ROUTINE AND FRACTURE CRITICAL

BRIDGE INSPECTION REPORT

Maine DOT CONTRACT NO. 20111208000000002637

BRIDGE # 2019-ANDROSCOGGIN RIVER BRIDGE
NORTH MAIN STREET OVER ANDROSCOGGIN RIVER
PERU, OXFORD COUNTY
MAINE DOT REGION 3 (WESTERN)

Start Date of Inspection: 08/09/2012
Finish Date of Inspection: 08/14/2012

Prepared For
Maine Department of Transportation
Bridge Maintenance Division

MaineDOT

Prepared By:

PARSONS BRINCKERHOFF

Parsons Brinckerhoff, Inc.
650 Elm Street
Manchester, NH 03101

Table of Contents

LOCATION MAP

(Located: Peru, Maine)

Bridge # 2019 – N. Main Street
Peru, Maine – Oxford County

PERU, OXFORD COUNTY, MAINE

I. Executive Summary

The focus of this report is the presentation of the routine and fracture critical inspection findings for Maine DOT Bridge No. 2019 (Androscoggin River Bridge) carrying North Main over the Androscoggin River in Peru, Oxford County, Maine.

The bridge was inspected on August 9th, 10th, 13th and 14th, 2012. No underwater inspection was performed. The routine inspection included examination of the gusset plates to determine any section loss and check the straightness of plates. Since the gusset plate thicknesses and plate dimensions for Bridge No. 2019 were not included in the original construction and/or shop drawings made available by Maine DOT, detailed field measurements of the gusset plates were required to be collected as part of the inspection.

A. Significant Findings

1. The transverse construction joint above FB7 in Span 3 has minor spalling of the edges of the joint for the full width of the northbound lane (Photo 5). Above FB4 in Span 3 the transverse construction joint has a one foot square spall patched with bituminous material along the west curb (Photo 6). Above FB1 in Span 3 the transverse construction joint has three small spalls patched with bituminous material (Photo 7).

   Recommendation: Perform spall repairs to the monolithic concrete wearing surface at the three transverse construction joint locations in Span 3.

2. The underside of deck has numerous spalls with exposed reinforcing which are typically concentrated along the inboard edges of S3 and S6 (Photos 16 & 18). Additional spalls in all stringer bays are present along the floorbeam haunch zones, especially over the end floorbeams (Photos 10 & 19).

   Recommendation: Perform concrete spall repairs to the underside of deck to remove and replace unsound concrete.

3. There is no deck joint at the south abutment and the end of the bridge deck has been removed and replaced with bituminous pavement. The bituminous pavement patch is deteriorated and settled in large areas with extensive successive patches placed, resulting in a rough riding surface over the 6-8 foot length approaching the end of the concrete bridge deck (Photo 26). Transverse cracks with heavy efflorescence were observed in the underside of deck above FB8 in Span 3 in all bays between S3 and S6 (Photo 20).

   Recommendation: Perform full depth deck replacement over a five foot length of the deck at the south abutment. Reconstruct the bituminous approach pavement over a length of 10 feet at the south end of the bridge by removing and replacing the pavement full-depth to restore a smooth transition onto the bridge deck.

4. There are substandard steel bridge traffic railings connected to the inner faces of the truss verticals and diagonals along the roadway truss line (Photos 3 & 4). The

traffic railings have impact damage at several locations, damaged or missing bolts at several locations, and are generally in poor condition with missing paint and active corrosion throughout. The steel bar lattice bicycle/pedestrian railing at the outboard edge of the sidewalk is also substandard (Photos 3 & 4).

Recommendation: Replace the steel bridge and sidewalk bicycle/pedestrian railings with new railings which meet current safety standards and criteria.

5. The east sidewalk curb face has a wide horizontal crack at the south end of Span 3 which extends along mid-height of the curb for nearly half of the length of the span (Photo 24). The east sidewalk curb face in Span 2 has a long spall with exposed reinforcing extending from L4 to L6 (Photo 25). The east sidewalk curb face has a wide horizontal crack in Span 2 which extends the full length of the panel between L6 and L7 along mid-height of the curb (Photo 9). The west curb has a 2 foot long severe spall with exposed reinforcing next to the south abutment. There are small spalls with exposed reinforcing in the west curb at both sides of the Pier 2 deck joint. There are small spalls with exposed reinforcing in both curb at both sides of the Pier 1 deck joint.

   Recommendation: Perform spall repairs to the east curb at the south end of Span 3, in Span 2 between L4 to L7. Perform spall repair to the west curb at the south abutment and to both curbs within 3 feet either side of the Pier 1 and 2 deck joints.

6. The sidewalk sliding plate joint at Pier 2 projects upward ¾ to one inch at the plate corner, creating a tripping hazard (Photo 28). A similar condition was observed at the Pier 1 sidewalk sliding plate joint.

   Recommendation: Replace the sidewalk sliding plate joints at Pier 1 and 2.

7. The Span 3 L1-L2 sidewalk truss has up to 8 inch deep debris accumulations between the side channels on the top of the L1 lower tie plate (Photo 31). The Span 3 sidewalk truss at L2 has 9-12 inch deep debris accumulations between the side channels on the lower lateral connection plate (Photo 32). Similar heavy debris accumulations were observed at L6 and L7 in Span 3 with 12 inch and 8 inch depths, respectively.

   Recommendation: High pressure wash the below-deck portions of the sidewalk truss focusing on the lower chord panel points to remove the heavy debris accumulations. High pressure wash the sidewalk truss lower lateral connection plates and the bridge seats to remove the moisture-laden debris deposits.

8. At L5 in the Span 1 roadway truss the vertical U5-L5 has sustained impact damage at the railing level with localized twisting of the member over a three foot length and a permanent bend in the flange tip (Photo 42). At L3 in the Span 3 sidewalk truss the vertical U3-L3 has sustained impact damage over a ten foot height of the west flange at sidewalk level with up to 3 inches of lateral displacement in the longitudinal direction and up to 1 1/2 inches of lateral displacement in the transverse direction (Photo 43). At L6 in the Span 1 roadway truss the vertical U6-L6 has sustained impact damage and a permanent bend in the flange tip (Photo 45). At L2 in the Span 2 roadway truss the vertical U2-L2 has sustained

impact damage and a permanent bend in the flange tip of 1 ½ inches over a length of two feet (Photo 46).

Recommendation: Since the truss verticals experience load reversal and are required to carry compressive dead loads and compressive live loads under certain live loading conditions, the impact damage could decrease the capacity of the member by reducing the compression buckling resistance to a level at which this mode of failure would govern compared to strength. The capacity of these members will be evaluated as part of the load rating to determine the need for repairs.

9. Impact damage to the Span 2 roadway truss L5-U6 diagonal has resulted in a notch in the flange tip which is approximately 2 inches deep (Photo 44). The damage at this location has been considered as section loss since the member is a tension diagonal. Impact damage to the Span 3 sidewalk truss U3-L4 diagonal has resulted in a notch in the flange tip which is approximately 1 inch deep.

   Recommendation: Depending on the results from the load rating analyses, consider adding web plates to these two diagonals to restore the section loss due to the impact damage notches. In any case, notches in FCM tension members are significant FSD's. Hence, the notches should be removed and all sharp edges should be ground smooth.

10. Field-welded plates have been added to the inboard flanges of many of the verticals just below the existing lower transverse sway frame members to cover open holes of the original sway frame connections (Photo 47). These welded plates are FSD's in FCM's which occur in numerous verticals in both truss lines in all 3 spans. A small tack weld was identified in the Span 3 roadway truss at L1 between the lower chord and vertical at a fill plate interface.

    Recommendation: Re-inspect all field weld locations in the vertical FCM's during future biennial bridge inspection cycles. Check for any indications of fatigue cracking initiation as part of the regularly scheduled bridge inspection cycles.

11. Impact damage to the sway frame lower transverse member along with lateral displacement of 6 inches in the horizontal plane was observed at Span 3 U3 (Photo 54). This sway frame also has a slight bend in the sway frame diagonal. Impact damage to the sway frame lower transverse member along with twisting and local vertical bends in the edges of the horizontal legs of the angle over both the northbound and southbound lanes was observed at Span 3 U4 (Photo 55). Impact damage to the sway frame lower transverse member along with lateral displacement in the horizontal plane of more than 3 inches was observed at Span 3 U6 (Photo 56). This sway frame also has a slight bend in the sway frame diagonal. Other locations of sway frame lower transverse member impact damage were observed, such as at Span 1 U2 over the southbound lane (Photo 57).

    Recommendation: Replace the sway frames at the four specified locations. Following completion of the sway frame replacement, the proper alignment and overall geometry of the affected panel points should be verified.

12. The lower lateral bracing angle in Span 2 connecting the FB1 sidewalk truss and FB2 roadway truss is displaced laterally in the horizontal plane by 4 inches (Photo 50). The lower lateral bracing angle in Span 2 connecting FB4 sidewalk truss and FB5 roadway truss is displaced laterally in the horizontal plane by 6 inches (Photo 59). The lower lateral bracing angle in Span 3 connecting the FB1 sidewalk truss and FB2 roadway truss is displaced laterally in the horizontal plane by 6 inches. The lower lateral bracing angle in Span 3 connecting the FB2 sidewalk truss and FB3 roadway truss is displaced laterally in the horizontal plane by 4 inches. The lower lateral bracing angle in Span 3 connecting the FB3 sidewalk truss and FB4 roadway truss is displaced laterally in the horizontal plane by 9 inches (Photo 60). Vertical displacement of approximately six inches was observed in the lower lateral bracing angle in Span 3 connecting the FB5 sidewalk truss and FB6 roadway truss.

    Recommendation: Replace the lower lateral bracing angle at the six specified locations. Following completion of the lower lateral bracing angle replacement, the proper alignment and overall geometry of the affected panel points should be verified.

13. The Span 1 roadway truss expansion bearing at Pier 1 has debris accumulations filling the slot for the southwest anchor bolt, inhibiting free thermal movements (Photo 61)**.** The south abutment expansion bearings have heavy 3-4 inch deep debris accumulations around the bearing and also completely filling the expansion slots and inhibiting free thermal movements (Photo 65)**.**

    Recommendation: Remove the debris accumulations from around the south abutment and Pier 1 expansion bearings as well as from the expansion slots to restore free thermal movements.

14. The bearing pin nuts are completely missing on the east faces of both truss line lower chords at the Span 2 expansion bearings on Pier 2 (Photo 62). The Span 3 sidewalk truss fixed bearing at Pier 2 has a cracked bearing pin nut on the lower chord west face and the lower half of the nut is missing (Photo 63). The bearing pin nut on the west side of the south abutment sidewalk truss bearing is cracked. The bearing pin nut on the east side of the south abutment roadway truss bearing is cracked and the lower half of the nut has fallen away completely from the face of the chord (Photo 66).

    Recommendation: Replace the bearing pin nuts at the five specified locations.

15. The Span 2 sidewalk truss expansion bearing is missing the single west side anchor bolt (Photo 63). The Span 2 roadway truss expansion bearing on Pier 2 is missing the southwest corner anchor bolt (Photo 64).

    Recommendation: Core drill and grout new anchor bolts at the two specified locations.

16. The south abutment breastwall has fine to medium map cracking in the upper five feet, a wide vertical crack at the roadway centerline in the upper two-thirds of the height, and two medium cracks in the lower portion of the breastwall (Photo 67). The wide vertical crack in the breastwall at roadway centerline extends across the

bridge seat and continues upward over the full height of the backwall (Photo 49). The south abutment backwall has severe map cracking outboard of the roadway truss along with heavy spalling in the sloped top portion. The northeast wingwall has map cracking with efflorescence (Photo 68). The southeast wingwall is in fair condition with two spalls less than 2 SF each in size and a medium vertical crack extending from the top to the base (Photo 69). The southwest wingwall is in poor condition with a large deep spall continuous along the top for full length of the wingwall (Photo 70).

Recommendation: Perform epoxy crack injection to repair the cracks in the south abutment and the three specified wingwalls. Perform spall repairs to remove and replace unsound concrete at the two spalls in the southeast wingwall as well as at the large spall in the southwest wingwall.

17. The west end of Pier 2 has a zone of spalls and scaling along the full height of the icebreaker edge (Photo 72).

    Recommendation: Perform spall repairs to remove and replace unsound concrete at the Pier 2 icebreaker edge.

18. The approach guiderails at the southwest and southeast corners are substandard due to lack of stiffening in the transition zones and lack of proper attachments to the bridge railings (Photo 73). The approach guiderail at the northeast corner is also substandard due to lack of stiffening in the transition zone and lack of proper attachment to the bridge railing (Photo 75). The northwest bridge corner is missing guiderail entirely (Photo 75).

    Recommendation: Replace the existing guiderails within 25 feet of each corner of the bridge with properly stiffened guiderail conforming to current standards. Install missing guiderail in the northwest corner

B. Condition Summary

The results of the inspection indicate that the bridge is overall in fair condition.

The **deck** is in fair condition, rated a 5. The transverse construction joints above each floorbeam have spalling along the edges with previous bituminous or concrete patches. The underside of deck has numerous spalls with exposed reinforcing which are typically concentrated along the inboard edges of S3 and S6. The east sidewalk curb face is cracked and deteriorated with spalls over nearly 150 feet of the bridge length. A few patches are present at the deck joints over both piers. A large bituminous patch is present at the south abutment at the end of the concrete bridge deck.

The **superstructure** is in poor condition, rated a 4. Approximately ten of the truss verticals and diagonals have sustained impact damage with several exhibiting permanent twisting and displacement with bent flange edges or notches. End floorbeam paint conditions are poor within all three spans. Numerous lower lateral bracing angles have lateral displacement believed to result from impacts from floating debris during high water periods. Numerous sway frames have sustained impact damage with four locations

warranting replacement of the lower transverse sway frame members. Bearing pin nuts are cracked or completely missing at a total of five locations. Two bearings are each missing an anchor bolt.

The **substructure** is in fair condition, rated a 5. The south abutment contains a wide vertical crack in the breastwall which continues across the bridge seat and up into the backwall. Three of the wingwalls have cracks and spalls with exposed reinforcing. The west end of Pier 2 has spalls and scaling along the full height of the icebreaker edge.

II. Introduction

The focus of this report is the presentation of the routine and fracture critical inspection findings for Maine DOT Bridge No. 2019 (Androscoggin River Bridge) carrying North. Main Street over the Androscoggin River in Peru, Oxford County, Maine.

The bridge was inspected on August 9th, 10th, 13th and 14th, 2012. The inspection team was comprised of Roger Stanley, P.E. (TL), Amy Campo, P.E. (ATL), and Kaon Lam (ATL).

In addition, as specified in the contract, red line markups of the previous Maine DOT Structure Inventory & Appraisal forms have been provided as separate attachments to this report.

Bridge Description

Bridge No. 2019 is a two-lane three span structure with an overall length of 574 feet. Each span consists of a riveted steel Parker through truss measuring 186'-6" from center to center of bearings (Photo on front cover of Report). The bridge was built in 1930 and currently carries two 11 foot wide traffic lanes along with a 5'-0" (+/-) clear sidewalk, located outboard of the east fascia truss along the downstream side. The total out to out width of the bridge roadway and sidewalk measures approximately 30 feet. The trusses are spaced at 24'- 6" center to center.

The substructure consists of two cast-in-place reinforced concrete abutments and two cast-in-place reinforced concrete piers. The two abutments are founded on rock and both piers are supported on piles. The bridge runs from north to south, carrying North Main Street over the Androscoggin River. For purposes of the inspection and Report documentation, plan north has been established to match the original construction plan orientation. The waterway flows downstream to the east.

Various repairs and modifications have been performed since the time of original construction according to plans provided by Maine DOT. Scupper locations have been slightly shifted as described in detail within the Deck Elements section of this report. Both abutments and both faces of both piers have been previously retrofitted with Dywidag post-tensioned concrete encasement repairs immediately below both truss bearings. The original sliding plate deck joints at both piers have been replaced with closed compression seal type deck joints. The lower transverse members at the portal bracing have been replaced with high strength bolted rolled (or welded) shapes at both ends of all three spans.

Inspection Access

The hands-on and visual Routine inspection was performed using an Underbridge Inspection Unit (UB-50) to inspect the underside of the deck, floorbeams, and lower chord members. A 33-foot aerial lift bucket truck was used to reach the upper portion of the truss

(above the deck), sway frames, and top chord lateral bracing members. The truss upper chords were inspected from the deck as well as from the aerial lift. The abutments and wingwalls were also inspected from the Underbridge Inspection Unit.

Prior to the inspection of the bridge, advanced notification to the appropriate authorities was required before performing any lane closures. Maine DOT provided flaggers to implement temporary single lane closures during this inspection.

Fracture Critical Members on this bridge are the tension members of the non-redundant trusses, such as lower chords and all verticals and diagonals except for the U4-L4 vertical and the L0-U1 and U7-L8 end posts which are non-FCM's. In addition, the bottom flange and portions of the floorbeam web that are in tension are also FCM's.

The general layout, framing and orientation foreach of the three spans of the bridge may be viewed on the Fracture- Critical Member (FCM) diagram located in the following section of this Report. Numbering of spans, substructure units, and span panel points used for the inspection is from north to south. Numbering of truss panel points used for the inspection is in accordance with the FCM diagram with L0 corresponding to the north end of each span and L8 corresponding to the north end of each span. Stringer lines designations were assigned looking ahead station from north to south and numbering from left to right. Following this convention, the two sidewalk stringers located outboard of the east truss are designated as S1 and S2, respectively. Stringers S3 to S6 are located between trusses, with S6 being the west fascia stringer.

Additional bridge data can be found in the Maine DOT Structure Inventory and Appraisal Sheet.

III. Fracture Critical Members and Fatigue-Prone Details

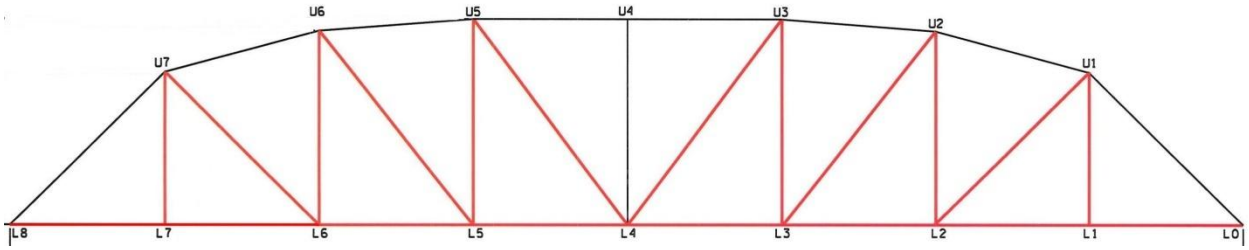
Fracture Critical Members on this bridge are the non-redundant tension members of the trusses along with the floorbeam bottom flange and portions of the floorbeam webs which experience tension loading. The riveted built up truss connections are classified as Fatigue Category D in accordance with AASHTO LRFD Bridge Design Specification, 4th Edition, Table 6.6.1.2.3-1.

Per the requirements of the National Bridge Inspection Standards found in Title 23 Part 650 Subpart C of the Code of Federal Regulations all FCMs were inspected hands-on from a distance no further than arms-length.

Field-welded plates have been added to the inboard flanges of many of the verticals just below the existing lower transverse sway frame members to cover open holes of the original sway frame connections. These welded plates are FSD's in FCM's which occur in numerous verticals in both truss lines in all 3 spans.

Depending on the length, orientation, and thickness of connected elements in these welds, these locations could represent a more severe fatigue category than Category D for the basic riveted built up truss connections. The bridge inspection scope did not include assessment of remaining fatigue life of the structure.

A diagram depicting the truss FCM members highlighted in red is included directly below.



Truss diagram showing Panel Point numbering system

Fracture Critical tension Members shown in **Bolded Red** linestyle (per original contract plan design loads)

IV. Inspection Findings

Deck Elements

The deck elements are in fair overall condition.

Deck & Wearing Surface: The cast-in-place concrete deck has an existing monolithic concrete wearing surface. The transverse construction joint above FB7 in Span 3 has minor spalling of the edges of the joint for the full width of the northbound lane (Photo 5). Above FB4 in Span 3 the transverse construction joint has a one foot square spall patched with bituminous material along the west curb (Photo 6). Above FB1 in Span 3 the transverse construction joint has three small spalls patched with bituminous material (Photo 7). Above FB7 in Span 2 the transverse construction joint has two spalls in the northbound lane measuring 1 to 2 SF in size, each patched with concrete (Photo 8). Above FB7 in Span 1 the transverse construction joint has a 4 SF spall in the northbound lane along the east curb, patched with concrete (Photo 9).

Underside of Deck: Three minor spalls in the underside of deck were noted in the floorbeam haunch zones of FB6 in Span 1 in various stringer bays (Photo 10). Approximately ten transverse cracks with efflorescence were observed in the underside of deck in Span 1 between FB7 and FB8 distributed in three different stringer bays (Photo 11). In Span 2 between FB1 and FB2 two transverse cracks with efflorescence were observed in the underside of the sidewalk slab. At the same location a longitudinal crack with efflorescence was noted along the horizontal construction joint between the sidewalk and the roadway deck slab (Photo 12). In Span 2 between FB3 and FB4 a longitudinal crack with efflorescence was observed between S3 and S4 located just inboard of the east curbline (Photo 13). In Span 2 between FB7 and FB8 four transverse cracks with efflorescence were noted between S5 and S6 (Photo 14).

A 2 foot square spall with exposed reinforcing was observed in Span 2 between FB5 and FB6 below the sidewalk in the outside vertical face of the curb along with efflorescence originating from the interface between the sidewalk to deck slab construction joint (Photo 15). A similar condition was observed in Span 3 between FB5 and FB6.

In Span 3 between FB0 and FB1 five spalls with exposed reinforcing were noted between S5 and S6 (Photo 16).

Patch repairs in the underside of deck were noted around the drainage downspouts at various locations.

Above FB0 in Span 2 all three stringer bays have been patched with repairs measuring 4 feet long by full width of the bay (Photo 17). Several transverse cracks with efflorescence were observed within 10 feet of the end floorbeam at this location.

On the north side of FB2 in Span 2, a 1 foot by 4 foot spall with exposed reinforcing was observed between S5 and S6. On the south side of FB2 in Span 2, a 4 foot by 6 foot concrete patch repair was observed between S5 and S6. In the same panel and

bay two spalls with exposed reinforcing measuring approximately 2 feet square each were observed near mid-panel and at FB3 (Photo 18).

Above FB8 in Span 2 a 1 foot by 2 foot spall was observed in the floorbeam haunch zone between S4 and S5 (Photo 19). At the same location two concrete patches were observed on either side of S5. A transverse crack with efflorescence is present in the patched area between S5 and S6. Two additional concrete patches were observed on either side of S5 above FB0 in Span 3.

In Span 3 above FB1 a spall with exposed reinforcing was observed between S4 and S5 and a wide transverse crack with efflorescence was noted between S3 and S4.

Transverse cracks with heavy efflorescence were observed above FB8 in Span 3 in all bays between S3 and S6 (Photo 20).

Bridge Railings: There are substandard steel bridge railings connected to the inner faces of the truss verticals and diagonals along the west truss line (Photos 3 & 4). The steel bar lattice bicycle/pedestrian railing at the outboard edge of the sidewalk is in fair condition (Photos 3 & 4).

The west traffic railing in Span 1 at L5 has a splice in both rails to repair previous impact damage to the attachments to the truss vertical which is rotated from the collision damage (Photo 21). Impact damage to the railing was observed in Span 3 at L5 (Photo 22). Similar conditions were observed at a few other locations in the railing, including Span 3 at the U1-L2 diagonal and between the Span 1 and Span end posts. At Span 1 the connection to the U2-L3 diagonal has impact damage and three damaged or missing bolts in the upper and lower rail attachments. A few missing bolts were observed at the connections of the railings to the attachment angles at verticals or diagonals (Photo 23).

Sidewalk & Curbs: The east sidewalk curb face has a wide horizontal crack at the south end of Span 3 which extends along mid-height of the curb for nearly half of the length of the span (Photo 24). The east sidewalk curb face in Span 2 has a long spall with exposed reinforcing extending from L4 to L6 (Photo 25). The east sidewalk curb face has a wide horizontal crack in Span 2 which extends the full length of the panel between L6 and L7 along mid-height of the curb (Photo 9).

The west curb has a 2 foot long severe spall with exposed reinforcing next to the south abutment. There are small spalls with exposed reinforcing in the west curb at both sides of the Pier 2 deck joint. There are small spalls with exposed reinforcing in both curb at both sides of the Pier 1 deck joint.

Joints: There is no deck joint at the south abutment and the end of the bridge deck has been removed and replaced with bituminous pavement. The bituminous pavement patch is deteriorated and settled in large areas with extensive successive patches placed, resulting in a rough riding surface over the 6-8 foot length approaching the end of the concrete bridge deck (Photo 26).

The deck joint at Pier 2 has minor spalling with bituminous patches and the joint opening varies along the length of the joint from ¾ inches to zero at the roadway centerline (Photo 27). The sidewalk sliding plate joint at Pier 2 projects upward ¾ to one inch at the plate corner, creating a tripping hazard (Photo 28). A similar condition was observed at the Pier 1 sidewalk sliding plate joint.

The deck joint at Pier 1 has minor spalling in the northbound lane and a one foot by 6 foot spall patched with concrete in the southbound lane (Photo 29).

Deck Drainage: Scuppers exist along both curblines in every other panel and are typically located midway between panel points. Outlets are all clear of debris and functioning properly. The original plans show curb face type scuppers and downspouts in line with the curbs located outboard of Stringers S3 and S6. However, since the as-inspected scuppers and downspouts are actually located within the roadway approximately six inches from the curb faces with downspouts inboard of S3 and S6, the scupper arrangement was apparently modified since original construction. Patch repairs in the underside of deck were noted around the drainage downspouts at various locations with timber formwork left in place, confirming that the scupper positions have been slightly shifted (Photo 14). The downspout pipes extend below the level of the deck and terminate immediately adjacent to the truss lower chords. However, the outlet ends of the drain pipes are typically situated above the underside of the lower chords, exposing the chords to runoff spray.

Superstructure

The superstructure steel elements are in poor condition.

Trusses: The **Upper Chord** members are in fair condition. The paint system is generally intact with minimal failures throughout the exterior and interior surfaces of the upper chords (Photo 30).

The horizontal exposure surfaces such as the top plate are in fair to satisfactory condition with respect to paint system condition.

The **Lower Chords** are in fair condition. The Span 3 L1-L2 sidewalk truss has up to 8 inch deep debris accumulations between the side channels on the top of the L1 lower tie plate (Photo 31). The Span 3 sidewalk truss at L2 has 9-12 inch deep debris accumulations between the side channels on the lower lateral connection plate (Photo 32). Similar heavy debris accumulations were observed at L6 and L7 in Span 3 with 12 inch and 8 inch depths, respectively. Active corrosion was observed in the lower chord bottom interior surfaces along with the lower portions of the vertical and gusset plates at sidewalk truss L6 in Span 3 (Photo 33).

Minor pack rust of the top and bottom splice plates with one inch vertical deformation was observed in the Span 3 roadway truss at the L3 lower chord splice (Photo 34).

A small tack weld was identified in the Span 3 roadway truss at L1 between the lower chord and vertical at a fill plate interface. Fusion to all three components was observed.

Vertical and Diagonal Members are in poor condition. The Span 3 sidewalk truss end post diagonal U7-L8 has sustained approximately six separate one-half inch deep scrapes and gouges in the flange edge due to vehicular impacts. Similar minor scrapes and gouges due to impact damage were observed in the end posts of both truss lines in all three spans. At the Span 1 L0-U1 sidewalk truss end post, a severed lacing bar due to section loss was observed (Photo 35).

At L3 in the Span 2 roadway truss the vertical and diagonal have sustained damage at 2 feet above the lower chord, which has caused localized twisting of the flanges over a one feet length in each member (Photo 36). The west flange of the diagonal U2-L3 is permanently deformed and bent inward by 2-1/2 inches (Photo 37). The west flange of the vertical U3-L3 is permanently deformed and bent outward by 1-1/2 inches (Photo 38). The most likely cause for this damage is large floating debris during a high water event, such as a trapped tree branch getting lodged between the two members.

Previously arrested section loss was observed to the lower end of the Span 2 roadway truss U7-L7 vertical. The vertical at this location has section loss on the east face of the flange up to 3/16 inch deep and 2 inches wide located approximately a foot above the top of the floorbeam (Photo 39). Section loss with active corrosion was observed to the lower end of the Span 2 roadway truss U6-L6 vertical. The vertical at this location has section loss on the east face of the flange up to 1/4 inch deep and 4 1/2 inches wide located approximately two feet above the top of the floorbeam (Photo 40). Section loss with active corrosion was observed to the lower end of the Span 2 roadway truss L5-U6 diagonal. The diagonal at this location has section loss on the east face of the flange up to 3/16 inch deep and 4 inches wide located approximately at top of curb level (Photo 41).

Active corrosion and minor paint loss was observed in the Span 3 roadway truss at the lower end of the L0-U1 end post. An area located immediately below U5 on the west face of the Span 3 sidewalk truss U5-L5 measuring approximately 18 inches tall was observed to have failed paint and active corrosion for full width of the member flange.

At L5 in the Span 1 roadway truss the vertical U5-L5 has sustained impact damage at the railing level with localized twisting of the member over a three foot length and a permanent bend in the flange tip (Photo 42). This location warrants repairs in order to restore capability for carrying compressive loads without buckling.

At L3 in the Span 3 sidewalk truss the vertical U3-L3 has sustained impact damage over a ten foot height of the west flange at sidewalk level with up to 3 inches of lateral displacement in the longitudinal direction and up to 1 1/2 inches of lateral displacement in the transverse direction (Photo 43). The east flange has up to 1 inch lateral displacement in the longitudinal direction and up to 1 1/2 inches of lateral displacement in the transverse direction. This location warrants repairs in order to restore capability

for carrying compressive loads without buckling.

Impact damage to the Span 2 roadway truss L5-U6 diagonal has resulted in a notch in the flange tip which is approximately 2 inches deep (Photo 44). The damage at this location has been considered as section loss since the member is a tension diagonal. Impact damage to the Span 3 sidewalk truss U3-L4 diagonal has resulted in a notch in the flange tip which is approximately 1 inch deep. The damage at this location has been considered as section loss since the member is a tension diagonal.

At L6 in the Span 1 roadway truss the vertical U6-L6 has sustained impact damage and a permanent bend in the flange tip (Photo 45). At L2 in the Span 2 roadway truss the vertical U2-L2 has sustained impact damage and a permanent bend in the flange tip of 1 ½ inches over a length of two feet (Photo 46). These locations warrant repairs in order to restore capability for carrying compressive loads without experiencing member buckling.

The Span 2 roadway truss diagonal U3-L4 has sustained minor impact damage at the railing level where the flange is bent 1 ½ inches over a length of just over a foot. The Span 3 sidewalk truss diagonal L4-U5 has sustained minor impact damage at 28 inches above the sidewalk level where the flange is bent 3/4 inches over a length of a foot. These members are tension diagonals which do not experience load reversal into compression. Therefore no member repairs are deemed necessary at these locations.

Minor scrape marks from impact damage were noted in the Span 3 roadway truss end post U7-L8 as well as in the U7-L7 and U5-L5 verticals. Various other verticals and diagonals exhibit scrape marks from traffic impact, such as at the Span 1 roadway truss U1-L2 diagonal and at the Span 3 U4-L4 vertical.

Field-welded plates have been added to the inboard flanges of many of the verticals just below the existing lower transverse sway frame members to cover open holes of the original sway frame connections (Photo 47). These welded plates are FSD's in FCM's which occur in numerous verticals in both truss lines in all 3 spans.

The Span 2 roadway truss diagonal U1-L2 is missing a single rivet in the east face L2 gusset, leaving 19 of the original total of 20 rivets to resist the member loads (Photo 48).

Floorbeams: The Span 2 FB8 and Span 3 FB0 end floorbeams at Pier 2 have failed paint areas on the webs and bottom flanges with active corrosion full length (Photo 19). In Span 3 the north face of FB1 has poor paint condition on the web between S3 and S4. The Span 3 FB8 end floorbeam has failed paint on the web and active corrosion (Photo 49).

Stringers: Stringers are generally in satisfactory condition with few visible defects (Photo 50). Stringers S2, S3, and S6 have typical areas along the top flange edges with minor paint loss and limited localized active corrosion along the underside of the deck (Photos 15, 16, and 18). Similar minor paint loss to the top flanges was also observed at

the ends of all stringers within 5 feet of the end floorbeams at all deck joints (Photos 11, 14, & 17).

Secondary Members: Top Chord Lateral Bracing- The lower transverse members at the portal bracing have been replaced with high strength bolted rolled shapes at both ends of all three spans (Photo 51). The height of the portal bracing has been raised by shifting the new lower transverse members higher up the end diagonals by approximately 2 feet. High strength bolted repairs were observed in various sway frame connections including the diagonal intersection connection plate at Span 3 U3 (Photo 52).

Impact damage to the portal bracing at the south end of Span 3 over the northbound lane was observed (Photo 53). Minor impact damage to the portal bracing at the south end of Span 1 over the centerline roadway was observed.

Impact damage to the sway frame lower transverse member along with lateral displacement of 6 inches in the horizontal plane was observed at Span 3 U3 (Photo 54). This sway frame also has a slight bend in the sway frame diagonal. Impact damage to the sway frame lower transverse member along with twisting and local vertical bends in the edges of the horizontal legs of the angle over both the northbound and southbound lanes was observed at Span 3 U4 (Photo 55). Impact damage to the sway frame lower transverse member along with lateral displacement in the horizontal plane of more than 3 inches was observed at Span 3 U6 (Photo 56). This sway frame also has a slight bend in the sway frame diagonal. A bend in the upper east sway frame diagonal was noted at Span U1. Other locations of sway frame lower transverse member impact damage were observed, such as at Span 1 U2 over the southbound lane (Photo 57) and at Span 1 U3.

Minor impact damage to the sway frame lower transverse member consisting of small dents and bends was observed at Span 1 U4, U5, and U6.

Minor amounts of rusting and paint loss were observed in the sway frame verticals.

Bottom Chord Lateral Bracing- The Span 3 FB8 sidewalk truss lower lateral bracing connection plate is covered in 2-3 inch deep debris accumulations.

In Span 2 at the FB5 roadway truss lower lateral bracing connection plate pack rust at the floorbeam flange edge has bent the connection downward by approximately one inch (Photo 58). A similar condition with ½ inch of downward displacement of the connection plate was noted at Span 1 at the FB5 roadway truss.

The lower lateral bracing angle in Span 2 connecting the FB1 sidewalk truss and FB2 roadway truss is displaced laterally in the horizontal plane by 4 inches (Photo 50). The lower lateral bracing angle in Span 2 connecting FB4 sidewalk truss and FB5 roadway truss is displaced laterally in the horizontal plane by 6 inches (Photo 59). The lower lateral bracing angle in Span 3 connecting the FB1 sidewalk truss and FB2 roadway truss is displaced laterally in the horizontal plane by 6 inches. The lower lateral bracing

angle in Span 3 connecting the FB2 sidewalk truss and FB3 roadway truss is displaced laterally in the horizontal plane by 4 inches. The lower lateral bracing angle in Span 3 connecting the FB3 sidewalk truss and FB4 roadway truss is displaced laterally in the horizontal plane by 9 inches (Photo 60). The most likely cause of lateral displacement of the lower lateral bracing angles is impact damage from large floating debris during a high water event, such as tree limbs. The direction of the displacements was confirmed to be consistent with the downstream waterway direction in all instances. Vertical displacement of approximately six inches was observed in the lower lateral bracing angle in Span 3 connecting the FB5 sidewalk truss and FB6 roadway truss.

Bearings: The Span 1 roadway truss expansion bearing at Pier 1 has debris accumulations filling the slot for the southwest anchor bolt, inhibiting free thermal movements (Photo 61)**.**

The bearing pin nuts are completely missing on the east faces of both truss line lower chords at the Span 2 expansion bearings on Pier 2 (Photo 62). The Span 3 sidewalk truss fixed bearing at Pier 2 has a cracked bearing pin nut on the lower chord west face and the lower half of the nut is missing (Photo 63). The Span 2 sidewalk truss expansion bearing is missing the single west side anchor bolt and the base of the pedestal casting is rotated slightly compared to the masonry plate (Photo 63). This bearing also has a variable gap along the west face between the underside of the pedestal casting and the top of the bronze plate surface. This condition could be an indication that the bearing pin may not be rotating freely as intended. The Span 2 roadway truss expansion bearing on Pier 2 is missing the southwest corner anchor bolt (Photo 64).

The south abutment expansion bearings have heavy 3-4 inch deep debris accumulations around the bearing and also completely filling the expansion slots and inhibiting free thermal movements (Photo 65)**.** The bearing pin nut on the west side of the sidewalk truss bearing is cracked. The bearing pin nut on the east side of the roadway truss bearing is cracked and the lower half of the nut has fallen away completely from the face of the chord (Photo 66). Based on observation of the paint interfaces at the anchor bolt flat washer plates, it appears that the bearings have not moved to any significant degree since the last bridge re-painting.

Corrosion Losses for Primary Members: Table 1 contains a listing of specific locations where measurable section loss was observed in primary superstructure members, including primary truss members, floorbeams, and stringers. For cases in which section loss was documented in the primary superstructure components, the live load rating computations were prepared to consider the actual remaining section. (The lower lateral bracing and associated connection plates are secondary members which serve to carry wind and lateral loads but do not participate directly in resisting traffic live loads.)

Member	Location	Description
Span 2 roadway truss L5-U6	Approximately 4 feet below mid-height horizontal bracing connection on the east face of the flange	Flange has a 2 inch deep notch due to impact damage (Photo 44-6906).
Span 2 roadway truss U7-L7	Approximately a foot above the top of the floorbeam on the east face of the flange	Section loss up to 3/16 inch deep and 2 inches wide (Photo 39-6913).
Span 2 roadway truss U6-L6	Approximately two foot above the top of the floorbeam on the east face of the flange	Section loss up to 1/4 inches deep and 4 1/2 inches wide (Photo 40-6914).
Span 2 roadway truss L5-U6	Approximately at top of curb level on the east face of the flange	Section loss up to 3/16 inch deep and 4 inches wide (Photo 41-6915).
Span 3 sidewalk truss U3-L4	Approximately 6 feet above curb level on the west face of the flange	Flange has a 1 inch deep notch due to impact damage.

TABLE 1- Locations of Measurable Section Loss in Primary Members

Substructure

The visible substructure elements are in fair condition.

Abutments: Both abutments have been previously retrofitted with Dywidag post-tensioned concrete encasement repairs immediately below both truss bearings (Photo 67). The south abutment breastwall has fine to medium map cracking in the upper five feet, a wide vertical crack at the roadway centerline in the upper two-thirds of the height, and two medium cracks in the lower portion of the breastwall (Photo 67). The wide vertical crack in the breastwall at roadway centerline extends across the bridge seat and continues upward over the full height of the backwall (Photo 49). The south abutment bridge seat is covered with 3-4 inch deep debris accumulations nearly full width of the seat. The south abutment backwall has severe map cracking outboard of the roadway truss along with heavy spalling in the sloped top portion.

Wingwalls: The northeast wingwall has map cracking with efflorescence (Photo 68).

The southeast wingwall is in fair condition with two spalls less than 2 SF each in size and a medium vertical crack extending from the top to the base (Photo 69). The southwest wingwall is in poor condition with a large deep spall continuous along the top for full length of the wingwall (Photo 70).

Piers: Both faces of both piers have been previously retrofitted with Dywidag post-tensioned concrete encasement repairs immediately below both truss bearings (Photo 71). The north face of Pier 1 has minor spalls and scaling (Photo 71). The west end of Pier 2 has a zone of spalls and scaling along the full height of the icebreaker edge (Photo 72).

Channel

There were no major visible deficiencies in the channel. A trapped tree trunk was observed to be lodged on the upstream end of Pier 1 (Photo 71).

Miscellaneous

Approach Pavement: The south approach pavement has numerous wide cracks and depressions which result in a rough surface (Photo 73). At the time of the inspection there was an active construction project underway along US 2 which appeared to include resurfacing work to the north bridge approach which was still to be completed (Photo 74).

Approach Curb: NA.

Approach Guiderails: The approach guiderails at the southwest and southeast corners are substandard due to lack of stiffening in the transition zones and lack of proper attachments to the bridge railings (Photo 73). The approach guiderail at the northeast corner is also substandard due to lack of stiffening in the transition zone and lack of proper attachment to the bridge railing (Photo 75). The northwest bridge corner is missing guiderail entirely (Photo 75).

Load Posting: The bridge is not currently posted for live load.

Signage: No vertical clearance signs are posted on the approach roadways or on the structure. There is a bridge ID marker located at the southeast leading end corner of the structure.

Utilities: Three under-deck utility pipe conduits are located between S3 and S4 running full length of the bridge (Photo 76). These conduits are suspended directly from hanger supports embedded in the deck slab and pass through cut-outs in the floorbeam webs. At the FB8 end floorbeam in Span 2 these three metallic conduits are severely corroded and completely perforated, exposing the electrical cables over a one foot length (Photo 77).

Between S5 and S6 in Span 1 there is an abandoned former messenger cable which extends over portions of the bridge length (Photo 78).

V. Conclusions and Recommendations

The results of the inspection indicate that the bridge is overall in fair condition.

- The **deck** is in fair condition, rated a 5. The transverse construction joints above each floorbeam have spalling along the edges with previous bituminous or concrete patches. The underside of deck has numerous spalls with exposed reinforcing which are typically concentrated along the inboard edges of S3 and S6. The east sidewalk curb face is cracked and deteriorated with spalls over nearly 150 feet of the bridge length. A few patches are present at the deck joints over both piers. A large bituminous patch is present at the south abutment at the end of the concrete bridge deck.
- The **superstructure** is in poor condition, rated a 4. Approximately ten of the truss verticals and diagonals have sustained impact damage with several exhibiting permanent twisting and displacement with bent flange edges or notches. End floorbeam paint conditions are poor within all three spans. Numerous lower lateral bracing angles have lateral displacement believed to result from impacts from floating debris during high water periods. Numerous sway frames have sustained impact damage with four locations warranting replacement of the lower transverse sway frame members. Bearing pin nuts are cracked or completely missing at a total of five locations. Two bearings are each missing an anchor bolt.
- The **substructure** is in fair condition, rated a 5. The south abutment contains a wide vertical crack in the breastwall which continues across the bridge seat and up into the backwall. Three of the wingwalls have cracks and spalls with exposed reinforcing. The west end of Pier 2 has spalls and scaling along the full height of the icebreaker edge.

Recommendations:

We recommend that the following safety improvements, repairs or rehabilitation, and/or monitoring should be made to retard further deterioration, preserve the structural integrity of the bridge, and extend its useful life:

1. Perform spall repairs to the monolithic concrete wearing surface at the three transverse construction joint locations in Span 3.
2. Perform concrete spall repairs to the underside of deck to remove and replace unsound concrete.
3. Perform full depth deck replacement over a five foot length of the deck at the south abutment. Reconstruct the bituminous approach pavement over a length of 10 feet at the south end of the bridge by removing and replacing the pavement full-depth to restore a smooth transition onto the bridge deck.
4. Replace the steel bridge and sidewalk bicycle/pedestrian railings with new railings which meet current safety standards and criteria.

5. Perform spall repairs to the east curb at the south end of Span 3, in Span 2 between L4 to L7. Perform spall repair to the west curb at the south abutment and to both curbs within 3 feet either side of the Pier 1 and 2 deck joints.

6. Replace the sidewalk sliding plate joints at Pier 1 and 2.

7. High pressure wash the below-deck portions of the sidewalk truss focusing on the lower chord panel points to remove the heavy debris accumulations. High pressure wash the sidewalk truss lower lateral connection plates and the bridge seats to remove the moisture-laden debris deposits.

8. Since the truss verticals experience load reversal and are required to carry compressive dead loads and compressive live loads under certain live loading conditions, the impact damage could decrease the capacity of the member by reducing the compression buckling resistance to a level at which this mode of failure would govern compared to strength. The capacity of these members will be evaluated as part of the load rating to determine the need for repairs.

9. Depending on the results from the load rating analyses, consider adding web plates to these two diagonals to restore the section loss due to the impact damage notches. In any case, notches in FCM tension members are significant FSD's. Hence, the notches should be removed and all sharp edges should be ground smooth.

10. Re-inspect all field weld locations in the vertical FCM's during future biennial bridge inspection cycles. Check for any indications of fatigue cracking initiation as part of the regularly scheduled bridge inspection cycles.

11. Replace the sway frames at the four specified locations. Following completion of the sway frame replacement, the proper alignment and overall geometry of the affected panel points should be verified.

12. Replace the lower lateral bracing angle at the six specified locations. Following completion of the lower lateral bracing angle replacement, the proper alignment and overall geometry of the affected panel points should be verified.

13. Remove the debris accumulations from around the south abutment and Pier 1 expansion bearings as well as from the expansion slots to restore free thermal movements.

14. Replace the bearing pin nuts at the five specified locations.

15. Core drill and grout new anchor bolts at the two specified locations.

16. Perform epoxy crack injection to repair the cracks in the south abutment and the three specified wingwalls. Perform spall repairs to remove and replace unsound

concrete at the two spalls in the southeast wingwall as well as at the large spall in the southwest wingwall.

17. Perform spall repairs to remove and replace unsound concrete at the Pier 2 icebreaker edge.

18. Replace the existing guiderails within 25 feet of each corner of the bridge with properly stiffened guiderail conforming to current standards. Install missing guiderail in the northwest corner.

Appendix A

Inspection Photographs

Photo 1 – Downstream elevation looking southwest. (Note- See Report cover for upstream elevation photo).

Photo 2 – View of bridge looking north from the south approach roadway.

Photo 3 – General top of deck, looking north in Span 3 from the south abutment.

Photo 4 – Top of deck, looking north from above the south pier (Pier 2).

Photo 5 – The transverse construction joint above FB7 in Span 3 has minor spalling of the edges of the joint for the full width of the northbound lane. Looking west.

Photo 6 – Above FB4 in Span 3 the transverse construction joint has a one foot square spall patched with bituminous material along the west curb. Looking west.

Photo 7 – Above FB1 in Span 3 the transverse construction joint has three small spalls patched with bituminous material.

Photo 8 – Above FB7 in Span 2 the transverse construction joint has two spalls in the northbound lane measuring 1 to 2 SF in size, each patched with concrete.

Photo 9 – Above FB7 in Span 1 the transverse construction joint has a 4 SF spall in the northbound lane along the east curb, patched with concrete. Looking east.

Photo 10 – Three minor spalls in the underside of deck were noted in the floorbeam haunch zones of FB6 in Span 1 in various stringer bays. View between S4 and S5.

Photo 11 – Approximately ten transverse cracks with efflorescence in the underside of deck in Span 1 between FB7 and FB8, distributed in three different stringer bays.

Photo 12 – In Span 2 between FB1 and FB2 two cracks with efflorescence in sidewalk slab and a longitudinal crack with efflor. along sidewalk horizontal construction joint .

Photo 13 – In Span 2 between FB3 and FB4 a longitudinal crack with efflorescence was observed between S3 and S4 located just inboard of the east curbline. Looking east.

Photo 14 – In Span 2 between FB7 and FB8 four transverse cracks with efflorescence were noted between S5 and S6 in top portion of photo. Looking east.

Photo 15 – A 2 foot square spall with exposed reinforcing in Span 2 between FB5 & FB6 along with efflorescence at sidewalk to deck slab construction joint. Looking southwest.

Photo 16 – In Span 3 between FB0 and FB1 five spalls with exposed reinforcing were noted between S5 and S6. View is looking south.

Photo 17 – Above FB0 in Span 2 all three stringer bays have been patched with repairs measuring 4 feet long by full width of the bay. Looking north at Pier 1.

Photo 18 –In Span 2 between S5 and S6 two spalls with exposed reinforcing measuring approximately 2 feet square each, near mid-panel and at FB3. View is looking south.

Photo 19 – Above FB8 in Span 2 a 1 foot by 2 foot spall was observed in the floorbeam haunch zone between S4 and S5 at top left. Also note concrete patches in both bays.

Photo 20 – Transverse cracks with heavy efflorescence were observed above FB8 in Span 3 in all bays between S3 and S6. Looking south at south abutment.

Photo 21 – West traffic railing in Span 1 at L5 has a splice in both rails to repair previous impact damage. Note truss vertical is rotated from collision damage. Looking west.

Photo 22 – Impact damage to the west traffic railing was observed in Span 3 at L5. Looking north in southbound lane.

Photo 23 – A few missing bolts were observed at the connections of the railings to the attachment angles at verticals or diagonals. View is at Span 3 U3-L4.

Photo 24 – East sidewalk curb face has a wide horizontal crack at south end of Span 3 which extends along mid-height of curb for nearly half of the length of the span.

Photo 25 – The east sidewalk curb face in Span 2 has a long spall with exposed reinforcing extending from L4 to L6. Looking northeast.

Photo 26 – South abutment bituminous pavement patch is deteriorated with extensive successive patches, resulting in a rough riding surface at the concrete bridge deck.

Photo 27 – Pier 2 deck joint has minor spalling with bituminous patches and the joint opening varies along the length of the joint from ¾ inches to zero at roadway centerline.

Photo 28 – The sidewalk sliding plate joint at Pier 2 projects upward ¾ to one inch at plate corner, creating a tripping hazard. Similar condition was observed at Pier 1 joint.

Photo 29 – The deck joint at Pier 1 has minor spalling in the near northbound lane and a one foot by 6 foot spall patched with concrete in the far southbound lane.

Photo 30 – Paint system is generally intact with minimal failures throughout exterior and interior surfaces of upper chords. View inside Span 3 sidewalk truss U3-U4.

Photo 31 – The Span 3 L1-L2 sidewalk truss has up to 8 inch deep debris accumulations between the side channels on the top of the L1 lower tie plate.

Photo 32 – The Span 3 sidewalk truss at L2 has 9-12 inch deep debris accumulations between the side channels on the lower lateral connection plate.

Photo 33 – Active corrosion was observed in lower chord bottom interior surfaces along with lower portions of vertical and gusset plates at sidewalk truss L6 in Span 3.

Photo 34 – Minor pack rust of the top and bottom splice plates with one inch vertical deformation was observed in the Span 3 roadway truss at the L3 lower chord splice.

Photo 35 – At the Span 1 L0-U1 sidewalk truss end post, a severed lacing bar due to section loss was observed just below top of sidewalk level. Looking north.

Photo 36 – At L3 in Span 2 roadway truss the vertical and diagonal have sustained damage at 2 feet above the lower chord, with localized twisting of the flanges.

Photo 37 – The west flange of the Span 2 roadway truss diagonal U2-L3 is permanently deformed and bent inward by 2-1/2 inches. Looking north.

Photo 38 – The west flange of the Span 2 roadway truss vertical U3-L3 is permanently deformed and bent outward by 1-1/2 inches. Looking south.

Photo 39 – The Span 2 roadway truss U7-L7 vertical has section loss on east face of flange up to 3/16 inch deep and 2 inches wide located a foot above top of the floorbeam.

Photo 40 – Span 2 roadway truss U6-L6 vertical has section loss on east face of flange up to 1/4 inch deep and 4 1/2 inches wide located two feet above top of floorbeam.

Photo 41 – Span 2 roadway truss L5-U6 diagonal has section loss on the east face of the flange up to 3/16 inch deep and 4 inches wide located at top of curb level.

Photo 42 –The Span 1 roadway truss U5-L5 has sustained impact damage at railing level with localized twisting over a three foot length and a permanent bend in the flange tip.

Photo 43 – Span 3 sidewalk truss U3-L3 has impact damage with up to 3 inches of lateral displacement in longitudinal direction and up to 1 1/2 inches in the transverse direction.

Photo 44 – Impact damage to the Span 2 roadway truss L5-U6 diagonal has resulted in a notch in the flange tip which is approximately 2 inches deep.

Photo 45 – At L6 in the Span 1 roadway truss the vertical U6-L6 has sustained impact damage and a permanent bend in the flange tip. Looking south.

Photo 46 – At L2 in the Span 2 roadway truss the vertical U2-L2 has sustained impact damage and a permanent bend in the flange tip of 1 ½ inches over a length of two feet.

Photo 47 – Field-welded plates added to many verticals just below existing lower transverse sway frame members to cover open holes of original sway frame connections.

Photo 48 – The Span 2 roadway truss diagonal U1-L2 is missing a single rivet in the east face L2 gusset, leaving 19 of the original total of 20 rivets to resist the member loads.

Photo 49 – The Span 3 FB8 end floorbeam has failed paint on the web and active corrosion. Looking south at south abutment between S4 &S5. Note crack in backwall.

Photo 50 – Stringers generally in satisfactory condition with few defects. Note displacement in Span 2 bracing connecting FB1 sidewalk and FB2 roadway trusses.

Photo 51 – The lower transverse members at portal bracing have been replaced with bolted rolled shapes at both ends of all three spans. View at north portal of Span 1.

Photo 52 – High strength bolted repairs were observed in various sway frame connections including the diagonal intersection connection plate at Span 3 U3.

Photo 53 – Impact damage to the portal bracing at the south end of Span 3 over the northbound lane was observed.

Photo 54 – Impact damage to the sway frame lower transverse member along with lateral displacement of 6 inches in the horizontal plane was observed at Span 3 U3.

Photo 55 – Impact damage to Span 3 U4 sway frame lower transverse member along with twisting and local vertical bends in edges of horizontal legs of angles over both lanes.

Photo 56 – Impact damage to the sway frame lower transverse member along with lateral displacement in the horizontal plane of more than 3 inches was observed at Span 3 U6.

Photo 57 – Sway frame lower transverse member impact damage at Span 1 U2 over southbound lane. Also note welded plate on vertical below sway frame strut.

Photo 58 – In Span 2 at FB5 roadway truss lower lateral connection pack rust at floorbeam flange edge has bent the connection plate down by approximately one inch.

Photo 59 – The lower lateral bracing angle in Span 2 connecting FB4 sidewalk truss and FB5 roadway truss is displaced laterally in the horizontal plane by 6 inches.

Photo 60 – The lower lateral bracing angle in Span 3 connecting the FB3 sidewalk truss and FB4 roadway truss is displaced laterally in the horizontal plane by 9 inches.

Photo 61 – The Span 1 roadway truss expansion bearing at Pier 1 has debris accumulations filling the slot for the southwest anchor bolt, inhibiting free movements.

Photo 62 – The bearing pin nuts are missing on the east faces of both truss line lower chords at Span 2 expansion bearings on Pier 2. Looking west with Span 2 on right.

Photo 63 – Span 3 sidewalk truss bearing at Pier 2 has a cracked bearing pin nut and lower half of the nut is missing (at right). Also note missing anchor bolt in Span 2 bearing.

Photo 64 – The Span 2 roadway truss expansion bearing on Pier 2 is missing the southwest corner anchor bolt. Looking southeast with Span 2 on left, Span 3 on right.

Photo 65 – South abutment expansion bearings have heavy 3-4 inch deep debris accumulations around the bearing and also filling the anchor bolt expansion slots.

Photo 66 – The bearing pin nut on the east side of the roadway truss bearing is cracked and the lower half of the nut has fallen away completely from the face of the chord.

Photo 67 – Both abutments have been retrofitted with Dywidag post-tensioned concrete encasement repairs immediately below both truss bearings. View at south abutment. Also note wide vertical crack in breastwall at centerline of bridge and two lower cracks.

Photo 68 – The northeast wingwall has map cracking with efflorescence.

Photo 69 – The southeast wingwall is in fair condition with two spalls less than 2 SF each in size and a medium vertical crack extending from the top to the base.

Photo 70 – The southwest wingwall is in poor condition with a large deep spall continuous along the top for full length of the wingwall.

Photo 71 – Both faces of both piers have been previously retrofitted with Dywidag post-tensioned concrete encasement repairs immediately below both truss bearings.

Photo 72 – The west end of Pier 2 has a zone of spalls and scaling along the full height of the icebreaker edge. Looking east in the downstream direction at upstream end of pier.

Photo 73 – The south approach pavement has numerous wide cracks and depressions which result in a rough surface. Also note substandard southwest corner guiderail.

Photo 74 – At time of inspection there was an active construction project underway along US 2 which appeared to include resurfacing work to north approach still to be completed.

Photo 75 – Approach guiderail at the northeast corner is substandard due to lack of stiffening and proper attachment to bridge railing. Northwest corner is missing guiderail.

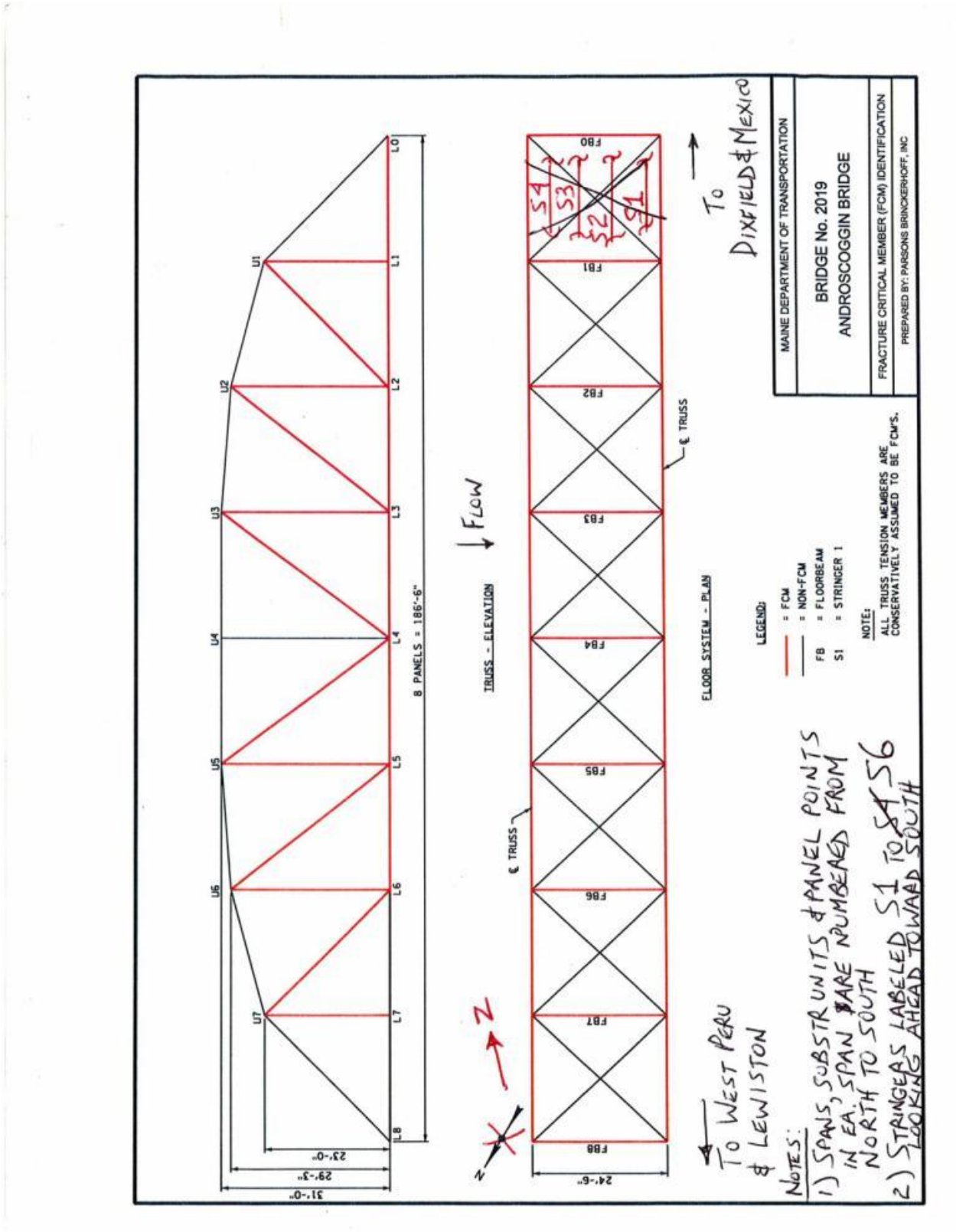
Photo 76 – Three under-deck utility pipe conduits are located between S3 and S4 running full length of the bridge. Looking north. Note hanger rods embedded in deck.

Photo 77 – At the FB8 end floorbeam in Span 2 the three metallic conduits are severely corroded and completely perforated, exposing the electrical cables over a one foot length.

Photo 78 – Between S5 and S6 in Span 1 there is an abandoned former messenger cable which extends over portions of the bridge length. Looking south.

Appendix B

Field Inspection Notes


MAINE DEPARTMENT OF TRANSPORTATION
BRIDGE No. 2019
ANDROSCOGGIN BRIDGE
FRACTURE CRITICAL MEMBER (FCM) IDENTIFICATION
PREPARED BY: PARSONS BRINCKERHOFF, INC
TRUSS - ELEVATION
FLOOR SYSTEM - PLAN
FLOW
℄ TRUSS
℄ TRUSS
TO DIXFIELD & MEXICO
TO WEST PERU & LEWISTON
LEGEND:
= FCM
= NON-FCM
FB = FLOORBEAM
S1 = STRINGER 1
NOTE:
ALL TRUSS TENSION MEMBERS ARE CONSERVATIVELY ASSUMED TO BE FCM'S.
8 PANELS = 186'-6"
31'-0"
29'-3"
23'-0"
24'-6"
NOTES:
1) SPANS, SUBSTR UNITS & PANEL POINTS IN EA. SPAN ARE NUMBERED FROM NORTH TO SOUTH
2) STRINGERS LABELED S1 TO S4 S6 LOOKING AHEAD TOWARD SOUTH

Maine South Truss Bridge 2019 Androscoggin Made by: BDH

Items to be verified in the Field: 8/2/2012

1. No shop drawings were provided for this structure, so we have no details of the gusset plates. Please field measure each unique gusset plate on the sidewalk and roadway truss.
2. Confirm presence of utilities; 1978 documents reference an added sewer main.

Maine North Truss Bridge 2019

Made by: AMM

6/5/2012

Gusset Plate	Thickness	Dimensions	Bolt Spacing	Splice Plate Dimensions	Notes
L0	measure	measure	measure	measure	
L2	measure	measure	measure	measure	
L3	measure	measure	measure	measure	
L4	measure	measure	measure	measure	
U1	measure	measure	measure	measure	No shop drawings given for this bridge
U2	measure	measure	measure	measure	
U3	measure	measure	measure	measure	


20¼"
8½"
11 3/4"
4½"
17"

AMC

Parsons Brinckerhoff - PHOTO LOG
Project: MAINE NORTH TRUSSES
Daily Page Number 1 of 4

Team Leader: RS Date: 8/9/12 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
884 672 885 673	(N) S W E Up Down	Span No.	3	Condition: S. APPROACH
		PP		
		Member		
886 674	(N) S W (E) Up Down	Span No.	3	Condition: S.E. CORNER
		PP		SUBSTANDARD GUIDE RAIL
		Member		
887 675	(N) S (W) E Up Down	Span No.	3	Condition: S.W. CORNER
		PP		SUBSTANDARD GUIDE RAIL
		Member		NO ATTACHMENT TO BRIDGE RAIL
888 676	(N) S (W) E Up Down	Span No.	3	Condition: S. APPROACH
		PP		NUMEROUS CRACKS IN BIT PAVEMENT
		Member		
889 677	N S (W) E Up Down	Span No.	3	Condition: SO. ABUT DECK JOINT
		PP		BIT PATCH W/DECK JOINT REFLECT
		Member		BUMPY FOR 6'-8' UP TO DECK
890 678	N S W (E) Up Down	Span No.	3	Condition: BRIDGE ID MARKER S.E. CORN.
		PP		
		Member		
891 679	N S W (E) Up Down	Span No.	3	Condition: BELOW S. ABUT ALONG BACK WALL
		PP		FIXED BRG
		Member		
892 680	(N) S W E Up Down	Span No.	3	Condition: FROM S. ABUT S.W.
		PP		
		Member		
893 681	(N) S W E Up Down	Span No.	3	Condition: GEN. SPAN 3 FROM ABUT
		PP		
		Member		
894 682	(N) S W (E) Up Down	Span No.	3	Condition: S.E. S.W. CURB + ROADWAY
		PP		CRACK ALONG MID HEIGHT OF CURB
		Member		TYP. FOR S. HALF OF SPAN

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 2 of 4

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
895	N S (W) E Up Down	Span No.	3	Condition: TYP BRIDGE TRAFFIC RAILING
		PP		
		Member		
896	N S W (E) Up Down	Span No.	3	Condition: S.W. PED RAILING
		PP		
		Member		
897	(N) S W (E) Up Down	Span No.	3	Condition: LOOK PORTAL DIAG.
		PP		SEVERAL HALF INCH DEER SCRAPES &
		Member		DENTS DUE TO IMPACT DAMAGE
898	N S (W) E Up Down	Span No.	3	Condition: TRANSVERSE CONS. JOINT @
		PP	L4	FB7 → MINOR SPALLING FULL WIDTH
		Member		OF NB LANE
899	N S (W) E Up Down	Span No.	3	Condition: SB LANE @ JOINT FB9
		PP		1' sq. SPALL W/PATCH ALONG W. CURB
		Member		
900	N S W (E) Up (Down)	Span No.	3	Condition: TYP SLOPPER @ E. CURB S.W.
		PP		EVERY OTHER PANEL, E & W. CURBS
		Member		
901	N S W (E) Up Down	Span No.	3	Condition: CURB HEIGHT 9"
		PP		
		Member		
902	N S (W) E Up Down	Span No.	3	Condition: L1 TRANS. CONST JOINT
		PP		3 MINOR SPALLS w/BIT PATCH
		Member		
903	N S (W) E Up Down	Span No.	2/3	Condition: DECK JOINT ABOVE PIER 2
		PP		MINOR SPALLING ALONG JOINT ARMOR
		Member		BIT PATCHING
904	N S (W) E Up (Down)	Span No.	2/3	Condition: JOINT OPENING VARIES FROM 3/4"
		PP		TO 0" @ ℄ OF ROADWAY
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 3 of 4

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
905	N S (W) E Up Down	Span No.	2/3	Condition: SPALLS IN ROADWAY CURB @
		PP		PIER 2 JOINT
		Member		
906	(N) S W E Up Down	Span No.	2	Condition: SPAN 2 GEN
		PP		
		Member		
907	N S W (E) Up (Down)	Span No.	2/3	Condition: SLIDING R JOINT IN S.W.
		PP		R EDGE PROJECTS UP IN CORNER S. SIDE
		Member		3/4" TO 1"
908	N S (W) E Up Down	Span No.	2	Condition: CONST JOINT @ FB7
		PP	L7	2 CONC. PATCH IN N.B. LANE
		Member		
909	(N) S W (E) Up Down	Span No.	2	Condition: E. S.W. CURB - LONG SPALL
		PP		W/EXPOSED REINF. FROM L6-L7
		Member		
910	N S W (E) Up Down	Span No.	2	Condition: DOWNSTREAM WATERWAY
		PP		
		Member		
911	N S (W) E Up Down	Span No.	2	Condition: UPSTREAM WATERWAY
		PP		
		Member		
912	N S (W) E Up Down	Span No.	1/2	Condition: PIER 1 DECK JOINT
		PP		CONC PATCH 6'X1' IN SB LANE
		Member		SPALLING IN W. CURB
913	N S W (E) Up Down	Span No.	1/2	Condition: CURB SPALL & RENT S.W. R
		PP		
		Member		
914	(N) S W E Up Down	Span No.	1	Condition: TOP OF DECK GEN.
		PP		
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 4 of 4

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
915	N S W (E) Up Down	Span No. PP Member	1 L7	Condition: L7 2'SQ DECK PATCH @ S.W. CRACK IN MID PATCH
916	N S (W) E Up Down	Span No. PP Member	1 L5	Condition: TRAFFIC RAIL SPLICED @ PREVIOUS IMPACT LOCATION
917	(N) S W E Up Down	Span No. PP Member	1	Condition: @ N. APPROACH ACTIVE CONS. ADJACENT TO BRIDGE (RT 2.)
918	N S (W) E Up Down	Span No. PP Member	1	Condition: N. ABUT DECK JOINT (PAVED OVER.)
919	N (S) (W) E Up Down	Span No. PP Member	1	Condition: N.W. CORNER @ → NO GUIDE RAIL
920	N (S) W (E) Up Down	Span No. PP Member	1	Condition: N.E. BRIDGE CORNER SUB STANDARD GUIDE RAIL SUB STANDARD ATTACHMENT TO FED RAIL → NO STIFF.
921	(N) S W (E) Up Down	Span No. PP Member		Condition: CONSTRUCTION SITE - TEMP
922 923	N (S) W E Up Down	Span No. PP Member		Condition: N. APPROACH OF BRIDGE SPAN 1
924	N (S) W E Up Down	Span No. PP Member		Condition: SAME BUT FARTHER BACK
	N S W E Up Down	Span No. PP Member		Condition:

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 1 of 9

Team Leader: KS Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
925	N (S)	Span No.	1	Condition: North face of Pier 1
	W E	PP		Pier retrofit under each bearing. Minor spalls on
	Up Down	Member		pier face. Trapped tree trunk @ pier along the underface @ upstream s/e
926	(N) S	Span No.	1	Condition: West fascia of span 1
	W E	PP		GENL
	Up Down	Member		
927	N (S)	Span No.		Condition: West fascia (looking from Span 1 toward
	W E	PP		Spans 2 and 3)
	Up Down	Member		GENL
928	N S	Span No.	1	Condition: 4" W Spall w/ exposed rebar along FB
	W E	PP		Similar condition exists thru Span 1, S3 and S9
	(Up) Down	Member	btw S5 & S6 @ FB6	FB6
929	N S	Span No.	1	Condition: 4" W Spall w/ exposed rebar along FB
	W E	PP		
	(Up) Down	Member	btw S4 & S5 @ FB6	
930	(N) S	Span No.	1	Condition: General Underside
	W E	PP		Looking N from Span 1 FB6
	Up Down	Member		3 Utility Pipes btw S3 and S4
931	N (S)	Span No.	1	Condition: General Underside
	W E	PP		Btw L7 and L8, fine transverse cracks w/ efflo
	Up Down	Member		in deck between S5 and S6 reoc throughout Similar condition
	N S	Span No.		Condition: @ FB 8 btw S4 and S5, and S5 and S6
	W E	PP		
	Up Down	Member		
932	N (S)	Span No.	1	Condition: Long cable running from FB7 to FB1
	W E	PP		in Span 1, just above the FB cutout
	Up Down	Member	Btw S5 and S6	
933	(N) S	Span No.	1	Condition: Along the interface of sidewalk truss from
	W E	PP		FB6
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL — Daily Page Number 2 of 9

Team Leader: _____ Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
934	(N) S / W E / Up Down	Span No.	1	Condition: Looking Underneath the sidewalk from FBG
		PP		GENL
		Member		
935	N (S) / W E / Up Down	Span No.		Condition: Looking S from Span 1 FBG
		PP		Underneath the sidewalk
		Member		GENL
936	N (S) / W E / Up Down	Span No.	2 & 3	Condition: East fascia
		PP		GENL
		Member		
937	(N) S / W E / Up Down	Span No.	1	Condition: East fascia
		PP		GENL
		Member		
938	(N) S / W E / Up Down	Span No.	1	Condition: Sidewalk truss btw L7 and L8.
		PP		GENL
		Member		
939	N S / (W) E / Up Down	Span No.		Condition: North face and Top of Cap of Pier 1
		PP		
		Member		
940	N S / (W) E / Up Down	Span No.		Condition: SD BD Pier 1 Bearings @ Sidewalk truss
		PP		Span 1 is to the right. Span 2 is to the left
		Member		
941	N S / W E / (Up) Down	Span No.		Condition: Span 1 & 2 End FBs over Pier 1
		PP		GENL
		Member		
942	(N) S / W E / Up Down	Span No.		Condition: N. Abutment
		PP		GENL Retaining @ each bearing. Fine
		Member		cracks w/ efflo @ NE wing wall
943	N S / W (E) / Up Down	Span No.		Condition: BRG Pier 1 End FBs
		PP		GENL
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL Daily Page Number 3 of 9

Team Leader: _____ Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
944	N (S) W (E) Up Down	Span No.		Condition: Roadway truss bearings @ Pier 1
		PP		
		Member		
945	N S W (E) Up Down	Span No.		Condition: ~~Pier 1 Bearings~~ Roadway truss bearings
		PP		@ Pier 1. Span 1 on the left Span 2 on the
		Member		right.
946	N S W (E) Up Down	Span No.		Condition: Blue end FBs @ PIER 1
		PP		
		Member		
947	N S W E Up (Down)	Span No.	1	Condition: Roadway truss Exp. Bearing @ Pier 1
		PP		W anchor bolt slot filled w/ debris
		Member		
948	N S W (E) Up (Down)	Span No.		Condition: @ West Face of Pier 1
		PP		GENL
		Member		
949	N (S) W E Up Down	Span No.		Condition: West fascia of Span
		PP		looking S from Pier
		Member		
950	N (S) W E Up Down	Span No.		Condition: North face of Pier 2 GENL
		PP		
		Member		
951 948	(N) S W E (Up) Down	Span No.	2	Condition: 4'L x 7'H concrete patch @ deck underside
		PP		in all 3 stringer bays. Several transverse cracks w/
		Member	LO FB	efflo within 10' ft of FB
952	N (S) W E Up Down	Span No.	2	Condition: General underside of Span 2 from below
		PP		Span 2 FB 1
		Member		
953	(N) S W (E) Up Down	Span No.	2	Condition: Lower Lateral bracing (angle) displaced 1" laterally in
		PP		the horiz. plane
		Member		View toward FB1 @ Sidewalk truss

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 9 of 9

Team Leader: _____ Date: 8/19/2002 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
954	(N) S / (W) E / Up (Down)	Span No.		Condition: Sidewalk truss bearings @ Pier 1
		PP		GENL
		Member		
955	N S / (W) E / Up Down	Span No.		Condition: South face of Pier 1
		PP		
		Member		
956	N (S) / W E / Up Down	Span No.	2	Condition: Betwn sidewalk East fascia of Span 2
		PP		
		Member		
957	(N) S / W E / Up Down	Span No.	2	Condition: Sidewalk ~~crack~~ subtype btwn 11 and 12
		PP		11 long. crack along the sidewalk CJ w/ efflo
		Member		2 traverse cracks in sidewalk w/ efflo
958	(N) S / (W) E / Up Down	Span No.	2	Condition: Underside of D deck btwn S5 and S6, a
		PP		4' x 6' ~~pad~~ concrete patch @ S. side FB2
		Member		
959	N (S) / W E / (Up) Down	Span No.	2	Condition: Btw FB2 and FB3, a two 2' Square spall
		PP		w/ exposed rebar @ mid-pt of panel btw S5 and S6.
		Member		A 2' Square spall w/ exposed rebar @ N side of FB3
960 961	N (S) / W (E) / Up Down	Span No.	2	Condition: Bent and twisted flange on both vertical end
		PP		diagonals. Likely due to floating debris impact at high water.
		Member	13 @ Roadway truss	
962	N (S) / W E / Up Down	Span No.	2	Condition: West fascia of Span 2
		PP		GENL
		Member		
963	(N) S / W E / Up Down	Span No.	2	Condition: West fascia of Span 2
		PP		GENL
		Member		
964	N (S) / W (E) / Up Down	Span No.	2	Condition: Diagonal U1-L2 missing the last rivet
		PP	12 @ Roadway truss	@ East gusset plate. Member has 19 out of
		Member		20 rivets intact. Missing Rivet @ the End of East flange

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 3 of 9

Team Leader: _____ Date: 8/19/2013 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
965	N S W (E) (Up) Down	Span No. PP Member	2	Condition: Between S3 and S6, a 1'x4' spall w/ exposed rebar @ FB2
966	(N) S (W) E Up Down	Span No. PP Member		Condition: @ Roadway from bearing @ Pier 1
967 968	(N) S W E Up Down	Span No. PP Member	2 Roadway from U2-L3	Condition: Out-to-Out depth of member is 9 5/8" Edge of flange bent inward approx 2½"
969 970	N (S) W (E) Up Down	Span No. PP Member	2 Roadway from U3-L3	Condition: @ Pier Edge of flange bent outward approx. 1½", Undeformed position of the flange should be @ 9"
971	N S W (E) Up Down	Span No. PP Member	2 L4 @ Roadway from	Condition:
972	(N) S W E Up Down	Span No. PP Member		Condition: South face of Pier 1
973	N (S) W E Up Down	Span No. PP Member		Condition: North face of Pier 2
974	N S (W) E Up Down	Span No. PP Member		Condition: Upstream Waterway
975	N S W (E) Up Down	Span No. PP Member	2	Condition: Btw FB3 & FB4, Deck underside has long crack w/ efflo near sidewalk curb btw S3 and S4
976	(N) S W E Up Down	Span No. PP Member	2	Condition: From midspan, general underside

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL Daily Page Number 6 of 9

Team Leader: _____ Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
977	N (S)	Span No.	2	Condition: From midspan, general underside
	W E	PP		
	Up Down	Member		
978	(N) S	Span No.	2	Condition: Btw S3 and S4 & three 4" ϕ steel pipes hung
	W E	PP		from deck
	Up Down	Member		
979	(N) S	Span No.	2	Condition: Inside Sidewalk truss L3-L4
	W E	PP		Additional inner plate to side channel btw sidewalk
	Up Down	Member		truss L3-L5
980	N (S)	Span No.	2	Condition: Top of lower chord btw L3-L4 @ sidewalk
	W E	PP		truss
	Up Down	Member		
981	N (S)	Span No.	2	Condition: Typical FB web cutout 4"x14" for utilities
	W E	PP		Typical each FB btw S3 and S4, and btw S5 and S6
	Up Down	Member		full length of bridge.
982	N S	Span No.	2	Condition: Lower lateral bracing connection plate
	(W) E	PP	L8 L9 @ Roadway truss	S side of FB 5 bend down by 1" due to pack
	Up Down	Member		rust @ FB edge & flange
983	(N S)	Span No.	2	Condition:
	W (E)	PP		Lower lateral -L- @ sidewalk truss L4, bent appx 6" in
	Up Down	Member		the horizontal direction likely due to high water debris impact
984	(N S)	Span No.	2	Condition:
	W (E)	PP		Close up of Previous Photo. Same location &
	Up Down	Member		condition as previous photo
985	N (S)	Span No.	2	Condition: Sidewalk curbline btw FB5 and FB6 and S2 and S3
	(W) E	PP		A 2' Square spall w/ exposed rebar @ FB5 & from
	Up Down	Member		@ Sidewalk to deck slab interface
986	N S	Span No.	2	Condition: 4½" thick sidewalk slab
	(W) (E)	PP		
	Up Down	Member	btw FB6 & FB5	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL Daily Page Number 7 of 9

Team Leader: _____ Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
987	N (S) W E Up Down	Span No.		Condition: North face of Pier 2
		PP		
		Member		
988	N (S) W E Up Down	Span No.	2	Condition: Roadway truss bearing @ Pier 2
		PP		Missing nut on bearing pin @ inside face of bottom chord.
		Member		
989	N S (W) E Up Down	Span No.		Condition: Sidewalk truss bearing @ Pier 2
		PP		Span 2 bearing is missing a bearing pin @ east side of bottom chord.
		Member		
990	N (S) W E Up Down	Span No.		Condition: Sidewalk truss bearing @ Pier 2
		PP		Span 2 bearing is slightly out of alignment w/ lower masonry plate
		Member		
991	N (S) W E Up Down	Span No.		Condition: Sidewalk truss bearing @ Pier 2
		PP		Span 2 bearing missing its west anchor bolt nut.
		Member		Span 3 bearing west bearing pin nut is cracked & missing lower half
992	N (S) W E (Up) Down	Span No.	2	Condition: Span 2 End FB @ Pier 2 btw S3 & S4.
		PP		At FB web cutout, steel pipes are completely perforated.
		Member		Steel pipes are appointed to have electric cables inside.
993	N S W (E) Up Down	Span No.		Condition: Sidewalk truss bearing @ Pier 2
		PP		Variable gap along long. side of Span 2 bearing.
		Member		
994	N S (W) E Up Down	Span No.		Condition: End Floorbeams and Top of Cap @ Pier 2
		PP		Developing paint failure in web & BF of End Floorbeam
		Member		
995	N S W E Up Down	Span No.		Condition: Roadway truss beams @ Pier 2
		PP		
		Member		
996	N (S) W E (Up) Down	Span No.	2	Condition: A 1'x 2' spall w/ exposed rebar @ N.
		PP		side of FB & btw S4 and S5
		Member	FB4	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL Daily Page Number 8 of 9

Team Leader: _____ Date: 8/10/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
997	N (S)	Span No.	2	Condition: On either side of SS @ FB 8, two concrete
	W E	PP		patches @ deck underside. Transverse cracks w/
	(Up) Down	Member	FB 8	efflo @ patch at right
998	N (S)	Span No.	2	Condition: Looking inside of Span 2 Roadway truss
	W E	PP		bearing @ Pier 2
	Up Down	Member		
999	N S	Span No.	2	Condition: Underside of deck btw FB 7 and 8
	W (E)	PP		four transverse cracks w/ efflo
	(Up) Down	Member		
1000	N S	Span No.		Condition: Upstream end (Upstream side) of Pier 2
	W (E)	PP		Spalls and cracks
	Up Down	Member		
1001	N (S)	Span No.		Condition: 1 Sp. Roadway truss bearings @ Pier 2
	W (E)	PP		Span 2 bearing missing SW anchor bolt
	Up Down	Member		
1002	N S	Span No.		Condition: End Floorbeams @ Pier 2
	W (E)	PP		Inside view in between the end floorbeams
	Up Down	Member		
	N S	Span No.		Condition: ~~Curb H~~ 6"H x 6"W Roadway Curb
	W E	PP		12" Concrete deck + Wearing surface
	Up Down	Member		Measured @ Span 2 ~~FB~~ FB 6
1003	N (S)	Span No.		Condition: Looking S toward Span 3 from Span 2
	W E	PP		FB # 5
	Up Down	Member		
1004	(N) S	Span No.		Condition: Looking N toward Span 1 from Span 2
	W E	PP		FB 5
	Up Down	Member		
1005	N S	Span No.	2	Condition: No additional plate along side of top
	W (E)	PP	Roadway truss @ US	chord
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG

Project: Notes by KL

Daily Page Number 9 of 9

Team Leader: ____________ **Date:** 8/14/2012 **Bridge:** 2019

PHOTO #	DIRECTION		LOCATION		DESCRIPTION
1006	[✓ N]	S	Span No.		Condition: West ~~fear~~ fascia of ~~[illegible]~~ bridge from
	W	E	PP		Span 2 TB 5
	Up	Down	Member		
1007	N	[✓ S]	Span No.		Condition: West fascia of bridge from Span 2
	W	E	PP		TB 5
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 1 of 10

Team Leader: RS Date: 8/13/2012 Bridge: 2019

NOTES BY B. HOLSAPPLE

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1103	(N) S / W (E) / Up Down	Span No.	3	Condition: Spalls in Path RW bgs over Pier 2
		PP	LO RW	
		Member	RW Bgs, Pier 2	
1104	N (S) / (W) E / (Up) Down	Span No.	3	Condition: Spalls in u/s of deck, with exposed reinf between S5+S6 and LO+L1
		PP	LO-L1 RW	
		Member	Deck	
1105	(N) S / W E / (Up) Down	Span No.	3	Condition: Patch over FBO, between S5+S6, [illegible] half bay width patch between S4+S5 also, same location.
		PP	LO 1	
		Member	FBO-bot	
1106	(N) S / W (E) / Up Down	Span No.	3	Condition: End FB, FBO; minor paint loss + active corrosion on u/s of bot. flg.
		PP		
		Member	FBO	
1107	N (S) / W E / Up Down	Span No.	3	Condition: FBL N. Side. Poor paint condition on web between S3+S5. Note spall w/exposed rebar over
		PP		
		Member	FBL	FB between S4+S5 and wide transverse crack w/efflor... over FB between S3+S4
1108	(N) S / (W) E / Up Down	Span No.	3	Condition: S face of Pier 2, Span L side
		PP	LO	
		Member		
1109	(N) S / W E / Up (Down)	Span No.	3	Condition: Up to 8" debris accumulations on lower the R at L1 between side channels.
		PP	L1 SW	
		Member	L1-L2	
1110	N (S) / (W) E / Up Down	Span No.	3	Condition: Approx. 4" of lateral displacement in L1SW to L2 RW lateral bracing, likely due to high water debris impact
		PP		
		Member		
1111	N (S) / W E / Up Down	Span No.	3	Condition: Crack U/S, Span L1 @ SW
		PP		
		Member		
1112	(N) S / W E / Up Down	Span No.	3	Condition: Node deterioration/section of lower lateral bracing Sur Span 3
		PP	L1 SW	
		Member		

Note:
RW = West = Upstream
SW = East = Downstream

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 2 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1113	N (S)	Span No.	3	Condition: SW faces L7 9-12" of debris inside
	W E	PP	L2 SW	the chord on lower lateral rear R. Similar condition
	Up Down	Member		on S. face of vertical
1114	N (S)	Span No.	3	Condition: Note ~6" lateral displacement in lower lat.
	(W) E	PP		bracing angle between L2 SW & L3 RW
	Up Down	Member		
1115	N (S)	Span No.	3	Condition: Note 9/16" lateral displacement in horizontal
	(W) E	PP		plane in lower lat. bracing angle between L3 SW
	Up Down	Member		& L4 RW
1116	N (S)	Span No.	3	Condition: Along SW fascia from L3
	W E	PP		
	Up Down	Member		
1117	(N) S	Span No.	3	Condition: Along SW fascia from L3
	W E	PP		
	Up Down	Member		
1118	N (S)	Span No.	3	Condition: Note offset of top flg of inside chan
	(W) E	PP	L4	channel for installation of TB. Condition occurs
	(Up) Down	Member	RW	at L2-L8 points, RW & SW, Span 3 only
1119	N (S)	Span No.	3	Condition: Looking S from L4 along RW fascia
	W E	PP		
	Up Down	Member	RW	
1120	(N) S	Span No.	3	Condition: Minor pack rust on top + bottom flg R
	W (E)	PP	L3	at splice.
	Up Down	Member	RW	
1121	(N) S	Span No.	3	Condition: Small bulk rust along top edge of
	W E	PP	L1	flg R. Bonded to both vertical stiffener
	Up (Down)	Member	RW	and bottom chord.
1122	N S	Span No.	3	Condition: Same as above
	W E	PP	L1	
	Up Down	Member	RW	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 3 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1123	N (S)	Span No.	3	Condition: Note retrofits at each leg + wide vert.
	W E	PP		crack in breastwall at RW d. Also 2 med. cracks
	Up Down	Member	S abut	bot. portion of breastwall
1124	N (S)	Span No.	3	Condition: 4'-0" long x 6-12" wide spall w/exposed rebar
	(W) E	PP	L5	between L5 + L6, 2 Ft N of FB5
	(Up) Down	Member	Deck	
1125	(N) S	Span No.	3	Condition: SW side - back face of curb between L5 +
	(W) E	PP		L6. Note eff. at SW-RW deck slab joint.
	(Up) Down	Member	SW fascia	
1126	(N) S	Span No.	3	Condition: Up to 12" debris accumulation on lower lat.
	W E	PP	L6	connection PL, S side of vertical
	Up Down	Member	SW fascia	
1127	(N) S	Span No.	3	Condition: Up to 8" of debris on lower lat. conn. PL.
	W E	PP	L7	S side. Similar on N face, ~4" debris
	Up Down	Member	SW fascia	
1128	N (S)	Span No.	3	Condition: Note fine-medium map cracking in approx
	(W) E	PP		<1 Ft of breastwall + wide vertical crack at
	Up Down	Member	S abut	℄ roadway
1129	(N) S	Span No.	3	Condition: Gen'l U/S from L7 SW
	W E	PP		
	Up Down	Member		
1130	N S	Span No.	3	Condition: Note ℄ gusset PL not similar to
	(W) E	PP	L7	L1 connection. Bolts ~~FB~~ go from FB etc.
	Up Down	Member	SW	thru gusset to vertical. Gusset does not appear
1131	(N) S	Span No.	3	Condition: to take significant load.
	(W) E	PP	L7	
	Up Down	Member	SW	Same location as above
1132	N (S)	Span No.	3	Condition: Note 2 spalls + medium vertical crack from
	W E	PP		top of wingwall to base
	Up Down	Member	SE wing	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 4 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1133	N S (W) E Up Down	Span No. PP Member	3	Condition: FB2 along S. abut. backwall. Minimal 1/4" gap between FB flg + backwall.
1134	N (S) (W) E Up Down	Span No. PP Member	3 L8 SW truss	Condition: (SW) end brg at S. abut. 3-4" debris accumulations cleaned from around masonry pl + upper stbs pl. Debris filling exp. slots.
1135	N (S) W E Up Down	Span No. PP Member	3 L8 SW truss	Condition: SW truss brg at S. abut
1136	N (S) W (E) Up Down	Span No. PP Member	3 L8 SW truss	Condition: Pin nut at SW brg is cracked. Inside (West) face. 2-3" debris accumulation at lower lat. connection pl
1137	N (S) (W) E Up Down	Span No. PP Member	3 L8	Condition: Looking along bridge seat from SW truss Note active corrosion along FB bot. flg + portions of web. 3-4" debris accumulations nearly full width of backwall
1138	N (S) W E Up Down	Span No. PP Member	3	Condition: Between S3-S4 at FB8. Note hvy efflo. + transverse cracks in deck over FB
1139	(N) S W E Up Down	Span No. PP Member	 SW truss	Condition: Looking N along interior of L7-L8. Typical condition of interior of bot. chord.
1140	N (S) W E Up Down	Span No. PP Member	3 S abut	Condition: Between S4+S5: Active corrosion on end FB web. Transverse cracks + efflo. above FB Mbl. crack in backwall extending across the seat + connecting to
1141	N (S) W E Up Down	Span No. PP Member	3 L8	Condition: crack in diaphragm wall (see photo 1123) Between S5-S6. Note abandoned previous electric utility. End FB corrosion + deck slab efflo.
1142	N (S) W E Up Down	Span No. PP Member	3 L1 SW truss	Condition: Inside face - note cracked pin nut w/ lower half fallen away.

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 5 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1143	N (S)	Span No.	3	Condition: RW truss brg at S abut.
	W E	PP	L8	
	Up Down	Member	RW truss	
1144	N (S)	Span No.	3	Condition: ~~Gen~~ brg RW truss brg, span 3 at S abut.
	W E	PP	L6	Note 1/2" vertical gap. Photo taken after removing
	Up Down	Member	RW truss	debris between PLs
1145	N (S)	Span No.	3	Condition: RW truss brg, outside face. Note 1/2" gap between
	W (E)	PP	L8	Pin nut + side web PL + unpainted condition of pin
	Up Down	Member	RW truss	nut indicates it was installed since the last painting
1146	N (S)	Span No.	3	Condition: Note spalling along top of wingwall + map
	W E	PP	L8	cracking along backwall.
	Up Down	Member	8	
1147	N (S)	Span No.	3	Condition: SW wing wall. ~~Heavy~~ heavy spalling along
	(W) E	PP		top of wingwall.
	Up Down	Member		
1148	N S	Span No.	3	Condition: looking E along face of backwall.
	W (E)	PP		
	Up Down	Member		
1149	N S	Span No.	3	Condition: Deck slab at S abutment. Bituminous
	W (E)	PP		patch extends ~2ft into span from face of
	Up Down	Member		backwall.
1150	N S	Span No.	3	Condition: RW truss brg at S abut.
	W (E)	PP	L8	
	Up Down	Member	RW truss	
1151	N S	Span No.	3	Condition: Note left anchor bolt after cleaning slot +
	W E	PP	L8	tapping compared to right anchor bolt. Paint indication
	Up Down	Member	RW truss brg	shows that brg has likely not moved since last painting.
1152	(N) S	Span No.	3	Condition: anchor bolts @ brg @ were banding w/no breakin paint.
	W E	PP	L6	Note active corrosion + loss of paint on top
	Up Down	Member	RW truss	of L flange for @ + lower 3" of vertical @ gusset.

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 6 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1153	(N) S W E Up Down	Span No. PP Member	3	Condition: Vertical bent in lower lateral brace from LL6 RW to L5 SW
1154	N S (W) E Up Down	Span No. PP Member	1 L5 RW truss	Condition: Note ½" vertical displacement at corner of FB. Lower lat. conn. PL displaced w/ pack rust.
1155	N (S) W E Up Down	Span No. PP Member	1 RW truss	Condition: Between SS+6 + between FBS+6 Note leaking form at downspout.
1156	N (S) W (E) Up Down	Span No. PP Member	1 SW truss	Condition: Same location opposite truss. Formwork dangling from downspout repair.
1157	N (S) W E (Up) Down	Span No. PP Member	1 FBS	Condition: Note FB haunch spalls between S4+S and S5+6, N side of FBS
1158	(N) S W E (Up) Down	Span No. PP Member	1 FB6	Condition: Similar condition at S side of FB4, all 3 stringer bays under roadway.
1159	N (S) W E Up Down	Span No. PP Member	1 Pier 1	Condition: N face of Pier 1. Note spalls + scaling on upstream half.
1160	(N) S W E Up Down	Span No. PP Member	1 RW truss	Condition: Looking N along RW fascia in Span 1 from L4
1161	N (S) W (E) Up Down	Span No. PP Member	1 	Condition: 2 12" square spalls up to 4" deep w/exp. frict. between S3+S4 and FB4+FB5
1162	(N) S (W) E (Up) Down	Span No. PP Member	1 	Condition: Between FB4+5, look it between S2+3 Note vert. long. gap at SW-RW deck slab interface. Rust staining + moisture leakage signs.

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 7 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1163	N (S)	Span No.	1	Condition: FB haunch span 1, N. face of FB6,
	W E	PP		between @ S3+4 and S4+5
	(Up) Down	Member	FB6	
1164	(N) S	Span No.	1	Condition: Impact damage to L5U5 member, RW truss.
	W E	PP	RW truss	Twisting at railing height
	Up Down	Member	L5-U5	
1165	N (S)	Span No.	1	Condition: 1" deformation in flg, likely due to vehicle
	(W) E	PP	RW truss	impact.
	Up Down	Member	L6-U6	
1166	(N) S	Span No.	1	Condition: Bent flg + twisting of member
	(W) E	PP	L5-U5	
	Up Down	Member	RW truss	
1167	(N) S	Span No.	1	Condition: Same condition as above
	W E	PP	L5-U5	
	Up Down	Member	RW truss	
1168	N S	Span No.	1	Condition: Same condition, looking W
	(W) E	PP	L5-U5	
	Up Down	Member	RW truss	
1169	N S	Span No.	1	Condition: Note welded PL on vertical just below
	W E	PP	L4-U4	sway frame, covering old holes. Typical at
	Up Down	Member	RW truss	every sway frame.
1170	N (S)	Span No.	1	Condition: Looking S along RW fascia
	W E	PP		
	Up Down	Member		
1171	(N) S	Span No.	1	Condition: Looking N along RW fascia
	W E	PP		
	Up Down	Member		
1172	(N) S	Span No.	1	Condition: Gen'l of N. Abut.
	W E	PP	LO	
	Up Down	Member	N. Abut	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 7 of 10

Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1173	(N) S / W E / Up Down	Span No.	1	Condition: Gen'l of NW Wingwall
		PP		
		Member	NW wingwall	
1174	(N) S / (W) E / Up Down	Span No.	1	Condition: N. Abutment RW truss brg
		PP	LO	
		Member	RW truss	
1175	(N) S / W (E) / Up Down	Span No.	1	Condition: View along bridge seat. Minor debris accumulation
		PP		
		Member	N Abut	
1176	N (S) / W E / (Up) Down	Span No.	1	Condition: Medium transverse crack. Full width of deck between 53+56 (photo between 54+55), between FB1+FB0
		PP		
		Member		
1177	(N) S / W (E) / Up Down	Span No.	1	Condition: SW truss brg at N Abut
		PP	LO	
		Member	SW truss	
1178	(N) S / W E / (Up) Down	Span No.	1	Condition: Looking at FBO between 53+54. FB haunch spall.
		PP		
		Member	FBO	
1179	(N) S / (W) E / Up Down	Span No.	1	Condition: SW truss brg on N abut. outside face
		PP	LO	
		Member	SW truss	
1180	(N) S / W E / Up Down	Span No.	1	Condition: NE wingwall - Note map cracking w/ efflor.
		PP		
		Member	NE wing	
1181	N (S) / W E / Up Down	Span No.	3	Condition: 1/2 to 8" debris accumulation on bearing ht.
		PP	L4	cont. R. typical both sides of L4 U4 vertical
		Member	SW truss	
1182	N S / (W) E / (Up) Down	Span No.	3	Condition: Gen'l of outside face of girder
		PP	L4	
		Member	SW truss	

Work ended ~5pm 8/13/2012.
Remaining: Spans 2 +3 L4, SW truss
Need measurements also photos of S & N Abut legs from side slopes.

Returned 7:30 AM 8/14/12

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 9 of 10

Team Leader: _____ Date: 8/14/2012 Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1183	N S (W) E Up Down	Span No.	3	Condition: Gen'l of ext. face
		PP	L3	
		Member	SW truss	
1184	N S (W) E Up Down	Span No.	3	Condition: Gen'l on ext. face.
		PP	L2	
		Member	SW truss	
1185	N (S) W E Up Down	Span No.	3	Condition: Gen'l along SW truss top chord, taken
		PP		from U2
		Member	SW truss	
1186	N (S) W E Up Down	Span No.	3	Condition: Gen'l of top chord lat. bracing
		PP		
		Member		
1187	(N) S W E Up Down	Span No.		Condition: Looking N towards Span 2, taken from
		PP		Span 3 U2 SW
		Member		
1188	(N) S W (E) Up Down	Span No.	1	Condition: SW truss brg at N abutment, from
		PP		outside
		Member	SW truss	
1189	N S W (E) Up Down	Span No.	1	Condition: Same as above
		PP		
		Member	SW truss	
1190	N S W (E) Up Down	Span No.		Condition: Downstream waterway
		PP		
		Member		
1191	N S (W) E Up Down	Span No.		Condition: Upstream waterway
		PP		
		Member		
1192	N (S) W E Up Down	Span No.	2	Condition: Upper chord from U2.
		PP		
		Member	SW	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

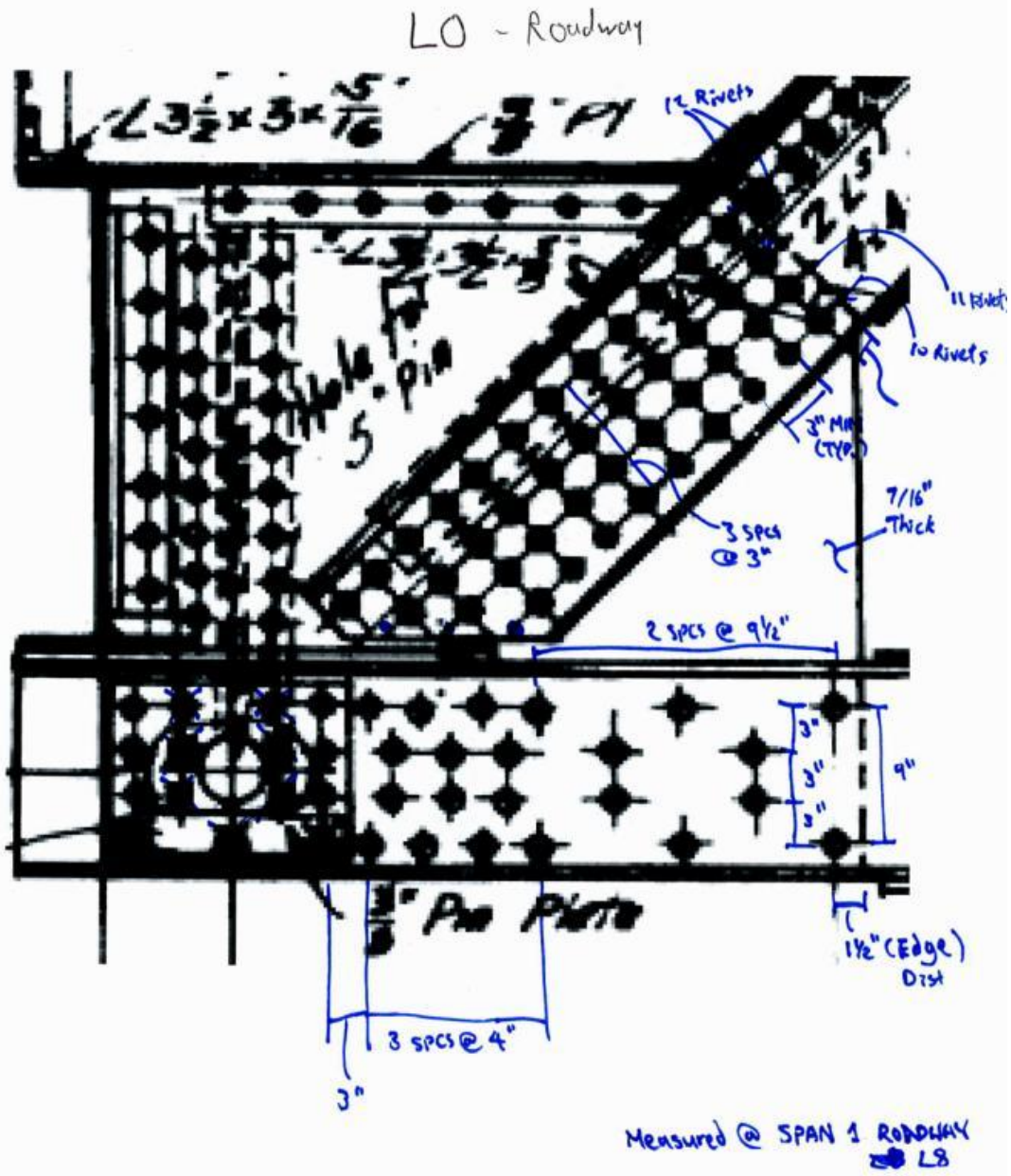
Daily Page Number 10 of 10

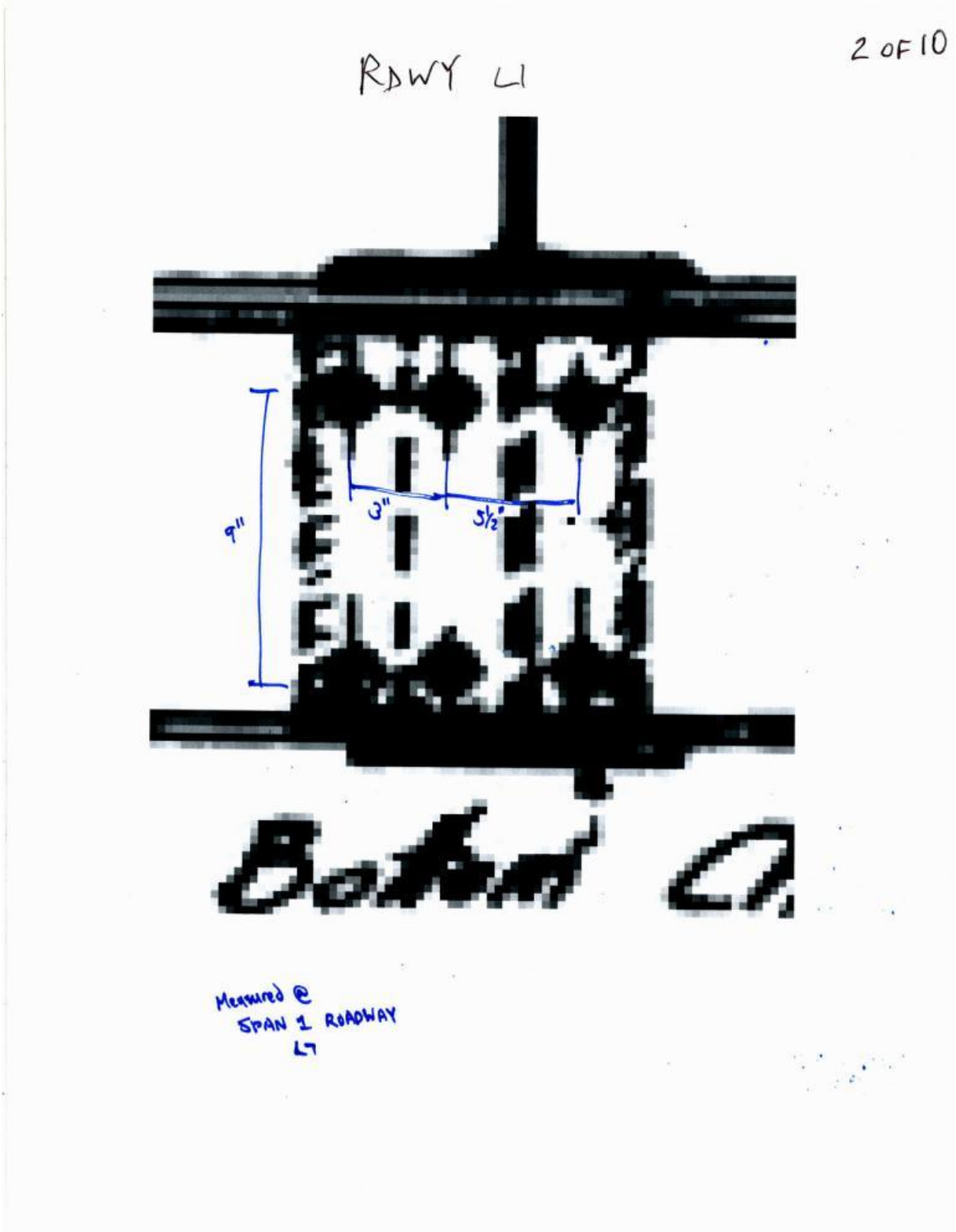
Team Leader: _____ Date: _____ Bridge: _____

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
1193	(N) S	Span No.	3	Condition: Gen'l from Span 2 U2, top of truss
	W E	PP		
	Up Down	Member	SW truss	
1194	N (S)	Span No.	2	Condition: Top lateral bracing from U2 SW
	(W) E	PP		
	Up Down	Member		
1195	(N) S	Span No.	2	Condition: Gen'l of ext. face
	(W) E	PP	L2	
	Up Down	Member	SW truss	
1196	N S	Span No.	2	Condition: Gen'l of ext. face
	(W) E	PP	L3	
	Up Down	Member	SW truss	
1197	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		
	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		
	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		
	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		
	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		
	N S	Span No.		Condition:
	W E	PP		
	Up Down	Member		

Q:\STR\photo log.xls

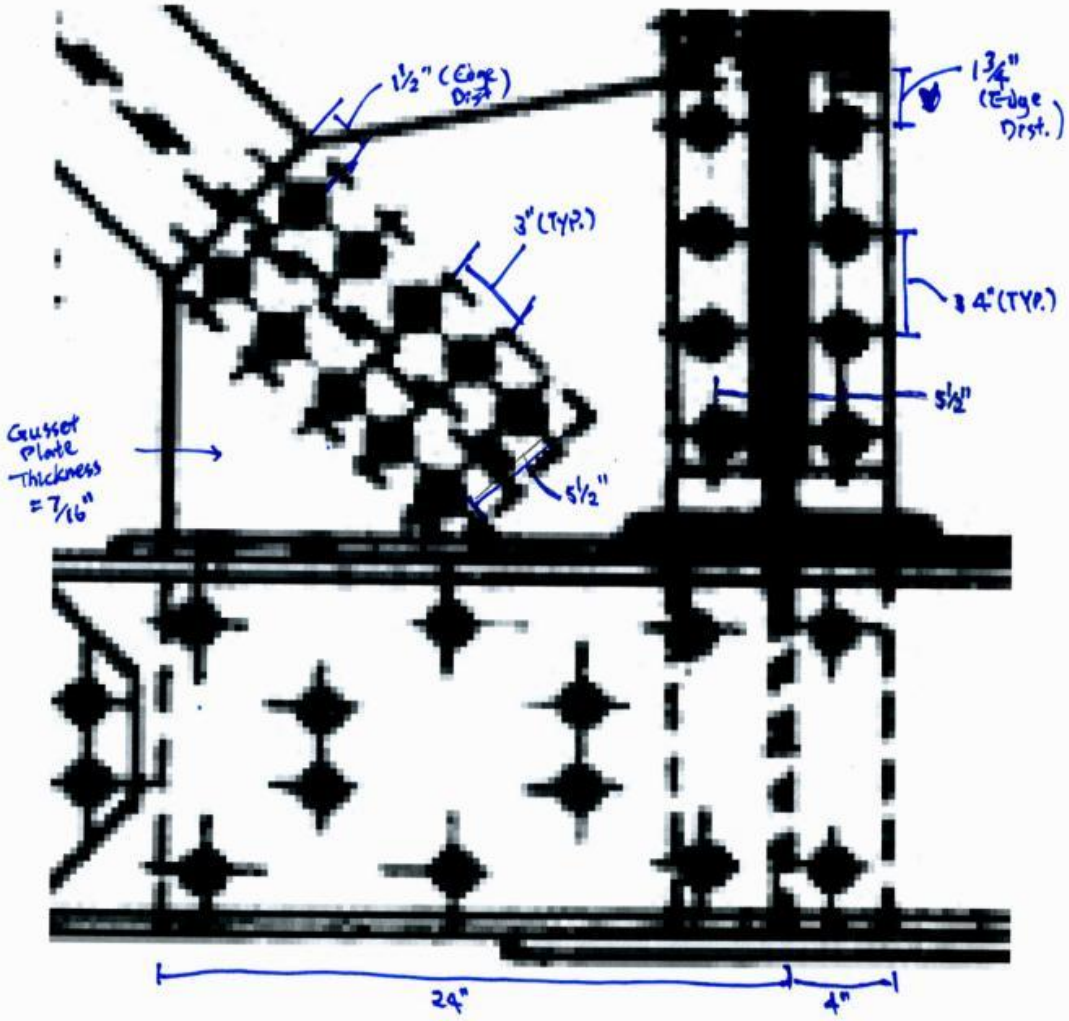
1 OF 10


LO - Roadway
12 Rivets
11 Rivets
10 Rivets
3" Max (TYP.)
7/16" Thick
3 SPCS @ 3"
2 SPCS @ 9½"
3"
3"
3"
9"
1½" (Edge) Dist
3 SPCS @ 4"
3"
Measured @ SPAN 1 ROADWAY
LB

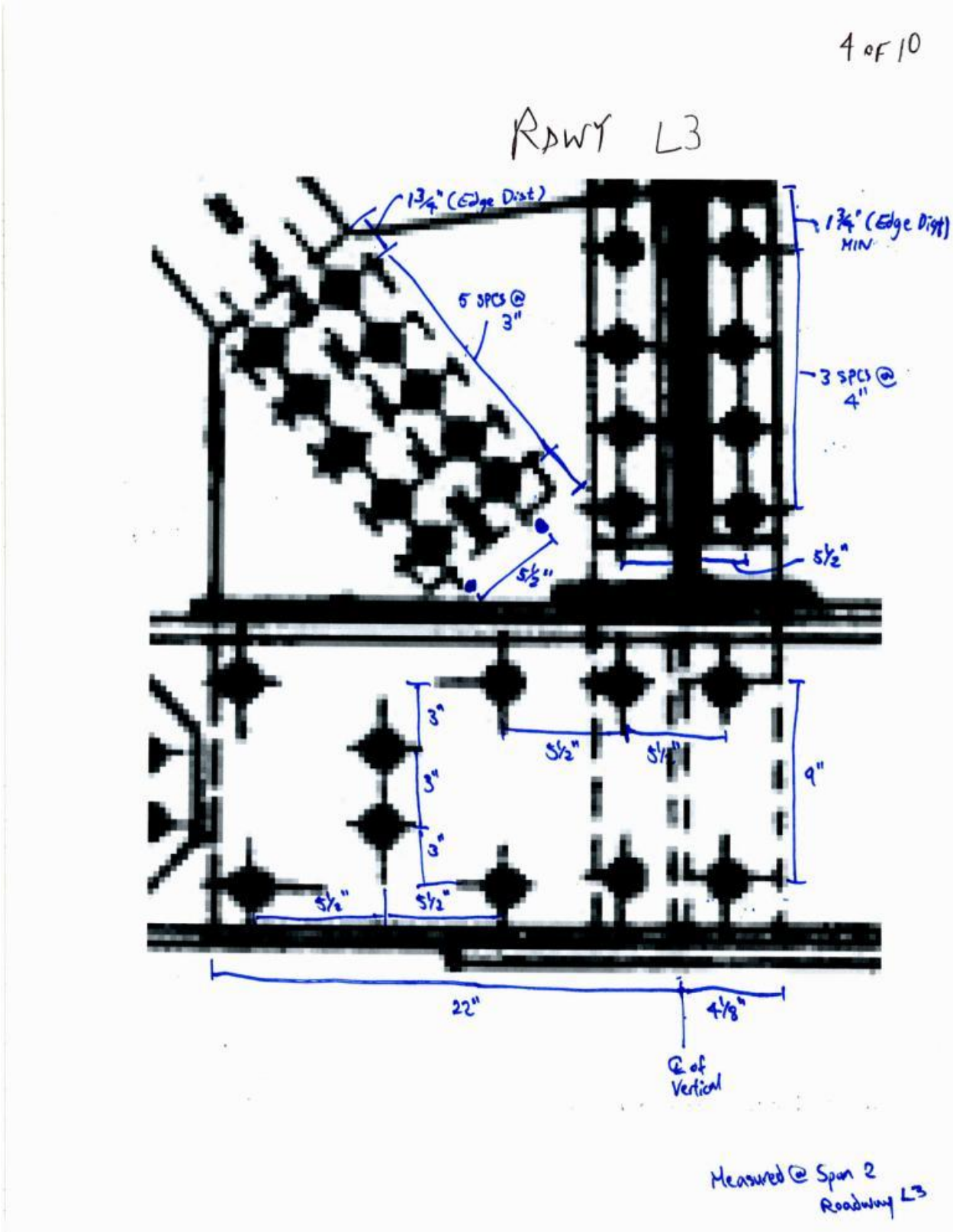

2 OF 10
RDWY LI
9"
3"
5½"
Measured @
SPAN 1 ROADWAY
LT

3 OF 10

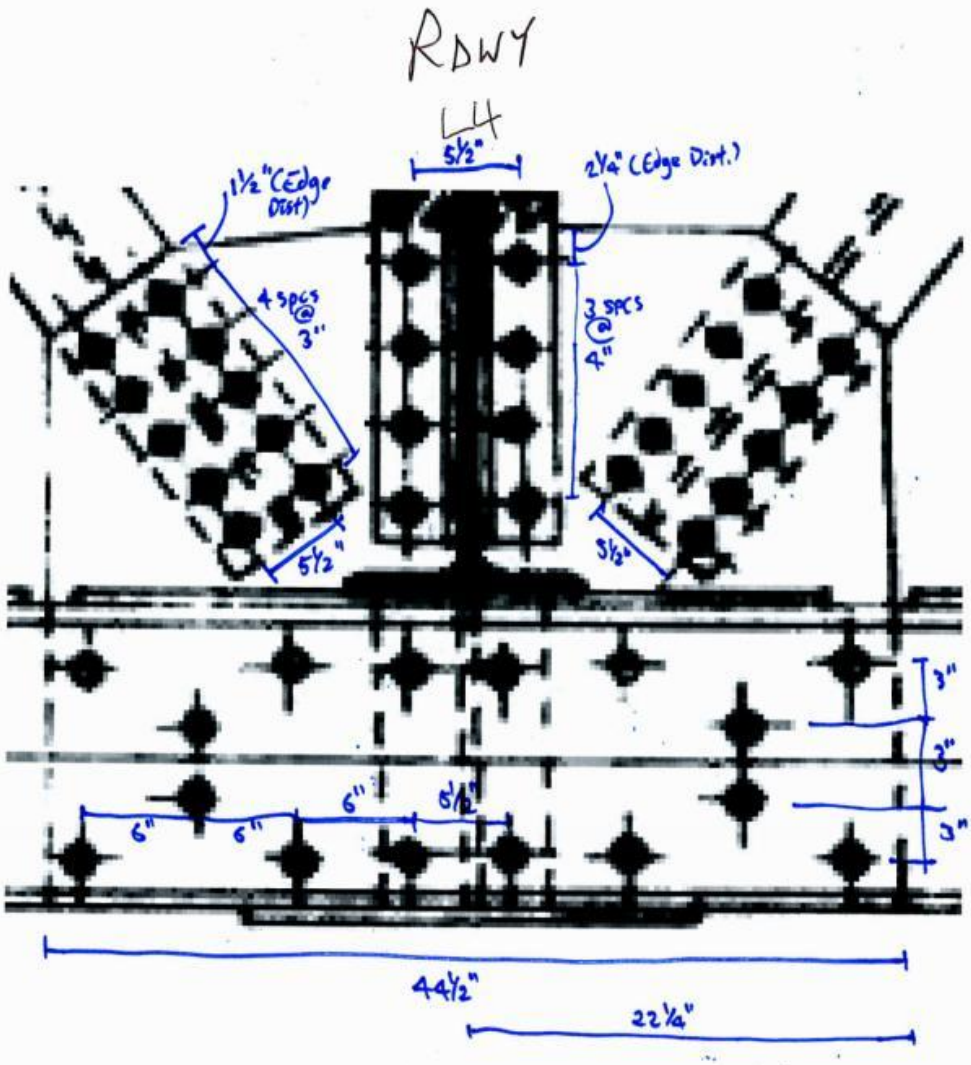
RDWY L2



Measured @ span 1 Head LG Roadway


4 of 10
RDWY L3
1¾" (Edge Dist)
1¾" (Edge Dist) MIN
5 SPCS @ 3"
3 SPCS @ 4"
5½"
5½"
3"
3"
3"
5½"
5½"
5½"
5½"
9"
22"
4⅛"
℄ of Vertical
Measured @ Span 2 Roadway L3

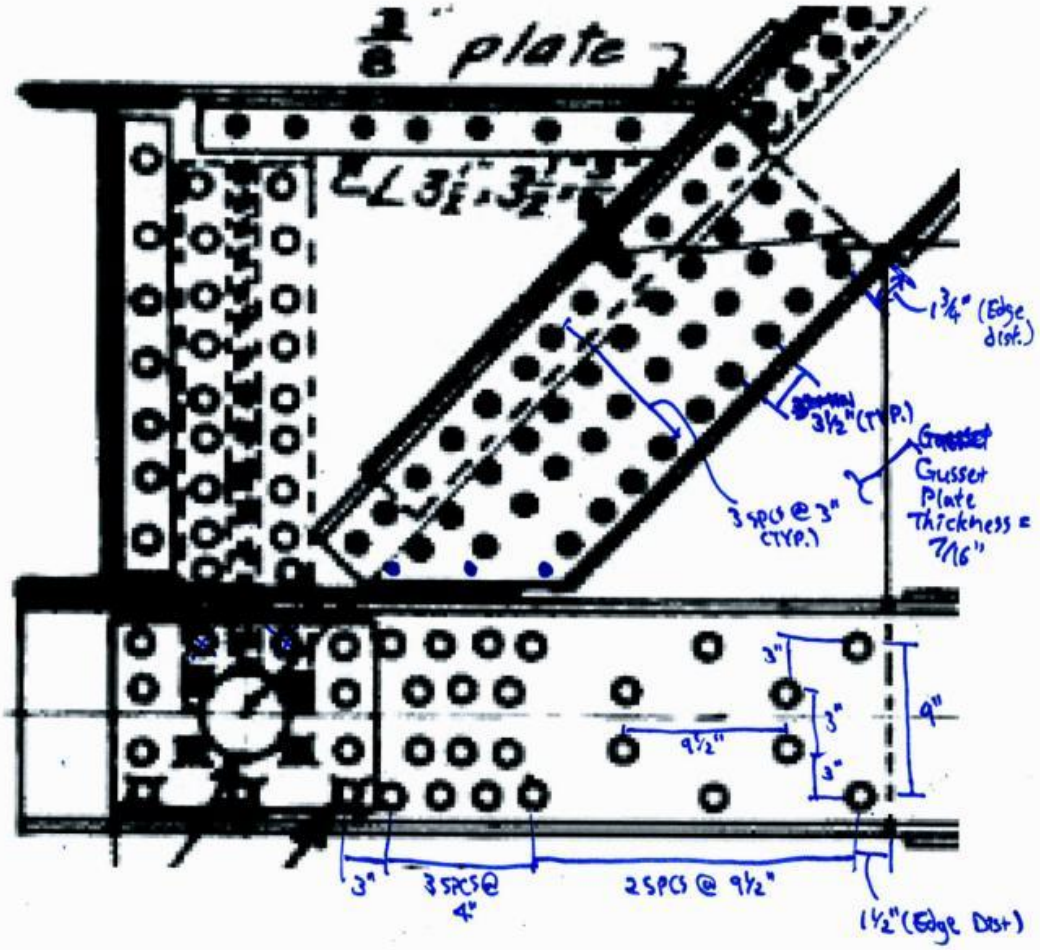
5 of 10



Measured @ Span 2 Roadway LH

6 OF 10

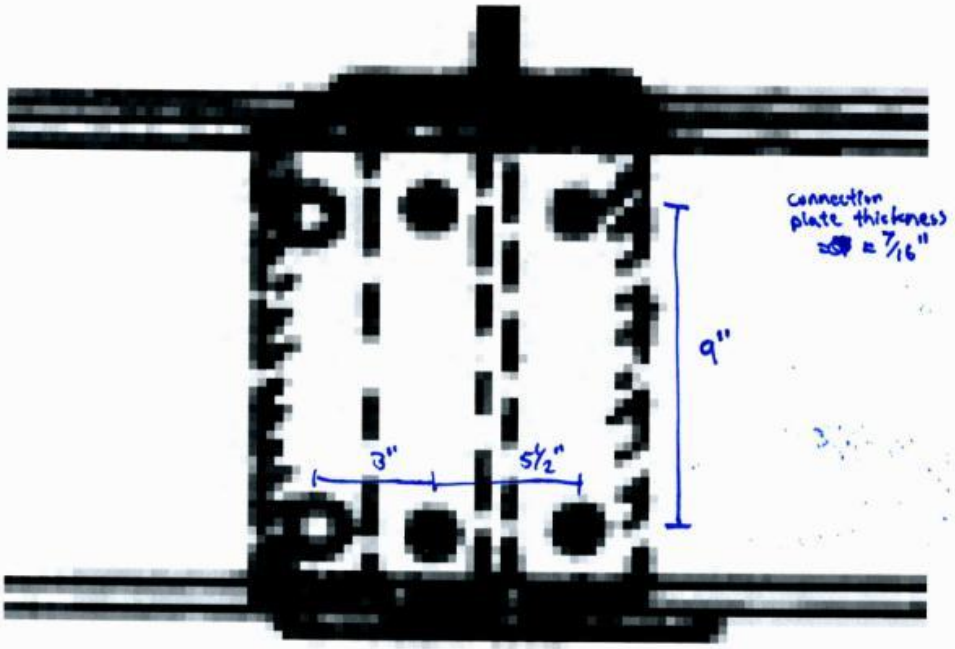
Sidewalk – LO



Measured @ SPAN 2 SIDEWALK LO

7 of 10

SDWLK
LT

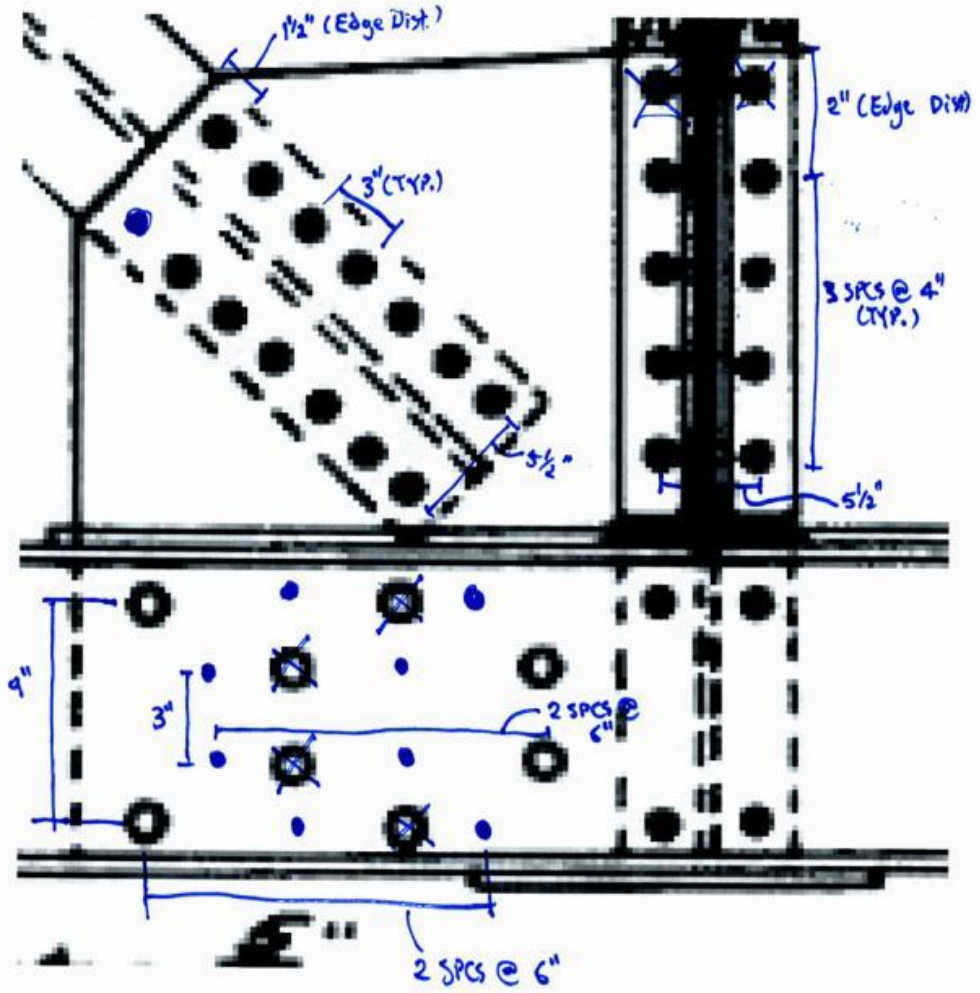


26 1/5" = 40"

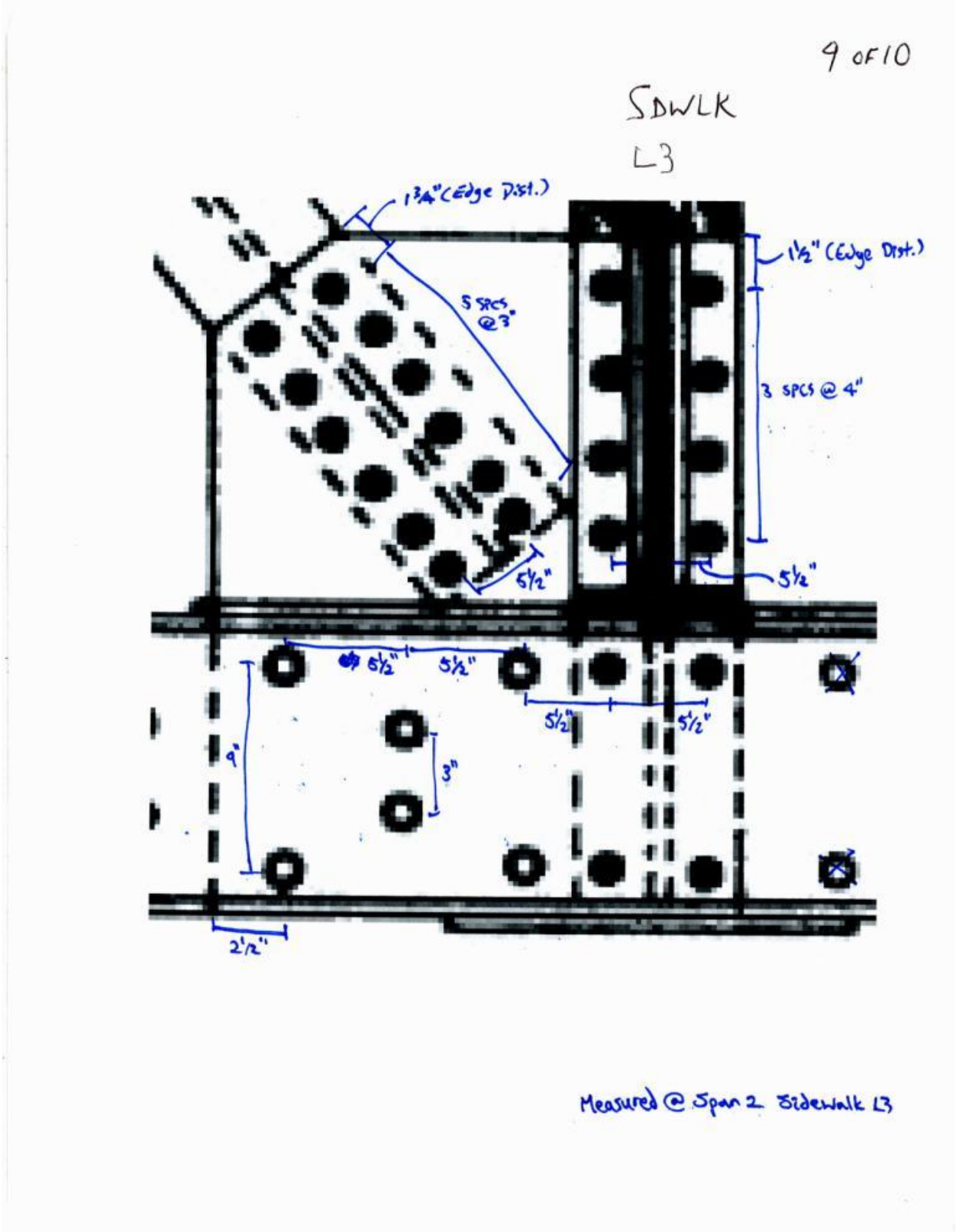
Measured @ Span 2 Sidewalk LT

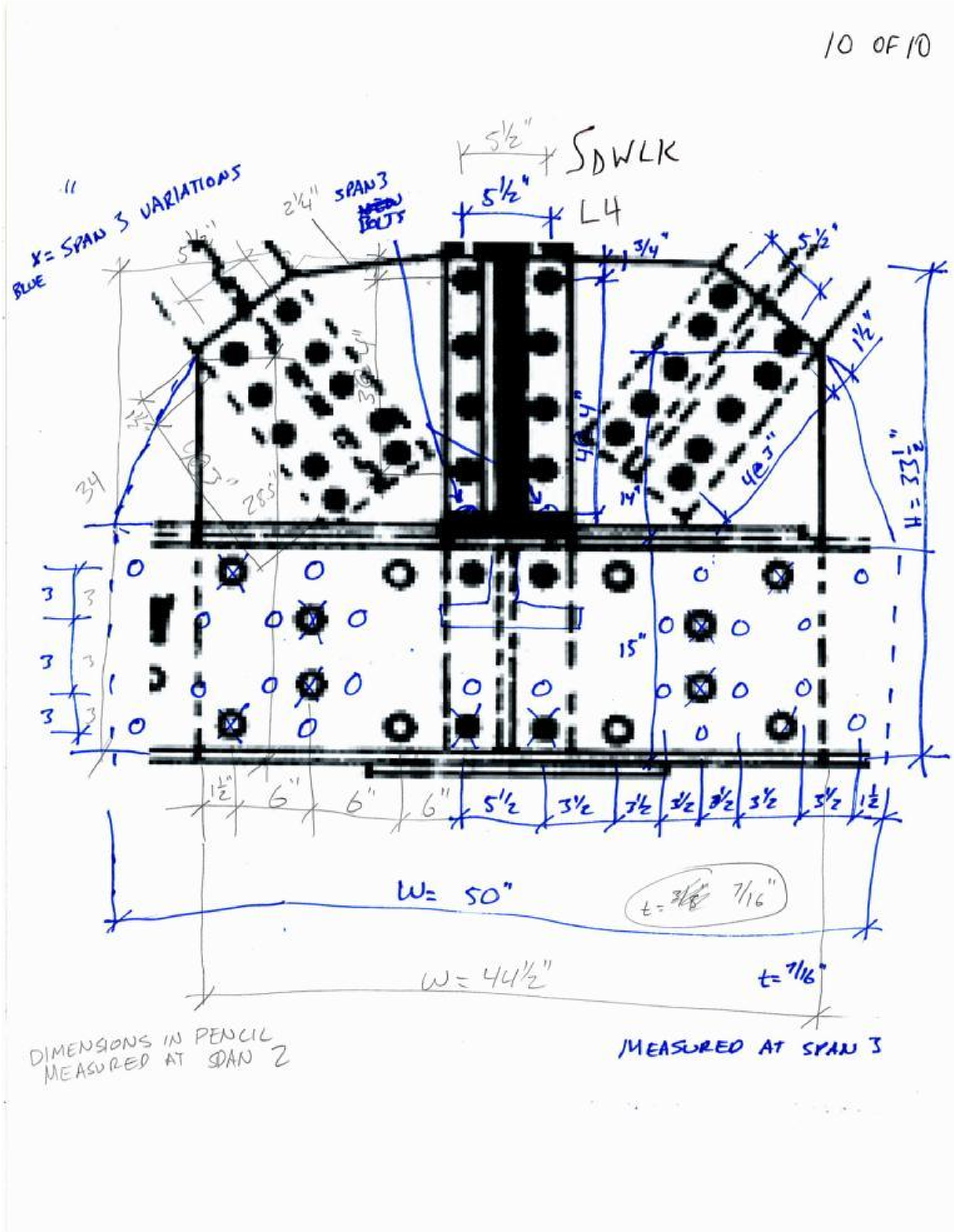
8 OF 10

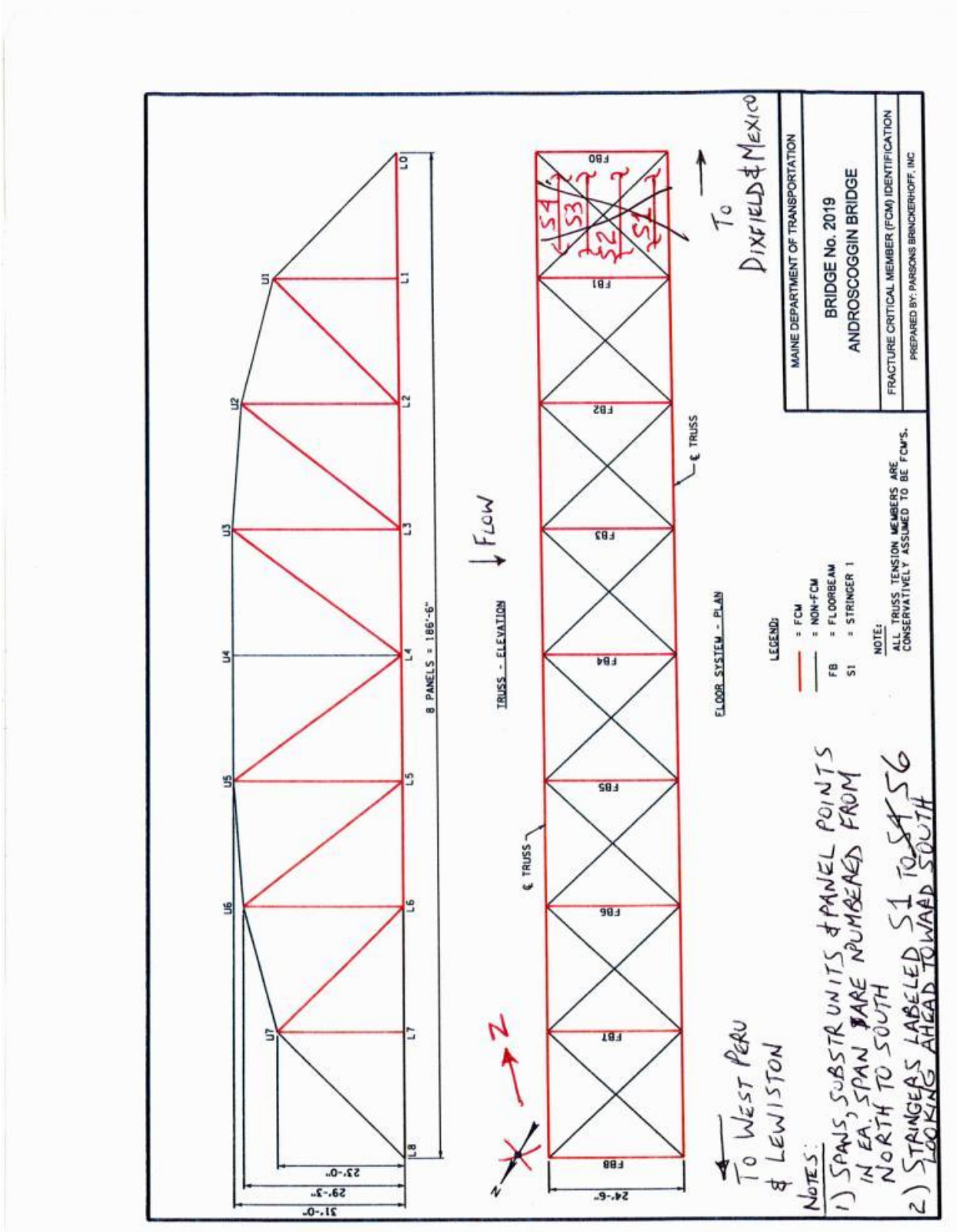
SDWLK
L2



Measured @ SB SPAN 1 LG Sidewalk


9 OF 10
SDWLK
L3
1¾" (Edge Dist.)
5 SPCS @ 3"
1½" (Edge Dist.)
3 SPCS @ 4"
5½"
5½"
5½"
5½"
5½"
9"
3"
2½"
Measured @ Span 2 Sidewalk L3


10 OF 10
SDWLK
L4
X = SPAN 3 VARIATIONS
BLUE
SPAN 3
W= 50"
t= 7/16"
W= 44½"
t= 7/16"
H= 33½"
DIMENSIONS IN PENCIL MEASURED AT SPAN 2
MEASURED AT SPAN 3

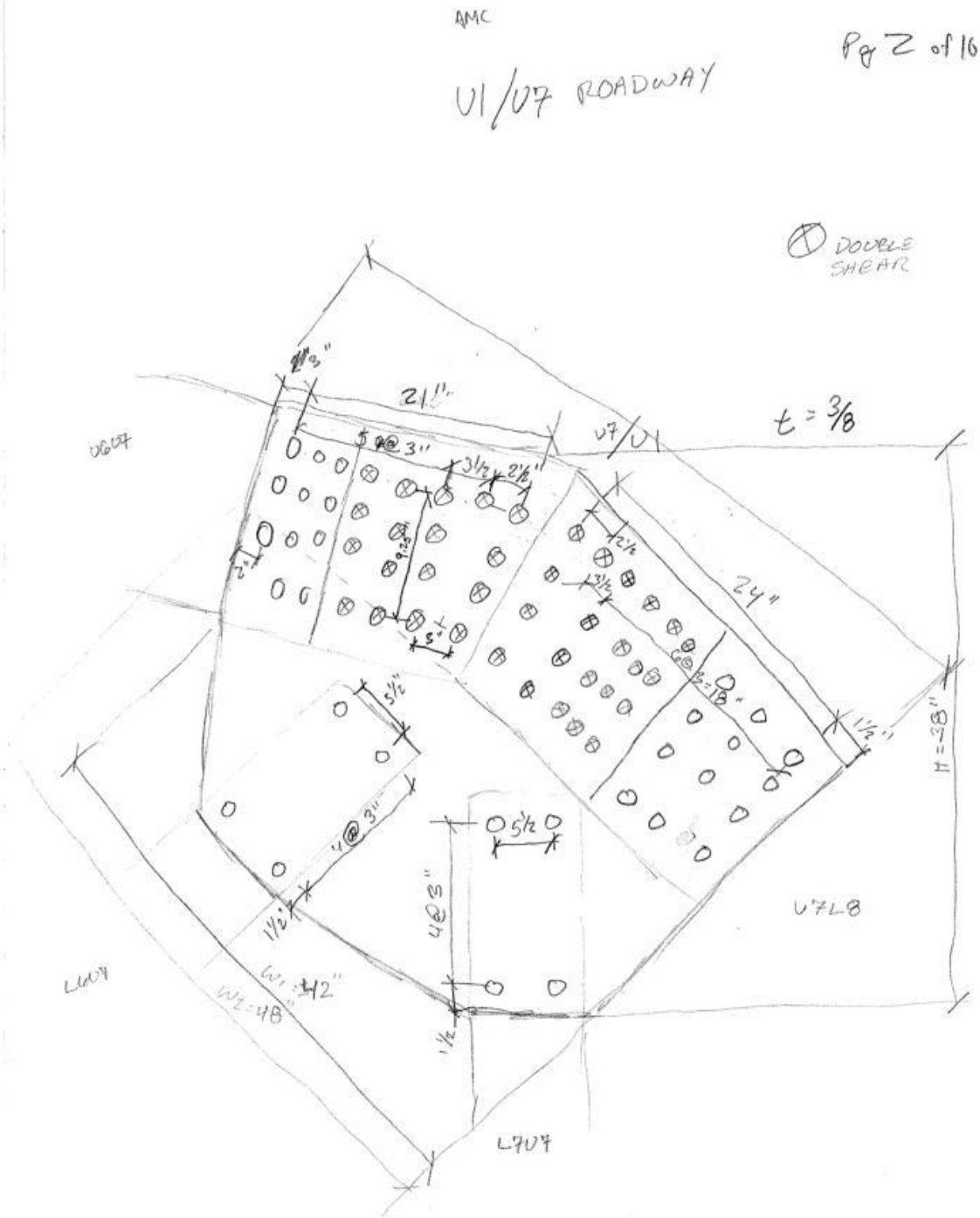

MAINE DEPARTMENT OF TRANSPORTATION
BRIDGE No. 2019
ANDROSCOGGIN BRIDGE
FRACTURE CRITICAL MEMBER (FCM) IDENTIFICATION
PREPARED BY: PARSONS BRINCKERHOFF, INC
TO DIXFIELD & MEXICO
TO WEST PERU & LEWISTON
FLOW
TRUSS - ELEVATION
FLOOR SYSTEM - PLAN
8 PANELS = 186'-6"
21'-0"
29'-3"
23'-0"
24'-6"
℄ TRUSS
LEGEND:
= FCM
= NON-FCM
FB = FLOORBEAM
S1 = STRINGER 1
NOTE:
ALL TRUSS TENSION MEMBERS ARE CONSERVATIVELY ASSUMED TO BE FCM'S.
NOTES:
1) SPANS, SUBSTR UNITS & PANEL POINTS IN EA. SPAN ARE NUMBERED FROM NORTH TO SOUTH
2) STRINGERS LABELED S1 TO S4 S6 LOOKING AHEAD TOWARD SOUTH

Parsons Brinckerhoff - PHOTO LOG
Project: MAINE N. TRUSS
Daily Page Number 1 of 16

Team Leader: R.S. - AMK Date: 8/10/12 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6697	(N) S	Span No.	3	Condition: GEN. PORTAL BRACING @ U7 W.
	W E	PP	L8 W.	
	(Up) Down	Member		
6698	(N) S	Span No.	3	Condition: GEN. PORTAL BRACING @ U7 TOP
	W E	PP		LAT CONN. RS - PAINT GOOD
	Up (Down)	Member		
6699	(N) S	Span No.	3	Condition: GEN. U7-U6 TOP LAT BRACING
	W E	PP		
	Up Down	Member		
6700	(N) S	Span No.	3	Condition: GEN. PORTAL BRACING @ U7. EAST
	W (E)	PP	U7	SIDE. NOTE H.S. BOLTS @ BOT. OF PORTAL FRAME
	Up (Down)	Member		BOT MOVED UP DIAG. APPROX 2'
6701	(N) S	Span No.	3	Condition: ORIGINAL CONN. R @ BOT OF PHOTO
	(W) E	PP		BOT. OF PORTAL FRAME MOVE UP TO TOP OF PHOTO
	Up (Down)	Member	U9L8	CONN. R W/H.S. BOLTS
6702	N (S)	Span No.	3	Condition: COLLISION SCRAPES HALFWAY UP
	(W) E	PP		MEMBER. SAME ON MEBER LG U9
	Up Down	Member	L9U9	
6703	N S	Span No.	3	Condition: ALONG TOP OF PORTAL FRAME
	W (E)	PP	U7	TO U7 E.
	Up Down	Member		
6704	N S	Span No.	3	Condition: GEN OF INSIDE U7 E.
	W (E)	PP	U7	
	Up Down	Member		
6705	N S	Span No.	3	Condition: GEN INSIDE U7 W
	W E	PP	U7 W.	
	Up Down	Member		
6706	(N) S	Span No.	3	Condition: ALONG OUTSIDE INT PNEL OF U9L8 W. TO
	W E	PP	U7 W	JOINT U7 W. RIVETS ON R IN DOUBLE
	(Up) Down	Member		SHEAR

Q:\STR\photo log.xls


AMC
Pg 2 of 16
U1/U7 ROADWAY
DOUBLE SHEAR
t = 3/8
21"
3"
U7/U1
U6U7
24"
U7L8
L6U7
L7U7
W1 = 42"
W2 = 48"
H = 38"

AMC

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 3 of 16

Team Leader: _____ Date: 9/16/12 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6709	N S	Span No.	3	Condition: INSIDE MEMBER U7L8 BTW GUSSETS
	W E	PP	U7 W.	
	Up Down	Member		
6708	N (S)	Span No.	3	Condition: COLLISION DAMAGE ON ~~L8~~ U7L8
	(W) E	PP		3/4" WAY UP POST @ ORIGINAL PORTAL
	Up Down	Member	U7L8 W.	FRAME R
6709	N S	Span No.	3	Condition: COLLISION DAMAGE ON U7L8 1/4 WAY
	W E	PP		UP.
	Up Down	Member	U7L8 W	
6710	(N) S	Span No.	3	Condition: GEN. TOP OF BRIDGE FROM BTW
	W E	PP		U6U7
	Up Down	Member		
6711	(N) S	Span No.	3	Condition: GEN, CONN. @ U6 W.
	W E	PP	U6 W.	
	Up Down	Member		
6712	(N) S	Span No.	3	Condition: TOP LAT DIA BRACING
	W (E)	PP		NO BENDS OR TWISTS
	Up Down	Member		
6713	(N) (S)	Span No.	3	Condition: "
	W (E)	PP		
	Up Down	Member		
6714	(N) S	Span No.	3	Condition: BENDS IN BRIDGE DUE TO
	W E	PP	U+5 W.	COLLISION DAMAGE SIMILAR THROUGHOUT
	Up Down	Member		
6715	(N) S	Span No.	3	Condition: SCRAPE IN SM HORIZ. STRUTS
	W E	PP		W. TRUSS FULL LENGTH
	Up Down	Member		
6716	N (S)	Span No.	3	Condition: GEN. CONN. OF SWAY BRACING
	W E	PP		TO VERT MEMBER, SIM. EAST TRUSS L6U7
	Up Down	Member	L6U6 W.	

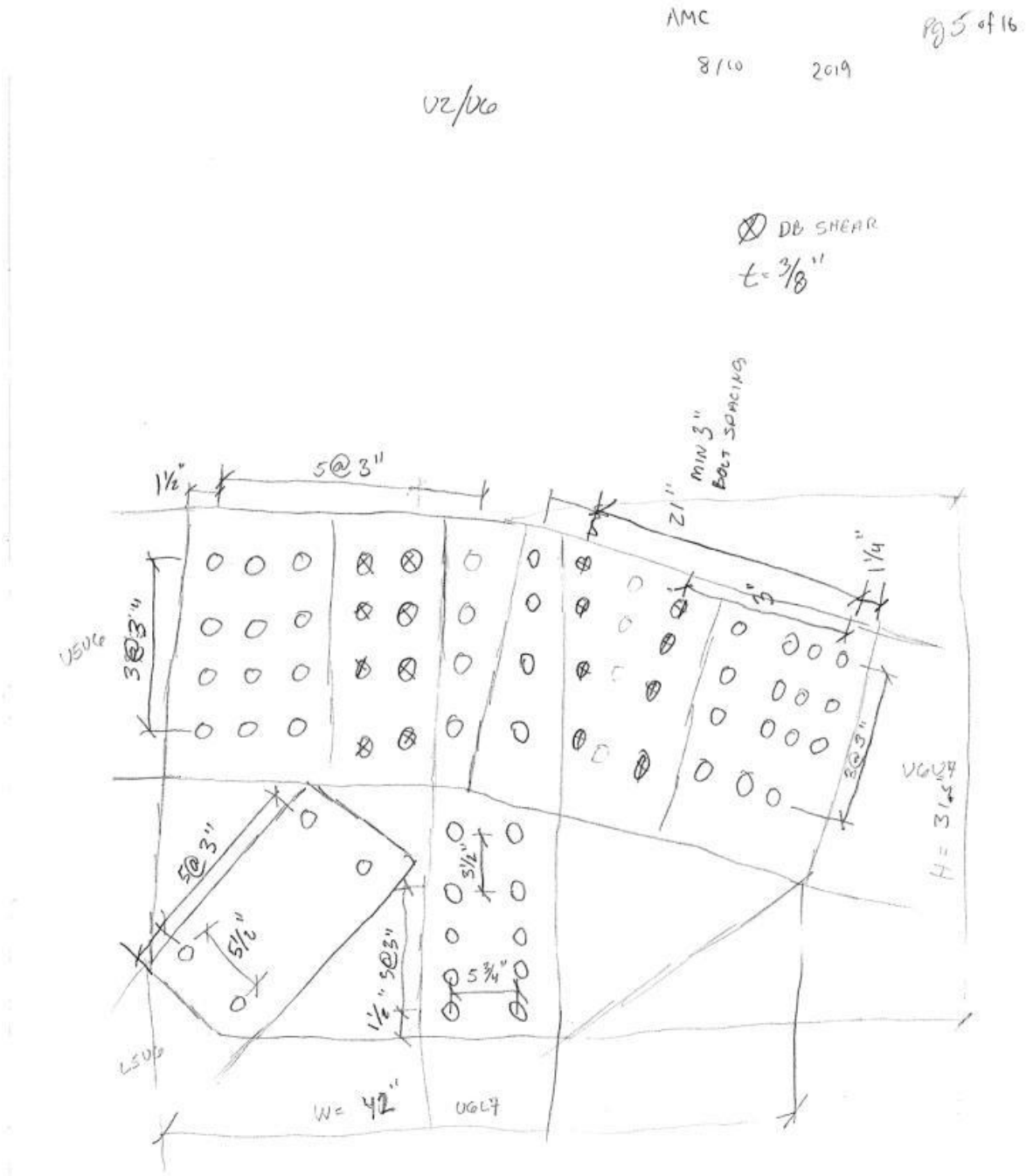
Q:\STR\photo log.xls

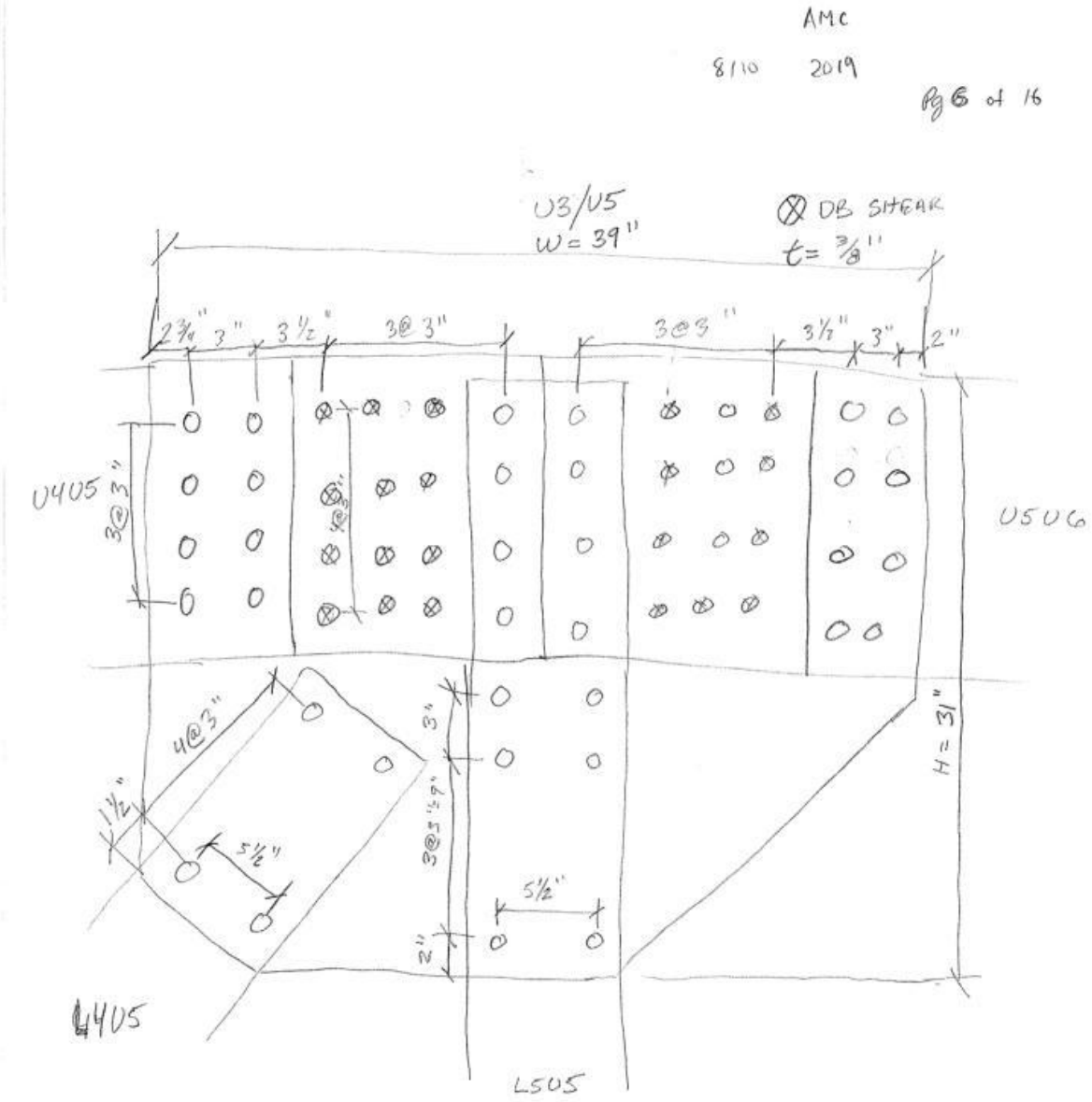
Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 4 of 16

Team Leader: _____ Date: 8/10/12 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6717	N S	Span No.	3	Condition: LOOKING ALONG BOT. OF SWAY
	W (E)	PP	C0	BRACING BTW VERT @ L0U0. COLLISION
	Up Down	Member		DAMAGE IN N.B. LANE
6718	N S	Span No.	3	Condition: GEN FROM TOP OF HORIZ STRUT
	(W) E	PP		CONN. TO VERT MEMBER
	Up (Down)	Member	L0U0	
6719	N S	Span No.	3	Condition: DOWN ALONG SWAY BRACING
	W (E)	PP	C0W	GENR IN DIAG. SWAY BRACING
	Up (Down)	Member		FROM COLLISION @ BOT
6720	N S	Span No.	3	Condition: ALONG TOP STRUT @ U0 TO
	W (E)	PP	U0E	U0E GEN OF U0E. G.R
	Up Down	Member		
6721	N S	Span No.	3	Condition: SAME CLOSE UP
	W (E)	PP	U0E	
	Up Down	Member		
6722	N S	Span No.	3	Condition: INT SPLICE PLATE @ TOP
	(W) E	PP	U0W.	CHORD MEMBERS - GUSSETS IN
	Up Down	Member		GOOD COND. NO PAINT FAILURS OR WELDS
6723	N S	Span No.	3	Condition: G. BOT OF G. R @ DIA. L0U0
	(W) E	PP	U0W.	CONN. SEE NEXT SHEET FOR DIMS
	Up Down	Member		
6724	(N) S	Span No.	3	Condition: GEN ALONG SWAY BRACING
	W E	PP		
	Up Down	Member		
6725	(N) S	Span No.	3	Condition: GEN. OF CONN.
	W (E)	PP	U5 E.	
	(Up) Down	Member		
6726	(N) S	Span No.	3	Condition: GEN. OF CONN.
	W E	PP	U5 W.	
	(Up) Down	Member		

Q:\STR\photo log.xls


AMC
Pg 5 of 16
8/10 2019
U2/U0
DB SHEAR
t= 3/8"
1½"
5@3"
MIN 3" BOLT SPACING
21"
1¼"
3@3"
U5U0
5@3"
5½"
5½"
1½"
5@3"
5¾"
3@3"
U0U4
H= 31½"
L5U0
W= 42"
U0L4


AMC
8/10 2019
Pg 6 of 16
U3/U5
W = 39"
⊗ DB SHEAR
t = 3/8"
2 3/4" 3" 3 1/2" 3@3" 3@3" 3 1/2" 3" 2"
U4U5
3@3"
U5U6
4@3"
1 1/2"
5 1/2"
3@3 1/2"
3"
2"
5 1/2"
H = 31"
L4U5
L5U5

Parsons Brinckerhuff - PHOTO LOG
Project: AMC
Daily Page Number 7 of 16

Team Leader: _____ Date: 9/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6727	N S	Span No.	3	Condition: COLLISION SCRAPES HALFWAY
	(W) E	PP	5 W.	UP L5U5
	Up Down	Member	L5U5	
6728	N S	Span No.	3	Condition: GEN OF SWAY BRACE CONN.
	(W) E	PP	5	UNDERSIDE - NO TACK WELDS
	(Up) Down	Member	L5U5	
6729	N (S)	Span No.	3	Condition: FRESH PAINT N. FACE OF DIAG.
	(W) E	PP		MINOR SCRAPES FROM COLLISION
	Up Down	Member	L4U5	ON W & E. FLANGE
6730	N S	Span No.	3	Condition: MINOR RUSTING + PAINT LOSS
	W (E)	PP	5	IN VERT. MEMBER OF SWAY BRACING
	Up Down	Member		
6731	N S	Span No.	3	Condition: GEN OF INT GUSSET PL U5 W.
	W E	PP	U5 W	SPICE PL @ JOINT OF TOP CHORD
	Up Down	Member		MEMBERS
6732	N (S)	Span No.	3	Condition: BTW G. PL ALONG VERT MEMBER
	(W) E	PP	U5 W.	L5U5 VERT RUNS TO NEAR TOP
	(Up) Down	Member		OF GUSSET PL THROUGH TOP CHORD CHANNEL
6733	N S	Span No.	3	Condition: UNDERSIDE OF LAT CONN. PL
	(W) E	PP	U5 W	NEW PAINT
	(Up) Down	Member		
6734	(N) S	Span No.	3	Condition: BTW G PL ALONG VERT,
	(W) E	PP	U5 W	S. SIDE OF CONN.
	(Up) Down	Member		
6735	(N) S	Span No.	3	Condition: TOP OF BRIDGE GEN
	W E	PP		
	Up Down	Member		
6736	(N) S	Span No.	3	Condition: TOP OF BRIDGE GEN
	W (E)	PP		
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 8 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6737	N S	Span No.	3	Condition: MAP CRACKING OF PAINT E. SIDE
	(W) E	PP		OF DIA. 3/4 WAY UP
	Up Down	Member	L4U5	
6738	N S	Span No.	3	Condition: PAINT PITTING W/RUST 1' LONG
	W E	PP	5	@ WELD
	Up (Down)	Member	L5U6	
6739	N S	Span No.	3	Condition: S. PORTAL COLLISION DAMAGE
	(W) (E)	PP		N.B. LANE
	(Up) Down	Member		
6740	(N) S	Span No.	3	Condition: TYP RAIL CONN. @ DIA.
	W E	PP		NO TACK WELDS
	Up Down	Member		
6741	(N) S	Span No.	3	Condition: TYP RAIL CONN. @ VERT
	W E	PP		NO TACK WELDS
	Up Down	Member		
6742	N S	Span No.	3	Condition: SCRAPE FROM COLLISION JUST
	(W) E	PP	4	BELOW SWAY BRACE. MINOR
	Up Down	Member	L4U4 W.	
6743	N S	Span No.	3	Condition: ~~BUCKLE~~ COLLISION DAMAGE TO
	W (E)	PP	4	BOT OF SWAY BRACE FRAME
	(Up) Down	Member		
6744	N S	Span No.	3	Condition: SWAY BRACE COLLISION DAMAGE
	W (E)	PP	4	MAINLY TWISTED IN NB LANE
	Up Down	Member		2" MAX ANGLE FLANGE DENT IN VERT'L MBR. LEGS IN S.B. LANE
6745	N (S)	Span No.	3	Condition:
	W (E)	PP		ZOOM OF S.B. ANGLE LEG DENT
	Up Down	Member		
6746	(N) S	Span No.	3	Condition: GEN TOP CHORD MEMBER
	(W) E	PP		E. FACE
	Up Down	Member	U5U4	

Q:\STR\photo log.xls

Pg 9 of 16

AMC
8/10 2019

RDWY
U4 NO G. PL

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 10 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6747	N S	Span No.	3	Condition: GEN U4 E INSIDE OF TRUSS
	W (E)	PP	4E	NO G.P @ T LOCATION. VERT. GOES
	Up Down	Member		UP THROUGH TOP CHORD FOR CONN.
6748	(N) S	Span No.	3	Condition: ALONG TOP LAT BRACING NO
	W (E)	PP		BENDS OR KINKS
	Up Down	Member		
6749	N (S)	Span No.	3	Condition: GEN U4 W. @ N. FACE OF
	(W) E	PP	4W.	CONN.
	Up Down	Member		
6750	N S	Span No.	3	Condition: BIRDS NEST ON N. SIDE OF
	(W) E	PP	U4W	CONN. PL
	Up Down	Member		
6751	N S	Span No.	3	Condition: BOT. OF CONN. PL @ U4W
	(W) E	PP	U4W.	
	(Up) Down	Member		
6752	(N) S	Span No.	3	Condition: ALONG INSIDE FACE OF TOP CHORD
	W E	PP		MEMBER U3U4
	Up Down	Member	U3U4	
6753	N (S)	Span No.	3	Condition: INSIDE FACE OF TOP CHORD @ CONN
	(W) E	PP	U4E.	VERT MEMBER ALL THE WAY THROUGH
	(Up) Down	Member		TOP CHORD
6754	(N) S	Span No.	3	Condition: GEN INSIDE MEMBER
	W E	PP		GOOD PAINT - NO TACK WELD
	Up Down	Member	U3U4	
6755	N S	Span No.		Condition: MISSING BOLTS @ RAIL CONN.
	(W) E	PP		TO DIAGONAL U3L4
	Up (Down)	Member	U3L4	
6756	N S	Span No.	3	Condition: WELDED PL JUST BELOW BOT OF
	(W) E	PP	3	SWAY BRACING - WELDED FULL LENGTH
	Up Down	Member	L3U3	ALL 4 SIDE

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 11 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6757	N S	Span No.	3	Condition: HOLES THAT ARE BEING COVERED
	W E	PP		BY WELDED PL WHERE SWAY BRACE
	Up Down	Member	L3U3	CONN. USED TO BE → SIM ON E. TRUSS L3U3
6758	N (S)	Span No.	3	Condition: SWAY BRACING CONN. TO L3U3
	(W) E	PP		ABOVE WELDED PL
	(Up) Down	Member	L3U3	SIM. E. TRUSS L3U3
6759	N S	Span No.	3	Condition: W H.S. BOLTS USED IN PLACE OF
	(W) E	PP		RIVET THAT WERE REMOVED WHE SWAY BRACING
	Up Down	Member	L3U3	WAS RAISED -SIM E. TRUSS L3U3
6760	N S	Span No.	3	Condition: COLLISION DAMAGE TO SWAY
	W (E)	PP	3	BRACE. N.B. LANE
	Up Down	Member		
6761	N (S)	Span No.	3	Condition: GEN VIEW OF SWAY BRACE CONN.
	(W) E	PP	3	TO L3U3 @ NEW LOCATION
	Up (Down)	Member	L3U3	
6762	N (S)	Span No.	3	Condition: NEW H.S. BOLTS ON CONN. PL OF
	W (E)	PP	3	SWAY FROM @ P.P. 3
	(Up) Down	Member		
6763	N (S)	Span No.	3	Condition: SWAY BRACE BEND W DIA
	W (E)	PP	3	FROM COLLISION
	(Up) Down	Member		
6764	N (S)	Span No.	3	Condition: SAME AS 6760 EXCEPT LOOKING DOWN
	W (E)	PP	3	
	Up (Down)	Member		
6765	(N) S	Span No.	3	Condition: TOP LAT BRACING BTW P.P. 2+3
	W (E)	PP		IN BENDS - GEN
	(Up) Down	Member		
6766	N (S)	Span No.	3	Condition: GEN. INSIDE OF CONN. @ U3 W.
	(W) E	PP	U3 W.	LAT. CONN. GUSSET PL SAME AS U5
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 12 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6767	N S / W E / Up Down	Span No.	3	Condition: BEND IN BOT FLG OF STRUT
		PP	U3 W.	@ CONN TO U3 W.
		Member		
6768	N S / W E / Up Down	Span No.	3	Condition: MINOR CORROSION AT TOP FR
		PP	U3 W.	OF TOP LATERAL CONN. TO U2 W.
		Member		
6769	N S / W E / Up Down	Span No.	3	Condition: SPLICE PL @ U3 + SAME AS
		PP	U3 W.	U3 CONN
		Member		
6770	N (S) / W E / Up Down	Span No.	3	Condition: GEN. ALONG HORIZ. STRUTS
		PP		W. TRUSS → E. FACE
		Member		
6771	N (S) / (W) E / (Up) Down	Span No.	3	Condition: SWAY BRACING @ P.P. 2
		PP	2	NO OBVIOUS COLLISION DAMAGE
		Member		
6772	N (S) / (W) E / (Up) (Down)	Span No.	3	Condition: SAME WELDED PLATE AS
		PP		SWAY CONN. TO L3U3 ~~NO~~ HOLES BEHIND
		Member	L2U2	SWAY BRACE WAS NOT MOVED @ ~~U2~~ L2U2 WAS
6773	N (S) / (W) E / Up (Down)	Span No.	3	Condition: SAME AS ABOVE BUT LOOKING
		PP	2	DOWN
		Member		
6774	N S / W (E) / (Up) Down	Span No.	3	Condition: BEND IN DIAG. OF SWAY BRACING
		PP	2	NO OBVIOUS COLLISION DAMAGE @ BOT.
		Member		ORIG RIVETS IN CONN. PLS
6775	N S / W E / Up Down	Span No.	3	Condition: GEN UPSTREAM WATERWAY
		PP		
		Member		
6776	N S / W E / Up Down	Span No.	3	Condition: PORTAL BTW U1E + U1W. @ PIER 2
		PP		SIM TO S. PORTAL OF SPAN 3
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 13 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
G777	(N) S W E Up Down	Span No. PP Member	3 1	Condition: S. FACE OF N. PORTAL @ N SPAN 3. NOTE REPLACED H.S. BOLTS
G778	(N) S (W) E Up Down	Span No. PP Member	3 U1L2W.	Condition: COLLISION DAMAGE TO BRIDGE RAIL @ U1L2
G779	N (S) (W) E (Up) Down	Span No. PP Member	3	Condition: SAME AS NEXT
G780	N (S) (W) E Up Down	Span No. PP Member	3 U2	Condition: BEND @ OF BOT FLG OF STRUT INTO CONN. PL. TYP TO FIT PLATES N. FACE OF STRUT
G781	(N) S W (E) Up Down	Span No. PP Member	3	Condition: ALONG TOP LATS -GEN
G782	N (S) W E Up Down	Span No. PP Member	3	Condition: GEN SPAN 3 LOOKING SOUTH FROM U2
G783	N S (W) E (Up) Down	Span No. PP Member	3 U2W.	Condition: GEN UNDER COVER @ CONN @ TOP LATS A LITTLE DIRTY BUT NO CORROSION OR PAINT FAILURES
G784	N (S) W E Up Down	Span No. PP Member	3 U1U2	Condition: GEN ALONG TOP CHORD E. FACE (INSIDE)
G785	(N) S W E Up (Down)	Span No. PP Member	3 U1U2	Condition: GEN ALONG TOP OF TO CHORD W. TRUSS
G786	(N) S W E Up (Down)	Span No. PP Member	3 U1U2	Condition: GEN ALONG BOT FLG

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 14 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6787	N S	Span No.	3	Condition: SMALL HOLES DRILLED INTO
6788	(W) E	PP	2	VERT FACE - SIM. ON ALL VERT
	Up Down	Member	L2 U2	MEMBERS
6789	N S	Span No.	3	Condition: ACTIVE CORROSION & PAINT LOSS
	(W) E	PP		@ PIER 2 CONN. ABOVE LO W. BRG ON
	Up (Down)	Member	L0U1	L0U1 BEAM & CONN. SPLICE PLATE
6790	N (S)	Span No.	3	Condition: GEN INSIDE FACE OF L0U1
	W E	PP		
	(Up) Down	Member	L0U1	
6791	N (S)	Span No.	3	Condition: MINOR COLLISION DAMAGE @
	(W) E	PP		CORNER OF SPAN 3 SB LANE @ PIER 2
	Up (Down)	Member	L0U1	
6792	N (S)	Span No.	3	Condition: RAIL CONN TO L0U1 W. TRUSS
	W E	PP		
	Up Down	Member	L0U1	
6793	N (S)	Span No.	3	Condition: RAIL CONN. TO TOP OF L0U1
	(W) E	PP		MINOR S.L. AROUND RIVETED PLATE
	Up Down	Member	L0U1	TOP AND BOT. RAILS.
6794	(N) S	Span No.	3	Condition: MOVED BOT OF PORTAL FRAME
	(W) E	PP	U1	NO WELDS
	(Up) Down	Member		
6795	(N) S	Span No.	3	Condition: OLD CONN PLATE FROM PORTAL
	(W) E	PP		TOP BOTTOM CONN.
	(Up) Down	Member	L0U1	
6796	N (S)	Span No.	3	Condition: GEN CONN @ U1
	(W) E	PP	U1W	NOTE SPLICE @ CENTER JOINT
	(Up) Down	Member		SAME SET UP AS U7 MEASURED
6797	N S	Span No.	3	Condition: GEN INT. GUSSET PLATE
	W E	PP	U3W	
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: AMC
Daily Page Number 15 of 16

Team Leader: _____ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6798	N S W (E) (Up) Down	Span No.	3	Condition: GEN. INT G. @ U1 E. TRUSS
		PP	U1 E	
		Member		
6799	(N) S W E (Up) Down	Span No.	3	Condition: INSIDE GUSSET ABOVE DIA.
		PP	U1 W.	U1L2
		Member		
6800	(N) S W E (Up) Down	Span No.	3	Condition: TOP LAT CONN. @ - DIRTY BUT
		PP	U1 W.	PAINT SEEMS TO BE INTACT
		Member		
6801	(N) S W E (Up) Down	Span No.	3	Condition: SAME AS 6799 CLOSER
		PP	W1 W.	GEN. PHOTO OF RIVET FORMATION
		Member		
6802	N S W (E) Up Down	Span No.	3	Condition: ALONG BOT OF N. PORTAL SPAN
		PP	1	3. 3. FACE, ALL H.S. BOLTS AT BOT.
		Member		
6803	(N) S W E Up Down	Span No.	3	Condition: MINOR RUST ALONG LACING AND
		PP		BOT. FLG OF LOU1 FOR APPROX 2'
		Member	LOU1	
6804	N (S) (W) E (Up) Down	Span No.	3	Condition: GEN UP ALONG LOU1
		PP		
		Member	LOU1	
6805	N (S) W E Up Down	Span No.	3	Condition: GEN PORTAL FRAME @ U1
		PP		
		Member		
6806	N S (W) E Up Down	Span No.	WP 3	Condition: MINOR COLLISION DAMAGE & SCRAPING
		PP		E FACE OF LOU1 2/3 WAY UP @ OBVIOUS
		Member	LOU1 W.	PORTAL CONN. PL
6807	N S W E Up Down	Span No.		Condition:
		PP		
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG

Project: AMC

Daily Page Number 16 of 16

Team Leader: ____________ Date: 8/10 Bridge: 2019

PHOTO #	DIRECTION		LOCATION		DESCRIPTION
6808	N	[✓ S]	Span No.	3	Condition: GEN OF U1 W. CONN.
	[✓ W]	E	PP	U1 W.	W/ H.S. BOLTS ALONG BOT OF PORTAL
	[✓ Up]	Down	Member		CONN.
6809	N	[✓ S]	Span No.	3	Condition: TOP OF U1 W. CONN.
	W	E	PP	U1 W.	
	Up	[✓ Down]	Member		
6810	N	[✓ S]	Span No.	3	Condition: GEN ABOVE N. PORTAL FRAME
	W	E	PP		OF SPAN 3
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 1 of 14

Team Leader: _____ Date: 8/13/2019 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6811	(N) S W E Up Down	Span No.	1	Condition: South side of North End Portal
		PP		Bottom member are connected w/ bolts
		Member		
6812	N (S) W E (Up) Down	Span No.	1	Condition: View of U1 Roadway inside the top chord
		PP	U1 Roadway	
		Member		
6813	N S W E (Up) Down	Span No.	1	Condition: East face of U1 Roadway
		PP	U1 Roadway	
		Member		
6814	(N) S W E (Up) Down	Span No.	1	Condition: View of U1 Roadway inside the top chord
		PP	U1 Roadway	
		Member		
6815	(N) S W E Up Down	Span No.	1	Condition: Lateral bracing connection @ U1 Roadway
		PP	U1 Roadway	
		Member		
6816	N S W (E) Up Down	Span No.	1	Condition: GEN
		PP	U1 Sidewalk	Include lateral bracing connection @ U1 Sidewalk
		Member		
6817	N (S) W E Up Down	Span No.	1	Condition: ~~Typ detail~~ Cover plate @ T.F.
		PP	~~U1~~	
		Member	U1-U2 RWY	
6818	N (S) W E Up Down	Span No.	1	Condition: East Fascia of U1-U2 RWY
		PP		
		Member	U1-U2 RWY	
6819	(N) S W E Up Down	Span No.	1	Condition: Lateral bracing bet U1 RWY and U2 SDK
		PP		Minor map cracking in paint
		Member		
6820	N (S) W (E) Up Down	Span No.	1	Condition: Sway brace @ U2
		PP		
		Member		

Q:\STR\photo log.xls

SDK - Sidewalk
RWY - Roadway

Parsons Brinckerhoff - PHOTO LOG
Project: Maine Dot Br

Daily Page Number 2 of 19

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6821	N (S) W (E) Up Down	Span No.	1	Condition: ~~Intermittent~~ Spray Irare @ U2
		PP		@ C of roadway, traffic damage N. Flange bent upward
		Member		up to 1½" over a 12" length South & N. Flange bent downward
6822	N (S) W (E) Up Down	Span No.	1	Condition: GENL View of Top Surface of Span 1
		PP		Typ
		Member		
6823	N (S) W E Up Down	Span No.	1	Condition: East face of U2 RWY and Lateral Bracing
		PP	U2 RWY	Connection @ U2 RWY
		Member		
6824	N (S) W E Up Down	Span No.	1	Condition: 2' Long Scrap mark to ~~East~~ ~~West~~ North side
		PP		of East Flange. Up to ⅛" x ⅛" Section loss along
		Member	U1-U2 RWY	the edge.
6825	(N) S W E Up Down	Span No.	1	Condition: GENL
		PP	U2 RWY	
		Member		
6826	(N) S W (E) Up Down	Span No.	1	Condition: GENL
		PP	U2 SDK	
		Member		
6827	(N) S W E Up Down	Span No.	1	Condition: South Face of Lateral brace btw U1 U2
		PP		
		Member		
6828	(N) S W E Up Down	Span No.	1	Condition: GENL
		PP	U2 RWY	East Face of U2 RWY
		Member		
6829	N (S) W E (Up) Down	Span No.	1	Condition: Inside View of top chord
		PP	U2 RWY	
		Member		
6830	(N) S (W) E Up Down	Span No.	1	Condition: GENL
		PP	U1 RWY	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KC
Daily Page Number 5 of 19

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6831	(N) S / W E / Up Down	Span No.	1	Condition: Inside view of top chord
		PP	U2 RUY	
		Member		
6832	(N) S / (W) E / Up Down	Span No.	1	Condition: Sway brace connection @ Mid-height
		PP		of U2-L2 RUY (TYPICAL)
		Member	U2-L2 RUY	Below the connection, there is a 1"W×12" H×1/8" T Connection plate
6833	(N) S / (W) E / Up Down	Span No.	1	Condition: Horizontal member connection to U2-L2 RUY
		PP		TYPICAL
		Member	U2-L2 RUY	
6834	N (S) / W (E) / Up (Down)	Span No.	1	Condition: 4 Holes on U2-L2 RUY below the sway.
		PP		Sway brace connection. Covered by the a cover plate
		Member	U2-L2 RUY	on the RD RUY side TYPICAL
6835	N (S) / W (E) / Up Down	Span No.	1	Condition: Horizontal member connection to U2-L3 RUY
		PP		TYPICAL
		Member	U2-L3 RUY	
6836	(N) S / (W) E / Up Down	Span No.	1	Condition: GENL
		PP	U3 RUY	
		Member	~~U3 RUY~~ R	
6837	N (S) / W E / (Up) Down	Span No.	1	Condition: GENL VIEW inside top chord.
		PP	U3 RUY	
		Member		
6838	N (S) / W (E) / Up Down	Span No.	1	Condition: GENL
		PP	U3 RUY	
		Member		
6839	(N) S / (W) E / (Up) Down	Span No.	1	Condition: GENL
		PP	U3 RUY	
		Member		
6840 6841	(N) S / W E / (Up) Down	Span No.	1	Condition: GENL View from U3-L3 RUY inside
		PP	U3 RUY	the top chord
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by EL
Daily Page Number 4 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6840	(N) S W E Up Down	Span No.	1	Condition: GEN'L
		PP	U3 RUY	
		Member		
6843	N S W (E) Up Down	Span No.	1	Condition: GEN'L
		PP	U3 SDK	
		Member		
6844	N S (W) E Up Down	Span No.	1	Condition: Horizontal member connection @ mid height of
		PP		U3-L3 RUY TYPICAL
		Member	U3-L3 RUY	
6845	N (S) W E Up Down	Span No.	1	Condition: Horizontal member @ RUY Truss
		PP		TYPICAL
		Member		
6846	(N) S (W) E Up Down	Span No.	1	Condition: Traffic Damage to guard rail btw L3-L2 RUY
		PP		Top rail bent outward by upto 3/4" over a 4' length
		Member		
6847	N (S) W E Up Down	Span No.	1	Condition: Traffic Damage to ~~gage~~ guard rail connection @
		PP		U2-L3 RUY. One bolt missing @ Bottom rail connection
		Member		One bolt missing and one bolt sheared off the connection angle @
6848	N (S) W E (Up) Down	Span No.	1	Condition: Great GEN'L views of inside the top chord
		PP	U4 RUY	
		Member		
~~6850~~ 6849	N (S) W E Up Down	Span No.	1	Condition: Map cracks in paint @ U4 end of U4-U3 RUY
		PP	U4 RUY	A Vertical crack in paint along the 4 rivets @ U4 end
		Member		of U4-U3 RUY
6850	N (S) W E Up Down	Span No.	1	Condition: Lateral brace @ Connection @ U4 RUY
		PP	U4 RUY	
		Member		
6851	N (S) W E Up Down	Span No.	1	Condition: GEN'L
		PP	U4 RUY	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 5 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6852	(N) S / (W) E / Up Down	Span No.	1	Condition: GENL
		PP	U9 RWY	
		Member		
6853	N (S) / W E / (Up) Down	Span No.	1	Condition: GENL view inside the top chord
		PP	U9 RWY	
		Member		
6854	N (S) / W E / Up Down	Span No.	1	Condition: GENL View inside the top chord
		PP		TYPICAL
		Member	U9-U5 RWY	
6855	N S / W (E) / Up Down	Span No.	1	Condition: GENL
		PP	U9 SDK	
		Member		
6856	N S / W (E) / Up (Down)	Span No.	1	Condition: Stray brace @ U9
		PP		Minor traffic damage above SB RWY
		Member		
6857	N (S) / (W) E / Up Down	Span No.	1	Condition: GENL
		PP	U5 ~~SDK~~ RWY	
		Member		
6858	N (S) / W E / (Up) Down	Span No.	1	Condition: GENL view inside the top chord
		PP	U5 ~~SDK~~ RWY	
		Member		
6859 ~~6858~~	N (S) / W E / (Up) Down	Span No.	1	Condition: GENL VIEW ~~and~~ inside the top chord
		PP	U5 RWY	N. of U5-L5 RWY
		Member		
6860 ~~6859~~	(N) S / (W) E / Up Down	Span No.	1	Condition: GENL
		PP	U5 RWY	
		Member		
6861	(N) S / W E / (Up) Down	Span No.	1	Condition: GENL View inside the top chord
		PP	U5 RWY	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL Daily Page Number 6 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6862	(N) S / W (E) / Up Down	Span No.	1	Condition: Sway brace @ U5
		PP		Minor traffic damage above N SB RUY
		Member		
6863	N S / W (E) / Up Down	Span No.	1	Condition: GENL
		PP	U5 SDK	
		Member		
6864	(N) S / (W) E / Up Down	Span No.	1	Condition:
		PP		Bottom 8' of member bent outward away from
		Member	U5-L5 RUY	RUY.
6865	(N) S / W E / Up Down	Span No.	1	Condition: South Edge of East Flange bent
		PP		outward by up to 1½" over a 6' height S. Edge
		Member	U5-L5 RUY	of West Flange bent outward by up to ¾" over a 6' height
6866	N (S) / W E / Up Down	Span No.	1	Condition: N. Edge of East Flange bent inward by up to ¾"
		PP		over a 6' height. N. Edge of West Flange bent inward by
		Member	U5-L5 RUY	up to 1¾" over a 18' height
6867	N (S) / W E / Up Down	Span No.	1	Condition: Bridge rail connection @ U5-L5 RUY
		PP		Retrofitted in order to connect w/ bent U5-L5 RUY
		Member		
6868 6869	(N) S / (W) E / Up Down	Span No.	1	Condition: Bridge rail connection @ U5-L5 RUY
		PP		Retrofitted in order to connect w/ bent U5-L5 RUY
		Member		
6870	(N) S / (W) E / Up Down	Span No.	1	Condition: Bridge rail connection @ U6-L6 RUY
		PP		Heavy to laminated rust. Rust stain. Gap between up to ¾"
		Member		angle and bridge rail. Typical
6871	N S / W (E) / Up Down	Span No.	1	Condition: GENL
		PP	U6 SDK	
		Member		
6872	N (S) / W E / (Up) Down	Span No.	1	Condition: Genl view inside the top chord
		PP	~~U6 SDK~~ U6 RUY	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 7 of 19

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6873 6874	N (S) W E (Up) Down	Span No.	1	Condition: Gen'l view inside the top chord
		PP	U6 RUY	north U6-L6 RUY
		Member		
6875	(N) S (W) E Up Down	Span No.	1	Condition: GENL
		PP	U6 RUY	
		Member		
6876	(N) S W E (Up) Down	Span No.	1	Condition: Gen'l view inside the top chord
		PP	U6 RUY	
		Member		
6877	(N) S W E Up Down	Span No.	1	Condition: Gen'l view of Top ~~chord~~ of trusses
		PP		
		Member		
6878	N (S) W E Up Down	Span No.	1	Condition: End Portal @ South end of Span 1
		PP		Bottom half of portal is connected w/ bolts. Minor
		Member		Traffic damage near G of RUY
6879	(N) S W E Up Down	Span No.	1	Condition:
		PP		GENL View of Sway Bracings
		Member		
6880	N (S) (W) E Up Down	Span No.	1	Condition: GENL
		PP	U7 RUY	
		Member		
6881	N (S) W E Up Down	Span No.	1	Condition: GENL
		PP	U7 RUY	
		Member		
6882	N (S) W E Up Down	Span No.	1	Condition: GENL View inside the top chord
		PP	U7 RUY	
		Member		
6883	N (S) W E (Up) Down	Span No.	1	Condition: GENL View inside the top chord
		PP	U7 RUY	N. of U7-L7 RUY
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 8 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6884	(N) S W E (Up) Down	Span No. PP Member	1 U7 RUY	Condition: GENL View inside the top chord
6885	N (S) W E Up (Down)	Span No. PP Member	1 U7-L8 RUY	Condition: Genl View inside the top chord
6886	N (S) W (E) Up Down	Span No. PP Member	1	Condition: Lateral bracing @ S. Portal of Span 1 Traffic damage near G of RUY Tdamy Flange bent toward S by up to 1" over a 16" length
6887	N S W E Up Down	Span No. PP Member	1	Condition: Bridge rail connection @ U7-L7 RUY. Missing washer nut for one bolt connection in Top rail
6888	N S W (E) Up Down	Span No. PP Member	1 U7 SOK	Condition: GENL
6889	N S (W) E Up (Down)	Span No. PP Member	2 U1 RUY	Condition: GENL
6890	N S (W) E Up Down	Span No. PP Member	2 U1 RUY	Condition: GENL
6891	N (S) W E Up Down	Span No. PP Member	2	Condition: Sway bracings in Span 2
6892	N (S) W E Up Down	Span No. PP Member	2	Condition: N. Portal of Span 2
6893	(N) S (W) E Up Down	Span No. PP Member	2	Condition: Traffic Damage to bridge rail @ RUY side @ N. End of Span 2

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project:

Daily Page Number 9 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6894	(N) S / (W) E / Up Down	Span No.	2	Condition: GENL
		PP	U2 RHY	
		Member		
6895	N (S) / W E / Up Down	Span No.	2	Condition: Gen'l top side of trusses of Span 2
		PP		
		Member		
6896	N S / W E / Up Down	Span No.	2	Condition: North edge of East flange bent inward by up to 1½" over a 24" height
		PP	U2-L2 RHY	
		Member		
6897	(N) S / (W) E / Up Down	Span No.	2	Condition: GENL
		PP	U3 RHY	
		Member		
6898	N S / (W) E / Up (Down)	Span No.	2	Condition: Bridge rail connection is missing a bolt in top rail.
		PP		
		Member	U3-L3 RHY	
6899	N S / W (E) / Up Down	Span No.	2	Condition: S & N Top Lateral bracing @ U4- Area of paint peeling w/ moderate to heavy rust @ bottom of Top flange
		PP		
		Member		
6900	(N) S / (W) E / Up Down	Span No.	2	Condition:
		PP	U4 RHY	
		Member		
6901	N (S) / W E / Up Down	Span No.	2	Condition: @ bridge rail Member has paint failure w/ heavy rust. N Edge of East flange bent outward by up to 1½" over a 19" length
		PP		
		Member	U3-L4 RHY	
6902	N S / W E / Up Down	Span No.	2	Condition: Scrap marks to both members @ bridge rail
		PP		
		Member	U4-L4 U5-L4 RHY	
6903	(N) S / (W) E / Up Down	Span No.	2	Condition: GENL
		PP	U5 RHY	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 10 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6904 6905	N (S) W E Up Down	Span No.	2	Condition: 2" W East Flange was sheared @ N. Edge over a 5" Length
		PP		
		Member	U6-L5 RHY	
6906	N S (W) E Up Down	Span No.	2	Condition: Close up of condition shot in previous pic East Flange is bent inward by up to 1"
		PP		
		Member	U6-L5 RHY	
6907	(N) S W E Up Down	Span No.	2	Condition: GENL
		PP	U6 RHY	
		Member		
6908	(N) S W E Up Down	Span No.	2	Condition: GENL VIEW OF TOP TRUSSES in Span 2
		PP		
		Member		
6909	N (S) W E Up Down	Span No.	2	Condition: @ Bridge rail, member has areas of paint failure w/ heavy rust and rust stain
		PP		
		Member	~~U6~~ U7-L6 RHY	
6910	N (S) W (E) Up Down	Span No.	2	Condition: South End Portal of Span 2
		PP		
		Member		
6911	N (S) W E Up Down	Span No.	2	Condition: Scattered areas of paint failure w/ moderate to heavy rust & rust stains
		PP		
		Member	U7-L8 RHY	
6912	N S (W) E Up Down	Span No.	2	Condition: GENL
		PP	U7 RHY	
		Member	~~U5~~	
6913	(N) S W E Up (Down)	Span No.	2	Condition: @ 11" from Top of FB 7, East ~~to~~ flange has a 2½"W x 2" L x up to 3/16" D SL that is painted over
		PP		
		Member	U7-L7 RHY	
6914	(N) S W E Up (Down)	Span No.	2	Condition: @ 21" from Top of FB6, East flange has a 4½" L x 5" x up to ¼" SL w/ heavy to laminated rust, paint failure & rust stain
		PP		
		Member	U6-L6 RHY	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 11 of 14

Team Leader: _____ Date: 8/13/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6915	N S (W) E Up Down	Span No.	2	Condition: @ 11" from bottom of bottom bridge rail,
		PP		a 4"l x 3"H x up to 3/8" SL of heavy to laminated
		Member	LS-UG RWY	rust ~~of~~, rust stains and paint failure
6916	(N) S W E Up Down	Span No.	2	Condition: South End Lateral bracing
		PP		
		Member		
6917	N S W (E) Up Down	Span No.	3	Condition: GENL
		PP	U7 SDK	
		Member		
6919 6918	(N) S W E (Up) Down	Span No.	3	Condition: W. Face of U7 @ SDK © in Span 3
		PP	U7 SDK	
		Member		
6920 ~~6919~~	(N) S W E (Up) Down	Span No.	3	Condition: Inside view of Top chord looking up
		PP	U7 SDK	from S. Side of U7-L7 SDK
		Member		
6921 ~~6920~~	N (S) W E (Up) Down	Span No.	3	Condition: Inside view of Top chord looking up
		PP	U7 @ SDK	from N. Side of U7-L7 SDK
		Member		
6922 ~~6921~~	N (S) W E (Up) Down	Span No.	3	Condition: ~~face~~ inside view of top chord
		PP	U7 SDK	
		Member		
6923 ~~6922~~	N (S) W E Up Down	Span No.	3	Condition: GENL
		PP	U7 SDK	
		Member		
6924	N S W (E) Up Down	Span No.	3	Condition: GENL
		PP	U7 SDK	
		Member		
6925	N (S) W (E) Up Down	Span No.	3	Condition: GENL
		PP	U6 SDK	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG

Project: Notes by KL

Daily Page Number 12 of 14

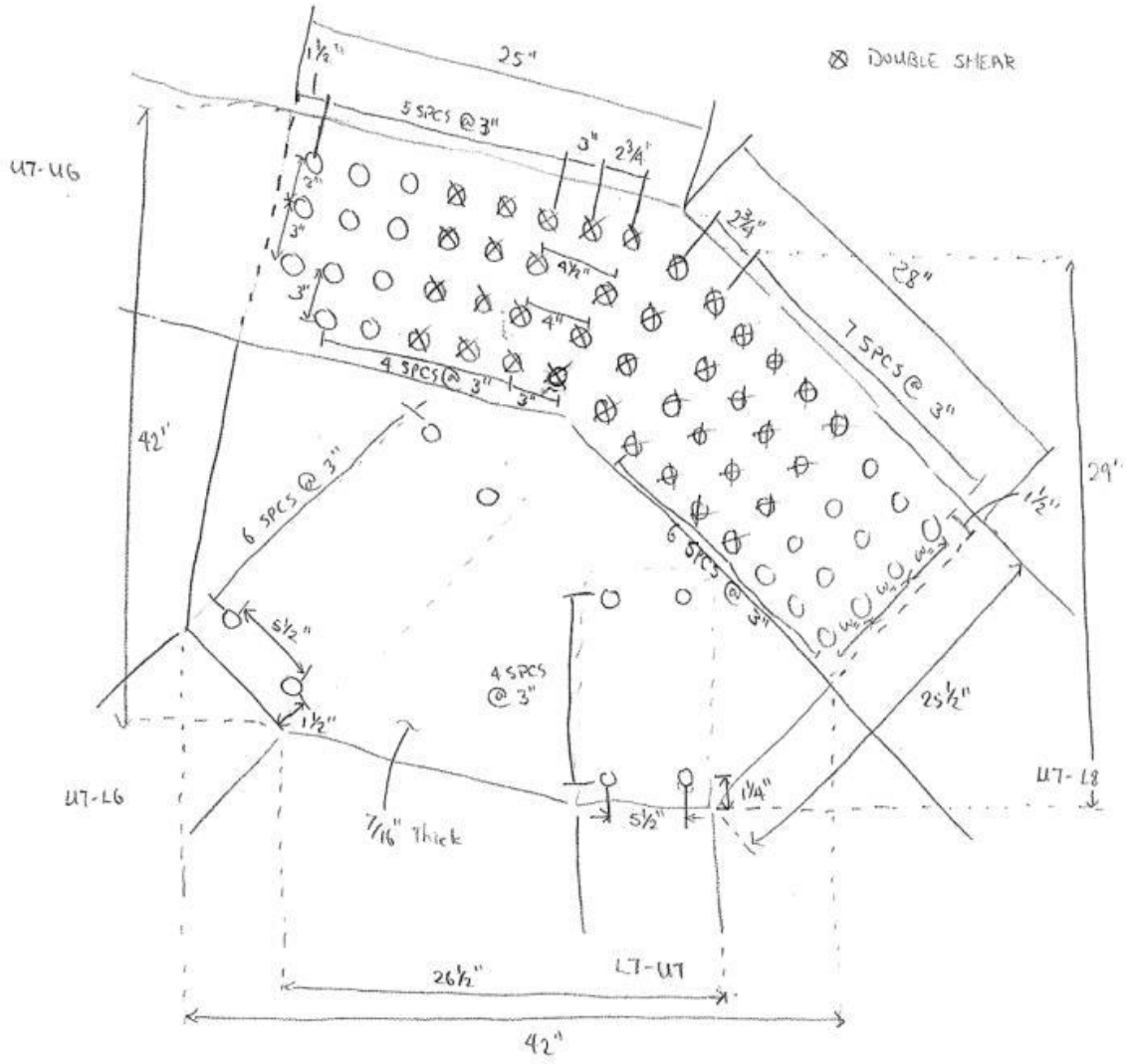
Team Leader: ______ Date: 8/13/2012 **Bridge:** 2019

PHOTO #	**DIRECTION**		**LOCATION**		**DESCRIPTION**
6926	N	[✓ S]	Span No.	3	Condition: Inside view of top chord
	W	E	PP	U6 SDK	
	[✓ Up]	Down	Member		
6927	[✓ N]	S	Span No.	3	Condition: GENL
	W	[✓ E]	PP	U6 SDK	
	Up	Down	Member		
6928	[✓ N]	S	Span No.	3	Condition: GENL
	W	E	PP	U6 SDK	Looking up from South side of U6-L6 SDK
	[✓ Up]	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		

Q:\STR\photo log.xls

P. 13 of 14
Notes by KL
6/13 2019

SIDEWALK U1 / U7



Measured @ SPAN 3 U7 SOK

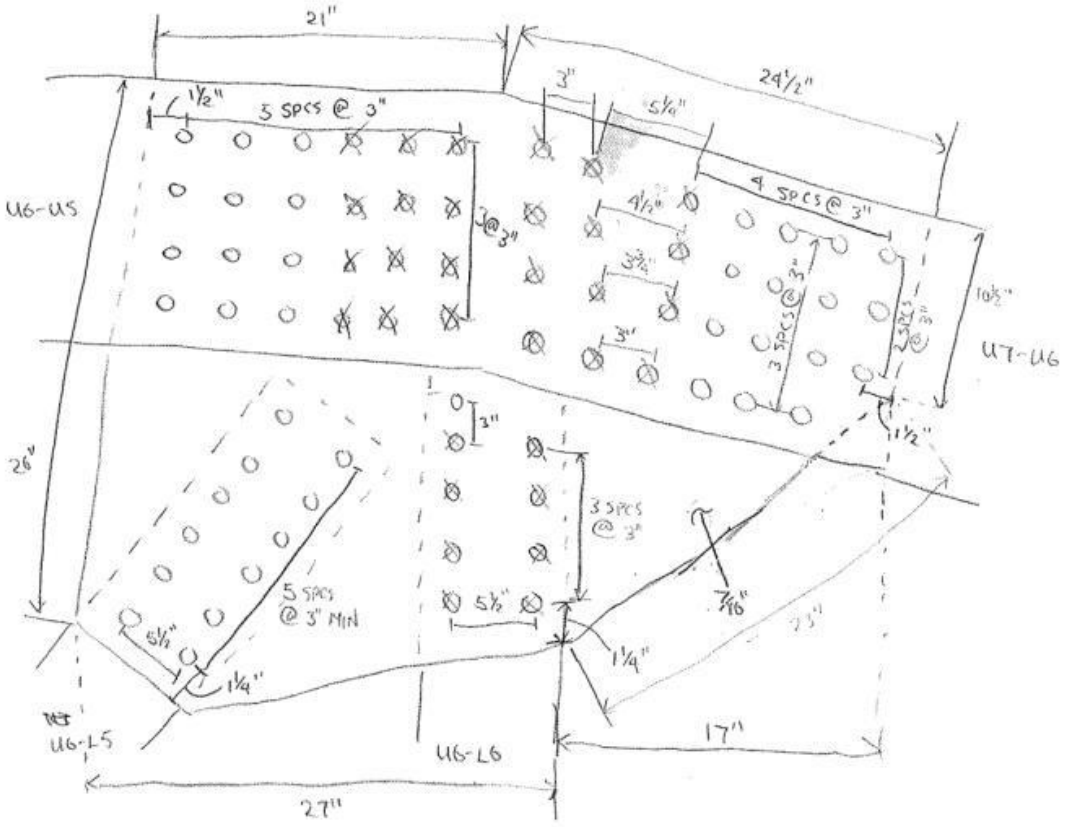
P.14 of 14

Video by KL

8/13 2019

SIDEWALK U2

⊗ DOUBLE SHEAR



Measured @ Span 3 U6 SOK

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 1 of 11

Team Leader: _____ Date: 8/19/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
Span 3 US SDK	(N) S	Span No.	3	Condition: Top of trusses in Span 3 view from UG
6929	W E	PP		
	Up Down	Member		
	N (S)	Span No.	3	Condition: West face of US SDK in Span 3
6930	W E	PP	US SDK	GENL
	Up Down	Member		
	N (S)	Span No.	3	Condition: GENL
6931	W (E)	PP	US SDK	
	Up Down	Member		
	N (S)	Span No.	3	Condition: GENL view inside the top chord
6932 6933 6934	W E	PP	US SDK	
	(Up) Down	Member		
	(N) S	Span No.	3	Condition: GENL VIEW ~~INSIDE~~ to inside the
6935	W E	PP	US SDK	top chord.
	(Up) Down	Member		
	(N) S	Span No.	3	Condition: GENL
6936	W (E)	PP	US SDK	
	Up Down	Member		
	N (S)	Span No.	3	Condition: Below the lateral bracing connection,
6937	W (E)	PP		US-LS SDK has a 18" x FL) area of paint failure
	Up Down	Member	US-LS SDK	w/ light rust on its west side of west flange
	(N) S	Span No.	3	Condition:
6938	W (E)	PP	US SDK	GENL
	Up Down	Member		
	(N) S	Span No.	3	Condition:
6939	W E	PP	US SDK	GENL
	(Up) Down	Member		
	N (S)	Span No.	3	Condition: GENL
6940	W (E)	PP	US SDK	
	Up Down	Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 2 of 11

Team Leader: _____ Date: 8/14/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6941	N S W E Up Down	Span No.	3	Condition: GEN
		PP	U3 SOK	
		Member		
6942	(N) S W E (Up) Down	Span No.	3	Condition: GEN
		PP	U3 SOK	
		Member		
6943	N (S) W E (Up) Down	Span No.	3	Condition: GEN
		PP	U3 SOK	
		Member		
6944	N (S) W (E) Up Down	Span No.	3	Condition: GEN
		PP	U3 SOK	
		Member		
6945	(N) S W (E) Up Down	Span No.	3	Condition: w/ heavy rust & Paint failure Scrap marks on member @ 28" from top of
		PP		SOK, the west flange is bent outward away from RUY
		Member	L9-U5 SOK	by up to 3/4" over a 12" length.
6946	(N) S W (E) Up Down	Span No.	3	Condition: Scrap marks w/ heavy rust and paint
		PP	~~L9~~	failure over a 67" high on west side of West Flange
		Member	U4-L9 SOK	
6947	(N) S W (E) Up Down	Span No.	3	Condition: Scattered areas of paint failure w/ heavy rust
		PP		& rust stains over the sidewalk. @ 4' from top
		Member	U3-L9 SOK	of sidewalk, scrap marks w/ heavy rust & rust stains
	N S W E Up Down	Span No.		Condition: on west face of west flange. There is a 1"
		PP		deep gouge over a 8" length on the south edge of
		Member		West Flange that bent inward to the RUY by 1".
6948	N S W (E) Up Down	Span No.	3	Condition: West Flange bent out of plane long. by up to
		PP		3" and transversely by up to 1½" East Flange bent out
		Member	U3-L3 SOK	of plane long. by up to 1" and transversely by up
6949 ~~6948~~	(N) S W (E) Up Down	Span No.	3	Condition: to 1½". The web is twisted out of plane
		PP		This is over a 10' height from top of SOK Scrap
		Member	U3-L3 SOK	marks w/ heavy rust & rust stains

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 3 of 11

Team Leader: _____ Date: 8/14/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6950 ~~6949~~	(N) S / W E / Up Down	Span No.	3	Condition: Same conditions as previous photo
		PP		
		Member	U3-L3 SDK	
6951 ~~6950~~	(N) S / W (E) / Up Down	Span No.	3	Condition: Scrap marks w/ heavy rust, paint failure,
		PP		and rust stains over a 7' length.
		Member	U2-L3 SDK	
6952 ~~6951~~	N S / W (E) / Up (Down)	Span No.	3	Condition:
		PP		Same condition as Photos 6948, 6949, & 6950
		Member	U3-L3 SDK	
6953	(N) S / W (E) / Up Down	Span No.	3	Condition: GENL
		PP	U2 SDK	
		Member		
6954	N (S) / W E / Up Down	Span No.	3	Condition: GENL
		PP	U2 SDK	
		Member		
6955	N (S) / W E / Up Down	Span No.	3	Condition: Top of Trusses in Span 3 View from U2
		PP		
		Member		
6956	(N) S / W E / Up Down	Span No.	2	Condition: Top of Trusses in Span 2
		PP		
		Member		
6957	N (S) / W E / Up Down	Span No.	3	Condition: GENL
		PP	U2 SDK	
		Member		
6958	(N) (S) / W E / (Up) Down	Span No.	3	Condition: GENL VIEW inside the top chord
		PP	U2 SDK	
		Member		
6959	(N) S / W E / (Up) Down	Span No.	3	Condition: ↳ General view inside the top chord
		PP		Typical
		Member	U1-U2 SDK	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 4 of 11

Team Leader: _____ Date: 8/14/202 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6960	(N) S W E Up Down	Span No.	3	Condition: General view inside the top chord
		PP	U1 SOK	
		Member		
6961 ~~6962~~	N S W (E) Up Down	Span No.	3	Condition: GENL
		PP	U1 SOK	
		Member		
6962	(N) S W E Up Down	Span No.	3	Condition: GENL
		PP	U1 SOK	West face of Span 3 U1 SOK
		Member		
6963	N S W (E) Up Down	Span No.	3	Condition: Area of paint failure w/ heavy rust & rust
		PP		stain Traffic Damage to West Angle, South
		Member	U1-L0 SOK	flange bent north by up to ½" over a 3" length
6964	N (S) W E Up Down	Span No.	2	Condition: GENL
		PP	U7 SOK	
		Member		
6965	N (S) W E Up Down	Span No.	2	Condition: GENL
		PP	U6 SOK	
		Member		
6966	(N) S W E Up Down	Span No.	2	Condition: Sway bracings
		PP		GENL
		Member		
6967	N S W (E) Up Down	Span No.	2	Condition: GENL
		PP	U5 SOK	
		Member		
6968	N (S) W E Up Down	Span No.	2	Condition: GENL
		PP	U5 SOK	
		Member		
6969	N (S) W E Up Down	Span No.	2	Condition: GENL
		PP	U4 SOK	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 5 of 11

Team Leader: _____ Date: 8/19/2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6970	N (S) W (E) Up Down	Span No.	2	Condition: GENL
		PP	U3 SDK	
		Member		
6971	N (S) W (E) Up Down	Span No.	2	Condition: GENL
		PP	U2 SDK	
		Member		
6972	N S W (E) Up Down	Span No.	2	Condition: GENL
		PP	U1 SDK	
		Member		
6973	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U7 SDK	
		Member		
6974	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U6 SDK	
		Member		
6975	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U5 SDK	
		Member		
6976	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U4 SDK	
		Member	~~U4 SDK~~	
6977	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U3 SDK	
		Member		
6978	N (S) W (E) Up Down	Span No.	1	Condition: GENL
		PP	U2 SDK	
		Member		
6979	N S W (E) Up Down	Span No.	1	Condition: GENL
		PP	~~U2~~ U1 SDK	
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 6 of 11

Team Leader: _____ Date: 8/19/~~2008~~ 2012 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6980	N S / W E / Up Down	Span No.	1	Condition: North End Portal
		PP		Lower Portal member previously replaced
		Member		
6981	(N) S / (W) E / (Up) Down	Span No.	1	Condition: North Portal GENL
		PP		
		Member		
6982	(N) S / W E / Up Down	Span No.	1	Condition: Severed lacing bar due to section loss
		PP		just below the sidewalk level
		Member	U1-L0 SDK	
6983	N S / (W) E / (Up) Down	Span No.	1	Condition: U2 Sway Brace
		PP		Bent member due to impact
		Member		Lateral displacement
6984	N S / (W) E / (Up) Down	Span No.	1	Condition: U3 Sway Brace
		PP		Bent member due to impact
		Member		Lateral displacement
6985	N S / (W) E / (Up) Down	Span No.	1	Condition: U4 Sway Brace
		PP		Similar condition as previous photo
		Member		
6986	N S / (W) E / Up Down	Span No.	1	Condition: Impact damage
		PP		
		Member	U5-L5 RHY	
6987	N S / (W) E / (Up) Down	Span No.	1	Condition: U5 Sway Brace
		PP		Lateral displacement
		Member		
6988	N S / (W) E / (Up) Down	Span No.	1	Condition: U6 Sway Brace
		PP		Lateral displacement
		Member		
6989	(N) S / W E / Up Down	Span No.	1	Condition: Minor impact damage 2' above SDK
		PP		
		Member	U6-L6 SDK	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 7 of 11

Team Leader: _____ Date: 8/14/12 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
6990	N S (W) E (Up) Down	Span No.	1	Condition: South Portal
		PP		
		Member		
6991	(N) S W E (Up) Down	Span No.	1	Condition: South Portal
		PP		Lower member previously replaced
		Member		Two separate impact damage
6992	N (S) W E (Up) Down	Span No.	2	Condition:
		PP		North Portal
		Member		
6993	(N) S W E (Up) Down	Span No.	2	Condition: North Portal
		PP		
		Member		
6994	N (S) W E (Up) Down	Span No.	2	Condition: @ 12' above deck, impact damage to
		PP		east flange
		Member	U2-12 RHY	
6995	N S W (E) Up (Down)	Span No.	2	Condition: @ 2' above deck, impact damage
		PP		to West flange
		Member	U3-13 SDK	
6996	N S (W) E (Up) Down	Span No.	2	Condition: U4 Sway Frame
		PP		No Sig. Damage TYPICAL
		Member		
6997	N (S) W E (Up) Down	Span No.	2	Condition: Torn East Flange @ N. Edge
		PP		
		Member	U6-L5 RHY	
6998	(N) S W (E) Up Down	Span No.	2	Condition: @ 2' above sidewalk, minor bent flange
		PP		
		Member	U6-L5 SDK	
6999	N (S) W (E) Up Down	Span No.	2	Condition: Impact damage @ 1' above deck
		PP		
		Member	U6-L6 SDK	

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG
Project: Notes by KL
Daily Page Number 5 of 11

Team Leader: _____ Date: 8/14 Bridge: 2019

PHOTO #	DIRECTION	LOCATION		DESCRIPTION
7000	N (S) W E Up Down	Span No.	2	Condition: South Portal
		PP		
		Member		
7001	N S W E Up Down	Span No.	2	Condition: South Portal
		PP		
		Member		
7002	N S W E Up Down	Span No.	2 3	Condition: South North Portal
		PP		
		Member		
7003	N S W E Up Down	Span No.	3	Condition: North Portal
		PP		
		Member		
7004	N S (W) E Up Down	Span No.	3	Condition: U3 Sway Brace
		PP		Minor lateral displacement
		Member		
7005	N S W E Up Down	Span No.	3	Condition: Torn West Flange @ Approx 4' above deck by sidewalk deck
		PP		
		Member	U3-L4 SOK	
7006	N S (W) E Up Down	Span No.	3	Condition: U4 Sway Brace
		PP		Twisted and bent
		Member		
7007	N S (W) E Up Down	Span No.	3	Condition: U6 Sway Brace
		PP		Bent w/ lateral displacement over NB lane
		Member		
7008	N S W E Up Down	Span No.	3	Condition: South Portal
		PP		
		Member		
7009	N S (W) E Up Down	Span No.	3	Condition: South Portal
		PP		Bent and twisted flange over NB lane
		Member		

Q:\STR\photo log.xls

Parsons Brinckerhoff - PHOTO LOG

Project: Notes by KL

Daily Page Number 9 of 11

Team Leader: ____________ Date: 8/14 Bridge: 2019

PHOTO #	DIRECTION		LOCATION		DESCRIPTION
7010	[✓ N]	S	Span No.	3	Condition: South Portal
	[✓ W]	E	PP		
	[✓ Up]	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		
	N	S	Span No.		Condition:
	W	E	PP		
	Up	Down	Member		

Q:\STR\photo log.xls

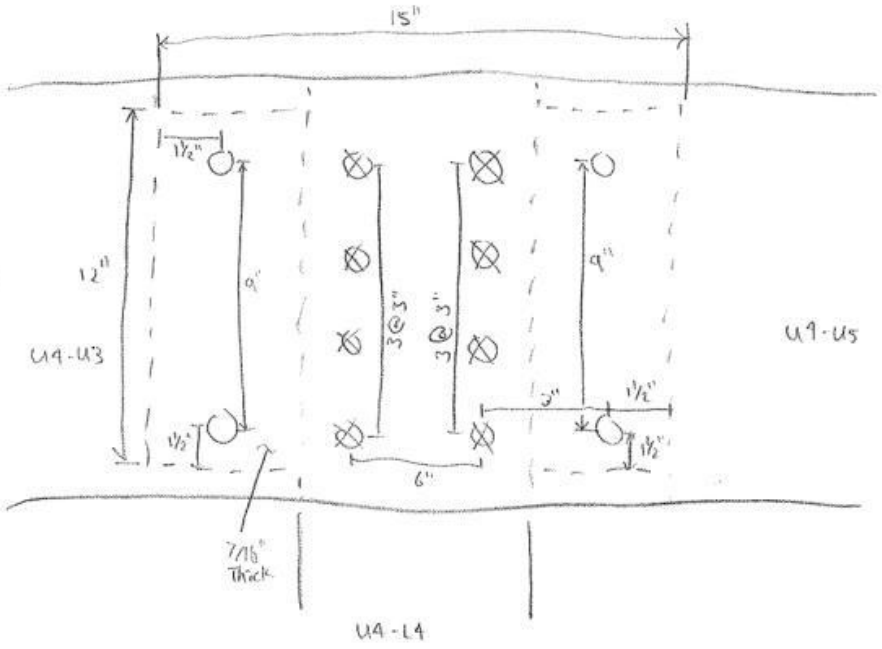
P.10 of 11

8/14 2019

Notes by KL

SIDEWALK U4

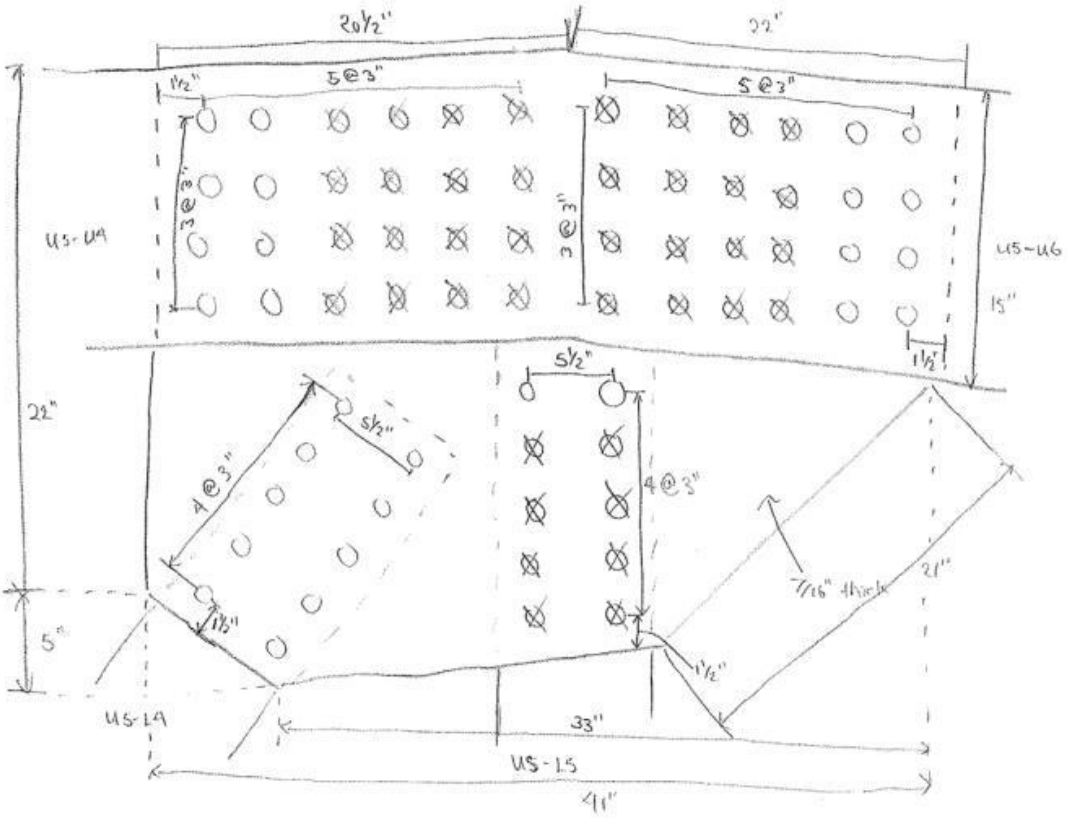
⊗ DOUBLE SHEAR



Measured @ Span 3 U4 SDK

P.11 of 11
8/19 2019
SIDEWALK U3 Notes by KL

⊗ DOUBLE SHEAR



Measured @ Span 3 U5 SOK

Appendix C

Structure Inventory and Appraisal (SIA) Sheet Redlines

Roger B. Stanley (TL)
11/13/12

Maine Department of Transportation

Maintenance & Operations
Bridge Maintenance

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 2019 Agency ID: 2019 SR: 11.4 SD/FO: SD

IDENTIFICATION

State 1:	23 Maine	Struc Num 8:	2019
Facility Carried 7:	IN PERU = N. MAIN	Location 9:	150 FT S'LY OF JCT US2
Rte.(On/Under)5A:	Route On Structure	Rte. Signing Prefix 5B:	3 State Hwy
Level of Service 5C:	0 None of the below	Rte. Number 5D:	00000
Directional Suffix 5E:	0 N/A (NBI)	% Responsibility :	0
SHD District 2:	03 Western	County Code 3:	017 Oxford
Place Code 4:	17240 Peru	Mile Post 11:	9.160 mi
Feature Intersected 6:	ANDROSCOGGIN RIVER		
Latitude 16:	44d 31' 48"	Longitude 17:	070d 27' 51"
Border Bridge Code 98:	Not Applicable (P)		
Border Bridge Number 99:	n/a		

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 3

Main Span Material/Design 43A/B:

3 Steel 10 Truss-Thru

Deck Type 107:	1 Concrete-Cast-in-Place
Wearing Surface 108A:	1 Monolithic Concrete
Membrane 108B:	0 None
Deck Protection 108C:	None

AGE AND SERVICE

Year Built 27:	1930	Year Reconstructed 106:	-4		
Type of Service on 42A:	5 Highway-pedestrian				
Type of Service under 42B:	5 Waterway				
Lanes on 28A:	2	Lanes Under 28B:	0	Detour Length 19:	7.8 mi
ADT 29:	6,442	Truck ADT 109:	9 %	Year of ADT 30:	2010

GEOMETRIC DATA

Length Max Span 48:	186.0 ft	Structure Length 49:	574.0 ft
Curb/Sdwlk Width L 50A:	0.5 ft	Curb/Sidewalk Width R 50B:	5.2 ft
Width Curb to Curb 51:	22.0 ft	Width Out to Out 52:	23.0 ft
Approach Roadway Width 32: (w/ shoulders)	26.0 ft	Median 33:	0 No median
Deck Area:	13,201.5 sq. ft		
Skew 34:	0.00 °	Structure Flared 35:	0 No flare
Vertical Clearance 10:	14.83 ft	Horiz. Clearance 47:	22.00 ft

Minimum Vertical Clearance Over Bridge 53: 14.8 ft
Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR
Minimum Vertical Underclearance 54B: 0.0 ft
Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR
Minimum Lateral Underclearance R 55: 327.8 ft
Minimum Lateral Underclearance L 56: 327.8 ft

INSPECTION

Frequency 91:	24 months	Inspection Date 90:	8/16/2010 08/14/2012	Next Inspection:	08/16/2012 08/14/2014
FC Frequency 92A:	24 months	FC Inspection Date 93A:	1/1/1901 08/14/2012	Next FC Inspection:	1/1/1901 08/14/2014
UW Frequency 92B:	NA	UW Inspection Date 93B:	NA	Next UW Inspection:	NA
SI Frequency 92C:	NA	SI Date 93C:	NA	Next SI:	NA
Element Frequency:	24 months	Element Inspection Date:	08/16/2010 08/14/2012	Next Elem. Insp. Due:	08/16/2012 08/14/2014

CLASSIFICATION

Defense Highway 100:	0 Not a STRAHNET hwy	Parallel Structure 101:	No || bridge exists
Direction of Traffic 102:	2 2-way traffic	Temporary Structure 103:	Not Applicable (P)
Highway System 104:	0 Not on NHS	NBIS Length 112:	Long Enough
Toll Facility 20:	3 On free road	Functional Class 26:	06 Rural Minor Arterial
Defense Hwy 110:	0 Not a STRAHNET hwy	Historical Significance 37:	5 Not eligible for NRHP
Owner 22:	01 State Highway Agency		
Custodian 21:	01 State Highway Agency		

CONDITION

Deck 58:	5 Fair	Super 59:	4 Poor	Sub 60:	5 FAIR ~~6 Satisfactory~~
Culvert 62:	N N/A (NBI)	Channel/Channel Protection 61:	6 Bank Slumping		

LOAD RATING AND POSTING

Inventory Rating Method 65:	2 AS Allowable Stres	Operating Rating Method 63:	2 AS Allowable Stress
Inventory Rating 66:	HS8.9	Operating Rating 64:	HS24.4
Design Load 31:	5 MS 18 (HS 20)	Posting 70:	5 At/Above Legal Loads
Posting status 41:	A Open, no restriction		

APPRAISAL

Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	0 Substandard
Transition 36B:	0 Substandard	Approach Rail Ends 36D:	0 Substandard
Str. Evaluation 67:	2	Deck Geometry 68:	2 Intolerable - Replace
Underclearance, Vertical and Horizontal 69:	N Not applicable (NBI)		
Waterway Adequacy 71:	6 Equal Minimum	Approach Alignment 72:	6 Equal Min Criteria
Scour Critical 113:	8 Stable Above Footing		

PROPOSED IMPROVEMENTS

Bridge Cost 94:	$ 5,319,000	Type of Work 75:	31 Repl-Load Capacity
Roadway Cost 95:	$ 532,000	Length of Improvement 76:	586.0 ft
Total Cost 96:	$ 7,978,000	Future ADT 114:	9,019
Year of Cost Estimate 97:	2004	Year of Future ADT 115:	2030

NAVIGATION DATA

Navigation Control 38:	0 Permit Not Required		
Vertical Clearance 39:	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 111:	Not Applicable (P)	Lift Bridge Vertical Clearance 116:	0.0 ft

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	18/2	P Conc Deck/Thin Ovl	(SF)	13,202	0 %	0	100 %	13,202	0 %	0	0 %	0	0 %	0
1	113/2	Paint Stl Stringer	(LF)	3,444	95 ~~79~~ %	2,721	5 ~~7~~ %	241	0 ~~11~~ %	379	0 ~~3~~ %	103	0 %	0
1	121/2	P/Stl Thru Truss/Bot	(LF)	1,148	75 ~~63~~ %	723	15 6 %	69	10 ~~26~~ %	298	0 ~~5~~ %	57	0 %	0
1	126/2	P/Stl Thru Truss/Top	(LF)	1,148	70 ~~72~~ %	827	15 ~~5~~ %	57	15 ~~16~~ %	184	0 ~~7~~ %	80	0 %	0
1	152/2	Paint Stl Floor Beam	(LF)	621	50 ~~61~~ %	379	10 ~~7~~ %	43	20 ~~27~~ %	168	20 ~~5~~ %	31	0 %	0
1	210/2	R/Conc Pier Wall	(LF)	46	0 %	0	70 %	32	30 %	14	0 %	0	0 %	0

Roger B. Stanley (TL)
11/13/12

Maine Department of Transportation

Maintenance & Operations
Bridge Maintenance

Structure Inventory and Appraisal Sheet (English Units)

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	215/2	R/Conc Abutment	(LF)	46	0 %	0	70 %	32	30 %	14	0 %	0	0 %	0
1	218/2	Undefined Wall Elem.	(LF)	80	71 %	57	15 %	12	12 %	10	2 %	2	0 %	0
1	302/2	Compressn Joint Seal	(LF)	46	0 %	0	100 %	46	0 %	0	0 %	0	0 %	0
1	311/2	Moveable Bearing	(EA)	12	50 0 %	0	25 75 %	9	25 %	3	0 %	0	0 %	0
1	334/2	Metal Rail Coated	(LF)	1,148	0 %	0	0 %	0	50 75 %	861	50 20 %	230	0 5 %	57
1	362/2	Traf Impact SmFlag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	384/2	Wear.Surf. - Thin	(SF)	12,628	0 %	0	80 %	10,102	18 %	2,273	2 %	253	0 %	0
1	388/2	Paint	(SF)	72,874	78 %	56,842	15 %	10,931	5 %	3,644	2 %	1,457	0 %	0
1	389/2	Reinfor conc dk/slab	(SF)	13,202	33 %	4,357	33 %	4,357	34 %	4,489	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	18/2	Concrete Deck - Protected w/ Thin	
1	113/2	Painted Steel Stringer	< none >
1	121/2	Painted Steel Bottom Chord Thru T	< none >
1	126/2	Painted Steel Thru Truss (excl. bot	< none >
1	152/2	Painted Steel Floor Beam	< none >
1	210/2	Reinforced Conc Pier Wall	
1	215/2	Reinforced Conc Abutment	
1	218/2	Undefined Wall Elem (Incl. Wing-,	< none >
1	302/2	Compression Joint Seal	
1	311/2	Moveable Bearing (roller, sliding, e	< none >
1	334/2	Metal Bridge Railing - Coated	< none >
1	362/2	Traffic Impact	Collision damage to two verticals, see notes and photos.
1	384/2	Wearing Surface - Thin (Dummy El	<none>
1	388/2	Paint (Dummy Element)	<none>
1	389/2	Reinforced Concrete Deck/Slab	<none>

BRIDGE NOTES

1930 Three span, riveted steel, through truss supporting concrete deck.

Inventory Load Rating very low.

PAST INSPECTION

Inspection Date: 08/16/2010 Type: 1 Regular NBI

Inspector: DTJHANN Pontis User Key: DTJHANN - JAMIE

Scope:

NBI: ☑ Other: ☐ Element: ☑

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Structure is in overall Fair condition.
Used UBC to inspect bridge.
Chain drag of the entire deck found only minor areas of delaminated concrete primarily around joint areas.
Bearing nut on SW bearing is backed off by 3/4"
Note that the nut is not painted and may have been part of the retrofit.
All four abutment bearings have been retrofitted with a catcher¿s mit.
Several of the keeper nuts on the bearing pins are cracked, broken or missing, see photos.
The South end of the center span bearings are tipped back.
There is a cable that has been strung around all of the bearings on the S'ly pier, but is not tight enough to do much.

Two locations of collision damage to verticals.
First is located on down stream side, center of S'ly span. Collision damage to vertical has twisted it out of plane by 2 ±