | ft.      | 12                   | 36                   | 0                    | 0                    |  |  |
|  | CS2 - Some su  |                     | Areas of |                      | debris in join       | ts.                  | 1                    |  |  |
| 311-Movable Bearing                          | 3 - Mod.   | 16                  | each     | 13                   | 3                    | 0                    | 0                    |  |  |
|  | CS2 - Initiated  | surface rust        | to a fev | v pier bearing       | gs.                  |                      |                      |  |  |

| Inspector: M        | liller,Jason | Structure Number: | 1808192            |
|---------------------|--------------|-------------------|--------------------|
| Inspection Date: 10 | 0/25/2023    | Facility Carried: | S MARGINAL RD (CR7 |

|   | Environment                         | Total<br>Quantity | Units    | Condition<br>State 1 | Condition<br>State 2 | Condition<br>State 3 | Condition<br>State 4 |  |
|---|-------------------------------------|-------------------|----------|----------------------|----------------------|----------------------|----------------------|--|
| 313-Fixed Bearing                         | 3 - Mod.                            | 4                 | each     | 4                    | 0                    | 0                    | 0                    |  |
|   | Fixed at P2.                        |                   |          |                      |                      |                      |                      |  |
| 321-Reinforced Concrete<br>Approach Slab  | 3 - Mod.                            | 720               | sq. ft.  | 520                  | 50                   | 150                  | 0                    |  |
|   | CS2 - A few cra                     | icks.             |          |                      |                      |                      |                      |  |
|   | CS3 - Wide tran<br>mostly to forwar |                   | ck along | header at fo         | prward & real        | r. Longitudina       | l cracks,            |  |
| 331-Reinforced Concrete Bridge<br>Railing | 3 - Mod.                            | 460               | ft.      | 360                  | 100                  | 0                    | 0                    |  |
|   | CS2 - Vertical onear forward.       | racks, som        | e leachi | ng. Some sc          | aling & small        | pop outs to          | right railing        |  |
| 521-Concrete Protective Coating           |                                     | 3680              | sq. ft.  | 1840                 | 0                    | 0                    | 1840                 |  |
|   | CS4 - PCS is in                     | effective.        |          |                      |                      |                      |                      |  |
| 815-Drainage                              | 3 - Mod.                            | 2                 | each     | 2                    | 0                    | 0                    | 0                    |  |
| 830-Abutment Backwall                     | 3 - Mod.                            | 63                | ft.      | 60                   | 3                    | 0                    | 0                    |  |
|   | CS2 - A few ver                     | rtical cracks     |          | -                    |                      | -                    | -                    |  |
| 521-Concrete Protective Coating           |                                     | 315               | sq. ft.  | 0                    | 0                    | 0                    | 315                  |  |
|   | CS4 - PCS is ineffective.           |                   |          |                      |                      |                      |                      |  |

| Inspe          | ctor:                            | Miller,Ja    | son               |                    | Stru       | icture Nu    | mber:                           | 1808192    |                     |                        |
|----------------|----------------------------------|--------------|-------------------|--------------------|------------|--------------|---------------------------------|------------|---------------------|------------------------|
| Inspe          | ction Date:                      | 10/25/2      | 023               |                    | Faci       | ility Carrie | ed:                             | S MARGINAL | RD (CR7             |                        |
| ODOT District: | District 12                      |              | C                 | CUY-00090-         | 1815       | _(1808       | 192)                            |            | Date Built:         | 07/01/1959             |
| Major Maint:   | 01 - State Highway A             | gency        | Facility Carried: | S MARGINAL RD (CF  | R7         | Traffic On:  | 1 - Highway                     |            | Rehab Date:         | 07/01/2012             |
| Routine Maint: | 04 - City or Municipal<br>Agency | Highway      | Feature Inters:   | IR-90 (S. MARGINAL | .)         |              | 1 - Highway, with<br>pedestrian | h or w/out | Insp. 01<br>Resp A: | - State Highway Agency |
| FIPS Code:     | 16000 - CLEVELAND                | (CUY county) | 1                 | Location: DISTRICT | Г 12       |              | F JCT. US-6                     |            | Insp<br>Resp B:     |                        |
|                | Inspec                           | tor Mille    | er,Jason          | Inspection Date    | 10/25/2023 | I            | Reviewer Seif, Yo               | bussef     |                     |                        |
|                |                                  |              |                   |                    |            |              |                                 |            |                     |                        |

## Inspector Comments - Deck and Approach

### Deck

### Approach

#### Signs

No bridge end markers.

# **Inspector Comments - General Appraisal**

#### Superstructure

#### **Diaphragm/X-Frames**

Some surface rusting.

### Fatigue

Welded cover plates at piers. 1" by 3/4" steel bar welded to bottom of the lower flange of right fascia near both abutments.

#### Utilities

Disconnected & misaligned conduit at abutments.

#### Substructure

#### **Slope Protection**

Cracks. 33" of undermining at top of forward embankment under bay 4.

#### <u>Culvert</u>

# **Inspector Comments - Waterway**

## Waterway Adequacy

#### <u>Channel</u>

Inspector:

Miller,Jason 10/25/2023 Structure Number: Facility Carried: 1808192 S MARGINAL RD (CR7

Scour Critical