

INVESTIGATION OF THE EFFECTIVENESS
OF BRIDGE BEARING ANCHOR DEVICES
AND BRIDGE JOINT COMPRESSION SEALS

by

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FINAL REPORT

HIGHWAY RESEARCH PROJECT 56

conducted for
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The opinions, findings, and conclusions expressed in this publication
are those of the authors and not necessarily those of the Arkansas
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ABSTRACT

A survey of I-beam bridges built during the approximate period of 1960-1970 was made to rate the effectiveness of bridge joint compression seals and to determine the significance of the change from ungalvanized anchor bolts to galvanized bolts. In addition, the nature, severity, and frequency of problems relating to bridge bearing devices, anchor bolts, expansion joints, and other related bridge components were determined.

GAINS, FINDINGS, AND CONCLUSIONS

Galvanized anchor bolts were found to be resisting corrosion significantly better than ungalvanized bolts. The age difference in the study samples was accounted for. Additionally, ungalvanized anchor bolts were the most frequent item given a low rating with 10.2% judged to be badly corroded. It is recognized that the problem may be even more severe, in that, the potentially corrosive region at the concrete surface is hidden from visual inspection by the bearing plate.

There was not a clear indication that the change to neoprene joint compression seals from steel cover plates made a positive contribution to bridge performance and resistance to corrosion. A primary factor affecting this comparison was the large percentage (19%) of neoprene compression seals that had failed in some manner. Continuous bridges were found to be in better condition than simple span bridges. This improvement in the continuous bridge ratings was attributed to the waterproofing aspects of the design. It is expected that bridges with neoprene compression seals would have ratings similar to continuous bridges if compression seal failures could be prevented.

When comparing the inspected bridge components at the abutments to the interior piers, bearing plates had an overall lower average at the abutment while the beam ends had an even larger difference in averages and were rated lower at the interior piers. Anchor bolts, bearing devices, and masonry had similar averages at both locations.

A linear relationship between the overall bridge rating and the year constructed was determined to be appropriate. The graph had a positive slope of 0.065. This factor was used to adjust data samples of unequal age.

Other comparisons found no significant climatic factor when comparing bridges in North Arkansas districts to those in Southern Arkansas. Additionally, this study indicated low traffic volume bridges to be in better condition than their high volume counterparts. Additional study could possibly relate bridge condition to the average daily traffic count.

SUMMARY AND RECOMMENDATIONS

Two main recommendations are apparent at the conclusion of this investigation. First, galvanized anchor bolts should continue to be specified on new bridge construction. Meanwhile, epoxy coated anchor bolts, both galvanized and ungalvanized, need to be evaluated for performance and economy.

Secondly, changes are recommended in the Standard Specifications for Highway Construction (1) in the section pertaining to neoprene joint compression seals. While the specifications adequately cover the neoprene material properties, the installation of the seal is not adequately covered. Thus, it is recommended that a table of joint width tolerances be developed and made a part of the standard specifications that would require the contractor to install a joint seal of the proper width. The tolerances would be a function of the design joint width and the ambient air temperature at the time of joint width measurement. Should the constructed joint width fall within the design width plus or minus the tolerance, the neoprene filler shown on the design drawings could be used. Otherwise, a new filler of appropriate width would be substituted for that shown on the design drawings. It is further recommended that the construction section of the ASHTD disseminate to their inspection personnel the importance of a properly functioning joint seal.

The author believes these changes will reduce maintenance and increase the safe life of Arkansas bridges.

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CHAPTER I

INTRODUCTION

Background

A major maintenance problem confronting state highway departments in maintaining the structural integrity of bridges is the proper operation of bridge bearing devices and expansion joints. Movements of bridges caused by temperature changes, vehicular loads, support settlement, and stream flow forces, all produce bridge motion. Design of bridges to provide for this motion is generally provided by bearing devices. Deterioration of these devices is primarily caused by the failure of the bridge joint compression seal or the anchor bolts securing the bearing devices to the pier cap.

A bridge which has inadequate joints or corroded bearing devices that limit or impair its ability to expand and contract can create serious damage to the pier caps, abutments, and bridge deck. Also, expansion joints that permit corrosive laden moisture to move through the joint can accelerate corrosion of anchor bolts and bearing devices and produce severe corrosion of both the beam web and flanges in the joint vicinity, as well as, between the top flange and concrete in composite beam bridges.

Review of Literature

A joint effort of the National Bureau of Standards and Battelle Columbus Laboratories estimated the cost of metallic corrosion in the United States to be as high as \$70 billion a year (2). Aside from this figure, estimated for 1975, the study shows that about 3½% of our entire energy is generated as a result of metallic corrosion. Even though only a very small percentage

of this cost would be attributable to bridges, the implications are the same - it is a very expensive problem. More specifically, in looking at the problem of corrosion in bridge design, the joint seals and anchor bolts are the major concerns within the scope of this review. Additionally, articles related to joint movement and anchorage importance were covered. In particular, joint movement resulting from thermal effects and anchorage importance relating to seismic activity were included.

A survey of highway bridge deficiencies (3) estimates that one in six U. S. highway bridges are deficient. Salt is a major problem corroding reinforcing steel, accelerating concrete spalling, and corroding main steel members. Walsh (4) reported types of treatment to prevent salt damage. Protective coatings and preformed joint seals were emphasized. Other articles reported a myriad of bridge problems resulting from corrosion (5-6). Efforts to reduce bridge corrosion have been made by implementing the use of elastomeric expansion joints (7-8). While preformed joint seals have been widely used for joints in shorter bridges, they are also being used as an alternative to the finger-type joints commonly found on longer bridges (9). The Texas Highway Department (10) has experimented with the elimination of all bridge joints on their shorter bridges. The design procedure uses a continuous structure with the approach slab attached to the bridge. Provisions for expansion are moved into the roadway. The elimination or reduction of expansion joints must account for, not only the generally designed for axial expansion and contraction, but also, flexural movements and stresses created by temperature gradients through the bridge (11-12). The nonuniform temperature distribution is even greater when a thin asphaltic overlay is applied (13).

In addition to the trend toward the use of preformed joint seals, galvanized steel is gaining increased popularity. The Arkansas Highway

Department has been using galvanized anchor bolts since the early 1960's. Numerous articles (14-18) report the virtues of galvanizing or using zinc-rich paints. Claims of greatly extended lives, less maintenance, and lower costs go virtually uncontested when the galvanized steel is exposed to differing atmospheric environments (19). However, when embedded or partially embedded in concrete, researchers are not in such agreement. The problem becomes a great deal more complex with the chemistry of the concrete medium and other embedded steel being significant factors. Both Unz (20) and Mange (21) report that galvanized steel may be more susceptible to attack than ungalvanized steel when excess moisture is present in the concrete in conjunction with chlorides. Okamura and Hisamatsu (22) reported that in the first year, concrete sections with galvanized reinforcing bars, when compared to ungalvanized bars, corroded less and had higher strength. Okamura and Hisamatsu used cracked concrete sections and accelerated corrosion by spraying specimens with calcium chloride. Unz (20) argues that even though this was likely true, longer periods of testing could have resulted in quite different results.

Since metallic corrosion is the result of electrical current flowing from one point on the steel to another, or from the steel to some other receptor, treatments to interrupt this current flow are being tried. Cathodic protection, long a means of protecting pipelines, is being installed on bridges (23). Gaining in popularity is the use of epoxy coating. Epoxy coatings are estimated to double the lifespan of reinforcing steel (24).

Interestingly, a study of bridge failures (25) indicated that corrosion and fatigue were the primary causes of failure in only 5 of the 143 bridge failures reported. However, the author noted that corrosion and fatigue do a great deal more damage than the number implies. The problems are frequently

detected and corrected long before the structure as a whole is in danger of collapse. The majority of the collapsed bridges (60%) resulted from natural phenomena such as floods and earthquakes. Arkansas bridges, particularly those in the northeastern region of the state, have been and will continue to be subjected to seismic forces. Since tremors in this region are an almost annual occurrence, the only unknown is not if the earthquakes will occur but rather a question of magnitude. The significant relationship of seismic loadings to this study is the importance of the anchorage system to prevent collapse and the fact that many Arkansas bridges are constructed in a potentially severe earthquake region.

Obviously, anchorage components weakened by corrosion would be very vulnerable to seismic failure. The San Fernando Valley earthquake of February 9, 1971, (26) indicated an obvious weakness in restraint at expansion joints. Large vertical movements occurred in addition to the expected horizontal movements. Bridge seismic loadings continue to be revised with the revisions being toward large increases in the seismic factors. A historic review of seismic design provisions for bridges is reported by Bull (27).

Scope

A sample of Arkansas State Highway and Transportation Department (ASHTD) bridges classified in the ASHTD-Road Inventory (28) as I-beam bridges generally constructed during the 1960-1970 period was inspected to evaluate current design standards applicable to bridge joints, bridge bearing devices, and related bridge components. In particular, two design changes implemented by the ASHTD were examined. First, a change in the specification of anchor bolts from ungalvanized to galvanized was made. Second, a design change in bridge joints from steel cover plates to neoprene compression seals was implemented.

In addition, the inspections were used to document the nature, severity, and frequency of problems relating to bridge bearing devices, anchor bolts, expansion joints, and other related bridge components.

CHAPTER II

DATA COLLECTION

Introduction

The initial phase of the study was to develop a process for rating and recording the bridge evaluations. First, meetings with bridge inspection personnel in three ASHTD districts were held for purposes of discussing their experiences and suggestions as applicable to this study. Bridge inspection manuals and forms (29-30) used by the bridge inspectors were reviewed. Next, inspections of three bridges were made where descriptive notes were recorded detailing the conditions of the items relating to bearing devices and joints. A numerical rather than a descriptive rating was desirable in order that collected data could be more easily organized and related. Utilizing these resources and objectives, inspection forms and rating codes explained in the next section were developed.

Inspection Form and Codes

First, a set of numerical codes were established to identify the type of bearing device, the type of bridge expansion joint, and the condition of the item being evaluated. The condition codes ranged numerically from 4 to 9 with "4" representing a failed or worst condition to "9" for a new or best condition. These codes are given along with samples of the bridge inspection forms in Appendix A.

The first part of the inspection form provides identification with respect to items such as county, district, or year constructed. The spaces for these items as well as the weather are self-explanatory.

The sketch of the bridge was given to precisely identify the location of each bearing device. The "From" and "To" were given to identify the direction from which the bridge was viewed. The view side is also referred to as the near side or the "1" side. Subsequent rows of bearing devices and beams were referred to as 2, 3, 4, etc. The devices were likewise lettered, A, B, C, etc., proceeding left to right. This is similar to the numbering scheme used for a steel framing plan. Thus, "C1" refers to the third bearing device from the left end on the first row or near side, outside row. The sketch varied depending on the number of spans. Since repetitions were expected in 3, 4, and 5 span structures, forms with sketches of their respective spans were made and pre-labeled. An additional form with unlabeled spans was used to record data for continuous type bridges and multi-span bridges that exceeded the size of the previous categories. Copies of each of these four forms are given in Appendix A.

The first column was used to identify the bearing device. Should the item recorded be A1-A6, this would specify locations A1, A2, etc. through A6. This was often used when all items along a support line were rated the same. The second column was used to record the bearing device code and the third through the seventh columns were used to record the condition code of the bearing plate, anchor bolts, expansion shoe, steel beam end, and masonry, respectively.

Next, a similar set of data was recorded for the expansion joints. Description comments rather than a numerical code were used to record the joint device condition. Sufficient data was not available to develop an acceptable numerical code during the early study period. Since most joints were covered with steel plates, measurements, if taken, were made from underneath the bridge. If the joint was of the neoprene compression

seal type, measurements were made on the top surface. Thus, the differentiation for the respective sets of data is made on the form.

Space was allocated to check if the anchor bolts were galvanized or ungalvanized. Following this are several lines for descriptive comments.

Bridge Inspections

Most I-beam bridges constructed during the study period were located along the interstate highway routes. Therefore, the inspection trips were planned around the interstate routes with additional U. S. and state routes added to better equalize sample sizes for ASHTD districts that had no responsibility or only limited responsibility for interstate structures. No bridges were inspected in district 2 due to the impracticalities of obtaining a sample from the small number of bridges constructed in that district during the 1960-70 study period. Four bridges were inspected in district 5. Eight bridges or more were inspected from each of the remaining 8 districts. Because of the uneven district distribution of qualified sample bridges, the spacing and selection of the bridges varied with districts. The method of bridge selection generally involved dividing the interstate mileage by the number of inspections desired to obtain the sample spacing.

The bridge inspection was completed in the following manner. Using the sample spacing, a bridge was selected. The bridge identification portion of the inspection form was completed. All items to be inspected were visually rated at each bearing location and recorded on the inspection form. In addition to the visual rating, anchor bolts were selected for "sounding". This involved striking the anchor bolt nut with a hammer and listening to the ring or sound produced. Anchor bolts badly corroded would not produce the high pitch ring of the uncorroded bolts. Furthermore, anchor bolts

whose cross sections were considerably reduced by corrosion would bend under this striking action. While the method would probably not identify minor bolt damage, the more severe corrosion could be detected. Visual ratings were generally supported by "sounding". The type of anchor bolt, galvanized or ungalvanized, was determined by making a scratch on the anchor bolt with a steel chisel.

The joint opening of bridges with steel cover plates was measured from underneath with an extensiometer. When the joints had neoprene compression seals, the measurements were made on top. While the actual joint dimensions were not specifically required for this study, the data was not difficult to obtain in conjunction with the inspection ratings. These dimensions in conjunction with the recorded temperature at the time of the measurement, could be used in a more comprehensive and detailed study of joints. A check was recorded if the joint was in good condition or noted with a descriptive comment if otherwise.

The bridge data collected is given in Appendix B grouped in districts consecutively from district 1 to district 10. District 2 was not given since no bridges were inspected in that district. The data was then available for tabulation and comparisons as explained in the following chapter.

CHAPTER III

DATA COMPILATION AND COMPARISONS

Introduction

Several comparisons and arrangements of data were necessary. The shear magnitude of the number of data items required that a computer program be developed to store, sort, arrange, and make comparisons. In addition to over 1000 bridge identification items, 18,485 rating values were collected. The computer program written to handle this task was named BRIDGE.

Description of the Computer Program

The first portion of the program was concerned with bridge identification. The Arkansas Highway Department has the counties numerically identified in consecutive order in their alphabetical order. Our input data contained the county number with the computer selecting and printing out the appropriate county name. Likewise, coded numerical values as given in Appendix A were used to identify the joint type and to classify the anchor bolt as galvanized or ungalvanized. Likewise, the program converted the numeric code to the appropriate alphabetical name. Other identification data was read into the program and printed back as requested without change in form. This data included the highway district number, the highway on which the bridge was located, the highway or other feature over which the bridge crossed, the bridge identification number, and the construction date.

The second and primary portion of the program dealt with computing average rating values for each bridge sampled and organizing the data in several different groups. Averages were computed for the anchor bolts, the bearing plate, the bearing device, the end of the steel beams adjacent to the joints,

the masonry in the vicinity of their respective bearing device, and an overall bridge average. The bridge average was computed by averaging each of the aforementioned five items using an equal weight for each item. All of these items with their respective identification data were printed out in the order of data input. Following this, a comparison of the abutment ratings was made to the interior ratings. Averages for the total sample were made and listed at the end of the comparison output.

Next, the bridges were collected in groups having the same year of construction. In addition to collecting an annual bridge count, averages of the items rated were computed for each bridge group. Next, the bridges were collected by highway department district and average district values were computed and listed for each of the rated items as well as the overall bridge average. Following this, the computer program arranged the bridges in order of worst to best based on the numerical value of each bridge's overall rating. Finally, all the rated items were scanned and collected in the "Code Distribution Table". A count of all anchor bolts rated "4" then "5", etc. was listed as well as these same counts for each of the other items rated.

Comparing Ratings at the Interior Piers to Abutments

The averages for the 96 bridges are tabulated at the end of the computer output portion titled, "A Comparison of the Abutment Condition Ratings with the Interior Condition Rating", for each of items rated and the overall average. The difference in the rating averages were less than 0.1 for the anchor bolts, bearing devices, and concrete cap. However, the abutment bearing plates were rated lower by a difference in factors of 0.21 and the interior beam ends were rated lower by a difference in factors of 0.39.

The lower rating of the abutment bearing plates was expected. The abutments were often partially covered with debris whereas the interior piers were

much cleaner. However, the large difference in the condition of the beam ends was quite unexpected. The most plausible explanation for this condition difference seems related to the differences in bearing devices. The abutment devices were, in general, slotted slide plates that accommodated very little joint movement. Whereas, the interior devices were a mixture of rockers, fixed brackets, and slide plates which generally accommodated most of the bridge expansion and contraction. This more constant movement of the interior joints kept the slide plates free and permitted more seepage of water through the joint. Failures of the neoprene compression seals were also generally concentrated at the high movement interior joints further contributing to the difference.

Data Listed by the Year Constructed

It would be expected that newer bridges should be in better condition than their older counterparts. While it is important to make comparisons of items of different ages, the differences in age must be accommodated. Using the computer data titled, A Comparison of the Bridge Ratings Arranged by Age, as listed in Appendix C, the graph of Figure 1 was constructed. Each data point represents the average of all bridges constructed for that particular year. It is important to note that each data point does not have an equal weight, i.e., the data point for 1959 represents two bridges while that for 1965 represents 16 bridges. The graph was drawn using a best fit of the weighted averages. If the data is collected in comparative numerical groups, such as collecting the bridges of the years 1958, 1959, and 1960 into a group of fifteen, these points while not shown show very little scatter and fall very close or on the graph. The slope of the linear graph indicates a change in the bridge overall rating of 0.065 for each year. This factor was used to adjust data when comparing groups of different ages. As we shall

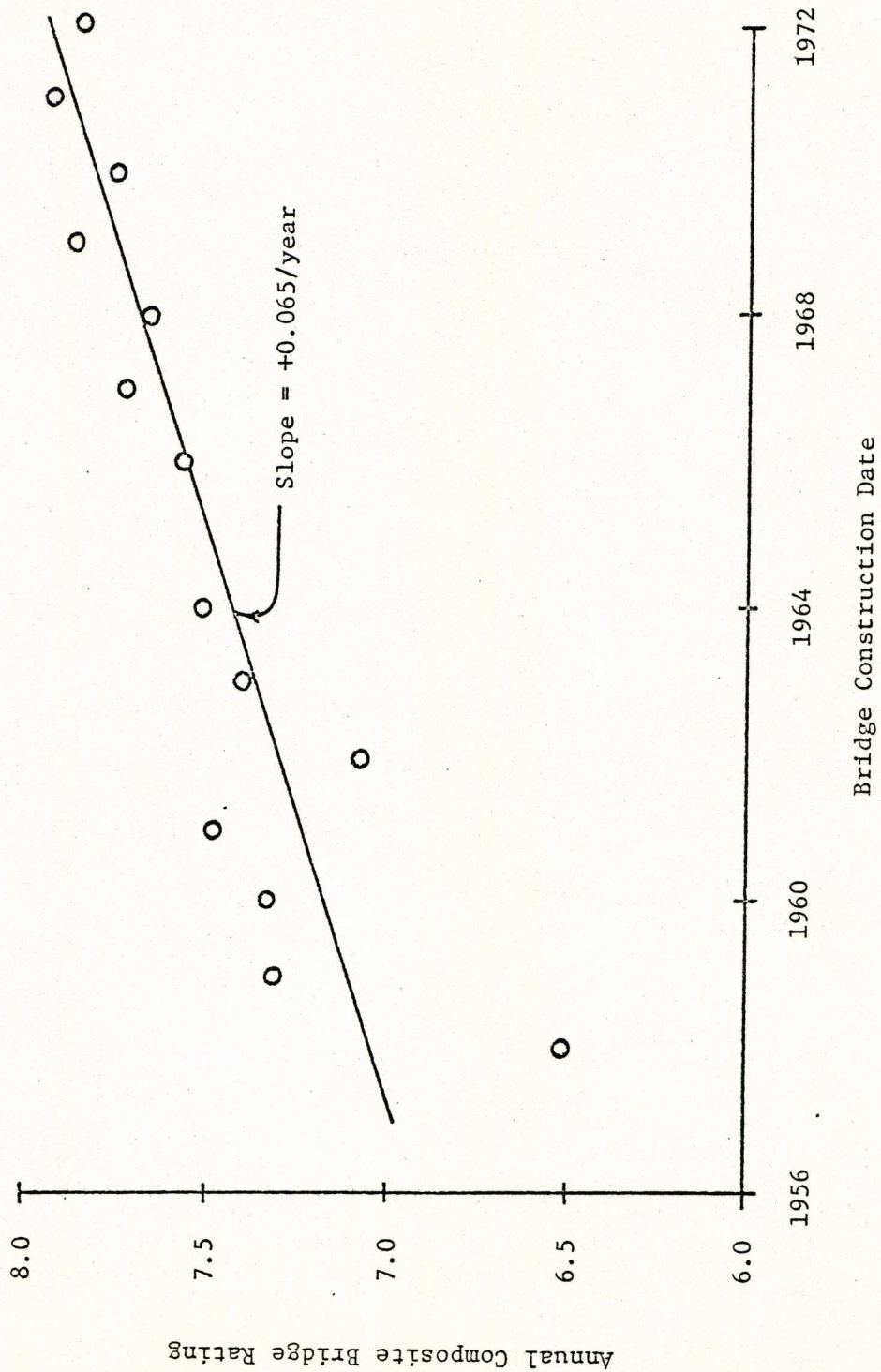


Figure 1. Effect of Age on Overall Bridge Condition

see later in the data discussions, design changes incorporated by the bridge design section of the highway department created a dramatic jump in the rating value of one of the 5 items rated. While this should have created a shift in the graph at the year of the design change, the effect was not perceived. Of course, this change only affected one of five items and would thus be diluted to a large degree.

Comparing Data by Districts

District averages are given for all highway department districts except district number 2. It was desirable to determine if there was a significant climatic factor when comparing bridges of Southern Arkansas to Northern Arkansas. While large differences in the average overall rating for districts existed, the highest being 7.88 for district 4 and the lowest being 7.07 for district 6, regional comparisons adjusted for age could not be considered conclusive. When the southern districts of 3 and 7 were compared to the northern districts of 5, 9, and 10, the southern region was in fact slightly better by a difference in their overall rating of 0.14 when adjusted for age. However, the central latitude districts of 1, 4, 6 and 8 were lowest with an adjusted difference in their overall rating of .05 below that of the northern group. A more detailed study which chooses northern and southern samples that eliminates many of the variables in the bridges included in this study could better treat this comparison. Additionally, the large rating differences noted in district 4 and district 6 also had large age differences, bridge construction features and probable differences in traffic density. All of these factors favored district 4. Also, comparisons of districts rather than regions obviously entails the use of much smaller sample sizes.

Galvanized Versus Ungalvanized Anchor Bolts

In the sample reported in this study, all bridges constructed before or

during 1963 had ungalvanized anchor bolts. The 1964 bridges and all years thereafter had galvanized bolts except for two 1965 bridges. Of the total sample of 96 bridges, 54 had galvanized anchor bolts, 42 ungalvanized.

The galvanized anchor bolts were rated much higher than the ungalvanized bolts. To make a comparison where the age factor is minimal, the 1963 ungalvanized bolts had a rating of 7.19 and the 1964 galvanized bolts had a rating of 7.76. When the two bridges with ungalvanized bolts are removed from the 1965 sample, the rating becomes 7.77 and all years thereafter had an anchor bolt rating that exceeded the 1965 average. This sudden change in rating of 0.57 even if adjusted for the one year difference in age is certainly significant.

Additionally, only 2 galvanized anchor bolts were rated below a "7" while 502 ungalvanized bolts were rated below "7". Again, age difference alone cannot be expected to account for this dramatic difference in rating.

Neoprene Compression Seals Versus Steel Cover Plates

There was not a clear indication that the switch to neoprene compression seals from the steel cover plates has made a significant improvement in bridge performance and resistance to corrosion. Of the 96 bridges evaluated, 10 were of continuous design with, in general, only one joint at each end. Of the remaining 86 bridges, 20 had neoprene compression seals and the other 66 had steel plates. The average construction date for the total bridge sample was 1964.3 with neoprene being generally used in 1967 and thereafter. For 1967, 13 bridges were sampled. Seven had neoprene and had an average composite rating of 7.76. Six had cover plates and had an average of 7.71. This was not very conclusive. Furthermore, all bridges inspected in 1966 used plates with the composite average 7.57. Adjusted for age to 7.64 indicates a slight preference for the neoprene but with such a small sample, this could not be conclusive. In theory, the filled joint not only prevents the larger debris

normally prevented by the cover plate but also corrosive laden water. However, in practice, if the joint seal fails (falls out) the condition is worse than with plates. There is an open joint which permits a build up of dirt and other particles that can hold moisture and accelerate corrosion. In reviewing the worst to best bridges, the neoprene bridges in general are toward the best, however, in general, these are also the newest with galvanized bolts - both of which are significant factors in the ratings.

Continuous Bridges

As noted above, 10 of the bridges sampled were of the continuous design. These are indicated on the data listing by a blank space where the joint type is given. The average composite rating for the continuous bridges was 7.77 as compared to an average of 7.47 for the remaining bridges when adjusted for the slight difference in the mean construction dates. This improvement in the continuous bridge ratings can be attributed to the waterproofing aspects of the continuous design. It would be quite plausible to expect bridges with neoprene compression seals to have similar good ratings if no seal failures occurred.

Traffic Density

While no attempt was made to relate the bridge conditions to the average daily traffic count, a comparison of the ratings were made comparing the bridges on the interstate highways to those bridges crossing over. The average year of construction of both groups of bridges was 1964.4. The interstate bridges had an average overall rating of 7.37 compared to those crossing over with a rating of 7.50. Of even more significance was the comparison with those bridges crossing over the interstate on routes designated as county roads. The county road bridges had an average year of construction

of 1964.9 and an overall rating of 7.62. Even when the rating is adjusted to 7.59 to account for age differences, the low traffic volume bridges were rated significantly higher. Other factors such as type of anchor bolts, joints, etc. were quite similar for both samples.

Distribution and Frequency Evaluations

The "Code Distribution Table" as given in the computer program listing indicates that anchor bolts had the highest distribution of ratings in the lower ranges. This becomes even more acute when recognizing the fact that all of the numbers listed for ratings "4", "5", and "6" were made on ungalvanized bolts except for two "6's" for galvanized bolts. For ungalvanized bolts these compute to be 0.7% failed, 10.2% badly corroded, and 31.0% in need of attention. While these numbers are indeed high, it is recognized that the problem may be even more severe, in that, the potentially corrosive region at the concrete surface is hidden by the bearing plate. While the "sounding" technique was used to detect suspected damage in this region, an allowance for error should be recognized.

No other rated item was deemed to have failed. For bearing plates, 3.8% were rated badly corroded with 25.2% needing cleaning and painting. The next highest item was the beam ends with 0.3% badly corroded and 7.1% in need of cleaning and painting. Due to the primary status of the load carrying responsibility of the beams, these might be characterized as more critical than the bearing plates even though the deficiency percentage of the beam ends was lower. The bearing devices and the concrete had even lower deficiency percentages for the combined ratings of "5" and "6" of 7.1% and 1.8%, respectively.

While the computer program was not used to classify the joint seal condition, a review of the data sheets indicates 19% of the neoprene com-

pression fillers had some type of failure. Six percent were broken or failed in some manner at the curb, 6% were projecting above the roadway with extensive wear damage and 7% had partially or totally fallen out of the joints. While 19% is indeed a very large number, it is expected that a more extensive investigation conducted by pumping water onto the joints and checking for an unacceptable leakage would add to this failure percentage.

A P P E N D I X A

BRIDGE RATING CODES
AND
INSPECTION FORMS

B E A R I N G D E V I C E C O D E S

1. Slide plates
2. Rocker
3. Fixed

E X P A N S I O N J O I N T C O D E S

1. Open joints
2. Steel cover plates
3. Neopreme filled joints

CONDITION CODES

- 9 New or looks like new condition
- 8 Good condition. No significant rust. In case of concrete, no cracking or other damage
- 7 Good condition. Light rust but not sufficient to warrant immediate request for painting. In case of concrete, very slight cracking or other damage.
- 6 Fair condition. Considerable rust. Needs cleaning and painting. Damage to concrete more noticeable where applicable.
- 5 Poor condition. Built-up layers of rust with substantial delaminating of metal. Widespread concrete spalling or cracking. Evaluation for repairs should be made.
- 4 Corroded to point of failure.

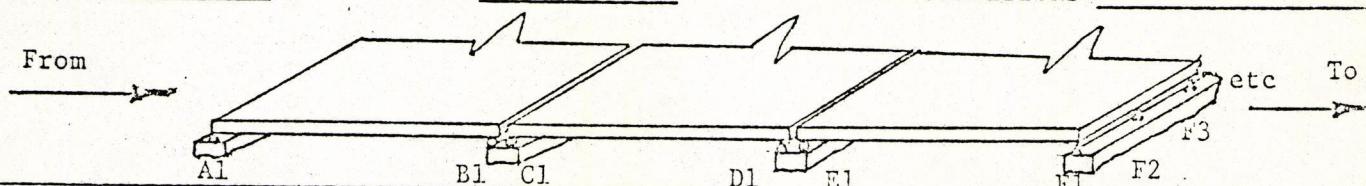
BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

3-SPAN BRIDGE

1. STATE Arkansas 2. DIST. _____ 3. COUNTY _____
4. ROUTE _____ 5. SEC. _____ 6. LOG _____ 7. BR. NO. _____
8. FEATURE INTERSECTED _____
9. BRIDGE ON HIGHWAY _____
10. YEAR BUILT _____ 11. MAIN SPAN (TYPE) I-Beam

12. DATE _____ 13. TEMP. _____ 14. WEATHER CONDITIONS



Anchor Bolts Galvanized - Yes No

Comments

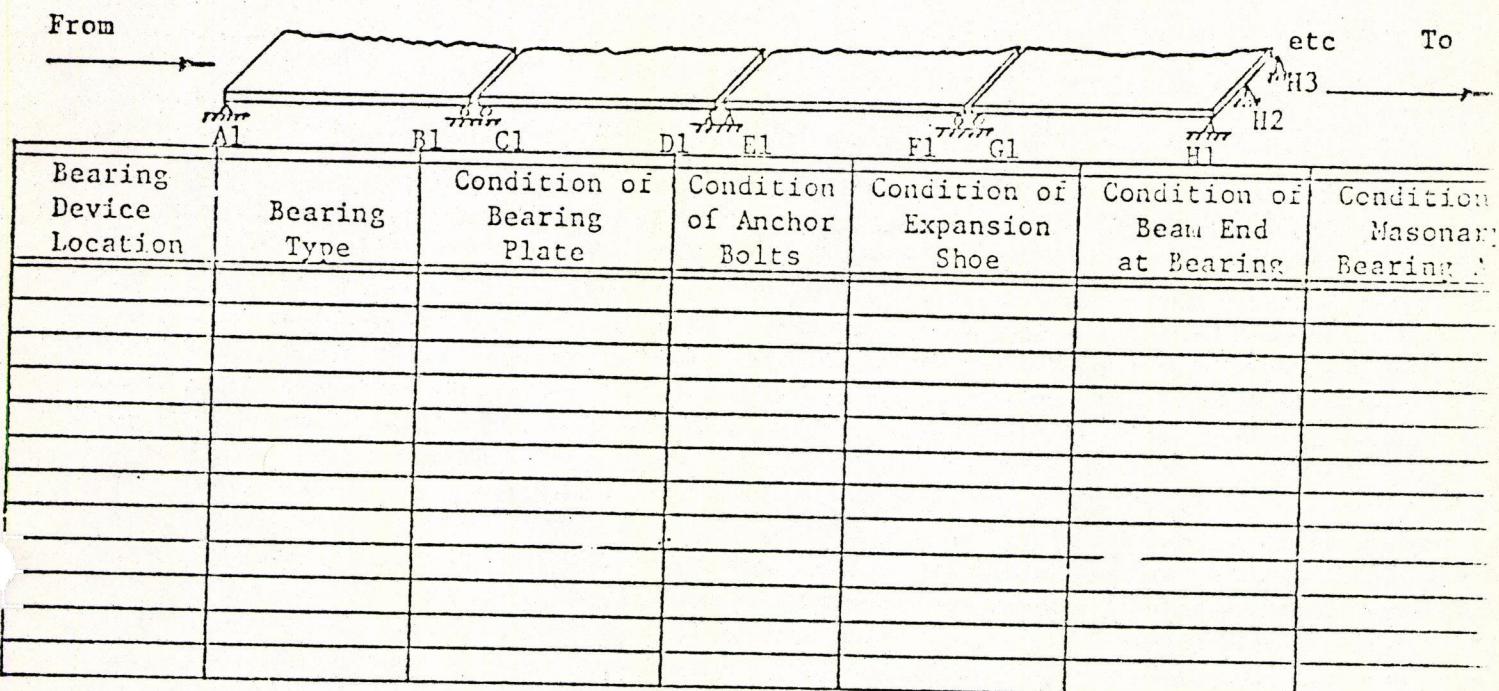
BRIDGE BLARING & JOINT INSPECTION

4 SPAN BRIDGE

IDENTIFICATION:

1. STATE Arkansas 2. DIST. _____ 3. COUNTY _____
4. ROUTE _____ 5. SEC. _____ 6. LOG _____ 7. BR. NO. _____
8. FEATURE INTERSECTED _____
9. BRIDGE ON HIGHWAY _____
10. YEAR BUILT _____ 11. MAIN SPAN (TYPE) I-Beam

12. DATE _____ 13. TEMP. _____ 14. WEATHER CONDITIONS



Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

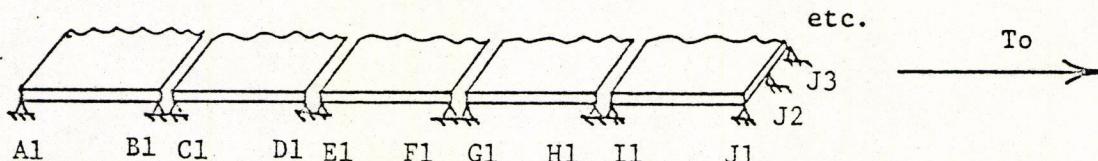
IDENTIFICATION:

5 SPAN BRIDGE

1. STATE Arkansas 2. DIST. _____ 3. COUNTY _____
4. ROUTE _____ 5. SEC. _____ 6. LOG _____ 7. BR. NO. _____
8. FEATURE INTERSECTED _____
9. BRIDGE ON HIGHWAY _____
10. YEAR BUILT _____ 11. MAIN SPAN (TYPE) I-Beam

12. DATE _____ 13. TEMP. _____ 14. WEATHER CONDITIONS

From



Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

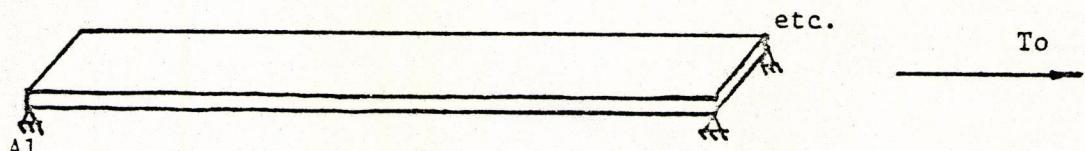
IDENTIFICATION:

GENERAL SKETCH FOR MULTI-SPAN & CONTINUOUS

1. STATE Arkansas 2. DIST. _____ 3. COUNTY _____
4. ROUTE _____ 5. SEC. _____ 6. LOG _____ 7. BR. NO. _____
8. FEATURE INTERSECTED _____
9. BRIDGE ON HIGHWAY _____
10. YEAR BUILT _____ 11. MAIN SPAN (TYPE) I-Beam

12. DATE _____ 13. TEMP. _____ 14. WEATHER CONDITIONS

From



To

Anchor Bolts Galvanized - Yes No

Comments

A P P E N D I X B

COMPLETED BRIDGE

INSPECTIONS

BRIDGES INSPECTED

IN

DISTRICT 1

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE I-55 5. SEC. 11 6. LOG 10.16 7. BR. NO. 3131A
 8. FEATURE INTERSECTED OVER U.S. 64 NEAR MARION
 9. BRIDGE ON HIGHWAY I-55
 10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/7/78 13. TEMP. 90°F 14. WEATHER CONDITIONS CLEAR & SUNNY

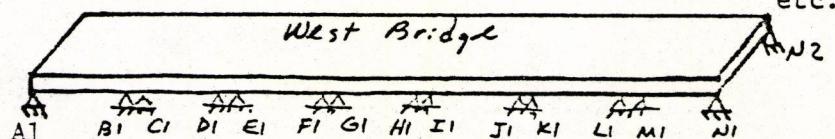
From

St. Louis

etc.

To

MEMPHIS



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A7	1	8	8	8	8	8
B1-B7	2	8	8	8	8	8
C1-C7	3	8	8	8	8	8
D1-D7	2	8	8	8	8	8
E1-E7	3	8	8	8	8	8
F1-F7	2	8	9	8	9	9
G1-G7	3	9	9	8	9	8
other piers expected the same						

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	OK				1.128"		
BC	3	OK				.931"		
DE	3	OK		1.420"		1.260"		
FG	3	OK		1.042"		1.125"		
HI	3	OK				2.057"		

(cont. below)

Anchor Bolts Galvanized - Yes No

Comments Rockers level along line F. End piers clean of dirt & Debris.
All neoprene seals looked good.

LOCATION	TYPE	CNT.	Pearlside
JK	3	OK	1.121"
LM	3	OK	1.003"
N	3	OK	.946"

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden 18
 4. ROUTE I-55 5. SEC. 11 6. LOG 10-16 7. BR. NO. 3131B
 8. FEATURE INTERSECTED Over US 64 near Marion
 9. BRIDGE ON HIGHWAY I-55
 10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

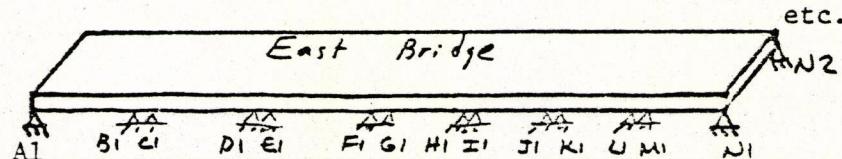
12. DATE 9/07/'78 13. TEMP. 90°F 14. WEATHER CONDITIONS Clear & Sunny

From

St. Louis

To

Memphis



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A7	1	8	8	8	8	8
B1-B7	2	8	8	8	8	8
C1-C7	3	8	8	8	8	8
D1-D7	2	8	8	8	8	8
E1-E7	3	8	8	8	8	8
F1-F7	2	8	8	8	8	8
G1-G7	3	8	8	8	8	8
<i>Other piers expected the same</i>						

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	OK						.808"
B C	3	OK		1.280"				.838"
D E	3	OK		.726"				.847"
F G	3	OK		1.096"				.850"
H I	3	OK						1.831"

Anchor Bolts Galvanized - Yes No

Comments Beans along Line 1 & 7 appear to be added at later date.
 East wing wall settled ~1" and shifted laterally 1" to the east
 at its top.

Location	Type	Cond.	Top far side
JK	3	OK	1.054"
LM	3	OK	1.077"
N	3	OK	.950"

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE 50 5. SEC. 4 6. LOG 9.41 7. BR. NO. 3137
 8. FEATURE INTERSECTED Over I-55 at Clarkdale & R Exit
 9. BRIDGE ON HIGHWAY 50
 10. YEAR BUILT 1958 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/7/78 13. TEMP. 90°F 14. WEATHER CONDITIONS Clear & Sunny

From

West

To

East

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are	etc.													
							A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	K1	L1	M1	
A1	1	5	6	6	8	8														
A2-A5	1	5	5	6	8	8														5
B1-B4	2	6	8	8	8	8														8
B5	2	6	8	8	8	8														8
C1-C5	3	6	8	8	8	8														8
D1-D2	2	6	8	8	8	8														8
D3	2	6	8	8	8	8														8
D4	2	6	8	8	8	8														8
D5	2	6	8	8	8	8														8
E1-E5	3	6	8	8	8	8														8
L1-L5	1	5	5	6	6	8														6

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	OK		1.964"				
D E	2	OK		1.740"				

Anchor Bolts Galvanized - Yes No

Comments Skipped some interior bents. Beam ends had been cleaned and painted. Interior better condition than end bents. Beam ends at K were already showing new rust. All expansion joints were open. A visual check along the top of the bridge indicated approximately 1" of gap by cover plates for expansion. End walls were not vertical but were in good condition.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE Kuhn Rd. 5. SEC. 52 6. LOG 275.24 7. BR. NO. 3117
 8. FEATURE INTERSECTED Over I-40 just past I-55, I-40 intersection west.
 9. BRIDGE ON HIGHWAY Kuhn Rd.
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 80°F 14. WEATHER CONDITIONS Clear & Sunny

From

North →

etc.

To

South →

A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	K1	L1
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area					
A1	1	6	6	6	6	6					
A2 - A5	1	6	8	8	8	8					
B1 - B5	2	6	6	8	8	6					
C1 - C2	3	6	5	8	8	8					
C3 - C5	3	6	8	8	8	8					
D1 - D5	2	6	6	7	6	8					
E1 - E5	3	6	6	8	8	8					
F1 - F5	2	6	6	6	6	6					
G1 - G5	2	6	6	6	6	8 (G1-6)					
L1	1	5	4	6	7	8					
L2 - L4	1	6	6	6	7	8					
L5	1	5	4	6	6	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	OK	.885"		.526"			
DE	2	OK		1.877"				
FG	2	OK		2.937"				

Anchor Bolts Galvanized - Yes No

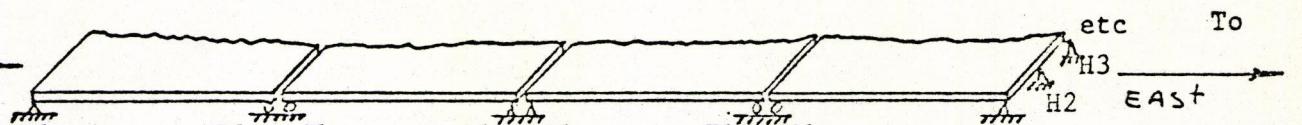
Comments Did not inspect H, I, J & K. L1 & L5 outside Anchor Bolts rusted off just under washer. (Photo made)

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE Hwy 63 5. SEC. 10 6. LOG 3.60 7. BR. NO. 3122
 8. FEATURE INTERSECTED PASSES OVER I-55
 9. BRIDGE ON HIGHWAY 63 JONESBORO EXIT FROM I-55
 10. YEAR BUILT 1958 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/7/78 13. TEMP. 90°F 14. WEATHER CONDITIONS CLEAR & SUNNY

From 

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arc
A1-A5	1M	6	6	8	8	8
B1-B5	2M	5	4	6	5	5 WIDE
C1-C5	1M	5	4	6	5-	5 OPEN
D1-D5	2M	5	5	6	6	OPEN
E1-E5	2M	5	5	6	6	LEVEL
F1-F5	1M	6	6	8	7	6
G1-G5	2M	6	6	8	6	6
H1-H5	1M	5	5	8	8 (LOOKS LIKE IT HAS BEEN REPAIRED)	6

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
2								

Anchor Bolts Galvanized - Yes No

Comments PARPET ON EAST SIDE DROPPED $\approx 1\frac{1}{2}$ " IN RELATION TO HEADWALL. BOTH END WALLS ON EAST ~~ARE~~ CRACKED VERTICALLY AS PER WEST. THE WING WALLS APPEAR TO BE PUSHED BACK BY TRIANGULAR WEDGES AT BRIDGE ABUTMENT. A MAKES CONTACT AT TOP. $1\frac{1}{2}$ " GAP AT BOTTOM.

ALL JOINTS APPEAR CLOSED FROM TOP. COULD NOT VIEW UNDERNEATH BECAUSE OF CROSS MEMBERS.

(BACK)

HEADWALL SEPARATED from PARPET $\approx 1\frac{3}{8}$ " APPEARS
HEADWALL BEEN PUSHED BACK DUE to EXPANSION. WINGWALL
CRACKED VERTICALLY AT BOTH sides of BRIDGE.

Photo 1.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (1X)
 4. ROUTE Ebony RD. 5. SEC. 52 6. LOG 273.37 7. BR. NO. 3115
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY Ebony RD.
 10. YEAR BUILT 62 11. MAIN SPAN (TYPE) I-Beam
 SIGN Post says 1958

12. DATE 9/8/78 13. TEMP. 81° 14. WEATHER CONDITIONS CLEAR - SUNNY
 9:41 A.M.

From								To			
NORTH	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar					
A1 & A5	1	6	5	8	8	8					
A2 - A4	1	6	6	8	6	8					
B1 - B5	2	6	6	6	6	6					
C1 - C5	3	6	6	8	8	8					
D1 - D5	2	6	6	7	8	8					
E1 - E5	2	6	6	7	8	8					
NUT LOOSE ON E2											
F1 - F5	3	6	6	8	7	8					
G1 - G5	2	6	6	8	7	8					
H1 & H5	1	6	5	6	7	8					
H2 - H4	1	6	6	7	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B1	2	8		2.245"				
D1	2	7		1.875"				
F6	2	7		2.000"				

Anchor Bolts Galvanized - . Yes No

Comments D1 on 5 side, cover R during EXPANSION is BREAKING CONCRETE on DECK SURFACE at Joint EDGE. OK on 1 SIDE.

F6 R over on Top of Slab on 1 SIDE, possibly (Probably) RESULT of WRECK on 1 side of Bridge.

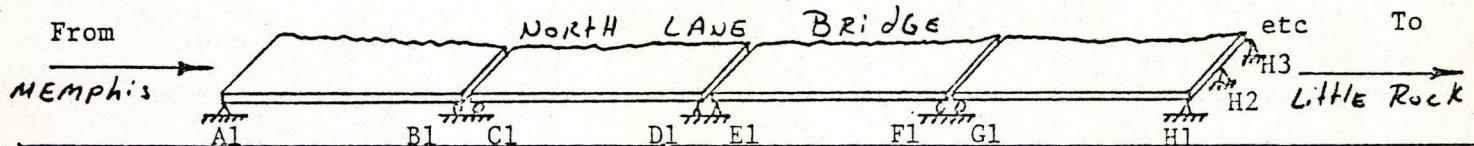
BEAMS 1 & 3 (EF) Bottom FLANGES BENT BADLY (photo), BEAM 2 web is BOWED.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE I-40 5. SEC. 52 6. LOG 271.17 7. BR. NO. A 3108
 8. FEATURE INTERSECTED over st. Hwy 147
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 83° F 14. WEATHER CONDITIONS SUNNY : CLEAR
10:30 A.M.



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A5	1	5	6	6	8	8
B1-B5	2	6	6	8	6	8
C1-C5	3	6	6	8	8 (C1-6)	8
D1-D5	2	6	6	8	6	8
E1-E5	3	7	7	8	8	8
F1-F5	2	5	5	6	6	7
G1-G5	2	6	6	6	6	7
H1-H5	1	5	5	5	7	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	ok	.901"					
De	2	ok	.696"					
Ef	2	ok	CLOSED					

Anchor Bolts Galvanized - Yes No

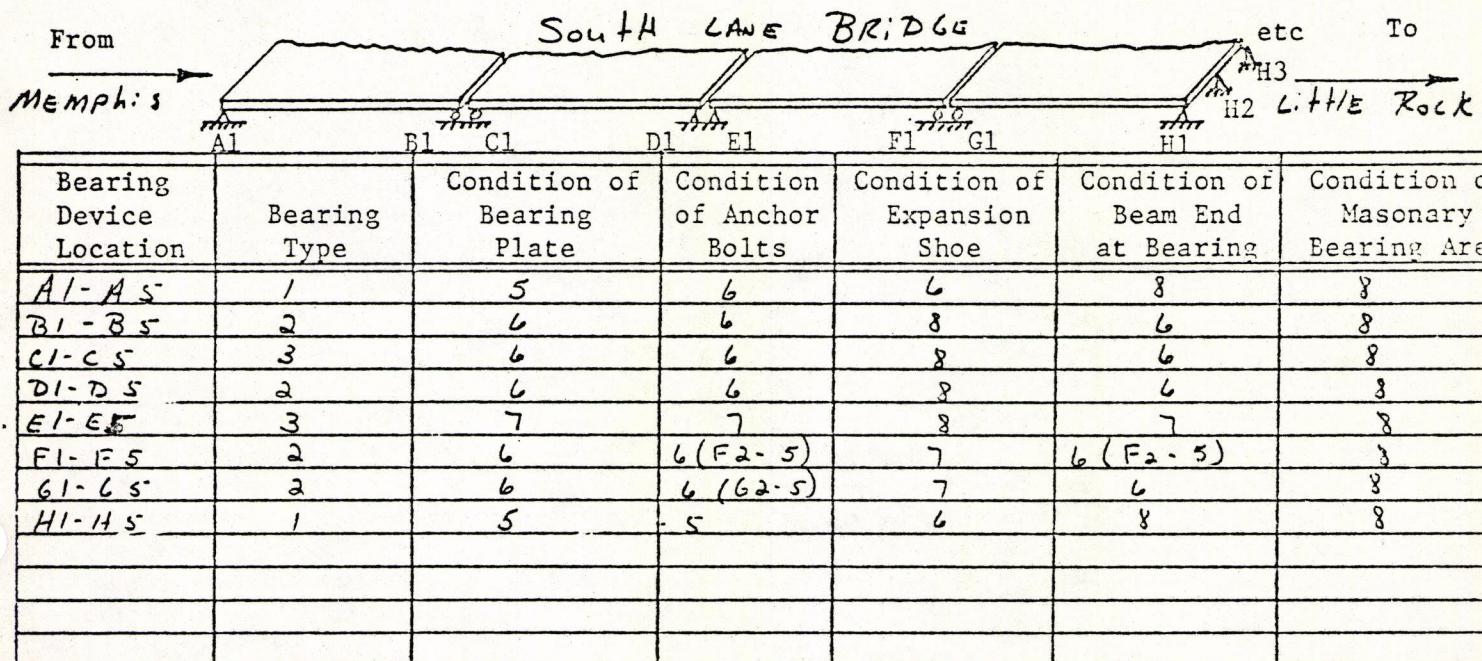
Comments Joints A : H Are Approximately open.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas
2. DIST. 1
3. COUNTY Crittenden (1)
4. ROUTE I-40
5. SEC. 52
6. LOG 271.17
7. BR. NO. B 3108
8. FEATURE INTERSECTED over S. Hwy 147
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1962
11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78
13. TEMP. 83°F
14. WEATHER CONDITIONS Sunny & Clear



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B6	2	OK		1.000"				
D6	2	OK		1.115"				
F6	2	OK		CLOSED				

Anchor Bolts Galvanized - Yes No

Comments Photo of Delamination of Anchor Bolt nut.

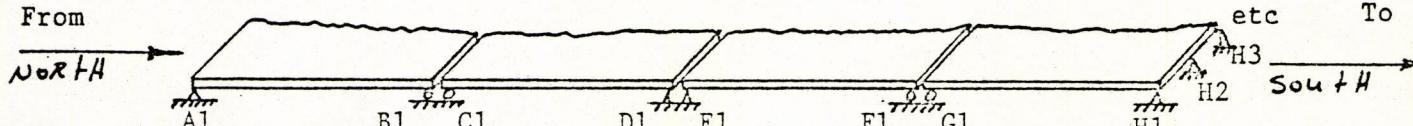
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BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (18)
 4. ROUTE S.H. 218 5. SEC. 52 6. LOG 265.08 7. BR. NO. 3844
 8. FEATURE INTERSECTED over I-40 9. SHEARERVILLE EXCHANGE
 9. BRIDGE ON HIGHWAY S.H. 218 10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/3/78 13. TEMP. 87° 14. WEATHER CONDITIONS CLEAR - SUNNY
11:30 AM

From  To

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A5	1	6	7	8	8	8
B1-B5	2	6	7	6	7	8
C1-C5	3	7	7	8	8	8
D1-D5	2	6	7	7	7	8
E1-E5	2	6	7	7	7	8
F1-F5	3	6	7	8	8	8
G1-G5	2	6	7	6	6	8
H2-H4	1	5	7	7	8	8
H1 & H5	1	6	6	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	~		2.040"				
D E	2	~		2.235"				
F G	2	~		1.720"				

Anchor Bolts Galvanized - Yes No

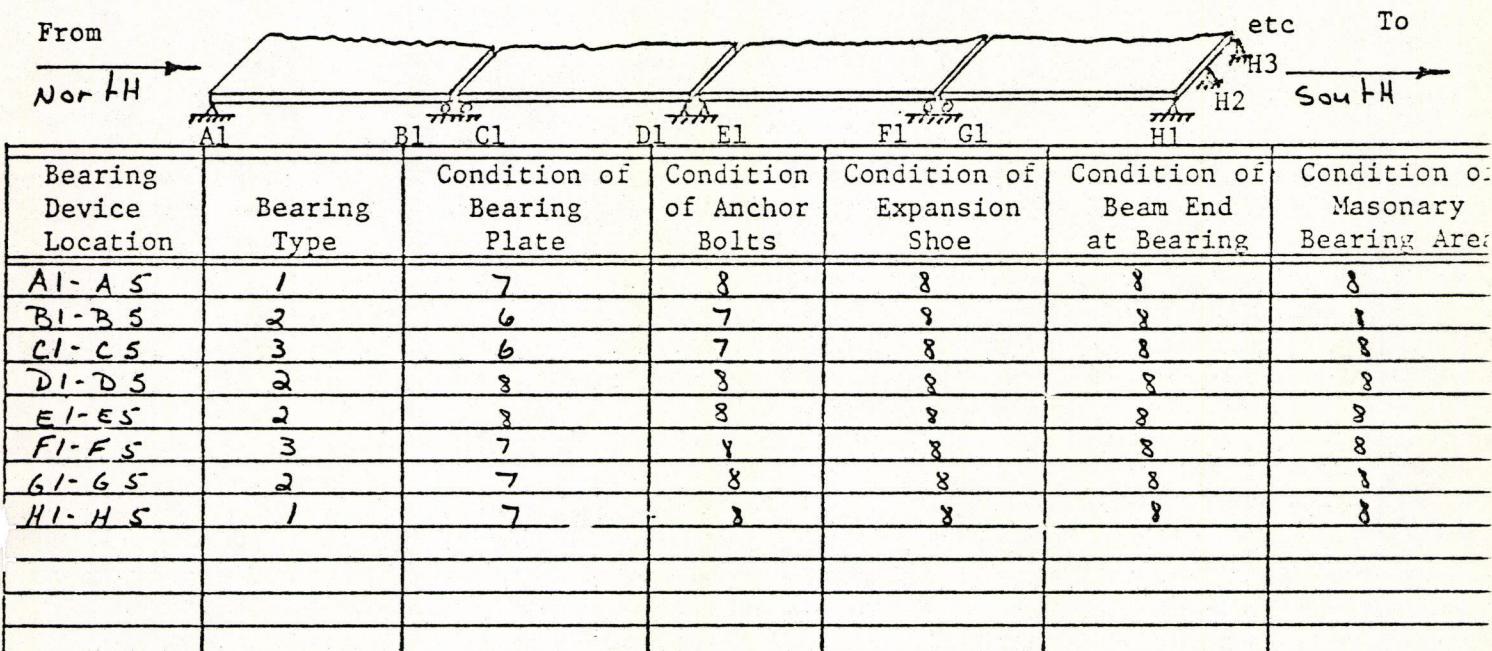
Comments Joints HAVE COVER PLATES, ALL JOINTS HAVE ROOM TO EXPAND, NORTH PARPET HAS NOT SETTLED!

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY ST. FRANCIS (68)
 4. ROUTE County Rd. 5. SEC. 57 6. LOG 259.5 7. BR. NO. 3899
 8. FEATURE INTERSECTED over I-40 Just west of Earl EXIT
 9. BRIDGE ON HIGHWAY County ROAD
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 86° 14. WEATHER CONDITIONS CLEAR - SUNNY



Anchor Bolts Galvanized - Yes No

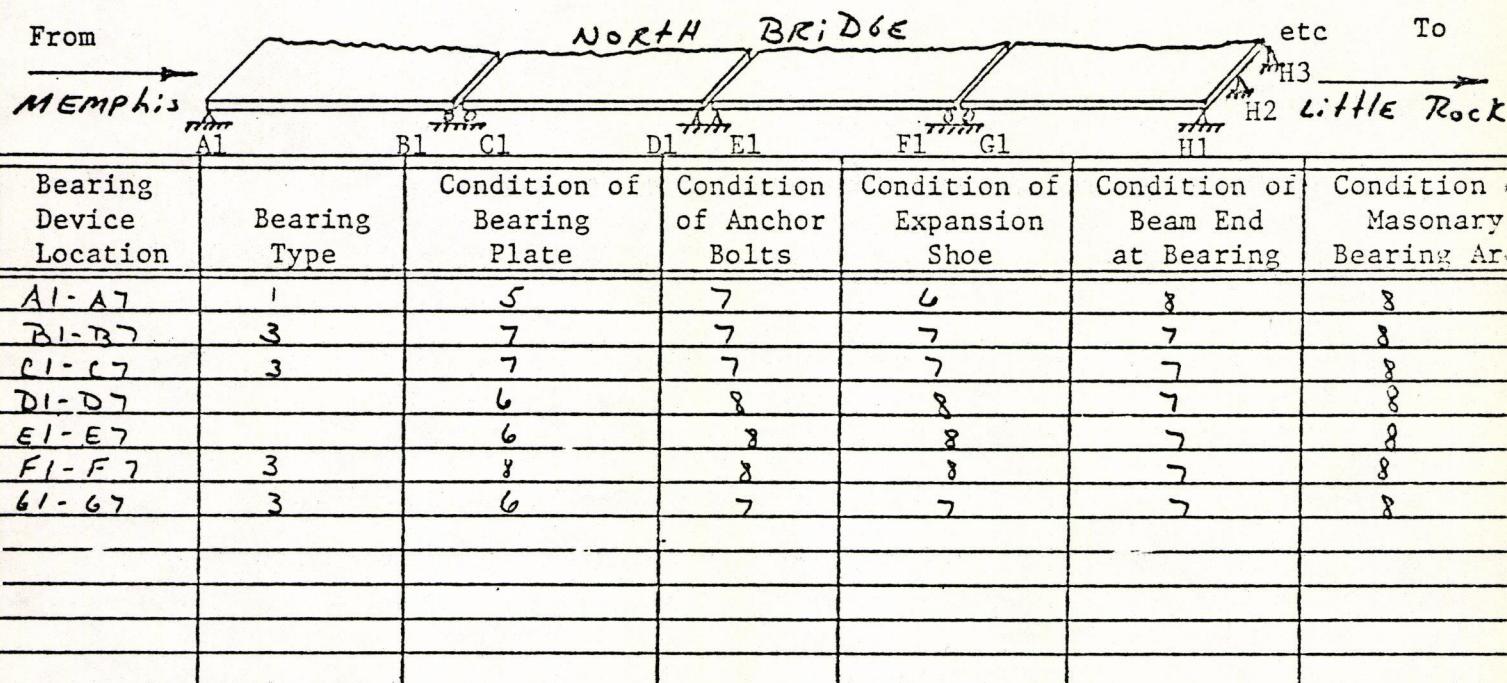
Comments 7 nuts TAKEN off A & H LINE. NAME PLATE MISSING
PHOTO OF NUT STOLEN & PHOTO OF A H... PT ← (?)

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY ST. FRANCIS (68)
4. ROUTE I-40 5. SEC. 51 6. LOG 240.74 7. BR. NO. 3619 A
8. FEATURE INTERSECTED over Hwy 1
9. BRIDGE ON HIGHWAY I - 40
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 91 °F 14. WEATHER CONDITIONS Hazy - Cloudy
2:00 PM



Anchor Bolts Galvanized - Yes No

Comments All Joints on Top HAD AT LEAST 1" PLATE GAP.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY St. Francis (LX)
 4. ROUTE I-40 5. SEC. 51 6. LOG 240.74 7. BR. NO. 3619-B
 8. FEATURE INTERSECTED OVER Hwy 1
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 91°F 14. WEATHER CONDITIONS Hazy - Hot

SOUTH BRIDGE

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar
A1-A7	1	5	7	6	8	8
B1-B7	3	6	7	6	7	8
C1-C7	3	8	7	8	8 (C3-6)	8
D1-D7	2	7	8	7	8	8
E1-E7	2	7	8	7	86	8
F1-F7	3	7	7	7	7	8
G1-G7	3	7	7	7	7	8
H1-H7	1	6	7	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B6	2	OK	2.632"					
D6	2	OK	1.742"					
F6	2	OK	1.914"					

Anchor Bolts Galvanized - Yes No

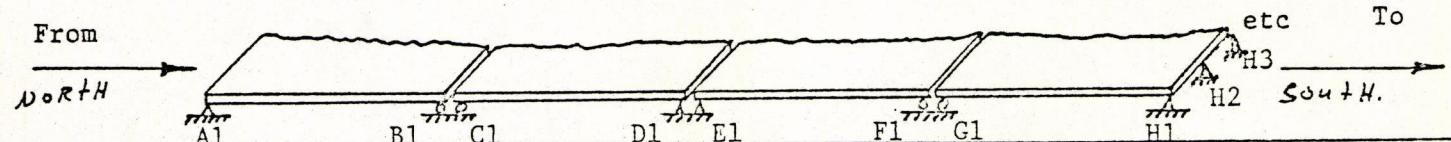
Comments All Joint cover plates on top O.K., Room for Expansion

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY St. Francis (68)
4. ROUTE Cty Rd. 5. SEC. 51 6. LOG 224.72 7. BR. NO. 3768
8. FEATURE INTERSECTED OVER I-40
9. BRIDGE ON HIGHWAY Cty Rd. Blossom OVERPASS
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 91° F
3:00 PM 14. WEATHER CONDITIONS Hazy - Hot



A1	B1	C1	D1	E1	F1	G1	H1
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area	
A1-A5	1	8	8	8	8	8	
B1-B5	2	8	8	8	8	8	
C1-C5	3	8	8	8	8	8	
D1-D5	2	7	8	8	8	8	
E1-E5	2	7	8	8	8	8	
F1-F5	3	7	8	8	8	8	
G1-G5	2	7	8	8	8	8	
H1-H5	1	7	8	8	8	8	

Anchor Bolts Galvanized - Yes No

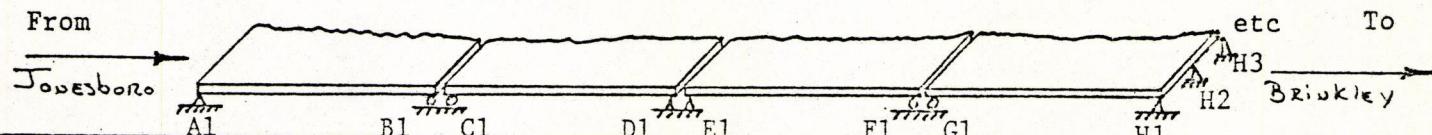
Comments THERE WAS PLENTY OF ROOM FOR EXPANSION BY COVER R'S ON TOP OF BRIDGE. END WALLS, ETC IN EXCELLENT CONDITION.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Monroe (48)
 4. ROUTE US 49 5. SEC. 43 6. LOG 215.74 7. BR. NO. 3730
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY US 49 OLD S.H. 39
 10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/3/78 13. TEMP. 90°F 14. WEATHER CONDITIONS Hazy - Hot
3:25 PM



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar
A1-A5	1	6	8	7	8	8 (A-5, -7)
B1-B5	3	9	8	7	8	8
C1-C5	3	7	8	8	6	8
D1-D5	2	7	7	8	6	8
E1-E5	2	7	7	8	6	8
F1-F5	3	6	8	7	6	7
G1-G5	3	6	8	7	8	7
H1-H5	1	6	8	7	9	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B1-C1	2	~ O.K.		1.661"				
D1-E1	2	O.K.		1.172"				

Anchor Bolts Galvanized - Yes No

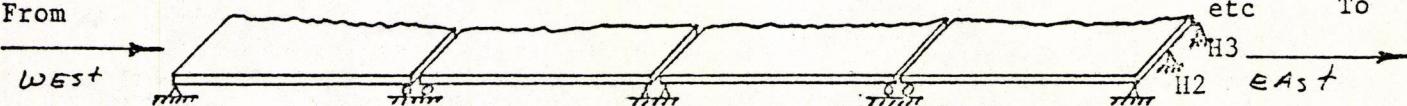
Comments 2 to 3 inches build-up of dirt in center of bridge
(8' wide on south end)

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 1 3. COUNTY Crittenden (1)
 4. ROUTE County Road 5. SEC. 11 6. LOG 26.75 7. BR. NO. 3211
 8. FEATURE INTERSECTED Bridge over I-55
 9. BRIDGE ON HIGHWAY over I-55 on County Road 243' LENGTH
 10. YEAR BUILT 1963 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 78°F 14. WEATHER CONDITIONS SLIGHT HAZE
SUNNY
10:30 AM

From  To

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1 & A4	1	6	7	7	8	8
A2 & A3	1	7	7	7	8	8
B1 - B4	FIXED I-M	7	7	8	8	8
C1 - C4	2	7	7	8	8	8
D1 - D4	3	7	8	8	7	8
E1 - E4	3	8	8	8	8	8
F1 - F4	2	7	8	8	8	8
F2 & F3	2	8	8	8	8	8
G4	3	8	8	8	7	8
G1 - G3	3	8	8	8	8	8
H1 - H4	1	6	7	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
DE	2	O.K.		2.666"				
FG	2	O.K.		2.144"				

Anchor Bolts Galvanized - Yes No

Comments All plates over joints had ~ 1" of room in concrete for expansion.

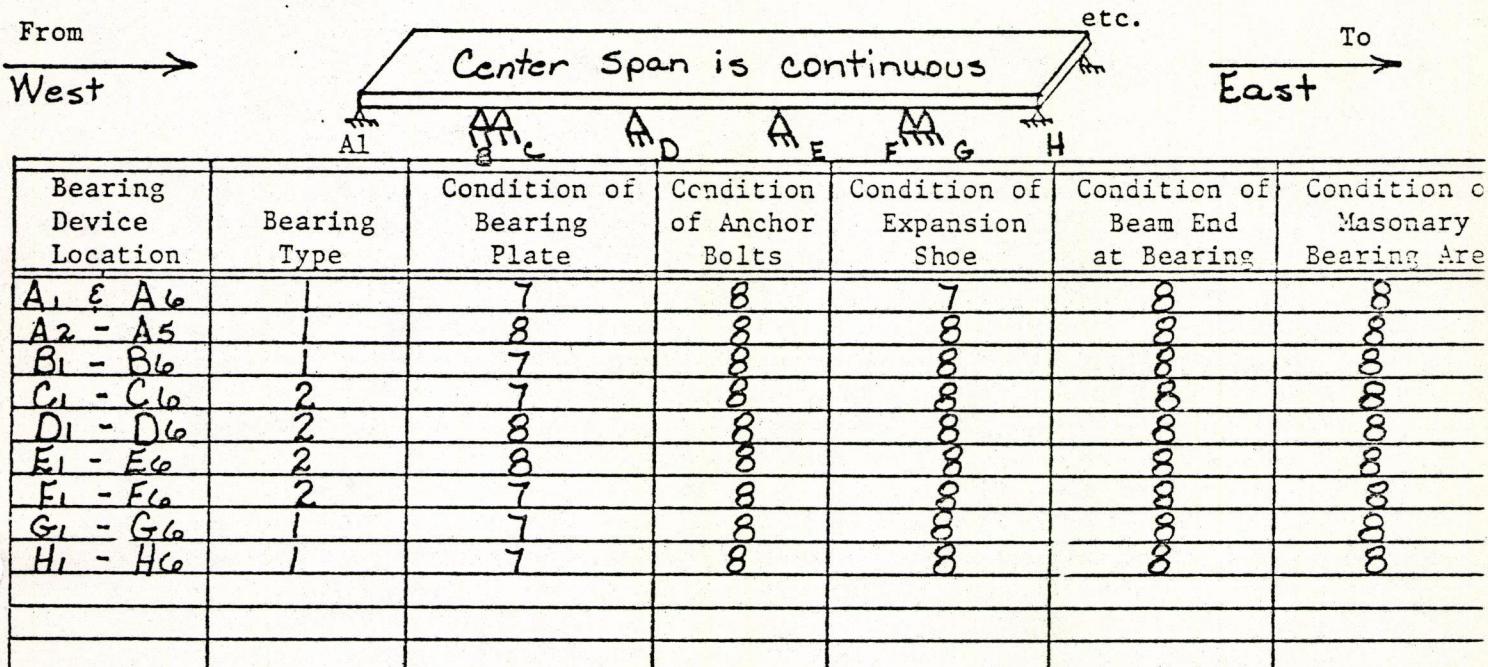
BRIDGES INSPECTED
IN
DISTRICT 3

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 50 Nevada
4. ROUTE St. Hwy 24 5. SEC. 13 6. LOG 43.95 7. BR. NO. 5061
8. FEATURE INTERSECTED over I-30
9. BRIDGE ON HIGHWAY State Hwy 24
10. YEAR BUILT 1972 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 67°F 14. WEATHER CONDITIONS Clear/Cool



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	Good	1.180"-T					
BC	"2"	Plate						
FG	3	Good	2.831"-T					
H	3	Good	1.371"-T					

Anchor Bolts Galvanized - Yes No

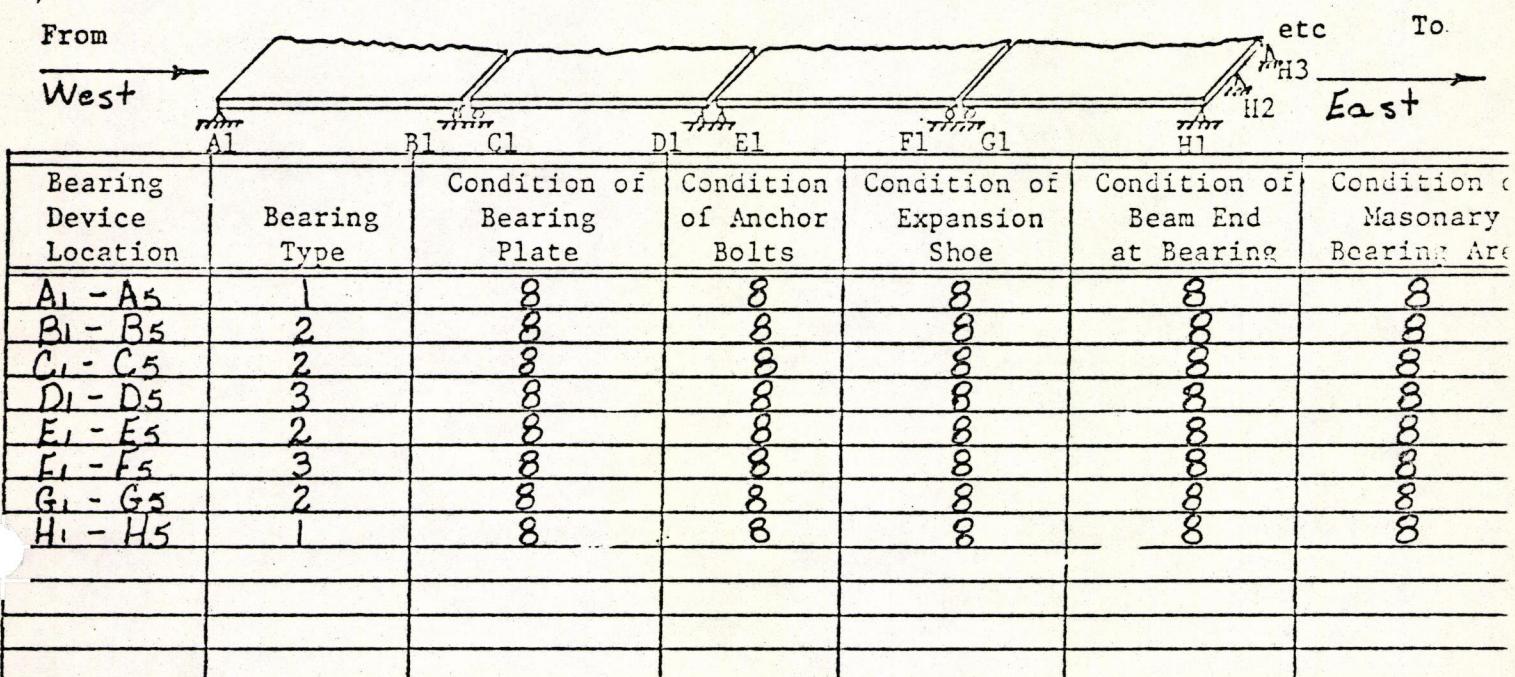
Comments Headwall Cracked in the Northwest corner Hwy 24 Interchange - 1969

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 50 Nevada
4. ROUTE Co. Rd. 5. SEC. 13 6. LOG 51.28 7. BR. NO. 5120
8. FEATURE INTERSECTED over I-30
9. BRIDGE ON HIGHWAY Boughton Rd
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear / Warm



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	Good					1.19 $\frac{1}{16}$ "	
BC	3	Good		1.518"			1.715"	
DE	3	Good		0.667"			1.845"	
FG	3	Fair					1.862"	
H	3	Good					1.39"	

Anchor Bolts Galvanized - Yes No

Comments Boughton Rd. underpass - 1967 - H 15

No Bridge drains, has slope but isn't washing clean. Dirt is building up along South curb. At joint FG the filler is open on the south curb, doesn't appear to leak to the interior.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 29 Hempstead
 4. ROUTE St. Hwy 4 5. SEC. 12 6. LOG 29.99 7. BR. NO. 5046
 8. FEATURE INTERSECTED over I-30
 9. BRIDGE ON HIGHWAY State Hwy. 4
 10. YEAR BUILT 1968 11. MAIN SPAN (TYPE) I-Beam

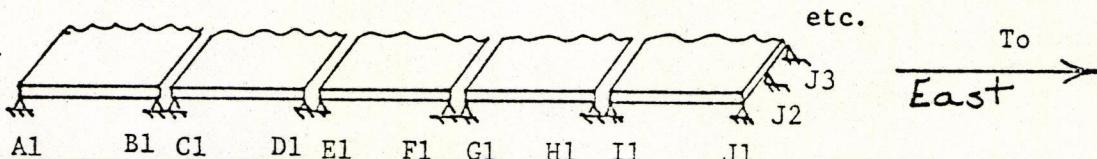
12. DATE 3/13/79 13. TEMP. 50°F 14. WEATHER CONDITIONS Clear/Cool

From

West

To

East



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1 - A5	1	7	8	7	8	8
B1 - B5	1	7	8	7	7	8
C1 - C5	3	7	7	7	7	8
D1 - D5	2	6	7	6	7	8
E1 - E5	3	7	7	7	7	8
F1 - F5	2	7	7	7	7	8
G1 - G5	3	7	7	7	7	8
H1 & H5	2	7	8	7	8	8
H2 - H4	2	8	8	8	8	8
I1 & I5	1	6	7	7	7	8
I2 - I4	1	7	8	8	8	8
J1 - J5	1	7	8	7	7	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	Fair						0.990"
BC	3	Fair		0.619"				0.968"
DE	3	Fair		0.975"				0.978"
FG	3	Fair		0.819"				1.239"
HI	3	Poor		0.846"				1.479"
J	3	Fair						1.150"

Anchor Bolts Galvanized - Yes No

Comments Hwy 4 Interchange - 1966

Expansion joints were tight. The neoprene joints, at A & BC, was broken at the top of the curb, no leakage evident. Neoprene at HI was worn on surface from installation projection. Drains let water spill on broken flange and drain back on upper flange.

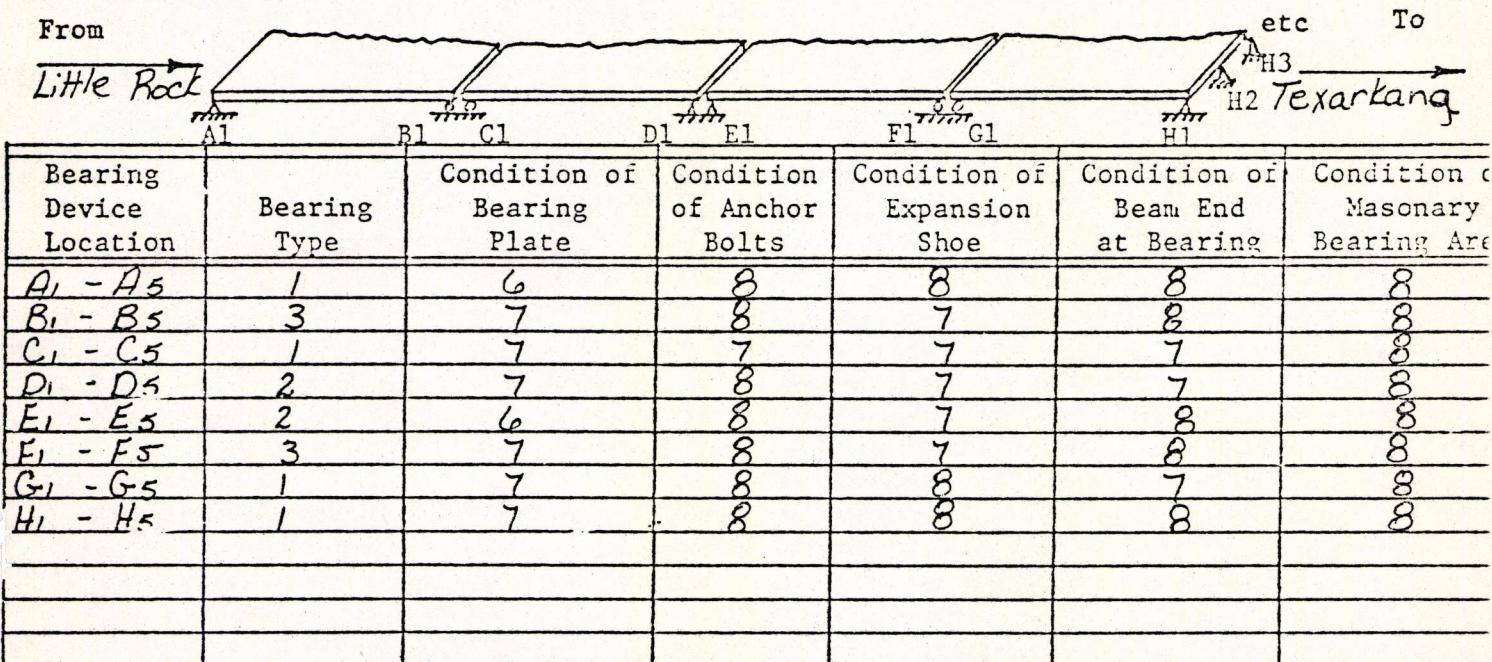
Photo's 24, 25, 26

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 29 Hempstead
4. ROUTE Co. Rd. 5. SEC. 12 6. LOG 17.79 7. BR. NO. 3863
8. FEATURE INTERSECTED Over I-30
9. BRIDGE ON HIGHWAY Co. Rd. "Red Lake Road"
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 57°F 14. WEATHER CONDITIONS Clear / Cool



Anchor Bolts Galvanized - Yes No

Comments Bridge drains on the end spans the upper flange is rusting at the drain. Nuts are missing off the bolts at C1 & C2. (Inside - 1 Bolt of 2)

BRIDGE BEARING & JOINT INSPECTION

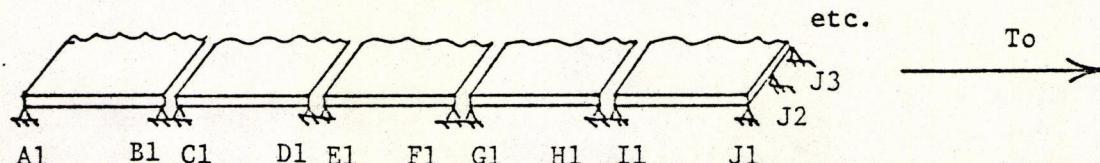
IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 29 Hempostead
 4. ROUTE I-30 5. SEC. 12 6. LOG 29.17 7. BR. NO. 5045 A
 8. FEATURE INTERSECTED over St. Louis & San Francisco R.R. track
 9. BRIDGE ON HIGHWAY I-30
 10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/78 13. TEMP. 50°F 14. WEATHER CONDITIONS Clear/Cool

From

To



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1 - A5	1	7	8	8	8	8
B1 - B4	2	6	7	7	7	8
B5	2	5	7	7	7	8
C1 - C4	2	6	7	7	7	8
C5	2	5	7	7	7	8
D1 - D5	1	7	8	7	7	8
E1 - E5	2	7	8	7	7	8
F1 - F5	1	7	8	7	8	8
G1 - G5	2	7	8	7	7	8
H1 - H5	3	7	8	7	7	8
I1 - I5	2	7	8	7	7	8
J1 - J5	1	8	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	3	Failed						
DE	3	Failed		0.775"				
FG	3	✓		1.261"				
HI	3	Failed						

Anchor Bolts Galvanized - Yes No

Comments Neoprene filler has dropped through at HI, the piers indicate some leakage from rust discoloration.
No bridge drains. Joints BC & DE neoprene has dropped down.

Photo's 28-30 of neoprene joints

BRIDGE BEARING & JOINT INSPECTION

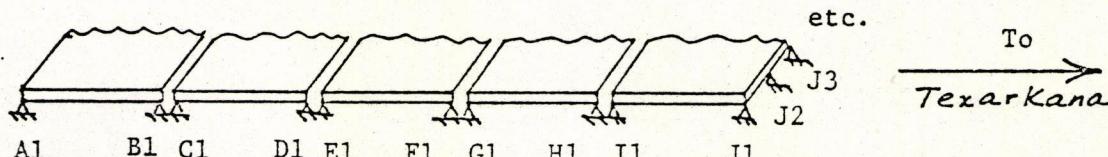
IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 29 Hempstead
 4. ROUTE I-30 5. SEC. 12 6. LOG 29.23 7. BR. NO. 5045 B
 8. FEATURE INTERSECTED over St. Louis & San Francisco R.R.
 9. BRIDGE ON HIGHWAY I-30
 10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 57°F 14. WEATHER CONDITIONS Clear/Cool

From

Little Rock →



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A ₁ - A ₅	1	7	8	8	8	8
B ₁ - B ₃	2	7	7	8	7	8
B ₄ - B ₅	2	6	7	7	7	8
C ₁ - C ₅	2	7	7	7	7	8
D ₁ - D ₅	1	7	7	7	7	8
E ₁ - E ₅	2	7	8	7	8	8
F ₁ - F ₅	1	7	8	7	7	8
G ₁ - G ₅	2	7	8	7	7	8
H ₁ - H ₅	3	6	7	7	7	8
I ₁ - I ₅	2	6	8	7	7	8
J ₁ - J ₅	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	3	OK		1.469"				
DE	3	OK		1.034"				
FG	3	Failed		1.234"				

Anchor Bolts Galvanized - Yes No

Comments No bridge drains. Built up of rust on rockers, worst part of bridge. Nut missing at A3. At joint FG the neoprene has dropped below holders.

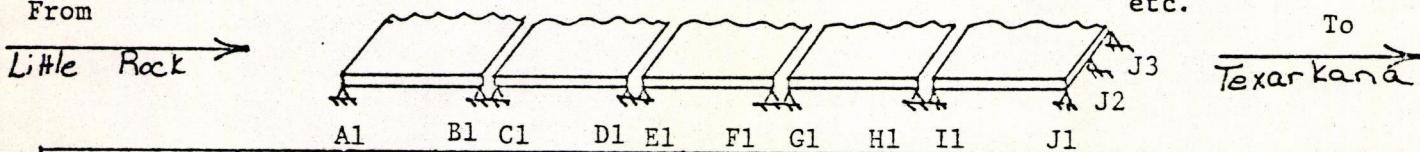
BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 29 Hempstead
4. ROUTE Co. Rd. 5. SEC. 12 6. LOG 22.56 7. BR. NO. 3995
8. FEATURE INTERSECTED Over I-30
9. BRIDGE ON HIGHWAY Guernsey Road
10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 55° F 14. WEATHER CONDITIONS Clear/Cool

From



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₅	1	7	8	8	8	8
B ₁ - B ₅	1	7	8	8	7	8
C ₁ - C ₅	3	7	8	8	8	8
D ₁ - D ₅	2	7	8	7	7	8
E ₁ - E ₅	1	7	8	8	8	8
F ₁ - F ₅	2	7	8	7	8	8
G ₁ -G ₂ ; G ₄ -G ₅	2	7	8	7	7	8
G ₃	2	6	8	7	7	8
H ₁ - H ₅	3	7	8	8	8	8
I ₁ - I ₅	1	6	7	8	7	8
J ₁ - J ₅	1	7	8	8	8	8

Anchor Bolts Galvanized - Yes No

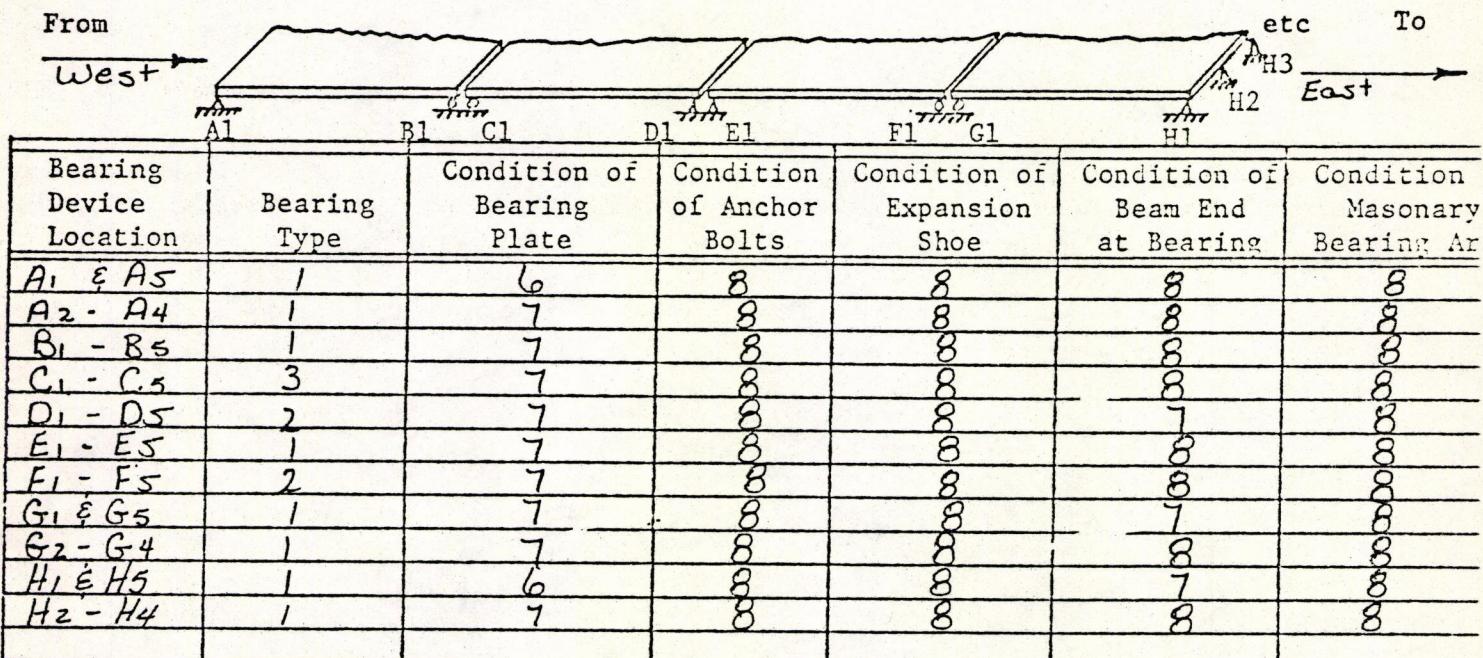
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 46 Miller
4. ROUTE Cty Rd 5. SEC. 11 6. LOG 9.87 7. BR. NO. 3573
8. FEATURE INTERSECTED over I-30
9. BRIDGE ON HIGHWAY Smith Road 1962-H15
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/cool



Anchor Bolts Galvanized - Yes No

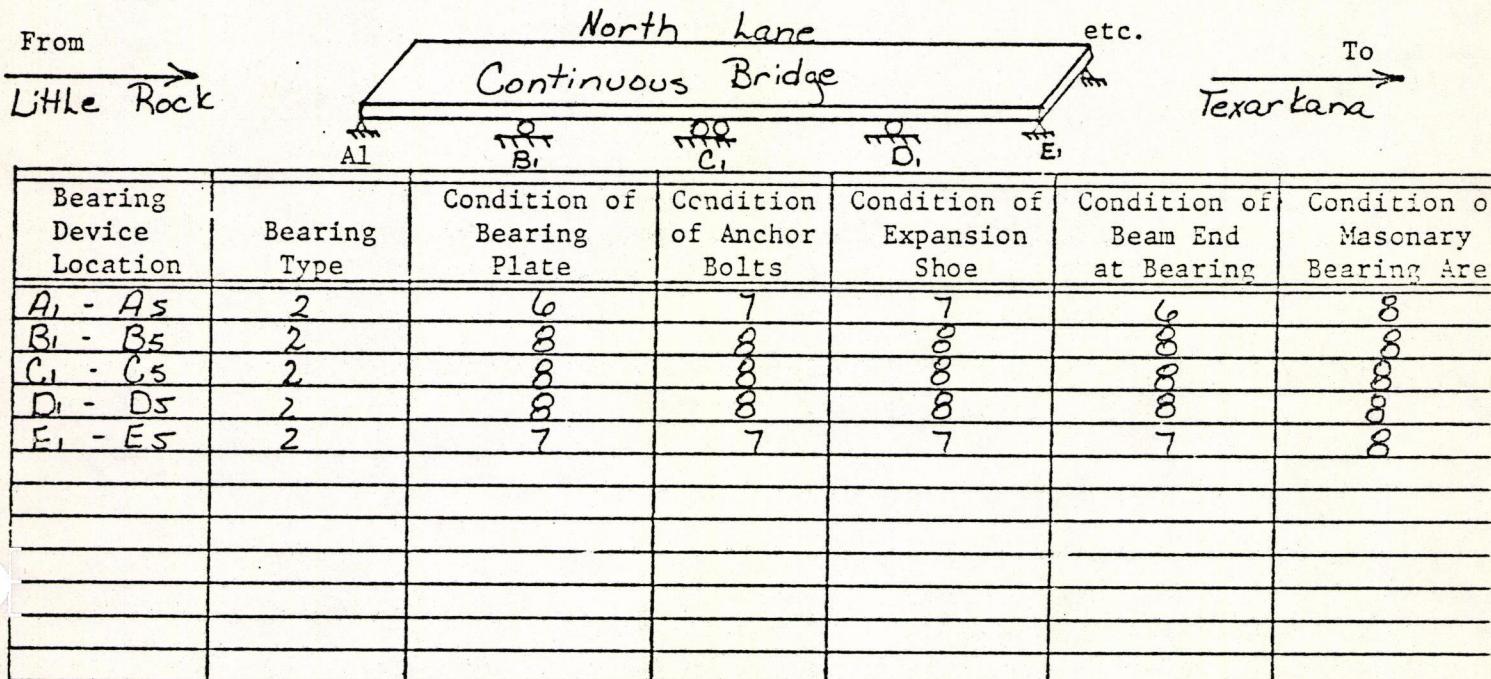
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 46 Miller
4. ROUTE U.S. 71 5. SEC. 3 6. LOG 2.90 7. BR. NO. 5142 A
8. FEATURE INTERSECTED Over I-30
9. BRIDGE ON HIGHWAY State Line Road (Arkansas Side)
10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/cool



Anchor Bolts Galvanized - Yes No

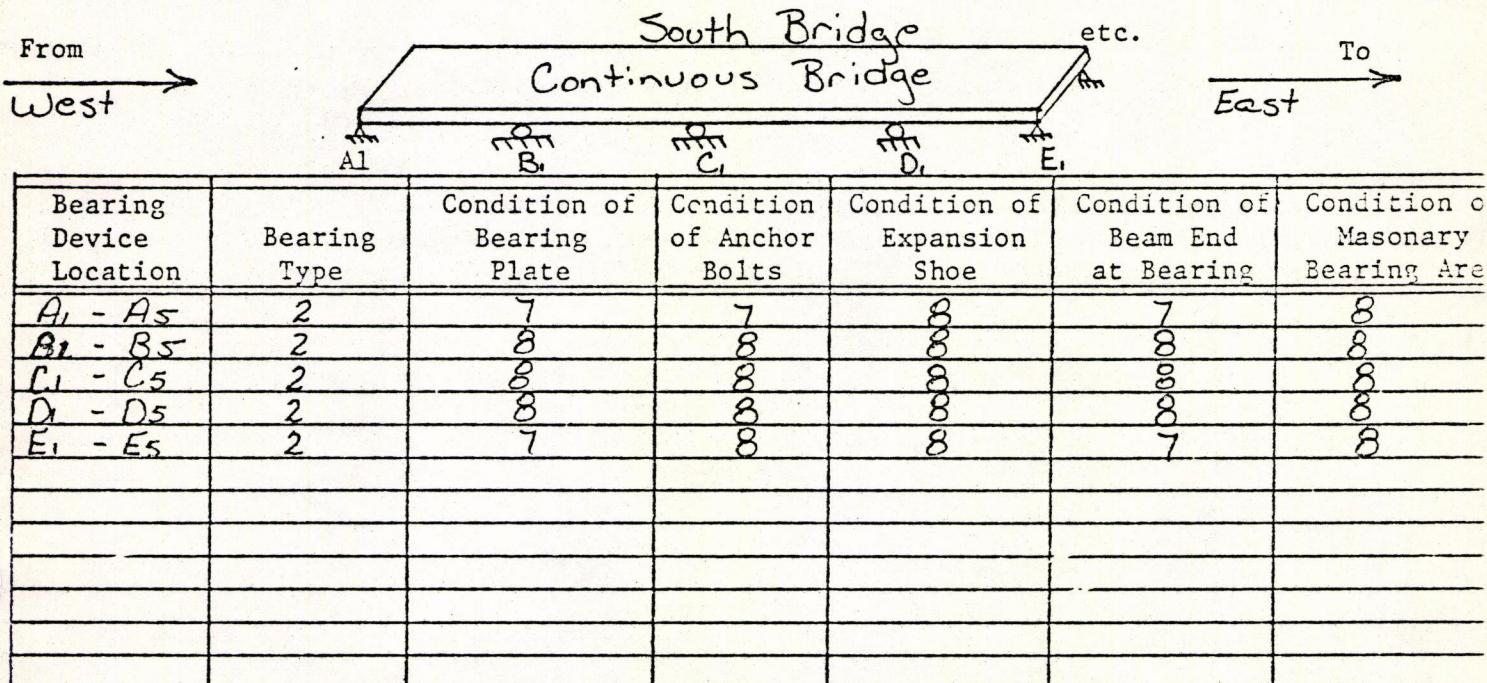
Comments No Bridge No Headwall Cracked

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 3 3. COUNTY 46 Miller
4. ROUTE US 71S 5. SEC. 3 6. LOG 2.90 7. BR. NO. 5142 B
8. FEATURE INTERSECTED over I-30
9. BRIDGE ON HIGHWAY State Line Road (Texas Side) U.S. 71
10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear / cool



Anchor Bolts Galvanized - Yes No

Comments Headwalls cracked - light rust on outside beams on the exterior top flange at the concrete line. There is a dirt build up from 3 to 6 inches on both abutments. No bridge number.

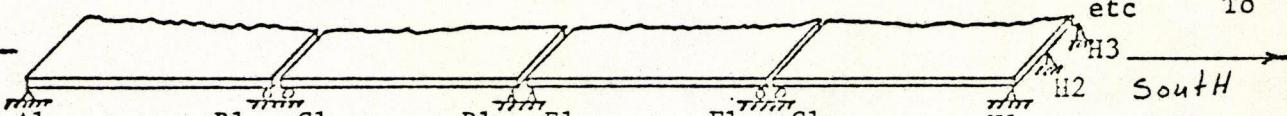
BRIDGES INSPECTED
IN
DISTRICT 4

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 17 CRAWFORD
 4. ROUTE CITY RD. 5. SEC. 11 6. LOG 21.98 7. BR. NO. 5079
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY VINE PRAIRIE RD.
 10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55° F 14. WEATHER CONDITIONS CLEAR-Cool

From  To

NORTH South

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing A
A1-A5	1	8	8	8	8	8
B1-B5	1	8	8	8	8	8
C1-C5	2	8	8	8	8	8
D1, D3, D5	3	8	8	8	7	8
D2, D4	3	8	8	8	8	8
E1, E5	2	7	8	8	8	8
E2-E4	2	8	8	8	8	8
F1-F5	3	8	8	8	8	8
G1-G5	1	8	8	8	8	8
H1-H5	1	8	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	~						1.080"
B	3	~						1.962"
C	3	~						1.149"
D	3	~						1.415"
E	3	~						1.162"

Anchor Bolts Galvanized - Yes No

Comments 1 nut of 2 missing on H4 & H5

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 17 CRAWFORD
 4. ROUTE I-40 5. SEC. 11 6. LOG 13.28 7. BR. NO. 3805 A
 8. FEATURE INTERSECTED OVER US-71
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55°F 14. WEATHER CONDITIONS CLEAR - COOL

From	NORTH BRIDGE						To				
Ft. Smith	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	cattle Rock
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar					
A1-A3, A6, A7	1	8	8	8	8	8					
A4-A5	1	7	8	8	8	8					
B1, B4, B5	1	7	8	7	7	7					
B2, B3, B5, B6	1	7	8	7	8	7					
C1-C7	1	7	8	7	7	7					
D1-D7	1	7	8	8	8	8					
E1-E7	1	7	8	8	7	7					
F1-F7	1	8 (FS-7)	8	8	8	8					
G1-G7	1	8 (G5, G-4)	8	8	8	8					
H1, H2, H4	1	8	8	8	8	8					
H3, H5, H6, H7	1	7	8	8	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	-		1.697"				
D-E	2	-		0.918"				

Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 17 CRAWFORD
 4. ROUTE I-40 5. SEC. 11 6. LOG 13.28 7. BR. NO. 3805 B
 8. FEATURE INTERSECTED OVER US-71
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55°F 14. WEATHER CONDITIONS CLEAR - COOL

From	South BRIDGE									
Ft. Smth	A1	B1	C1	D1	E1	F1	G1	H1	H2 L.H/R Rock	H3
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar				
A1-A7	1	8	8	8	8	8				8
B1-B7	1	7	8	7	7	7				7
C1, C3, C5, C7	1	7	8	8	8	8				7
C2, C4, C6	1	7	8	8	8	8				7
D1-D7	1	7	8	8	7	7				7
E1-E7	1	7	8	8	7	7				7
F1-F7	1	8	8	8	8	8				8
G1, G3, G5, G7	1	8	8	8	8	8				8
G2, G4, G6	1	7	8	8	8	8				8
H1-H3, H5-H7	1	8	8	8	8	8				8
H4	1	7	8	8	8	8				8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	-		1.507"				
Dc	2	-		2.030"				

Anchor Bolts Galvanized - Yes No

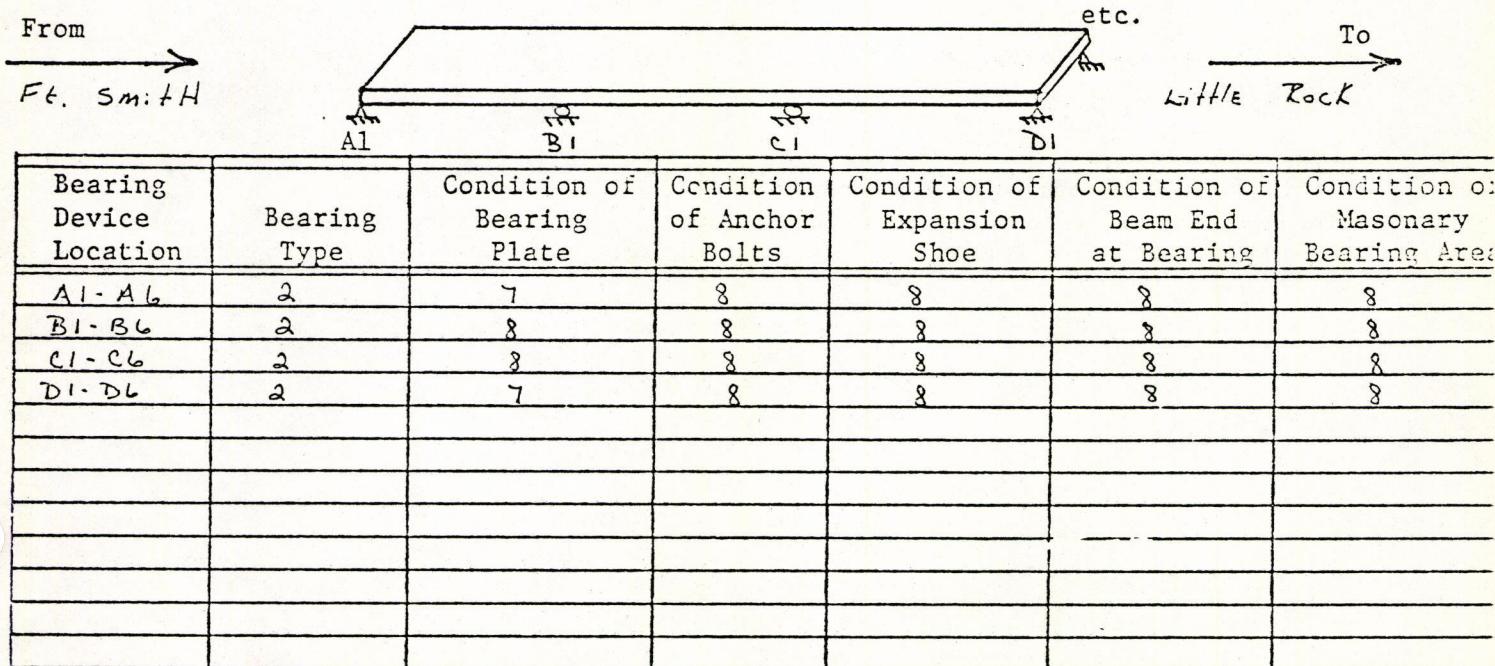
Comments CONCRETE SPALLING on top of PIER CAPS

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 24 FRANKLIN
4. ROUTE I-40 5. SEC. 12 6. LOG 34.58 7. BR. NO. 5116 A
8. FEATURE INTERSECTED S.H. 23 INTERCHANGE
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1971 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55°F 14. WEATHER CONDITIONS FAIR - CLOUDY



Anchor Bolts Galvanized - Yes No

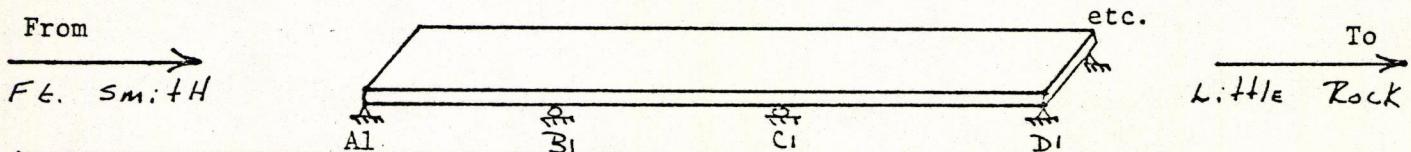
Comments Joint Neoprene Aid CHEWED UP ON TOP

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 24 Franklin
4. ROUTE I-40 5. SEC. 12 6. LOG 34.58 7. BR. NO. 51168
8. FEATURE INTERSECTED OVER SH-23
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1971 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55 °F 14. WEATHER CONDITIONS CLEAR - COOL



Anchor Bolts Galvanized - Yes No

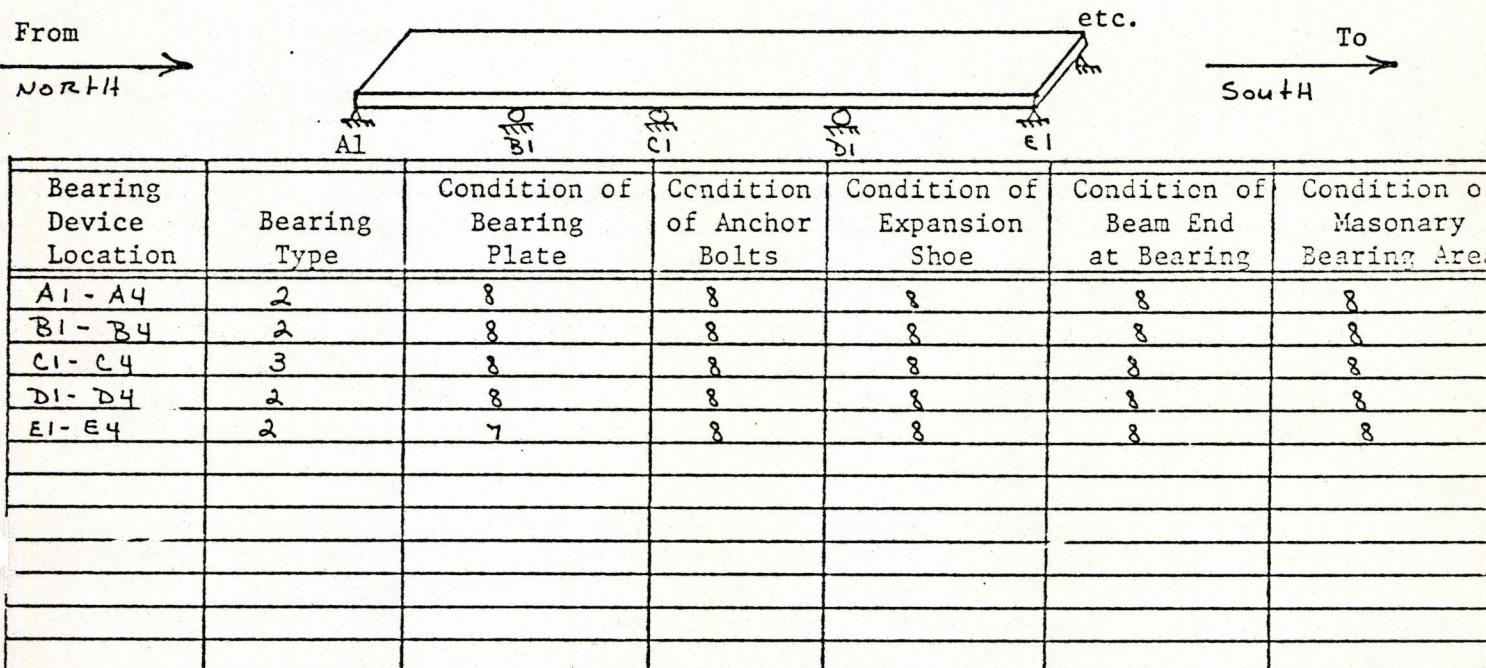
Comments _____

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 24 FRANKLIN
4. ROUTE CITY 5. SEC. 12 6. LOG 32.45 7. BR. NO. 5115
8. FEATURE INTERSECTED OVER I-40
9. BRIDGE ON HIGHWAY CITY RD. OVER I-40
10. YEAR BUILT 1969 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 45°F 14. WEATHER CONDITIONS Clear - Cool



Anchor Bolts Galvanized - Yes No

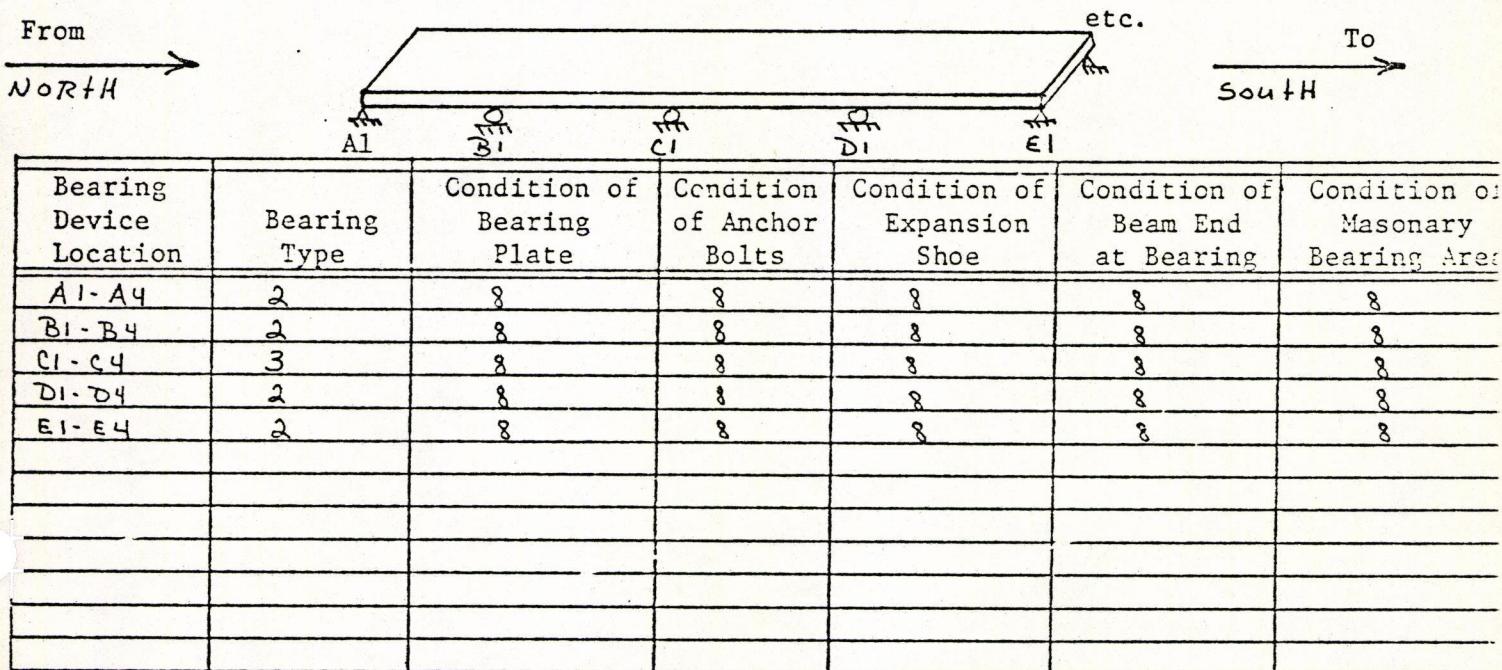
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 24 FRANKLIN
4. ROUTE Cry. Rd. 5. SEC. 12 6. LOG 29.34 7. BR. NO. 5112
8. FEATURE INTERSECTED OVER I-40
9. BRIDGE ON HIGHWAY TONEY Rd.
10. YEAR BUILT 1971 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 45°F 14. WEATHER CONDITIONS CLEAR - COOL



Anchor Bolts Galvanized - Yes No

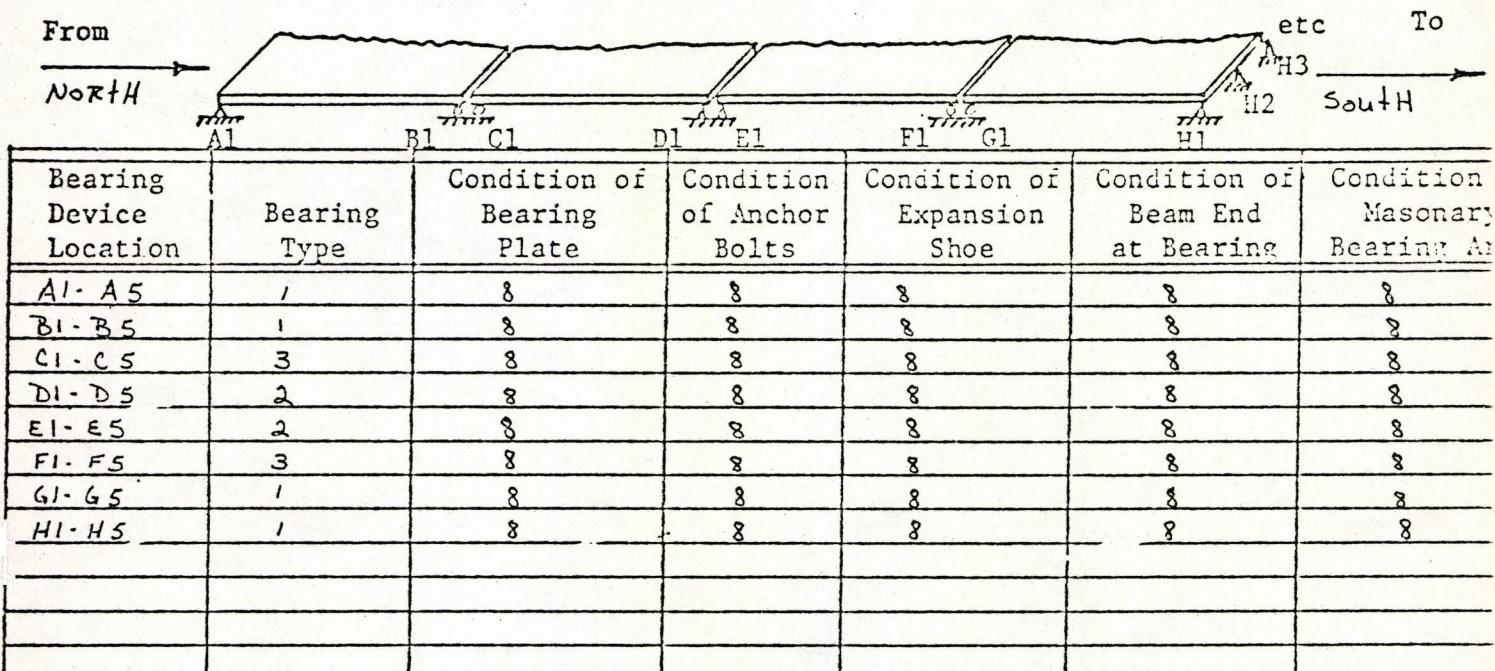
Comments Photo of Neoprene Joint #35

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 4 3. COUNTY 17 CRAWFORD
4. ROUTE SH 215 5. SEC. 1 6. LOG 1.89 7. BR. NO. 5081
8. FEATURE INTERSECTED OVER I-40 \approx 20' EAST OF FT. SMITH
9. BRIDGE ON HIGHWAY SH 215
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 55°F 14. WEATHER CONDITIONS CLEAR - COOL



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	~						0.970"
B C	3	~		0.809"				0.953"
D E	3	✓						1.624"
F G	3	✓						1.014"
H	3	✓						1.072"

Anchor Bolts Galvanized - Yes No

Comments

BRIDGES INSPECTED

IN

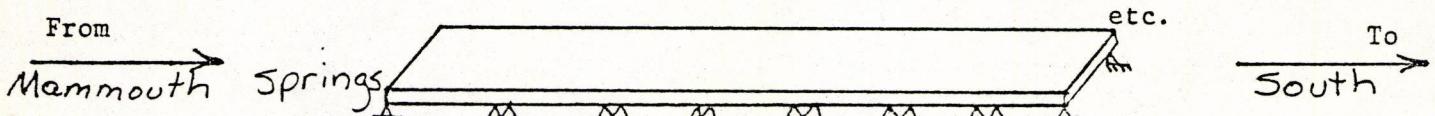
DISTRICT 5

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 5 3. COUNTY 25 Fulton
 4. ROUTE SH - 289 5. SEC. 4 6. LOG 12.78 7. BR. NO. 5187
 8. FEATURE INTERSECTED over Myatt Creek
 9. BRIDGE ON HIGHWAY S.H. - 289 South of Mammoth Springs
 10. YEAR BUILT 1970 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/16/79 13. TEMP. 45°F 14. WEATHER CONDITIONS Clear/Cool



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₅	1	8 (A ₁ , A ₅ - 7)	8	8	8 (A ₁ , A ₅ - 7)	8
B ₁ - B ₅	2	7	8	7	8	8
C ₁ - C ₅	1	7	8	7	8	8
F ₁ - F ₅	2	7	8	7	7	8
G ₁ - G ₅	2	7	8	7	7	8
H ₁ - H ₅	1	7	8	8	8 (H ₁ , H ₅ - 7)	8
I ₁ - I ₅	2	7	8	8	8 (I ₁ , I ₅ - 7)	8
J ₁ - J ₅	1	7	8	8	8	8
K ₁ - K ₅	2	7	8	7	7	8
L ₁ - L ₅	1	7	8	8	7	8
M ₁ - M ₅	2	7	8	7	7	8
N ₁ - N ₅	1	8 (N ₁ , N ₅ - 7)	8	8	8 (N ₁ , N ₅ - 7)	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	-				1.372"		
BC	3	/				1.274"		
DE	3	/				1.464"		
FG	3	Failed				2.367"		
HI	3	/				1.461"		

Anchor Bolts Galvanized - Yes ✓ No L/M/T JK 1.564"
 N 1.386"
 N 1.004"

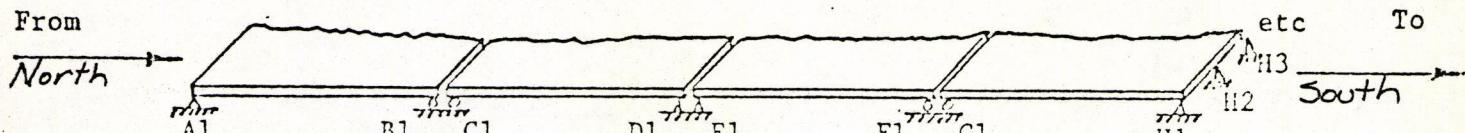
Comments FG Neoprene Sealer dropped down in 2 places
Neoprene sealer broken at top of curb
photo

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 5 3. COUNTY 25 Fulton
4. ROUTE S.H. - 289 5. SEC. 4 6. LOG 6. 96 7. BR. NO. 5402
8. FEATURE INTERSECTED over South Fork of Spring River
9. BRIDGE ON HIGHWAY S.H. 289
10. YEAR BUILT 1972 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/16/79 13. TEMP. 50°F 14. WEATHER CONDITIONS Clear / Cool



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonar Bearing
A ₁ - A ₄	1	8	8	8	8	8
B ₁ - B ₄	2	8	8	8	8	8
C ₁ - C ₄	3	8	8	8	8	8
D ₁ - D ₄	2	8	8	8	8	7
E ₁ - E ₄	2	8	8	8	8	7
L ₁ - L ₄	3	7	8	7	8	7
M ₁ - M ₄	2	8	8	7	8	7
N ₁ - N ₄	3	8	8	8	8	7
O ₁ - O ₄	3	8	8	8	8	7
P ₁ - P ₄	2	8	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	OK				1.218"		
BC	3	OK				1.271"		
DE	3	OK				2.417"		
FG	3	OK				1.574"		
HI	3	OK				1.342"		

Anchor Bolts Galvanized

Yes

N

۱۵

L/M

-no

P

1.302

1.480"

1.431"

1.292"

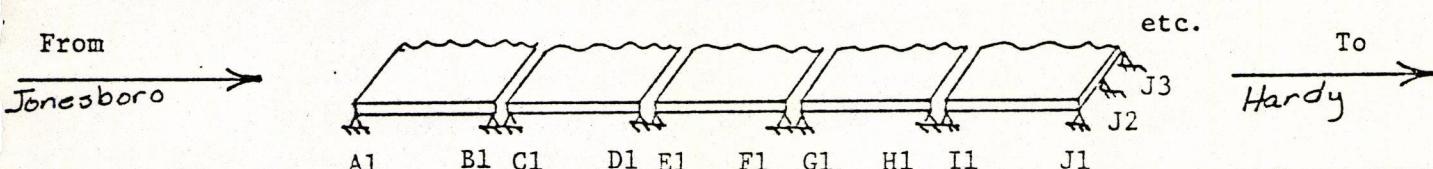
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 5 3. COUNTY 67 Sharp
4. ROUTE U.S. - 63 5. SEC. 2 6. LOG 11.84 7. BR. NO. 3406
8. FEATURE INTERSECTED over Martin Creek
9. BRIDGE ON HIGHWAY U.S. 63
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/16/79 13. TEMP. 55°F 14. WEATHER CONDITIONS Clear/Cool



Anchor Bolts Galvanized - Yes No

Comments

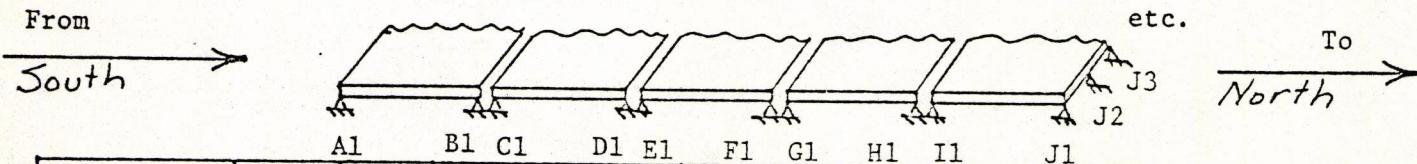
BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 5 3. COUNTY 25 Fulton
4. ROUTE S.H.-9 5. SEC. 15 6. LOG 1.49 7. BR. NO. 2772
8. FEATURE INTERSECTED over South Fork Spring River
9. BRIDGE ON HIGHWAY S.H.-9 just North of Sodlam
10. YEAR BUILT 1969 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/16/79 13. TEMP. 40°F 14. WEATHER CONDITIONS Clear/Cool

From



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	OK				1.292"		
BC	3	OK				1.392"		
DE	3	OK				2.310"		
FG	3	OK				1.610"		
HI	3	OK				1.530"		

Anchor Bolts Galvanized - Yes No

1120'

Comments

BRIDGES INSPECTED

IN

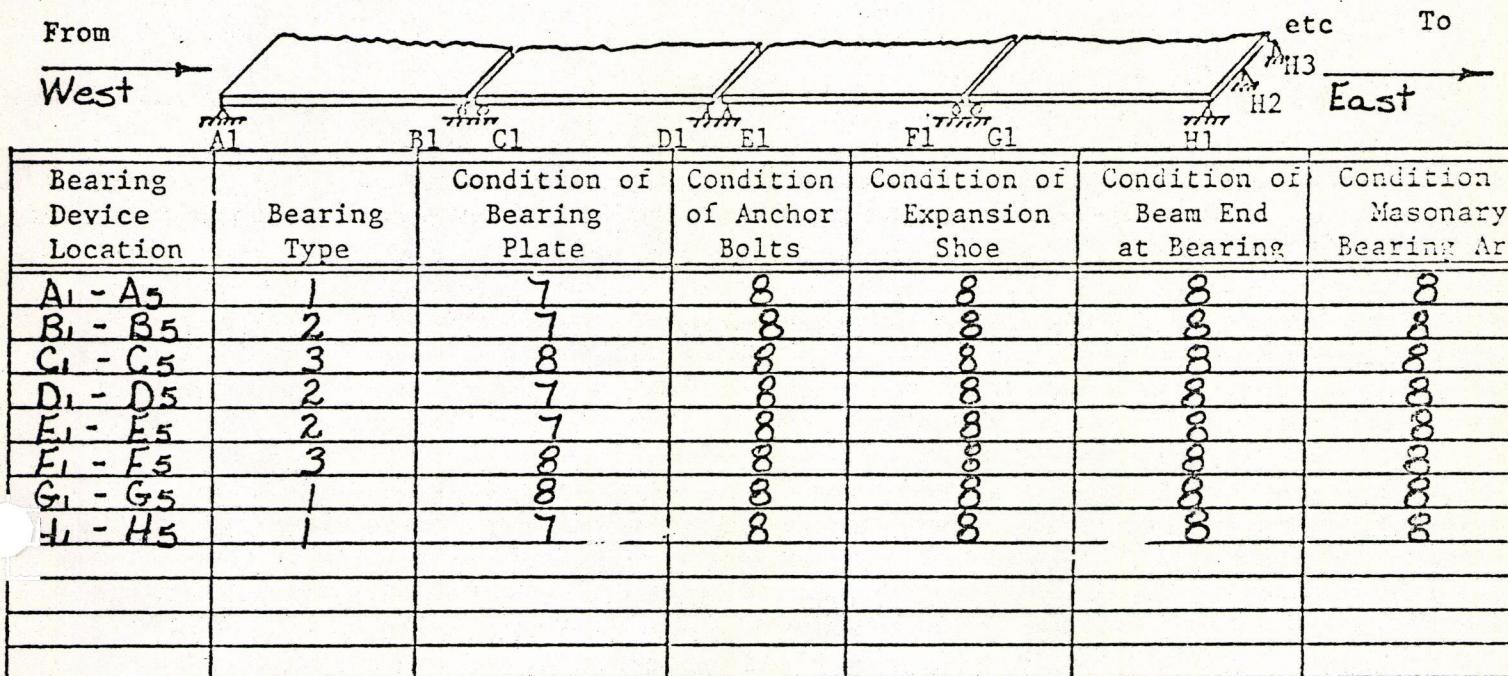
DISTRICT 6

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 30 Hot Springs
4. ROUTE St. Hwy 283 5. SEC. 21 6. LOG 82.59 7. BR. NO. 3396
8. FEATURE INTERSECTED over I-30
9. BRIDGE ON HIGHWAY St. Hwy 283
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 71°F 14. WEATHER CONDITIONS Clear/Warm



Anchor Bolts Galvanized - Yes No

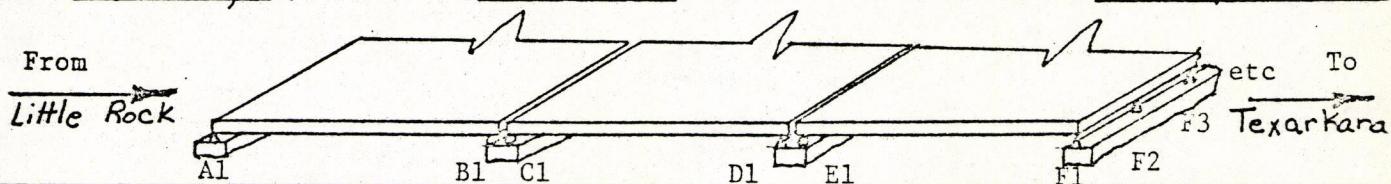
Comments Friendship Interchange - 1965
overall looked very good

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 30 Hot Springs
 4. ROUTE I-30 5. SEC. 21 6. LOG 101.04 7. BR. NO. 3428 A
 8. FEATURE INTERSECTED over Cri & P. R.R.
 9. BRIDGE ON HIGHWAY I-30
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE March 12, 1979 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear / Warm



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ , A ₃	1	7	7	8	8	8
A ₂ , A ₄ , A ₅	1	6	7	7	7	8
B ₁	2	6	5	7	6	8
B ₂ - B ₅	2	6	5	7	7	8
C ₁ - C ₃ , C ₅	2	6	5	7	6	8
C ₄	2	6	5	7	7	8
D ₁ - D ₅	1	6	5	6	6	8
E ₁ - E ₅	2	6	5	6	6	8
F ₁ - F ₄	1	7	6	7	7	8
F ₅	1	6	5	5	6	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		0.834				
DE	2	✓		1.643				

Anchor Bolts Galvanized - Yes No

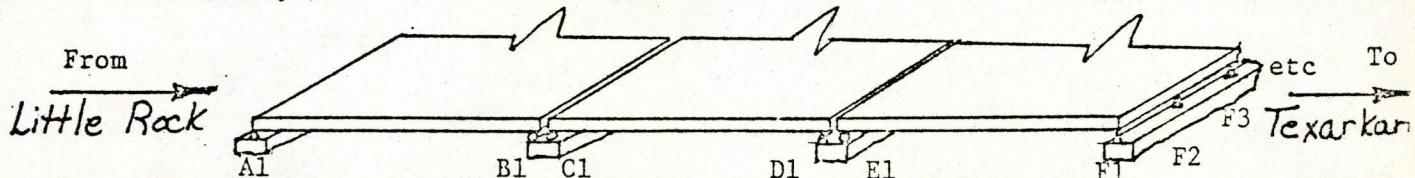
Comments Cri & P Railroad overpass
Top of South Head Wall on East side broken
steel exposed Southeast beam line on
outside had more rust than opposite side

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 30 Hot Spring
 4. ROUTE I-30 5. SEC. 21 6. LOG 102.06 7. BR. NO. 3428
 8. FEATURE INTERSECTED over Cri & P. R.R.
 9. BRIDGE ON HIGHWAY I-30
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear/Warm



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₅	1	7	6	7	7	8
A ₂ - A ₄	1	7	6	7	8	8
B ₁ - B ₅	2	6	5	6	6	8
C ₁ - C ₅	2	6	6	7	6	8
D ₁ - D ₃ , D ₄	1	6	5	7	7	8
D ₄	1	6	5	7	6	8
E ₁ - E ₅	2	6	5	7	6	8
F ₁ - F ₅	1	6	6	7	7	8
F ₂ - F ₄	1	6	6	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	✓		1.091"				
D-E	2	✓		1.676"				

Anchor Bolts Galvanized - Yes No

Comments Cri & P. Railroad overpass

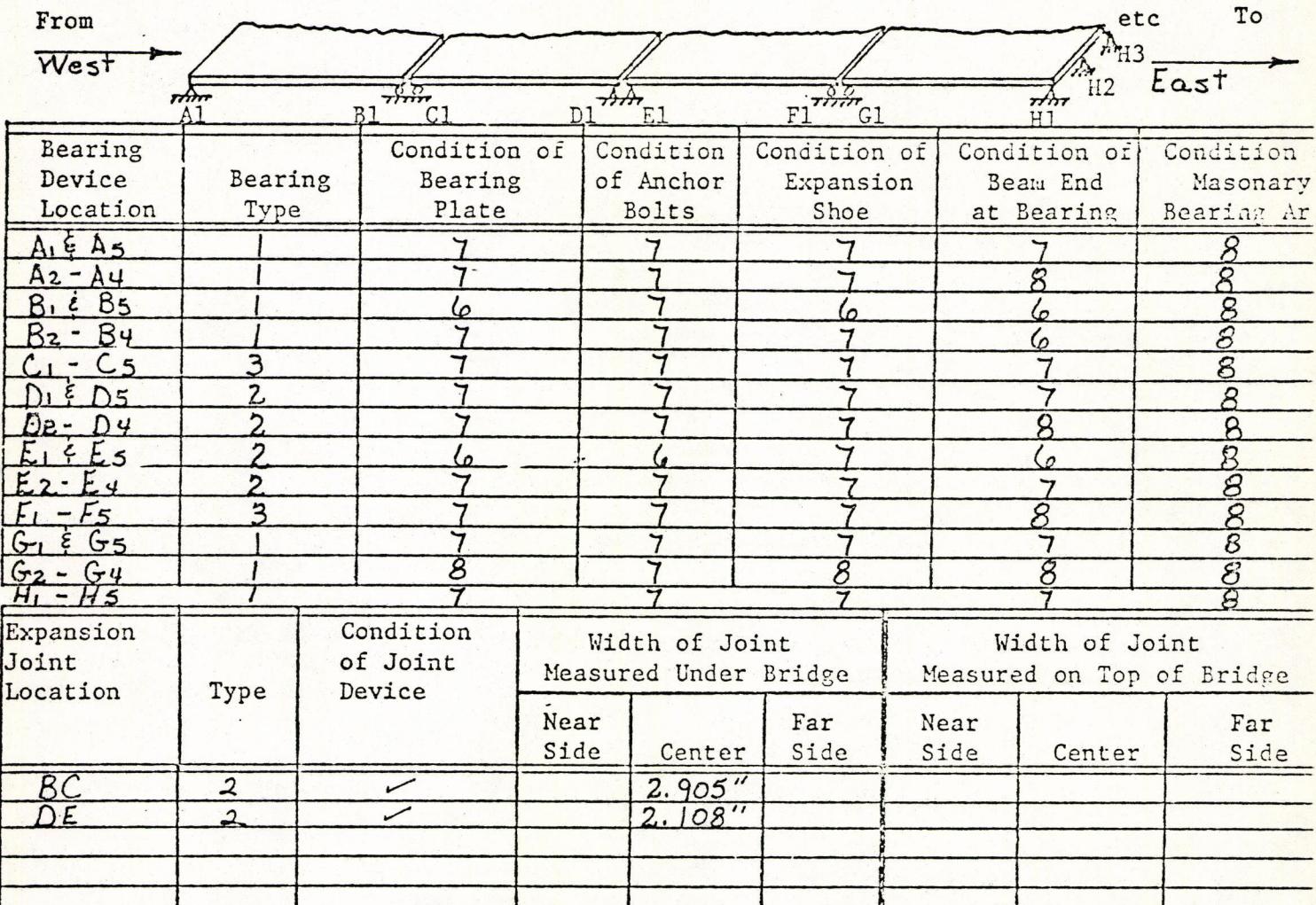
Top of South Head Wall on East side broken -
Steel exposed Southeast beam line on
outside had more rust than opposite side

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 62 Saline
4. ROUTE Cty. Rd. 5. SEC. 22 6. LOG 108.46 7. BR. NO. 3248
8. FEATURE INTERSECTED over I-30 just past Hot Springs cutoff
9. BRIDGE ON HIGHWAY Cty. Rd.
10. YEAR BUILT 1963 11. MAIN SPAN (TYPE) I-Beam

12. DATE March 12, 1979 13. TEMP. 67°F 14. WEATHER CONDITIONS Clear / warm



Anchor Bolts Galvanized - Yes No

Comments Cross Roads Church Grade Separation - 1960

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 62 Saline
 4. ROUTE old U.S.-67 5. SEC. 22 6. LOG 113.65 7. BR. NO. 3042
 8. FEATURE INTERSECTED over T-30
 9. BRIDGE ON HIGHWAY old U.S.-67
 10. YEAR BUILT 1958 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/Cool

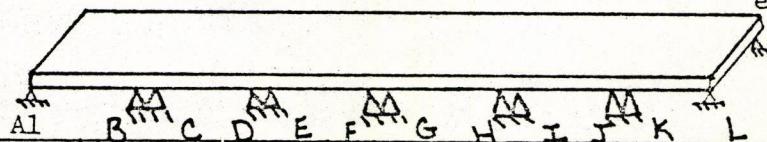
From

North →

etc.

To

→ South



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A ₁ - A ₅	1	5	7 (A ₅ -6)	6	8 (A ₅ - 7)	8
B ₁ - B ₅	2	5	5	6	6	7
C ₁ - C ₅	3	6	5	6	7	7
D ₁ - D ₅	2	6	5	6	6	7
E ₁ - E ₅	3	7	5	6	6	7
F ₁ - F ₅	2	5	5	6	7	7
G ₁ - G ₅	2	6	5	6	7	7
H ₁ - H ₅	3	6	6	7	7	7
I ₁ - I ₅	2	6	6	6	7	7
J ₁ - J ₅	3	7	6	7	7	7
K ₁ - K ₅	2	7	5	6	6	7
L ₁ - L ₅	1	5 (L ₁ - 6)	7 (L ₁ - 5)	7	8 (L ₁ - 7)	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		1.899"				
DE	2	✓		2.302"				
FG	2	✓		2.398"				
HI	2	✓		2.204"				
JK	2	✓		1.716"				

Anchor Bolts Galvanized - Yes No

Comments Dirt has washed down on bottom flange of A beam. Joint plates tight - some riding up on concrete on hot summer days. Concrete deck of low quality. Some reinforcing steel is exposed. Bearing concrete looks o.k. South Head wall rapidly deteriorating.

Photo's #21 Anchor bolt

#22 & 23 Abutment deterioration

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY 62 Saline
 4. ROUTE St Hwy 35 5. SEC. 22 6. LOG 116,69 7. BR. NO. 3142
 8. FEATURE INTERSECTED over I-30
 9. BRIDGE ON HIGHWAY Hwy 35 at Benton
 10. YEAR BUILT 1958 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 61°F 14. WEATHER CONDITIONS Clear/Cool

From North → etc. To South →

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A ₁ - A ₅	1	7	7	7	8	8
B ₁ - B ₅	2	5	5	5	7	8
C ₁ - C ₅	3	6	6 (C ₃ -5)	7	7	8
D ₁ , D ₄ , D ₅	2	6	6	7	7	8
D ₂ & D ₃	2	6	5	7	7	8
E ₁ - E ₅	3	7	7 (E ₁ -5)	7	7	8
F ₁ - F ₅	2	6	5	6	7	7
G ₁ - G ₅	2	6	6 (G ₃ -5)	6	7	7
H ₁ - H ₅	3	7	5	7	7	7
I ₁ - I ₅	2	6	6 (I ₄ -5)	7	7	7
J ₁ - J ₅	3	7	7	8	8	7
K ₁ - K ₅	2	7	7	8	8	7
L ₁ - L ₅	1	7	7	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		0.406"				
DE	2	✓		1.481"				
FG	2	✓		1.995"				
IJ	2	✓		3.211"				

Anchor Bolts Galvanized - Yes No

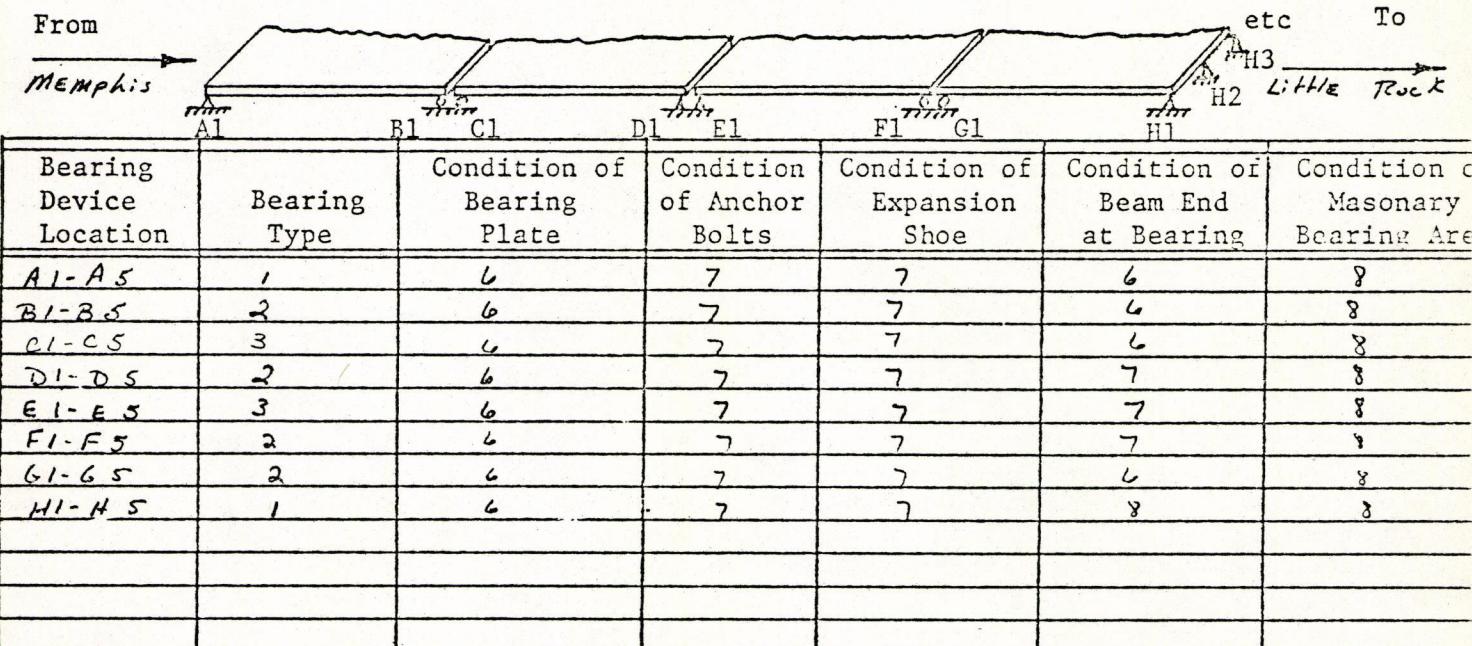
Comments Joints on top (A's) looked o.k. Bridge deck had only minor concrete spalling.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY Prairie (59)
4. ROUTE I-40 5. SEC. 42 6. LOG 19718 7. BR. NO. A 3711
8. FEATURE INTERSECTED CRT & PRR RAILROAD
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/71 13. TEMP. 90°F 14. WEATHER CONDITIONS Hazy



Anchor Bolts Galvanized - Yes No

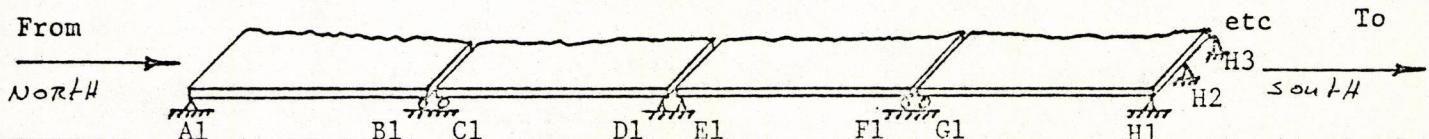
Comments COVER R's ALL HAD EXPANSION ROOM
(PHOTO OF ABUTMENT WASHOUT)

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY Lyonne (43)
 4. ROUTE Airport Rd. 5. SEC. 41 6. LOG 183.54 7. BR. NO. 3656
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY City Rd. Airport ROAD UnderPASS
 10. YEAR BUILT 1963 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/8/78 13. TEMP. 89° 14. WEATHER CONDITIONS Hazy-Warm
5:00 PM



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A5	1	7	8	8	8	8
B1-B5	2 ↓ DIFF.	6	7	8	7	8
B2-B4	3	7	8	8	8	8
C1-C5	3	8	8	8	8	8
D1-D5	2	8	8	8	8	8
E1-E5	2	7	8	8	8	8
F1-F5	3	8	8	8	8	8
G1	2	6	8	8	7	8
G2-G5		8	8	8	8	8
H1-H5		7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	O.K.		2.112"				
D-E	2	O.K.		1.867"				

Anchor Bolts Galvanized - Yes No

Comments R's on top open sufficiently for expansion
(PHOTO - TRUCK RAN OFF ROAD)

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY Lonoke (43)
 4. ROUTE SH-15 5. SEC. 11 6. LOG 2.76 7. BR. NO. 3224
 8. FEATURE INTERSECTED overpass for I-40
 9. BRIDGE ON HIGHWAY S.H. 15 Remington Road
 10. YEAR BUILT 1963 - been added to 11. MAIN SPAN (TYPE) I-Beam

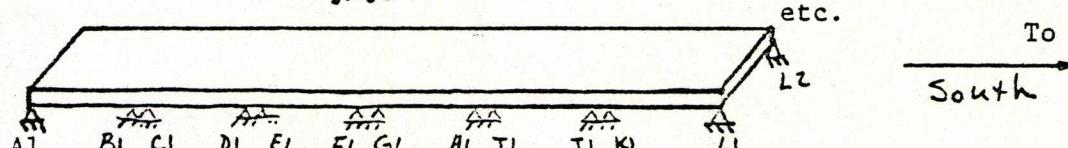
12. DATE 9/8/'78 13. TEMP. 89°F 14. WEATHER CONDITIONS Hazy
5:30 P.M.

From

North

To

South



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A2	1	6	7	8	8	8
B3-B6	3M	6	6	8	8	8
B1-B2 B7-B8	1	6	6	8	8	8
C1-C4 C7-C8	3	6	6	8	7	8
C5-C6	3	6	5	8	7	8
D1-D8	2	6	6	8	8(D3+D6-7)	8
E1-E8	3	6	8	8	8	8
F1-F2 F7-F8	2	6	6	6	8	8
F3-F6	2	7	8	8	8	8
K3-K6	3M	7	6	8	7	8
K1-K2 K7-K8	2	7	8	8	8	8
L1-L8	1	6	6	6	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	OK		1.729"				
DE	2	OK		1.224"				
FG	2	OK		$\approx 2.0"$	(Could not measure)			

Anchor Bolts Galvanized - Yes No

Comments All joint plates across top of bridge had room for expansion.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY PUCASKI (Go)
 4. ROUTE Rixey Road 5. SEC. 10 6. LOG 4.95 7. BR. NO. 3058
 8. FEATURE INTERSECTED Over Hwy 61
 9. BRIDGE ON HIGHWAY Rixey Road South of Jacksonville
 10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/9/78 13. TEMP. 81°F 14. WEATHER CONDITIONS Haze

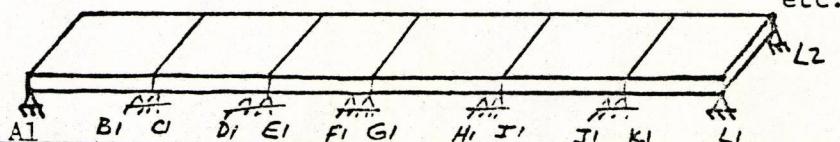
From

West

To

East

9:00 A.M.



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A5	1	6	6	8	8	8
B1-B5	2	6	6	7	7	8
C1-C5	3	6	7	7	8	8
D1-D5	2	6	6	6	7	8
E1-E5	3	6	6	6	7 (E4-6)	8
F1-F5	2	5	5	6	7	8
G1-G5	2	5	5	6	7	8
H1-H5	3	6	6	8	6	8
I1-I5	2	5	5	6	7	8
J1-J5	3	6	5 (J1&J4-6)	8	8	8
K1-K5	2	6	7	8	7	8
L1-L5	1	6	7	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	OK		2.185"				
DE	2	OK		2.19"				
FG	2	OK		2.470"				
HI	2	OK		2.880"				
JK	2	OK		1.330"				

Anchor Bolts Galvanized - Yes No

Comments Photo of beam damage due to wreck. North traffic hit all beams pending 1st & last worst. Same true for southbound. Photos of anchor bolt deterioration. Plates over joints OK for expansion.

BRIDGE BEARING & JOINT INSPECTION

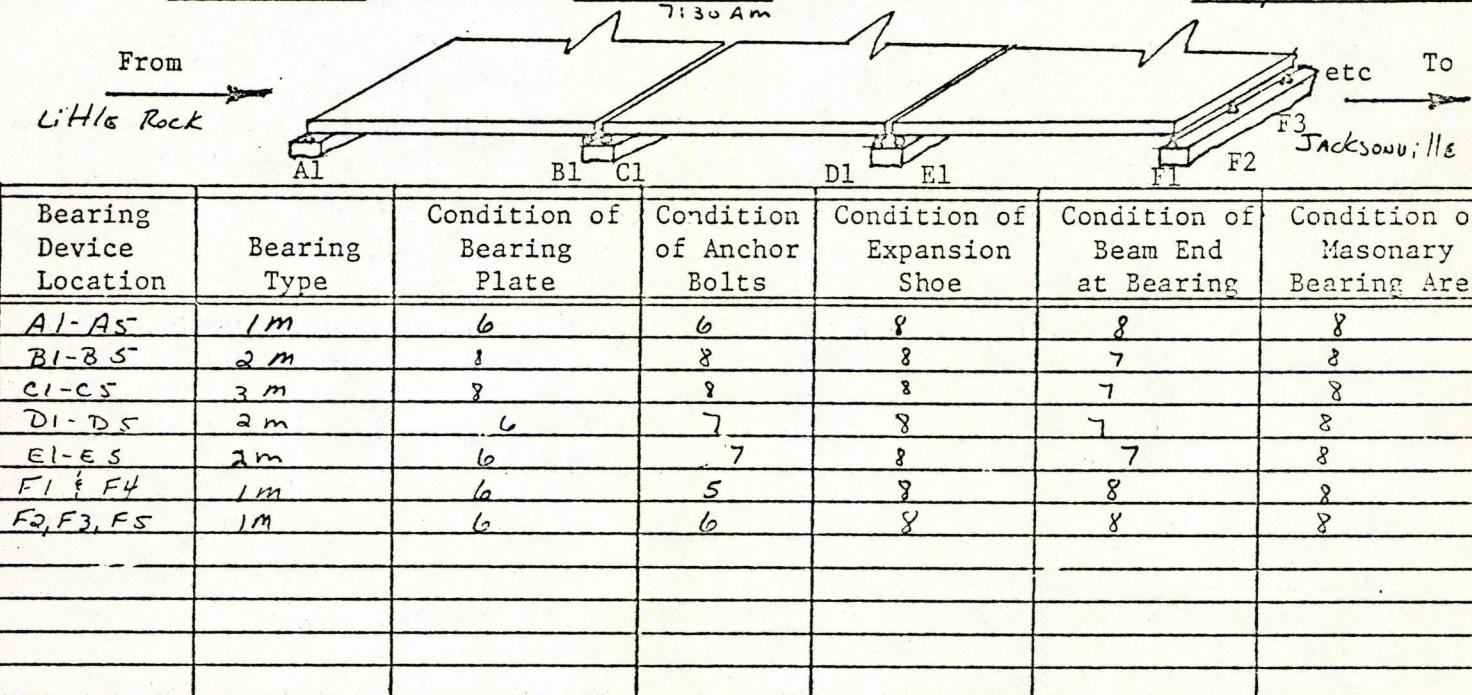
IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY Pulaski (60)
4. ROUTE Hwy 67 5. SEC. 10 6. LOG 3.26 7. BR. NO. 3056A
8. FEATURE INTERSECTED OVER SHERWOOD ROAD
9. BRIDGE ON HIGHWAY Hwy 67 (Interstate Stds)
10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9-9-78 13. TEMP. 77° 14. WEATHER CONDITIONS Haze - Cool

13. TEMP. 76

14. WEATHER CONDITIONS $H_{Az} = C_{w} \cdot 1$



Anchor Bolts Galvanized - Yes No

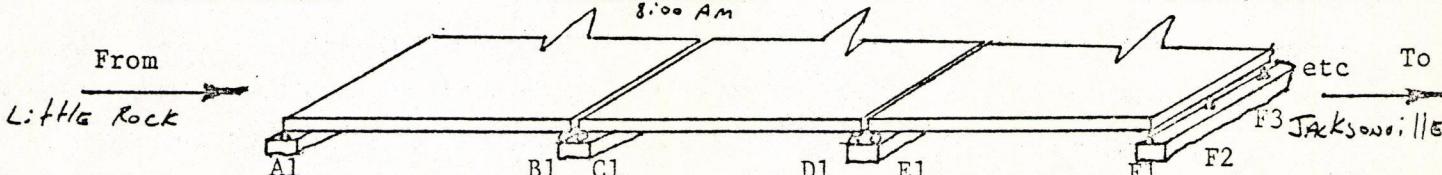
Comments OLD TYPE DEVICES WITH LUGS. COVER PLATES HAVE ROOM FOR EXPANSION AS VIEWED FROM TOP.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 6 3. COUNTY Pu/ask: (60)
 4. ROUTE Hwy 67 5. SEC. 10 6. LOG 3.25- 7. BR. NO. 3056B
 8. FEATURE INTERSECTED OVER Sherwood Road
 9. BRIDGE ON HIGHWAY Hwy 67
 10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/9/78 13. TEMP. 77° 14. WEATHER CONDITIONS Hazy - Cool



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonry Bearing Area
A1 & A5	1m	6	6	6	8	8
A2-A4	1m	6	7	8	8	8
B1-B5	2m	6	7	7	8	8
C1-C5	3m	8	7	7	7	8
D1-D5	2m	7	7	8	8	8
E1-E4	2m	7	6	8	6	8
E2,E3,E5	2m	7	7	8	7	8
F1-F5	1m	7	5 & 6	7	7	8
Two Bolts Per Bearing, 78, Back Bolts Against Head Wall Were Badly Corroded (5) on F4 & F5						

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B.C.	2	O.K.		1.890"				
D.E.	2	O.K.		1.981"				

Anchor Bolts Galvanized - Yes / No X

Comments Expansion Joints on top of roadway were sufficiently open for expansion.

BRIDGES INSPECTED

IN

DISTRICT 7

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 10 Clark
 4. ROUTE SH. 8 & 51 5. SEC. 14 6. LOG 72.86 7. BR. NO. 3692
 8. FEATURE INTERSECTED over I-30
 9. BRIDGE ON HIGHWAY SH. 8 & S.H. 51
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 71°F 14. WEATHER CONDITIONS Clear/Warm

From											
West	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Arm					
A ₁ - A ₅	1	7	8	7	8	8					
B ₁ - B ₅	2	7	8	8	7	8					
B ₂ - B ₄	1	7	8	8	7	8					
C ₁ - C ₅	3	7	8	8	8	8					
D ₁ - D ₅	2	6	8	7	7	8					
E ₁ - E ₅	3	7	8	8	8	8					
F ₁ - F ₅	2	7	7	7	7	8					
G ₁ - G ₅	2	7	7	7	7	7					
H ₁ & H ₅	1	7	8	7	7	8					
H ₂ - H ₄	1	7	8	8	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		1.110"				
DE	2	✓		1.908"				

Anchor Bolts Galvanized - Yes No

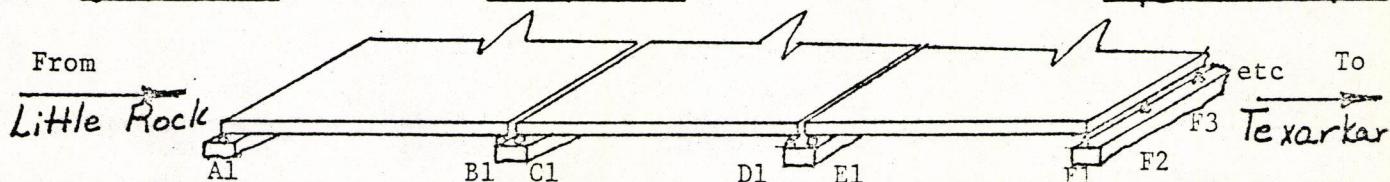
Comments Arkadelphia Interchange - 1963
O.K. on top

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 10 Clark
4. ROUTE I-30 5. SEC. 14 6. LOG 77.54 7. BR. NO. 3707 A
8. FEATURE INTERSECTED over S.H. 7
9. BRIDGE ON HIGHWAY I-30
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 71°F 14. WEATHER CONDITIONS Clear/Cool



A1	B1	C1	D1	E1	F1	
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1 - A3	1	7	8	8	8	8
A4 & A5	1	7	8	7	7	8
B1 - B5	2	6	8	7	8	8
C1 - C4	2	6	8	7	7	8
C5	2	6	8	7	6	8
D1 - D5	3	7	8	8	8	8
E1 - E5	2	6	8	7	7	8
F1 & F5	1	7	8	8	7	8
F2 - F4	1	7	8	8	8	8

Anchor Bolts Galvanized - Yes No

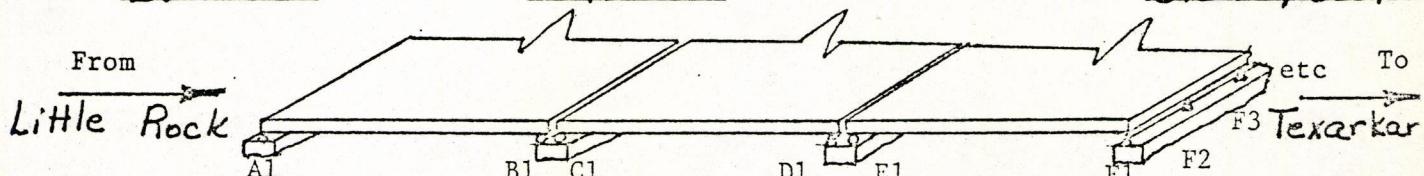
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 10 Clark
4. ROUTE I-30 5. SEC. 14 6. LOG 77.56 7. BR. NO. 3707 E
8. FEATURE INTERSECTED over 5t. Hwy 7
9. BRIDGE ON HIGHWAY I-30
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 71°F 14. WEATHER CONDITIONS Clear/Cool



Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 10 Clark
 4. ROUTE St. Hwy 53 5. SEC. 14 6. LOG 62.84 7. BR. NO. 3813
 8. FEATURE INTERSECTED over I-30
 9. BRIDGE ON HIGHWAY St. Hwy
 10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 71°F 14. WEATHER CONDITIONS Clear/warm

From											To
West	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arc					
A1 & A5	1	7	8	7	7	8					
A2 - A4	1	7	8	8	8	8					
B1 - B5	2	7	8	7	8	8					
C1 - C5	3	7	8	7	8	8					
D1	2	7	8	7	7	8					
D2 - D5	2	7	8	7	8	8					
E1 - E5	2	7	8	8	8	7					
F1 - F5	3	7	7	7	7	7					
G1 - G5	2	7	8	7	7	7					
H1 & H5	1	7	8	7	7	7					
H2 - H4	1	7	8	8	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		1.783"				
CD	2	✓		1.521"				

Anchor Bolts Galvanized - Yes No

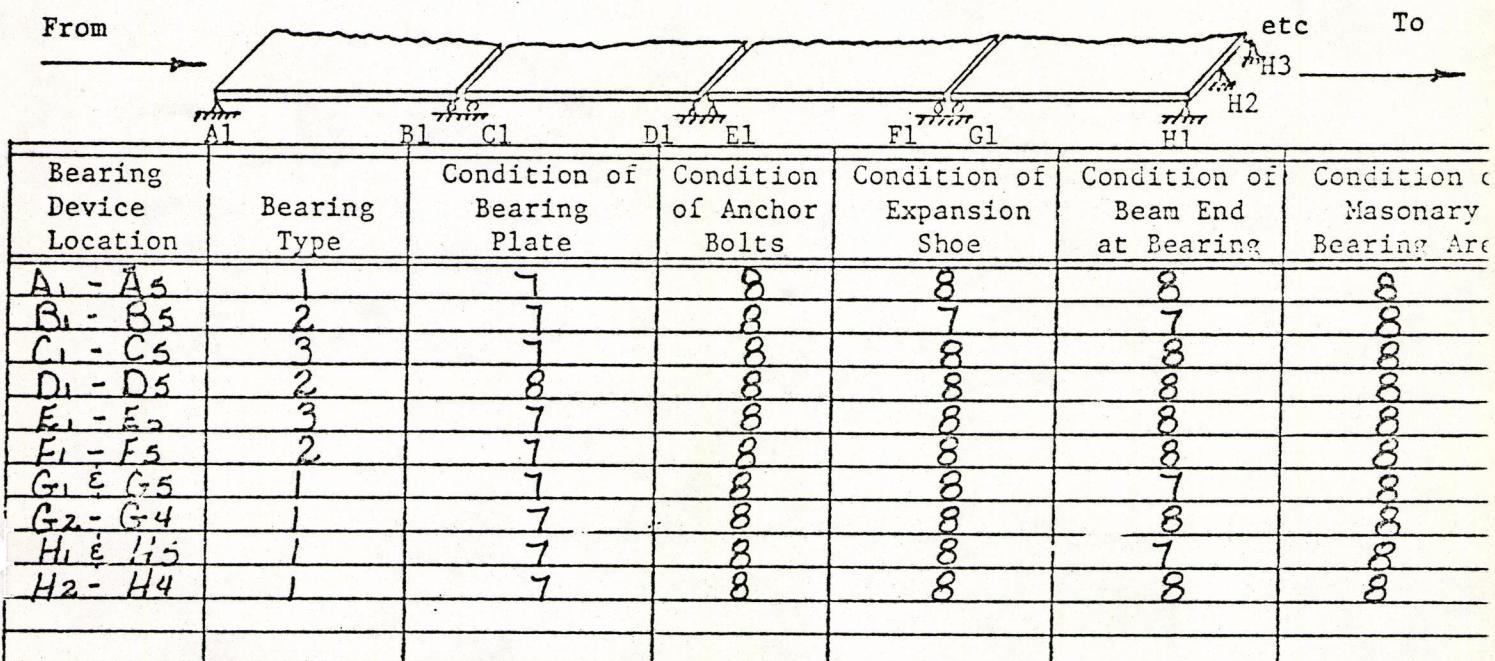
Comments Hwy 53 Interchange, H-20, 1964
light rust on all beam steel

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 10 Clark
4. ROUTE Cty. Rd. 5. SEC. 14 6. LOG 65.10 7. BR. NO. 3817
8. FEATURE INTERSECTED over I-30 Cty. Rd. - paved
9. BRIDGE ON HIGHWAY Cty. Rd
10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/12/79 13. TEMP. 72°F 14. WEATHER CONDITIONS Clear/cool



Anchor Bolts Galvanized - Yes No

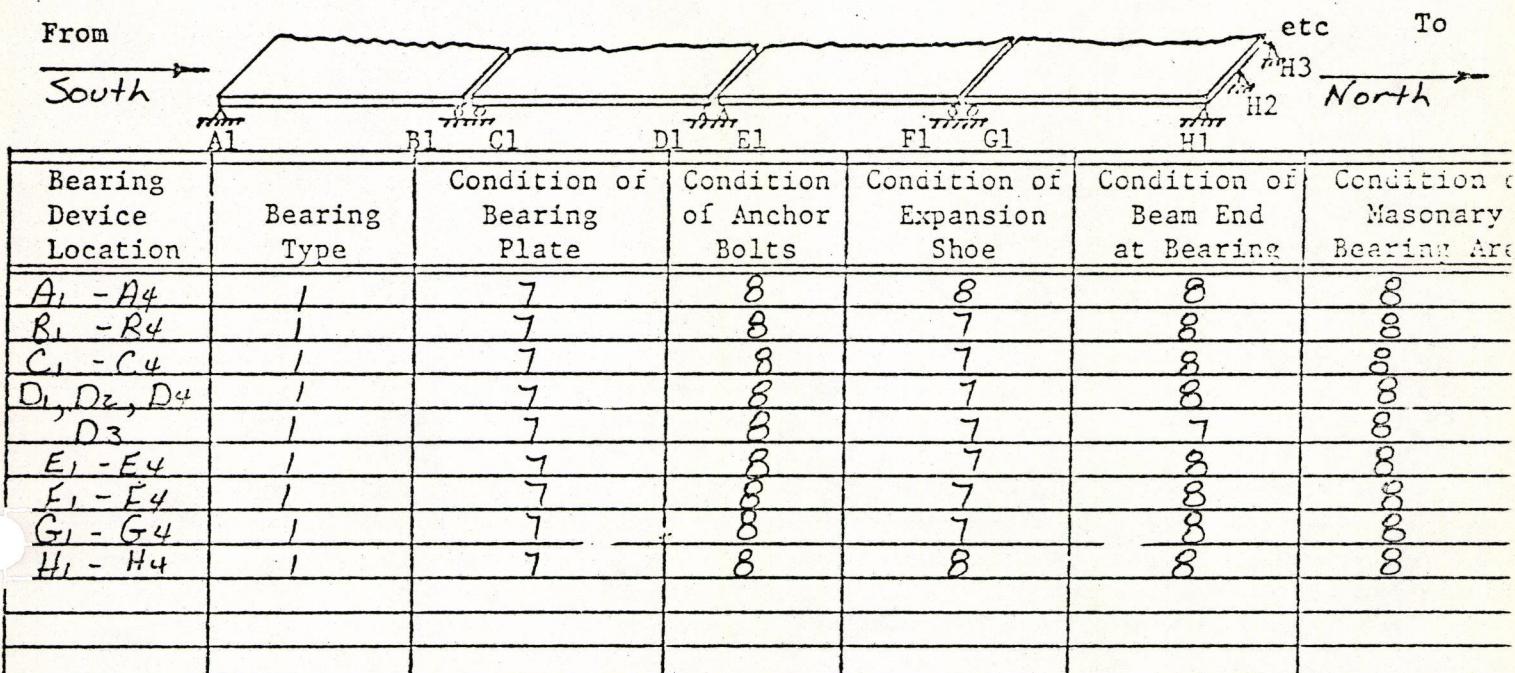
Comments Shiloh Rd. underpass - 1964

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 70 Union
4. ROUTE U.S. 167 5. SEC. 1 6. LOG 15.13 7. BR. NO. 3145
8. FEATURE INTERSECTED Hwy 82 overpass (us- 82)
9. BRIDGE ON HIGHWAY U.S. 167
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear / cool



Anchor Bolts Galvanized - Yes No

Comments Joints at Bridge ends are closed. First support at A has very little expansion capability - Center joint is O.K.

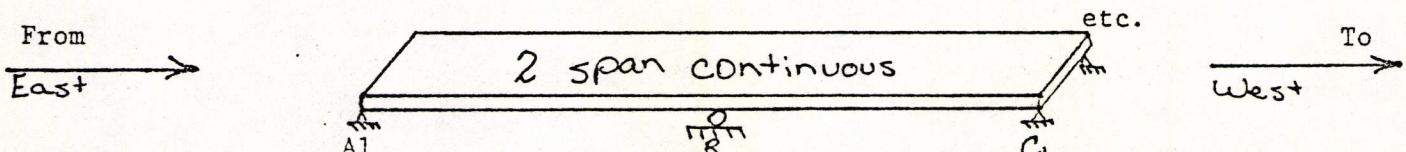
1 Photo of steel plates in the expansion joint

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 70 Union
4. ROUTE Cty Rd 5. SEC. 1 6. LOG 17.59 7. BR. NO. 3149
8. FEATURE INTERSECTED U.S. 167
9. BRIDGE ON HIGHWAY Champagnolle Road (H20-1959)
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear/warm



Anchor Bolts Galvanized - Yes No

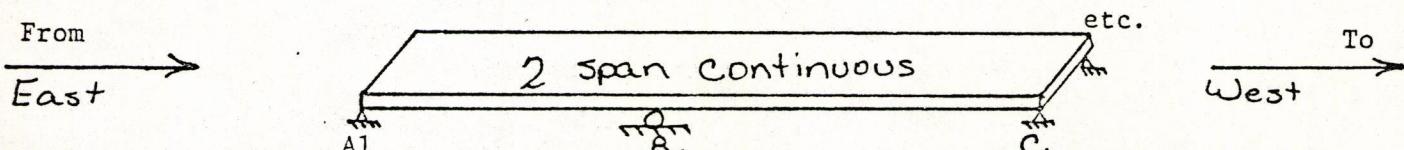
Comments No room for expansion, only minor breakage has occurred. The supports at the abutments (A & C) were dirty. The bridge has been repainted recently.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 70 Union
4. ROUTE 5 Hwy 15N 5. SEC. 1 6. LOG 16.25 7. BR. NO. 3148
8. FEATURE INTERSECTED over U.S. 167
9. BRIDGE ON HIGHWAY St. Hwy 15 N
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/cool



Anchor Bolts Galvanized - Yes No

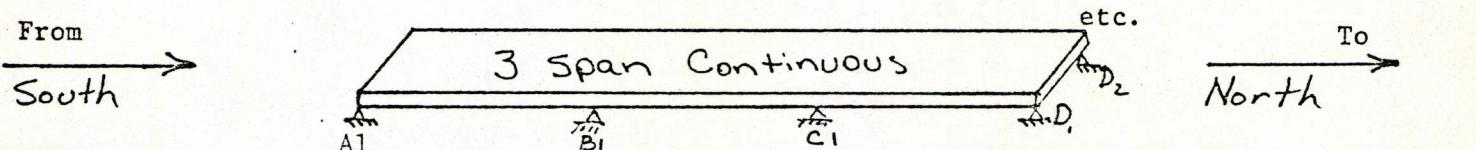
Comments Insufficient room for expansion on east end. No room for expansion on west end. Minor breakage has occurred at both abutments.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 70 Union
4. ROUTE U.S. 167 5. SEC. 1 6. LOG 15.47 7. BR. NO. 3146
8. FEATURE INTERSECTED over Missouri Pacific R.R.
9. BRIDGE ON HIGHWAY U. S. 167
10. YEAR BUILT 1959 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/cool



Anchor Bolts Galvanized - Yes No

Comments Pier C had exposed steel

BRIDGE BEARING & JOINT INSPECTION

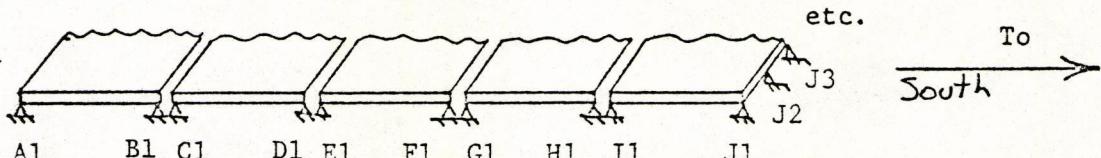
IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 7 Calhoun
 4. ROUTE U.S. 167 5. SEC. 4 6. LOG 17.50 7. BR. NO. 3637
 8. FEATURE INTERSECTED over St. Louis - S.W. R.R. near Fordyce
 9. BRIDGE ON HIGHWAY U.S. 167
 10. YEAR BUILT 1968 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear/Warm

From

North →



To

South →

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A ₁	1	7	8	7	7	.8
A ₂ - A ₅	1	8	8	8	8	8
B ₁ - B ₅	1	8	8	8	8	8
C ₁ - C ₅	1	8	8	8	8	8
D ₁ - D ₅	2	8	8	8	8	0
E ₁ - E ₅	1	8	8	8	8	8
F ₁ - F ₅	1	8	8	8	8	8
G ₁ - G ₅	2	8	8	8	8	8
H ₁ - H ₅	1	8	8	8	8	8
I ₁ - I ₅	1	8	8	8	8	8
J ₁ - J ₅	1	8	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3							0.947"
BC	3			0.496"			0.877"	
FG	3							1.069"
HI	3							1.096"
J	3							0.906"

Anchor Bolts Galvanized - Yes No

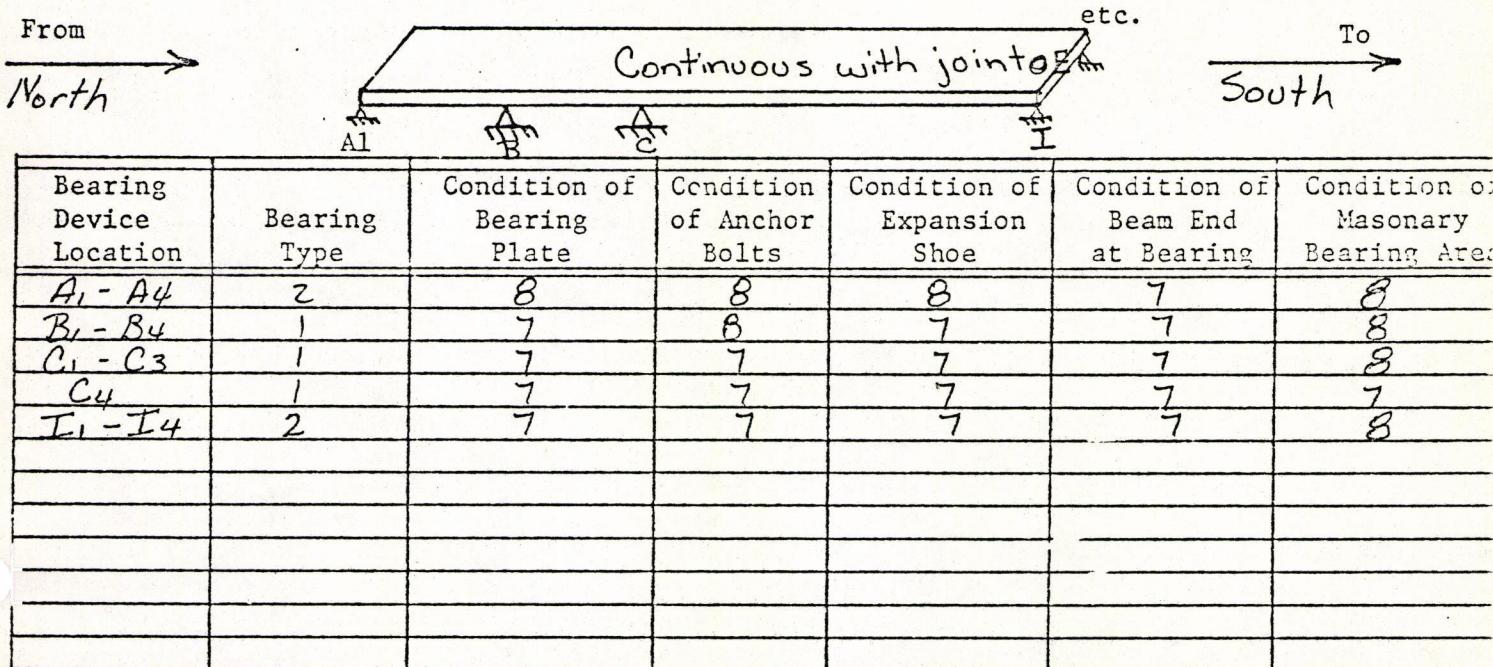
Comments Joints very good condition.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 70 Union
4. ROUTE U.S. 167 5. SEC. 1 6. LOG 17.59 7. BR. NO. 3150
8. FEATURE INTERSECTED over C.R.I. & P. R.R.
9. BRIDGE ON HIGHWAY U.S. 167
10. YEAR BUILT 1959 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Clear/Cloudy



Anchor Bolts Galvanized - Yes No

Comments Considerable rust on top flange of beam next to concrete, all beams. Reinforcing steel exposed at C4 location of pier C. Open joint at E.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 7 3. COUNTY 7 Calhoun
 4. ROUTE U.S. 167 5. SEC. 4 6. LOG 17.76 7. BR. NO. 3638
 8. FEATURE INTERSECTED over Hwy 79
 9. BRIDGE ON HIGHWAY U.S. 167
 10. YEAR BUILT 1968 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/13/79 13. TEMP. 70°F 14. WEATHER CONDITIONS Clear/Warm

From North											
	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing						Condition Masonary Bearing Arm
A ₁ - A ₄	1	8	8	8	8						8
B ₁ - B ₃	1	8	8	8	8						8
B ₄	1	7	8	7	7						8
C ₁ - C ₃	1	8	8	8	8						8
C ₄	1	6	8	7	7						8
D ₁ - D ₄	2	7	8	7	8						8
E ₁ , E ₂ , E ₄	2	7	8	7	8						8
E ₃	2	7	8	7	7						8
F ₁ - F ₄	3	7	8	7	7						8
G ₁ - G ₄	2	7	8	7	7						8
H ₁ - H ₃	1	8	8	8	8						8
H ₄	1	6	8	7	7						8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	-						1.034"
BC	3	-						0.974"
DE	3	Failed						1.252"
FG	3	-						1.195"
H	3	-						1.266"

Anchor Bolts Galvanized - Yes ✓ No

Comments Neoprene joint DE has dropped down at a point about 10 inches from the center line and appears to be leaking underneath.

BRIDGES INSPECTED

IN

DISTRICT 8

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 23 FAULKNER
 4. ROUTE SH - 89 5. SEC. 4 6. LOG 11.14 7. BR. NO. 3787
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY MAYFLOWER INTERCHANGE SH - 89
 10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 40°F 14. WEATHER CONDITIONS CLEAR - COOL

From								To			
NORTH	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arc					
A1-A4	1	7	8	8	8	8					
A5	1	7	8	8	7	7					
B1-B5	2	7	8	7	7	7					
B2-B4	2	8	8	8	8	8					
C1-C5	3	7	8	8	8	8					
C2-C4	3	8	8	8	8	8					
D1-D5	2	7	8	8	8	8					
E1-E5	2	7	8	8	7	7					
F1,F2,F4,F5	3	8	8	8	8	8					
G5,F3	2,3	7	8	8	8	8					
G1-G2,G3,G4	2	8	8	8	8	8					
H1-H5	1	7	8	8	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B6	2	-			1.636"			
D5	2	-			1.764"			

Anchor Bolts Galvanized - Yes No

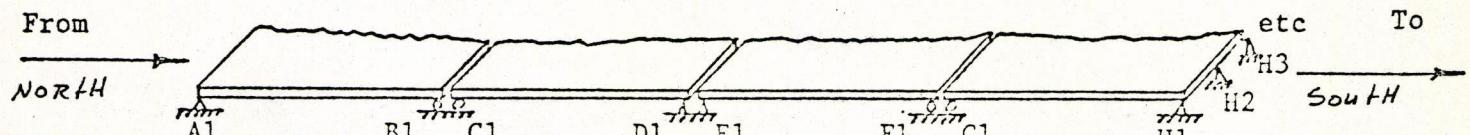
Comments Lots of EXPANSION Room at Abutments - ok

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 23 FAULKNER
 4. ROUTE US-65B 5. SEC. 32 6. LOG 128.74 7. BR. NO. 3890
 8. FEATURE INTERSECTED OVER I-40 PAST MAYFLOWER GOING TOWARD FT. SMITH
 9. BRIDGE ON HIGHWAY US-65B
 10. YEAR BUILT 1966 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. ≈ 40°F 14. WEATHER CONDITIONS _____

 From NORTH To SOUTH						
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing At
A1-A4-A5	1	7	8	8	8	8
A2, A3	1	6	8	8	8	8
B1-B5	2	8	8	8	8	8
C1-C5	3	8	8	8	8	8
D1-D5	2	7	8	7	8	8
E1-E5	2	7	8	7	7	8
F1-F5	3	8	8	8	8	8
G1-G5	2	8	8	8	8	8
H1-H5	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	✓		2.174"				
D E	2	✓		1.869"				

Anchor Bolts Galvanized - Yes No

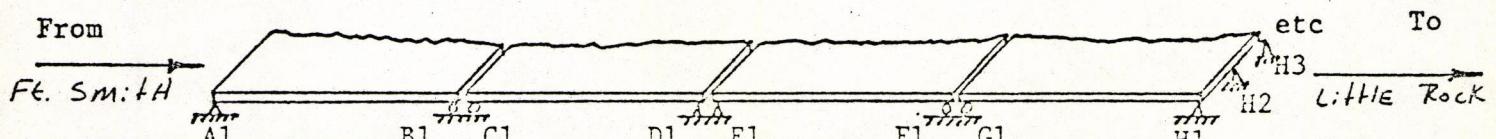
Comments Dirt Build-up on Abutment, Both ends. RE's OK,
EXPANSION SPACE & END WALLS, OK.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 23 FAULKNER
4. ROUTE I-40 5. SEC. 32 6. LOG 126.76 7. BR. NO. 3889 A
8. FEATURE INTERSECTED OVER U.S. 64
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 40°F 14. WEATHER CONDITIONS CLEAR-COOL



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A3 A6-A7	1	8	8	8	8	8
A4, A5	1	7	8	8	7	8
B1-B4	2	7	8	7	8	8
C1-C7	3	8	8	8	7	8
D1-D7	2	7	8	7	8	8
E1-E7	2	7	8	7	7	8
F1-F6	3	8	8	8	8	8
F7	3	7	8	8	8	8
G1-G5	2	8	8	8	8	8
G6, G7	1	7	8	8	8	8
H1-H3, H5-H7	1	7	8	8	8	8
H4	1	7	8	8	7	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	-		2.646"				
De	2	-		1.967"				

Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 23 Faulkner
 4. ROUTE I-40 5. SEC. 32 6. LOG 126.76 7. BR. NO. 3889 B
 8. FEATURE INTERSECTED OVER U.S.-64
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. ≈ 40° 14. WEATHER CONDITIONS CLEAR - COOL

From Ft. Smth		etc						To H2 Little Rock
A1	B1	C1	D1	E1	F1	G1	H1	
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arc		
A1-A3, A5-A7	1	8	8	8	8	8		8
A4	1	7	8	8	8	8		8
B1-B7	2	7	8	7	7	7		7
C1-C7	3	7	8	8	8	8		7
D1-D7	2	7	8	7	7	7		7
E1-E7	2	7	8	7	8	7		7
F1-F7	3	7	8	8	7	8		8
G1-G7	2	7	8	8	8	8		8
H1-H7	1	7	8	8	8	8		8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	~		2.242"				
DE	2	~		1.420"				

Anchor Bolts Galvanized - Yes /X/ No / /

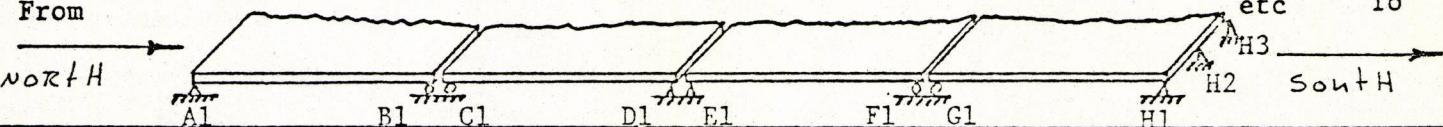
Comments EXPANSION ROOM AT ABUTEMENT OK. SPALLING OCCURRING ON CONCRETE PIERS BC & DE.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 58 PINE
 4. ROUTE Cty. RD. 5. SEC. 22 6. LOG 97.60 7. BR. NO. 3999
 8. FEATURE INTERSECTED Cty. RD. OVERPASS - OVER I-40
 9. BRIDGE ON HIGHWAY
 10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 40 °F 14. WEATHER CONDITIONS CLEAR - COOL

From  To

From	A1	B1	C1	D1	E1	F1	G1	H1	H2	To
NORTH	A1	B1	C1	D1	E1	F1	G1	H1	H2	SOUTH
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area				
A1-A5	1	7	8	8	8	8				8
A2-A4	1	8	8	8	8	8				8
B1-B5	1	7	8	7	8	8				8
B2-B4	1	8	8	8	8	8				8
C1-C5	3	8 (C5-7)	8	8	8	8				8
D1-D5	2	7	8	8	8	8				8
E1-E5	2	7	8	7	8	8				8
F1-F5	3	8 (F5-7)	8	8 (F5-7)	8	8				8
G1-G5	1	7	8	7	7	8				8
G2-G4	1	8	8	8	8	8				8
H1-H5	1	7	8	8	8	8				8
H2-H4	1	8	8	8	8	8				8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	→ R		0.949"				
D-E	2	→ R		1.338"				

Anchor Bolts Galvanized - Yes /X/ No / /

Comments

F4 - Fixed - Bottom R not flat on CONCRETE - APPEARED to BE PUSHED up.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 15 Conway
 4. ROUTE CTY RD. 5. SEC. 31 6. LOG 117.56 7. BR. NO. 3951
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY CTY. RD. MEN'S FEE INTERCHANGE
 10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. ≈ 40° 14. WEATHER CONDITIONS CLEAR - COOL

From											
NORTH	A1	B1	C1	D1	E1	F1	G1	H1	H2	H3	etc
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are					
A1-A5	1	8	8	8	8	8					
B1-B5	2	8	8	7	8	8					
B2-B4	2	8	8	8	8	8					
C1-C4	3	8	8	8	8	8					
C5	3	8	8	7	8	8					
D1-D4	2	8	8	8	8	8					
D5	2	7	8	8	8	8					
E1-E5	2	8	8	8	8	8					
F1-F5	3	8	8	8	8	8					
G1-G5	2	8	8	8	8	8					
H1-H5	1	8	8	8	8	8					

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	FAIR						1.581"
B-C	3	FAIR		2.334"				1.994"
D-E	3	GOOD						1.690"
F-G	3	GOOD						2.122"
H	3	GOOD						1.432"

Anchor Bolts Galvanized - Yes No

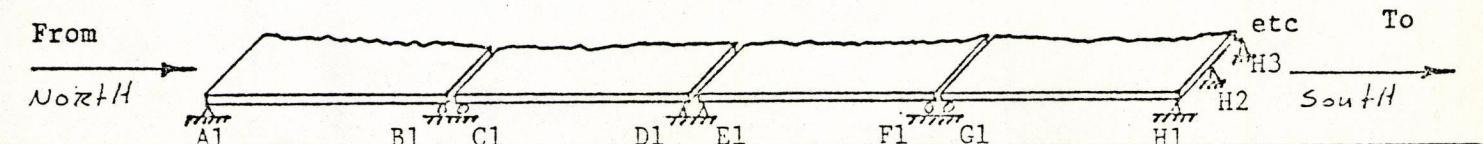
Comments EXPANSION Joint NEOPRENE BROKEN AT BASE of Curb on EAST
EDGE of BRIDGE at Joint A-B-C -- COULD SEE THROUGH -- ACROSS
BRIDGE Joint LOOKED SEALED.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 58 POPE
4. ROUTE CITY RD. 5. SEC. 22 6. LOG 87.04 7. BR. NO. 3968
8. FEATURE INTERSECTED OVER I-40
9. BRIDGE ON HIGHWAY CITY RD.
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 45° 14. WEATHER CONDITIONS CLEAR - COOL



A1	B1	C1	D1	E1	F1	G1	H1
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area	
A1-A5	1	(A1, A5-7)	8	8	(A5-7)	8	8
B1 & B5	1	7	8	7	7	8	
B2-B4	1	7	8	8	8	8	
C1 & C5	3	7	8	7	8	8	
C2-C4	3	7	8	8	8	8	
D1-D5	2	(D1, D5-7)	8	7	8	8	
E1-E5	2	7	8	7	(E1, E5-7)	8	8
F1 & F5	2	7	8	7	7	8	
F2-F4	2	8	8	8	8	8	
G1 & G5	1	7	8	8	7	8	
G2-G4	1	7	8	8	8	8	
H1-H5	1	7	8	8	8	8	

Anchor Bolts Galvanized - Yes No

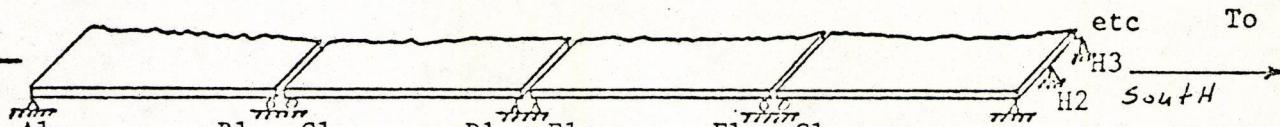
Comments \approx 2" Gaps At Headwalls For Expansion

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 58 Pope
 4. ROUTE Cty. Rd 5. SEC. 22 6. LOG 77.75 7. BR. NO. 3586
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY Cty. Rd. Russellville West Interchange
 10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 45°F 14. WEATHER CONDITIONS CLEAR-Cool

From  To

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing Ar
A1-A5	1	7	8	8	8	8
B1-B5	2	7	7	7	7	7
C1-C5	3	7	7	7	6	7
D1-D3-D5	2	7	7	7	6	7
D2	2	7	6	7	6	7
E1-E5	2	7	7	7	6	7
F1-F5	3	7	7	7	6	7
G1-G5	2	7	7	7	7	7
G2-G4	2	7	8	7	8	7
H1-H3, H5	1	7	7	7	8	8
H4	1	6	7	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	OK		0.878"				
Dc	2	OK		1.822"				

Anchor Bolts Galvanized - Yes No

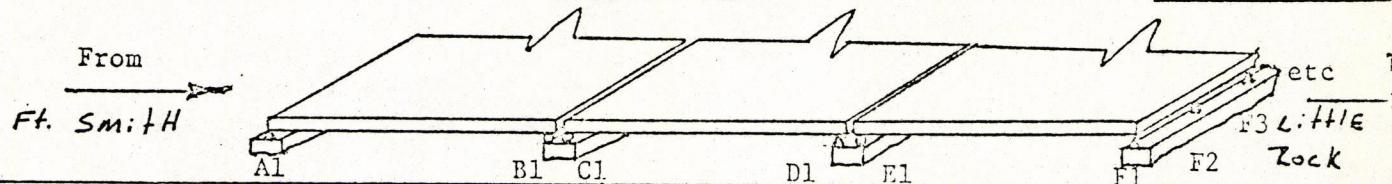
Comments BRIDGE HAD A SLOPE N → S WATER RAN UNDER THE DOWN ON BEAMS UNDERNEATH. BEAMS ENDS ON FREE PLATE EDGES WORSE.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 58 POPE
 4. ROUTE I-40 5. SEC. 22 6. LOG 73.97 7. BR. NO. 3316A
 8. FEATURE INTERSECTED CITY RD. London INTERCHANGE RD.
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. ≈ 47°F 14. WEATHER CONDITIONS CLEAR - COOL



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonal Bearing
A1-A7	1	7	8	8	8	8
B1-B7	1	7	8	7	7	8
C1-C7	1	7	8	7	8	8
D1-D7	1	7	8	7	7	8
E1-E2, E3-E5-E7	1	7	8	7	8	8
E4	1	7	8	7	7	8
F1-F7	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2			2.121"				
De	2			2.076"				

Anchor Bolts Galvanized - Yes No

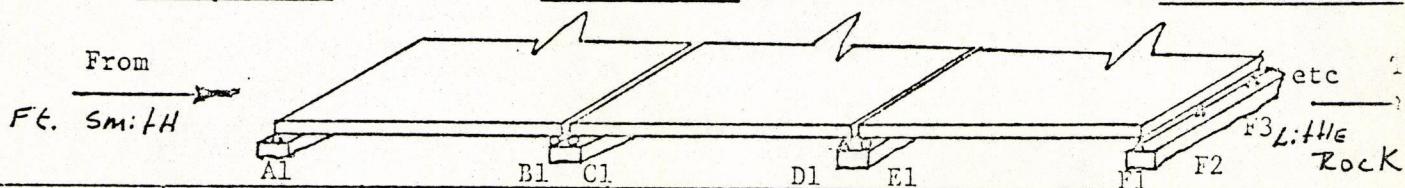
Comments EXPANSION Room At Abutments o.k.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 58 POPE
 4. ROUTE I-40 5. SEC. 22 6. LOG 43.94 7. BR. NO. 3316B
 8. FEATURE INTERSECTED CITY RD LONDON INTERCHANGE RD.
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. $\approx 47^{\circ}\text{F}$ 14. WEATHER CONDITIONS CLEAR-COOL



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing
A1-A7	1	7	8	8	8	8
B1-B7	1	7	8	7	7	8
C1-C7	1	7	8	7	8	8
C1-C4	1	7	8	7	7	8
D1-D7	1	7	8	7	7	8
E1-E7	1	7	8	7	7	8
E3-E4	1	7	8	7	8	8
F1-F7	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	—		1.919"				
de	2	—		2.005"				

Anchor Bolts Galvanized - Yes /X/ No / /

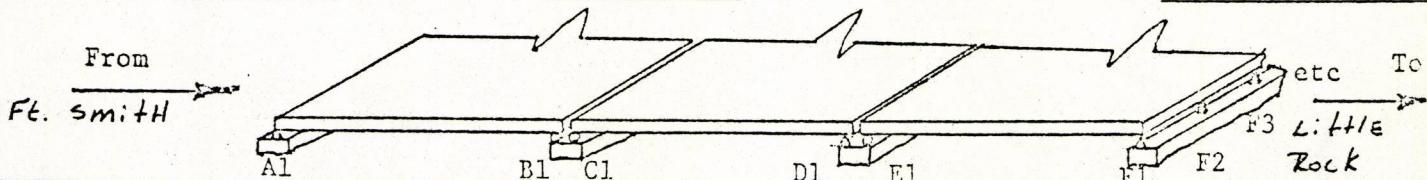
Comments EXPANSION ROOM AT ABUTEMENTS O.K.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 36 JOHNSON
4. ROUTE I-40 5. SEC. 21 6. LOG 63.83 7. BR. NO. 3777 A
8. FEATURE INTERSECTED OVER US-64
9. BRIDGE ON HIGHWAY I-40
10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. $\approx 50^{\circ}\text{F}$ 14. WEATHER CONDITIONS CLEAR, cool



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arm
A1 & A5	1	7	8	7	7	8
A2-A4	1	7	8	8	8	8
B1-B5	1	7	8	7	7	8
C1-C5	2	7	8	7	8	8
D1-D5	1	7	8	7	7	8
E1-E5	2	7	8	7	7	8
F1-F5	1	7	8	8	8	8

Anchor Bolts Galvanized - Yes No

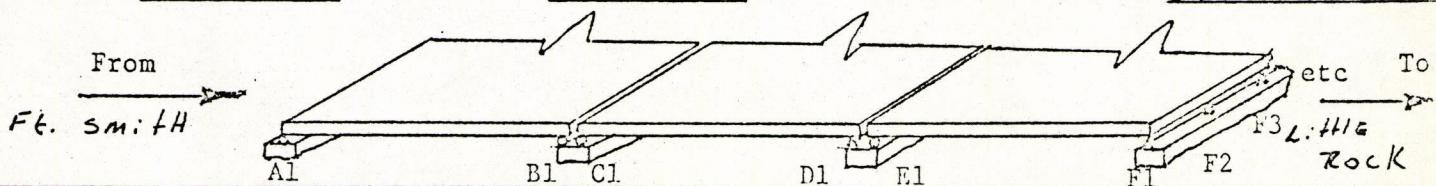
Comments Plenty of Expansion Room at Abutments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 36 Johnson
 4. ROUTE I-40 5. SEC. 21 6. LOG 63.83 7. BR. NO. 3777 B
 8. FEATURE INTERSECTED OVER US-64
 9. BRIDGE ON HIGHWAY I-40
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. ≈ 50°F 14. WEATHER CONDITIONS CLEAR - COOL



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing At
A1-A5	1	7	8	8	8	8
B2-B4, B5	3	7	8	7	8	8
B1	3	7	8	7	7	8
B3	3	7	7	7	8	8
C1-C5	2	7	8	7	6	8
D1-D5	3	7	8	7	7	8
E1-E4	2	7	8	7	7	8
E5	2	7	8	7	6	8
F1-F5	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	✓		0.902"				
D E	2	✓		2.150"				

Anchor Bolts Galvanized - Yes /X/ No / /

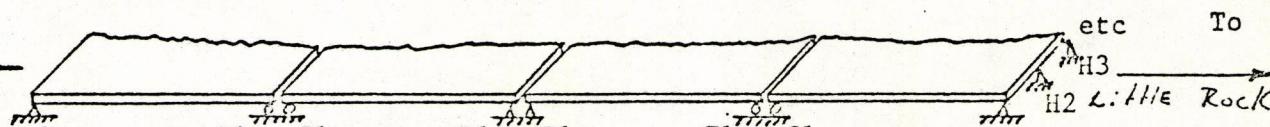
Comments Abutement EXPANSION GOOD

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 8 3. COUNTY 36 Johnson
 4. ROUTE U.S. 64 5. SEC. 4 6. LOG 11.04 7. BR. NO. 3760
 8. FEATURE INTERSECTED OVER I-40
 9. BRIDGE ON HIGHWAY U.S. - 64
 10. YEAR BUILT 1964 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/14/79 13. TEMP. 53°F 14. WEATHER CONDITIONS CLEAR - COOL

From  To

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1 - A3	1	6	8	7	8	8
A4 - A5	1	7	8	8	8	8
B1 - B5	1	7	8	7	8	7
C1	2	7	8	7	7	7
C2 - C5	2	7	8	8	7	7
D1 & D5	1	7	8	7	7	8
D2 - D4	1	7	8	7	8	8
E1 - E5	2	7	8	8(E1, E5 - 7)	7	8
F1 & F5	3	7	8	8	7	8
F2 - F4	3	7	8	8	8	8
G1 - G5	1	7	8	8	7(G2 - 8)	8(G5 - 6)
H1 - H5	1	7	8	8	8(H5 - 7)	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	~		0.858"				
D E	2	~		1.647"				

Anchor Bolts Galvanized - Yes No

Comments Photo #34 of abutment cracking @ west edge of BC

BRIDGES INSPECTED

IN

DISTRICT 9

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 8 Carroll
4. ROUTE SH-68 5. SEC. 4 6. LOG 9.78 7. BR. NO. 2771 A
8. FEATURE INTERSECTED Over Osage Creek
9. BRIDGE ON HIGHWAY S.H. - 68
10. YEAR BUILT 1970 11. MAIN SPAN (TYPE) I-Beam

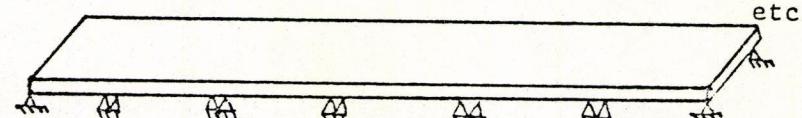
12. DATE 3/15/79 13. TEMP. 55°F 14. WEATHER CONDITIONS Partly Cloudy

From

South

T₈

North



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₇	1	8 (A ₁ , A ₇ - 7)	8	8	8	8
B ₁ - B ₇	2	8 (B ₁ , B ₇ - 7)	8	8	8	8
C ₁ - C ₇	1	8 (C ₁ , C ₇ - 7)	8	8	8	8
D ₁ - D ₇	2	7	8	7	8	8
E ₁ - E ₇	1	7	8	8	8	8
F ₁ - F ₇	2	7	8	7	8	8
G ₁ - G ₇	2	7	8	7	7	8
H ₁ - H ₇	1	7	8	7	8	8
I ₁ - I ₇	2	7	8	7	8	8
J ₁ - J ₇	1	7	8	7	8	8
K ₁ - K ₇	2	7	8	7	8	8
L ₁ - L ₇	1	8 (L ₇ - 7)	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	✓					1.132"	
BC	3	✓					1.621"	
DE	3	✓					1.750"	
FG	3	✓					2.450"	
HI	3	✓					2.170"	

Anchor Bolts Galvanized

1

Yes



No

17

JK
1

1.956"
1.373"

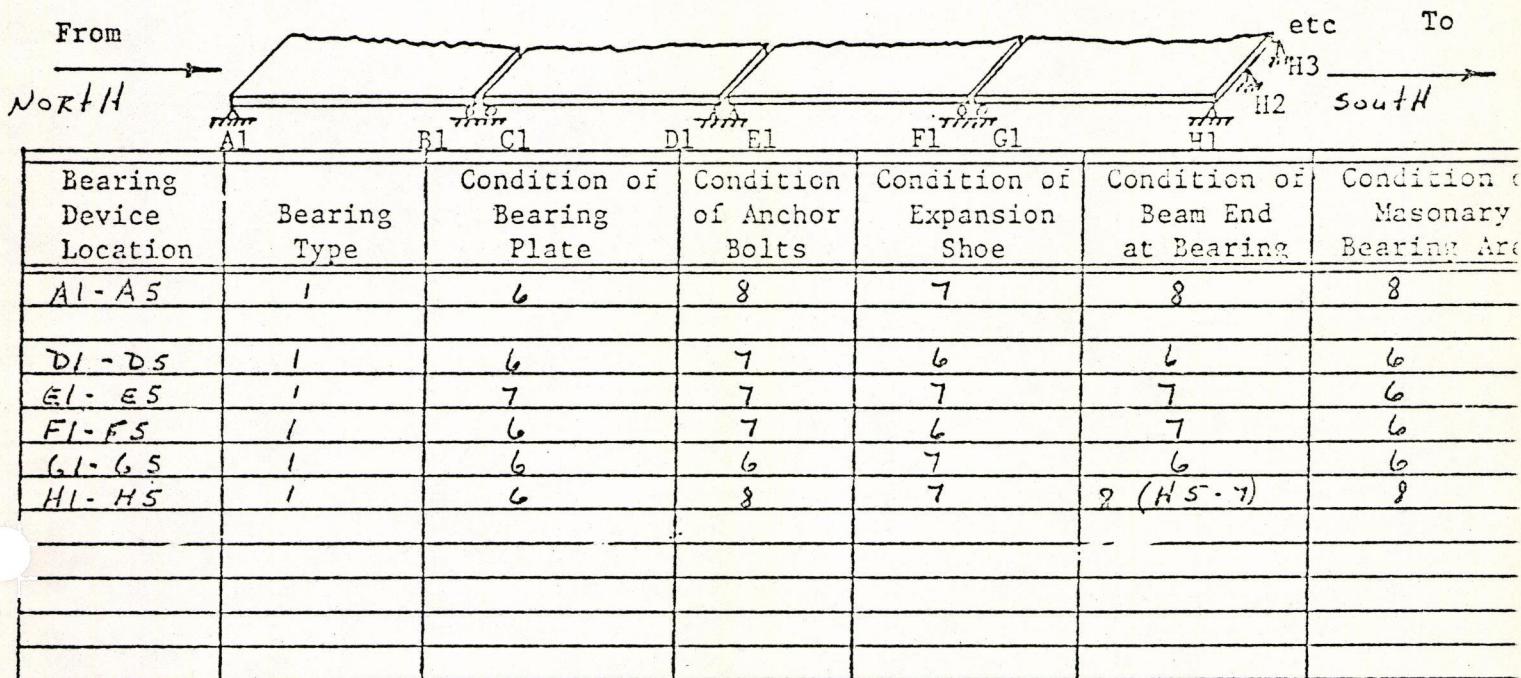
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 8 CARROLL
4. ROUTE SH-21 5. SEC. 5 6. LOG 247 7. BR. NO. 3308
8. FEATURE INTERSECTED OVER DRY FORK CREEK
9. BRIDGE ON HIGHWAY SH-21
10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. 55°F 14. WEATHER CONDITIONS CLEAR - COOL



Anchor Bolts Galvanized - Yes No

Comments

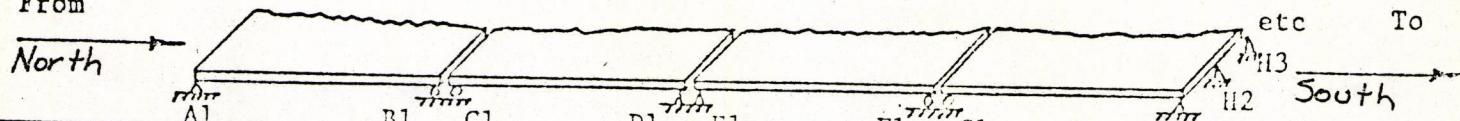
BREAST PLATING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY Carroll
4. ROUTE SH-21 5. SEC. 5 6. LOG 6.32 7. BR. NO. 3309
8. FEATURE INTERSECTED over Piney Creek
9. BRIDGE ON HIGHWAY S.H. 21
10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. $\approx 58^{\circ}\text{F}$ 14. WEATHER CONDITIONS Clear/Cool

From



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition Masonary Bearing A
A ₁ & A ₅	1	6	7	7	7	8
A ₂ - A ₄	1	6	8	7	8	8
B ₁ - B ₅	1	7	7	7	7	7(B ₁ - G)
C ₁ & C ₅	1	7	8	7	7	6(C ₅ - 7)
C ₂ - C ₄	1	7	8	7	8	7
D ₁ - D ₅	1	7	7	7	7	7
E ₁ - E ₅	1	7	7	7	8(E ₁ , E ₅ - 7)	7
F ₁ & F ₅	1	6	7	7	6(F ₅ - 7)	7(F ₅ - 8)
F ₂ - F ₄	1	7	8	7	8	8
G ₁ & G ₅	1	6	7	7	8(F ₅ - 7)	7(F ₅ - 8)
G ₂ - G ₄	1	7	8	7	8	8
H ₁ - H ₅	1	7	8	7	8	8

Anchor Bolts Galvanized - Yes No

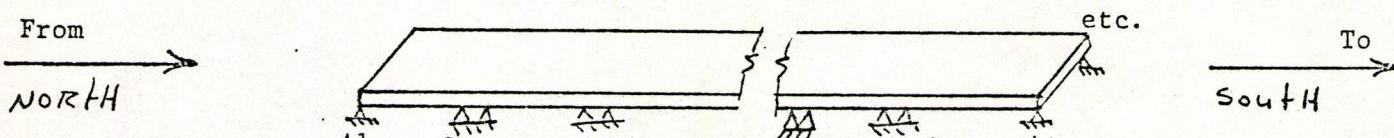
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 44 Madison
4. ROUTE US-68 5. SEC. 3 6. LOG 3.37 7. BR. NO. 3345
8. FEATURE INTERSECTED OVER WAR EAGLE CREEK
9. BRIDGE ON HIGHWAY US-68
10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. 55° 14. WEATHER CONDITIONS CLEAR - COOL



AI	BI	CI	DI	EI	Fk	Li	Mi	Ni
Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area		
A1-A5	1	7 (A2, A3 - 6)	7	8	8 (A1-7)		8	
B1-B4	1	6	7	6	6		7	
B5	1	5	5	6	5		7	
C1-C5	1	6	6	6	7 (C1-6)		8	
C2-C4	1	6	7	6	7		7	
D1-D5	2	7	7	7	7		8	
E1-E5	3	7	7	7	7 (E2, E4 - 8)		8	
K1-K5	1	6 (K4, K5 - 7)	7	7	7		8	
L1-L5	1	6	7	7	7		8	
M1-M5	1	7	7	7	7		8	
N1-N5	1	7 (N1, N4 - 6)	7	7	8 (N1, N5 - 7)		8	
E1-E5	3	7	7	7	8		8	

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	2	✓		1.902"				
DE	2	✓		1.873"				
JK	2	✓		1.571"				
LM	2	✓		1.781"				

Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 44 MADISON
 4. ROUTE SH-23 5. SEC. 8 6. LOG 23.76 7. BR. NO. 3582
 8. FEATURE INTERSECTED OVER WAR EAGLE CREEK
 9. BRIDGE ON HIGHWAY SH-23
 10. YEAR BUILT 1963 11. MAIN SPAN (TYPE) I-Beam

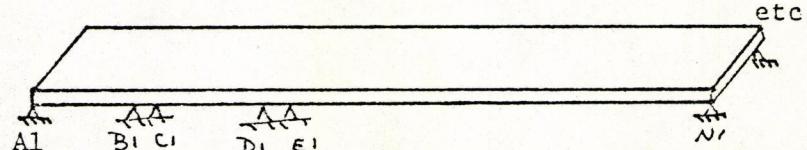
12. DATE 3/15/79 13. TEMP. 55°F 14. WEATHER CONDITIONS CLEAR COOL

From

NORTH

To

SOUTH



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1	1	6	7	7	8	8
A2-A4	1	8	8	8	8	8
A5	1	7	8	8	7	8
B1	1	6	7	7	7	8
B2	1	6	7	7	8	8
B3-B4	1	7	7	7	8	8
B5	1	7	7	7	7	7
C1	1	6	7	7	8	8
C2-C4	1	6	7	8	8	8
C5	1	6	7	7	8	8
D1-D5	1	6	7	8	8	8
E1-E5	1	7	7	8	7	8
N1-N5	,	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
Bc	2	✓		1.862"				
de	2	✓		1.487"				

Anchor Bolts Galvanized - Yes No

Comments PARTS OF BEAM ENDS HAVE BEEN CLEANED & REPAINTED RECENTLY - S, K, L, M, F,
@ M5 A HOLE UNDER ONE RL LEFT UNFILLED. WATER FREEZING
CAUSED CONCRETE TO CRACK ON CORNER.

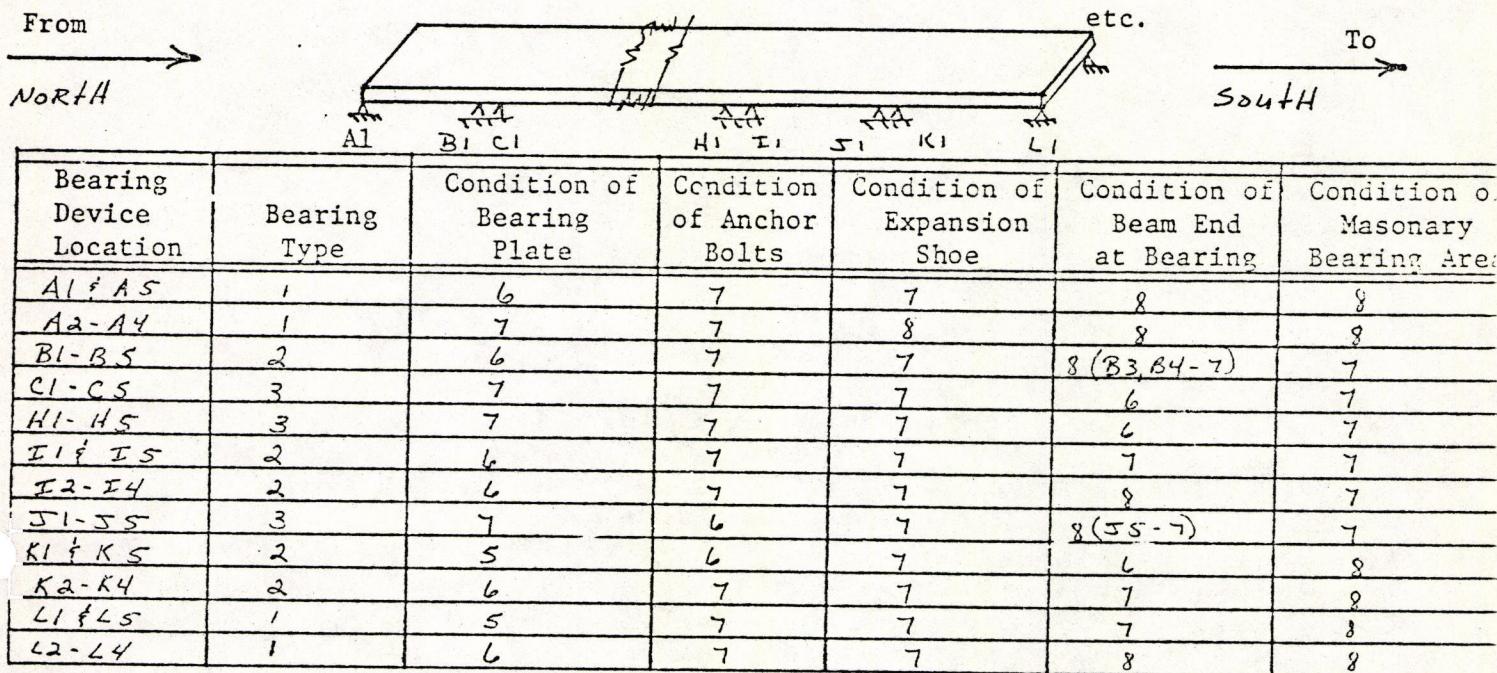
ASPHALT BRIDGE DECK COVER SEEMS TO HAVE PREVENTED MOST
WATER LEAKAGE THROUGH JOINTS. THE ONLY ASPHALT BREAKAGE
WAS AT JOINT HI.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 44 Madison
4. ROUTE SH-23 5. SEC. 9 6. LOG 4.08 7. BR. NO. 3583
8. FEATURE INTERSECTED OVER WAR EAGLE GREEK.
9. BRIDGE ON HIGHWAY SH-23
10. YEAR BUILT 1963 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. 45° 14. WEATHER CONDITIONS CLEAR - COOL



Anchor Bolts Galvanized - Yes No

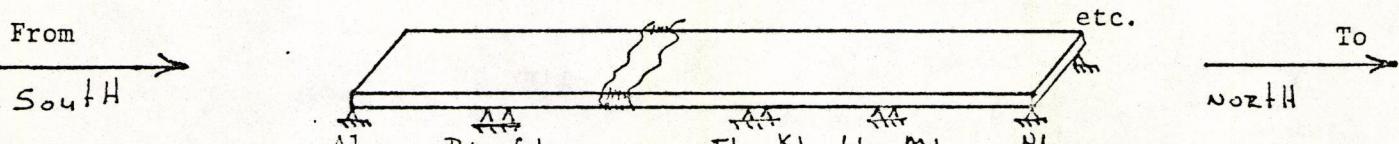
Comments _____

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 44 MADISON
 4. ROUTE SH - 45 5. SEC. 7 6. LOG 299 7. BR. NO. 3755
 8. FEATURE INTERSECTED WAR EAGLE CREEK
 9. BRIDGE ON HIGHWAY SH - 45
 10. YEAR BUILT 1965 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. 35 14. WEATHER CONDITIONS CLEAR - COOL



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1 & A5	1	7	8	7	7	8
A2 - A4	1	7	8	8	8	8
B1	2	7	7	7	6	7
B2 - B5	2	7	7	7	7	7
C1 - C5	3	7	8	7	8	7
J1 - J5	2	7	8	7	7	7
K1 - K5	3	7	8	7	8	7
L1 - L5	2	7	7	7	7	7
M1 - M5	2	7	7	7	7	7
N1 - N5	1	7	8	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	OK		2.747"				
J K	2	OK		1.887"				
L M	2	OK		2.764"				

Anchor Bolts Galvanized - Yes No

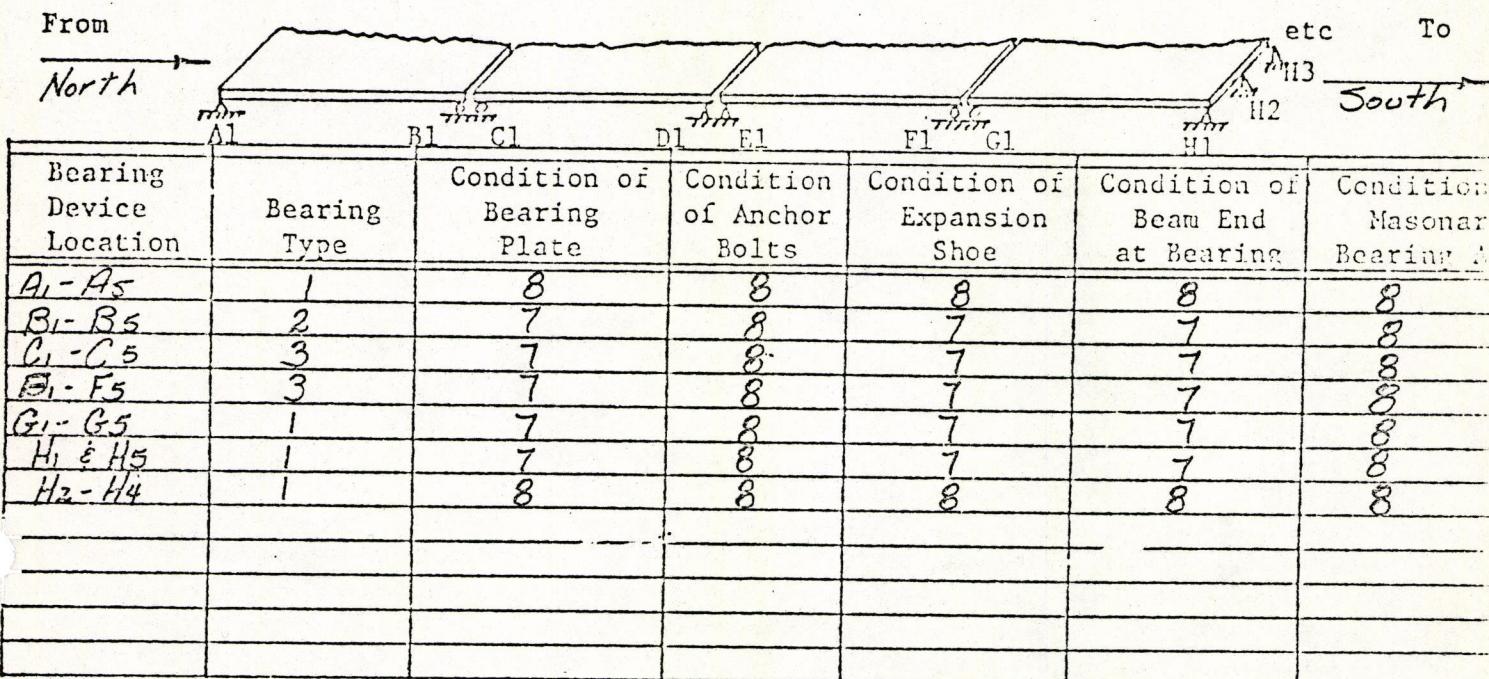
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 9 3. COUNTY 8 Carroll
4. ROUTE S.H. - 103 5. SEC. 4 6. LOG 6.81 7. BR. NO. 5082
8. FEATURE INTERSECTED over Osage Creek
9. BRIDGE ON HIGHWAY S.H. - 103
10. YEAR BUILT 1967 11. MAIN SPAN (TYPE) I-Beam

12. DATE 3/15/79 13. TEMP. 60°F 14. WEATHER CONDITIONS Partly Cloudy / Ca.



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	✓				1.210"	1.300"	1.370"
BC	3	Failed				1.105"	1.272"	1.403"
DE	3	✓				2.382"	2.464"	2.052"
FG	3	Failed				1.316"	1.539"	1.267"
H	3	✓				1.210"	1.422"	1.455"

Anchor Bolts Galvanized - Yes No

Comments BC Neoprene Broken at top of curb
FG Neoprene Broken at top of curb

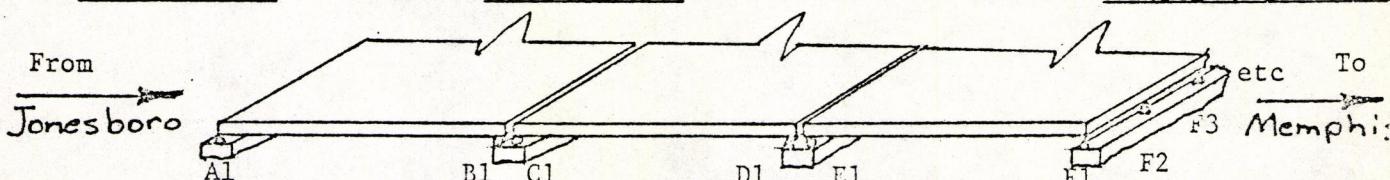
BRIDGES INSPECTED
IN
DISTRICT 10

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY 16 Craighead
4. ROUTE U.S. 63 5. SEC. 7 6. LOG 2.24 7. BR. NO. 5203 B
8. FEATURE INTERSECTED over Mopac R.R.
9. BRIDGE ON HIGHWAY U.S. 63 near Jonesboro
10. YEAR BUILT 1970 11. MAIN SPAN (TYPE) I-Beam

12. DATE 1-26-'79 13. TEMP. 31°F 14. WEATHER CONDITIONS Snow & overcast



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
BC	3	✓			4.523			
DE	3	✓			1.575			

Anchor Bolts Galvanized - Yes No

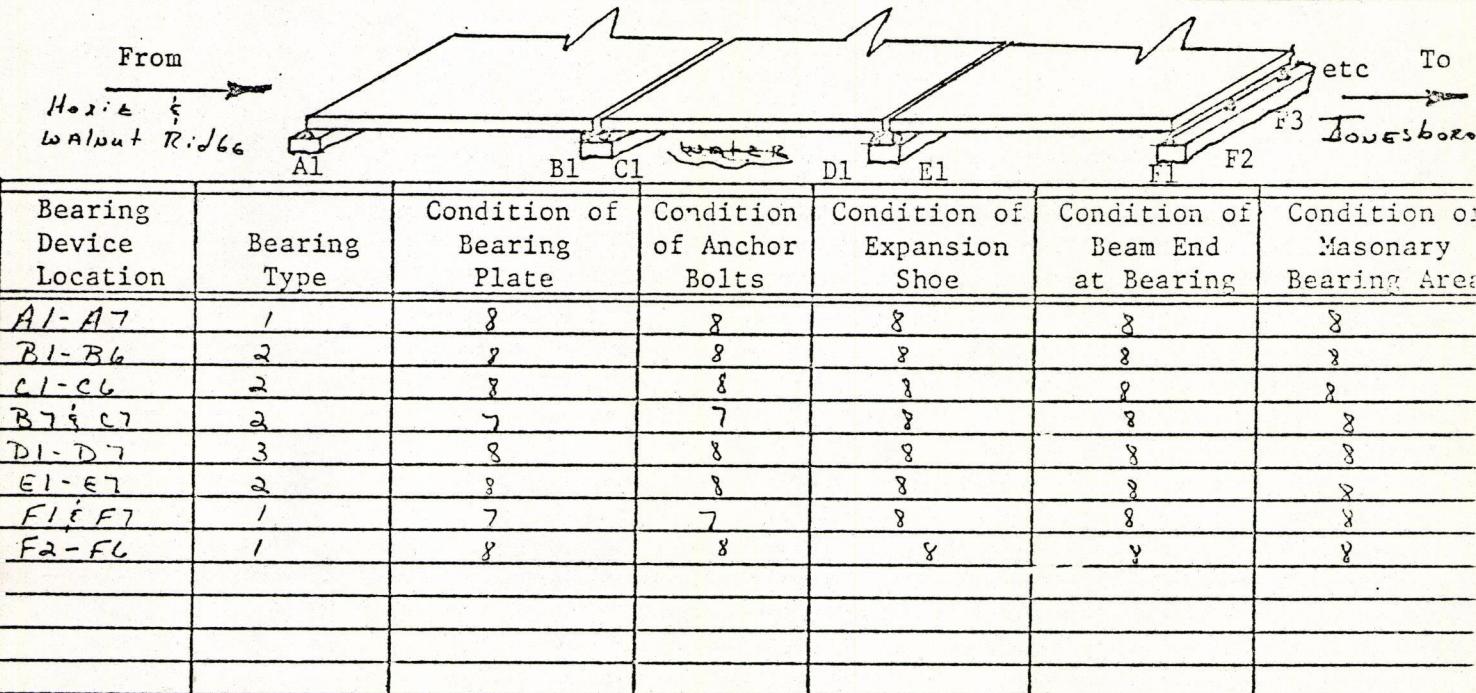
Comments Leak between 4 & 5 on BC - pick of ice
Joint filler had fallen out on line BC & debris
had piled up before joint replaced

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY CRAighHEAD (16)
 4. ROUTE US 63 BYPASS 5. SEC. 6 6. LOG 9.05 7. BR. NO. 5207 B
 8. FEATURE INTERSECTED ROGERS Ditch
 9. BRIDGE ON HIGHWAY US 63 NEAR BERRY's Truck Stop
 10. YEAR BUILT 1970 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/9/78 13. TEMP. 90°F 14. WEATHER CONDITIONS CLEAR - Hot



Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
A	3	O.K.	MAT'L. MOVING IN SLOP	1.400"	1.429"	1.326"		
B	3	O.K.	2.750"	2.858"	3.006"	2.951"	2.999"	2.999"
C	3	O.K.				1.962"	1.734"	2.025"
D	3	O.K.					1.400"	1.429"
E	3	O.K.						1.326"
F	3	O.K.						

Anchor Bolts Galvanized - Yes X No /

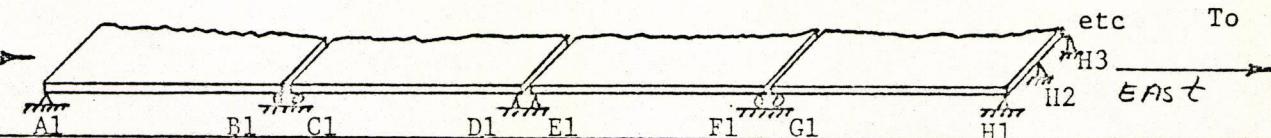
Comments Some Dirt Build-up on A-piers but base P's
ARE IN SURPRISINGLY Good Condition.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE <u>Arkansas</u>	2. DIST. <u>10</u>	3. COUNTY <u>Mississippi (47)</u>	
4. ROUTE <u>S.H. 81</u>	5. SEC. <u>12</u>	6. LOG <u>30.03</u>	7. BR. NO. <u>3180</u>
8. FEATURE INTERSECTED <u>OVER I-55</u>			
9. BRIDGE ON HIGHWAY <u>S.H. 81 OVER I-55</u>			
10. YEAR BUILT <u>1961</u>	11. MAIN SPAN (TYPE) <u>I-Beam</u>		

12. DATE 9/27/78 13. TEMP. 80°F 14. WEATHER CONDITIONS Hazy - Sunny
11:30 A.M.

From  To

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1	1	5	6	7	7	8
A2-A5	1	7	7	7	8	8
B1-B5	3	7	7	7	8	8
C1-C5	2	7	7	7	8	8
D1-D5	3	7	7	7	7	8
E1-E5	3	7	7	7	8	8
F1-F5	2	7	7	7	7	8
G1-G5	3	7	7	7	8	8
H1-H4	1	6	8	8	8	8
H5	1	6	7	6	6	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
D E	2	✓		2.412"				

Anchor Bolts Galvanized - Yes No

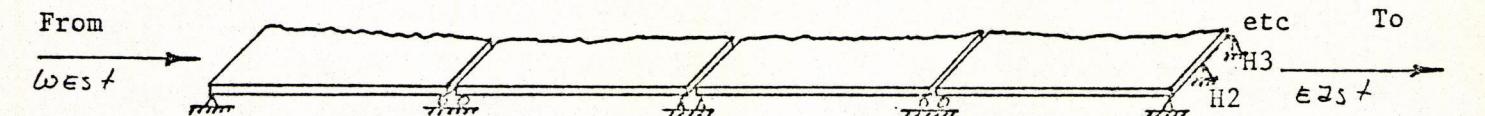
Comments NUTS LOOSE ON B1 & C5

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE S.H. 308 5. SEC. 12 6. LOG 30.03 7. BR. NO. 3213
 8. FEATURE INTERSECTED S.H. 308 OVER I-55
 9. BRIDGE ON HIGHWAY
 10. YEAR BUILT 1960 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 79°F 14. WEATHER CONDITIONS Sunny



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A4	1	7	7	8	8	8
B1 & B4	3	7	8	8	7	3
B2-B3	3-M	7	8	8	7	8
C1-C4	2	7	8	7	8	8
D1-D4	3	8	8	8	8	8
E1-E4	3	9	8	8	7	8
F1-F4	2	7	7	8	8	8
G2 & G3	2	7	7	8	8	8
G1 & G4	3-M	7	7	8	8	9
H1-H4	1	6	7	8	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	O.K.		2.588"				
D-E	2	O.K.		2.557"				

Anchor Bolts Galvanized - Yes No

Comments All COVER R's OVER Joists OK with EXPANSION ROOM

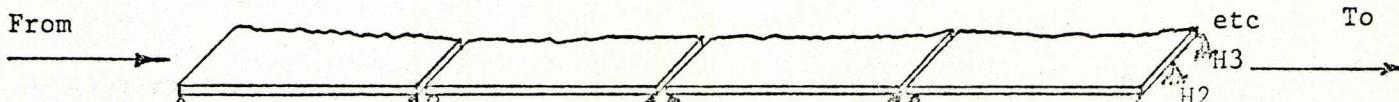
FRENCHMAN'S BAYOU GRADE SEPARATION - 1959

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE S. H. 14 5. SEC. 12 6. LOG 41.36 7. BR. NO. 3123
 8. FEATURE INTERSECTED I-55 west under
 9. BRIDGE ON HIGHWAY S. H. 14
 10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 86°F 14. WEATHER CONDITIONS Hazy - Sunny
1:40 PM



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Arc
A1, A2, A4, A5	1	7	7	7	7	8
A3	1	7	7	8	8	8
B1 - B5	3	7	8	8	8	8
C1 - C5	2	7	8	8	7	8
D1 - D5					8	8
E1 - E5					7	8
F1 - F5	2	7	7	8	8	8
G1 - G5	3	7	7	8	8	8
H1 - H4	1	7	7	8	8	8
H5	1	6	6	6	7	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
		MEASURBmeas						
	PS	TAKEN						

Anchor Bolts Galvanized - Yes No

Comments Some touch up painting was obvious

H1 Inside Anchor Bolt pulled out or broken off.

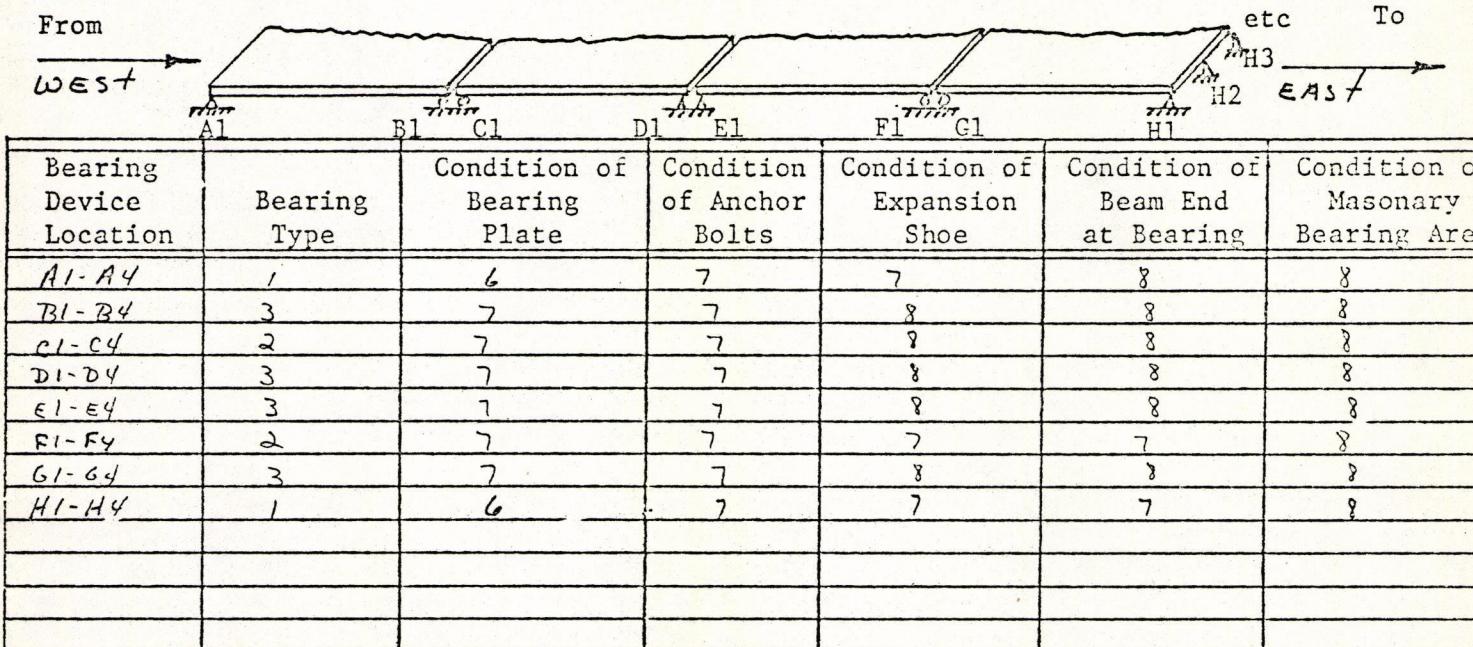
Joints on Top o.k. P's

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE FAS 288 5. SEC. 12 6. LOG 39.71 7. BR. NO. 3142
 8. FEATURE INTERSECTED OVER I-55
 9. BRIDGE ON HIGHWAY FAS 288 OVER I-55
 10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 81
12:00 noon 14. WEATHER CONDITIONS Hazy - Sunny



Anchor Bolts Galvanized - Yes No

Comments C 1 ROCKER OPEN MORE THAN OTHERS.

Joint COVER TR's O.K.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY 47 Mississippi
 4. ROUTE I-55 5. SEC. 12 6. LOG 43,94 7. BR. NO. 3370 A
 8. FEATURE INTERSECTED over S.H. 181
 9. BRIDGE ON HIGHWAY I-55
 10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85°F
2:15 PM 14. WEATHER CONDITIONS Hazy - sunny

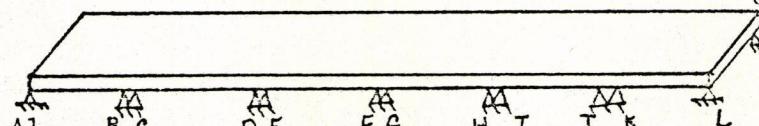
From

Memphis →

To

← St. Louis

etc.



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₅	1	5	6	7	8	8
B ₁ - B ₅	3	7	7	8	6	8
C ₁ - C ₅	2	7	7	8	8	8
D ₁ - D ₅	3	7	7	7	6	7
E ₁ - E ₅	2	7	7	7	7	8
J ₁ - J ₅	2	6	6	7	7	8
K ₁ - K ₅	3	7	7	7	7	8
L ₁ - L ₅	2	5	6	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B _C	2	O.K.		1.279"				

Anchor Bolts Galvanized - Yes No

Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY 47 Mississippi
4. ROUTE I-55 5. SEC. 12 6. LOG 43.86 7. BR. NO. 3370 B
8. FEATURE INTERSECTED over S.H. 181
9. BRIDGE ON HIGHWAY I-55
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85° F
2:15 P.m. 14. WEATHER CONDITIONS Hazy / Sunny

Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A ₁ - A ₅	2	6	6	7	8	8
B ₁	3	6	6	7	6	8
B ₂ - B ₅	3	7	7	7	6	8
C ₁	2	6	6	7	6	8
C ₂ - C ₅	2	7	7	7	7	8
J ₁ - J ₅	2	7	7	7	7	8
K ₁ - K ₅	3	7	7	7	6	8
L ₁ - L ₅	2	5	6	6	8	5

Anchor Bolts Galvanized - Yes No

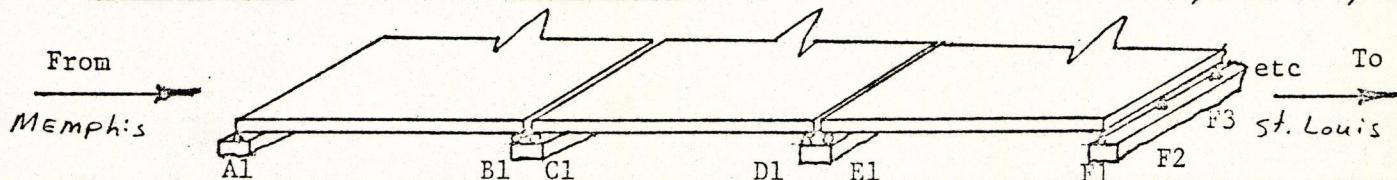
Comments

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE I-55 5. SEC. 12 6. LOG 48.28 7. BR. NO. 3289 A
 8. FEATURE INTERSECTED State Hwy. 140
 9. BRIDGE ON HIGHWAY I-55 OVER S.H. 140
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85° 14. WEATHER CONDITIONS Hazy - Sunny



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A5	1	6	7	7	8	8
B1-B5	3	7	7	7	7	8
C1-C5	2	7	7	7	7	8
D1-D5	3	7	7	7	8	8
E1-E5	3	7	7	7	7	8
F1-F5	1	6	7	7	8	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B-C	2	OK		.525"				
D-E	2	OK		2.060"	FIXED	Both BEAM ENDS		

Anchor Bolts Galvanized - Yes No

Comments All Rockers open

All C rust breaking through what looks like new or
not too old of repainting

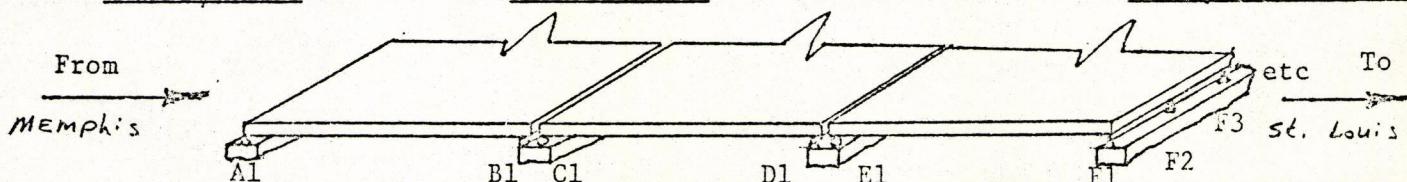
Joints & R's on top ok

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi 47
 4. ROUTE I-55 5. SEC. 12 6. LOG 48.29 7. BR. NO. 32893
 8. FEATURE INTERSECTED STATE 140
 9. BRIDGE ON HIGHWAY I-55 OVER S.H. 140
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85° 14. WEATHER CONDITIONS Hazy-Sunny



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonry Bearing Are
A1 - A5	1	6	7	7	8	8
B1 - B5	3	7	7	7	7	8
C1 - C5	2	7	7	7	6	8
D1 - D5	3	7	7	7	7	8
E1 & E5	3	7	7	7	7	8
F2 - F4	3	7	7	7	6	8
F1 - F3 & F5	1	6	6	7	8	8
F4	1	6	6	7	7	8

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
B C	2	OK		0.634"				
D E	2	OK		2.084"				

Anchor Bolts Galvanized - Yes No

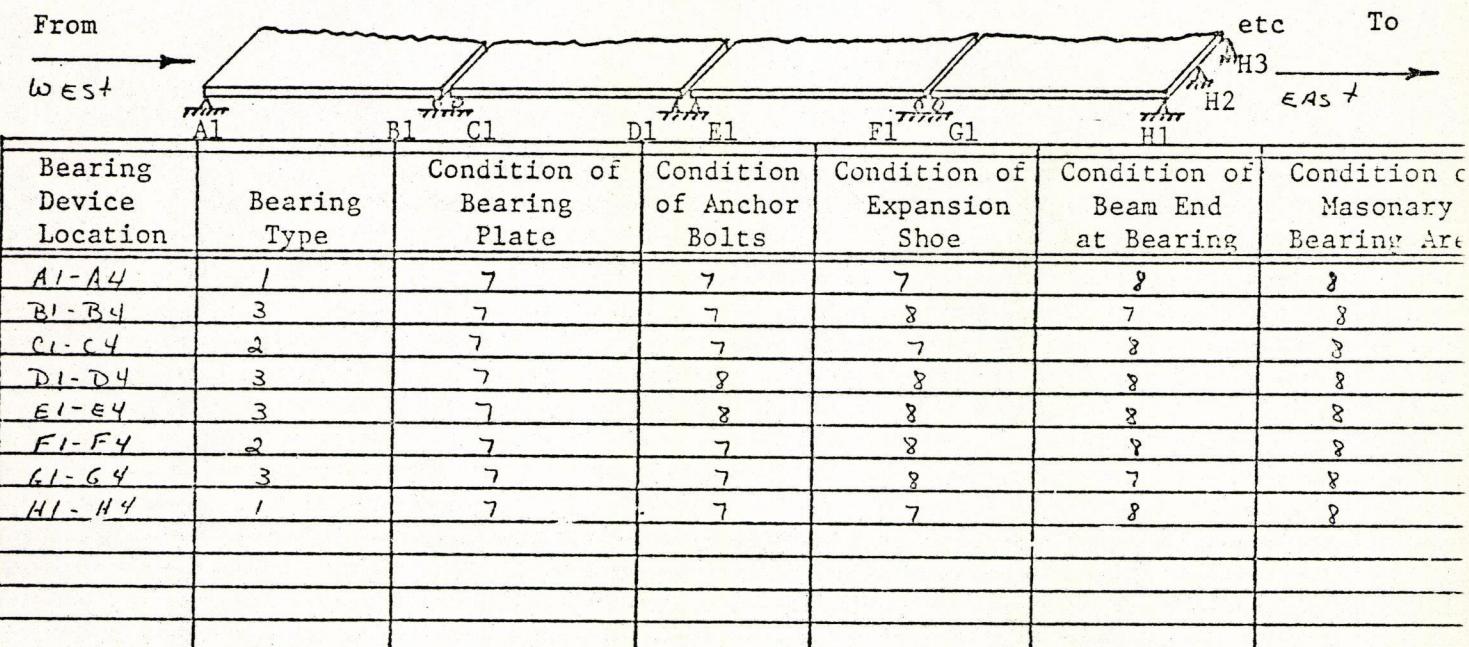
Comments Joints & R's on top ok

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
4. ROUTE County Road 5. SEC. 12 6. LOG 55.16 7. BR. NO. 3282
8. FEATURE INTERSECTED OVER I-55
9. BRIDGE ON HIGHWAY County Road CALLED Tuckertown GRADE SEPARATION
10. YEAR BUILT 1961 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85° 14. WEATHER CONDITIONS Hazy - Sunny
3:15 PM



Anchor Bolts Galvanized - Yes No

Comments MASONRY CHIPPED out to Evidently LEVEL BEAM DURING
construction at A2 & A3. Also occurred at other locations,
otherwise masonry OK

Guard Rail on south side Broken

Paint Peeling on Beam 3 Between C & D

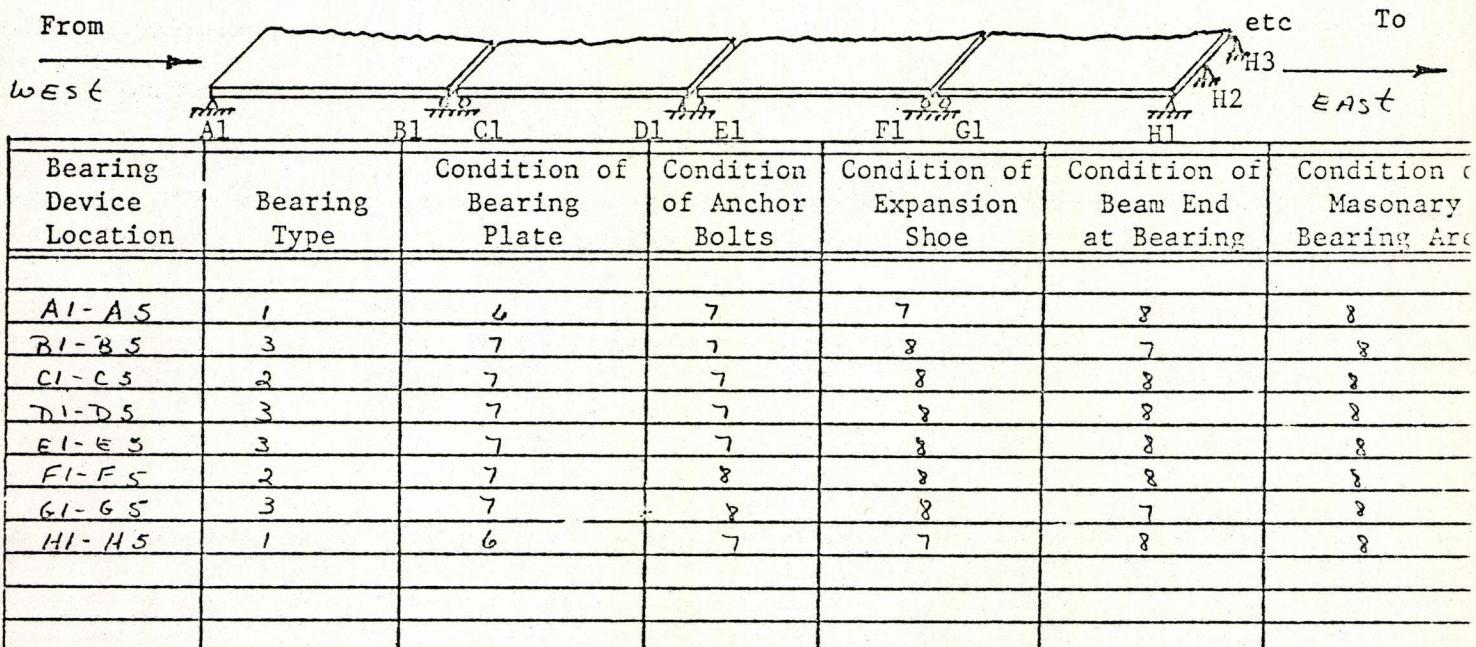
Ri, K

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
4. ROUTE S.H. 312 5. SEC. 12 6. LOG 61.97 7. BR. NO. 3287
8. FEATURE INTERSECTED OVER I-55
9. BRIDGE ON HIGHWAY S.H. 312 LEMSFORD GRADE SEPARATION
10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 85°F 14. WEATHER CONDITIONS Hazy - Sunny
3:40 P.M.



Anchor Bolts Galvanized - Yes No

Comments

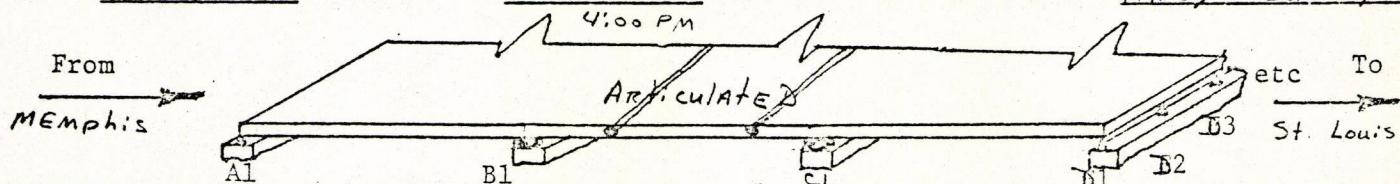
COVER R's on top of BRIDGE OK EXPANSION Room OK

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE I-55 5. SEC. 12 6. LOG 63.29 7. BR. NO. 3162A
 8. FEATURE INTERSECTED OVER U.S. 61 AT Blytheville
 9. BRIDGE ON HIGHWAY I-55
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 84 °F 14. WEATHER CONDITIONS Hazy - Sunny



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Area
A1-A5	1	6	7	7	3	8
B1-B5	3	7	8	8	8*	8
C1-C5	3	7	7	8	8*	8
D1-D5	1	7	7	8	8	7

*Beam ends evaluated at joint rather than at bearing since for this design, they do not occur at the same location.

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
No Joints At	SUPPORTS							

Anchor Bolts Galvanized - Yes / No \

Comments D4 - nut partially off

Articulated DESIGN HAS CENTER SPAN simple BEAM with BOTH ENDS SPANS CANTILEVERED. THE SOUTH Joint IS A HINGE AND THE NORTH Joint is A PIN.

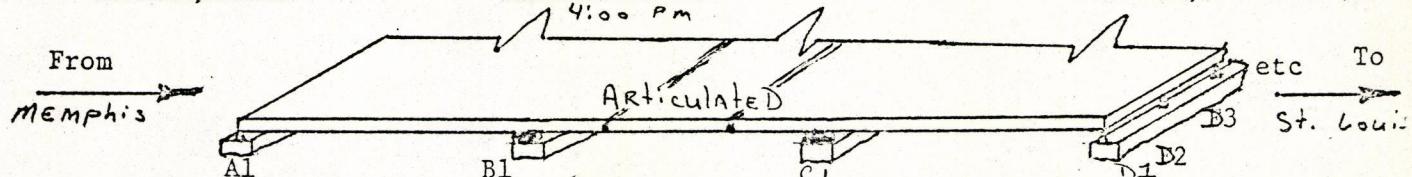
Joint EXPANSION SPACE ON top of Bridge by COVER IT's LOOKED MARGINAL for a REAL "hot" DAY. Joint R would RIDE UP on CONCRETE Some SPALLING indicated THIS May BE HAPPENING.

BRIDGE BEARING & JOINT INSPECTION

IDENTIFICATION:

1. STATE Arkansas 2. DIST. 10 3. COUNTY Mississippi (47)
 4. ROUTE I-55 5. SEC. 12 6. LOG 63.28 7. BR. NO. 3162 B
 8. FEATURE INTERSECTED over U.S. 61 at Blytheville
 9. BRIDGE ON HIGHWAY I-55
 10. YEAR BUILT 1962 11. MAIN SPAN (TYPE) I-Beam

12. DATE 9/29/78 13. TEMP. 84°F 14. WEATHER CONDITIONS Hazy - Sunny



Bearing Device Location	Bearing Type	Condition of Bearing Plate	Condition of Anchor Bolts	Condition of Expansion Shoe	Condition of Beam End at Bearing	Condition of Masonary Bearing Are
A1-A5	1	7	7	7	8	8
B1-B5	3	7	7	8	8 *	8
C1-C5	3	7	7	8	8 *	8
D1-D5	1	7	7	7	8	8
D2-D4	1	6	6	7	8	7
* Same as 3162 A						

Expansion Joint Location	Type	Condition of Joint Device	Width of Joint Measured Under Bridge			Width of Joint Measured on Top of Bridge		
			Near Side	Center	Far Side	Near Side	Center	Far Side
No Joints At		supports						

Anchor Bolts Galvanized - Yes No

Comments At pinned joint - steel rated 7
At hinged joint - " " "

SEE note on 3162 A about joints. Applies to this bridge also.

A P P E N D I X C

COMPUTER PROGRAM

"BRIDGE"

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DIMENSION ID(150),IC(150),HW(150),IX(150),IO(150),IB(150),HY(150),
IAL(150),IY(150),IBT(150),IJ(150),IPL(18,9),ISH(18,9),IBL(18,9),IBE
2(18,9),IMA(18,9),CT1(75),CT2(75),CT3(75),CT4(75),RG1(2),RG2(2),RG3
3(2),RJ1(4),RJ2(4),RJ3(4),APL(150),ABL(150),ASH(150),ABE(150),AMA(1
450),ABV(150),STR(150),BOUT(150),BIN(150),PLOUT(150),PLIN(150),SHOU
ST(150),SHIN(150),COOUT(150),COIN(150),BMOUT(150),BMIN(150),ALLOT(1
650),ALLTN(150)
IR=16
IW=17
READ(IR,80)(CT1(I),CT2(I),CT3(I),CT4(I),I=1,75)
80 FORMAT(6(4A3,1X),2X)
READ(IR,82)((RG1(I),RG2(I),RG3(I),I=1,2),(RJ1(I),RJ2(I),RJ3(I),I=1
1,4))
82 FORMAT(18A3)
WRITE(IW,92)
WRITE(IW,89)
WRITE(IW,38)
WRITE(IW,89)
38 FORMAT(/30X,'OUTPUT OF CONDITION RATINGS IN ORDER OF DATA INPUT')
WRITE(IW,84)
WRITE(IW,85)
WRITE(IW,86)
84 FORMAT(//'* HWY COUNTY BRIDGE BRIDGE BRIDGE YE
1AR TYPE OF TYPE OF ANCHOR BEARING BEARING END OF MASONA
2RY OVERALL ')
85 FORMAT(' DISTRICT ON OVER NUMBER BUILT
1 ANCHOR EXPANSION BOLT PLATE DEVICE BEAM BEARING
2 RATING ')
86 FORMAT(' HWY HWY
1 BOLTS JOINT RATING RATING RATING RATING RATING'
2)
READ(IR,88)N&R
88 FORMAT(I3)
ITB4=0
ITB5=0
ITB6=0
ITB7=0
ITB8=0
ITP4=0
ITP5=0
ITP6=0
ITP7=0
ITP8=0
ITS4=0
ITS5=0
ITS6=0
ITS7=0
ITS8=0
ITN4=0
ITN5=0
ITN6=0
ITN7=0
ITN8=0
ITC4=0
ITC5=0
ITC6=0
ITC7=0
ITC8=0
DO 18 L=1,N&R
READ(IR,81)ID(L),IC(L),HW(L),IX(L),HY(L),IO(L),IB(L),AL(L),IY(L),
IJ(L),IBT(L),NH,NS
WRITE(10,120)IR(L),AL(L),NH,NS

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112)
READ (R,N3)((IPL(J,K),IBL(J,K),ISH(J,K),IBE(J,K),IMA(J,K),K=1,NB),
1J=1,NS)
83 FORMAT(60I1)
IB4=0
IB5=0
IB5=0
IB6=0
IB7=0
IB8=0
IP4=0
IP5=0
IP6=0
IP7=0
IP8=0
IS4=0
IS5=0
IS6=0
IS7=0
IS8=0
IN4=0
IN5=0
IN6=0
IN7=0
IN8=0
IC4=0
IC5=0
IC6=0
IC7=0
IC8=0
APL(L)=0
ASH(L)=0
ABE(L)=0
AMA(L)=0
ABL(L)=0
BOUT(L)=0
BIN(L)=0
PLOUT(L)=0
PLIN(L)=0
SHOUT(L)=0
SHIN(L)=0
COOUT(L)=0
COIN(L)=0
BMOUT(L)=0
BMIN(L)=0
ALLOT(L)=0
ALLIN(L)=0
DO 12 K=1,NB
DO 12 J=1,NS
IF(J.EQ.1) GO TO 23
IF(J.EQ.NS) GO TO 23
BIN(L)=BIN(L)+IBL(J,K)
PLIN(L)=PLIN(L)+IPL(J,K)
SHIN(L)=SHIN(L)+ISH(J,K)
COIN(L)=COIN(L)+IMA(J,K)
BMIN(L)=BMIN(L)+IBE(J,K)
GO TO 24
23 BOUT(L)=BOUT(L)+IBL(J,K)
PLOUT(L)=PLOUT(L)+IPL(J,K)
SHOUT(L)=SHOUT(L)+ISH(J,K)
COOUT(L)=COOUT(L)+IMA(J,K)
BMOUT(L)=BMOUT(L)+IBE(J,K)
24 CONTINUE
IF(IBL(J,K).EQ.4) IB4=IB4+1
IF(IBL(J,K).EQ.5) IB5=IB5+1

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```

IF(IBL(J,K).EQ.6) IB6=IB6+1
IF(IBL(J,K).EQ.7) IB7=IB7+1
IF(IBL(J,K).EQ.8) IB8=IB8+1
IF(IPL(J,K).EQ.4) IP4=IP4+1
IF(IPL(J,K).EQ.5) IP5=IP5+1
IF(IPL(J,K).EQ.6) IP6=IP6+1
IF(IPL(J,K).EQ.7) IP7=IP7+1
IF(IPL(J,K).EQ.8) IP8=IP8+1
IF(ISH(J,K).EQ.4) IS4=IS4+1
IF(ISH(J,K).EQ.5) IS5=IS5+1
IF(ISH(J,K).EQ.6) IS6=IS6+1
IF(ISH(J,K).EQ.7) IS7=IS7+1
IF(ISH(J,K).EQ.8) IS8=IS8+1
IF(IBE(J,K).EQ.4) IN4=IN4+1
IF(IBE(J,K).EQ.5) IN5=IN5+1
IF(IBE(J,K).EQ.6) IN6=IN6+1
IF(IBE(J,K).EQ.7) IN7=IN7+1
IF(IBE(J,K).EQ.8) IN8=IN8+1
IF(IMA(J,K).EQ.4) IC4=IC4+1
IF(IMA(J,K).EQ.5) IC5=IC5+1
IF(IMA(J,K).EQ.6) IC6=IC6+1
IF(IMA(J,K).EQ.7) IC7=IC7+1
IF(IMA(J,K).EQ.8) IC8=IC8+1
APL(L)=APL(L)+PL(J,K)
ASH(L)=ASH(L)+ISH(J,K)
ABE(L)=ABE(L)+IBE(J,K)
AMA(L)=AMA(L)+IMA(J,K)
12 ABL(L)=ABL(L)+IBL(J,K)
ITB4=ITB4+IB4
ITB5=ITB5+IB5
ITB6=ITB6+IB6
ITB7=ITB7+IB7
ITB8=ITB8+IB8
ITP4=ITP4+IP4
ITP5=ITP5+IP5
ITP6=ITP6+IP6
ITP7=ITP7+IP7
ITP8=ITP8+IP8
ITS4=ITS4+IS4
ITS5=ITS5+IS5
ITS6=ITS6+IS6
ITS7=ITS7+IS7
ITS8=ITS8+IS8
ITN4=ITN4+IN4
ITN5=ITN5+IN5
ITN6=ITN6+IN6
ITN7=ITN7+IN7
ITN8=ITN8+IN8
ITC4=ITC4+IC4
ITC5=ITC5+IC5
ITC6=ITC6+IC6
ITC7=ITC7+IC7
ITC8=ITC8+IC8
XA=NR*NS
XOUT=2.*NB
XIN=XA-XOUT
BIN(L)=BIN(L)/XIN
PLIN(L)=PLIN(L)/XIN
SHIN(L)=SHIN(L)/XIN
COIN(L)=COIN(L)/XIN
BMIN(L)=BMIN(L)/XIN
BOUT(L)=BOUT(L)/XOUT
PLOUT(L)=PLOUT(L)/XOUT
SHOUT(L)=SHOUT(L)/XOUT
COOUT(L)=COOUT(L)/XOUT

```

```

ALLIN(L)=(BIN(L)+PLIN(L)+SHIN(L)+COIN(L)+BMIN(L))/5.
ALLOT(L)=(BOUT(L)+PLOUT(L)+SHOUT(L)+COUT(L)+BMOUT(L))/5.
APL(L)=APL(L)/XA
ASH(L)=ASH(L)/XA
ABE(L)=ABE(L)/XA
AMA(L)=AMA(L)/XA
ABL(L)=ABL(L)/XA
ABV(L)=(APL(L)+ABL(L)+ASH(L)+ABE(L)+AMA(L))/5.
LJ=IBT(L)
LI=IJ(L)
LL=IC(L)
IF(L .EQ. 45) WRITE(IW,70)
70 FORMAT(////////)
      WRITE(IW,87) ID(L),CT1(LL),CT2(LL),CT3(LL),CT4(LL),HW(L),IX(L),HY(L
1),IO(L),IB(L),AL(L),IY(L),RG1(LJ),RG2(LJ),RG3(LJ),RJ1(LI),RJ2(LI),
2RJ3(LI),ABL(L),APL(L),ASH(L),ABE(L),AMA(L),ABV(L)
87 FORMAT( 3X,I2,5X,43,2X,A3,I3,4X,A3,I3,4X,I4,A1,3X,I4,3A3,1X,3A
13,F6.2,5F9.2)
18 CONTINUE
      WRITE(IW,92)
      WRITE(IW,89)
      WRITE(IW,101)
      WRITE(IW,89)
101 FORMAT(/23X,'A COMPARISON OF THE ABUTEMENT CONDITION RATINGS WITH
1THE INTERIOR CONDITION RATINGS',/)
99 FORMAT(/)
      WRITE(IW,96)
      WRITE(IW,97)
      WRITE(IW,98)
96 FORMAT(///' COUNT    BRIDGE          ANCHOR          BEARING
1     BEARING          BF&M          CONCRETE          8
2BRIDGE')
97 FORMAT('          NUMBER          BOLTS          PLATES
1     DEVICE          ENDS          CAP          AVER
2AGE')
98 FORMAT(23X,'ABUT. INT.          ABUT. INT.          ABUT. INT.
1     ABUT. INT.          ABUT. INT.          ABUT. INT.')
      BRIDN=0
      BRIDD=0
      BEAMN=0
      BEAMU=0
      CONCN=0
      CONCO=0
      SHOEN=0
      SHOEU=0
      PLATN=0
      PLATO=0
      BOLTN=0
      BOLTG=0
      DO 25 I=1,NBR
      BRIDN=BRIDN+ALLIN(I)
      BRIDD=BRIDD+ALLOT(I)
      BEAMN=BEAMN+BMIN(I)
      BEAMU=BEAMU+BMIN(I)
      CONCN=CONCN+COIN(I)
      CONCO=CONCO+COUT(I)
      SHOEN=SHOEN+SHIN(I)
      SHOEU=SHOEU+SHOUT(I)
      PLATN=PLATN+PLIN(I)
      PLATO=PLATO+PLOUT(I)
      BOLTN=BOLTN+BIN(I)
      BOLTG=BOLTG+BOUT(I)
      IF (I .EQ. 47) WRITE(IW,70)
25 WRITE(IW,94) I,BRIDN(I),ALLOT(I),BIN(I),PLOUT(I),PLIN(I),SHOUT(I
1,SHIN(I),BMOUT(I),BMIN(I),COUT(I),COIN(I),ALLOT(I),ALLIN(I))

```

```

BRIDN=BRIDN/NBR
BRIDO=BRIDO/NBR
BEAMN=BEAMN/NBR
BEAMO=BEAMO/NBR
CONCN=CONCN/NBR
CONCO=CONCO/NBR
SHOEN=SHOEN/NBR
SHOE0=SHOE0/NBR
PLATN=PLATN/NBR
PLATO=PLATO/NBR
BOLTN=BOLTN/NBR
BOLTO=BOLTO/NBR
WRITE(IW,99)
WRITE(IW,89)
WRITE(IW,89)
WRITE(IW,95)BOLTO,BOLTN,PLATO,PLATN,SHOE0,SHOEN,BEAMO,BEAMN,CONCO,
2CONCN,BRIDO,BRIDN
95 FORMAT(3X,'AVERAGES ARE',9X,6(F4.2,3X,F4.2,8X)/)
WRITE(IW,92)
WRITE(IW,89)
WRITE(IW,60)
60 FORMAT(18X,'A COMPARISON OF THE BRIDGE RATINGS ARRANGED BY AGE')
WRITE(IW,89)
WRITE(IW,61)
WRITE(IW,62)
WRITE(IW,63)
61 FORMAT(//' NUMBER      YEAR OF',8X, 'ANCHOR      BEARING      BEAR
IING      END OF      MASONARY      OVERALL')
62 FORMAT('      OF      CONSTRUCTION      BOLT      PLATE      DEVIC
IE       BEAM      BEARING      RATING')
63 FORMAT('      BRIDGES      RATING      RATING      RATING
1G       RATING      RATING')
IYEAR=1956
26 NC=0
BOLT=0.
PLATE=0.
SHOE=0.
BEAM=0.
CONCR=0.
TOTAL=0.
IYEAR=IYEAR+1
DO 28 I=1,NBR
IF(IYEAR .NE. IY(I))GO TO 28
NC=NC+1
BOLT=BOLT+ABL(I)
PLATE=PLATE+APL(I)
SHOE=SHOE+ASH(I)
BEAM=BEAM+ABE(I)
CONCR=CONCR+AMA(I)
TOTAL=TOTAL+ABV(I)
28 CONTINUE
IF (NC .EQ. 0)GO TO 27
BOLT=BOLT/NC
PLATE=PLATE/NC
SHOE=SHOE/NC
BEAM=BEAM/NC
CONCR=CONCR/NC
TOTAL=TOTAL/NC
27 WRITE(IW,64)NC,IYEAR,BOLT,PLATE,SHOE,BEAM,CONCR,TOTAL
64 FORMAT(16,10X,14,6F13.2)
IF (IYEAR .LT. 1973) GO TO 26
WRITE(IW,89)
WRITE(IW,89)
DO 19 N=1,10
NUM=0

```

```

BOLTS=0
PLATES=0
DEVICE=0
BEAM=0
CONCR=0
BRIDGE=0
89 FORMAT('*****'
1*****'
2*****')
90 FORMAT(/47X,'BRIDGE DATA FOR HIGHWAY DISTRICT',I3,/)
NCT=0
DO 13 L=1,NBR
IF (N .NE. ID(L)) GO TO 13
NCT=NCT+1
IF (NCT .GT. 1) GO TO 15
WRITE(IW,92)
92 FORMAT(1H1)
WRITE(IW,89)
WRITE(IW,90)
WRITE(IW,89)
WRITE(IW,84)
WRITE(IW,85)
WRITE(IW,86)
15 LJ=IST(L)
LI=IJ(L)
LL=IC(L)
WRITE(IW,47)ID(L),CT1(LL),CT2(LL),CT3(LL),CT4(LL),HW(L),IX(L),HY(L)
1),IO(L),IR(L),AL(L),IY(L),RG1(LJ),RG2(LJ),RG3(LJ),RJ1(LI),RJ2(LI),
2RJ3(LI),ABL(L),APL(L),ASH(L),AHE(L),AMA(L),ABV(L)
47 FORMAT(/3X,I2,5X,4A3,2X,A3,I3,4X,A3,I3,4X,I4,A1,3X,I4,3X,3A3,1X,3A
13,F6.2,5F9.2)
NUM=NUM+1
AYEAR=AYEAR+IY(L)
BOLTS=BOLTS+A2L(L)
PLATES=PLATES+APL(L)
DEVICE=DEVICE+ASH(L)
BEAM=BEAM+AHE(L)
CONCR=CONCR+AMA(L)
BRIDGE=BRIDGE+ABV(L)
13 CONTINUE
IF (NUM.EQ.0)GO TO 14
AYEAR=AYEAR/NUM
BOLTS=BOLTS/NUM
PLATES=PLATES/NUM
DEVICE=DEVICE/NUM
BEAM=BEAM/NUM
CONCR=CONCR/NUM
BRIDGE=BRIDGE/NUM
WRITE(IW,99)
WRITE(IW,89)
WRITE(IW,89)
WRITE(IW,74)AYEAR,BOLTS,PLATES,DEVICE,BEAM,CONCR,BRIDGE
74 FORMAT(/9X,'AVERAGE VALUES FOR THIS DISTRICT ARE',7X,F6.1,20X,F6.2
1,5F9.2,/)

14 CONTINUE
WRITE(IW,92)
WRITE(IW,89)
WRITE(IW,93)
93 FORMAT(/40X,'BRIDGES LISTED FROM WORST OVERALL RATING TO BEST')
WRITE(IW,89)
WRITE(IW,84)
WRITE(IW,85)
WRITE(IW,86)

```

```

20 STR(I)=ABV(I)
 00 22 J=1,NBR
 SMALL=9.
 00 21 I=1,NBR
 IF(STR(I).GT.SMALL) GO TO 21
 SMALL=STR(I)
 M=I
21 CONTINUE
 LJ=IBT(M)
 LI=IJ(M)
 LL=IC(M)
 IF(J .EQ. 45) WRITE(IW,70)
 WRITE(IW,87) ID(M),CT1(LL),CT2(LL),CT3(LL),CT4(LL),HW(M),IX(M),HY(M
 1),IO(M),IB(M),AL(M),IY(M),RG1(LJ),RG2(LJ),RG3(LJ),RJ1(LI),RJ2(LI),
 2RJ3(LI),ABL(M),APL(M),ASH(M),ABE(M),AMA(M),ABV(M)
 STR(M)=20.
22 CONTINUE

```

SCAN THE ANCHOR BOLTS AND PRINT OUT THE BRIDGE DATA IF THE BRIDGE

```

HAS A BOLT RATING OF 4 OR LESS
WRITE (IW,92)
WRITE (IW,89)
WRITE (IW,110)
WRITE (IW,111)
WRITE (IW,89)
WRITE (IW,112)
110 FORMAT(38X,'COMPARING BRIDGES ON THE INTERSTATE SYSTEM')
111 FORMAT(40X,'TO THOSE CROSSING OVER THE INTERSTATE')
112 FORMAT(//5X,'SCANNING THE ANCHOR BOLT RATINGS//')
102 FORMAT(2X,'DISTRICT',I3,5X,'BRIDGE NUMBER',IS,A1,5X,'YEAR BUILT',I
 15,5X,'LOCATION OF BOLT',I2,'-',I2)

```

THIS PART OF THE PROGRAM COMPARES THE BRIDGES OVER INTERSTATES TO THE

```

BRIDGES ON INTERSTATES.
AYEAR=0.
BYEAR=0.
CYEAR=0
NUM=0
NCT=0
NCOINT=0
KOUNT=0
AVG1=0
AVG2=0
AVG3=0
FOR L=1,NBR
IF(HW(L).EQ.' I-')
NUM=NUM+1
AYEAR=AYEAR+IY(L)
AVG1=AVG1+ABV(L)
END IF
IF(HY(L).EQ.' I-')
NCT=NCT+1
BYEAR=BYEAR+IY(L)
AVG2=AVG2+ABV(L)
END IF
IF(HW(L).EQ.' CTY')
KOUNT=KOUNT+1
CYEAR=CYEAR+IY(L)
AVG3=AVG3+ABV(L)

```

```

END IF
END FOR
AVGE1=AVG1/NUM
AVGE2=AVG2/NCT
AVGE3=AVG3/KOUNT
AYEAR1=AYEAR/NUM
BYEAR1=BYEAR/NCT
CYEAR1=CYEAR/KOUNT
WRITE(IN,35)NUM,AYEAR1,AVGE1
35 FORMAT(15(/),30X,'NUMBER OF BRIDGES ON INTERSTATES IS',I4,/,38X,'  

1AVERAGE YEAR IS',F9.1,/,37X,'AVERAGE VALUE IS',F10.2)
WRITE(IN,36)NCT,BYEAR1,AVGE2
36 FORMAT(//,29X,'NUMBER OF BRIDGES OVER INTERSTATES IS',I4,/,38X,'  

1AVERAGE YEAR IS',F9.1,/,37X,'AVERAGE VALUE IS',F10.2)
WRITE(IN,37)KOUNT,CYEAR1,AVGE3
37 FORMAT(//,30X,'NUMBER OF BRIDGES ON COUNTY ROADS IS',I4,/,38X,'  

1AVERAGE YEAR IS',F9.1,/,37X,'AVERAGE VALUE IS',F10.2)
WRITE(IN,82)
WRITE(IN,89)
WRITE(IN,200)
WRITE(IN,89)
200 FORMAT(/20X,'A PRINTOUT OF THE RATINGS DISTRIBUTION FOR EACH BRIDG  

1E COMPONENT EXAMINED')
WRITE(IN,201)
WRITE(IN,202)
WRITE(IN,203)
WRITE(IN,204)
WRITE(IN,205)
WRITE(IN,206)
WRITE(IN,207)
WRITE(IN,208)
WRITE(IN,209)
WRITE(IN,210)
201 FORMAT(////25X,'RATING CODE DESCRIPTIONS'//)
202 FORMAT(30X,'3 GOOD CONDITION WITH INSIGNIFICANT RUST IF ANY. FO  

1R')
203 FORMAT(34X,'CONCRETE, INSIGNIFICANT CRACKING OR SPALLING')
204 FORMAT(/30X,'7 LIGHT RUST BUT NOT SUFFICIENT TO WARRANT IMMEDIATE  

1TE REQUEST FOR')
205 FORMAT(34X,'PAINTING. FOR CONCRETE, SLIGHT CRACKING OR SPALLING.'  

1)
206 FORMAT(/30X,'6 VERY RUSTY. NEEDS CLEANING AND PAINTING.')
207 FORMAT(34X,'FOR CONCRETE, MODERATE CRACKING OR SPALLING')
208 FORMAT(/30X,'5 LAYERS OF RUST WITH SUBSTANTIAL DELAMINATING OF M  

1ETAL.')
209 FORMAT(34X,'FOR CONCRETE, WIDE SPREAD SPALLING OR CRACKING')
210 FORMAT(/30X,'4 FAILED OR CORRODED TO THE POINT OF FAILURE')
WRITE(IN,211)
WRITE(IN,212)
211 FORMAT(/////52X,'CODE DISTRIBUTION TABLE')
212 FORMAT(36X,'4',9X,'5',9X,'6',9X,'7',8X,'8')
213 FORMAT(//10X,'ANCHOR BOLTS',5X,5I12)
WRITE(IN,213)ITB4,ITB5,ITB6,ITB7,ITB8
WRITE(IN,214)ITP4,ITP5,ITP6,ITP7,ITP8
WRITE(IN,215)ITS4,ITS5,ITS6,ITS7,ITS8
WRITE(IN,216)ITN4,ITN5,ITN6,ITN7,ITN8
WRITE(IN,217)ITC4,ITC5,ITC6,ITC7,ITC8
214 FORMAT(/10X,'BEARING PLATES',3X,5I12)
215 FORMAT(/10X,'SHOES',12X,5I12)
216 FORMAT(/10X,'BEAM END',9X,5I12)
217 FORMAT(/10X,'CONCRETE',9X,5I12)
STOP
END

```

***** OUTPUT OF CONDITION RATINGS IN ORDER OF DATA INPUT *****

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Year Built	Type of Anchor Bolts	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Bearing Rating	Masonry Rating	Overall Rating
10	MISSISSIPPI CRITTENDEN	I- 55 CITY 0	US- 61 I- 55	3162A 1963	UNGALV. UNGALV.	PLATE	7.25 7.50	6.75 7.13	7.75 7.75	8.00 8.00	7.75 7.84	7.50 7.64
10	MISSISSIPPI	I- 55	US- 61	3162B 1962	UNGALV. UNGALV.	PLATE	6.85 7.25	6.85 7.25	7.50 7.75	8.00 8.00	7.85 7.75	7.41 7.50
10	MISSISSIPPI	SH-112	I- 55	3287 1962	UNGALV. UNGALV.	PLATE	7.25 7.00	6.75 6.67	7.75 7.00	8.00 8.00	7.75 7.63	7.52 7.52
10	MISSISSIPPI	CITY 0	I- 55	3282 1961	UNGALV. UNGALV.	PLATE	7.25 7.00	6.75 6.67	7.75 7.00	8.00 8.00	7.75 7.50	7.52 7.52
10	MISSISSIPPI	I- 55	SH-140	3289A 1962	UNGALV. UNGALV.	PLATE	7.00 6.63	7.00 6.38	7.50 7.25	8.00 8.00	8.00 7.13	7.23 7.07
10	MISSISSIPPI	I- 55	SH-181	3310A 1962	UNGALV. UNGALV.	PLATE	6.83 6.63	6.67 6.38	7.00 7.00	8.00 8.00	8.00 7.03	7.00 7.11
10	MISSISSIPPI	I- 55	SH-140	3289B 1962	UNGALV. UNGALV.	PLATE	6.60 6.43	6.60 6.43	6.83 6.83	6.97 6.97	8.00 8.00	6.97 6.97
10	MISSISSIPPI	I- 55	SH-181	3310B 1961	UNGALV. UNGALV.	PLATE	7.33 7.33	7.80 7.80	6.67 6.67	8.00 8.00	7.55 7.55	7.55 7.55
10	MISSISSIPPI	SH- 14	I- 55	3183 1961	UNGALV. UNGALV.	PLATE	7.00 6.97	6.75 6.75	7.75 7.63	8.00 8.00	7.42 7.42	7.42 7.42
10	MISSISSIPPI	FAS2:8	I- 55	3182 1961	UNGALV. UNGALV.	PLATE	7.00 6.97	6.75 6.75	7.75 7.63	8.00 8.00	7.00 7.00	7.52 7.52
10	MISSISSIPPI	SH- 81	I- 55	3180 1961	UNGALV. UNGALV.	PLATE	7.07 6.82	7.10 7.10	7.67 7.67	8.00 8.00	7.97 7.97	7.53 7.53
10	MISSISSIPPI	SH-308	I- 55	3213 1960	UNGALV. UNGALV.	PLATE	7.50 7.50	7.13 7.13	8.00 8.00	8.00 8.00	7.69 7.69	7.36 7.36
10	CRAIGHEAD	US- 63	OTH 0	5207B 1970	GALV. UNGALV.	NEOPREME	7.90 5.95	7.90 5.75	8.00 7.00	8.00 8.00	8.00 7.97	7.96 7.97
6	PULASKI	CITY 0	US- 67	3058A 1960	UNGALV. UNGALV.	PLATE	6.63 6.63	6.83 6.83	7.43 7.37	8.00 8.00	8.00 7.42	6.79 6.75
6	PULASKI	US- 67	CITY 0	3058B 1960	UNGALV. UNGALV.	PLATE	6.93 6.93	6.67 6.67	7.43 7.33	8.00 8.00	8.00 7.39	7.25 7.25
6	PULASKI	US- 67	CITY 0	3056A 1960	UNGALV. UNGALV.	PLATE	6.59 6.59	6.19 6.19	7.75 7.75	8.00 8.00	8.00 7.23	7.23 7.23
6	LONKE	SH- 15	I- 40	3222A 1963	UNGALV. UNGALV.	PLATE	7.95 7.40	7.40 7.40	7.92 7.92	8.00 8.00	8.00 7.85	7.36 7.36
6	LONKE	CITY 0	I- 40	3656 1963	UNGALV. UNGALV.	PLATE	7.95 7.40	7.40 7.40	7.92 7.92	8.00 8.00	8.00 7.95	7.96 7.96
6	PRairie	I- 40	RR 0	3711A 1965	GALV. GALV.	PLATE	7.75 7.75	7.00 7.00	7.00 7.00	8.00 8.00	8.00 7.23	6.79 6.79
1	MONROE	US- 49	I- 40	3730 1966	GALV. GALV.	PLATE	7.00 7.00	7.38 7.38	7.43 7.43	8.00 8.00	8.00 8.00	7.25 7.25
1	ST. FRANCIS	CITY 0	I- 40	3768 1965	GALV. GALV.	PLATE	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	7.88 7.88
1	ST. FRANCIS	I- 40	SH- 1	3619A 1965	GALV. GALV.	PLATE	7.25 7.43	6.63 6.43	7.34 7.29	7.14 7.14	8.00 8.00	7.22 7.22
1	ST. FRANCIS	I- 40	SH- 1	3619A 1965	GALV. GALV.	PLATE	7.43 7.43	6.86 6.86	7.34 7.29	7.14 7.14	8.00 8.00	7.23 7.23
1	ST. FRANCIS	CITY 0	I- 40	3899 1965	GALV. GALV.	PLATE	7.75 7.00	7.00 7.00	7.92 7.92	8.00 8.00	8.00 8.00	7.85 7.85
1	CRITTIENDEN	SH-218	I- 40	3711A 1966	GALV. GALV.	PLATE	6.95 6.95	6.05 6.05	7.38 7.38	8.00 8.00	8.00 7.92	6.92 6.92
1	CRITTIENDEN	I- 40	SH-147	3108A 1962	UNGALV. UNGALV.	PLATE	5.98 5.98	5.75 5.75	6.82 6.82	7.00 7.00	7.00 7.00	7.52 7.52
1	CRITTIENDEN	I- 40	SH-147	3108B 1962	UNGALV. UNGALV.	PLATE	5.95 5.95	5.88 5.88	6.60 6.60	8.00 8.00	8.00 8.00	7.88 7.88
1	CRITTIENDEN	CITY 0	I- 40	3115 1962	UNGALV. UNGALV.	PLATE	5.90 6.20	6.00 6.20	7.30 7.30	8.00 8.00	8.00 8.00	6.90 6.90
1	CRITTIENDEN	CITY 0	I- 40	3117 1962	UNGALV. UNGALV.	PLATE	7.43 7.07	6.95 6.95	7.34 7.34	7.00 7.00	7.00 7.00	7.26 7.26
1	CRITTIENDEN	SH- 50	I- 55	3137 1958	UNGALV. UNGALV.	PLATE	7.03 5.67	7.00 7.00	7.95 7.95	8.00 8.00	8.00 8.00	7.75 7.75
1	CRITTIENDEN	SH- 63	I- 55	3122 1958	UNGALV. UNGALV.	PLATE	5.13 5.13	5.13 5.13	7.38 7.38	8.00 8.00	8.00 8.00	6.00 6.00
1	CRITTIENDEN	I- 55	US- 64	3131A 1960	UNGALV. UNGALV.	NEOPREME	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	5.97 5.97
1	CRITTIENDEN	I- 55	US- 64	3131B 1960	UNGALV. UNGALV.	NEOPREME	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	8.00 8.00	5.97 5.97
10	CHAIGHEAD	RR 0	5203B 1970	3117 1967	GALV. GALV.	NEOPREME	7.67 7.43	7.67 7.43	8.00 8.00	8.00 8.00	8.00 8.00	7.15 7.15
6	SALINE	SH- 35	I- 30	3142 1958	UNGALV. UNGALV.	PLATE	6.05 5.67	6.42 7.03	7.33 7.33	7.00 7.00	7.00 7.00	7.50 7.50
6	SALINE	SH- 67	I- 30	3092B 1958	UNGALV. UNGALV.	PLATE	5.45 5.45	5.82 5.82	6.15 6.15	7.00 7.00	7.00 7.00	6.23 6.23
6	SALINE	CITY 0	I- 30	3248 1963	UNGALV. UNGALV.	PLATE	6.95 5.47	6.95 6.20	7.17 6.67	8.00 8.00	8.00 8.00	7.22 6.57
6	HOT SPRINGS	I- 30	RH 0	3427A 1965	UNGALV. UNGALV.	PLATE	5.47 5.50	8.00 8.00	6.53 6.17	8.00 8.00	8.00 8.00	6.57 6.57
6	HOT SPRINGS	I- 30	RH 0	3428B 1965	UNGALV. UNGALV.	PLATE	5.47 5.47	8.00 8.00	6.67 6.17	8.00 8.00	8.00 8.00	6.67 6.67
6	HOT SPRINGS	SH-283	I- 30	3896 1967	GALV. GALV.	PLATE	8.00 7.34	8.00 7.34	8.00 8.00	8.00 8.00	8.00 8.00	7.88 7.88
7	CLARK	SH- 51	I- 30	3692 1965	GALV. GALV.	PLATE	7.75 7.45	6.88 6.88	7.57 7.57	8.00 8.00	8.00 8.00	7.53 7.53
7	CLARK	I- 30	SH- 7	3707A 1965	GALV. GALV.	PLATE	6.50 7.45	6.50 7.45	7.50 7.50	8.00 8.00	8.00 8.00	7.99 7.99
7	CLARK	I- 30	SH- 7	3707H 1965	GALV. GALV.	PLATE	6.50 7.47	6.50 7.47	7.57 7.57	8.00 8.00	8.00 8.00	7.10 7.41

A COMPARISON OF THE ABUTEMENT CONDITION RATINGS WITH THE INTERIOR CONDITION RATINGS

COUNT	BRIDGE NUMBER	ANCHOR ROLLS		BEARING PLATES		BEARING DEVICE		BEAM ENDS		CONCRETE CAP		BRIDGE	
		ABUT.	INT.	ABUT.	INT.	ABUT.	INT.	ABUT.	INT.	ABUT.	INT.	ABUT.	INT.
1	3162A	7.00	7.50	6.50	7.00	7.50	8.00	6.00	6.00	7.50	8.00	7.30	7.70
2	3211	7.00	7.67	6.25	7.42	7.00	8.00	6.00	7.79	8.00	8.00	7.25	7.77
3	3162B	6.70	7.00	6.70	7.00	7.00	8.00	6.00	8.00	7.70	8.00	7.22	7.60
4	3287	7.00	7.33	6.00	7.00	7.00	8.00	6.00	8.00	7.67	8.00	8.00	7.20
5	3282	7.00	7.33	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.40	7.57
6	3289A	7.00	7.00	6.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.20	7.25
7	3370A	6.00	6.83	5.00	6.83	7.00	7.00	8.00	8.00	8.00	8.00	8.00	8.00
8	3226B	6.50	7.00	6.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.20	7.25
9	3370B	6.00	6.90	5.50	6.90	7.00	7.00	7.00	7.00	7.00	7.00	6.80	7.17
10	3163	6.90	7.55	6.90	7.00	6.50	7.00	6.00	6.00	6.45	6.00	6.00	7.12
11	3182	7.00	7.00	6.00	7.00	7.40	8.00	7.50	7.75	7.50	8.00	6.00	7.05
12	3180	7.30	7.00	6.30	7.00	7.00	7.00	7.83	7.50	7.83	8.00	8.00	7.66
13	3213	7.00	7.67	6.50	7.33	7.30	7.00	7.03	7.03	7.00	7.00	7.10	7.53
14	5207B	7.86	7.93	7.86	7.93	8.00	8.00	8.00	8.00	7.67	8.00	7.97	7.32
15	3058	6.50	5.84	6.00	5.70	6.00	6.00	6.00	6.00	7.58	8.00	8.00	7.50
16	3150B	6.10	6.90	6.50	7.00	7.10	7.50	7.50	7.50	7.50	8.00	8.00	7.72
17	3056A	5.80	7.50	6.00	7.00	6.00	8.00	6.00	8.00	7.00	8.00	8.00	7.34
18	3224	6.50	6.63	6.00	6.25	7.00	7.00	7.00	7.00	7.00	8.00	8.00	7.36
19	3656	6.00	7.93	7.00	7.53	7.00	7.00	7.83	7.83	8.00	8.00	8.00	7.50
20	3111A	7.00	7.00	6.00	6.00	8.00	8.00	8.00	8.00	7.67	8.00	8.00	7.33
21	3770	6.00	7.67	6.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	8.00	7.27
22	3166	8.00	6.00	7.00	7.33	8.00	8.00	8.00	8.00	7.08	8.00	8.00	7.94
23	3619B	7.00	7.33	5.50	7.00	6.00	6.00	6.00	6.00	7.50	8.00	8.00	7.30
24	3619A	7.00	7.60	5.50	6.80	6.00	6.00	6.00	6.00	7.00	8.00	8.00	7.68
25	3659	8.00	7.67	7.00	7.00	8.00	8.00	8.00	8.00	7.50	8.00	8.00	7.87
26	3844	6.80	7.00	6.00	6.00	7.00	7.00	8.00	8.00	7.00	7.00	8.00	7.16
27	3108A	5.50	6.00	5.00	6.00	5.50	7.00	7.50	7.50	6.00	8.00	8.00	7.00
28	3106B	5.50	6.10	5.00	6.17	5.00	6.00	6.00	6.00	6.00	8.00	8.00	7.38
29	3115	5.60	6.10	6.00	6.00	6.00	6.00	6.00	6.00	6.13	8.00	8.00	7.50
30	3117	6.40	6.13	5.80	6.00	7.30	7.33	7.30	7.33	7.20	8.00	8.00	7.29
31	3137	5.10	8.00	5.00	6.00	6.00	6.00	6.00	6.00	7.00	8.00	8.00	6.82
32	3122	5.50	8.00	5.00	6.00	6.00	6.00	6.00	6.00	6.00	8.00	8.00	6.93
33	3131A	6.00	8.00	5.50	5.33	8.00	6.67	8.00	7.00	7.17	8.00	8.00	6.80
34	3131B	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	5.98
35	5203B	8.00	7.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	5.94
36	3142	7.00	5.66	7.00	7.79	8.00	8.00	8.00	8.00	8.00	8.00	8.00	6.25
37	3092B	6.20	5.30	7.00	6.30	7.00	6.00	6.00	6.00	7.20	8.00	8.00	6.25
38	3248	7.00	6.93	4.50	6.08	5.80	6.22	7.10	6.62	7.20	8.00	8.00	6.16
39	3428A	6.40	5.00	6.00	6.60	6.00	6.97	7.00	7.03	7.30	8.00	8.00	6.25
40	3428B	6.00	5.25	6.50	6.00	6.50	6.50	6.50	6.50	6.25	8.00	8.00	7.21
41	3896	8.00	6.00	8.00	7.50	7.00	6.75	7.60	6.20	8.00	8.00	8.00	6.35
42	3692	6.00	7.67	7.00	6.83	6.00	6.00	6.00	6.00	6.00	8.00	8.00	6.44
43	3707A	8.00	6.00	7.00	6.25	7.80	7.25	7.80	7.50	7.50	8.00	8.00	7.90
44	3707B	8.00	8.00	7.00	6.25	7.90	7.25	7.90	7.45	7.45	8.00	8.00	7.62
45	3813	8.00	7.83	7.00	7.00	7.00	7.17	7.60	7.75	8.00	8.00	8.00	7.39
46	3817	8.00	6.00	7.00	7.17	8.00	7.00	7.60	7.47	7.47	8.00	8.00	7.25
								7.83	7.83	7.80	8.00	8.00	7.49
								7.77	7.77	7.75	8.00	8.00	7.76

AVERAGES 48

A COMPARISON OF THE BRIDGE RATINGS ARRANGED BY AGE

NUMBER OF BRIDGES	YEAR OF CONSTRUCTION	ANCHOR BOLT RATING	BEARING PLATE RATING	BEARING DEVICE RATING	END OF BEAM RATING	MASONRY BEARING RATING	OVERALL RATING
0	1957	0.00	0.00	0.00	0.00	0.00	0.00
4	1958	5.91	5.82	6.83	7.05	6.95	6.51
2	1959	7.56	7.03	7.28	6.88	7.84	7.32
9	1960	7.17	6.87	7.44	7.46	7.78	7.34
9	1961	7.34	7.07	7.47	7.65	7.92	7.49
10	1962	6.57	6.36	7.28	7.31	7.93	7.09
6	1963	7.19	6.78	7.53	7.60	7.89	7.40
6	1964	7.76	7.15	7.50	7.42	7.82	7.53
16	1965	7.48	6.77	7.40	7.36	7.89	7.38
7	1966	7.18	6.94	7.58	7.50	7.96	7.57
13	1967	7.94	7.40	7.67	7.73	7.96	7.74
3	1968	7.82	7.41	7.47	7.62	8.00	7.66
2	1969	8.00	7.72	7.83	7.85	8.00	7.88
4	1970	7.89	7.42	7.62	7.84	8.00	7.76
3	1971	8.00	7.67	8.00	8.00	8.00	7.93
2	1972	8.00	7.62	7.88	8.00	7.75	7.85
0	1973	0.00	0.00	0.00	0.00	0.00	0.00

BRIDGE DATA FOR HIGHWAY DISTRICT 1

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Year Built	Type of Anchor Bolts	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
1	CRITTENDEN	CTY 0	I- 55	3211	1963	UNGALV.	PLATE	7.50	7.13	7.75	7.84	8.00
1	MONROE	US- 49	I- 40	3730	1966	GALV.	PLATE	7.75	6.75	7.38	7.00	7.72
1	ST. FRANCIS	CTY 0	I- 40	3768	1965	GALV.	PLATE	8.00	7.38	8.00	8.00	7.88
1	ST. FRANCIS	I- 40	SH- 1	3619B	1965	GALV.	PLATE	7.25	6.63	6.88	7.34	8.00
1	ST. FRANCIS	I- 40	SH- 1	3619A	1965	GALV.	PLATE	7.43	6.43	7.29	7.14	8.00
1	ST. FRANCIS	CTY 0	I- 40	3899	1965	GALV.	PLATE	7.75	7.00	8.00	8.00	7.75
1	CRITTENDEN	SH-218	I- 40	3844	1966	GALV.	PLATE	6.95	6.03	7.13	7.38	8.00
1	CRITTENDEN	I- 40	SH-147	3108A	1962	UNGALV.	PLATE	5.88	5.75	6.88	6.82	7.75
1	CRITTENDEN	I- 40	SH-147	3108B	1962	UNGALV.	PLATE	5.95	5.88	7.25	6.60	8.00
1	CRITTENDEN	CTY 0	I- 40	3115	1962	UNGALV.	PLATE	5.90	6.00	7.32	7.30	8.00
1	CRITTENDEN	CTY 0	I- 40	3117	1962	UNGALV.	PLATE	6.20	5.95	7.07	7.00	7.95
1	CRITTENDEN	SH- 50	I- 55	3137	1958	UNGALV.	PLATE	7.03	5.67	7.33	7.80	7.27
1	CRITTENDEN	SH- 63	I- 55	3122	1958	UNGALV.	PLATE	5.13	5.38	7.00	6.38	6.00
1	CRITTENDEN	I- 55	US- 64	3131A	1960	UNGALV.	NEOPREME	6.00	8.00	8.00	8.00	5.97
1	CRITTENDEN	I- 55	US- 64	3131B	1960	UNGALV.	NEOPREME	8.00	8.00	8.00	8.00	8.00

AVERAGE VALUES FOR THIS DISTRICT ARE 1962.6

6.98 6.53 7.42 7.37 7.78 7.22

BRIDGE DATA FOR HIGHWAY DISTRICT 3

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Bridge Number	Year Built	Type of Anchor Bolts	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
3	NEVADA	SH- 24	I- 30	5061	1972	GALV.	NEOPREME	8.00	7.33	7.96	8.00	8.00	7.86
3	NEVADA	CTY 0	I- 30	5120	1967	GALV.	NEOPREME	8.00	8.00	8.00	8.00	8.00	8.00
3	HEMPSTEAD	SH- 4	I- 30	5046	1968	GALV.	NEOPREME	7.46	6.92	7.02	7.26	8.00	7.33
3	HEMPSTEAD	I- 30	RR 0	50058	1967	GA-V.	NEOPREME	7.60	6.76	7.26	7.30	8.00	7.38
3	HEMPSTEAD	CTY 0	I- 30	3863	1967	GALV.	PLATE	7.88	6.75	7.38	7.63	8.00	7.52
3	HEMPSTEAD	I- 30	RR 0	5045A	1967	GALV.	NEOPREME	7.80	6.86	7.20	7.30	8.00	7.43
3	HEMPSTEAD	CTY 0	I- 30	3995	1966	GALV.	PLATE	7.90	6.88	7.70	7.60	8.00	7.62
3	MILLER	CTY 0	I- 30	3573	1965	GALV.	PLATE	8.00	6.90	8.00	7.77	8.00	7.73
3	MILLER	US- 71	I- 30	5142A	1964	GALV.		7.60	7.40	7.60	7.40	8.00	7.60
3	MILLER	US- 71	I- 30	5142B	1964	GALV.		7.80	7.60	8.00	7.60	8.00	7.80

AVERAGE VALUES FOR THIS DISTRICT ARE

1966.7

7.60

7.14

7.61

7.59

8.00

7.63

BRIDGE DATA FOR HIGHWAY DISTRICT 4

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Bridge Number	Year Built	Type of Anchor Bolts	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
4	FRANKLIN	CTY 0	I- 40	5115	1969	GALV.		8.00	7.80	8.00	8.00	8.00	7.96
4	FRANKLIN	CTY 0	I- 40	5112	1971	GALV.		8.00	8.00	8.00	8.00	8.00	8.00
4	CRAWFORD	SH-215	I- 40	5081	1967	GALV.	NEOPREME	8.00	8.00	8.00	8.00	8.00	8.00
4	CRAWFORD	CTY 0	I- 40	5079	1967	GALV.	NEOPREME	8.00	7.95	8.00	7.92	8.00	7.97
4	CRAWFORD	I- 40	US- 71	3805d	1965	GALV.	PLATE	8.00	7.43	7.88	7.63	7.50	7.69
4	CRAWFORD	I- 40	US- 71	3805a	1965	GALV.	PLATE	8.00	7.34	7.75	7.70	7.50	7.66
4	FRANKLIN	I- 40	SH- 23	51164	1971	GALV.		8.00	7.50	8.00	8.00	8.00	7.90
4	FRANKLIN	I- 40	SH- 23	51168	1971	GALV.		8.00	7.50	8.00	8.00	8.00	7.90

AVERAGE VALUES FOR THIS DISTRICT ARE 1968.3

8.00 7.69 7.95 7.91

7.88

7.86

BRIDGE DATA FOR HIGHWAY DISTRICT 5

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Year Built	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating	
					BOLTS							
5	FULTON	SH-289	CRK 0	5187	1970 GALV.	NEOPREME	8.00	7.10	7.42	7.45	8.00	7.59
5	FULTON	SH-289	CRK 0	5402	1972 GALV.	NEOPREME	8.00	7.90	7.80	8.00	7.50	7.84
5	SHARP	US- 63	CRK 0	3406	1961 UNGALV.	PLATE	6.80	7.00	6.96	7.08	7.32	7.03
5	FULTON	SH- 9	CRK 0	2712	1969 GALV.	NEOPREME	8.00	7.63	7.67	7.70	8.00	7.80

AVERAGE VALUES FOR THIS DISTRICT ARE

1968.0

7.70 7.41 7.46 7.56 7.70 7.57

BRIDGE DATA FOR HIGHWAY DISTRICT 6

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Bridge Number	Year Built	Type of Anchor Bolts	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
6	PULASKI	CTY 0	US- 67	3058	1960	UNGALV.	PLATE	5.95	5.75	7.00	7.23	8.00	6.79
6	PULASKI	US- 67	CTY 0	3058A	1960	UNGALV.	PLATE	6.63	6.83	7.37	7.43	8.00	7.25
6	PULASKI	US- 67	CTY 0	3056A	1960	UNGALV.	PLATE	6.93	6.67	8.00	7.33	8.00	7.39
6	LONONE	SH- 15	I- 40	3224	1963	UNGALV.	PLATE	6.59	6.19	7.63	7.75	8.00	7.23
6	LONONE	CTY 0	I- 40	3656	1963	UNGALV.	PLATE	7.95	7.40	8.00	7.92	8.00	7.85
6	PRairie	I- 40	RR 0	3711A	1965	GALV.	PLATE	7.00	6.00	7.00	6.63	8.00	6.92
6	SALINE	SH- 35	I- 30	3142	1958	UNGALV.	PLATE	6.05	6.42	6.83	7.33	7.50	6.83
6	SALINE	US- 67	I- 30	30928	1958	UNGALV.	PLATE	5.45	5.62	6.15	6.70	7.05	6.23
6	SALINE	CTY 0	I- 30	3248	1963	UNGALV.	PLATE	6.95	6.97	7.02	7.17	8.00	7.22
6	HOT SPRINGS	I- 30	RR 0	3428A	1965	UNGALV.	PLATE	5.47	6.20	6.67	6.53	8.00	6.57
6	HOT SPRINGS	I- 30	RR 0	3428B	1965	UNGALV.	PLATE	5.50	6.17	6.83	6.67	8.00	6.63
6	HOT SPRINGS	SH-283	I- 30	3896	1967	GALV.	PLATE	8.00	7.38	8.00	8.00	8.00	7.88

AVERAGE VALUES FOR THIS DISTRICT ARE
1962.3

6.54 6.48 7.21 7.23 7.88 7.07

BRIDGE DATA FOR HIGHWAY DISTRICT 7

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Bridge Number	Year Built	Type of Expansion Bolts	Type of Anchor Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
7	CLARK	SH- 51	I- 30	3692	1965	GALV.	PLATE	7.75	6.88	7.45	7.57	8.00	7.53
7	CLARK	I- 30	SH- 7	3707A	1965	GALV.	PLATE	8.00	6.50	7.43	7.50	8.00	7.49
7	CLARK	I- 30	SH- 7	3707B	1965	GALV.	PLATE	8.00	6.50	7.47	7.10	8.00	7.41
7	CLARK	SH- 53	I- 30	3813	1966	GALV.	PLATE	7.88	7.00	7.27	7.50	8.00	7.53
7	CLARK	CTY 0	I- 30	3817	1966	GALV.	PLATE	8.00	7.13	7.88	7.77	8.00	7.75
7	UNION	US- 82	3145	1961	UNGALV.	NEOPREME	8.00	7.00	7.25	7.97	8.00	7.64	
7	UNION	CTY 0	US-167	3149	1961	UNGALV.	8.00	8.00	8.00	8.00	8.00	8.00	
7	UNION	SH- 15	US-167	3148	1961	UNGALV.	8.00	7.67	8.00	8.00	8.00	8.00	
7	UNION	US-167	RR 0	3146	1959	UNGALV.	7.63	6.81	7.31	6.75	7.75	7.25	
7	CALHOUN	US-167	RR 0	3637	1968	GALV.	NEOPREME	8.00	7.98	7.98	7.98	8.00	7.99
7	UNION	US-167	RR 0	3150	1959	UNGALV.	7.50	7.25	7.25	7.00	7.94	7.39	
7	CALHOUN	US- 79	3638	1968	GALV.	NEOPREME	8.00	7.34	7.41	7.63	8.00	7.67	

AVERAGE VALUES FOR THIS DISTRICT ARE 1963.7

7.90 7.17 7.56 7.97 7.63

BRIDGE DATA FOR HIGHWAY DISTRICT 8

Hwy District	County	Bridge On Hwy	Bridge Over Hwy	Bridge Number	Year Built	Type of Anchors	Type of Expansion Joint	Anchor Bolt Rating	Bearing Plate Rating	Bearing Device Rating	End of Beam Rating	Masonry Bearing Rating	Overall Rating
8	FAULKNER	SH- 89	I- 40	3787	1966	GALV.	PLATE	8.00	7.35	7.95	7.80	8.00	7.82
8	FAULKNER	US- 65	I- 40	3890	1966	GALV.	PLATE	8.00	7.45	7.75	7.68	8.00	7.81
8	FAULKNER	I- 40	US- 64	3889A	1967	GALV.	PLATE	8.00	7.41	7.63	7.70	8.00	7.75
8	FAULKNER	I- 40	US- 64	3889B	1967	GALV.	PLATE	8.00	7.11	7.63	7.63	7.50	7.57
8	POPE	CTY 0	I- 40	3999	1967	GALV.	PLATE	8.00	7.50	7.75	7.95	8.00	7.84
8	CONWAY	CTY 0	I- 40	3951	1967	GALV.	NEOPREME	8.00	7.97	7.92	8.00	8.00	7.98
8	POPE	CTY 0	I- 40	3968	1967	GALV.	PLATE	8.00	7.22	7.60	7.77	8.00	7.72
8	POPE	CTY 0	I- 40	3586	1964	GALV.	PLATE	7.17	6.97	7.13	6.82	7.25	7.07
8	POPE	I- 40	CITY 0	3316B	1964	GALV.	PLATE	8.00	7.00	7.33	7.50	8.00	7.57
8	POPE	I- 40	CITY 0	3316A	1964	GALV.	PLATE	8.00	7.00	7.36	7.67	8.00	7.60
8	JOHNSON	I- 40	US- 64	3777B	1965	GALV.	PLATE	7.97	7.00	7.33	7.27	8.00	7.51
8	JOHNSON	I- 40	US- 64	3777A	1965	GALV.	PLATE	8.00	7.00	7.27	7.43	8.00	7.54
8	JOHNSON	US- 64	I- 40	3760	1964	GALV.	PLATE	8.00	6.92	7.60	7.52	7.70	7.55

AVERAGE VALUES FOR THIS DISTRICT ARE 1965.6

7.93 7.22 7.56 7.61 7.88 7.64

BRIDGE DATA FOR HIGHWAY DISTRICT 9

HWY DISTRICT	COUNTY	BRIDGE ON HWY	BRIDGE OVER HWY	YEAR BUILT	TYPE OF ANCHOR BOLTS	TYPE OF EXPANSION JOINT	ANCHOR BOLT RATING	BEARING PLATE RATING	BEARING DEVICE RATING	END OF BEAM BEARING RATING	OVERALL RATING
9	MADISON	SH- 45	CRK 0	3755	1965	GALV.	PLATE	7.63	7.00	7.20	7.42
9	MADISON	SH- 23	CRK 0	3583	1963	UNGALV.	PLATE	6.82	6.35	7.07	7.15
9	MADISON	SH- 23	CRK 0	3582	1963	UNGALV.	PLATE	7.30	6.67	7.73	7.97
9	CARROLL	SH- 21	CRK 0	3308	1960	UNGALV.	PLATE	7.17	6.17	6.67	6.97
9	MADISON	US- 68	CRK 0	3345	1960	UNGALV.	PLATE	6.92	6.54	6.90	7.12
9	CARROLL	SH- 21	CRK 0	3309	1960	UNGALV.	PLATE	7.40	6.77	7.02	7.40
9	CARROLL	SH-103	CRK 0	5082	1967	GALV.	NEOPREME	7.93	7.30	7.33	7.27
9	CARROLL	SH- 68	CRK 0	2771A	1970	GALV.	NEOPREME	8.00	7.25	7.42	7.92
											8.00
											7.72

AVERAGE VALUES FOR THIS DISTRICT ARE

1963.5

7.40 6.76 7.17 7.37 7.57 7.25

BRIDGE DATA FOR HIGHWAY DISTRICT 10

HWY DISTRICT	COUNTY	BRIDGE ON HWY	BRIDGE OVER HWY	YEAR BUILT	TYPE OF ANCHOR BOLTS	TYPE OF EXPANSION JOINT	ANCHOR PLATE BOLT RATING	BEARING PLATE DEVICE RATING	BEARING BEAM DEVICE RATING	END OF BEAM BEARING RATING	MASONRY BEARING RATING	OVERALL RATING
10	MISSISSIPPI	I- 55	US- 61	3162A	1962	UNGALV.	PLATE	7.25	6.75	7.75	8.00	7.75
10	MISSISSIPPI	I- 55	US- 61	3162B	1962	UNGALV.	PLATE	6.85	6.85	7.50	8.00	7.85
10	MISSISSIPPI	SH-312	I- 55	3287	1962	UNGALV.	PLATE	7.25	6.75	7.75	8.00	7.50
10	MISSISSIPPI	CITY 0	I- 55	3282	1961	UNGALV.	PLATE	7.25	7.00	7.63	7.75	8.00
10	MISSISSIPPI	I- 55	SH-140	3289A	1962	UNGALV.	PLATE	7.00	6.67	7.00	7.50	8.00
:0	MISSISSIPPI	I- 55	SH-181	3370A	1962	UNGALV.	PLATE	6.63	6.38	7.25	7.13	8.00
10	MISSISSIPPI	I- 55	SH-140	3289B	1962	UNGALV.	PLATE	6.83	6.67	7.00	7.03	8.00
10	MISSISSIPPI	I- 55	SH-181	3370B	1961	UNGALV.	PLATE	6.60	6.43	6.83	6.97	8.00
10	MISSISSIPPI	SH- 14	I- 55	3183	1961	UNGALV.	PLATE	7.33	6.97	7.80	7.67	8.00
10	MISSISSIPPI	FAS28d	I- 55	3182	1961	UNGALV.	PLATE	7.00	6.75	7.63	7.75	8.00
10	MISSISSIPPI	SH- 61	I- 55	3180	1961	UNGALV.	PLATE	7.07	6.82	7.10	7.67	7.97
10	MISSISSIPPI	SH-308	I- 55	3213	1960	UNGALV.	PLATE	7.50	7.13	8.00	7.69	8.00
10	CRAIGHEAD	US- 63	OTH 0	5207B	1970	GALV.	NEOPREME	7.90	7.90	8.00	8.00	7.96
10	CRAIGHEAD	US- 63	RR 0	5203B	1970	GALV.	NEOPREME	7.67	7.43	7.67	8.00	7.75

AVERAGE VALUES FOR THIS DISTRICT ARE
1962.6

7.15 6.89 7.49 7.64 7.97 7.43

BRIDGES LISTED FROM WORST OVERALL RATING TO BEST

HWY DISTRICT	COUNTY	BRIDGE ON HWY	BRIDGE OVER HWY	BRIDGE NUMBER	YEAR BUILT	TYPE OF ANCHOR BOLTS	TYPE OF EXPANSION JOINT	ANCHOR BOLT RATING	BEARING PLATE RATING	BEARING BEAM DEVICE RATING	END OF BEAM RATING	MASONRY BEARING RATING	OVERALL RATING
1	CRITTENDEN	SH- 63	I- 55	3122	1958	UNGALV.	PLATE	5.13	5.38	7.00	6.38	6.00	5.97
6	SALINE	US- 67	I- 30	3092A	1958	UNGALV.	PLATE	5.45	5.82	6.15	6.70	7.05	6.23
6	HOT SPRINGS	I- 30	RR 0	3428A	1965	UNGALV.	PLATE	5.47	6.20	6.67	6.53	8.00	6.57
6	CRITTENDEN	I- 40	SH-147	3109A	1962	UNGALV.	PLATE	5.88	5.75	6.88	6.82	7.75	6.61
6	HOT SPRINGS	I- 30	RR 0	3428B	1965	UNGALV.	PLATE	5.50	6.17	6.83	6.67	8.00	6.63
9	CARROLL	SH- 21	CRK 0	3308	1960	UNGALV.	PLATE	7.17	6.17	6.67	6.97	6.67	6.73
1	CRITTENDEN	I- 40	SH-147	3108B	1962	UNGALV.	PLATE	5.95	5.88	7.25	6.60	8.00	6.73
6	PULASKI	CITY 35	US- 67	305d	1960	UNGALV.	PLATE	5.95	5.75	7.00	7.23	8.00	6.79
6	SALINE	SH- 35	I- 30	3142	1958	UNGALV.	PLATE	6.05	6.42	6.83	7.33	7.50	6.83
1	CRITTENDEN	CITY 0	I- 40	3117	1962	UNGALV.	PLATE	6.20	5.95	7.07	7.00	7.95	6.83
1	CRITTENDEN	CITY 0	I- 40	3115	1962	UNGALV.	PLATE	5.90	6.00	7.32	7.30	8.00	6.90
6	PRairie	I- 40	RR 0	3711A	1965	GALV.	PLATE	7.00	6.00	7.00	6.63	8.00	6.92
9	MAIDISON	SH- 23	CRK 0	35d3	1963	UNGALV.	PLATE	6.82	6.35	7.07	7.15	7.38	6.95
10	MISSISSIPPI	I- 55	SH-181	3370B	1961	UNGALV.	PLATE	6.60	6.43	6.83	6.97	8.00	6.97
1	CRITTENDEN	SH- 50	I- 55	3137	1958	UNGALV.	PLATE	7.03	5.67	7.33	7.80	7.27	7.02
5	SHARP	US- 63	CRK 0	3406	1961	UNGALV.	PLATE	6.80	7.00	6.96	7.08	7.32	7.03
9	MAIDISON	US- 68	CRK 0	3345	1960	UNGALV.	PLATE	6.92	6.54	6.90	7.12	7.84	6.90
8	POPE	CITY 0	I- 40	3586	1964	GALV.	PLATE	7.17	6.97	7.13	6.82	7.25	7.07
10	MISSISSIPPI	I- 55	SH-181	3370A	1962	UNGALV.	PLATE	6.65	6.38	7.25	7.13	8.00	6.92
1	CRITTENDEN	SH-218	I- 40	3844	1966	GALV.	PLATE	6.95	6.05	7.13	7.15	7.38	6.95
10	MISSISSIPPI	I- 55	SH-140	3289d	1962	UNGALV.	PLATE	6.83	6.57	7.00	7.03	7.27	7.02
1	ST. FRANCIS	I- 40	SH- 1	3619B	1965	GALV.	PLATE	6.25	6.63	6.81	6.96	7.32	7.03
9	CARROLL	SH- 21	CRK 0	3309	1960	UNGALV.	PLATE	7.40	6.77	7.02	7.12	7.52	7.06
6	SALINE	CITY 0	I- 30	3243	1963	UNGALV.	PLATE	6.95	6.97	7.02	7.17	7.52	7.22
6	LONROKE	SH- 15	I- 40	3224	1963	UNGALV.	PLATE	6.65	6.38	7.25	7.13	7.38	7.07
10	MISSISSIPPI	I- 55	SH-140	3289A	1962	UNGALV.	PLATE	7.00	6.19	6.67	7.13	8.00	7.22
7	UNION	US-167	RR 0	3146	1959	UNGALV.	PLATE	7.07	7.00	7.13	7.15	8.00	7.23
6	PULASKI	US- 67	CTY 0	3056B	1960	UNGALV.	PLATE	7.63	6.81	7.00	7.03	7.10	7.23
1	ST. FRANCIS	I- 40	SH- 1	3619A	1965	GALV.	PLATE	6.43	6.93	7.37	7.43	8.00	7.33
9	MAIDISON	SH- 45	CRK 0	3755	1965	GALV.	PLATE	7.43	6.43	7.29	7.14	8.00	7.25
1	MONROE	US- 49	I- 40	3730	1966	GALV.	PLATE	7.63	7.00	7.02	7.17	7.52	7.26
10	MISSISSIPPI	SH- 81	I- 55	3180	1961	UNGALV.	PLATE	7.75	6.75	7.38	7.00	7.25	7.30
3	HEMPSTEAD	SH- 4	I- 30	504b	1966	GALV.	NEOPREME	7.46	6.82	7.10	7.50	8.00	7.52
3	HEMPSTEAD	I- 30	RR 0	5045H	1967	UNGALV.	PLATE	7.60	6.92	7.31	7.47	7.97	7.33
6	PULASKI	US- 67	CTY 0	3056A	1960	UNGALV.	NEOPREME	7.66	6.63	7.26	7.55	8.00	7.33
7	UNION	US-167	RR 0	3150	1959	UNGALV.	PLATE	6.93	6.67	7.26	7.43	8.00	7.38
10	MISSISSIPPI	I- 55	US- b1	3162B	1962	UNGALV.	PLATE	7.50	7.25	7.50	7.33	8.00	7.39
10	CLARK	I- 30	SH- 7	3707B	1965	GALV.	PLATE	6.85	6.85	7.00	7.94	8.00	7.39
10	MISSISSIPPI	FAS26B	I- 55	3182	1961	UNGALV.	PLATE	8.00	6.50	7.47	7.85	8.00	7.41
3	HEMPSTEAD	I- 30	RR 0	5045A	1967	GALV.	NEOPREME	7.00	6.75	7.02	7.10	8.00	7.41
9	MAIDISON	SH- 23	CRK 0	3582	1963	UNGALV.	PLATE	6.80	6.86	7.26	7.75	8.00	7.42
7	CLARK	I- 30	SH- 7	3707A	1965	GALV.	PLATE	7.30	6.67	7.20	7.50	8.00	7.43
10	MISSISSIPPI	SH-312	I- 55	3287	1962	UNGALV.	PLATE	6.50	7.43	7.73	7.97	8.00	7.48
10	MISSISSIPPI	I- 55	US- 61	3162A	1962	UNGALV.	PLATE	7.25	6.75	7.75	7.50	8.00	7.49

7.75

7.50

8	JOHNSON HEMPSTEAD	I- 40 CTY 0	1965 3863	GALV. GALV.	PLATE PLATE	7.97 7.88	7.00 6.75	7.33 7.63	6.00 6.00	7.51 7.52
10	MISSISSIPPI	CTY 0	1- 55	3282	UNGALV.	PLATE	7.25	7.00	7.63	6.00
7	CLARK	SH- 53	I- 30	3813	1966 GALV.	PLATE	7.88	7.00	7.27	7.75
7	CLARK	I- 40	US- 64	3692	1965 GALV.	PLATE	7.75	6.88	7.45	6.00
6	JOHNSON	I- 40	US- 64	3777A	1965 GALV.	PLATE	8.00	7.00	7.57	6.00
6	JOHNSON	I- 40	US- 64	3760	1964 GALV.	PLATE	8.00	6.92	7.43	6.00
9	CARROLL	SH-103	CRK 0	5082	1967 GALV.	NEOPREME	7.93	7.30	7.52	7.70
10	MISSISSIPPI	SH- 14	I- 55	3183	1961 UNGALV.	PLATE	7.33	6.97	7.27	7.55
8	POPE	I- 40	CTY 0	3316B	1964 GALV.	PLATE	8.00	7.00	7.33	6.00
6	FAULKNER	I- 40	US- 64	38898	1967 UNGALV.	PLATE	8.00	7.11	7.63	7.50
5	FULTON	CRK 0	5187	1970	1964 GALV.	NEOPREME	8.00	7.10	7.42	7.50
3	MILLER	US- 71	I- 30	5142A	1964 GALV.	PLATE	7.60	7.40	7.60	7.40
8	POPE	I- 40	CTY 0	3316A	1964 GALV.	PLATE	8.00	7.00	7.36	6.00
3	HEMPSTEAD	CTY 0	I- 30	3995	1966 GALV.	PLATE	7.00	6.88	7.70	6.00
7	UNION	US-167	US- 82	3145	1961 UNGALV.	NEOPREME	8.00	7.00	7.25	7.55
1	CRITTENDEN	CTY 0	I- 55	3211	1963 UNGALV.	PLATE	7.50	7.13	7.75	7.57
4	CRAWFORD	I- 40	US- 71	3805A	1965 UNGALV.	PLATE	8.00	7.34	7.75	7.57
10	MISSISSIPPI	SH-308	I- 55	3213	1960 UNGALV.	PLATE	7.50	7.13	8.00	7.60
7	CALHOUN	US-167	US- 79	3638	1968 GALV.	NEOPREME	8.00	7.34	7.41	7.60
4	CRAWFORD	I- 40	US- 71	3805B	1965 GALV.	PLATE	8.00	7.00	7.70	7.62
9	CARROLL	SH- 68	CRK 0	2771A	1970 GALV.	NEOPREME	8.00	7.00	7.97	7.64
8	POPE	CTY 0	I- 40	3968	1967 GALV.	PLATE	8.00	7.50	7.75	7.64
3	MILLER	CTY 0	I- 30	3573	1965 GALV.	PLATE	8.00	7.34	7.75	7.66
8	FAULKNER	I- 40	US- 64	3889A	1967 GALV.	PLATE	8.00	7.50	7.70	7.66
1	ST. FRANCIS	CTY 0	I- 40	3899	1965 GALV.	PLATE	7.50	7.13	8.00	7.60
10	CRAIGHEAD	US- 63	RR 0	5203B	1970 GALV.	NEOPREME	7.67	7.43	7.88	7.50
7	CLARK	CTY 0	I- 30	3817	1966 GALV.	PLATE	8.00	7.25	7.42	7.60
5	FULTON	SH- 9	CRK 0	2772	1969 GALV.	NEOPREME	8.00	7.22	7.60	7.72
3	MILLER	US- 71	I- 30	5142B	1964 GALV.	PLATE	8.00	6.90	7.77	8.00
8	FAULKNER	US- 65	I- 40	3890	1966 GALV.	PLATE	8.00	7.41	7.63	8.00
1	ST. FRANCIS	CTY 0	I- 40	3899	1965 GALV.	PLATE	7.75	7.00	7.43	7.67
10	CRAIGHEAD	US- 63	RR 0	5203B	1970 GALV.	NEOPREME	7.67	7.43	7.88	7.60
7	CLARK	CTY 0	I- 30	3817	1966 GALV.	PLATE	8.00	7.13	7.88	7.72
5	FULTON	SH- 9	CRK 0	2772	1969 GALV.	NEOPREME	8.00	7.63	7.77	8.00
3	MILLER	US- 71	I- 30	5142B	1964 GALV.	PLATE	8.00	7.80	7.70	7.73
8	FAULKNER	US- 65	I- 40	3890	1966 GALV.	PLATE	8.00	7.60	8.00	7.60
8	FAULKNER	SH- 89	I- 40	3787	1966 GALV.	PLATE	8.00	7.45	7.75	7.80
5	FULTON	SH-289	CRK 0	5402	1972 GALV.	NEOPREME	8.00	7.35	7.95	7.75
6	POPE	CTY 0	I- 40	3999	1967 GALV.	PLATE	8.00	7.90	7.80	7.50
6	LONOKE	CTY 0	I- 40	3656	1963 UNGALV.	PLATE	8.00	7.50	7.75	7.95
3	NEVADA	SH- 24	I- 30	5061	1972 GALV.	NEOPREME	8.00	7.40	8.00	7.80
6	HOT SPRINGS	SH-283	I- 30	3896	1967 GALV.	PLATE	8.00	7.33	7.96	8.00
1	ST. FRANCIS	CTY 0	I- 40	3787	1966 GALV.	PLATE	8.00	7.34	7.88	8.00
4	FRANKLIN	I- 40	SH- 23	5116B	1971 GALV.	NEOPREME	8.00	7.35	7.95	7.82
4	FRANKLIN	I- 40	SH- 23	5116A	1971 GALV.	PLATE	8.00	7.50	7.77	8.00
7	UNION	SH- 15	US-167	3148	1961 UNGALV.	PLATE	8.00	7.67	7.67	7.85
4	FRANKLIN	CTY 0	I- 40	5115	1969 GALV.	NEOPREME	8.00	7.33	7.96	8.00
10	CRAIGHEAD	US- 63	OTH 0	5207B	1970 GALV.	PLATE	8.00	7.34	8.00	7.81
4	CRAWFORD	CTY 0	I- 40	5079	1967 GALV.	NEOPREME	8.00	7.38	8.00	8.00
8	CONWAY	I- 40	3951	1967	1967 GALV.	NEOPREME	8.00	7.50	8.00	7.94
7	CALHOUN	US-167	RR 0	3637	1968 GALV.	NEOPREME	8.00	7.50	8.00	7.90
4	CRAWFORD	SH-215	I- 40	5081	1967 GALV.	NEOPREMF	8.00	8.00	8.00	8.00
4	FRANKLIN	CTY 0	I- 40	5112	1971 GALV.	NEOPREME	8.00	8.00	8.00	8.00
7	UNION	CTY 0	US-167	3149	1961 UNGALV.	NEOPREME	8.00	8.00	8.00	8.00
3	NEVADA	CTY 0	I- 30	5120	1967 UNGALV.	NEOPREME	8.00	8.00	8.00	8.00
1	CRITTENDEN	I- 55	US- 64	3131B	1960 UNGALV.	NEOPREME	8.00	8.00	8.00	8.00
1	CRITTENDEN	I- 55	US- 64	3131A	1960 UNGALV.	NEOPREME	8.00	8.00	8.00	8.00

COMPARING BRIDGES ON THE INTERSTATE SYSTEM
TO THOSE CROSSING OVER THE INTERSTATE

NUMBER OF BRIDGES ON INTERSTATES IS 29
AVERAGE YEAR IS 1964.4
AVERAGE VALUE IS 7.37

NUMBER OF BRIDGES OVER INTERSTATES IS 43
AVERAGE YEAR IS 1964.4
AVERAGE VALUE IS 7.50

NUMBER OF BRIDGES ON COUNTY ROADS IS 22
AVERAGE YEAR IS 1964.9
AVERAGE VALUE IS 7.62

A PRINTOUT OF THE RATINGS DISTRIBUTION FOR EACH BRIDGE COMPONENT EXAMINED

RATING CODE DESCRIPTIONS

- 6 GOOD CONDITION WITH INSIGNIFICANT RUST IF ANY. FOR CONCRETE, INSIGNIFICANT CRACKING OR SPALLING.
- 7 LIGHT RUST BUT NOT SUFFICIENT TO WARRANT IMMEDIATE REQUEST FOR PAINTING. FOR CONCRETE, SLIGHT CRACKING OR SPALLING.
- 6 VERY RUSTY. NEEDS CLEANING AND PAINTING.
FOR CONCRETE, MODERATE CRACKING OR SPALLING.
- 5 LAYERS OF RUST WITH SUBSTANTIAL DELAMITATION OF METAL.
FOR CONCRETE, WIDE SPREAD SPALLING OR CRACKING
- 4 FAILED OR CORRODED TO THE POINT OF FAILURE

	"4"	"5"	"6"	"7"	"8"
ANCHOR BOLTS	12	165	327	941	2252
BEARING PLATES	0	142	790	1891	874
SHOES	0	11	252	1433	2001
BEAM END	0	12	311	1101	2273
CONCRETE	0	14	52	360	3271

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