TranSystems

BRIDGE INSPECTION REPORT
VOLUME 1 OF 2

INSPECTION OF THE HALE BOGGS MEMORIAL BRIDGE IN LULING-DESTREHAN

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CTL GROUP

JULY 2008

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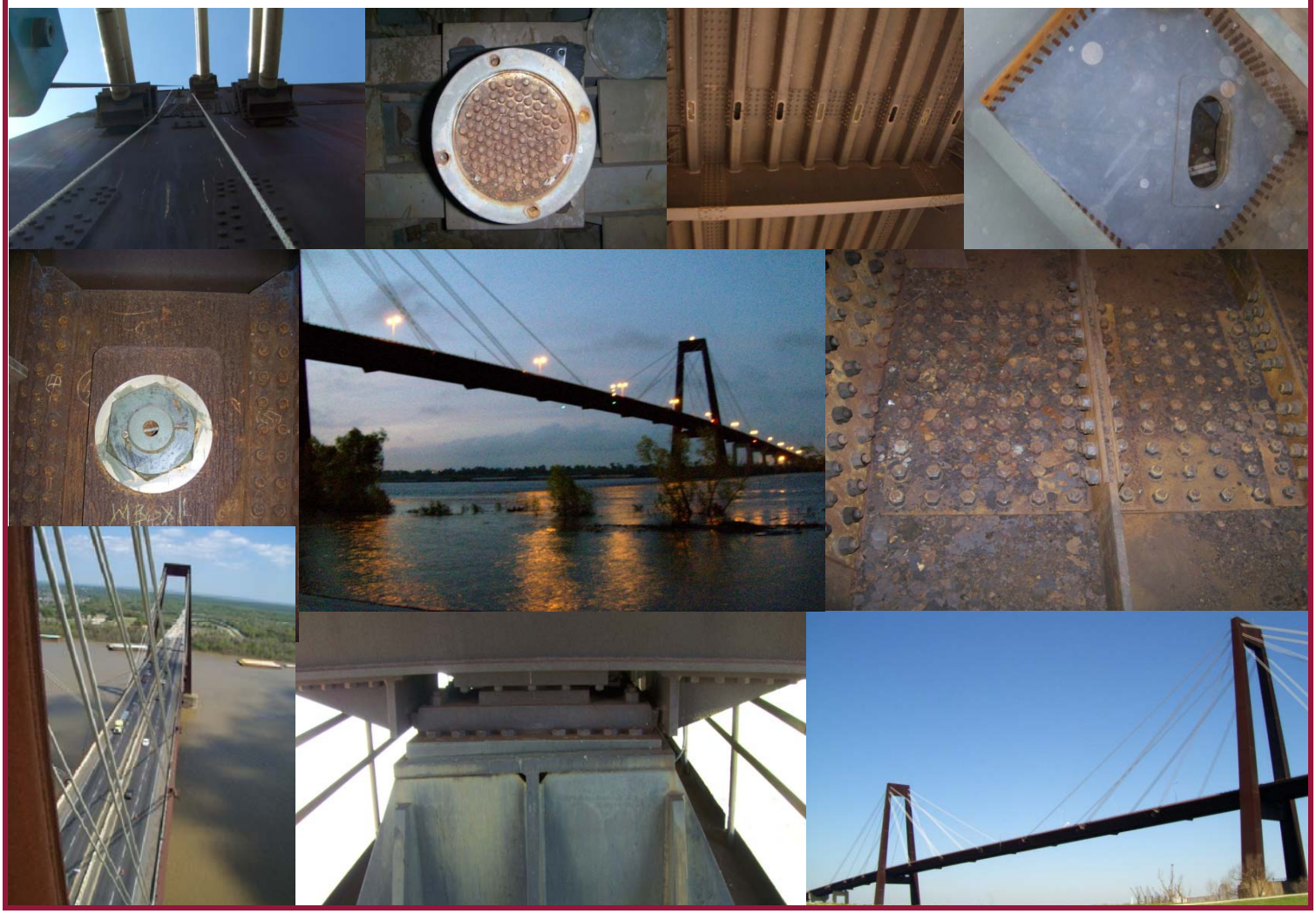

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EXECUTIVE SUMMARY

The Louisiana Department of Transportation and Development engaged the services of a team of consultants led by the CTL Group to inspect, test and evaluate the stay cables of the Hale Boggs Memorial Bridge. The bridge carries Interstate 310 over the Mississippi River and is composed of three sections: south approach in Luling, main span river crossing, and north approach in Destrehan. It was determined that the stay-cables were in poor condition and in need of complete replacement. Design for the new cables soon followed. During the design it was determined that inspection of the entire main span river crossing was in order. Subsequent to LADOTD approval, the CTL Group contracted with TranSystems Corporation to perform the bridge inspection. The scope of inspection is limited to the main span river crossing – the steel cable-stayed bridge superstructure between pier 1S and pier 1N and the main span steel towers. This report is the result of that effort.

The inspection was performed during the months of March and April in 2008. The primary objective of the work was to evaluate the structural components of the bridge and recommend a course of action regarding the need for retrofit repairs and/or maintenance activities. A summary of inspection findings is as follows:

- No critical-hazard deficiencies were found.
- No critical-structural deficiencies were found.
- Two types of severe / major deficiencies were identified. The first includes cracking in a total of 125 locations of the steel orthotropic deck. The second type is the poor condition of the expansion deck joint at pier 1N.
- Several minor deficiencies were identified and can easily be repaired.

A summary of the conclusions is as follows:

- The structural inspection performed on the steel orthotropic deck found evidence of structural damage or distress that could be attributed to fatigue.
- The existing deck joint at pier 1N was found to have missing and cracked components.
- The typical condition of the weathering steel is satisfactory condition.
- The wind fairing was found to be in serious condition with advanced deterioration.

A total of eight bridge retrofit recommendations are offered for consideration by LADOTD including the following:

- Repair the cracking in the orthotropic steel deck.
- Replace the expansion joint at pier 1N.
- Replace the wind fairing.
- Repair the many location of fastener deficiencies located throughout the main span river crossing.
- Repair deficient welds found inside the longitudinal steel box girder.
- Repair several concrete pedestals at pier 1S and pier 1N.
- Provide proper ventilation in both towers and the longitudinal steel box girders.

In addition, a series of twelve maintenance recommendations are provided to ensure long-term performance of the bridge and to address several items found during the inspection. Finally, a couple of inspection recommendations are included so that deficiencies identified in this report can be monitored and, if necessary, appropriate action taken to address any problems. Two miscellaneous recommendations are identified in an effort to address additional long-term performance issues of the bridge.

PROJECT SCOPE

The project scope included three tasks, as follows:

(1) mobilization and data collection;

(2) bridge inspection, including hands-on inspection of the main span bridge superstructure between pier 1S and pier 1N which consists of twin trapezoidal steel box girders and the main span towers above the water-line;

(3) evaluation and report, identifying the condition ratings of the various deck components and superstructure elements, and providing recommendations for necessary repairs and/or maintenance activities.

TASK 1 - MOBILIZATION AND DATA COLLECTION

Prior to beginning the field inspection, we assembled and reviewed available data including original design drawings and past inspection reports. Following review of the available information, we prepared bridge specific field note sheets for use in recording the inspection findings. Observed conditions were recorded on these field note sheets in an effort to document and develop condition ratings, and to locate and identify conditions in need of repair or maintenance. These field notes function as a record of the inspection efforts and the basis for corrective actions.

We coordinated needed field equipment and materials and submitted both northbound and southbound sketches for the maintenance & protection of traffic for lane closures required during the inspection work. We attended several meetings to discuss the project and obtain information on the bridge.

The inspection was performed in accordance with the procedures, methodologies, and techniques presented in the following publications:

Code of Federal Regulations – CFR Title 23 Part 650 *National Bridge Inspection Standards*, (NBIS);
Manual for Condition Evaluation of Bridges, Second Edition, AASHTO;
Standard Specifications for Highway Bridges, Seventeenth Edition, AASHTO;
Bridge Inspector's Reference Manual, USDOT,FHWA,NHI; October 2002;
Inspection of Fracture Critical Bridge Members, USDOT, FHWA, September 1986;
Inspecting Steel Bridges for Fatigue Damage, Dr. John W. Fisher, Lehigh University, March 1981;
Fatigue and Fracture in Steel Bridges, Dr. John W. Fisher, Lehigh University, 1984; and
Welding Inspection, American Welding Society, 1980.

TASK 2 - BRIDGE INSPECTION

Our inspection sequence started with the known bridge trouble spots identified in previous reports and documents. Our first priority was to assess the condition of these locations. Our inspection work included the steel orthotropic deck (including bearings, joints, and other deck components), twin trapezoidal steel box girders, cross girders, and two steel A-frame towers. Since CTL Group engineers had already inspected the cables, cable anchorages and components and recommended their replacement, our inspection scope was limited to the areas adjacent to the stay-cable anchorages.

We inspected members for deterioration; section loss; missing, deficient or damaged components; misalignment, and other defects. We hand cleaned deteriorated areas to determine the extent of section loss, and the effective dimensions of the remaining structure. When hand cleaning proved ineffective in some locations we used light grinding. Thickness measurements were obtained by caliper and ruler and verified by ultrasonic measuring devices as necessary. Sufficient measurements of members were obtained so that the as-inspected configuration of the structural section can be determined when physical properties are needed. We inspected connections and hammer sounded selected locations. The number and location of loose, broken or missing fasteners was recorded.

This inspection focused upon the condition of suspected steel cracks and deficient weld conditions in addition to the rust formation on the weathering steel. Existing conditions were compared to previous reports where appropriate. We identified whether cracks have propagated beyond previously drilled arresting holes.

The surface condition of the weathering steel was visually observed and significant rusting and/or pitting was noted. Many locations of rusting, pitting, or flaking were observed and the loss of thickness was measured using a Krautkramer Branson ultrasonic thickness gauge. While we originally assumed that 25 locations, mostly inside the towers, would be subjected to ultrasonic thickness measurements, the actual number was more than 400 locations and over 800 measurements throughout the bridge. These measurements are contained in the Preliminary Report dated May 13, 2008. This report is included on the DVD found on the inside cover of Volume 2 of this report.

We performed a visual inspection of the welded connections (consisting of the actual weld material and surrounding base metal). Particular emphasis on weld deterioration, distress, or discontinuities (i.e. cracking, corrosion, pinholes/porosity, undercut, slag inclusion, lack of fusion, etc.) was recorded graphically and by dimension on the inspection field notes. We also supplemented this data with digital color photographs.

Observed conditions in the field were photographed and recorded using digital cameras. The field note sheets identify the location of each photograph. A total of approximately 1800 photos were taken. A photo log is also provided at the end of the field notes for each camera used and provides a brief description of each photo. A complete copy of our field notes is included in Appendix E found in Volume 2 of this report. A complete copy of our inspection photos is included in Appendix F found in Volume 2 of this report. A PDF copy of the field notes and an electronic copy of each inspection photo and report photo (shown in Appendix B) in JPG format is included on the DVD found on the inside cover of Volume 2 of this report.

Access to the structure was obtained through the use of an under-bridge inspection unit, ladders, a motorized suspended rigged basket, and protected climbing techniques. The under-bridge inspection vehicle was utilized for inspection of the underside of the deck and the box girders and cross girder exteriors. Inspection of box girder interiors, cross girders and towers was performed by walking and climbing within these elements. Tower exteriors were inspected through the use of a rigged basket.

Traffic control equipment (variable message board, signs, a flashing arrow board and cones) was required for the maintenance and protection of traffic during the inspection. We furnished and maintained the traffic control equipment through the use of a subcontractor. Lane closures were generally allowed during the day with an approximate 7-hour work time frame. Traffic management plans were developed, reviewed by LADOTD, revised per comments, and are included in Appendix D.

Crack locations were identified and proposed for selection by CTL Group engineers to test crack activity under service live load. A total of 10 cracks spread along the span and among the various types of cracks found were selected and subjected to crack activity testing performed by an acoustic NDT subcontractor. We assisted with providing access to the structure for this work during our inspection activities.

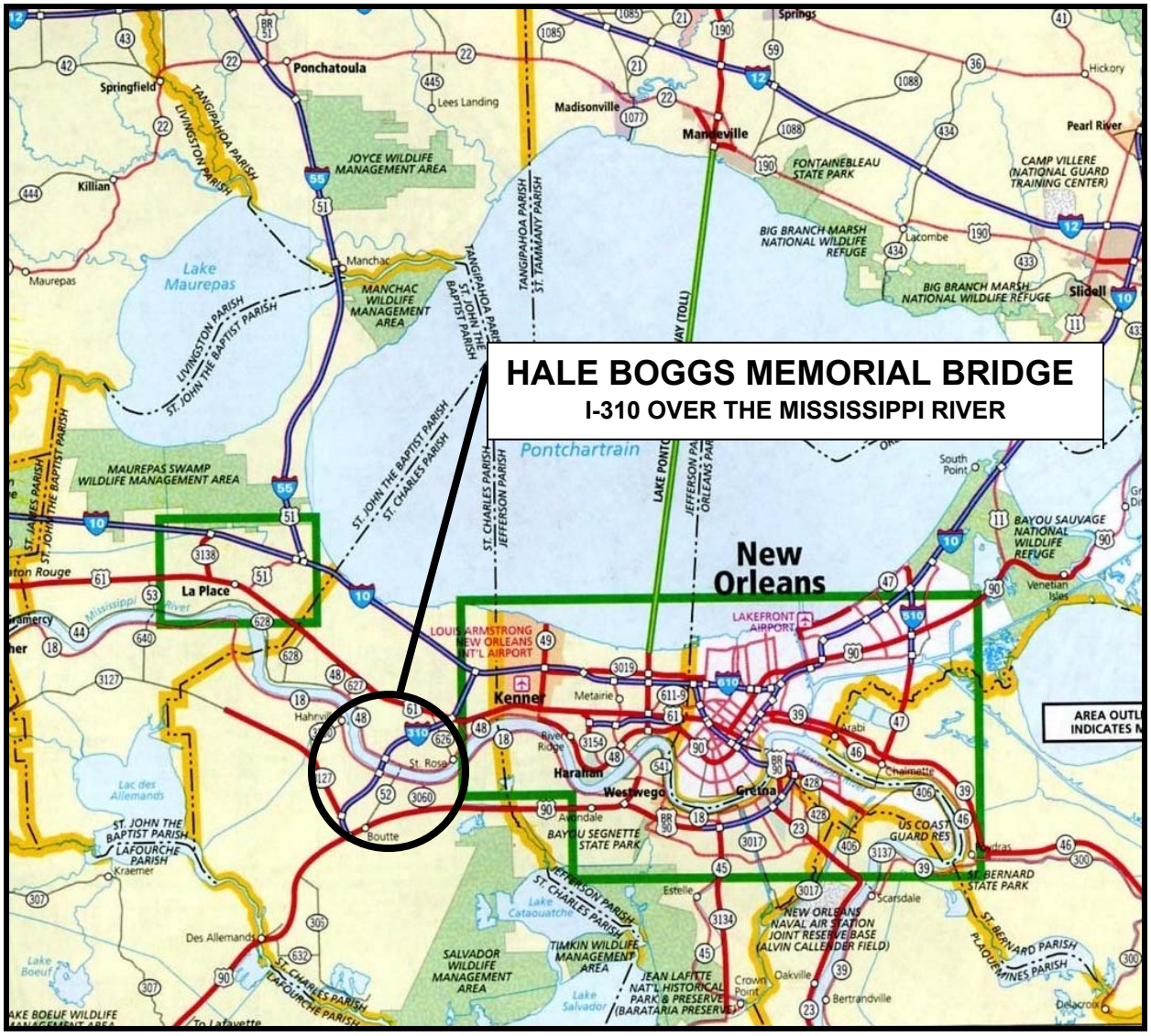
Upon completion of the inspection work, we met with LADOTD personnel and engineers from the CTL Group to identify significant inspection findings and discuss corrective actions. Several significant defects were identified. These defects include cracking of the orthotropic deck plate and rib and deficiencies with the deck joint at pier 1N. A complete listing of the crack locations is provided on Charts 1 – 4 found in Appendix B. We used our digital camera to obtain photographs that helped to coordinate the assessment of conditions found.

Our inspection work did not uncover any conditions that required immediate emergency repair.

TASK 3 – EVALUATION AND REPORT

The results of the work described in this project scope are contained in this bridge inspection report. A preliminary report was submitted in May 2008, a few weeks after completion of the inspection work. It contained an up-to-date summary of the as-inspected condition of the bridge in an effort to facilitate the on-going cable replacement design work. A complete copy of that preliminary report, this bridge inspection report, our field notes, and every photo obtained during the work is included on the DVD found on the inside cover of Volume 2.

LOCATION MAP



DESCRIPTION OF BRIDGE

Date of Construction: 1983

Original Design Loading:

Future Wearing Surface: 19 psf
Live Load: HS20 – 44 Truck Loading (AASHTO 1973 Standard Specification)
Wind Loads On Substructure: Piers 1 to 4: 50 psf
Wind Loads On Girders: Piers 1S to 1N: 65 psf
Wind Loads on Bents and Cables: 150 psf
Hurricane Wind Loads
- Substructure: Piers 1 to 4: 60 psf
- Girders: Piers 1S to 1N: 90 psf
- Bents and Cables: 150 psf

Bridge Type: Main River Section is a five span cable-stayed structure with two steel towers supporting a main river span and two back spans. Superstructure consists of an orthotropic steel deck supported by continuous longitudinal steel trapezoidal box girders, floor beams and diaphragms.

Skew: No Skew

Spans: Span 1M: 260 ft, Span 2M: 508 ft, Span 3M: 1222 ft, Span 4M: 495 ft, Span 5M: 260 ft.

Width of Bridge Deck: 82'-0" out to out of parapets

Roadway Surface: Epoxy Asphalt from pier 1S to approximately 40' south of cross-girder 12. Striated concrete from 40' south of cross-girder 12 to pier 1N.

Curbs: None

Sidewalk / Walkway / Median: 2'-6" wide hollow steel median barrier

Bridge Railing: 1'-6" wide hollow steel parapet with top steel rail

Protective Screen: none

Approach Railing: Solid concrete parapet with top steel rail

Superstructure: Spans 1M and 5M are longitudinal steel trapezoidal box girders with an orthotropic deck with floor beams and diaphragms. Spans 2M, 3M, 4M are a continuation of that superstructure, but supported by evenly spaced cross-girders carried by stay-cables.

Modification to Original Structure: During erection, significant cracking was observed in the longitudinal box girders in the web plates adjacent to the cross-girders. To prevent further growth, 2"diameter crack arrest holes were drilled at the crack tips. To prevent future cracks 2" diameter stress relief holes were drilled in similar areas in the web plates of the longitudinal box girders.

The modular expansion joint at pier 1N was replaced in 2004.

Utilities: The interior of the longitudinal box girders has two types of conduit. The first type supplies power to the interior of the box girders using 3" diameter galvanized steel conduit that travels longitudinally at mid-height of the box along the web stiffeners and through the internal diaphragms. The second type is a rectangular conduit, approximately 8" wide by 4" tall with a removable top cover that travels longitudinally one foot above the bottom flange of the box. Numerous instrument monitoring equipment conduit is located throughout the lengths of the longitudinal box girders.

The interior of the towers have 3" diameter galvanized steel conduit travelling the full height in the tiers with ladder access. This conduit supplies power to receptacles and lighting fixtures in these tiers.

The roadway has standard lighting fixtures mounted to the top of the steel median.

Substructure: The main span river crossing section has both concrete and steel substructure elements. Piers 1S, 1, 4, and 1N have a substructure that consists of a concrete stem and concrete hammerhead pier cap. Piers 2 and 3 have a concrete footing and short concrete base that rises above the river to an elevation of 50 feet. Extending from these concrete bases are steel A-framed towers.

The steel towers consist of an east and west leg which are connected by an upper strut at the top and a lower strut approximately 1/3 of the way up, with a top elevation of 403 feet. The towers are 145'-0" wide at the bottom and taper to a 70'-0" width at the top. On both towers, the lower strut acts as pier cap for the superstructure.

SUMMARY OF INSPECTION FINDINGS

The following represents a summary of the inspection findings. The numerical condition ratings recorded on the standard State of Louisiana DOTD Bridge Inspection Report can be found in Appendix A. The Structures Inspection Field Report contained in Appendix B contains additional information including general remarks and more complete descriptions of the inspected conditions found which relate to the numerical condition ratings. Charts, sketches, and photos are also provided to further document the described conditions.

I. Critical-Hazard Deficiencies

The following critical-hazard deficiencies represent components or elements of the bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge.

1. None – no critical-hazard deficiencies were found.

II. Critical-Structural Deficiencies

The following critical-structural deficiencies represent structural elements of the bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

2. None – no critical-structural deficiencies were found.

III. Severe / Major Deficiencies

The following severe / major deficiencies represent components or elements of the bridge in need of repairs which are more extensive in nature and need more planning and effort to repair.

3. Deck / Item 58.2 Deck -

   For erection purposes, lifting lugs were fillet welded to the deck plate and adjacent deck ribs close to the webs of the longitudinal box girders. At 3 locations in the east box girder (adjacent to the east web) and at 10 locations in the west box girder (adjacent to the west web) cracks have developed in the fillet welds and propagated into the base metal. The orthotropic steel deck plate is connected to the box girder transverse web stiffener with two fillet welds. These fillet welds terminate (do not wrap around) at the end of the web stiffener. At this connection a total of 112 cracks were found. Throughout the bridge, the bolted field splices for the deck exhibited isolated instances of loose bolts, missing nuts, and missing bolts.

4. Deck / Item 58.7 Deck Joints -

   In the northbound lanes, the joint at pier 1N was found to be missing a portion of the modular joint separation beam. The adjacent separation beam was noted to be cracked for its full width.

II. Minor Deficiencies

The following minor deficiencies represent components or elements of the bridge in need of repairs which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired.

5. Deck / Item 58.5 Bridge Rails -

   Three instances of missing nuts on the bolts connecting the steel rail to the parapet were noted. One instance was noted on the east rail just south of cross-girder 1, and two instances were noted on the west rail just north of pier 2.

6. Deck / Item 58.8 Joint Seals -

   The expansion modular joint glands at both pier 1N and 1S exhibited heavy sand, road debris, and minor vegetation growth. A 1'-0" long section of the neoprene seal at joint 1N was noted to be pulling out from the adjacent separation beams in the right lane of the southbound lane.

7. Superstructure / Item 59.1 Bearings –

   The bearings located at piers 1S, 3, and 1N consist of sliding plates with welded keeper plates to prevent lateral movement. At these locations, the sliding plate was found to have worn a groove in the keeper plate. At pier 1S, two instances were found where the keeper plate was missing, and, at pier 1N, two instances were found where the sliding plate had bent the keeper plate.

8. Superstructure / Item 59.2 Girders –

   Several isolated locations of loose bolts, missing nuts or bolts, and broken/sheared bolts were noted throughout each longitudinal box girder at the field splices. Adjacent to cross-girder 12 in both longitudinal box girders along the diagonal web connection, several bolts were never installed and the temporary erection drift pins remain.

   Wind Fairing: The wind fairing has areas of 100% loss along both longitudinal and transverse stiffeners. The interior of the wind fairing typically exhibited moderate to heavy pigeon and roadway debris. This debris has accumulated between the longitudinal stiffener and the wind fairing and is up to 6" deep. Areas of 100% loss are typically found in locations of moderate to heavy debris accumulation. Several instances were noted where the losses extended for approximately 10 feet.

9. Substructure / Item 60.4 Pedestals –

   The bearings at pier 1N and pier 1S are anchored into concrete pedestals which typically exhibited corner spalls for the full height of the pedestal. The spalls along pier 1S were noted to extend the full width of the pedestal.

10. Substructure / Item 60.5 Bents –

    Gaps ranging from 1/2" to 1 1/4" were noted between the web plates at horizontal field splices for towers 2 and 3. In the corners of the tower legs, at these horizontal field splice gaps, water condensation, rust

staining, and other signs of water infiltration were noted. Typically where signs of water infiltration were noted, areas of moderate to heavy laminating rust were also found on the tower webs and diaphragm plates.

On the exterior legs of the towers, impacted rust has typically developed between the vertical edge of the horizontal web field splice and the tower legs. This impacted rust was typically measured to be 3/4" thick, with some splices exhibiting impacted rust up to 1 1/4" thick.

One of the roof access hatch covers on top of tower 2 is detached, allowing water and pigeons into the tower. The flashing of the access hatches on top of tower 3 exhibited heavy corrosion with areas of 100% loss. The west side of the lower struts on both bents exhibited pools of water (after recent precipitation), with the submerged steel exhibiting moderate corrosion with negligible losses.

Cable Anchorages: At tier 25 of the east leg of tower 3 a broken PE pipe was noted.

Maintenance Railing on Tower Struts: On the lower strut of both towers by the west leg the last two safety rail posts exhibited 100% section loss at the base connection.

11. Traffic Services / Striping –

The striping was found to be typically in good condition with cracking and deterioration along the striping edges in some locations on both sides of the roadway.

12. Traffic Services / Aerial Signals –

The red filter, for the beacon on top of tower 3, was found broken at the base of the light. The bolt locking the filter in place was found to be broken.

13. Traffic Services / Navigation Lights –

The navigation light on the west side of tower 2 is not functioning.

14. Traffic Services / Roadway Lights –

Two locations, one south of diaphragm 20 and one south of diaphragm 49, were found beneath the deck where each anchor rod for the light pole connection had only one nut. Double nuts were not present. In each case, one of the four nuts was also noted to be loose.

15. General Notes / Rivets / Bolts -

Field splices exhibited some instances of missing bolts, missing nuts, loose nuts and broken/sheared bolts. Adjacent to field splices, some deck plate knee braces exhibited undersized bolts, and a broken/sheared bolt.

16. General Notes / Welds -

The most typical weld deficiency was poor quality weld termination for fillet welds connecting stiffeners to the web plates and flange plates. A frequent crack initiation site for the fatigue cracks was found between the orthotropic deck plate and transverse web stiffeners in the longitudinal box girders. In addition, on the interior of the longitudinal box girders some locations of intersecting welds were found at the cross frame connection to the box girder's web plate creating a tri-axial constraint.

17. General Notes / Steel Corrosion -

The towers exhibited active water infiltration with active corrosion and up to 1/8" deep losses along the web and diaphragm plates. These areas of active corrosion were typically limited to the exterior corners of the tower legs at the tiers located directly beneath a bolted horizontal field splice. The exterior of four cross-girders exhibited losses up to 1/4" along the web plate at the interface with the flange plate.

18. General Notes / Fatigue -

The superstructure exhibited several areas of fatigue type cracking. On the interior of the cross-girders, cracked welds were found in cross-girders 5, 6, and 8. The interior of the longitudinal box girders exhibited two types of fatigue cracks. The first type of fatigue crack was less prevalent and was found between the deck ribs and lifting lugs. The second type of fatigue crack was located between the deck plate and the transverse web stiffener of the longitudinal box girders.

19. General Notes / Drainage -

Some locations of clogged scuppers were found.

20. General Notes / Cleanliness -

Tier 1 for both towers 2 and 3 and some areas of other tiers exhibited heavy debris composed of sand and/or pigeon waste. Heavy debris consisting of sand and pigeon droppings was noted on tier 1 of the legs of both towers and pigeon carcasses were typically found on tiers 1 and 7. Rodents, rodent's dens, and moderate rodent debris were noted in tiers 23-25 of both towers.

The interior of the longitudinal box girders exhibited heavy rodent droppings, debris, and nests typically near the cross-girders with active nests noted between cross-girder 1 and pier 1 as well as cross-girder 12 and pier 4. Moderate construction debris was noted in the northern bay of the west longitudinal girder including part of an aluminum utility support. The animal screenings around the hangers, at the bottom of the longitudinal girders were found bent with broken welds at both locations at pier 4. On the interior of the east longitudinal girder an area of asphalt, which had fallen through holes in the deck, was noted near pier 1S, and heavy sand debris was noted between diaphragms 13 and 14.

Cross-girders 1 and 12 exhibited heavy animal debris up to 12" deep in the east and west ends of cross-girder 12. The rotated alignment (axially inclined) of the cross-girders allow water and debris accumulation along the bottom corner. Pigeons are gaining access to the wind fairing through gaps between the wind fairing and cross-girders, and at the ends of the fairing where the screens are broken.

The pier diaphragms connecting the east and west longitudinal box girders exhibited heavy pigeon debris and several pigeon nests. Pigeons were found to be gaining access to the space through large gaps between the longitudinal box girder and the diaphragm.

21. General Notes / Utilities -

The electrical receptacles did not work in the west legs of towers 2 and 3 and below tier 8 of the east leg of tower 2. On the interior of the towers some locations of open conduit pull boxes with exposed wires, missing safety glass at lighting fixtures, and broken light fixtures were found.

The electrical receptacles did not work in the west longitudinal box girder from pier 3 to pier 1N. Some locations of broken conduit brackets for circular conduit were noted in both box girders. Some locations of 10 to 15 foot long sections of the top cover of a rectangular conduit were noted as removed or missing throughout the lengths of both longitudinal girders. In some instances, the exposed wires in the rectangular conduit exhibited damage from being chewed on by rodents.

22. Special Details / Cross-girders / Floorbeams -

Three cracked welds were found on the interiors of cross-girders 5, 6 and 8. In cross-girders 1 and 6 missing bolts were noted at the end cap for the anchorage covers.

EVALUATION

Evaluation of the Hale Boggs Memorial Bridge is based upon the inspection data and measurement data collected during the field inspection effort and presented as follows:

1. The results of the structural inspection on the main span river crossing superstructure and towers indicates that the bridge has suffered some distress in the orthotropic steel deck due to repetitive truck loading in the right lane of both the northbound and southbound roadways. This distress includes cracking in 112 locations at the top of the transverse web stiffener to orthotropic deck plate welded connection.

2. The deck joint at pier 1N continues to be maintenance problem. Although this joint was completely replaced several years ago, it currently exhibits a missing portion of one separation beam adjacent to another cracked separation beam. In addition, an underside of joint review reveals this expansion joint in disarray with multiple bearing elements misplaced. While the deck joint at pier 1S does exhibit uneven movement across the separation beams, it does not have the magnitude of problems associated with it as the joint on the Destrehan side of the river.

3. Item 58 – Deck: The roadway surface has been downgraded to fair condition due to longitudinal cracking, irregular patching and map cracking along the wheel lines. The structural deck has been downgraded to fair condition due to the significant fatigue cracking described above. The deck joints have been downgraded to poor condition due to the expansion joint at pier 1N as described above. The joint seals have been downgraded to fair condition due to the minor tearing (cracking) of the seal at pier 1N.

4. Item 59 – Superstructure: The bearings have been upgraded to satisfactory condition in this report. This upgrade is most likely due to the limited scope of our work (main river span crossing only). We believe it is likely that the approach span bearings previously controlled the coding of this element. The x-bracing/diaphragms have been downgraded to satisfactory due to impacted rust and minor section losses. The previously uncoded floorbeam element has been identified to be in good condition. Each longitudinal box girder has floorbeams numbered from FB1 to FB123.

5. Item 60 – Substructure: The pedestals have been downgraded to fair condition due to full height spalls. The bents have been downgraded to satisfactory condition due to some minor deterioration adjacent to horizontal field splices.

6. The condition evaluation rating of several General Notes items have been downgraded. Welds and Fatigue have been downgraded to poor condition due to significant cracking in the orthotropic steel deck and cross-girders. Member alignment has been downgraded to good condition due to some minor original construction deficiencies at field splices. Drainage has been downgraded to good condition due to the current condition of clogged scuppers. Utilities has been downgraded to fair condition due to some minor issues with conduits and fixtures.

   In addition, two General Notes items have been upgraded. The Steel Corrosion item has been upgraded from serious condition to fair condition. While our initial impression of the observed sheet rusting in the longitudinal box girders was that this condition may be a cause for concern, our significant amount of measurements and cleaning of spot areas has led to the assessment that the steel corrosion in the longitudinal box girders is typically in satisfactory condition. However, the controlling location for our assessment of the Steel Corrosion item is controlled by the towers which have active corrosion to the exterior corners of tower legs at the tiers located

directly beneath a bolted horizontal field splice. The other General Notes item upgraded is Paint. The interiors of cross-girders are painted grey. The paint is in good condition.

7. The condition evaluation rating of several Special Details items have changed. This bridge has pins and hangers which are located at piers 1 and 4. A single assembly consists of two hanger plates, an upper pin connected to the longitudinal box girder, and a lower pin connected to a hold-down assembly on top of the pier. There are two assemblies at each pier. The Pin & Hanger item was found to be in good condition. The Cross-Girder / Floorbeam item has been downgraded to fair condition due to minor section loss and cracking of welds of the cross-girders.

8. The condition evaluation rating of several Traffic Services items have been downgraded. Aerial Signals has been downgraded to good condition due to some minor problems with the aerial beacon on top of tower 3. Navigation Lights has been downgraded to satisfactory condition due to the non-functioning navigation light on the west side of tower 2. Roadway Lights has been downgraded to satisfactory condition due to the loose nuts at two light pole connections.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations have been reached based upon the results of the inspection of the main river spans and towers of the Hale Boggs Memorial Bridge and are presented as follows:

I. Conclusions

1. The structural inspection performed on the steel orthotropic deck found evidence of structural damage or distress that could be attributed to fatigue. Noted conditions such as initial partial depth cracking of welds, (full depth) cracking of welds, and propagation of the initial weld cracks into the steel orthotropic deck base metal at many transverse stiffener to deck plate connections are all attributable to fatigue. Additional cracking of welds and the deck rib at lifting lug locations was also found during the inspection.

2. The existing deck joint at pier 1N was found to have missing and cracked components. As a result, it is ineffective in protecting the superstructure from roadway drainage and debris and has the potential to become a roadway hazard if its condition continues to deteriorate.

3. The typical condition of the weathering steel is satisfactory condition. Field measurements confirm that the typical amount of section loss is best described as minor deterioration. This assessment even applies to areas of the longitudinal box girders where laminating sheets of surface rust were found. Loss measurements by caliper and ruler were confirmed to be close to measurements by ultrasonic thickness gage and generally a little more conservative.

4. The wind fairing was found to be in serious condition with advanced deterioration. Local failures of the plate and/or beam element are possible. The wind fairings are in need of replacement.

5. The lack of tower ventilation is contributing to the rate of deterioration by allowing wet areas to remain wet. This results in moderate to heavy laminating rust forming on the tower webs in some locations.

6. Isolated locations of missing nuts, bolts, undersized bolts, and broken/sheared bolts are not an immediate structural integrity concern. Repairs of these locations should be prioritized and repairs made when funds are available.

7. Various types of noted weld discontinuities and deficiencies (including intersecting welds) are also not an immediate structural integrity concern. Inspection of selected areas on a more frequent basis should be considered.

8. The original construction retrofit which cored out a portion of the longitudinal box girder web plate in order to create a crack arrest hole was successful. No deficiencies were found at these locations.

II. Bridge Retrofit Recommendations

The following bridge retrofit recommendations are provided to form the basis of the design phase of the project.

9. The 13 locations of cracks which have developed in the fillet welds of the lifting lugs and propagated into the ribs of the orthotropic deck should be repaired.

10. The 112 locations of cracks which have developed in the fillet welds of the intermediate web stiffeners and propagated into the orthotropic deck should be repaired.

11. The 3 locations of cracked welds in the fracture critical cross-girders should be repaired.

12. The many locations of fastener deficiencies at deck bolted field splices (loose nuts, missing nuts, and missing bolts) should be repaired. Other fastener deficiencies noted throughout the bridge (boxes and towers) should also be repaired. These deficiencies include: isolated missing or loose nuts/bolts at field splices; loose bolts; missing nuts; missing bolts; severely deteriorated nuts and bolts; broken/sheared bolts; and in locations where several bolts were never installed and the temporary erection drift pins remain.

13. The gap found in the weld metal of diaphragm 3 near the east fascia should be repaired.

14. The expansion deck joint at pier 1N is in poor condition and should be replaced.

15. The wind fairing is in serious condition and should be replaced.

16. The pedestal spalls found at the pier 1N and pier 1S bearing pedestals should be repaired.

17. Proper ventilation in both the towers and the longitudinal boxes should be installed to allow fresh air exchange and provide a method for moisture control.

18. The washers which have been tack welded to the hangers at pier 4 should be removed and the broken welded frame directly above this location should be repaired.

III. Maintenance Recommendations

Maintenance recommendations are provided to ensure long-term performance of the bridge and to address several items found during the inspection.

19. Seal the regularly spaced longitudinal cracks, map cracks, and transverse gouges in the roadway wearing surface using an epoxy asphaltic sealer.

20. Replace the missing nuts found at three locations on the bridge rail connections.

21. Clean the interior of longitudinal box girders that contains debris, moderate construction debris, aluminum utility support, areas of asphalt, heavy amounts of sand, rodent droppings, rodent debris, rodent nests. Clean the interior of wind fairing that contain moderate to heavy pigeon debris and roadway debris. Clean the interior of the towers that contain heavy debris consisting of sand, pigeon carcasses, pigeon waste, rodents, rodent nests, and

rodent debris. Remove water from the interior of cross-girders and clean the interior of the cross-girders of heavy animal debris. Clean the interior of the pier diaphragms that exhibited heavy pigeon debris, pigeon nests.

22. Repair or replace the screens at the ends of the wind fairings where pigeons are gaining access through gaps in the screen and through broken screens. Repair the large gaps between the longitudinal box girders and the diaphragms that allow pigeon access to the interior of the longitudinal box girders. Replace the animal screening at pier 4.

23. Seal the towers at the horizontal field splices so that water does not enter the inside of the towers.

24. Repair the broken roof access hatch cover ontop of tower 2. Replace the flashing around the access hatch at the top of the towers.

25. Clean out clogged scuppers.

26. Repair or replace the electrical receptacles that did not work in the towers, the open conduit pull boxes with exposed wires in the towers, the missing safety glass at light fixtures in the towers, and the broken light fixture found inside one of the tower legs. Repair or replace the electrical receptacles that did not work and the broken conduit brackets in the longitudinal box girders. Also replace the missing top cover of rectangular conduit in the longitudinal box girders and replace the exposed wires that were found to have been damaged by rodents.

27. Replace the broken red filter in the aerial signal on top of tower 3 and replace the broken bolt that locks the filter in-place.

28. Repair or replace the bulb in the navigation light on the west side of tower 2 and repair/tighten the bottom cap.

29. Tighten the loose nut at two roadway light locations and install a double set of nuts.

30. Re-inspect the cracking and deterioration along the striping edges and re-paint when necessary.

31. Repair the drainage problem located on the west side of the lower struts of both towers.

32. Replace two maintenance railing posts on the lower strut near the west leg of each tower.

33. Weld the few locations found of partially welded access covers in each tower.

IV. Inspection Recommendations

Inspection recommendations are provided so that deficiencies identified in this report can be monitored and, if necessary, appropriate action taken to address any problems.

34. The following components are considered special members based upon their condition and should be inspected on a more frequent basis (12 months), as follows:
    - Expansion Joints at pier 1N and pier 1S – abnormal expansion of beam elements.
    - Bearings with keeper plate deficiencies – grooved, broken or bent.
    - Pier 4 wind lock – longitudinal alignment.

- Problematic cracked welded connection of transverse stiffener to deck plate – fatigue life concerns at locations directly underneath the right travel lane, right wheel line (east web of east box and west web of west box).
- Problematic cracked weld connection of lifting lug to deck plate.
- Locations of intersecting welds in the longitudinal box girders.

35. It is recommended that the routine inspection cycle for the bridge be maintained at 24 months.

V. Miscellaneous Recommendations

The following recommendations address long-term performance of the bridge.

36. It is recommended that a fatigue evaluation study be performed in order to determine the stress in the deck plate and the remaining fatigue life of the typical problematic stiffener-web to deck-plate connection. The intent of this study would be to gain a better understanding of the current cracking problems, identify the remaining fatigue life of the problematic detail, and assist in the development of long-term performance recommendations for the remaining un-cracked locations.

37. Analyze and rate bridge based upon existing conditions. We recommend the live load inventory and operating ratings be determined as required by the NBIS federal regulations contained in the *Code of Federal Regulations 23 Highways – Part 650*, Subpart C.

AVAILABLE PLANS AND REPORTS

The following information was made available to TranSystems personnel.

1. As-Built Plans
   Hale Boggs Memorial Bridge
   State Project No. 450 - 37 - 01
   I-310 over Mississippi River
   Dated: April 9, 1974

2. As-Built Plans
   Hale Boggs Memorial Bridge
   State Project No. 450 - 37 - 02
   I-310 over Mississippi River
   Dated: May 24, 1977

3. Evaluation Report
   An Evaluation of the cracking in the Luling Bridge Box Girder Webs and Recommendations for its Retrofit.
   Fisher, Fang & Associates, Inc.
   Dated: April 1982

4. Rehabilitation Plans
   Cable Stay Replacement / Preliminary 95% Submittal dated June 2008
   Hale Boggs Memorial Bridge
   State Project No. 450 - 37 - 0022
   St. Charles Parish I-310

Appendix A

Bridge Inspection Report Form

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

BRIDGE INSPECTION REPORT

Dist	Parish	Route	Control	Section	Log Mile	I.D.	Bridge Type	Year Built	Design
02	ST. CHARLES	I - 310	450	37	0510	1	STCAGR	1983	20

Bridge Name or Feature Crossed	Bridge Length	Horiz. Clear	Vert. Clear	Surface Type	AD
HALE BOGGS BRIDGE	2745'	38'	208'	ASP	---

Structure Number	RECALL NUMBER	(90) INSPECTION COMPLETE	DATE NEXT INSPECTION	Type Inspection	Recommendation	Total Rating	Overall Struct. Rating
ON-SYSTEM NUMBER: Dist, Par, Control, Sect, Log Mile, ID OFF-SYSTEM NUMBER: P, Par, Latitude, Longitude, ID							
0 2 4 5 4 5 0 3 7 0 5 1 0 1	2 0 6 0 0 0	0 4 1 1 0 8	0 4 1 1 1 0	1	4	6	5

TRAFFIC SERVICES												
CONDITION	Reg. Signs	Striping	Object Markers	Warning Signs	Warning Devices	Clear. Signs	Clear. Devices	Aerial Signals	Navig. Lights	Rdwy. Lights	Legibility	Visibility
6	-	7	-	-	-	-	-	7	6	6	-	-

(65) APPROACH								
CONDITION	Rdwy. Surface	Const. Joints	Shoulders	Embankment	Appro. Slab	Relief Joints	Guardrails	Retain Walls
-	-	-	-	-	-	-	-	-

(58) DECK								
CONDITION	Rdwy. Surface	Deck	Curbs	Sidewalks	Bridge Rails	Parapets	Deck Joints	Joint Seals
5	5	5	-	-	7	-	4	5

(59) SUPERSTRUCTURE													
CONDITION	Bearings	Girders	Floor Beams	Stringers	Trusses	Lower Chord	X-Bracing/Diaphragm	Lower Lat. System	Portal Frames	Verticals	Diagonals	Upper Lat. System	Sway Frames	Upper Chord
6	6	6	7	-	-	-	6	-	-	-	-	-	-	-

(60) SUBSTRUCTURE												
CONDITION	Abutments	Back / Wing Walls	Bulkheads	Pedestals	Bents	Caps	Piling	Bracing	Piers	Columns	Footing	Foundation
6	-	-	-	5	6	-	-	-	-	-	-	-

(61) WATERWAY								
CONDITION	Embankment	Revetment	Channel	Spur Dyke	Vegetation	Fenders	Drift	Scour
-	-	-	-	-	-	-	-	-

MOVABLE SPANS								
CONDITION	Mech. System	Wedges	Greasing	Elec. System	Barriers/Gates	Control Panel	Operator House	Nav Signals
-	-	-	-	-	-	-	-	-

GENERAL NOTES																	
Rivets/Bolts	Welds	Steel Corrosion	Fatigue	Paint	Conc Spall/Scale	Conc. Cracks	Timber Decay	Connections	Movement / Load	Settlement	Member Align.	O'Load Distress	Drainage	Rdwy. Align.	Cleanliness	Collision Damage	Utilities
6	4	5	4	7	-	-	-	7	7	7	7	8	7	8	4	6	5

POSTED LOAD				SAFETY FEATURES				APPRAISALS				
Single Vehicle	Vehicle	Vehicle	Combination	Bridge Rail	Transition	Appro. GRail	GRail Ends	UnderClearance	WW Adequacy	App. Rdwy. Align	Surface	Thickness
-	-	-	-	1	N	N	N	X	X	X	0	1

TYPE WORK RECOMMENDED																															
#1			#2			#3			#4			#5			#6			#7			#8		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SPECIAL DETAILS						ATTACHMENTS							ACCESS EQUIP					PERSONAL RESOURCES								
Pin & Hanger	Two - Girder Sys	Two - Truss Sys.	Suspension Spans	X-Grid Floor Beams	Pier Caps	Remarks/Narrative	Sketches	Photographs	Stream Bed Profile	Timber Rating	588 Steel Form	MOV Bridge Insp.	Snooper	Bucket Truck	Scaffolding	Boat	Ext Ladder	No. of Inspectors	Man - Hours (hours / tenths)					Team Leader's Initials		
7	8	-	7	5	-	-	-	-	-	-	-	-	Y	N	N	Y	Y	5	0	3	1	5	0	S	M	D

Inspected By: _____

Approved By: _____

Date Approved : _____

* CONFIDENTIAL, PRIVILEGED& NON-DISCOVERABLE INFORMATION

The information set forth in this document is privileged, confidential and exempt from disclosure under **23 U.S.C. § 409** and other applicable law. If you received this inormation in error, you are on notice that any unauthorized examination, disclosure, copying, distribution, or taking of any

Appendix B

Structures Inspection Field Report

2-DIST	ROUTE		PARISH
02	I - 310		ST. CHARLES

TranSystems Corporation

STRUCTURE INSPECTION FIELD REPORT

ROUTINE INSPECTION

CITY/TOWN	8 - STRUCTURE NO.	11- MILE POINT	41 - STATUS	90 - ROUTINE INSPECTION DATE
LULING - DESTREHAN	02454503705101	005.1	A:OPEN	APR 11, 2008

07 - FACILITY CARRIED	MEMORIAL NAME / LOCAL NAME	27 - YR BUILT	106 - YR REBUILT	YR REHAB'D (NON 106)
RT I - 310	HALE BOGGS BRIDGE	1983	0000	0000

06 - FEATURES INTERSECTED	26 - FUNCTIONAL CLASS.	DIST. BRIDGE INSPECTION ENGINEER
WATER MISSISSIPPI RIVER	URBAN ARTERIAL	

43 - STRUCTURE TYPE	22 - OWNER	21 - MAINTAINER	TEAM LEADER	PROJECT MANAGER
STEEL STAYED GIRDER	State Highway Agency	State Highway Agency	S. Darling	P. Norton

107 - DECK TYPE	WEATHER	TEMP. (air)	TEAM MEMBERS:
STEEL PLATE	VARIED	48-80°F	B.CORSON, C.SAUVEUR, M.JOHNSON, J.READ, S.BECKMAN, B.SULIKOWSKI, C.YOUNG, S.BARTHA, W.WEIR

ITEM 58 — 5

DECK	TSC	DEF
1. Roadway Surface	5	
2. Deck	5	S - P
3. Curbs	N	
4. Sidewalks	N	
5. Bridge Rails	7	M - P
6. Parapets	N	
7. Deck Joints	4	S - P
8. Joint Seals	5	M - P

TRAFFIC SERVICES — 6

	TSC	DEF
1. Reg. Signs	X	
2. Striping	7	M - P
3. Object Markers	N	
4. Warning Signs	N	
5. Warning Devices	N	
6. Clearance Signs	N	
7. Clearance Devices	N	
8. Aerial Signals	7	M - P
9. Navigation Lights	6	M - P
10. Roadway Lights	6	M - P
11. Legibility	X	
12. Visibility	X	

APPROACHES — X

	TSC	DEF
1. Roadway Surface	X	
2. Construction Joints	X	
3. Shoulders	X	
4. Embankment	N	
5. Approach Slab	N	
6. Relief Joints	X	
7. Guardrails	N	
8. Retaining Walls	N	

ITEM 59 — 6

SUPERSTRUCTURE	TSC	DEF
1. Bearings	6	M - P
2. Girders	6	M - P
3. Floor Beams	7	
4. Stringers	N	
5. Trusses	N	
6. Lower Chord	N	
7. X-Bracing / Diaphragm	6	
8. Lower Lateral System	N	
9. Portal Frames	N	
10.Verticals	N	
11.Diagonals	X	
12.Upper Lateral System	N	
13.Sway Frames	N	
14.Upper Chord	N	

GENERAL NOTES

	TSC	DEF
1. Rivets / Bolts	6	M - P
2. Welds	4	M - P
3. Steel Corrosion	5	M - P
4. Fatigue	4	M - P
5. Paint	7	
6. Concrete Spall / Scale	X	
7. Concrete Cracks	X	
8. Timber Decay	X	
9. Connections	7	
10. Movement / Load	7	
11. Settlement	7	
12. Member Alignment	7	
13. Overload Distress	8	
14. Drainage	7	M - P
15. Roadway Alignment	8	
16. Cleanliness	4	M - P
17. Collision Damage	6	
18. Utilities	5	M - P

ITEM 60 — 6

SUBSTRUCTURE	TSC	DEF
1. Abutments	X	
2. Back / Wingwalls	N	
3. Bulkheads	N	
4. Pedestals	5	M - P
5. Bents	6	M - P
6. Caps	X	
7. Piling	N	
8. Bracing	N	
9. Piers	X	
10. Columns	X	
11. Footing	H	
12. Foundation	H	

SPECIAL DETAILS

	TSC	DEF
1. Pin & Hanger	7	
2.Two Girder System	8	
3.Two Truss System	N	
4.Suspension Spans	7	
5. X-Girder/ Floor Beams	5	M - P
6. Pier Caps	X	

UNDERMINING (Y/N) *If YES Please Explain* N

COLLISION DAMAGE: *Please Explain*
None( ) Minor (X) Moderate ( ) Severe ( )

SCOUR: *Please Explain*
None(X) Minor ( ) Moderate ( ) Severe ( )

LOAD DEFLECTION : *Please Explain*
None( ) Minor(X) Moderate( ) Severe( )

LOAD VIBRATION: *Please Explain*
None( ) Minor(X) Moderate( ) Severe( )

Any Fracture Critical Member : (Y/N) Y

Any Cracks: (Y/N) Y

X=NOT IN SCOPE N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	HALE BOGGS	02454503705101	APR 11,2008

ITEM 61 X

CHANNEL & CHANNEL PROTECTION

	TSC	DEF
1. Embankment	X	
2. Revetment	X	
3. Channel	X	
4. Spur Dyke	N	
5. Vegetation	X	
6. Fenders	X	
7. Drift	N	
8. Scour	N	

STREAM FLOW VELOCITY:

Tidal (☐) High (☒) Moderate (☐) Low (☐)

APPRAISALS

	TSC	DEF
1. Underclearance	X	
2. Waterway Adequacy	X	
3. Approach Rdwy Align	X	

ITEM 36 TRAFFIC SAFETY

	TSC	DEF
1. Bridge Rail	1	
2. Transition	X	
3. Approach Guard Rail	X	
4. Approach Guard Rail Ends	X	

WEIGHT POSTING:

Not Applicable ☒

	H	3	3S2	SINGLE
Actual Posting	-	-	-	-
Recommended Posting	-	-	-	-

	At bridge N	At bridge S	Other Advance N	Other Advance S
Signs in Place (Y=Yes N=No)	-	-	-	-
Legibility/ Visibility	- / -	- / -	- / -	- / -

CLEARANCE POSTING:

Not Applicable ☒

	E ft	E in	W ft	W in	meter
Actual Field Measurement		0		0	
Posted Clearance		0		0	

	At bridge E	At bridge W	Advance E	Advance W
Signs in Place (Y=Yes N=No)	-	-	-	-
Legibility/ Visibility	- / -	- / -	- / -	- / -

ACCESSIBILITY: (Y/N/P)

	Used
Lift Bucket	N
Ladder	Y
Boat	Y
Wader	N
Snooper	Y
Rigging	Y
Staging	N
Traffic Control	Y
RR Flagger	N
Rigged Basket	Y
Other:	

CONDITION RATING GUIDE (for Items 58, 59, 60)

	CODE	CONDITION	DEFECTS
	N	Not Applicable	
G	9	Excellent	Excellent condition.
G	8	Very Good	No problem noted.
G	7	Good	Some minor problems.
F	6	Satisfactory	Structural elements show some minor deterioration.
F	5	Fair	All primary structural elements are sound but may have minor section loss, cracking, spalling or scour.
P	4	Poor	Advance section loss, deterioration, spalling or scour.
P	3	Serious	Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or sheer cracks in concrete may be present.
C	2	Critical	Advance deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
C	1	"Imminent" Failure	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service.
	0	Failed	Out of service - beyond corrective action.

DEFICIENCY REPORTING GUIDE

DEFICIENCY: A defect in a structure that requires corrective action

CATEGORIES OF DEFICIENCIES:

M = Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion to steel, Minor scouring, Clogged drainage, etc.

S = Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroding rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S = Critical-Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H = Critical-Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples included but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

URGENCY OF REPAIR:

I = Immediate - [Inspector(s) contact Bridge Inspection Engineer to report the Deficiency and to receive further instruction from him/her].

A = As soon as possible - [Action/Repair should be initiated by Bridge Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize - [Shall be prioritized by Bridge Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

REMARKS

INSPECTION SCOPE

The Hale Boggs Memorial Bridge carries Interstate 310 over the Mississippi River. The structure is composed of three sections: south approach in Luling, main span river crossing, and north approach in Destrehan. The scope of this bridge inspection is limited to the main span river crossing – the steel cable-stayed bridge superstructure between pier 1S and pier 1N and the main span steel towers.

BRIDGE ORIENTATION

The bridge is oriented from south to north and the numbering system for bridge components increases from the south to the north for the main span river crossing. The box girders are designated east and west and each box has floorbeams numbered from FB1 to FB123; internal diaphragms numbered from ID1 to ID51; and cross-girders numbered CG1 to CG12. The main span river crossing piers are designated pier 1S (a common pier with the south approach); pier 1; pier 2 (tower 2); pier 3 (tower 3); pier 4; and pier 1N (a common pier with the north approach). Each A-frame tower (tower 2 and tower 3) has an east leg and west leg.

GENERAL REMARKS

The main span river crossing consists of a five span continuous twin trapezoidal box girder connected by a steel orthotropic deck, floorbeams, and internal diaphragms **(see photo 1)**. This superstructure is supported by three lines of converging cable-stays on each side of both towers **(see photo 2)**. At the deck level, the cable-stays are connected to transverse welded cross-girders (inclined steel box girder sections). The twin longitudinal box girders frame into these cross-girders with welded connections **(see photo 3)**.

The superstructure is supported by bearings at pier 1S; tower 2; tower 3; and pier 1N and by a pin and hanger assembly at piers 1 and 4 **(see photo 4)**. The steel towers rise 400 feet above the river to support the upper cable-stay anchorages. A total of 36 cable-stays are anchored in the towers, equally split between the east and west legs **(see photo 5)**. Each tower has two horizontal struts connecting the inclined legs of the tower with the lower strut also serving as the support for the superstructure bearings.

The bridge was opened to traffic in 1983, and has had two modifications since its original design. First, many cracks in the longitudinal steel box girder webs were discovered near the cross-girder to longitudinal girder connections during the erection. Arrest holes (2" diameter) were drilled in the webs adjacent to the longitudinal stiffeners. Then, problems with the modular expansion joint above pier 1N recently required replacement. The superstructure steel is un-painted weathering steel, except for the interiors of the cross girders which have been painted. The towers are also un-painted weathering steel.

Access Notes: The internal components of the longitudinal box girders, cross girders, and towers were accessed following confined space procedures. The external components of the cross girders and longitudinal girders were accessed through the use of a UB-50 inspection truck (snooper), while basket rigging was used to access the exterior faces of the towers.

Special Notes: To improve the structure's dynamic response during severe wind events, the main span of the river crossing section is equipped with a wind fairing. This wind fairing is mounted to the exterior faces of the east and west longitudinal girders in the main span only.

ITEM 58 – DECK

58.1 – Roadway Surface

(Fair Condition): The roadway surface consists of a 2 1/2" thick epoxy asphaltic wearing surface from pier 1S up to approximately 50 feet south of cross-girder 12, where the roadway surface transitions to a striated concrete wearing surface **(see photo 6)**. In the epoxy asphaltic wearing surface regions, regularly spaced longitudinal cracks (up to 1/4 inch wide) were noted near the right lane line for both northbound and southbound

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

REMARKS

traffic directions **(see photo 7)**. These cracks were typically up to 2 feet long and longitudinally spaced at 15 foot intervals.

Additional locations of longitudinal cracks were noted throughout in both southbound and northbound lanes **(see photo 8)**. These cracks were typically found in the wheel lines of the right lanes. Patches in the epoxy asphalt wearing surface were also noted, typically ranging in size from approximately 5 square feet to over 100 square feet **(see photo 9)**. These patches were observed to be in a higher concentration from cross-girder 8 to cross-girder 10.

The wearing surface in the right lane exhibited isolated locations of map cracking along the wheel lines **(see photo 10)**. The right shoulder in the southbound lanes was found to have a 20 foot long section of map cracking approximately halfway between cross-girders 6 and 7. A 1/2" deep by 60 foot long gouge in the wearing surface was noted across both southbound lanes and the right shoulder between tower 3 and cross-girder 9 **(see photo 11)**.

58.2 – Deck

(Fair Condition): The deck consists of a continuous orthotropic steel deck plate of varying thickness, reinforced with welded longitudinal ribs **(see photo 12)**. For erection purposes, lifting lugs were fillet welded to the deck plate and adjacent deck ribs close to the webs of the longitudinal box girders **(see photo 13)**. At three locations in the east box girder (adjacent to the east web) and at ten locations in the west box girder (adjacent to the west web) cracks have developed in the fillet welds and propagated into the base metal. The worst crack condition noted at the lifting lugs was 3 3/4" long and almost 1/16" wide near floorbeam 94 of the west longitudinal box girder. **(see photo 14)**. **For a complete table of lifting lug crack locations, see chart 1**.

The orthotropic steel deck plate is connected to the box girder transverse web stiffener with two fillet welds **(see sketch 1)**. These fillet welds terminate (do not wrap around) at the end of the web stiffener. At this connection a total of 112 cracks were found. These cracks initiate in the fillet weld material. A total of 75 of these 112 cracks were found to have propagated into the orthotropic steel deck plate (20 cracks in the east box girder and 55 cracks in the west box girder). The longest crack (5 inches long) was found in the west box girder. **For a complete table of orthotropic steel deck plate crack locations, see charts 2 - 4**.

Throughout the bridge, the bolted field splices for the deck exhibited isolated instances of loose bolts, missing nuts, and missing bolts **(see photo 15)**. Deck field splices, between the longitudinal box girders, exhibited leaching in isolated locations **(see photo 16)**. Water leakage through a gap in the weld between the deck plate, deck rib, and diaphragm 3 was noted near the east fascia **(see photo 17)**.

Above pier 1N inside of the west longitudinal box girder, the deck has a reinforced concrete diaphragm. This concrete exhibited typical minor longitudinal cracking with efflorescence **(see photo 18)**.

Deck deflection measurements were taken along both the east and west webs in selected locations of both the east and west longitudinal box girders. These measurements were obtained using a digital displacement gauge, which measured the displacement of the deck rib adjacent to the web **(see photo 19)**. A table containing a summary of the measurements can be seen on **chart 5**. These measurements indicate that under live load, the deck experiences a downward displacement as well as an upward displacement adjacent to the problematic web stiffener to deck plate connections. The displacements were found to be greater on the web under the right lane of traffic. The right wheel line of the right lane of traffic is directly over the problematic connections and measurement locations.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

REMARKS

58.5 – Bridge Rails

(Good Condition): Three instances of missing nuts on the bolts connecting the steel rail to the parapet were noted **(see photo 20)**. One instance was noted on the east rail just south of cross-girder 1, and two instances were noted on the west rail just north of pier 2. The median parapet exhibited several instances of minor collision damage/rubbing along both directions of travel **(see photo 21)**.

58.7 – Deck Joints

(Poor Condition): In the northbound lanes, the joint at pier 1N was found to be missing a portion of the modular joint separation beam **(see photo 22).** The adjacent separation beam was noted to be cracked for its full width **(see photo 23)**. Beneath this location the joint produces a loud banging noise under truck live load. This noise appears to be caused by the separation beams striking the support beams.

In the southbound lanes, the modular joint sections above pier 1N were found to be abnormally shifted on the north end **(see photo 24)**. This condition coincides with the modular joint sections above pier 1S which were found to be abnormally shifted on the south end.

58.8 – Joint Seals

(Fair Condition): The expansion modular joint glands at both pier 1N and 1S exhibited heavy sand, road debris, and minor vegetation growth **(see photo 25)**. A 1'-0" long section of the neoprene seal at joint 1N was noted to be pulling out from the adjacent separation beams in the right lane of the southbound lane **(see photo 26)**.

ITEM 59 – SUPERSTRUCTURE

59.1 –Bearings

(Satisfactory Condition): The bearings located at piers 1S, 3, and 1N consist of sliding plates with welded keeper plates to prevent lateral movement. At these bearings, the keeper plates were typically noted to be in contact with the sliding plate, and in isolated cases the sliding plate was found to have worn a groove in the keeper plate **(see photo 27)**. At pier 1S, two instances were found where the keeper plate was missing, and, at pier 1N, two instances were found where the sliding plate had bent the keeper plate **(see photo 28)**. All of these sliding plates exhibited signs of several inches of longitudinal movement **(see photo 29)**.

The bearings at pier 2 consist of a cylindrical bearing device that is restrained from longitudinal expansion, but allows for transverse movement **(see photo 30)**. The keepers exhibited signs of lateral movement. The base plates under the west longitudinal box girder were found to have scores up to 1/16" deep, while the base plates under the east longitudinal box girder had scores up to 1/8" deep **(see photo 31)**.

A complete table of the bearing expansion measurements can be found on **chart 6.**

Wind Locks: Wind locks are located at piers 1 - 4 and were found to be in good condition. The wind locks at piers 1 and 2 did not exhibit signs of movement. At pier 2 the southeast vertical stiffener was noted to be bent approximately 1" to the west **(see photo 32)**. The wind locks at piers 3 and 4 showed signs of movement **(see photo 33)**. At pier 4, movement was found to be approximately 3" to the north and 5" to the south. Also, the wind lock at pier 4 appeared to be longitudinally misaligned by approximately 6" **(see photo 34)** with daylight found between the west shoe and west bearing plate **(see photo 35)**.

59.2 – Girders

(Satisfactory Condition): Both longitudinal box girders were found to have minor deficiencies throughout including light laminating rust, isolated areas of moderate laminating rust, light to moderate debris, isolated missing or loose nuts/bolts at field splices and weld discontinuities. On the interior of the boxes, typical laminating sheets of light surface rust were noted on the webs and top of the bottom flange. Isolated locations

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exhibited moderate laminating rust on the webs and bottom flange **(see photo 36)**. The laminating rust was found to typically form along the horizontal plane of the web's longitudinal stiffeners, and would continue up the web.

In an effort to determine the magnitude of section loss caused by these conditions, ultrasonic thickness measuring was performed on representative areas in each longitudinal box girder. These measurements were obtained using a 1/2" diameter probe on a portable Krautkramer ultrasonic thickness gauge. Ten areas were selected in each longitudinal box girder with three locations in the north and south back spans and four locations in the main span. The worst condition found is shown in **chart 7** where a section loss of 0.05" was measured.

In general, the ultrasonic thickness measurements identified that moderate laminating rust on average corresponded to a section loss of between 0.03"-0.04" and light laminating rust corresponded to section losses less than 0.02". The worst location of section loss in the west longitudinal box girder was found along the west web above pier 1S where the bottom flange exhibited an area of moderate rust with pitting up to 1/8" deep for an area of approximately 1 square foot **(see photo 37)**.

The interior of the longitudinal box girders typically exhibited light debris along the top of the bottom flange. Areas of moderate debris were typically located in regions where the webs exhibited moderate laminating surface rust **(see photo 38)**. The west longitudinal box girder exhibited moderate construction debris and an aluminum utility support in the bay adjacent pier 1N **(see photo 39)**. On the interior of the east longitudinal girder an area of asphalt, which had fallen through holes in the deck, was noted near pier 1S, and heavy sand debris was noted between diaphragms 13 and 14 **(see photo 40)**. In the regions adjacent to the cross-girders rodent droppings, debris, and nests were typically found.

In addition, several isolated instances of loose bolts, missing nuts or bolts **(see photo 41)**, and broken/sheared bolts were noted throughout each longitudinal box girder at the field splices. Misaligned box sections and splice plates (up to 5/8" misaligned) were noted at field splice locations **(see photo 42)**. Adjacent to cross-girder 12 in both longitudinal box girders along the diagonal web connection, several bolts were never installed and the temporary erection drift pins remain **(see photo 43)**. In each longitudinal box girder between pier 2 and cross-girder 10, three sets of four empty (non-active) bolt holes were noted in the bottom flange, between adjacent diaphragms **(see photo 44)**.

At each cross-girder field splice location, several 2" diameter crack arrest holes have been drilled into the box girders webs. At isolated locations visible cracks remain and were found to terminate into the crack arrest holes **(see photo 45)**. Minor nicks (up to 1/8" deep and less than 3" long) were noted in isolated locations along the outside edge of flanges **(see photo 46)** and webs. Random instances of bright orange abrasion dust (caused by the longitudinal box girder's diagonal web stiffener rubbing against the deck) were noted in both longitudinal box girders **(see photo 47)**.

Wind Fairing

The wind fairing is in serious condition with areas of 100% loss along both longitudinal and transverse stiffeners. The interior of the wind fairing typically exhibited moderate to heavy pigeon and roadway debris. This debris has accumulated between the longitudinal stiffener and the wind fairing and is up to 6" deep **(see photo 48)**. Areas of 100% loss are typically found in locations of moderate to heavy debris accumulation. Most of these locations are for lengths less than 18" and widths less than 3" **(see photo 49)**. Several instances were noted where the losses extended for approximately 10 feet **(see photo 50)**. Pigeons are gaining access to the wind fairing through gaps between the wind fairing and cross girders, and at the ends of the fairing where the screens are broken **(see photo 51)**.

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59.3 – Floorbeams
(Good Condition): Minor impacted rust up to 1/4" thick was found at isolated floorbeam splice locations between the longitudinal box girders **(see photo 52)**.

59.7 – X-Bracing/Diaphragms
(Satisfactory Condition): At the external connection of the diaphragm of the longitudinal box girder, minor impacted rust up to 1/4" thick was typically noted. At isolated locations, in addition to the impacted rust, minor section losses up to 1/8" deep were noted along the bottom flange of the diaphragm **(see photo 53)**.

ITEM 60 – SUBSTRUCTURE

60.4 –Pedestals
(Fair Condition): The bearings at pier 1N and pier 1S are anchored into concrete pedestals which typically exhibited corner spalls for the full height of the pedestal. The spalls along pier 1S were noted to extend the full width of the pedestal **(see photo 54)**.

60.5 – Bents
(Satisfactory Condition): Gaps ranging from 1/2" to 1 1/4" were noted between the web plates at horizontal field splices for towers 2 and 3. In the corners of the tower legs, at these horizontal field splice gaps, water condensation, rust staining, and other signs of water infiltration were noted. Typically where signs of water infiltration were noted, areas of moderate to heavy laminating rust were also found on the tower webs and diaphragm plates **(see photo 55)**. Some webs and diaphragms exhibited pitting up to 1/8" deep **(see photo 56)**. Lack of light and ventilation appears to have allowed the water to remain on the webs and diaphragms for extended periods of time. In the upper strut of tower 2 and the lower strut of tower 3 moderate rust with 1/8" pitting and up to 1/2" loss of the bolts and nuts was found **(see photo 57)**. Heavy debris consisting of sand and pigeon droppings was noted on tier 1 of the legs of both towers **(see photos 58 and 59)**.

Thickness measurements were obtained throughout the east leg of each tower using a 1/2" diameter probe of a portable Krautkramer ultrasonic thickness gauge. Measurement locations were selected on tower legs that had moderate amounts of laminated rust on the webs and/or pitting/moderate rust and debris along the diaphragm plate. Measurements were obtained and compared to the original design drawings (not shop drawings) to estimate section losses. The largest section losses were found in tower 3, east leg at tier 7 in the southwest corner where a 0.11" loss was measured on the web plate, and a 0.13" loss was measured on the diaphragm plate. The complete findings at this tier can be found in **chart 8**.

The ultrasonic thickness measurements were compared to the section losses measured by ruler. This comparison found that estimated loss by ruler measurement was typically close to the ultrasonic thickness measurements but generally more conservative (estimating a larger loss). Based upon these findings **chart 9** summarizes loss locations in areas not tested using the ultrasonic thickness gauge.

On the exterior legs of the towers, impacted rust has typically developed between the vertical edge of the horizontal web field splice and the tower legs. This impacted rust was typically measured to be 3/4" thick, with some splices exhibiting impacted rust up to 1 1/4" thick. Isolated field splices with impacted rust exhibited section losses at the end of the field splice plate up to 1/8" deep **(see photo 60)**. Impacted rust up to 1/2" was typically noted between the tower web plates and the cable stay anchorage houses **(see photo 61)**.

Also on the exterior legs of the towers beneath the cable stay anchorage houses (south face of the west leg of tower 2) three holes with broken/sheared bolts were found **(see photo 62)**. Along the west face of the west leg of tower 2, at approximately the level of tier 21, a 6" diameter by 1" deep dent and 1/16" gouges was found **(see photo 63)**. The flashing of the access hatches on top of tower 3 exhibited heavy corrosion with areas of 100%

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loss **(see photo 64)**. The west side of the lower struts on both bents exhibited pools of water (after recent precipitation), with the submerged steel exhibiting moderate corrosion with negligible losses **(see photo 65)**.

Cable Anchorages: The cable saddles in the towers were found to be in good condition. On the saddles, some keeper plates were noted to be bent by up to 1/2" **(see photo 66)**. These bends appears to be a result of the original construction. One location where the anchorage end cap was missing was found in the east leg of tower 2 at tier 23 **(see photo 67)**. Gaps between the PE pipe and the cable anchorage housing gasket were noted on the west leg of both bents **(see photo 68)**. At tier 25 of the east leg of tower 3 a broken PE pipe was noted **(see photo 69)**.

Maintenance Railing on Tower Struts:

On the lower strut of both towers by the west leg the last two maintenance rail posts exhibited 100% section loss at the base connection **(see photo 70)**. The kick plates in these regions also exhibited minor section loss and moderate rust. On both towers isolated instances of partially welded access covers, which deflected up to 1/2" under the inspector's weight, were noted **(see photo 71)**.

GENERAL

1. Rivets / Bolts

(Satisfactory Condition): Field splices exhibited some instances of missing bolts **(see photo 72)**, missing nuts, loose nuts **(see photo 73)** and broken/sheared bolts. Adjacent to field splices, some deck plate knee braces exhibited undersized bolts **(see photo 74)**, and a broken/sheared bolt **(see photo 75)**. On the exterior of the longitudinal box girders, the bolts at floorbeam and diaphragm splices typically exhibited minor losses up to 1/16" **(see photo 76)**.

2. Welds

(Poor Condition): Isolated locations of weld deficiencies were noted throughout the structure. The most typical deficiency was poor quality weld termination for fillet welds connecting stiffeners to the web plates and flange plates. At the termination of the fillet weld lack of fusion was typically noted **(see photo 77)**. The locations with lack of fusion provided a frequent crack initiation site for the fatigue cracks found between the orthotropic deck plate and transverse web stiffeners in the longitudinal box girders. Weld porosity, up to 6" long, was noted in some welds throughout the longitudinal box girders **(see photo 78)**. Isolated locations of poor quality welds exhibiting inconsistent throat size and slag were also found **(see photo 79)**.

In addition, on the interior of the longitudinal box girders some locations of intersecting welds were found at the cross frame connection to the box girder's web plate. This intersecting weld condition creates a tri-axial constraint **(see photo 80)**. No signs of distress were noted at these intersecting welds.

Undercut welds were also found throughout the interior of the longitudinal box girders. The most frequently noted location was between the deck plate and web plates. The areas of undercutting noted were typically less than 6" **(see photo 81)**.

3. Steel Corrosion

(Fair Condition): Typical light laminating rust was noted throughout the towers and longitudinal box girders **(see photo 82)**. The towers exhibited active water infiltration with active corrosion and up to 1/8" deep losses along the web and diaphragm plates. These areas of active corrosion were typically limited to the exterior corners of the tower legs at the tiers located directly beneath a bolted horizontal field splice. Some areas of moderate laminating rust were found on the interiors of the longitudinal box girders, which exhibited minor section losses, typically up to 1/16" deep, and an isolated instance of section loss up to 1/8" deep. The exterior of four cross girders exhibited losses up to 1/4" deep along the web plate at the interface with the flange plate.

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4. Fatigue

(Poor Condition): The superstructure exhibited several areas of fatigue type cracking. On the interior of the cross-girders, cracked welds were found in cross-girders 5, 6, and 8 **(see photo 83)**. These cracks appeared to be limited to the weld material and were up to 2 1/8" long. The longitudinal box girders had previously documented cracks in the web plates near the field splices. These cracks were retrofitted with 2" diameter arrest holes **(see photo 84)**. No propagation of these cracks past the arrest holes was noted.

The interior of the longitudinal box girders exhibited two types of fatigue cracks. The first type was less prevalent and was found between the deck ribs and lifting lugs. The lifting lugs are attached to the deck ribs with fillet welds. Crack initiation was located at the termination of the fillet welds at the bottom of the deck rib with crack propagation extending into the base metal of the rib **(see photo 85)**. These cracks were found in a total of 13 locations with a maximum crack length of 3 3/4" and a maximum crack width of approximately 1/16". **See chart 1** for locations of cracks between lifting lugs and deck rib.

The second type of noted fatigue crack was located between the deck plate and the transverse web stiffener of the longitudinal box girders **(see photo 86)**. This crack initiation site was noted to be at the termination of the fillet welds. **See sketch 1** for the detail of this connection. These crack locations were found at the east web of the east longitudinal girder and the west web of the west longitudinal girder. This location corresponds to the approximate location of the right wheel line of the right lane for each direction of traffic. A total of 34 cracks were located in the east longitudinal box girder of which 20 cracks had propagated into the deck plate base metal. A total of 78 cracks were located in the west longitudinal box girder of which 55 cracks had propagated into the deck plate base metal. **See charts 2 – 4** for a complete listing of the location of these cracks.

12. Member Alignment

(Good Condition): The longitudinal box girders exhibited some minor misalignments of the bottom flange at field splices up to 5/8" **(see photo 87)**.

14. Drainage

(Good Condition): Some locations of clogged scuppers were found **(see photo 88)**.

16. Cleanliness

(Poor Condition): Tier 1 for both towers 2 and 3 and some areas of other tiers exhibited heavy debris composed of sand and/or pigeon waste **(see photo 89)**. Pigeon carcasses were found on tiers 1 and 7. Rodents, rodent's dens, and moderate rodent debris were noted in tiers 23-25 of both towers **(see photo 90)**. The interior of the longitudinal box girders exhibited heavy rodent debris typically near the cross-girders with active nests noted between cross-girder 1 and pier 1 as well as cross-girder 12 and pier 4.

The diaphragms at piers 1 and 4, connecting the east and west longitudinal box girders, exhibited heavy pigeon debris and several pigeon nests **(see photo 91)**. Pigeons were found to be gaining access to the space through large gaps between the longitudinal box girder and the diaphragm. Moderate construction debris was noted in the northern bay of the west longitudinal girder including part of an aluminum utility support **(see photo 39)**. The cross-girders typically exhibited light debris on the interior with minor water accumulation **(see photo 92)**. However, cross-girders 1 and 12 exhibited heavy animal debris up to 12" deep in the east and west ends of cross-girder 12 **(see photo 93)**. Typical light to moderate rust debris was noted along the floors of the interiors of the longitudinal box girders and interiors of the towers.

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17. Collision Damage

(Satisfactory Condition): The east wind fairing exhibited signs of collision damage between diaphragm 26 and 27 **(see photo 94)**. The bridge center median exhibited several instances of minor collision (rubbing) over the entire length for both directions of travel **(see photo 95)**.

18. Utilities

(Fair Condition): The electrical receptacles did not work in the west legs of towers 2 and 3 and below tier 8 of the east leg of tower 2. On the interior of the towers some locations of open conduit pull boxes with exposed wires **(see photo 96)**, missing safety glass at lighting fixtures, and broken light fixtures **(see photo 97)** were found.

The electrical receptacles did not work in the west longitudinal box girder from pier 3 to pier 1N. Some locations of broken conduit brackets for circular conduit were noted in both box girders **(see photo 98)**.

Some locations of 10 to 15 foot long sections of the top cover of a rectangular conduit were noted as removed or missing throughout the lengths of both longitudinal girders **(see photo 99)**. In some instances, the exposed wires in the rectangular conduit exhibited damage from being chewed on by rodents.

SPECIAL DETAILS

1. Pin and Hanger

(Good Condition): Pin and hanger assemblies were found to be located at piers 1 and 4. A single assembly consists of two hanger plates, an upper pin connected to the longitudinal box girder, and a lower pin connected to a hold-down assembly on top of the pier. The pins are hollow and the hangers are held in place with a brass washer secured by a lomas nut and cotter pin **(see photo 100)**.

Typically, a gap measuring 3/16"-1/4" was found between the hanger and nut. The lower pins typically exhibited light to moderate surface rust with negligible section loss **(see photo 101)**. The east lower pin and hanger hold-down connection at pier 1 was found to have double nuts with a zero thread count on the upper nuts for all four anchor bolts **(see photo 102)**. At pier 4, small washers were found tack welded to the hangers around the large bronze washer **(see photo 103)**.

The animal screenings around the hangers, at the bottom of the longitudinal girders were found bent with broken welds at both locations at pier 4 **(see photos 104 and 105)**. It appears that longitudinal movement of the superstructure at the pin and hanger location caused rotation of the hangers which broke the welds and significantly deformed the animal screening.

5. Cross-Girders / Floorbeams

(Fair Condition): Minor deficiencies were noted on the exterior of the cross-girders including some areas of section loss up to 1/4" deep. On the interior, three cracked welds were found. The cross-girders consist of square welded box girders which span transversely between the east and west cable-stay deck level anchorages. Access to the interior of the cross-girders is achieved through four access holes from the interior of the east and west longitudinal trapezoidal box girders. In addition, cross-girders 1 and 12 have an access hatch near the cable-stay's anchorage on one side only – the east side for cross-girder 1 and the west side for cross-girder 12.

The three cracked welds were found on the interiors of cross girders 5, 6 and 8. These cracks appear to be limited to the weld material with the longest crack measuring 2 1/8" **(see photo 106)**. **See sketch 2** for a complete listing of crack locations, lengths, and photo references.

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The rotated alignment (axially inclined) of the cross-girders allow water and debris accumulation along the bottom corner. Minor water accumulation was found in this area along cross-girders 2, 3, 4, 5, 9, 11 and 12 **(see photo 92)**. Moderate debris was noted along this corner in cross-girders 1 and 12 **(see photo 93)**.

On the exterior surfaces, the alignment of the cross-girders has allowed moisture and debris to accumulate along the top web plates at the connection to the flange plate, where the cross-girder frames into the longitudinal box girder. This has resulted in losses up to 1/4" deep on cross-girders 2, 6, 8 and 11 in areas of approximately 1 to 2 1/2 square feet **(see photo 107)**. **See chart 10** for a complete listing of cross-girder section losses.

On the interior of the cross-girders, the cable anchorages typically exhibit loose rubber gaskets and water seepage through the cables **(see photo 108)**. The leakage in cross-girder 4 has caused moderate rust with up to 1/8" deep loss on the anchorage covers **(see photo 109)**. Isolated cable anchorages exhibited rubber gaskets that were partially or completely dislodged **(see photo 110)**. In cross-girders 1 and 6 missing bolts were noted at the end cap for the anchorage covers **(see photo 111)**. On the exterior of the cross-girders, the caulk around the cable stays was found to be cracked/separating from the rubber gasket on cross-girders 4, 5 and 8 **(see photo 112)**.

TRAFFIC SERVICES

2. Striping

(Good Condition): The striping was found to be typically in good condition with cracking and deterioration along the striping edges in some locations on both sides of the roadway **(see photos 113 and 114)**.

8. Aerial Signals

(Good Condition): The red filter, for the beacon on top of tower 3, was found broken at the base of the light. The bolt locking the filter in place was found to be broken **(see photo 115)**. At dusk, this light is visible, exhibiting a white hue **(see photo 116)**.

9. Navigation Lights

(Satisfactory Condition): The navigation light on the west side of tower 2 is not functioning. At the time of inspection, the bottom cap was noted to be loose **(see photo 117)**. Light was not visible, at dusk, on the west face of tower 2 **(see photo 118)**.

10. Roadway Lights

(Satisfactory Condition): Two locations, one south of diaphragm 20 and one south of diaphragm 49, were found beneath the deck where each anchor rod for the light pole connection had only one nut. Double nuts were not present. In each case, one of the four nuts was also noted to be loose **(see photo 119)**.

Chart / Sketch / Photo Log

Chart 1: Cracks between lifting lugs and deck rib.
Chart 2: Crack locations between web stiffener and deck plate - Chart 1 of 3.
Chart 3: Crack locations between web stiffener and deck plate - Chart 2 of 3.
Chart 4: Crack locations between web stiffener and deck plate - Chart 3 of 3.
Chart 5: Summary of deck displacement measurements.
Chart 6: Expansion bearing measurements.
Chart 7: Typical ultrasonic thickness measurements - box girder.
Chart 8: Typical ultrasonic thickness measurements - tower leg.
Chart 9: Typical steel losses in interior of tower (using caliper and ruler).
Chart 10: Cross-girder losses (using caliper and ruler).

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Sketch 1: Web stiffener to deck detail.
Sketch 2: Cross girder crack locations.

Photo 1: Typical exterior connection of diaphragm to longitudinal box girder. Note utility line exiting the longitudinal box girder and entering the deck.
Photo 2: East elevation of structure's main river section.
Photo 3: Typical connections of exterior cross-girder. Cross-girder 1 shown.
Photo 4: Typical pin and hanger connection to pier. Shown at west longitudinal box girder at pier 4.
Photo 5: Typical cable arrangement for main span (south elevation of tower 3).
Photo 6: Typical transition from asphalt wearing surface to striated concrete wearing surface south of cross-girder 12.
Photo 7: Typical longitudinal cracks approximately 2' long and spaced at 15' intervals approximately 6" from right edge line.
Photo 8: Isolated longitudinal cracking in northbound right lane south of cross-girder 1.
Photo 9: Typical patches in wearing surface.
Photo 10: Map cracking in right wheel line of the right lane in the southbound direction near cross girder 12.
Photo 11: Score in wearing surface (1/2" deep, 60' long) across both lanes in the southbound direction between tower 3 and cross-girder 9.
Photo 12: Typical underside of deck, shot between diaphragms 19 and 20 in the west longitudinal box girder. Note typical light surface rust and dots indicating moisture condensation.
Photo 13: Typical lifting lug welded to adjacent deck ribs, and the deck plate. Note the cracked weld between the left rib and lifting lug.
Photo 14: Crack, 3 1/4" long, at weld between lifting lug and deck longitudinal rib in west longitudinal box girder near floorbeam 94.
Photo 15: Missing nut in deck plate field splice in longitudinal box girder at field splice 5.
Photo 16: Isolated location of water leaching through the deck at the field splice with moderate corrosion. Field splice 16 between east and west longitudinal box girders, shown.
Photo 17: Gap in welds between deck plate, deck rib, and diaphragm with water leaking through along east longitudinal box girder at diaphragm 3.
Photo 18: Reinforced concrete diaphragm above pier 1N exhibiting transverse cracks with efflorescence in the west longitudinal box girder.
Photo 19: Typical deck deflection measurement equipment set up.
Photo 20: Missing nut at rail connection to the parapet in span 1.
Photo 21: Minor vehicle collision/rubbing along median in the southbound direction in span 2.
Photo 22: Missing section of the modular joint separation beam at pier 1N in the left lane of the northbound direction of travel.
Photo 23: Crack the full width of the separation beam in the modular joint at pier 1N in the left lane of northbound direction of travel.
Photo 24: Modular joint at pier 1S in the southbound direction of travel exhibiting uneven spacing, with the separation beams shifted towards the north. Note the debris in the glands at each of the shoulders.
Photo 25: Typical heavy debris in modular joint glands shown at pier 1N in the northbound direction of travel.
Photo 26: A 1'-0" section of the gland pulling free from the separation beams of the modular joint at pier 1N in the right lane of the south bound direction of travel.

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Photo 27: Southwest keeper plate in contact with horizontal plate at the east bearing of the east longitudinal box girder at pier 1S. Note groove in keeper plate.

Photo 28: Northwest keeper plate bent out of position, with a broken weld, at the east bearing of the east girder at pier 1N.

Photo 29: Surface hardened along bottom of horizontal plate, indicating longitudinal movement at the bearings. West bearing, of east girder at pier 1N.

Photo 30: West elevation of the east bearing at pier 2.

Photo 31: East elevation of west bearing at west girder at pier 2. Note scores along masonry plate up to 1/16" deep and moderate surface rust.

Photo 32: Southeast stiffener of the wind lock at pier 2, with a 1" bend to the west along the bottom edge.

Photo 33: Surface hardened on wearing plate, indicating longitudinal movement, of the wind lock at pier 4.

Photo 34: West elevation of the wind lock at pier 4 exhibiting approximately 6" of longitudinal misalignment.

Photo 35: Daylight at the west shoe and the west bearing plate of the wind lock assembly at pier 4.

Photo 36: Typical moderate rust with negligible loss along interior of web plates of longitudinal box girders.

Photo 37: One square foot area of pitting up to 1/8" deep on the top of the bottom flange along the west web of the west longitudinal box girder above pier 1S.

Photo 38: Moderate debris along bottom flange, and moderate rust along web plates of the west longitudinal box girder between pier 2 and diaphragm 15.

Photo 39: Aluminum utility support at end bay of the west longitudinal box girder adjacent to pier 1N.

Photo 40: Heavy sand debris along bottom flange of east longitudinal box girder between diaphragms 12 and 13.

Photo 41: Broken bolt at bottom flange connection of the longitudinal stiffener at field splice 20 of the east longitudinal box girder.

Photo 42: Misalignments of approximately 1/4" between sections of the west longitudinal box girder at field splice 17.

Photo 43: Drift pins remain (instead of bolts) at the field splice along the east web longitudinal stiffener just south of cross-girder 12 in the west box girder.

Photo 44: Typical square pattern of blind bolt holes in the bottom flange of the box girders. Note moderate debris along the bottom flange.

Photo 45: Full depth crack in the web plate entering crack arrest hole along east web at field splice 4 of the east longitudinal box girder.

Photo 46: Nick in bottom flange of east longitudinal box girder along east web just below floorbeam 1.

Photo 47: Abrasion dust between diagonal stiffener and deck plate along west web above cross-girder 4 of the west longitudinal box girder.

Photo 48: Typical pigeon debris between wind fairing plate and longitudinal stiffeners.

Photo 49: Typical areas of 100% loss of the wind fairing plate. Locations match horizontally with the longitudinal stiffeners.

Photo 50: Area of 100% loss in the west longitudinal box girder wind fairing plate along the longitudinal stiffener.

Photo 51: Typical broken/dislodged varmit screening adjacent to the piers.

Photo 52: Typical impacted rust between bottom flange and splice plates at floorbeam 39.

Photo 53: Typical impacted rust with 1/8" loss in splice plate at connection of diaphragm 29 and west longitudinal box girder.

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Photo 54: Typical spalling of bearing pedestals at pier 1S, for the full height and full width of pedestal.

Photo 55: Tier 11, southwest corner of tower 2 east leg exhibiting signs of water infiltration, moderate rust along the web and diaphragm plates, and moderate debris along the diaphragm plate.

Photo 56: Active, isolated pitting up to 1/8" deep noted along diaphragm plates adjacent to corners with signs of water ingress. Tower 2, the south east corner of tier 19 shown.

Photo 57: Up to 1/8" pitting along splice plate and 20% loss of bolts and nuts on the south side of the west chamber in the top strut of tower 2.

Photo 58: Heavy pigeon debris located along the floor (tier 1) of the tower legs.

Photo 59: Approximately 12" deep of heavy sand and debris noted on the floor (tier 1) of the tower legs.

Photo 60: Up to 1 1/4" of impacted rust between bent web and splice plates, with the splice plate exhibiting up to 1/8" loss.

Photo 61: Typical impacted rust, up to 1/2" thick, between the tower web plate and the cable stay anchorage house. Note missing bolt.

Photo 62: Typical sheared bolts under cable houses on the south face of the east leg of tower 2.

Photo 63: Isolated 6" diameter dent, up to 1" deep and 1/16" deep gouges in the west web of the west leg of tower 2.

Photo 64: Heavy corrosion with areas of up to 100% loss along access hatch flashing on the top level of tower 3.

Photo 65: Typical pooling of water at field splice by west leg of tower 2.

Photo 66: Typical bent keeper assembly on cable anchorage, shown at the west leg of tower 3 at tier 23.

Photo 67: End cap for cable stay is missing, with ends of cables exhibiting light rust at tier 23 of the east leg of tower 2.

Photo 68: Instance of 1/16" gap between cable stay and gasket at connection to tower leg.

Photo 69: Broken PE pipe at tier 25 of the east leg of tower 3.

Photo 70: Typical 100% section loss of the hand railing connection to the tower lower strut.

Photo 71: Access cover not fully welded in tower 3 west column tier 13, exhibiting up to 1/2" deflection under inspector live load.

Photo 72: Two missing bolts at deck field splice adjacent to cross-girder 12 in the west longitudinal box girder.

Photo 73: Location of a loose bolt along the west web of the longitudinal box girder at field splice 16.

Photo 74: Missing nut and missing bolt on undersized bolts in deck plate knee brace along east web at field splice 10 of the east longitudinal box girder.

Photo 75: Broken bolt at deck splice knee brace at field splice 26 of the west longitudinal box girder.

Photo 76: Typical minor pitting on bolts and nuts at exterior field splices.

Photo 77: Fillet welds along each face of longitudinal stiffener to tower web exhibiting lack of fusion at termination of welds. Located at east leg of tower 2 at tier 3.

Photo 78: Instance of minor porosity in weld material between deck plate and web plate of the longitudinal box girder.

Photo 79: Inconsistent weld throat size, and excessive slag between the south face of floorbeam 8 and the web plates of the east longitudinal box girder.

Photo 80: Instance of intersecting welds with tri-axial constraints at the junction of the floorbeam/longitudinal box girder web plate/longitudinal stiffener. West longitudinal box girder along the west web at floorbeam 11 shown.

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Photo 81: Minor weld undercutting along the web plate of the box girder at the connection to the deck plate. Floorbeam 9 to diaphragm 5 east web box shown.

Photo 82: Typical light laminating rust along interiors of the longitudinal box girders.

Photo 83: 1 1/2" long crack in weld on interior of cross girder 8 in the third bay between the east diaphragm and the longitudinal stiffener.

Photo 84: Crack in west web of east longitudinal box girder propagating into crack arrest hole.

Photo 85: Typical fatigue crack at lifting lug to deck rib connection, with propagation from weld material into deck rib base metal.

Photo 86: Typical fatigue crack at longitudinal box girder transverse web stiffener weld to deck plate, with propagation into deck plate base metal.

Photo 87: Approximately 5/8" of misalignment of bottom flanges of the east longitudinal box girder at field splice 28.

Photo 88: Instance of a clogged scupper in the northbound direction of traffic, approximately 130 feet north of pier 2.

Photo 89: Pigeon debris located throughout tier 25 of the east leg of tower 3.

Photo 90: Rodent nest between longitudinal web stiffeners on tier 23 of the east leg of tower 3.

Photo 91: Heavy pigeon debris, approximately 2" deep, in the diaphragm between the longitudinal box girders at pier 1.

Photo 92: Minor water accumulation along the bottom corner of cross-girder 4.

Photo 93: Typical heavy debris along the bottom corner of cross-girder 12 near the east end.

Photo 94: Collision damage to the east wind fairing between diaphragms 26 and 27.

Photo 95: Signs of vehicle collision/rubbing along median in the southbound direction of travel at cross-girder 3.

Photo 96: Typical loose/missing utility cover with exposed wires inside tower.

Photo 97: Typical broken light fixture in interior of towers.

Photo 98: Broken utility conduit bracket on interior of west longitudinal box girder.

Photo 99: Approximately 20 foot long section of dislodged top cover to rectangular utility conduit on the interior of the longitudinal box girder.

Photo 100: Typical upper pin in very good condition, east hanger of east longitudinal box girder at pier 1 shown.

Photo 101: Typical lower pin exhibiting light to moderate surface rust with negligible loss.

Photo 102: Pier 1 east lower pin held-down connection with double nuts on anchor bolts, with zero thread count.

Photo 103: Typically noted bolt washers tack welded to the hanger plate in order to hold pin's bronze washer in place.

Photo 104: Broken welds and bolts at bent animal screening around west pin and hanger assembly at pier 4.

Photo 105: Overall view of bent animal screening around west pin and hanger assembly at pier 4.

Photo 106: Crack, 2 1/8" long, in cross-girder 5 weld between longitudinal stiffener plate and diaphragm plate.

Photo 107: Area of pitting with losses up to 1/4" deep along top web plate by flange plate of cross-girder 8.

Photo 108: Active water leakage through rubber seal at west anchorages of cross-girder 1.

Photo 109: Active water leakage, with moderate rust and losses up to 1/8" deep on anchorage protective cover in cross-girder 4, note the loose rubber seal.

Photo 110: Dislodged rubber seal at west cable anchorage of cross-girder 2.

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Photo 111: Missing bolt at anchorage cover at western anchorages of cross-girder 1.

Photo 112: Cracked caulk at cable to cross-girder connection, shown at east anchorages of cross-girder 8.

Photo 113: Typical right edge line striping exhibiting cracking line material.

Photo 114: Right edge line exhibiting isolated instances of worn portions of line material.

Photo 115: Broken bolt on cover to aerial light on top of tower 3.

Photo 116: West elevation of tower 3 at dusk, note white hue emitted from aerial signal on top of bent.

Photo 117: Open cap to navigation light on west side of tower 2.

Photo 118: West elevation of bridge at night, note the absence of a navigation light on the right side by tower 2.

Photo 119: Loose nuts at deck connection to light pole anchor bolts.

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Chart 1

Cracks between Lifting Lugs and Deck Rib

East Box Girder

Crack No.	Longitudinal Location	Transverse Location	Propagation into Base Metal	Inspection Photos	Report Photos
1	Between FB91/92	Adjacent to East Web	Yes		
2	South of FB95	Adjacent to East Web	Yes	C1-733	
3	South of FB115	Adjacent to East Web	Yes	C1-734	

West Box Girder

Crack No.	Longitudinal Location	Transverse Location	Propagation into Base Metal	Inspection Photos	Report Photos
1	3' North of FB35	Adjacent to West Web	Yes	C2-452 thru 453	85
2	5' North of ID18	Adjacent to West Web	No	C2-470	
3	5' South of ID 23	Adjacent to West Web	Yes	C2-498	
4	3' South of FB90	Adjacent to West Web	Yes	C2-524/526	13
5	3' South of FB92	Adjacent to West Web	Yes		
6	3' North of FB94	Adjacent to West Web	Yes	C2-531	14
7	3' North of ID42	Adjacent to West Web	Yes	C2-545	
8	5' South of FB92	Adjacent to West Web	Yes		
9	3' North of FB107	Adjacent to West Web	Yes		
10	3' South of FB123	Adjacent to West Web	Yes	C2-603	

Chart 1: Cracks between lifting lugs and deck rib.

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Chart 2

East Box Girder

Crack Locations between Web Stiffeners and Deck Plate

Crack No.	Longitudinal Location	Web Location	Propagation into Base Metal	Inspection Photos	Report Photos
1	Second Stiffener North of ID9	East	Yes	C1-178 thru 179	
2	First Stiffener South of ID10	East	Yes	C1-188 thru 189	
3	Second Stiffener South of ID11	East	Yes	C1-203 thru 204	
4	First Stiffener North of FB37	East	No		
5	First Stiffener North of FB38	East	No	C2-185	
6	First Stiffener North of ID16	East	No		
7	First Stiffener North of FB39	East	No		
8	First Stiffener North of FB40	East	No	C2-192	
9	First Stiffener North of ID17	East	No		
10	First Stiffener North of FB46	East	Yes	C2-228	
11	First Stiffener North of ID19	East	Yes		
12	First Stiffener North of FB47	East	No		
13	First Stiffener North of FB71	East	No		
14	First Stiffener North of FB72	East	Yes		
15	First Stiffener North of FB80	East	Yes		
16	First Stiffener South of ID36	East	Yes		
17	First Stiffener North of ID36	East	Yes	C2-324 thru 325	
18	First Stiffener North of FB87	East	Yes		
19	First Stiffener South of ID37	East	No		
20	First Stiffener North of FB95	East	Yes	C2-267	
21	First Stiffener South of ID40	East	Yes		
22	First Stiffener South of ID42	East	Yes		
23	First Stiffener North of FB102	East	No		
24	First Stiffener North of ID43	East	Yes		
25	First Stiffener North of FB107	East	Yes		
26	First Stiffener South of ID45	East	No		
27	First Stiffener North of ID45	East	Yes		
28	First Stiffener North of FB109	East	Yes	C2-347	
29	First Stiffener North of FB110	East	Yes		
30	First Stiffener South of ID48	East	No		
31	First Stiffener North of ID 48	East	No		
32	First Stiffener South of ID 49	East	Yes		
33	First Stiffener North of FB119	East	Yes		
34	First Stiffener North of ID51	East	No		

Chart 2: Crack locations between web stiffener and deck plate - Chart 1 of 3.

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Chart 3

West Box Girder

Crack Locations between Web Stiffeners and Deck Plate

Crack No.	Longitudinal Location	Web Location	Propagation into Base Metal	Inspection Photos	Report Photos
1	First Stiffener North of ID3	West	Yes	C2-291 & C2-293	
2	First Stiffener South of ID4	West	No		
3	First Stiffener North of FB8	West	Yes		
4	First Stiffener North of FB9	West	Yes		
5	First Stiffener North of FB12	West	No	C2-397 thru 398	
6	First Stiffener North of ID6	West	No		
7	Second Stiffener North of ID6	West	Yes		
8	First Stiffener North of FB14	West	No		
9	First Stiffener North of FB15	West	Yes	C2-399	
10	First Stiffener North of ID7	West	Yes		
11	First Stiffener North of FB16	West	Yes		
12	First Stiffener North of FB17	West	No		
13	Second Stiffener North of FB17	West	Yes		
14	First Stiffener North of ID8	West	Yes		
15	Second Stiffener North of ID8	West	Yes		
16	Thirsd Stiffener North of ID8	West	No		
17	First Stiffener North of FB18	West	No		
18	First Stiffener North of ID9	West	Yes		
19	Second Stiffener North of ID9	West	Yes		
20	First Stiffener South of ID10	West	Yes		
21	First Stiffener North of ID10	West	Yes	C2-419	
22	First Stiffener North of FB23	West	Yes		
23	First Stiffener North of FB24	West	No		
24	First Stiffener North of ID11	West	Yes		
25	Second Stiffener North of ID11	West	Yes		
26	First Stiffener North of ID12	West	No		
27	Second Stiffener North of ID12	West	Yes		
28	First Stiffener North of FB29	West	Yes		
29	First Stiffener North of ID13	West	Yes	C2-438	86
30	First Stiffener South of ID14	West	Yes		
31	First Stiffener North of FB33	West	No		
32	First Stiffener North of FB35	West	Yes		
33	First Stiffener North of FB39	West	Yes		
34	First Stiffener North of Pier 2	West	No		
35	Second Stiffener north of ID18	West	Yes		
36	First Stiffener north of FB45	West	Yes		
37	First Stiffener North of FB46	West	Yes		
38	First Stiffener North of ID19	West	Yes		
39	First Stiffener North of FB47	West	Yes	C2-480 & C2-482	

Chart 3: Crack locations between web stiffeners and deck plate - Chart 2 of 3.

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Chart 4

West Box Girder

Crack Locations between Web Stiffeners and Deck Plate

Crack No.	Longitudinal Location	Web Location	Propagation into Base Metal	Inspection Photos	Report Photos
40	First Stiffener North of FB52	West	Yes		
41	First Stiffener North of FB53	West	No		
42	First Stiffener North of ID22	West	Yes		
43	First Stiffener North of FB55	West	Yes		
44	First Stiffener South of FB56	West	No		
45	First Stiffener North of FB56	West	No		
46	First Stiffener North of FB60	West	No		
47	First Stiffener North of FB61	West	No		
48	First Stiffener North of FB62	West	No		
49	First Stiffener North of ID26	West	No		
50	First Stiffener North of FB63	West	No		
51	First Stiffener North of FB64	West	Yes		
52	First Stiffener North of ID32	West	Yes		
53	First Stiffener North of FB77	West	Yes		
54	First Stiffener North of ID33	West	Yes		
55	First Stifener North of FB80	West	Yes		
56	First Stiffener North of FB86	West	No		
57	First Stiffener North ID36	West	No		
58	First Stiffener North FB89	West	Yes		
59	First Stiffener North of FB93	West	Yes		
60	First Stiffener North of FB94	West	Yes		
61	First Stiffener North of FB96	West	Yes		
62	First Stiffener North of FB95	West	Yes		
63	First Stiffener North of ID41	West	Yes		
64	Second Stiffern North of ID41	West	Yes		
65	First Stiffenr North of FB100	West	Yes		
66	First Stiferner North of FB101	West	Yes	C2-542 thru C2-543	
67	First Stiffern North of ID42	West	Yes		
68	First Stifferner North of FB102	West	Yes		
69	First Stifferner North of FB103	West	Yes		
70	Firs Stiffener North of FB108	West	Yes		
71	First Stiffener North of ID 45	West	Yes		
72	First Stiffener North of FB109	West	No		
73	First Stiffener North FB110	West	Yes		
74	First Stiffener North FB115	West	Yes		
75	First Stiffener North FB116	West	Yes		
76	First Stiffener North of FB119	West	No		
77	First Stiffener North of FB120	West	Yes		
78	First Stiffener North of FB122	West	Yes	C2-601 thru 602	

Chart 4: Crack locations between web stiffeners and deck plate - Chart 3 of 3.

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Chart 5

Summary of Deck Displacement Measurements

West Box Girder								
Span	Between		Web	Maximum (down)	Mininum (upward)	Web	Maximum (down)	Mininum (upward)
South Backspan	FB9	ID5	West	0.0445 in	0.0050 in	East	0.0170 in	0.0060 in
South Backspan	FB13	ID6	West	0.0425 in	0.0040 in	East	0.0125 in	0.0055 in
South Backspan	FB25	FB26	West	0.0555 in	0.0075 in	East	0.0300 in	0.0040 in
Main Span	FB35	FB36	West	0.0425 in	0.0050 in	East	0.0100 in	0.0015 in
Main Span	FB47	FB48	West	0.0715 in	0.0085 in	East	0.0540 in	0.0070 in
Main Span	FB63	FB64	West	0.0195 in	0.0084 in	East	0.0175 in	0.0040 in
Main Span	FB70	FB71	West	0.0530 in	0.0060 in	East	0.0080 in	0.0015 in
North Back Span	FB93	FB94	West	0.0445 in	0.0050 in	East	0.0040 in	0.0010 in
North Back Span	FB102	FB103	West	0.0500 in	0.0115 in	East	0.0130 in	0.0045 in
North Back Span	FB114	ID47	West	0.0185 in	0.0015 in	East	0.0060 in	0.0015 in
East Box Girder								
South Backspan	FB16	FB17	West	0.0050 in	0.0040 in	East	0.0185 in	0.0020 in
South Backspan	FB31	FB32	West	0.0175 in	0.0020 in	East	0.0265 in	0.0030 in
Main Span	FB39	FB40	West	0.0010 in	0.0050 in	East	0.0160 in	0.0040 in
Main Span	FB47	FB48	West	0.0190 in	0.0030 in	East	0.0320 in	0.0030 in
Main Span	FB63	FB64	West	0.0070 in	0.0020 in	East	0.0265 in	0.0035 in
Main Span	FB70	FB71	West	0.0090 in	0.0030 in	East	0.0145 in	0.0045 in
North Back Span	FB93	FB94	West	0.0060 in	0.0040 in	East	0.0330 in	0.0040 in
North Back Span	FB102	FB103	West	0.0065 in	0.0020 in	East	0.0395 in	0.0090 in
North Back Span	FB109	FB110	West	0.0050 in	0.0030 in	East	0.0340 in	0.0025 in

Chart 5: Summary of deck displacement measurements.

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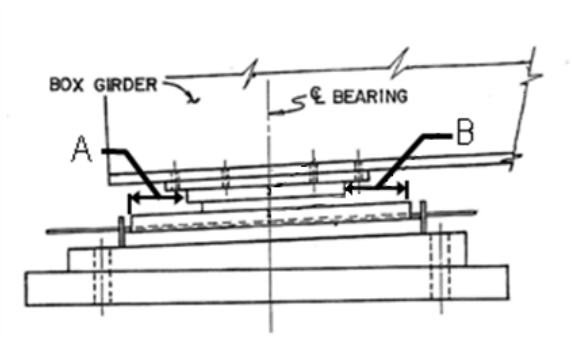
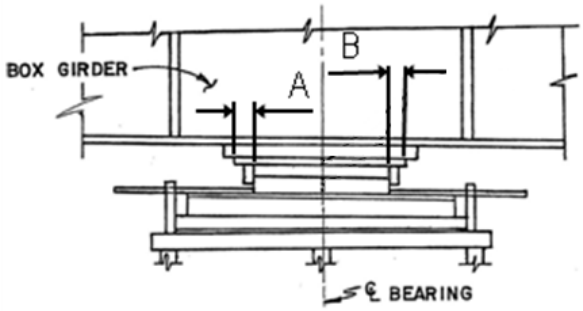


Bearing Type X



Bearing Type Y (East Elevation)

CHART 6

Expansion Bearing Measurement Table

					Measurement	
Pier	Longitudinal Box Girder	Bearing Location	Temp.	Reference Sketch	A	B
Pier 1S	West	East	50° F	X	7"	2"
		West	50° F	X	7"	1 7/8"
	East	East	50° F	X	7 1/2"	1 11/16"
		West	50° F	X	7"	2"
Pier 3	West	East	48° F	Y	2 5/8"	3/4"
		West	48° F	Y	2 5/8"	3/4"
	East	East	48° F	Y	2 5/8"	5/8"
		West	48° F	Y	2 3/4"	5/8"
Pier 1N	West	East	80° F	X	4 3/4"	16"
		West	80° F	X	4 1/2"	16 1/2"
	East	East	80° F	X	4 3/4"	16 1/4"
		West	80° F	X	4 1/4"	16 1/4"

Chart 6: Expansion bearing measurements.

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Chart 7

Typical Ultrasonic Thickness Measurements in Longitudinal Box Girder

East Girder, Between ID22 & ID23				
		Measurment after		
Location	Plate Thickness from Plans	Wire Brush	Light Grinding	Loss
A	0.625 in	0.615 in	0.609 in	0.02 in +/-
B	0.625 in	0.621 in	0.617 in	0.01 in +/-
C	0.750 in	0.741 in	0.698 in	0.05 in +/-
D	0.750 in	0.710 in	0.702 in	0.05 in +/-
E	0.750 in	0.767 in	0.726 in	0.02 in +/-
F	0.625 in	0.624 in	0.615 in	0.01 in +/-
G	0.625 in	0.623 in	0.616 in	0.01 in +/-

Condition Noted in Field
Typical light rust on webs. Bottom flange typically exhibited light rust with an area of isolated heavy rust in vicinity of Locations C and E.

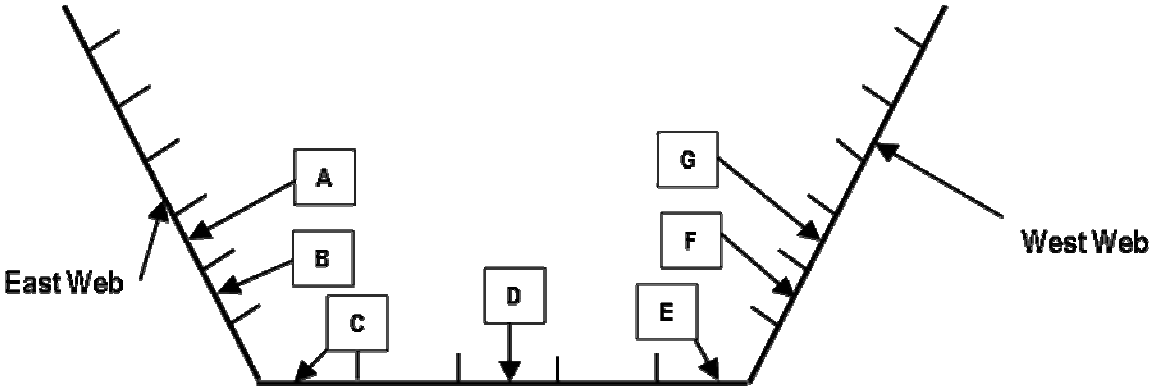

Chart 7: Typical ultrasonic thickness measurements - box girder.

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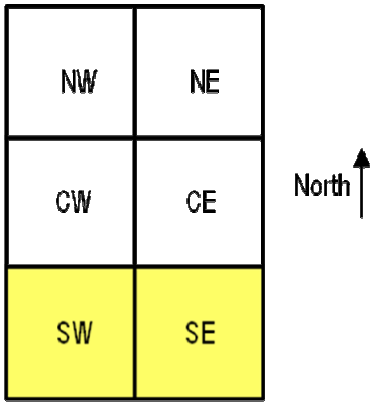
Chart 8

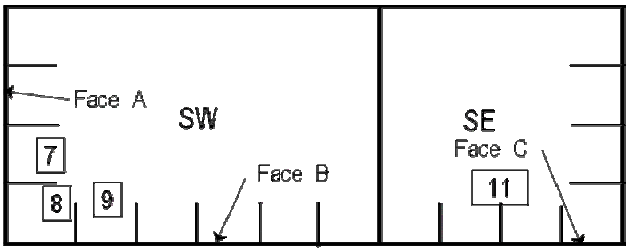
Typical Ultrasonic Thickness Measurements in Tower Leg

Tower 3, East Leg, Tier 7				
		Measurment after		
Location	Plate Thickness from Plans	Wire Brush	Light Grinding	Loss
1	0.625 in	0.641 in	0.637 in	-0.01 in +/-
2	0.625 in	0.642 in	0.634 in	-0.01 in +/-
3	0.625 in	0.588 in	0.535 in	0.09 in +/-
4	0.625 in	0.397 in	0.520 in	0.11 in +/-
5	0.625 in	0.634 in	0.628 in	0.00 in +/-
6	0.625 in	0.634 in	0.634 in	-0.01 in +/-
7	0.375 in	0.524 in	0.309 in	0.07 in +/-
8	0.375 in	0.328 in	0.250 in	0.13 in +/-
9	0.375 in	0.368 in	0.315 in	0.06 in +/-
10	0.625 in	0.642 in	0.634 in	-0.01 in +/-
11	0.375 in	0.400 in	0.364 in	0.01 in +/-



Tower 3, East Column, Tier 7

Noted Conditions: Typical Moderate Rust on Floor and Webs with light accumulation of debris on floor. SW Bay exhibited pitting up to 1/8" on Webs and Floor.



Floor Plan - South West and South East Bays

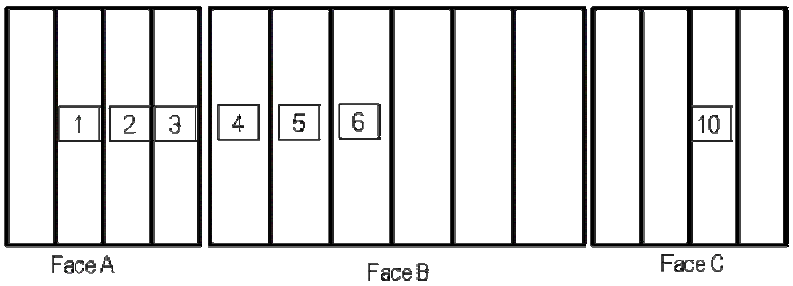


Chart 8: Typical ultrasonic thickness measurements - tower leg.

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Chart 9

Typical Steel Losses in Interior of Towers (using ruler)

Tower 2				
Column	Tier	Bay	Ruler Measured Diaphragm Plate Loss	Ruler Measured Web Plate Loss
East	9	NE	1/16"	Negligible
East	11	NE	1/16"	Negligible
East	15	NE	1/16"	Negligible
East	19	NE	1/16"	Negligible
East	19	SE	1/16"	Negligible
Tower 3				
Column	Tier	Bay	Ruler Measured Diaphragm Plate Loss	Ruler Measured Web Plate Loss
East	7	SW	1/8"	1/8"
East	7	NE	1/16"	Negligible
East	7	NW	1/16"	Negligible
West	7	NW	1/16"	Negligible
West	9	NW	1/16"	Negligible

Chart 9: Typical steel losses in interior of tower (using caliper and ruler).

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Chart 10

Cross Girder #	Location of Loss		Depth and Area of Loss	Inspection Photos	Report Photos
	Longitudinal Girder Closest To	Connection Corner			
2	East	Southeast	1/4" for 1 S.F.	C1-332	
6	West	Northwest	3/16" for 2.5 S.F.	C1-500	
8	West	Southwest	1/4" for 1 S.F.	C1-509	107
11	West	Northwest	1/4" for 1 S.F.	C1-584	

Chart 10: Cross-girder losses (using caliper and ruler).

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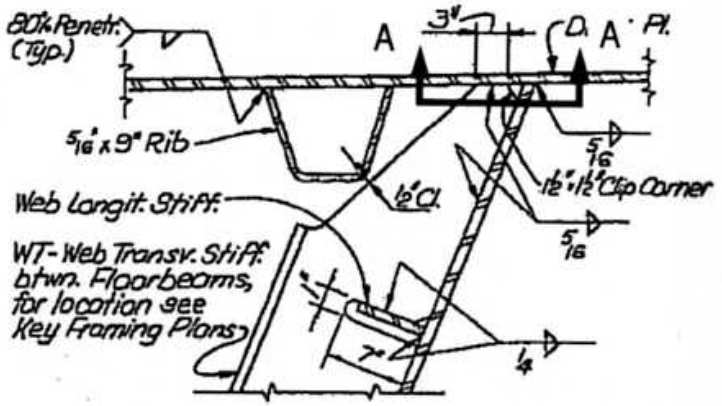
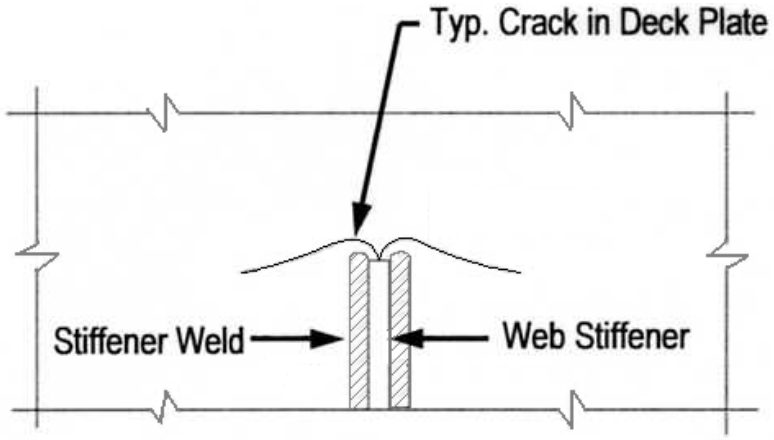
SKETCHES



Web Stiffener to Deck Detail



Section A-A

Sketch 1: Web stiffener to deck detail.

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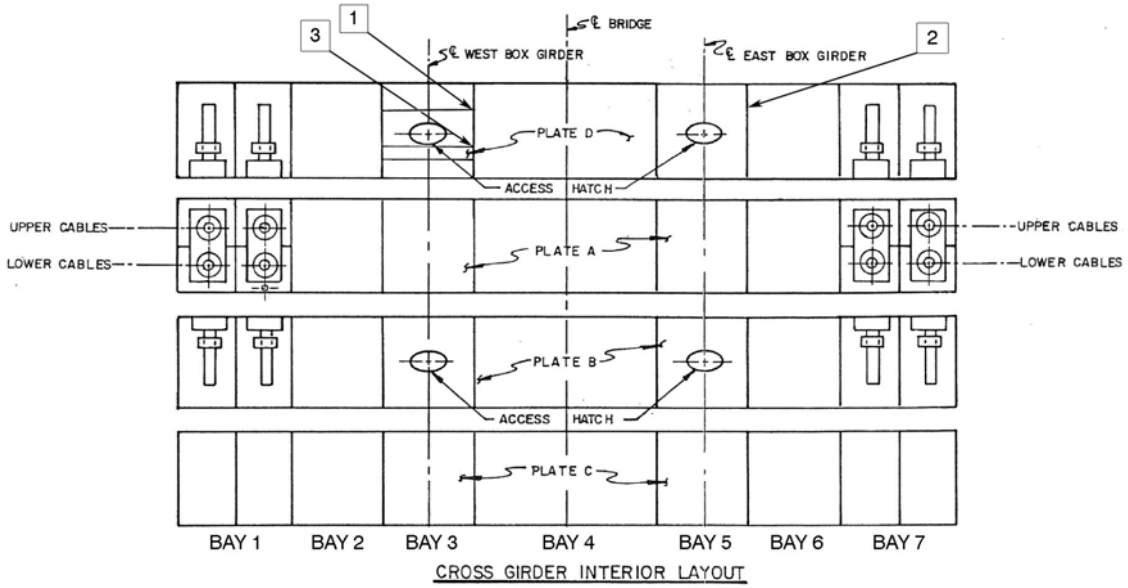
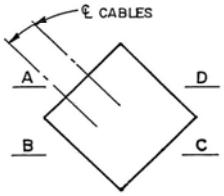
SKETCHES



CROSS GIRDER INTERIOR LAYOUT



CROSS GIRDER
CROSS SECTION

CROSS GIRDER 5 LOOKING WEST
CROSS GIRDER 6 LOOKING WEST
CROSS GIRDER 8 LOOKING EAST

Cross Girder Crack Locations

See Cross Girder Interior Layout Sketch above for Numbering System

Ref. #	Cross Girder	Crack Location			Crack Length	Inspection Photos	Report Photos
		Bay	Welds Connecting				
			Plate 1	Plate 2			
1	5	3	Plate D Long. Stiffener	East Diaphragm	2 1/8"	C2-241 thru 242	
2	6	5	Plate D	Plate D Long. Stiffener	1 1/4"	C2-249 thru 250	
3	8	3	Plate D Long. Stiffener	East Diaphragm	1 1/2"	C2-289	83

Sketch 2: Cross-girder crack locations.

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PHOTOS

Photo 1: **Typical exterior connection of diaphragm to longitudinal box girder. Note utility line exiting the longitudinal box girder and entering the deck.**

Photo 2: **East elevation of structure's main river section.**

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PHOTOS

Photo 3: Typical connections of exterior cross-girder. Cross-girder 1 shown.

Photo 4: Typical pin and hanger connection to pier. Shown at west longitudinal box girder at pier 4.

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PHOTOS

Photo 5: **Typical cable arrangement for main span (south elevation of tower 3).**

Photo 6: **Typical transition from asphalt wearing surface to striated concrete wearing surface south of cross-girder 12.**

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PHOTOS

Photo 7: **Typical longitudinal cracks approximately 2' long and spaced at 15' intervals approximately 6" from right edge line.**

Photo 8: **Isolated longitudinal cracking in northbound right lane south of cross-girder 1.**

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PHOTOS

Photo 9: Typical patches in wearing surface.

Photo 10: Map cracking in right wheel line of the right lane in the southbound direction near cross girder 12.

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PHOTOS

Photo 11: Score in wearing surface (1/2" deep, 60' long) across both lanes in the southbound direction between tower 3 and cross-girder 9.

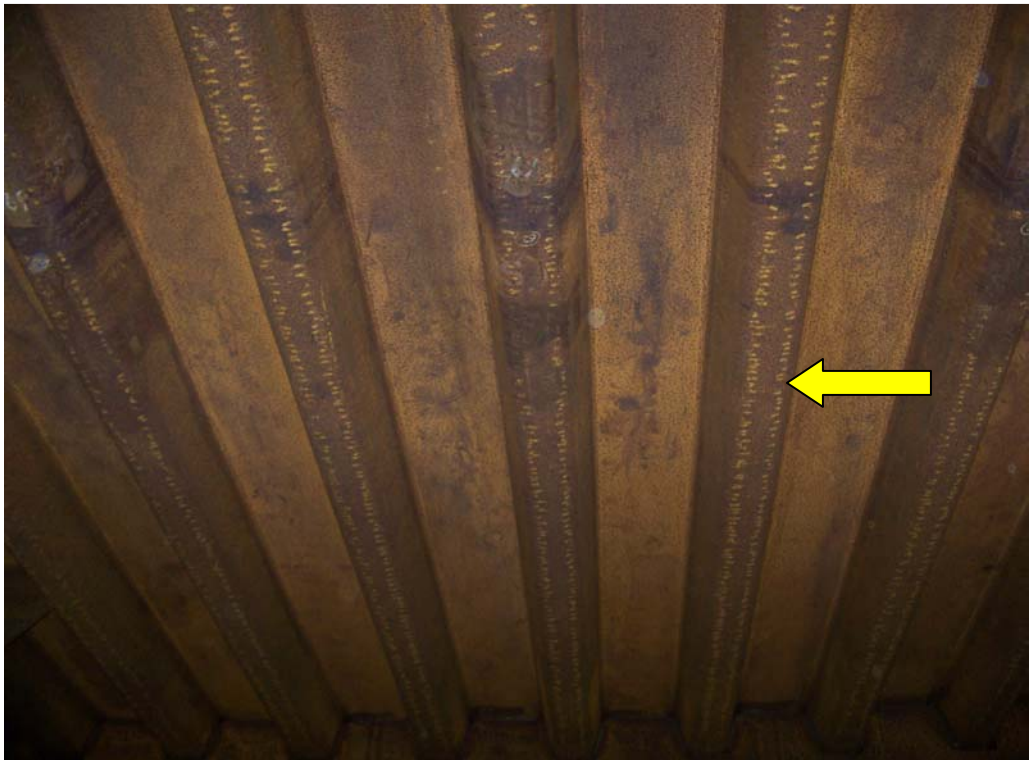

Photo 12: Typical underside of deck inside the west longitudinal box girder. Note typical light surface rust and dots indicating moisture condensation.

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PHOTOS

Photo 13: Typical lifting lug welded to adjacent deck ribs, and the deck plate. Note the cracked weld between the left rib and lifting lug.

Photo 14: Crack, 3 1/4" long, at weld between lifting lug and deck longitudinal rib in west longitudinal box girder near floorbeam 94.

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PHOTOS

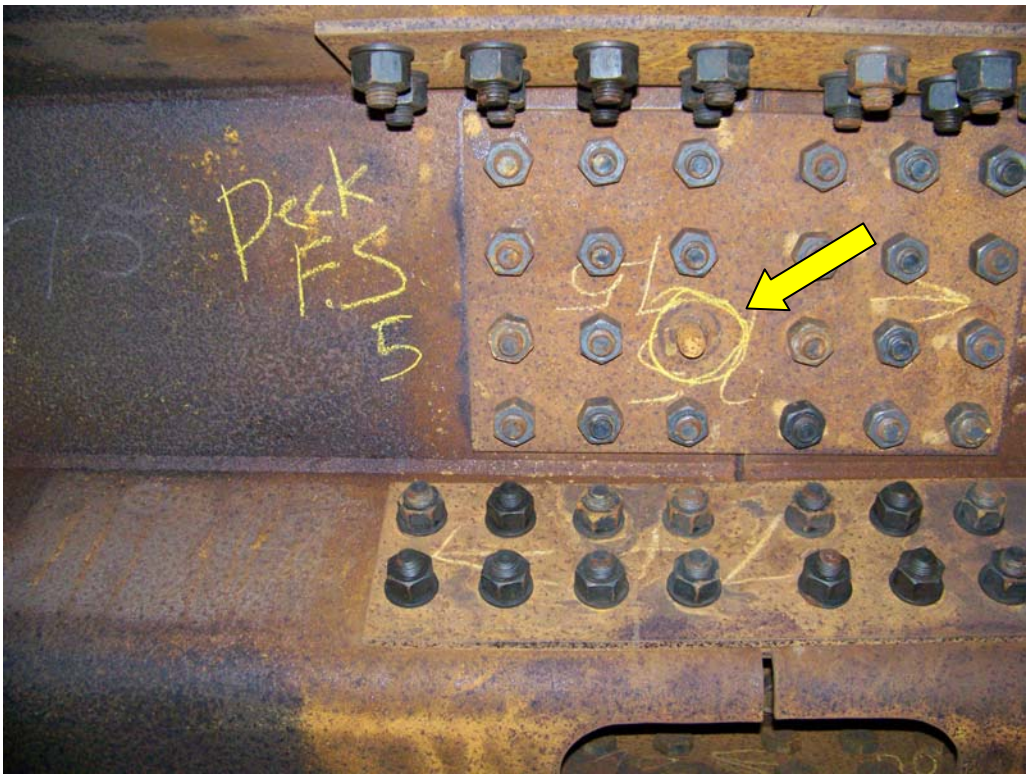

Photo 15: Missing nut in deck plate field splice in longitudinal box girder at field splice 5.

Photo 16: Isolated location of water leaching through the deck at the field splice with moderate corrosion. Field splice 16 between east and west longitudinal box girders, shown.

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PHOTOS

Photo 17: **Gap in welds between deck plate, deck rib, and diaphragm with water leaking through along east longitudinal box girder at diaphragm 3.**

Photo 18: **Reinforced concrete diaphragm above pier 1N exhibiting transverse cracks with efflorescence in the west longitudinal box girder.**

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PHOTOS

Photo 19: Typical deck deflection measurement equipment set up.

Photo 20: Missing nut at top rail connection to the parapet in span 1.

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PHOTOS

Photo 21: Minor vehicle collision/rubbing along median in the southbound direction in span 2.

Photo 22: Missing section of the modular joint separation beam at pier 1N in the left lane of the northbound direction of travel.

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PHOTOS

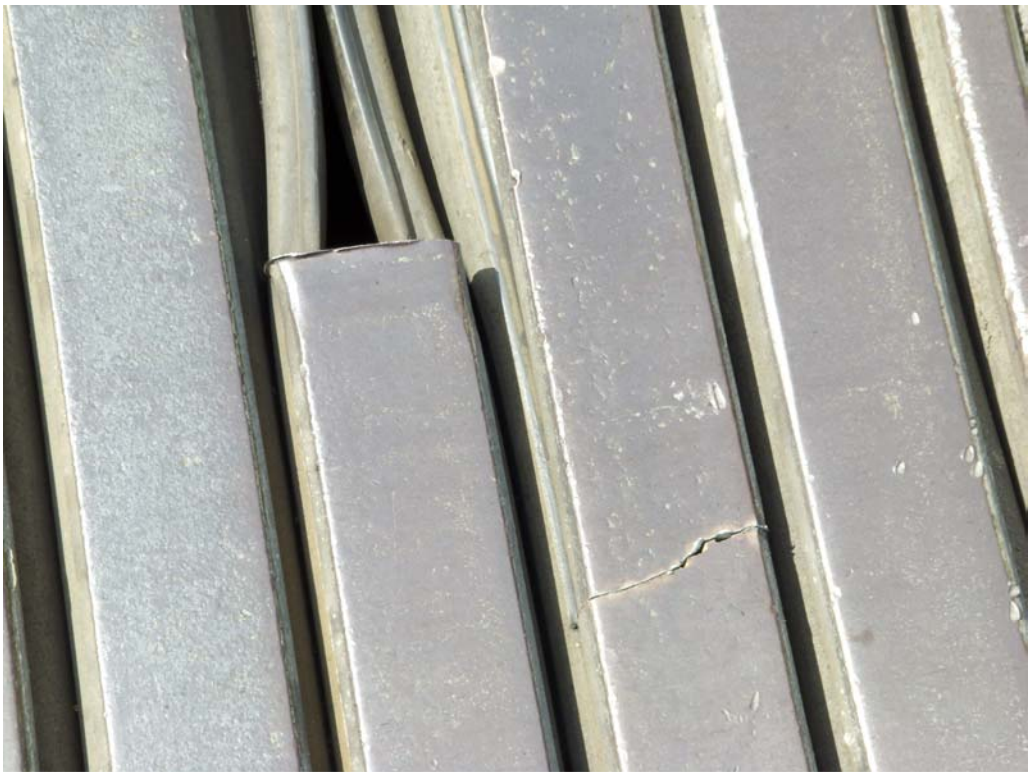

Photo 23: Crack the full width of the separation beam in the modular joint at pier 1N in the left lane of northbound direction of travel.

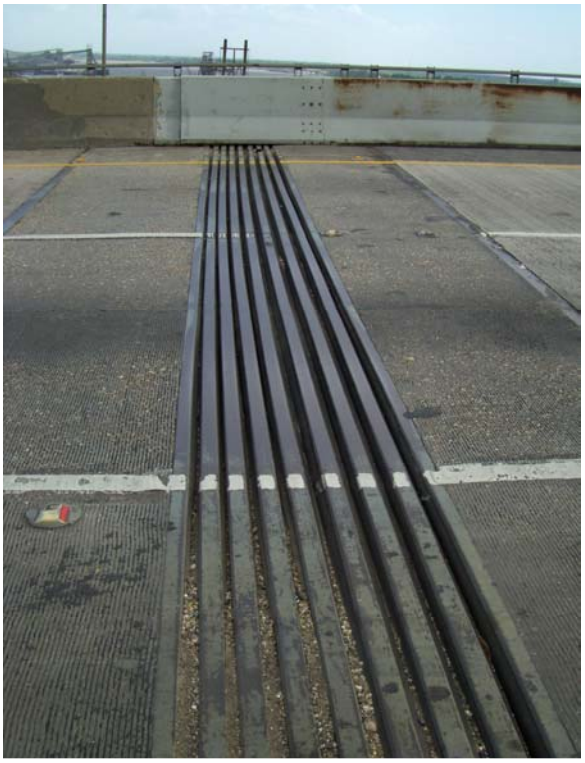

Photo 24: Modular joint at pier 1S in the southbound direction of travel exhibiting uneven spacing, with the separation beams shifted towards the north. Note the debris in the glands at each of the shoulders.

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PHOTOS

Photo 25: **Typical heavy debris in modular joint glands shown at pier 1N in the northbound direction of travel.**

Photo 26: **A 1'-0" section of the gland pulling free from the separation beams of the modular joint at pier 1N in the right lane of the south bound direction of travel.**

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PHOTOS

Photo 27: Southwest keeper plate in contact with horizontal plate at the east bearing of the east longitudinal box girder at pier 1S. Note groove in keeper plate.

Photo 28: Northwest keeper plate bent out of position, with a broken weld, at the east bearing of the east girder at pier 1N.

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PHOTOS

Photo 29: **Surface hardened along bottom of horizontal plate, indicating longitudinal movement at the bearings. West bearing of east girder at pier 1N.**

Photo 30: **West elevation of the east bearing at pier 2.**

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PHOTOS

Photo 31: East elevation of west bearing at west girder at pier 2. Note scores along masonry plate up to 1/16" deep and moderate surface rust.

Photo 32: Southeast stiffener of the wind lock at pier 2, with a 1" bend to the west along the bottom edge.

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PHOTOS

Photo 33: Surface hardened on wearing plate, indicating longitudinal movement, of the wind lock at pier 4.

Photo 34: West elevation of the wind lock at pier 4 exhibiting approximately 6" of longitudinal misalignment.

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PHOTOS

Photo 35: Daylight at the west shoe and the west bearing plate of the wind lock assembly at pier 4.

Photo 36: Typical moderate rust with negligible loss along interior of web plates of longitudinal box girders.

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PHOTOS

Photo 37: One square foot area of pitting up to 1/8" deep on the top of the bottom flange along the west web of the west longitudinal box girder above pier 1S.

Photo 38: Moderate debris along bottom flange, and moderate rust along web plates of the west longitudinal box girder between pier 2 and diaphragm 15.

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Photo 39: Aluminum utility support at end bay of the west longitudinal box girder adjacent to pier 1N.

Photo 40: Heavy sand debris along bottom flange of east longitudinal box girder between diaphragms 12 and 13.

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PHOTOS

Photo 41: **Broken bolt at bottom flange connection of the longitudinal stiffener at field splice 20 of the east longitudinal box girder.**

Photo 42: **Misalignments of approximately 1/4" between sections of the west longitudinal box girder at field splice 17.**

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PHOTOS

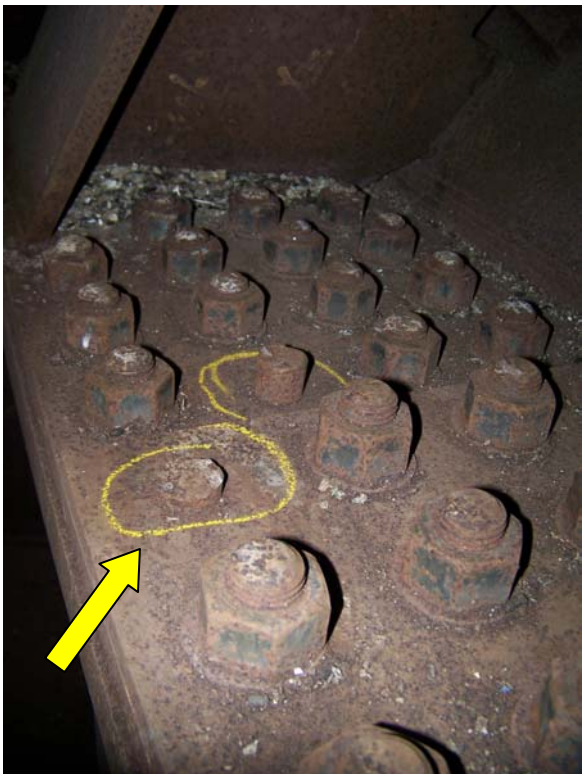

Photo 43: Drift pins remain (instead of bolts) at the field splice along the east web longitudinal stiffener just south of cross-girder 12 in the west box girder.

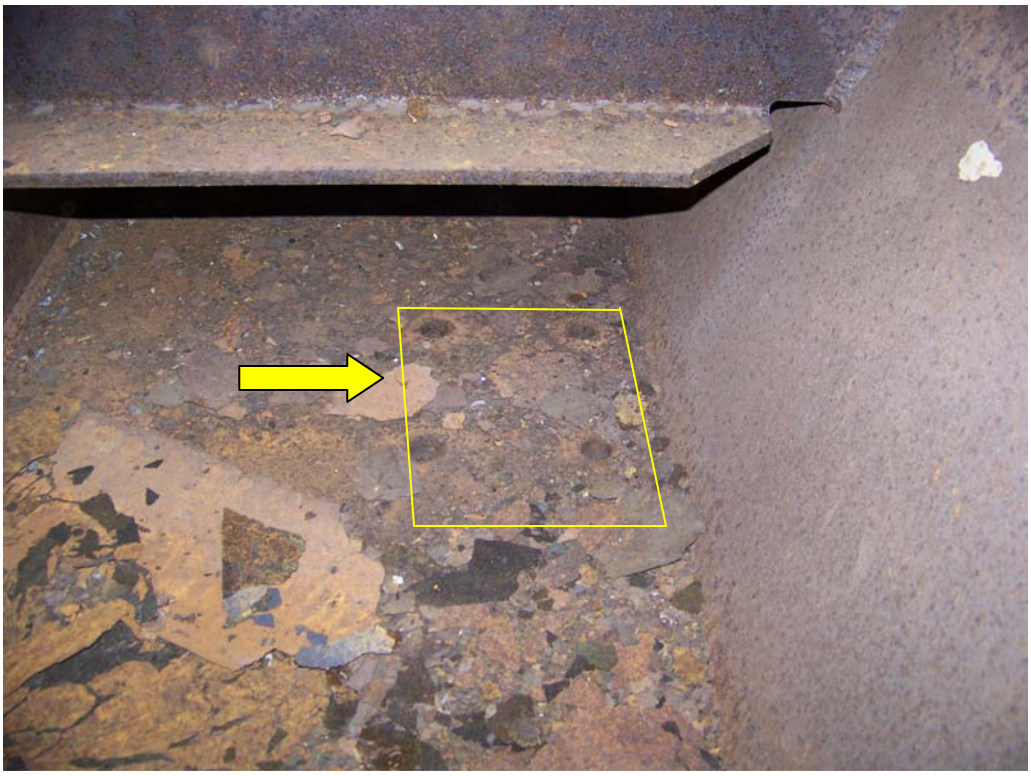

Photo 44: Typical square pattern of blind bolt holes in the bottom flange of the box girders. Note moderate debris along the bottom flange.

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PHOTOS

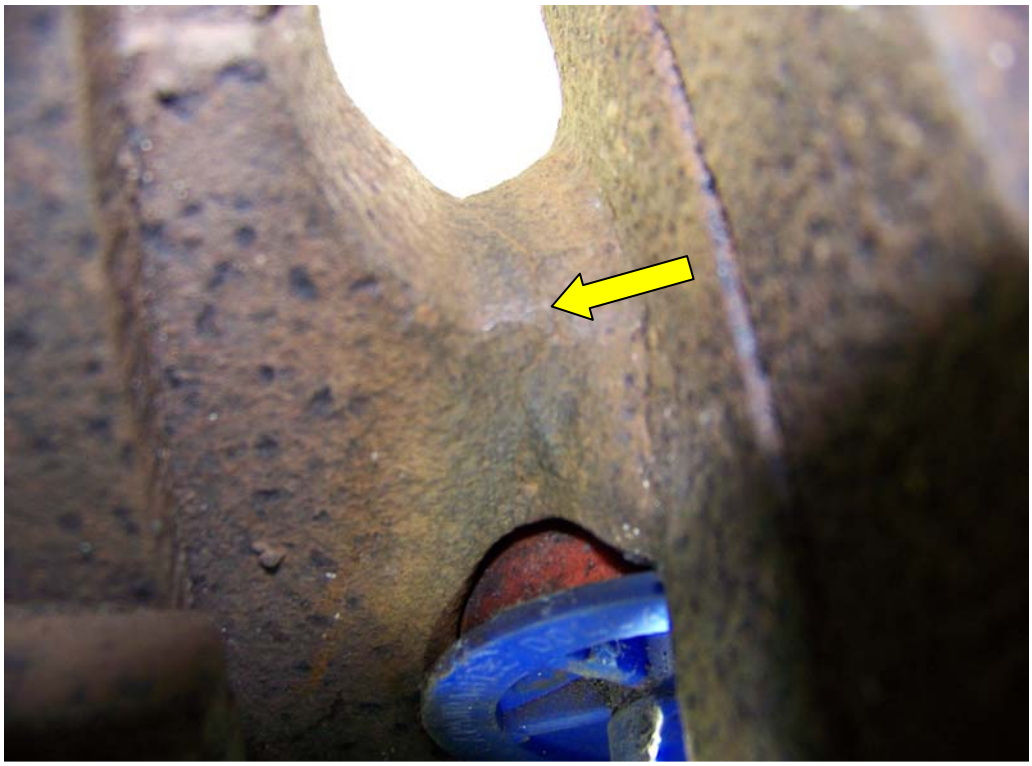

Photo 45: **Full depth crack in the web plate entering crack arrest hole along east web at field splice 4 of the east longitudinal box girder.**

Photo 46: **Nick in bottom flange of east longitudinal box girder along east web just below floorbeam 1.**

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PHOTOS

Photo 47: Abrasion dust between diagonal stiffener and deck plate along west web above cross-girder 4 of the west longitudinal box girder.

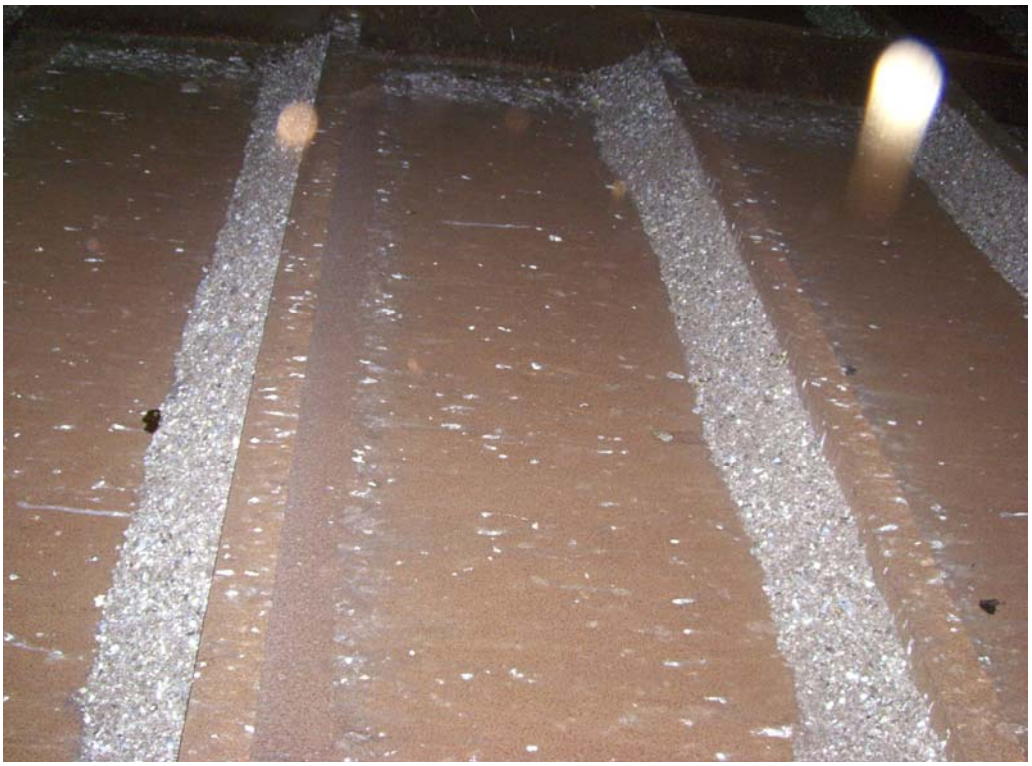

Photo 48: Typical pigeon debris between wind fairing plate and longitudinal stiffeners.

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PHOTOS

Photo 49: Typical areas of 100% loss of the wind fairing plate. Locations match horizontally with the longitudinal stiffeners.

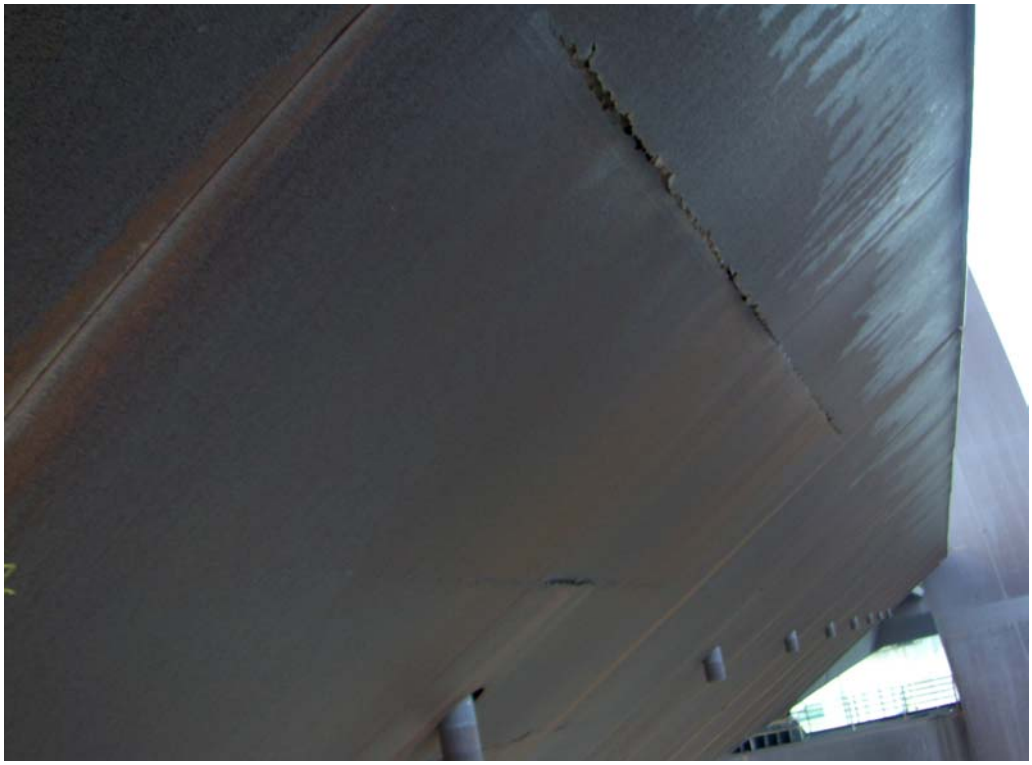

Photo 50: Area of 100% loss in the west longitudinal box girder wind fairing plate along the longitudinal stiffener.

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PHOTOS

Photo 51: Typical broken/dislodged varmit screening adjacent to the piers.

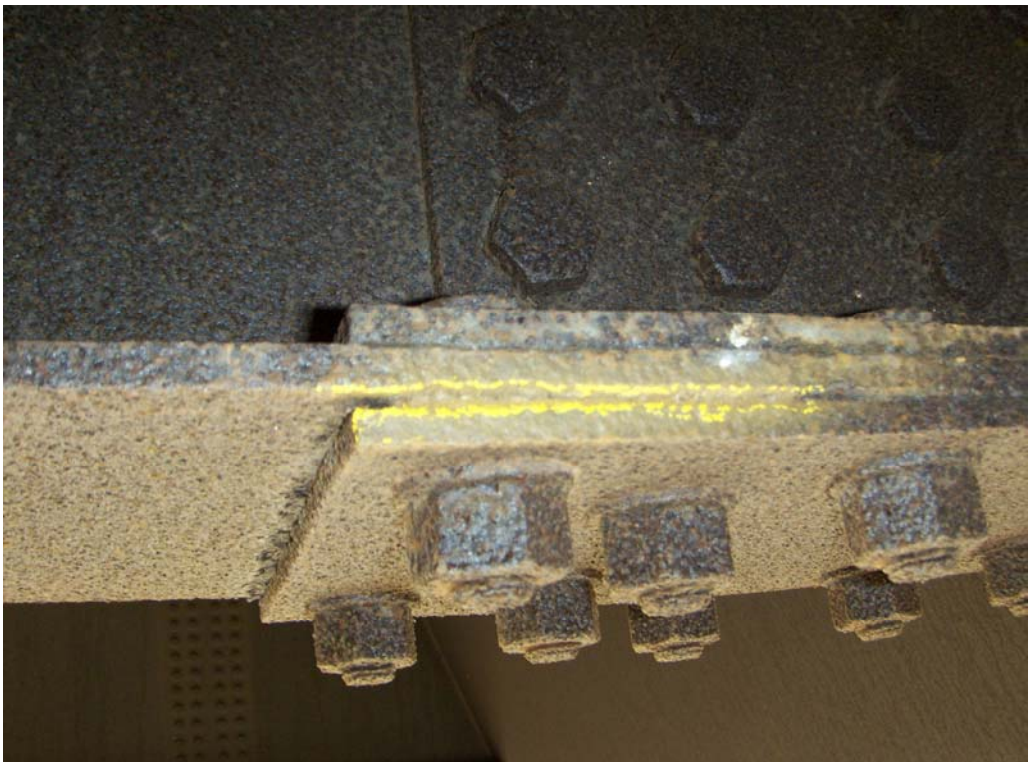

Photo 52: Typical impacted rust between bottom flange and splice plates at floorbeam 39.

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Photo 53: Typical impacted rust with 1/8" loss in splice plate at connection of diaphragm 29 and west longitudinal box girder.

Photo 54: Typical spalling of bearing pedestals at pier 1S, for the full height and full width of pedestal.

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PHOTOS

Photo 55: **Tier 11, southwest corner of tower 2 east leg exhibiting signs of water infiltration, moderate rust along the web and diaphragm plates, and moderate debris along the diaphragm plate.**

Photo 56: **Active, isolated pitting up to 1/8" deep noted along diaphragm plates adjacent to corners with signs of water ingress. Tower 2, the south east corner of tier 19 shown.**

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PHOTOS

Photo 57: Up to 1/8" pitting along splice plate and 20% loss of bolts and nuts on the south side of the west chamber in the top strut of tower 2.

Photo 58: Heavy pigeon debris located along the floor (tier 1) of the tower legs.

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Photo 59: **Approximately 12" deep of heavy sand and debris noted on the floor (tier 1) of tower legs.**

Photo 60: **Up to 1 1/4" of impacted rust between bent web and splice plates, with the splice plate exhibiting up to 1/8" loss.**

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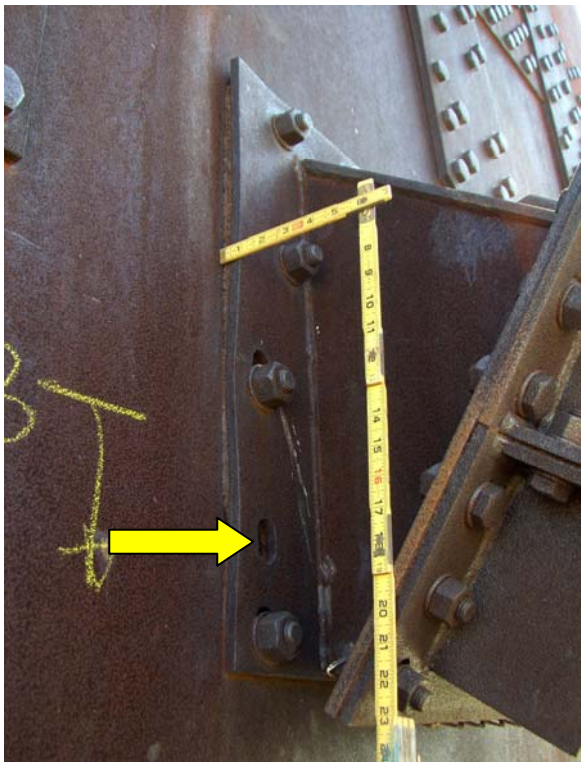

Photo 61: **Typical impacted rust, up to 1/2" thick, between the tower web plate and the cable house. Note missing bolt.**

Photo 62: **Typical sheared bolts under cable houses on the south face of the east leg of tower 2.**

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PHOTOS

Photo 63: **Isolated 6" diameter dent, up to 1" deep and 1/16" deep gouges in the west web of the west leg of tower 2.**

Photo 64: **Heavy corrosion with areas of up to 100% loss along access hatch flashing on the top level of tower 3.**

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Photo 65: Typical pooling of water at field splice by west leg of tower 2.

Photo 66: Typical bent keeper assembly on cable anchorage, shown at the west leg of tower 3 at tier 23.

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Photo 67: **End cap for cable stay is missing, with ends of cables exhibiting light rust at tier 23 of the east leg of tower 2.**

Photo 68: **Instance of 1/16" gap between cable stay and gasket at connection to tower leg.**

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Photo 69: Broken PE pipe at tier 25 of the east leg of tower 3.

Photo 70: Typical 100% section loss of the hand railing connection to the tower lower strut.

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PHOTOS

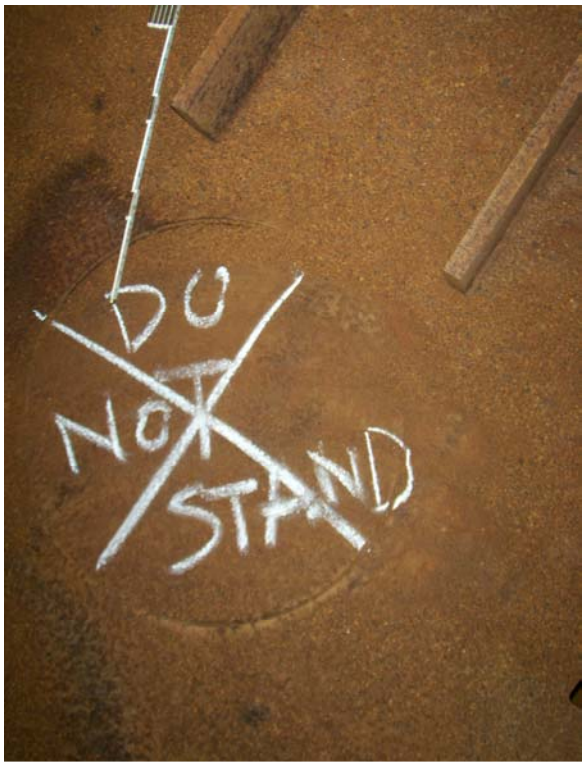

Photo 71: **Access cover not fully welded in tower 3 west column tier 13, exhibiting up to 1/2" deflection under inspector live load.**

Photo 72: **Two missing bolts at deck field splice adjacent to cross-girder 12 in the west longitudinal box girder.**

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Photo 73: Location of a loose bolt along the west web of the longitudinal box girder at field splice 16.

Photo 74: Missing nut and missing bolt on undersized bolts in deck plate knee brace along east web at field splice 10 of the east longitudinal box girder.

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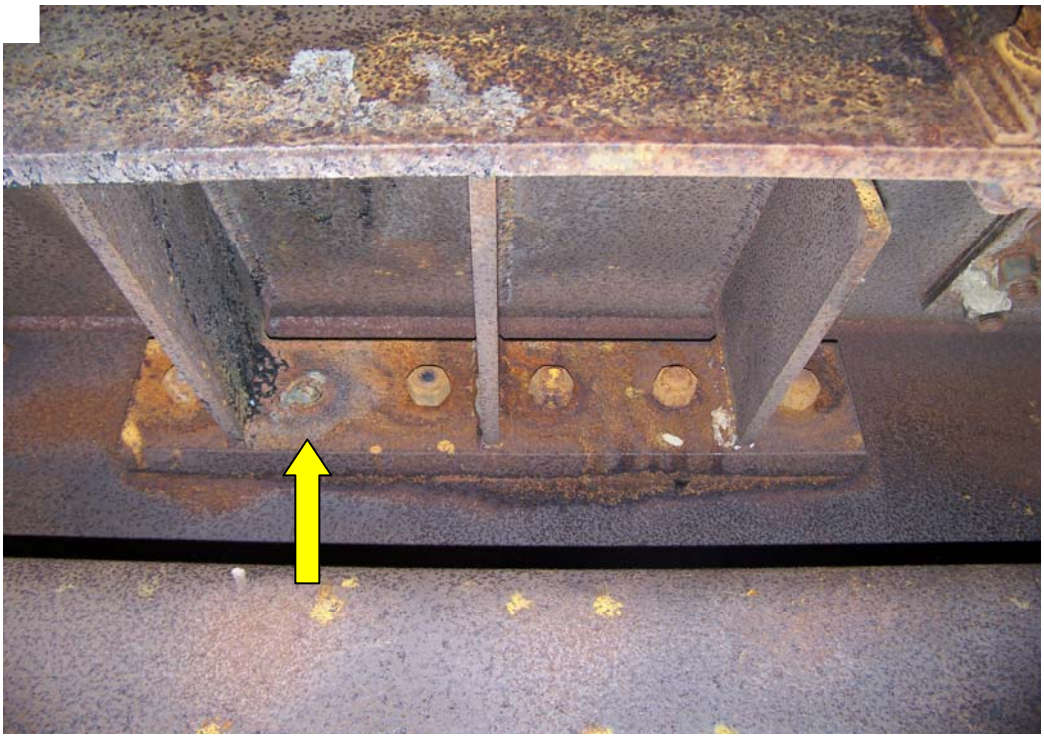

Photo 75: Broken bolt at deck splice knee brace at field splice 26 of the west longitudinal box girder.

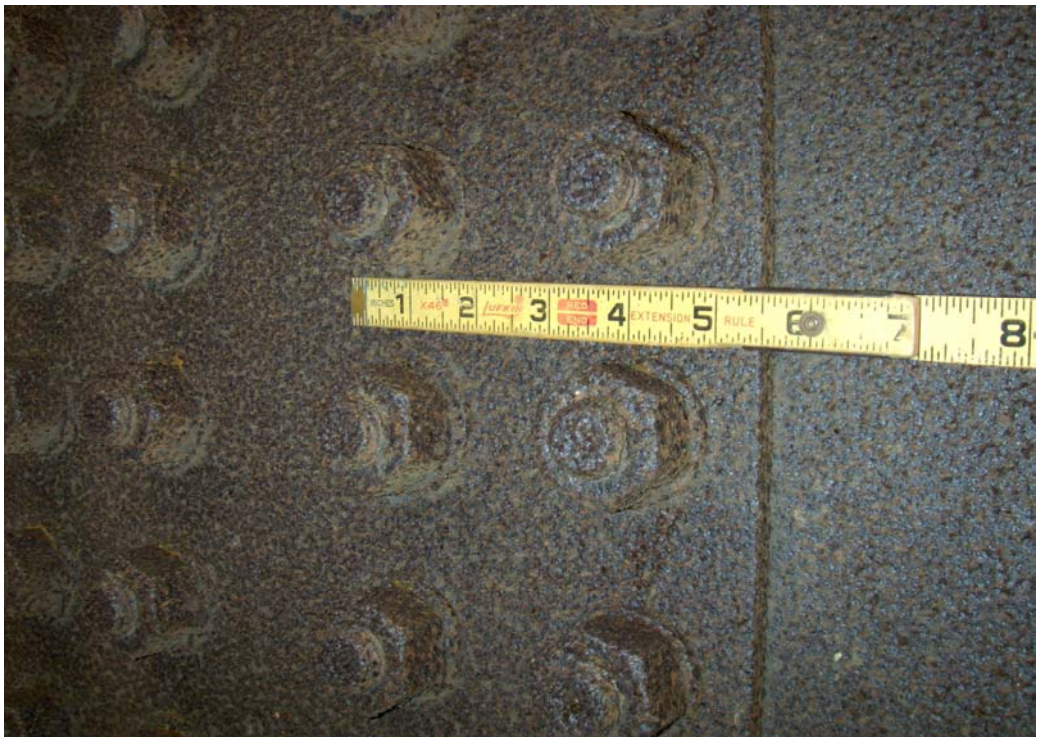

Photo 76: Typical minor pitting on bolts and nuts at exterior field splices.

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PHOTOS

Photo 77: Fillet welds along each face of longitudinal stiffener to tower web exhibiting lack of fusion at termination of welds. Located at east leg of tower 2 at tier 3.

Photo 78: Instance of minor porosity in weld material between deck plate and web plate of the longitudinal box girder.

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PHOTOS

Photo 79: **Inconsistent weld throat size, and excessive slag between the south face of floorbeam 8 and the web plates of the east longitudinal box girder.**

Photo 80: **Instance of intersecting welds with tri-axial constraints at the junction of the floorbeam/longitudinal box girder web plate/longitudinal stiffener. West longitudinal box girder along the west web at floorbeam 11 shown.**

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PHOTOS

Photo 81: **Minor weld undercutting along the web plate of the box girder at the connection to the deck plate. Floorbeam 9 to diaphragm 5 east box shown.**

Photo 82: **Typical light laminating rust along interiors of the longitudinal box girders.**

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Photo 83: **1 1/2" long crack in weld on interior of cross girder 8 in the third bay between the east diaphragm and the longitudinal stiffener.**

Photo 84: **Crack in west web of east longitudinal box girder propagating into crack arrest hole.**

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PHOTOS

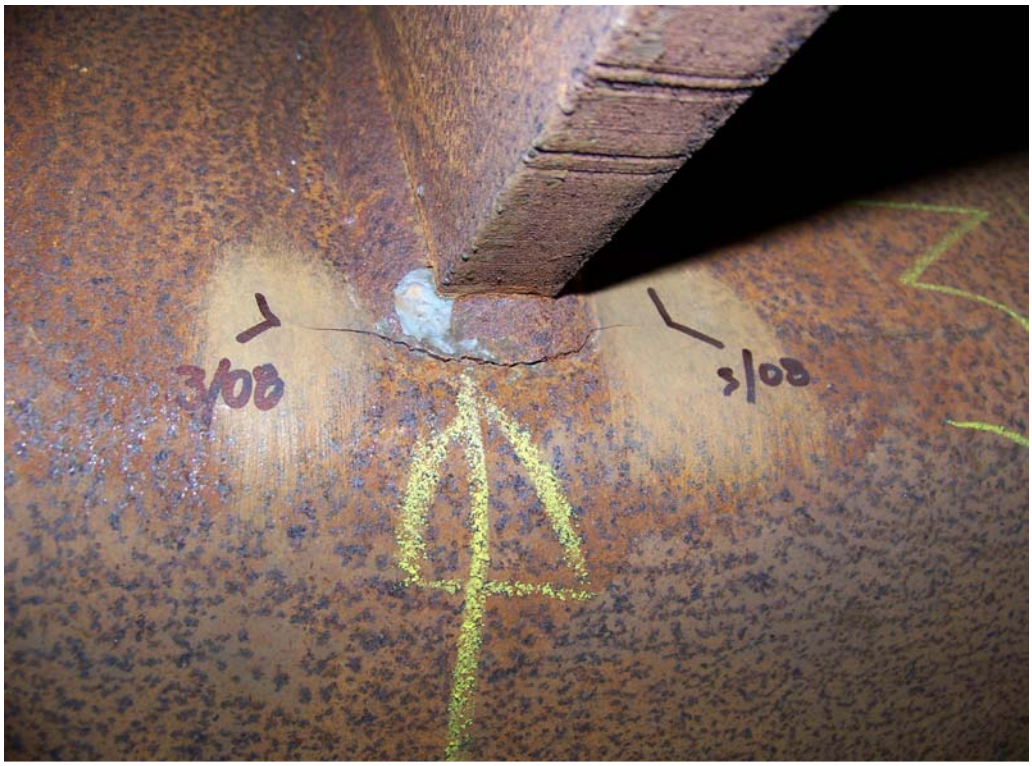

Photo 85: Typical fatigue crack at lifting lug to deck rib connection, with propagation from weld material into deck rib base metal.

Photo 86: Typical fatigue crack at longitudinal box girder transverse web stiffener weld to deck plate, with propagation into deck plate base metal.

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PHOTOS

Photo 87: **Approximately 5/8" of misalignment of bottom flanges of the east longitudinal box girder at field splice 28.**

Photo 88: **Instance of a clogged scupper in the northbound direction of traffic, approximately 130 feet north of pier 2.**

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 89: Pigeon debris located throughout tier 25 of the east leg of tower 3.

Photo 90: Rodent nest between longitudinal web stiffeners on tier 23 of the east leg of tower 3.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 91: Heavy pigeon debris, approximately 2" deep, in the diaphragm between the longitudinal box girders at pier 1.

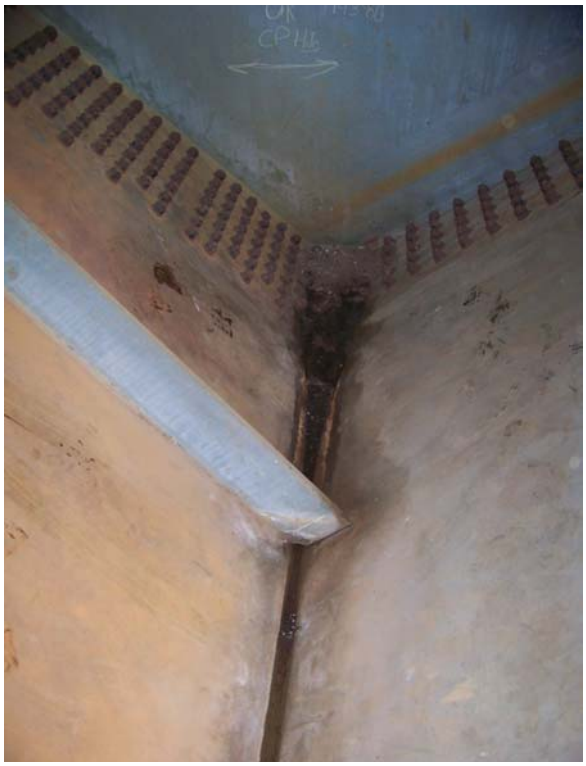


Photo 92: Minor water accumulation along the bottom corner of cross-girder 4.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 93: Typical heavy debris along the bottom corner of cross-girder 12 near the east end.

Photo 94: Collision damage to the east wind fairing between diaphragms 26 and 27.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 95: Signs of vehicle collision/rubbing along median in the southbound direction of travel at cross-girder 3.

Photo 96: Typical loose/missing utility cover with exposed wires inside tower.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 97: Typical broken light fixture in interior of towers.

Photo 98: Broken utility conduit bracket on interior of west longitudinal box girder.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 99: Approximately 20 foot long section of dislodged top cover to rectangular utility conduit on the interior of the longitudinal box girder.

Photo 100: Typical upper pin in very good condition, east hanger of east longitudinal box girder at pier 1 shown.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 101: Typical lower pin exhibiting light to moderate surface rust with negligible loss.

Photo 102: Pier 1 east lower pin hold down connection with double nuts on anchor bolts, with zero thread count.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

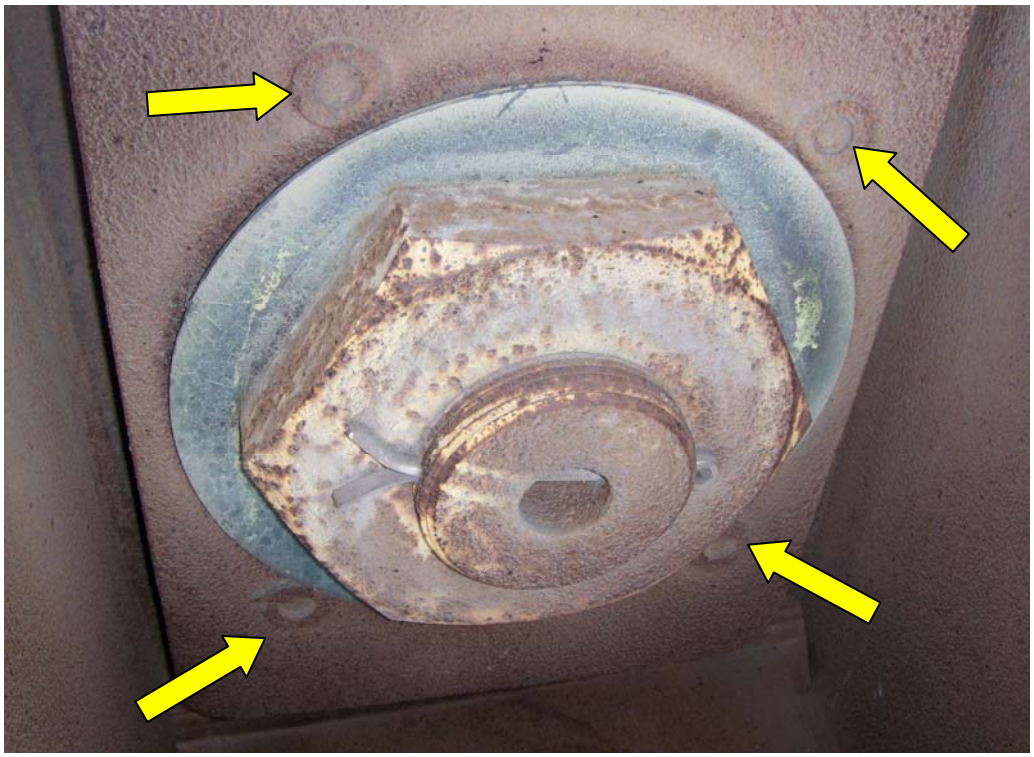


Photo 103: Typically noted bolt washers tack welded to the hanger plate in order to hold pin's bronze washer in place.

Photo 104: Broken welds and bolts at bent animal screening around west pin and hanger assembly at pier 4.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 105: Overall view of bent animal screening around west pin and hanger assembly at pier 4.

Photo 106: Crack, 2 1/8" long, in cross girder 5 weld between longitudinal stiffener plate and diaphragm plate.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 107: Area of pitting with losses up to 1/4" deep along top web plate by flange plate of cross-girder 8.

Photo 108: Active water leakage through rubber seal at west anchorages of cross-girder 1.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 109: Active water leakage, with moderate rust and losses up to 1/8" deep on anchorage protective cover in cross-girder 4, note the loose rubber seal.

Photo 110: Dislodged rubber seal at west cable anchorage of cross-girder 2.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 111: Missing bolt at anchorage cover at western anchorages of cross-girder 1.

Photo 112: Cracked caulk at cable to cross-girder connection, shown at east anchorages of cross-girder 8.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 113: Typical right edge line striping exhibiting cracking of line material.

Photo 114: Right edge line exhibiting isolated instances of worn portions of line material.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 115: Broken bolt on cover to aerial light on top of tower 3.

Photo 116: West elevation of tower 3 at dusk, note white hue emitted from aerial signal on top of bent.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 117: Open cap to navigation light on west side of tower 2.

Photo 118: West elevation of bridge at night, note the absence of a navigation light on the right side by tower 2.

CITY/TOWN	BR. NAME	8.-STRUCTURE NO.	INSPECTION DATE
LULING - DESTREHAN	**HALE BOGGS**	**02454503705101**	**APR 11, 2008**

PHOTOS

Photo 119: Loose nuts at deck connection to light pole anchor bolts.

Appendix C

SIA Sheet

STRUCTURE INVENTORY AND APPRAISAL

Report Date: **April 11, 2008**

Identification	Code
(1) State	Louisiana
(2) State Highway Department District	02
(3) Parish Code P45 (4) City / Town	0790
(5) Inventory Route	112003101
(6) Feature Intersected	Water Mississippi River
(7) Facility Carried	I-310
(8) Structure Number	02454503705101
(9) Location	Luling - Destrehan
(10) Vertical Clearance	**208 FT - 5 IN**
(11) Milepoint	**0005.1000**
(12) Road Section No.	00000
(13) Bridge Description	
(14) Defense Milepoint	
(15) Defense Section Length	
(16) Latitude	**29D 56.5'**
(17) Longitude	**90D 22.5'**
(18) Physical Vulnerability	3
(19) Bypass Detour Length	99 MI
(20) Toll	On Free Road
(21) Custodian	State Highway Department
(22) Owner	State Highway Department
(23) Federal-Aid Project No.	3

Classification	Code
(24) Federal-Aid System	01
(25) Administrative	1
(26) Functional Class	01
(27) Year Built	1983
(28) Lanes on Structure	4
(29) ADT on Structure	000000
(30) Year of ADT	1900
(31) Design Load	5
(32) App Rdwy Wdth w/Shld	077
(33) Bridge Median	2
(34) Skew	00
(35) Structure Flared	**1**
(36) Traffic Safety Features	1NNN
(37)	
(38) Navigation Control	1
(39) Navigation Vertical Clearance	133
(40) Navigation Horizontal Clearance	0076
(41) Open or Closed	A

Condition	Rating
(58) Deck	**5**
(59) Superstructure	**4**
(60) Substructure	**6**
(61) Channel & Channel Protection	8
(62) Culvert & Retaining Walls	N
(63) Estimated Remaining Life	**05**
(64) Operating Rating	236
(65) Approach Roadway Alignment	8
(66) Inventory Rating	236

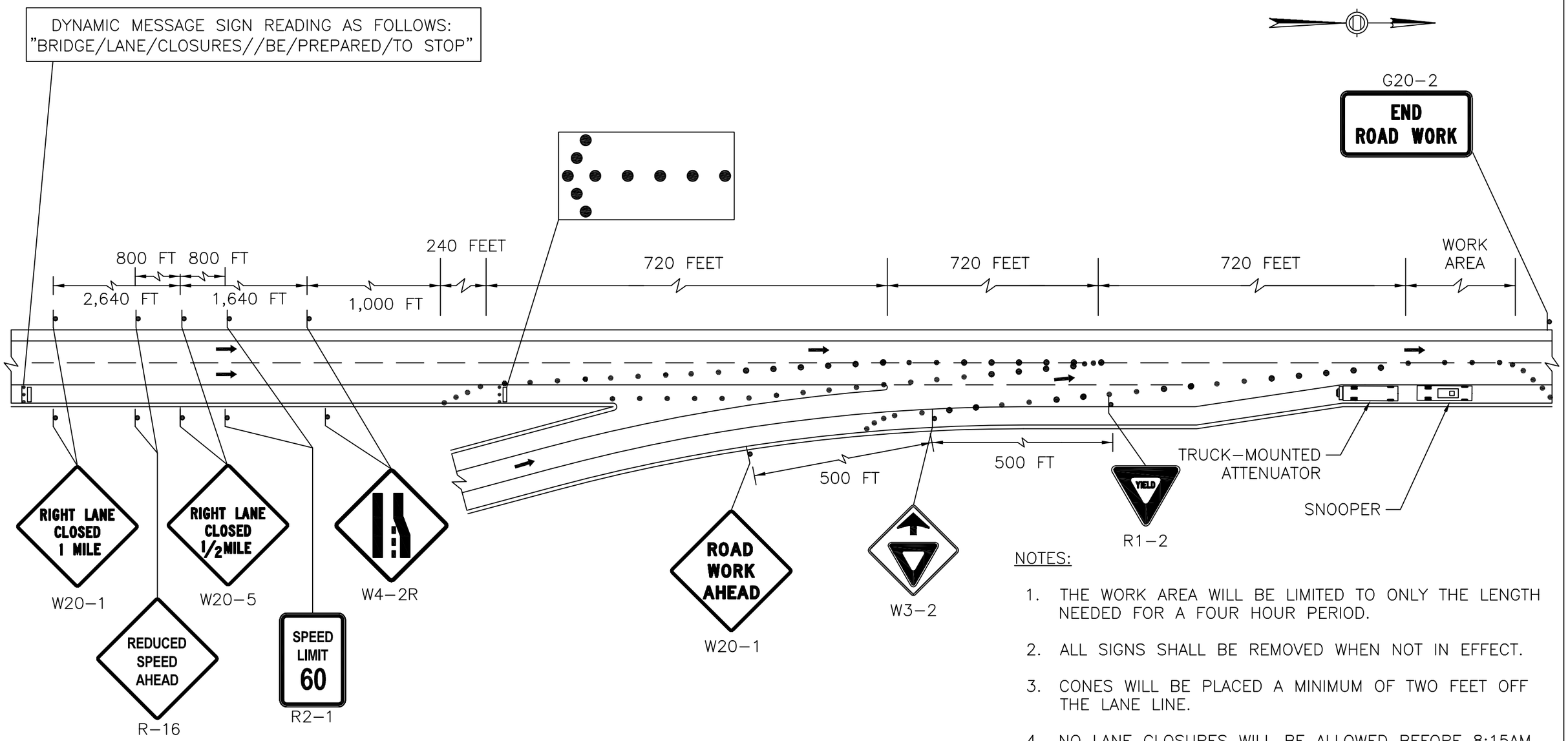
Appraisal	Rating
(67) Structual Condition	**4**
(68) Deck Geometry	8
(69) Underclearances, Vertical & Lateral	8
(70) Safe Load Capacity	8
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8

Structure Data	Code
(42) Type Service	4
(43) Structure Type Main	314
(44) Structure Type Approach	303
(45) No. of Spans Main	5
(46) No. of Approach Spans	00
(47) Total Horizontal Clearance	**038**
(48) Maximum Span Length	1222
(49) Structure Length	000000
(50) Sidewalk Left 00 Feet	Right 00 Feet
(51) Bridge Roadway Width Curb to Curb	0383
(52) Deck Width Out-to-Out	0924
(53) Vertical Clearance over Deck	9912
(54) Minimum Vertical Underclearance	0000
(55) Minimum Lateral Underclearance Right	0000
(56) Minimum Lateral Underclearance Left	0000
(57) Wearing Surface	7

Proposed Improvements	Code
(73) Year Needed	**13**
(74) Type of Service	**1**
(75) Type of Work	**371**
(76) Improvement Length	**002745**
(77) Design Loading	5
(78) Roadway Width	0082
(79) Number of Lanes	4
(80) ADT 000000 (81) Year	1900
(82) Proposed Roadway Improvement Year	**2009**
(83) Approach Improvement	0
(84) Cost of Improvements	**30000**
(85) P E Cost	**999**
(86) Demolition Cost	0
(87) Substructure Cost	0
(88) Superstructure Cost	**30000**
(89)	0
(90) Date of Last Inspection	**041108**

Appendix D

Traffic Management Plans



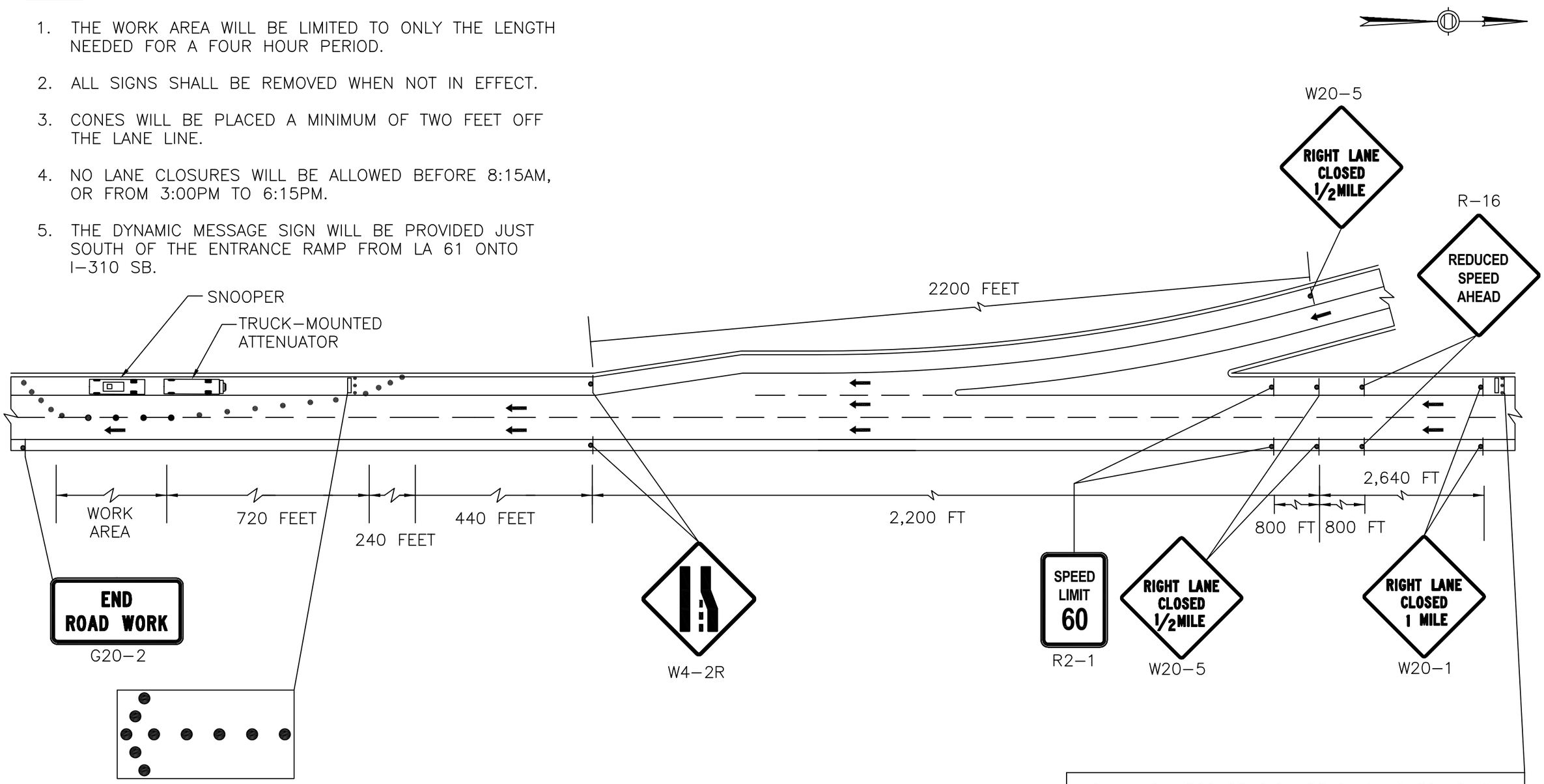
NOTES:

1. THE WORK AREA WILL BE LIMITED TO ONLY THE LENGTH NEEDED FOR A FOUR HOUR PERIOD.
2. ALL SIGNS SHALL BE REMOVED WHEN NOT IN EFFECT.
3. CONES WILL BE PLACED A MINIMUM OF TWO FEET OFF THE LANE LINE.
4. NO LANE CLOSURES WILL BE ALLOWED BEFORE 8:15AM, OR FROM 3:00PM TO 6:15PM.
5. THE DYNAMIC MESSAGE SIGN WILL BE PROVIDED JUST NORTH OF THE ENTRANCE RAMP FROM LA 3127 SB ONTO I-310 NB.

LADOTD	**TRAFFIC MANAGEMENT PLAN FOR THE INSPECTION OF THE HALE BOGGS BRIDGE LULING, LA**	**I-310 NORTHBOUND ROADWAY RIGHT LANE CLOSURE** NOT TO SCALE

NOTES:

1. THE WORK AREA WILL BE LIMITED TO ONLY THE LENGTH NEEDED FOR A FOUR HOUR PERIOD.
2. ALL SIGNS SHALL BE REMOVED WHEN NOT IN EFFECT.
3. CONES WILL BE PLACED A MINIMUM OF TWO FEET OFF THE LANE LINE.
4. NO LANE CLOSURES WILL BE ALLOWED BEFORE 8:15AM, OR FROM 3:00PM TO 6:15PM.
5. THE DYNAMIC MESSAGE SIGN WILL BE PROVIDED JUST SOUTH OF THE ENTRANCE RAMP FROM LA 61 ONTO I-310 SB.



DYNAMIC MESSAGE SIGN READING AS FOLLOWS:
"BRIDGE/LANE/CLOSURES//BE/PREPARED/TO STOP"

LADOTD	**TRAFFIC MANAGEMENT PLAN FOR THE INSPECTION OF THE HALE BOGGS BRIDGE LULING, LA**	**I-310 SOUTHBOUND ROADWAY RIGHT LANE CLOSURE** NOT TO SCALE

TranSystems

BRIDGE INSPECTION REPORT
VOLUME 2 OF 2

INSPECTION OF THE HALE BOGGS MEMORIAL BRIDGE IN LULING-DESTREHAN

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CTL GROUP

JULY 2008

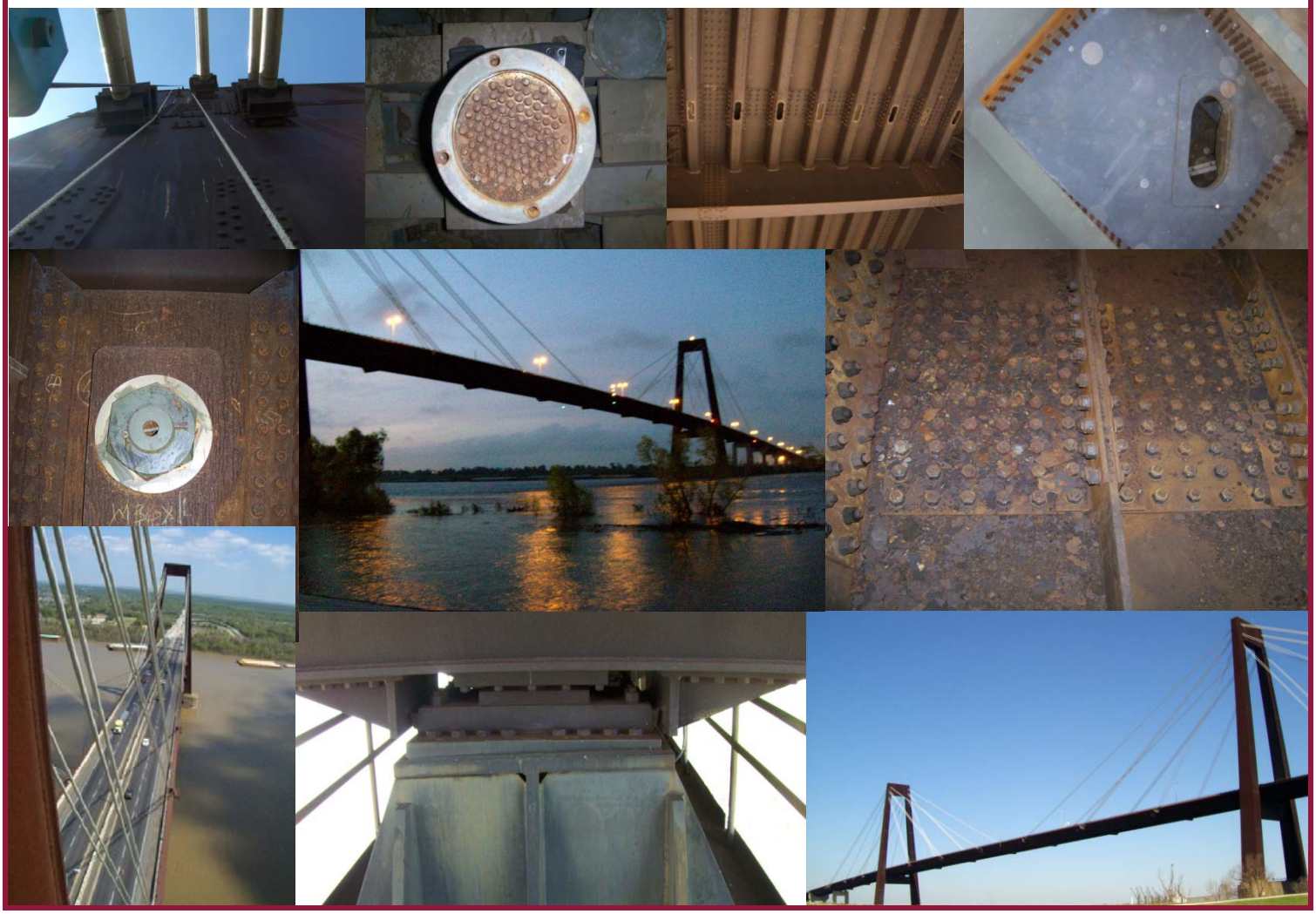
BRIDGE INSPECTION REPORT
VOLUME 2 OF 2

INSPECTION OF THE HALE BOGGS MEMORIAL BRIDGE IN LULING-DESTREHAN

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CTL GROUP

JULY 2008



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Photos	

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- PDF of Bridge Inspection Report
- PDF of Transystems Field Notes
- JPG of Complete Set of Inspection Photos
- JPG of Complete Set of Report Photos

Appendix E

TranSystems Field Notes

FIELD NOTES

HALE BOGGS MEMORIAL BRIDGE
(MAIN CABLE STAYED STRUCTURE
AND TOWER SUPPORTS)

I-310
OVER
MISSISSIPPI RIVER

ST. CHARLES PARISH
DISTRICT 2
LULING- DESTREHAN, LA

PERFORMED FOR

LOUISIANA'S ON THE MOVE... DOTD BUILDS THE WAY

CTL GROUP

INSPECTION APRIL 2008

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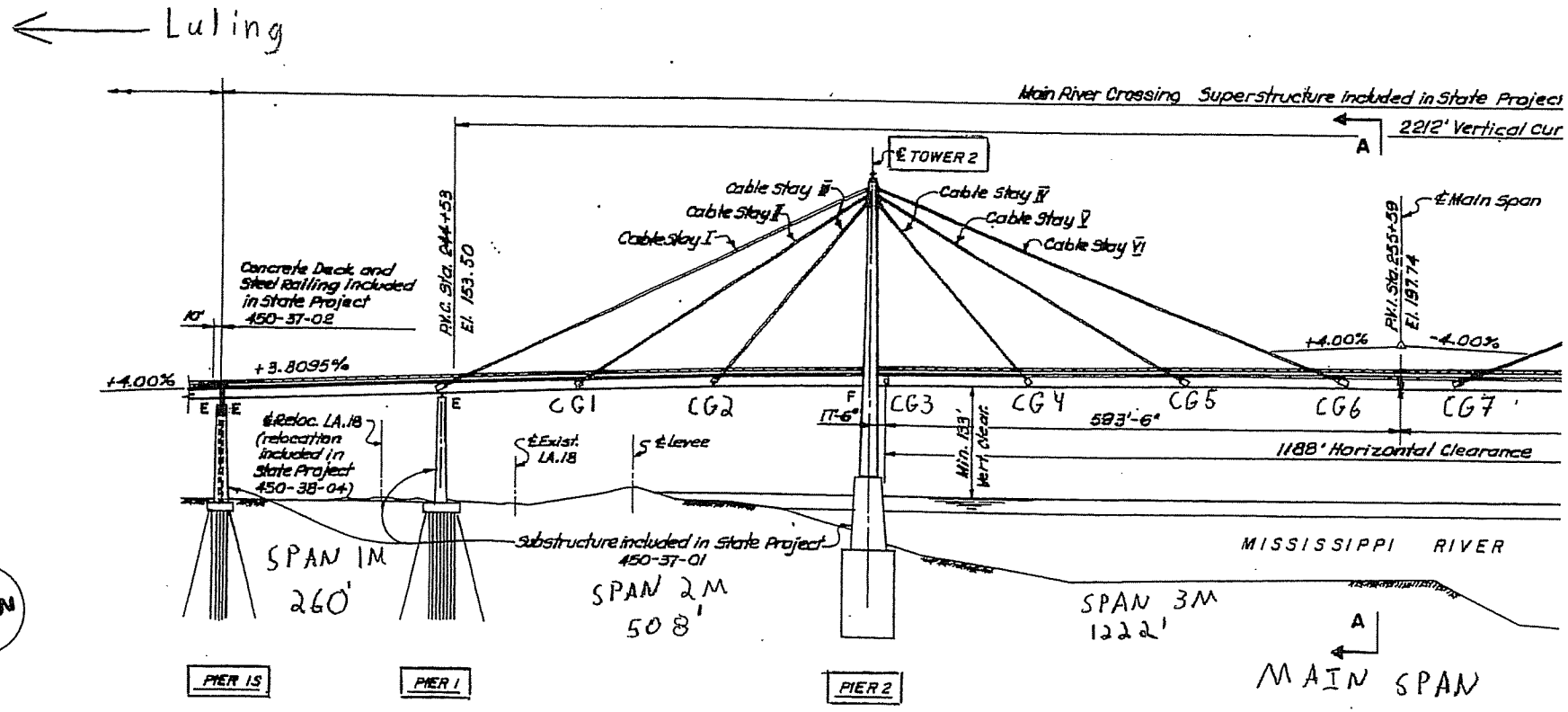

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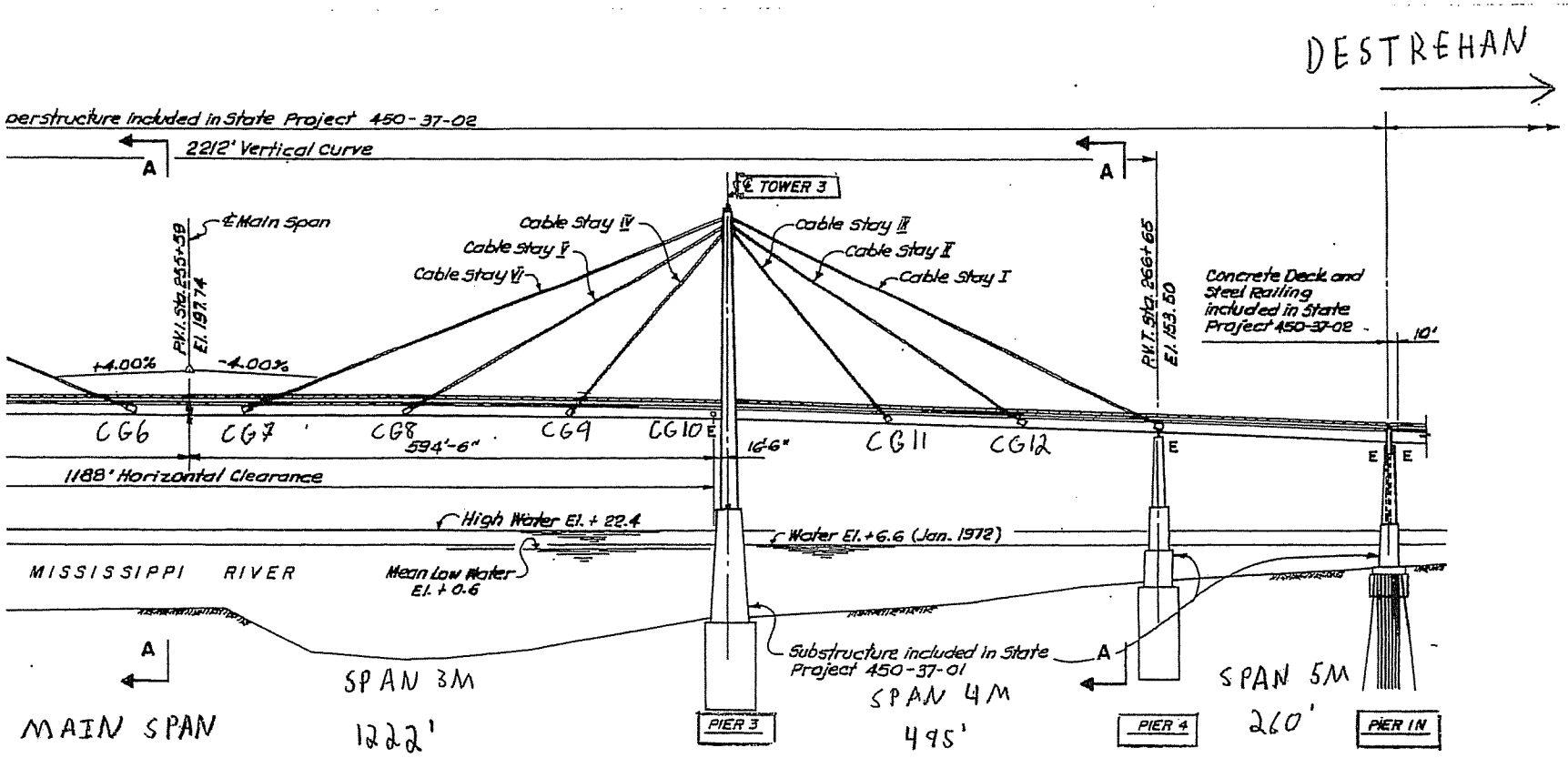
CTLGroup
NOTES BY:

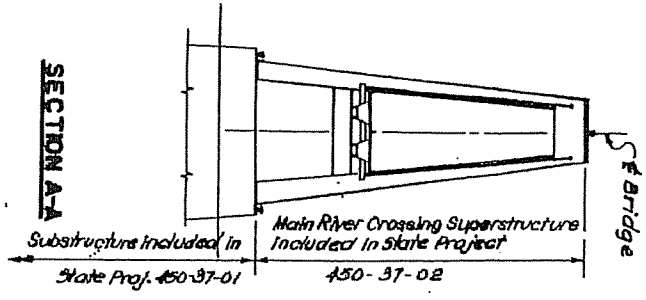
Bridge No: Luling Bridge
City/Town: Luling, LA

Trans Systems

ELEVATION

JOB: P710070019
CREW: NB
DATE: 4-11-08
SHEET: 1 of 2
of





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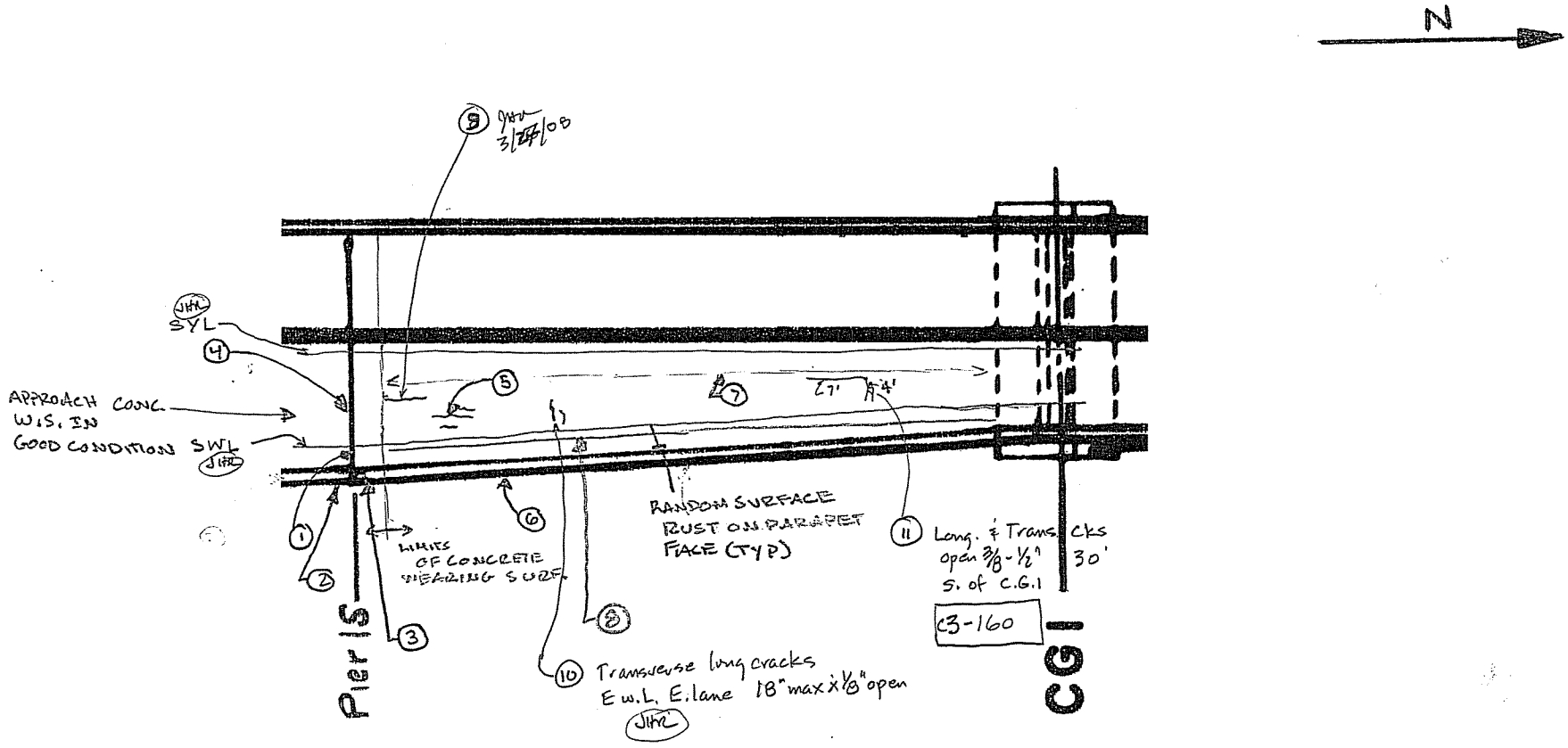
Bridge No: Luling Bridge
City/Town: Luling, LA
CTLGroup
NOTES BY:
Trans Systems
ELEVATION
JOB: P710070019
CREW: NB
DATE: 4-11-08
SHEET: 2 of 2 of



Additional Notes taken by JHR on 3/27/08

1. HEAVY SAND & DEBRIS X FULL WIDTH OF JOINT C3-150/152
2. MISSING NUT ON RAILING ANCHOR 10' SOUTH OF JOINT C3-153
3. RAILING PIECE w/ 0/4 BOLTS / SPALL ON PARAPET 11"L x 8"W x 2"D C3-154/155
4. NO NOTICABLE SETTLEMENT AT BRIDGE TRANSITION
5. 3 CRACKS: 19", 55", 21" X UP TO 3/8" WIDE C3-157 (≈ 22'-6" W of br. rail gwr 3/27/08)
6. MISSING NUTS ON RAILING ANCHOR (4 missing JHR 3/27/08)
7. MINOR RUTTING / HAIRLINE long. CRACKS IN WHEEL PATH
8. UP TO 1/2" LIP AT ROADWAY - SHOULDER ASPHALT CHANGE
9. 26'-long long. ck. starting at jt. conc. and going N. ≈ 1' E. of lane line. C3-159

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
CRS	3/20/08	1 of 1
JHR	3/27/08	1 of 2

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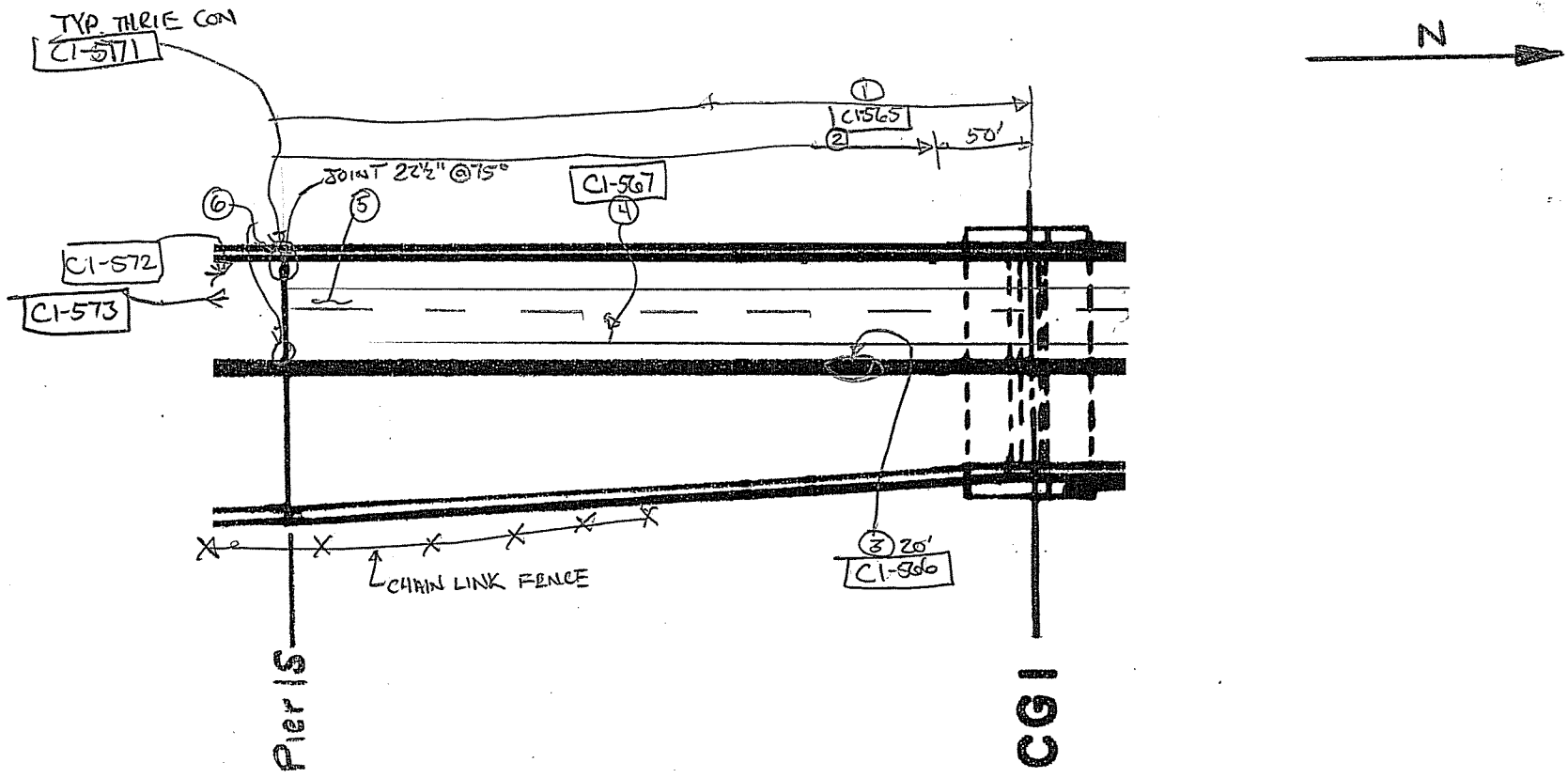

1. LONG. CRACK BTWN SHOULDER PVT & LANE PVT (TYP. ~10'L WITH 3' SPACE) CI-565
2. TYP. 1' CR TO RIGHT OF EDGE, SPACED EVERY 15'
3. IMPACT/RUBBING ALONG BARRIER
4. TRANSVERSE CR.
5. LONG. CRACKS 3-4' CR IN SERIES
6. HVY DEBRIS IN E.J. SHOULDER CI-569/570
7. MODULAR E.J. IN LEFT LANE MOVES TO THE SOUTH CI-568

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
BKC, JHR	4/2/08	2 of 4
		of

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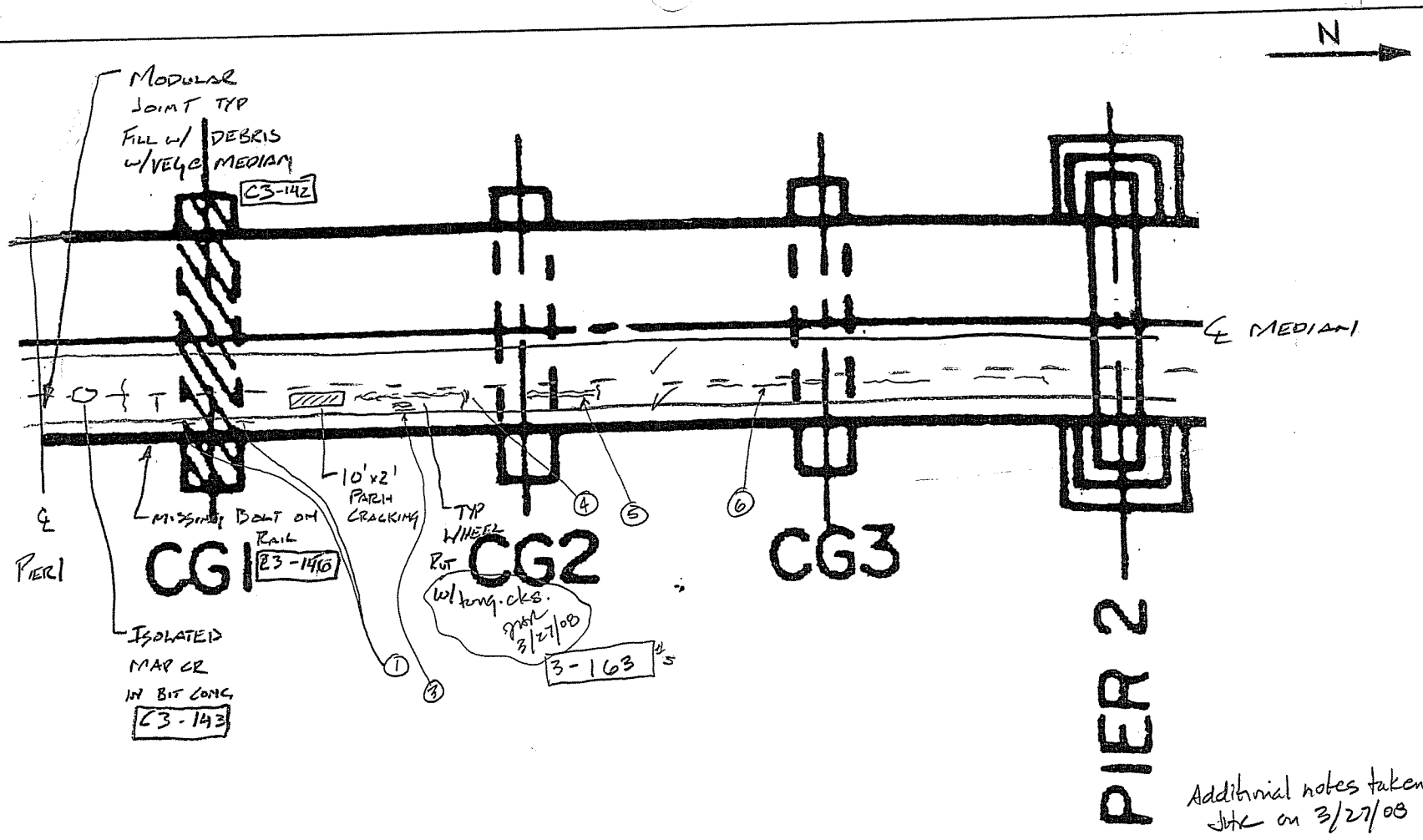

Additional notes taken by JHK on 3/27/08

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems

TOP OF DECK

JOB: P7100700019

CREW:	DATE:	SHEET:
WRW	3/20/08	1 of 1
JHK	3/27/08	2 of 2

1. short long cks on SWL just S of and at CG. #1 JHK 3/27/08 3-161
2. ≈ 60'N of CG#1 req. short long. cks. start and go to Pier 2 along SWL 3-162 3-164 #6
3. 6' long long cks E. w. Line E. Lane NB ≈ 45's CG#2
4. transverse long cks ≈ 30' So. CG#2 from Lane lines east ≈ 4'
5. long cks from CG#2 N ≈ 22' ending at short 4' long transverse cks; all in west W.L. E. Lane NB
6. long cks in W. W. L. E. Lane; ll cks are 6" to 8" apart.

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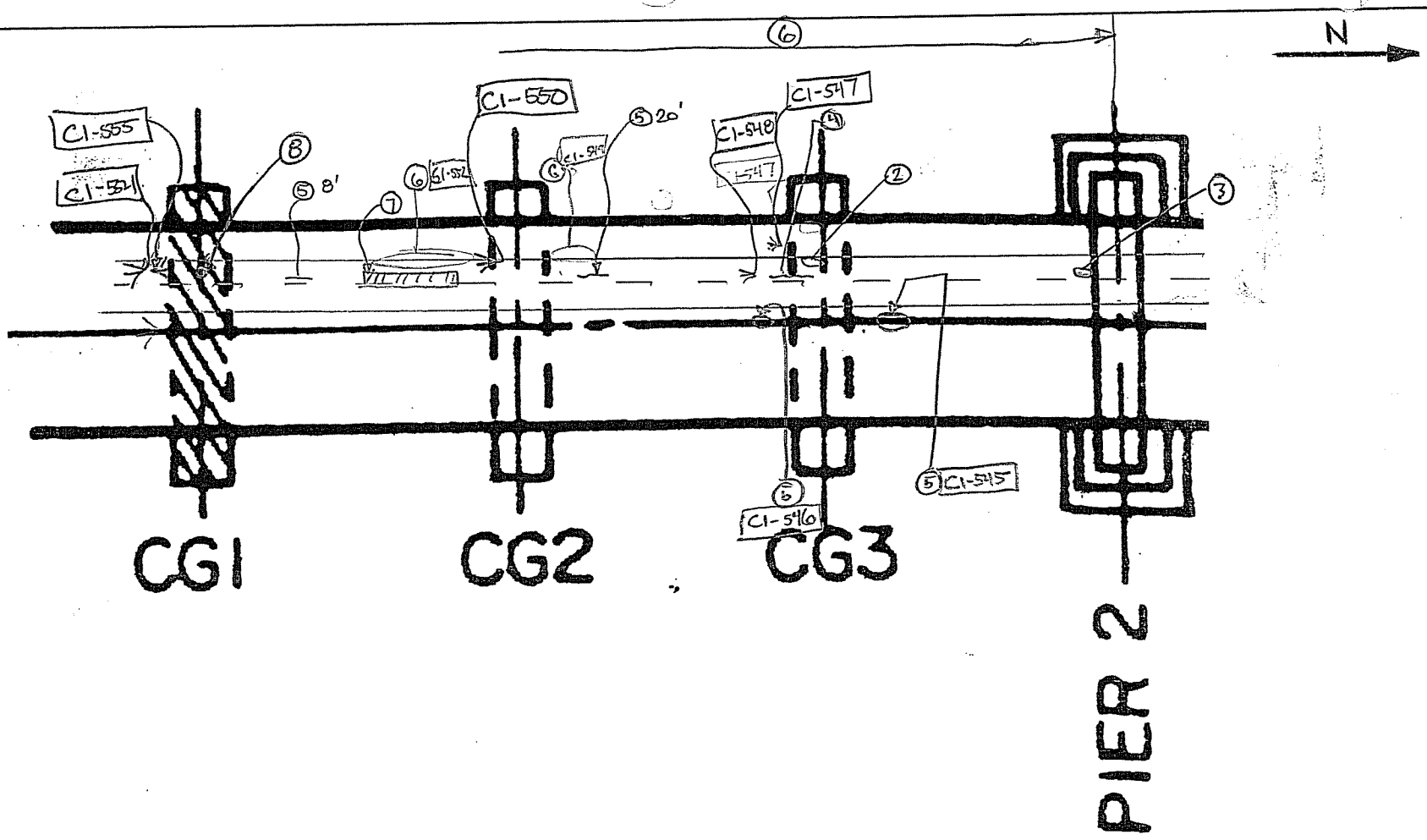

① TYP. LONG. CRS SPACED @ 15' APROX 1' LONG 1/8" WIDE (100. INSTANCES 1-2' LONG)
② LONG CRACK. ALONG RIGHT EDGE LINE 10'L x 1/4" WIDE CI-543
③ 4' LONG CR. IN LEFT WHEEL LINE
④ LONG CR. LEFT WHEEL LINE 20' x 1/16" CI-544
⑤ VEHICLE RUBBING/IMPACT ALONG RAILING
⑤ LONG CR. LEFT WHEEL LINE ___'L
⑥ TYP. CO. AT EDGE OF SHOULDER PAT/LANE PAT APPROX 10'L W/3'-4' SPACING CI-549 CI-552
⑦ 55'L x 2'W PATCH CI-551
⑧ POT. PAT SAMPLE LOC. CI-553

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
BKC, JHR	4/2/08	1 of 4
		of

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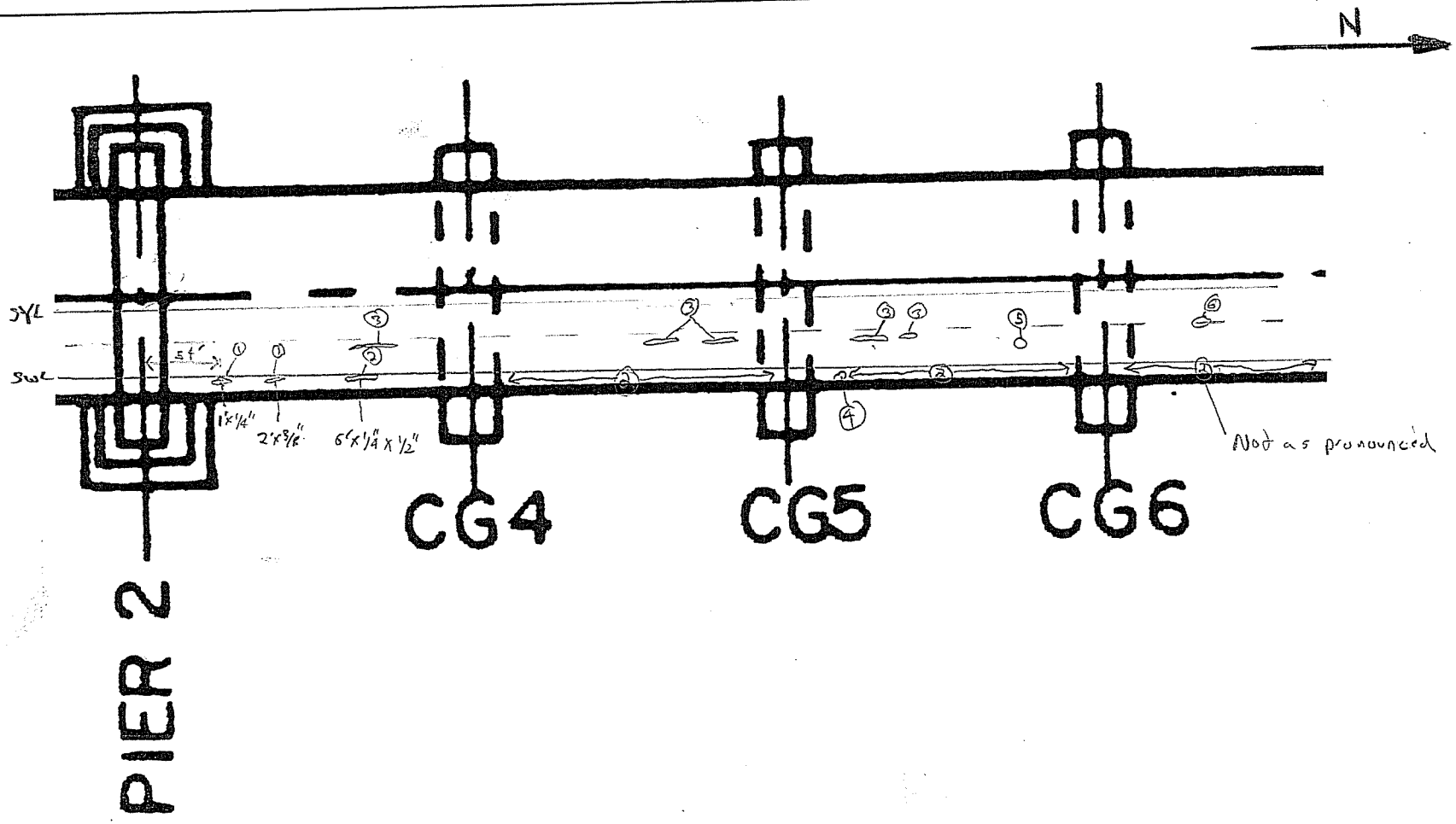

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C1-417 Typical looking north C1-420 Typical, median barrier & deck looking N.

① Long. Cracking in pavement (length x width) typical. Follow note #2.

② Long. cracking in pave. F. SWL 2" from SWL, spaced approx. 15'-6" apart looking S. Typical C1-418

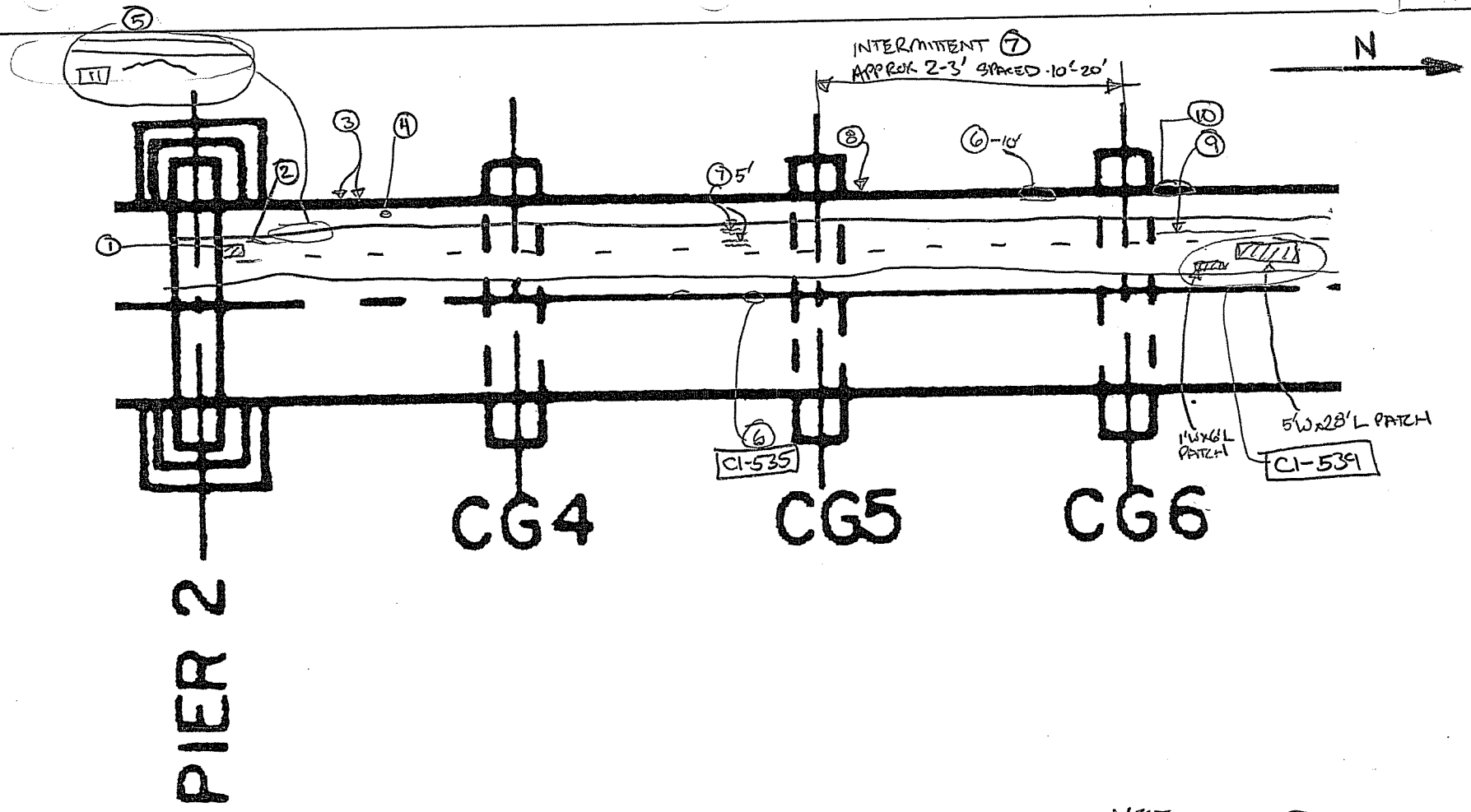
③ Long. cracking in pavement, east lane, west wheel line, 2 cracks 6" apart 8'-10'L Typical C1-419

④ 1st drain N. CG5, plugged

⑤ East lane, midde of lane, gouge 4"x 1½"x 3/4"

⑥ 6 lane reflectors missing CG6 – CG7

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
JHR SGB	3/26/08	1 of 2
		of



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TYP. WEST RAILING COND. CI-536

① 4'W x 9'L PATCH CI-531

② 3' LONG. CR 1/8" WIDE, BY EDGELINE

③ MISSING NUT ON ANCHOR

④ CLOGGED SCUPPER CI-532

⑤ TYP. 1/4" WIDE x 2'L CR. TO W. OF EDGE LINE SPACED AT 15' INTERVALS CI-534

⑥ MINOR SCRAPING / RUBBING FROM IMPACT

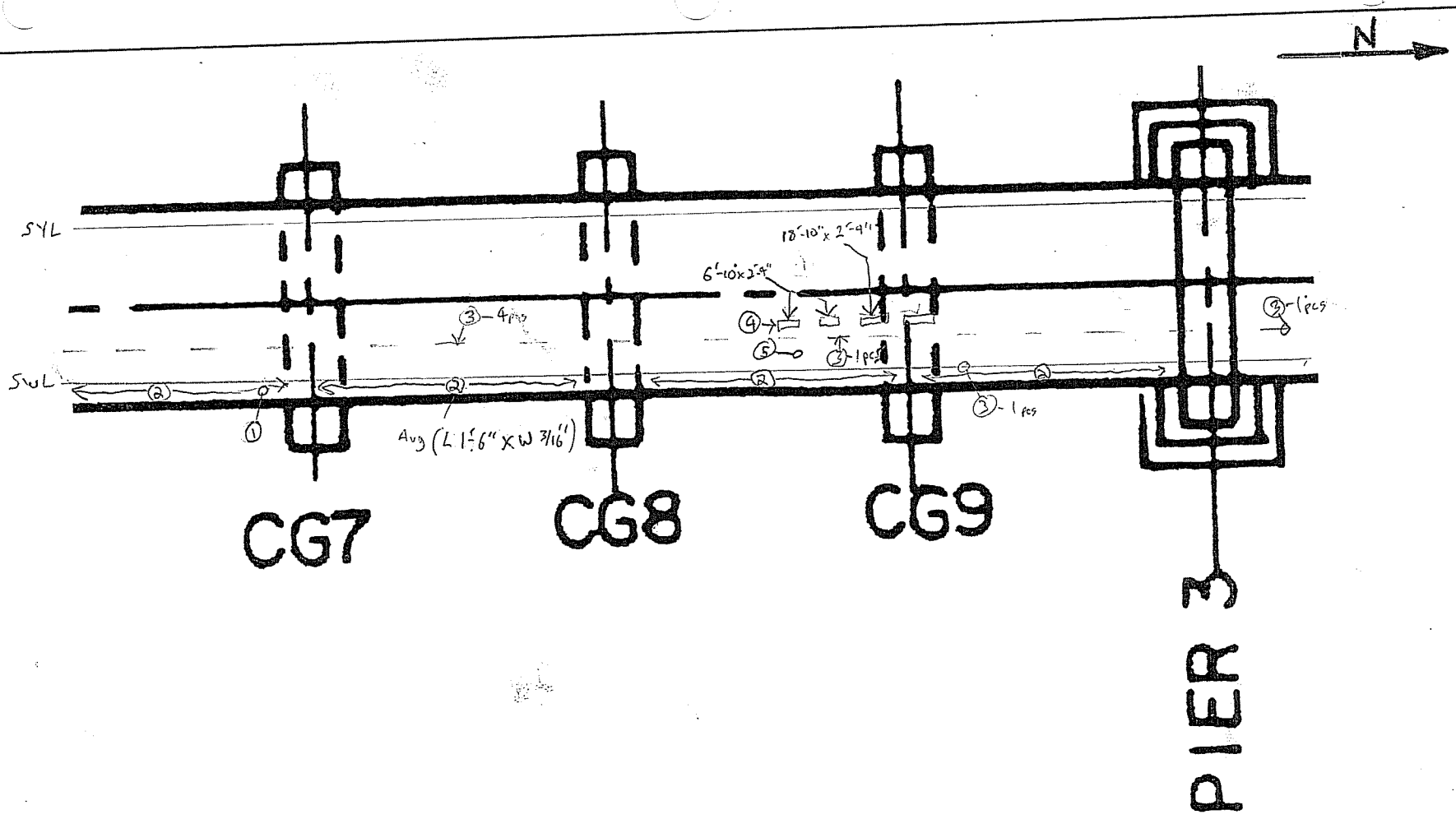
⑦ LONG. MAP CRACKING IN WHEEL LINES - L'

⑧ BENT PLATE ON WIND FERRING 8'L x 3" BENT CI-537

⑨ LONG. CR. IN RT LANE 2' FROM LANE LINE, RUNS ~50' CI-538

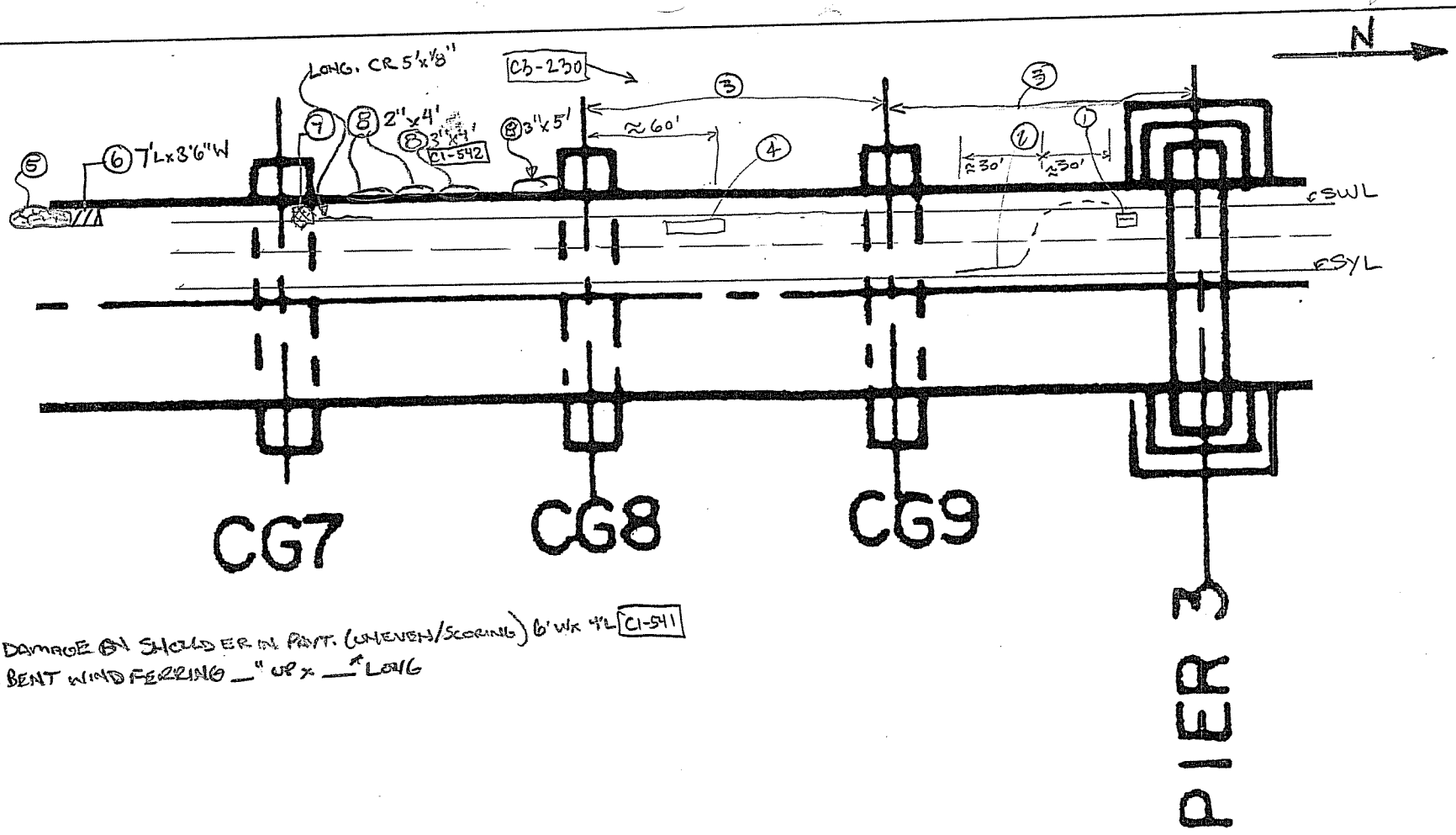
⑩ BENT [illegible] AND FERRING, 1½" UP OVER 2'

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
BRC, SHR	4/1/08	3 of 4
		of



① 1st Drain opening south of CG7 in plugged.
② Lon. cracking in pave. approx. 2" E. SWL, spaced approx. 15'-6" apart [C1-437]
③ Ln reflector damaged between lanes
④ West Ln. pavement removal and replacement locations avg L 6'-10" x W 2'-4" [C1-439]
⑤ East Ln pavement popout (1" x 3½" x ¾") [C1-442] 25' S. CG9
⑥ Lon. cracking in pavement E. Ln. W. wheel line, 2 cracks running 23', 6" apart [C1-445]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
SGB, JHR	3/27/08	1 of 3
		of

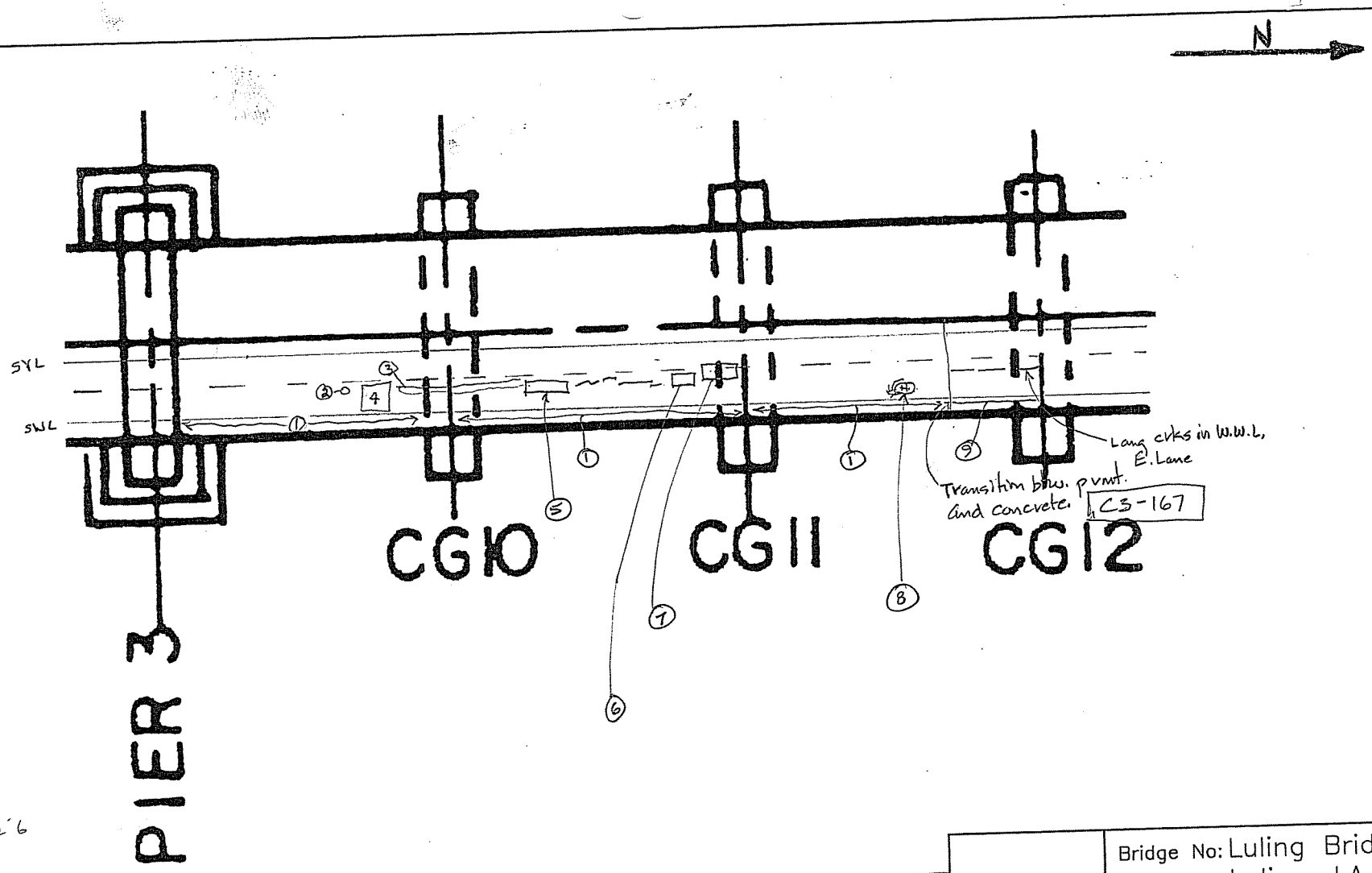


⑦ DAMAGE ON SHOULDER IN PAVT. (UNEVEN/SCORING) 6' Wx 4'L C1-541
⑧ BENT WIND FERRING __" UP x __" LONG

12
333

① 2'-8" w x 5' long patch w/ long. crks in W.W.L. W. Lane. C3-224
② transverse and long. gouge in E.W.L. West lane through East lane and along E.W.L. E. Lane C3-225
approximately 30' long. 1/2" deep some gouges also in breakdown lane for another 30' ft. C3-226
③ intermittant long crks at SWL (EDGE LINE) on ≈ 15' c's. <1' in length C3-227
④ 3½' wide x 20' long patch in W.W.L. West Lane w/ long cracks. C3-228/229
⑤ MAP CRACKING ALONG SHOULDER FOR 20' L C1-540
⑥ PATCH [illegible]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
JHR	3/31/08	3 of 3
BKC, JHR	4/1/08	4 of. 4



CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
SGB, JHR	3/27/08	2 of 3
		of

① Lon. cracking in pavement, approx. 2" E. SWL, spaced approx. 15'-6" apart

② E. Ln., W. wheel line, single crack 2'-6" x 18'-1/2", 60' S. CG10 [C1-447]

③ E. Ln, W. wheel line, slight wheel rutting w/ multiple cracks parrallel [C1-448] CL=

④ E. Ln, pavement replacement L 14'-6" x 12'-6". [C1-446]

⑤ E Ln, patch W.W.L. 2'-6" x 13'-6"

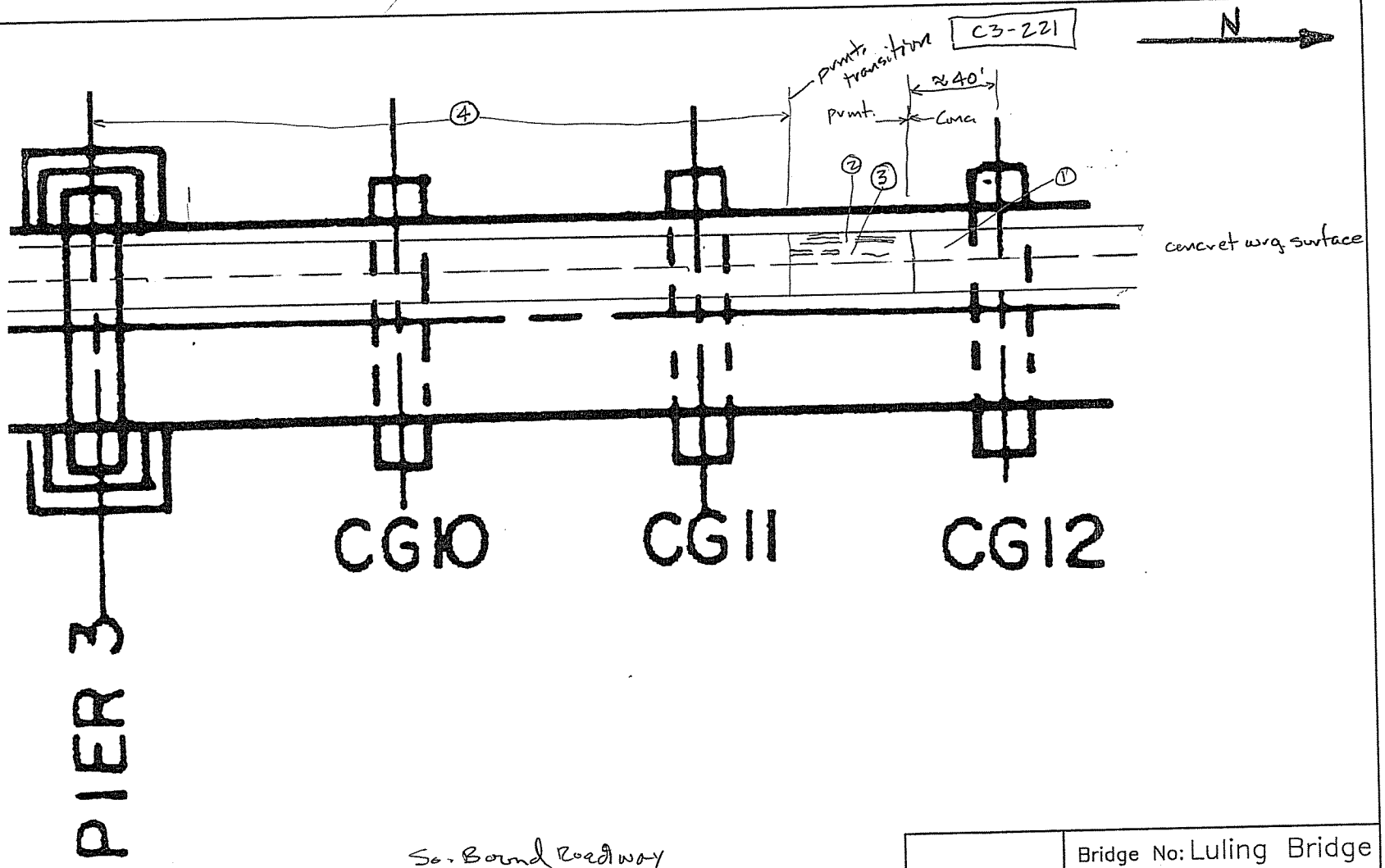
⑥ patch W.W.L. E. Lane 2'-6" W. x 6' Long.

⑦ patch w/ long crk. 3'-6" W. x 14'-6" long.; long ck. open 3/16" [C3-165]

⑧ 2'-6" x 4' long depression in E.W.L. E. Lane ≈90' S. CG #12 w alegator cracking; 3/4"+ deep. [C3-166]

⑨ long crk. continues in conc. wearing surface to C.G. #12 [C3-168] (hair line crk.) Crk meanders but is more or less continuous.

13
833



So. Bound Roadway

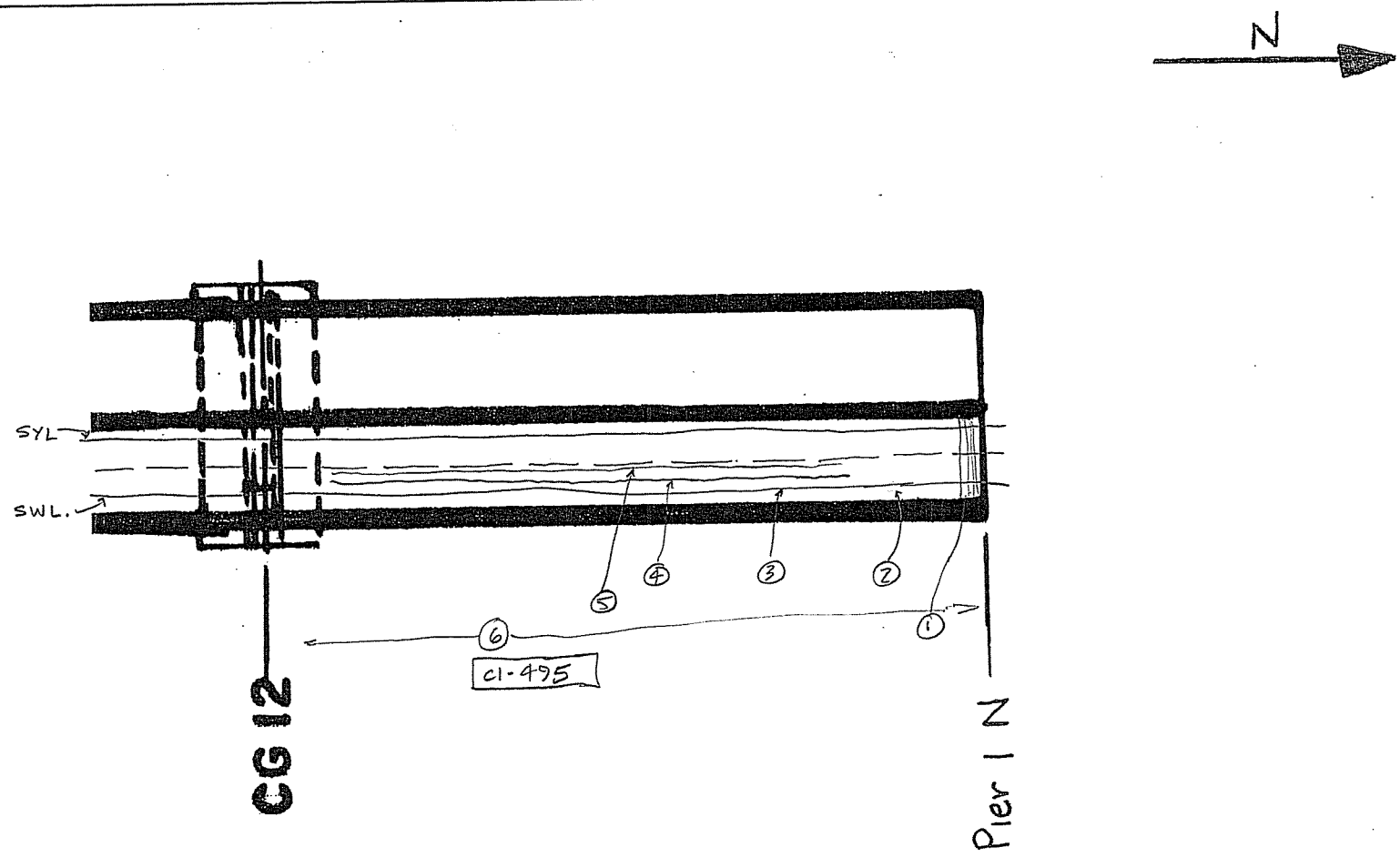
① No long. crks at SWL in Conc. Wearing Surface

② In West lane there is heavy long/alegator crking in West W.L. C3-219

③ In West lane there is mod. long cracking in East W.L. C3-220

④ Uniformly spaced long crks at or just West of SWL C3-222/223
Crk length varies from ≈10' to 2.5' in length (longer to North)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
JHR	3/31/08	2 of 3
		of



① br. jt. at PIN filled w/ foaes E. end.; missing steel armor section 3rd from N.; crk in steel armor 2nd from N both in E. travel lane. [C3-169] [C3-170] [C3-171] [C3-172] Jt. rides rough (see notes of Wes & Shawn)

② [CI-480] - Meander in h.l. crk at SWL ≈30'S. PIN.

③ h.l. crk at SWL through out length from CG 12 to PIN

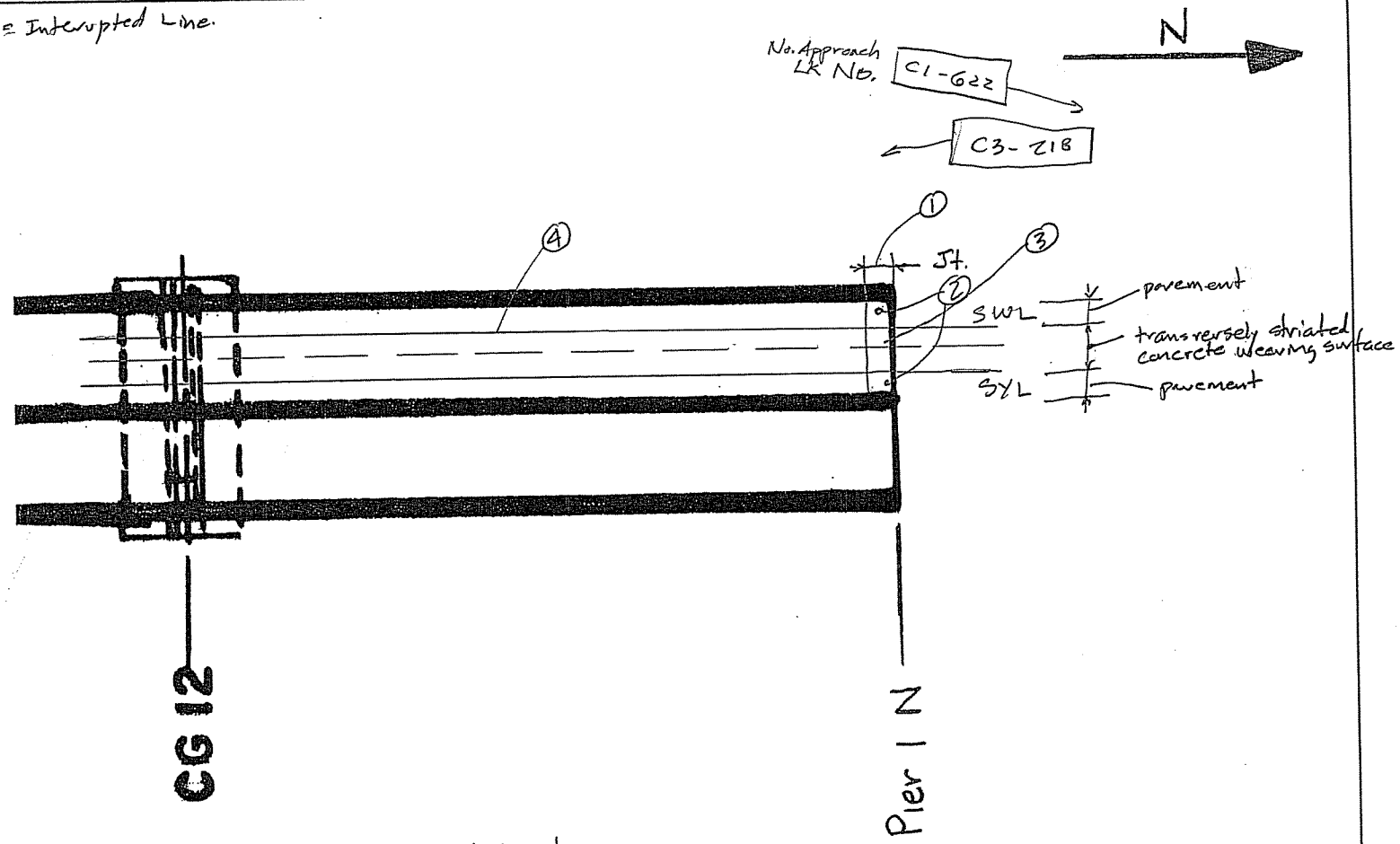
④ h.l. crk 3-4' west of SWL " " " " [CI-481]

⑤ h.l. crks in the West W.L. E.L. of N. Bd. [CI-482]

⑥ typical p.o. btw. CG 12 and Pier 1 N 15-20 p.o. primarily in E.L. of N. bd.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
JHR	3/27/08	3 of 3
JHR	3/28/08	3 of 3

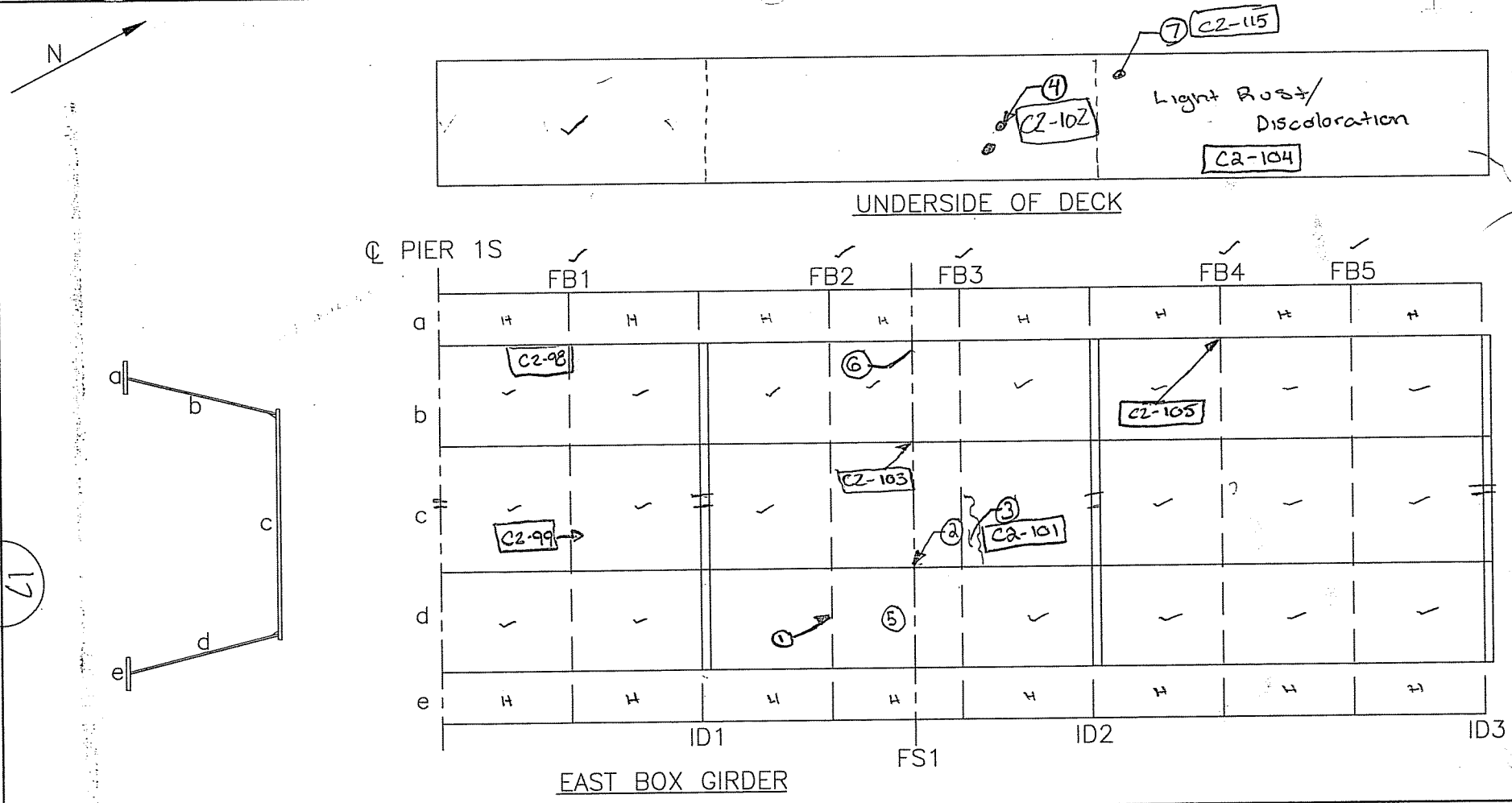
I.L. = Interupted Line.



So. Bound Deck

1. Jt armor is intact, but alignment of north sections in both lanes is to the N. C3-214
2. Jt is filled with fines in W. brake down and E. shoulder C3-216 C3-215
3. Wedge Comp. Seal coming out of jt armor for ≈1' section just west of I.L. C3-217
4. No longitudinal crack at SWL throughout

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOP OF DECK		
JOB: P7100700019		
CREW:	DATE:	SHEET:
JHR	3/31/08	1 of 3
		of



① Missing Bolt / Washer on Conduit Box

② Heavy Rust on Bolts / web @ web to Base Angle @ Field Splice C2-100

③ Collection of Asphalt C2-101

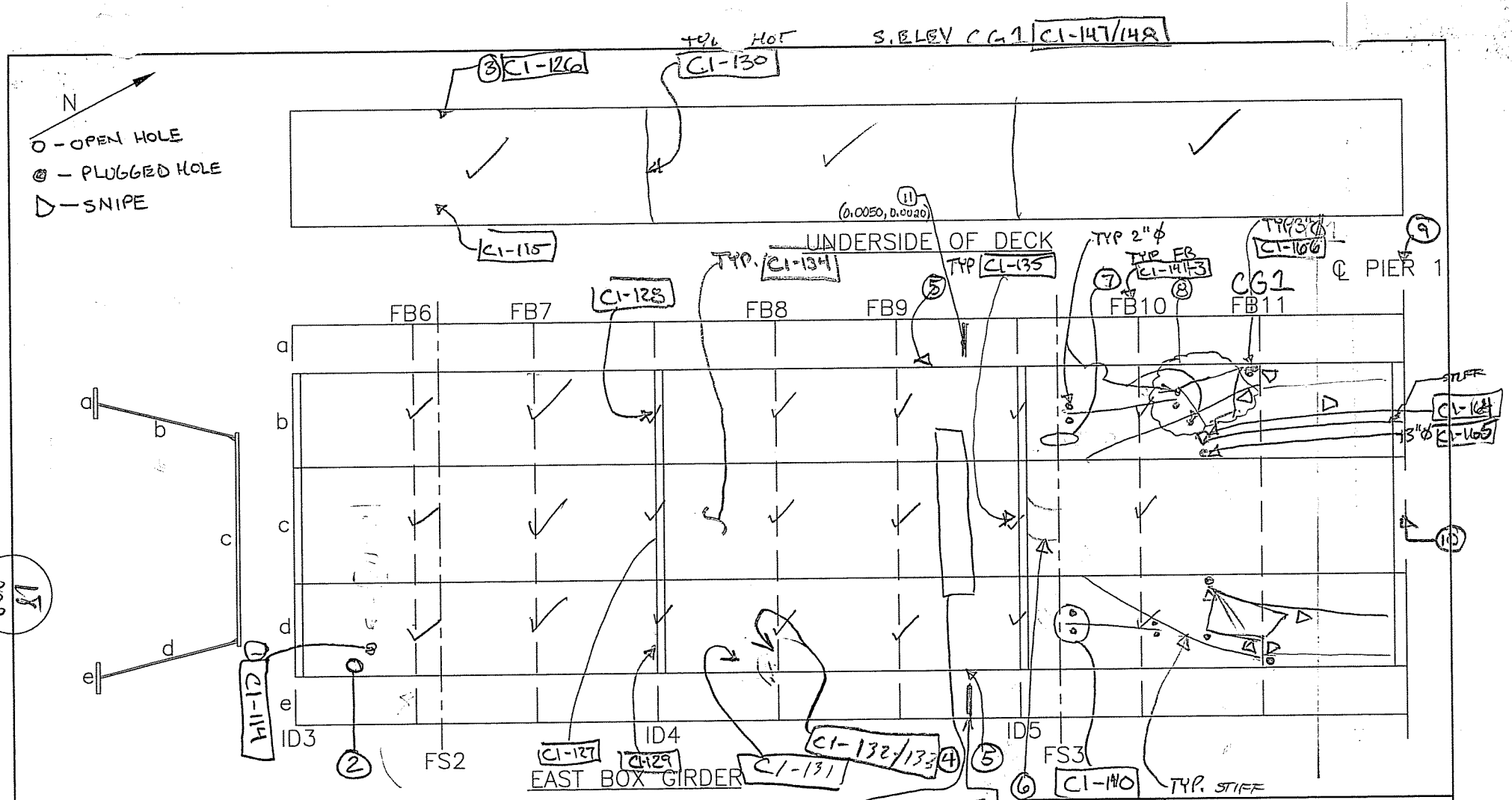
④ Drill Holes in Deck causing a collection of Fallen Asphalt C2-102

⑤ Flaky Rust on web around Field Splice

⑥ Angle Plate not Flush w/ web stiffner @ FS1 C2-114

⑦ Dent in Deck / Ceiling C2-115

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS / MJS	3/6	9 of 9
MJJ / CRS	3/7	2 of 2



1. CONDUIT MISSING TOP, LOOSE WIRES
2. OPEN CONDUIT HOLE W/ WIRE MESH 4" ϕ
3. MISSING BOLT AT FS 2 BY W. WEB
4. POOR QUALITY WELD W/ IRREGULARITIES (IE THROAT SIZE) & SLAG BTWN X-BRACE / WEB
5. TYP. ISO. LENGTHS 6"-1' UNDERCUTTING, BTWN TOP FE & WEB C1-136/137
6. STIFF. BEND TO EAST 2½" AT DIA. 5 C1-138
7. 3 LOOSE BOLTS AT SPLICE C1-139
8. GEN SHOT AREA C1-144; DTL 2 x 2" ϕ PLUGGED C1-145; DTL 1-2" ϕ PLUGGED C1-146
9. PIGEON DEBRIS ALL IN PIER 1 BTWN E-W C1-168-170
10. TYP. PIN/HANGER IN GOOD COND. C1-167
11. Plunger Test location, Readings in inches (Max, Min) Max is deflection down, Min is deflection up

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems

FRAMING SPAN 1M

JOB: P710070019

CREW:	DATE:	SHEET:
BKC, BS	3/6/08	10 of 12
BKC, BS	3/7/08	1 of 3

1 BKC, MJS 4/9/08

2 BKC, CTY 4/10/08

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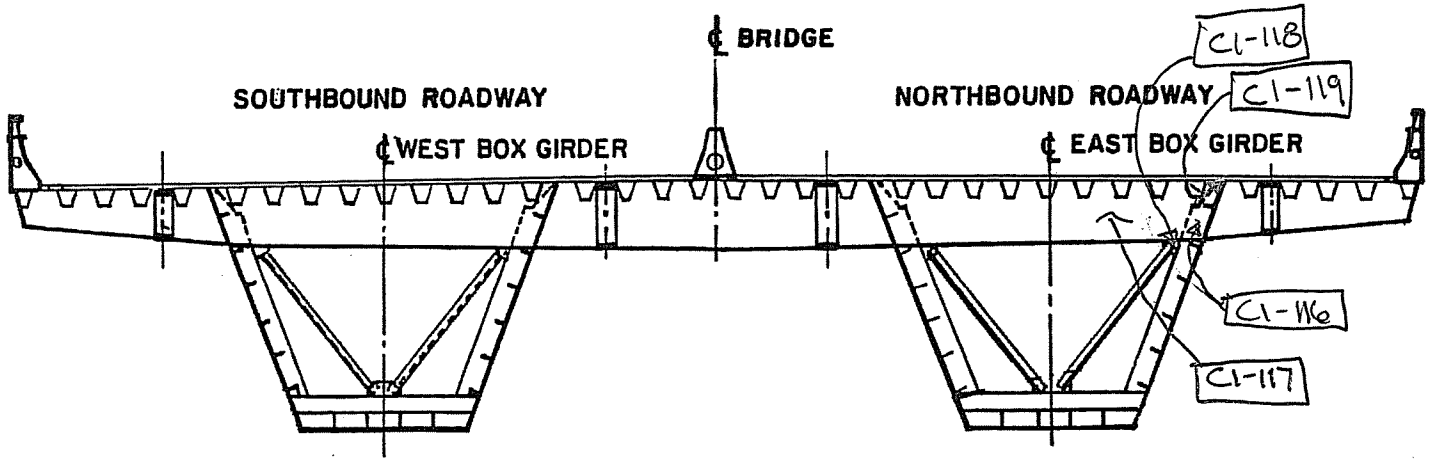

TYPICAL CROSS SECTION

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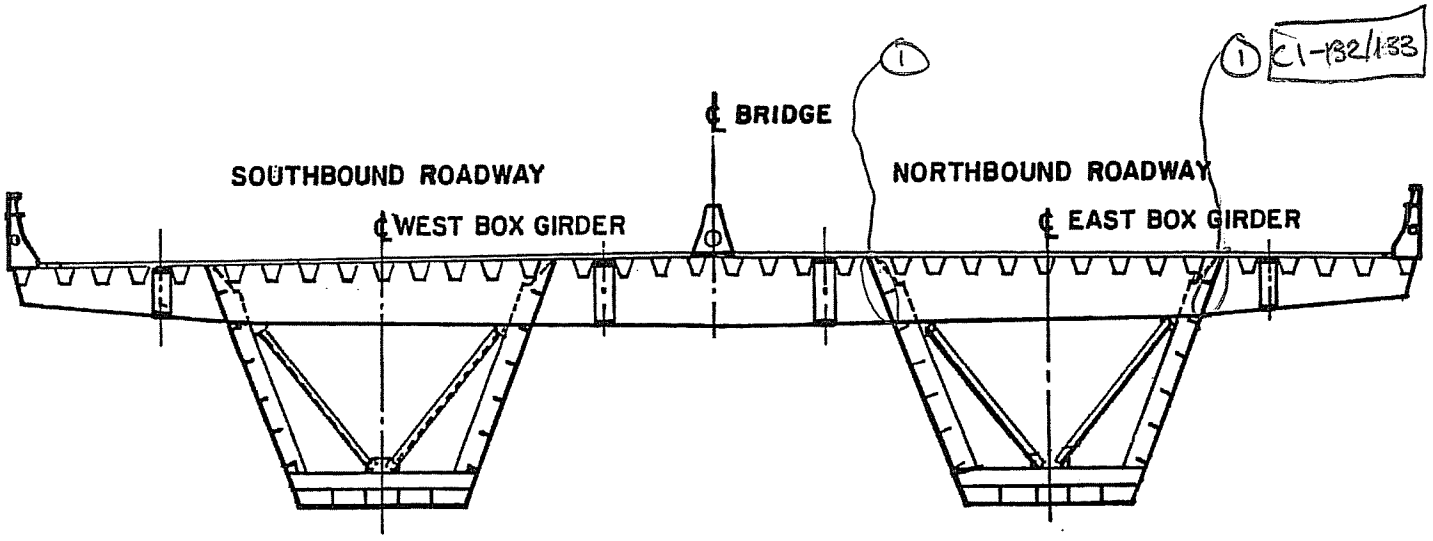
FLOORBEAM 6
SPAN 1

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TYPICAL CROSS SECTION		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	11 of 12
		of

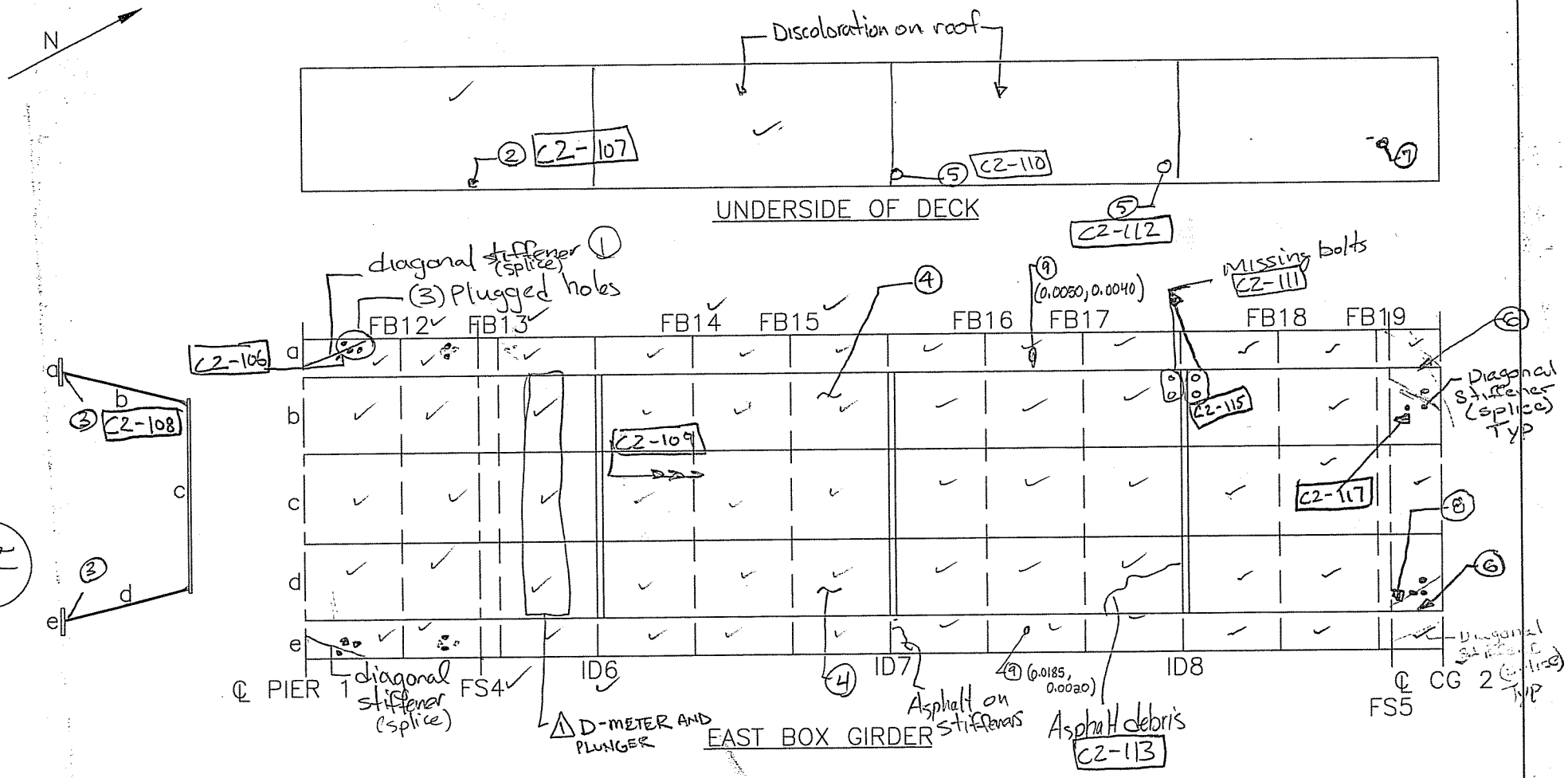


TYPICAL CROSS SECTION

FLOORBEAM 7
SPAN 1

① POOR QUALITY WELD W/ IRREG. THROAT SIZE W/ EXCESS SLAG (S. FACE ONLY BTWN FB & WEB)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TYPICAL CROSS SECTION		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	12 of 12
		of



① One bolt missing in diagonal stiffener splie. drift pin installed
② Missing nut in orthotropic deck splice, E side of box beam. F.S. 4
③ Undercut noted at several stiffener to floor field welds
④ Minor rust flaking at top of longitudinal stiffeners.
⑤ Holes drilled through slab and ceiling, Asphalt has fallen through to box girder.
⑥ No Weld at Stiffner to U/S Deck (Typ) @ Both Sides C2-119
⑦ Missing Nut/Washer @ FS5 C2-116 • Plugged hole
⑧ Gap in Stiffener Due to Diagonal Splice Plates C2-118
△2 ⑨ Location of Plunger Test, Readings in inches (Max, Min)
deflection up
deflection down

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/7/08	1 of 2
△1 BKC/MJJ	4/8/08	of
△2 BKC/CTY	4/10/08	

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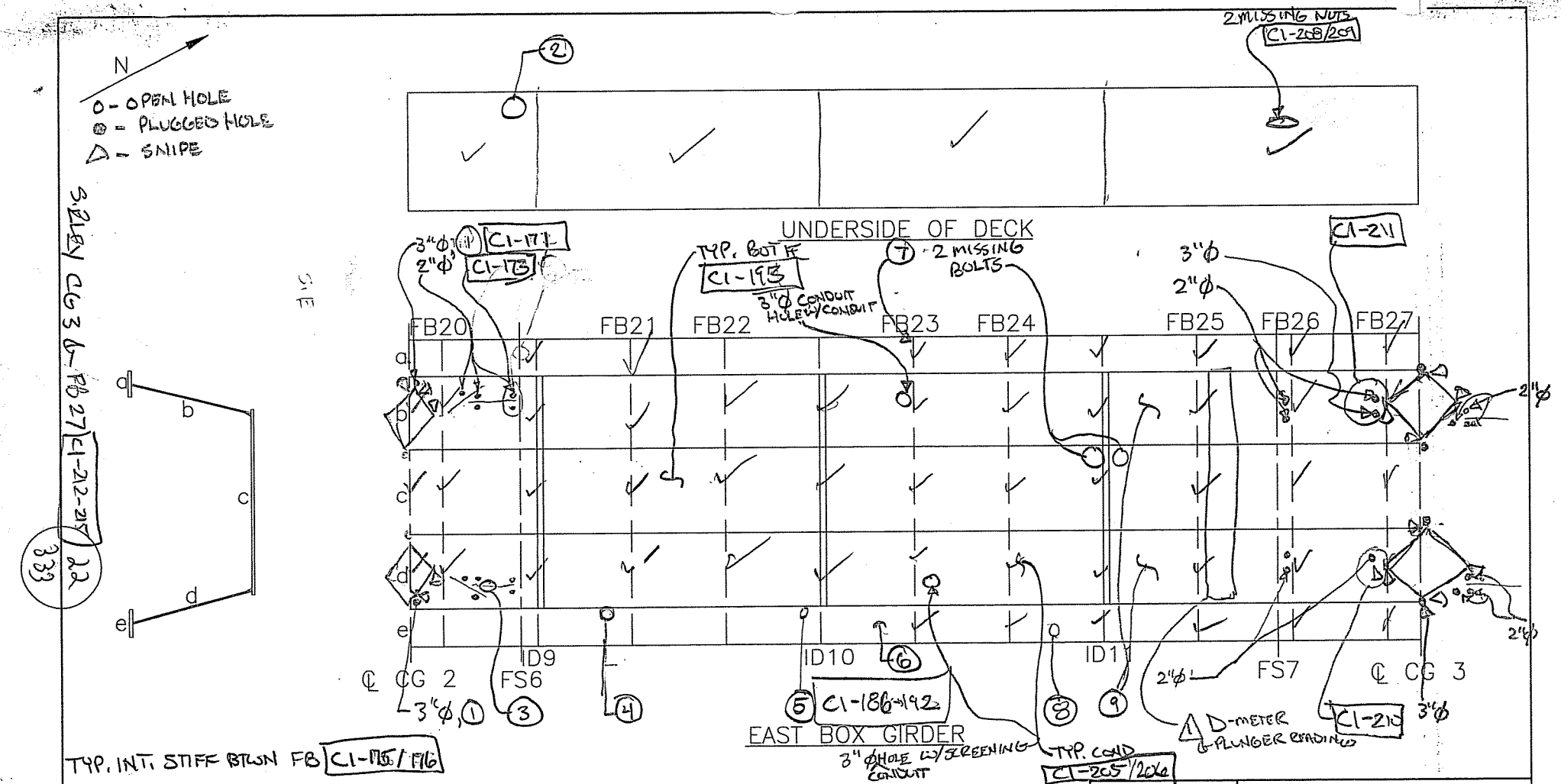
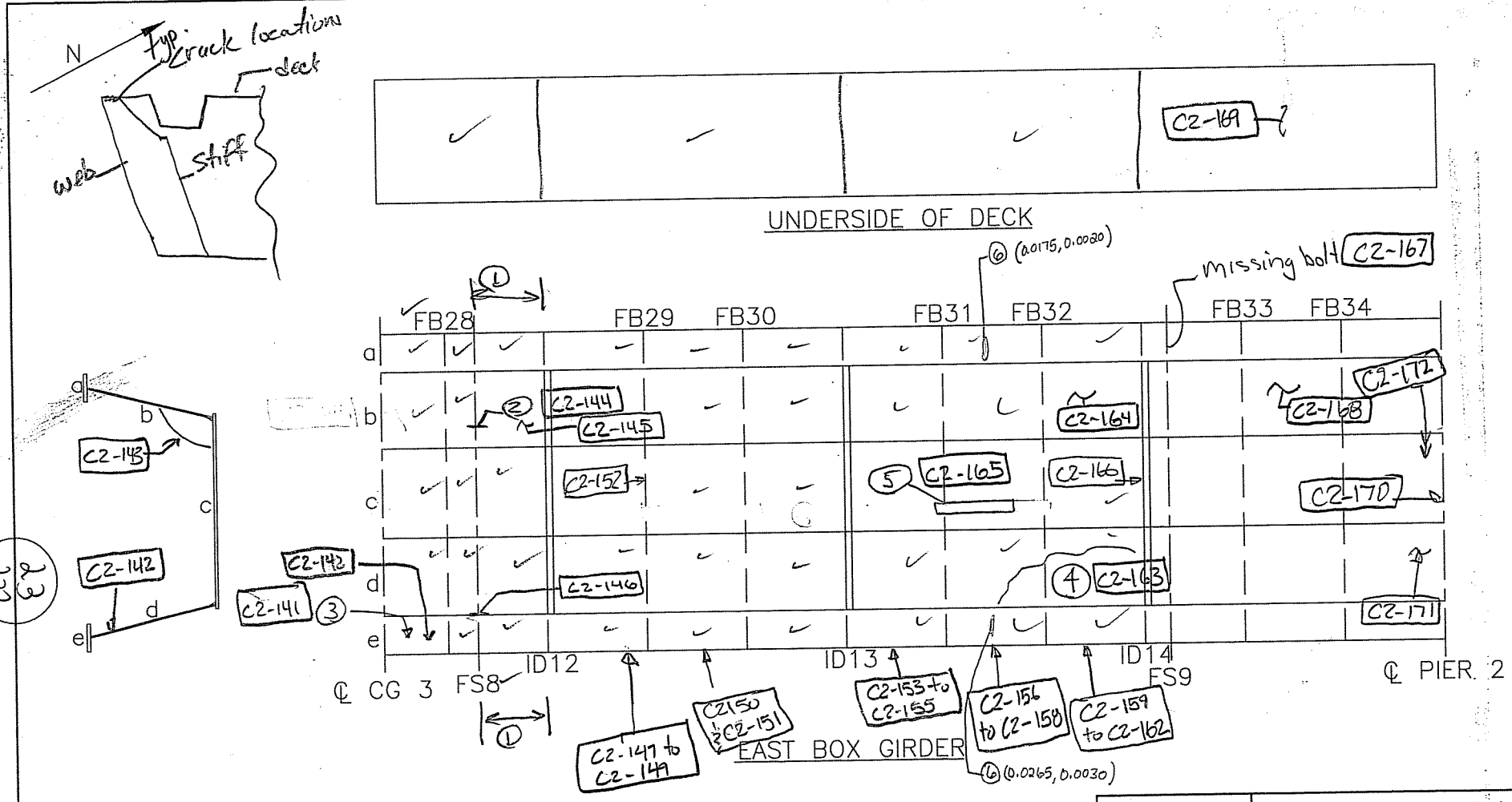


TYP. INT. STIFF BTWN FB C1-175/176

1. STIFF. TO S. OF HOLE CUT AT 90° TO AVOID INT. WELDS
2. MISSING NUT AT FS 6 ALONG DECK C1-172
3. TWO LOOSE BOLTS AT HORIZ. STIFF C1-174
4. 1" CR WELD MAT. BTWN TRAN. STIFF/TOP FF AT 2ND STIFF N. OF ID 9 C1-177-185
5. 1½" CR WELD MAT./BASE METAL TRAN STIFF/TOP FF INTO TOP FF STIFF S OF ID 10.
6. 1" CR IN WELD MAT. VISUAL INDICATES POT. IN FF C1-194 thru 198 (SINGLE HASH WELD MAT. DOUBLE POT. IN BASE)
7. UNDER CUT IN WELD BTWN FB & TOP FF AT WEB. C1-199 – C1-201
8. 1½" CR WELD MAT. & TOP FF TRAN STIFF/TOP FF 2 STIFF S. OF ID 11 C1-202→204
9. LARGE SHEETS OF DELAM. RUST C1-207

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/7/08	3 of 3
BKC, MJS	4/8/08	of



① Heavy rust sheeting from field splice 8 to ID12. Rust has accumulated on top of hor. stiffners and on floor.

② Loose bolt in FS 8 connection at stiffener (West web wall) C2-144

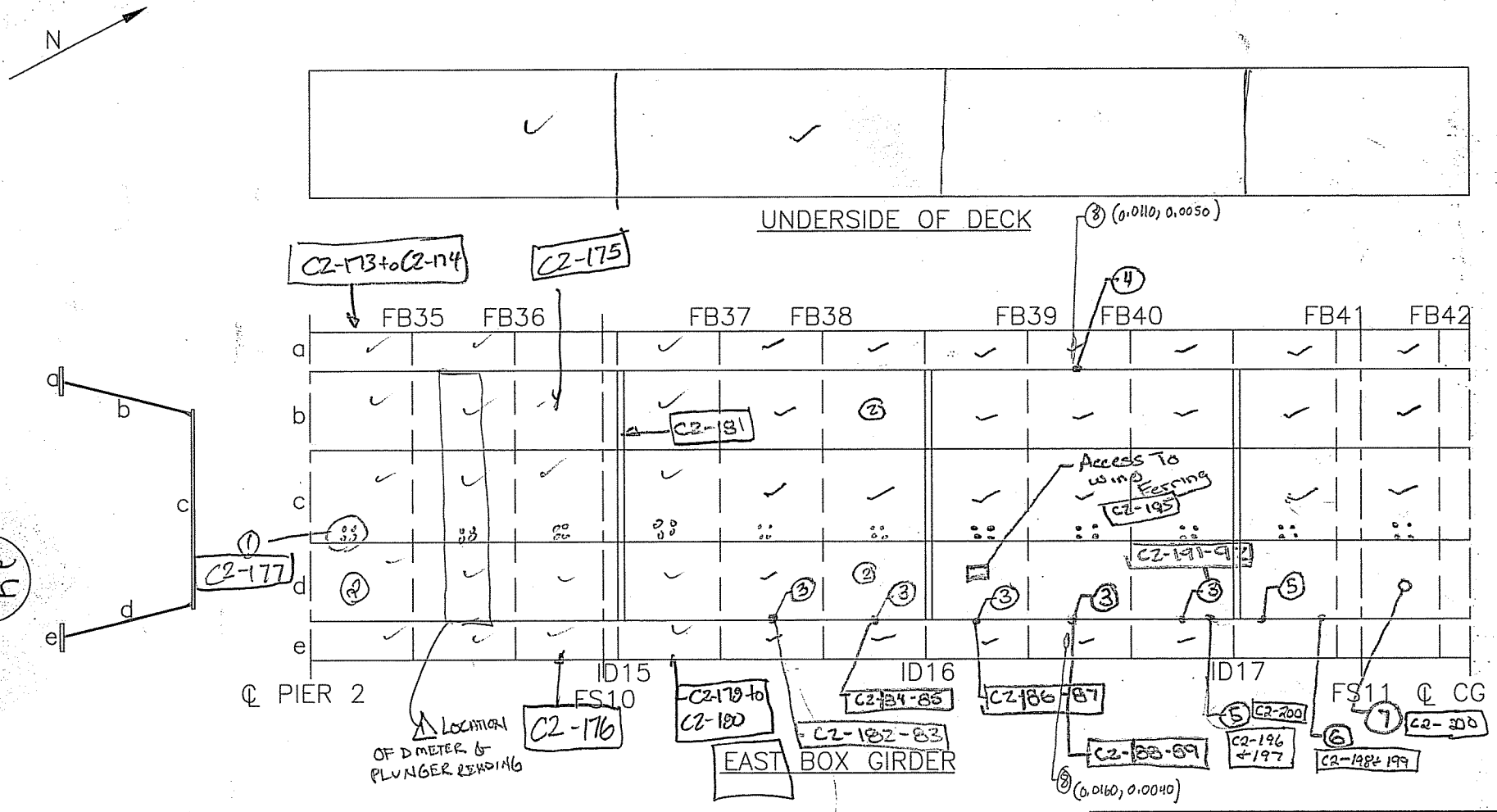
③ Bent splice connection on top of plate A C.G. #3, connection to East box girder. Approx. Gap width is 28" L x 3/8" (max) W C2-141

④ Sand debris Along floor

⑤ Cabletray has top off for approximately 12' section

⑥ Location of plunger tests, Readings are in inches (Max, Min) Max is deflection down, Min is up

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS/CRS	3/10/08	1 of 2
⚠ BKC/CTV	4/10/08	of



(1) Typical location of missing bolts with holes in bottom of girder C2-177

(2) Heavy rust streaking / flaking of webs - Occurs on both web walls

(3) Small crack @ Deck - web Stiffener weld wrapping around Both sides

(4) Deep Undercut @ Deck - web Stiffener weld C2-190

(5) Small crack @ Deck - web Stiffener @ North side of weld C2-193-94

(6) 1/8" T.A. @ u/s Deck & Near 1st Stiffener South of FB41; East Web

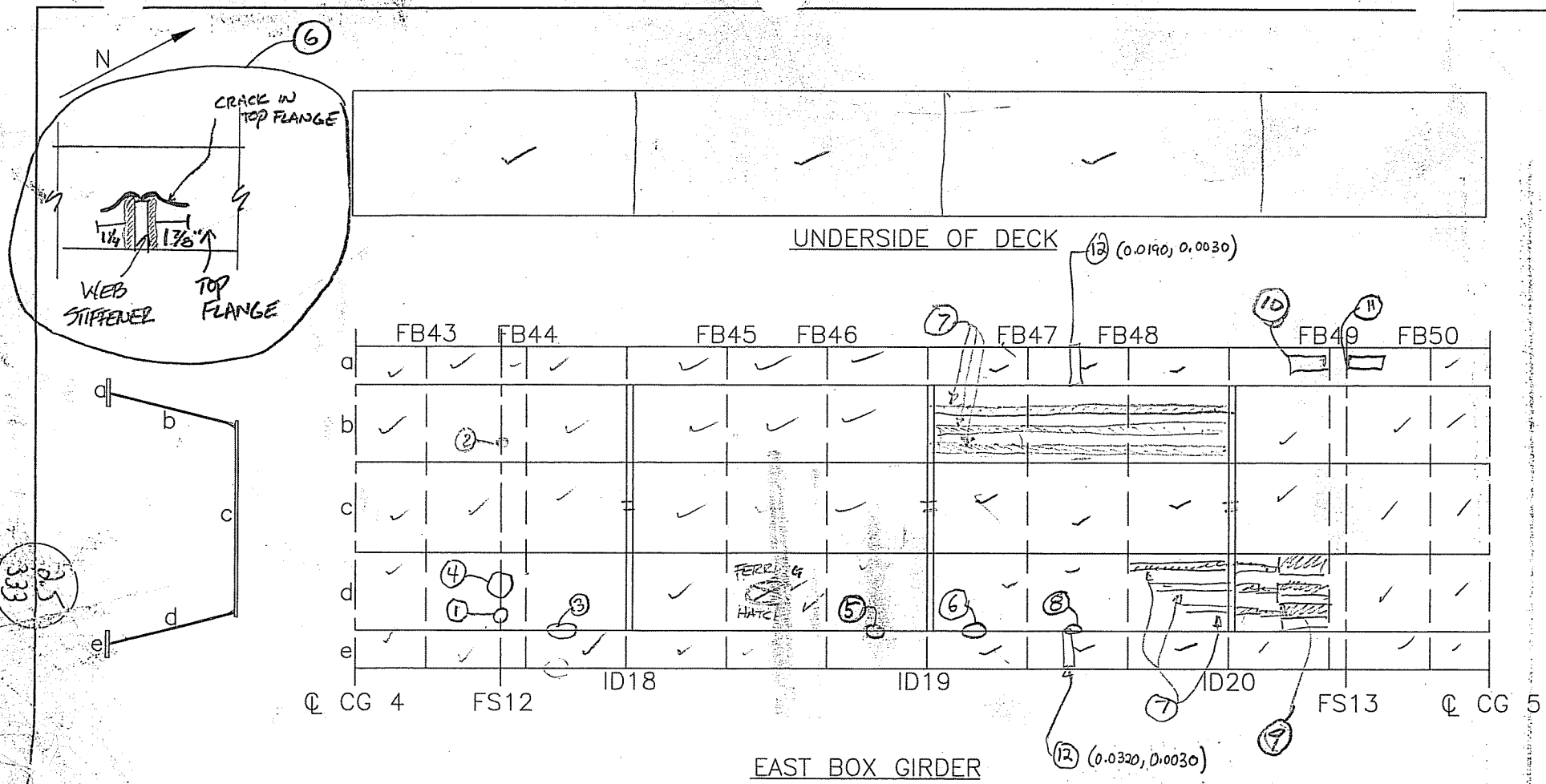
(7) Missing Plug @ Hole; East Wall B/T FB41-42 @ Diagonal Splice

(8) Location of Plunger Test, Readings in inches (Max def. down, Min (Max def. up.))

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CTY	3/10/08	2 of 2
CRS/CTY	3/11/08	1 of 2

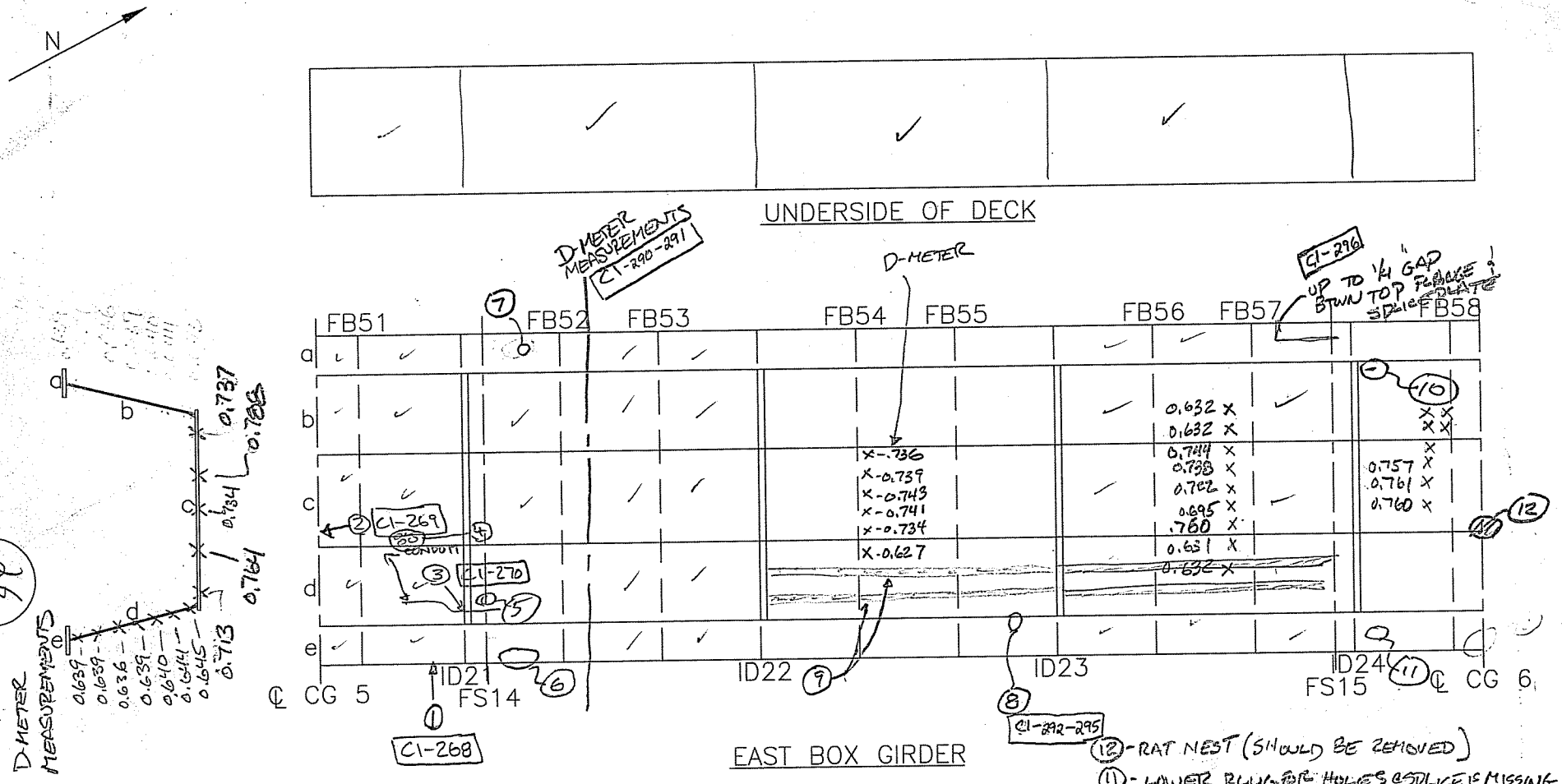
1 BKC, MJJ 4/9/08

2 BKC, CTY 4/10/08



1. 2 BOLTS @ FS12 ARE UNDER THREADED C2-224
2. 1 BOLT MISSING C2-225
3. WELD @ TOP OF STIFFENER IS UNDERCUT & BOLT MISSING @ TOP FLANGE C2-226 & 227
4. 5 BOLTS IN A ROW OF 10 UNDER THREADED
5. CRACK @ STIFFENER WELD, CRACK PROPAGATED 7/8" INTO BASE METAL C2-228 → C2-232
6. CRACKS @ STIFFENER WELD, N. CRACK PROP 1¼" INTO BASE METAL, S. CRACK PROP 1⅞" INTO BASE METAL
7. MED. GRAINED/FLAKING RUST UP TO 10" HIGH ABOVE EACH LONG. STIFFENER C2-237
8. CRACK @ STIFFNER WELD, NOT PROPAGATED INTO BASE METAL C2-238
9. MED. GRAINED/FLAKING RUST UP TO FULL HEIGHT BTWN STIFFENERS
10. 1/8" GAP BTWN TOP FLANGE/DECK & SPLICE PLATE C2-239
11. 1/8" GAP BTWN TOP FLANGE/DECK & SPLICE PL W/ UNDERTHREADED BOLT C2-240
12. Location of Plunger Test, Readings in inches (Max def. down, Max. def. up)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/CRS	3/12/08	1 of 2
~~BKC/SPS~~	~~4/9/08~~	of
BKC/CTY	4/10/08	



(12) - RAT NEST (SHOULD BE REMOVED)

(11) - LOWER PLUG FOR HOLES @ SPLICE IS MISSING

(1) EVIDENCE OF WATER LEAKING THROUGH TOP SPLICE PLATE. IMPACTED RUST (3/16") between splice plate and deck, (3) Bolts are moderately rusted with minor section loss C1-268

(2) BROKEN LADDER CLIP FROM C.G. 5 INTO BAY. C1-269

(3) CONDUIT THROUGH ID21 IS RUBBING ON DIAPHRAGM CAUSING WEARING OF CONDUIT C1-270

(4) (4) BOLT HOLES IN BOTTOM FLANGE OF GIRDER NEXT TO PLATE D, NO BOLTS

(5) 1 LOOSE BOLT @ FS14 (6) GAP BTWN TOP FLG. & SPLICE PLATE, UP TO 1/8"

(7) Nut Missing from PL attached to underside of deck (8) CRACK @ TOP OF STIFFENER WELD, PROPGATED 1" INTO FLANGE

(9) MED. GRAINED / FLAKING RUST UP TO 8" HIGH ABOVE LONG. STIFFENERS

(10) GOUGE IN WEST WEB @ ID24, NEAR TOP FLANGE 2" LONG UP TO 1/8" DEEP C1-297

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 3M	
JOB: P710070019	

CREW:	DATE:	SHEET:
MJJ/CTY	3/12/08	1 of 3
SWB/PGN/CTY	3/13/08	1 of 2

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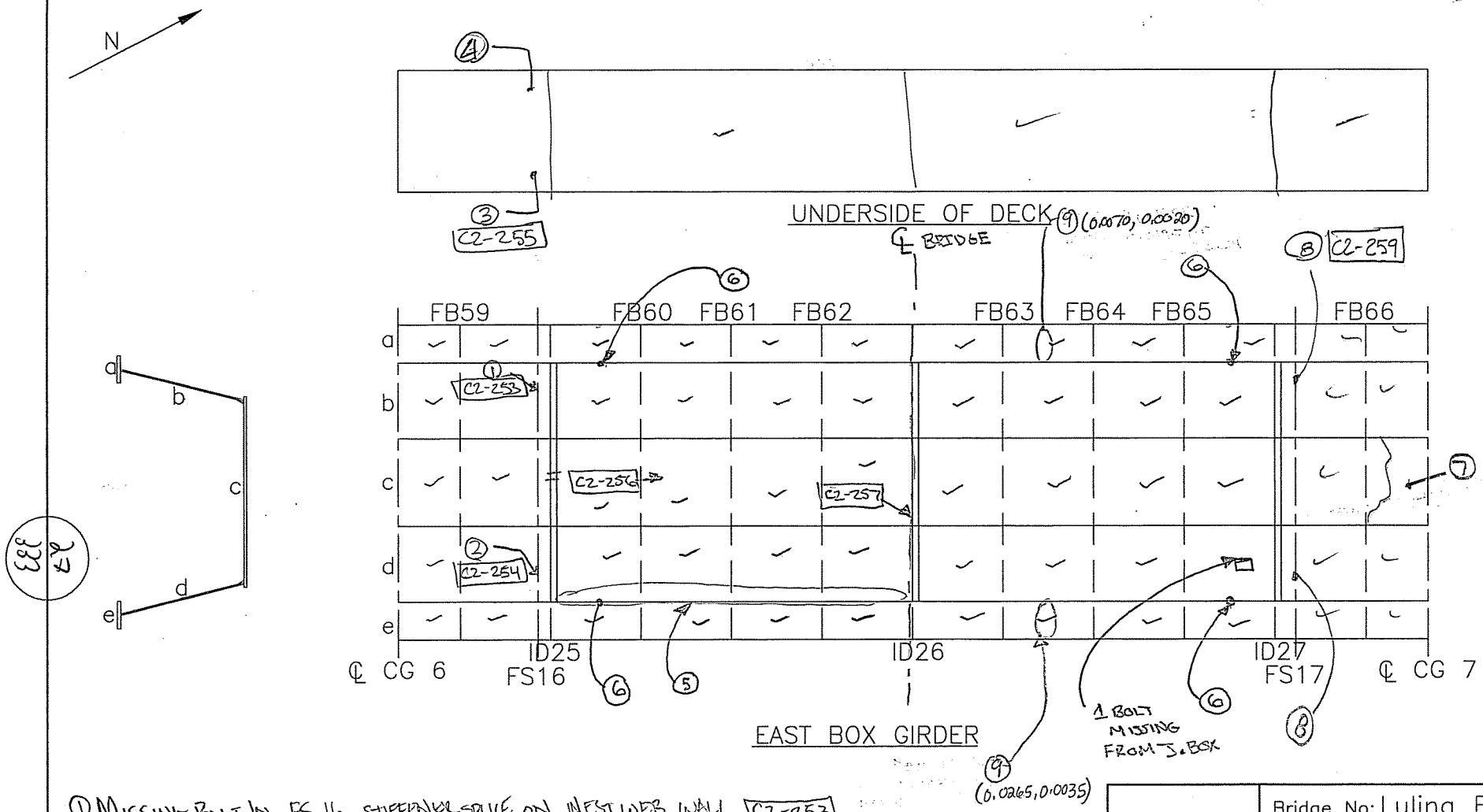


① MISSING BOLT IN FS 16, STIFFENER SPLICE ON WEST WEB WALL C2-253

② LOOSE BOLT IN FS 16, EAST WALL SPLICE PLATE C2-254

③ LOOSE BOLT IN FS 16, DECK SPLICE PLATE, C2-255

④ MISSING NUT IN FS 16, DECK SPLICE PLATE

⑤ STIFFENER - FLANGE WELDS GOOD ✓

⑥ 2 BOLTS @ STIFFENER - FLANGE WELD LOCATION C2-258 (TYP)

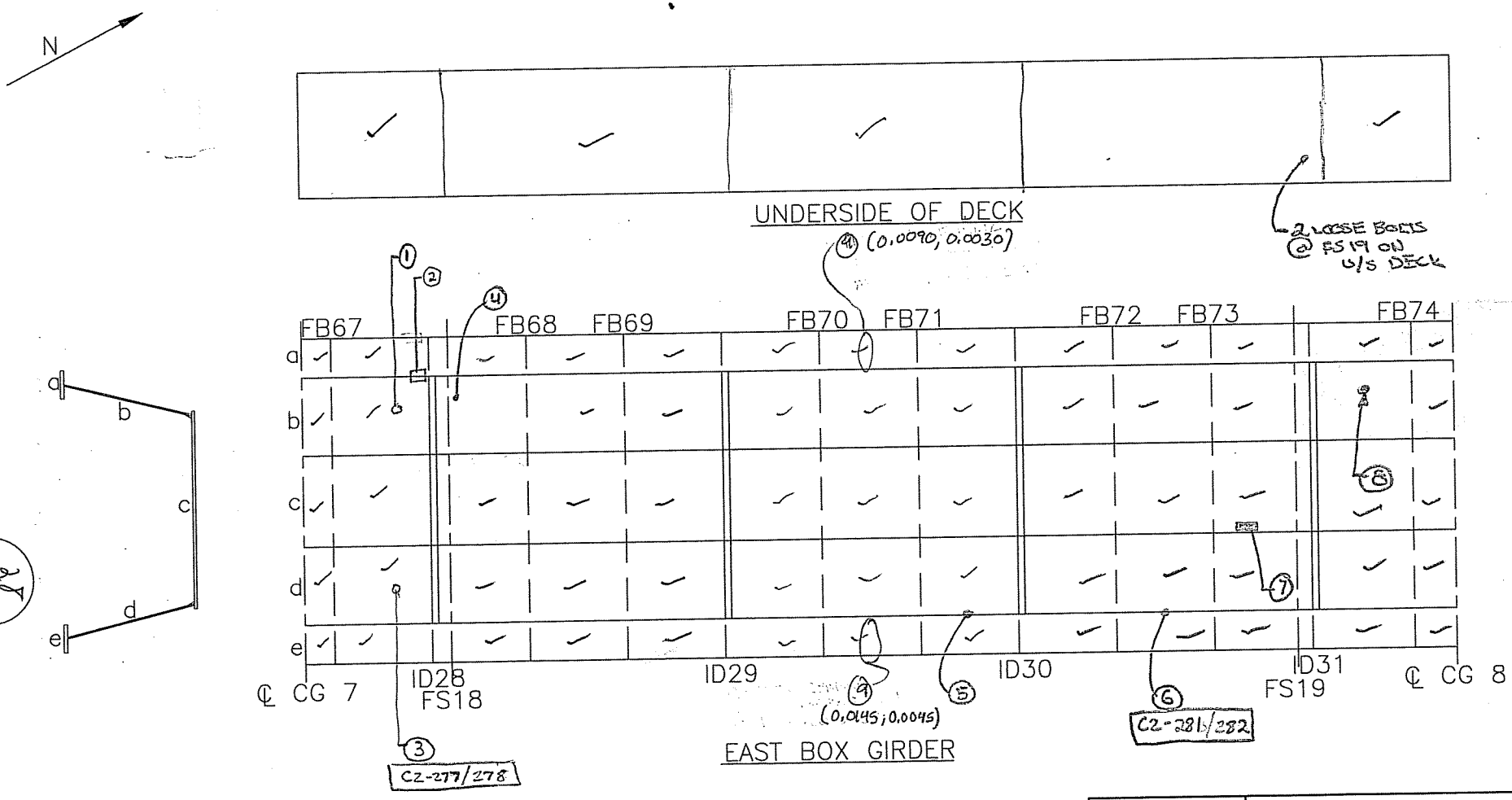
⑦ HEAVY ACCUMULATION RAT DEBRIS AND DIRT AT C.L. 7 LOCATION

⑧ MISSING BOLT IN FS 17, STIFFENER SPLICE ON WEB WALL C2-259

⚠ ⑨ Plunger test location. Readings in inches (Max defl. down, Max defl. up)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJ/CES	3/14/08	2 of 3
~~BKC/SMJ~~	~~4/9/08~~	of

⚠ BKC/CTY 4/10/08



(1) Missing plug in crack arrest hole

(2) 1/8" gap between underside deck and bolted PL

(3) 1/2" LONG CRACK ~~[illegible]~~ @ CRACK ARREST HOLE EXTENDING TO SPLICE GAP BELOW

(4) 1ST/2ND STIFFENER DOWN FROM FLANGE; LAST 3 NUTS @ NORTH SIDE OF FS18 CUT DUE TO PROXIMITY TO STIFFENER C2-279 C2-280

(5) CRACK AT STIFFENER - FLANGE WELD W/ NO PROPAGATION INTO BASE METAL

(6) CRACK AT STIFFENER - FLANGE WELD / PROPAGATING 3/8" INTO FLANGE ON SOUTH SIDE

(7) 3 FT² AREA W/ UP TO 1/8" FLAKING RUST @ BASE C2-283

(8) 3 LOOSE BOLTS AT GIRDER SPLICE C2-284

△(9) Plunger Test Location, Readings in inches (Max defl. down, Max defl. up)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS, CTY, SGB	3/17/08	1 of 3
△1 BKC, CTY	4/10/08	of

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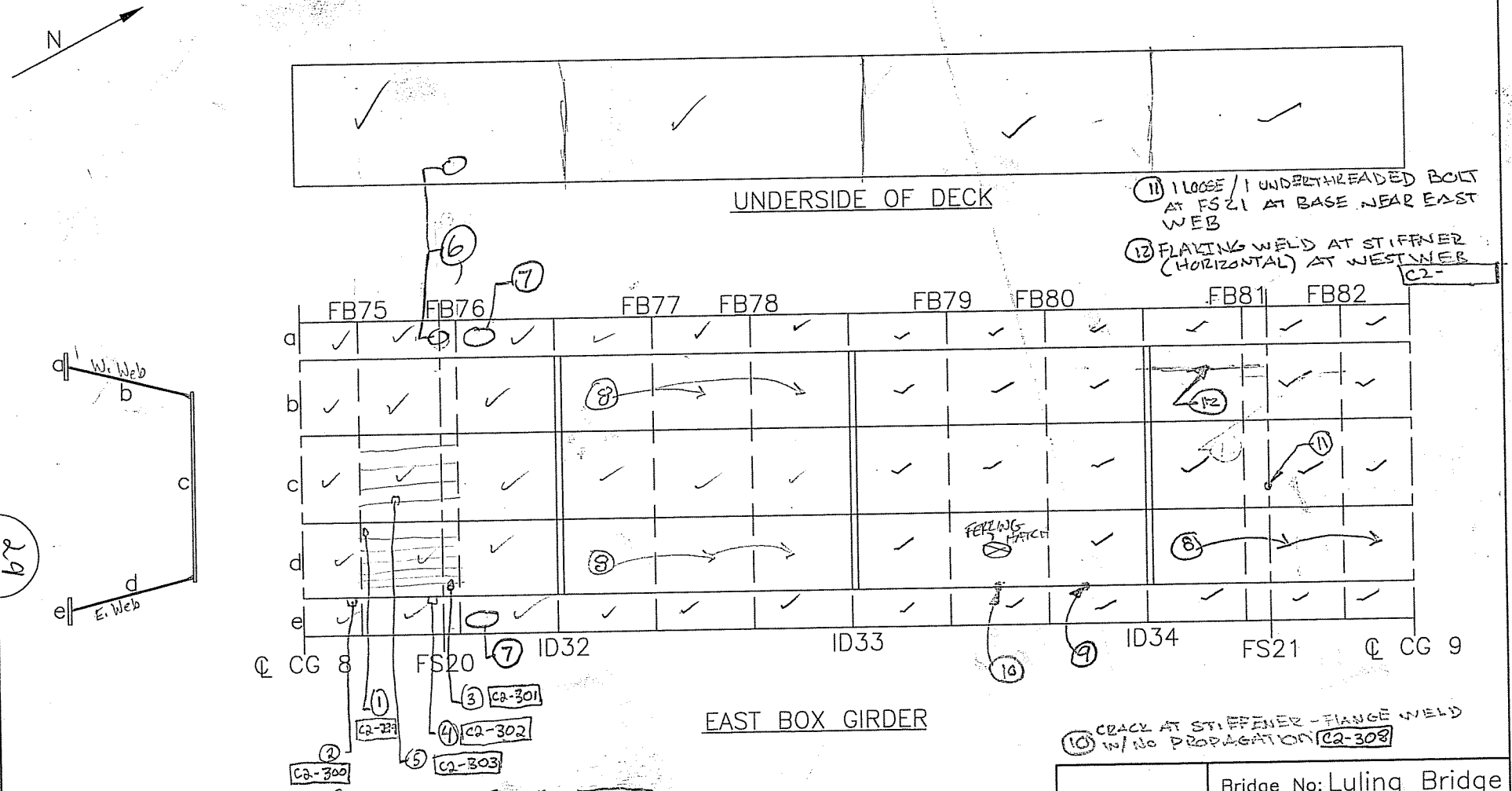

(11) 1 LOOSE / 1 UNDERTHREADED BOLT AT FS21 AT BASE NEAR EAST WEB

(12) FLAKING WELD AT STIFFNER (HORIZONTAL) AT WEST WEB C2-

(10) CRACK AT STIFFENER - FLANGE WELD w/ NO PROPAGATION C2-308

(1) Missing bolt on E. Web, near floor just to N. of FB 75 C2-299

(2) Bolt sheared off of P. @ underside of deck FS 20. South of Stiffener which is South of FB76 E. Side C2-300

(3) At F.S. 20 E. Web on underside of Top long. stiff. Angle is deflected 1/4" & bolt is out of hole 1/4" (-) C2-301

(4) At F.S. 20 E. Web @ underside of deck 1 nut backed off from bolt (tar leaking through) C2-302

(5) Bolt sheared off @ F.S. 20 on Floor in between first 2 long. stiff W. of E. Web C2-303

(6) 9 LOOSE BOLTS IN WEST DECK RIB @ SPLICE

(7) ALL NUTS @ TOP FLANGE SPLICE UNDERTHREADED w/ A GAP UP TO 1/8"

(8) FLAKING RUST UP TO 3" HIGH ABOVE EACH STIFFENER w/ FLAKED OFF BUILD-UP OF RUST ON BOT FLANGE

(9) CRACK AT STIFFENER TO FLANGE WELD PROPAGATING 1 1/2" INTO FLANGE ON BOTH SIDES C2-304-307

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SUB/CBS/CTY/SGB	3/18/08	2 of 6
		of

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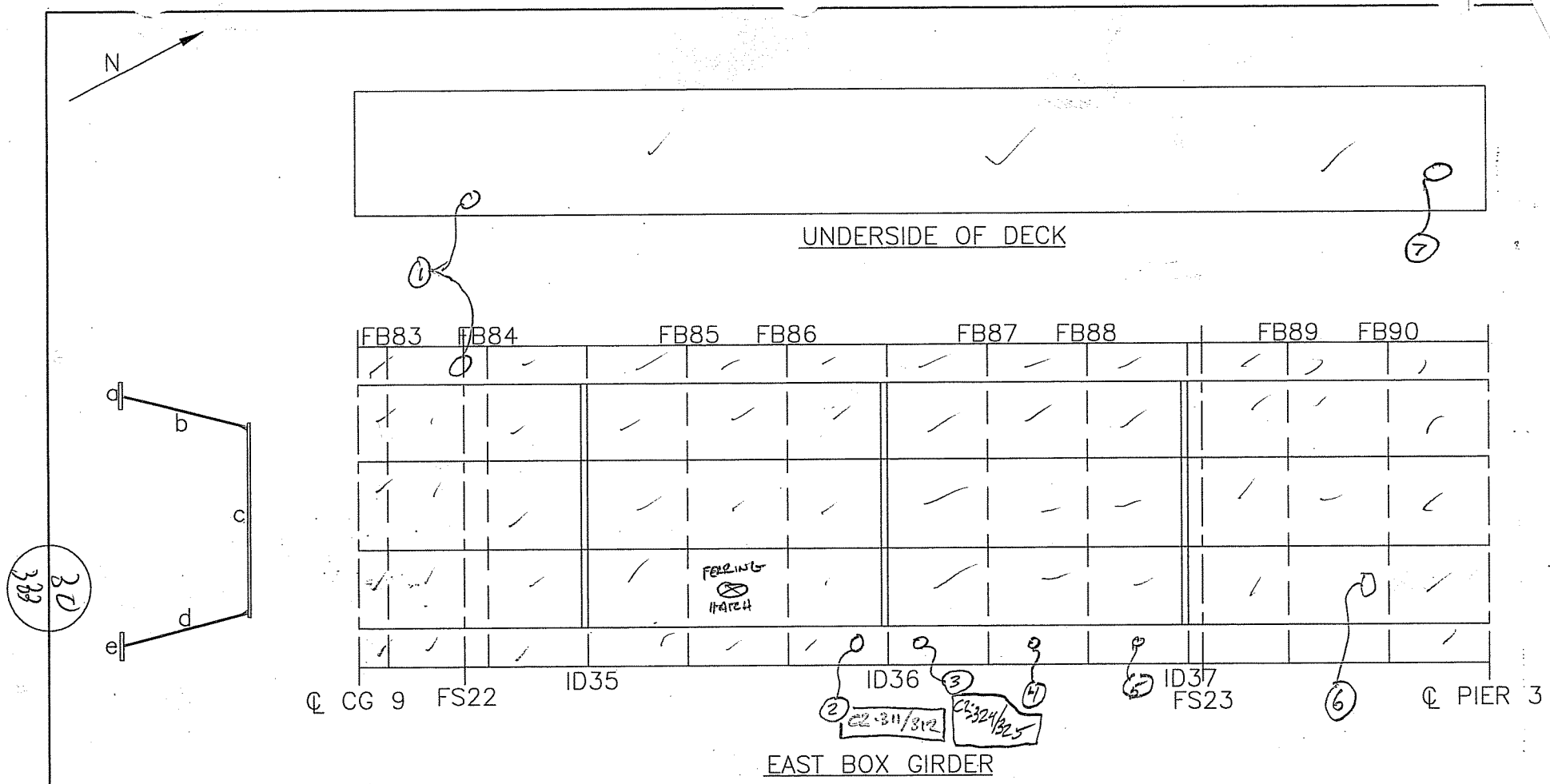


① MISSING NUT @ TOP FLANGE SPLICE

② CRACK IN TOP WELD @ 1ST STIFFENER SOUTH OF ID36, PROPAGATED 1/4" INTO FLANGE ON SOUTH

③ CRACK IN TOP WELD @ 1ST STIFFENER NORTH OF ID36, PROP. 1 1/8" INTO FLANGE ON NORTH

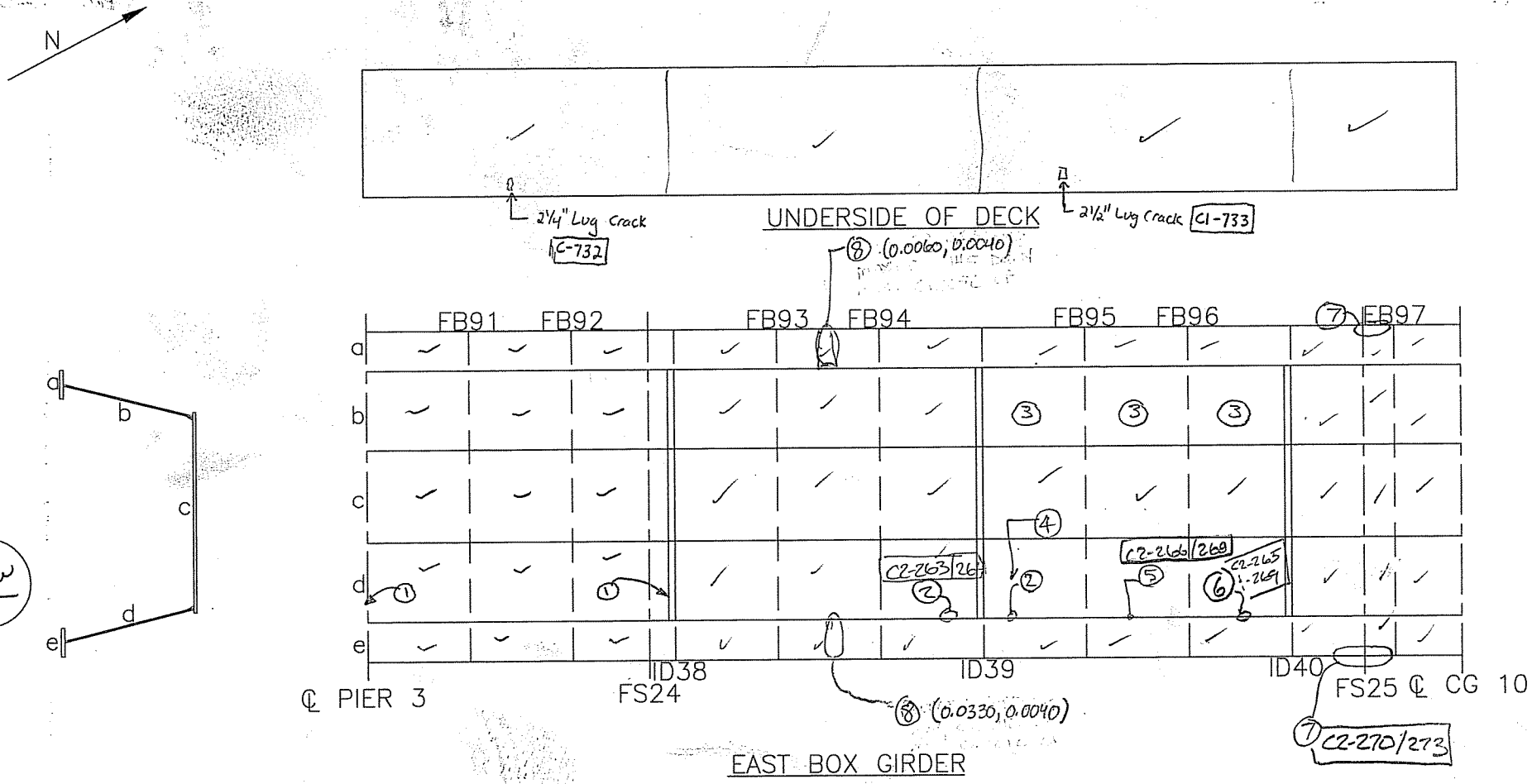
④ CRACK IN TOP WELD @ STIFFENER BTWN FB87-88, PROP 1" INTO FLANGE ON SOUTH

⑤ CRACK IN TOP WELD @ 1ST STIFFENER SOUTH OF ID37

⑥ CONDUIT DISCONNECTED @ JOINT NEAR EAST WEB

⑦ INSTRUMENTATION ATTACHED TO UNDERSIDE OF TOP FLANGE

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/CRS/CTY/SSB	3/18/08	6 of 6
SWB/CRS/CTY/SCB	3/19/08	2 of 4



(1) CONDUIT RUBBING AGAINST CONDUIT ACCESS HOLE w/ INDICATES IT IS LOOSE (TYP) C2-262

(2) WELD @ TOP OF WEB STIFFENER CRACKED C2-263 - 264

(3) THIN FLAKING RUST UP TO FULL HEIGHT B/T WEB STIFFENERS (TYP)

(4) LOOSE CONDUIT BRACKET ATTACHMENT TO STIFFENER

(5) WELD @ TOP OF WEB STIFFENER CRACKED AND EXTENDS INTO BASE METAL. 7/8" North of WELD AND 1'8" South of WELD. C2-266/268

(6) WELD @ TOP OF STIFFENER CRACKED AND HAS PROPAGATED INTO TOP FLANGE 3/4" NORTH OF STIFFENER C2-265 & C2-269

(7) GAP UP TO 1/8" BTWN SPLICE; TOP FLANGE @ NW, NE; SE PLATES; NE; NW PLATE MOST NUTS UNTHREADED C2-270/273

⚠ (8) Location of Plunger Test, Readings in inches (Max defl down, Max defl up)

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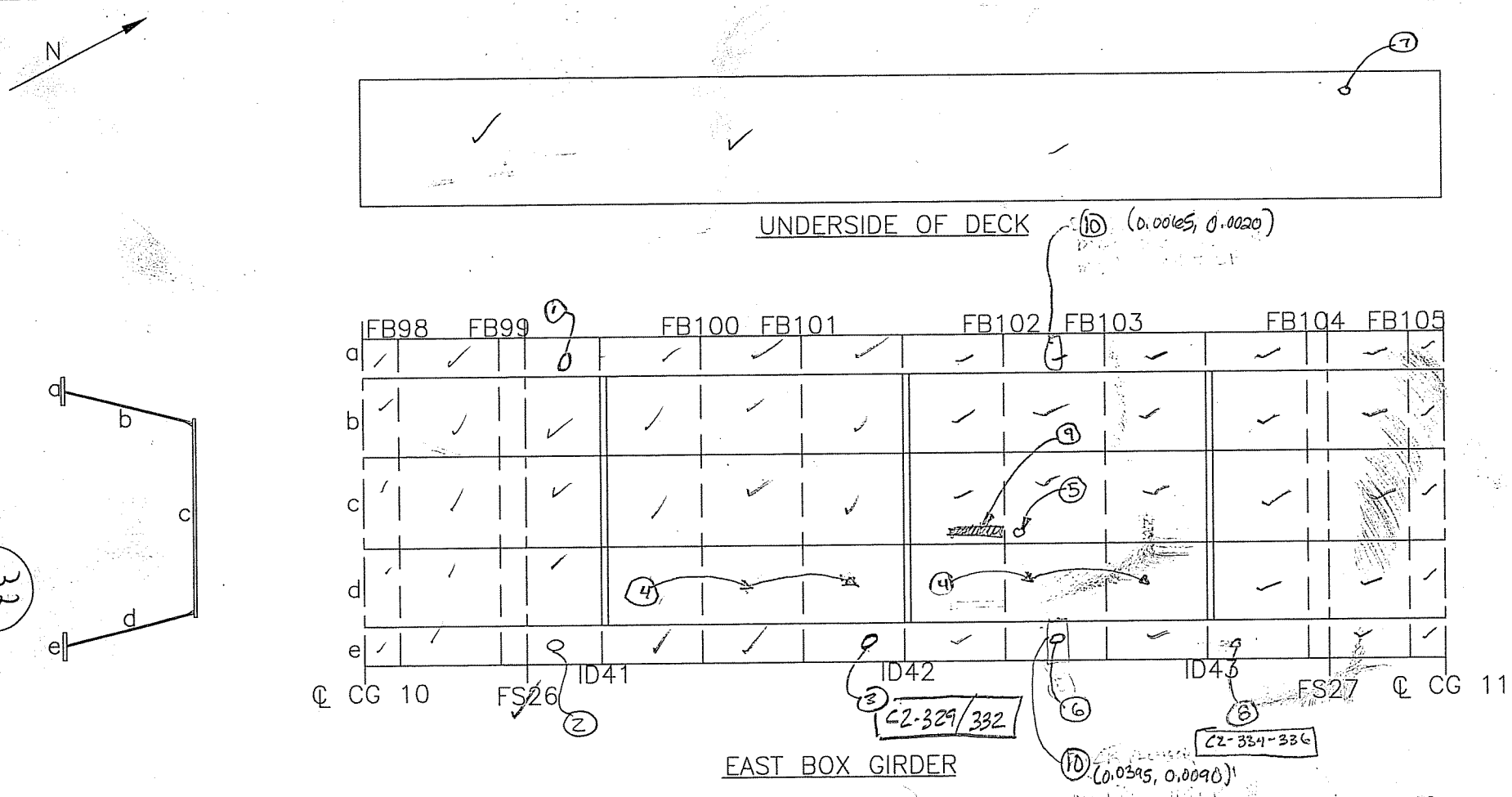
NOTES BY:	TranSystems	
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRD/SWB/CTY/MSS	3/15/08	1 of 2
⚠ BKC CTY	4/10/08	of



① POOR QUALITY WELD, POSSIBLE CRACK @ TOP STIFFENER WELD, 1ST STIFF SOUTH OF ID41 – SHOULD BE TESTED

② TWO MISSING NUTS @ TOP FLANGE SPLICE

③ WELD @ TOP OF STIFFENER CRACKED w/ CRACK PROPAGATED INTO FLANGE 3/4" NORTH & 1 1/4" SOUTH

④ UP TO 8" WIDE FLAKING RUST FROM THE BASE OF EACH HORIZONTAL STIFFENER

⑤ MISSING NUT ON FLOOR NEAR EAST WEB

⑥ WELD @ TOP OF STIFFNER CRACKED w/ NO PROPAGATION

⑦ LOOSE BOLT AT FS 27 @ U/S DECK: INTERIOR OF RIB NEAR WEST WEB

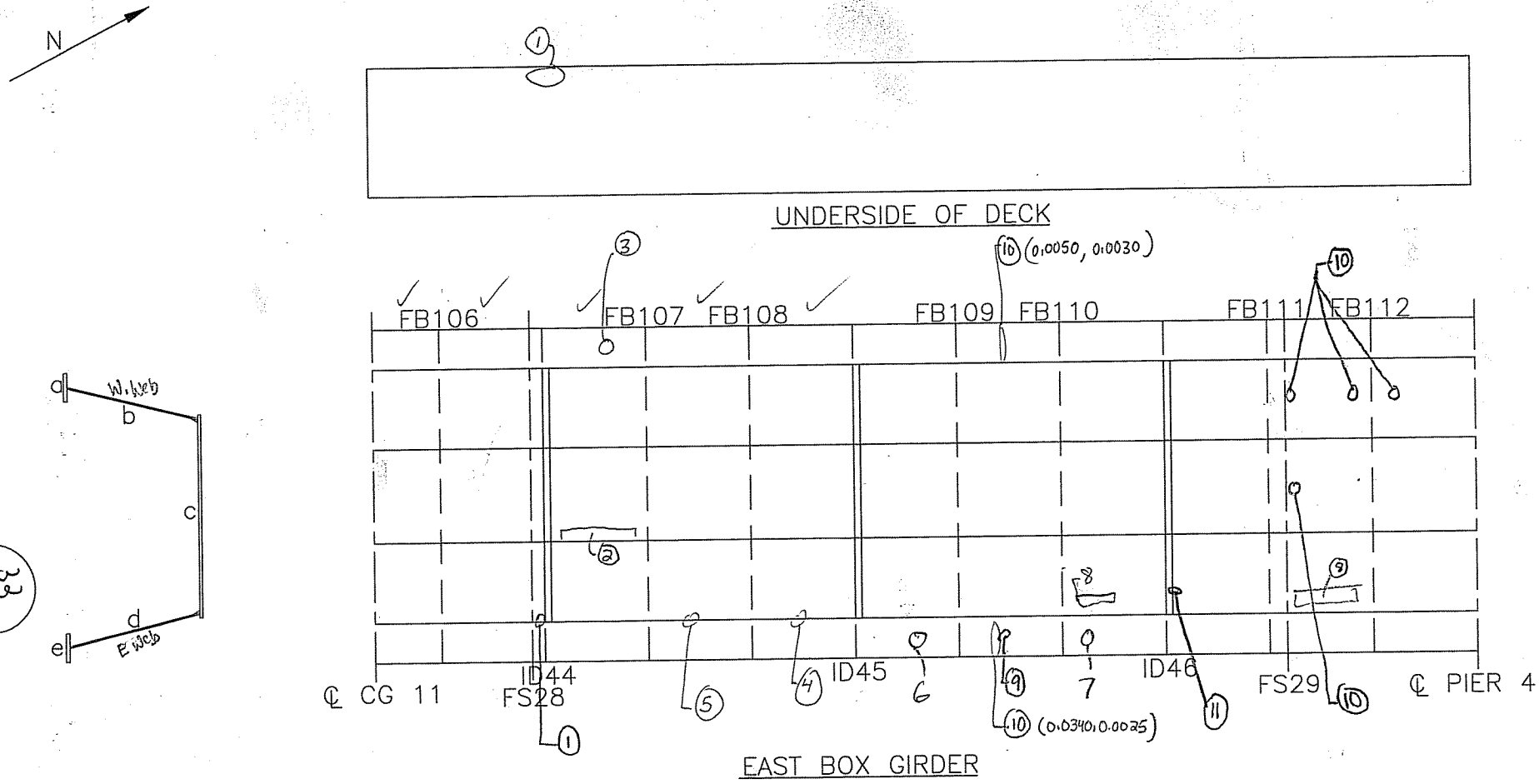
⑧ WELD @ TOP OF STIFFENER CRACKED w/ CRACK PROPAGATED INTO FLANGE 3/4" NORTH & SOUTH

⑨ MISSING CABLE TRAY COVER

⚠ ⑩ Location of plunger Test, Readings in inches (Max defl down, Max defl up)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 4M	
JOB: P710070019	

CREW:	DATE:	SHEET:
SUB/CRS/CTJ/SGB	3/19/08	1 of 4
ABKC/CTY	4/10/08	of



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(1) 3 loose nuts @ splice in deck Rib

(2) Missing cover on section of cable Tray

(3) Gap up to 1/2" @ top flange [C2-338]

(4) 1st stiff. S. ID45 crack at top weld 1/8" prop. between side welds [C2-339-340]

(5) 1st Stiff. N. FB107 Crack at top weld / Prop 3/4" into South Flange [C2-341-342]

(6) E.G., E.ST., 1st stiffner north of ID 45 weld cracked prop. into Flange 1" B.S. [C2-344-349]

(7) 1st Stiff. N. FB110, Crack at top weld prop. B.S., 1" on north, 3/4" on south [C2-346]

(8) Cover missing on cable tray / broken cover

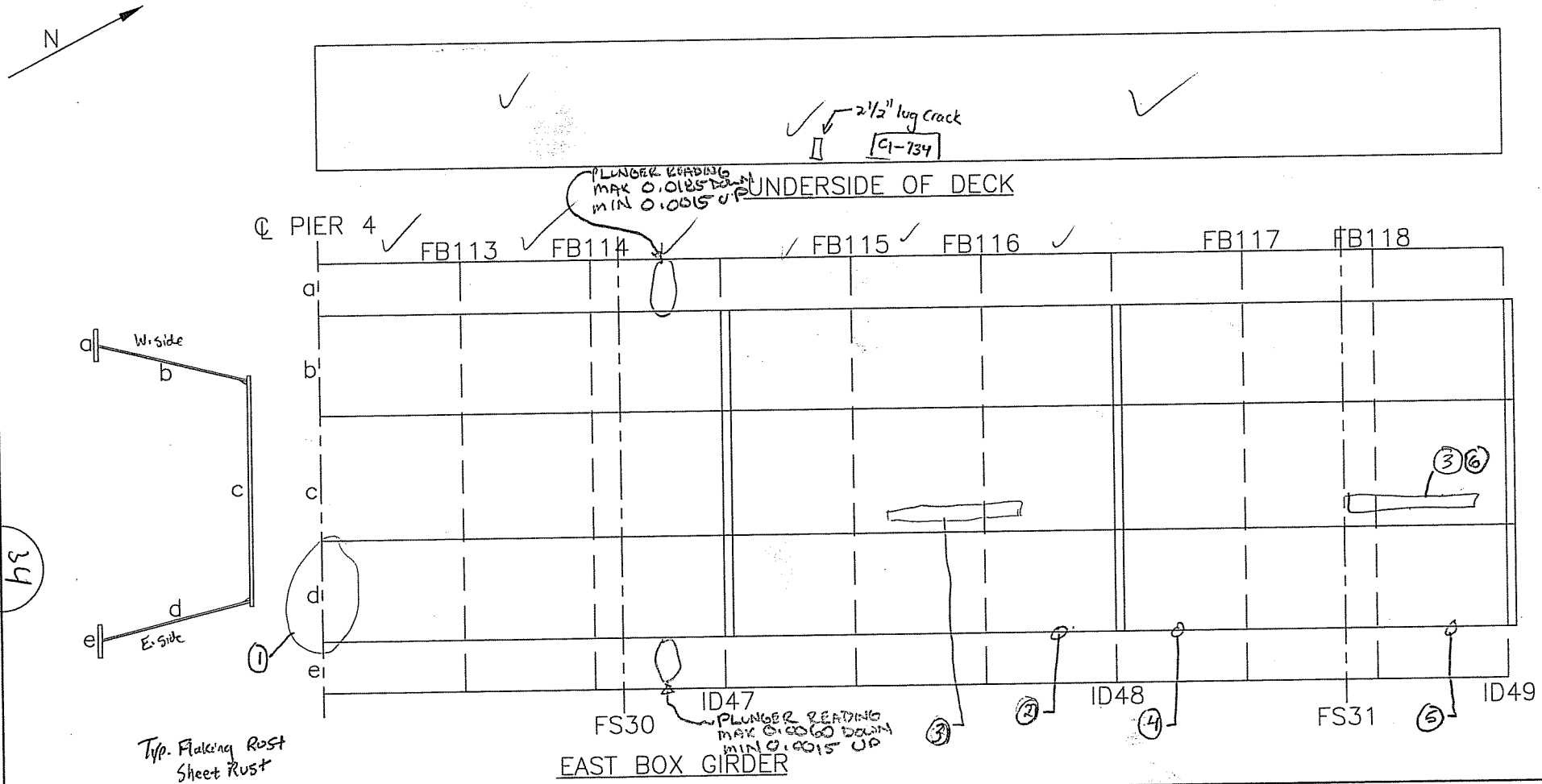
(9) Crack @ top of stiff N. FB109 E. Web. N. & S. side of st. separate welds but crack propagated in Ft. btwn the 2 welds [C2-347-348]

(10) Missing Plug in hole

(11) Missing weld between N. side ID 46 and Top of 11th long. web stiff. from bottom [C2-349-350]

⚠ (10) Location of Plugger, Reading in inches (Max defl. down, Max defl up)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/CRS/CTY/SGB	3/19/08	4 of 4
SWB/CRS/CTY/SGB BKC/CTY	3/20/08 4/10/08	1 of 3



Typ. Flaking Rust
Sheet Rust

(1) Rat Activity / dead Rat
(2) Crack in Weld south side of stiffener (no prop. into FL) E. side @ top
(3) Broken Cable Tray Cover
(4) Cracks in Welds @ top of St. N. ID48 N. + S. Sides E. side
(5) crack @ top St. S. of ID 49 South side only in weld + prop. into FL ≈ 1/2" E. side
(6) Rats chewed cords in conduit-tray

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB/CTY	3/20/08	3 of 3
SGB/CTY/WRW	3/21/08	1 of 2
BKC, SMD	4/9/08	

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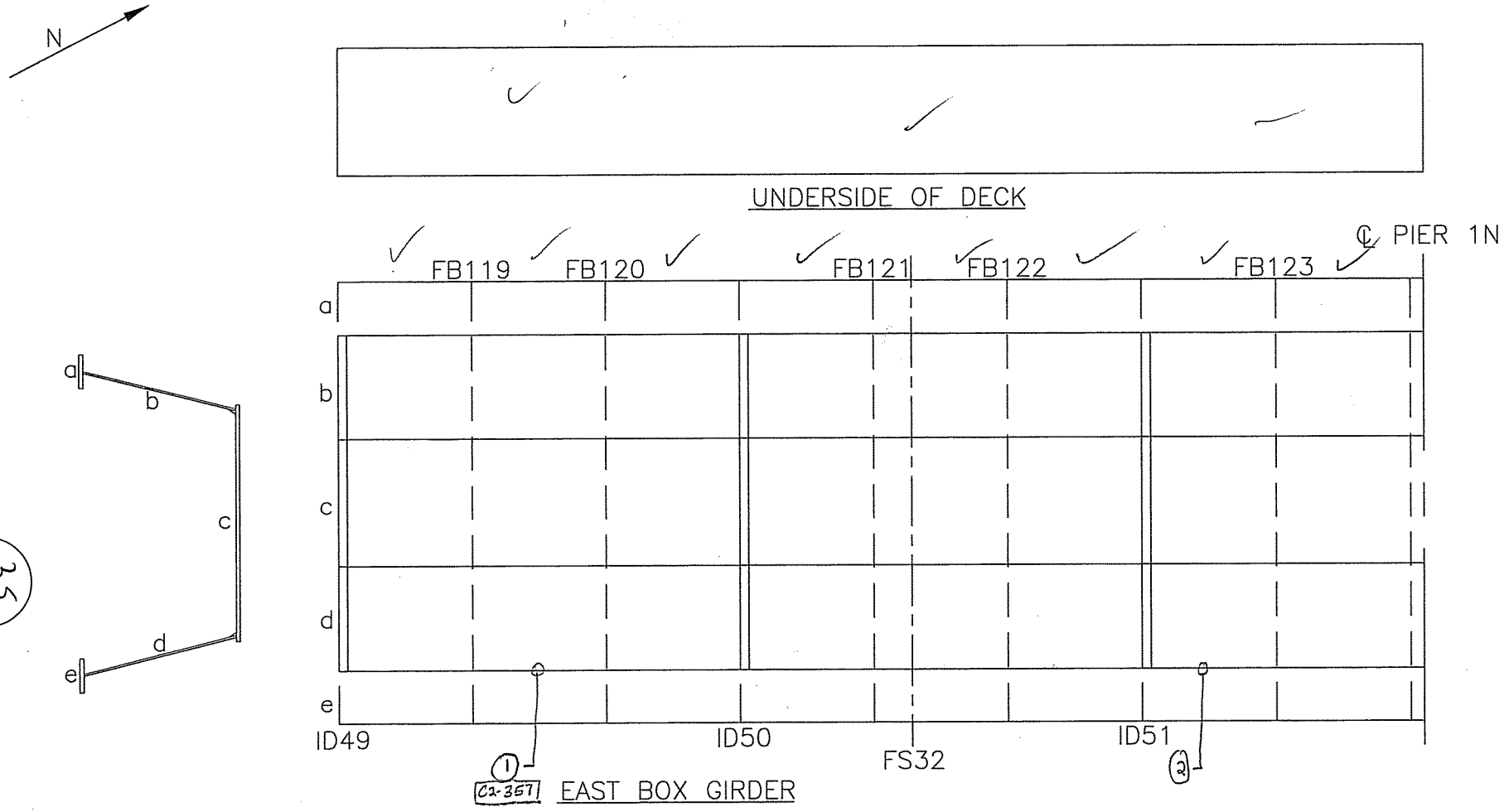

Typical flaking rust / sheet rust on floor from web all bays

(1) Cr. in Weld @ top of St. Prop into FL 1" S., 1/2" N. side E. side C2-357

(2) Cr. in Weld @ top of St. (horseshoe shape)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB/CTY/WRW	3/21/08	2 of 2
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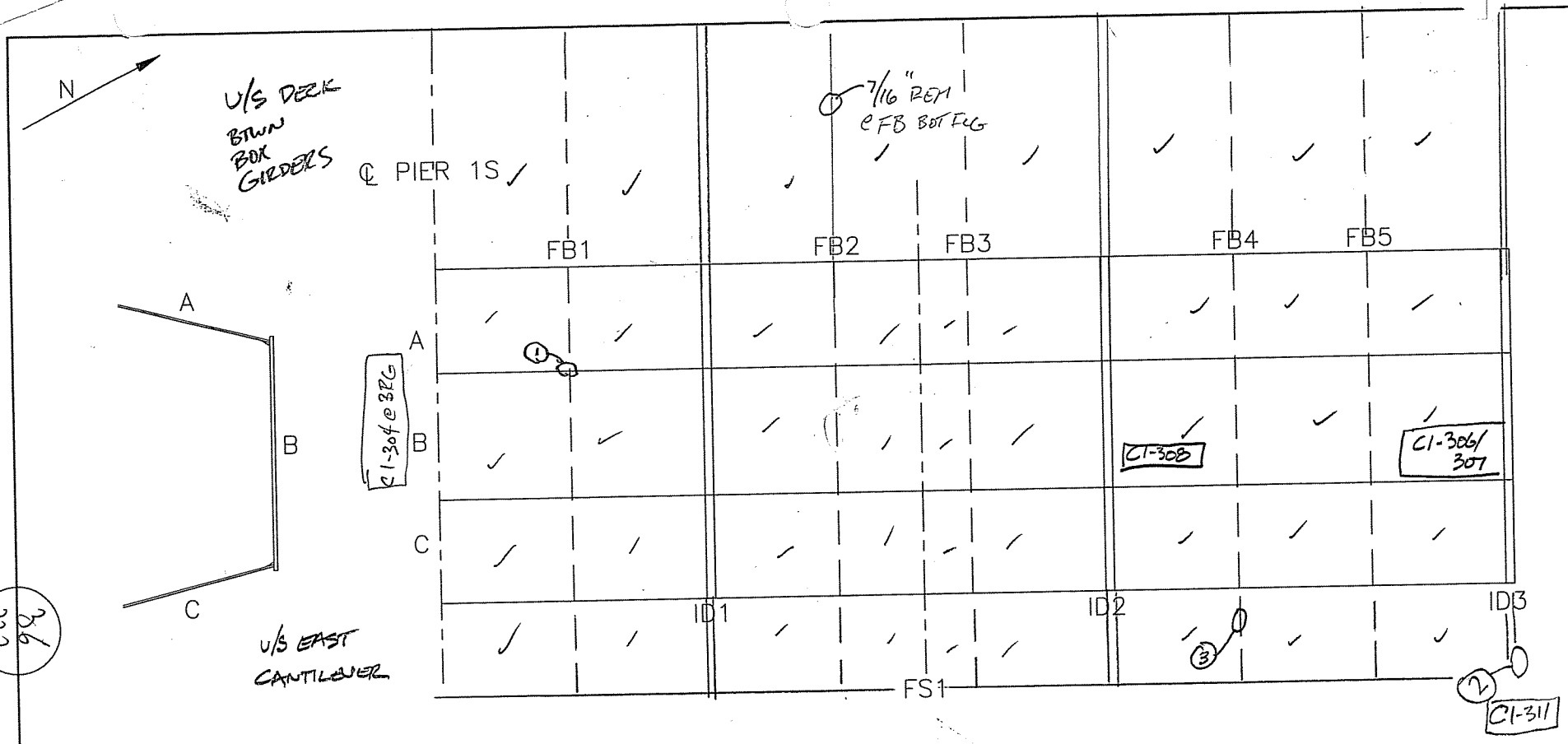

① 2" WIDE x 5/8" DEEP GOUGE IN OUTSTANDING PART OF BOTTOM FLANGE PLATE C1-305

② GAP IN WELD FB WEB / TOP FLANGE & SIGNS OF LEAKAGE C1-311/312

③ MISALIGNMENT @ BOTTOM FLANGE OF FLOORBEAM @ SPLICE C1-309

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB (w/OPER)	3/17/08	1 of 4
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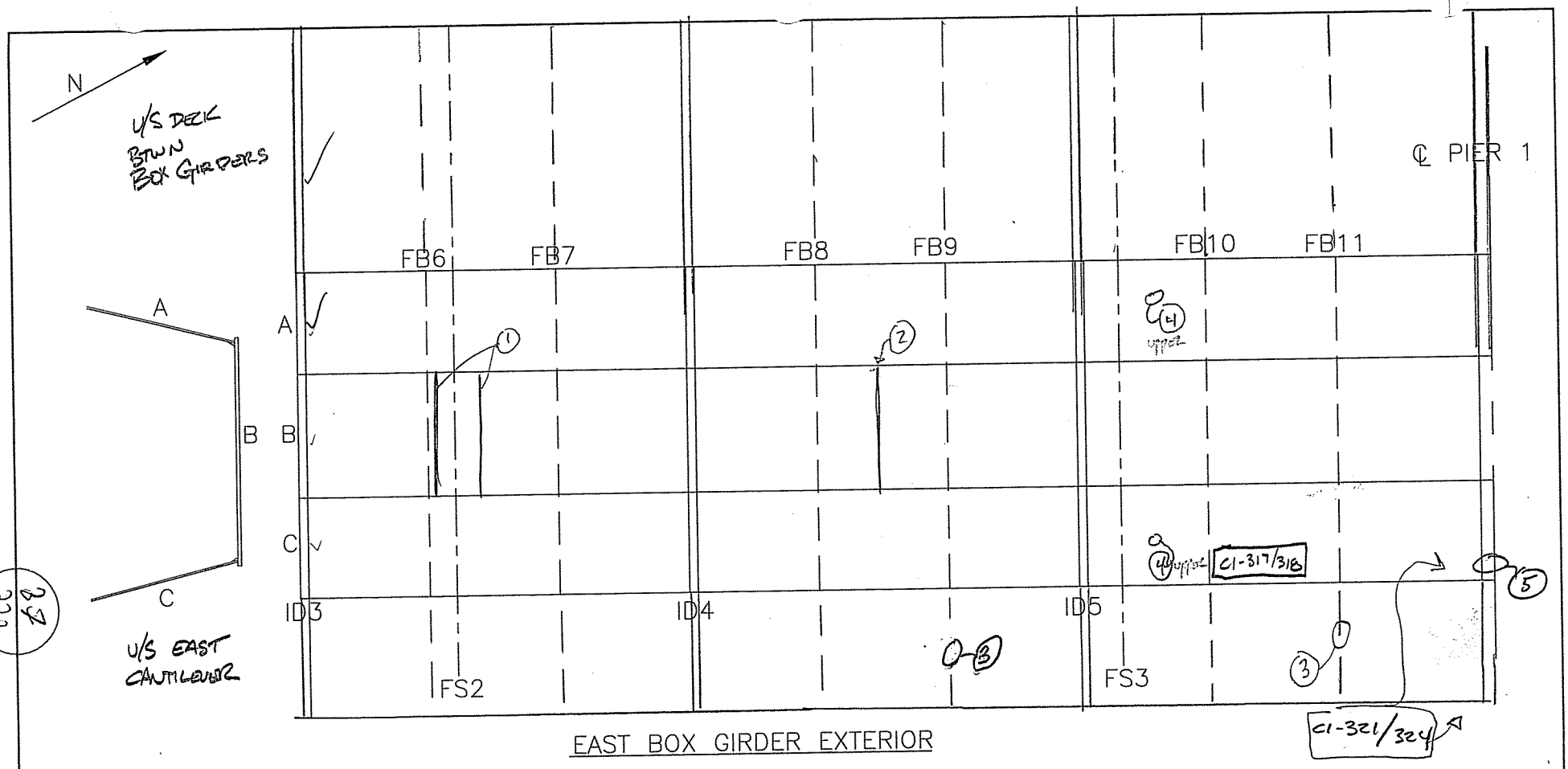

EAST BOX GIRDER EXTERIOR

① WELDED BOT. FLG TRANSITION 60"+/- FROM SPLICE (FROM 7/8" TO 1"), IN GOOD COND.

② WELDED BOT. FLG. TRANSITION FROM 7/8" TO 1/2", IN GOOD CONDITION

③ BOTTOM FLANGE OF FB9 BENT @ EAST EXTERIOR SPLICE C1-314/315

" " " FB11 " " " " C1-316

④ PREVIOUS CRACK IN GIRDER WEB @ SPLICE, FULLY ARRESTED W/ DRILLED HOLE C1-317/318

⑤ GAP @ UPPER DIAGONAL PLATE @ CROSS GIRDER TO GIRDER CONNECTION C1-319/320

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 1M	
JOB: P710070019	

CREW:	DATE:	SHEET:
SWB	3/17/08	2 of 4
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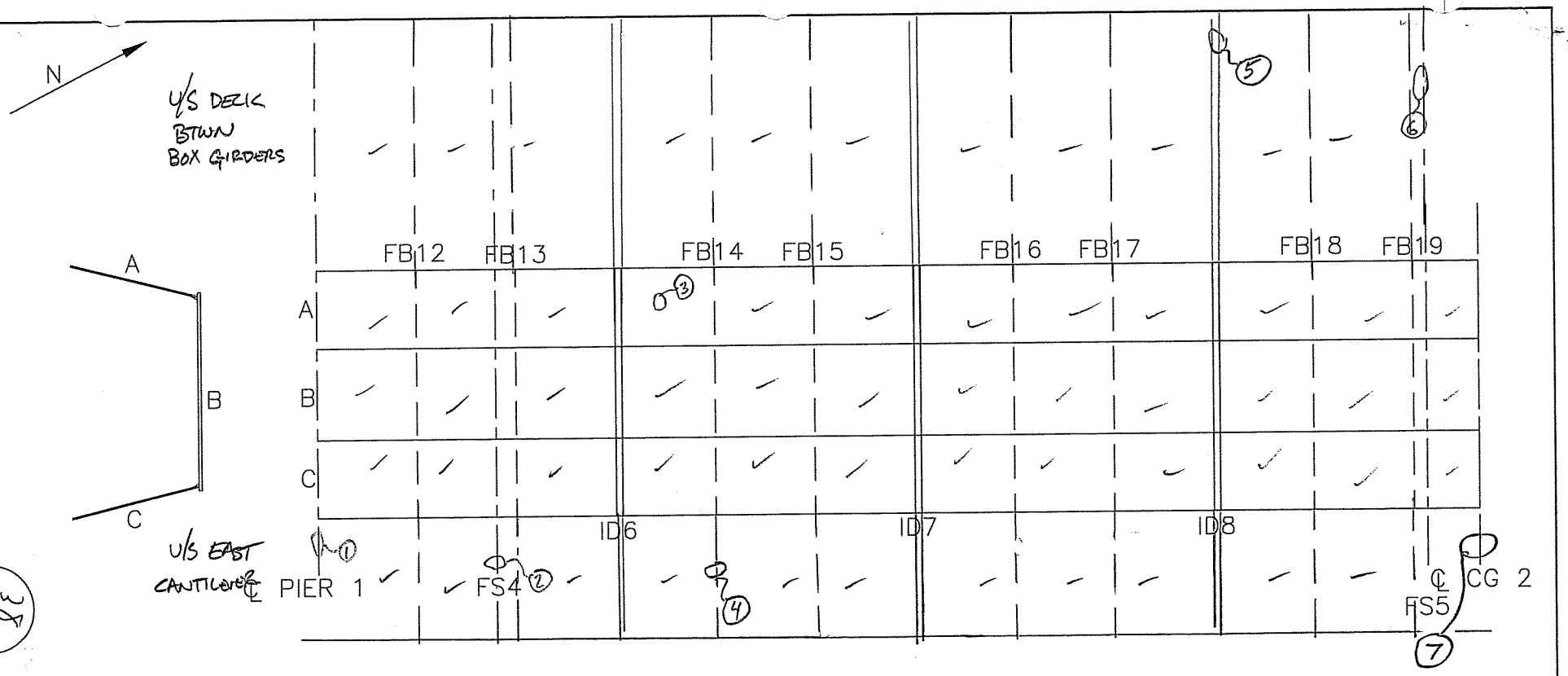

EAST BOX GIRDER EXTERIOR

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1. DEBRIS COLLECTED @ GIRDER/CROSS GIRDER CONNECTION [C1-325]
2. MISSING SCREEN @ DECK RIB @ SPLICE
3. TWO PENTS 2" LONG x 1/2" WIDE x UP TO 1/8" DEEP [C1-326/327]
4. TWO VOIDS IN WELD @ FB WEB / TOP FLANGE 1 x 1" & 1 x 1/2" [C1-228]
5. SIGNS OF LEAKAGE @ WEST SPLICE BTWN GIRDERS [C1-329/330]
6. TWO MISSING SCREENS @ DECK @ SPLICE
7. 1/4" LOSS TO CROSS GIRDER @ CROSS GIRDER TO E.B.G CONNECTION, SEE SKETCH. [C1-331/334]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB	3/17/08	3 of 4
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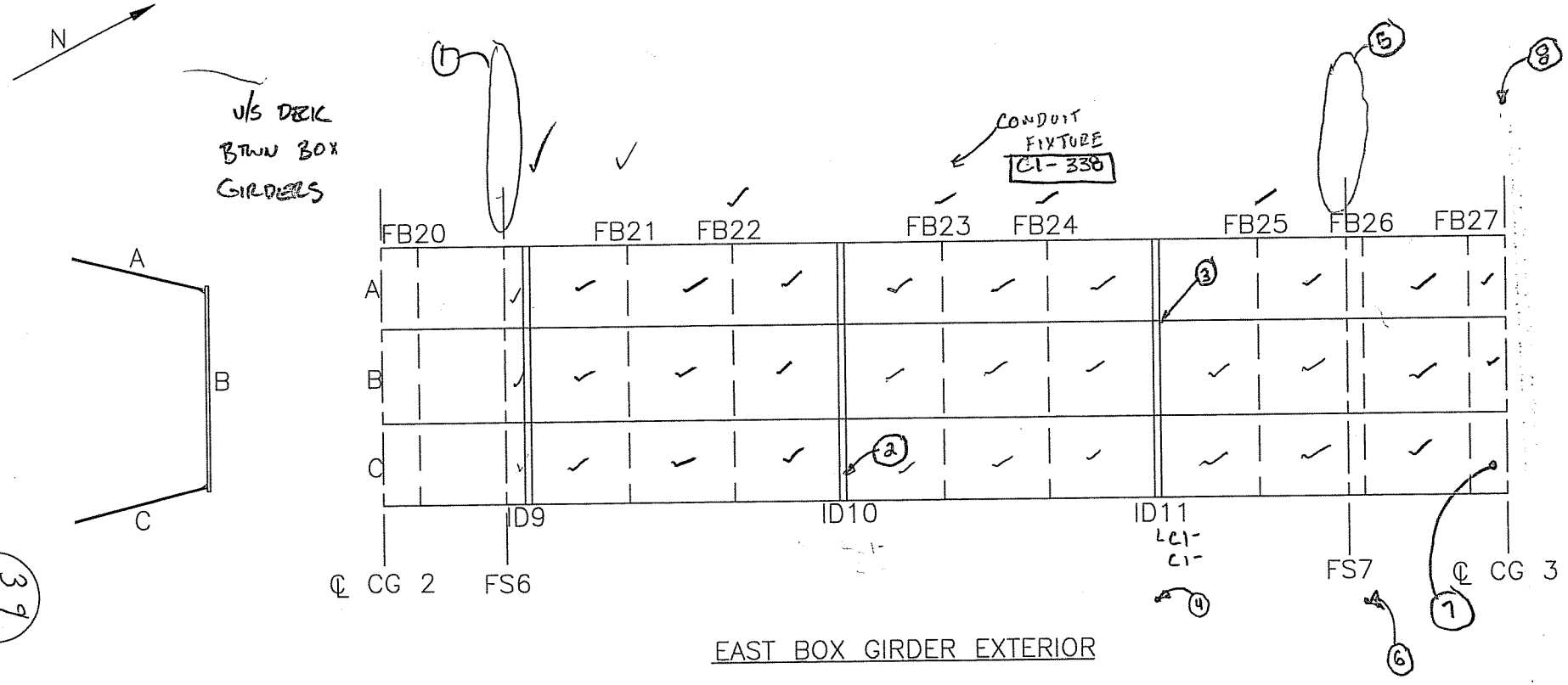

EAST BOX GIRDER EXTERIOR

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1. 6 of 8 SCREENS MISSING @ DECK RIBS @ SPLICE
2. MINOR SHEET RUST AT HORIZONTAL STIFF. ON NORTH SIDE
3. UP TO 1/4" I.R AT U/S FLANGE - ID11 SPLICE W/ 4 MISSING BOLTS C1- /
4. CONST. DENT 1/8" BEND AT BOTTOM FLANGE AT FB/ID 11
5. 1 of 8 SCREENS MISSING @ DECK RIBS @ SPLICE
6. UP TO 1/8" BEND AT COVER PLATE W/ I.R. AT BOTTOM FLANGE (TYP) C1-
7. 5/8" LONG CRACK AT INTERIOR OF ARREST HOLE C1- /
8. SURFACE RUST W/ EFFLO AT CENTER OF CG3 AT SPLICE C1-
9. 2 MISSING NUTS NEAR CG3 AT ANGLE GUSSET

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NOTES BY:	TranSystems	
FRAMING SPAN 2M		
JOB: P710070019		
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SWB/CRS	3/20/03	1 of 2
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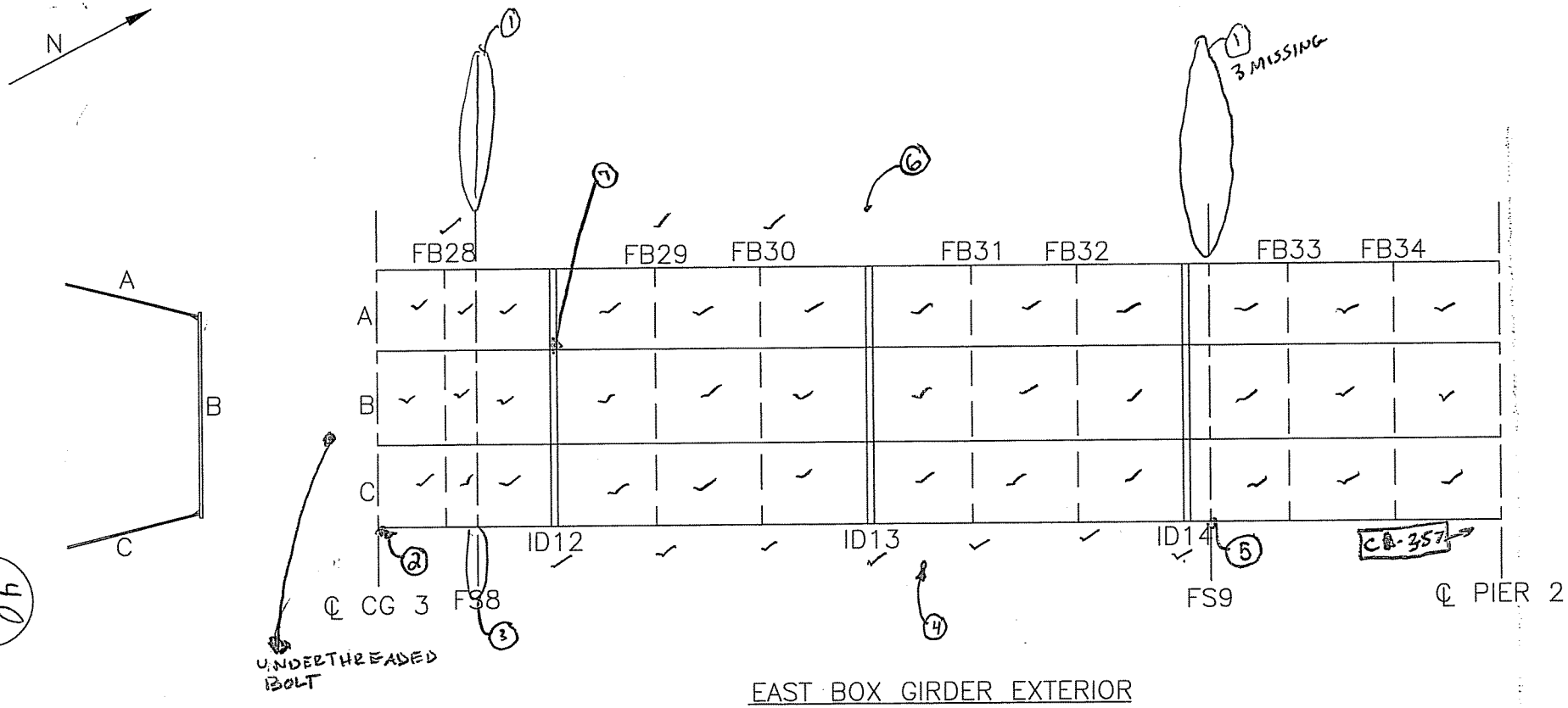

EAST BOX GIRDER EXTERIOR

(1) 5 OF 8 PIGEON CAGES MISSING FROM RIBS OF DECK AT SPLICE

(2) 5/16" I.R. AT CG3 CORNER/SPLICE AT EAST WEB CI- /

(3) 2 OF 4 PIGEON CAGES MISSING FROM RIBS OF DECK AT SPLICE

(4) I.R. AT U/S DECK SPLICE PLATE CI-

(5) 3 UNDERTHREADED BOLTS W/ I.R. AT FS9 NEAR EAST WEB CI-

(6) SHEARED OFF BOLT AT BOTTOM FLANGE @ ID13 CI-

(7) 1/4" I.R. AT ID12 SPLICE W/ BOTTOM FLANGE E. GIRDER & WEST WEB

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
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CRS	3/20/08	2 of 2
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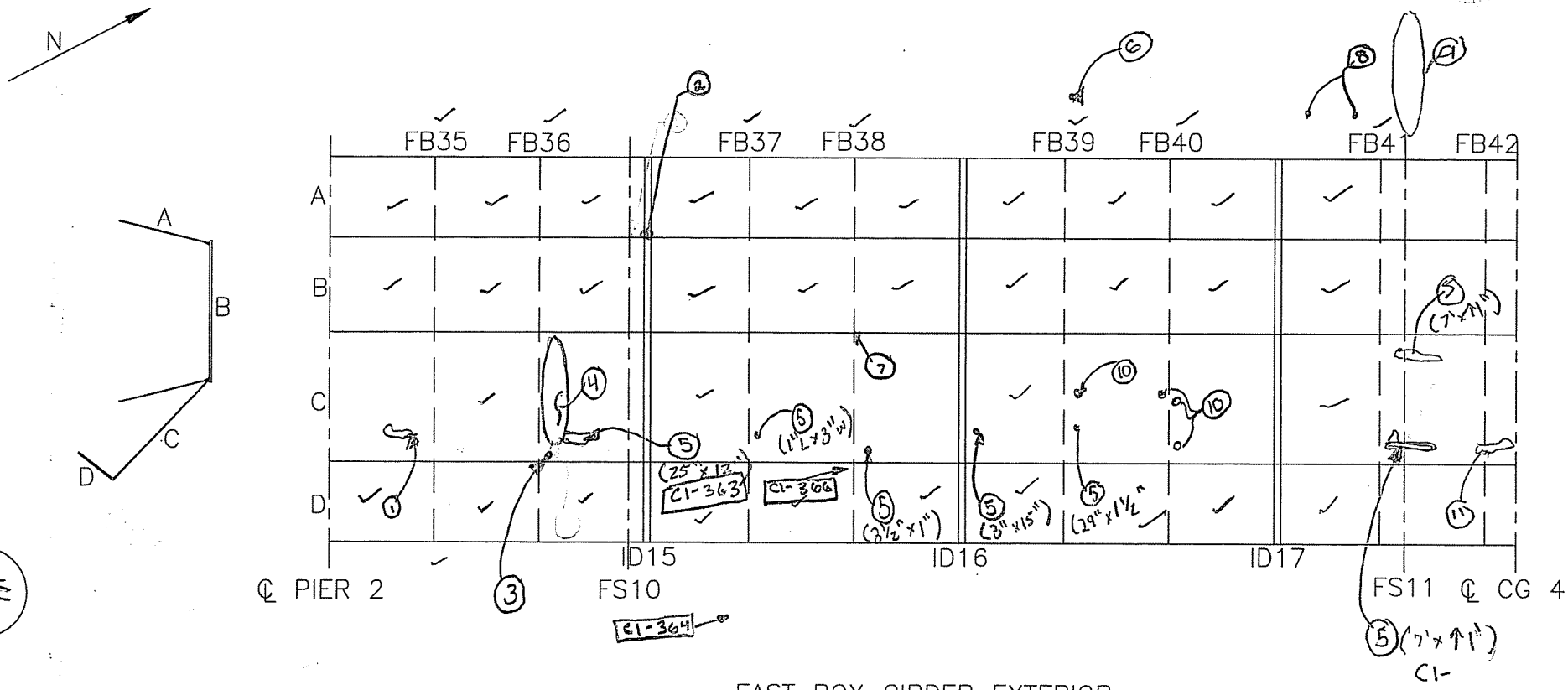

EAST BOX GIRDER EXTERIOR

(10) MULTIPLE THRU HOLES UP TO 3/4" Ø

(11) 100% LOSSES UP TO 1½" H x 3" L

(1) 100% LOSS 32" L x UP TO 5" HIGH C1-359

(2) 1/4" IR. AT DIAPHRAM - BOTTOM FLANGE OF BOX GIRDER PLATE (TYP)

(3) 2 CRACKS NEAR FB36 BRACING - BACK OF BOX GIRDER 1½" L & 3/4" L

(4) MULTIPLE THRU HOLES UP TO 1½" Ø C1-362 UP ALONG FB 36

(5) 100% LOSS (#" L x #" H)

(6) 3/16" IR AT BOTTOM COVER PLATE AT FB 39 AT BOTTOM FLANGE C1-365

(7) BENT CORNER OF WIND FERRING AT GIRDER BASE C1-367

(8) 1/4" SCREW HOLE ON U/S DECK w/SURFACE RUST C1-368

(9) 3 OF 8 PIGEON CAGES MISSING FROM U/S DECK RIBS AT FS 11

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
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CRS	3/31/08	of
		of

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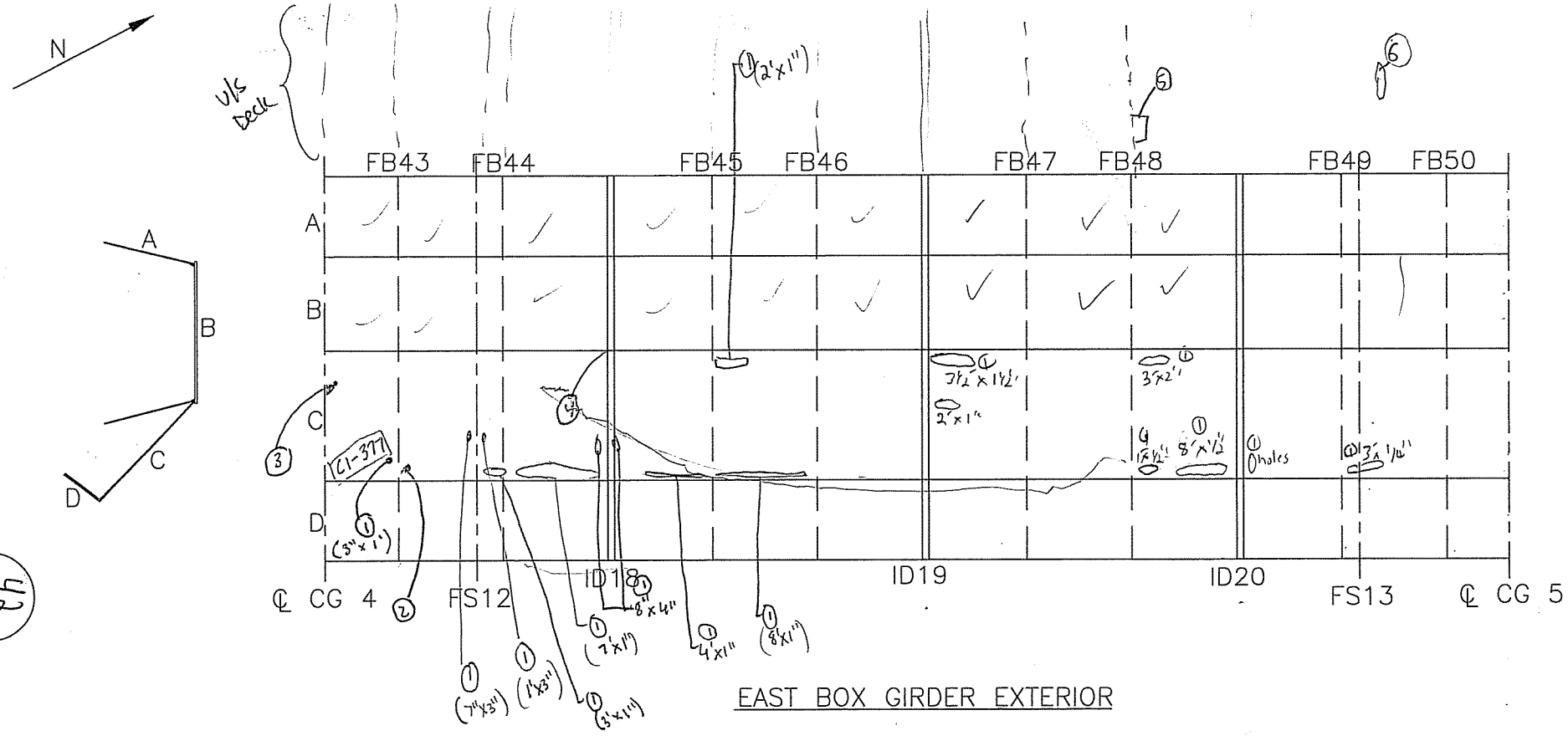

① 100% LOSS (4'L x 3'W) (TYPICAL)

② SEVERAL THROUGH HOLES UP TO 3/4" ø

③ 3/4" IMPACTED RUST AT SPLICE PLATE NEAR CG4 & EAST WIND FERRING CI-378

④ 1/4" I.R. AT ID18 - BOTTOM FLANGE OF E.B.G. SPLICE PL

⑤ 1/8" I.R. at FB48 North Face bottom FL

⑥ Missing 3' varmint screen on ribs of deck splice

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY, SGB	3-22-08	of
WRW,		of

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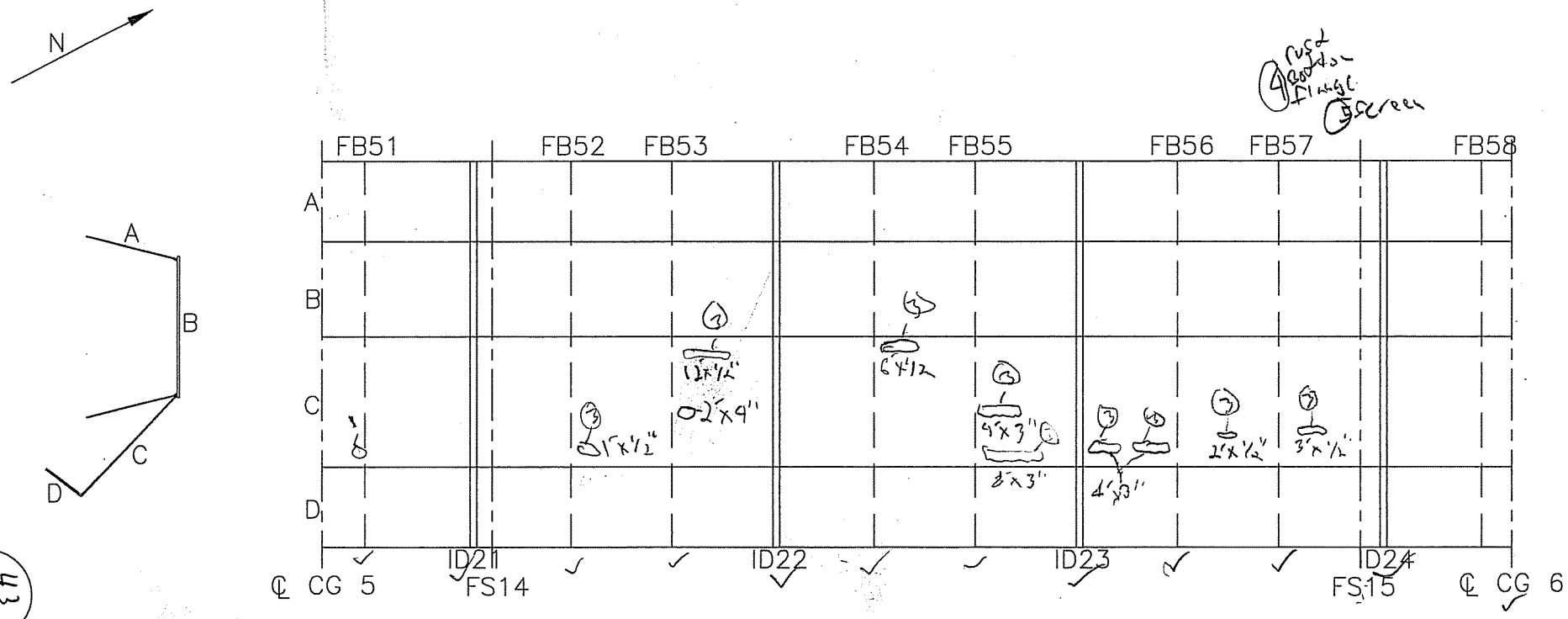

EAST BOX GIRDER EXTERIOR

① missing bolts on plate. C1-380

② 1/8" loss splice plate East connection plate FB 52 C1-381 Bottom flange

③ Rust on fencing 100% loss (length x width) typical

④ 3/16" loss on East connection plate on FB 57 C1-382 Bottom flange

⑤ Missing 4 screens on Deck rib connection splice.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB	3/24/08	4 of 4
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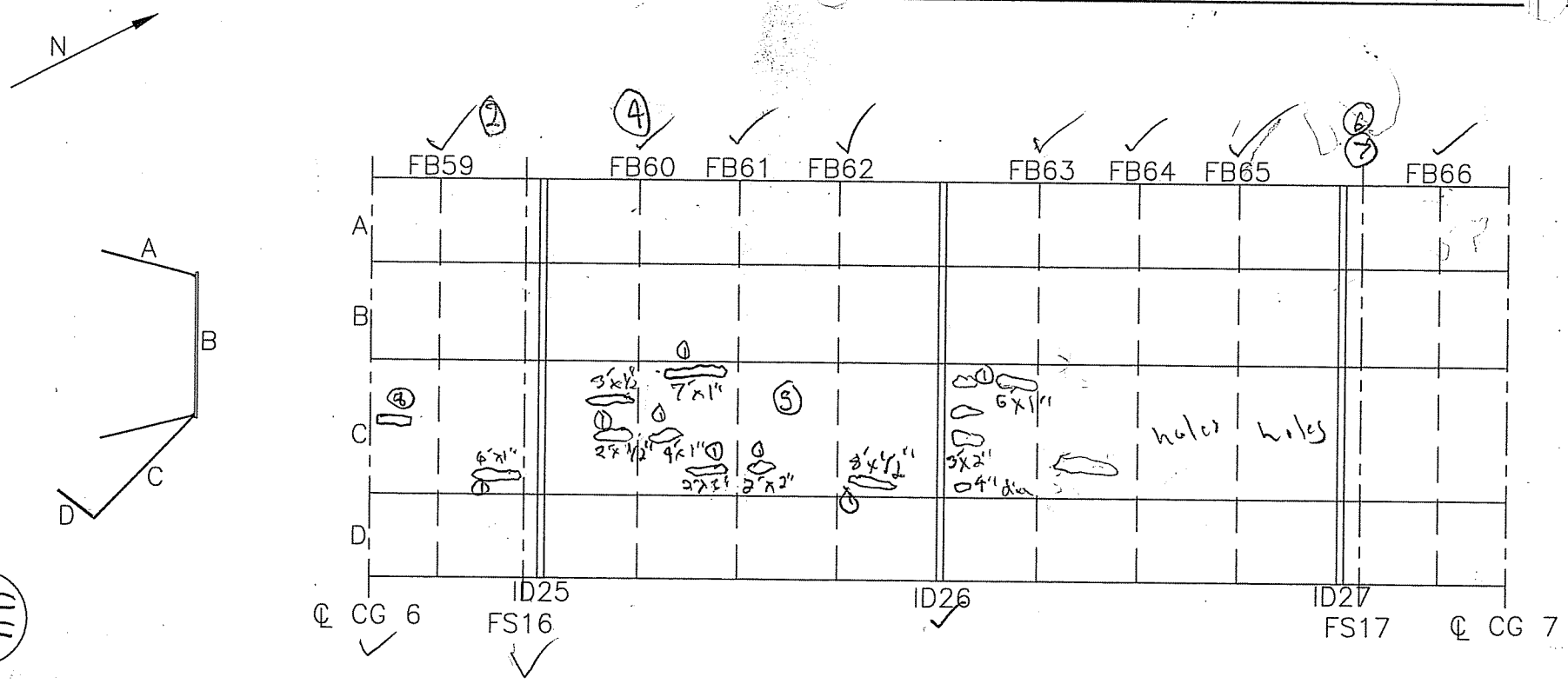

EAST BOX GIRDER EXTERIOR

① Rust on ferring 100% loss
② Missing 3 varmit screens on deck rib splice connection. FS16
③ Deck splice plate overlaps another plate [C1-383]
④ Misaligned connection on E. plate of FB60 [C1-384]
⑤ Wind ferring damaged [C1-385]
⑥ 1/8" loss on deck splice plate [C1-386]
⑦ ID27 bolts on splice plate rusted to no threads [C1-387]
⑧ Plate on ferring, loss around edges [C1-388]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB	3/24/08	3 of 4
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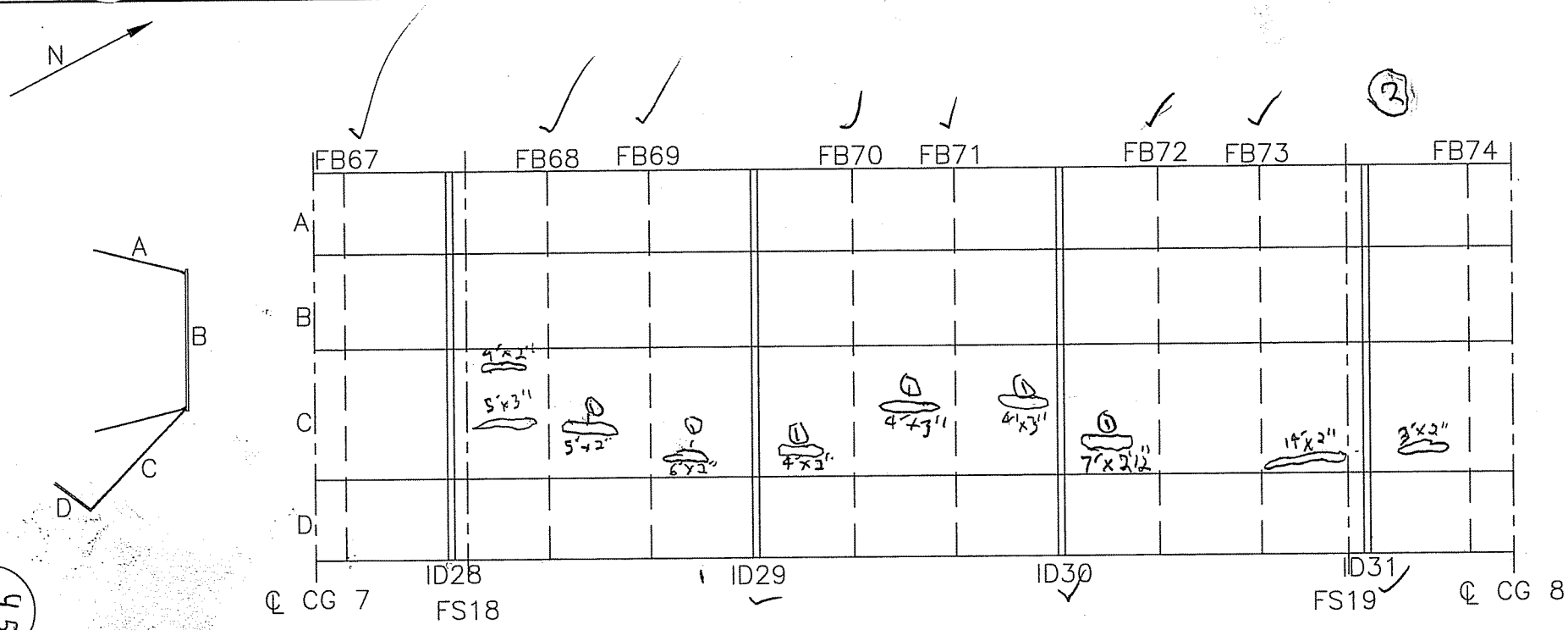

EAST BOX GIRDER EXTERIOR

① 100% loss on ferring (Length x Width) typical

~~② Plate on farring, loss around edges~~ ~~C1-388~~

~~③ FS 16 deck rib missing 3 varied screws, splice connection~~

② ~~④~~ Bracket for deck, gap on nut and plate C1-389 short bolts

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB	3/29/08	2 of 4
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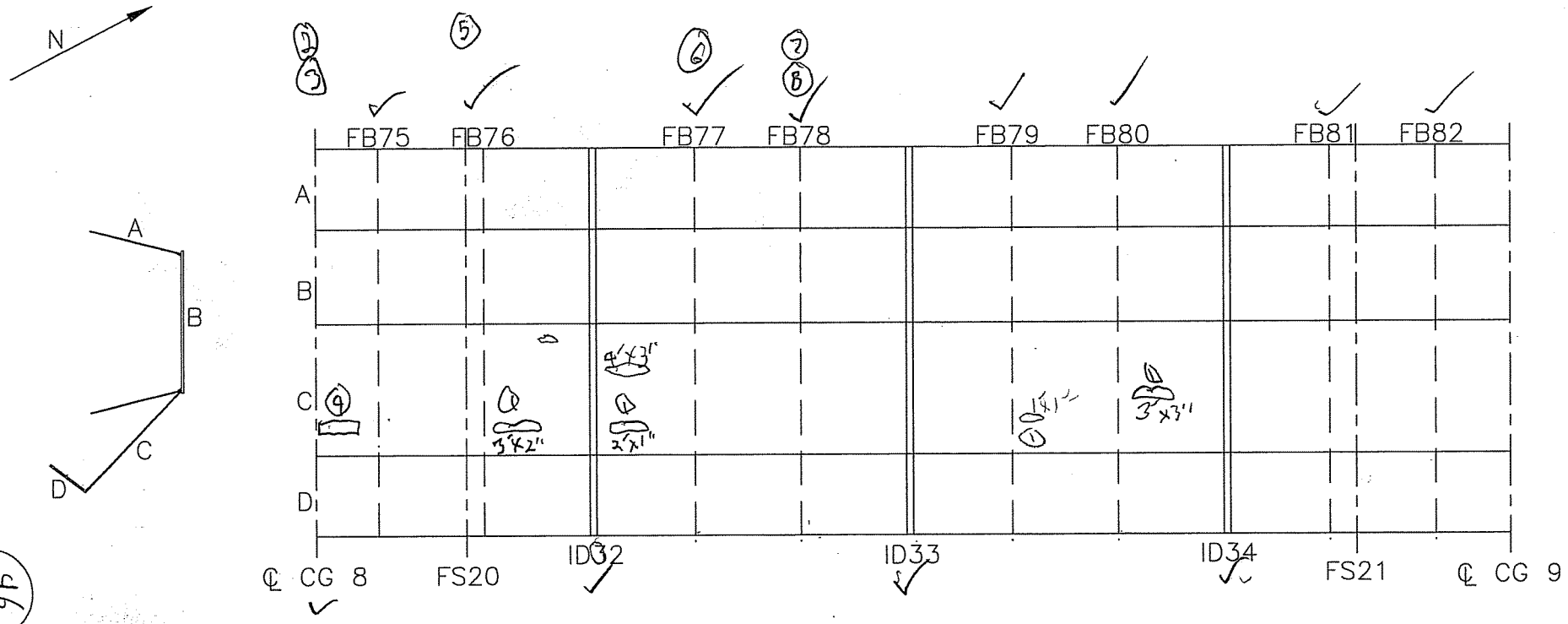

EAST BOX GIRDER EXTERIOR

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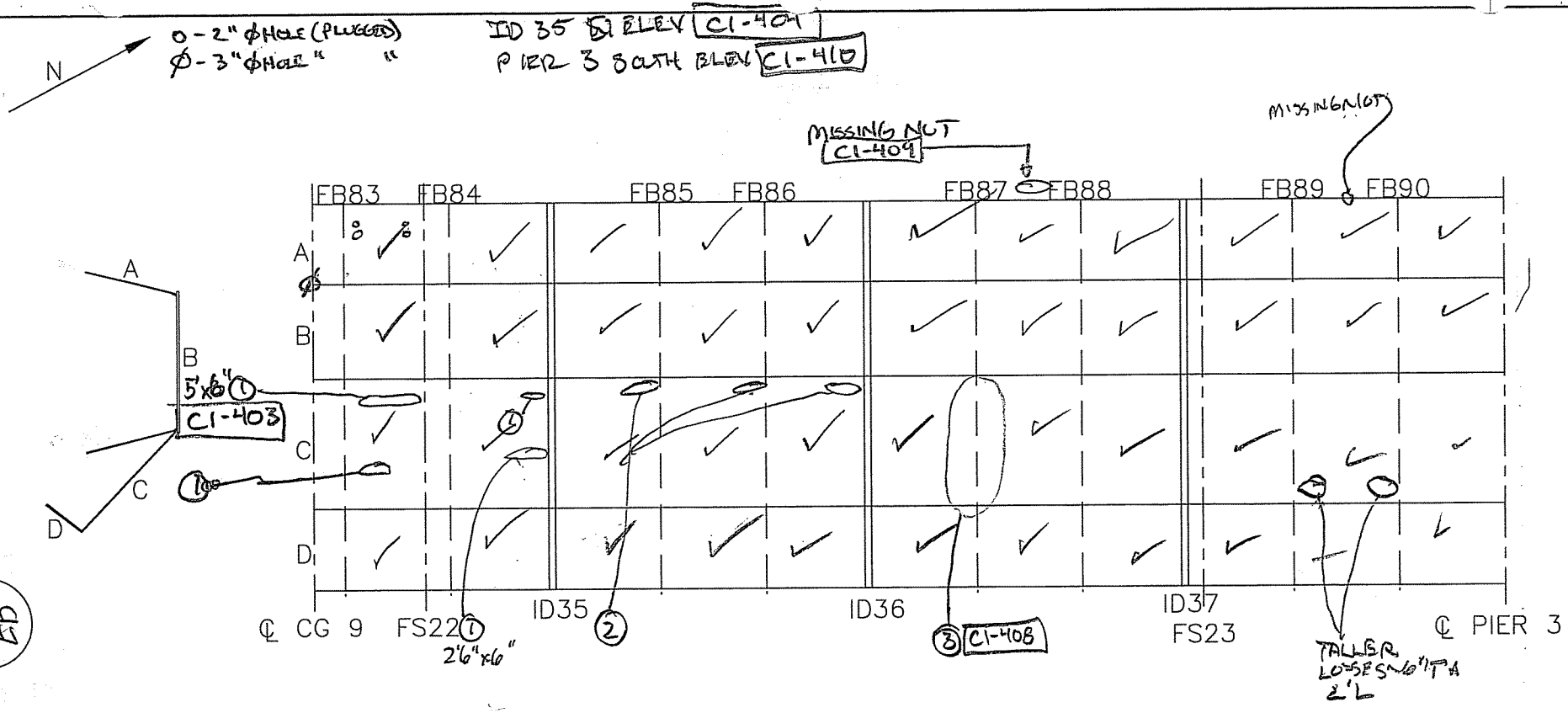
① 100% loss
② Gap in caulking around cables (C1-390)
③ Caulk around cables cracking (C1-391)
④ Plate has a lot of loss around edges (C1-392)
⑤ Missing 4 varmit screens deck rib connection FS 20
⑥ FB 77 missing nut on bracket to deck (C1-393)
⑦ FB 78 missing bolt on splice plate (C1-394)
⑧ Missing nut, deck splice plate bolt
⑨ FS 21 deck rib connection, missing 1 varmit screen

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB	3-24-08	1 of 4
		of

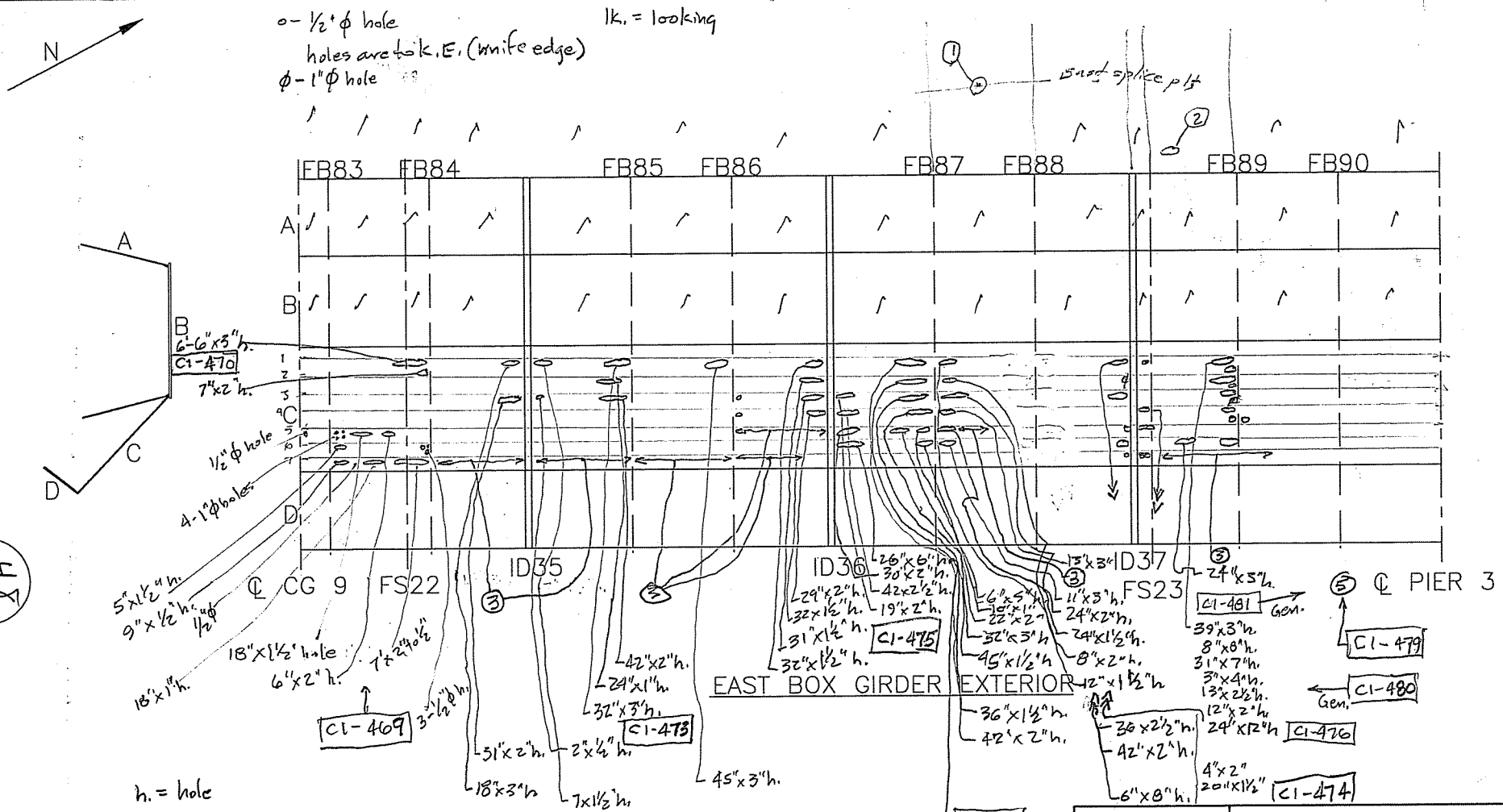


EAST BOX GIRDER EXTERIOR

TYP. BOLT COND. C1-405/406 THREADS VISIBLE/RUST SIGNS OF LOSS

1. 100% SEC. LOSS
2. 100% SEC. LOSS FOR APPROX 2'6" x 3", TYP BY BOT OF FB C1-407
3. 100% SEC. LOSS FOR APPROX 2'6" x 3", TYP ALONG LONG STIFF AT FB C1-408

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BHC, JHR	3-25-08	2 of 3
		of



① Missing ~~bolt~~ nut on bolt, marked up deck splice.

② Missing bird screen C1-468

③ General cond. of small 1/2" or < ϕ holes at rib btw. FB's and/or ID's C1-471 C1-472

④ Top of fairing D lk s to CG. 9 C1-477

⑤ Rusting at end FB90 Fairing Connections. C1-479

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 3M	
JOB: P710070019	

CREW:	DATE:	SHEET:
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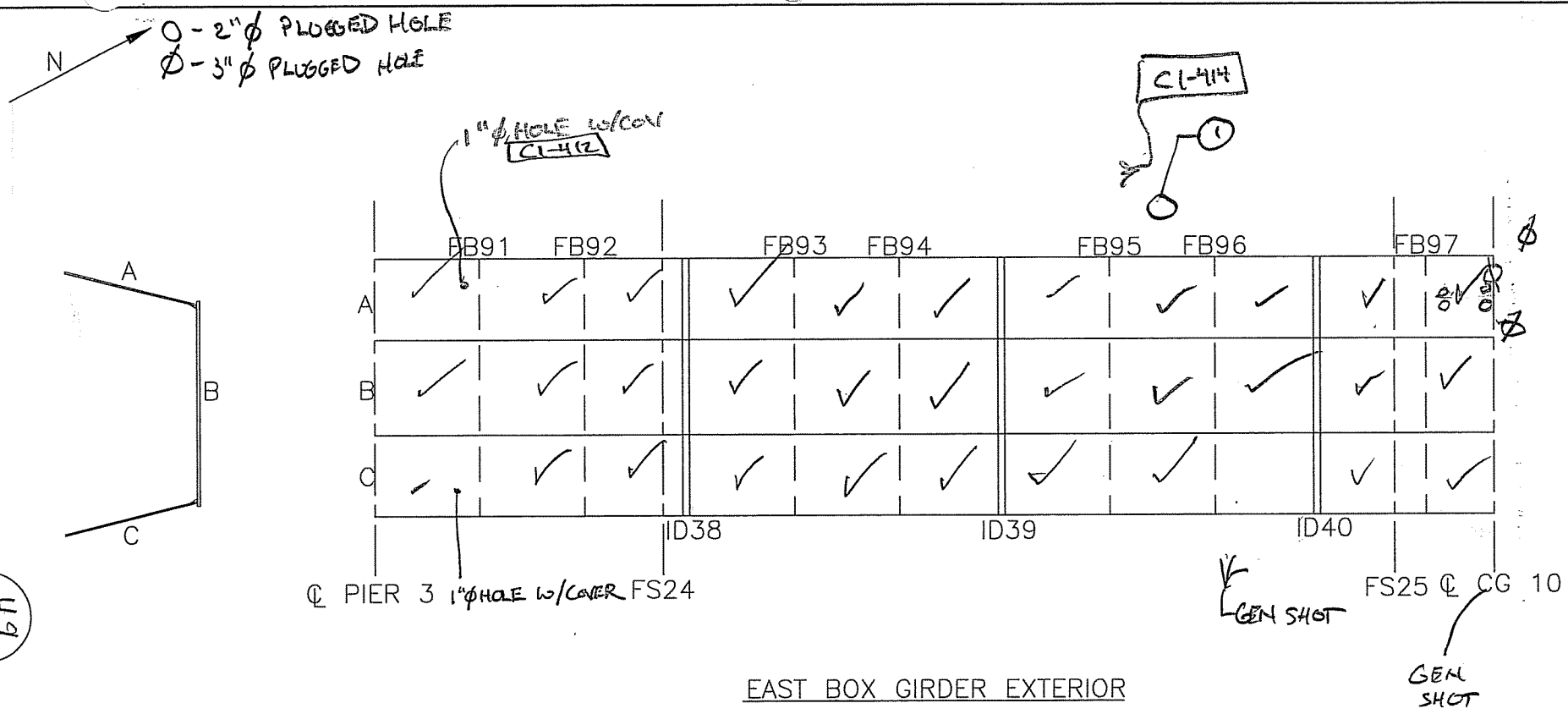

EAST BOX GIRDER EXTERIOR

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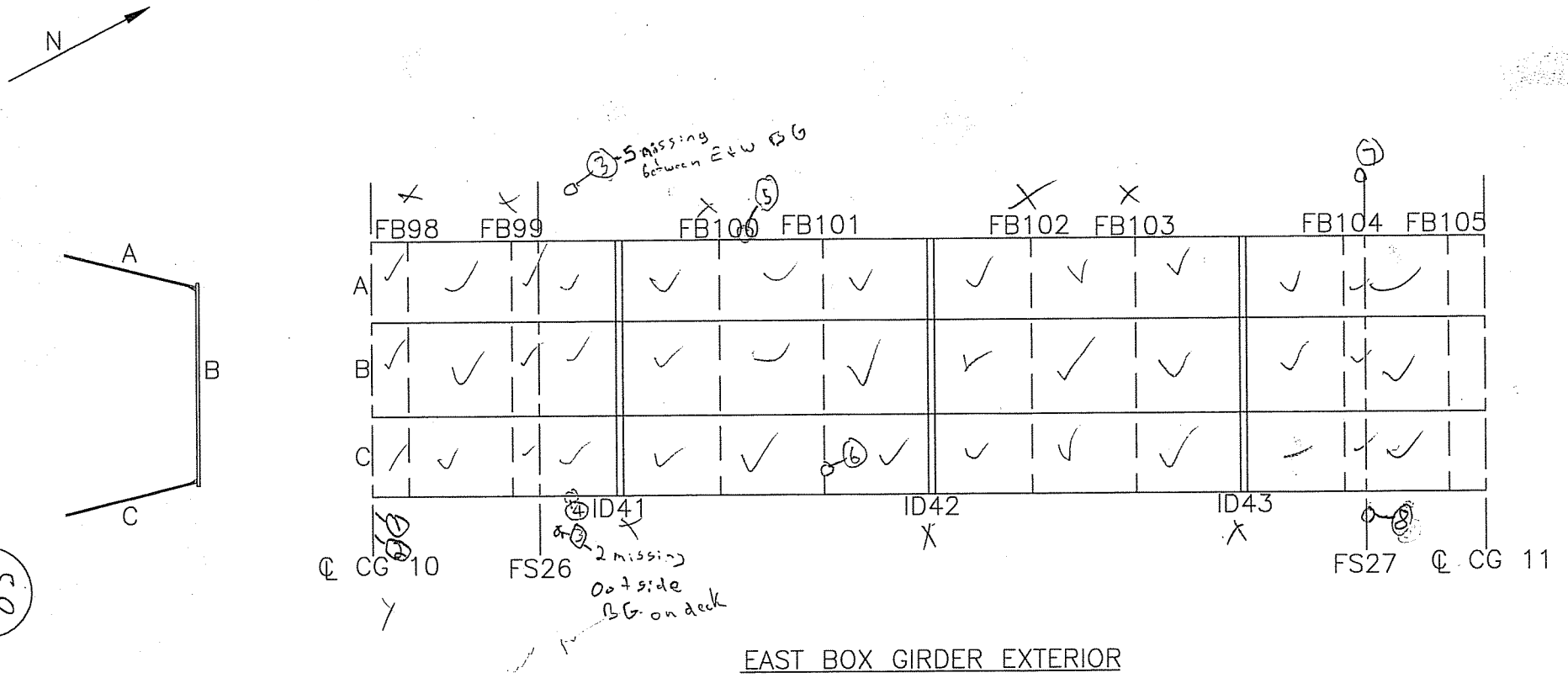
NELEY FB95 C1-414
NELEY FB91 C1-411
(1) BRACKETS w/ BOLTS FROM DECK C1-413
(2) PLUGGED HOLE (MISSING BOLT) IN TOPE KNEE BRACE CONL.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BMC, JHR	3-25-06	3 of 3
		of



EAST BOX GIRDER EXTERIOR

(1) CG10 missing bolt bottom flange [C1-431]
(2) P.R. bottom of CG10 and flange connection [C1-432]
(3). Missing 7 varmit screens on deck rib N. of FS26
(4). missing 2 nuts out side bracket [C1-433] and heavy corrosion.
(5) missing 1 nut on bracket E. of BG, N FB100 to connect BG to deck [C1-434]
(6) " " → N FB101 to connect FB to deck [C1-435] 1/8" Gap B to F
(7) missing 2 varmit screens on deck rib FS27 between E & W BG
(8) " 1 " " " FS27 E.S. of BG

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGD/operator	3/26/08	of
		of

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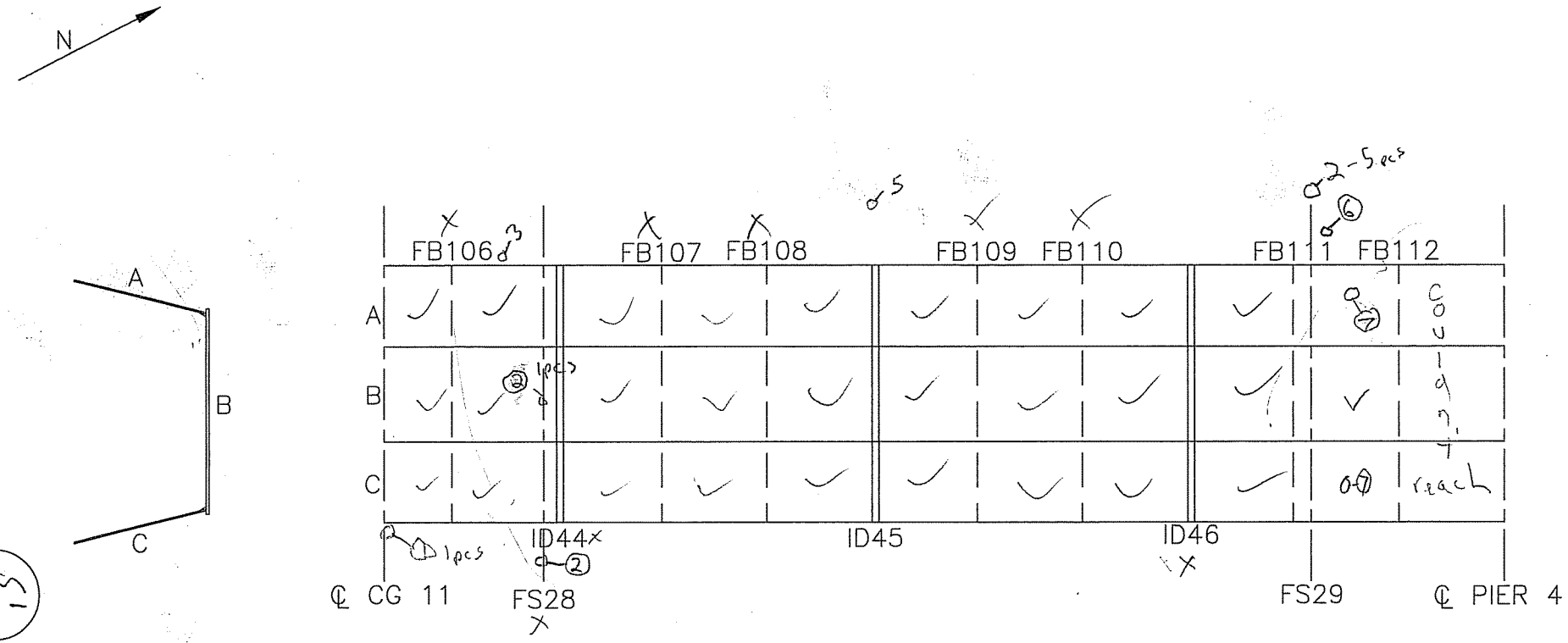
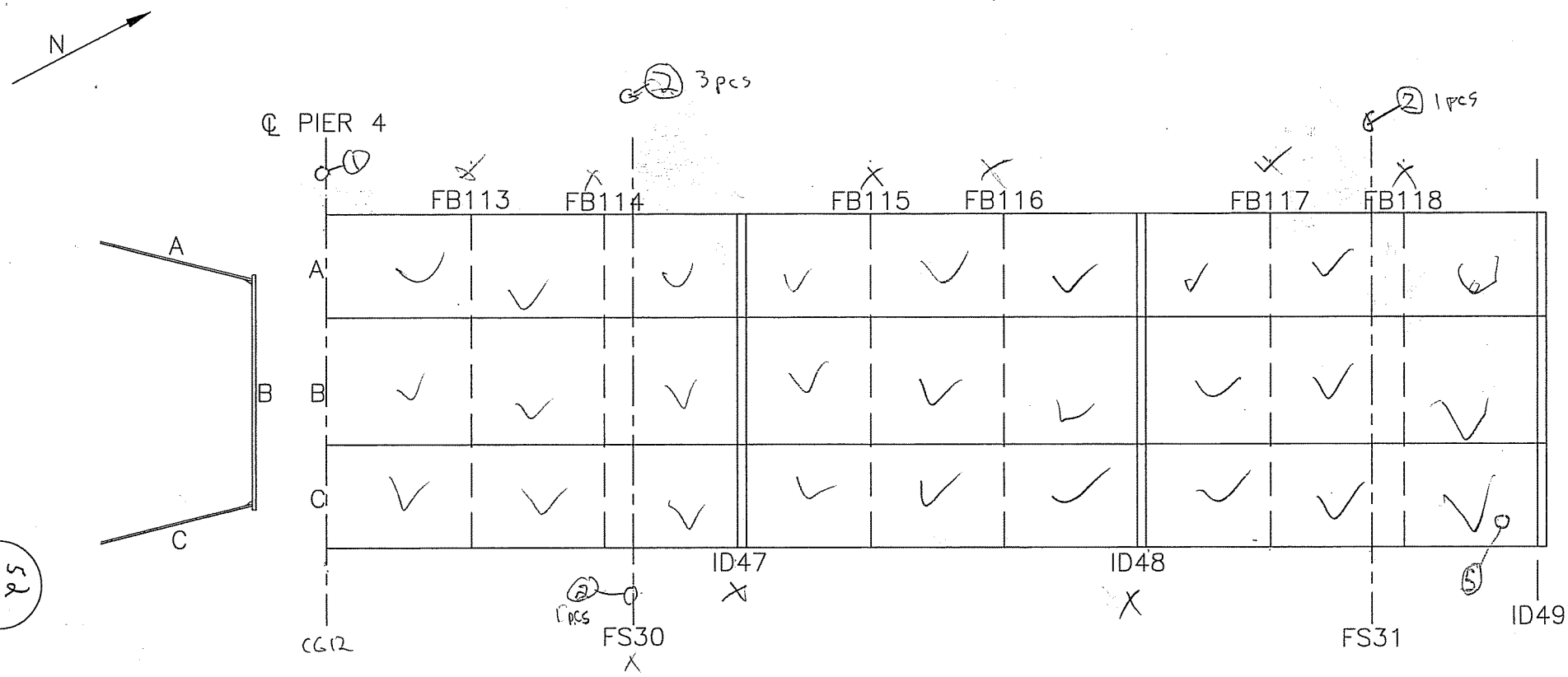
333



EAST BOX GIRDER EXTERIOR

① Moisture build up F. CG11 top near ℄ from BG [C1-459]	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② Rib on deck missing varmit screen F.	NOTES BY:	TranSystems	
③ Crack arrest hole W.S. BG connection from CG11 [C1-460] possible existing crack			
④ FS28, F.S. misalignment on box girder [C1-461] approx. 5/8"	FRAMING SPAN 4M		
⑤ P.R. ID45 E. splice 1st ST. from bottom [C1-462]	JOB: P710070019		
⑥ W.S. BG 1" N. FS 29 missing plug @ lon. BG splice [C1-463]	CREW:	DATE:	SHEET:
⑦ B.S. BG below FB 112, hole in wall w/bolt [C1-464]	SGB	3/27/08	1 of 2
			of

S1
333



EAST BOX GIRDER EXTERIOR

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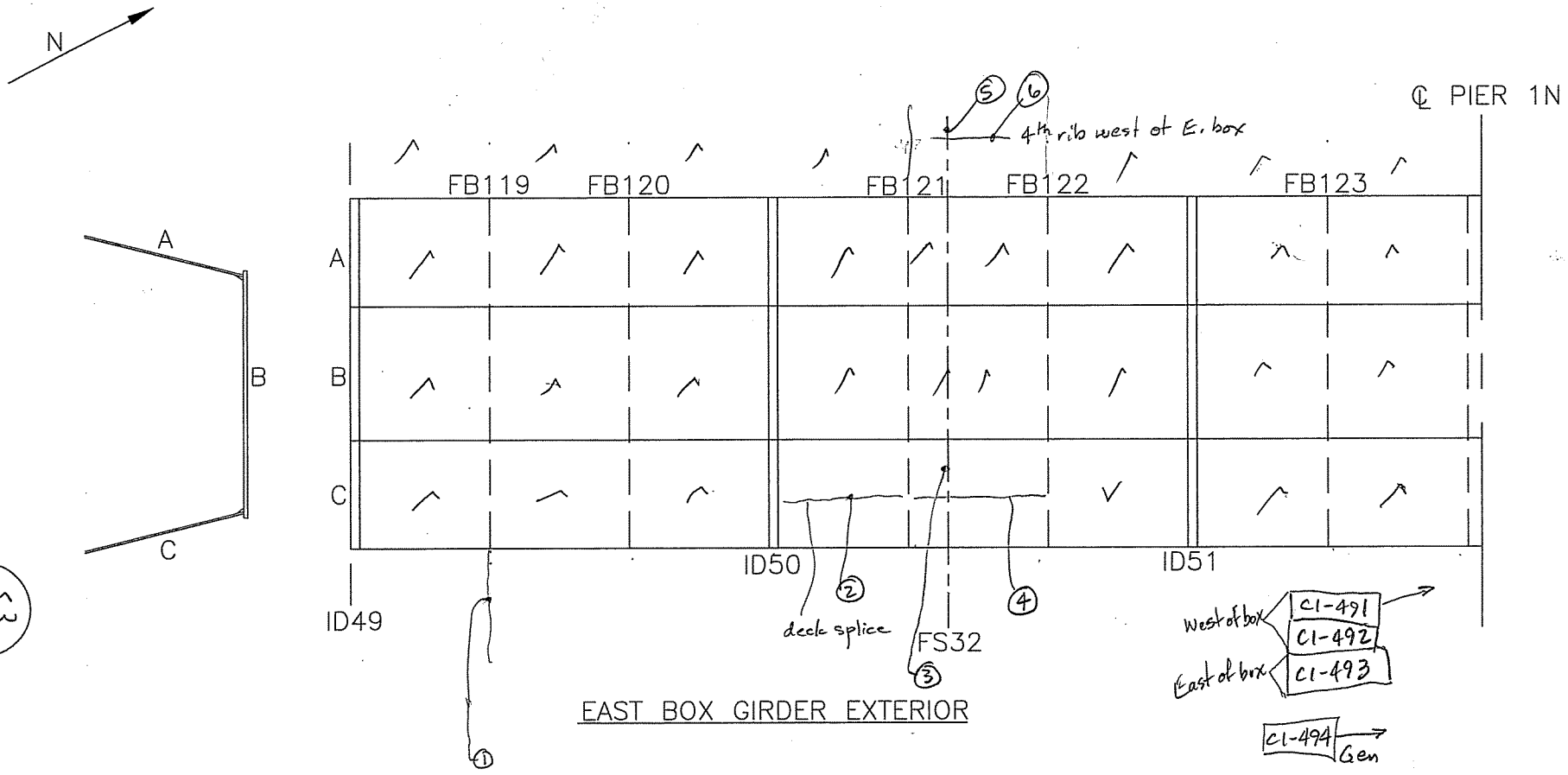
start
464

① Pier 4 top of Concrete, spalled edge by Handrail anchors N.S (C1-465)
② Missing screens on rib of deck splice S.W. BG.
③ ID 47 W. Floor Beam outside BG, P.R. and mis aligned Bottom ℄ (C1-466)
④ FB 117 W.S. of BG, loss on Bt. ℄ splice (C1-467) 1/8" loss on ℄
⑤ Vent screen damaged on circular opening

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB	3/27/08	2 of 2
		of



EAST BOX GIRDER EXTERIOR

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1. minor rust pact at bolt splice ~~at~~ FB119 [C1-485] typ. condition.
2. missing bolt w/ concrete visible btw ID 50 and FB121 [C1-486]
3. missing bird screen at FS 32 [C1-487]
4. missing nut at deck splice btw FB121 and 122 [C1-488]
5. 5 missing bird screens at FS 32 between E. & W. boxes [C1-489]
6. 5/8" hole in rib [C1-490]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
JHR	3/23/09	2 of 3
		of

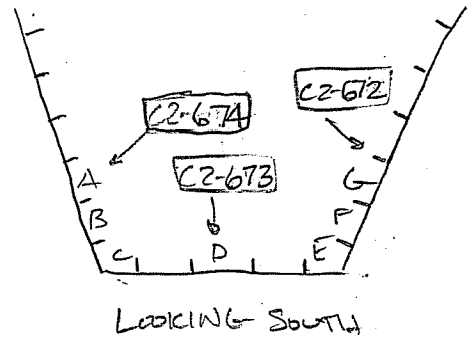
LOCATION - EAST GIRDER BTWN ID35 & ID36

MAIN SPAN

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.635	.629
B	.630	.629
C	.745	.737
D	.750	.745
E	.751	.746
F	.633	.628
G	.636	.633

ALL IN INCHES



GENERAL CONDITION OF STEEL IS CLEAN WITH TYPICAL WEATHERING STEEL PATINA

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MW | SMD	4/10/08	1 of 7
		of

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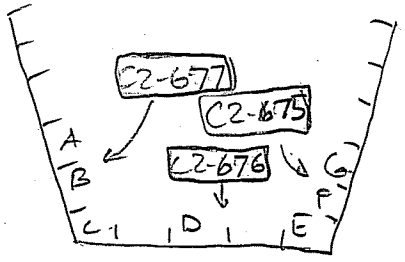
LOCATION - NORTH OF CG #8

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	1.272	1.259
B	1.271	1.261
C	1.125	1.130
D	1.127	1.151
E	1.130	1.110
F	1.262	1.253
G	1.259	1.250



LOOKING SOUTH

LIGHT SURFACE RUST (TYPICAL PATINA)

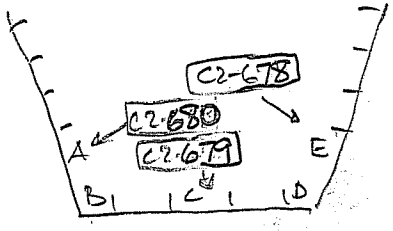
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / SMD	4/16/08	2 of 7
		of

SS 333

LOCATION - EAST GIRDER BTWN 1D26 & 1D27

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.575	.571
B	1.098	1.101
C	1.111	1.107
D	1.112	1.113
E	.569	.565

ALL IN INCHES



LOOKING SOUTH

LIGHT SURFACE PATINA RUST

FLOOR WAS TO SHINY STEEL BEFORE STARTING

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: MJJ/SMJD	DATE: 4/10/08
SHEET: 3 of 7	

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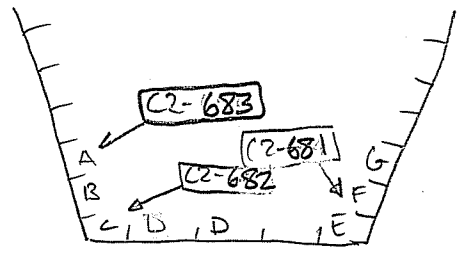
LOCATION - E. GIRDER, BTWN 1022 & 1023

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.615	.609
B	.621	.617
C	.741	.698 ← HEAVY RUST
D	.710	.702
E	.767	.726
F	.624	.615
G	.623	.616
	ALL IN INCHES	



LOOKING SOUTH

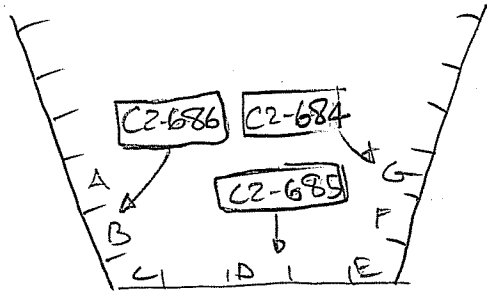
WALLS ARE LIGHTLY RUSTED FLOOR IN AREA C IS HEAVILY RUSTED, OTHERWISE ONLY LIGHT RUST

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: MJJ/SMD	DATE: 4/10/08
SHEET: 4 of 7	

LOCATION - E. GIRDER, BTWN 1013 & 1014

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.627	.622
B	.630	.625
C	.758	.748
D	.744	.736
E	.752	.737
F	.625	.619
G	.629	.620



LOOKING SOUTH

HEAVY RUST / SAND ON FLOOR, WALLS HAVE TYP. PATINA RUST

CTLGroup

Bridge No: Luling Bridge
City/Town: Luling, LA

NOTES BY: TranSystems

JOB: P710070019

CREW:	DATE:	SHEET:
MJJ/SMD	4/10/00	5 of 7
		of

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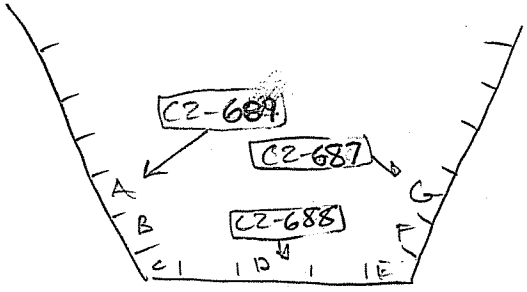
LOCATION - E GIRDER BTWN ID6 & ID7

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.627	.620
B	.624	.617
C	.788	.743
D	.752	.734
E	.755	.745
F	.686	.676
G	.683	.675

ALL IN INCHES



LOOKING SOUTH

GENERALLY LIGHTLY RUSTED FLOOR AND WALLS, (TYP. PATINA)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MSS/SMD	4/10/08	6 of 7
		of

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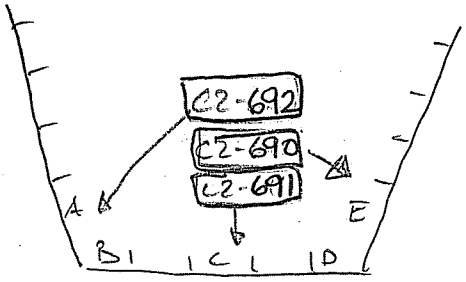
LOCATION - E. GIRDER BTWN ID3 & ID4

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.582	.558
B	.904	.861
C	.875	.868
D	.878	.858
E	.595	.568



LOOKING SOUTH

MODERATE RUST SHEETING ALONG E. WEB & FLOOR, LIGHT SHEETING ALONG WEST WALL

LAST ONE!!

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: MJJ / SMD	DATE: 4/16/08
SHEET: 7 of 7	

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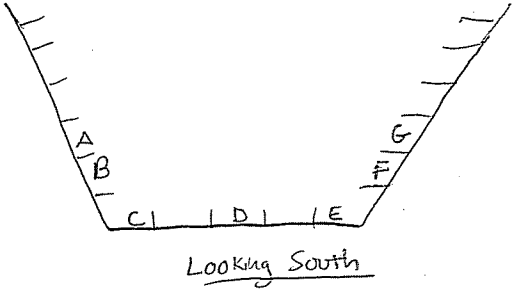
1st

LOCATION - East Girder btwn FB113 and ID47

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.569	.564
B	.572	.562
C	.477	.471
D	.493	.482
E	.481	.473
F	.570	.562
G	.571	.564



General condition light rust on walls light to moderate sheet rust on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	11 of 13
		of

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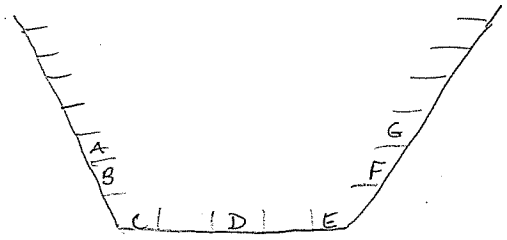
2nd

LOCATION - East Girder just North of ID 45

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.625	.623
B	.625	.622
C	.742	.739
D	.746	.743
E	.738	.735
F	.622	.615
G	.623	.619



Looking South

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Overall Condition: light rust on walls and floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	12 of 13
		of

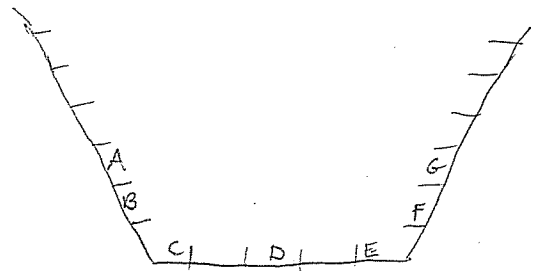
3rd

LOCATION - East Girder Btwn ID41 and FB99

just N. of Field Splice 26

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.632	.623
B	.629	.618
C	.722	.716
D	.775	.787
E	.737	.728
F	.645	.616
G	.649	.610



Looking South

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Overall conditions light rust floor and walls, some light sheet rust on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	13 of 13
		of

North of ID45 - East Tub

(X) location of BF thickness ≈ 3 FT N of ID45

ID45 ↓ N

all steel	.752	.760	.759	.753	.754	
good cond.	.745	.749	.749	.746	.742	
light rust	.013 (X)	.011 (X)	.010 (X)	.007 (X)	.012 (X)	
	gap	shft	shft	shft	shft	gap

rem thickness range (0.742 - 0.749)
rust/grinding loss = (0.007 - 0.013)

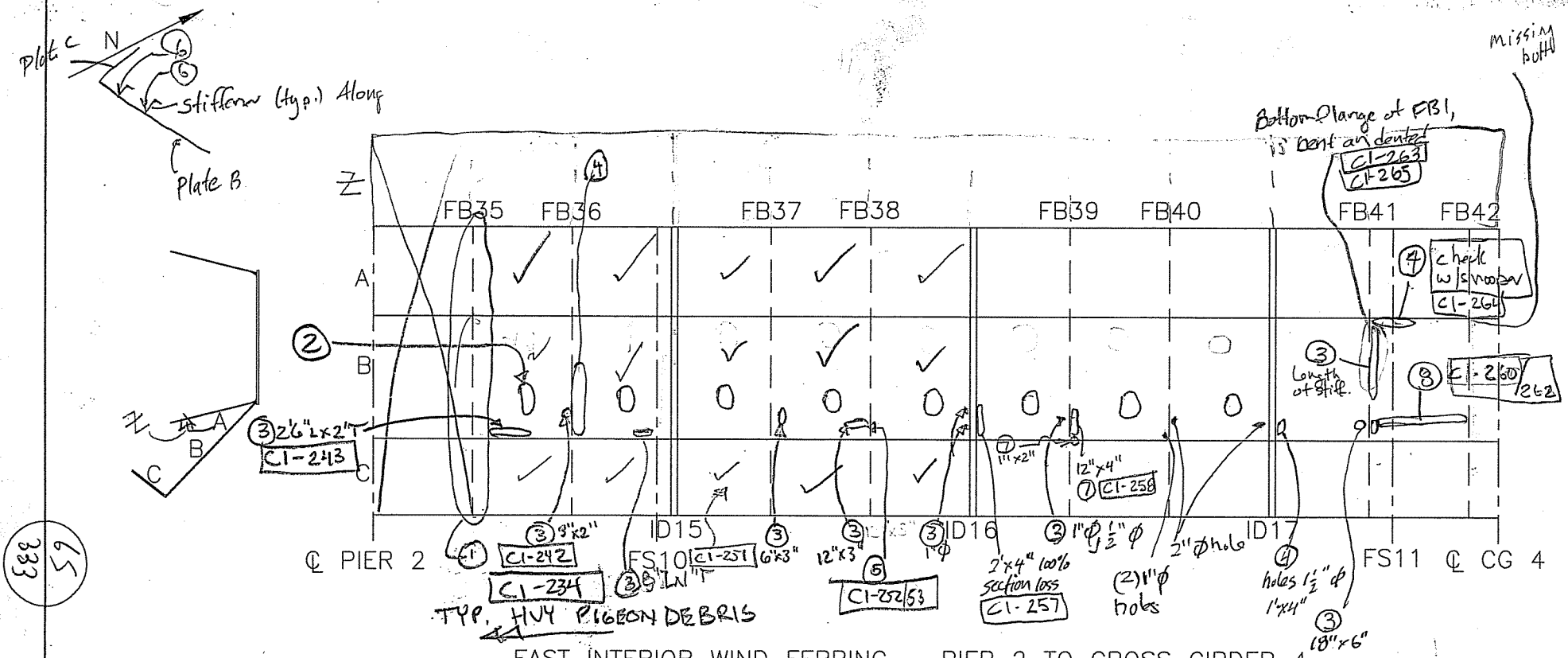
BF Field Splice north of ID45 (north side)

steel cond. = medium	shft	shft	shft	shft	shft	gap
rust	SPLICE PLATES					
debris	.758	.752	.745	.749	.749	
	.737	.736	.732	.735	.733	
	.021	.016	.013	.014	.016	

rem thickness range = (0.732 - 0.737)
rust/grinding loss = (.013 - .021)

loss = 0.015
Δ from 3/4"

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
PN	4-4-08	1 of 1
		of



EAST INTERIOR WIND FERRING – PIER 2 TO CROSS GIRDER 4

TYP. PL C C1-251
TYP. FB CON C1-236 THRU C1-241
1. NETTING BROKEN C1-233
2. TYP. SCUPPER HOLE C1-235
3. AREA OF PITTING W/ 100% SEC LOSS
4. AREAS OF 100% LOSS 2'6"x6" C1-244, HOLES 2"x1" C1-245/46, REST PAPER THIN W/ HOLING C1-247 → 250
5. POROUS WELD IN FB TO DECK
6. Heavy build up of dirt/Pigeon debris on uphill side of stiffeners, causing rust and section loss
7. 100% section loss
8. 100% section loss entire length from FB41 to FB42. Typical 2" Wide Band, up to 5" wide Close to FB 41.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA		
NOTES BY: E. Girder	TranSystems		
FRAMING SPAN 3M			
JOB: P710070019			
CREW:	DATE:	SHEET:	
BKC	3/10/08	2 of 2	
MJJ / SWB	3/11/08	2 of 2	

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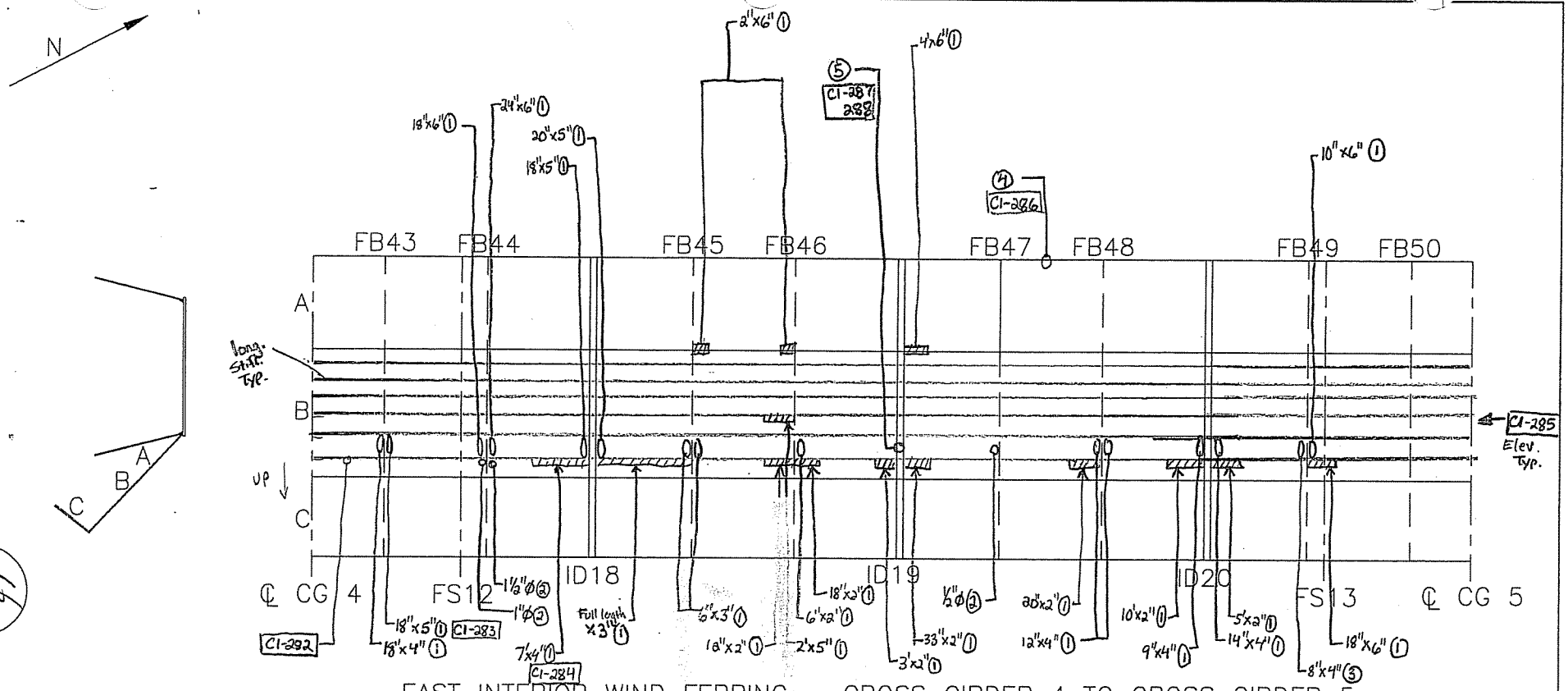

EAST INTERIOR WIND FERRING – CROSS GIRDER 4 TO CROSS GIRDER 5

Typ. on all stiffeners PL B up to 3½" deep pigeon excrement and dirt Typ. Photo CI-282

① Heavy pitting and 100% section loss

② Small hole in PL B

③ Heavy Pitting + Pinholes

④ Missing nut from bracket attached to underside of deck btwn FB47 + FB48 E. Fenring N. Side of Bracket CI-286

⑤ Underside of deck @ S. side ID19 hole in weld, debris CI-287-288

⑥ Missing wire screens underside of deck @ F.S.12, 3 locations CI-289

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN ,3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CTY	3/12/08	3 of 3
		of

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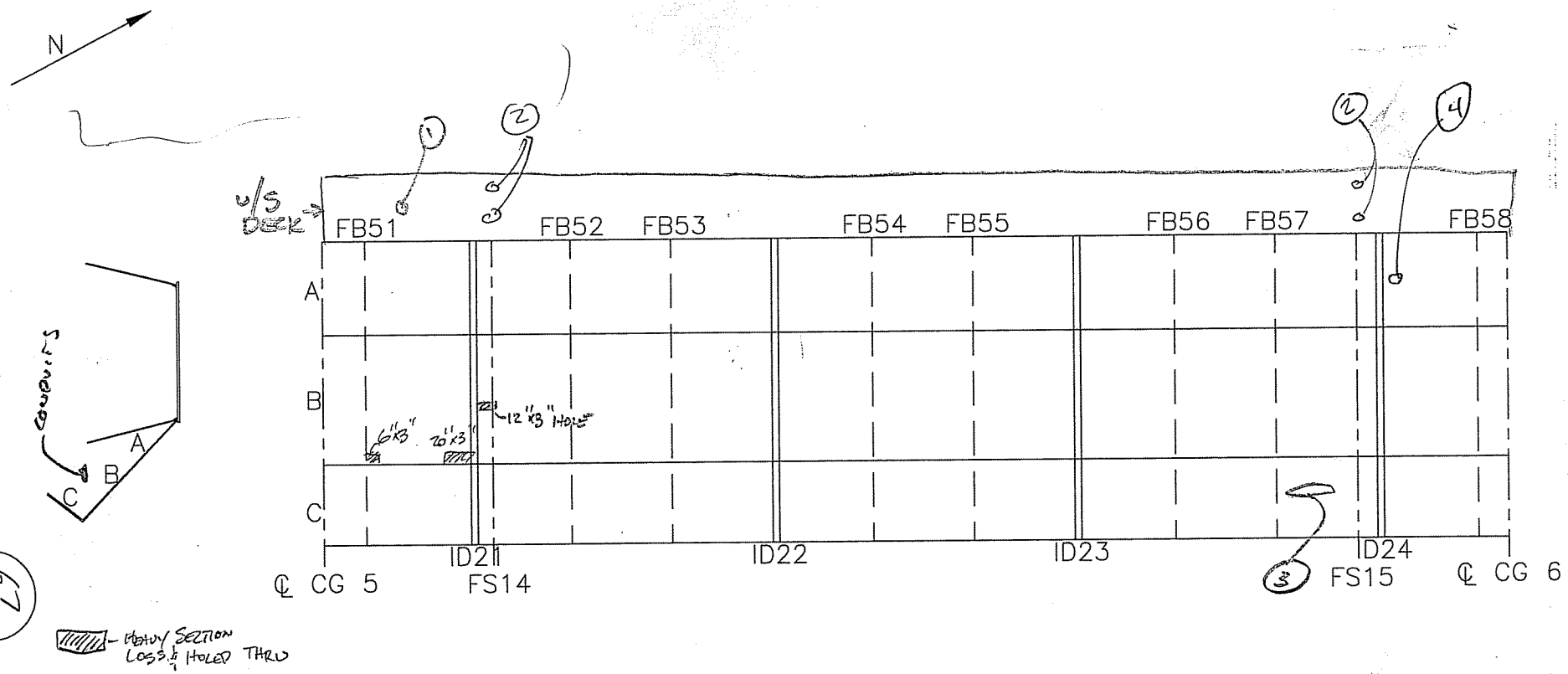

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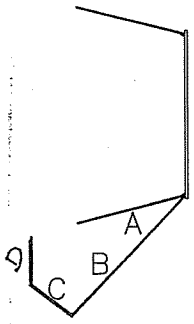
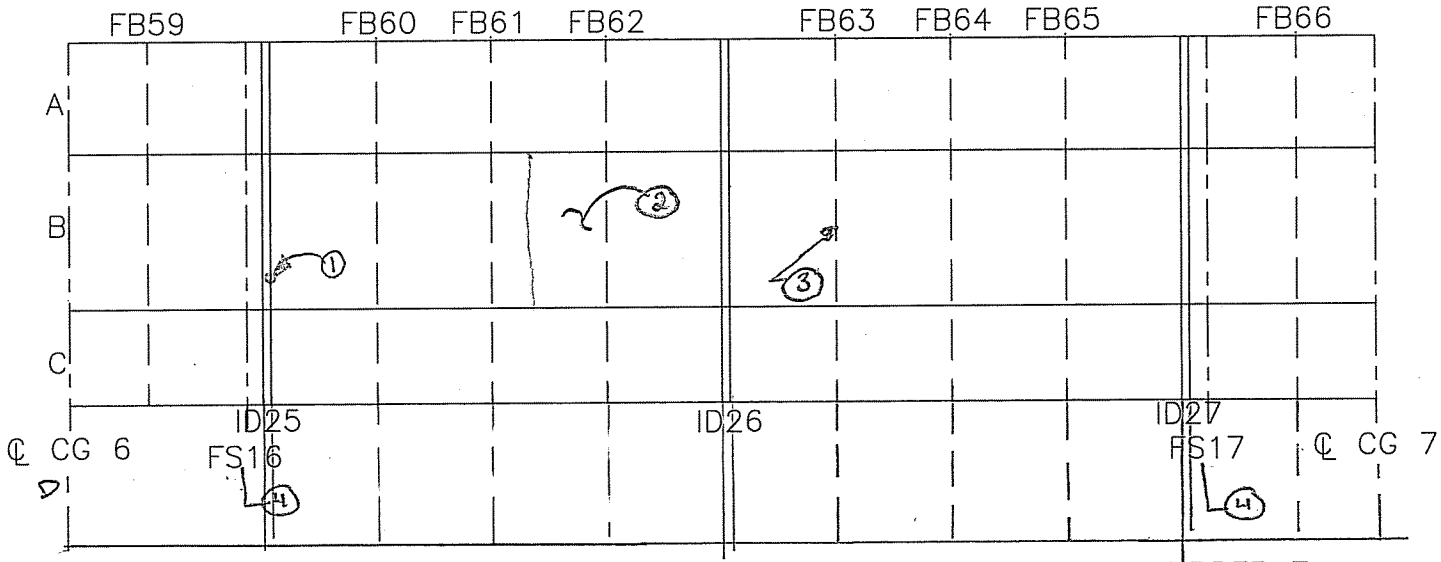
EAST INTERIOR WIND FERRING – CROSS GIRDER 5 TO CROSS GIRDER 6

1. MISSING NUT @ LONGITUDINAL DECK SPLICE
2. 2 MISSING SCREWS @ DECK SPLICE CI-298-299
3. MISSING SECTION OF CONDUIT
4. MISSING PLUG @ HOLES @ SPLICE

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/PGN/CTI	3/13/08	2 of 2
		of





EAST INTERIOR WIND FERRING – CROSS GIRDER 6 TO CROSS GIRDER 7

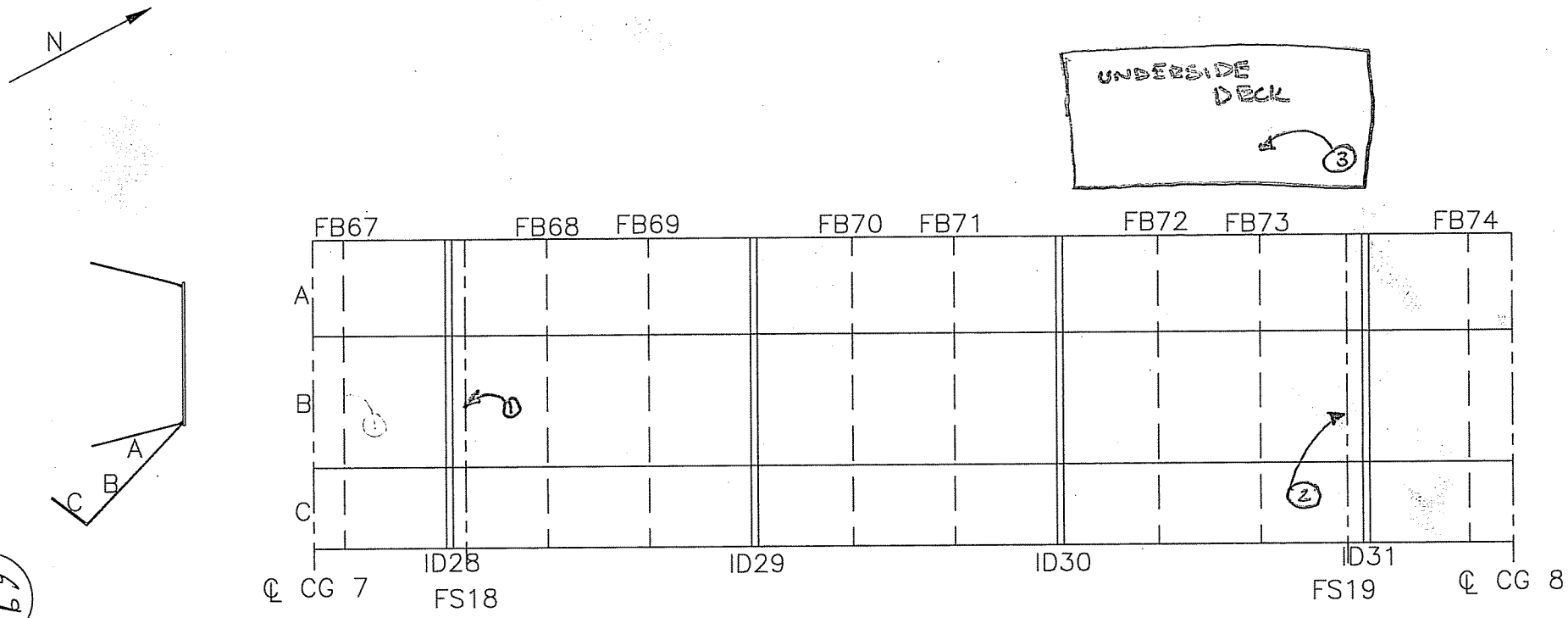
(1) UP TO 3/16" GAP BETWEEN DIAGONAL BRACE & GUSSET PLATE [C2-295-296]

(2) BOWING OF FERRING FACE (SEE EXTERIOR NOTES FOR DETAILS OF STEEL LOSSES) [C2-294 & 297]

(3) UP TO 1/8" BEND IN BTM. FLANGE / COVER PLATES @ FB63 [C2-298]

(4) ALL PIGEON CAGES IN TACT

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SLOB/CRS/CTY/SGB	3/18/08	1 of 6
		of



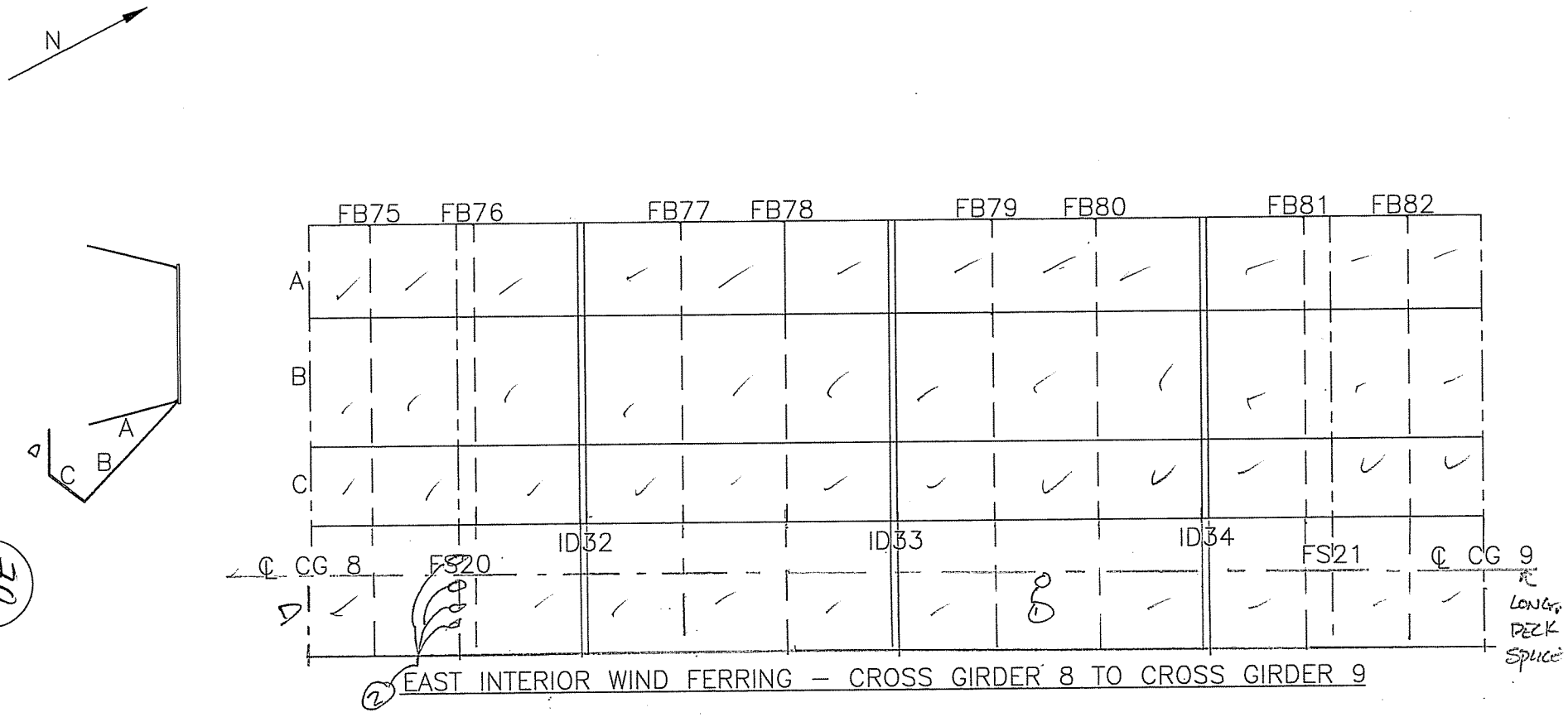
EAST INTERIOR WIND FERRING – CROSS GIRDER 7 TO CROSS GIRDER 8

① 4 MISSING PIGEON CAGES AT FS18 AT ORTHOTROPIC DECK

② SEE NOTE ① (2 MISSING)

③ COVER PLATE w/ 1/8" BEND AT BOTTOM FLANGE [C7-292-293]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/CTY/SGB	3/17/09	3 of 3
		of



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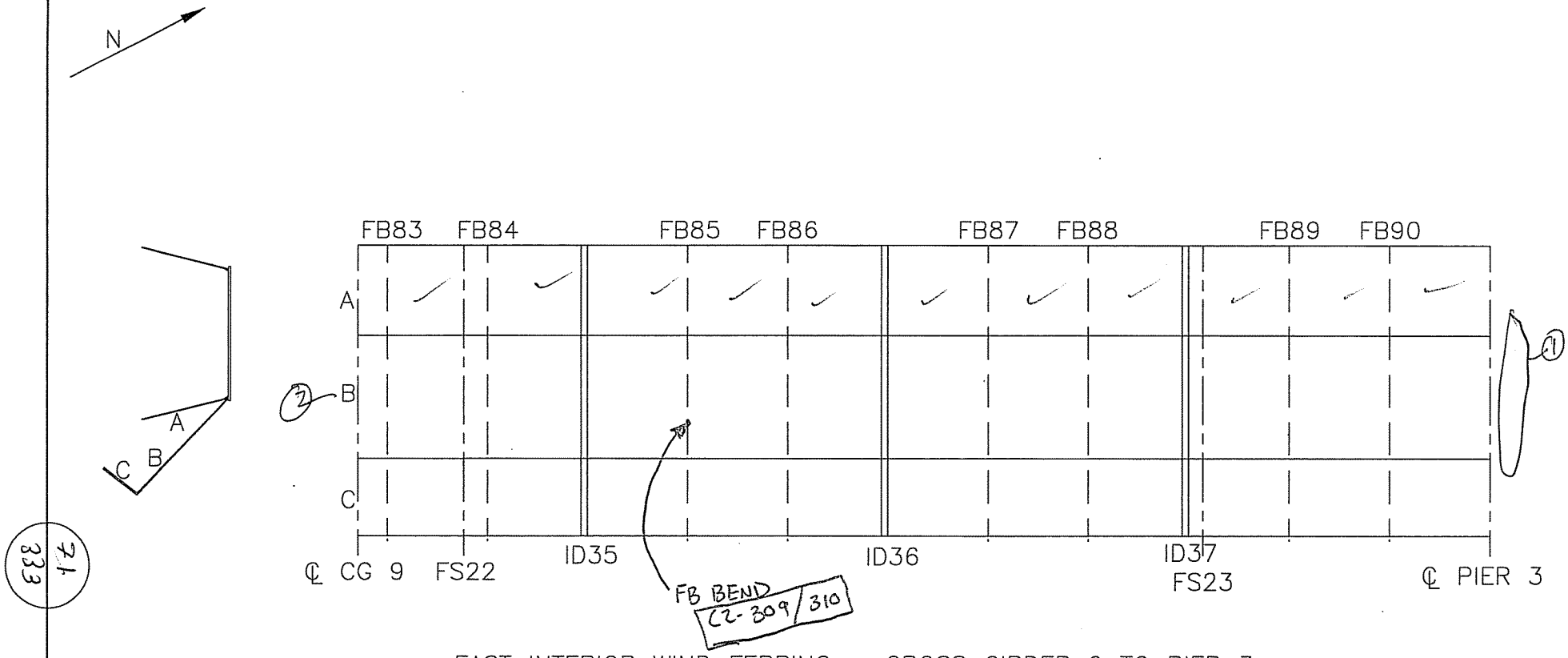
① MISSING NUT @ LONG. DECK SPLICE
② ALL PIGEON SCREENS MISSING @ TRANSVERSE DECK SPLICE

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/CRS/CTY/SGB	3/18/08	3 of 6
		of

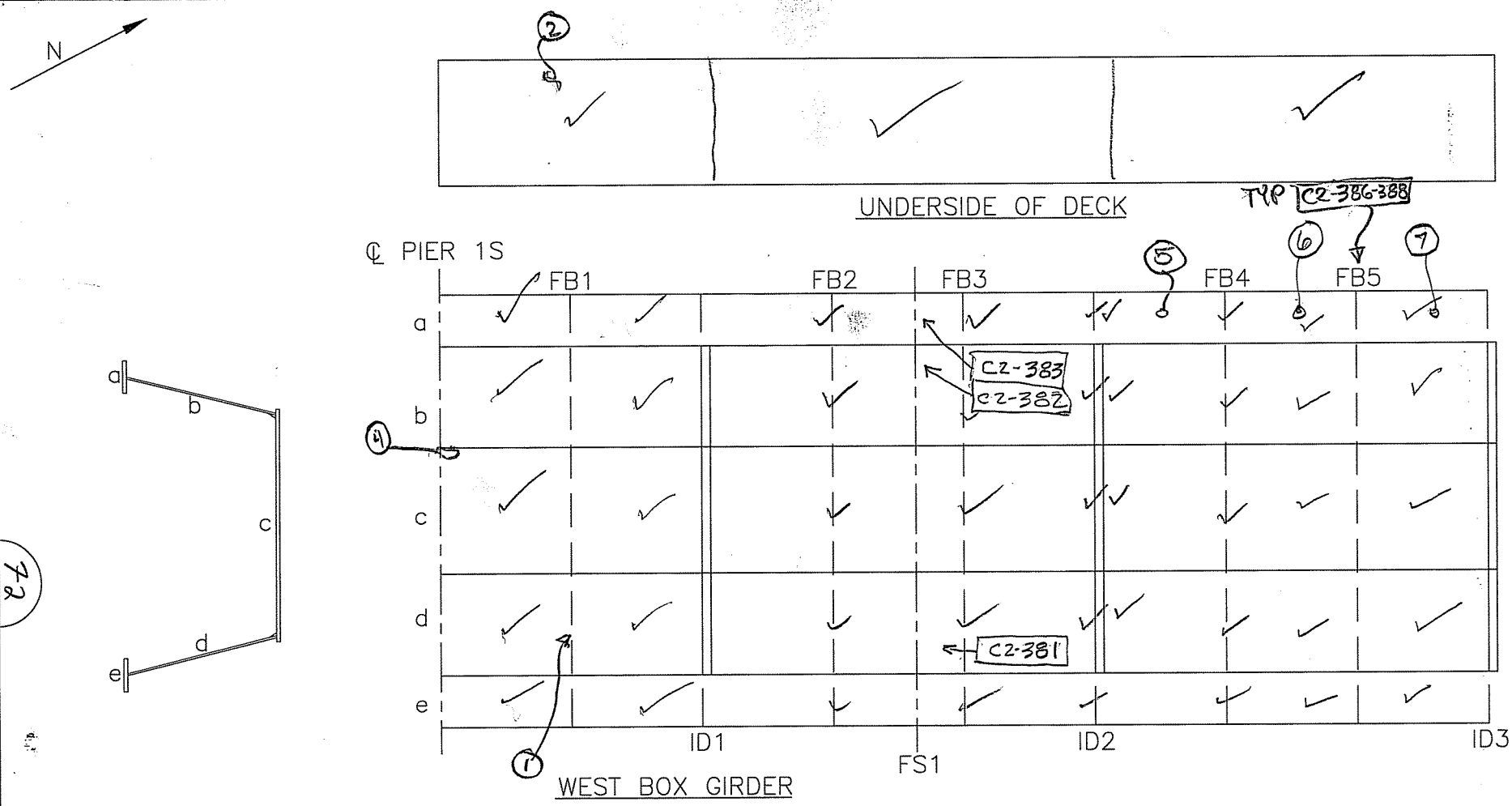


EAST INTERIOR WIND FERRING – CROSS GIRDER 9 TO PIER 3

7.1
333

(1) SCREENING LOOSE @ END OF FERRING
(2) HEAVY DEBRIS BUILD-UP ALONG STRUTS WITH AREAS OF 100% LOSS, TYPICAL

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/CRS/CY/SGB	3/18/09	4 of 6
		of



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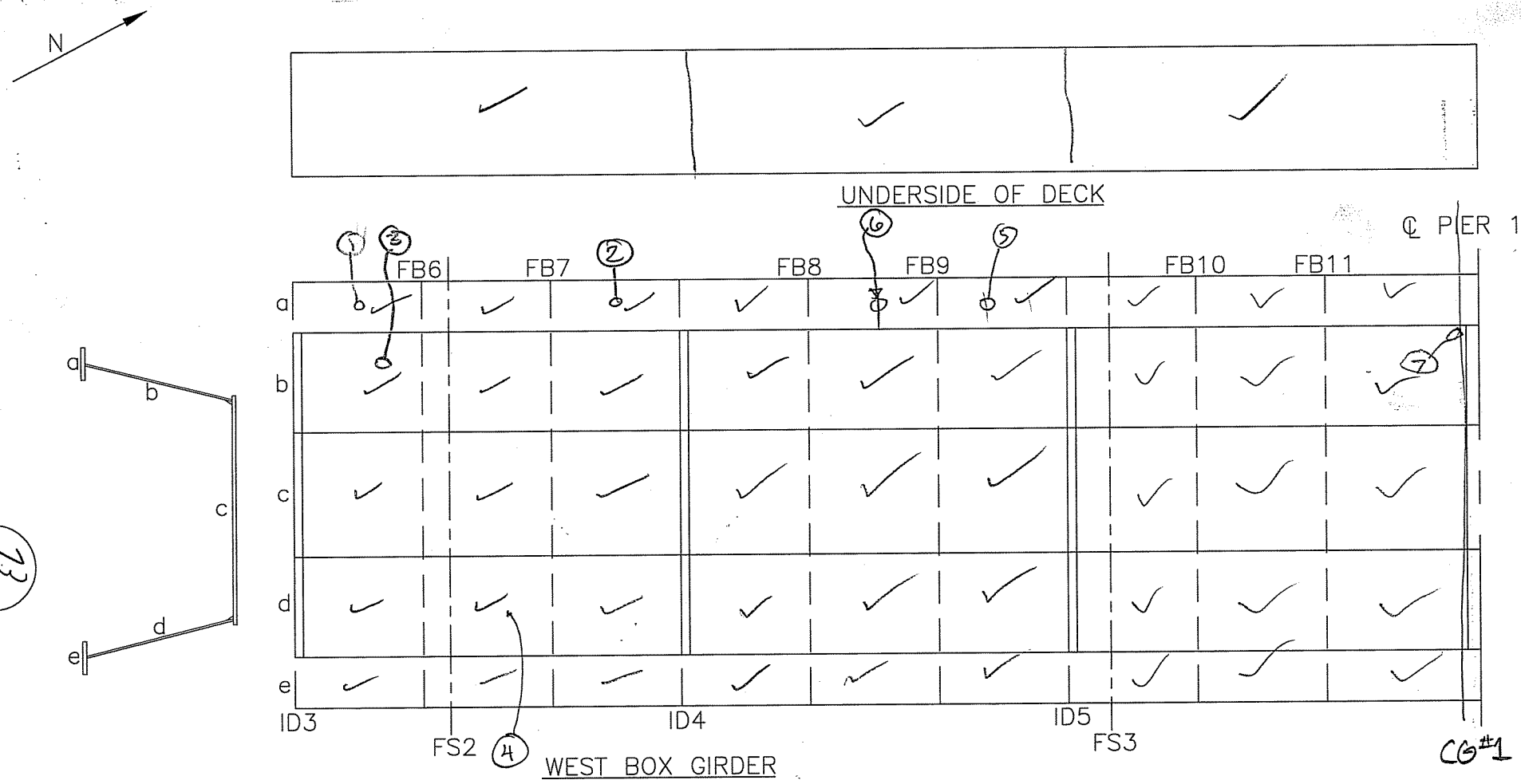
① TYP. COND FB 1 C2-377
② TYP. COND UNDERSIDE OF DECK C2-378
③ SLAG LIKE MAT. AT INTERSECTIONS, NO LOSSES, WELDS IN GOOD COND C2-379
④ 6"L×1"T LAM. RUST W/ CP TO 1/8" LOSS C2-380
⑤ 2-1/2" C.R. BTWN TOP FL & STIFF, IN WELD MAT C2 384/85
⑥ 2-1/2" C.R. BTWN TOP Flg Stiff, IN WELD MAT
⑦ 1-1/4" C.R. BTWN TOP Flg. Stiff., IN WELD MAT

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
JHR, BKC	3/24/08	1 of 2
		of



1. CR INTO TOP FL 3½" C2-389 THRU C2-393
2. ½" CR IN WELD TOP FL/STIFF WELD MAT.
3. 3" ø HOLE W/NETTING (WIRE MESH)
4. TYP. MULT. OVERPASS ON WELDS C2-394
5. CR INTO TOP FL 3½"
6. CR INTO TOP FL 1½"
7. Missing bolt on W. plate for CG#1 C2-395

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, THR, BS	3/24/08	2 of 2
BS, SGB	3/25/08	1 of 2

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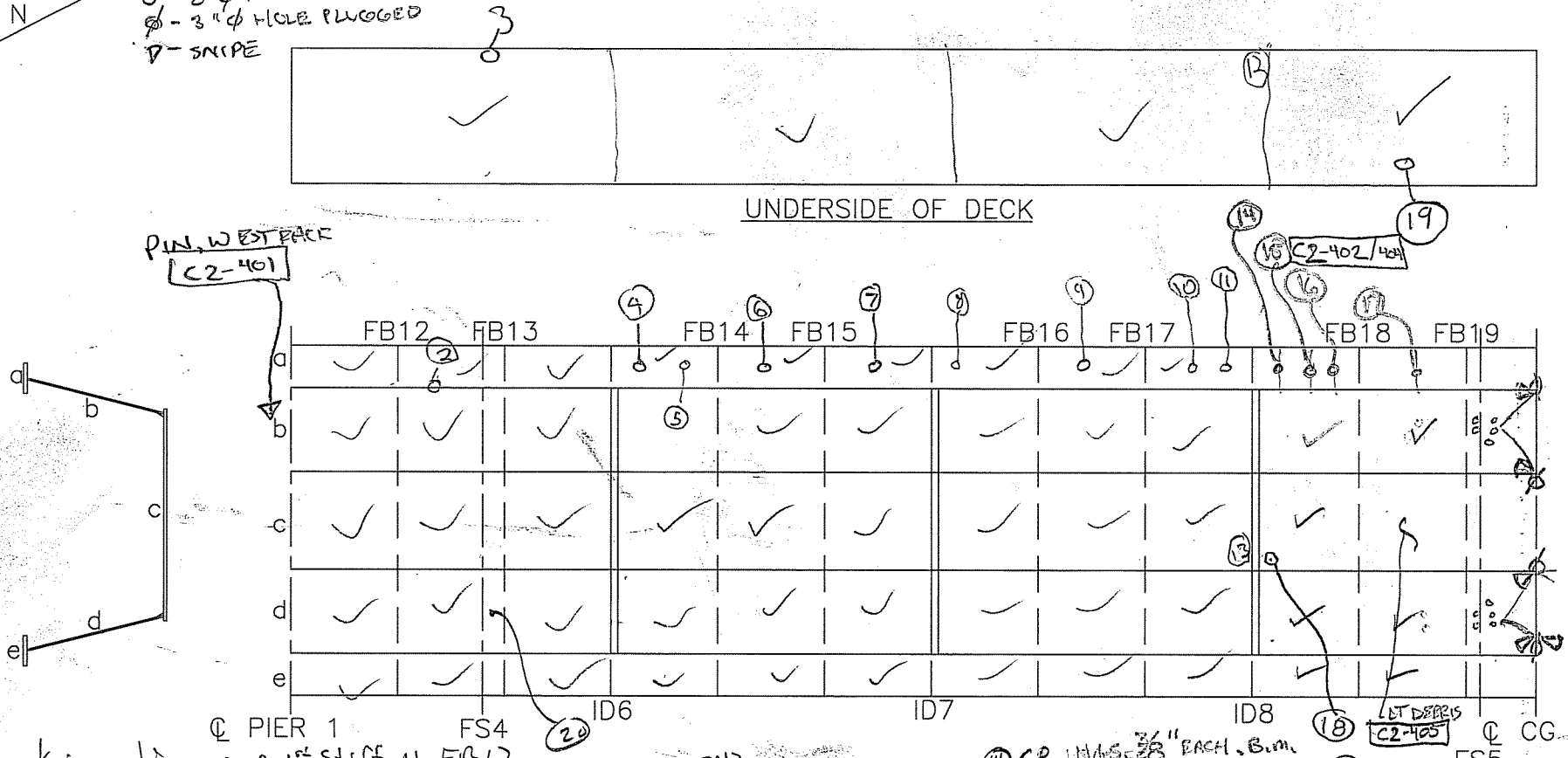
B.M. = CRACK GOES INTO BASE METAL W.M. = ~~NCK~~ CRACK IN WELD MATERIAL

S. ELEV C.G. 2 [C2-406-401]

N

O - 2" ϕ HOLE PLUGGED
ϕ - 3" ϕ HOLE PLUGGED
▽ - SNIPE



(10) Crack in weld no prop. 1st Stiff. N. FB17
(11) Crack in weld prop. 1/4" S. 3/8" N. into flange 2nd Stiff. N. FB17
(12) ID7 N. Face, E.S., very top on deck, incomplete weld [C2-400]
(13) ID8 S. Face, E.S. missing bolt on floor.

WEST BOX GIRDER

(14) CR, N&S, 3/8" EACH, B.M.
(15) CR, N&S, B.M., 3 1/2" TOT
(16) CR, N&S, 3/8" EACH, WELD
(17) C.R., S. 1/4", W.M.
(18) 2-MISSING BOLTS ON FLOOR
(19) ONE MISSING BOLT AND ONE MISSING NUT ON DECK FORM CLAMP ENTERING RIB [C2-224-225]
(20) CRACK AT END OF RIB [C2-224-225]

(1) West stiffening flange, missing bolt [C2-396]
(2) West stiffener, 1st Stiff. N. FB12, weld cracked S. [C2-397] N. [C2-398]
(3) West side, Deck rib furthest to the W., loose nut on deck splice
(4) Crack @ tip of weld 1st Stiff N. ID6 only in weld
(5) Crack in weld prop. 1/2" to the N. in flange 2nd Stiff N. ID6
(6) Crack in weld 1st Stiff. N. FB14
(7) Crack in weld prop. 1 1/2 S.S. 2" on N.S. into flange, 1st Stiff. N. FB15 [C2-399]
(8) Crack in weld prop. 1/2" into flange B.S. 1st Stiff N. ID7
(9) Crack in weld prop. 1/4" into flange B.S. 1st Stiff. N. FB16

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA		
NOTES BY: TranSystems			
FRAMING SPAN 2M			
JOB: P710070019			
CREW:	DATE:	SHEET:	
BS, SGB	3/25/08	2 of 2	
BKC, BS	3/26/08	1 of 2	

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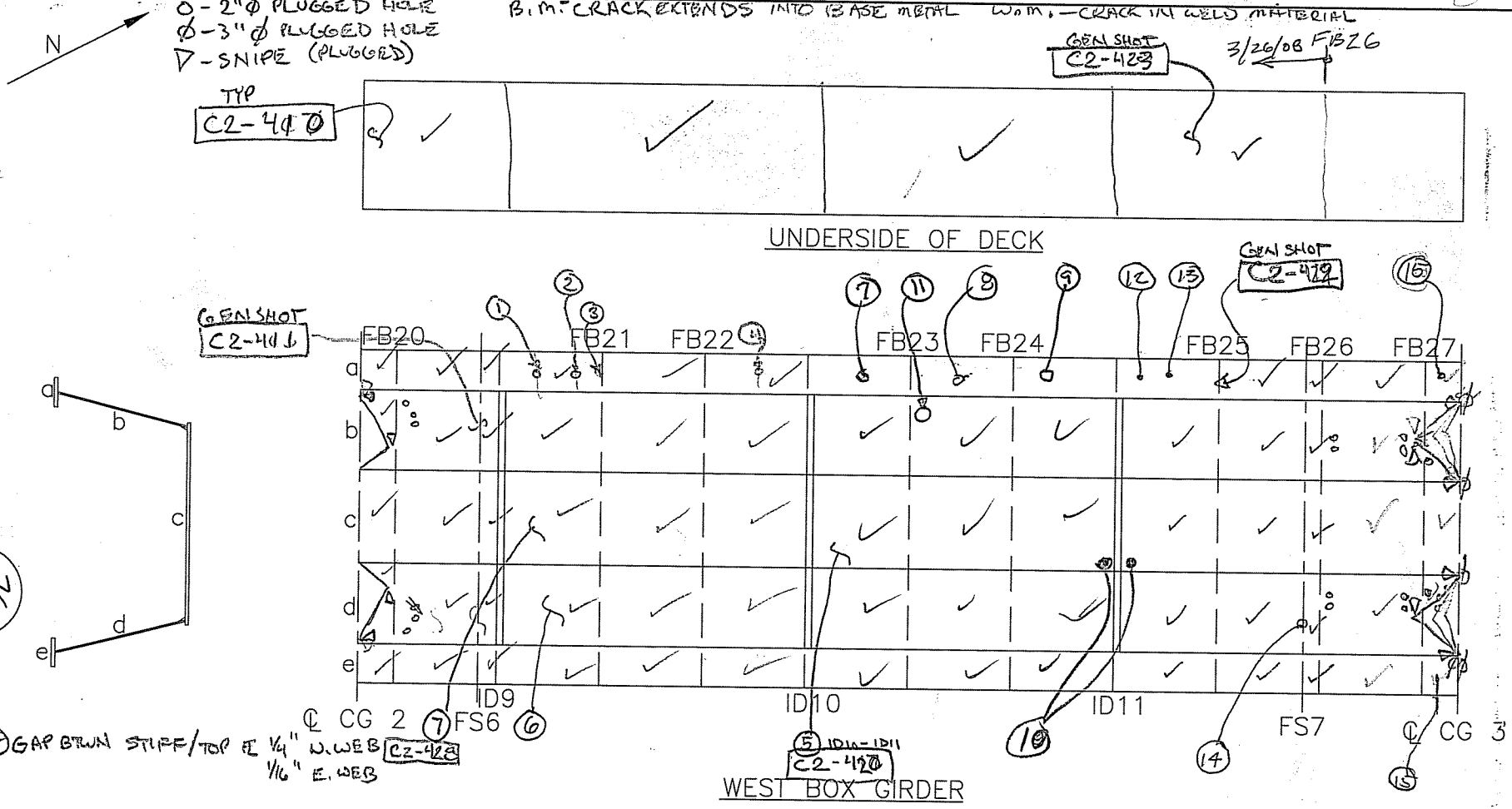
O - 2"ϕ PLUGGED HOLE
ϕ - 3"ϕ PLUGGED HOLE
▽ - SNIPE (PLUGGED)

B.M. - CRACK EXTENDS INTO BASE METAL W.M. - CRACK IN WELD MATERIAL



(15) GAP BTWN STIFF/TOP ℄ 1/4" W. WEB C2-428
1/16" E. WEB

(1) CR. 2" TOTNGS B.M. 1 STIFF N. OF ID 9
(2) CR 4" TOTNGS, B.M. 2 STIFF N OF ID 9 C2-413 + 415
(3) POROSITY IN WELD BTWN TOP ℄ & WEB C2-414 (3" LONG)
(4) CR 1" EACH NGS, B.M. 1 STIFF S. OF ID 10
(5) LT DEBRIS ALONG FLOOR BTWN ID9-10, LAM. LAYER C2-412
(6) TYP. LAM. LAYER RUST ALONG WEBS (E & W) C2-413
(7) CR. 2" TOT. N&S B.M 1 STIFF N. OF ID 10 C2-417 THR 419
(8) CR. 1/2" S. BM - 1 STIFF N. OF FB 23
CR 1/4" N. WM
(9) CR. 1/4" S. WM. - 1 STIFF N. OF FB 24
CR. 1/2" N. WM.
(10) TWO MISSING BOLTS ON FLOOR AT N AND S. SIDE OF ID 11
(11) 3"ϕ UTILITY HOLE W/WIRE MESH
(12) CR. 1/4" W.M./S. - 1 STIFF N. of ID11
CR 1/2" B.M./N.
(13) CR 1 1/2" TOT. N&S BM - 2 STIFF N. of ID11
(14) loose bolt in field splice of vert. leg of 5th stiffener from bottom plate (on S. side of splice bolt & nut visible)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS, JHR	3/26/08	2 of 2
BKC, BS	3/27/08	1 of 2

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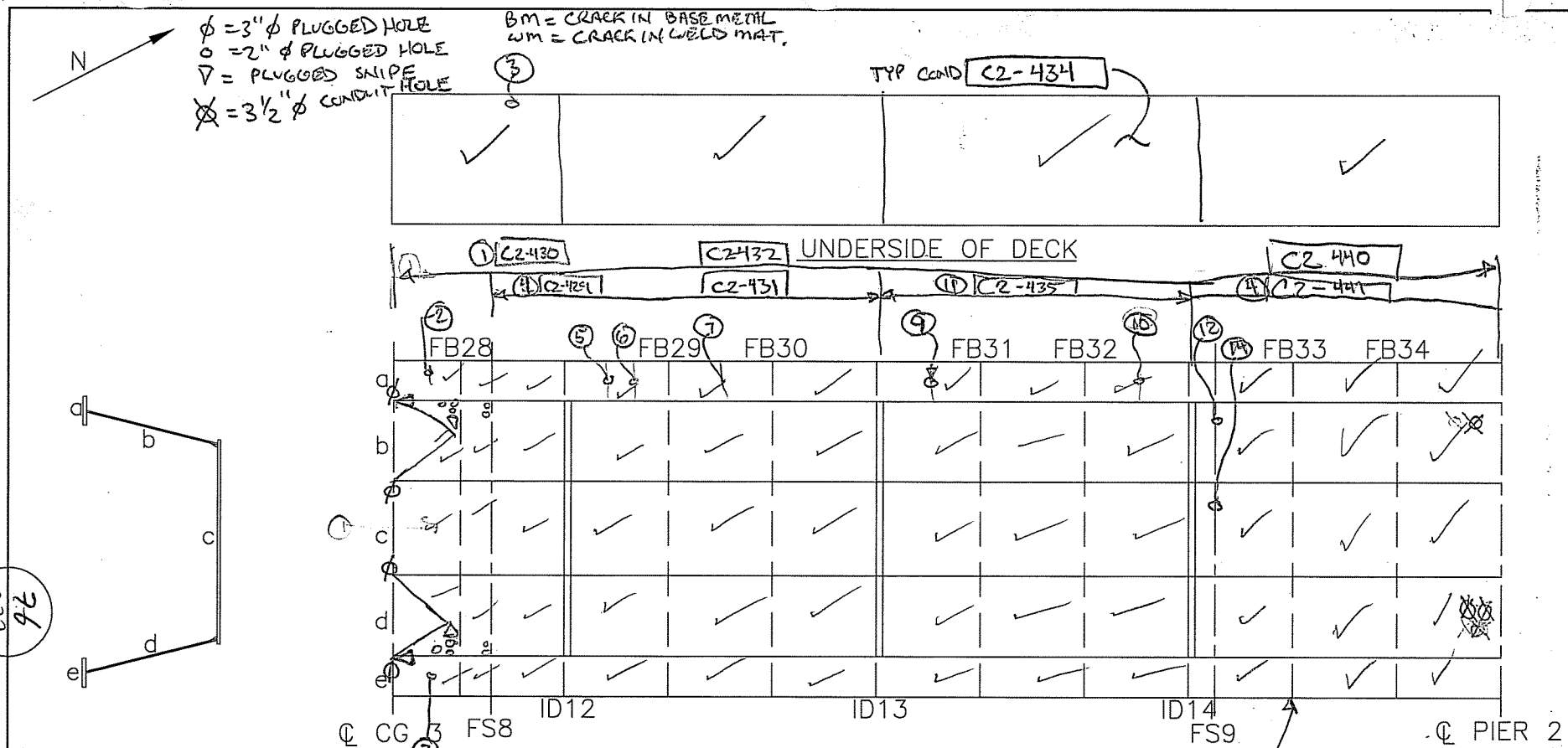

1. LT DEBRIS ALONG BOT. FL C2-430
2. GAP BTWN 1ST STIFF N. CG 3, ¼" W. WEB, 1/16" E. WEB
3. LOOSE BOLT ON, WEST DECK TUB AT SPLICE
4. MOD. LAMINATING RUST ALONG WEBS. NEG. LOSS (E & W) C2-429
5. CR. 1ST STIFF N. OF ID 12, S. ¾" W.M.
6. CR. 2nd STIFF N OF ID 12, S. 1" B.M., N. ⅜" W.M.
7. CR 1ST STIFF N OF FB29, 1" TOTAL BTWN N & S BM
8. TYP. MULT. PASS ON WELD. SHOT TOP FL / WEB C2-435
9. CR 1ST STIFF N OF ID 13, 2½" TOTAL N & S, BM C2-436 THRU 439
10. CR 1ST STIFF S OF ID 14, 1½" TOTAL N & S, B.M.
11. LT LAMINATING RUST ALONG WEBS
12. 2-FROZEN BOLT W/ LOOSE NUT, 2nd, 3rd, 4th LONG. STIFF FROM TOP (SAME POSITIONS)
13. CR 1ST STIFF N. OF FB33, W.M. ⅜" N, ½" S
14. 3-LOOSE BOLTS ON LONG. BTM FL STIFF @ W. STIFF

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/27/08	2 of 2
		of

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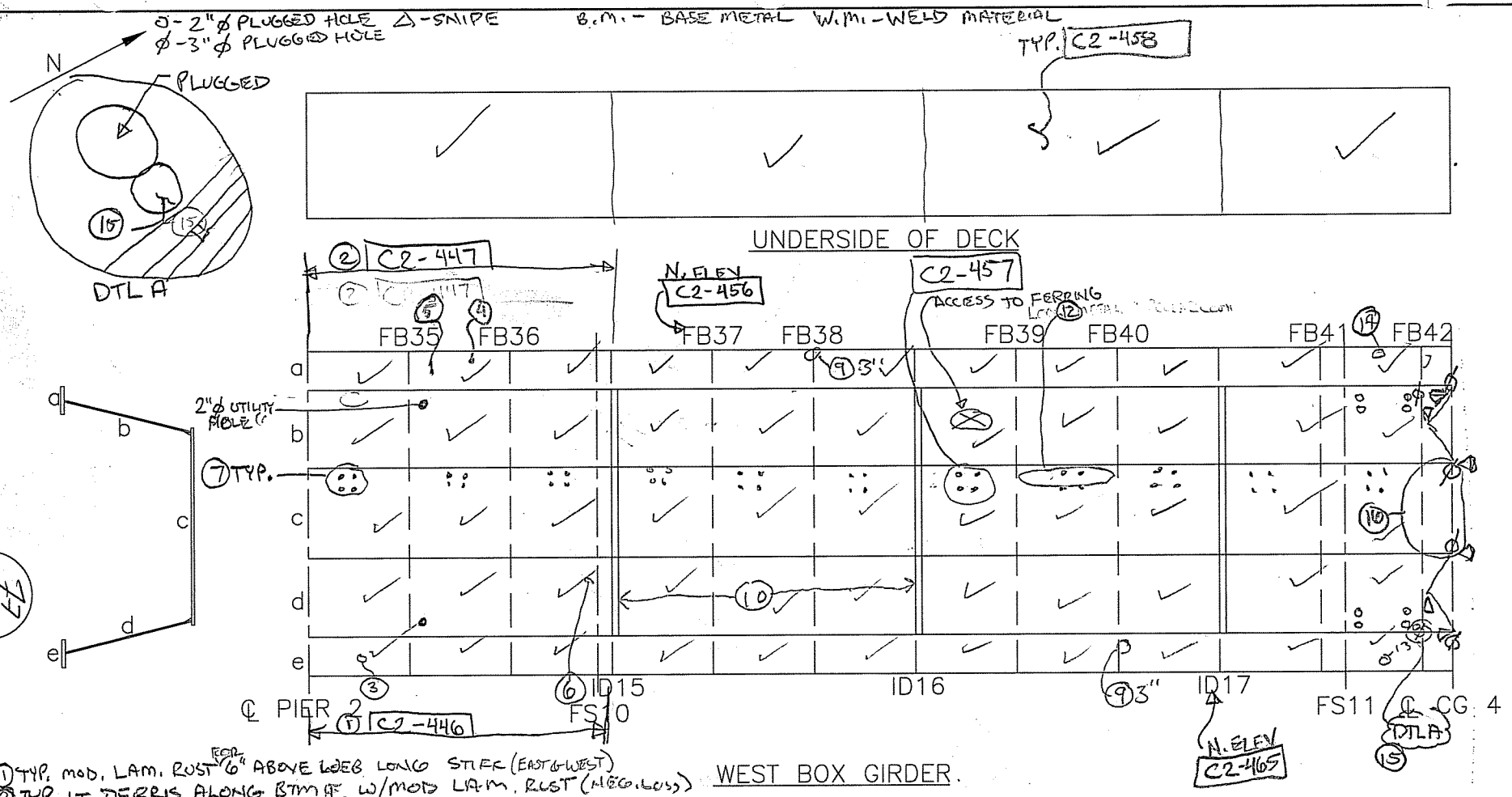

1. TYP. MOD. LAM. RUST FOR 6" ABOVE WEB LONG STIFF (EAST & WEST)
2. TYP. LT DEBRIS ALONG BTM FE. W/MOD LAM. RUST (MEG. LOSS)
3. POT. CR. W.M. 1ST STIFF N. P2, N. 2 1/8"
4. CR. 1ST STIFF N. FB 35, 2" B.M. TOTAL N&S
5. ~~℄ LONG CR. BTWN LIFTING LUG, & DECK PAN B.M. 3 1/2" LONG~~ C2-451 THRU 454
6. MISSING BOLT AT 2nd STIFF FROM POT
7. # HOLES NO BOLTS AT EVERY STIFF W. SIDE BTWN P2 - ID15 - ID16 - ID17 - CG4
8. N. FS. STIFF MISSING WELD C2-448/49 S. STIFF EXHIBIT POOR WELD C2-450
9. POR. in weld connecting web to deck flange.
10. Light sheeting on E. web C2-455
11. CR 1ST STIFF N. OF FB39 B.M. 2 1/2" TOTAL N&S
12. LOOSE CIRCULAR METAL CONDUIT
13. E. web @ top, bracket bolted to deck flange, two loose bolts C2-459/460
14. W. web @ top, bracket bolted to deck flange, one bolt sheared off.
15. E. WEB JUST TO S. OF CG4 CORNER. CR IN STRESS RELIEF NO VISIBLE PROP C2-461-464
16. HVY RAT DROPPINGS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKG, BS, SOB	3/28/08	1 of 2
		of

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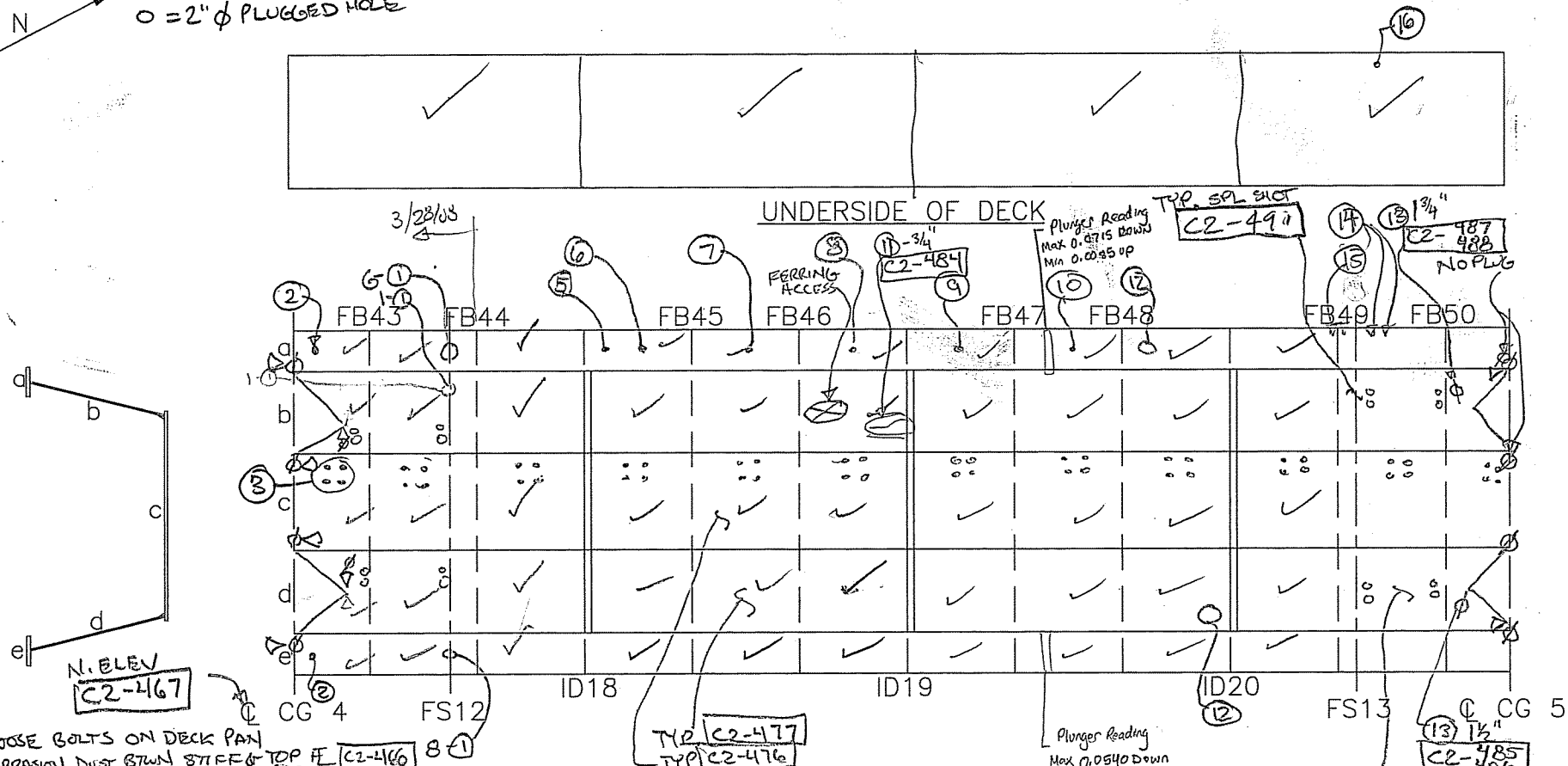
ϕ = 3" ϕ PLUGGED HOLE ▽ = SNIPE
O = 2" ϕ PLUGGED HOLE

B.m. = BASE METAL WM - WELD MATERIAL

N



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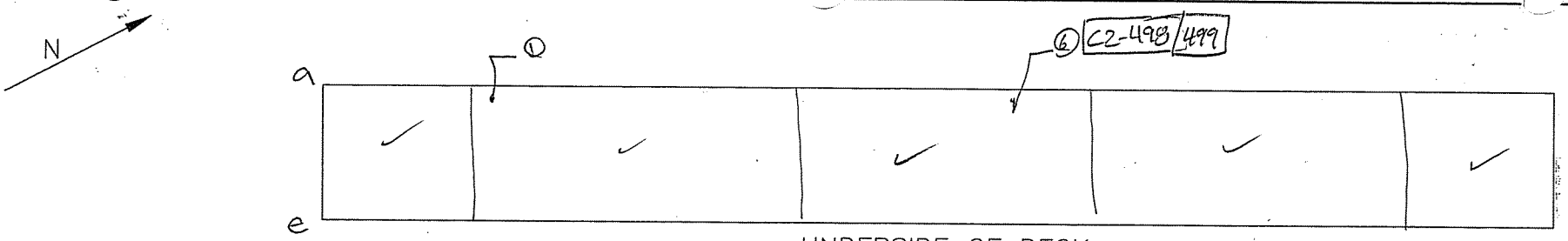
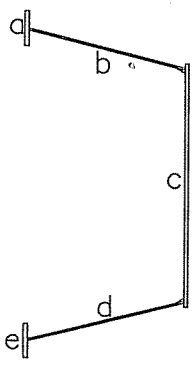
1. LOOSE BOLTS ON DECK PAN
2. ABRASION DUST BTWN STIFF & TOP FL C2-466
3. 4 EMPTY BOLT HOLES UNDER EACH STIFF CG4-ID18-ID19-ID20-CG4
4. MULTIPLE PASS WELD W/DISCONT. BTWN WEB/TOP FL C2-468
5. 1 1/2" W.m. CR BTWN LIFTING LUG/EAR NEAR W. WEB, 4' N. OF ID18 C2-469-471
6. 3 1/2" B.m. NGS CR 2nd STIFF N. OF ID18 C2-472-475
7. 1/2" B.m. CR N., 1st STIFF N. OF FB45
8. 3" B.m. CR NGS, 1st STIFF N OF FB46
9. 1st STIFF N. OF ID19 3/4" B.m CR, N & 3/8" WM S.
10. 1st STIFF N OF FB47, B.m CR NGS 4 3/4" C2-480-483
11. WEB WRNG. STIFF WELDED IN BENT POSITION BY ~ "
12. 3 1/2" ϕ SCREENED HOLES
13. CR INTO ARRESTING HOLE, LENGTH FROM PREVIOUS NOTES
14. 2 MISSING BOLTS ON DECK PAN SPLICE C2-488
15. 2 SHEARED OFF BOLTS
16. MISSING NUT ON DECK SPLICE

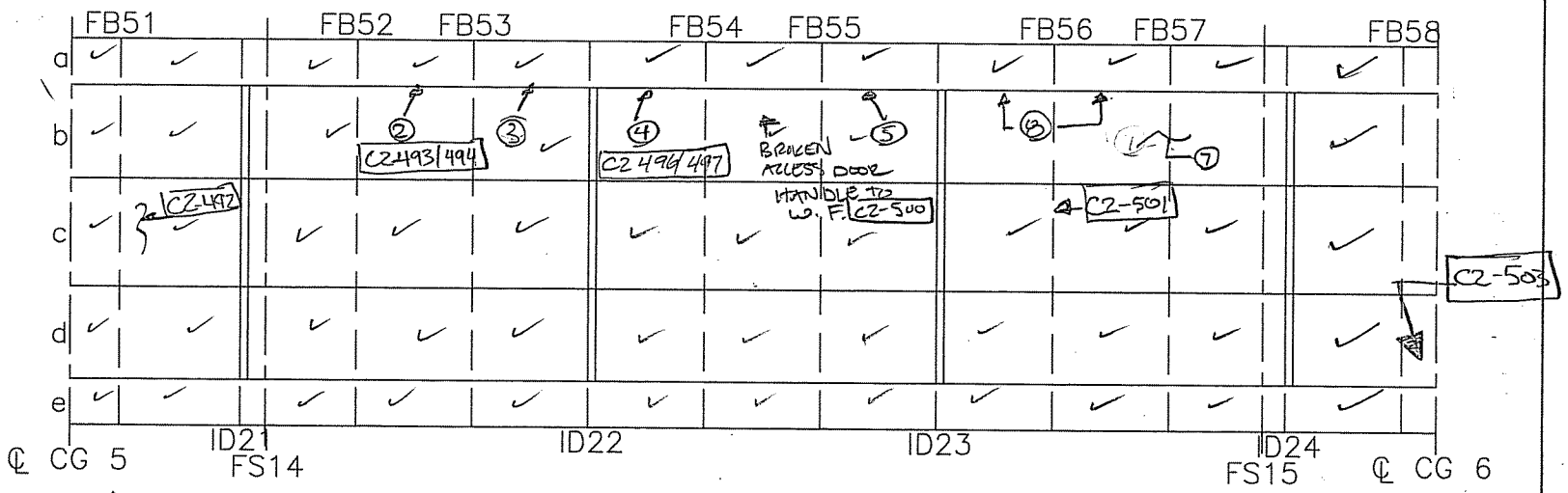
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS, SGB	3/28/8	2 of 2
BKC, BS	3/29/08	1 of 1

BKC/SMD 4/9/08



UNDERSIDE OF DECK





WEST BOX GIRDER

C2-492 - General shot in Bay

① (2) Loose bolts in deck plate splice, 1 NUT MISSING IN DECK SPLICE

② Crack in stiffener to deck weld, Approx. 3 1/8" LONG BASE METAL CRACK C2-493/494

③ CRACK IN STIFFENER TO DECK WELD, APPROX. 1/2" INTO WELD METAL TO SOUTH, NONE TO NORTH

④ CRACK IN STIFFENER TO DECK WELD, APPROX 3 3/8" INTO BASE METAL C2-496/497 C2-495/494

⑤ " " " " " " " 3 1/8" INTO BASE METAL

⑥ APP. 2 1/4" CRACK IN WELD METAL & 1/4" CRACK IN BASE METAL IN WELD AT LIFTING LUG TO DECK C2-498/499

⑦ LIGHT TO MODERATE RUST SHEETING ON WEST WEB

⑧ APP. 1/2" LONG CRACK IN WELD METAL OF STIFF. TO DECK WELD

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BS	3/31/08	1 of 1
		of

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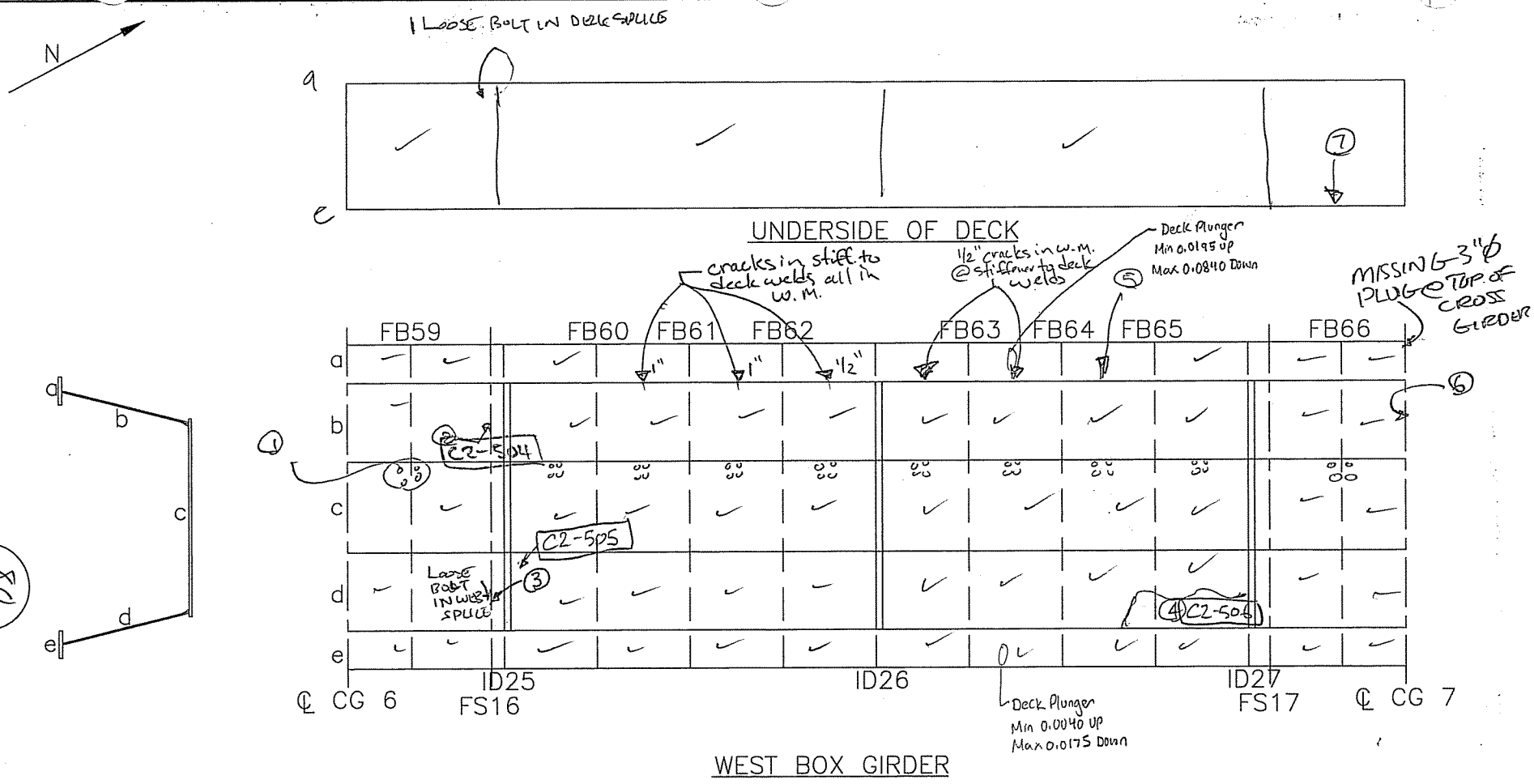


8C 333

① Four empty bolt holes in bottom ② (2) Missing bolts in FB59 splice C2-504

③ (1) Missing bolt in FB 59 splice

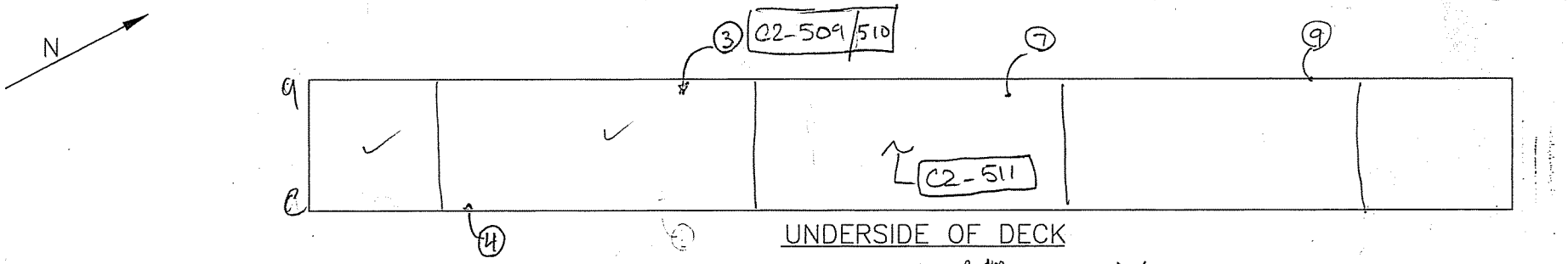
④ Unusual rust stain on floor near ID27. Possible caused by standing water C2-506

⑤ 1/2" crack in W.M. & 1/4" crack in base metal of stiffener to deck weld.

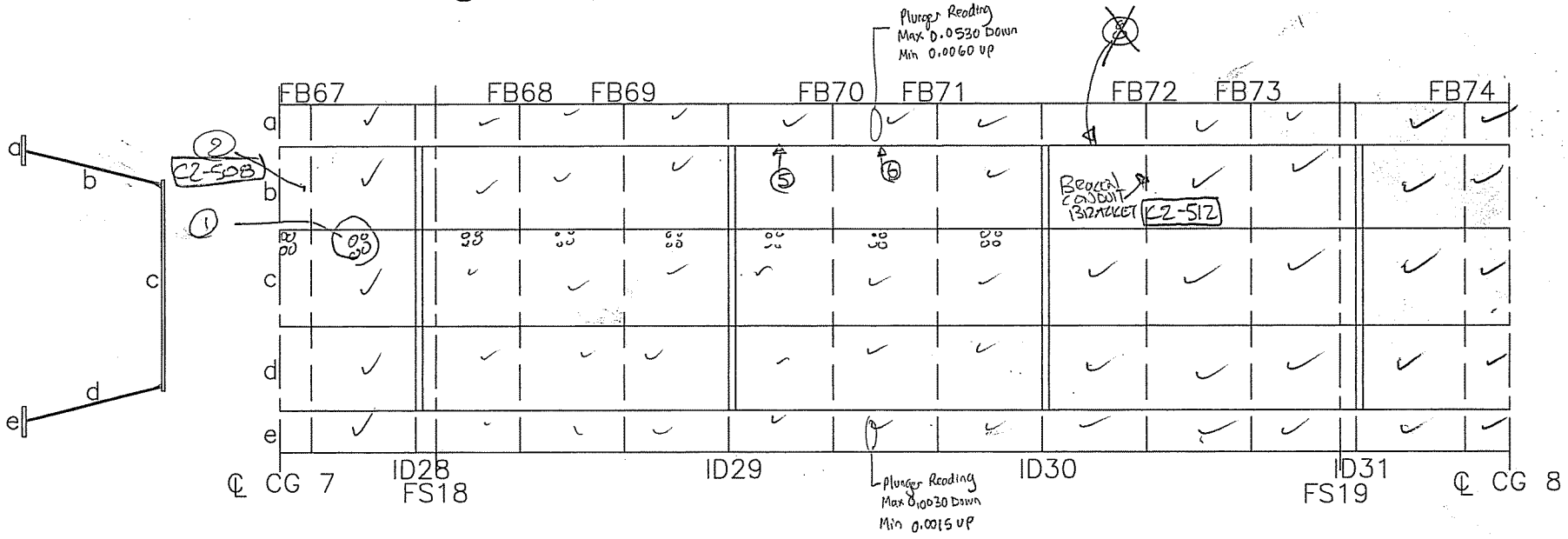
⑥ (1) Missing bolt in C.G. splice

⑦ (2) Loose nuts & 1 missing bolt in deck splice @ FS17

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJ/BS	4/1/08	1 of 2
BKC/SMD	4/9/08	of



UNDERSIDE OF DECK



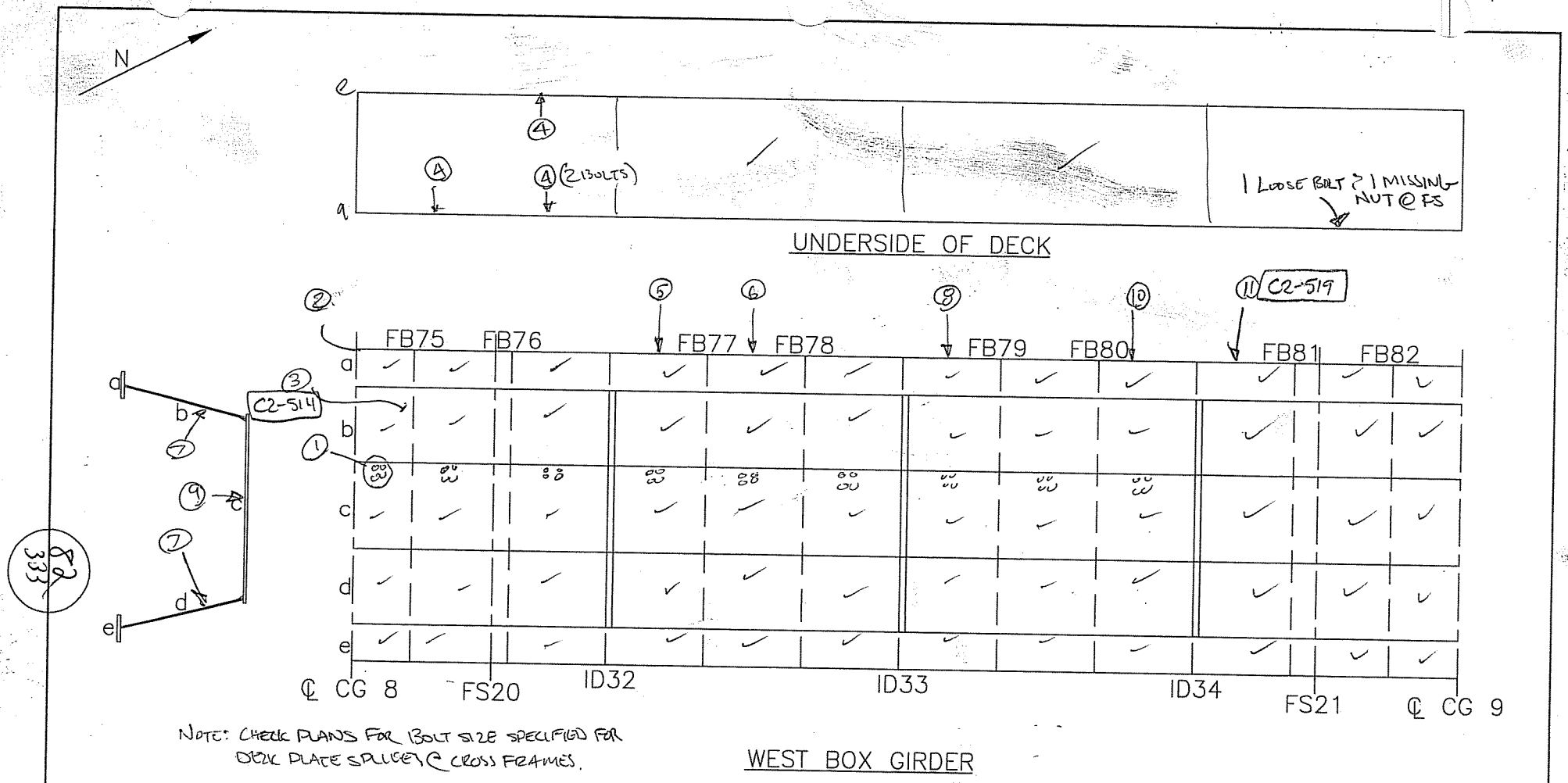
WEST BOX GIRDER

F1 333

1. FOUR EMPTY BOLT HOLES
2. MISSING FOAM INSERT FOR HOLE IN WEB C2-508
3. 1 3/4" CRACK IN WELD METAL OF LIFTING LUG WELDED TO DECK PLATE C2-509/510
4. (2) MISSING NUTS @ FS 18 IN DECK PLATE / 1 BOLT MISSING NUT IN DECK SPLICE
5. 3 1/2" CRACK IN B.M. @ STIFFENER TO DECK WELD
6. 3/4" " IN W.M. " 7. 1 1/4" CRACK IN W.M. of LIFTING LUG/DECK WELD
8. ~~1" CRACK IN W.M. @ STIFFENER TO DECK WELD~~ 9. (1) MISSING BOLT IN DECK SPLICE @ FS 19

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M.		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/BS	4/1/08	2 of 2
MJJ/BS/PN	4/2/08	1 of 3

BKC/SMD 4/9/08



NOTE: CHECK PLANS FOR BOLT SIZE SPECIFIED FOR DECK PLATE SPLICES & CROSS FRAMES.

① FOUR EMPTY BOLT HOLES ② MISSING 3" ϕ PLUG @ TOP OF CROSS GIRDER PENETRATION

③ MISSING BOLT IN DIAGONAL SPLICE CONNECTION C2-514 ④ BROKEN BOLT IN DECK PLATE SPLICE

⑤ 3 3/4" CRACK IN B.M @ STIFFENER TO DECK WELD

⑥ 7 1/4" CRACK IN B.M. BETWEEN WELD @ STIFFENER TO DECK WELD.

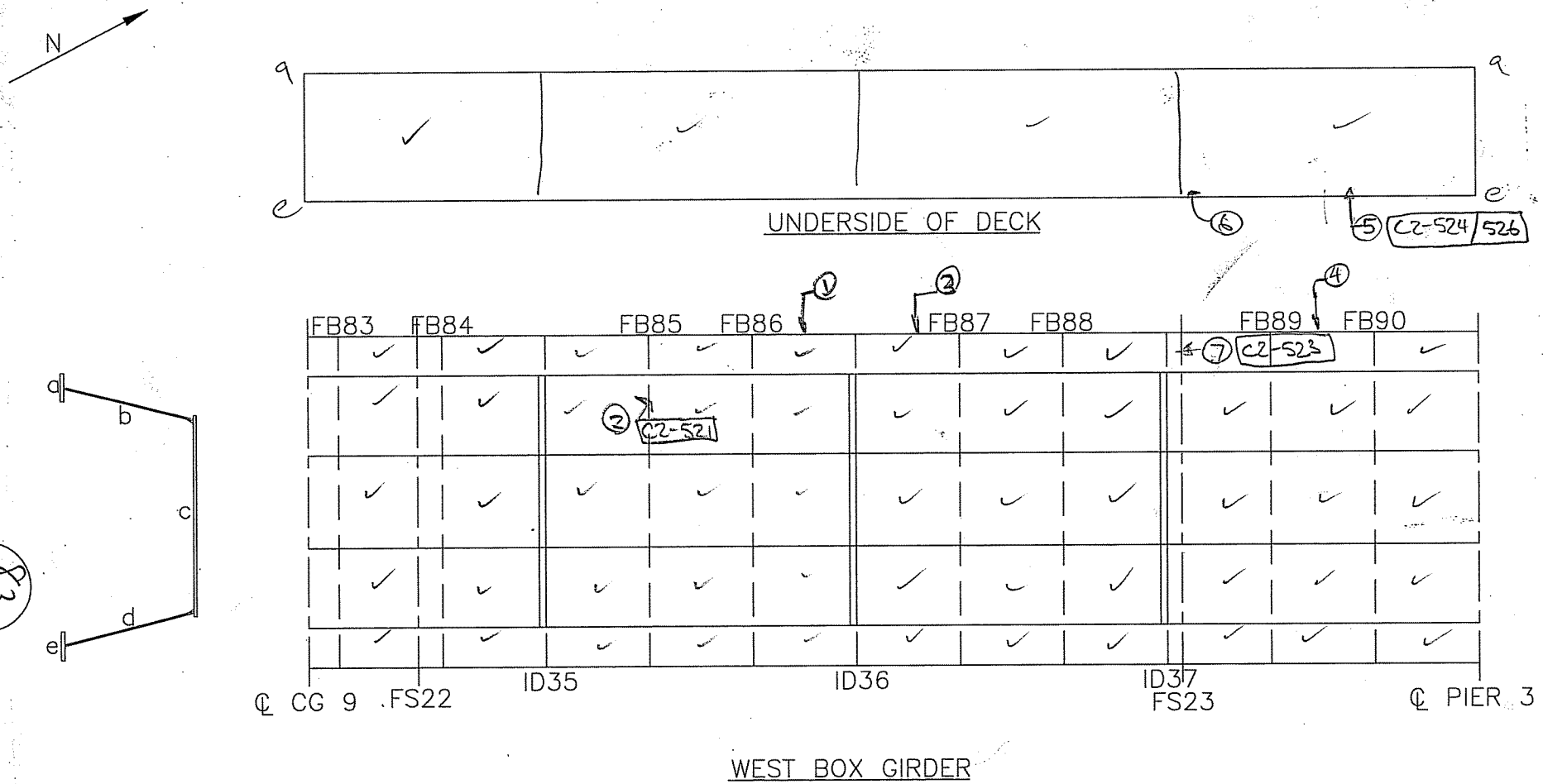
⑦ RUST SHEETING ACCUMULATION ON TOP OF HORIZONAL WEB STIFFENERS C2-515

⑧ 3 1/4" CRACK IN B.M. @ STIFFENER TO DECK WELD ⑨ SHEETING RUST COMMON ON FLOORS, F

⑩ 2 1/2" CRACK IN B.M. @ STIFFENER TO DECK WELD

⑪ TIP OF WELD @ STIFFENER TO DECK APPEARS TO BE BROKEN OFF. C2-519

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MW/BS/PN	4/2/08	2 of 3
		of



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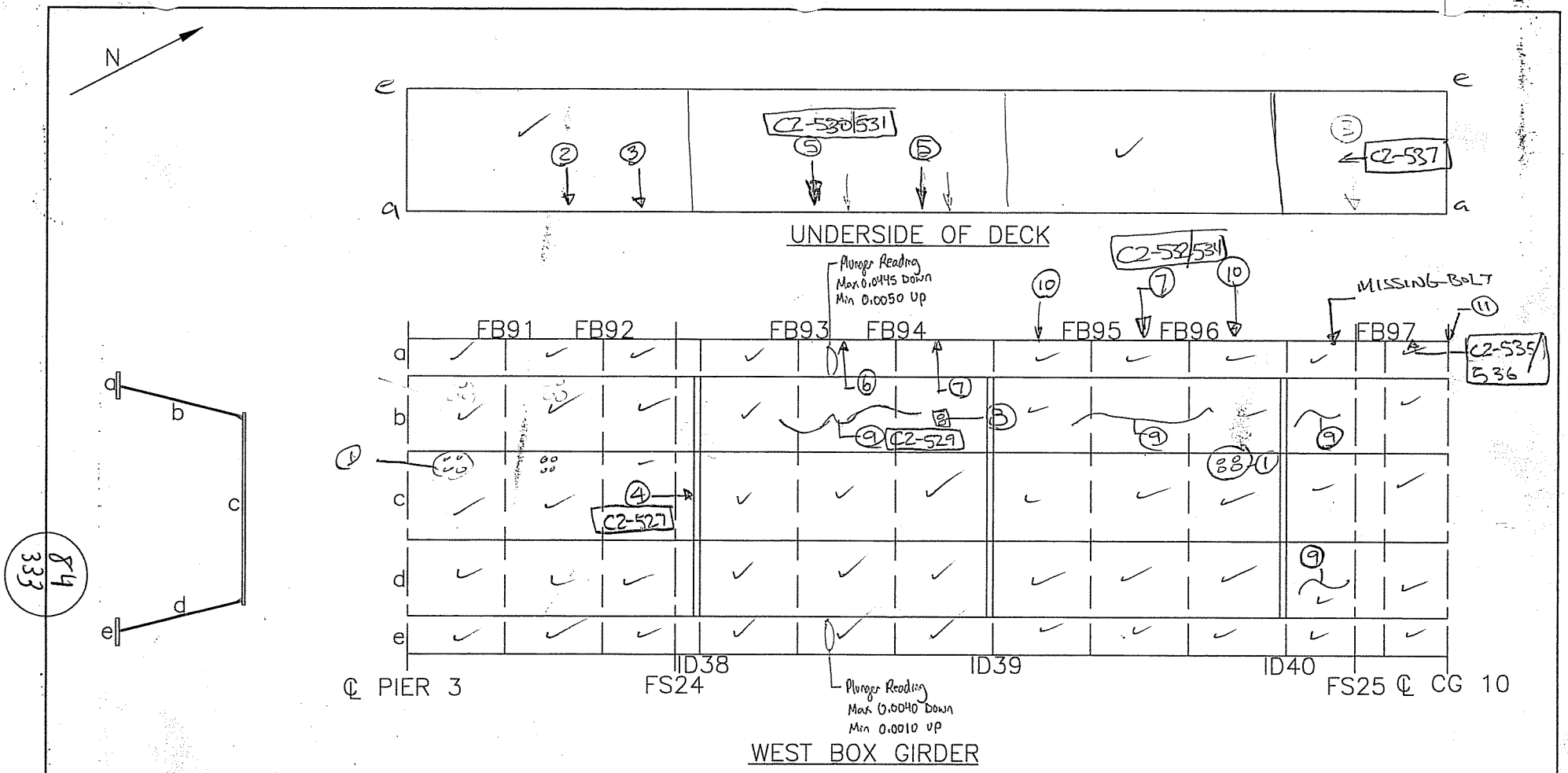
① 3/4" CRACK IN W.M. @ STIFFENER TO DECK WELD
② BROKEN CONDUIT BRACKET @ FB85
③ 1/2" CRACK IN WELD METAL @ STIFFENER TO DECK WELD
④ 3 1/4" Crack IN B.M. OF WELD BETWEEN STIFFENER AND DECK
⑤ 2 3/4" CRACK IN BM. OF WELD AT LIFTING LUG C2-524 - C2-526 ⑥ MISSING BOLT IN DECK SPLICE @ FS23
⑦ TOP LONG. HOR. STIFFENER @ FS 23 IS BENT @ SPLICE CONNECTION C2-523

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA		
NOTES BY: TranSystems			
FRAMING SPAN 3M			
JOB: P710070019			
CREW:	DATE:	SHEET:	
MJJ / BS / PN	4/2/08	3 of 3	
MJJ / BS	4/3/08	1 of	



① FOUR EMPTY BOLT HOLES ② 2" CRACK IN B.M. OF WELD BETWEEN DECK LIFTING LUG.

③ TWO MISSING NUTS AND ONE LOOSE BOLT IN DECK CONNECTION @ FS 25

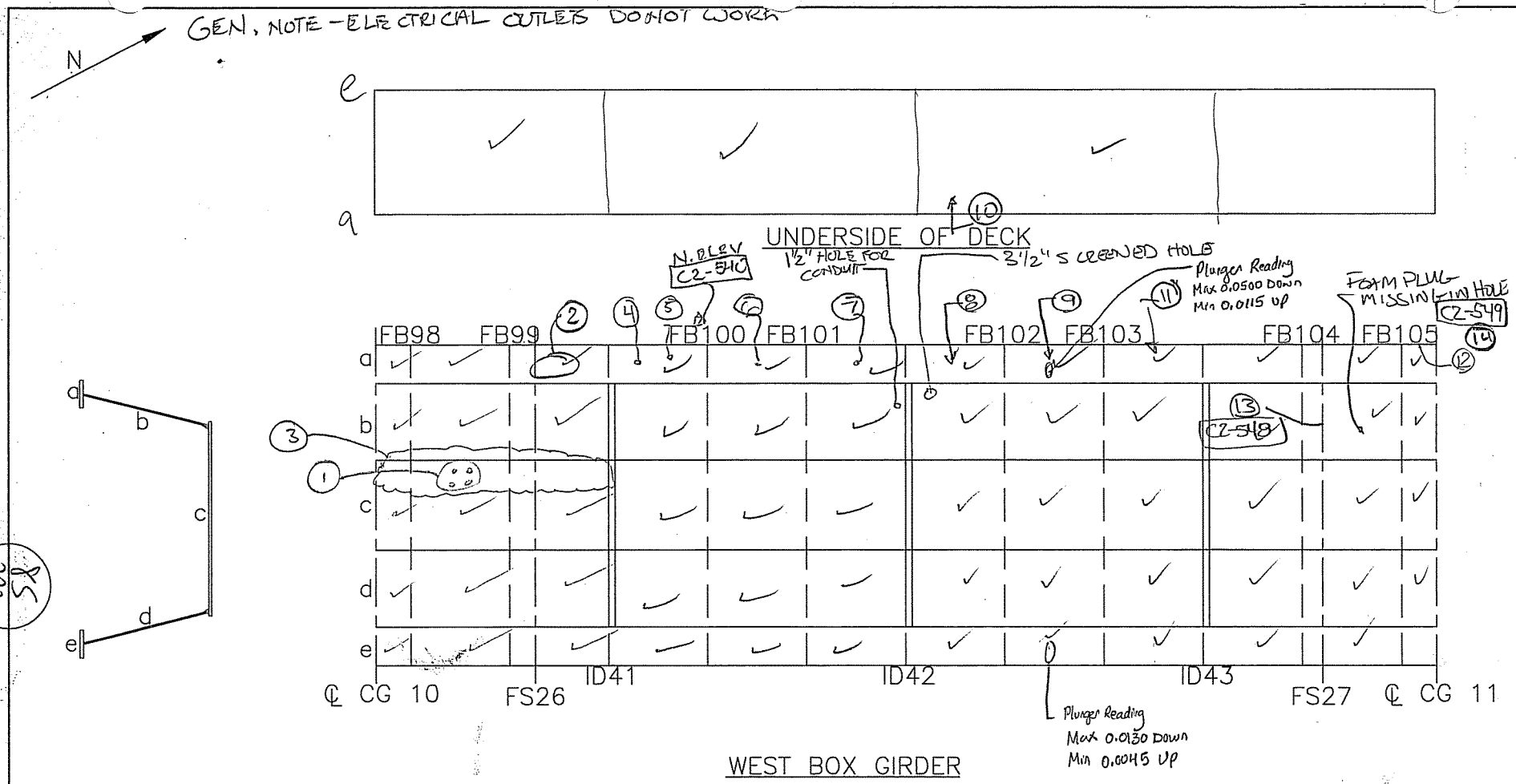
④ BROKEN LADDER RUNG @ ID 38. C2-527 ⑤ 3 3/4" CRACK IN B.M. OF WELD BTWN DECK & LUG C2-530/531

⑥ 1 3/4" CRACK IN B.M. BTWN DECK & STIFFENER ⑦ 5" CRACK IN B.M. BTWN DECK & STIFFENER

⑧ ELECTRICAL OUTLET NOT WORKING ⑨ MODERATE RUST SHEETING ON INTERIOR WEB WALL C2-529

⑩ 2 3/4" CRACK IN BM BTWN DECK & STIFFENER ⑪ FOAM ROLL MISSING AT WEB HOLE @ TOP OF CG 10

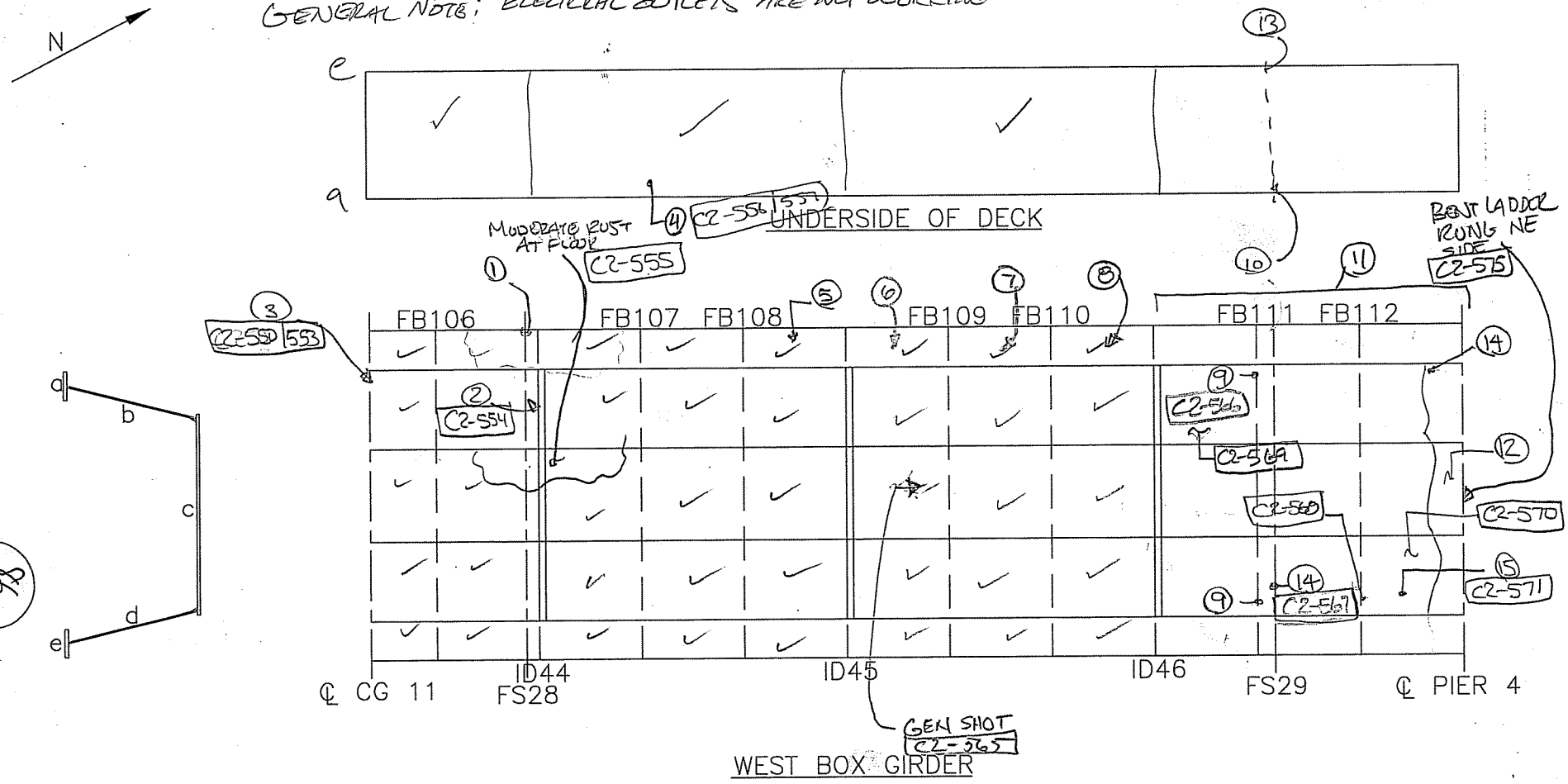
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/BS	4/3/08	2 of 2
MJJ/BS/BCM	4/4/08	1 of 2
BKC, SMD	4/9/08	



1. 4 BOLT HOLES / UNDER STIFF
2. UNDER SIZED BOLTS AT DECK PAN SP WITH MISSING NUT C2-539
3. LT DEBRIS W/ MOISTURE BTWN WEB / 1ST STIFF C2-538
4. CR. NGS IN B.M. 2" 1ST STIFF N. ID41
5. CR. NGS IN B.M. 2½" 2nd STIFF N. ID41
6. CR. NGS B.M. 2" 1ST STIFF N. OF FB100
7. CR. NGS B.M. 4" 1ST STIFF N. OF FB101 C2541-543
8. 2¾" CRACK IN B.M. @ STIFFENER TO DECK WELD
9. 2" CRACK IN B.M. @ STIFFENER TO DECK WELD
10. CRACK IN B.M. 3" @ LUG N OF FB102 C2-544/547
11. 2" CRACK IN STIFFENER TO DECK WELD THROUGH B.M.
12. DIAGONAL STIFFENER & DECK ARE RUBBING - MAKING DUST
13. FIELD SPLICE WEB PLATE IS SLIGHTLY BUCKED, C2-548
14. CR INTO STRESS RELIEF HOLES TOP & BOT (NO PROP. PAST HOLES

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA		
NOTES BY: TranSystems			
FRAMING SPAN 4M			
JOB: P710070019			
CREW:	DATE:	SHEET:	
BKC, MJJ, BS	4/4/08	2 of 2	
BKC/SMD	4/9/08	of	

GENERAL NOTE: ELECTRICAL OUTLETS ARE NOT WORKING



① 4 LOOSE BOLTS IN COP OF DECK SPLICE @ FS 28, ALSO 3 MISSING NUTS @ DECK SPLICE BRACKET IMMEDIATELY SOUTH OF FS 28. C2-554

② RUST SHEETING ON ID44.

③ RUST ON TOP OF CG11 AND ALONG SPLICE PLATES FROM WATER C2-550-553

④ 2 1/4" CRACK IN BM @ DECK TO LUG WELD C2-556/557

⑤ 3 1/2" CRACK IN BM @ STIFFENER TO DECK WELD

⑥ 4 1/4" B.M. CRACK 1ST STIFF N. OF ID45 C2-562 THRU 564

⑦ 1/4" W.M. N. WELD, 1ST STIFF N. FB109

⑧ 3/8" W.M. S. WELD, 1 1/2" B.M. N. WELD, 1ST STIFF N. FB110

⑨ INTERSECTING WELDS @ STIFFENER/WEB/FLOORBEAM WELD. C2-566

⑩ (3) MISSING OR LOOSE NUTS @ EDGE OF DECK SPLICE (FS29)

⑪ BAY ID46-ID47 HAS MORE EXTENSIVE SHEETING RUST.

⑫ PIGEON DEBRIS ACCUMULATING ON FLOOR/TOP OF STIFFENERS NEXT TO ID47 C2-570

⑬ 2 LOOSE BOLTS AND 1 MISSING NUT @ DECK SPLICE

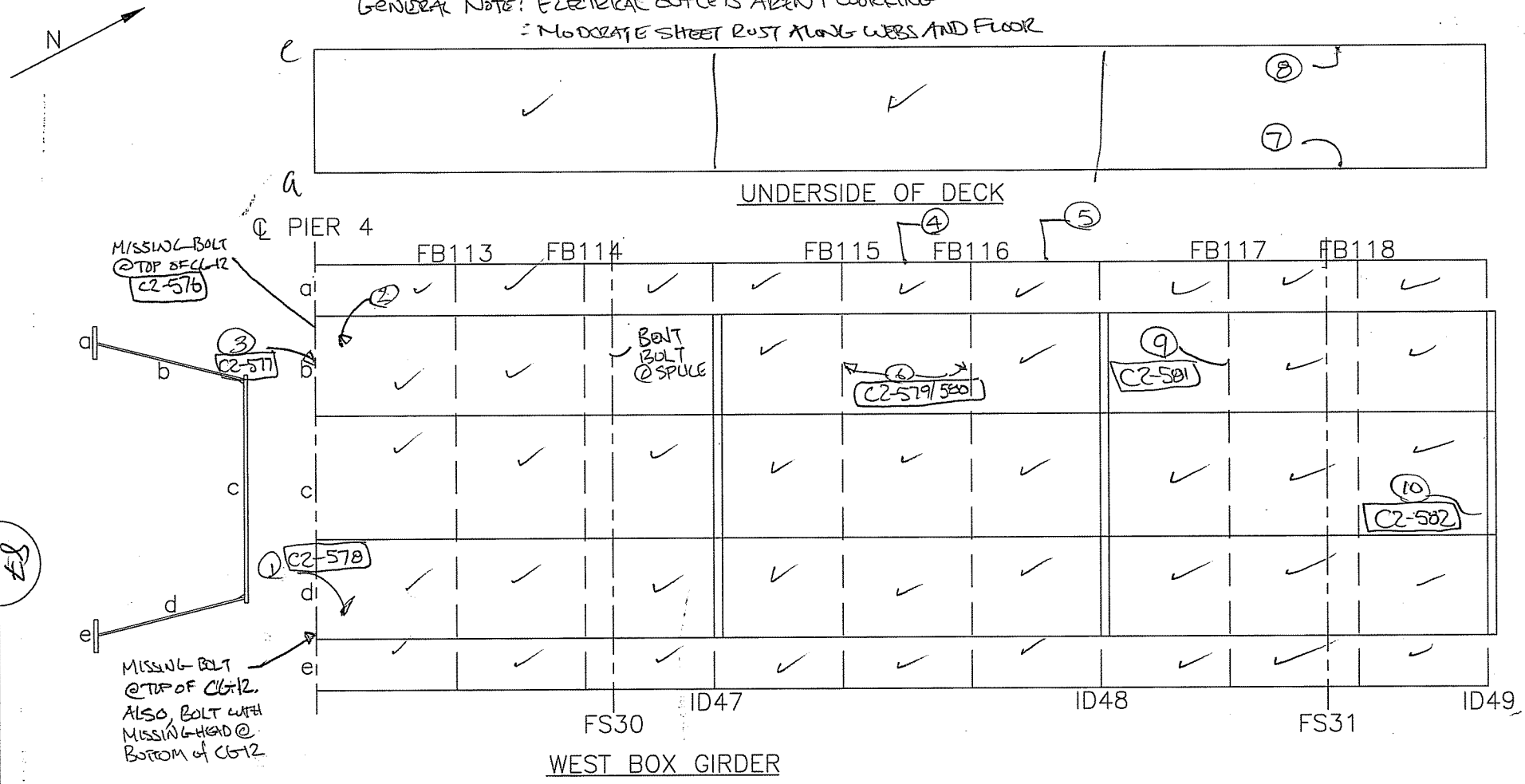
⑭ STRESS RELIEF HOLE HAS CRACK INTO IT, NOT BEYOND. C2-567

⑮ (2) DRIFT PINS IN DIAGONAL SPLICE INSTEAD OF BOLTS C2-571

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/BS	4/4/08	1 of 1
MJJ/BS/BCM	4/5/08	1 of 2

8/33

GENERAL NOTE: ELECTRICAL OUTLETS AREN'T WORKING
: MODERATE SHEET RUST ALONG WEBS AND FLOOR



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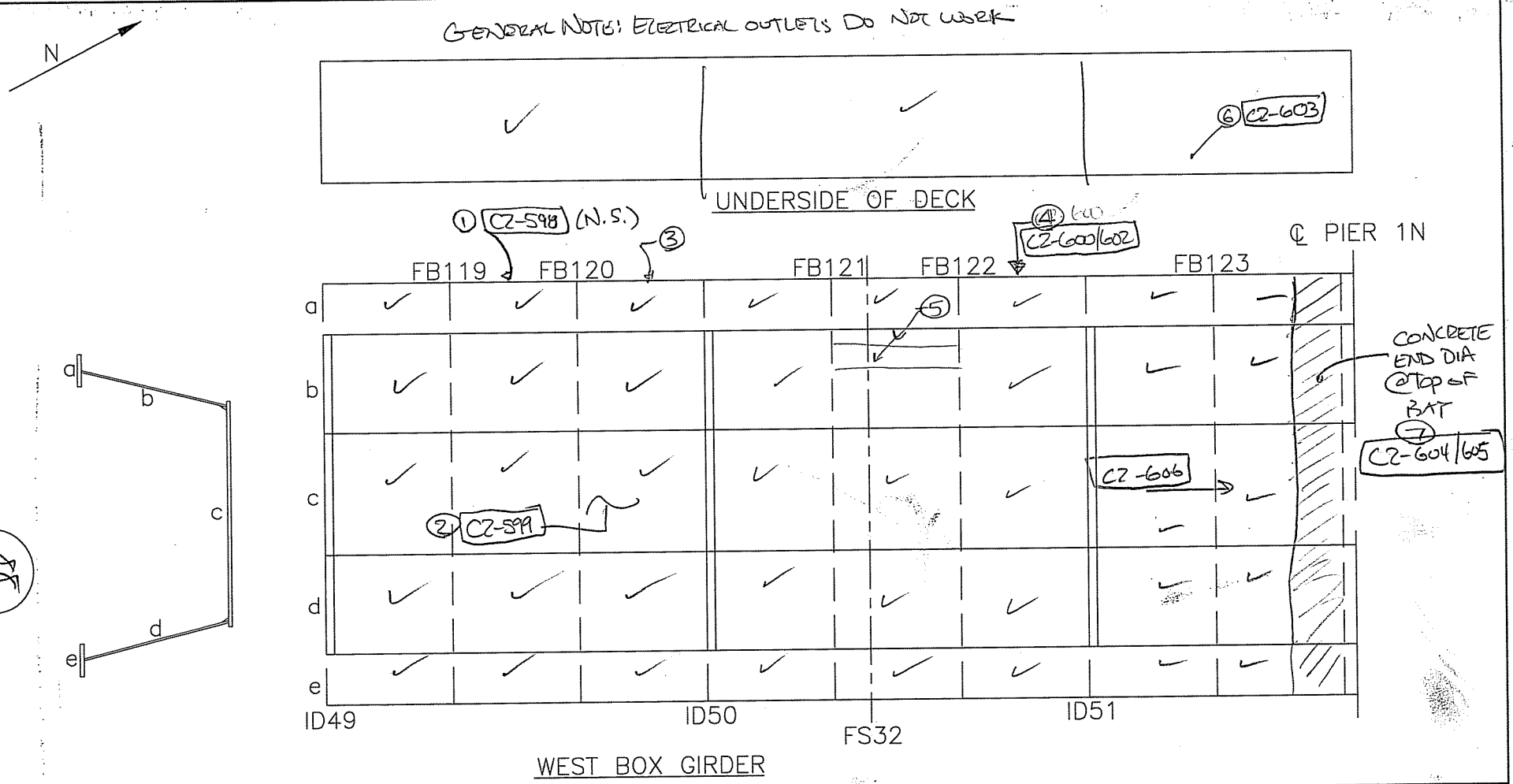
① (2) MISSING BOLTS @ DIAGONAL SPLICE PLATE C2-578
② 1 MISSING BOLT @ DIAGONAL SPLICE PLATE ③ PACK RUST BETWEEN TOP OF CG12 AND SPLICE C2-577
④ 3 1/4" CRACK IN BM. @ STIFFENER TO DECK WELD ⑤ 1' CRACK IN B.M. @ STIFF. TO DECK WELD
⑥ CONDUIT IS ABRADING AT EACH ATTACHMENT TO THE STIFFENER C2-579/580
⑦ (4) MISSING OR LOOSE BOLTS AT OUTSIDE DECK CUP SPLICE
⑧ (2) LOOSE BOLTS @ OUTSIDE DECK CUP SPLICE
⑨ ELECTRICAL JUNCTION BOX IS MISSING 2 OUT OF 4 BOLTS
⑩ LONG. STIFFENER IS SLIGHTLY BENT

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 5M	
JOB: P710070019	

CREW:	DATE:	SHEET:
MJS/BS	4/5/08	2 of 2
		of

GENERAL NOTE: ELECTRICAL OUTLETS DO NOT WORK



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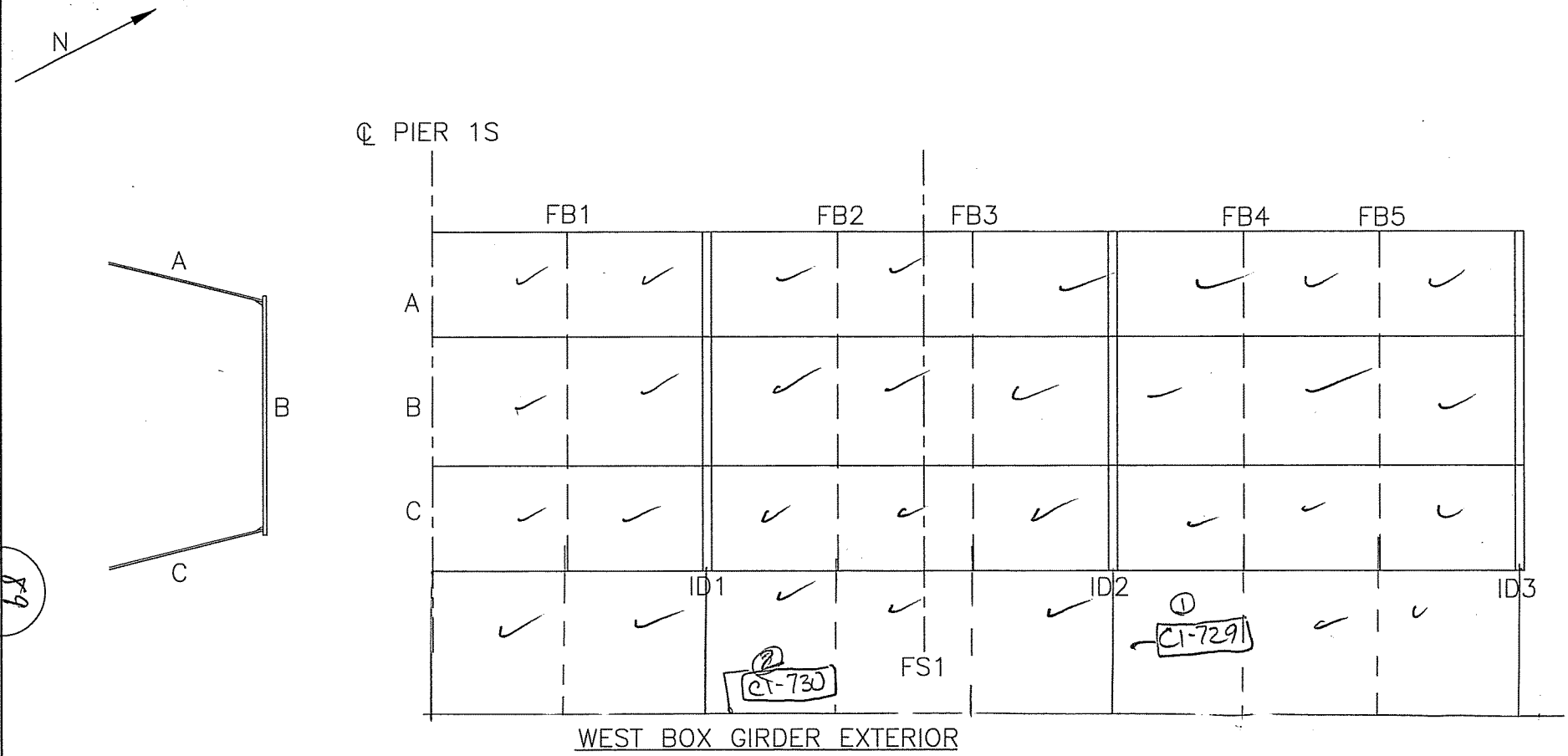
① CRACK IN W.M. of stiffner to deck weld, 1 3/4" on South side, 1 1/2" on N. side C2-598
② ALUMINUM FRAME AND OTHER CONSTRUCTION DEBRIS C2-599
③ 1 1/2" CRACK IN W.M. OF STIFFENER ON SOUTH SIDE.
④ 4" B.M. CRACK IN STIFF to DECK WELD C2-600/602
⑤ SAND ACCUMULATED @ TOP of STIFFENERS
⑥ 2 1/4" CRACK IN B.M. @ LUG to DECK WELD C2-603
⑦ CONCRETE DIA. HAS MINOR TRANSVERSE CRACKS AND EFFLORESENCE ON BOTTOM C2-604/605

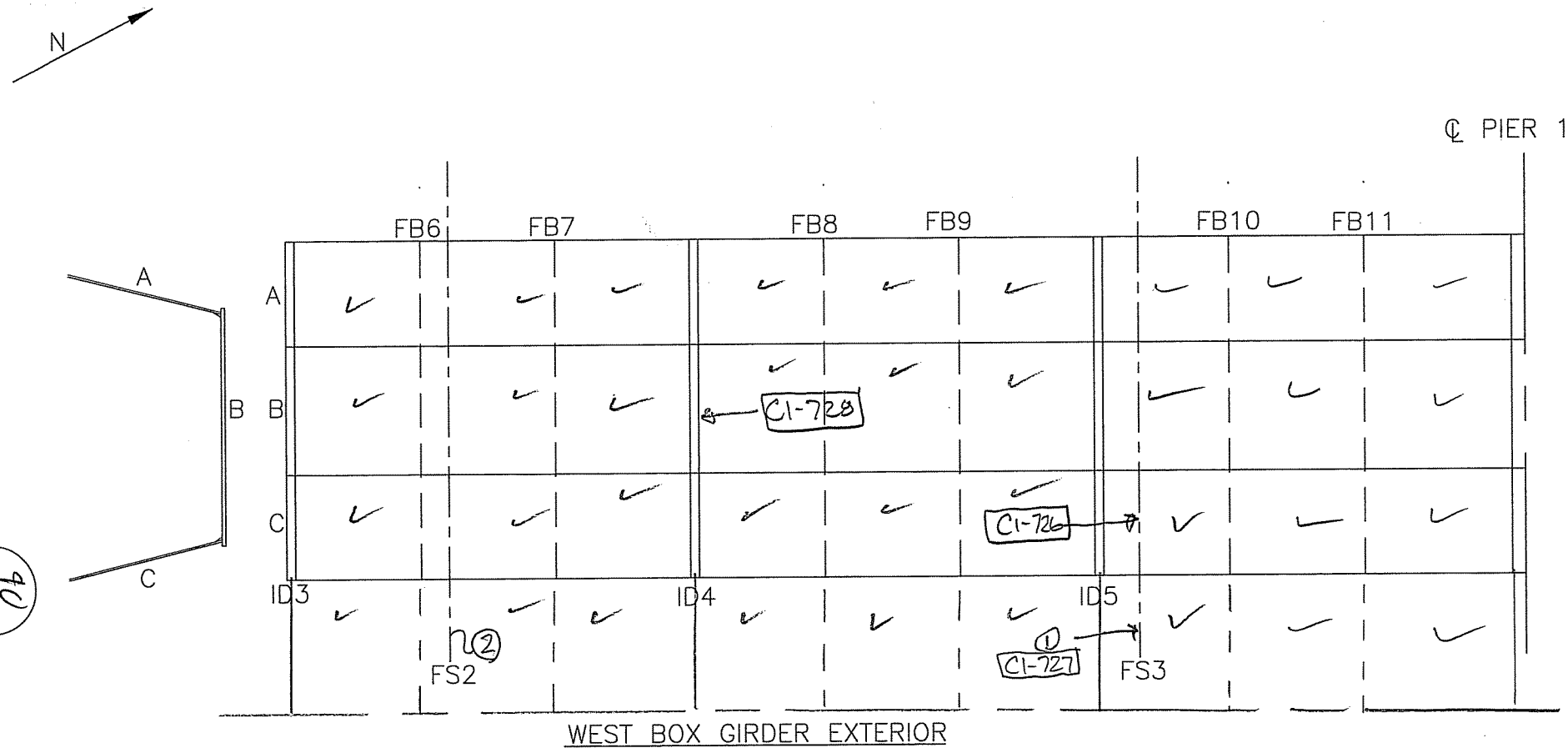
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/BS	4/7/08	1 of 1
		of



① N OF ID 2, MINOR LEACHING THRU DECK SPLICE CI-729

② NO NUTS @ UNDERSIDE OF LIGHTPOLE ATTACHMENT CI-730

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ	4/8/08	2 of 3
		of



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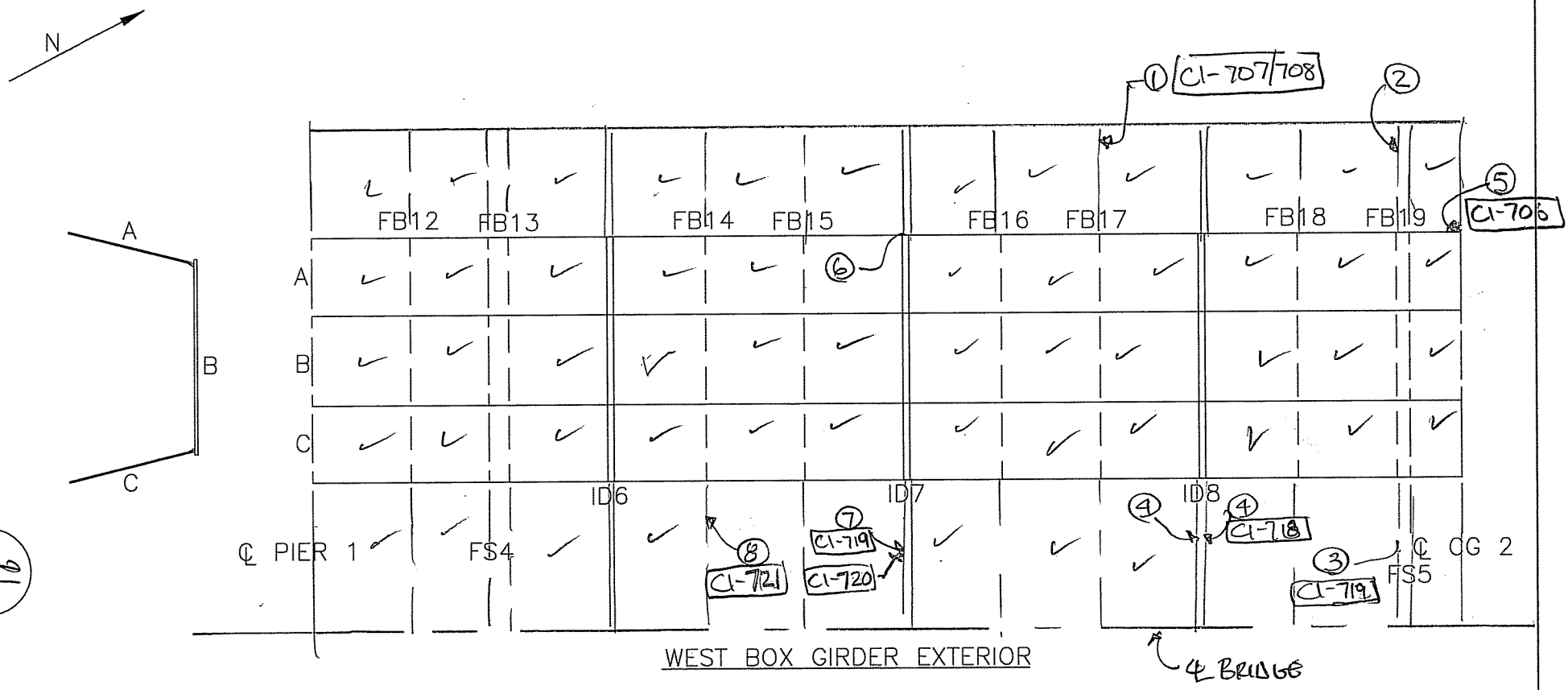
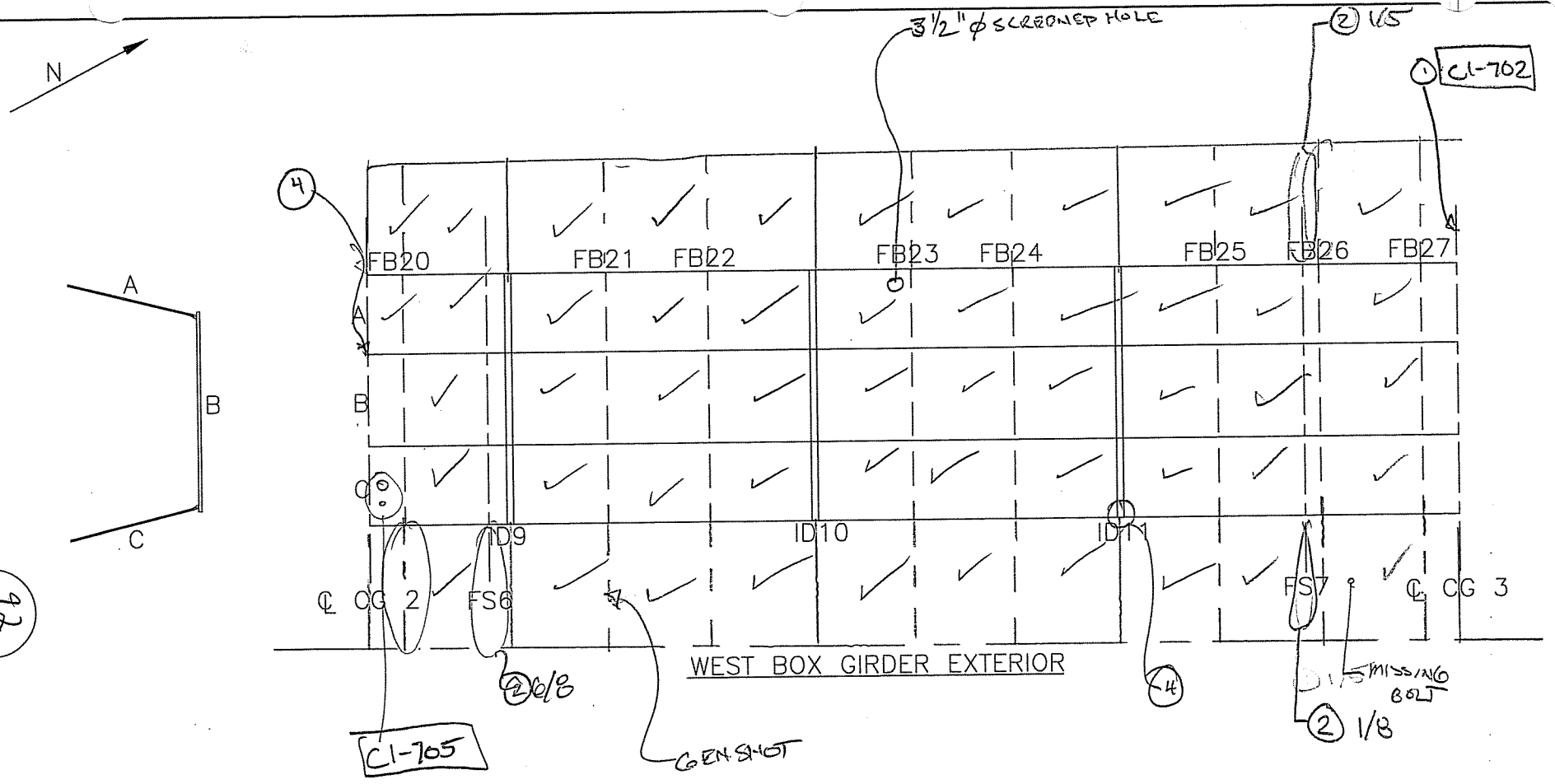
① MINOR LEACHING @ CUP @ FS #3 CI-727
② " " " " " FS#2

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 1M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJ	4/8/08	1 of 3
		of



① BOTTOM FLANGE FB17 BENT CI-707/708
② 2 SCREWS MISSING ON CUP SPLICE @ FS5
③ LEACHING @ FS5 BETWEEN EAST AND WEST GIRDERS CI-717
④ LEACHING @ LONGITUDINAL DECK SPLICE @ ID8 CI-718
⑤ W GIRDER TO CG 2 CONNECTION, PACK RUST CI-706
⑥ (4) MISSING BOLTS BOTTOM PLATE SPLICE ID7 TO WEST GIRDER
⑦ BOTTOM OF LIGHT POLE BRACKET @ S. SIDE OF ID7, NUTS MISSING @ BTM OF DECK CI-719
⑧ FB 14, SLIGHT BEND IN BTM FLANGE @ SPLICE CONNECTION CI-721

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ	4/7/08	1 of 1
		of



1. LEECHING ON CG
2. MISSING VARMIT SCREEN
3. 3/8" MISALIGNED BOT FL AT SPL CI-703/704
4. STIFF & EM. AT BOT CG CI-705
5. CRACKS IN CAULK AROUND CABLES CI-706, GAP IN INSTRUMENT HOLE CI-707
6. LEECHING THROUGH DECK
7. 4-MISSING BOLTS, UP TO 1/4" I.R.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BCM	4/7/08	3 of 3
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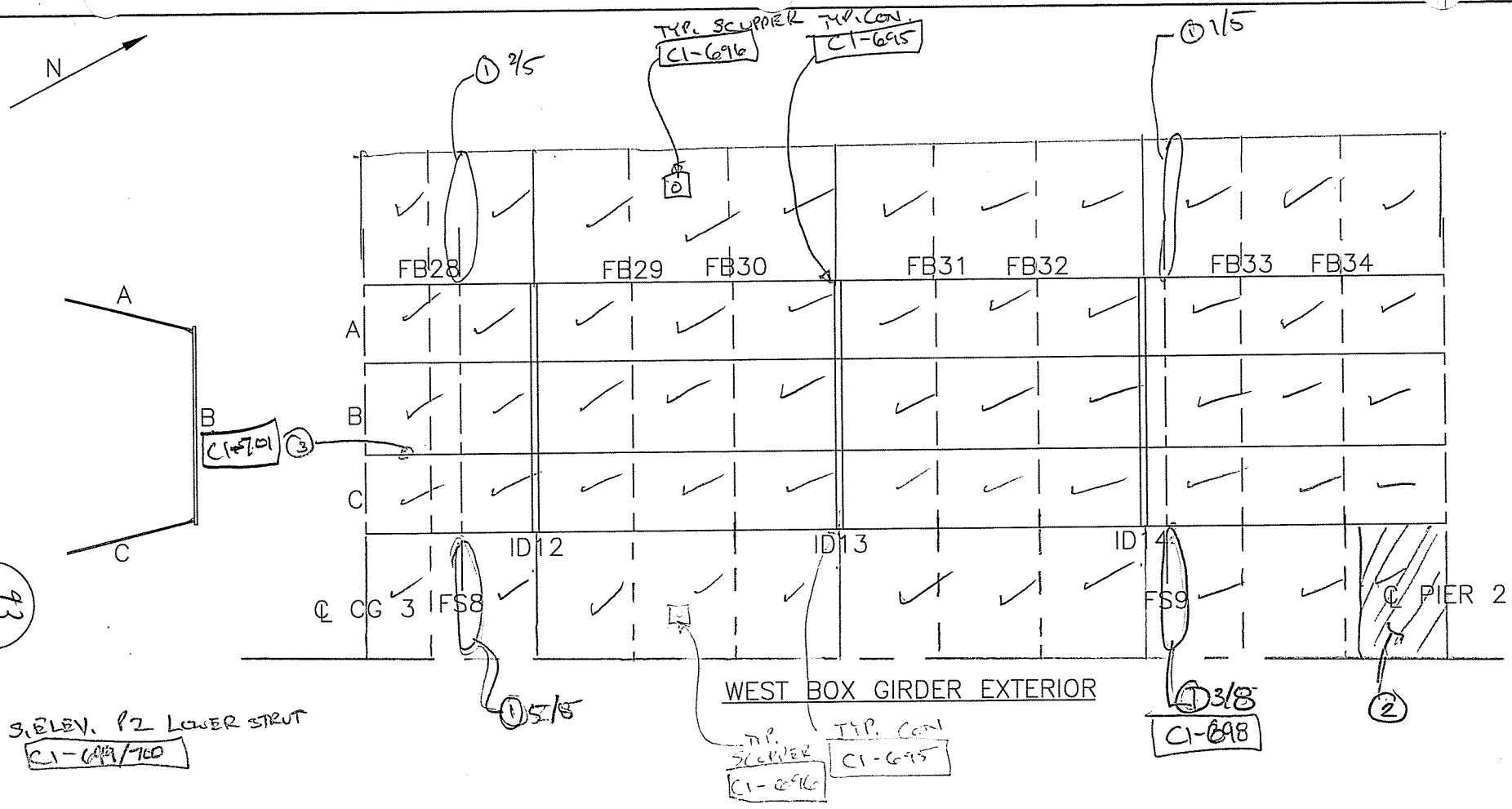

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S. ELEV. P2 LOWER STRUT
C1-699/700

① VARMIT SCREENS MISSING
② CAT WALK & MACHINERY C1-697
③ TYP. BOT WELD IN GOOD COND.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 2M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BGM	4/7/08	2 of 3
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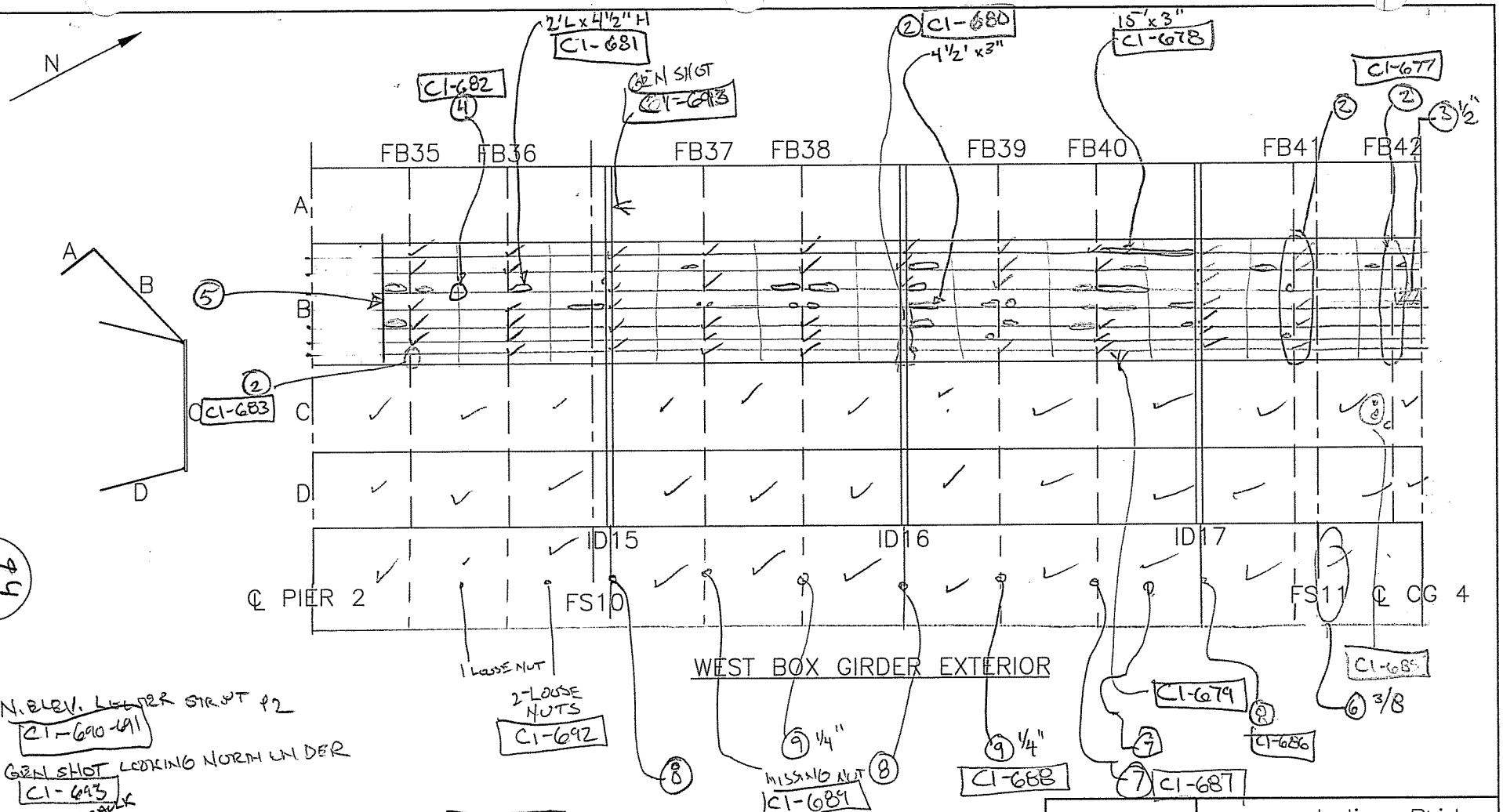

N. ELEV. LOWER STRUT P2
C1-690-691

GEN SHOT LOOKING NORTH UNDER
C1-693

1. CR.'S IN CALK ALONG BOT OF CABLE ANCHORAGE C1-676
2. LEECHING AT WIND FERRING
3. FERRING SR P W/V.R.
4. DOUBLE DRILLED SCUPPER HOLE C1-682
5. DAMAGED/MISSING SCUPPER PLATE C1-684
6. VARMIT SCREENS MISSING 2/L
7. LEECHING THROUGH PLY
8. 1/8" I.R.
9. I.R. BTWN SPL PL'S

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
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BCM	4/7/08	1 of 3
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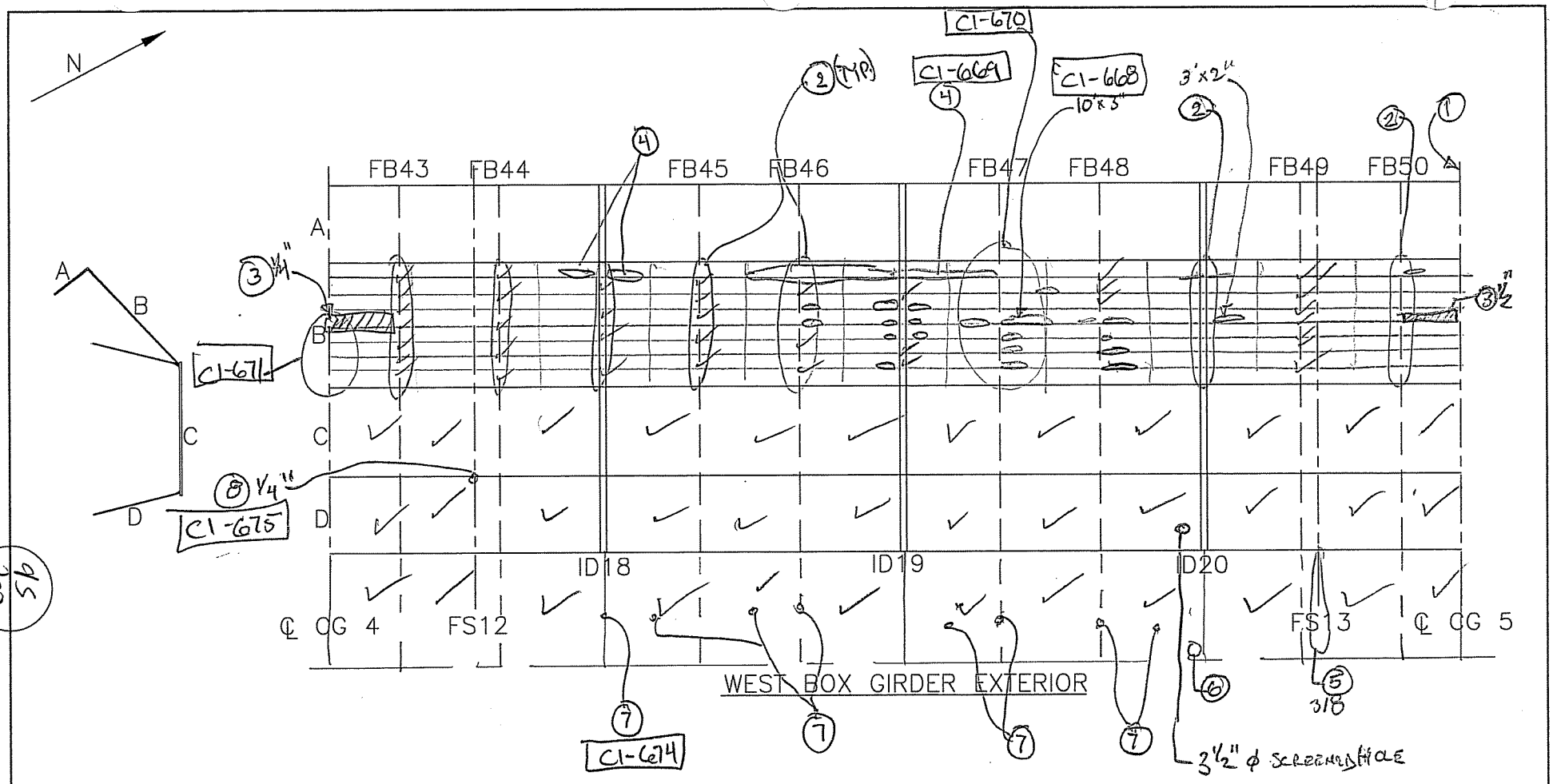

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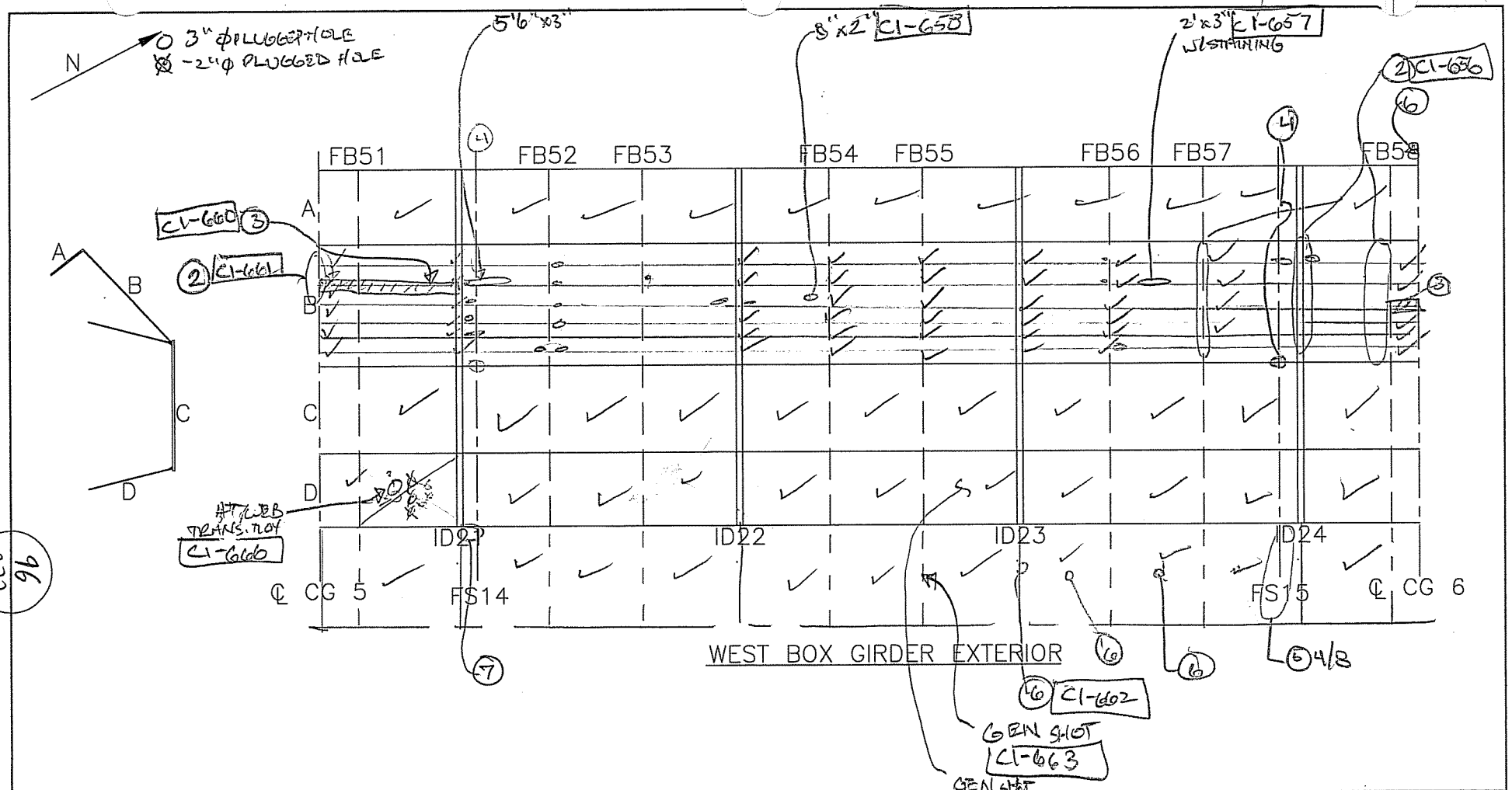
1/32-1/16

1. GAP BTWN CAULK AND CABLES C1-667
2. LEECHING FROM WIND FERRING
3. FERRING SP PL W/ LRF
4. PAPER THIN W/ HOLED THROUGH SECTIONS APPROX 3" TALL
5. VARMIT SCREENS MISSING — OF —
6. GAPS BTWN TOP, S. NUTS AT LT ANCHORAGE S. OF ID20 C1-672/673
7. LEECHING THROUGH DECK
8. MIS-ALIGNED BOT E AT FS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	4/5/08	3 of 3
		of



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1. CG 6 CABLE/GROUT IN GOOD COND C1-655
2. LEECHING FROM FERRING
3. WIND FERRING SH. W/UP TO 1/2" I.R.
4. 1/8" MISALIGNMENT AT FS
5. VARMIT SCREEN MISSING ___ OF ___
6. LEECHING THROUGH DECK
7. UNDERSIZED BOLTS, 1 SHEARED OFF C1-665

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	4/5/08	2 of 3
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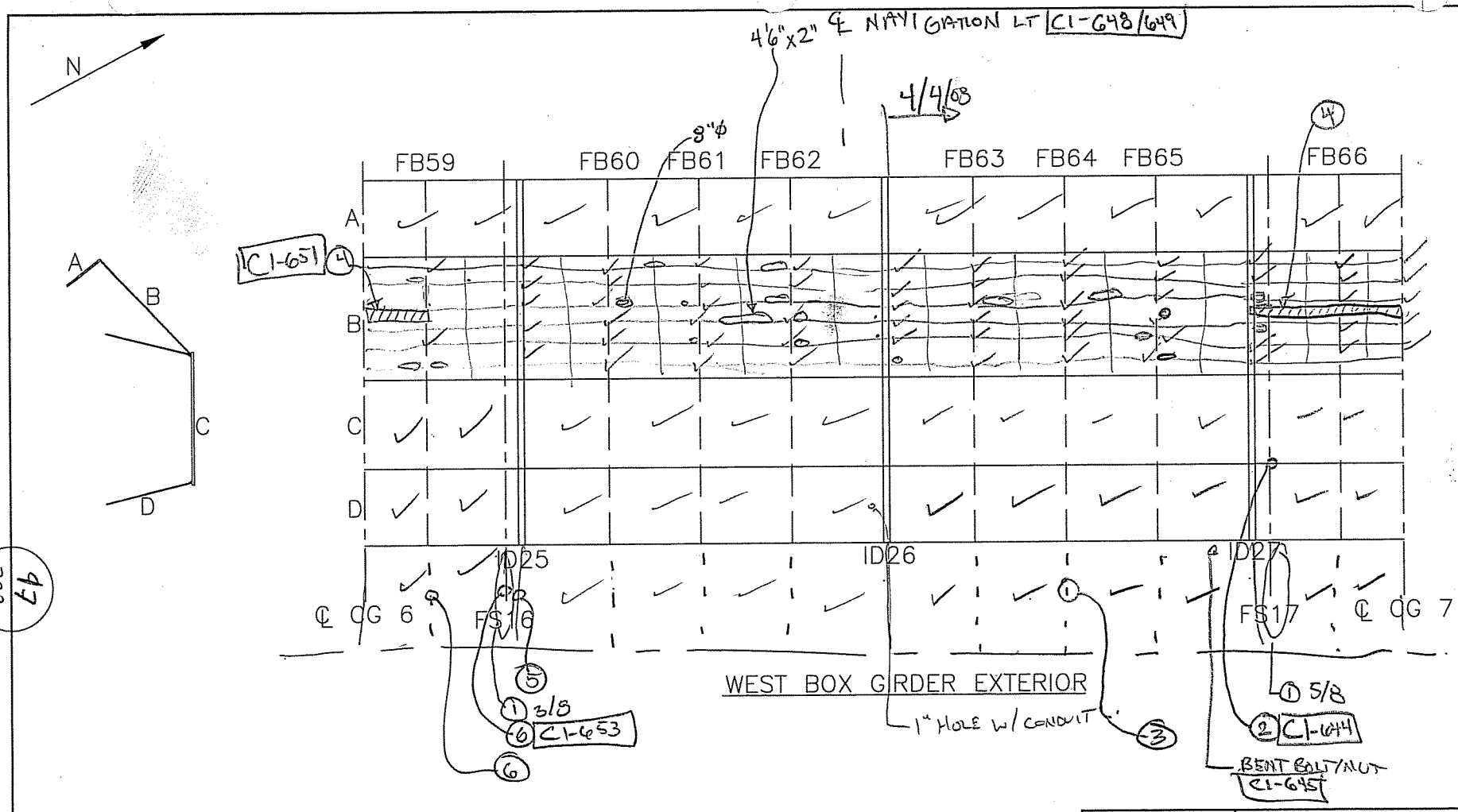

1. MISSING VARMIT SCREENS
2. MISALIGNED FS 1/4"
3. LOW. RUST AT SR W/ NEG. LOSS C1-646/647
4. WIND FERRING SR PL W/ I.R. UP TO 1/2"
5. LEECHING OUTD IN FROM DECK C1-652
6. LEECHING FROM DECK

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	4/4/08	4 of 4
BKC	4/5/08	1 of 3

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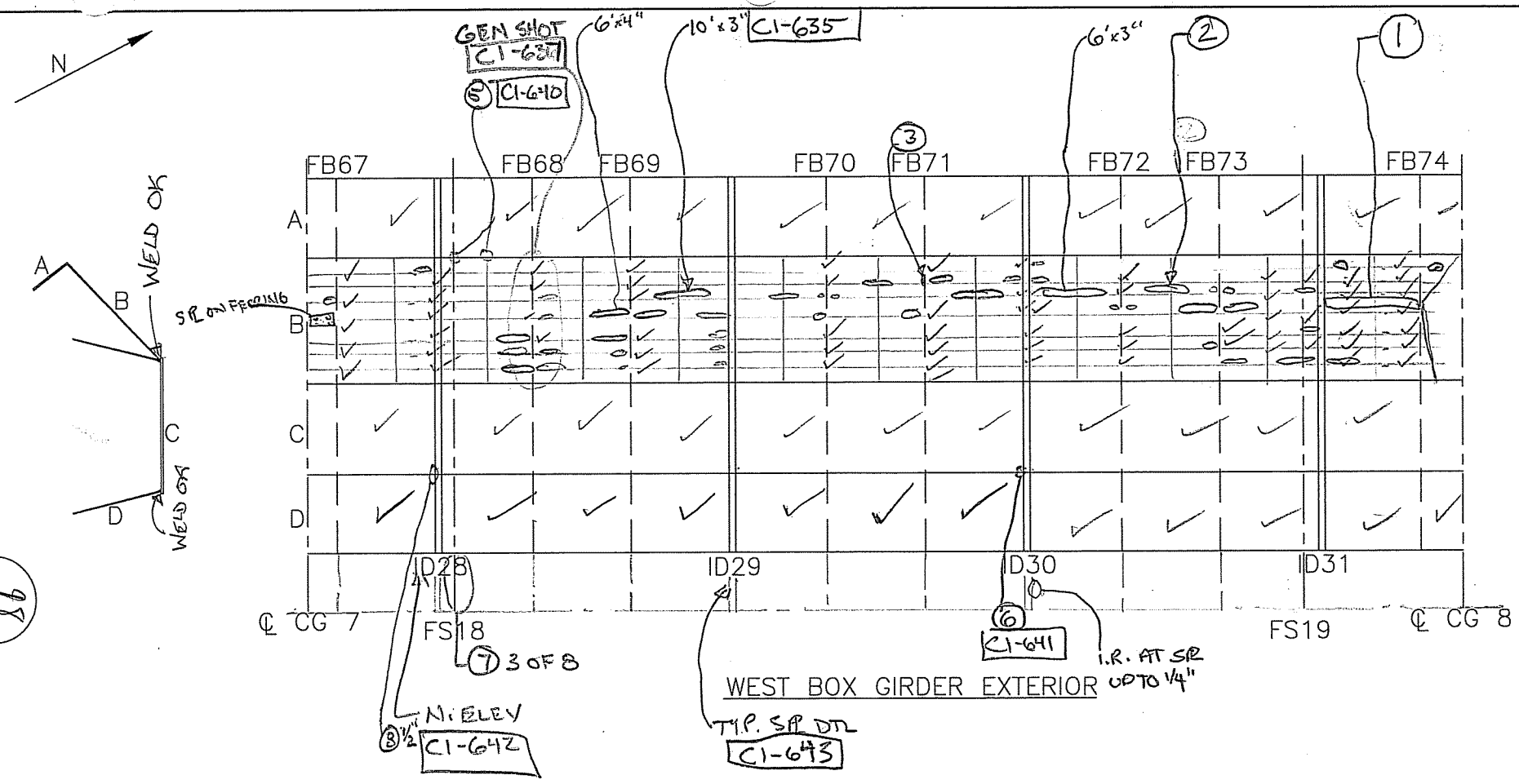

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1 Splice plate at Fairing - West / CG8 C1-633

2 LOSS IN WIND FEERING 6'L x 3"T C1-632

3 1"T x 1/2" W TORCH ON END C1-634

4 CAULK AROUND CABLES IN BOND COND. C1-638+639

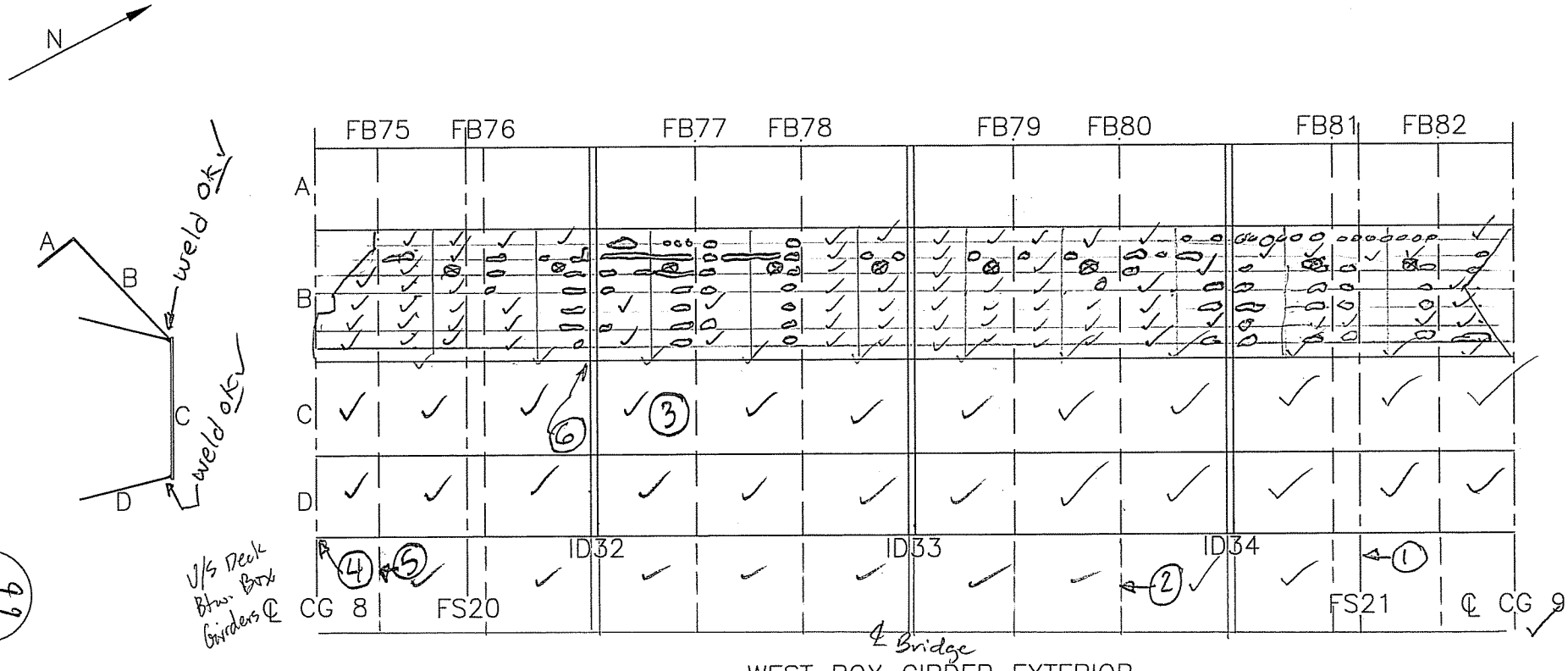
5 MISALIGNED PLATE BOT. E 1/4"

6 1/4" I.R. W/ SEC LOSS UP TO 1/8" C1-641

7 MISSING VARMIT SCREENS — B —

8 I.R. ___ W/ ___ LOSS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
PGN/BKC	4/4/08	3 of 4
		of



WEST BOX GIRDER EXTERIOR

✓ ok-no problems noted
⊗ scupper downspout

1. 1 of 8 screens missing on Deck Pan element
2. minor impacted rust at bot flg of field splice [CI-626]
3. lighting conduit + support [CI-627] (may be wind measuring pole)
4. Minor impacted rust at corner of CG8 [CI-628, 629]
5. 4/8 screens missing at deck pans
6. 1/4" vertical mis-alignment at transverse BF splice [CI-630, 631]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
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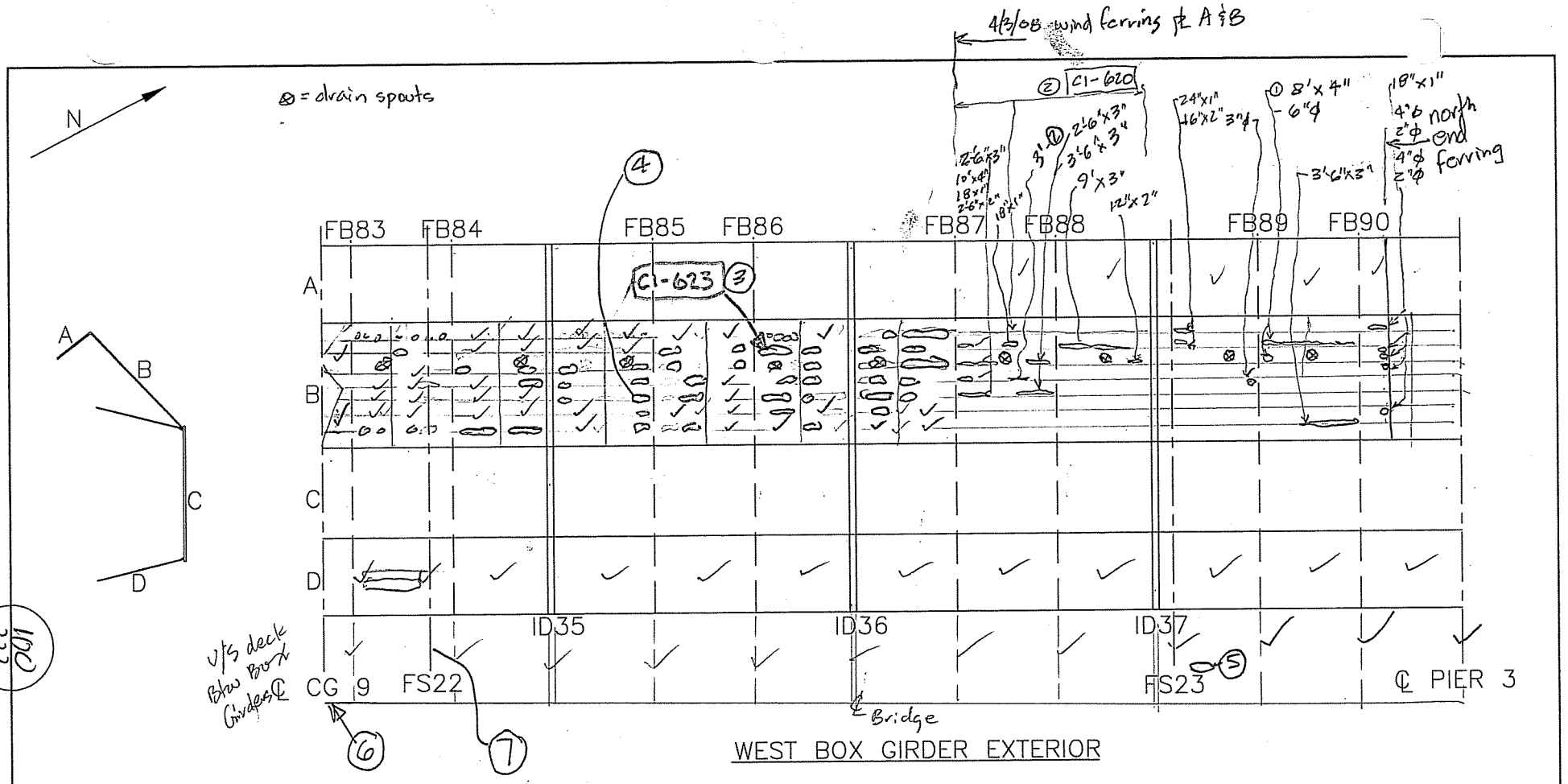
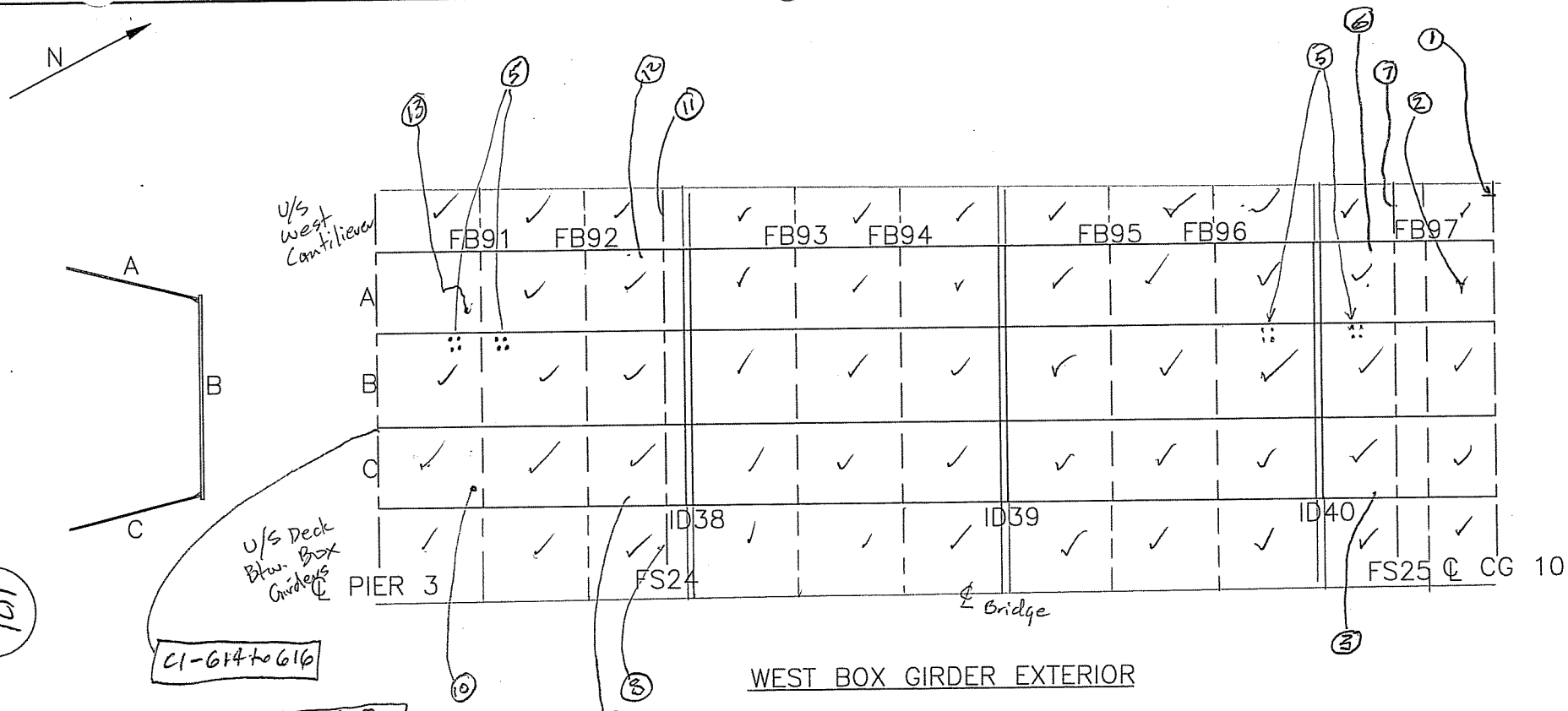
		of



WEST BOX GIRDER EXTERIOR

① series of pinholes with open holes along interior rib. C1-619
② series of pin holes along rib C1-620
③ Typical - Loss in Fairing at many locations
④ 25" wide x 3" high x up to 100% loss C1-624
⑤ screen missing on deck pan
⑥ light pigeon debris on outside of box
⑦ 4/8 deck screens missing C1-625

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
JHR	4/3/08	4 of 4
PGN	4/4/08	1 of 4



WEST BOX GIRDER EXTERIOR

(13) hole West box W. Web [C1-618]
(12) one missing bolt deck support just S. F.S. 24 [C1-617]
(11) one missing bird screen FS24 west overhang.
(10) hole in east web west box just S. FB91, ≈14" below bot. flg FB91
(1) 1 missing cotter pin each in top and bot. cable gasket bolts west end CG10. [C1-605]
(2) N end hor. splice in E web just S CG10 torch cut hole [C1-606/607]
(3) Missing bolt top support for deck at E web W. box just S FS25 [C1-608]
(4) 1/8" pack rust at bot. flg. splice FS25 1K N [C1-609]
(5) group of 4 missing bolt holes west edge bot flg. btw. FS25 and FB96 / and either side FB91
(6) two missing bolts in hor. deck support just so. FS25 [C1-610]
(7) 2 missing bird screens. FS 25 West overhang
(8) " " " " FS24 btw. boxes
(9) missing bolt so. support for deck plate at FS24 [C1-611]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 4M		
JOB: P710070019		
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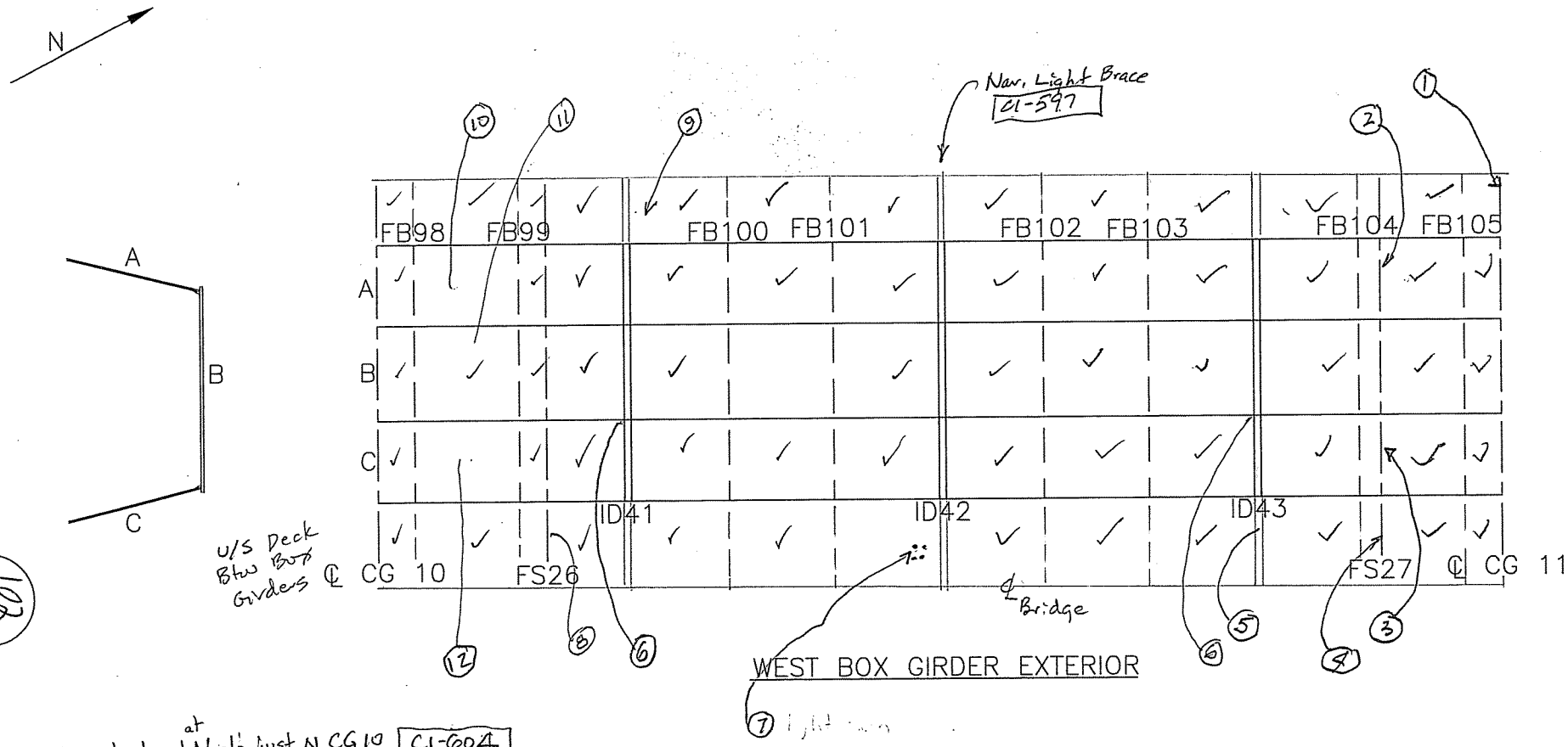
JHR	4/3/08	3 of 4
		of



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(12) Arrested crk at hole just N CG10 C1-604
(11) 4 missing bolts s. FS 26 bot. flg. C1-603
(10) Arrested crk in hole below Inc. splice N CG10 C1-601/602
(1) CG11 west end cable attachments C1-590 cracks in gasket caulking C1-589 missing cotter pin C1-588
(2) Just N. F.S. 27 holes at S.E. hor. splice ℄'s arrested cracks C1-591/592/593
(3) Top hole s. end horizontal splice just S CG11 C1-594 crk at top hole
(4) two bird screens missing. F.S. 27
(5) ID 43 bot. splice ℄ (West) loose bolt. C1-595
(6) Pack rust at bot. corn. ID42 to W. Box E. side. C1-596 (typ.)
(7) Light anchorage S ID42 N.E. bolt not tight. C1-598/599
(8) 5 of 8 bird screens missing FS 26
(9) one bolt missing in deck splice just N ID41 West overhang C1-600

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 4M		
JOB: P710070019		
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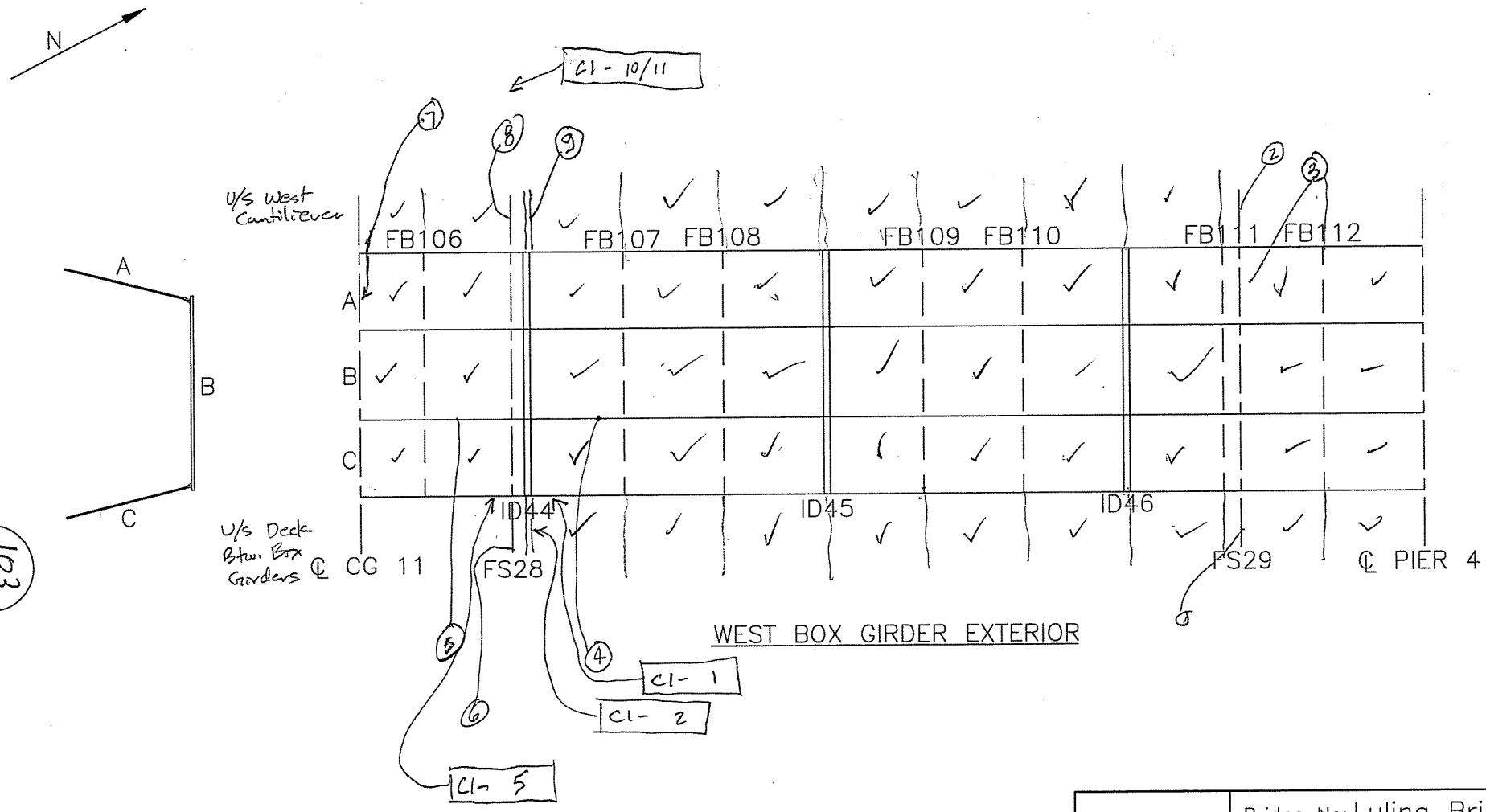
JHR	4/3/08	2 of 4
		of



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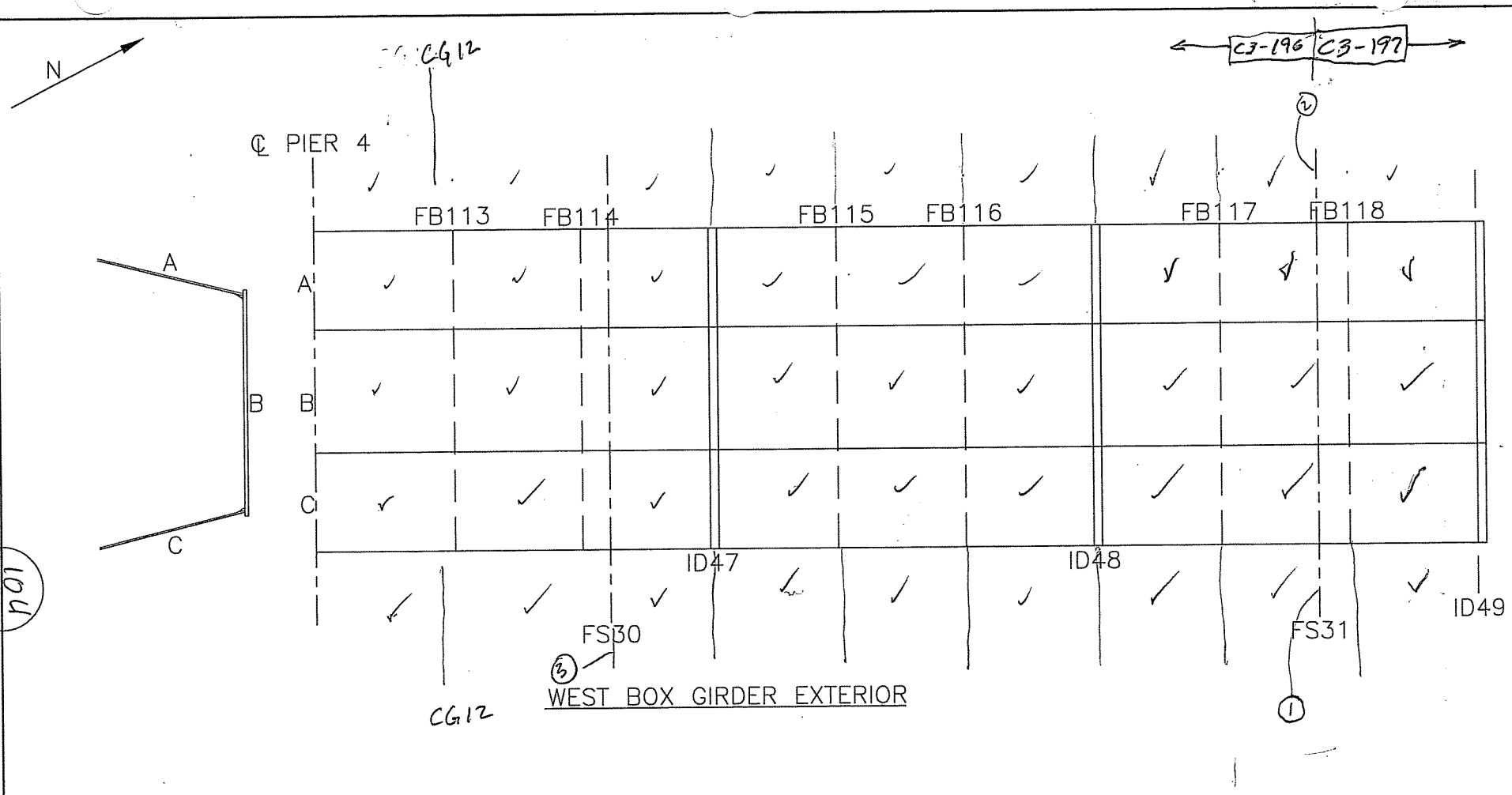
1. 5 bird screens missing. FS 29
2. 1 bird screen missing FS29 outside
3. holes at hng. field splice ~~were~~ ends were observed w/no cracks noted CI-574
4. Typ. weld west box bot. flg. to East web CI-575/576
5. Weld at web transition/bot flg. interface N CG 11 CI- 3/4
6. One missing bird screen FS 28 interior of deck.
7. CG11 con. to west box pitting at West web connection CI- 6/7/8
8. One missing bird screen West o. hang. FS.28
9. 3/16" Pack rust at bot. F. beam. splice ℄ CI- 9

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 4M		
JOB: P710070019		
CREW:	DATE:	SHEET:
JHR	4/2/08	1 of 1
JHR	4/3/08	1 of 4



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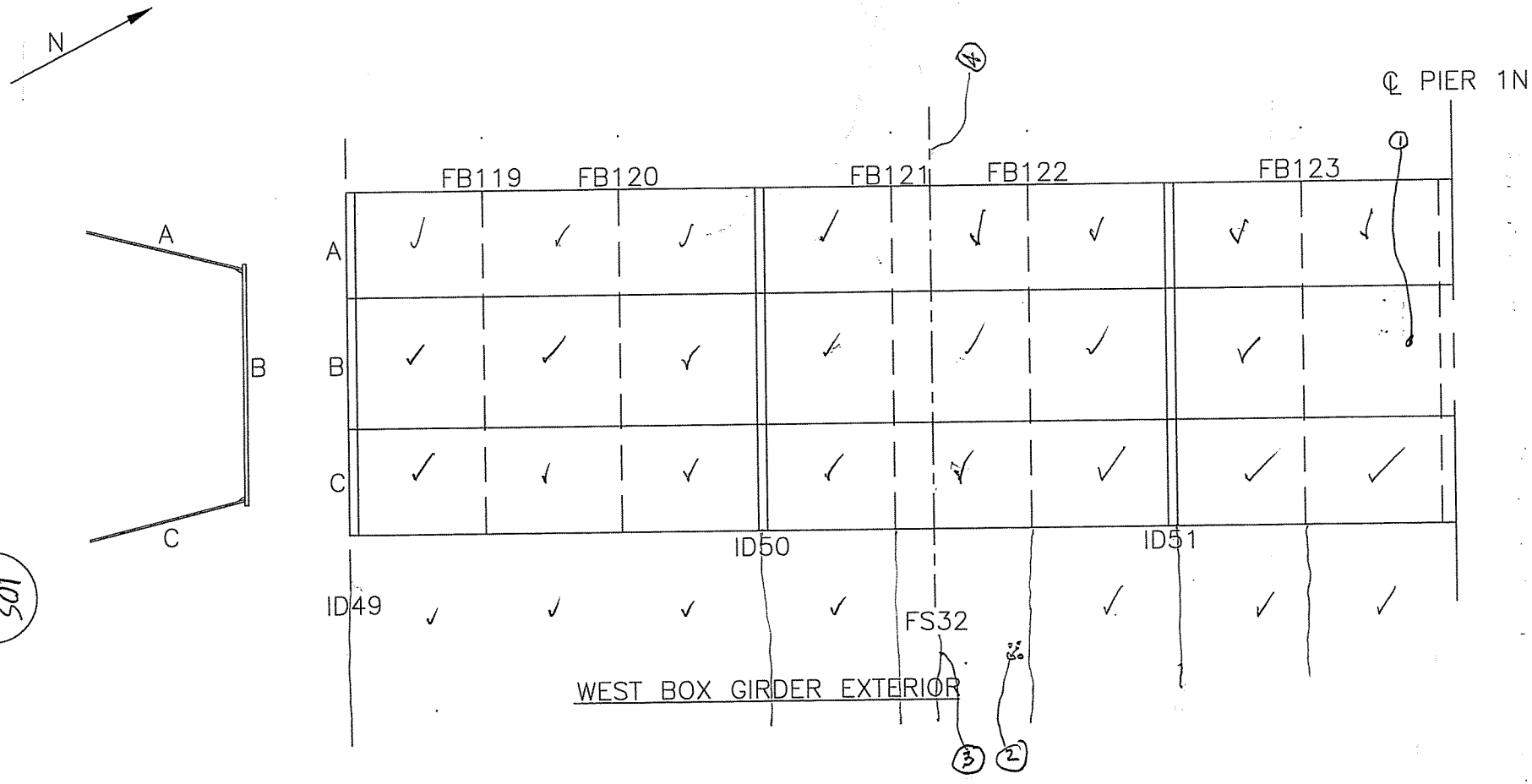
① one missing bird screen FS 31 interior
② 2 - missing bird screens FS 31 west end.
③ 3 - missing bird screens FS 30, interior between boxes
④ Brgs. at Pier 4 are tilted to the North. Mark holes in bottom of cross beam at Pier 4

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
FRAMING SPAN 5M	
JOB: P710070019	

CREW:	DATE:	SHEET:
JHR	3/31/08	2 of 2
		of



105
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① holes in PL B 24 N and 20 S. 1/8" ϕ just S. PIN C3-194

② anchorage for light standard ✓ C3-195

③ five missing bird screens at FS32

④ one missing bird screen W side of West Box.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 5M		
JOB: P710070019		
CREW:	DATE:	SHEET:
JHR	3/31/08	1 of 2
		of

1st

LOCATION - WEST GIRDER, BTWN FB9 & 1D5

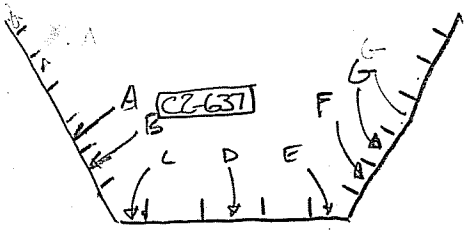
MAX = .0445" DOWN
MIN = .005" DOWN

C2-638
MAX = .014" DOWN
MIN = .006" UP
TIR = .02"

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.565	.562
B	.570	.561
C	.506	.487
D	.505	.493
E	.518	.487
F	.560	.555
G	.559	.556

ALL IN INCHES



LOOKING NORTH

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AREA TESTED WAS GENERALLY CLEAN, WITH NO SHEETING RUST.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC, MJJ	4/9/08	2 of 13
		of

2nd

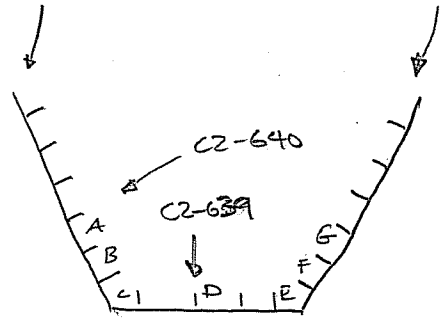
LOCATION - WEST GIRDER BTWN FB13 & 106

MAX = .0425" DWN
MIN = -.004" UP

MAX = .0125" DWN
MIN = -.0055" UP

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.659	.628
B	.657	.626
C	.750	.737
D	.755	.737
E	.753	.748
F	.684	.663
G	.694	.668

ALL IN INCHES



LOOKING NORTH

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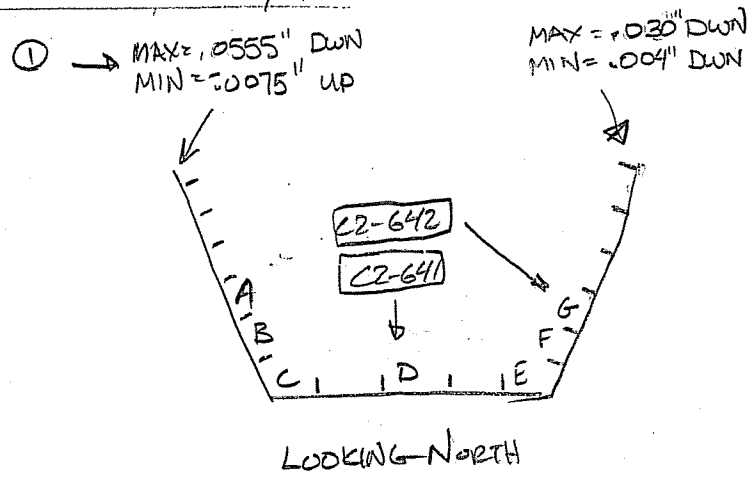
AREA HAD LIGHT RUST SHEETING OVER FLOOR AND WEBS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC MJJ	4/9/08	3 of 13
		of

3RD

LOCATION - WEST GIRDER BTWN ID11 & FB26

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.627	.617
B	.621	.614
C	.734	.722
D	.749	.727
E	.737	.725
F	.628	.611
G	.658	.618
	ALL IN INCHES	



GENERAL CONDITION OF AREA IS MODERATE TO MEDIUM RUST SHEETING ALONG WALLS & MEDIUM TO HEAVY ALONG FLOOR

① CRACK LOCATED @ DIGITAL PLUNGER READING

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC MJJ	4/9/08	4 of 13
		of

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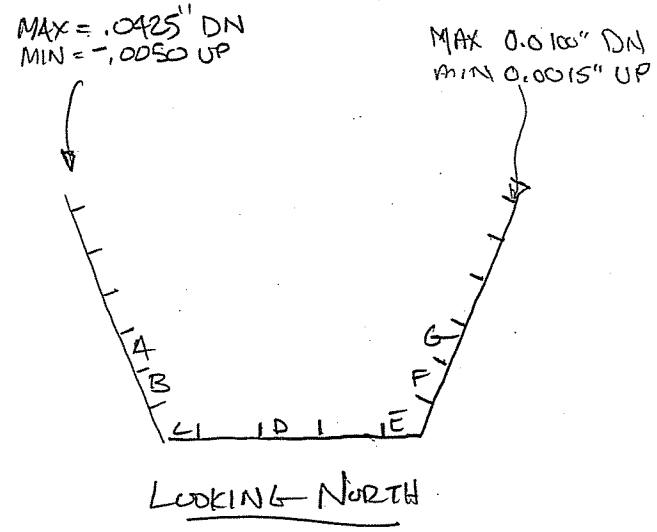
4th

LOCATION - West Girder Btwn FB35 & FB36

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
A	.641	.628
B	.641	.627
C	1.097	1.081
D	1.149	1.113
E	1.121	1.102
F	.673	.635
G	.651	.637

ALL IN INCHES



MODERATE SHEET RUST ON FLOOR, LIGHT SHEET RUST ON WALLS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BLC, MJJ	4/9/08	1 of 13
		of

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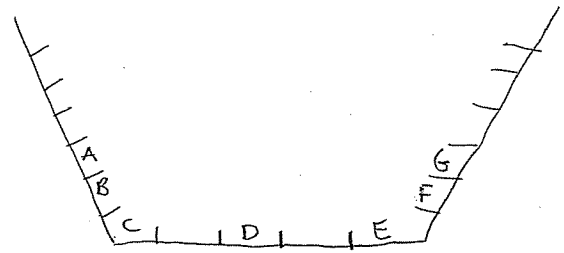
5th Test

LOCATION - West Girder Btwn FB46T 1st stiff south of ID 19

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.632	.626
B	.634	.627
C	.761	.740
D	.754	.739
E	.746	.732
F	.628	.623
G	.631	.624



Looking North

General condition is light rust on walls and floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	5 of 13
		of

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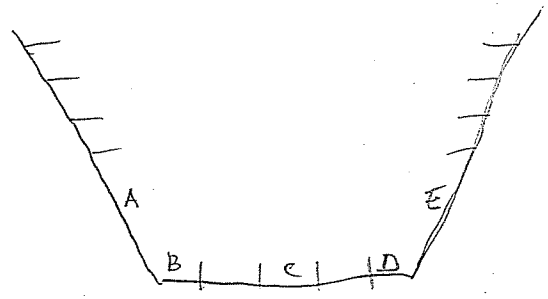
6th

LOCATION - West Girder just south of FB 65

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.563	.566
B	1.131	1.117
C	1.126	1.122
D	1.129	1.121
E	.565	.565



Looking North

General Condition: light rust on floors + wall, some areas of light sheet rust on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: CTY MJJ	DATE: 4/9/08
SHEET: 6 of 13	

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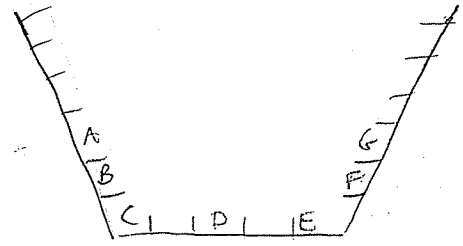
7th

LOCATION - West Girder btwn FB80+ ID34

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.640	.636
B	.638	.634
C	.715	.706
D	.768	.729
E	.725	.712
F	.626	.616
G	.626	.617



Looking North

General condition light to moderate sheet rust on walls
moderate to heavy sheet rust on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems

JOB: P710070019

CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	7 of 13
		of

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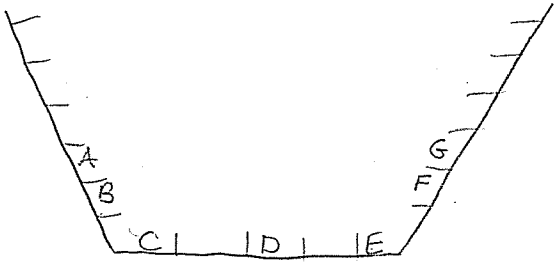
8th

LOCATION - Just N. of Tower 3 W. Box Girder & S. of FB 91

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.634	.632
B	.633	.631
C	1.139	1.119
D	1.132	1.126
E	1.135	1.119
F	.633	.626
G	.635	.628



Looking North

General Condition: light rust floor and walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	8 of 13
		of

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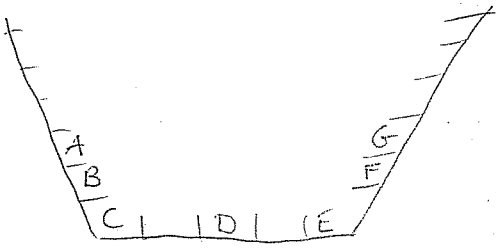
9th

LOCATION - West Girder btwn FB 103 and FD43

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.630	No Power
B	.631	
C	.727	
D	.760	
E	.734	
F	.620	
G	.624	



light rust on walls
light - mod. rust on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

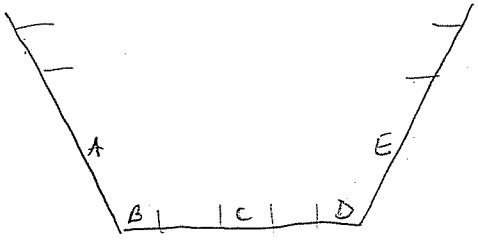
CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	9 of 13
		of

10th

LOCATION - West Girder between FB 118 and ID 49

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
A	.561	NO POWER
B	.865	↓
C	.867	
D	.860	
E	.554	

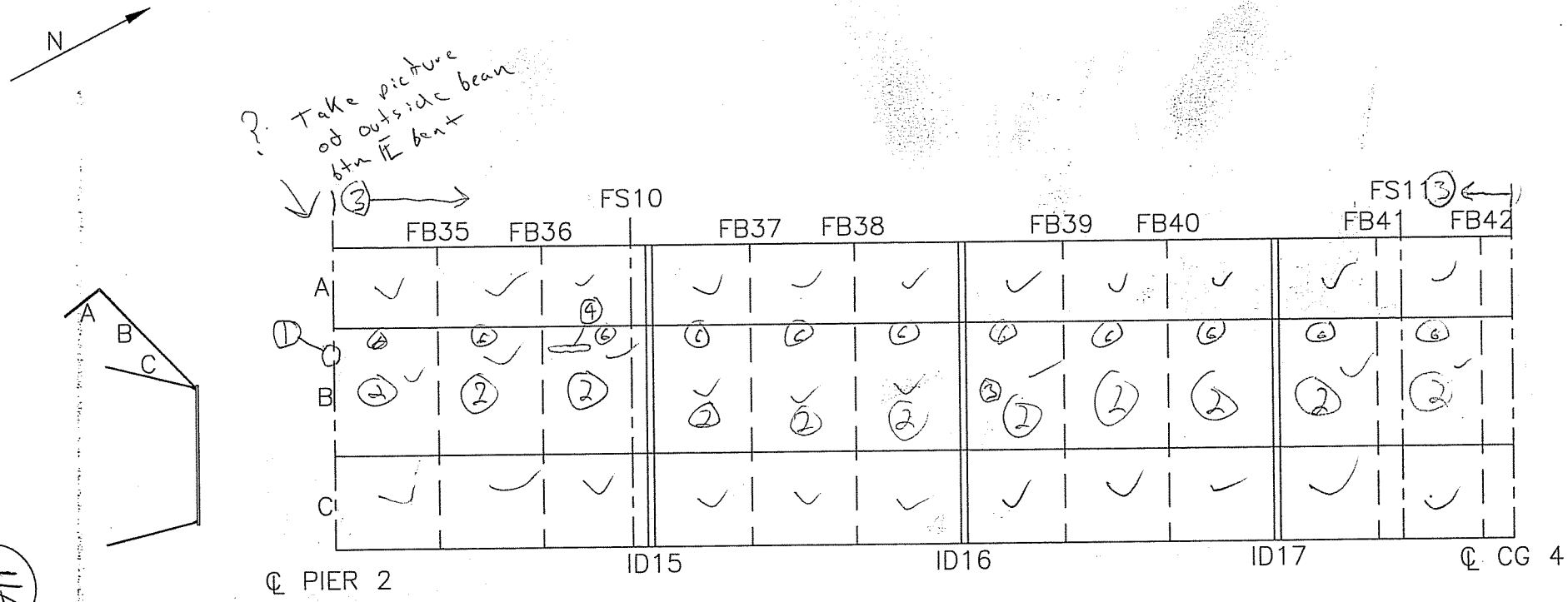


Looking North

Mod sheet rust floor and walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
CTY MJJ	4/9/08	10 of 13
		of



WEST INTERIOR WIND FERRING – PIER 2 TO CROSS GIRDER 4

① W.S., S. end, the screens to close the end in have fallen off [C3-176]
② Pigeon droppings building up on stiff. [C3-175]
③ 100% loss on WF plate on top of stiff. (See ext. insp. form location & dimension)
④ Lamination in WF plate w/area of 100% loss [C3-177]
⑤ S. of wind ferring btm ⊥ bent fascia beam on W.S. [C3-179]
⑥ W. of deck, on WF, 3rd stiff. from top of B, road fines (sand) buildup [C3-180]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB/JHR	3/24/08	1 of 3
		of

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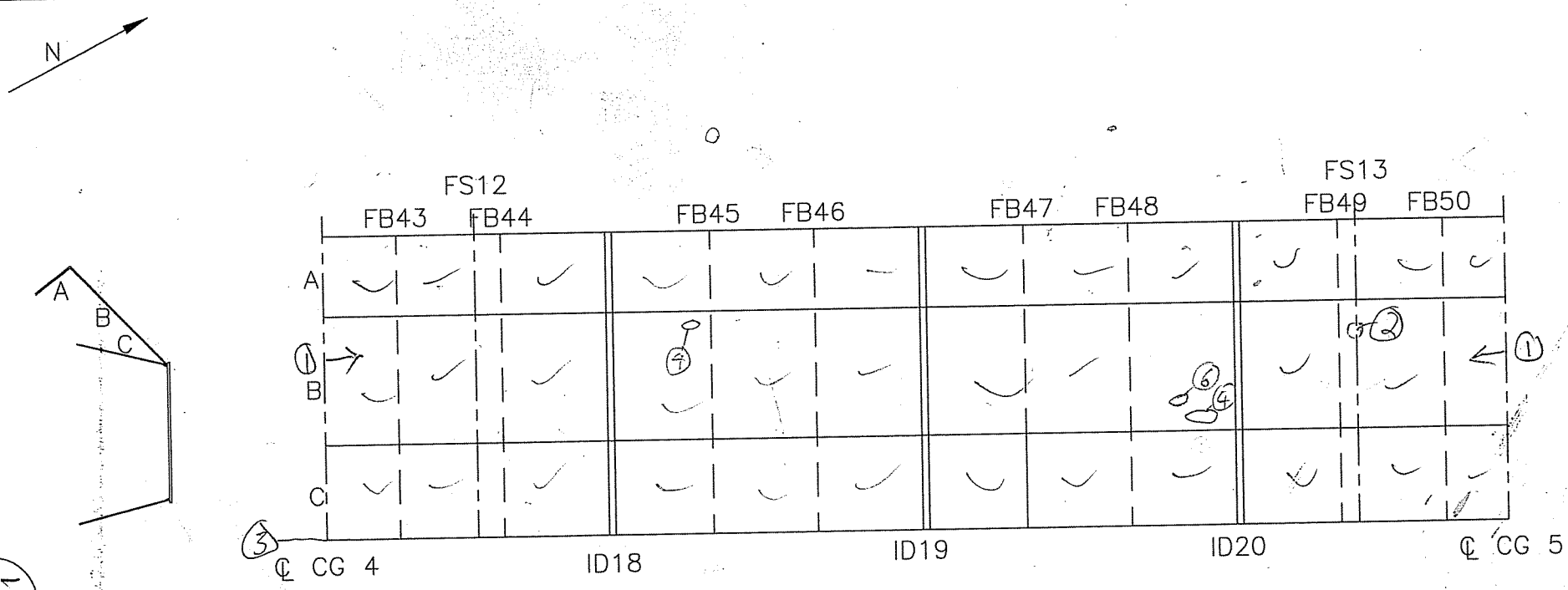

WEST INTERIOR WIND FERRING – CROSS GIRDER 4 TO CROSS GIRDER 5

*See exterior BG forms for areas of sec. loss

(1) W. WF, stiff. pigeon droppings collecting on side of ST. (typical)
(2) FS13, deck rib splice, 1 bird screen missing
(3) CG4, diagonal ST above C.G. in contact w/deck flange, abrasion dust [C3-181]
(4) W. WF, lamination on 1st ST below A sec [C3-182] (Typ) w/ 100% L, sec extent
(5) W. WF, ID19, transstiff for WF panel is kinked. [C3-183] also FD27
(6) W. WF, between FB48 & ID20, 3rd purlin from btm, deformation 6" [C3-184]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB/JHR	3/29/08	2 of 3
		of

Purlin

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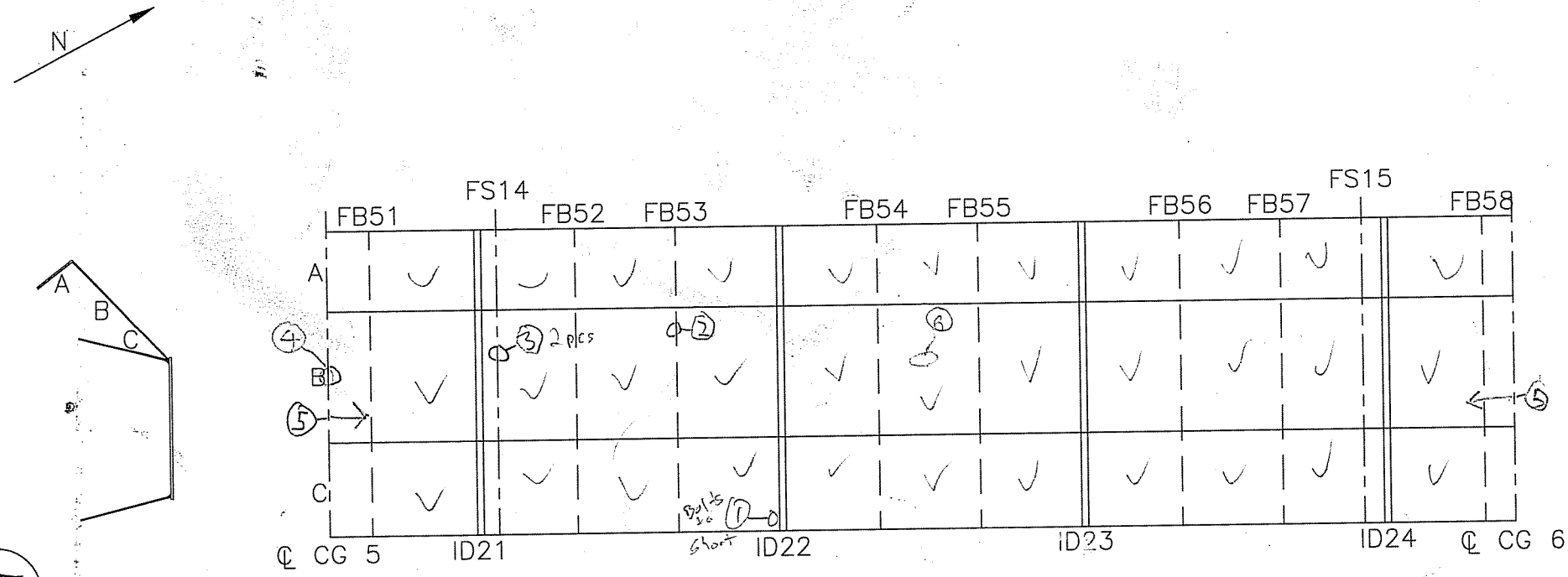


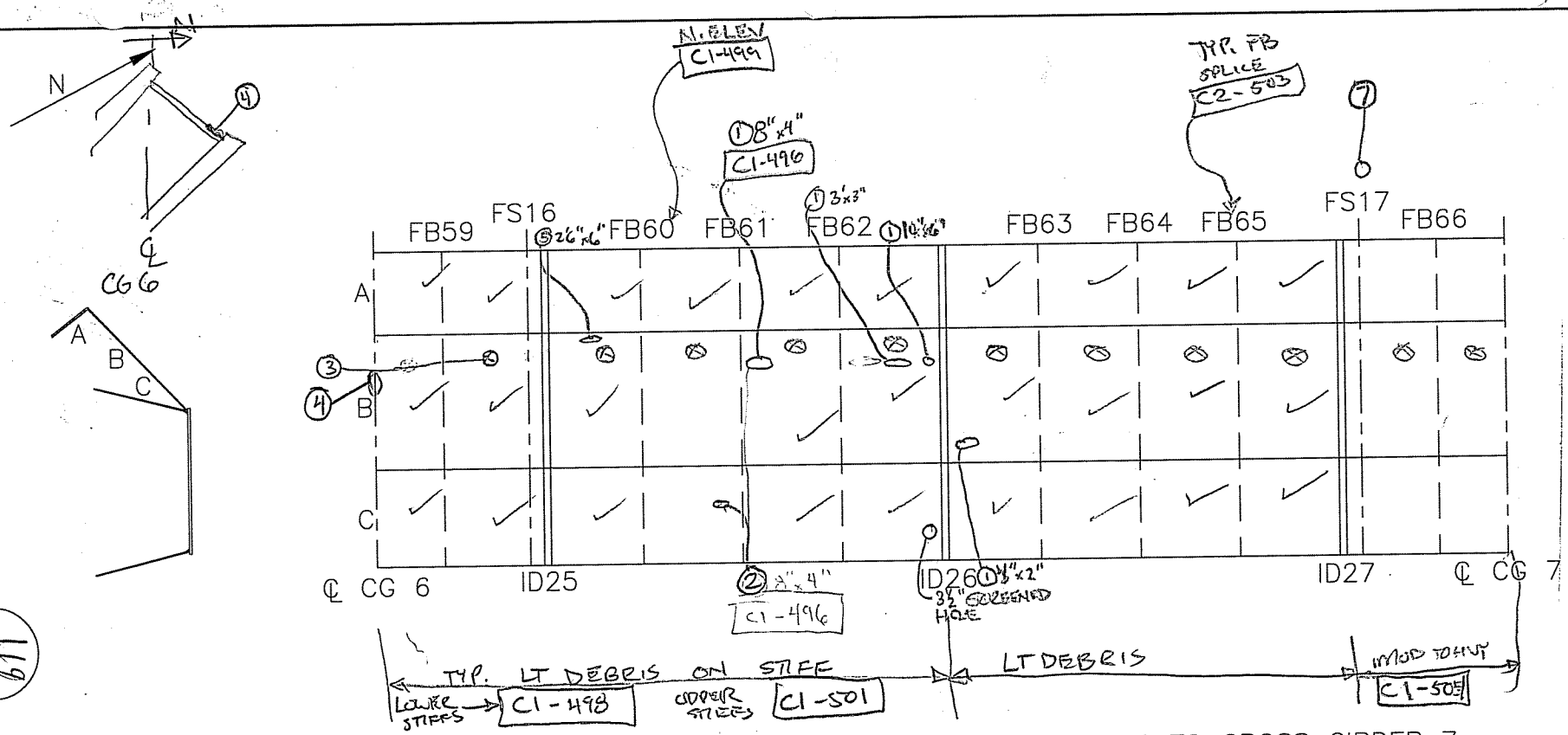
WEST INTERIOR WIND FERRING – CROSS GIRDER 5 TO CROSS GIRDER 6

*See exterior BG forms for areas of section loss

C3-185

(1) W. WF, ID22 bracket connecting brace to deck flange, missing nut [C3-185]
(2) W. WF, FB53, Trans. ST for WF Panel has sec. loss, S. face [C3-186]
(3) W. WF, FS14 missing varnit screens on rib of deck splices
(4) CG5, W.S., top along N. edge debris and moisture collected [C3-187]
(5) W. WF, pigeon debris collected along edge of purlins.
(6) W. BG, near hatch, pitting on web exterior 1/16" [C3-190]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB/JHR	3/29/08	3 of 3
		of

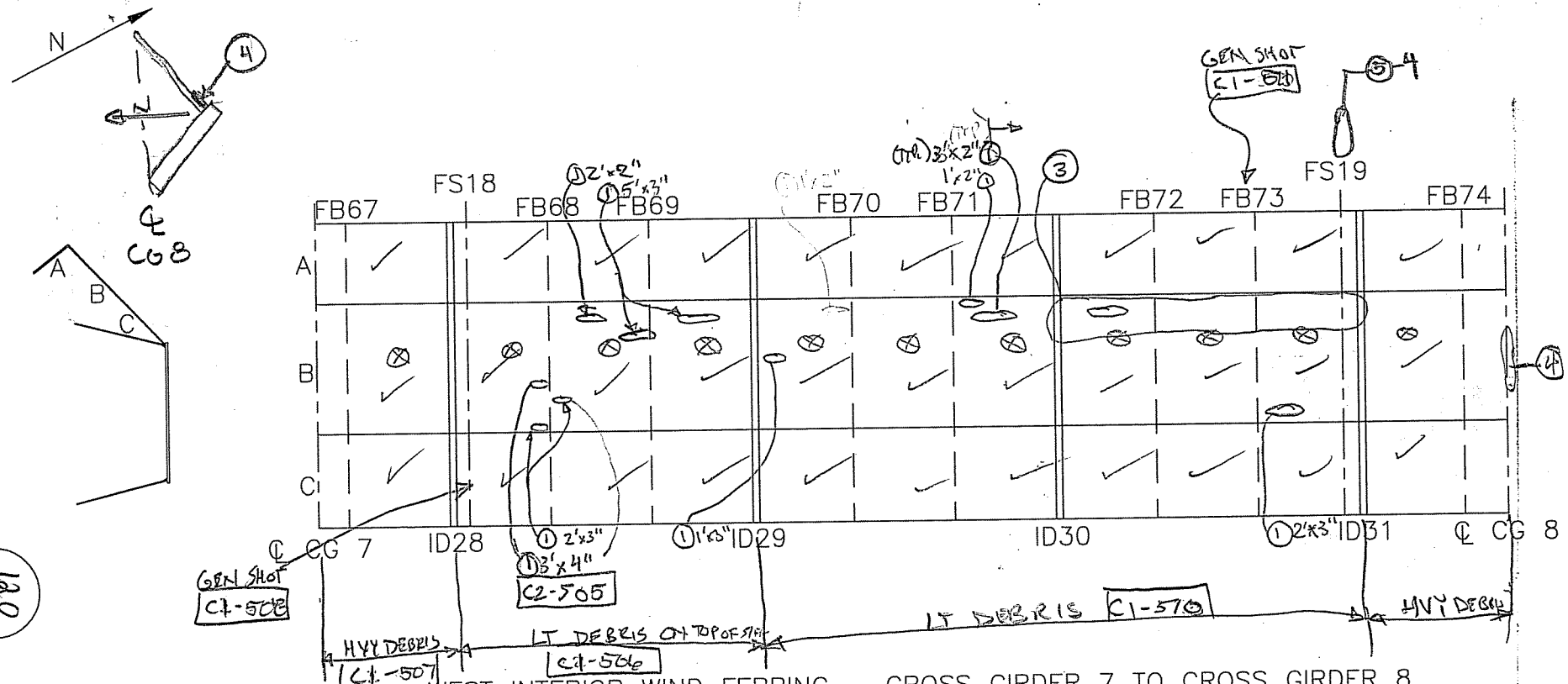


WEST INTERIOR WIND FERRING – CROSS GIRDER 6 TO CROSS GIRDER 7

119/333

1. 100% SECTION LOSS L" x H"
2. 1/8" DENT W/ 1/8" DEEP GOUGE C1-497
3. TYP. SCUPPER DRAIN HOLE
4. PITTING 4-8" WIDE UP TO 3/16" DEEP ON TOP NORTH FL OF CG 6 C1-500 FOR 5' LENGTH
5. SECTION L" x H" OF 50% LOSS W/ ISO. HOLES
6. TYP. WATER MARKS ON FERRING AT FB/ID C1-502
7. 1 MISSING PIGEON FERRING ON DECK STIFF

CTLGroup	Bridge No: Luling City/Town: Luling,	Bridge LA
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	3/31/08	1 of 2
		of

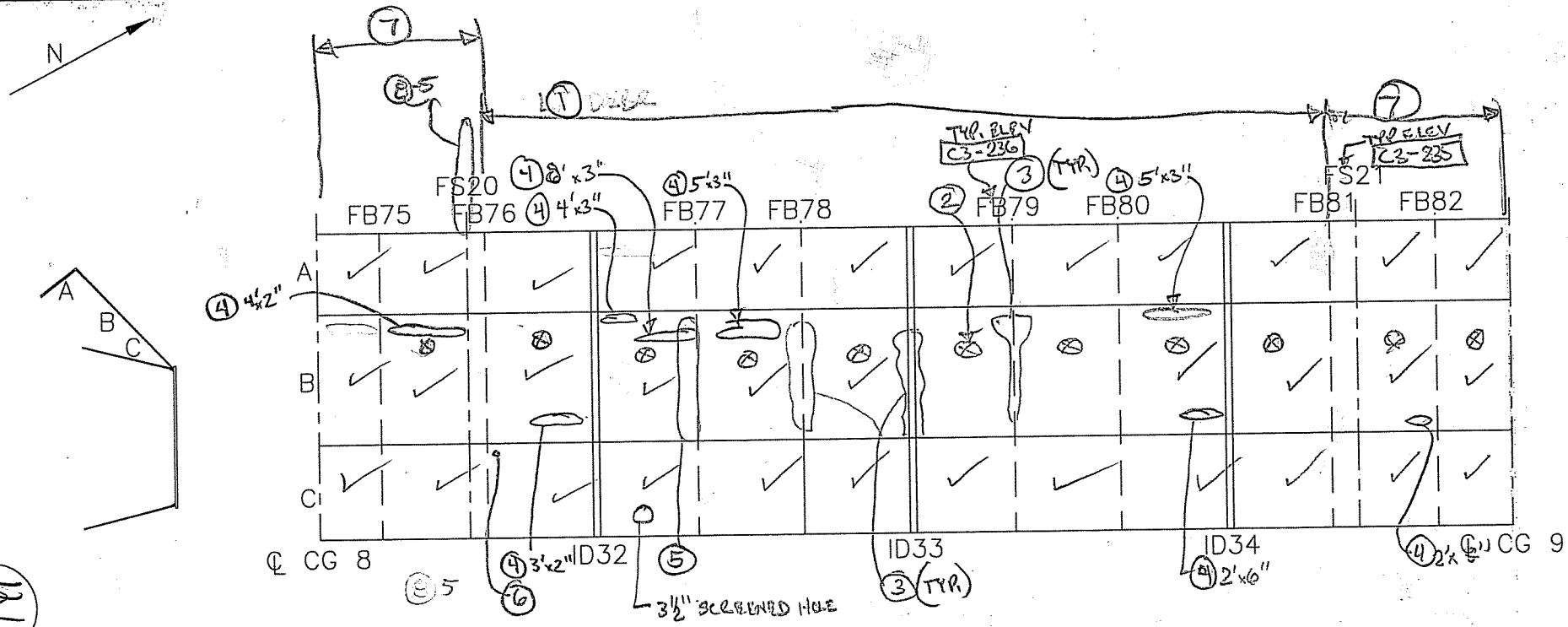


WEST INTERIOR WIND FERRING – CROSS GIRDER 7 TO CROSS GIRDER 8

1a.0
333

1. 100% SECTION LOSS L×H
2. SCUPPER DRAIN HOLE (TYP.)
3. TYP. 100% LOSSES ALONG STIFF/FERRING APPROX. 3" WIDE LENGTHS RANGE APPROX. 2'-4'
4. PITTING UP TO 4" WIDE & 1/4" DEEP FOR 3' ALONG SOUTH TOP EDGE OF CG 8 C1-509
5. MISSING PIGEON SCREENING – OF 4

CTLGroup	Bridge No: Luling City/Town: Luling,	Bridge LA
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	3/31/08	2 of 2
		of



WEST INTERIOR WIND FERRING – CROSS GIRDER 8 TO CROSS GIRDER 9
(100% LOSS ESTIMATES MADE FROM VISUAL W/O HAMMERING OR TESTS)

1. LT DEBRIS ON TOP OF STIFF C3-232
2. SCUPPER HOLE (TYP.)
3. TYP. RUST STAINING, INDICATIONS / WATER INFILTRATION C3-231
4. 100% SEC. LOSS L&H
5. TYP. LOSSES ALONG STIFFS ~6" H x 3'-4' LONG C3-233
6. MISSING BOLT, LWR FERRING CON. TO TUB LWB
7. MOD. PIGEON DEBRIS ON TOP OF STIFF C3-234
8. MISSING PIGEON SCREENING AT FS – SEE 6.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC	4/2/08	1 of 1
		of

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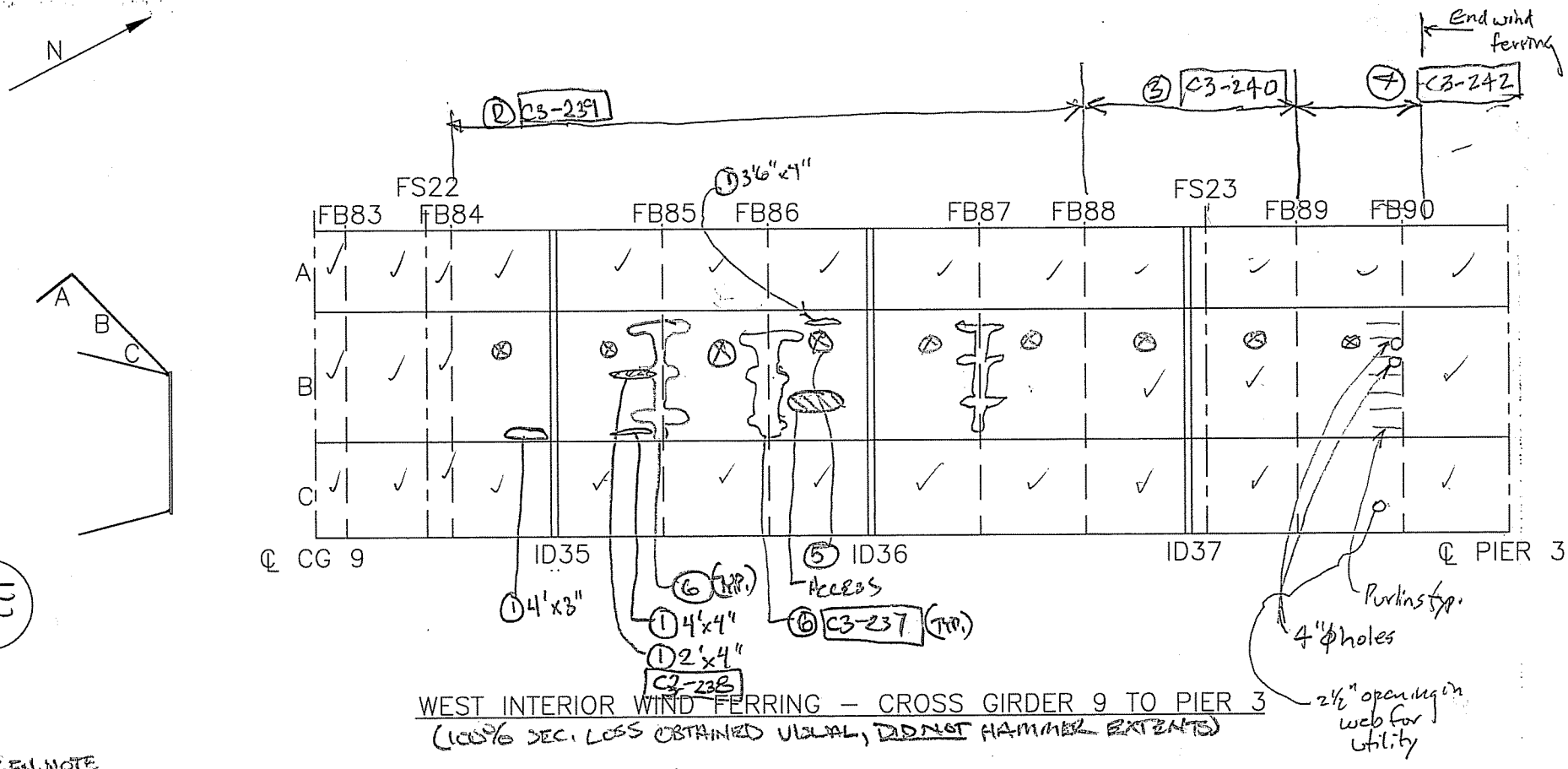

WEST INTERIOR WIND FERRING – CROSS GIRDER 9 TO PIER 3
(100% SEC. LOSS OBTAINED USUAL, DO NOT HAMMER EXTENTS)

GEN. NOTE
WHEN DEBRIS PULLED FROM STIFF, TYP. NOTE PITTING OF FERRING

① 100% SECTION LOSS L×H
② LT DEBRIS ON TOP OF STIFF
③ MOD DEBRIS ON TOP OF STIFF
④ HVY DEBRIS ON TOP OF STIFF
⑤ TYP. HOLE FOR SCUPPER
⑥ RUST STAINS/SIGNS OF WATER INGRESS
⑦ Missing 2 of 5 bird screens at FS23
⑧

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
FRAMING SPAN 3M		
JOB: P710070019		
CREW:	DATE:	SHEET:
BRC/JHR	4/2/08	4 of 4
		of

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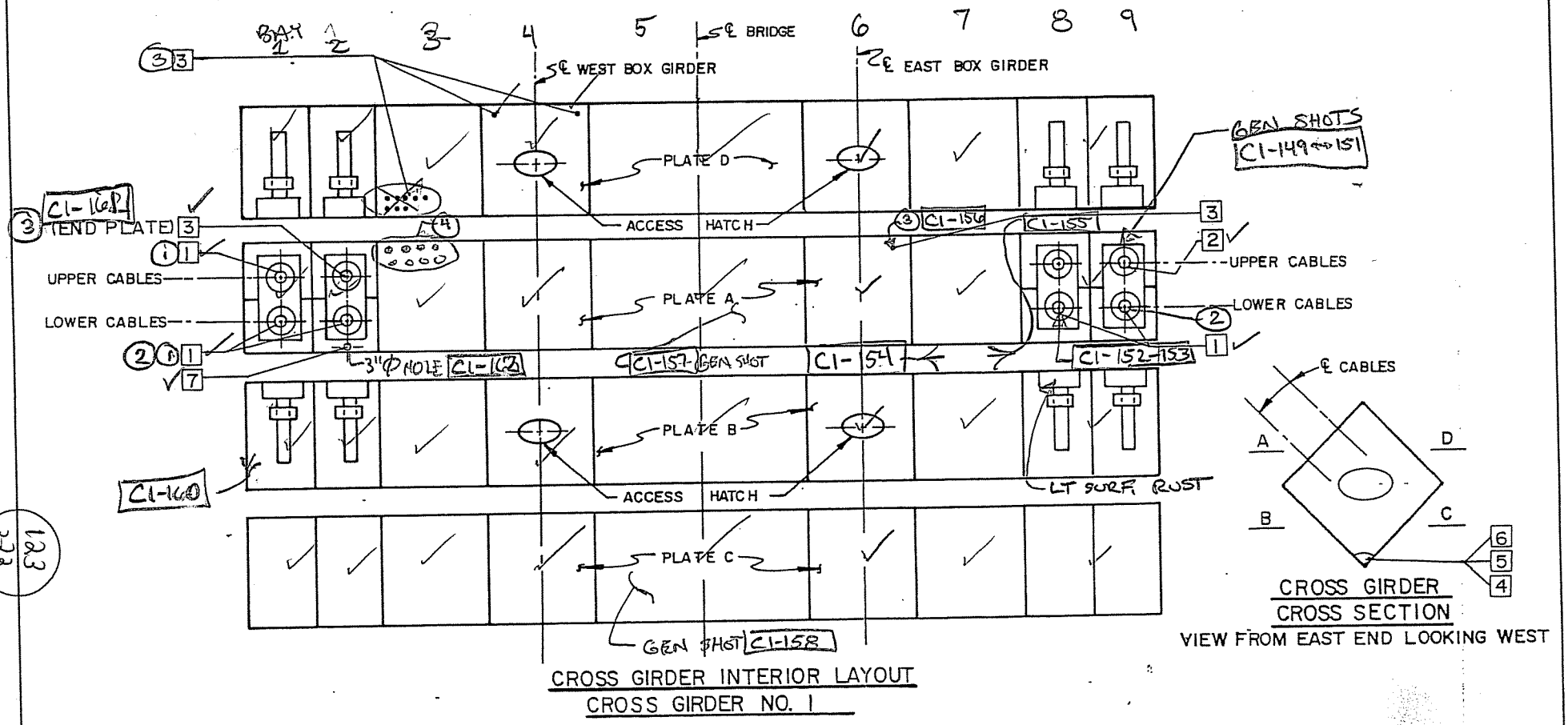
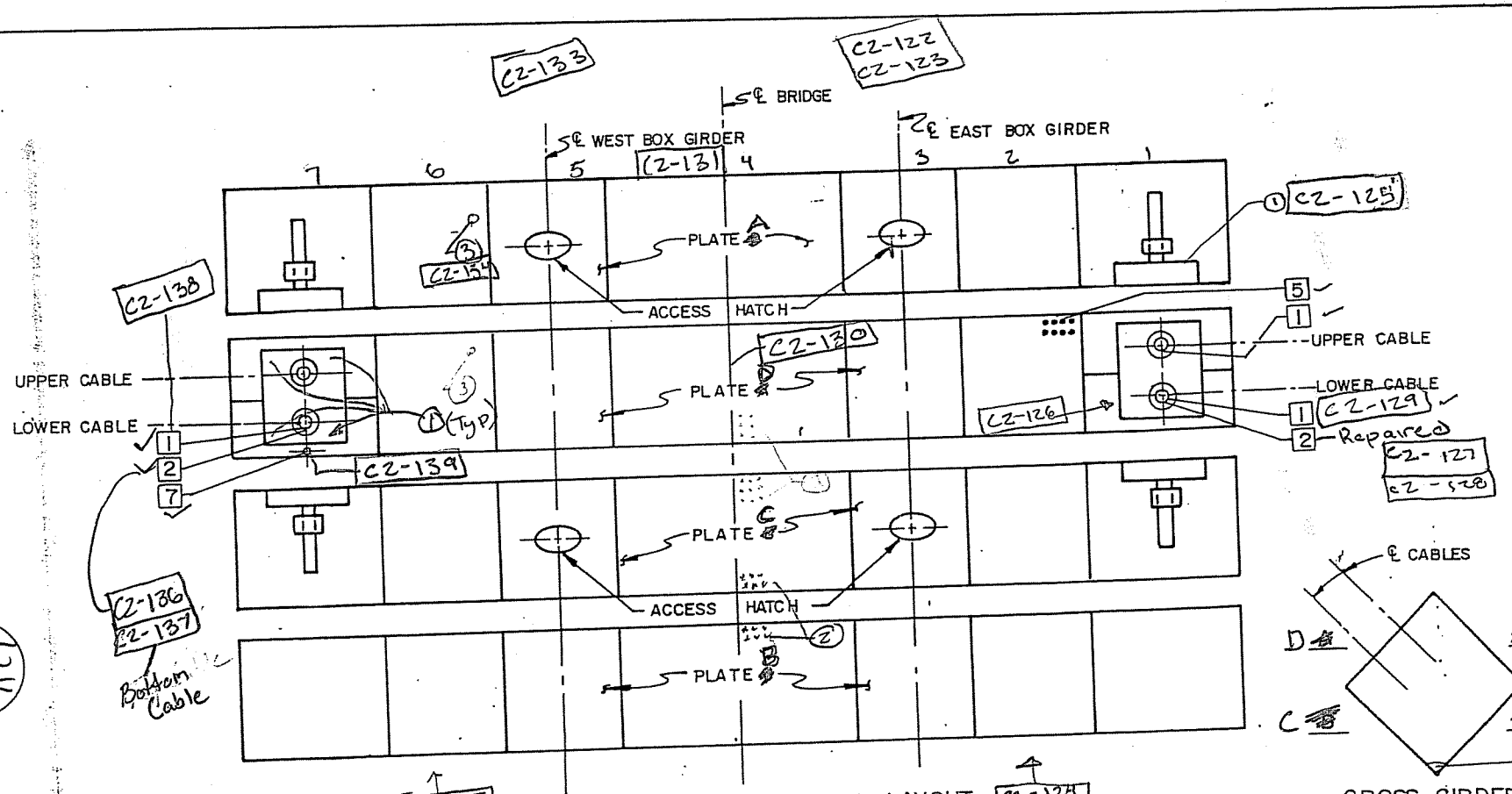


1. [1] WATER LEAKING [C1-152]
2. [2] LOOSE RUBBER GASKET [C1-153]
3. MISSING BOLT (DRIFT PIN)
4. 3 MISSING BOLTS, 3 PARTIALLY ON NUTS [C1-159]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
BKC, BS	3/7/08	2 of 3
		of

CROSS GIRDER PROBLEM LABELING

1. WATER LEAKING / PREVIOUS LEACHING AT CABLE STAY ENDS.
2. RUBBER SEAL LOOSE / FALLING OUT.
3. MISSING / LOOSE BOLT(S)
4. STANDING WATER AND / OR DEBRIS
5. MINOR SURFACE RUST
6. BIRD MESTING / WASTE
7. FABRICATED HOLE (3" DIAMETER"
8. CRACK IN WELD.
9. POROUS WELD
10. SILICOME SEAL "WALKING UP" CABLE
11. APPROXIMATELY 1/8" GAP BETWEEN SILICONE SEAL AND RUBBER GASKET



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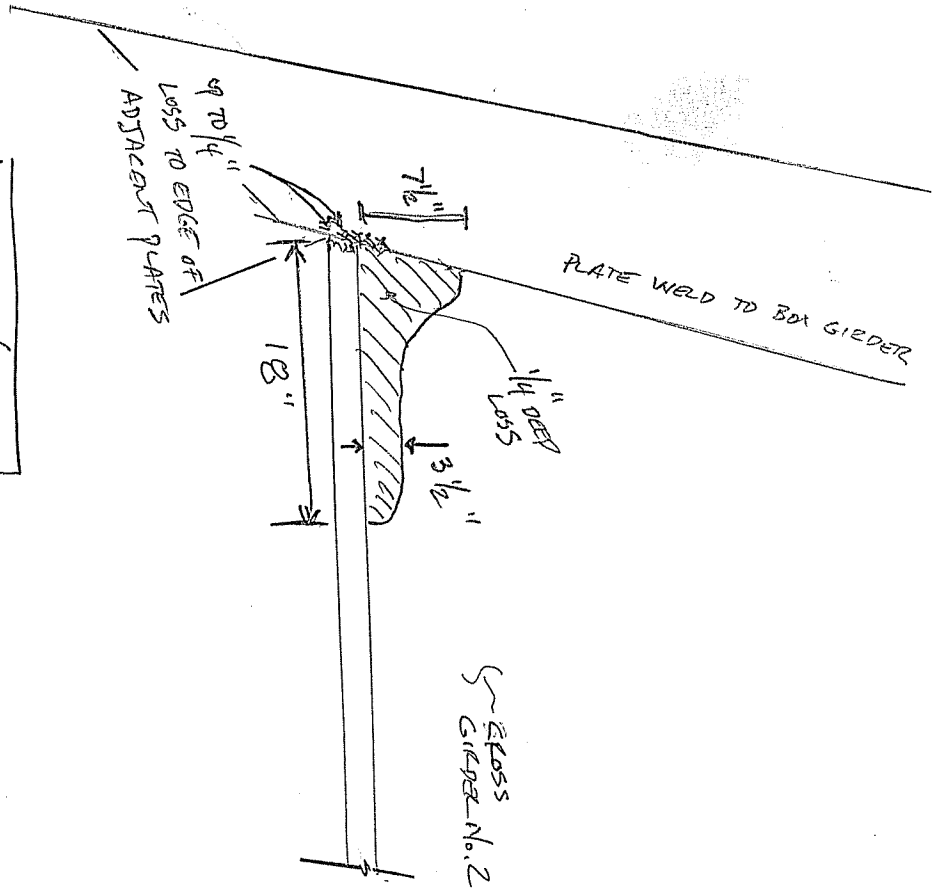
① Empty Bolt holes in Anchorage
② Heavy Rust @ B-C Angle Bolts [C2-132]
③ Bolt w/ Missing Nut [C2-134]

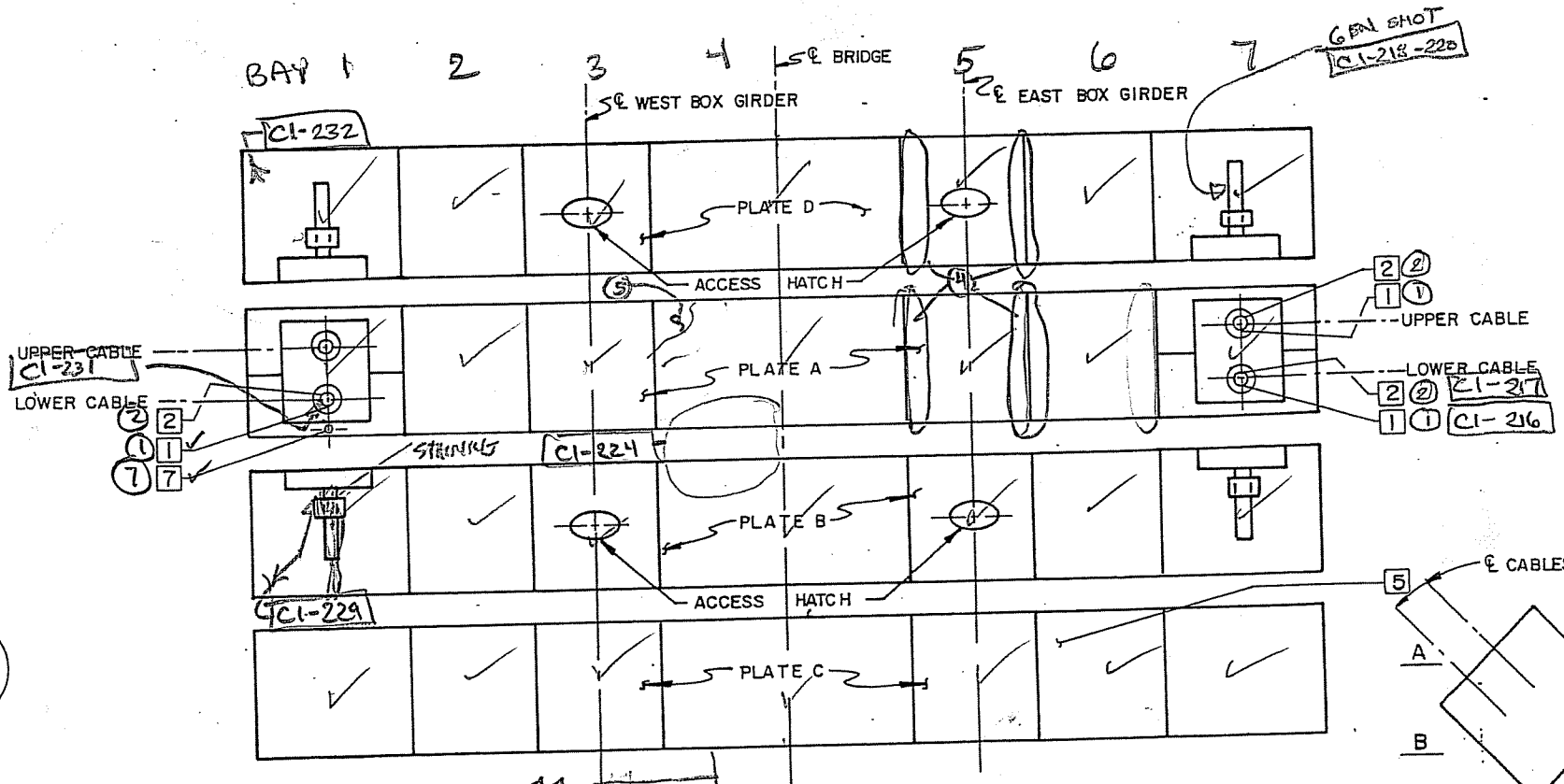
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
CROSS GIRDER	
JOB: P7100700019	

CREW:	DATE:	SHEET:
BKC, BS	3/8/08	1 of 1
		of



C1-331 / 334

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: SWB/operator	DATE: 3/17/08
SHEET: 4 of 4 of	



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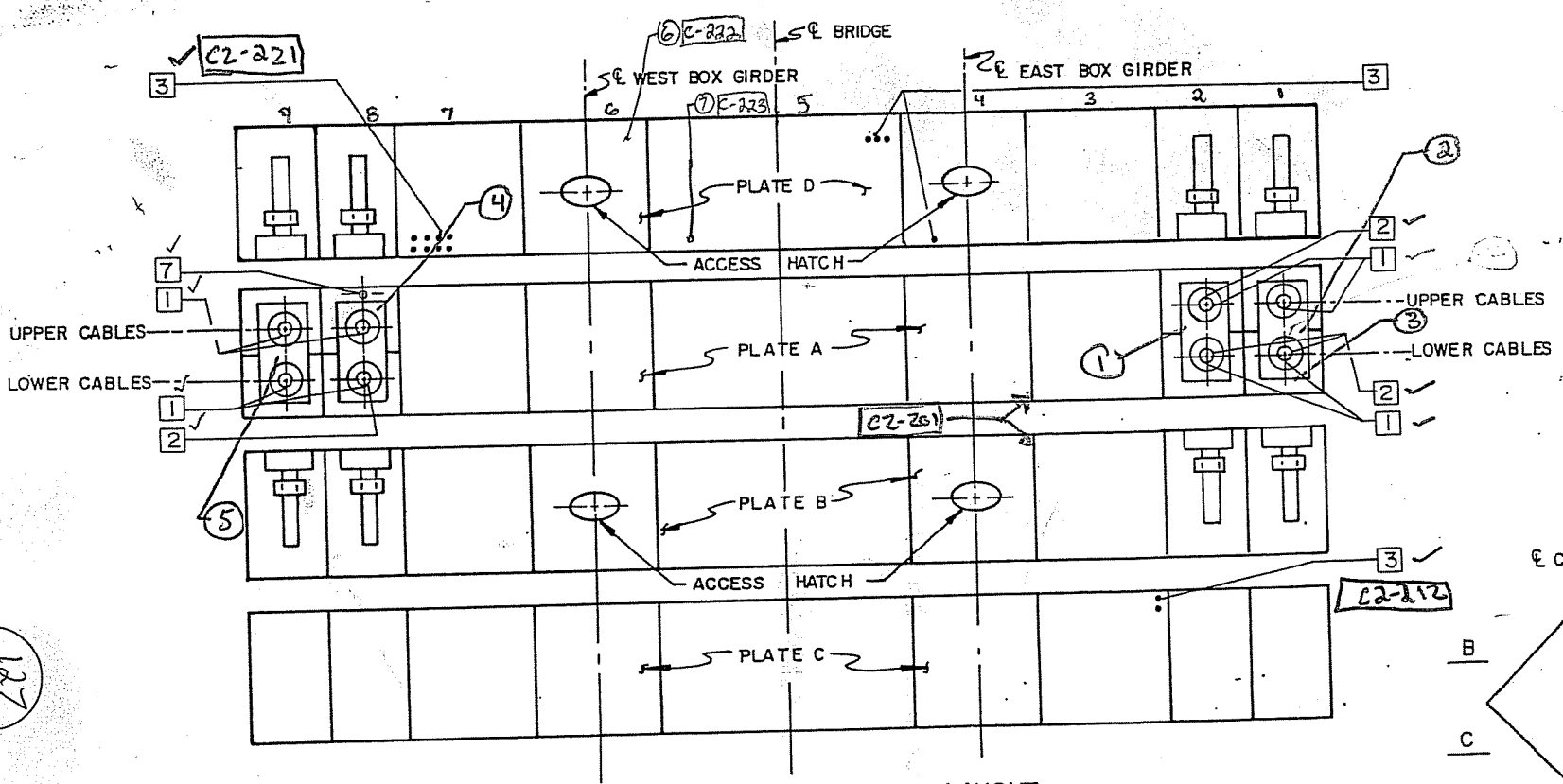
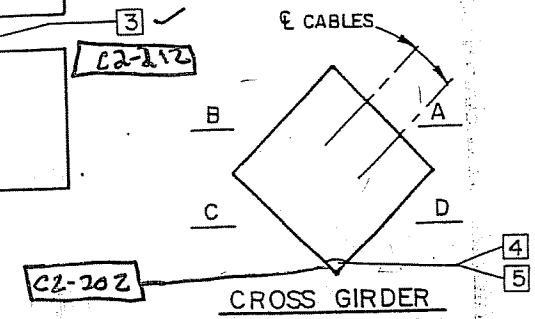
GEN SHOT BAY 2 C1-227/228
GEN SHOT BAY 3 C1-226
GEN SHOT BAY 5 C1-223
GEN SHOT BAY 6 C1-221/222

1. LEAKING AT ANCHORAGE C1-
2. LOOSE RUBBER SEAL
3. TYP. MINOR WATER ALONG BOT. BTWN PL BRG
4. RUST STAINING AT SP. BOLTS
5. MOD. RUST/PT FAIL. NEG. SEC. LOSS C1-225
7. 3" ø HOLE FOR CONDUIT C1-230

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
BRC, CTY	8/10/08	1 of 2
		of



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 4



CROSS GIRDER
CROSS SECTION.
VIEW FROM ~~EAST~~ West END LOOKING ~~WEST~~ East

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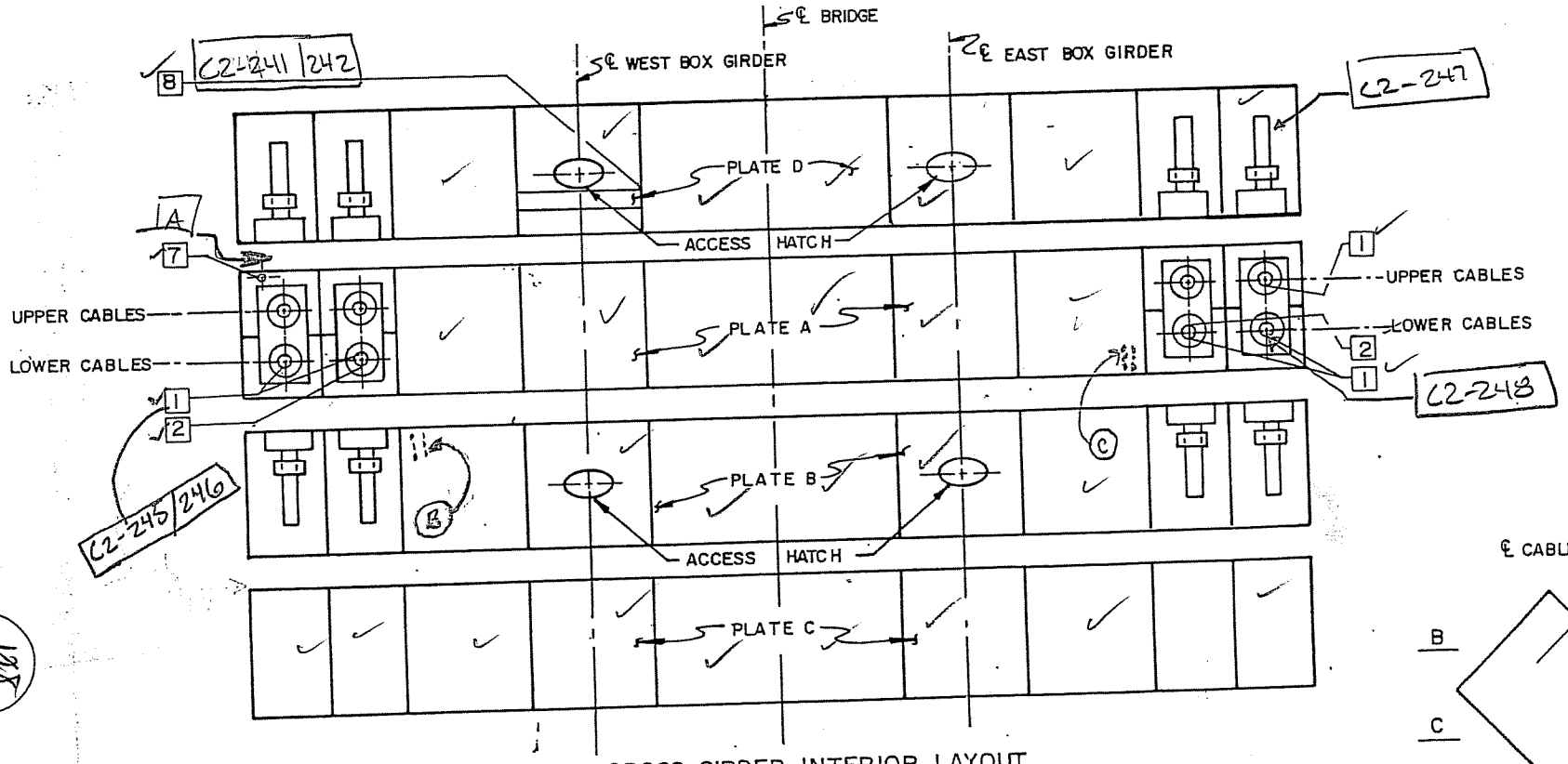
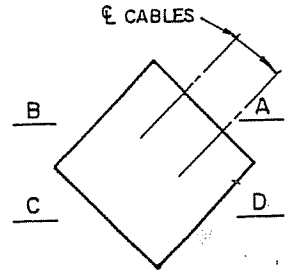
(1) Photos C2-204, 205, 206, 207 → Loss @ cable Stay end
(2) Photos C2-208, 209, 210 → Loss @ cable Stay End
(3) Leakage Through Cable Plates in Addition to cable Stay End C2-211
(4) Photos Bay 8 - C2-214-217
(5) Photos Bay 9 - C2-218-220
(6) 2 Missing Bolts C2-222 Bay 6
(7) Sheared bolt Bay 5 C-223

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
CRS / CTY	3/11/08	2 of 2
		of



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 5



CROSS GIRDER
CROSS SECTION
VIEW FROM ~~EAST~~ END LOOKING ~~WEST~~ East West

(A) - MINOR ACCUMULATION OF DIRT/RAT & PIGEON DEBRIS w/ MOISTURE ALONG LOWER EDGE OF STIFFENERS AND AT LOWER CORNER OF BOX GIRDER

(B) Crack is located in C.G.5 AT TOP OF 3rd Bay from west end. Crack is 2 1/2" long and runs longitudinally along weld. Connection is longitudinal stiffener to East side wall of Bay C2-241 | 242

(B) 6 of 8 BOLTS UNDERTHREADED w/ 1 BOLT LOOSE C2-243/244

(C) 6 of 8 BOLTS UNDERTHREADED

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
SWB/CRS	3/12/08	2 of 2
MJJ/CRS	3/13/08	1 of 3

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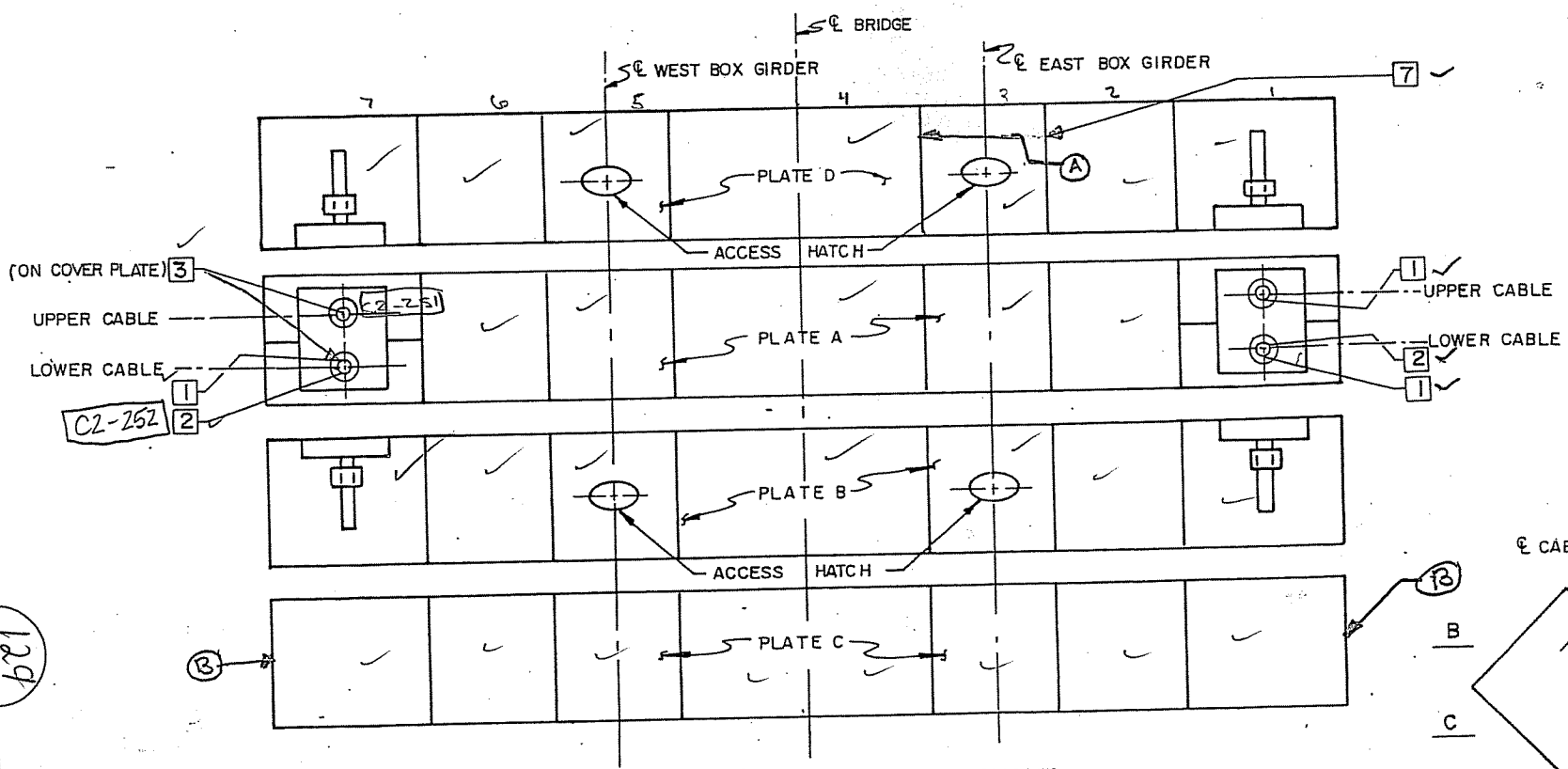
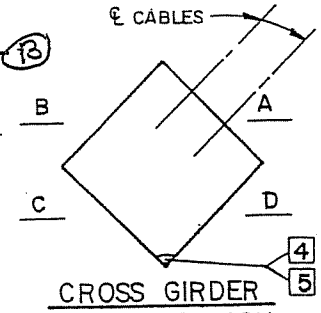


CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 6



CROSS GIRDER
CROSS SECTION
VIEW FROM ~~EAST~~ WEST END LOOKING ~~WEST~~ EAST

(A) 1 1/4" HIGH VERTICAL H.L. CRACK ON WEST WALL; BAY 3 @ WALL STIFFNER C2-249 C2-250

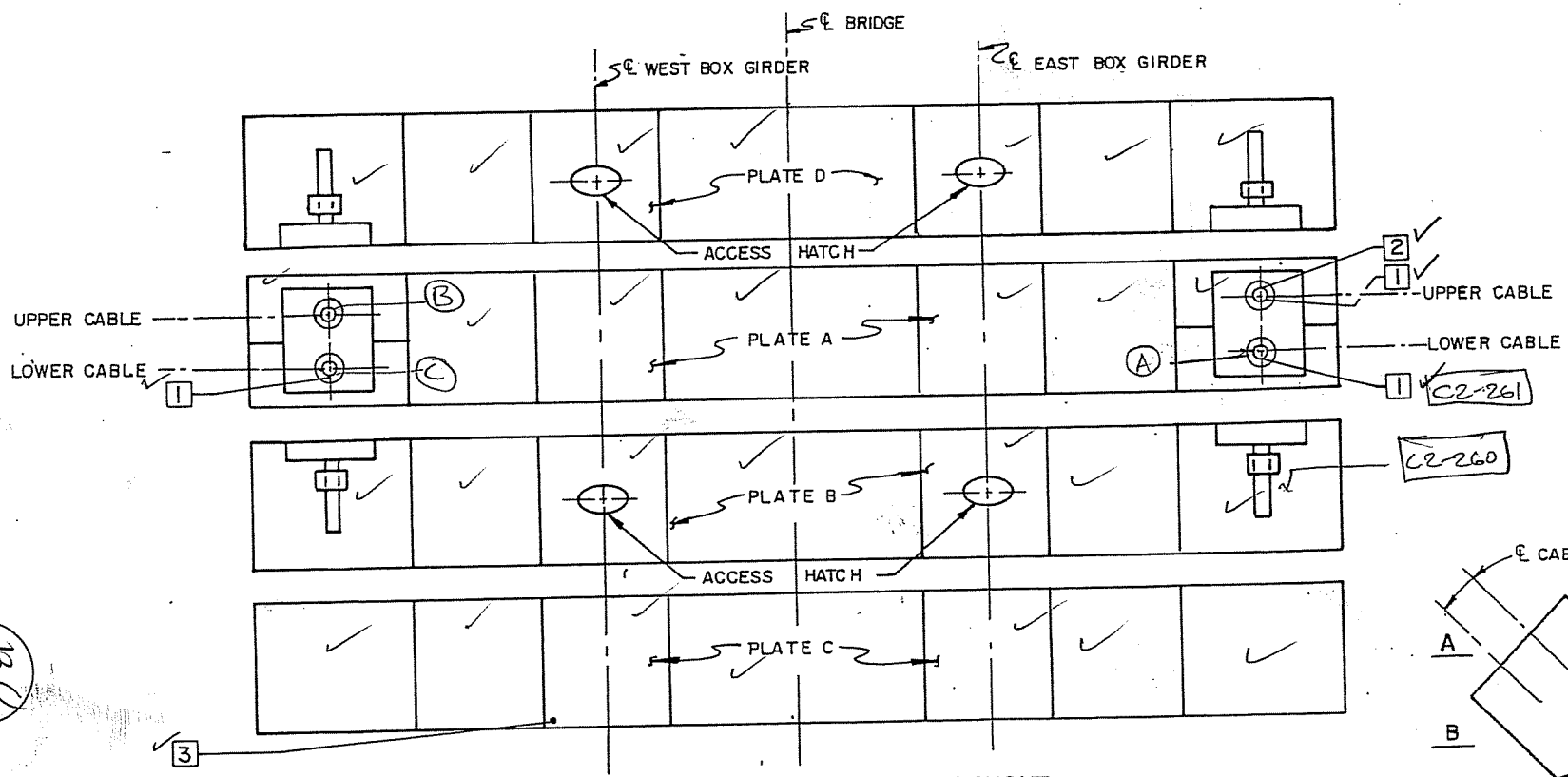
(a) RUBBER SEAL @ EAST ANCHORAGE DISPLACED BUT / INTACT

(3) MISSING BOLT ON END ANCHORAGE LOWER PLATE. C2-251

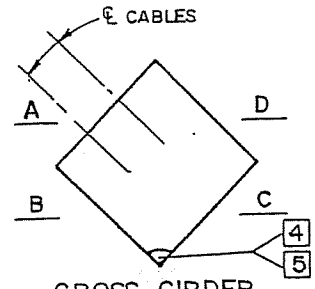
(B) CABLE ACCESS HATCH HAS NEW / UNDERTHREADED BOLTS ALL THE WAY AROUND

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
MJJ/CBS	3/14/08	1 of 3
		of

129
333



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 7



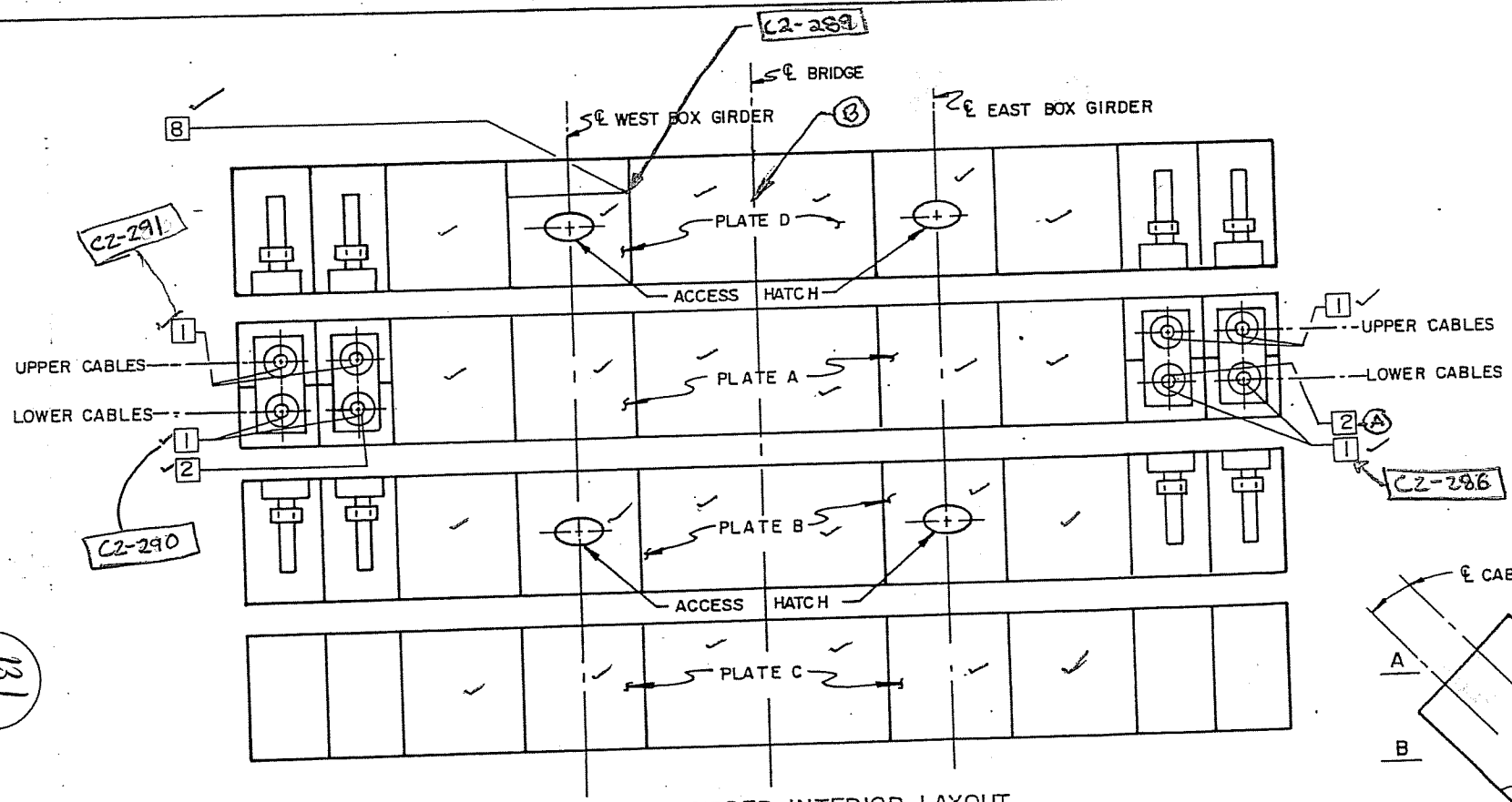
CROSS GIRDER
CROSS SECTION
VIEW FROM ~~EAST~~ WEST END LOOKING ~~WEST~~ EAST

(A) LIGHT RUST AROUND LOWER EAST CABLE IN G.G.7
(B) RUBBER RING IS MISSING FROM TOP CABLE.
(C) RUBBER RING IS DISPLACED FROM BOTTOM CABLE.

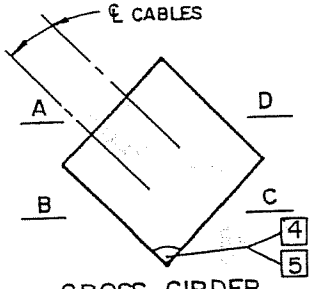
ACCESS DOOR ON PLATE C IN WEST ANCHORAGE BAY HAS ALL UNDERTHREADED BOLTS.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
MW/CRS	3/4/08	3 of 3
		of

130
333



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 8



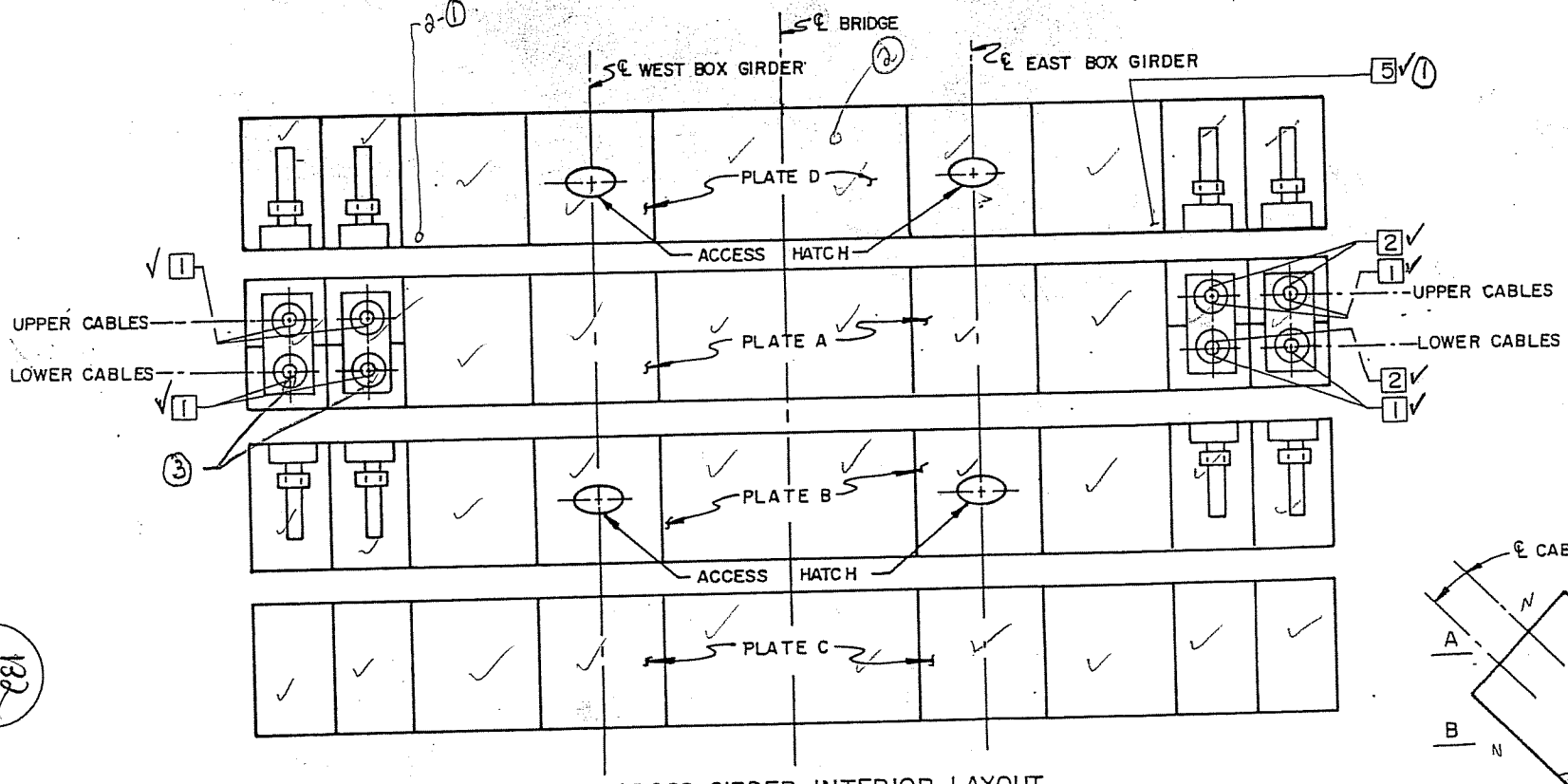
CROSS GIRDER
CROSS SECTION
VIEW FROM EAST END LOOKING WEST

(A) RUBBER SEAL COMPLETELY OFF AT BOTTOM CABLE ANCHORAGE C2-285

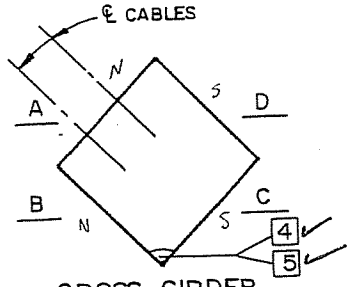
(B) UP TO 1/8" GAP BETWEEN ANGLE MEMBER & BASE SPLICE PL AT CG SPLICE C2-287-288

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
CRS/CTY/SGB	3/17/08	2 of 3
		of

131
333



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 9

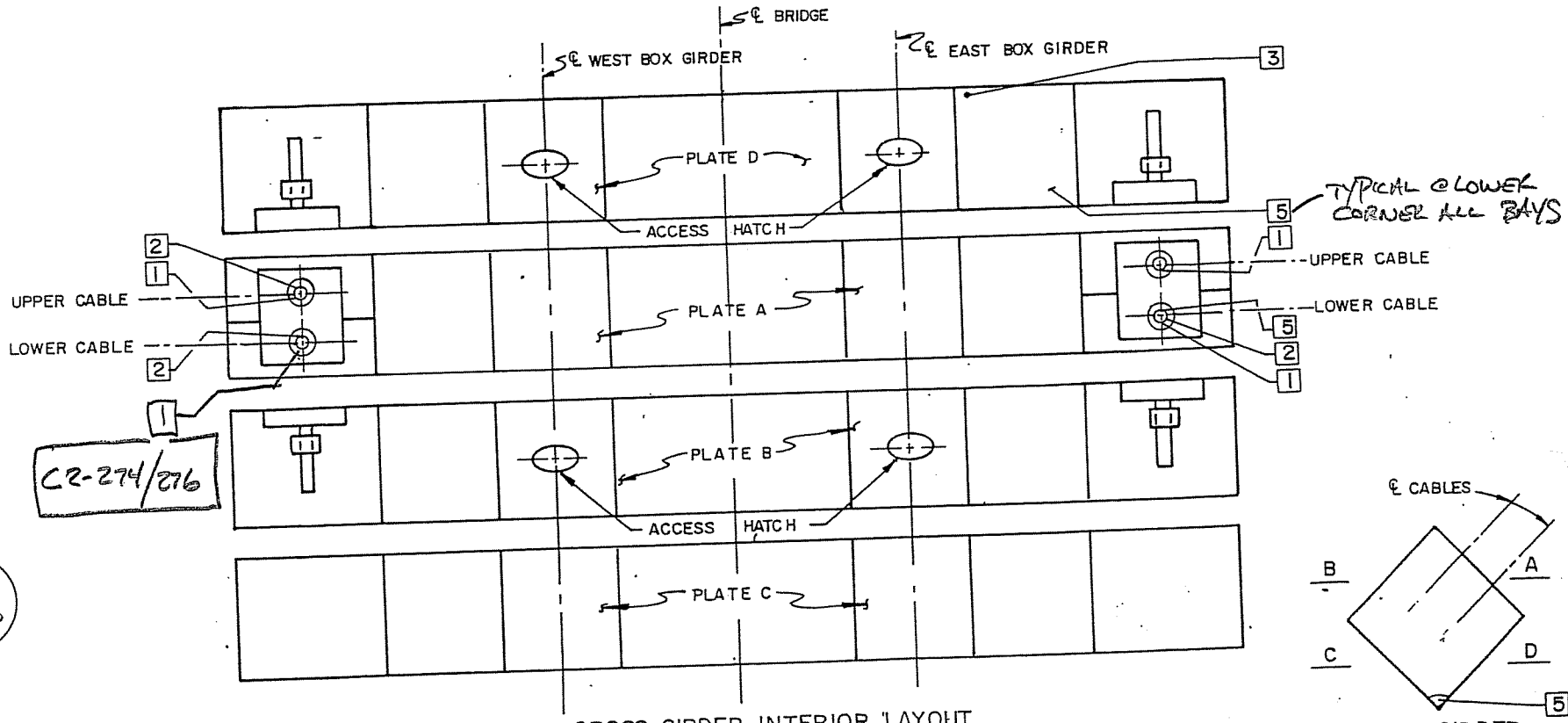


CROSS GIRDER
CROSS SECTION
VIEW FROM ~~EAST~~ WEST END LOOKING ~~WEST~~ EAST

132
333

(1) Approx. 3/4" gap btwn bolt head and PL D, loose
(2) Minor Surface Rust
(3) Loose Rubber

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
CROSS GIRDER	
JOB: P7100700019	
CREW:	DATE:	SHEET:
SWB/CRS/CTY/S.P.	3/18/08	5 of 6
		of

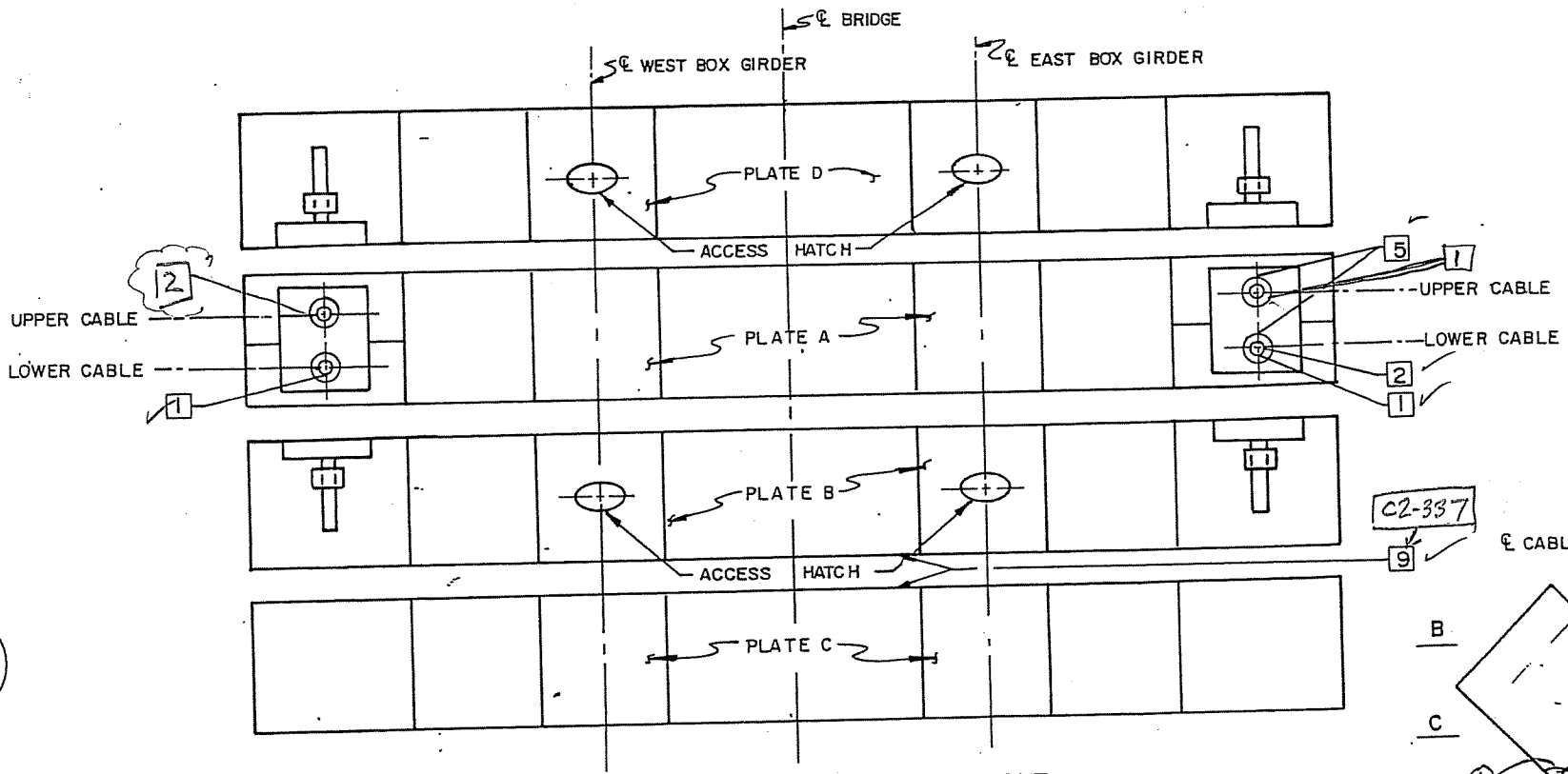


CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 10

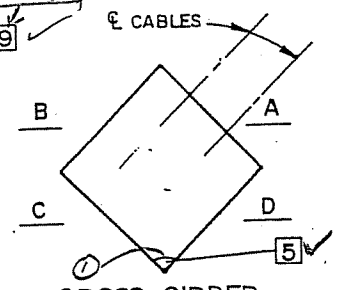
CROSS GIRDER
CROSS SECTION
VIEW FROM EAST END LOOKING WEST

133
333

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
SWB/CRS/MJJ/CTJ	3/15/06	2 of 2
		of



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 11



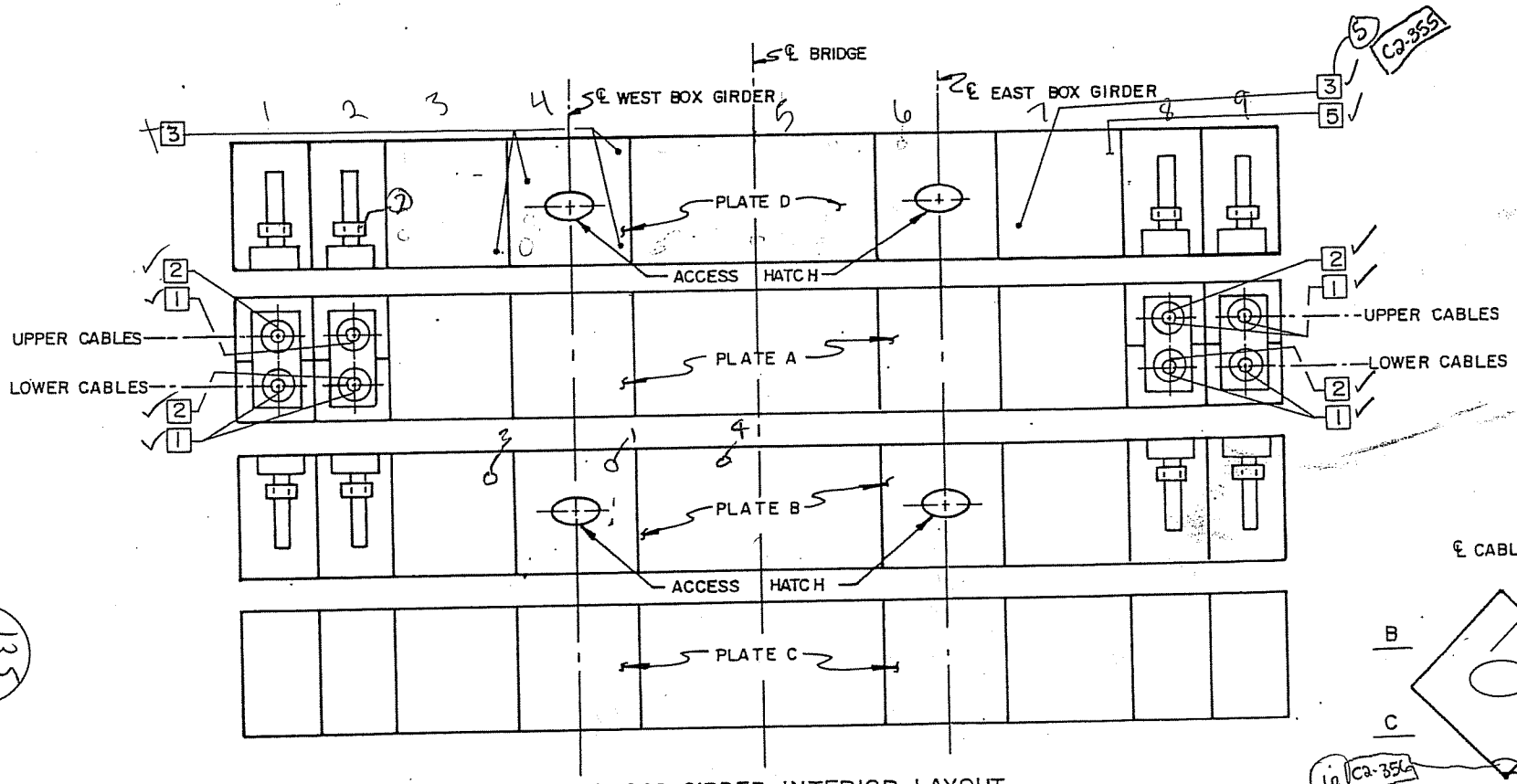
CROSS GIRDER
CROSS SECTION
VIEW FROM EAST END LOOKING WEST

134
333

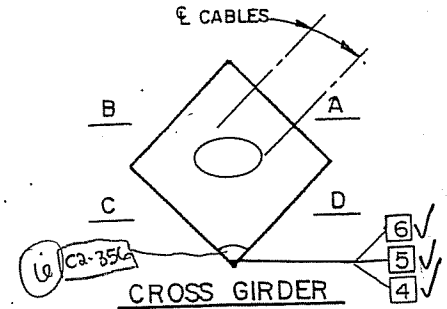
① STANDING WATER ALONG BOTTOM CORNER OF CROSS GIRDER

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
CROSS GIRDER	
JOB: P7100700019	

CREW:	DATE:	SHEET:
SWB/CRS/CTY/SCB	8/19/08	3 of 4
		of



CROSS GIRDER INTERIOR LAYOUT
CROSS GIRDER NO. 12



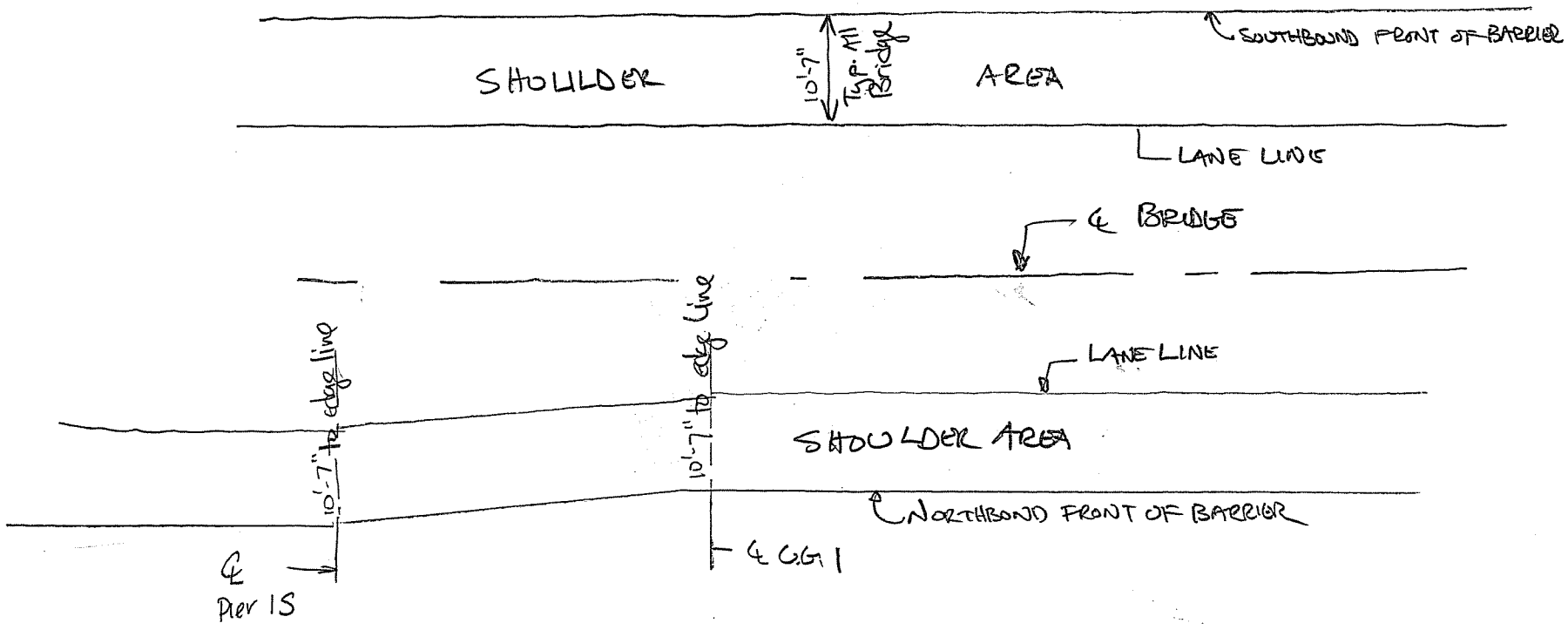
CROSS GIRDER
CROSS SECTION
VIEW FROM ~~EAST~~ WEST END LOOKING ~~WEST~~ EAST

135
333

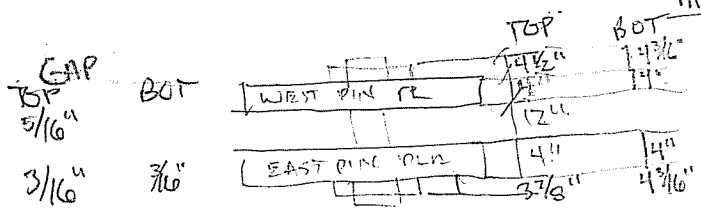
① Drift pin stuck in bolt hole [C2-351]
② Rust on socket clamp, leaking seal on bottom, top has previous moisture. [C2-352]
③ Bolt cut off by torch [C2-353]
④ Two drift pins stuck in bolt holes [C2-354]
⑤ Melted / Torched drift pin on PR B [C2-355]
⑥ Debris accumulated in bottom of CG12 at E & W ends up to 4". [C2-356]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
CROSS GIRDER		
JOB: P7100700019		
CREW:	DATE:	SHEET:
SGD/CTY	3/20/08	2 of 3
		of

EDGELINE MEASUREMENTS



CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ	4/8/00	3 of 3
		of



THREAD
E. ELEV TOP PIN C3-244
5 W. ELEV TOP PIN C3-245
4 E. ELEV BOT PIN C3-247
4 W. ELEV BOT PIN C3-249

PIN & HANGER DATA SHEET

Form BRI-29, Rev. 6/99

Measurements Taken By: BKC, PGN Date: 9/3/09

Bridge No.: [redacted] Town: [redacted]

Hanger Location: [redacted] Effective span for Movement: [redacted] (ft)

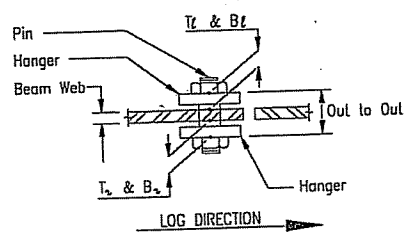
Page: 1 of 6

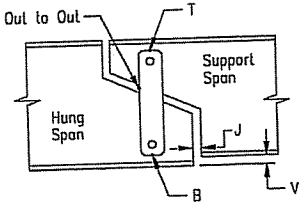
Beam No.	W.GAP (in)	E.GAP (in)	Tr (in)	Br (in)	Tl (in)	Bl (in)	Out to Out (in)	Secondary System Type	Gap[1] (Y/N)	Nut Restraint System	Temp	Comments
												DIST B/W PIN 12" EAST PIN PL 4" TH
TOP : EAST TUB 1	5/16	3/16"	3 7/8"		4 1/2"		28" 3/8"	NONE	Y	LOMAS NUT W/COTTER PIN	75°	HOLLOW PIN, W/BRASS WASHER, VERY GOOD COND.
2												[illegible]
BOT EAST TUB 3	3/16"	3/16"		4 3/16"		4 3/16"	28 1/2"	NONE	Y	LOMAS W/COTTER	EAST FACE	C 3/4" I.R. BRUN WASHER AND HANGER C3-246 GEN. [illegible] NUT & PIN & BOTH EAST & WEST C3-248
4												
5												
6												C3-250 GEN. COND. DOUBLE NUTS W/NO VISIBLE THREADS
7												
8												
9												
10												

137
333

Notes:

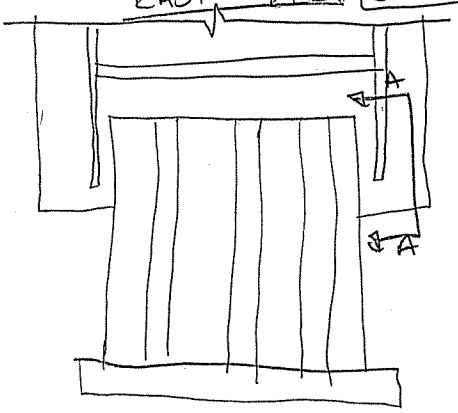
1) For Pin & Hanger assemblies with a redundant support system, indicate if there is a gap between the redundant system (bearing) and the bottom flange of the suspended girder.
2) All measurements are taken in reference to log direction.
   - **V** : Vertical misalignment of girders @ left edge of girder's bottom flange.
   - **J** : Joint opening between webs, measured just above the bottom flange fillet, on the left face of the girder's web.
   - **Out to Out** : The out-to-out of hangers taken at the leading edge, based on log direction.
3) Use a permanent marker to indicate locations of field measurements.



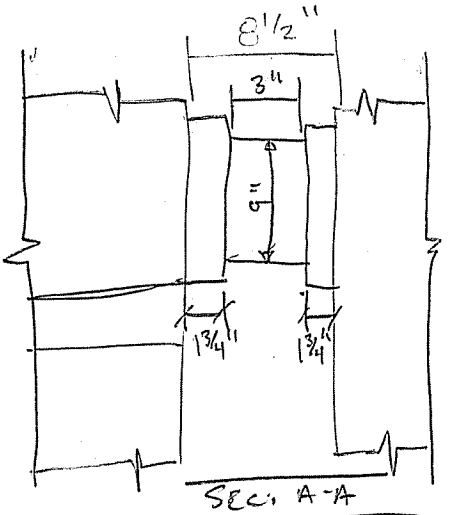


WIND LOCK AT PIER 1

EAST ELEV C3-251



WEST ELEV C3-254



SEC. A-A

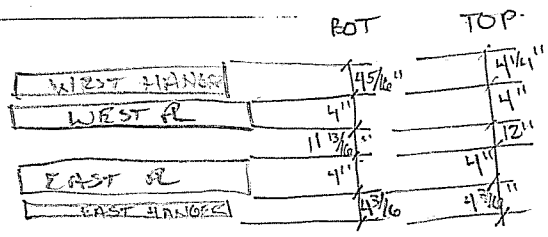
EAST C3-252

WEST C3-253

BKC, PGM 4/3/08

SHEET 2/6

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
		of
		of



	THREAD	ELEV SHOT
EAST TOP	5	C3-260
WEST TOP	5	C3-262
EAST BOT	4	C3-256
WEST BOT	5	C3-259

PIN & HANGER DATA SHEET

Form BRI-29, Rev. 6/99

Measurements Taken By: BRG, PGN Date: 7/3/08

Bridge No.: [redacted] Town: [redacted]

Hanger Location: [redacted] Effective span for Movement: [redacted] (ft)

Page: 3 of 6

Beam No.	GAP EAST V (in)	GAP WEST J (in)	Tr (in)	Br (in)	Tl (in)	Bl (in)	Out to Out (in)	Secondary System Type	Gap[1] (Y/N)	Nut Restraint System	Temp	Comments
1	3/16"	1/4"		4 3/16"		4 5/16"	28 7/8"	NONE	Y	LUMAS LOCTITE	75°	EAST F. UP TO 1/4 IL. R., MED. RUST. C3-255 WEST F. UP TO 3/16" T.R. ; MED. RUST C3-258
2												
3	3/16"	1/4"		4 3/16"		4 1/4"	28 7/16"	NONE	Y	LUMAS LOCTITE	75°	E. PIN NUT HAS 1/4" GAP BTW NUT/BRASS WASHER E. PIN HAS GREASE COMING FROM PIN
4												
5												W. NUT IN VERY GOOD COND.
6												
7												
8												
9												
10												

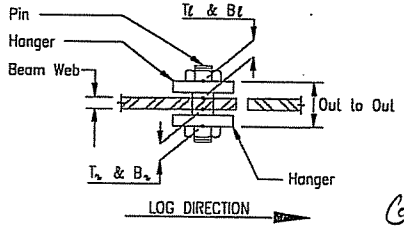
WEST TUB BOT

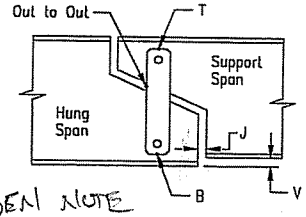
WEST TUB TOP

139
333

Notes:

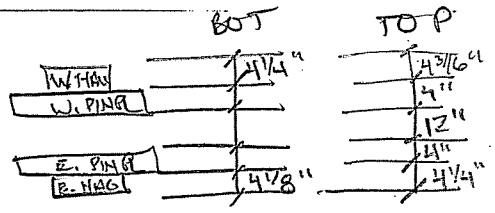
1) For Pin & Hanger assemblies with a redundant support system, indicate if there is a gap between the redundant system (bearing) and the bottom flange of the suspended girder.
2) All measurements are taken in reference to log direction.
   - **V** : Vertical misalignment of girders @ left edge of girder's bottom flange.
   - **J** : Joint opening between webs, measured just above the bottom flange fillet, on the left face of the girder's web.
   - **Out to Out** : The out-to-out of hangers taken at the leading edge, based on log direction.
3) Use a permanent marker to indicate locations of field measurements.





GEN NOTE
NEGATIVE 1 THREAD ON DOUBLE NUT AT BOT. OF ASSEMBLY C3-257

BIRD NESTING IN ASSEMBLY



	THREADS	BLOCK
BOT WEST	5	C3-279
BOT EAST	5	C3-280
TOP WEST	5	C3-285
TOP EAST	5	C3-286

PIN & HANGER DATA SHEET

Form BRI-29, Rev. 6/99

Measurements Taken By: BFC, PGM Date: 4/3/02

Bridge No.: [redacted] Town: [redacted]

Hanger Location: EAST TUB PIER 4 Effective span for Movement: [redacted] (ft)

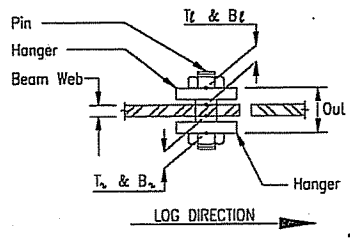
Page: 4 of 6

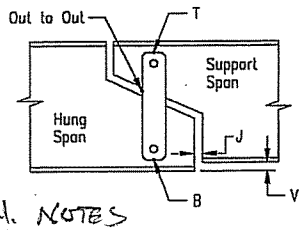
	Beam No.	W. GAP W (in)	E. GAP J (in)	Tr (in)	Br (in)	Tl (in)	Bl (in)	Out to Out (in)	Secondary System Type	Gap[1] (Y/N)	Nut Restraint System	Temp	Comments
W. TUB BOT	1	1/4"	1/8"		4 1/8"		4 1/4"	28 1/2"	—	Y	LUMASW COTER	75°	W. NUT LT RUST/MINIMAL PITTING, 2 WELDED WASHERS BOT
	2												E. NUT T.R. UP TO 5/8", MOD SURF RUST, 4 WELDED NUTS
	3												
	4												W. NUT, — LT RUST, 4 WELDED WASHERS
BK TUB TOP	5	3/16"	1/4"			4 3/16"		28 7/16	—	Y	LUMASW COTER	75°	E. NUT WASHER T.R. 1/4", 4 WELDED WASHERS
	6												
	7												
	8												
	9												
	10												

146
3.33

Notes:

1) For Pin & Hanger assemblies with a redundant support system, indicate if there is a gap between the redundant system (bearing) and the bottom flange of the suspended girder.
2) All measurements are taken in reference to log direction.
   - **V** : Vertical misalignment of girders @ left edge of girder's bottom flange.
   - **J** : Joint opening between webs, measured just above the bottom flange fillet, on the left face of the girder's web.
   - **Out to Out** : The out-to-out of hangers taken at the leading edge, based on log direction.
3) Use a permanent marker to indicate locations of field measurements.

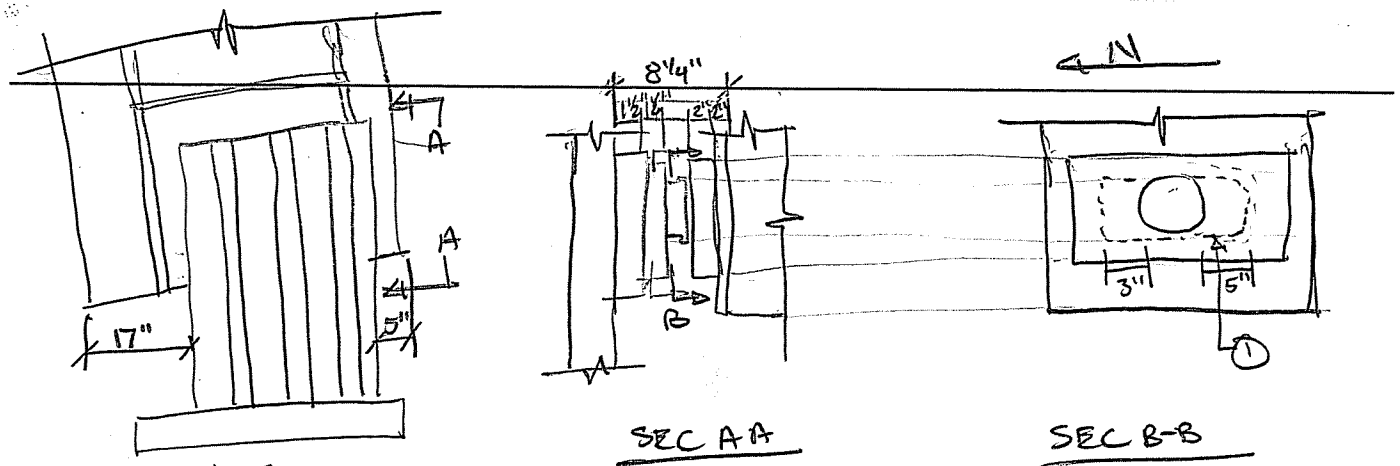




GEN. NOTES

SCREENING BENT ON N. SIDE, BROKEN BOLT/WELDS E. SIDE

C3-282 — 284



WEST ELEV

C3-271

EAST ELEV

C3-277

SEC A-A

SEC B-B

PIER 4 WIND LOCK

WEST PIN HAS VISIBLE LIGHT & SHOWS SIGNS OF MOVEMENT C3-271-274

EAST PIN SHOWS SIGNS OF MOVEMENT C3-275/276

MOVEMENT RANGE IS IN BOTH NORTH & SOUTH DIRECTION (3"N, 5"S)

1 INDICATION OF MOVEMENT (SHINY METAL/POLISH FINISH)

Bridge No: Luling Bridge	CTLGroup
City/Town: Luling, LA	NOTES BY:
Trans Systems	
JOB: P710070019	
CREW: BRC, PGN	DATE: 4/3/08
SHEET: 5 of 6	of

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333

	TOP	BOT
W. HANG	4 3/16"	4 1/4"
W. PIN PL	4 1/16"	
	12 1/4"	
E. PIN PL	4 1/16"	
E. HANG	4 3/16"	4 3/16"

	THREADS	ELEV SLOT
TOP EAST	5	C3-263
TOP WEST	5	C3-264
BOT EAST	5	C3-278
BOT WEST	5	C3-268

PIN & HANGER DATA SHEET

Form BRI-29, Rev. 6/99

Measurements Taken By: BKC, PGN Date: 4/3/03

Bridge No.: [redacted] Town: [redacted]

Hanger Location: WEST TUB AT OP1 Effective span for Movement: [redacted] (ft)

Page: 6 of 6

	Beam No.	WEST GAP (in)	EAST GAP (in)	Tr (in)	Br (in)	Tl (in)	Bl (in)	Out to Out (in)	Secondary System Type	Gap[1] (Y/N)	Nut Restraint System	Temp	Comments
WEST TUB TOP	1	1/4"	1/4"	4 3/16"		4 3/16"		28 3/4"	NONE	Y	LUMAS W/COTTER	80°	EASTSIDE HAS LT SURF. RUST, WASHERS TACK WELDED TO HANGER NO SIGNS OF DISTRESS.
	2												WESTSIDE HAS LT SURF RUST. WASHERS TACK WELDED TO HANGER HOLDING BRASS WASHER. C3-265
	3												
WEST TUB BOT	4	1/4"	3/16"		4 3/16"			28 5/8	NONE	Y			HANGER AT ANGLE W/ BROKEN WELDS ON WING SUPPORTING PLATES R/L C3-266/267
	5												LT RUST ON WEST NUT, WELDED WASHERS ON BOT 3/4" 1.0 RO ON EAST NUT, W/ LT RUST C3-269 1 1.0 WELDED WASHER
	6												
	7												
	8												
	9												
	10												

333 148

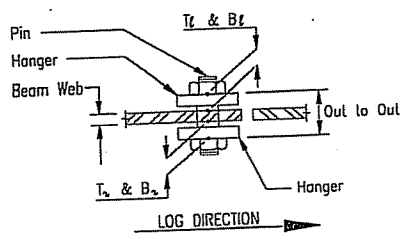
Notes:

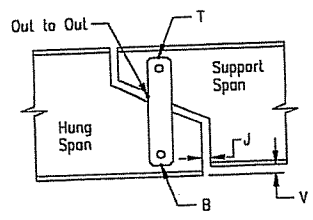
1) For Pin & Hanger assemblies with a redundant support system, indicate if there is a gap between the redundant system (bearing) and the bottom flange of the suspended girder.

2) All measurements are taken in reference to log direction.

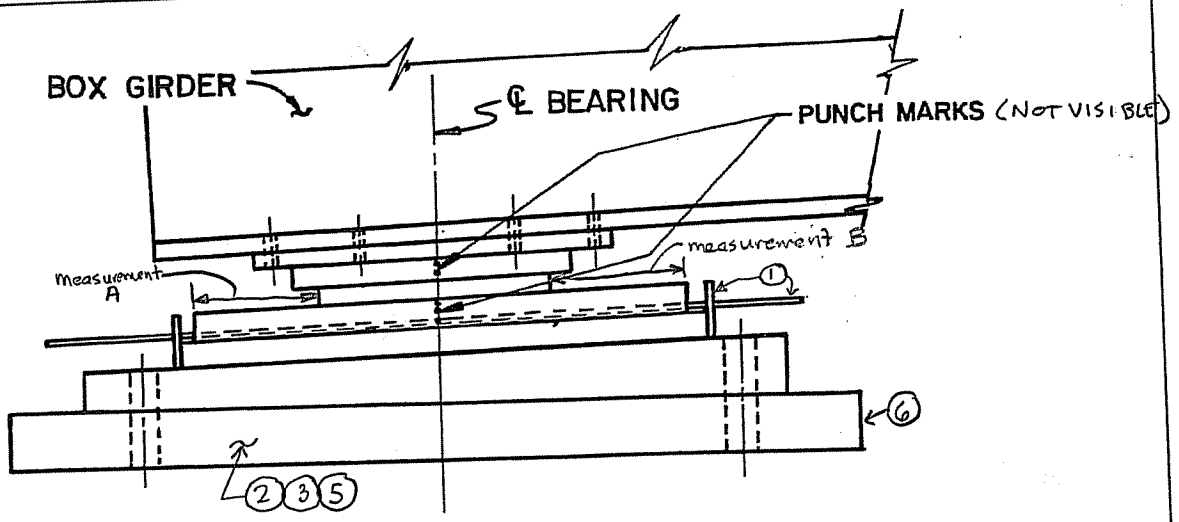
- **V** : Vertical misalignment of girders @ left edge of girder's bottom flange.
- **J** : Joint opening between webs, measured just above the bottom flange fillet, on the left face of the girder's web.
- **Out to Out** : The out-to-out of hangers taken at the leading edge, based on log direction.

3) Use a permanent marker to indicate locations of field measurements.





GEN. NOTES
ANCHOR NUTS (SINGLE) IN OVERSIZED HOLE THAT IS GROUTED



6 WEST Half of N. Elev of pedestal w/ corner spall on west Brg of West Box. C3-38

7 SW keeper PL shows signs of previous contact w/ Horizontal PL @ west Brg for West Box C3-36

EXPANSION BEARING MEASUREMENTS			
	LOCATION	TEMP.(°F)	MEASUREMENT
PIER 1 S	WEST BOX GIRDER EAST BEARING	50°F	A = 7" B = 2"
	WEST BOX GIRDER WEST BEARING	50°F	A = 7" B = 1 7/8"
	EAST BOX GIRDER EAST BEARING	50°F	A = 7 1/2" B = 1 11/16"
	EAST BOX GIRDER WEST BEARING	50°F	A = 7" B = 2"
PIER 1 N	WEST BOX GIRDER EAST BEARING		
	WEST BOX GIRDER WEST BEARING		
	EAST BOX GIRDER EAST BEARING		
	EAST BOX GIRDER WEST BEARING		

NOTE 1 Same, NOTE 2 Same Except NOT FW on S. Face & no spall on W. Face

~~NOTE: "N" OR "S" REFERS TO THE DIRECTION OF TOP PUNCH MARKS IN RELATION TO BOTTOM PUNCH MARKS.~~

1 WELDED Keeper PL on NE Corner C3-21 of East Brg for EAST Box is missing, NW & SW Keepers in contact with Horizontal PL C3-25

2 FH x 2 3/4" w corner spall on South Half C3-22 of East & West Faces x FW of South Elev. of Conc. Pedestal of E. Brg for E. Box

3 Corner spall F.L. of East Side, FW of South Side & 1/2 L of west side of East Brg of West Box C3-32

4 SW & NW Keepers in contact w/ horiz plate @ E. Brg for West Box

5 Corner Spall - 1/2 L on East Face, F.L. on South Face & 1/2 L on west Face of W. Brg of West Box C3-35

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
	JOB: P710070019	
CREW:	DATE:	SHEET:
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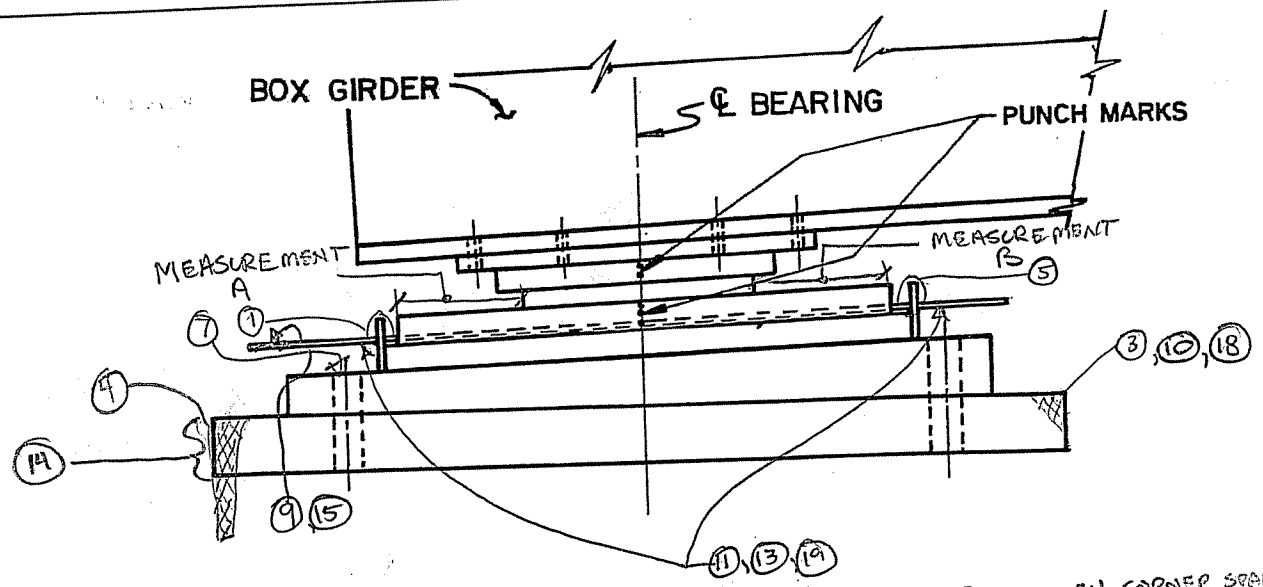
		of



18 S.F., FH CORNER SPALL ON PEDESTAL W.GIR. WBRG

19 BOT OF PL INDICATES MOVEMENT (3½"S, 6"N) W.GIR. WBRG

EXPANSION BEARING MEASUREMENTS				
	LOCATION	TEMP.(°F)	MEASUREMENT	
PIER 1S	WEST BOX GIRDER EAST BEARING			
PIER 1S	WEST BOX GIRDER WEST BEARING			
PIER 1S	EAST BOX GIRDER EAST BEARING			
PIER 1S	EAST BOX GIRDER WEST BEARING			
PIER 1N	WEST BOX GIRDER EAST BEARING	80°F	A = 4¾" B = 16"	N.E. ELEV C2-704
PIER 1N	WEST BOX GIRDER WEST BEARING	80°F	A = 4½" B = 16½"	N.W. ELEV C2-708
PIER 1N	EAST BOX GIRDER EAST BEARING	80°F	A = 4¾" B = 16¼"	N.E. ELEV C2-697
PIER 1N	EAST BOX GIRDER WEST BEARING	80°F	A = 4¼" B = 16¼"	N.E. ELEV C2-700

TYPICALLY DOUBLE NUTTED ANCHOR RODS

NOTE: "N" OR "S" REFERS TO THE DIRECTION OF TOP PUNCH MARKS IN RELATION TO BOTTOM PUNCH MARKS.

1 BROKEN WELD/BENT KEEPER ON NE CORNER, EAST TUB, E. BEARING C2-693
2 KEEPER FROZEN W/WEARING, SE CORNER, E.TUB, E.BRG C2-694
3 PEDESTAL CORNER SPALL F.L., E.TUB, E.BRG, S. FACE C2-696
4 DELAM & SPALL IN PEDESTAL/PIER 1' WIDE x 6" TALL C2-695
5 ~~KEEPER CLEAR OF PL BUT INDICATIONS OF RUBBING~~, SW CORNER E.GIRE
6 CORNER DELAM F.H./F.W. PEDESTAL S.F. E.GIR. WBRG SE CORNER E.GIR. WBRG
7 DOUBLE NUT ON ANCHOR ROD, NE CORNER E.GIR. W. BRG
8 BROKEN KEEPER NW CORNER, E.GIR. W.BRG C2-698
9 6½"x2½" CUT OUT OF PL IN NW CORNER W.BRG, E.GIR. C2-699
10 SPALL/DELAM. ALONG CORNER OF S.F. PEDESTAL, E.GIR. W.BRG C2-701
11 BOT. OF PL INDICATES SIGNS OF MOVEMENT (5"S, 6"N, E.GIR. W.BRG)
12 N.E. KEEPER RUBBING/IN CONTACT, NW. BENT C2-704, W.GIR. E.BRG
13 BOT OF PL INDICATES SIGNS OF MOVEMENT (3½"S, 8"N W.GIR. E.BRG)
14 3'L x FH, PEDESTAL W.GIR. E.BRG SPALL C2-702, NO FACE
15 6½"x2½" CUT OUT OF PL IN NE CORNER, E.BRG. W.GIR C2-703
16 2'L x FH PEDESTAL CORNER SPALL, W.GIR. WBRG C2-706
17 SE. KEEPER FROZEN, N.W. BENT C2-707

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC, CTY	4/10/08	1 of 1
		of

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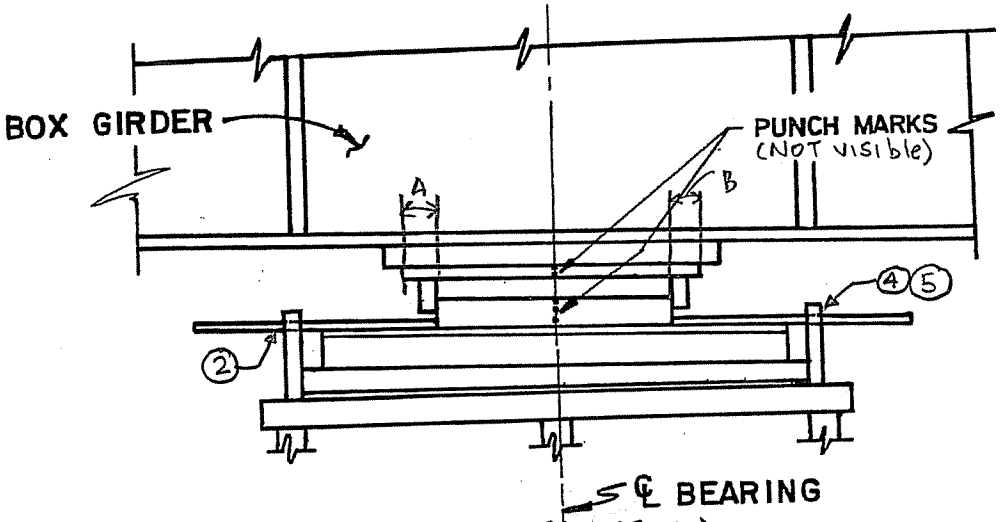

EAST ELEVATION

EXPANSION BEARING MEASUREMENTS				
	LOCATION	TEMP.(°F)	MEASUREMENT	
PIER 3	WEST BOX GIRDER EAST BEARING	48°F	A = 2 5/8" to the South B = 3/4" to the South	C3-51 to 53
PIER 3	WEST BOX GIRDER WEST BEARING	48°F	A = 2 5/8" to the South B = 5/8" to the South	C3-54 to 56
PIER 3	EAST BOX GIRDER EAST BEARING	48°F	A = 2 5/8" to South B = 5/8" to South	C3-42 to 44 C3-46
PIER 3	EAST BOX GIRDER WEST BEARING	48°F	A = 2 3/4" to South B = 5/8" to South	C3-45 C3-48 to 50

~~* NO PREVIOUS PUNCH MARKS~~.

NOTE: "N" OR "S" REFERS TO THE DIRECTION OF TOP ~~PUNCH MARKS~~ Plate IN RELATION TO BOTTOM ~~PUNCH MARKS~~ Plate.

Center Keeper Assembly: C3-59 to 62

6 Overall good condition

7 Signs of Longitudinal movement

1 Typ. Cond - Brg. Assemblies exhibit Lt Rusting of weathering steel.

2 Signs of Movement Noted on bottom of Horizontal PL

3 Bolsters Exhibit Random small areas of med-hvy Rust as well as bolster AB NUTS w/ negligible Losses.

4 NW Keeper of W. Brg of E. Box Girder in contact w/ Horizontal PL (Signs of Movement) C3-48 [SE Keeper similar but less, severe]

5 Same As 4 on W. Brg of W. Box Girder C3-54

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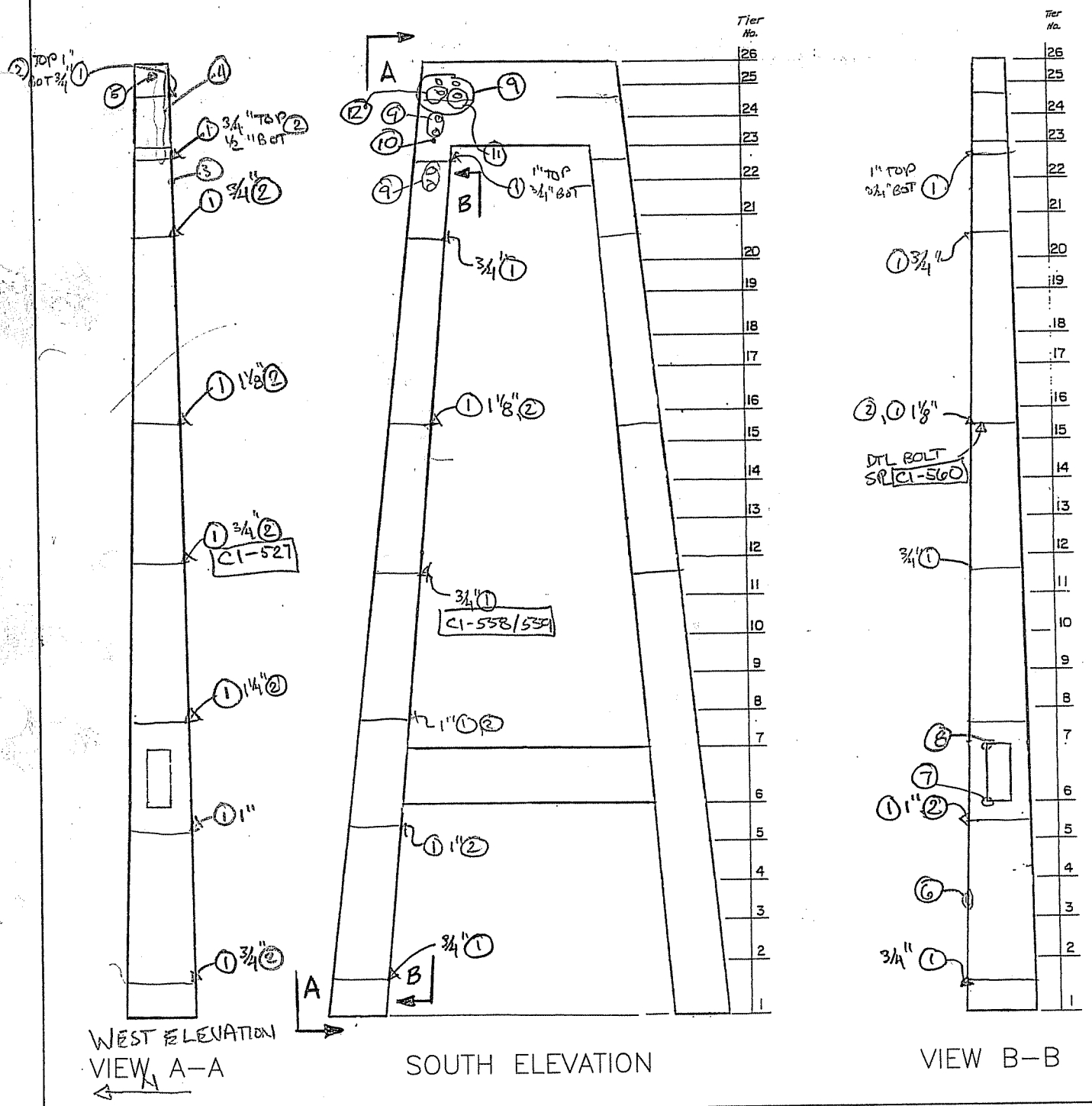
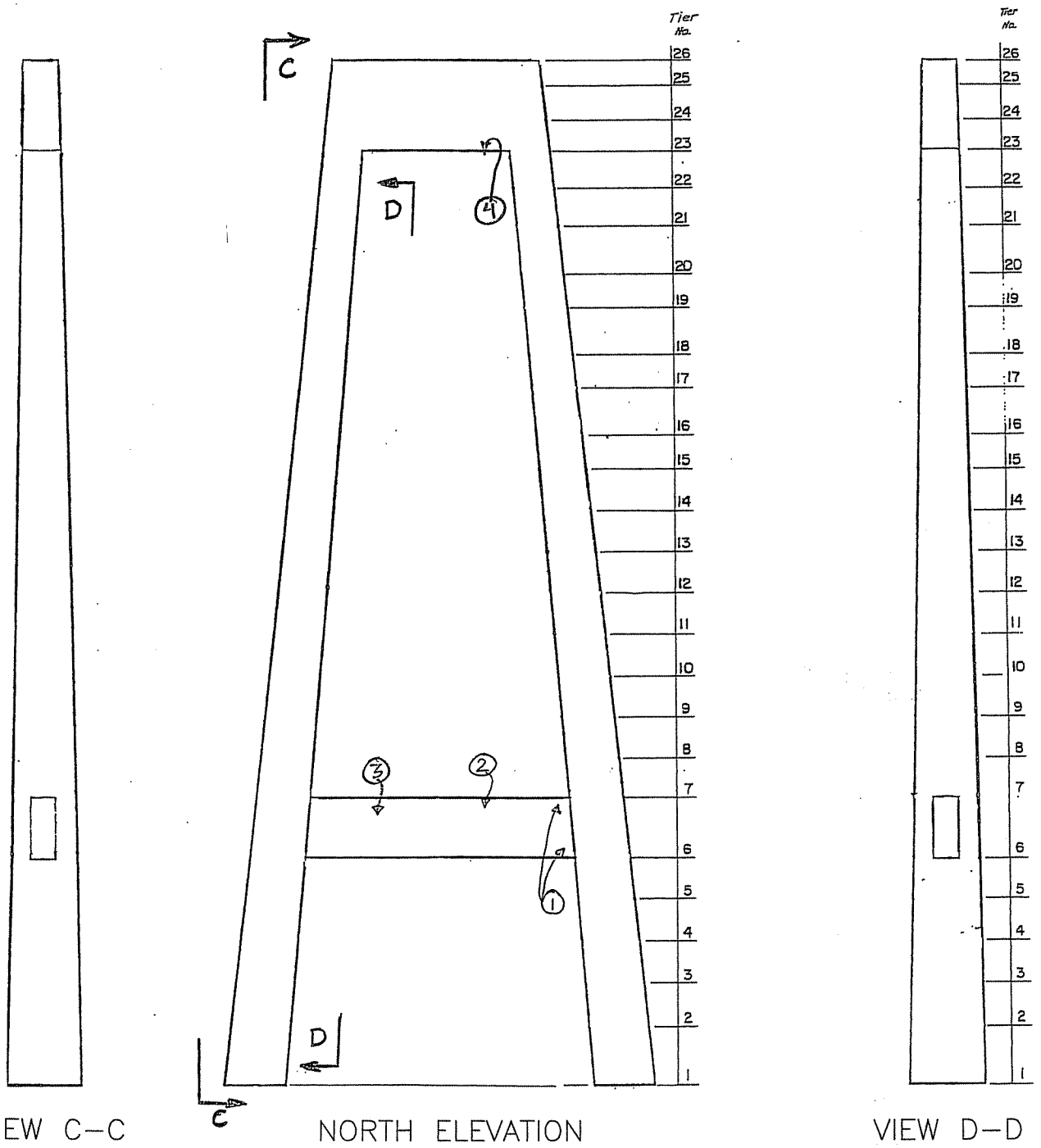
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
SD	3/5/08	1 of 1
		of



1. PACK RUST
2. SECTION LOSS ALONG SEICE (UP TO 1/8")
3. WELDED SR IN GOOD COND. (TYP.) C1-528
4. RUST STAINING FROM TOP OF STRUT, NEG. LOSS C1-529
5. 1 1/8" HOLE APPROX. 5' FROM TOP IN CENTER
6. 1/2" DENT FOR 6" ALONG S.R. AT E. END C1-556
7. HOLE AT WELD TO STRUT AND SILICONE CALK, HOLE IS IN A CAVITY
8. TYP. CAULK AT WELD TERMINATION
9. SLIGHT GAP 1/16" OR LESS RUN CABLE & GASKET C1-561
10. 1 BOLT MISSING, 1 BOLT SHEARED BELOW BOT CABLE HOUSE CG2 C1-562
11. 3 SHEARED BOLTS BELOW HOUSING, ONE SHEARED BOLT IN HOUSING C1-563
12. 3 SHEARED BOLTS BELOW ASSEMBLY C1-564

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, JHR	4/1/08	2 of 4
BKC, JHR	4/2/08	3 of 4

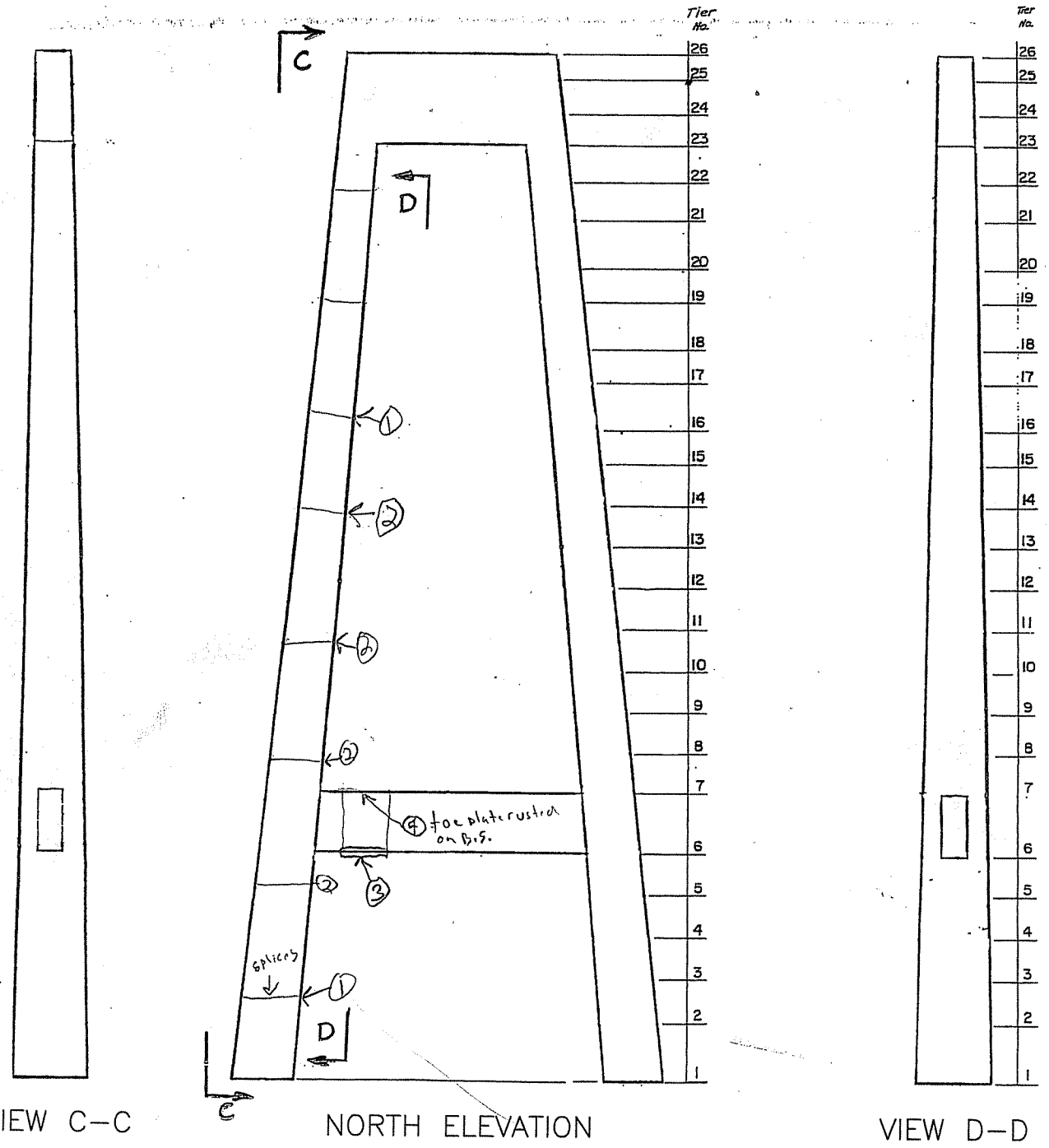
E ⟷ W



1. TYP. N. WALL COND. C1-13 TO C1-14 CHAMBER 3
2. TYP. ANCHOR BOLTS CON. ON TOP ⊥ CHAMBER 4 C1-15
3. TYP. MOD. RUST ALONG N. WALL C1-16
4. SOUTH END, 70% LOSS AT SPL. ⊥ NUTS/BOLTS & PITT UP TO 1/8" C1-54 C1-55

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
TOWER 2	
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC, MJJ	3/3/08	1 of 10
		of



E.S., N tower 2, S. face of wind fairing, pigeon screen damaged

① P.R splice plate W. verticle edge 3/4"

② P.R splice plate W. verticle edge 1"

③ N. edge E splice bottom plate on Horizontal buildup Brace [CI-449]

④ Drainage top of E. sp. plate between E+W leg H. brace [CI-450]

⑤ 9th Bolt on 6th splice from bottom W. R not seated [CI-455]

X Pictures CI-449-458 are of this tower 148 NF, E.T.

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CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
SGB, JHR	3/27/08	of
		of

East Brg. Notes: (Fixed Long., Exp. TRANS.)

1. OVERALL Good Condition C3-1 C3-2 C3-4
2. Signs of Movement Transv. Noted
3. Measurements of Movement @ Long. keepers

   EAST Brg. Assem.
   South Keeper = 3/4" To the WEST C3-3
   North Keeper = 11/16" To the WEST

   WEST Brg. ASSEMB.
   South Keeper = 7/8" to the East
   North Keeper = 7/8" to the East C3-5
4. Vertical 1/16" deep gouges in base pL. of brg. on East & West Faces @ random locations.
5. Bolster Cavities filled w/ Lt debris & pigeon debris

West Brg Notes: (Fixed Long., Exp. Transv.)

1. overall Good Cond. C3-8 C3-10
2. Signs of Transv. Movement Noted
3. Measurements of Movement @ Long. keepers

   East Brg. Assemb.
   South Keeper = 1/16" to the West
   North Keeper = 11/16" to the West

   West Brg. Assembly
   South Keeper = 15/16" to the East
   North Keeper = 1 1/4" to the East C3-9
4. Vertical 1/16" to 1/8" deep gouges in base PL of both East & West Brg. Assemb. typ. on interior faces C3-6 C3-7
5. Bolster Cavities filled w/ Lt Pigeon Debris.

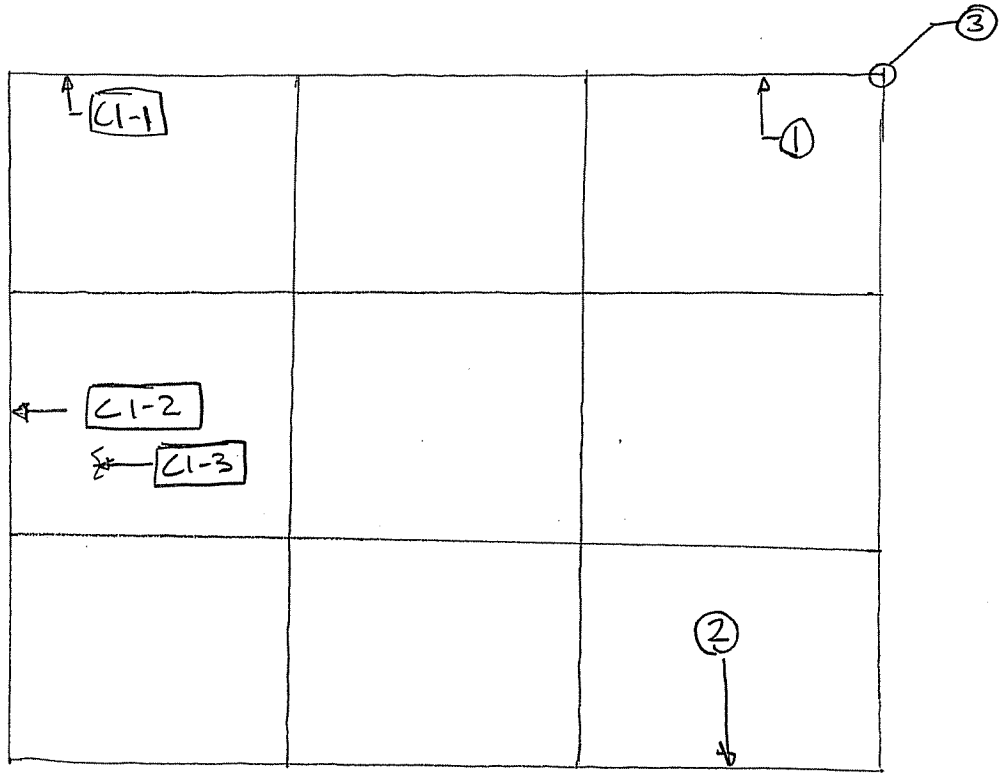
Center Keeper Assembly:

1. overall good cond. C3-13, 14 C3-16
2. SE Vertical stiff. bent ≈1" to the West C3-11
3. Both sides of Keeper in contact w/ center assembly (No movement noted) C3-12 C3-15

OTHER Notes:

1. Last Two Posts on West End of Both Lower strut Railings are detached @ base C3-17, 18
2. Small Amount of water Ponding on top of Pier 2 Lower strut @ west End.

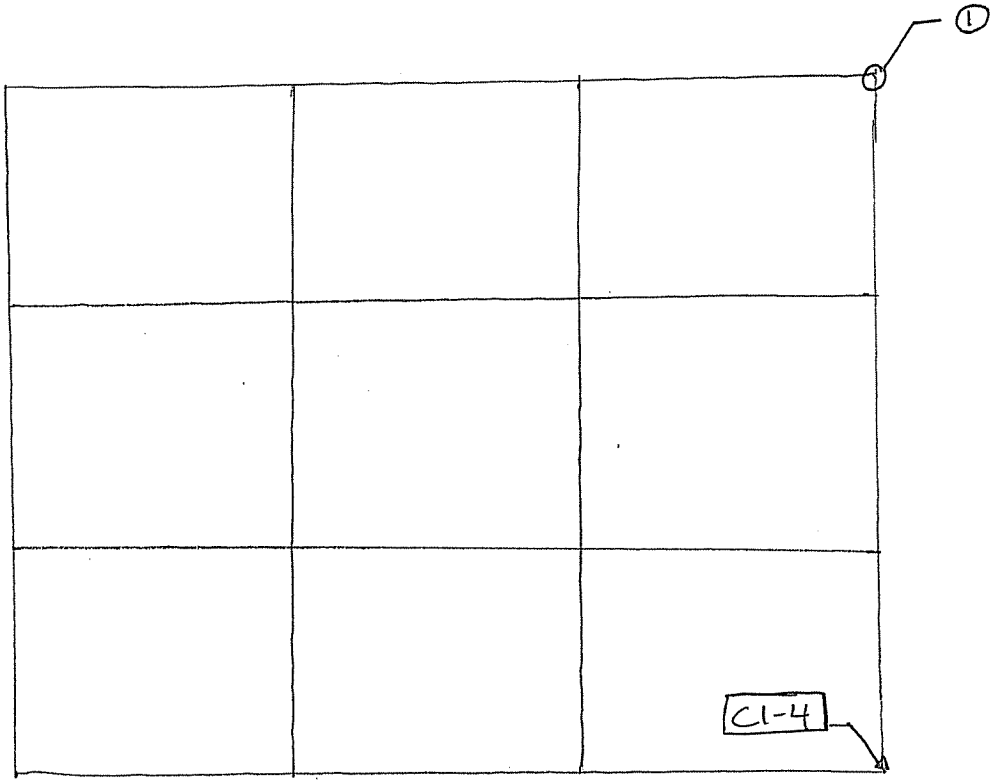
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
Pier 2 / Tower 2 Bearings		
JOB: P710070019		
CREW:	DATE:	SHEET:
SD	3/4/08	1 of 2
		of



PIER 2
E COLUMN
TIER 1

① NE Corner, Water staining at splice location, typical at most splice locations
② SE Corner bay South wall, missing bolt
③ TYP. MOD. LAMINATING RUST ON EXT. WALL CORNER – ALL CORNERS

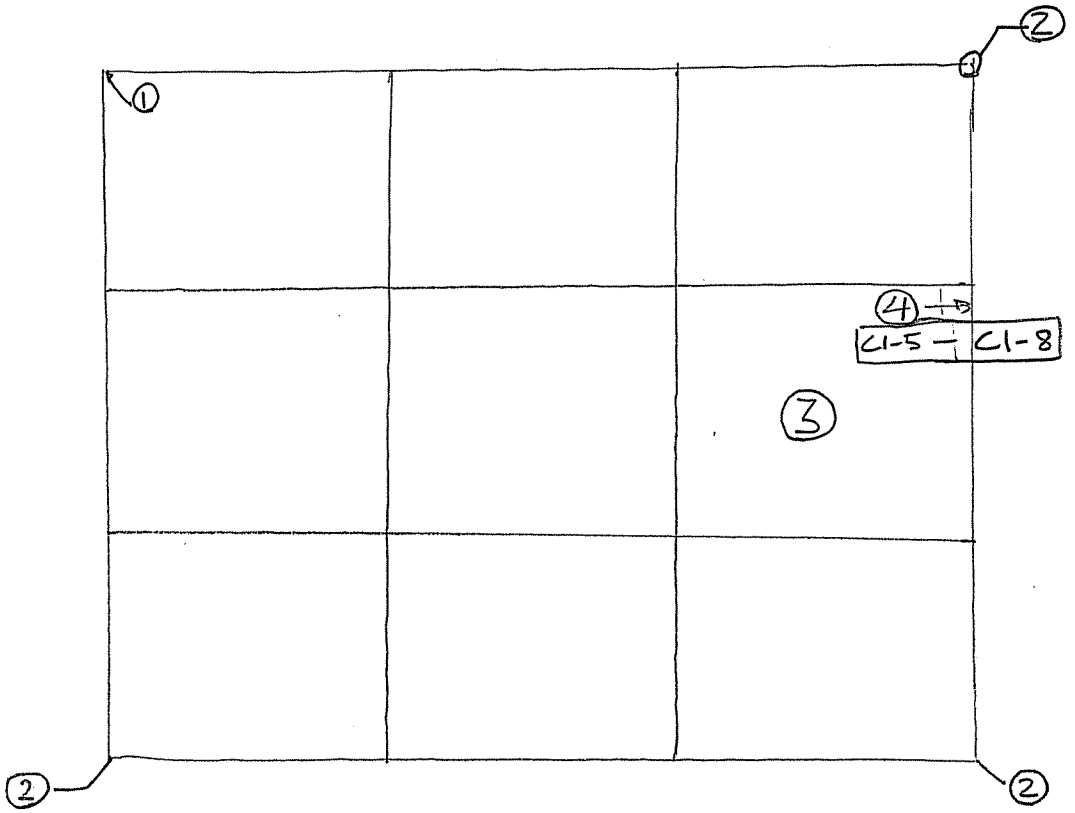
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/MJW	3/3/08	2 of 10
		of



PIER 2
E COLUMN
TIER 2

1 Typ. MODERATE LAMINATING RUST ON EXTERIOR WALL CORNER - ALL CORNERS

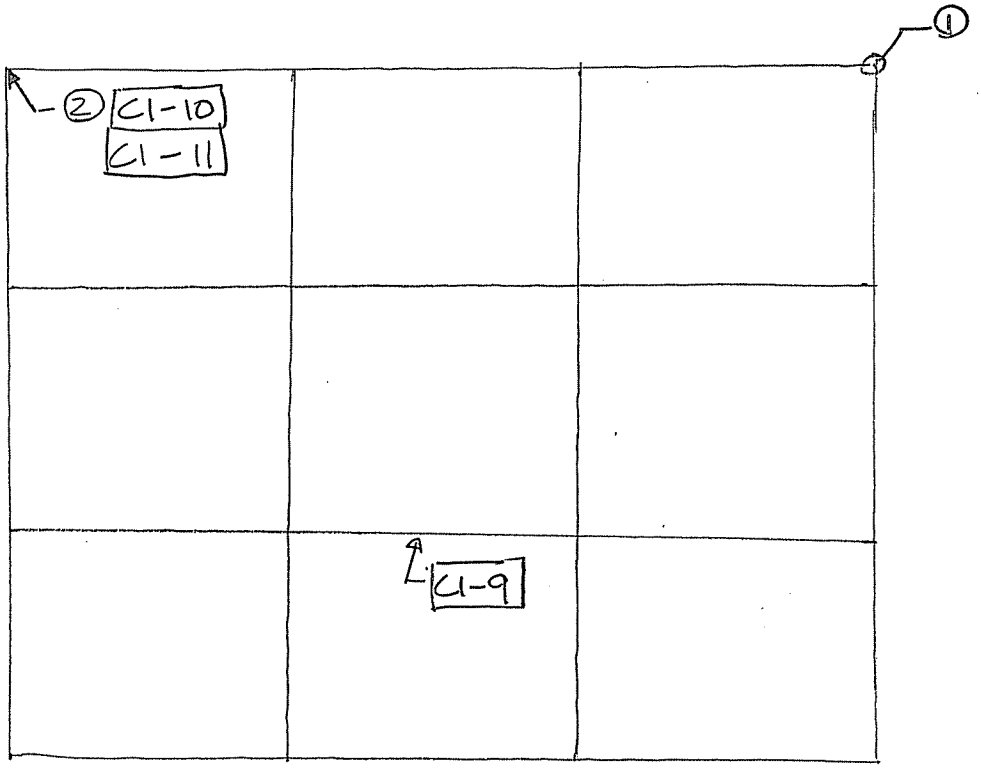
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MW/BKC	3/3/08	3 of 10
		of



PIER 2
E COLUMN
TIER 3

1. HEAVIER RUST THAN TYPICAL LOCATIONS AT NORTHWEST CORNER OF TIER 3.
2. TYP. MODERATE LAMINATING RUST ON EXT. WALL CORNER
3. ONLY BAY VISIBLE FROM TIER 3, ALL OTHER BAYS VISIBLE FROM LOWER TIERS.
4. POOR WELD – PICTURES C15–C18

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ | BKC	3/3/08	4 of 10
		of

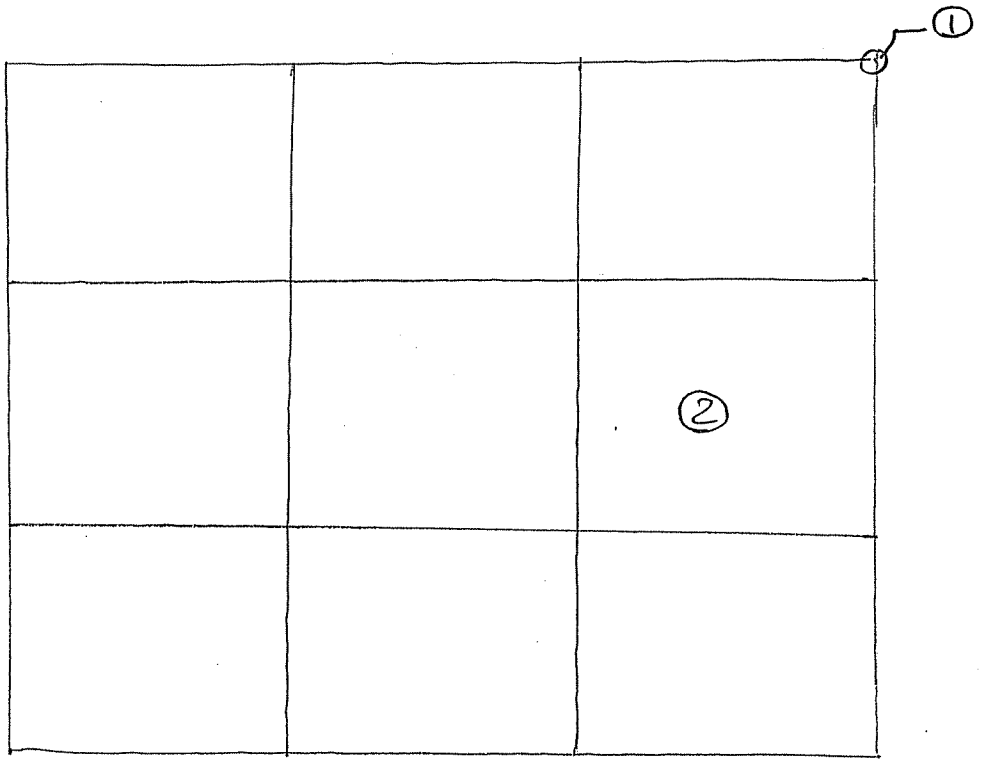


PIER 2
E COLUMN
TIER 4

1 TYP. MOD. LAMINATING RUST ON EXTERIOR WALL CORNERS - ALL CORNERS

2 HEAVY RUST BELOW HORIZONTAL STIFFENER PLATE

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BKC	3/3/08	5 of 10
		of

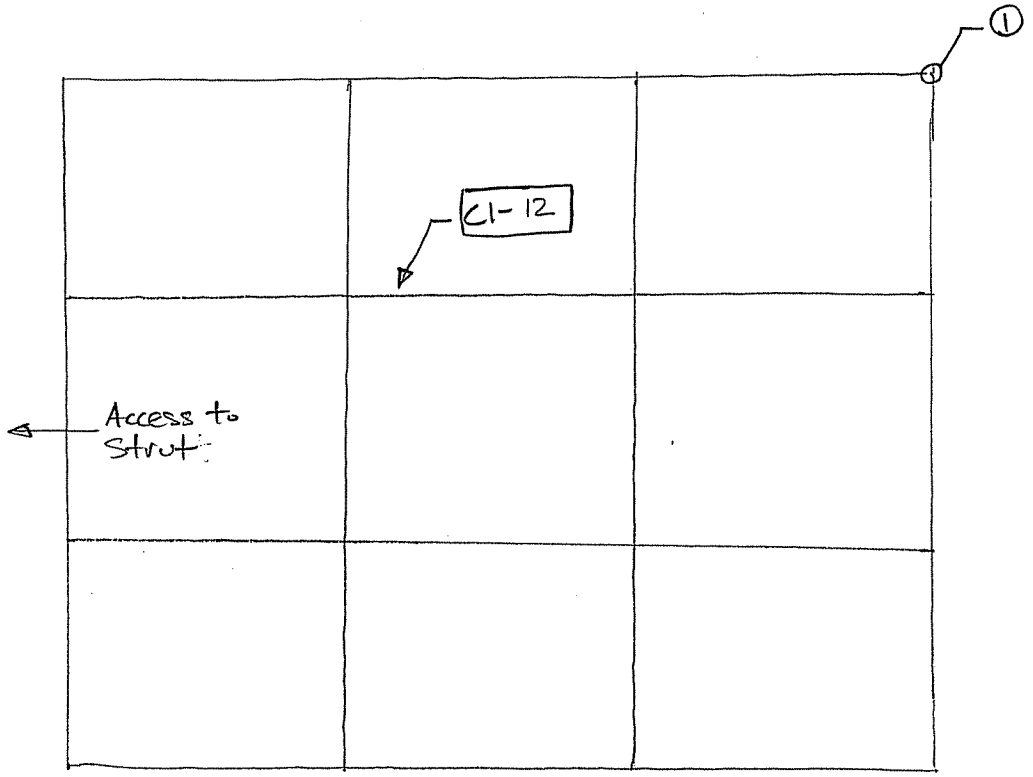


PIER 2
E COLUMN
TIER 5

① TYP. MOD. LAMINATING RUST ON EXTERIOR WALL CORNERS
- ALL CORNERS

② ONLY BAY VISIBLE FROM TIER, OTHER BAYS VISIBLE FROM LOWER TIER.

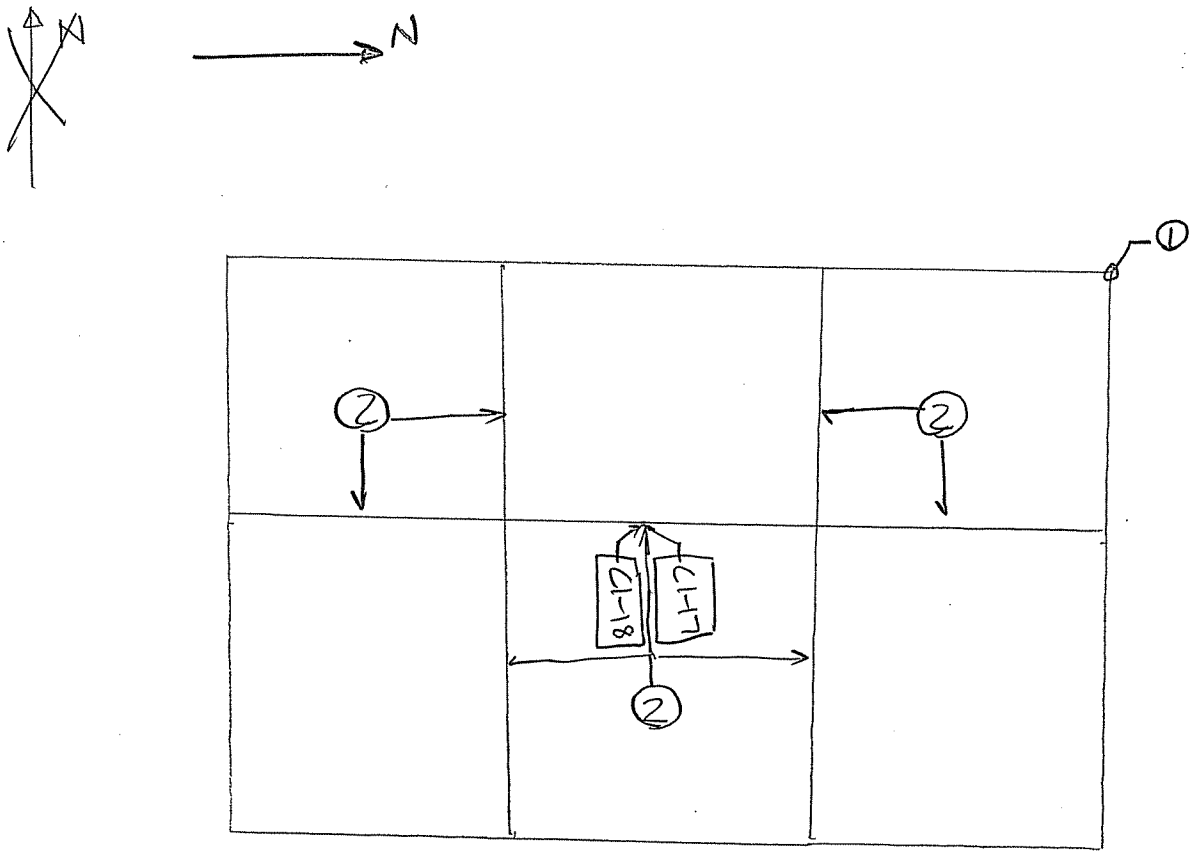
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/BKC	3/3/08	6 of 10
		of

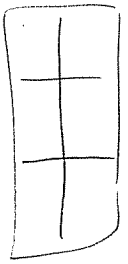


PIER 2
E COLUMN
TIER 6

1 TYP. MOD. LAMINATING RUST ON EXT. WALL CORNER - ALL CORNERS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BKC	3/3/08	7 of 10
		of





PIER 2

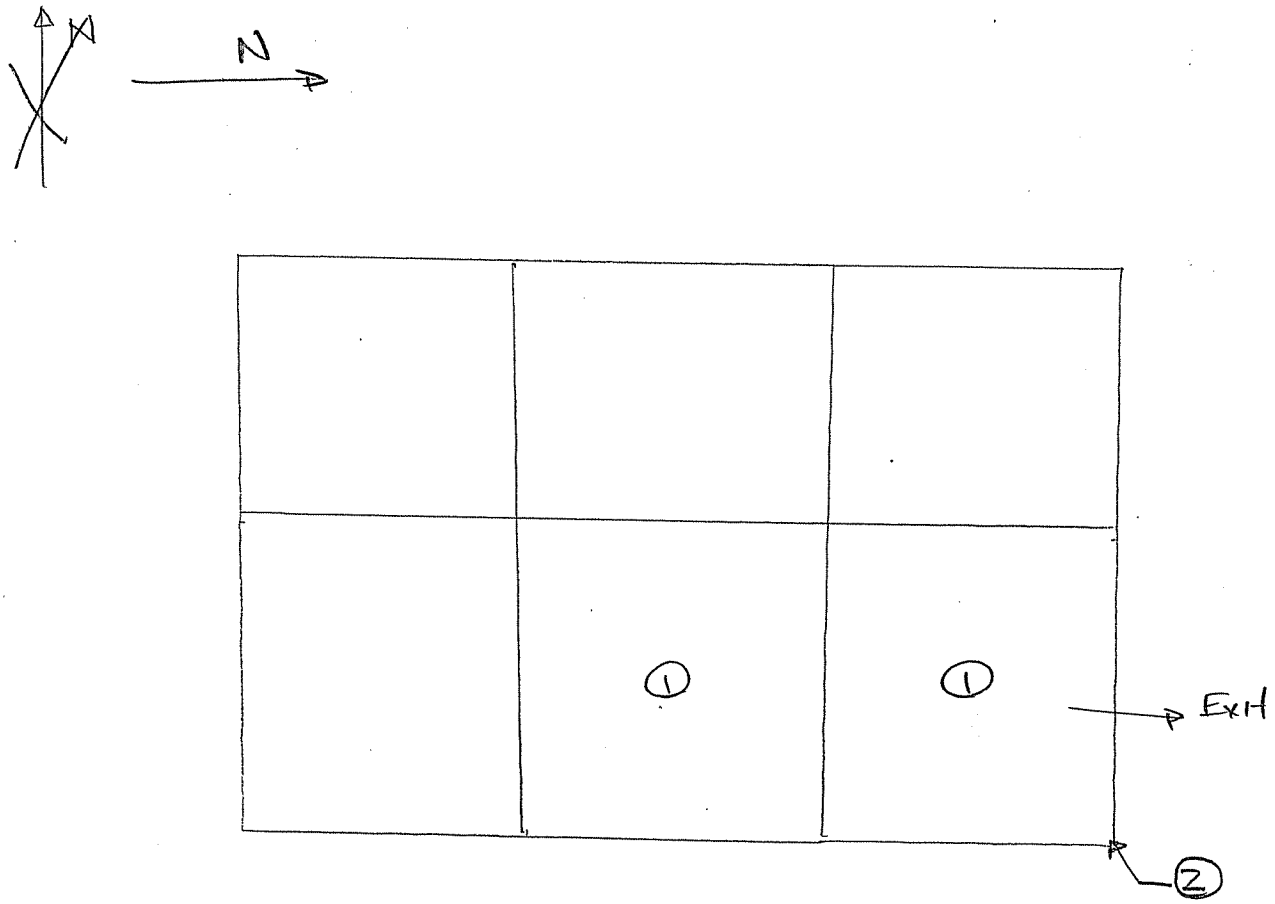
E COLUMN

TIER 7

1 Typical moderate laminating rust on exterior wall corners - all corners

2 Approx. 1" gap in web, typical at all interior webs

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BKC	3/3/08	8 of 10
		of

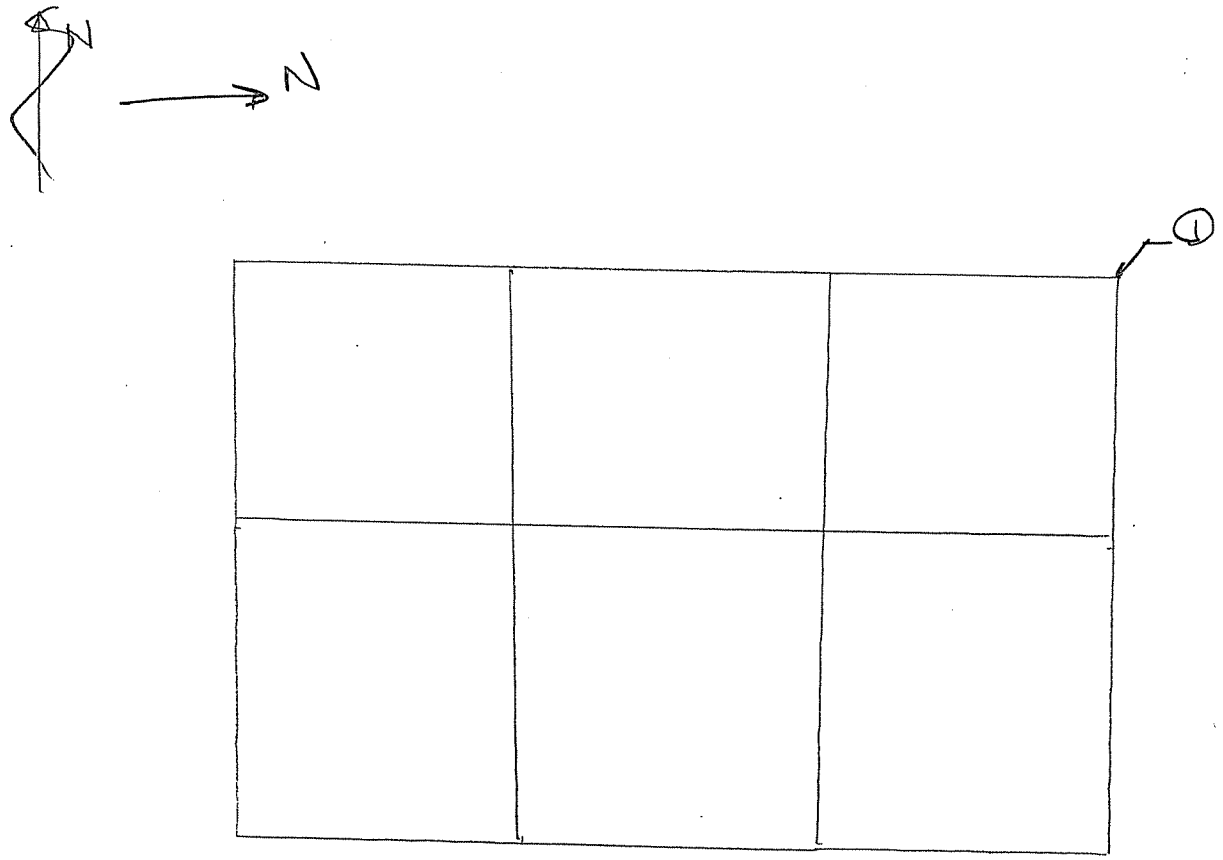


PIER 2
E COLUMN
TIER 8

1 ONLY BAYS VISIBLE FROM TIER. OTHER BAYS VISIBLE FROM LOWER TIERS.

2 TYPICAL MOD. LAMINATING RUST ON EXTERIOR WALL CORNER - ALL CORNERS

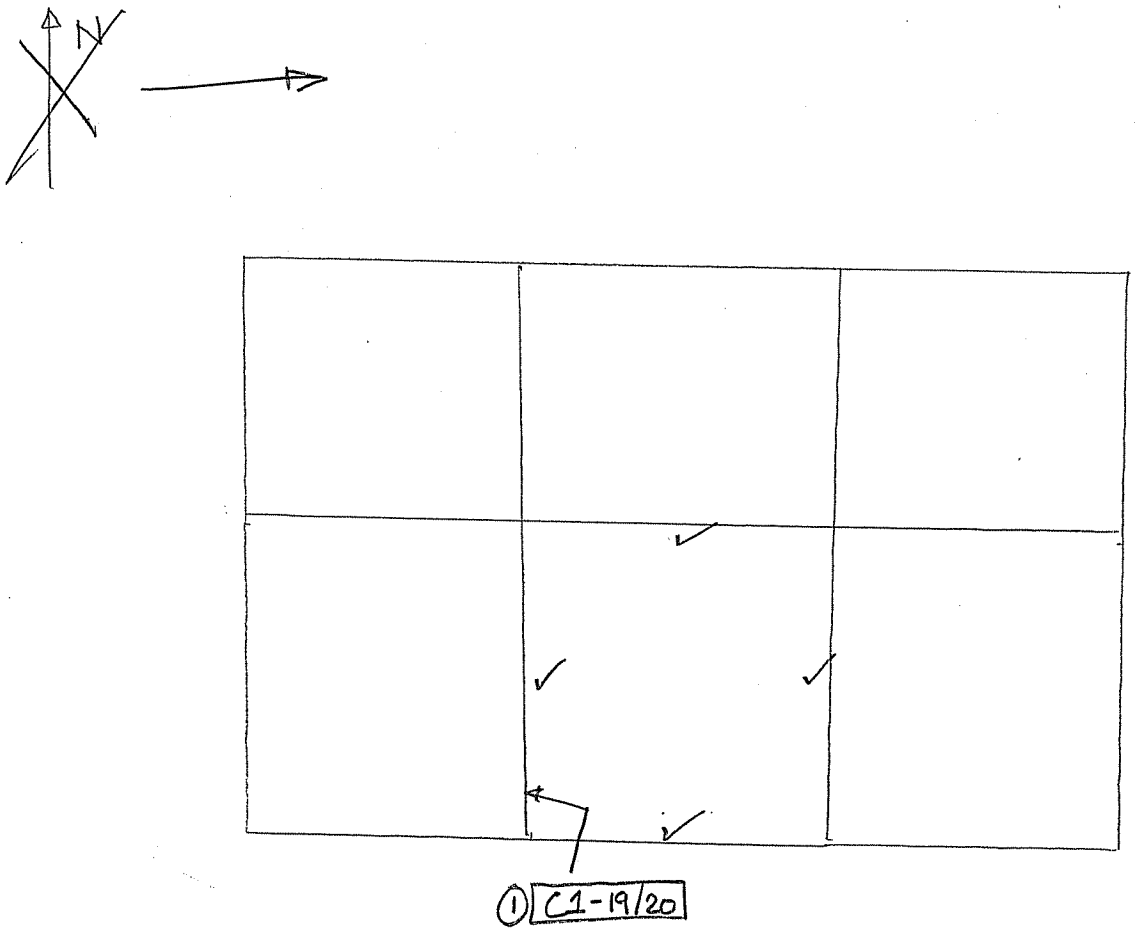
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BKC	3/3/08	9 of 10
		of



PIER 2
E COLUMN
TIER 9

1 TYP. MOD. LAMINATING RUST ON EXT. WALL CORNER - ALL CORNERS.

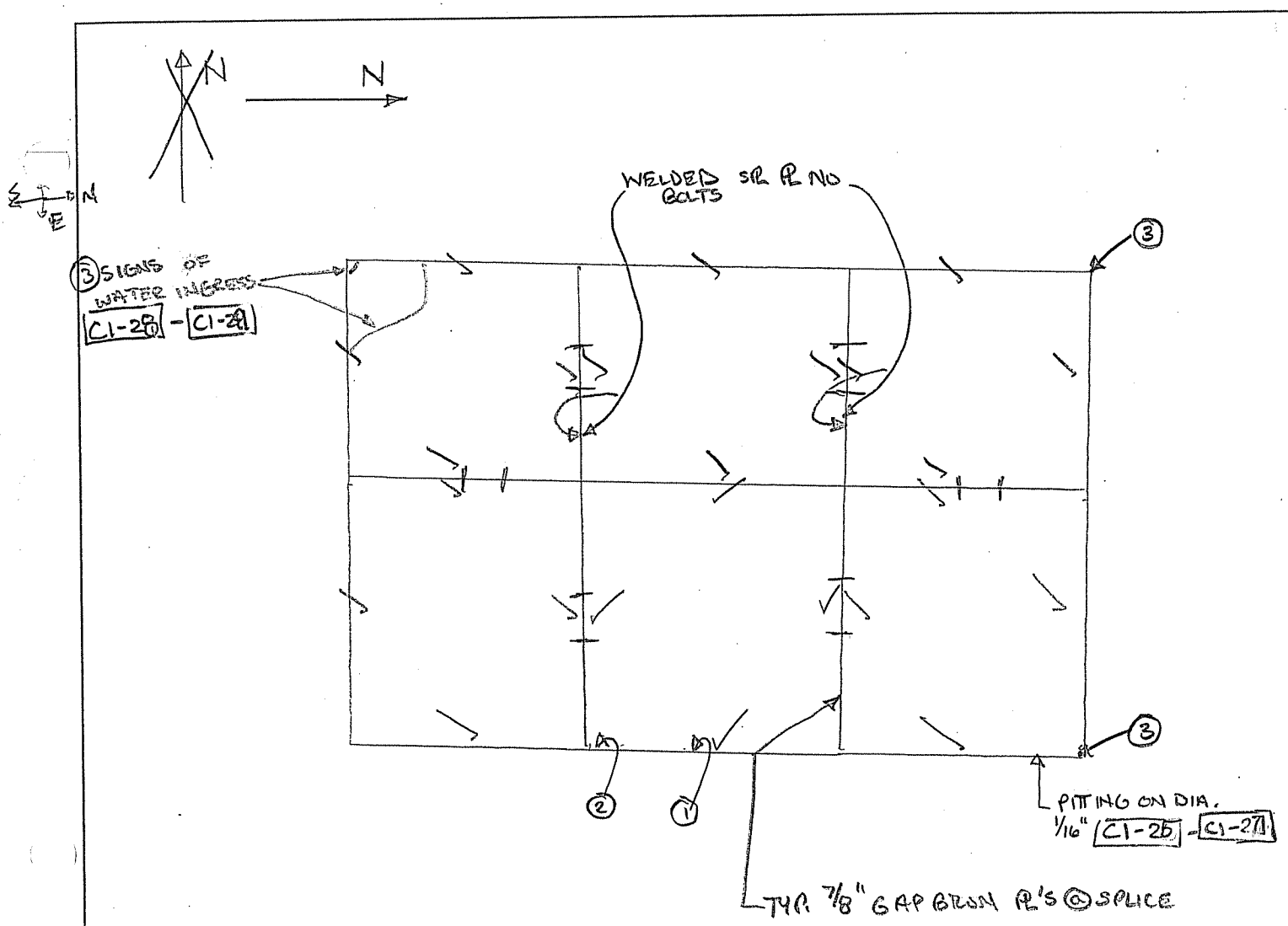
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / BKC	3/3/08	10 of 10
		of



PIER 2
E COLUMN
TIER 10

1 TYP. LT RUST ALONG WALL

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	1 of 21
		of



PIER 2

E. COLUMN

TIER 11

1. TYP. LONG STIFF TO VERT. STIFF C1-21 THRU C1-23
2. TYP. WELD DTL (STIFF LONG. TO WALL) C1-24
3. WATER INGRESS AT CORNER, W/MOD. RUST NEG. SEC. LOSS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJS	3/4/08	2 of 21
		of

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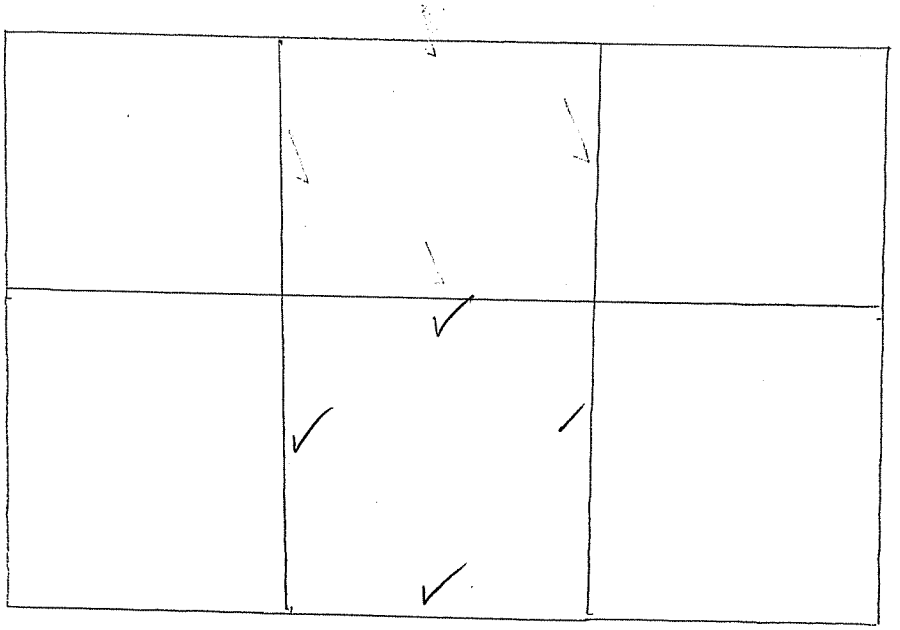
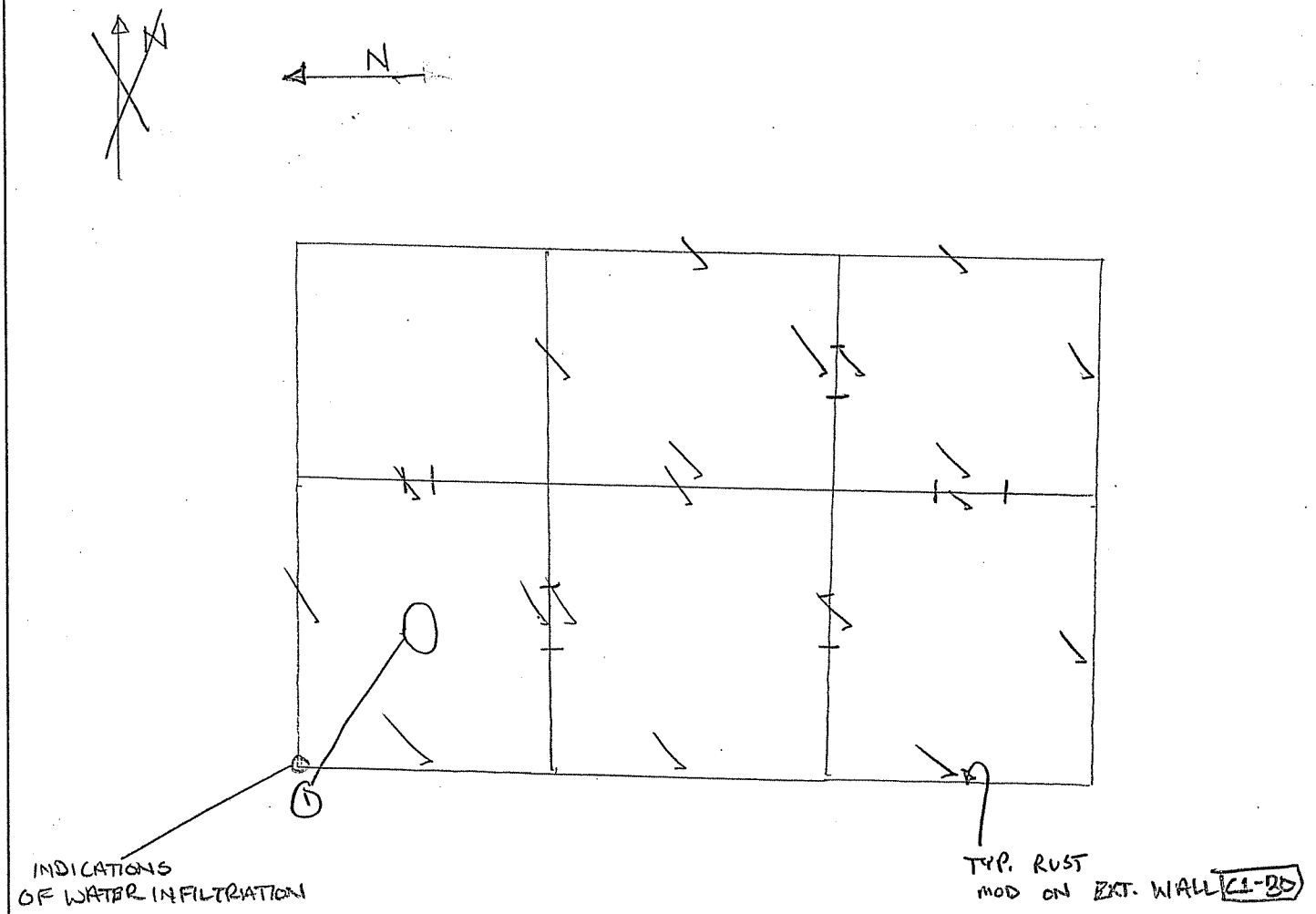


PIER 2

E COLUMN

TIER 12

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BFC, MJS	3/4/08	3 of 21
		of



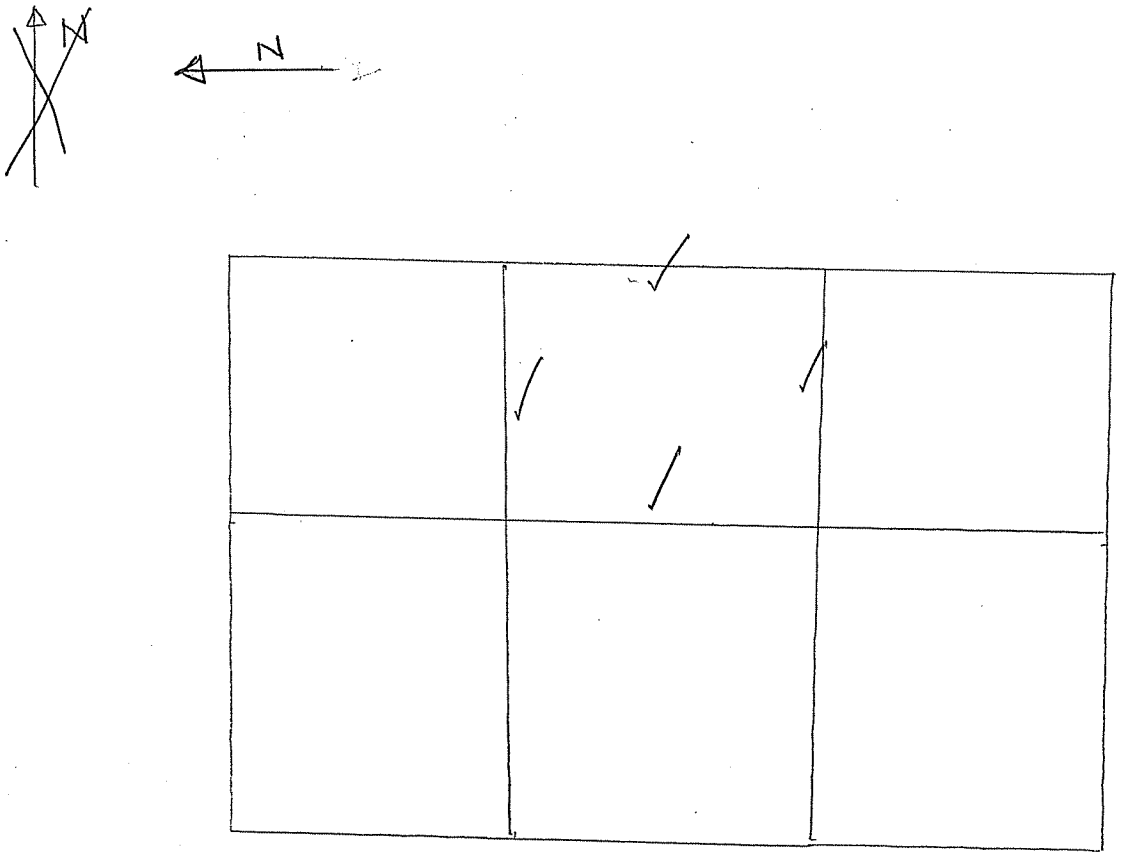
PIER 2

E. COLUMN

TIER 13

(1) DANGEROUS, PARTIALLY (80-90%) DRILLED OUT HOLE 3'ø C1-B1

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	4 of 21
		of

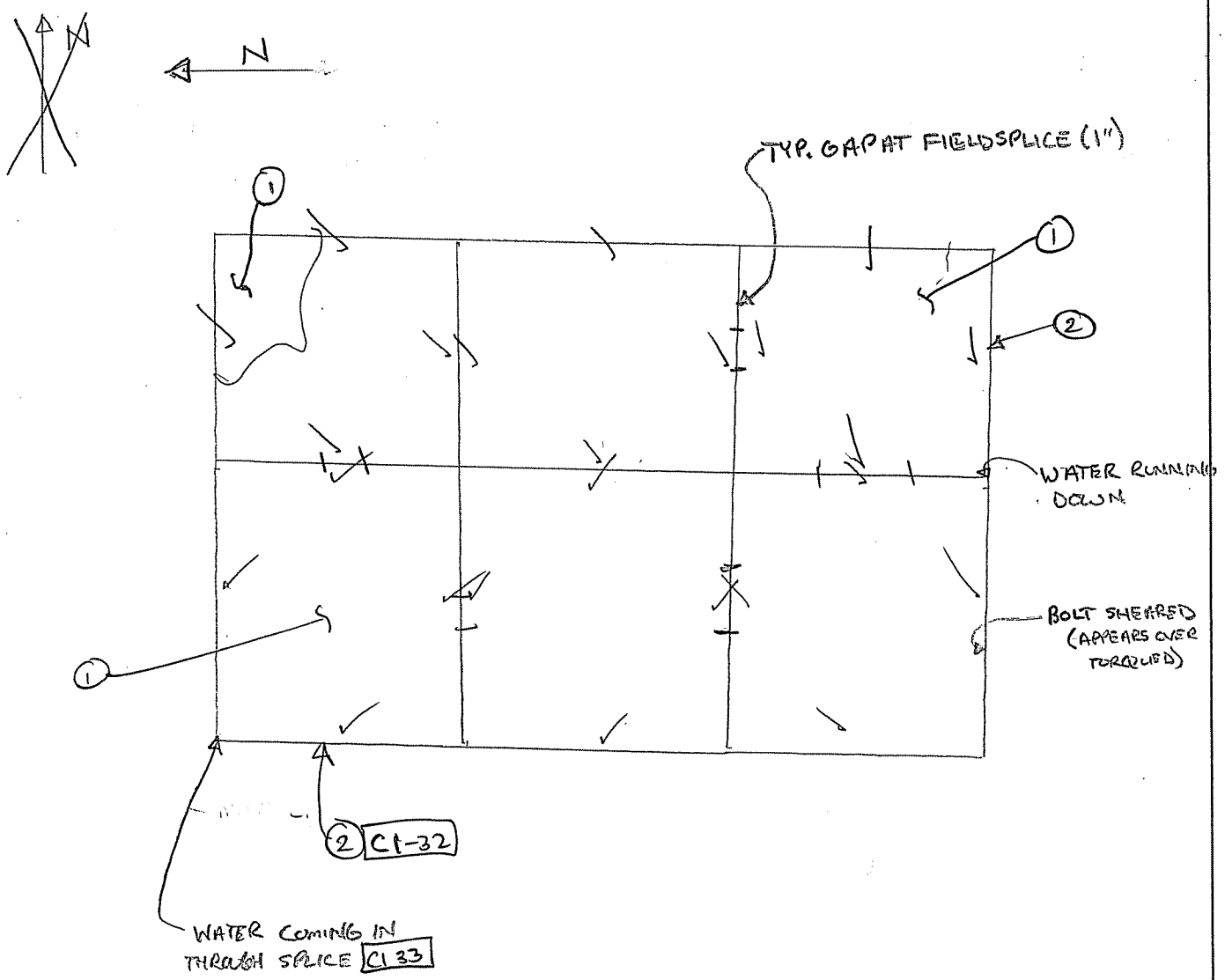


PIER 2

E COLUMN

TIER 14

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	5 of 21
		of



PIER 2

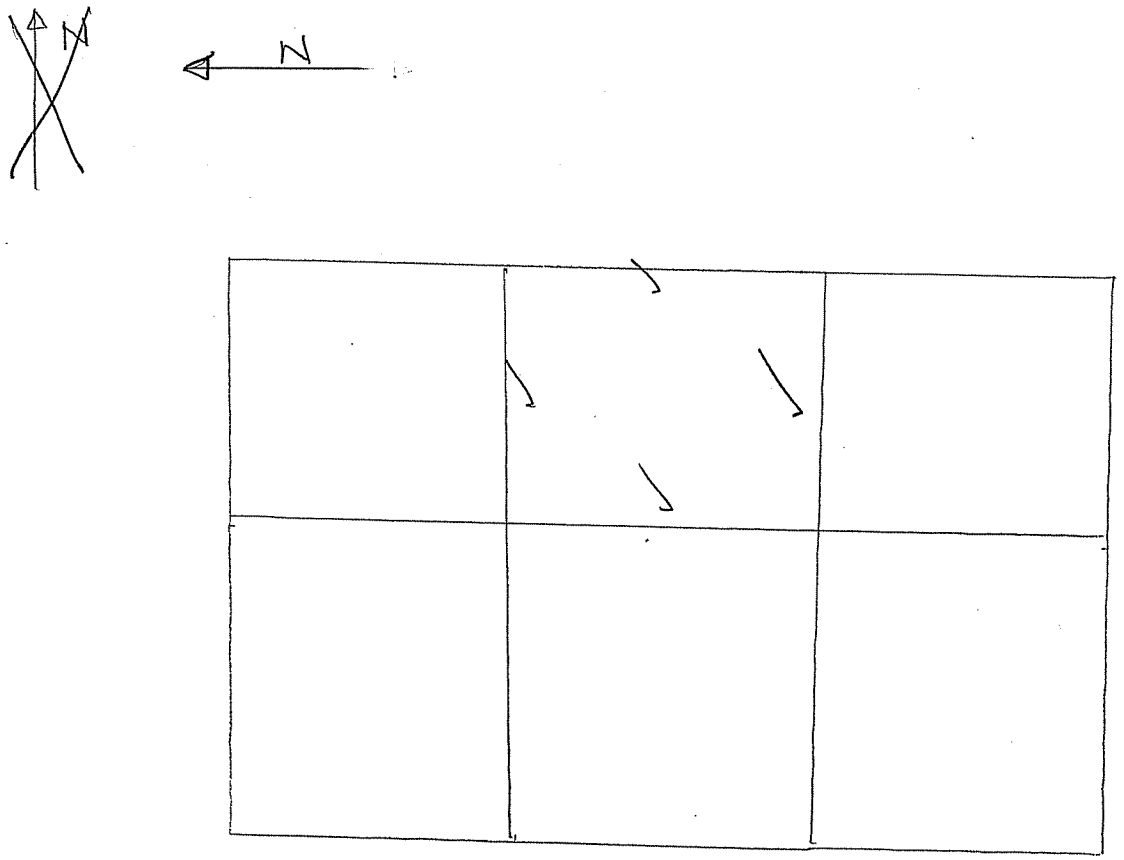
E COLUMN

TIER 15

1 MOISTURE/WET ALONG IF DIAPH. (WORSE BY WALLS)

2 MOD. RUST. ALONG EXT. WALLS OF BAY. NEG. SEC. LOSS

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	6 of 21
		of



PIER 2

E COLUMN

TIER 16

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJS	3/4/08	7 of 21
		of

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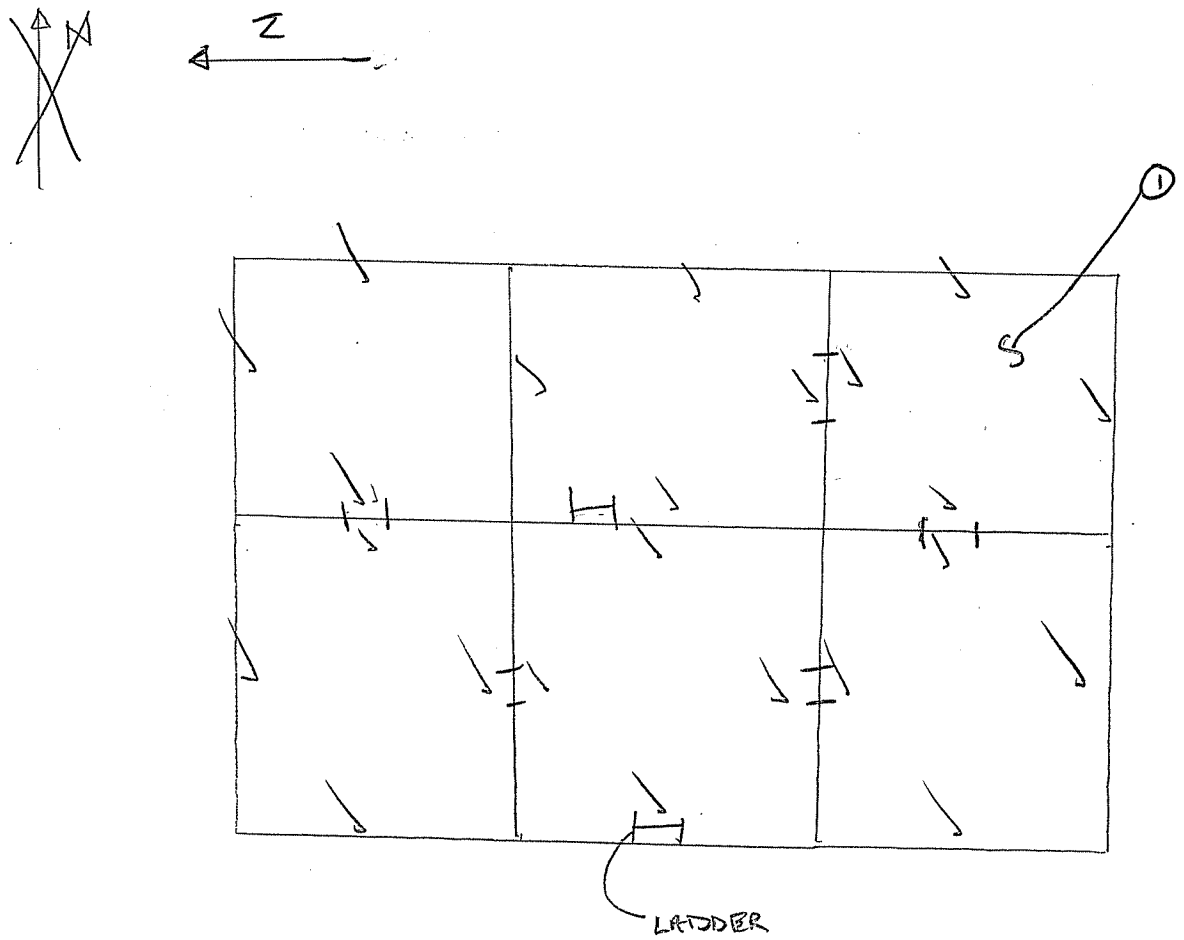
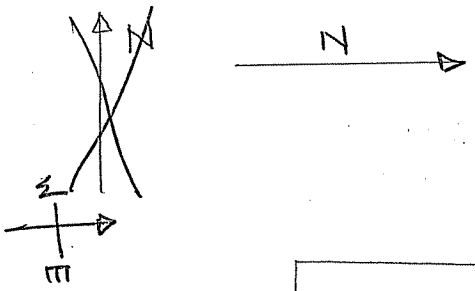
333

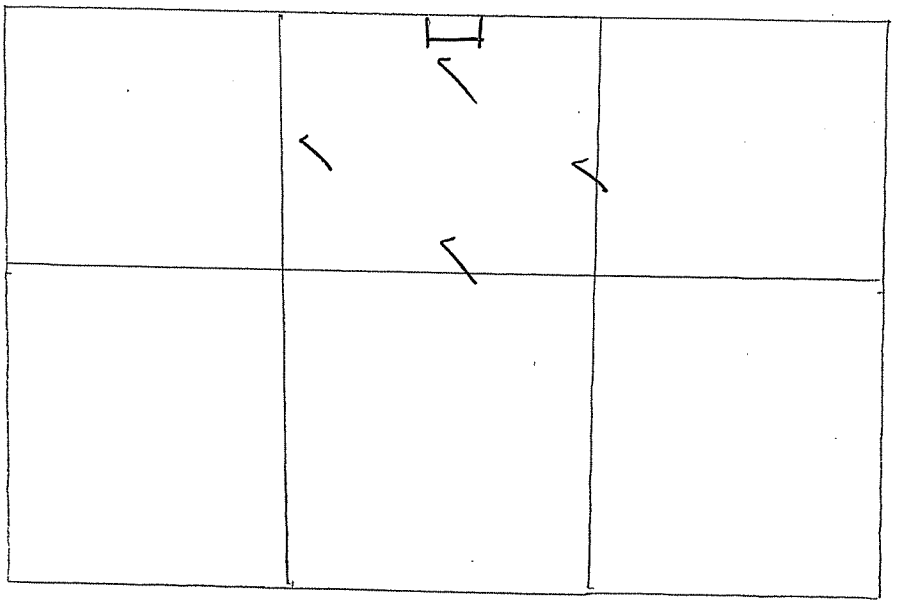


PIER 2
E COLUMN
TIER 17

1 MOISTURE ALONG FLOOR DIA.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	8 of 21
		of



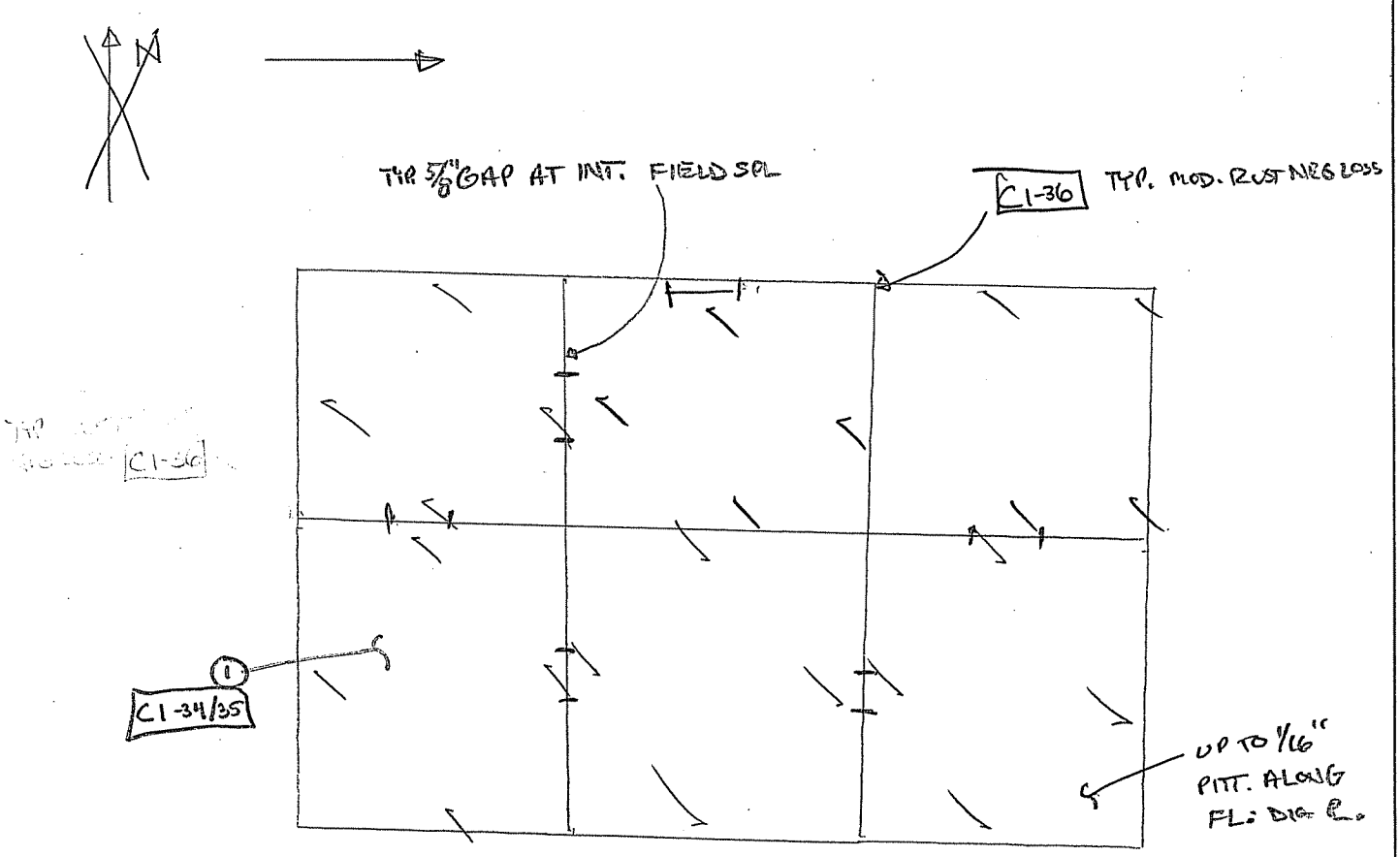


PIER 2

E COLUMN

TIER 18

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJS	3/4/08	9 of 21
		of



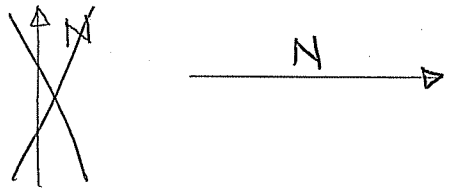
PIER 2

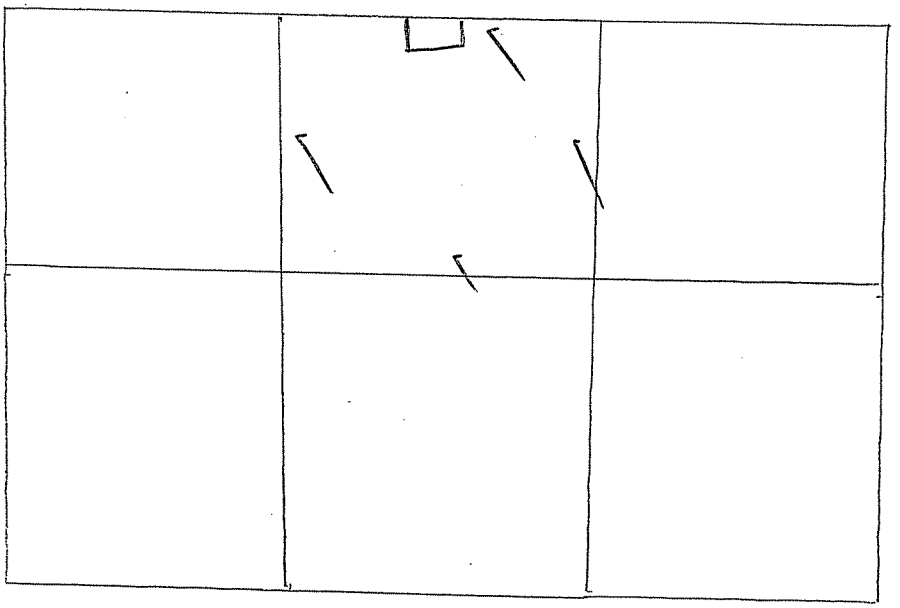
E COLUMN

TIER 19

1 DRAIN P/ MOIST. ALONG BOT. DIA. ℄ w/ UP TO 1/8" PITTING

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, MSS	3/4/08	10 of 21
		of



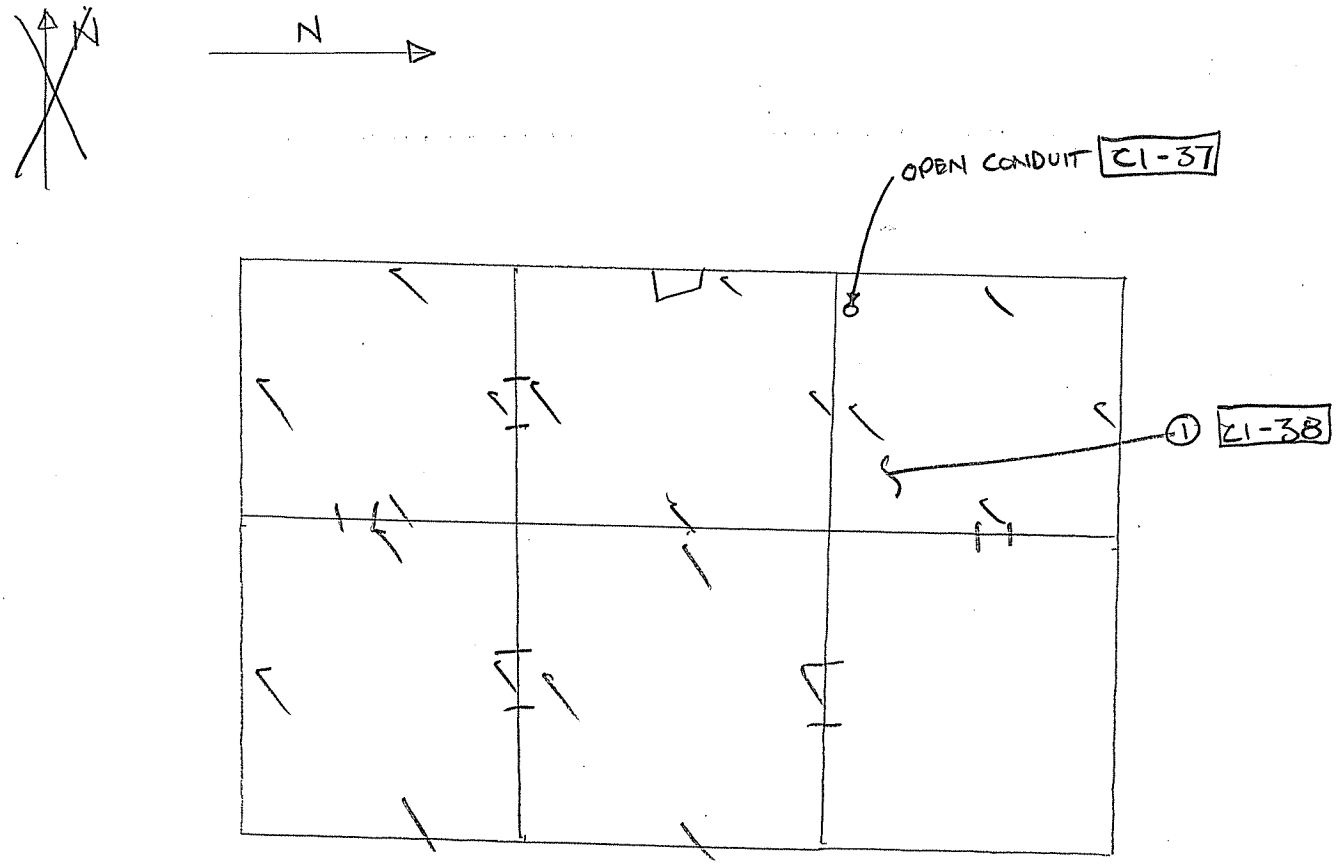


PIER 2

E COLUMN

TIER 20

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MSJ	3/4/08	11 of 21
		of



PIER 2
E COLUMN
TIER 21

1 TYP. TOP. DIA EXHIB. SIGNS OF CONDENSATION (RUST STAINS)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	12 of 21
		of

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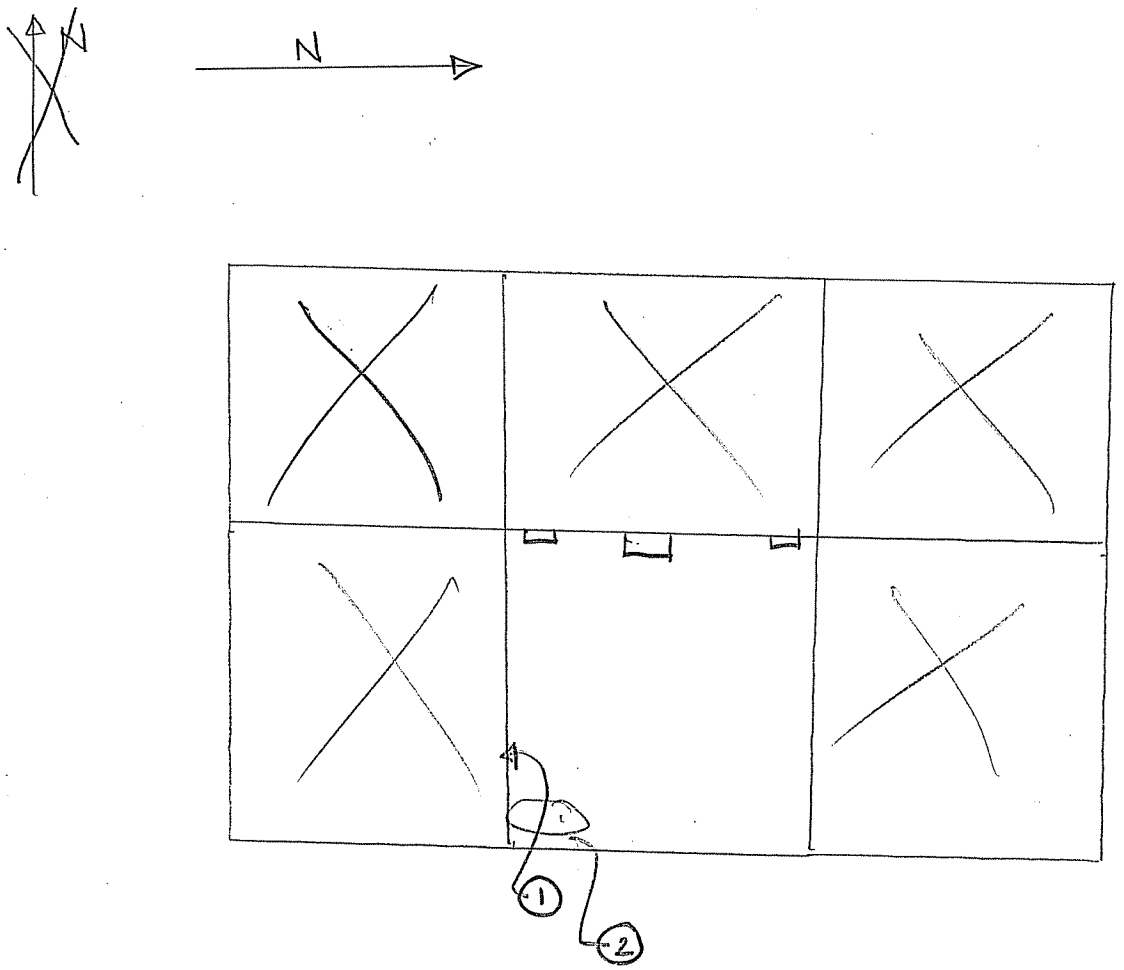
333



PIER 2

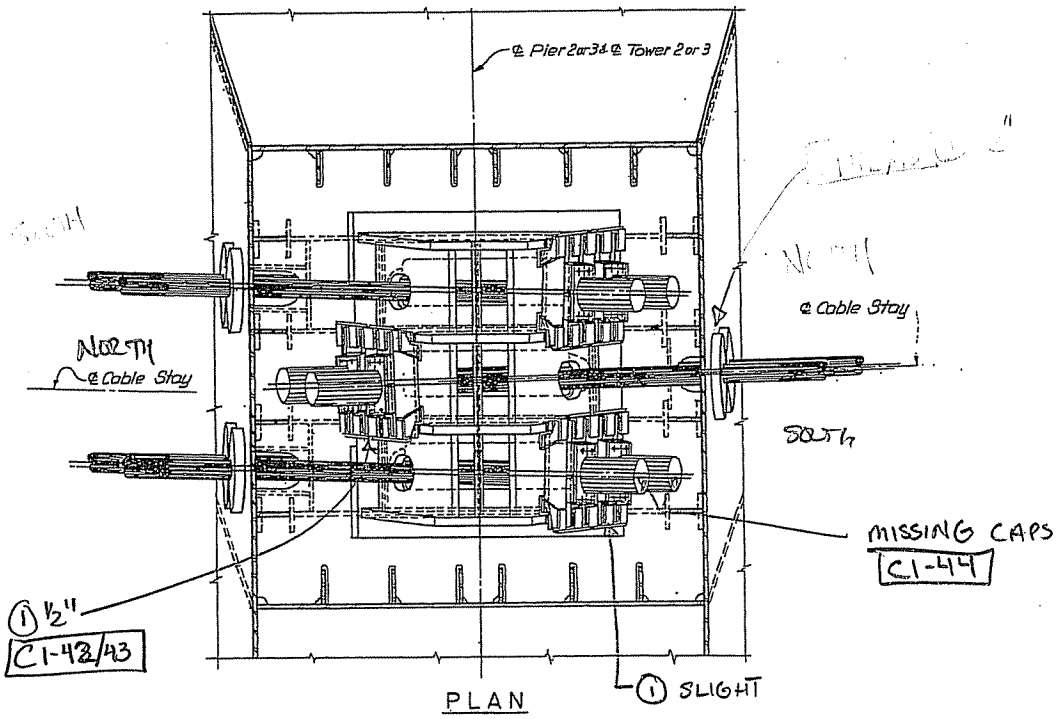
E COLUMN

TIER 22

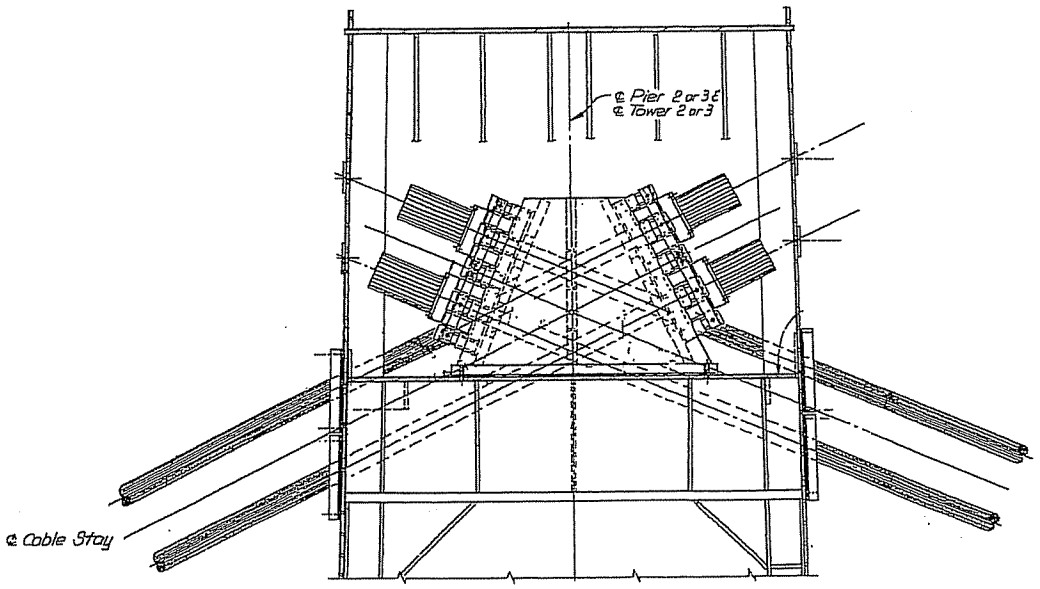
SOUTH WALL ELEV C1-41

1. TYP. COND. OF CABLE/WALL CON. C1-39
2. TYP COND. KNEE BRACE CON C1-40

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	13 of 21
		of



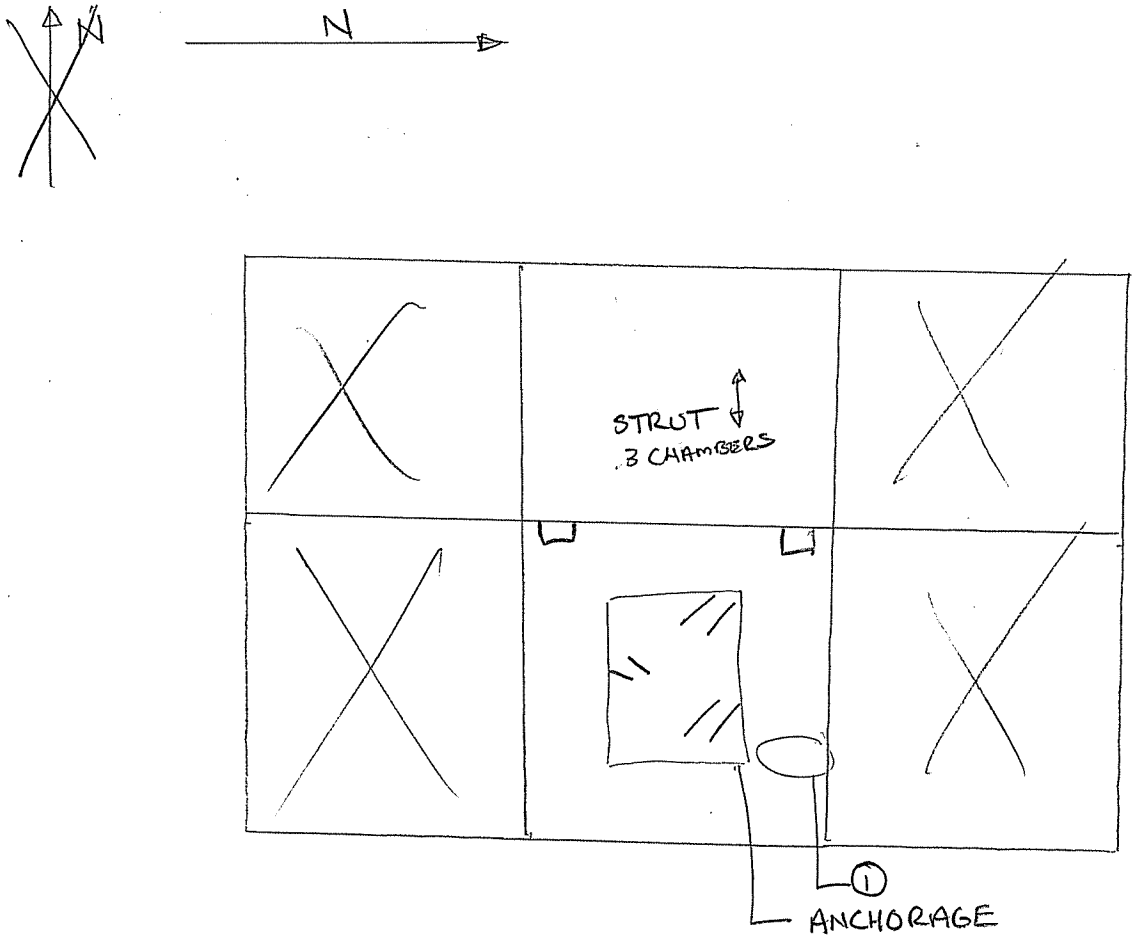
PLAN



P2, S.COL, T23

① BENT KEEPER PL

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	14 of 21
		of



PIER 2

E COLUMN

TIER 23

(1) TYP. KNEE BRACE CON. C1-46	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
	NOTES BY:	TranSystems
	JOB: P710070019	
	CREW:	DATE:	SHEET:
	BKC, MJS	3/4/08	15 of 21
			of

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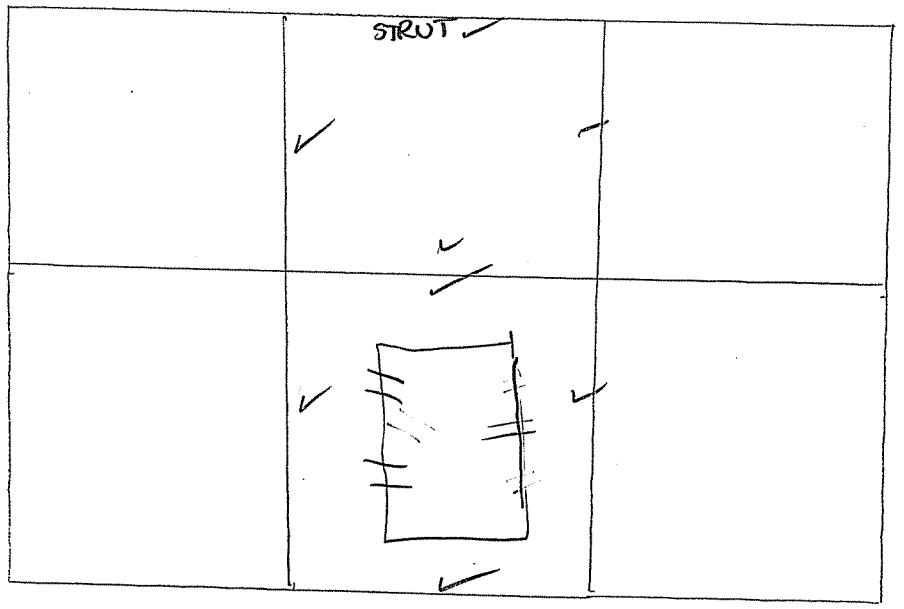
333

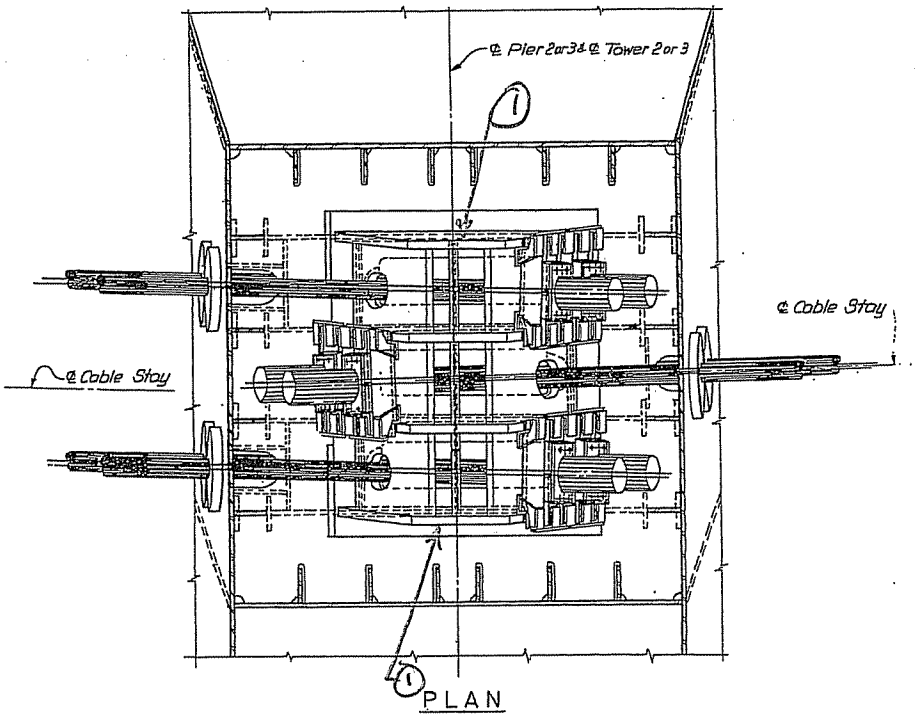


PIER 2

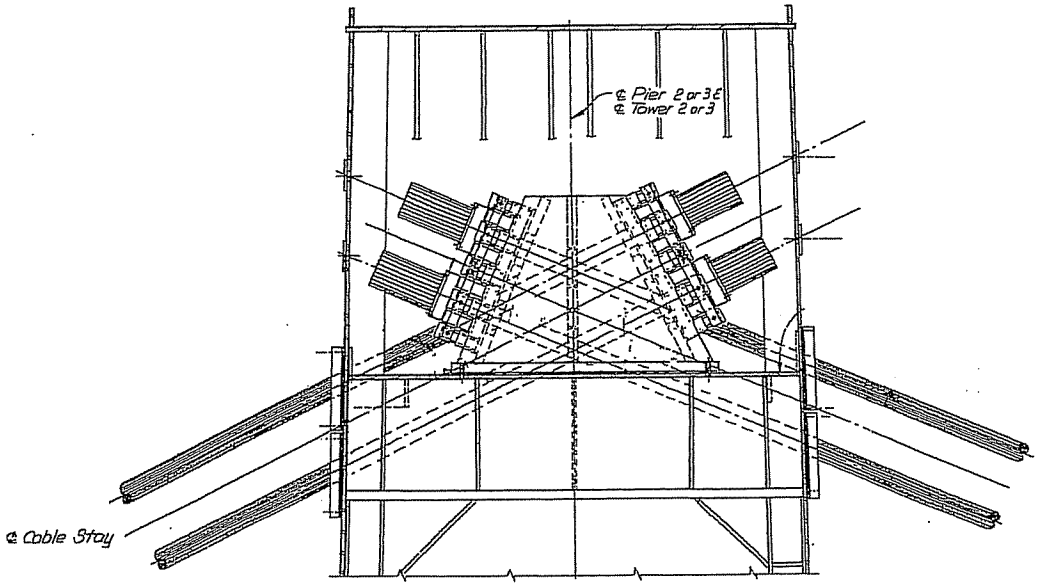
E COLUMN

TIER 24

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
	CREW:	DATE:	SHEET:
	BKC, MJJ	3/4/08	16 of 21
			of

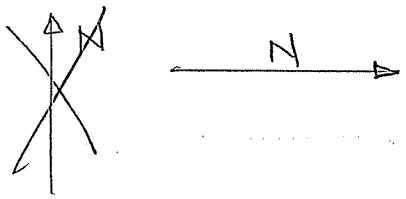


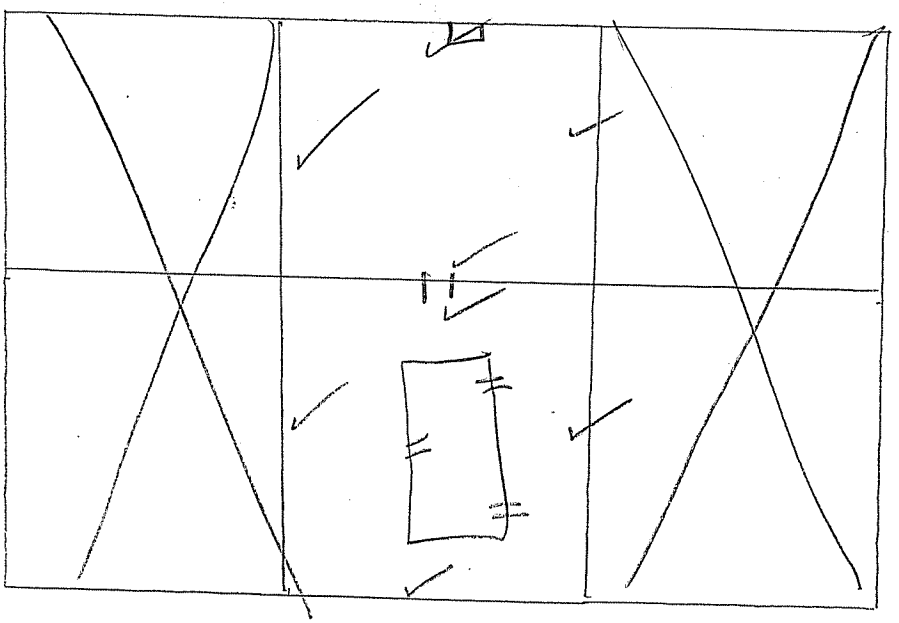
PLAN



TIER 24, P2, E. COL

1 1/4" BOLD GEL (OUTWARD) C1-46	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
	NOTES BY:	TranSystems	
	TOWER 2		
	JOB: P710070019		
	CREW:	DATE:	SHEET:
	BKC, MJJ	3/4/08	17 of 21
			of



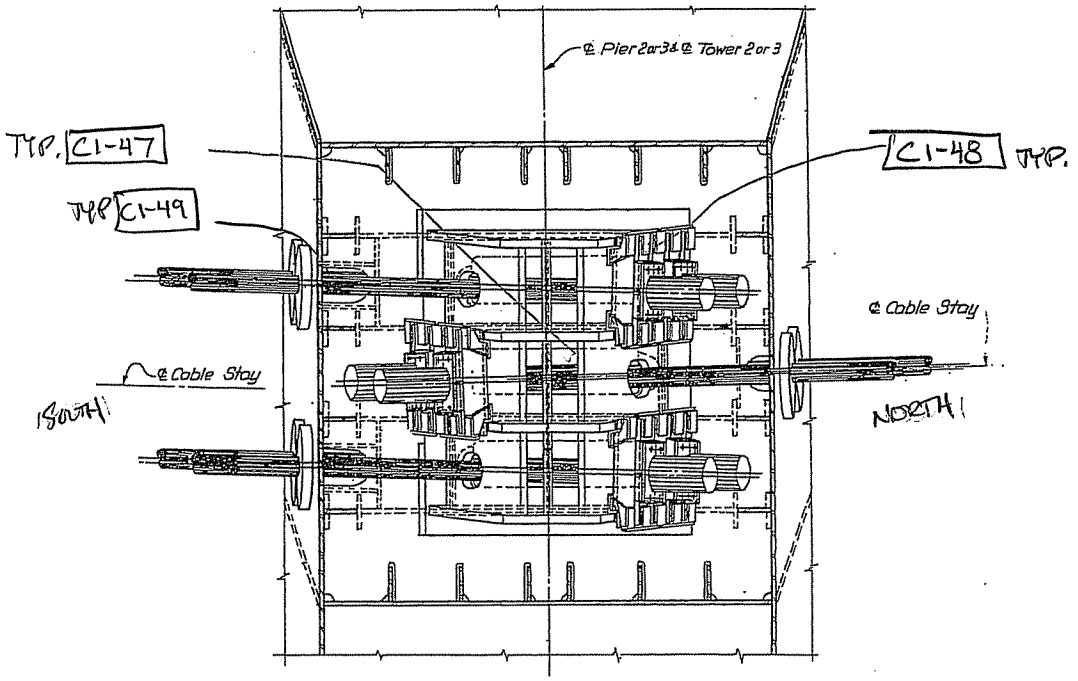


PIER 2

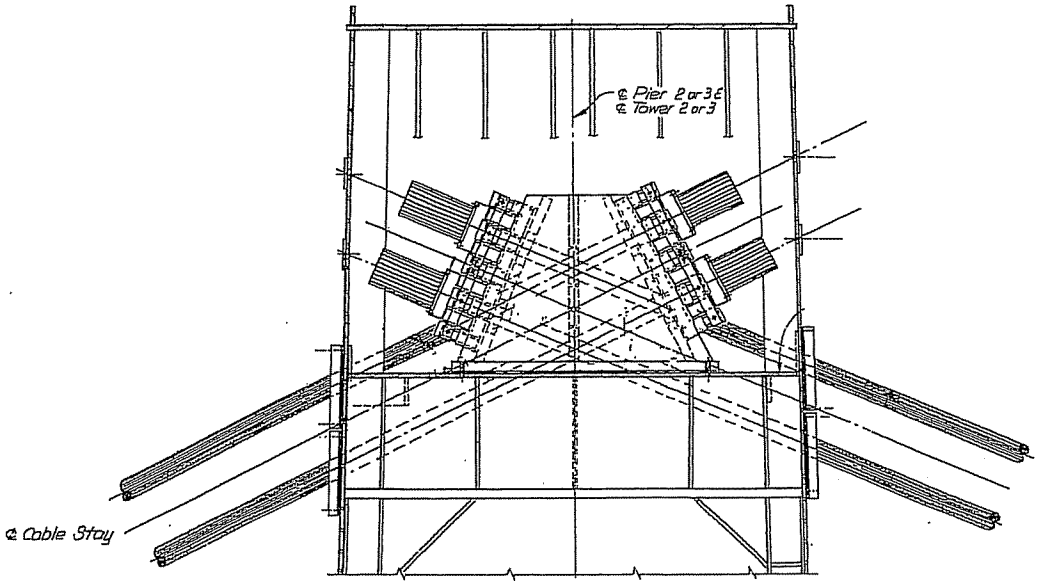
E COLUMN

TIER 25

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	18 of 21
		of

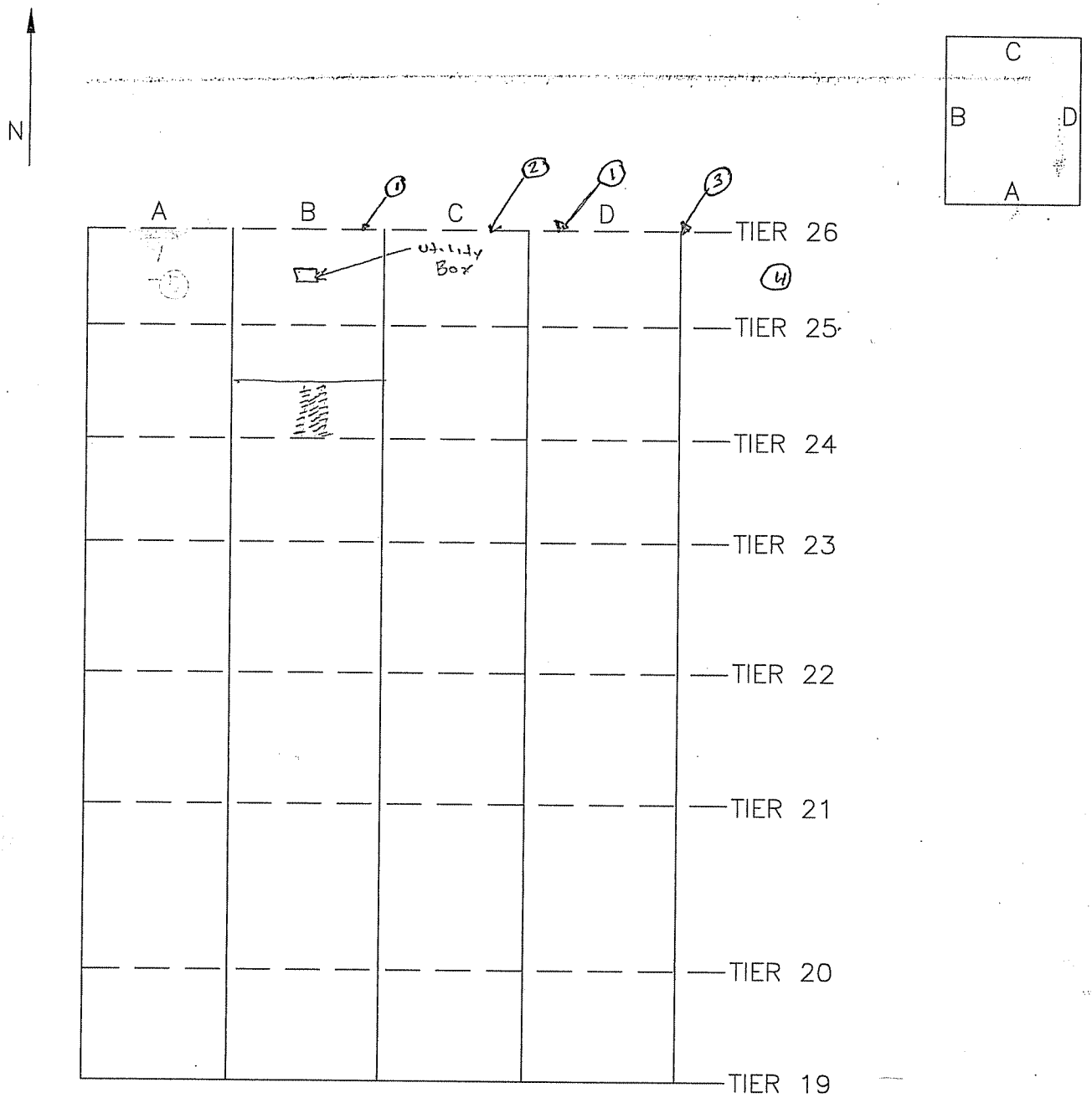


PLAN



TIER 25, PIER 2, E. COL

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	19 of 21
		of



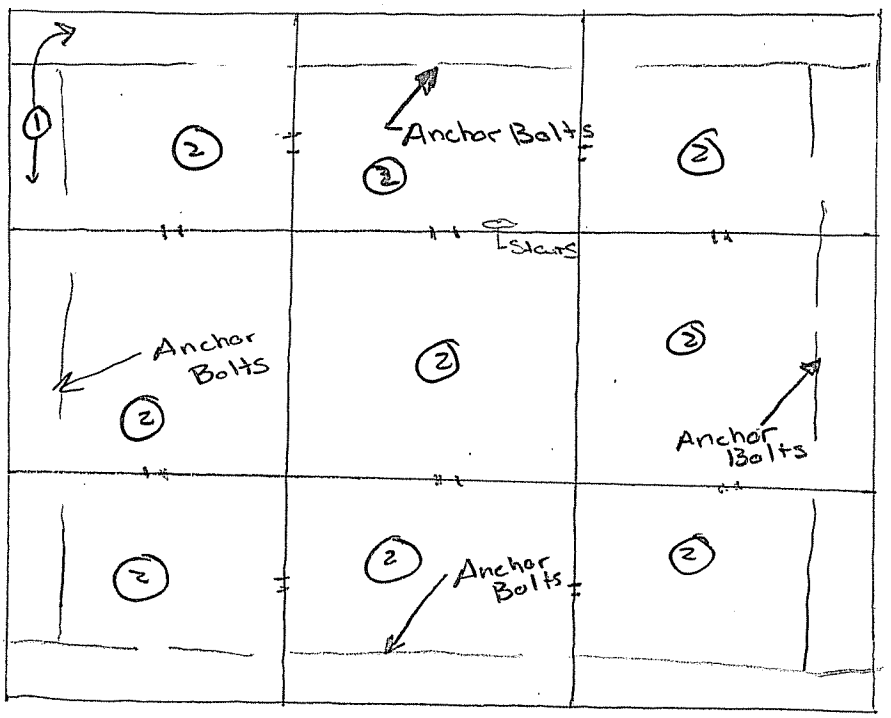
TOWER 2, WEST COLUMN INTERIOR – TIERS 19–26

CZ-9

1. Hatch Frame w/ 100d" Losses around Perimeter
2. Tier 26 Kick Plate w/ 1/16" Loss x 16" CZ-10
3. 100' Loss in Safety Railing ≈ 1/2" Ø CZ-11
4. Lights Not Illuminated (Typ)
5.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
TOWER NOTES	
JOB: P710070019	

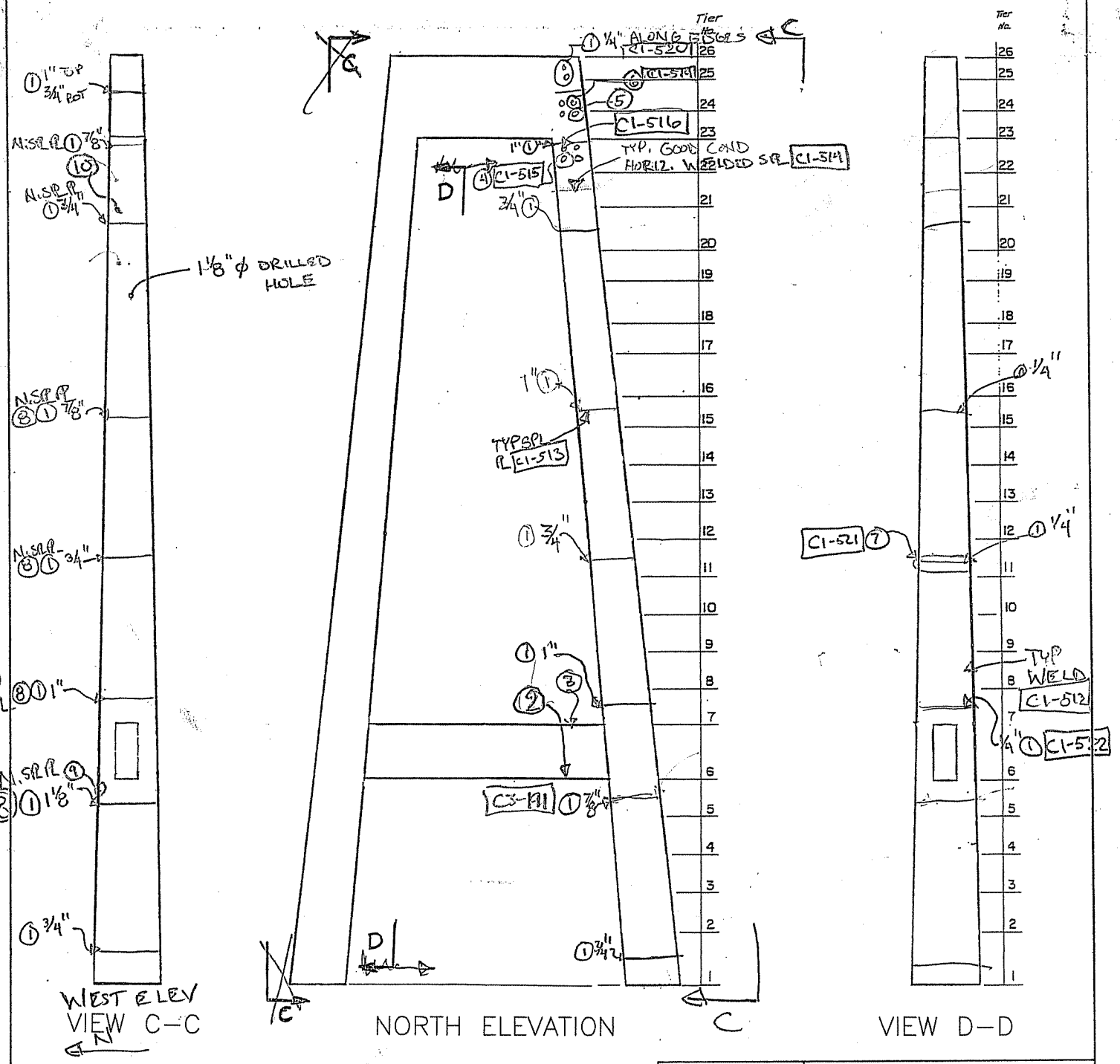
CREW:	DATE:	SHEET:
CRS, BS	3/3/08	1 of 3
		of



Tier 1 Photos C2 42-45

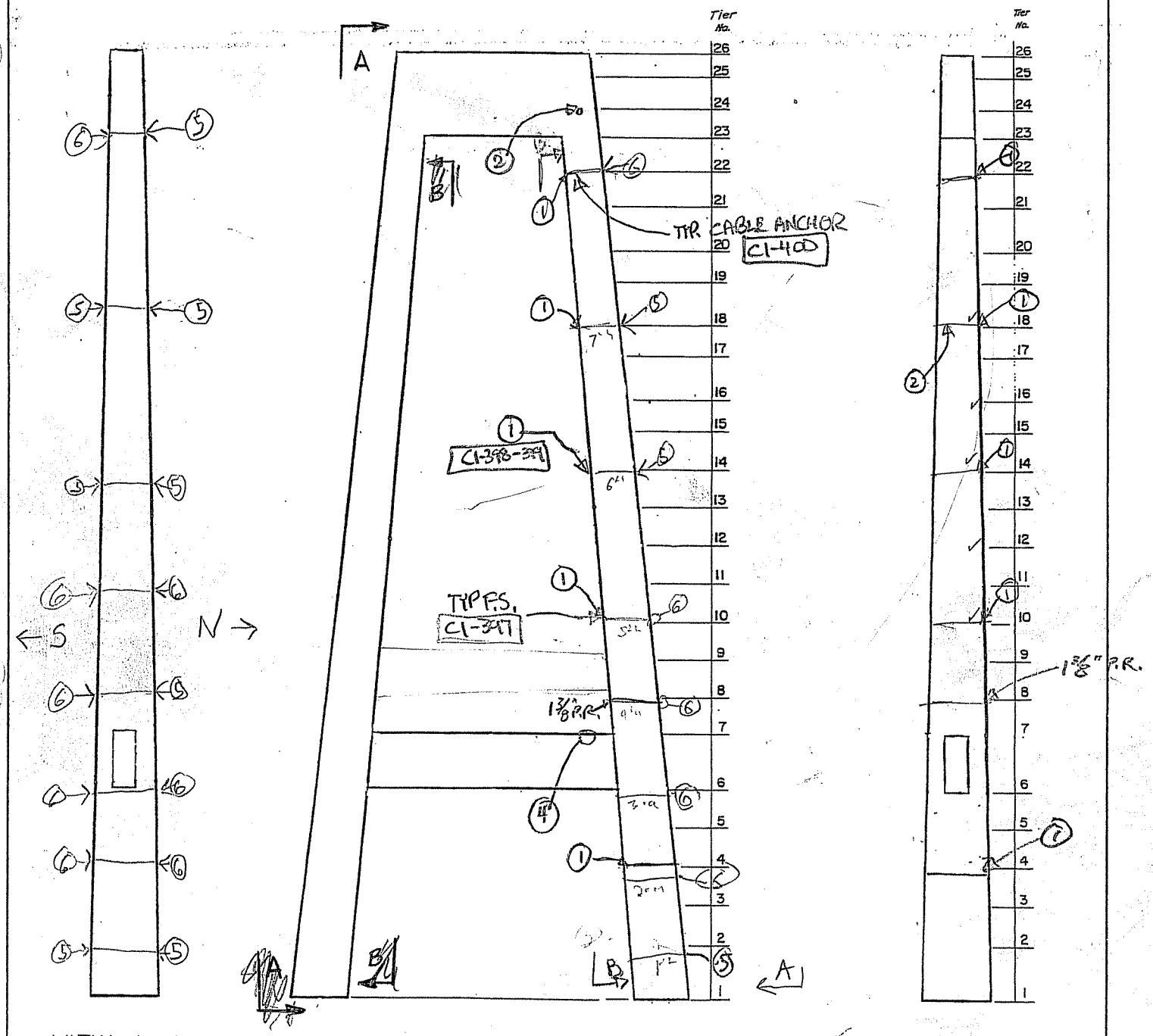
PIER 2
W COLUMN
TIER 1

① Middle of Tier – Ground - Anchor Bolts Painted all Around	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② Typical Rust / Flaking on all walls	NOTES BY:	TranSystems	
	JOB: P710070019		
	CREW:	DATE:	SHEET:
	CRS / BS	3/4	1 of 26
			of



1. PACK RUST
2. 1/4" DIPP AT SPLICE PL BOT FE CI-192/193
3. WATER POOLING DRIPPING AT FS SPLICE ON STRUT
4. SP TO 1/8" P.R. BTWN CABLE/HOUSING
5. CABLE ASSEMBLY HAS 1/4"ϕ HOLE IN BOT CI-511/518
6. MISSING BOLT
7. TYP. P.R. 1/4" ALONG TOP EDGE OF STL BTWN LONG BOLT SPACES CI-521
8. 1/16" LOSS ALONG SP PL CI-523
9. MULTI PASS WELD BTWN N. PL & W. PL (TYP.) CI-524
10. 6" ϕ 3/8" DENT, WITH MINOR 1/16" D. GOUGING CI-525

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC JHR	3/31/08	1 of 1
BKC JHR	4/1/08	1 of 4



VIEW A–A SOUTH ELEVATION VIEW B–B

① ~~ATTSTEDGE OF F.S. ON CAP.~~ 1" PACK RUST C1-395/96	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② LOOSE BOLT, 9 FROM N. EDGE	NOTES BY:	TranSystems	
③ 1/2" P.R. BRUN ANCHOR & WEB. C1-401	TOWER 2		
④ LOSS OF KICKGUARD RUST ON FS.	JOB: P710070019		
⑤ 3/4" Pack Rust E. edge of splice plate	CREW:	DATE:	SHEET:
⑥ 1" Pack Rust E. edge of splice plate	BKC, JHR	3/25/08	1 of 3
⑦ Typical P.R. 2nd splice from bottom E.S. C1-421	SGB, JHR	3/26/08	of

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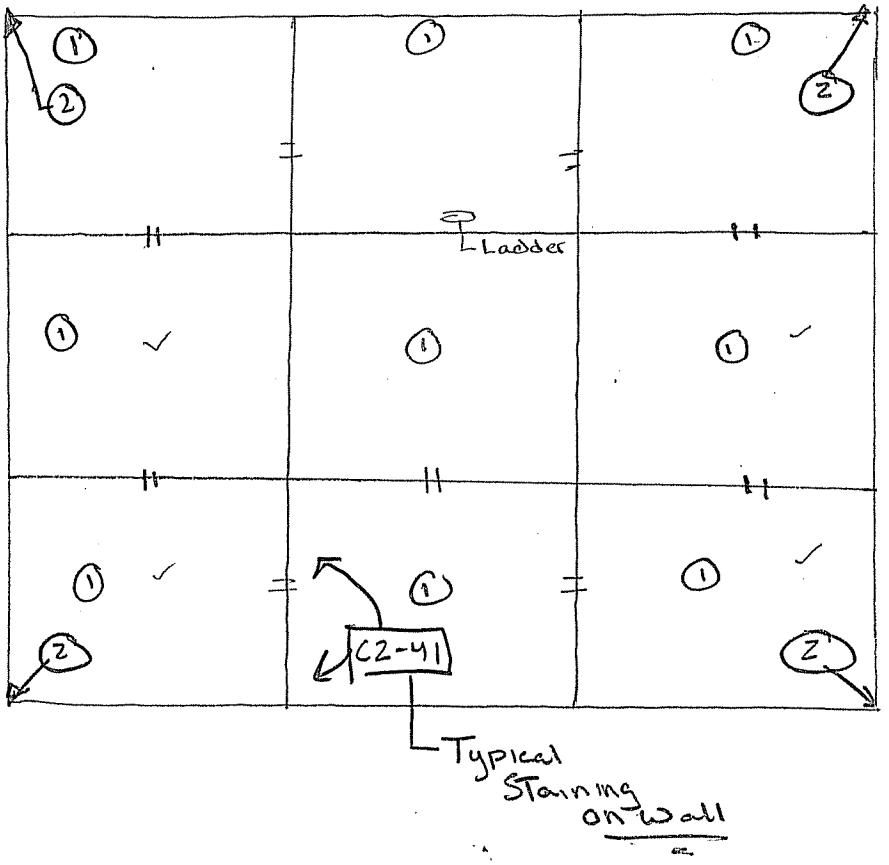
333



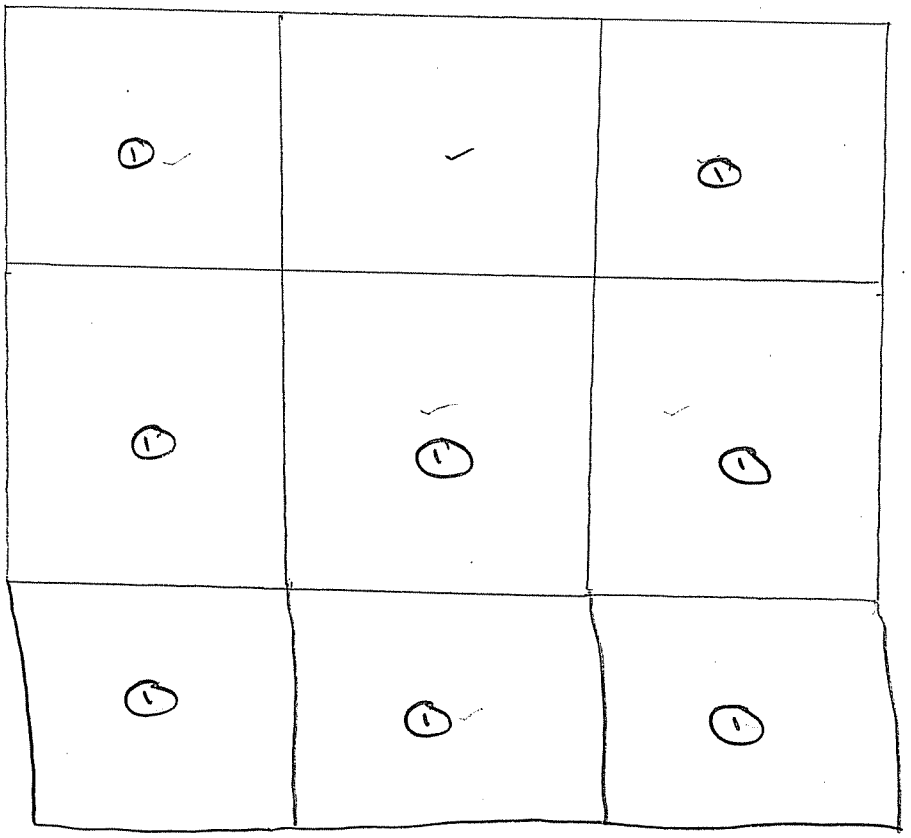
PIER 2
W COLUMN
TIER 2

(1) Typical Rust Staining / Flaking on Walls Thru Tier 3

(2) EFFlo / Moisture Staining @ Corner From Splice (Typ)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	2 of 26
		of

N



PIER 2

W COLUMN

TIER 3

1 Visible From Tier 2

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
CRS / BS	3/4	3 of 26
		of

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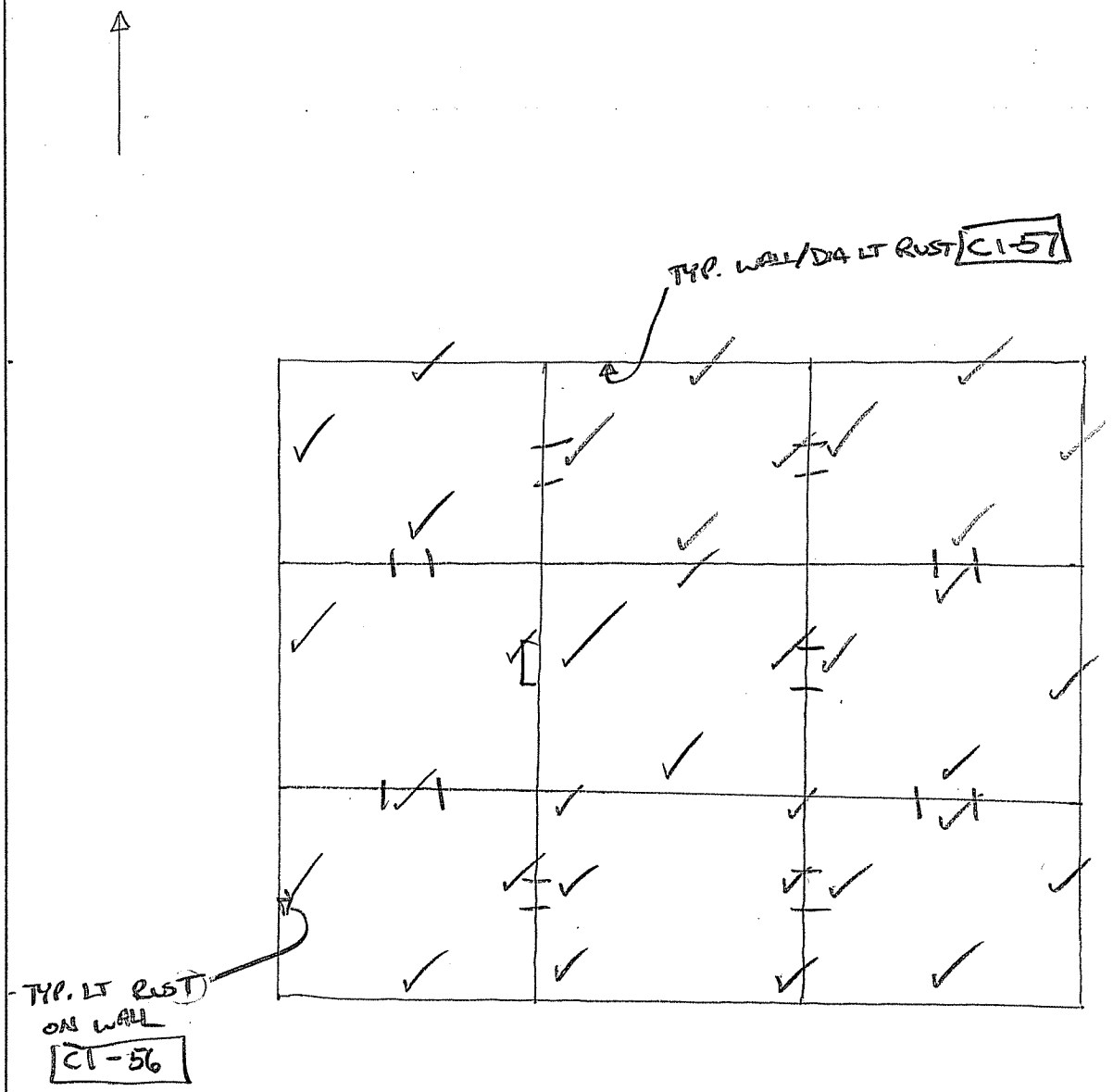
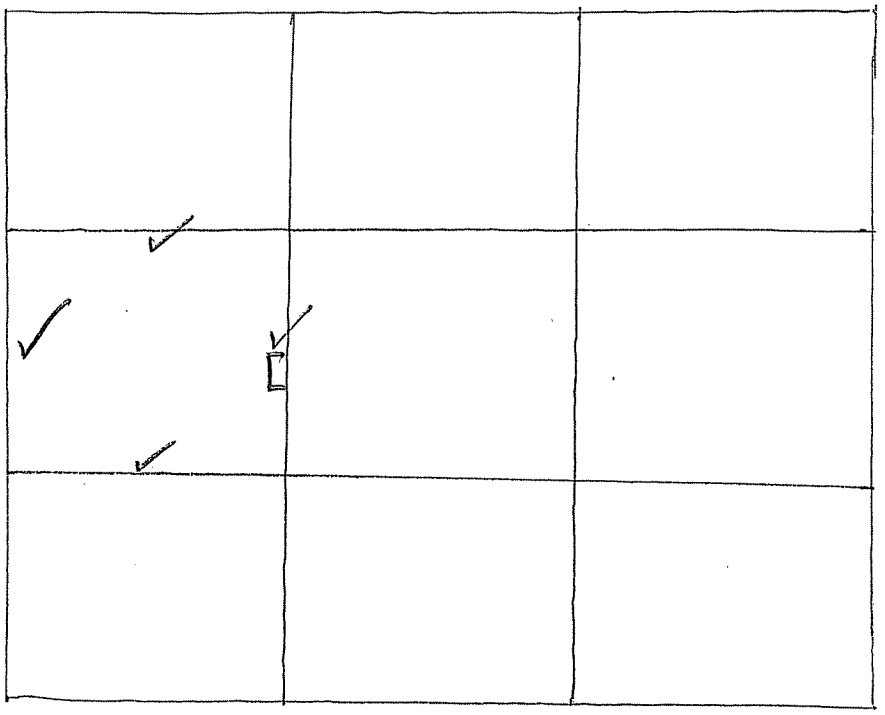
333



PIER 2
W COLUMN
TIER 4

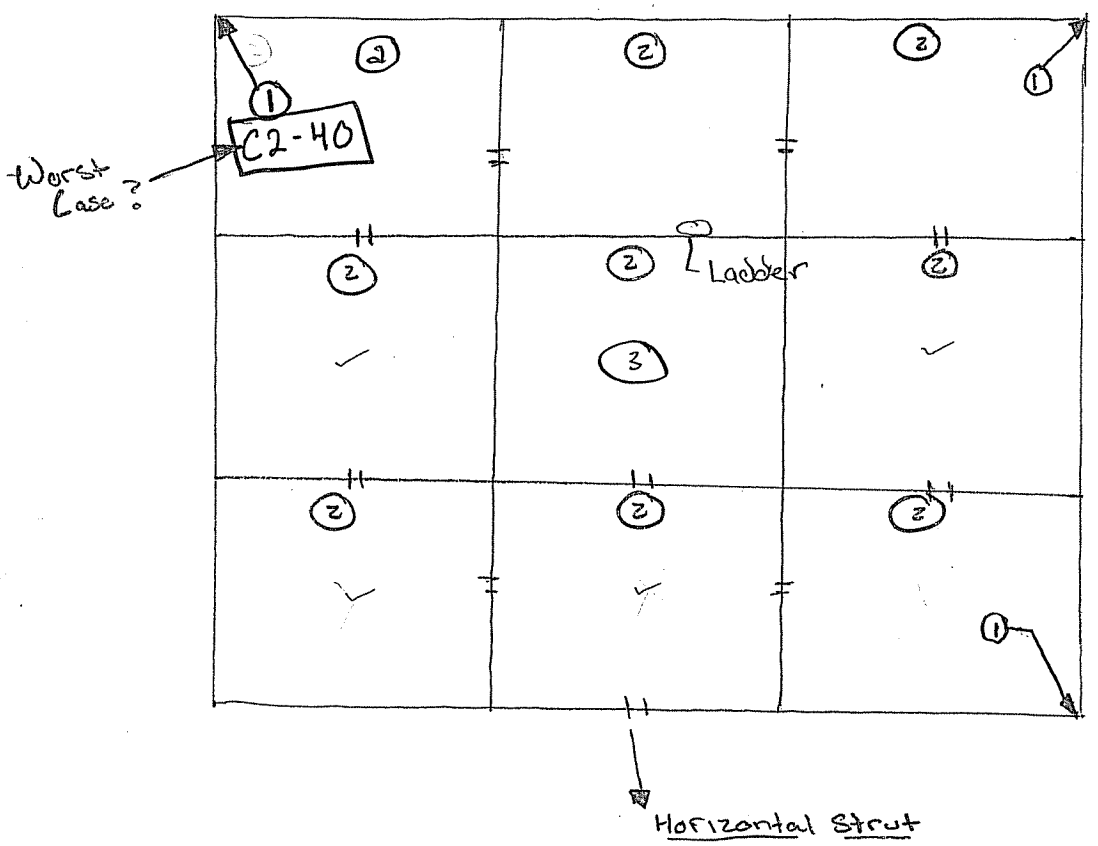
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJJ	3/4/08	21 of 21
		of



PIER 2
W COLUMN
TIER 5

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, MJS	3/4/08	20 of 21
		of

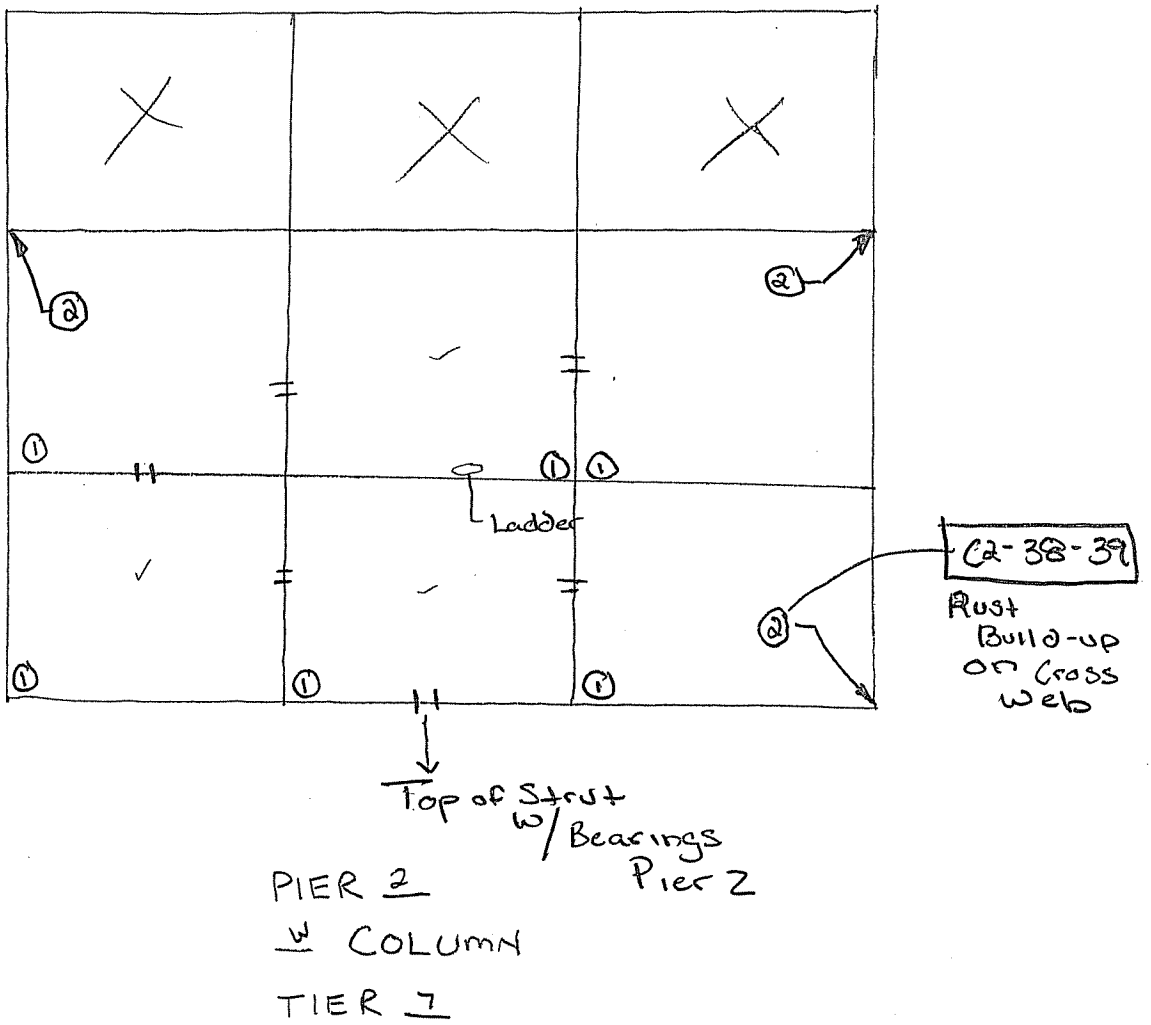
LPS
333



PIER 2
W COLUMN
TIER 6

① Moisture @ corner / Efflo from leak @ Splice gap (Typ.)
② Typical Staining w/ Efflo / Flaking on all walls up to Full Height of Tier 6
③ Heavy Pigeon Droppings C2-40

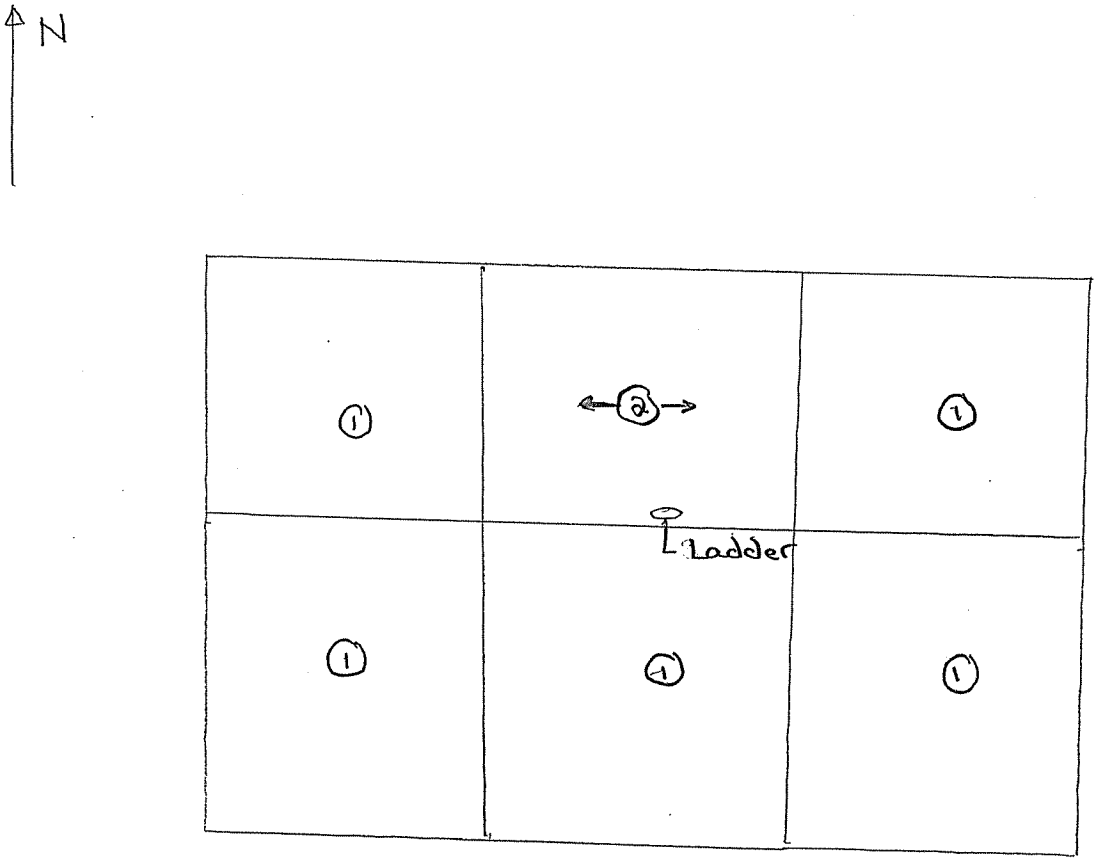
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	4 of 26
		of



① Typical Rust Staining / Flaking on walk Thru Tier 8

② Gap in Splice w/ Moisture Staining / EFIFIO on Wall angle (Typ)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
CRS/BS	3/4	5 of 26
		of



PIER 2
W COLUMN
TIER 8

1 Cells Visible From Tier 7
2 Typical Rust Staining / Flaking

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRB / BS	3/4	6 of 26
		of

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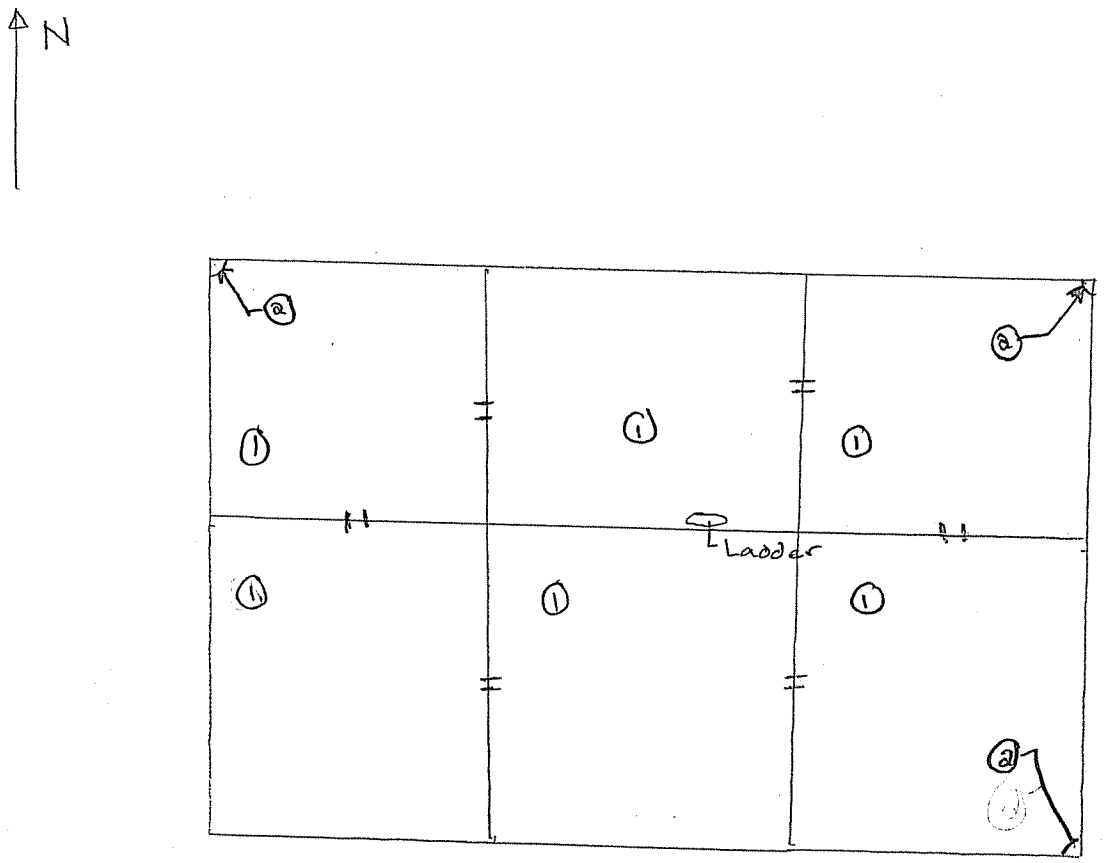
335



PIER 2

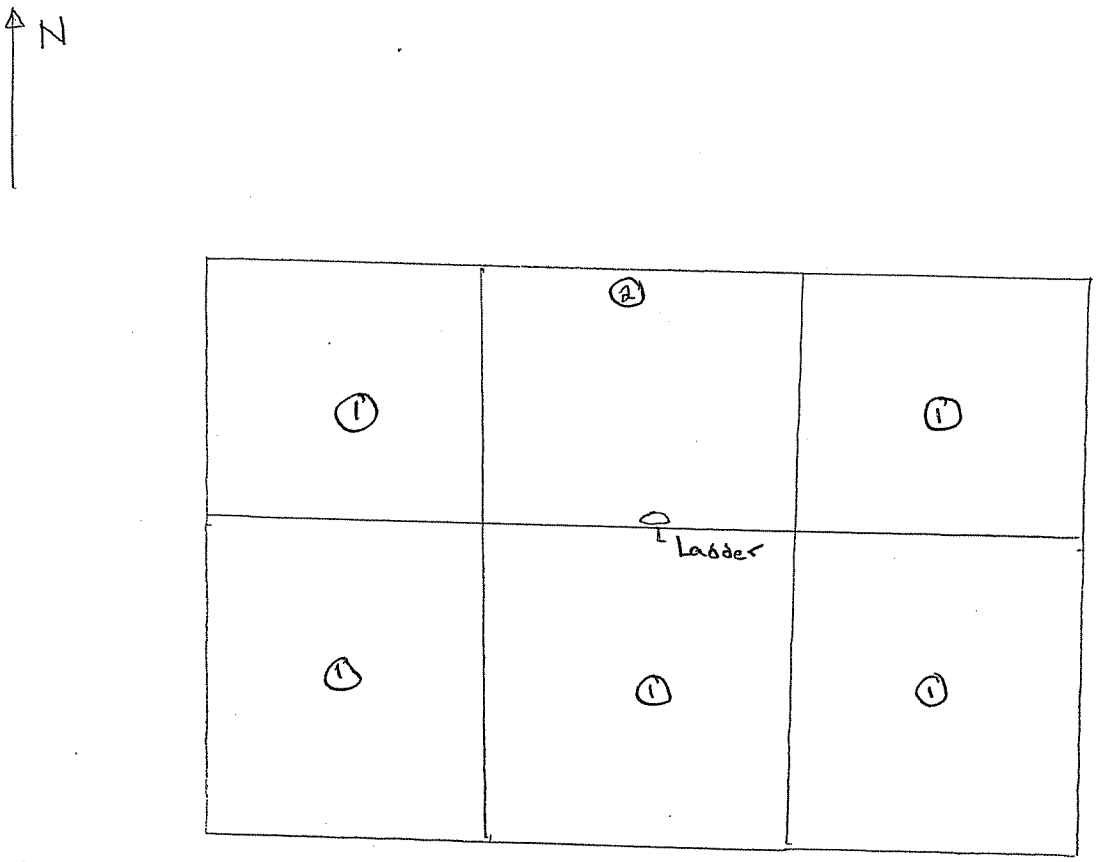
W COLUMN

TIER 9

1 Typical Rust Staining/Flaking on walls Thru Tier 10

2 Moisture in Corner @ Top of Tier 10 @ Splice (Typ)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
CRS / BS	3/4	7 of 26
		of



PIER 2

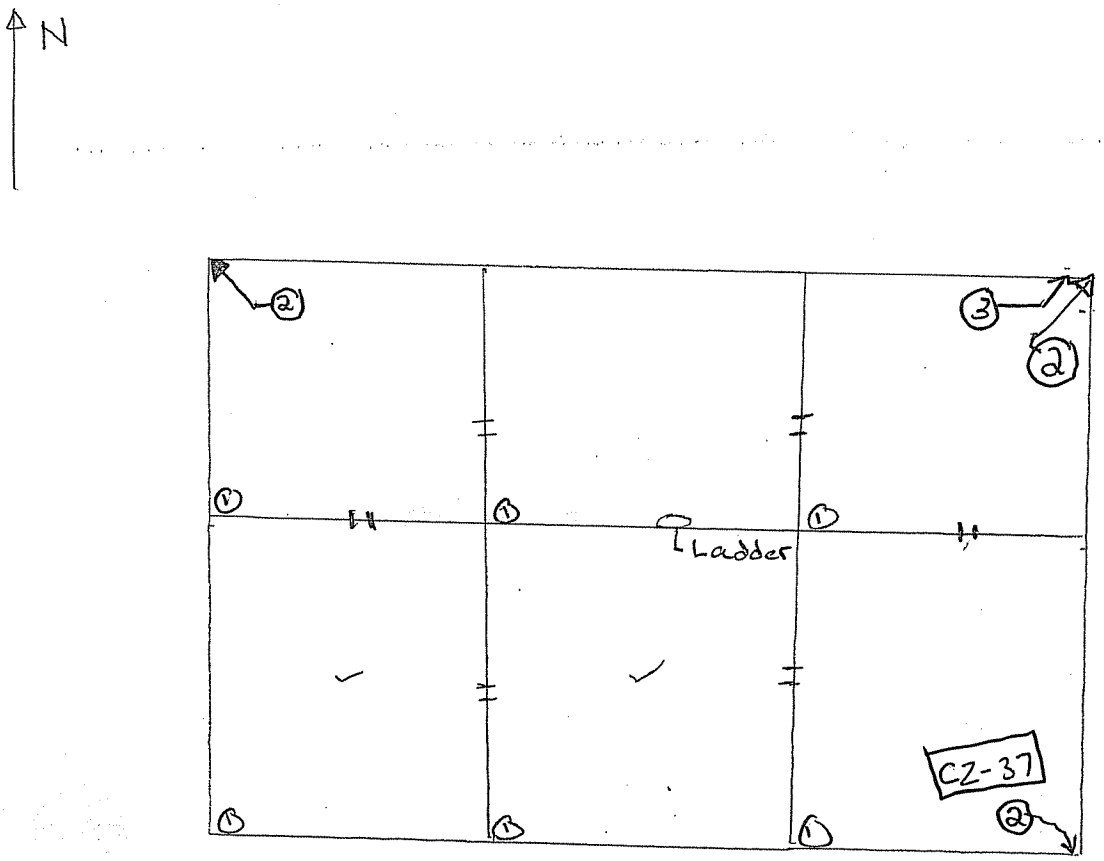
W COLUMN

TIER 10

1 Cells visible from Pier 9

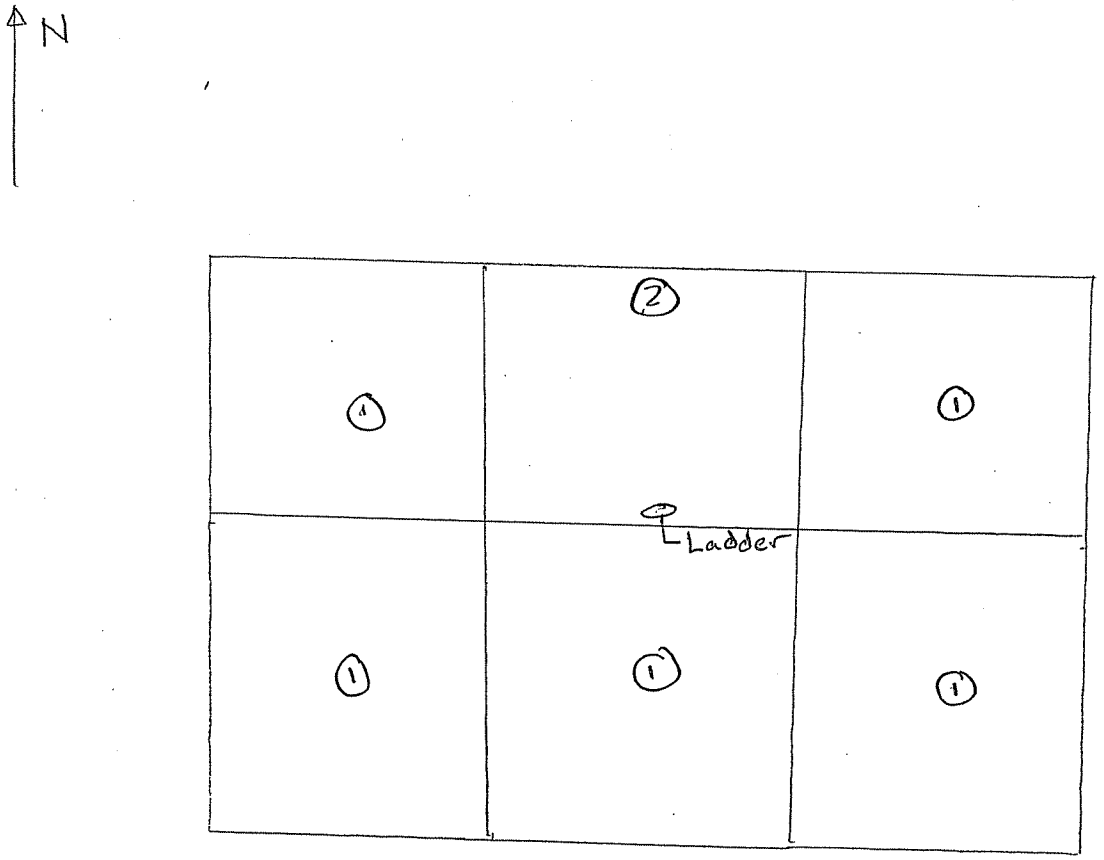
2 Typical Rust Staining / Flaking on walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	8 of 26



PIER 2
W COLUMN
TIER 11

① Typical Rust Staining / Flaking on all walls Thru Tier 12	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② Small Gap in Splice w/ Moisture Staining / EFFlo @ corner (Typ) CZ-37	NOTES BY:	TranSystems	
③ Moisture visible even w/ Tier 12			
	JOB: P710070019		
	CREW:	DATE:	SHEET:
	CRS/BS	3/4	9 of 26
			of



PIER 2

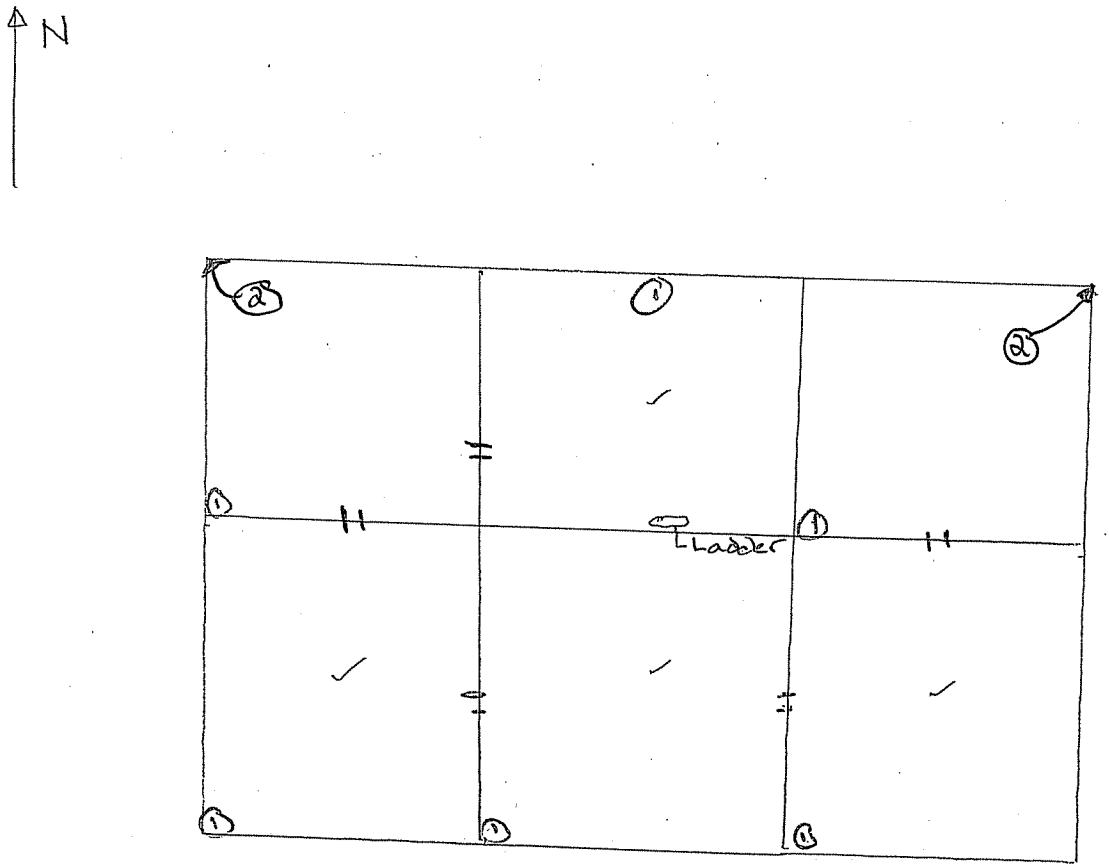
W COLUMN

TIER 12

① Cells Visible From Tier 11

② Typical Rust Staining/Flaking on Walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	10 of 26
		of

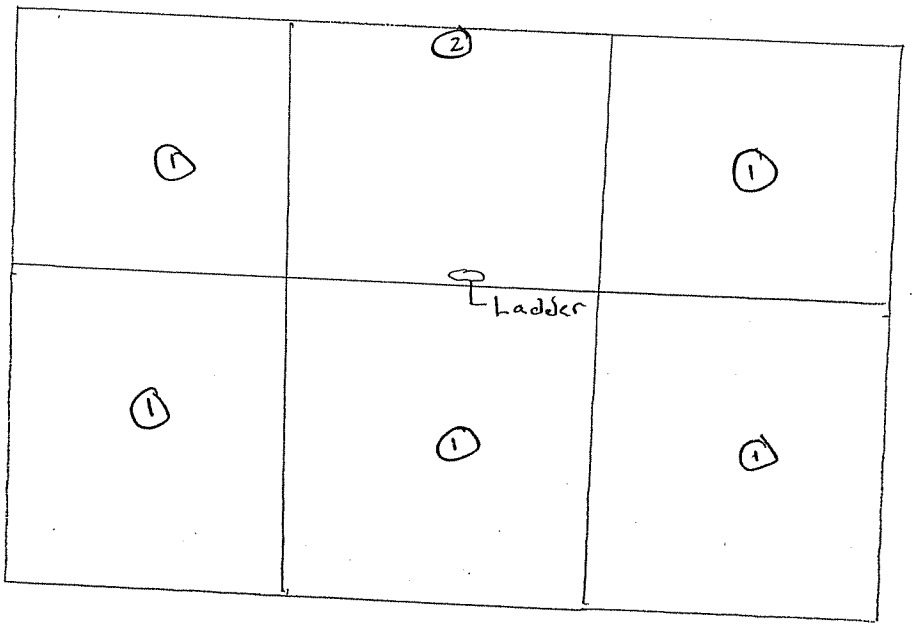


PIER 2

W COLUMN

TIER 13

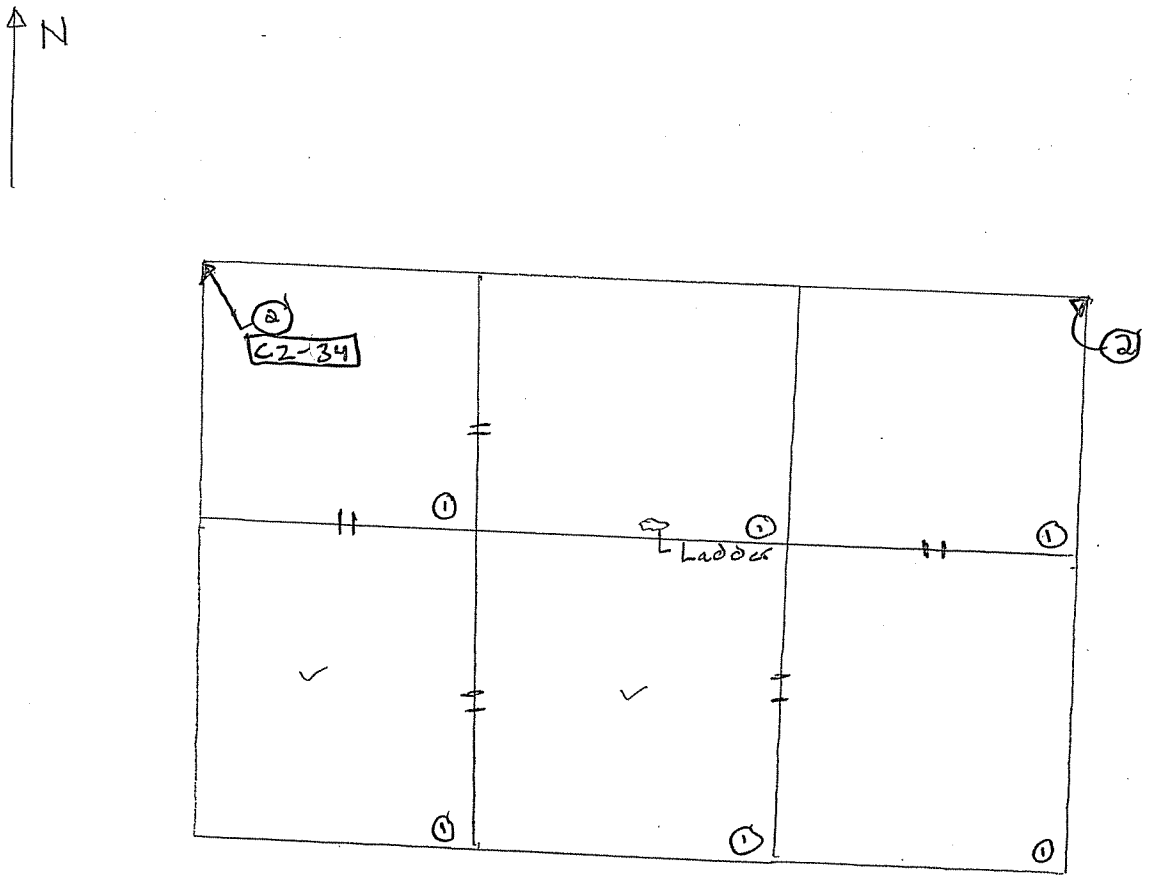
① Typical Rust Staining/Flaking on all walls up Thru Tier 14	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② Visible moisture Staining up Throug Base of Tier 15 (Typ) C2-35 C2-36	NOTES BY:	TranSystems	
	JOB: P710070019		
	CREW:	DATE:	SHEET:
	CRS/BS	3/4	11 of 26
			of



PIER 2
W COLUMN
TIER 14

1 Visible From Tier 13
2 Typical Rust Staining / Flaking on Walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	12 of 26
		of

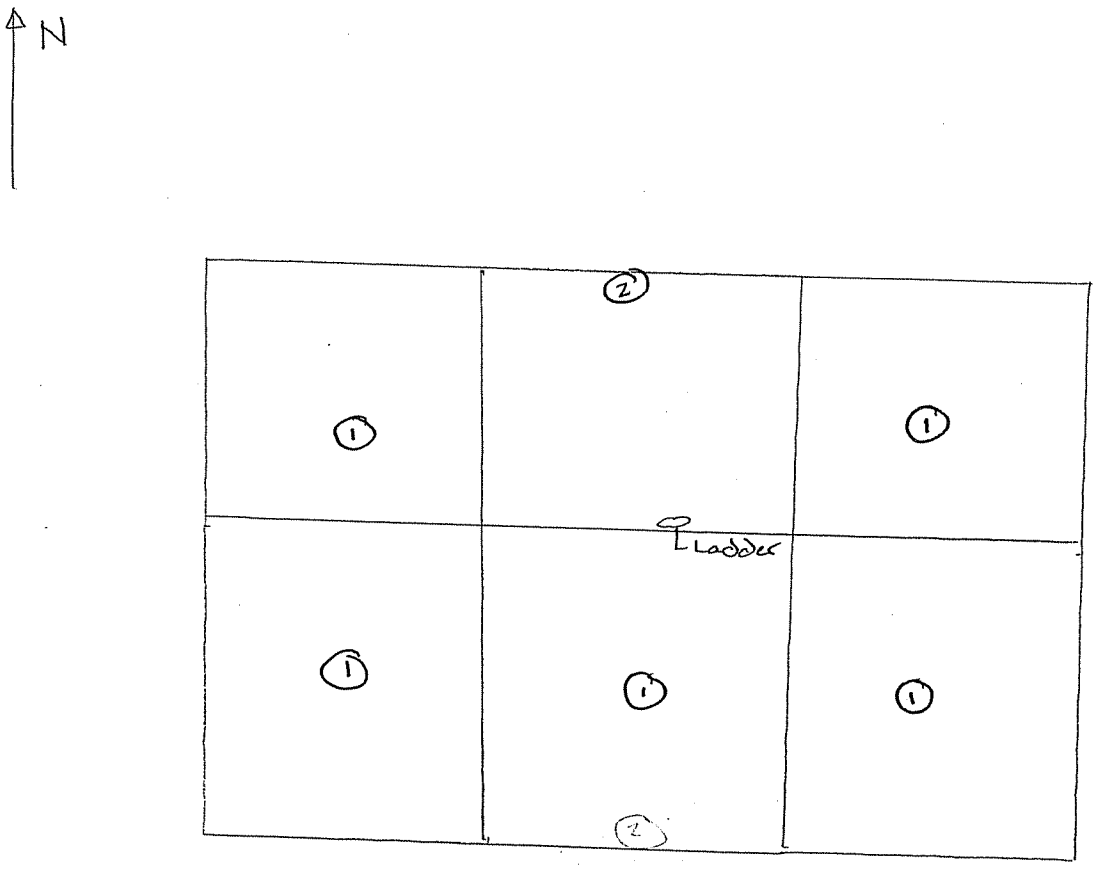


PIER 2
W COLUMN
TIER 15

1 Typical Rust Staining / Flaking on walls Thru Tier 16

2 Gap @ Splice w/ Moisture Staining / EFF10 (Typ) C2-34

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CDS/BS	3/4	13 of 26
		of



PIER 2

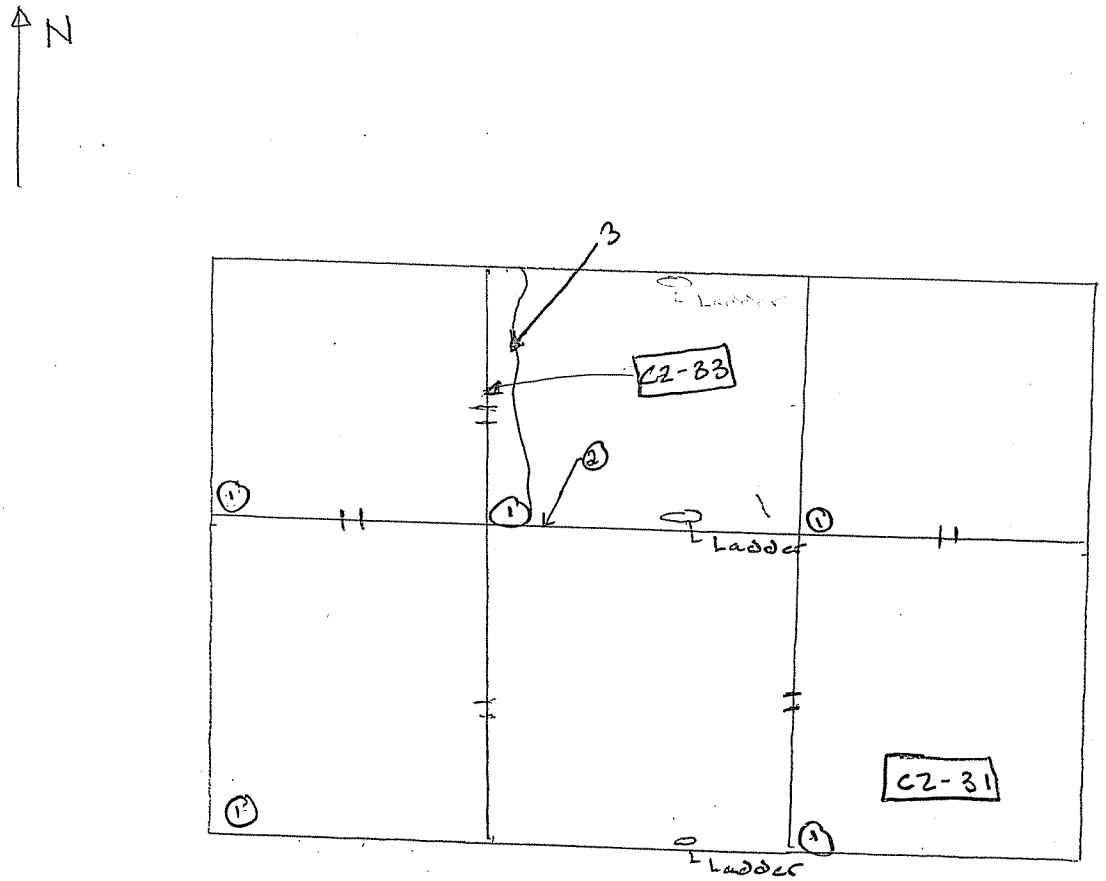
W COLUMN

TIER 16

① Visible From Tier 15

② Typical Rust Staining / Flaking on walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	14 of 26
		of

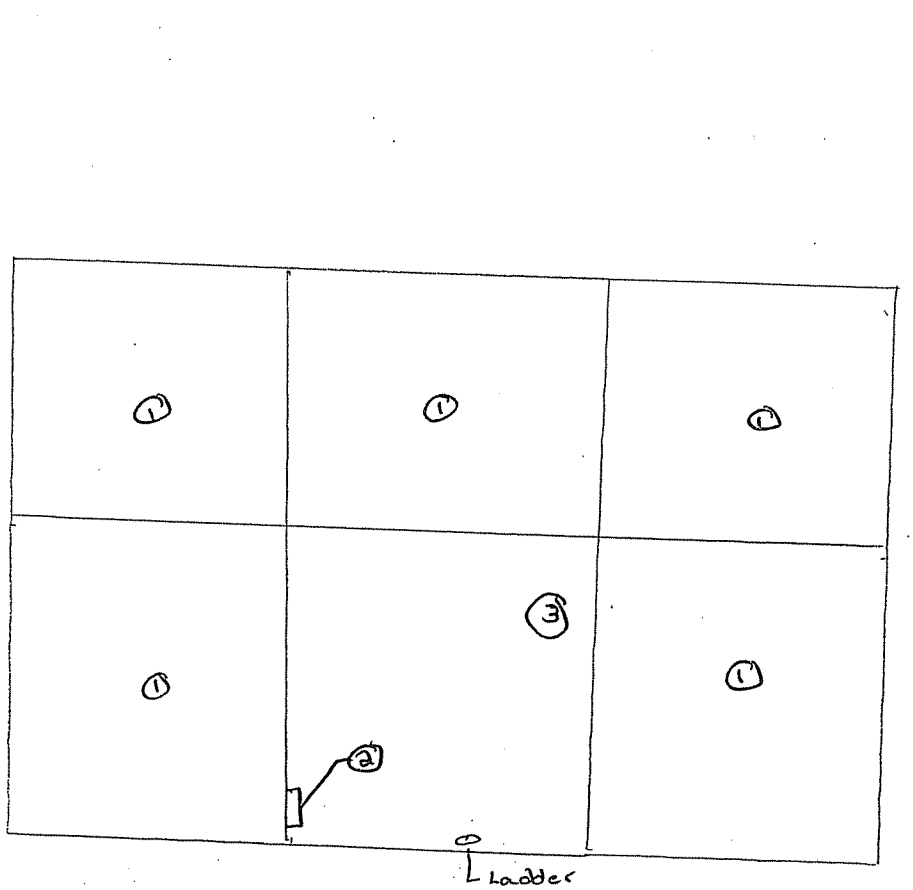


PIER 2

W COLUMN

TIER 17

① Typical Rust / Flaking on W walls ; up Thru Tier 18	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
② Missing Cover Plate on Conduit w/ Exposed Wires C2-32	NOTES BY:	TranSystems	
③ Tier 17-18 Heavy Staing / Damp Near Tier 19 Floor C2-33			
	JOB: P710070019		
	CREW:	DATE:	SHEET:
	CRS / BS	3/4	15 of 26
			of



PIER 2

W COLUMN

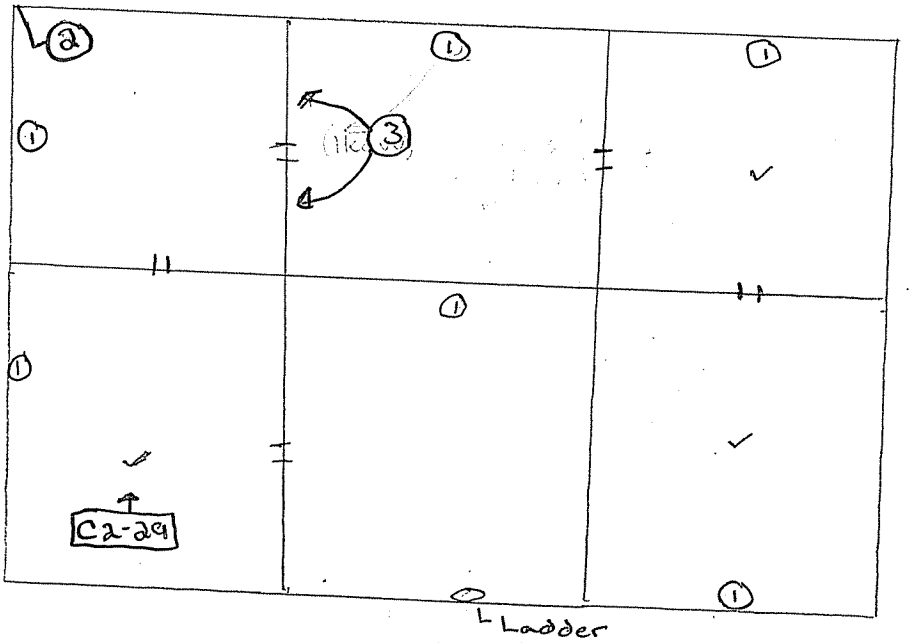
TIER 18

1 Cells visible from Tier 17

2 Conduit Box w/ open Hatch / Exposed wires (C2-30)

3 Typical Rust Staining / Flaking on walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS / BS	3/4	16 of 26
		of



PIER 2

W COLUMN

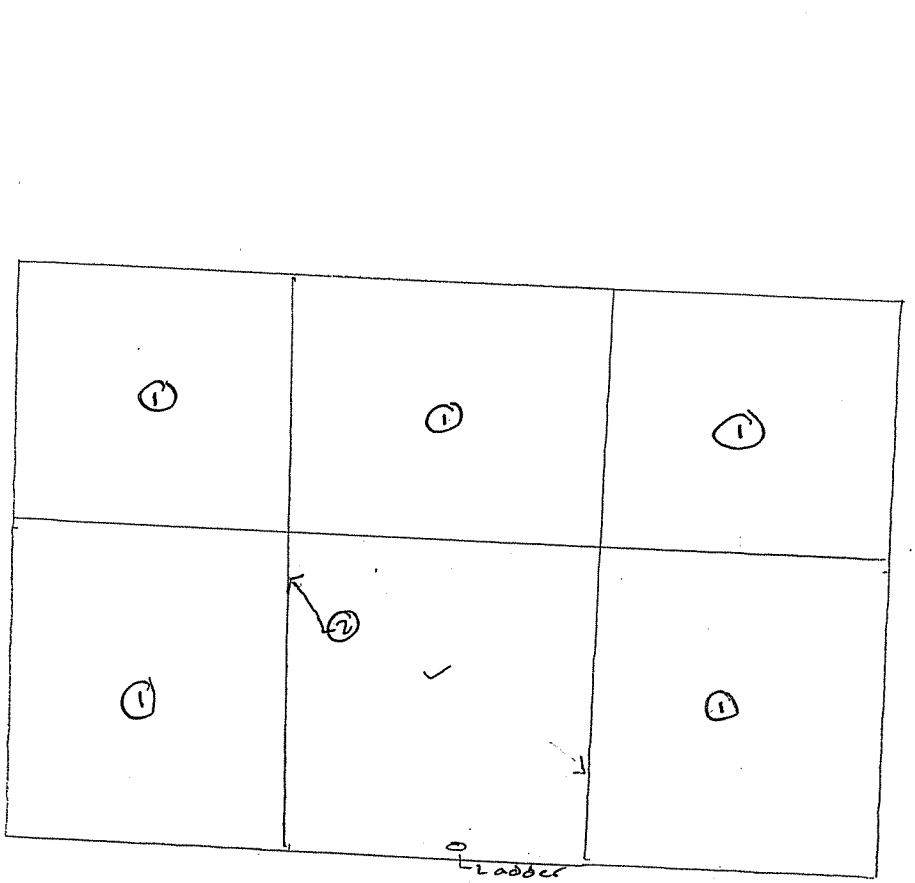
TIER 19

1 Typical Rust Staining on Walls / Flaking

2 Small Gap in Splice w/ EFF10 / Staining @ Corner C2-28

3 Heavy Staining up Thru Pier 20

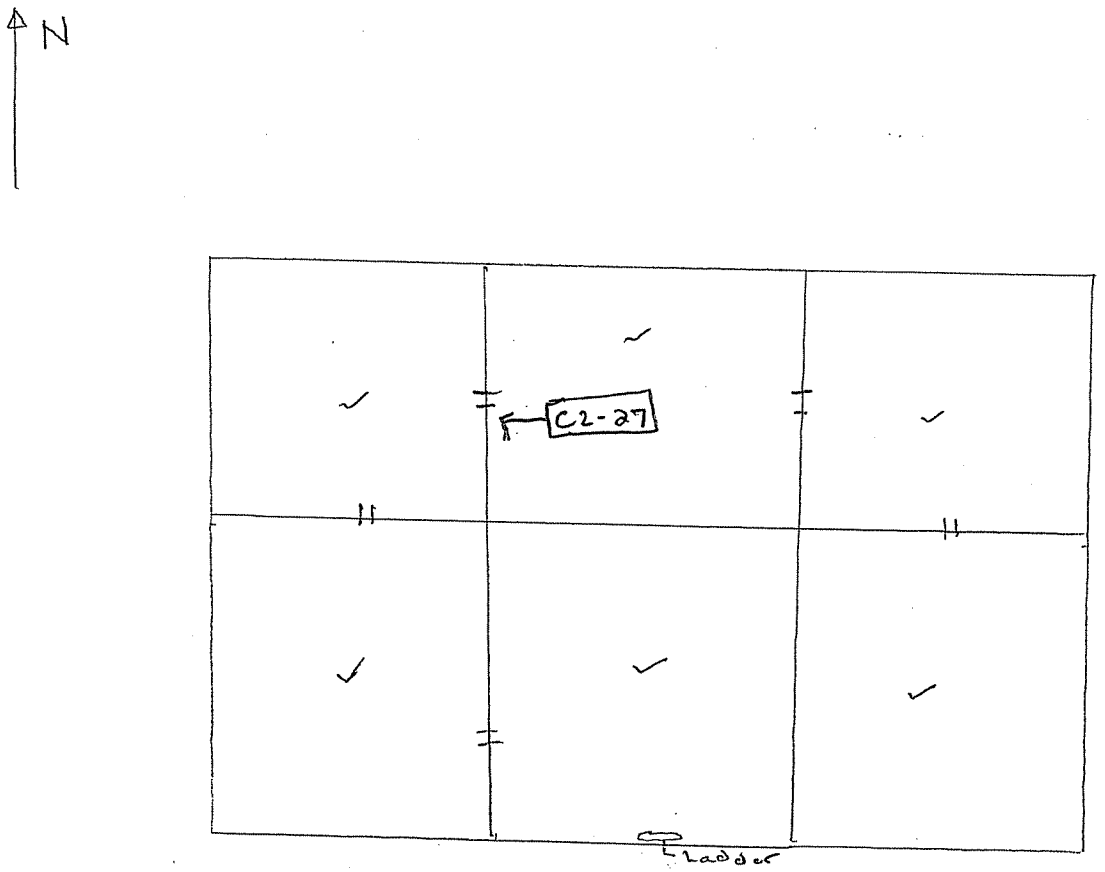
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	17 of 26
		of



PIER 2
W COLUMN
TIER 20

1 Visible From Tier 19
2 Rust Staining (Typ)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
CRS / BS	3/4	18 of 26
		of



PIER 2

W COLUMN

TIER 21

① Light Rust staining on all walls C2-27 (Typ)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
CBS/BS	3/4	19 of 26
		of

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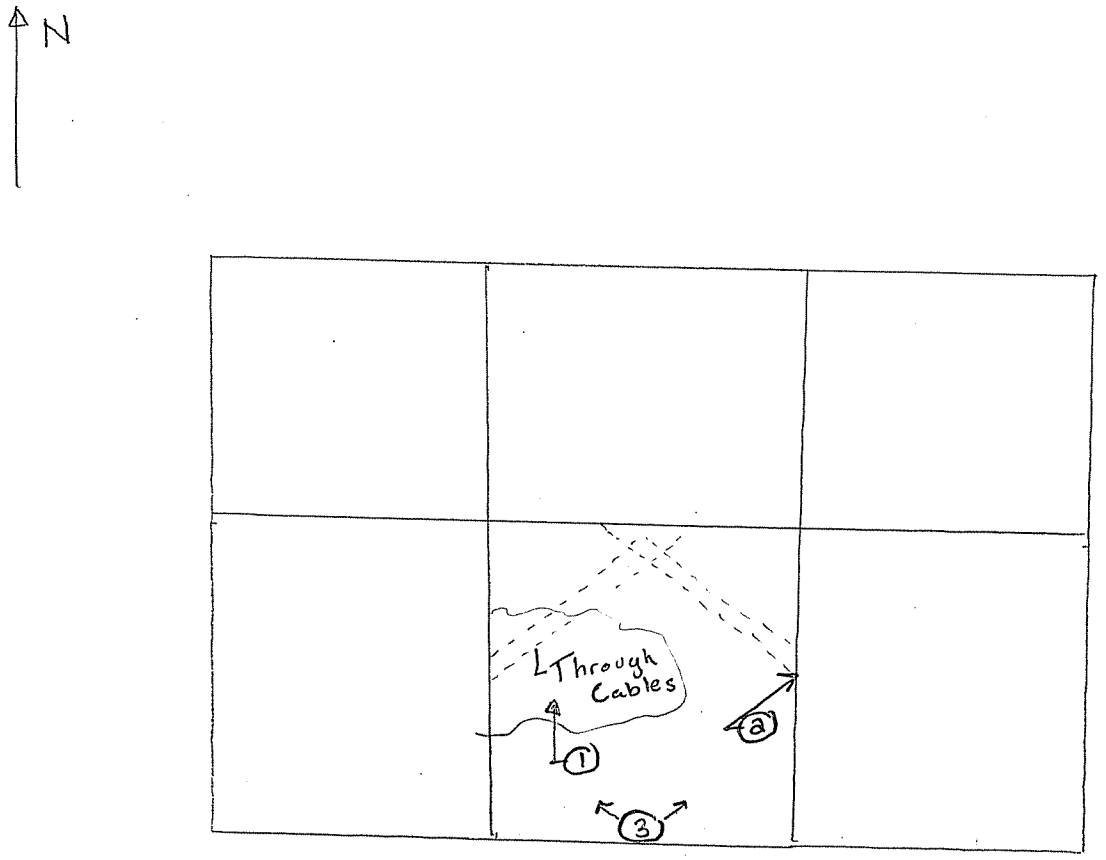


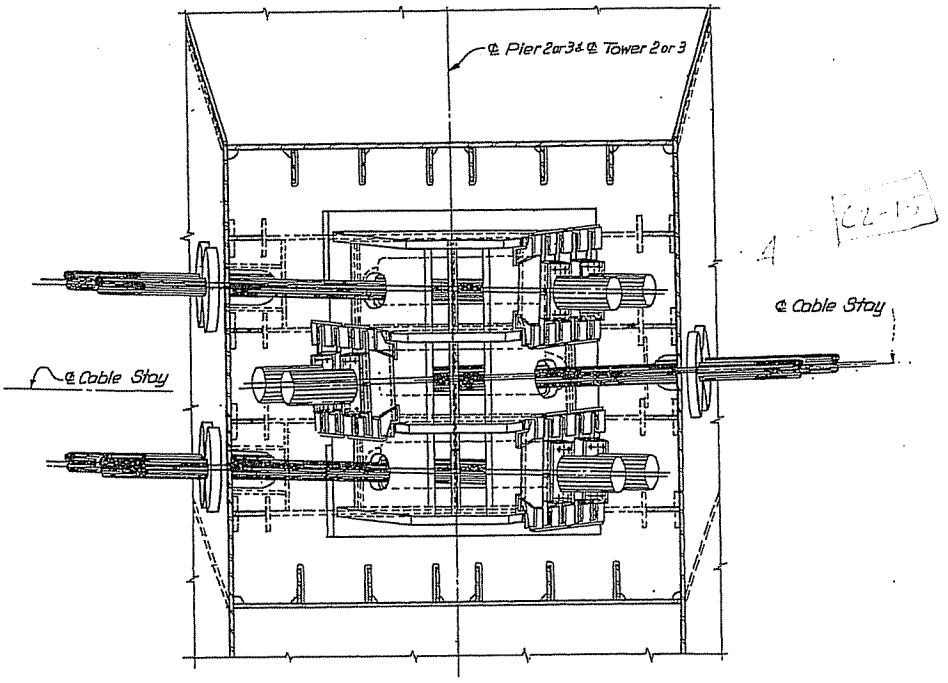
PIER 2

W COLUMN

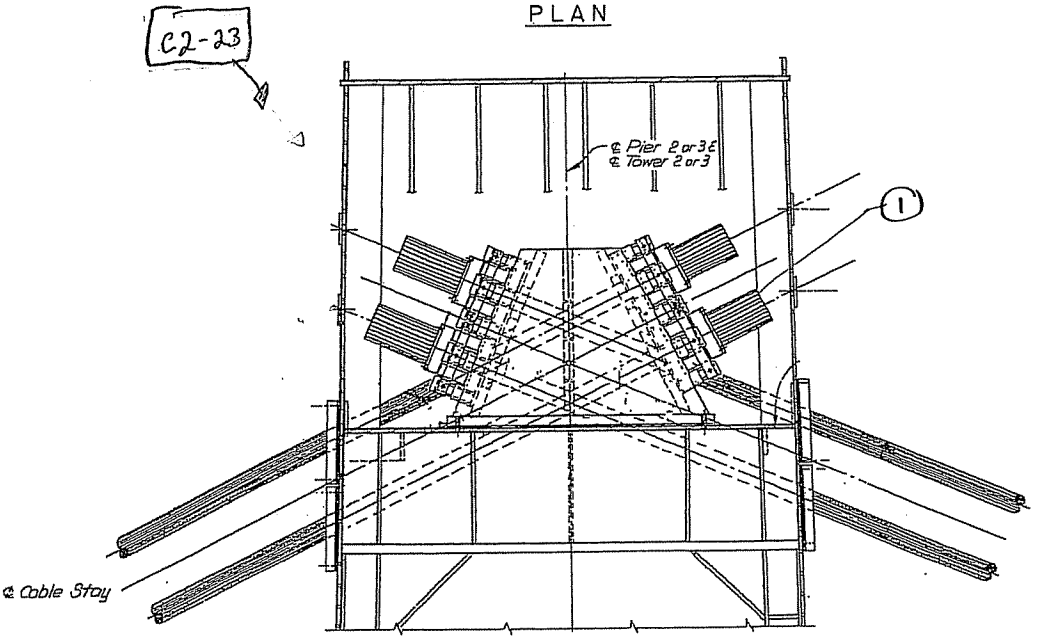
TIER 22

1. Moisture on Floor From Cable Holes
2. 1/8" gap @ Brace Pl. C-2-24 / C2-25
3. Typical Flaking Rust on all Splice Plates

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	20 of 26



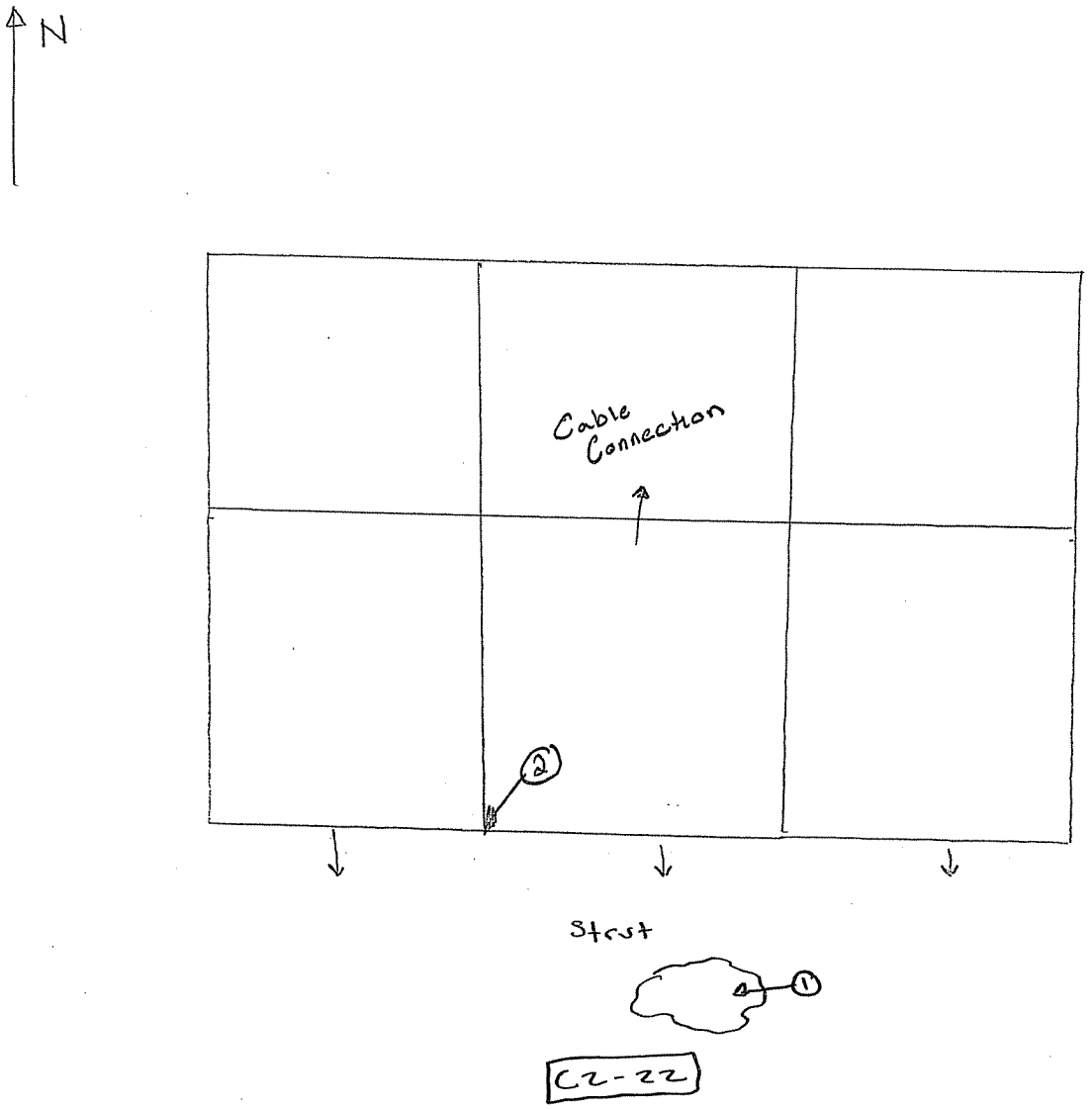
PLAN



Tier 23 Cable Connect

1 Sheared off Bolt @ Cable End C2-10

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	24 of 26
		of



C2-22

PIER 2

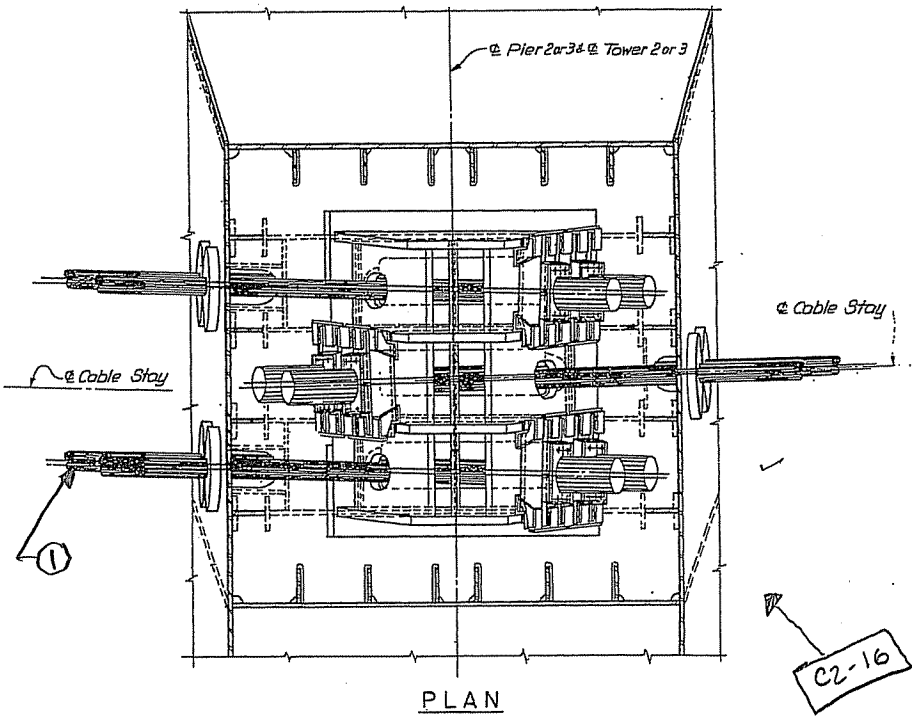
W COLUMN

TIER 23

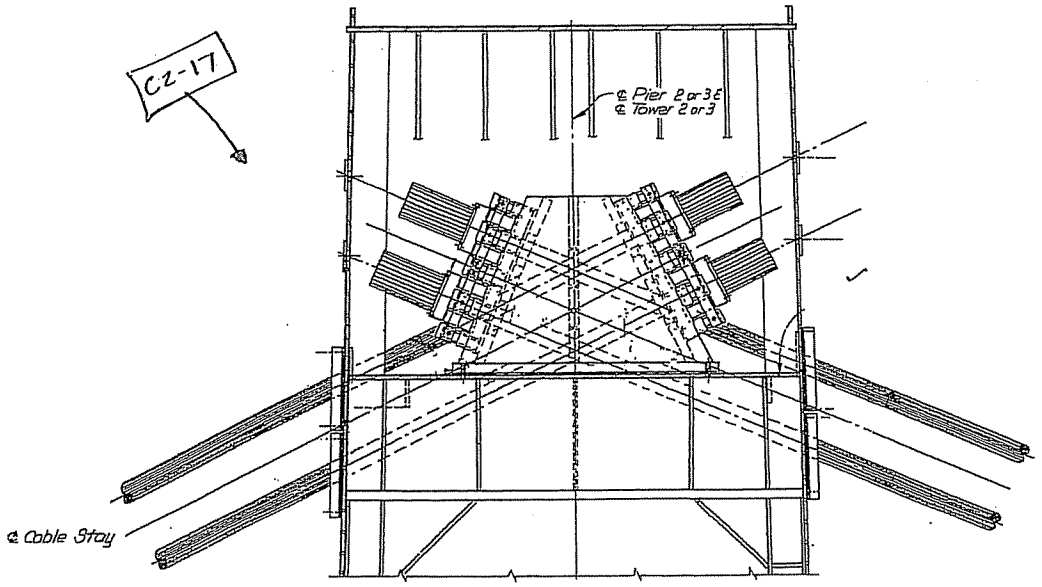
1 Moisture From Leak in Top of Strut

2 Moisure Staining / EFFlo From Const. Hole in Tier 24 Floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	21 of 26



PLAN

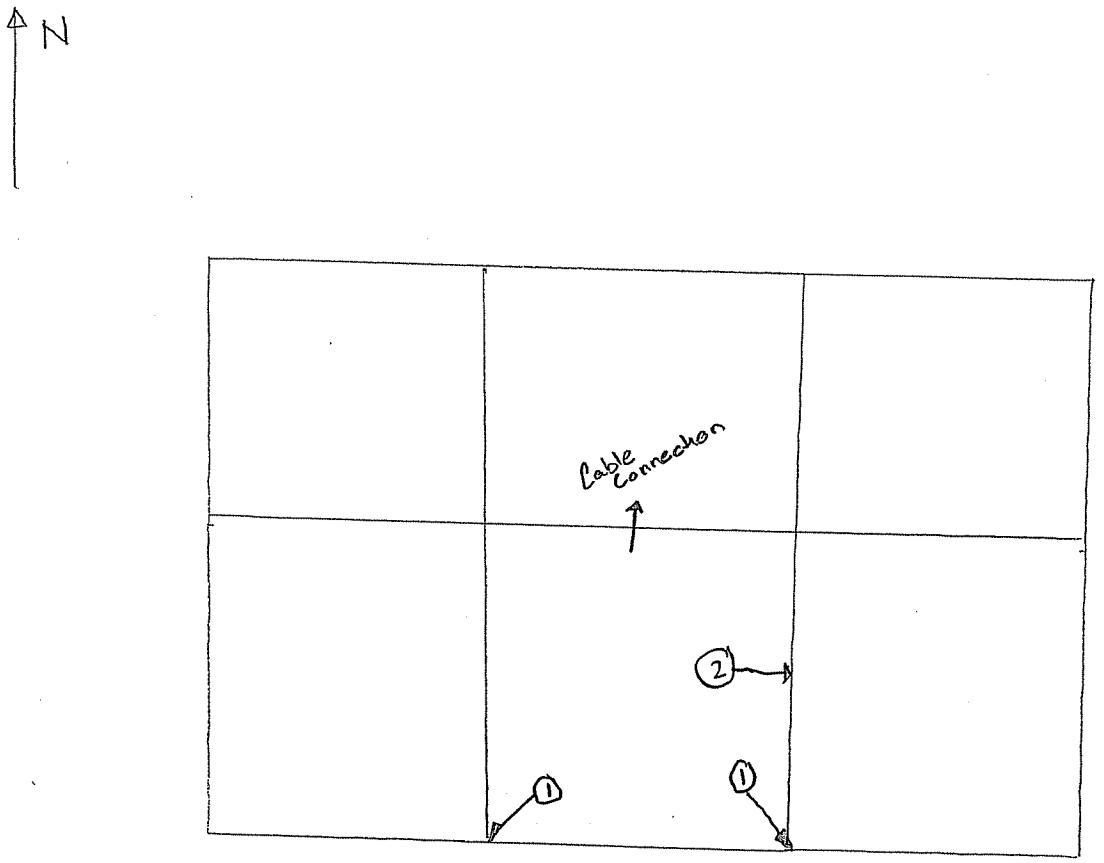


Tier 24
Cable Connection

1 Sheared off Bolt on Top Cap of Cable

C2-18

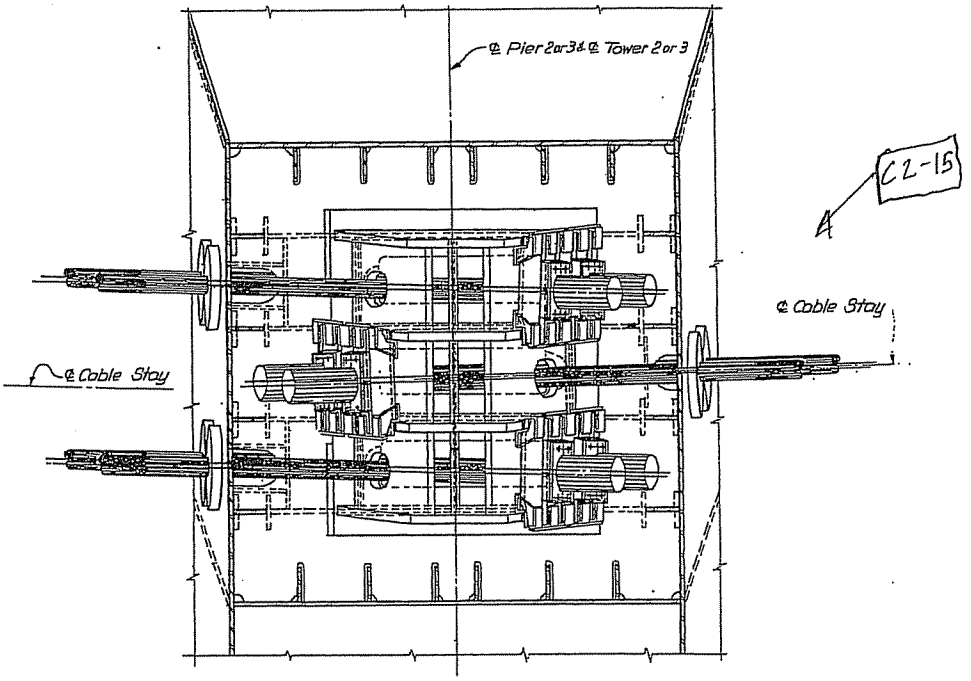
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
LRS/BS	3/4	25 of 26
		of



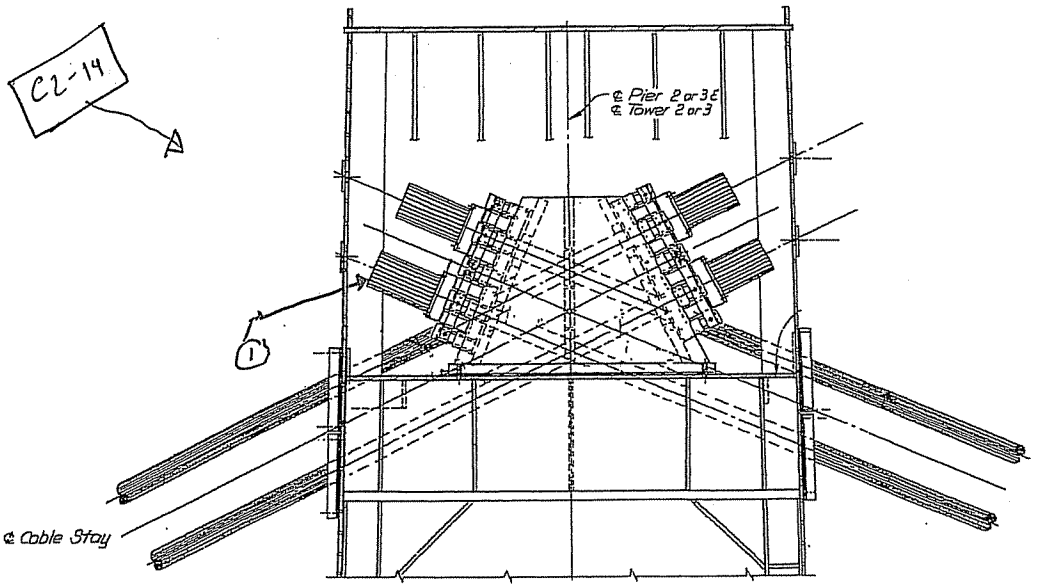
PIER 2
W COLUMN
TIER 24

① Water Leaking Through Cons. Hole in Tier Floor; w/ staining on walls [CZ-19] (Typ.)
② EFF10 / Rust Staining on Splice P2

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	22 of 26
		of



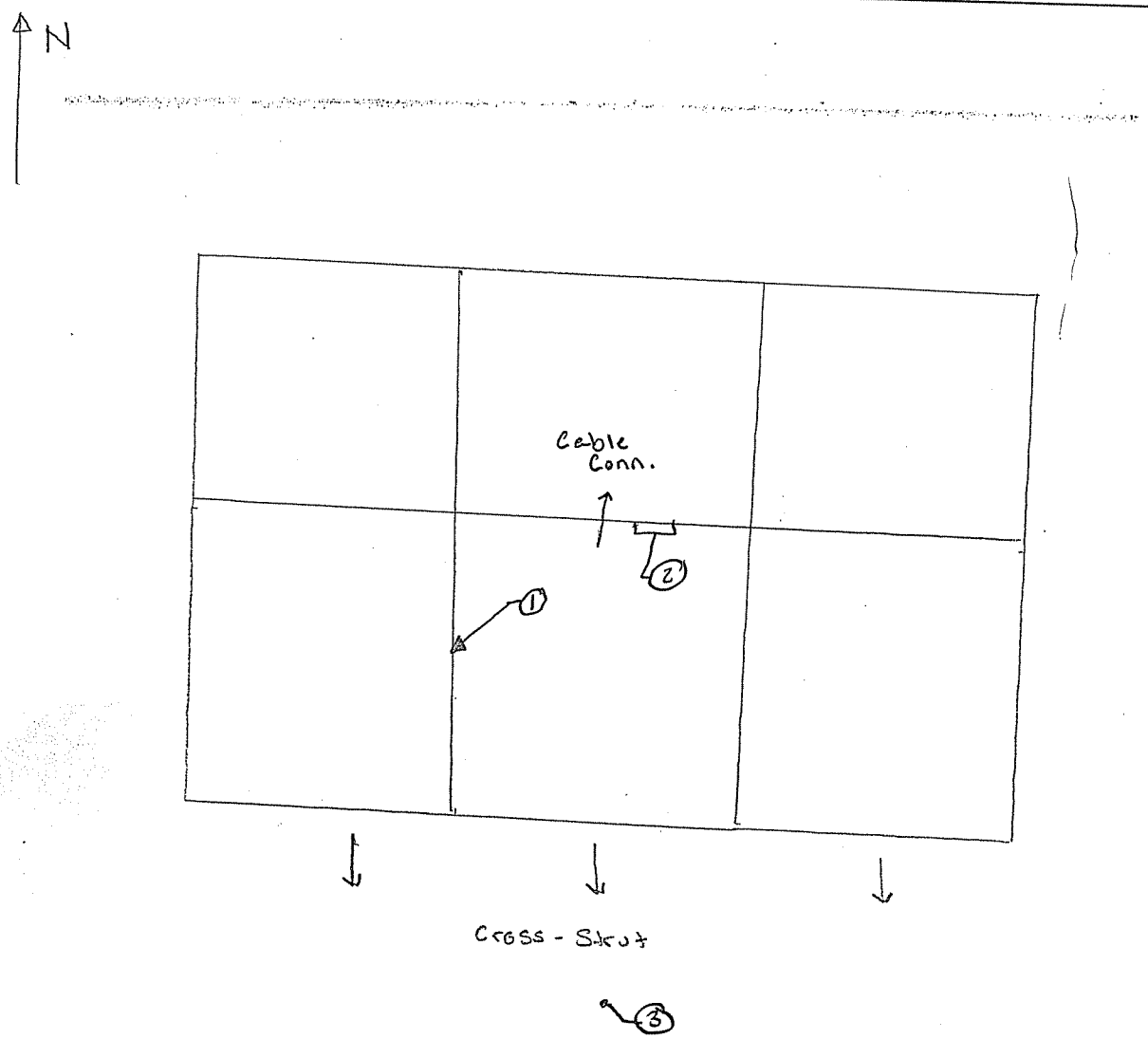
PLAN



Tier 25

1 Sheared off Bolt @ Cable cap C2-13

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/BS	3/4	26 of 26
		of



PIER 2
W COLUMN
TIER 25

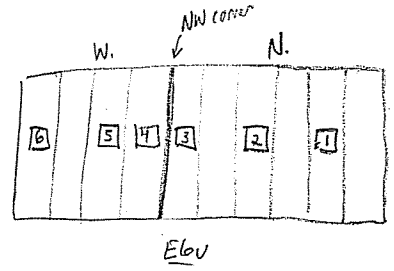
1. Water Leakage @ Splice PL w/ up to 1/16" Loss x 6" w [C2-11]
2. Missing Cover on Conduit [C2-12]
3. Active Leak in Strut Ceiling w/ moisture on Tier 23 [C2-20-21]

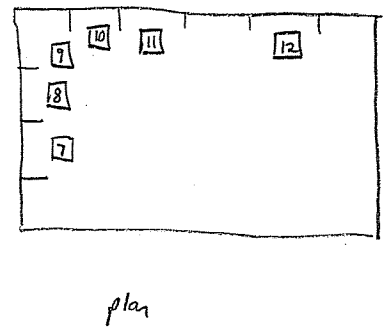
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
CRS, BS	3/4/08	23 of 26
		of

LOCATION - Tower 2 E. leg Tier 7 NW corner

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.641	.636
2	.643	.637
3	.643	.636
4	.648	.629
5	.651	.635
6	.649	.634
7	.397	.384
8	.396	.382
9	.410	.384
10	.393	.378
11	.402	.381
12	.397	.380





Mod Rust Floors / Wall

Sheet rust on Floor / wall

Mod rust accumulation on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE: / SHEET:
BKC/BS/CTY/MJJ	4/8/08 / 1 of 19
	. of

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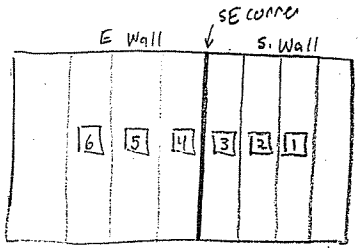
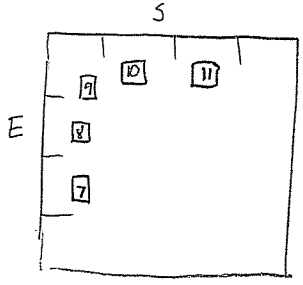
LOCATION - Tower 2 E. leg Tier 7 SE corner

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.647	.636
2	.646	.629
3	.640	.621
4	.651	.635
5	.661	.639
6	.658	.638
7	.280	.389
8	.375	.365
9	.410	.371
10	.390	.365
11	.410	.384



Elev



Plan

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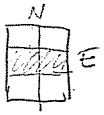
Mod Rust on walls / Sheet rust
Heavy pitting on floor
Sheet rust on floor
Heavy accumulation of rust on floor

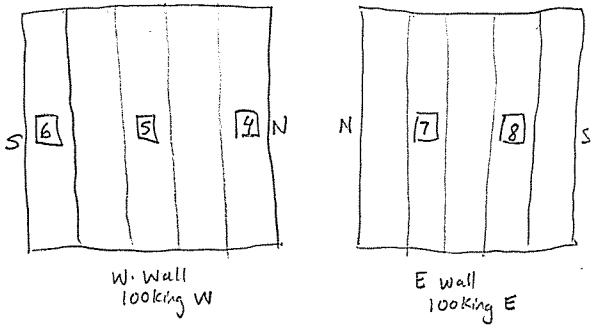
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

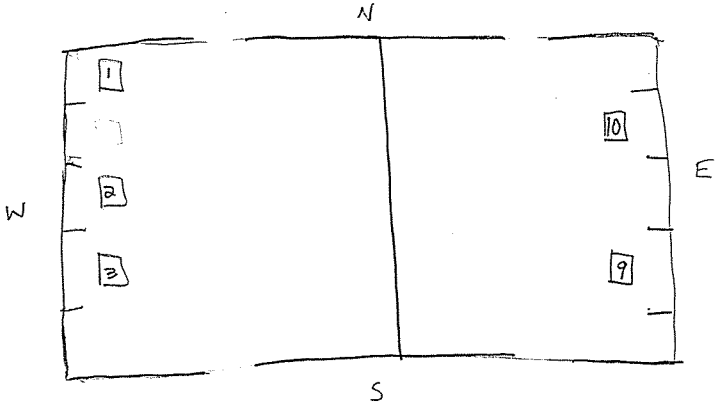
CREW:	DATE:	SHEET:
BKC/BS/CRY/MJS	4/8/08	2 of 19
		of

LOCATION - TIER II Tower 2 E. Leg Middle sections



LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.395	.378
2	.380	.374
3	.394	.372
4	.647	.624
5	.627	.622
6	.650	.625
7	.660	.638
8	.657	.641
9	.417	.383
10	.406	.380





Floor Plan

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Mod. rust floor + walls

light rust accumulation on floor

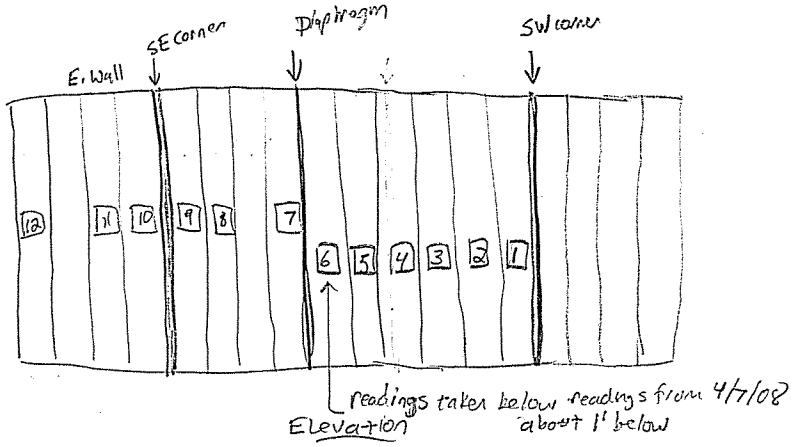
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

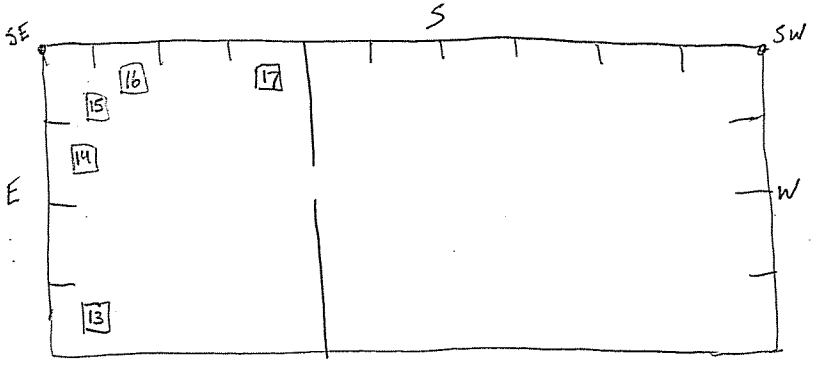
CREW:	DATE:	SHEET:
BKC/BS/CTY/MJJ	4/8/08	3 of 19
		of

LOCATION - Tower 2 E leg SW & SE corners Tier 11

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.622	.612
2	.627	.619
3	.649	.633
4	.644	.622
5	.646	.625
6	.644	.631
7	.634	.625
8	.632	.619
9	.629	.608
10	.654	.638
11	.663	.641
12	.657	.638
13	.416	.397
14	.375	.398
15	.353	.384
16	.406	.384
17	.412	.392





Floor Plan

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
BKC/BS/CTY/MJJ		4 of 19
		of

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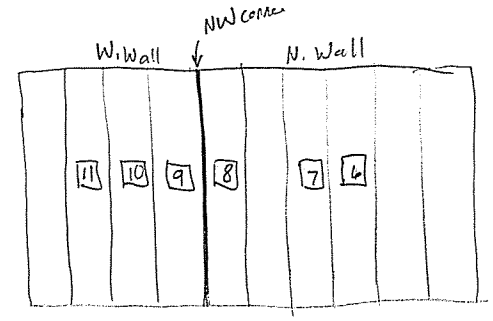
Tower 2 E. log

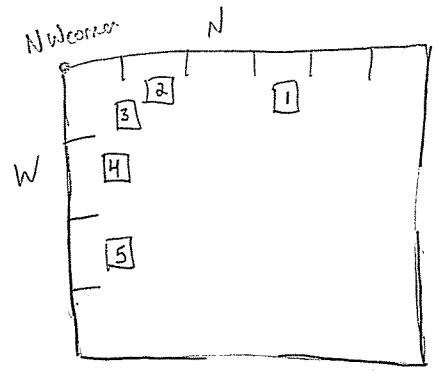
LOCATION - Tier 11 NW corner

THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.399	.386
2	.395	.380
3	.365	.358
4	.317	.369
5	.403	.376
6	.635	.630
7	.634	.631
8	.636	.625
9	.644	.626
10	.649	.629
11	.647	.625



Elev



Floor Plan

Mod. rust on walls/floor

light rust accumulation on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC/BS/CTY/MJJ	4/8/08	5 of 19
		of

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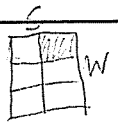
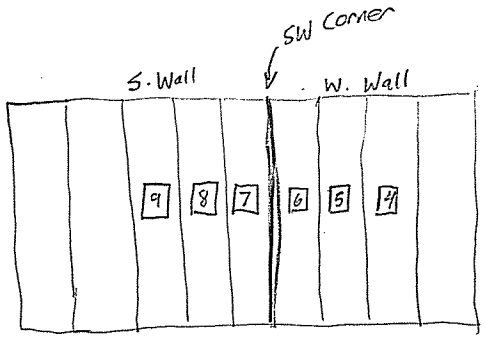
Tower 2 E. leg

LOCATION - TIER 15 SW Corner

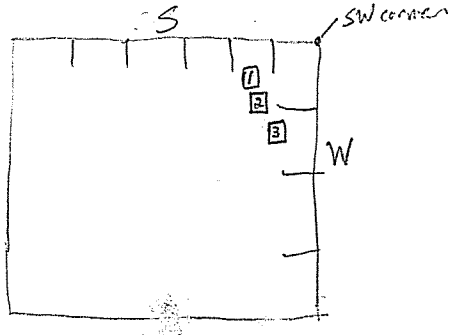


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.405	.387
2	.405	.392
3	.401	.389
4	.629	.622
5	.634	.621
6	.635	.622
7	.625	.613
8	.636	.617
9	.635	.624



Wall Elevation



Floor Plan

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Caliper reading of diaphragm/floor 3/8"

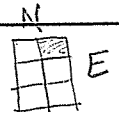
Typ. rust piled on floor up to 1/4" deep @ corner

Walls have mod. rust.

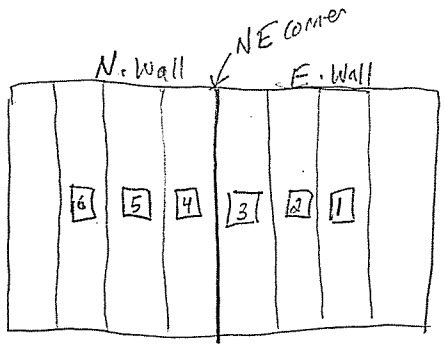
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC/BS/CEY	4/8/08	6 of 19
		of

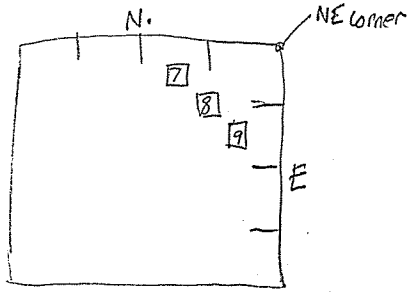
LOCATION - Tower 2 E. leg TIER 15 NE corner



LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.657	.645
2	.658	.647
3	.671	.636
4	.675	.639
5	.651	.644
6	.657	.644
7	(1)	.347
8	(1)	.343
9	(1)	.337



Wall Elevation



Floor Plan

(1) Heavy Pitting 1/16" unable to take T-Meter Reading

Typ. Rust on floor up to 1/8" deep

Walls lmod. rust

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/BS/CTY	4/8/08	7 of 19
		of

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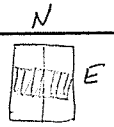
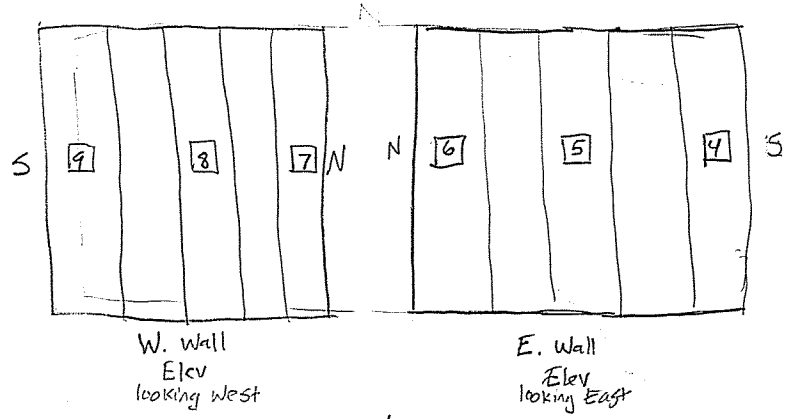
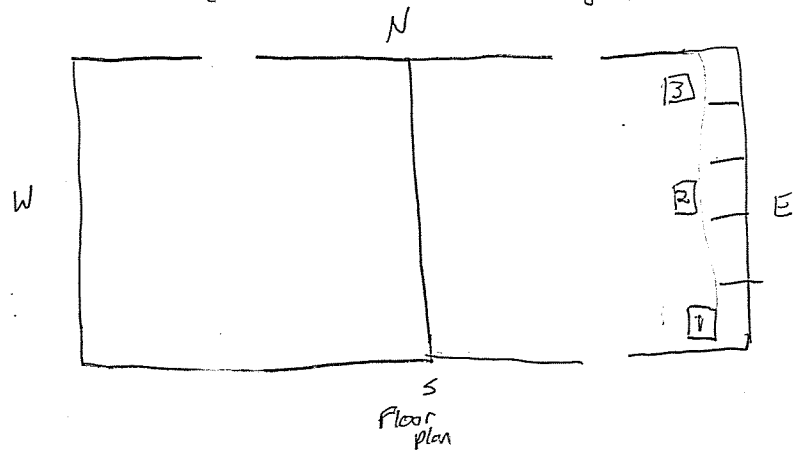
LOCATION - Tower 2 E. Leg TIER 19 Middle sections



LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.407	.389
2	.399	.389
3	.406	.386
4	.712	.643
5	.667	.646
6	.664	.645
7	.660	.638
8	.657	.643
9	.654	.643





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light rust accumulation on floor

Moderate rust on walls

Sheet rust on walls

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/BS/CTY	4/8/08	8 of 19
		of

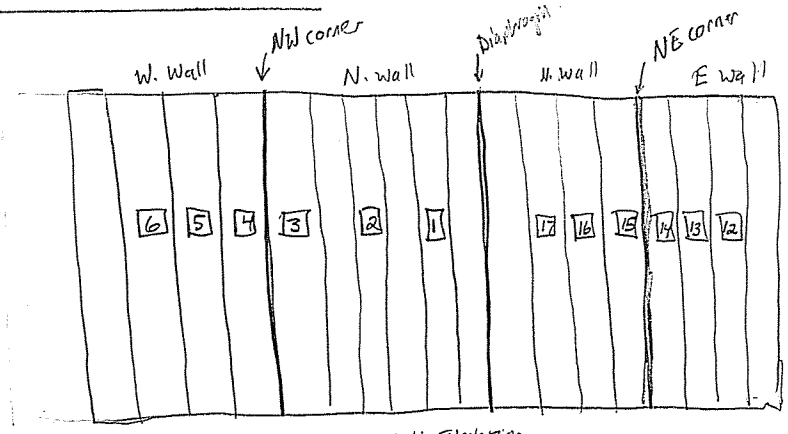
Tower 2 E. leg

LOCATION - TIER 19 NW + NE corners

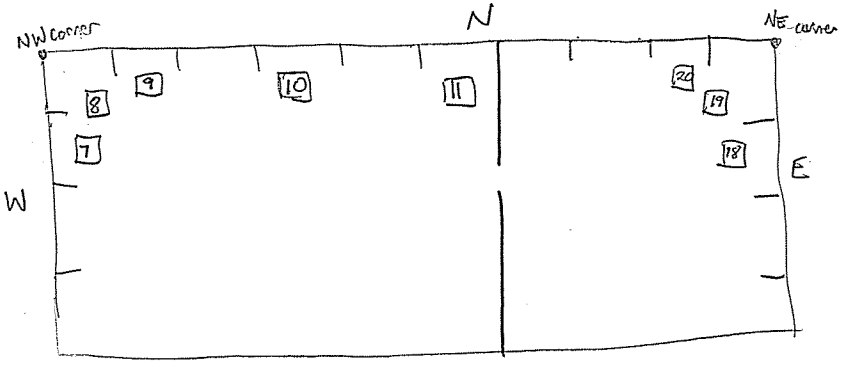
N E

THICKNESS AFTER

LOCATION		WIRE BRUSH		GRINDING	
1	12	.644	.668	.642	.651
2	13	.650	.662	.641	.646
3	14	.651	.671	.646	.647
4	15	.657	.672	.642	.639
5	16	.652	.657	.635	.643
6	17	.646	.656	.644	.637
7	18	.467	.307	.375	.347
8	19	.341	.280	.363	.339
9	20	.389	.384	.399	.353
10		.402		.394	
11		.396		.384	



Wall Elevation



Floor Plan

Mod. Rust walls + floor, Heavy Rust accumulation on floor, Sheet rust on walls

Moderate + Heavy pitting on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	

CREW:	DATE:	SHEET:
BKC/BS/CTY	4/8/08	9 of 19
		of

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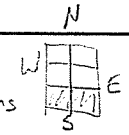
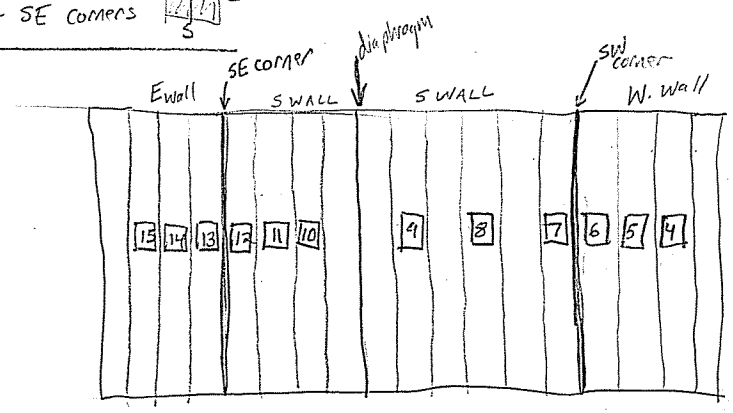
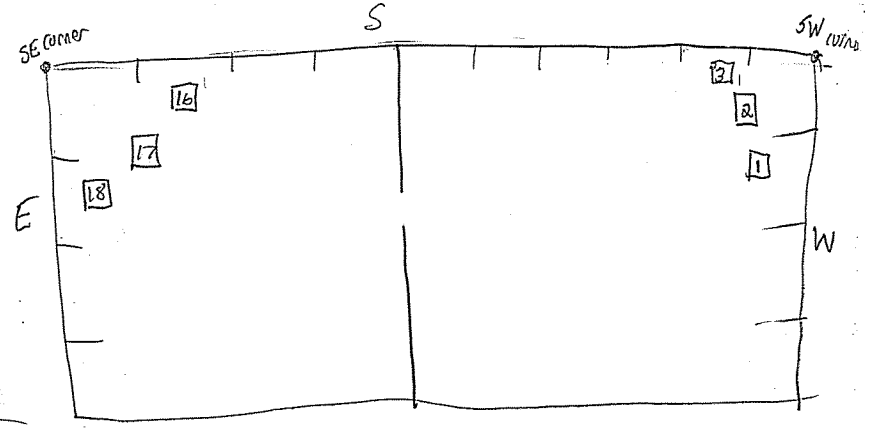
Tower 2 E, leg

LOCATION - TIER 19 SW + SE corners





LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.429	.371
2	.407	.373
3	.417	.381
4	.657	.640
5	.656	.642
6	.652	.639
7	.647	.629
8	.649	.636
9	.673	.637
10	.636	.616
11	.642	.627
12	.641	.625
13	.658	.641
14	.656	.642
15	.655	.644
16	1	.345
17	1	.348
18	1	.353



Caliper Reading Floor/Diaphragm 3/8"

① Floor heavy pitting too rough for D Meter readings

Sheet rust on walls

Med. Rust floor + Walls

heavy accumulation of rust piles on floor

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/BS/CTY	4/8/08	10 of 19
		of

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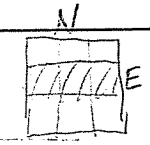
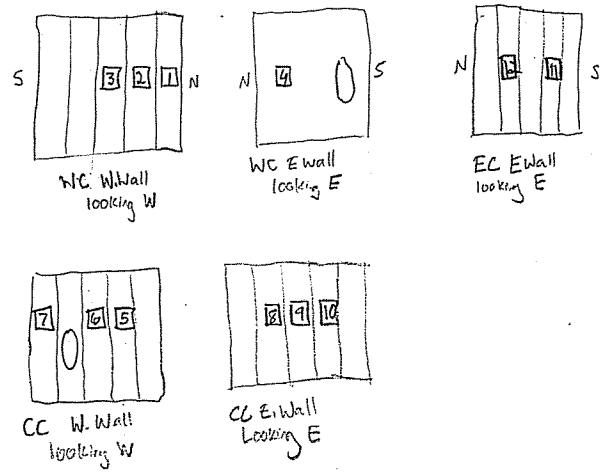
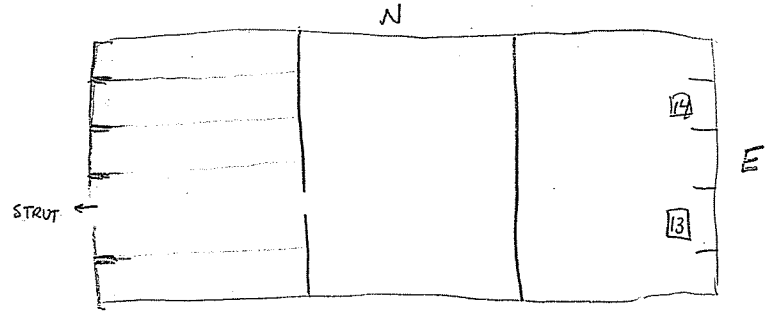
LOCATION - Tower 3 E. leg Tier 6 Middle bays



THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.645	.641
2	.637	.634
3	.634	.630
4	.641	.634
5	.631	.632
6	.633	.632
7	.626	.626
8	.630	.628
9	.626	.630
10	.630	.630
11	.638	.629
12	.629	.626
13	.890	.870
14	.879	.872





Mod. Rust Floors/Walls

Slight rust accumulation piles on floor

Bird Excrement Floor of East Center bay

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems

JOB: P710070019

CREW:	DATE:	SHEET:
BKC/CTY	4/8/08	11 of 19
		of

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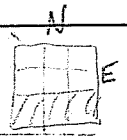
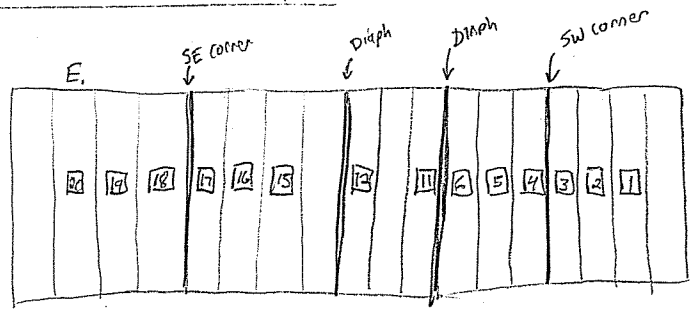
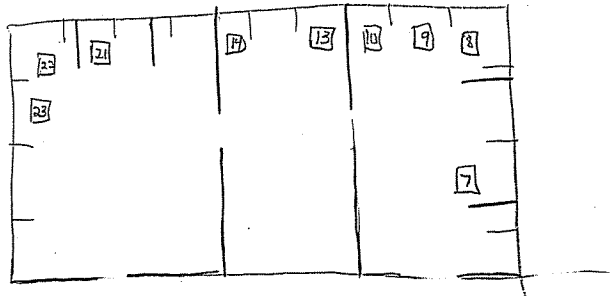
LOCATION - Tower 3 Eleg TIER6 S. Bays



THICKNESS AFTER

LOCATION		WIRE BRUSH		GRINDING	
1	13	.642	.387	.640	.374
2	14	.643	.387	.639	.377
3	15	.686	.637	.629	.633
4	16	.634	.634	.615	.630
5	17	.636	.635	.622	.630
6	18	.630	.633	.625	.629
7	19	.431	.634	.357	.631
8	20	.398	.636	.367	.632
9	21	.426	.389	.312	.381
10	22	.398	.387	.368	.382
11	23	.627	.390	.623	.381
12		.630		.628	





Mod Rust Walls/Floor

Mod-heavy accumulation of rust on floors of SW corner, light accumulation in other 2

1/16" pitting on floor SW, SE corners [9-10]

1/16" pitting on walls at SW corners [3] + [4]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/CTY	4/8/08	12 of 19
		of

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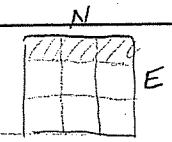
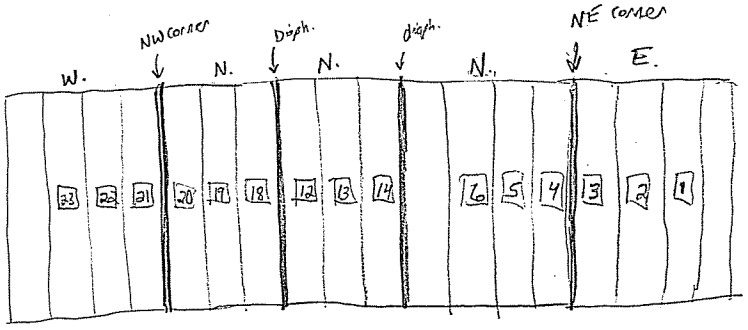
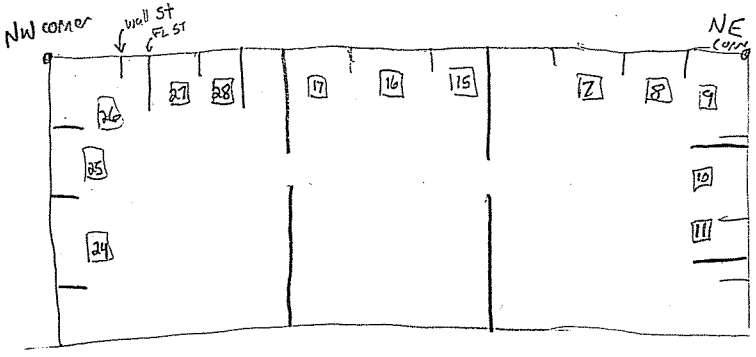
LOCATION - Tower 3 E. leg Tier 6 N. side



LOCATION		THICKNESS AFTER WIRE BRUSH		THICKNESS AFTER GRINDING	
1	15	.632	.389	.629	.374
2	16	.631	.385	.631	.373
3	17	.633	.383	.622	.372
4	18	.704	.645	.608	.621
5	19	.642	.641	.627	.627
6	20	.638	.643	.629	.620
7	21	.388	.641	.365	.625
8	22	.439	.642	.356	.631
9	23	.429	.641	.355	.630
10	24	.392	.383	.367	.370
11	25	.402	.390	.368	.370
12	26	.637	.395	.621	.361
13	27	.629	.412	.614	.364
14	28	.638	.392	.628	.374



Wall Elev



Floor plan

Mod Rust Floors/Walls

Mod Rust accumulation on floor

1/16" pitting on floor NW, NE corners

1/16" Pitting on wall NE corner near location 4 + 3

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/CTY	4/8/08	13 of 19
		of

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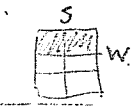
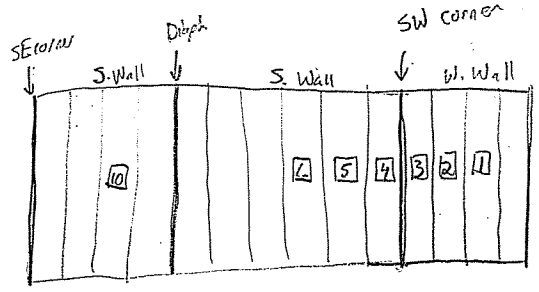
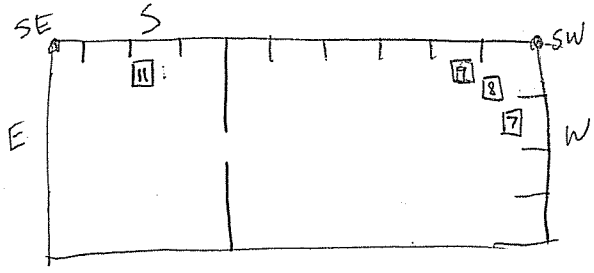
LOCATION - Tower 3 E leg, Tier 7 S. side



LOCATION	THICKNESS AFTER WIRE BRUSH	GRINDING
1	.641	.637
2	.642	.634
3	.588	.535
4	.397	.520
5	.634	.628
6	.634	.634
7	.524	.309
8	.328	.250
9	.368	.315
10	.642	.634
11	.400	.364



Elev



Plan

Mod Rust Floor/walls

light accumulation rust SE floor, heavy accumulation SW floor

1/16-1/8" Pitting SW Floor + walls near corner 3, 4, 7 8 9

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKC/CTY	4/8/08	14 of 19
		of

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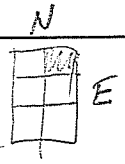
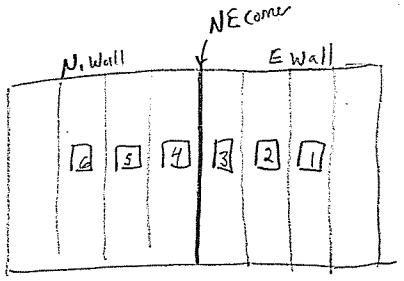
LOCATION - Tower 3 Elev Tier 7 NE corner

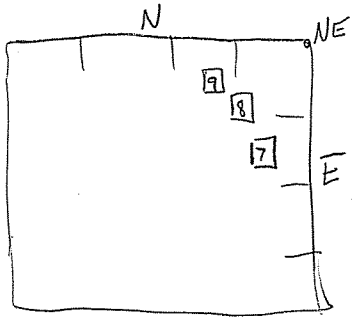


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.630	.626
2	.634	.628
3	.654	.628
4	.634	.620
5	.641	.628
6	.641	.628
7	.381	.309
8	.400	.304
9	.482	.316



Elev



Plan

Mod Rust Floor/walls
heavy accumulation on floor
Pitting in corner Floor & wall

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/CTY	4/8/08	15 of 19
		of

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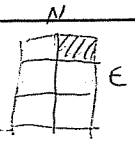
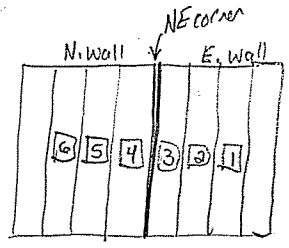
LOCATION - Tower 3 E. leg Tier 11 NE corner



THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.628	.629
2	.628	.621
3	.634	.621
4	.641	.621
5	.641	.628
6	.636	.628
7	.433	.355
8	.311	.303
9	.322	.344



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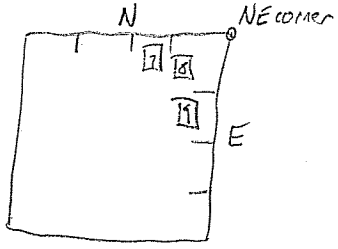

Floor plan

Mod. Rust Walls/Floor

Mod- heavy rust accumulation on floor

1/16" pitting on floor near corner

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE: / SHEET:
BKC/BS/CTY/MJS	4/8/08 / 16 of 19
	of

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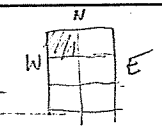
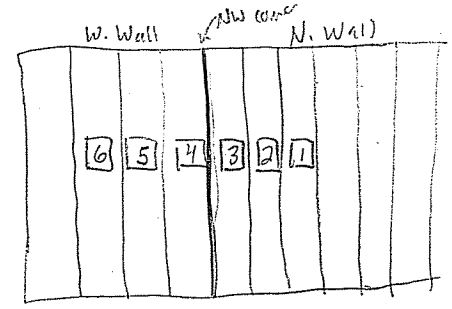
LOCATION - Tower 3 Elev Tier 11 NW corner

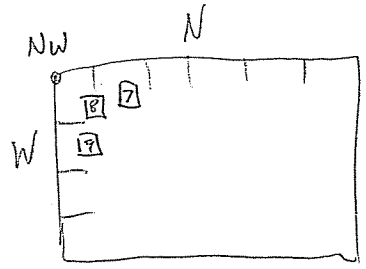


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.623	.609
2	.626	.615
3	.628	.602
4	.597	.621
5	.648	.647
6	.647	.647
7	.329	.374
8	.394	.368
9	.327	.368



Elev



Plan

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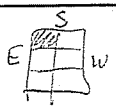
Mod Rust Wall / Floor
Mod accumulation of rust on floor
1/16" pitting on floor near corner + on Wall @ corner

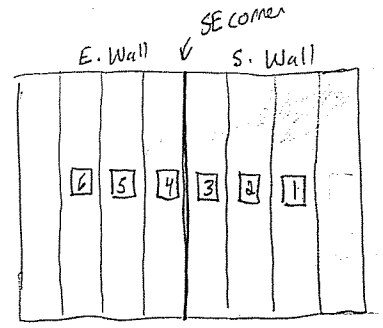
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/CTY/BS/HJJ	4/3/08	17 of 19
		of

LOCATION - Tower 3 Eleg Tier 11 SE corner

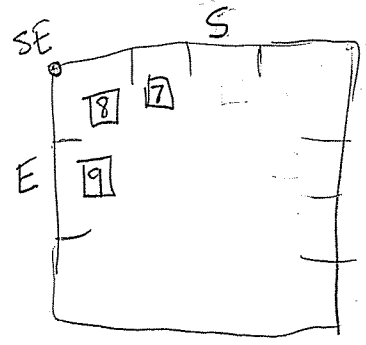


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.631	.625
2	.634	.622
3	.666	.621
4	.641	.621
5	.632	.624
6	.629	.627
7	.397	.331
8	.387	.335
9	.329	.361



Elev



Plan

Mod Rust Floor/walls

Mod Rust accumulation on floor

1/16" pitting on floor in corner

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/BS/CTY/MSJ	4/8/08	18 of 19
		of

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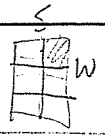
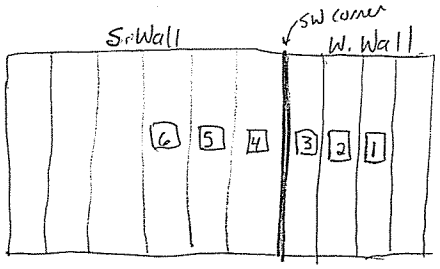
LOCATION - Tower 3 E. leg Tier 11 SW corner

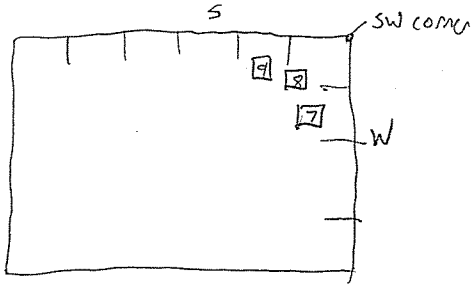


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.634	.628
2	.634	.628
3	.647	.634
4	.628	.617
5	.628	.622
6	.621	.621
7	.361	.370
8	.309	.355
9	.394	.383



Elevation

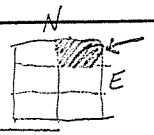


Floor Plan

Mod Rust Walls / Floor
Med accumulation on floor
1/16" pitting floor / wall in corner

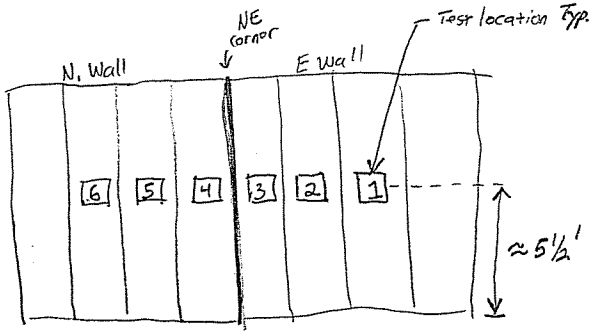
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC/CTY/BS/MJJ	4/8/08	19 of 19
		of

LOCATION - Tier 9 NE corner Tower 2

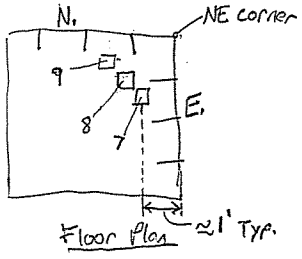


THICKNESS AFTER

LOCATION	WIRE BRUSH	GRINDING
1	.633	.624
2	.637	.620
3	.642	.624
4	.658	.624
5	.642	.624
6	.651	.630
7	(1)	.338
8	(1)	.327
9	(1)	.338



Elevation



Floor Plan

Diaphragm/wall thickness caliper reading 3/8"

Typ. Pitting in NE corner on floor

(1) 1/16" Heavy Pitting, unable to take D-Meter reading

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
BKC/BS/CTY	4/7/08	1 of 2
		of

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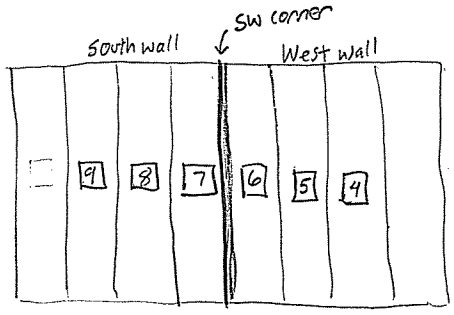
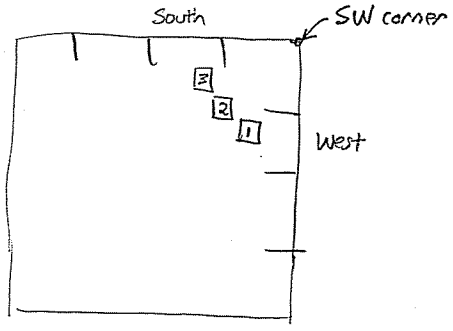
LOCATION - TIER 9 SW corner

LOCATION	THICKNESS AFTER WIRE BRUSH	THICKNESS AFTER GRINDING
1	.393	.373
2	.386	.370
3	.390	.379
4	.643	.624
5	.637	.624
6	.637	.624
7	.617	.591
8	.649	.598
9	.656	.613



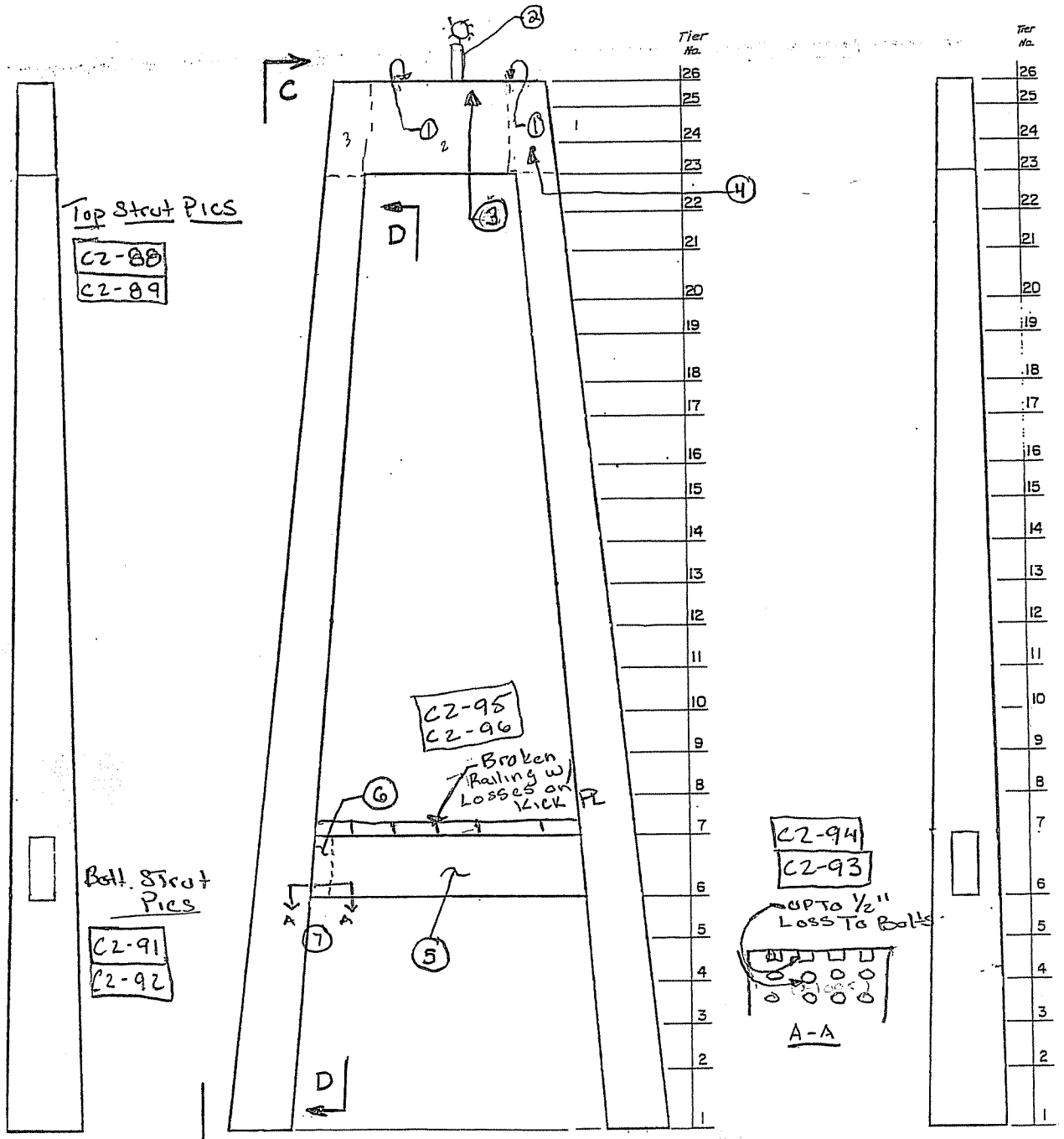
Wall Elevation



Floor PLAN

229
333

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKS/BS/CTY	4/7/08	2 of 2
		of

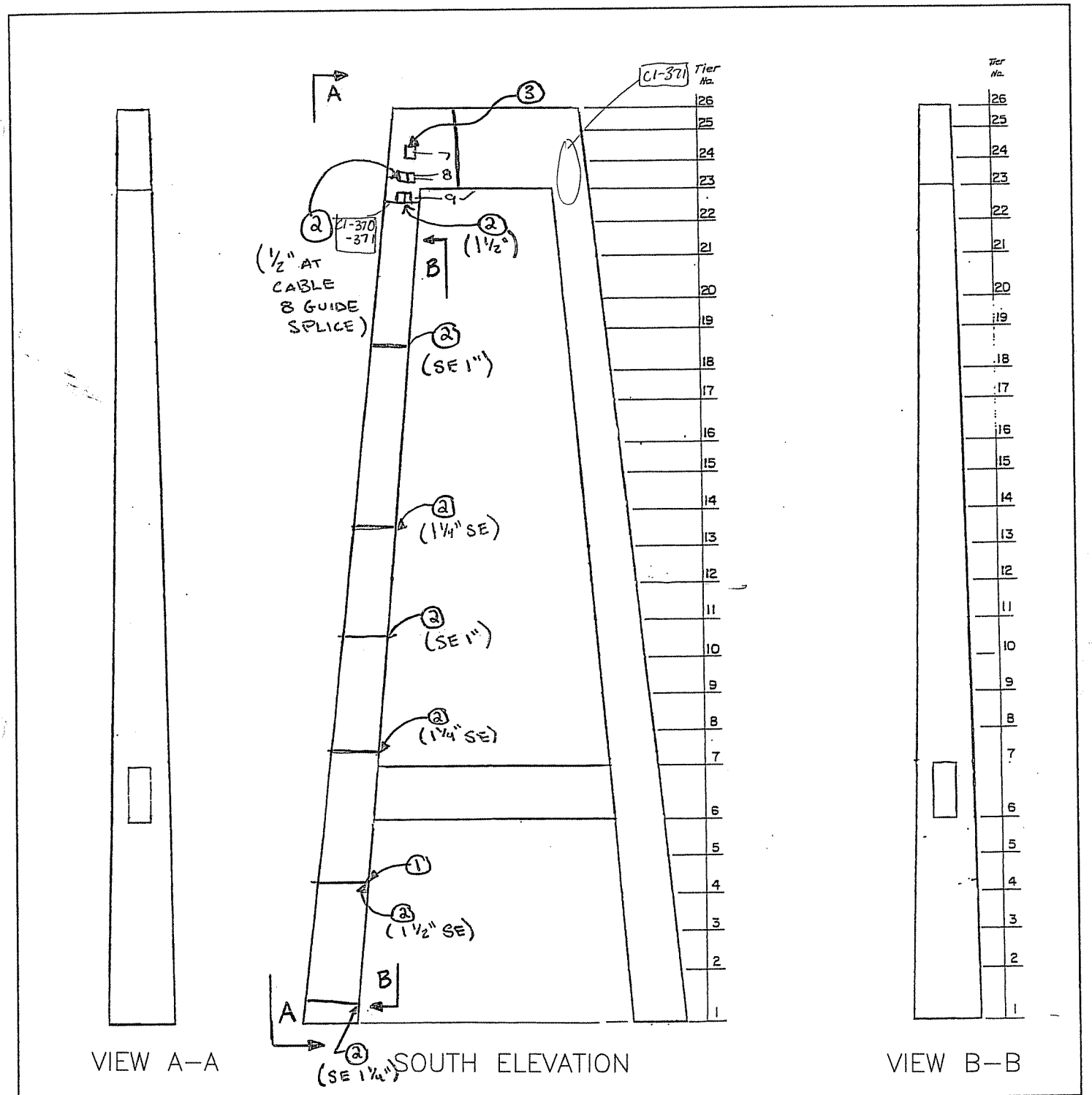


Tower 3
Pier 3

1. 100% Losses to Hatch Kick PL w/ T.R. Around Perimiter C2-86
2. Navigation Light Working w/ Broken Lock & Broken glass C2-87
3. W-Section w/ open Bolt Holes
4. EFFlo on Splice Bolts /@ Corners in Bay 1
5. Lights Not illuminated on Bottom C2-90
6. Heavy Rust on Chamber 1 Floor – Strut Splice Plates
7. Section A-A up to 1/2" Loss on Bolts

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJJ	3/6	8 of 9
		of

230
333

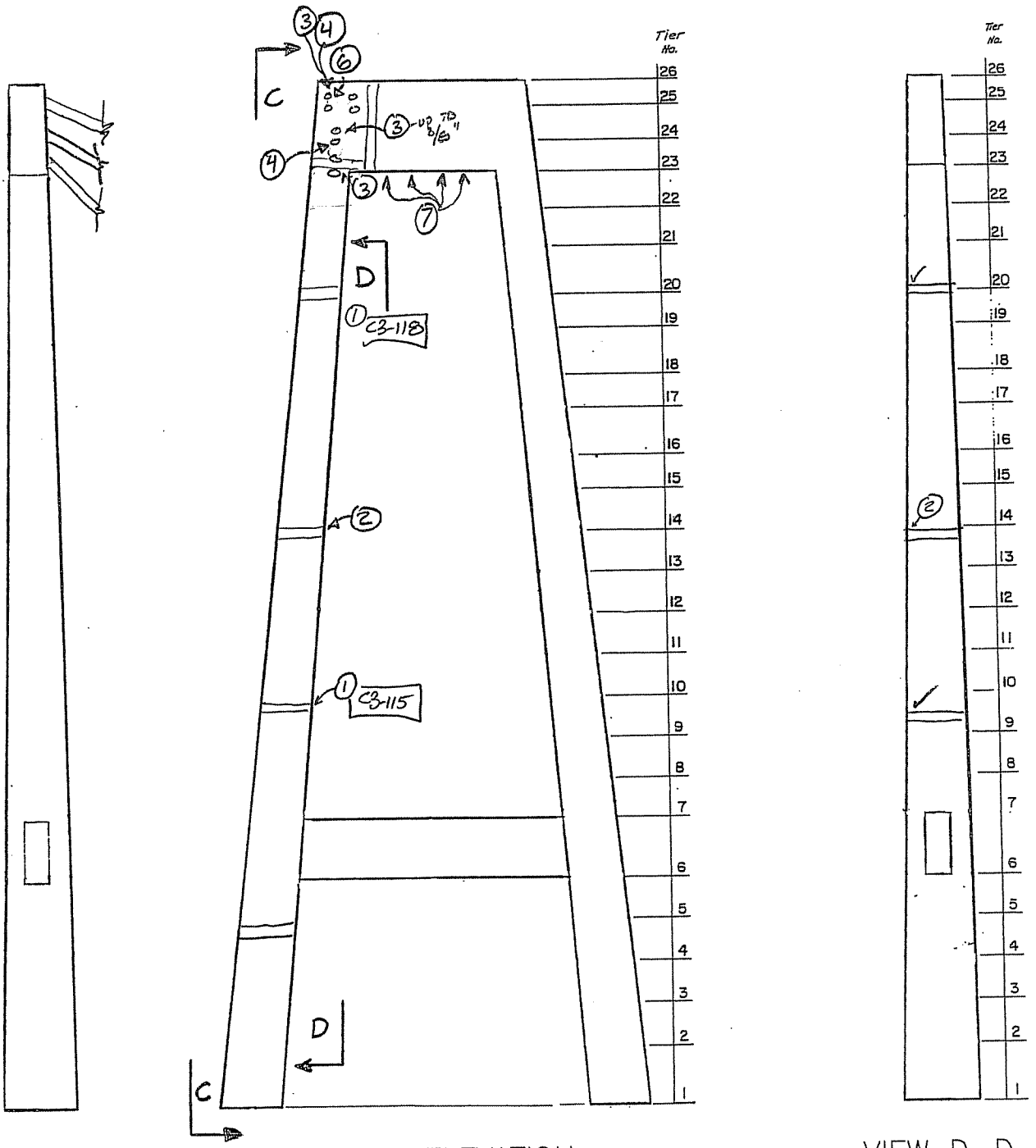


① TOWER SPLICE (TYPICAL)

② IMPACTED RUST (# ") (TYPICAL)

③ 3/4" I.R. AT TOP CABLE & GUIDE PLATE CI-375

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/WRW/CTY	3/21/08	of
		of



VIEW C–C

NORTH ELEVATION

VIEW D–D

① 3/4" I.R. @ SPLICE PLATE ID N.E. CORNER ON NORTH FACE C3-115

② 7/8" I.R. @ SPLICE PLATE @ N.E. CORNER ON NORTH FACE C3-116

③ UP TO 1/4" I.R. @ SPLICE PLATE ON EAST FACE C3-117

③ UP TO 3/16" I.R. AROUND CABLE GUIDE C3-119 (TYP)

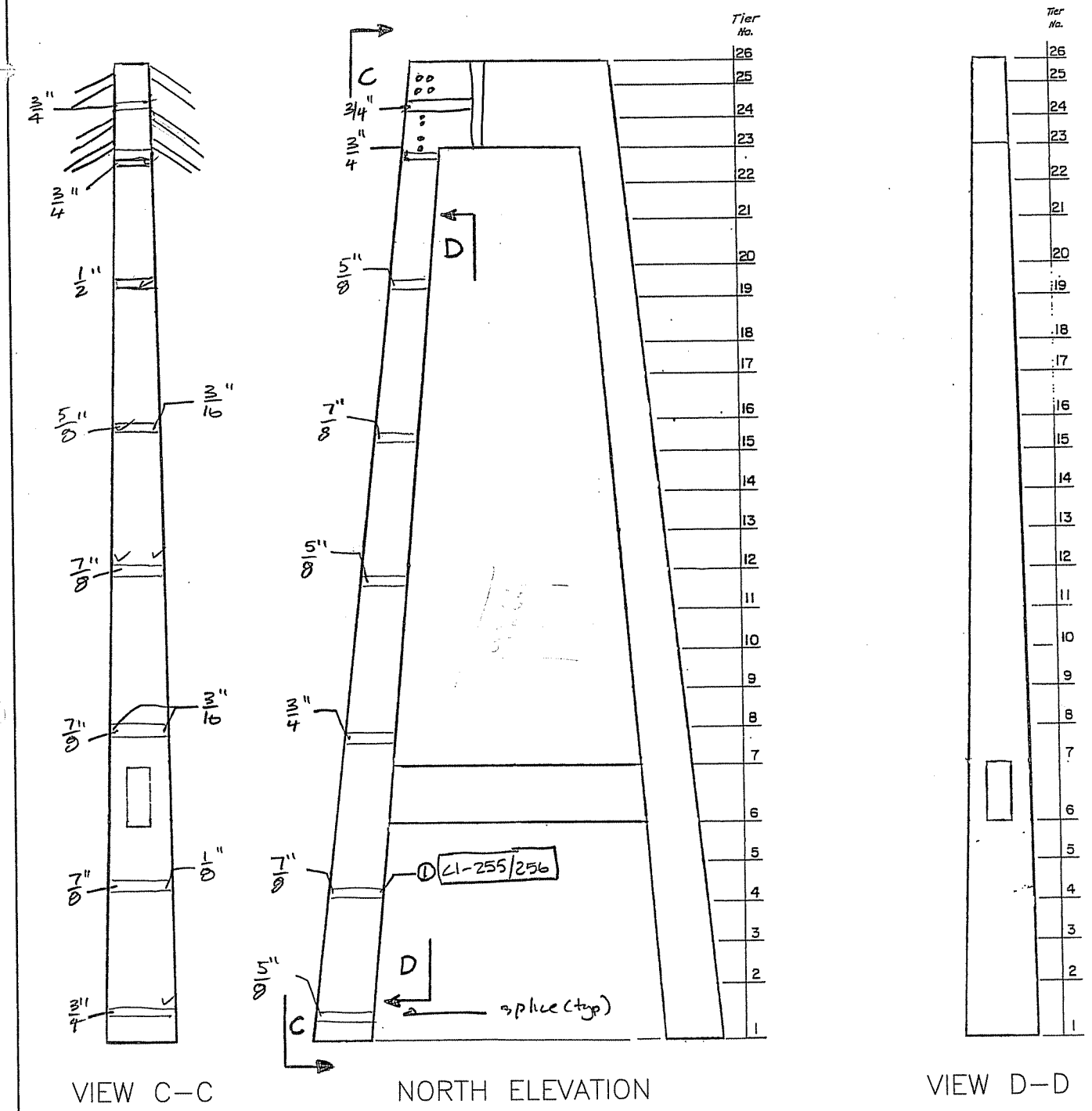
④ MISSING PIGEON SCREEN @ CABLE GUIDE

⑤ MISSING BOLT @ CABLE GUIDE

⑥ 1/8" GAP/MISSING BOLT @ EAST/UPPER CABLE GUIDE

⑦ TYPICAL FLAKING RUST NEAR/AROUND WEEP HOLES IN UNDERSIDE OF UPPER STRUT.

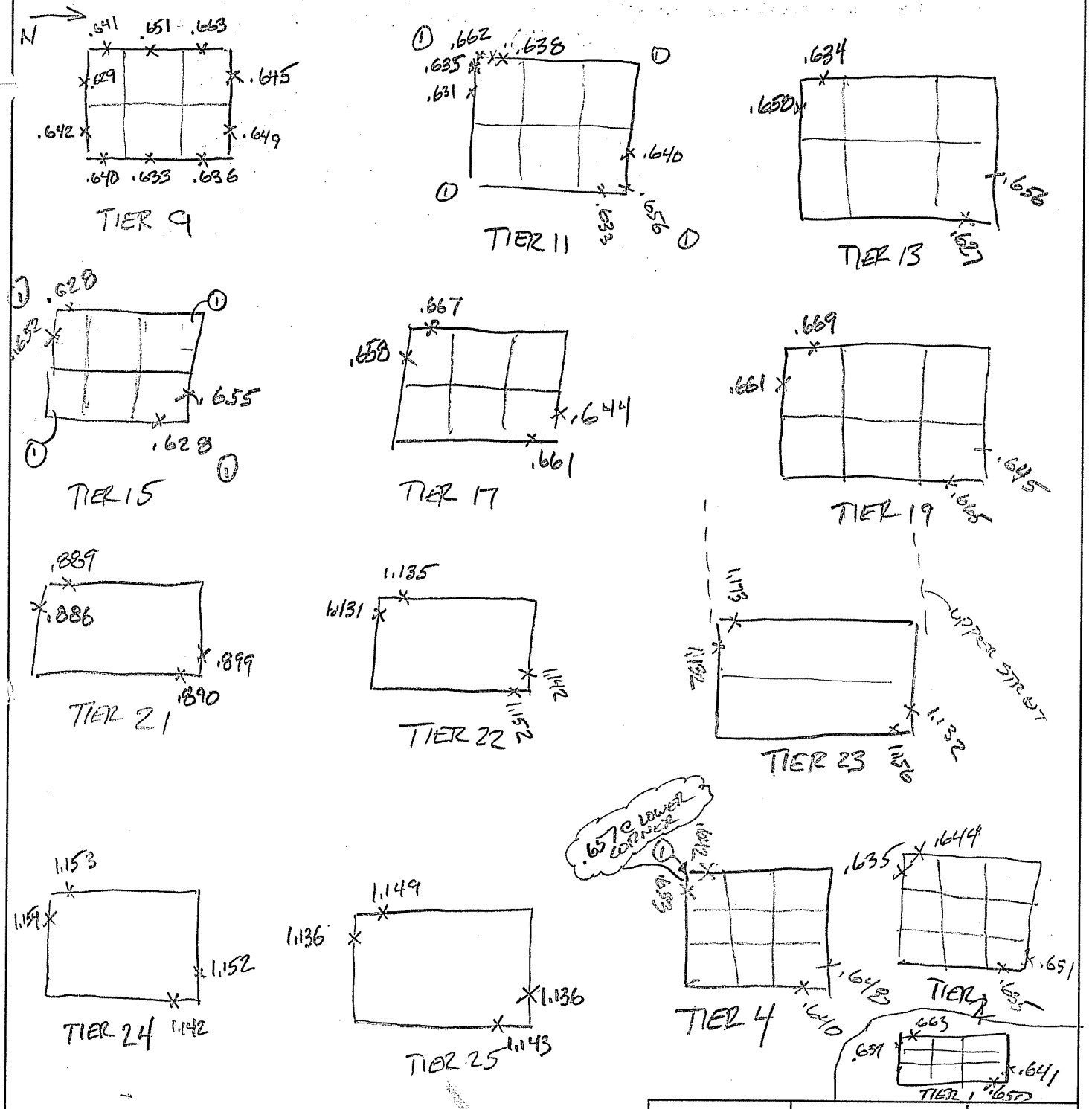
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
TOWER 3	
JOB: P710070019	
CREW:	DATE:	SHEET:
CRS/SWB	3/10/08	1 of 1
		of



① IMPACTED RUST (1") THICK BY 4" AT EDGE OF SPLICE PLATE

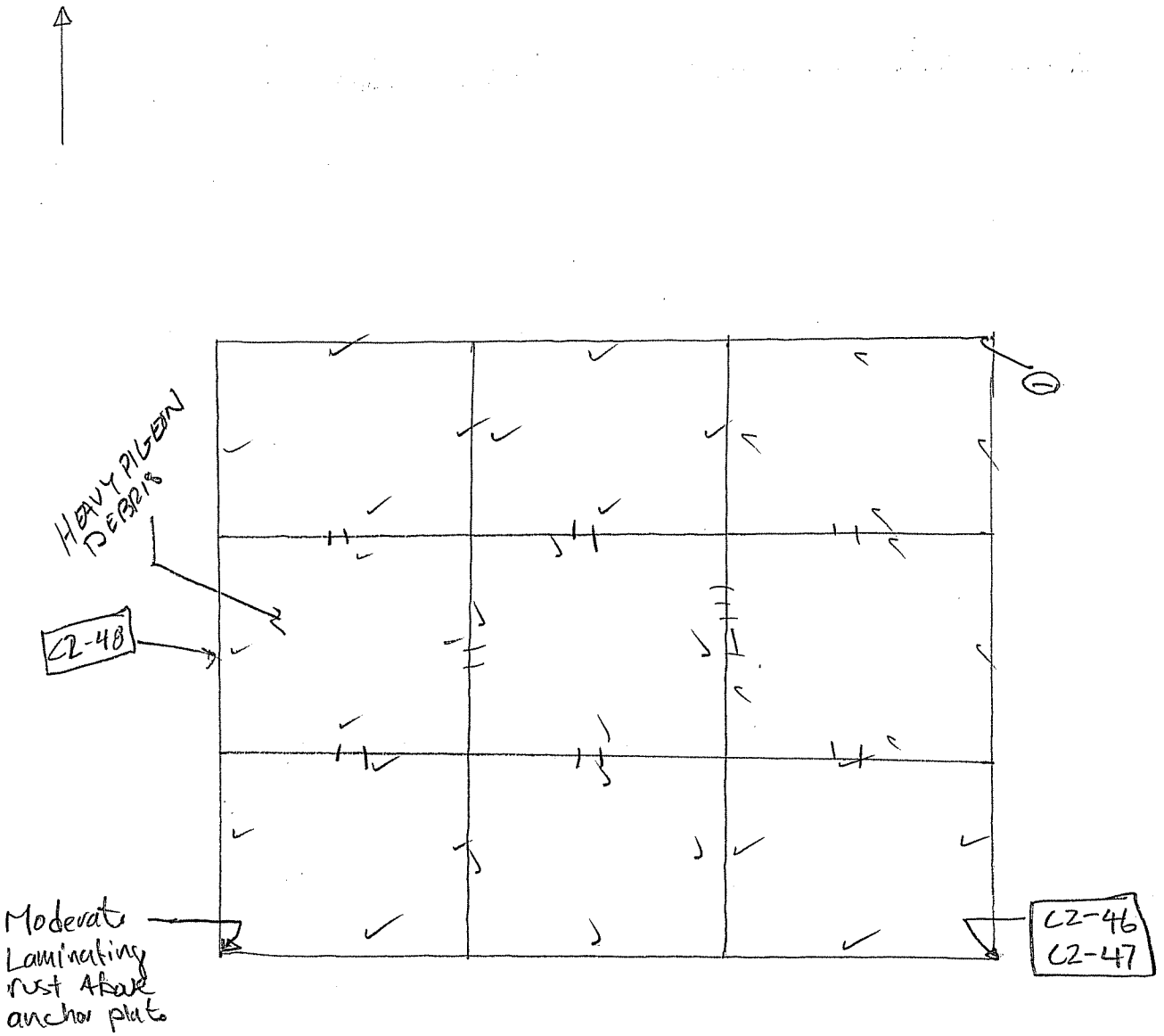
ALL MEASUREMENTS INDICATE THICKNESS OF 1.12. AT EDGE OF SPLICE PLATE. IMPACTED RUST EXTENDS FROM EDGE OF PLATE TO FIRST COLUMN OF BOLTS.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/SWB	3/11/08	1 of 2
		of



① LEAKAGE @ CORNER FROM SPLICE

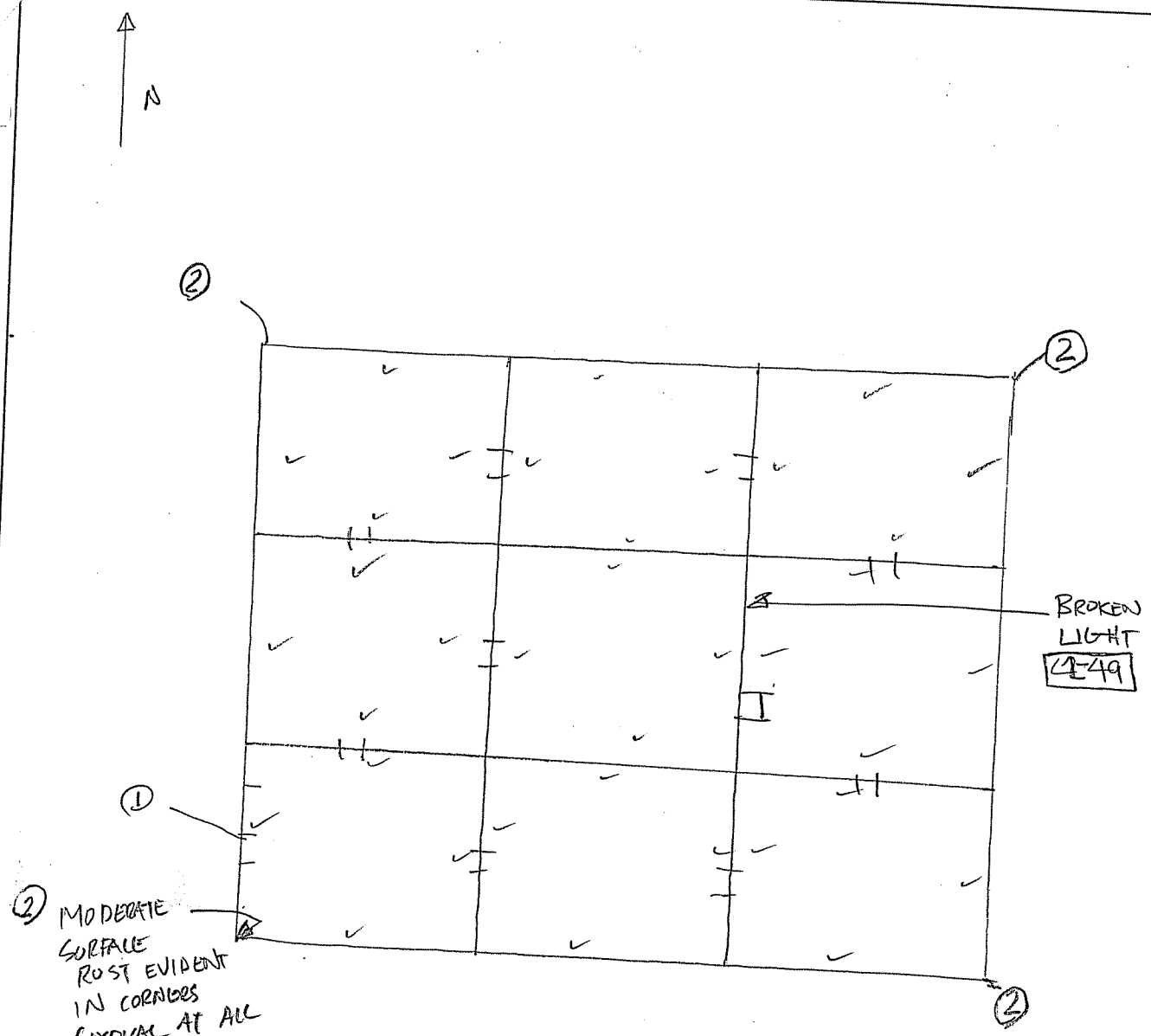
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
TOWER 3 - EAST LEG DMETER		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWD/PGN/CTY	3/14/08	2 of 3
		of



PIER 3
E COLUMN
TIER 1

1 Evidence of water intrusion at splice plate

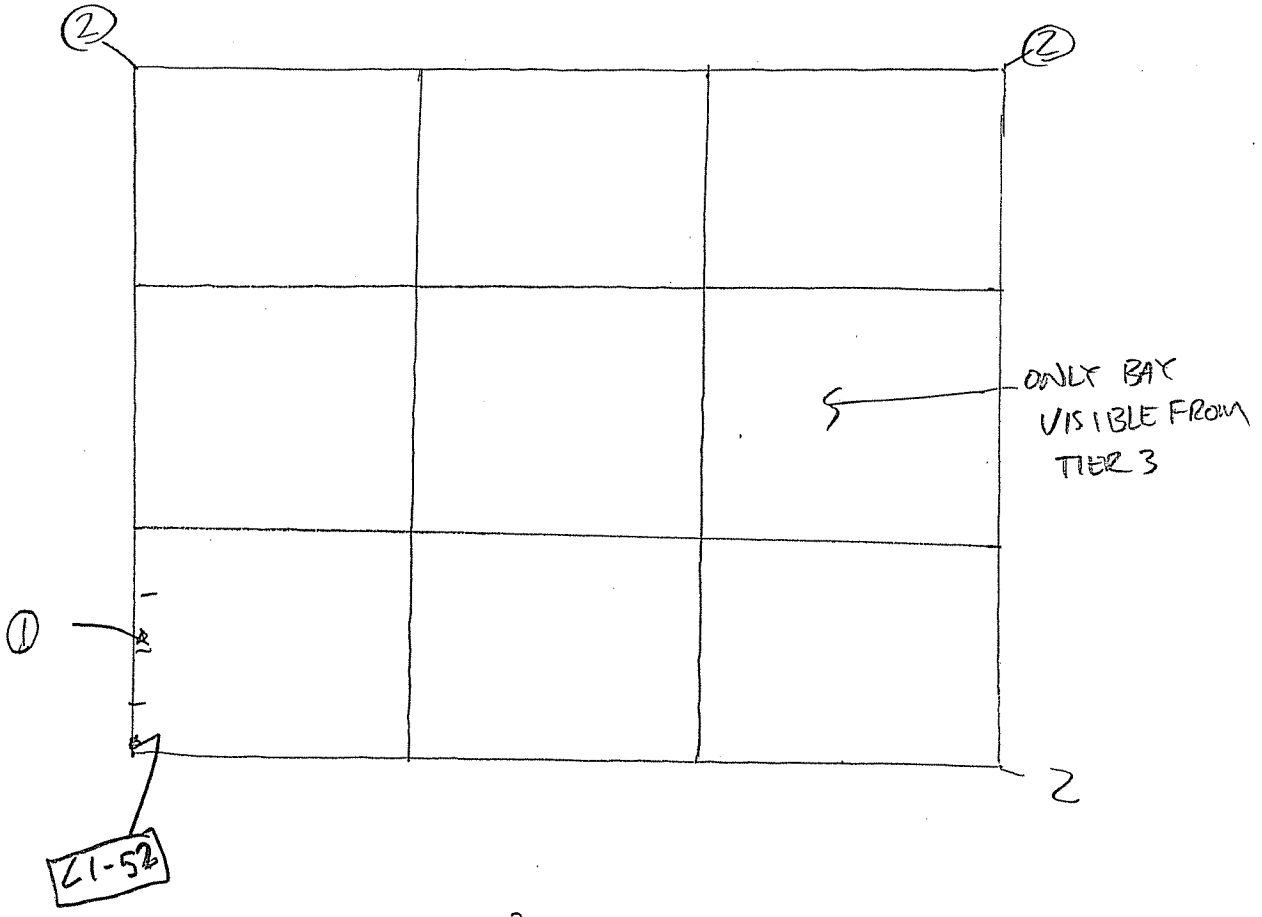
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJ/CRS	3/5/08	1 of 21
		of



PIER 3
E COLUMN
TIER 2

1 MODERATE ROST LENGTH OF VERTICAL STIFFENERS

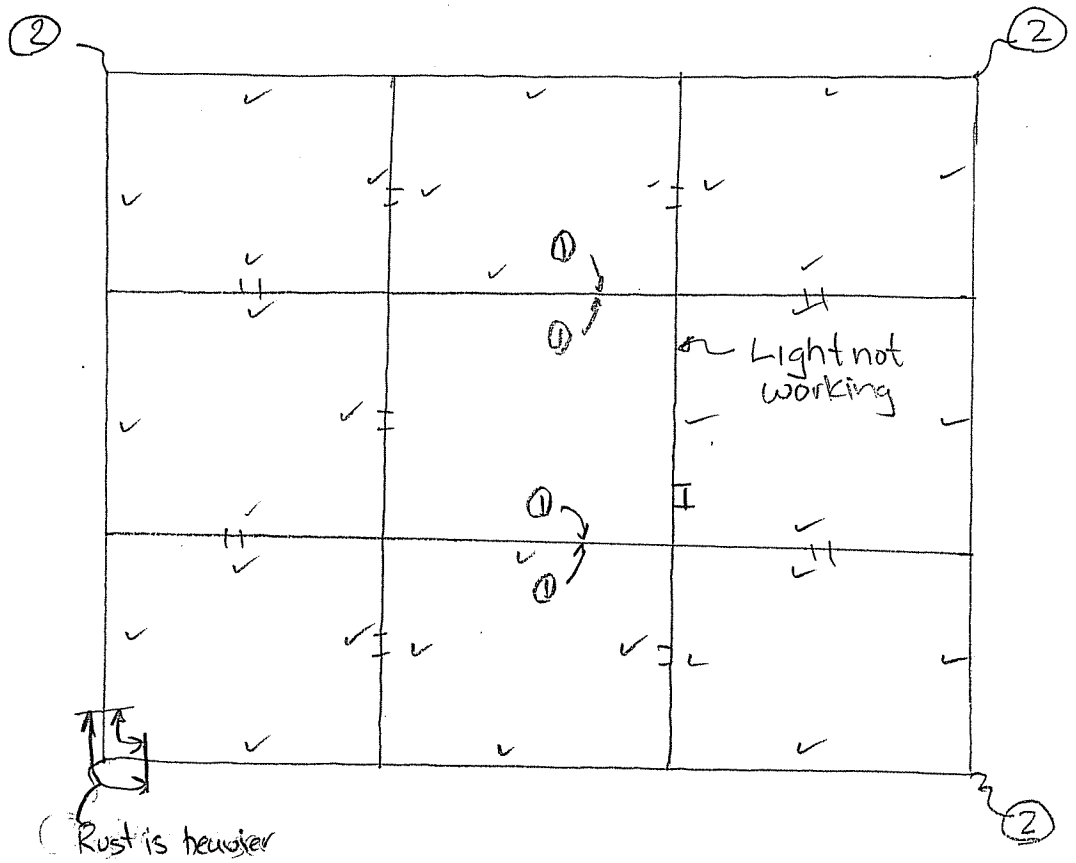
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW: MJ/CRS	DATE: 3/5/08
	SHEET: 2 of 21
	of



PIER 3
E COLUMN
TIER 3

	CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
2 MODERATE ROST AT CORNERS	NOTES BY:	TranSystems
	JOB: P710070019	
	CREW:	DATE:	SHEET:
	MJ / CRS	3/5/08	3 of 21
			of

237
333



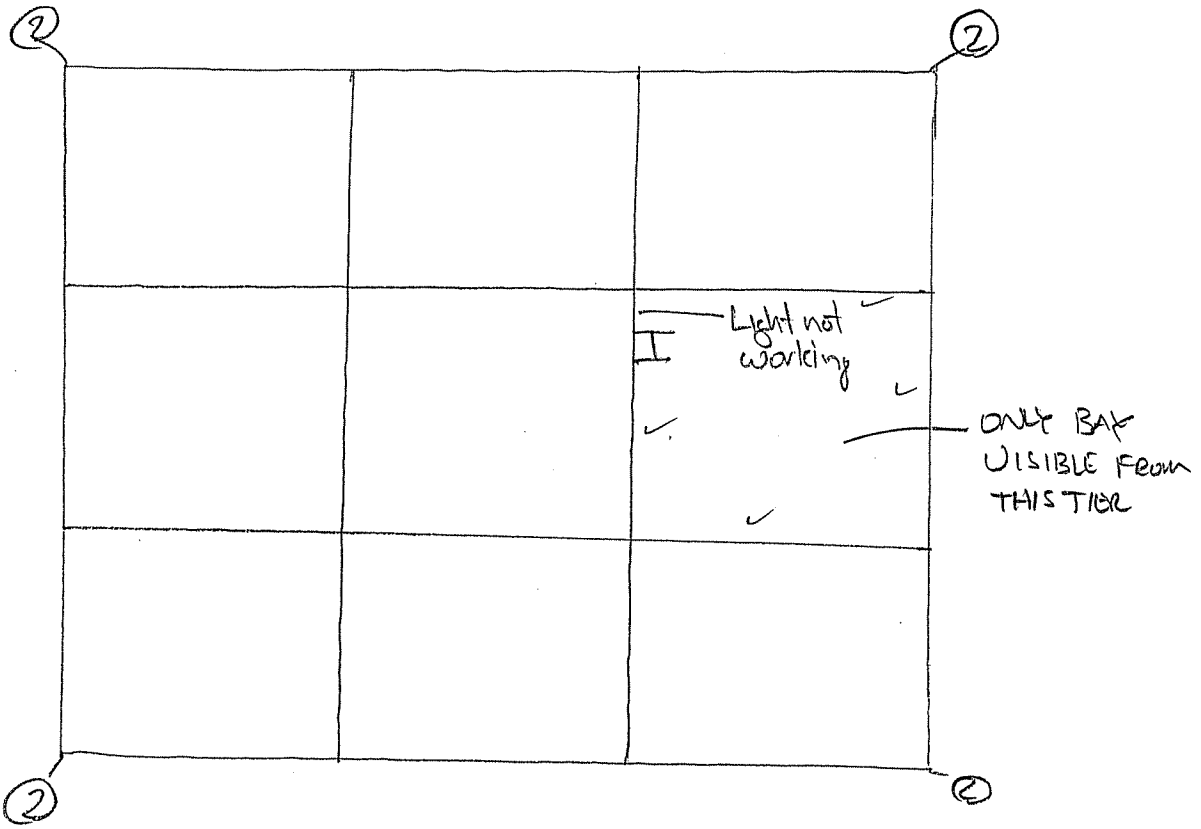
Rust is heavier than typical in corner (rust lumination at splice plate)

CL-52

PIER 3
E COLUMN
TIER 4

① SPLICE Plates welded to wall below actual splice

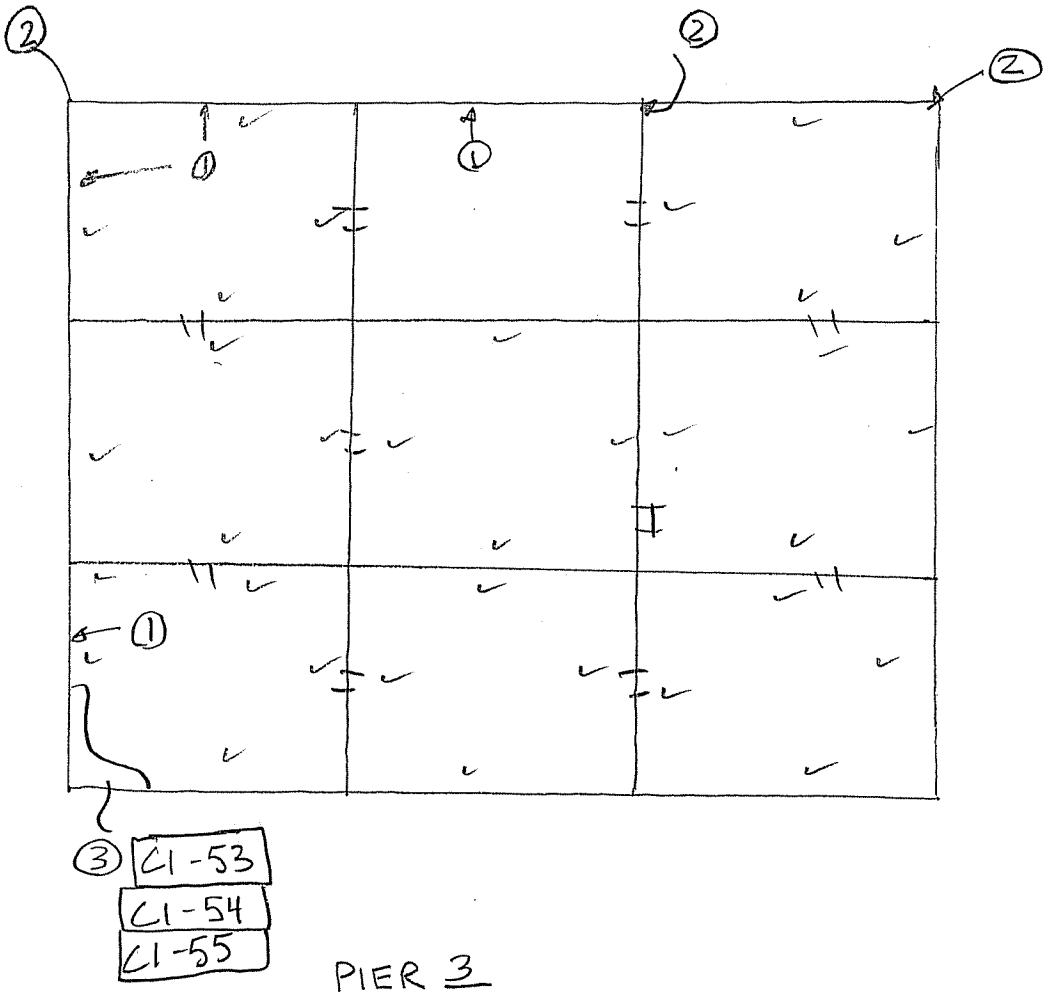
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
MJ/CRS	3/5/08	4 of 21



PIER 3
E COLUMN
TIER 5

2 Typical rust at corners

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/5/09	5 of 21
		of

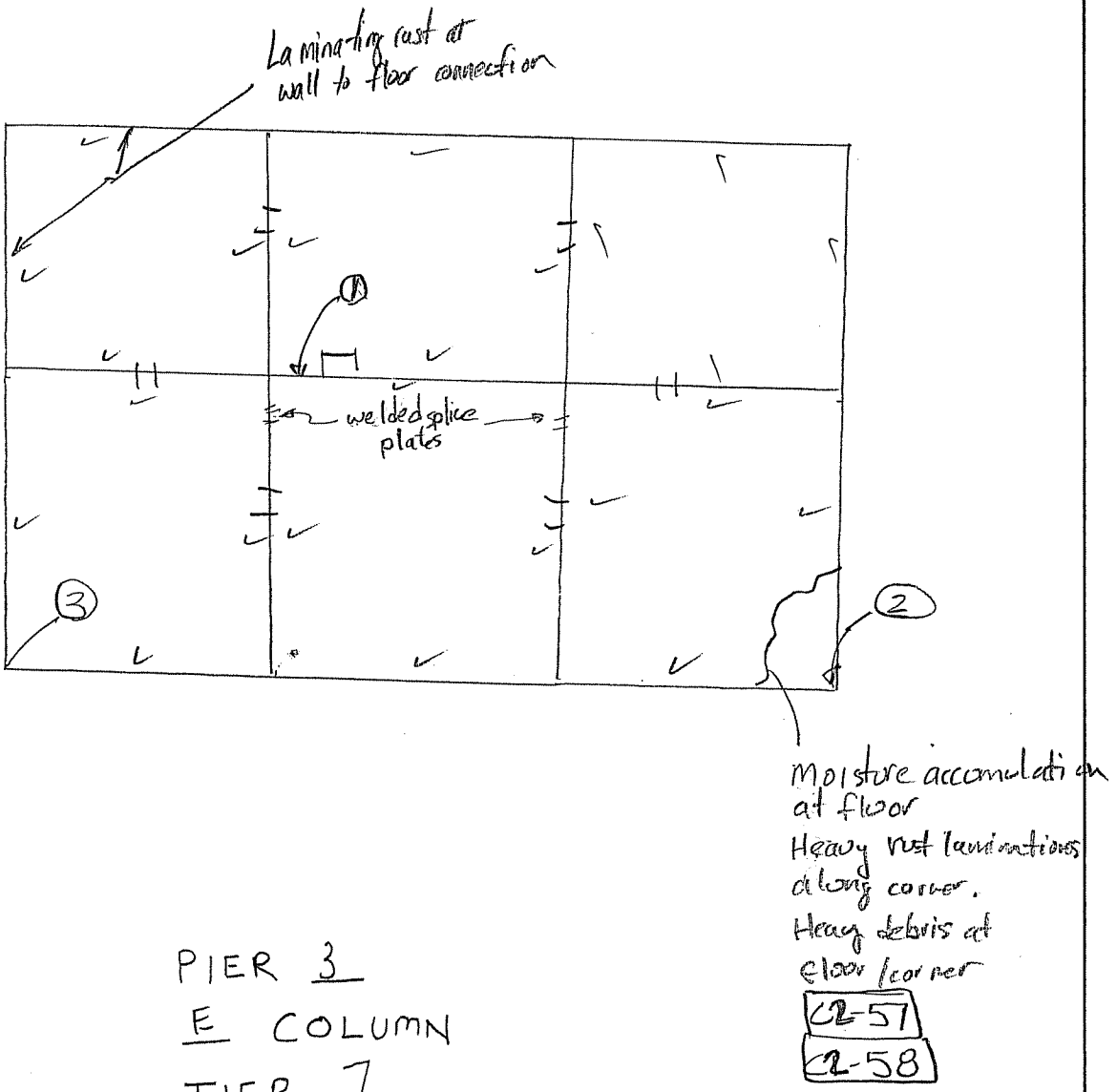


PIER 3
E COLUMN
TIER 6

① Extensive surface rust over entire wall, no pitting observed.

③ Heavy rust accumulation on flex, evidence of water infiltration at corner. Laminating rust on stiffeners in area.

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS/CRS	3/5/08	6 of 21



PIER 3
E COLUMN
TIER 7

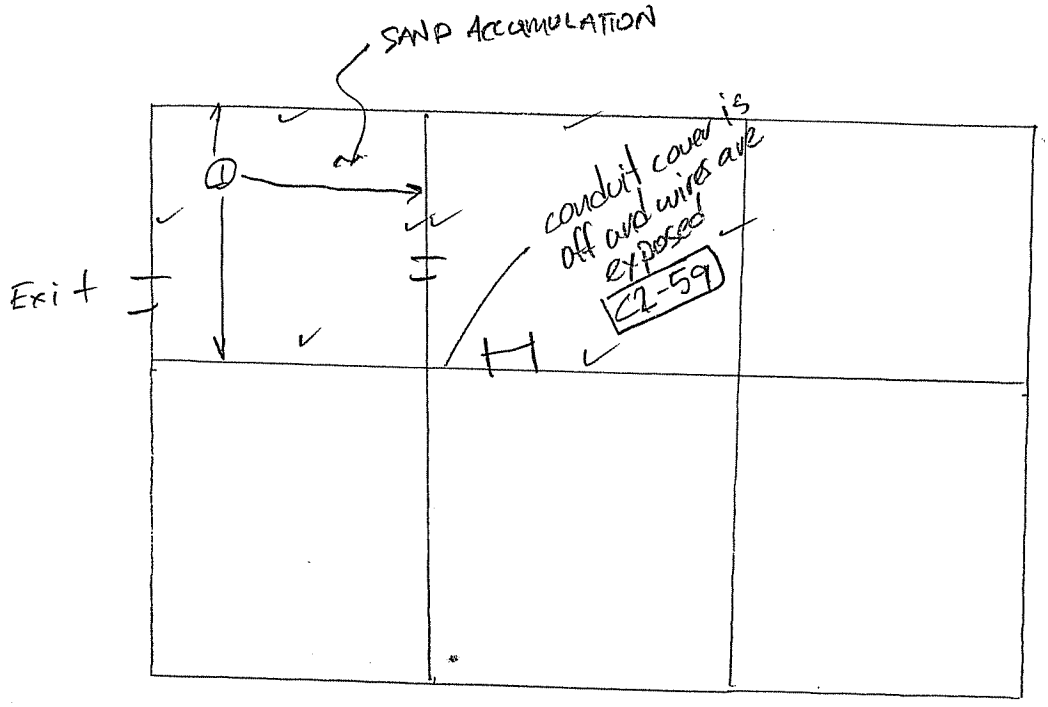
NORTH

1 No safety Glass over light, cover missing from junction box also

2 1/8" pitting on Exterior walls, section loss (1/8") on the stiffener

3 Moderate debris accumulation, evidence of moisture at corner

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/5/08	7 of 21
		of

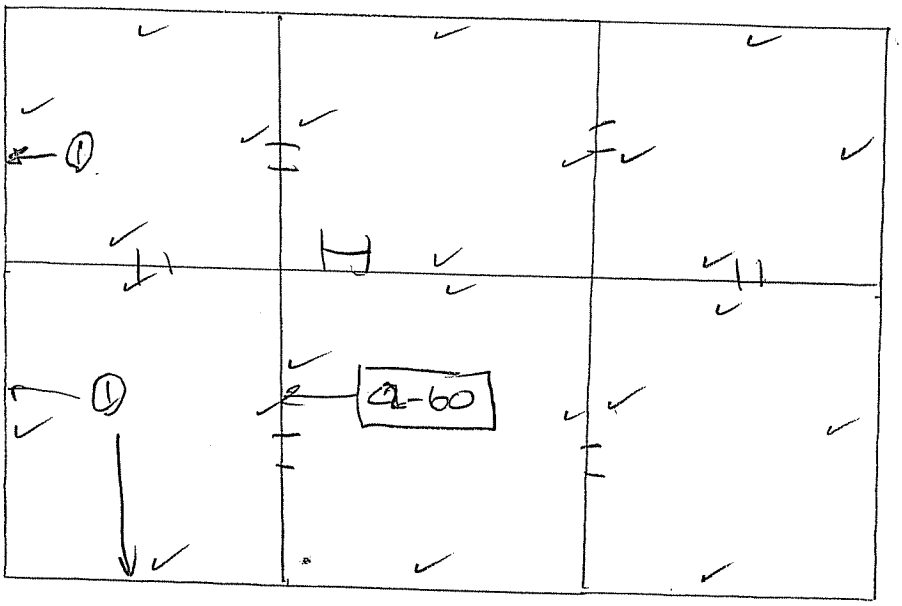


PIER 3
E COLUMN
TIER 8

NORTH

① Rust lamination along floor to wall connection

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / CRS	3/5/08	8 of 21
		of

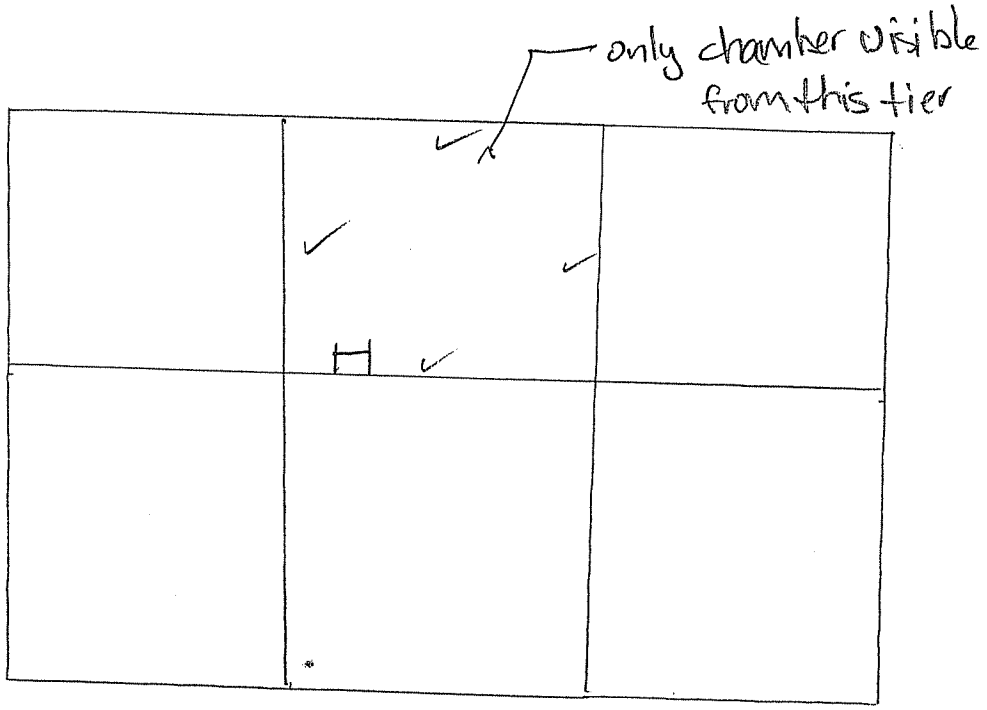


PIER 3
E COLUMN
TIER 9

NORTH

1 Extensive surface rust over entire exterior wall, no pitting observed.

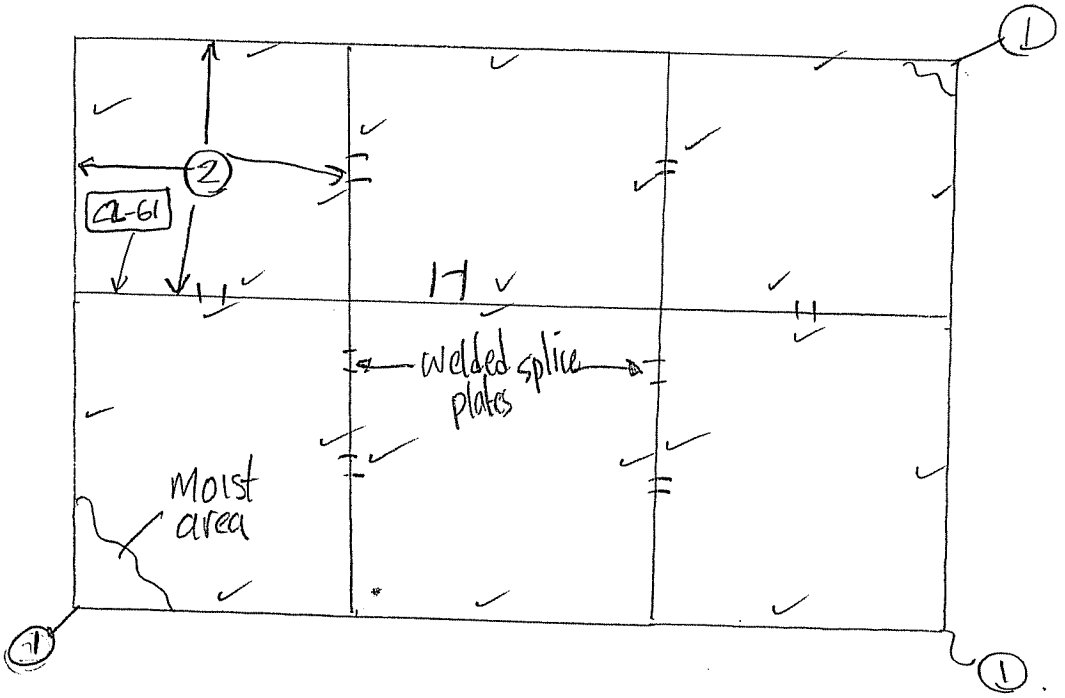
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/5/08	9 of 21
		of



PIER 3
E COLUMN
TIER 10

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ / CRS	3/5/08	10 of 21
		of



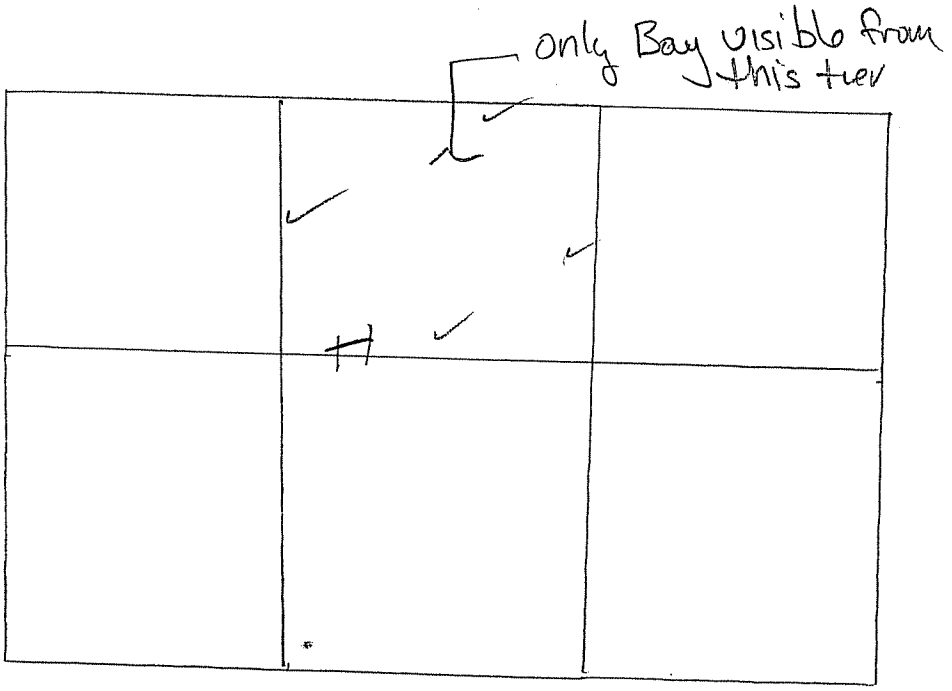
PIER 3
E COLUMN
TIER II

NORTH

① Water infiltration at splice plate, minor rust debris accumulation on floor

② Rust laminations at floor to wall connections

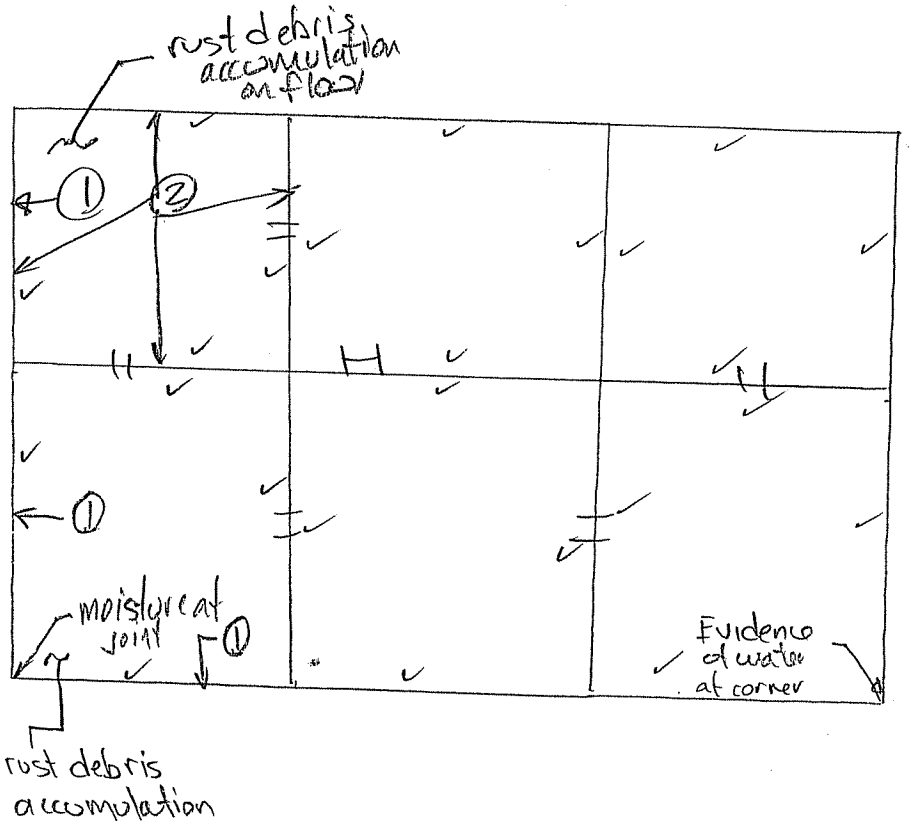
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
NJJ / CRS	3/5/08	11 of 21
		of



PIER 3
E COLUMN
TIER 12

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS/CRS	3/5/08	12 of 21
		of

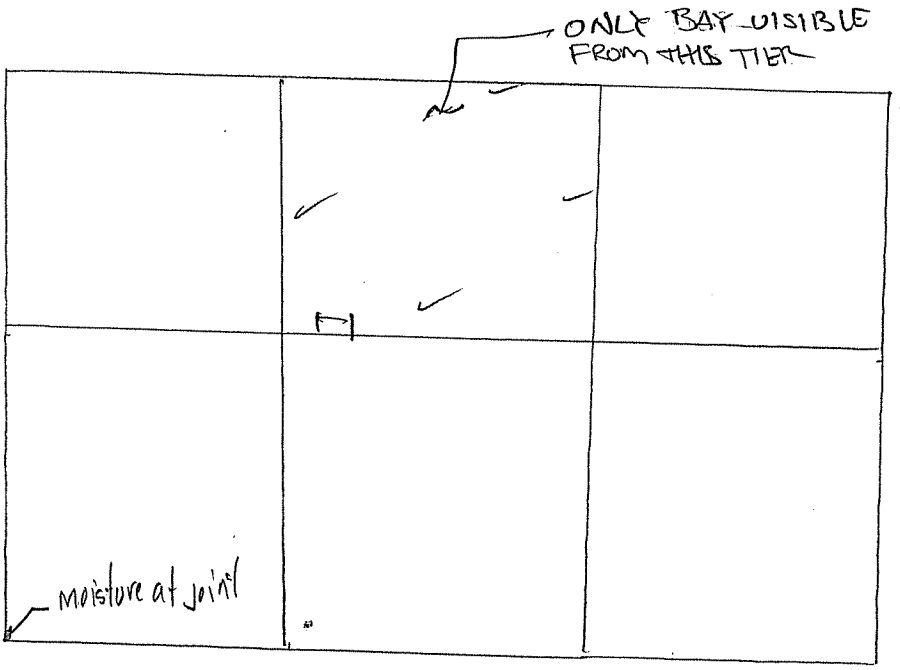


PIER 3
E COLUMN
TIER 13

NORTH

1. Extensive surface rust on entire wall, no pitting observed
2. Minor rust lamination at floor to wall connections

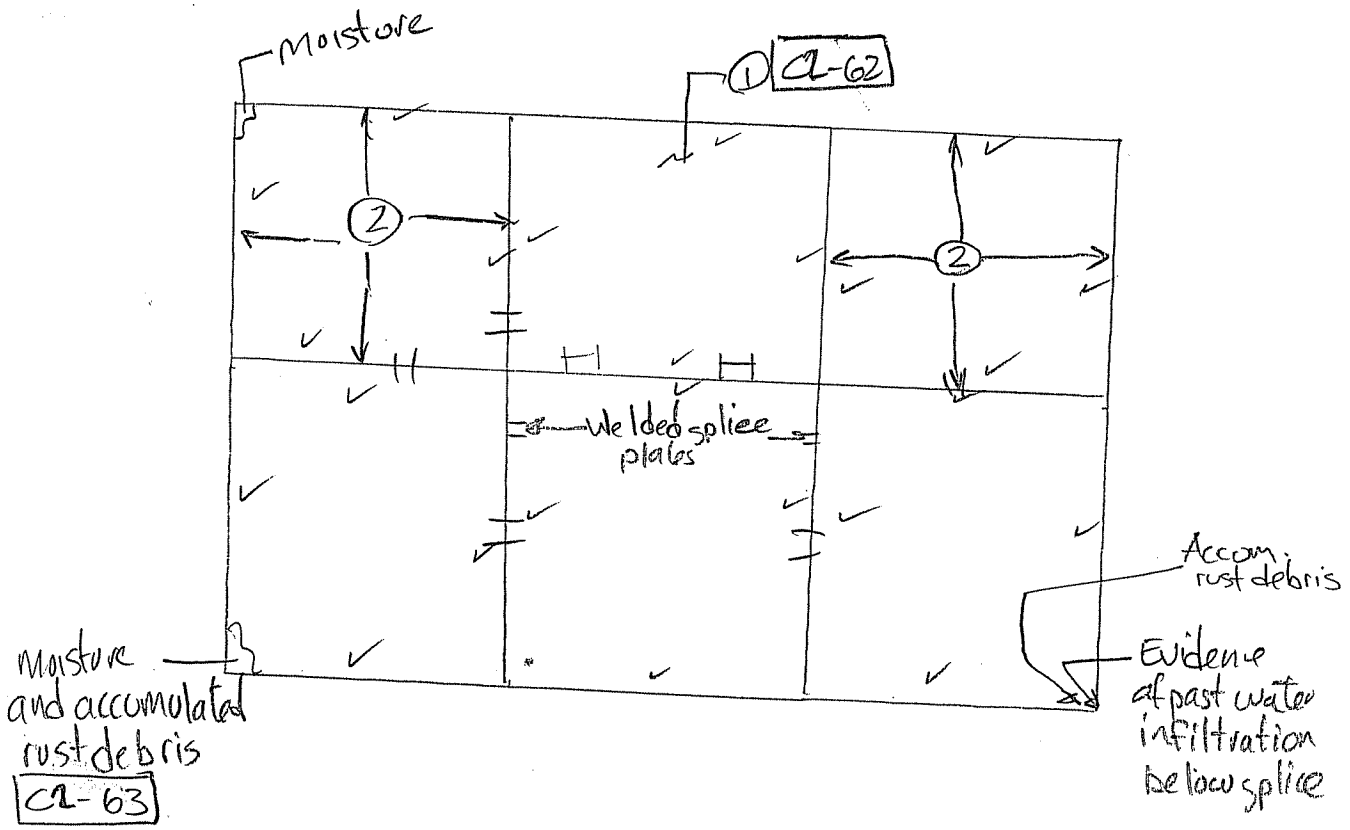
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CBS	3/5/08	13 of 21
		of



PIER 3
E COLUMN
TIER 14

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CBS	3/5/08	14 of 21
		of



PIER 3

E COLUMN

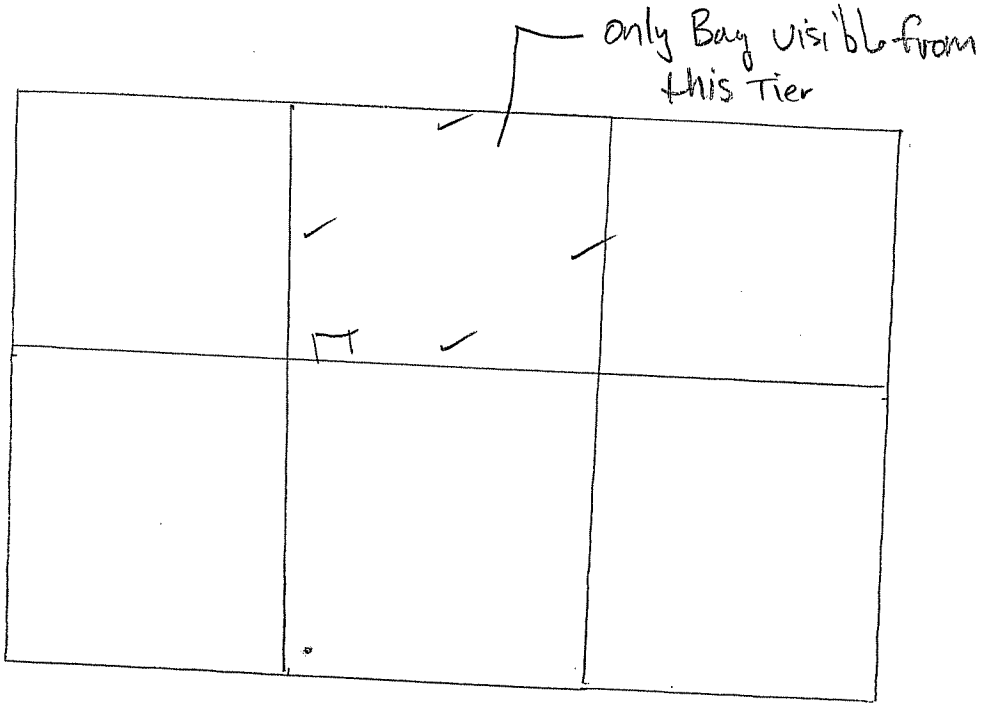
TIER 15

NORTH

① Rust on Ceiling of Bay, Minor laminations

② Rust lamination at floor to wall connection

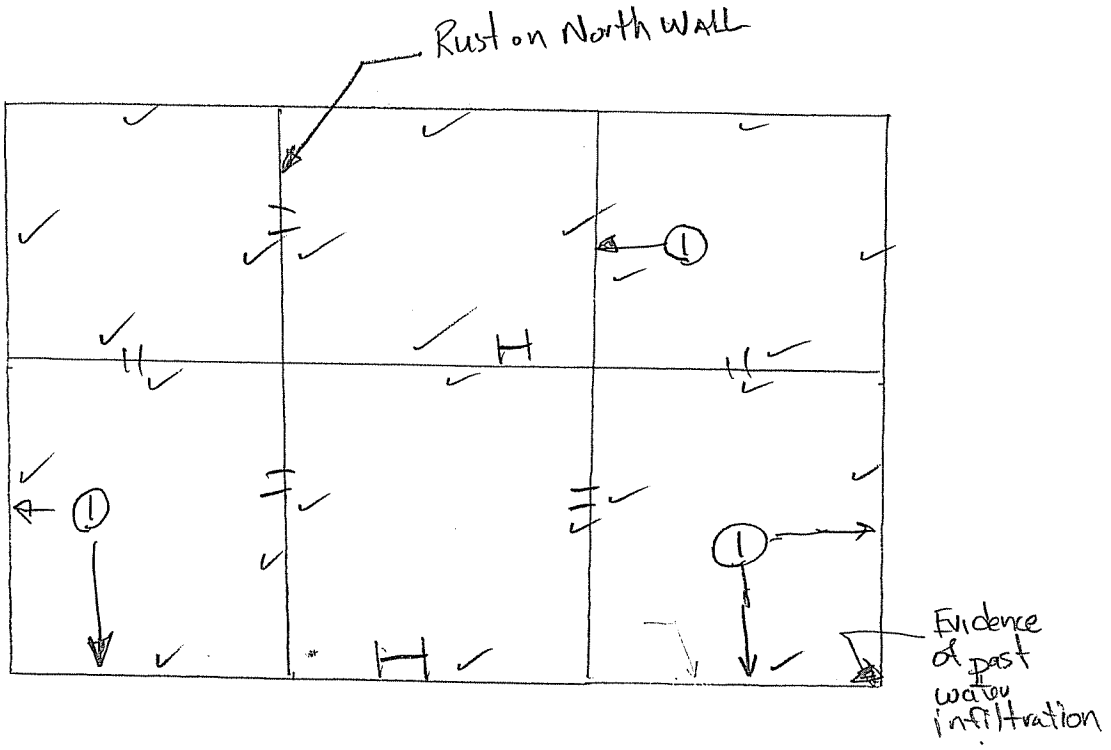
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS/CRS	3/5/08	15 of 21
		of



PIER 3
E COLUMN
TIER 16

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MSS/CRS	3/5/08	16 of 21
		of



PIER 3
E COLUMN
TIER 17

NORTH

1 Extensive surface rust on wall, no pitting observed

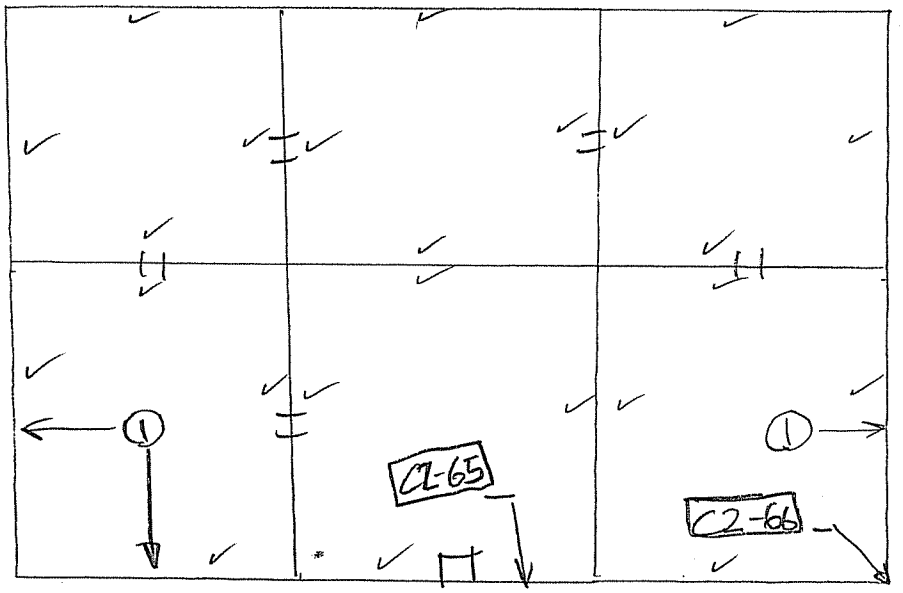
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJD/CRS	3/5/08	17 of 21
		of

ONLY BAY VISIBLE FROM THIS TIER

PIER 3
E COLUMN
TIER 18

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/5/08	18 of 21
		of

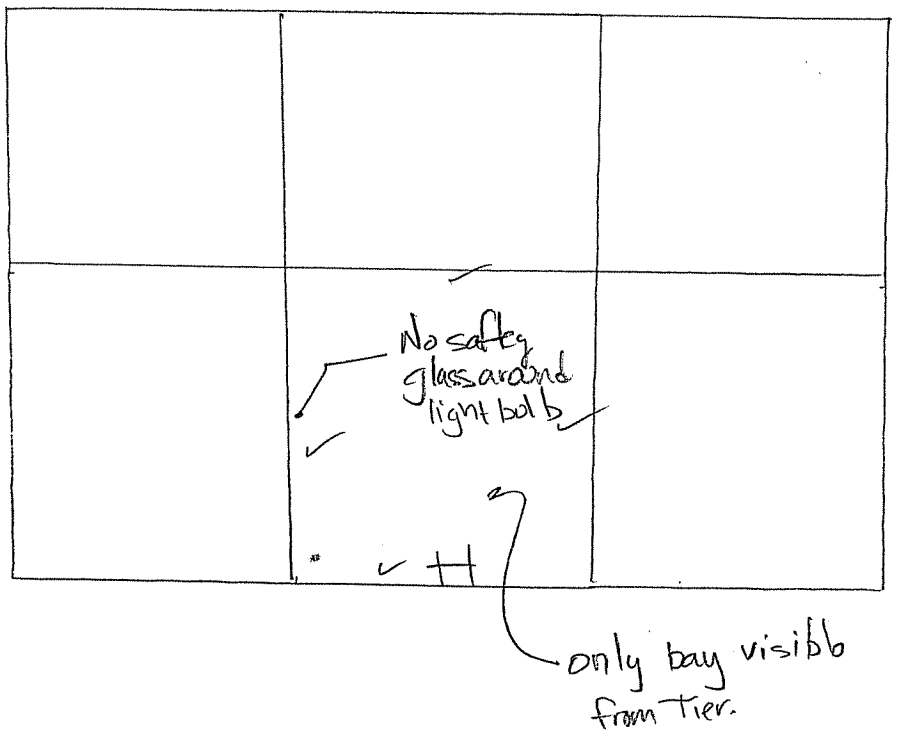


PIER 3
E COLUMN
TIER 19

NORTH

① Extensive surface rust over entire wall, no pitting observed.

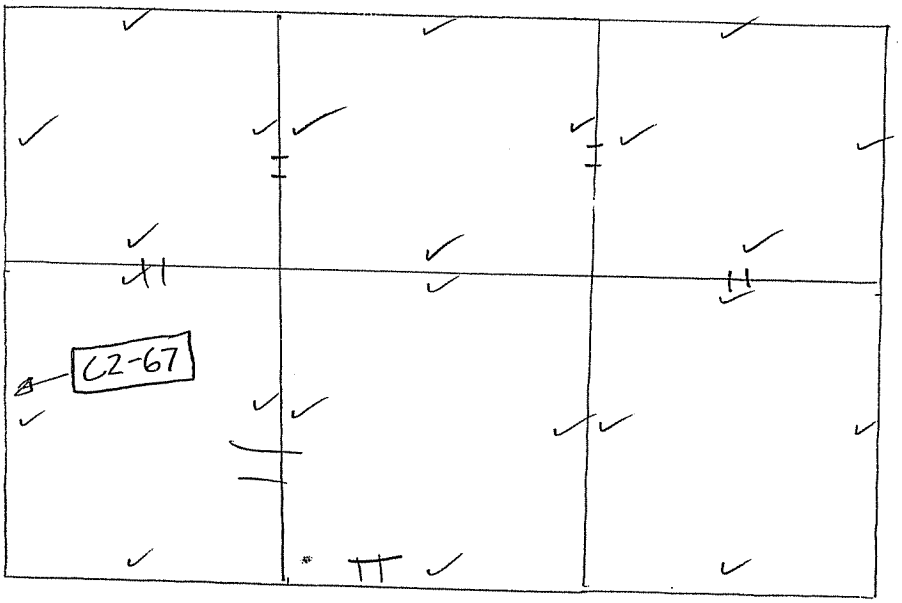
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS/CRS	3/5/08	19 of 21
		of



PIER 3
E COLUMN
TIER 20

NORTH

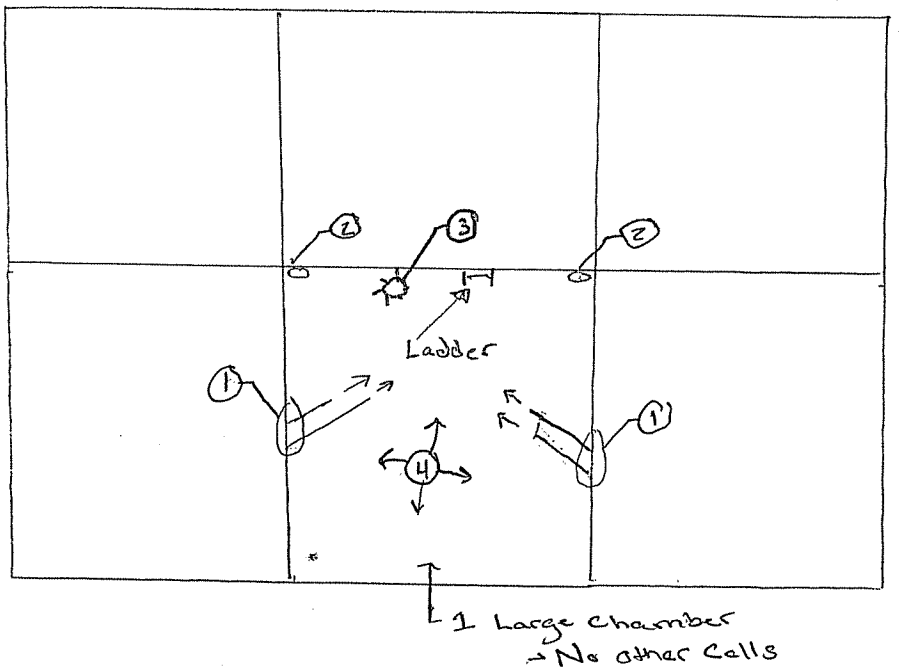
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
MJJ/CRS	3/5/08	20 of 21
		of



PIER 3
E COLUMN
TIER 21

NORTH

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
MJS / CRS	3/5/08	21 of 21
		of



PIER 3

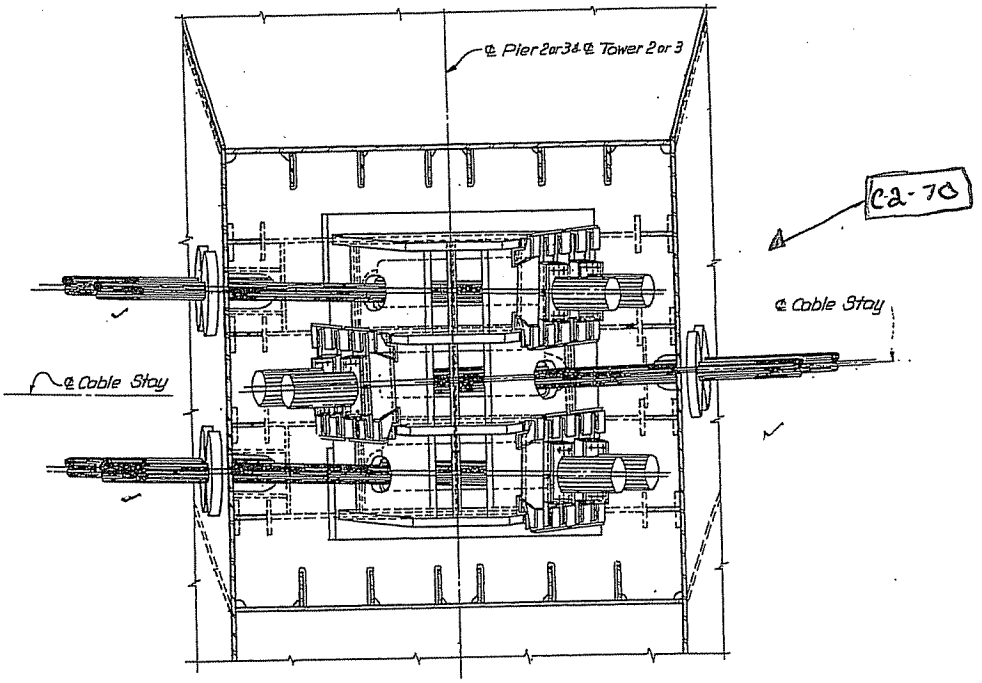
E COLUMN

TIER 22

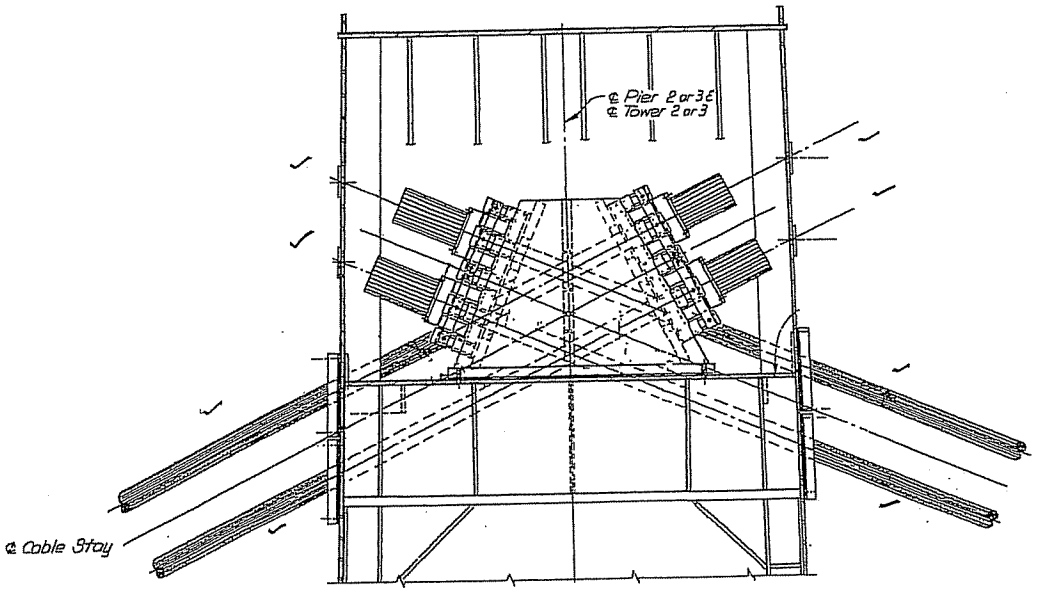
← NORTH

1. Cable opening to outside
2. Ladders to Tier 23
3. No Safety glass over Light
4. All welds in good condition @ Brace R's

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJJ	3/6	1 of 9
		of



PLAN



Saddle Tier 23
East Column
Tower 3

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJS	3/6	5 of 9
		of

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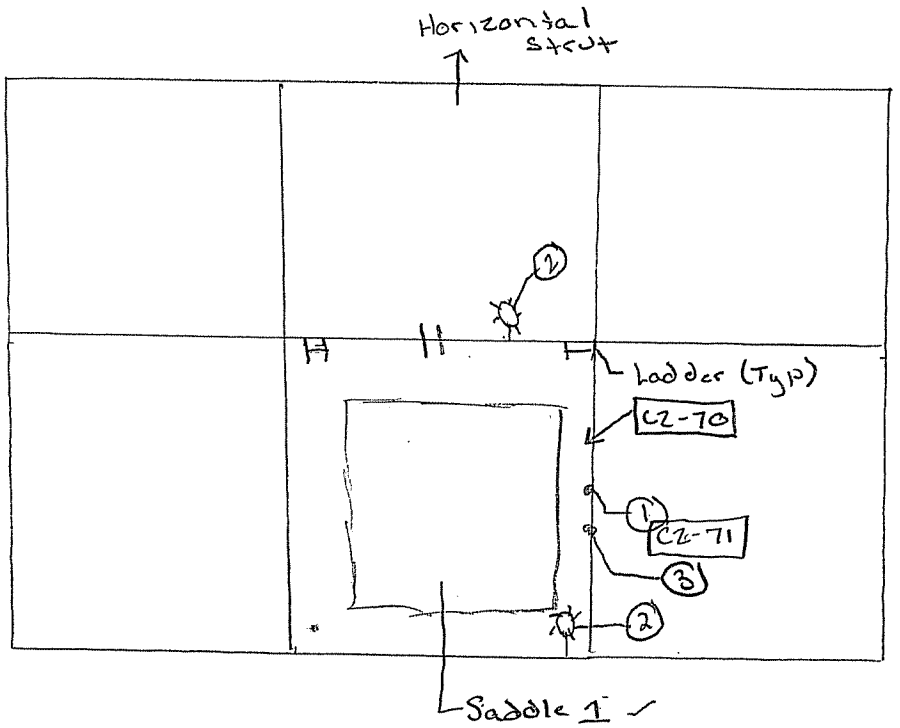
333



PIER 3

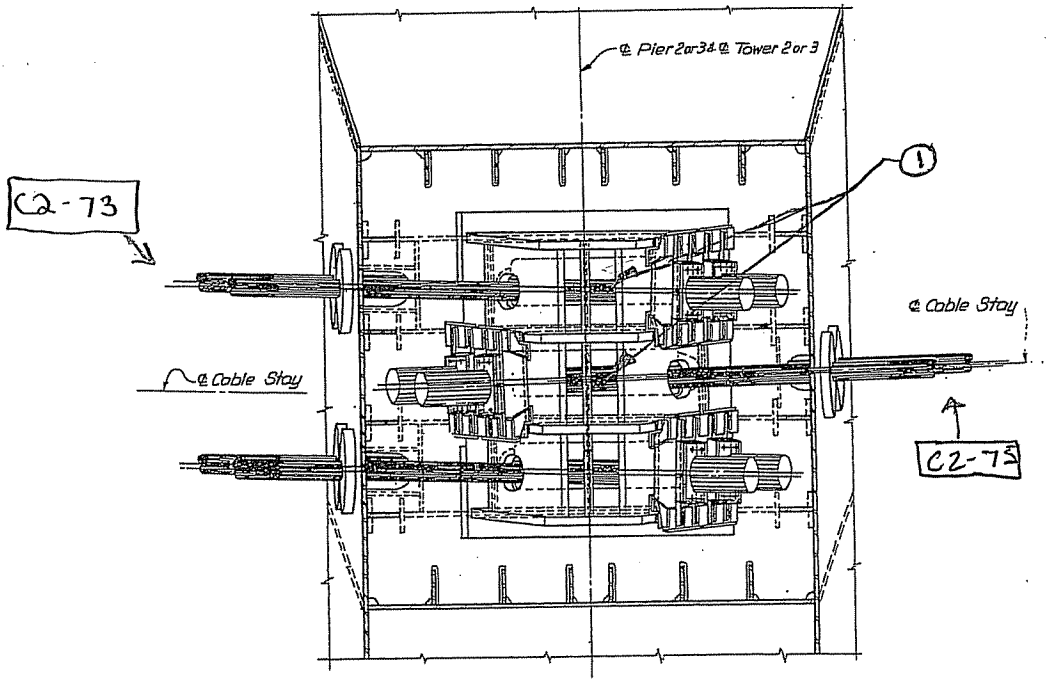
E COLUMN

TIER 23

NORTH

1. Large Nest
2. No Safety Glass on Light
3. Missing Bolt @ Cable Shield w/ missaligned Exposed Bolt above @ S.E Cable CZ-72

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJJ	3/10	2 of 9
		of



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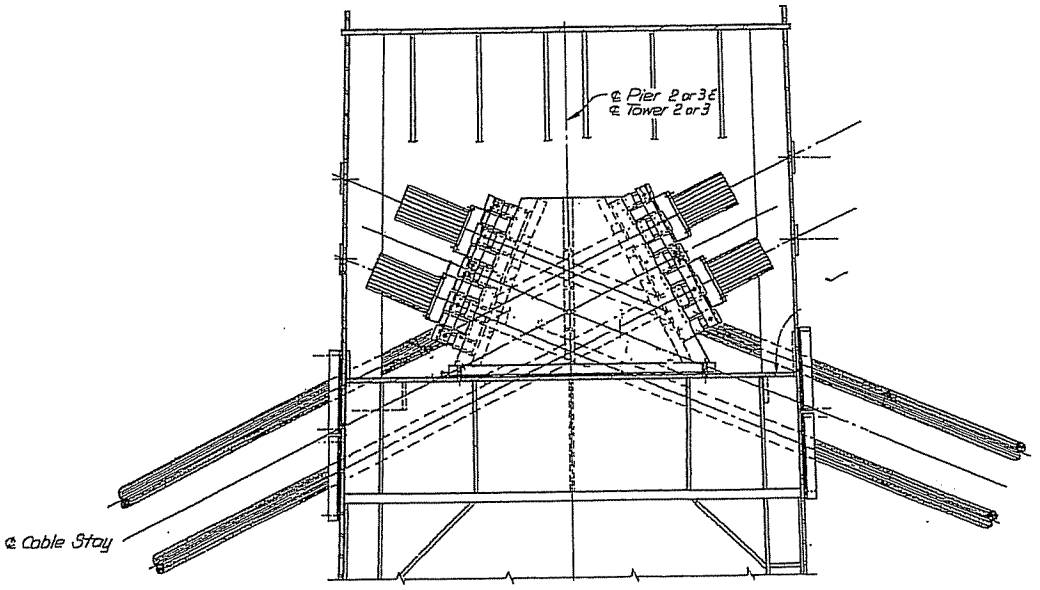

Saddle Tier 24 E. Column
Tower 3

1 Injection Ports in cables [C2-74]

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJJ	3/6	6 of 9
		of

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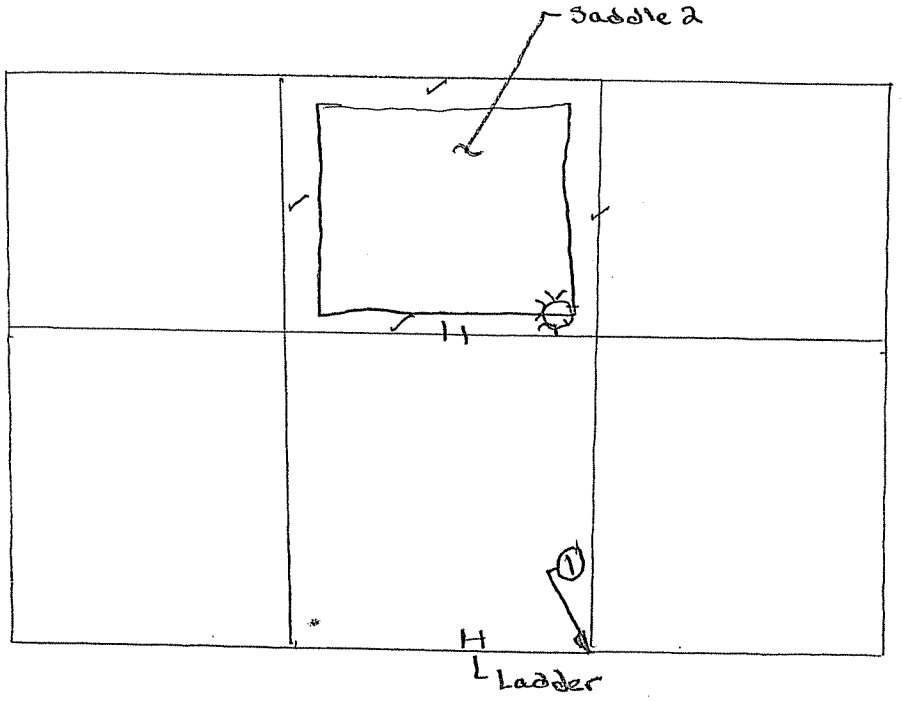
333



PIER 3

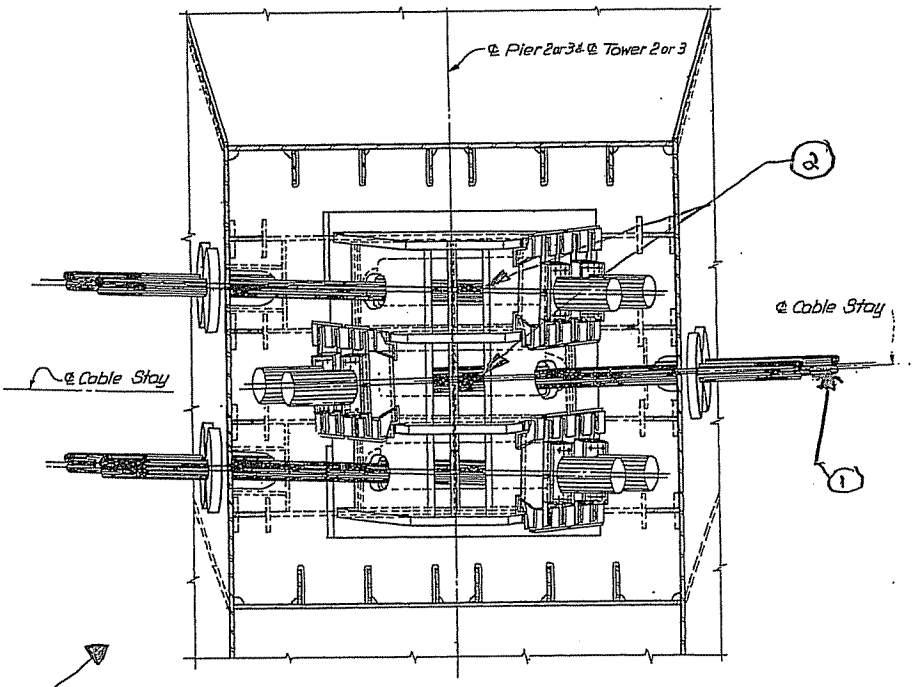
E COLUMN

TIER 24

NORTH

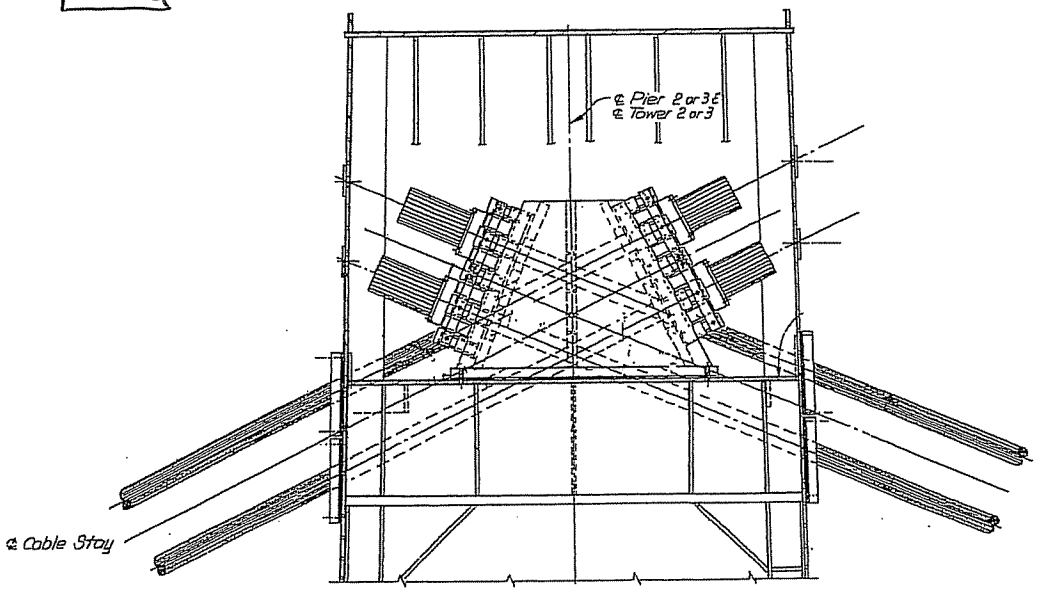
1 EFFlo Running Down Corner From Exterior Moisture

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJS	3/6	3 of 9
		of



C2-76

PLAN

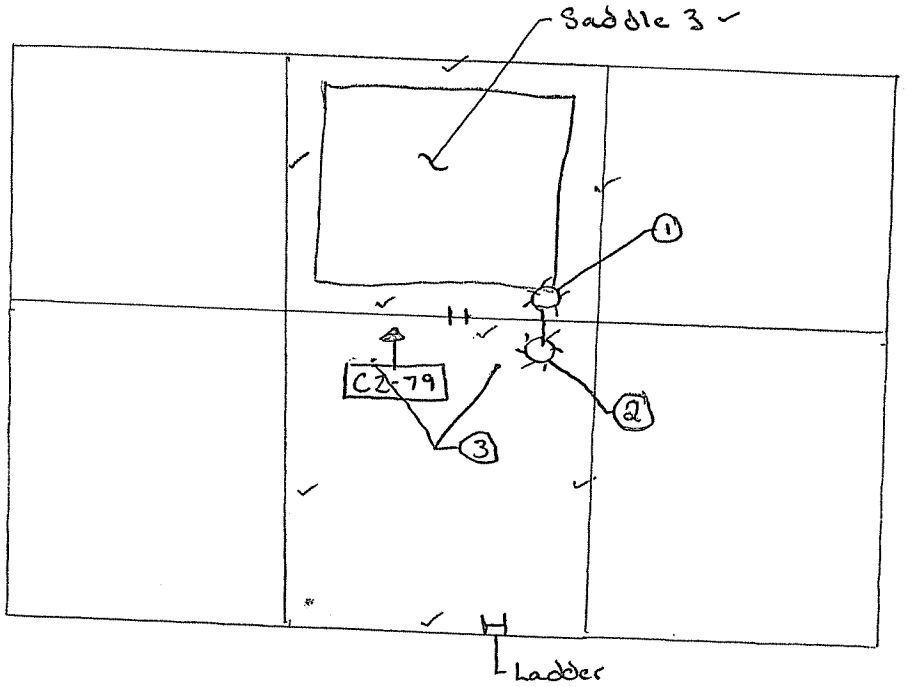


Tier 25 Saddle
East. Column Pier 3

1. Gap/split in Cable Casing [C277-78]
2. Injection Ports Located inside cables

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 2		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJS	3/10	7 of 9
		of

261
333



PIER 3

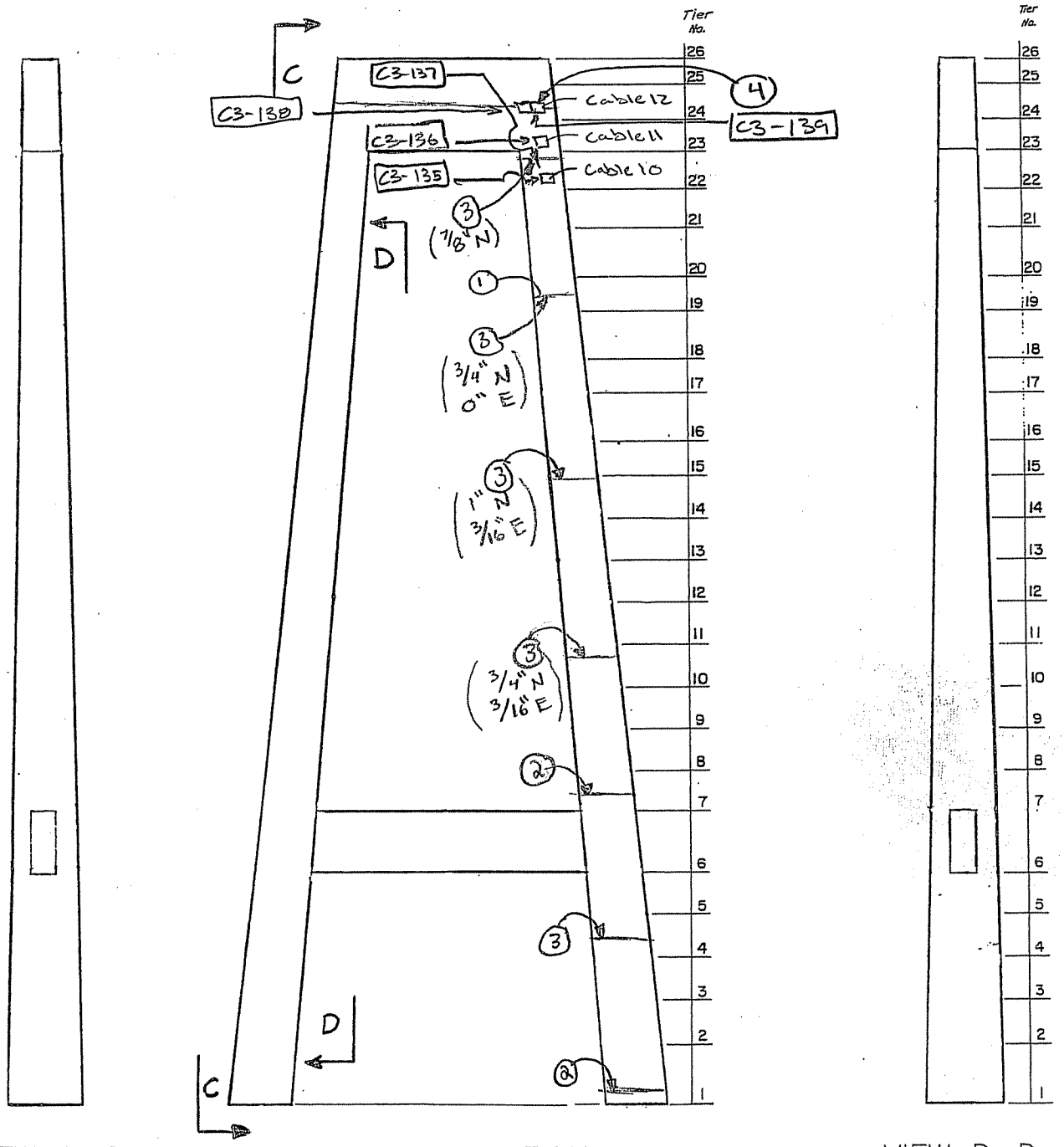
E COLUMN

TIER 25

NORTH

1. Light Not Illuminated During Inspection
2. No Safety Casing on Light (Light Works)
3. W-Sections w/ Open Bolt Holes @ Ends

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS / MJS	3/6	4 of 9
		of



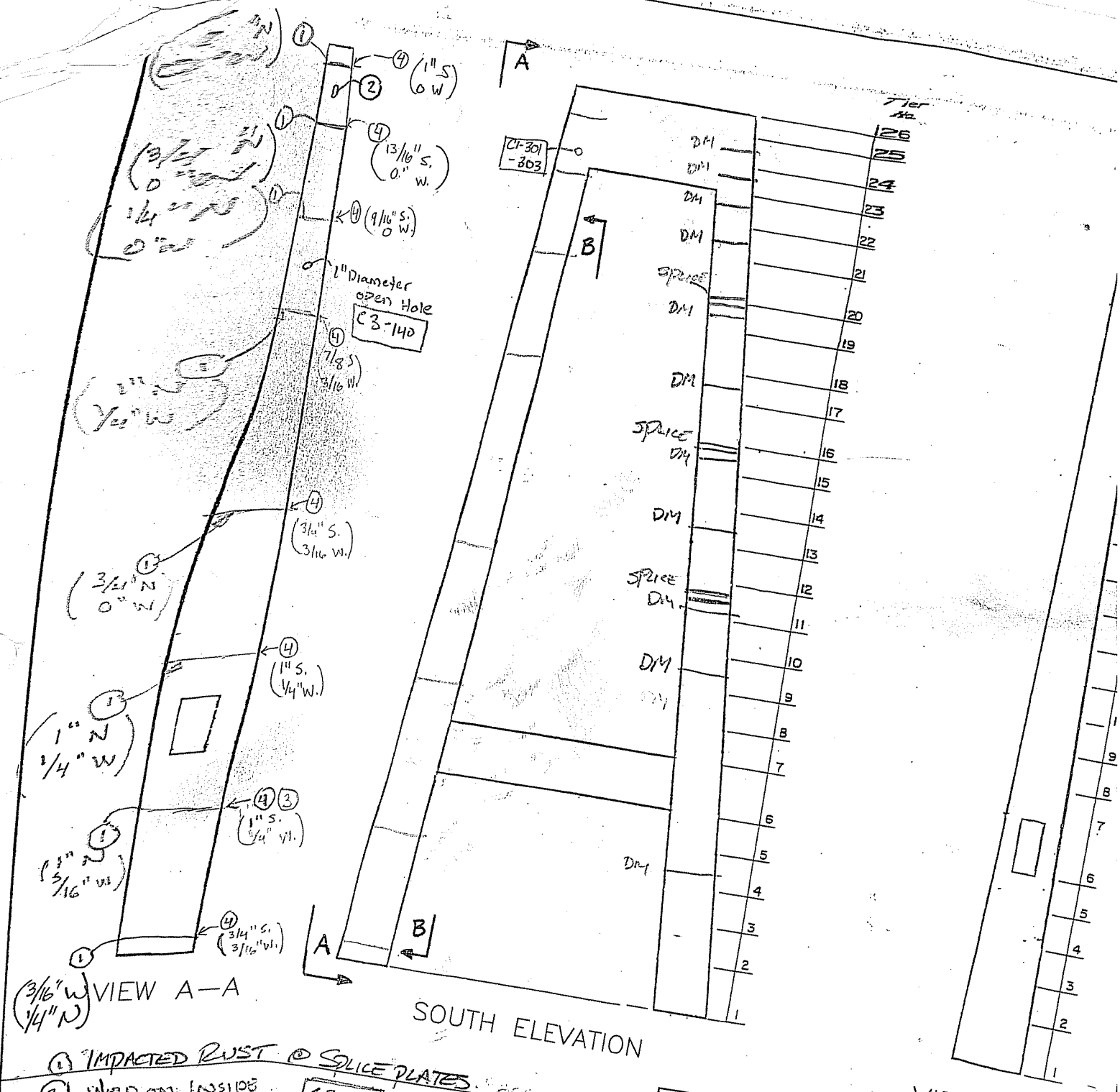
VIEW C–C

NORTH ELEVATION

VIEW D–D

1. SPLICE (TYP)
2. IR @ SPLICE CORNER - UP TO 7/8" ON NORTH FACE / 3/16" ON EAST FACE
3. SEE NOTE 2 - 1/4" EAST FACE / 1" NORTH FACE (TYP " E " N)
4. CABLE GUIDES - GOOD ✓

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
CRS/MJJ	3/13/08	2 of 3
		of



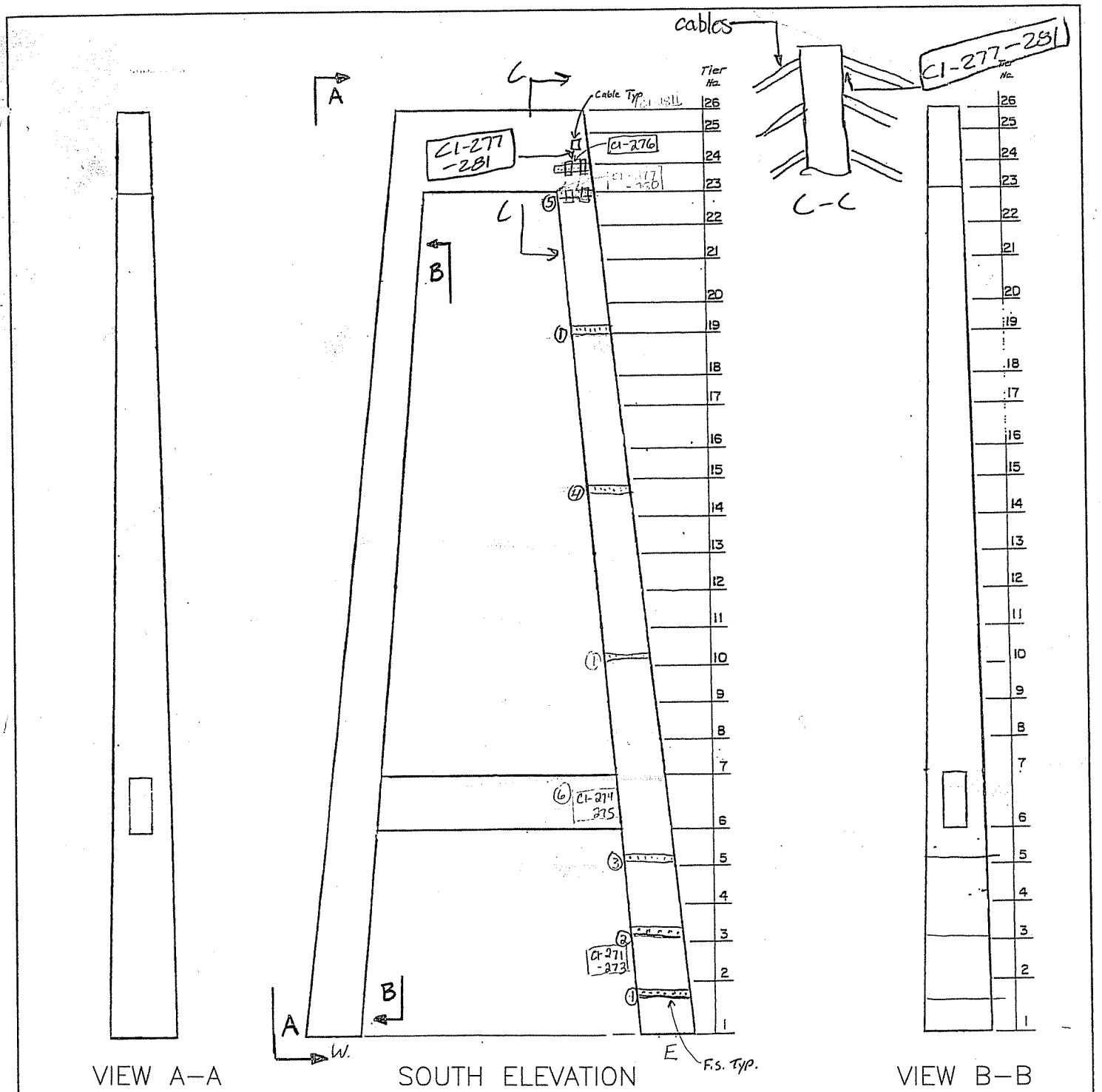
(1) IMPACTED RUST @ SPLICE PLATES.

(2) WELD ON INSIDE OF TOWER WALL REFLECTING THROUGH WALL CB-141

(3) 1" I.R. S. Face goes 4'-4" in along plate from edge

(4) Impact Rust on SW Corner of Tower (Dimensions given @ location)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	TOWER 3	
	JOB: P710070019	
CREW: CES/MW SNB	DATE: 3/13/08 3/14/08	SHEET: 3 of 3



(1) 3/4" Pack Rust @ F.S. on S.W. corner buckling out South Face

(2) 1" South Face, 1/4" W. Face Pack Rust @ Field splice C1-271-273

(3) 1" Pack Rust @ F.S. on S.W. corner South Face

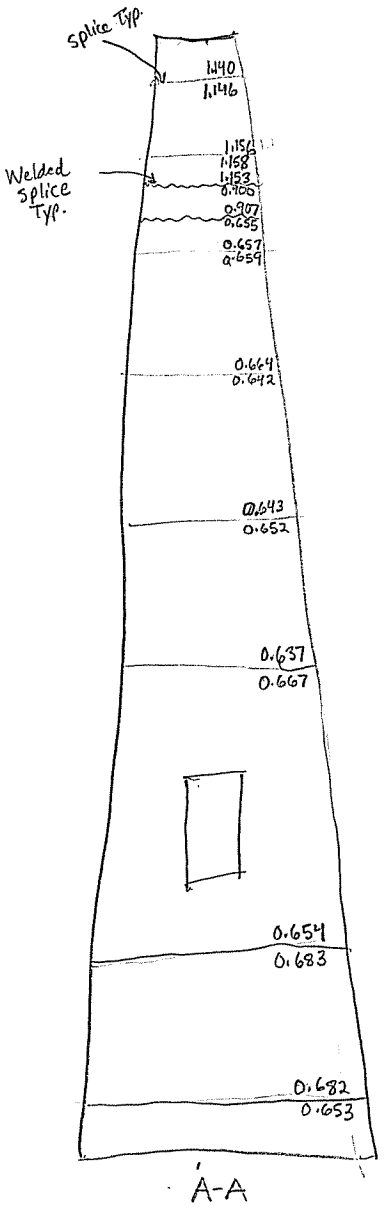
(4) 7/8" " , 1/4" Pack Rust West Face @ SW corner

(5) 1" Pack Rust South Face SW Corner

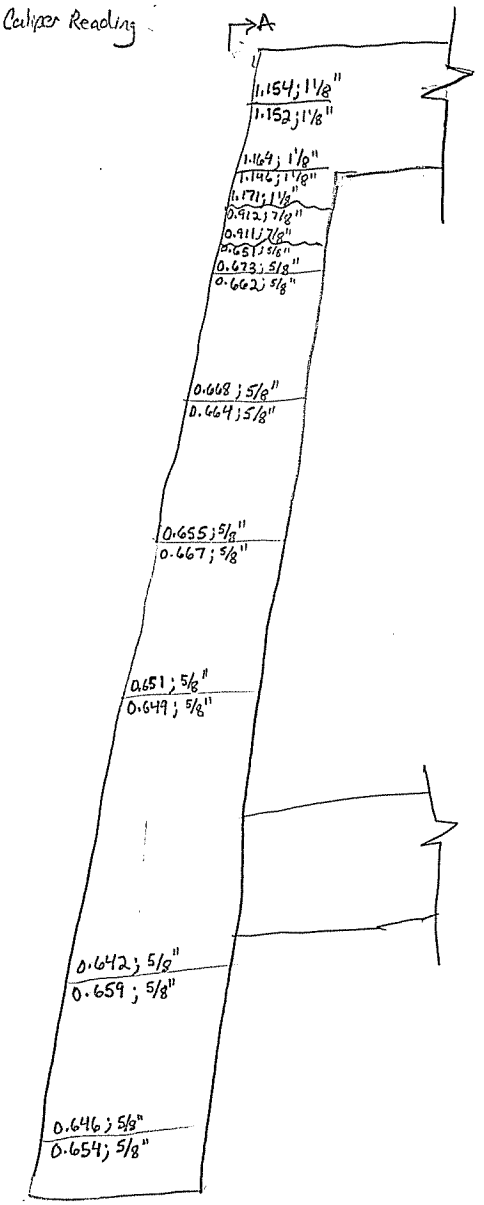
(6) Rust + Water at Strut South Face C1-274 + 275

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
CTY / MJJ	3/12/08	2 of 3
		of

D METER Readings; Caliper Reading



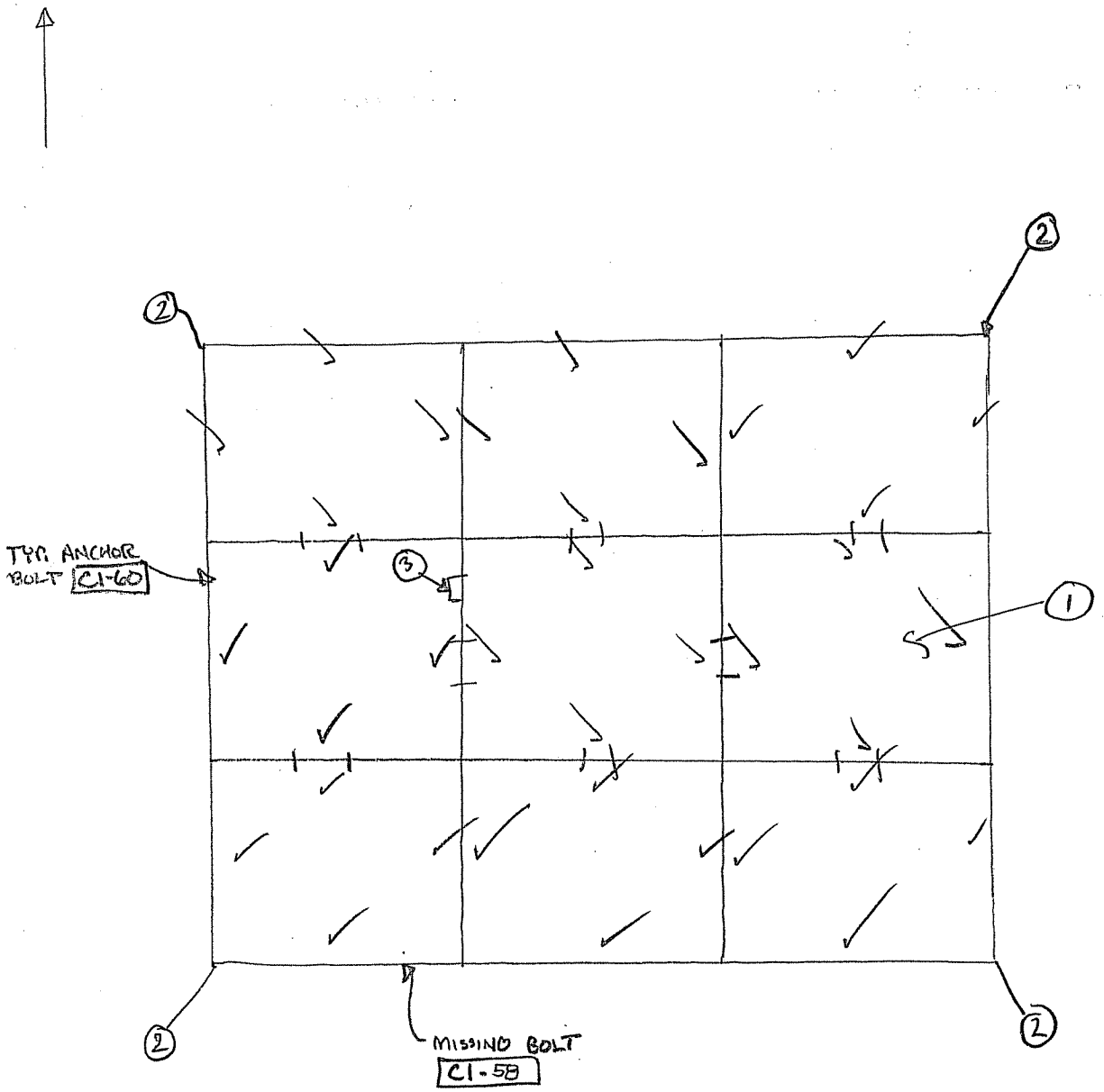
A-A
WEST Elev



A
South Elev

WEST LEG
Tower 3

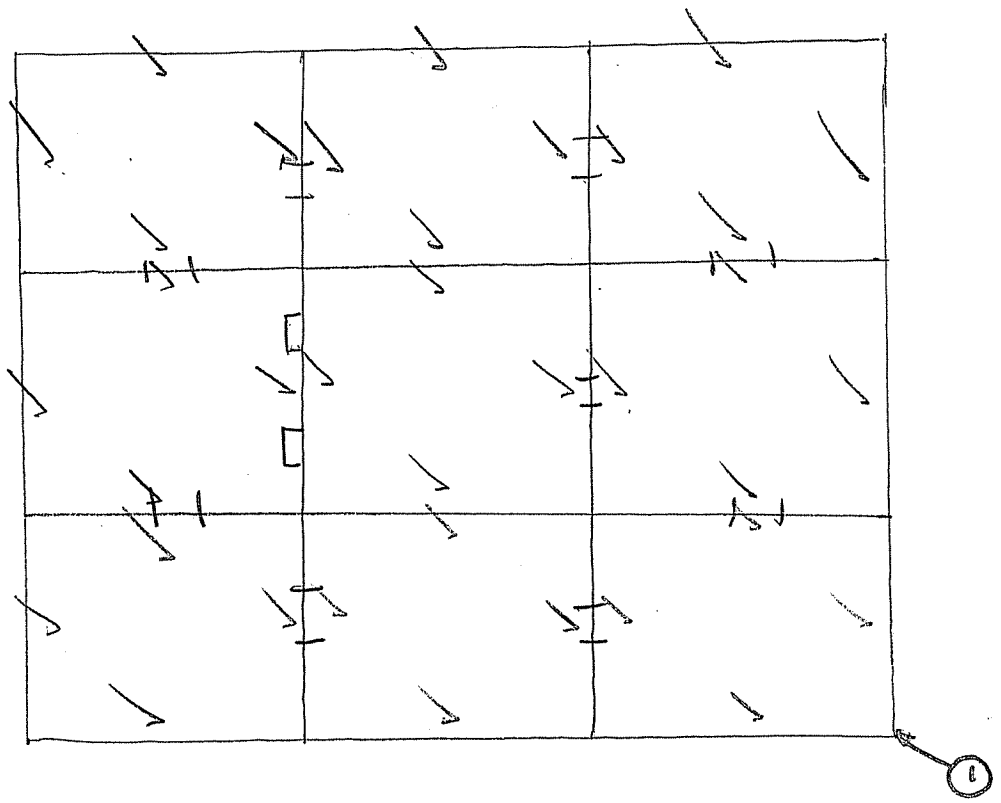
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3 WEST LEG DMETER		
JOB: P710070019		
CREW:	DATE:	SHEET:
SWB/PGN/CTY	3/14/08	3 of 3
		of



PIER 3
W COLUMN
TIER 1

(1) APROX. 12" OF SAND ON E. WALL, 4" OTHER WALLS C1-59
(2) SIGNS OF WATER INFILTRATION, BY SR. CON.
(3) DAMAGED LADDER RUNG AT SR. LOC. C1-61

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, B S	3/5/08	1 of 19
		of

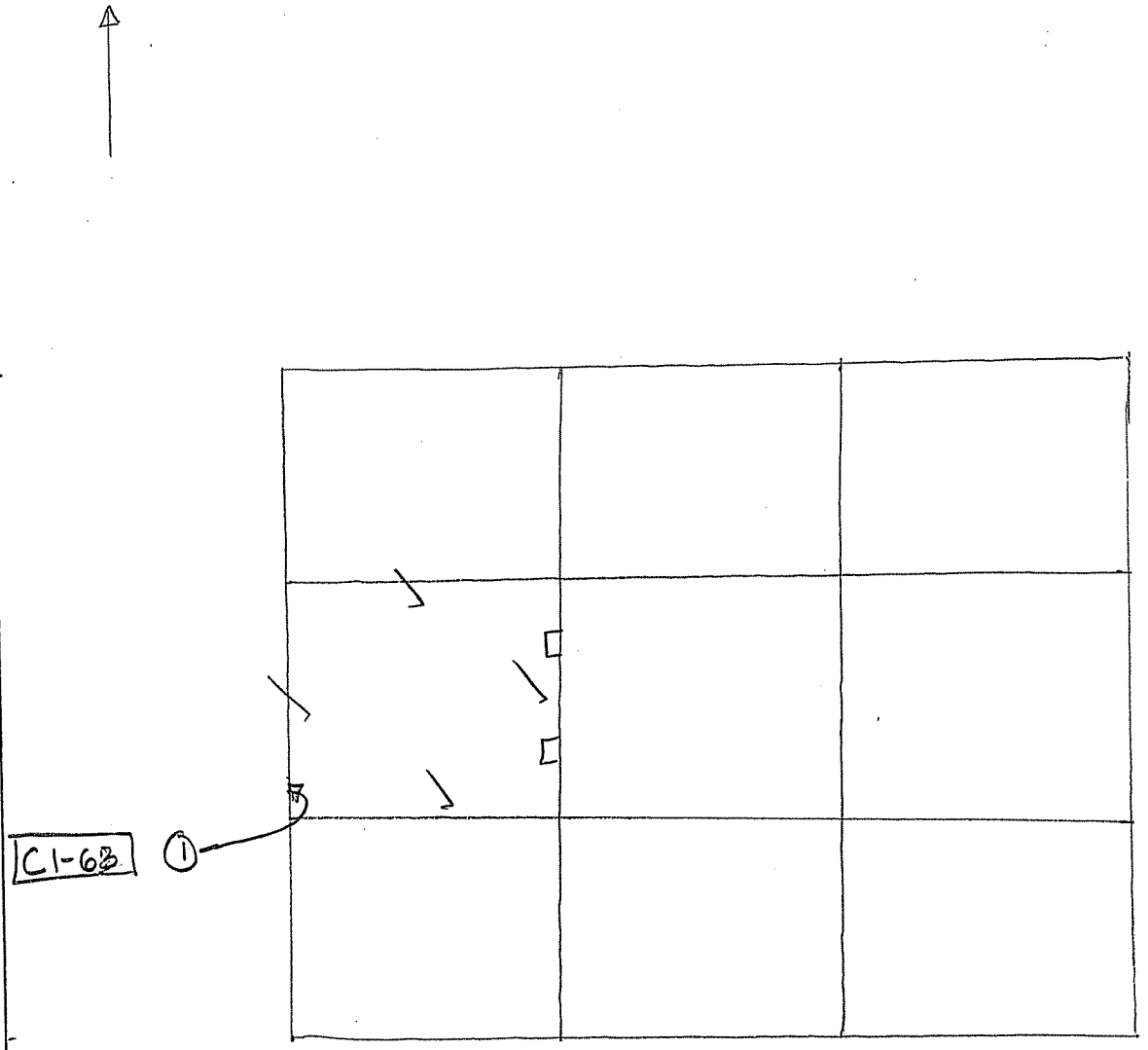


PIER 3
W COLUMN
TIER 2

TYP. TO E. BAYS LT RUST (SEMI-ACTIVE)

1 MOD. RUST ALONG CORNER (T2 TO T3)

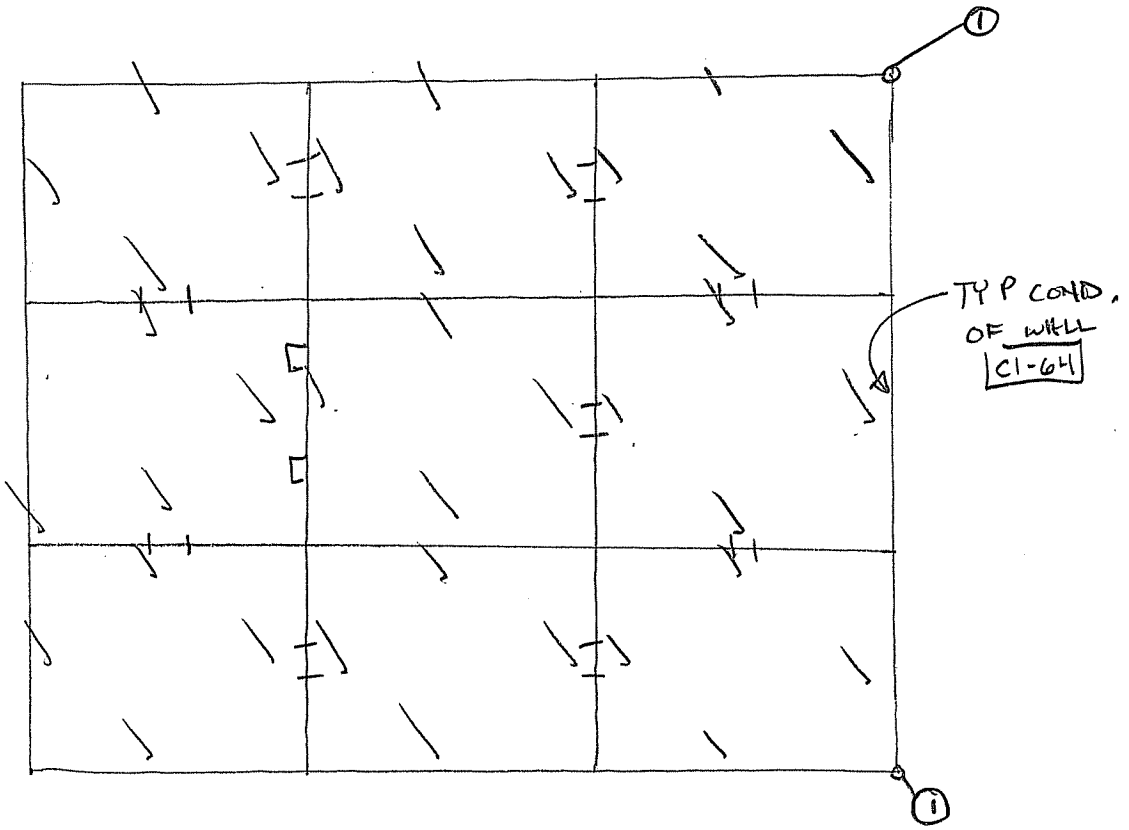
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, B S	3/5/08	2 of 19
		of



PIER 3
W COLUMN
TIER 3

1 DOUBLE PASS ON WELD TO LONG STIFF. (NO DISTRESS)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY: TranSystems		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	3 of 19
		of



PIER 3
W COLUMN
TIER 4

1 INDICATIONS OF SEMI ACTIVE CORROSION (LT RUST)

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	4 of 19
		of

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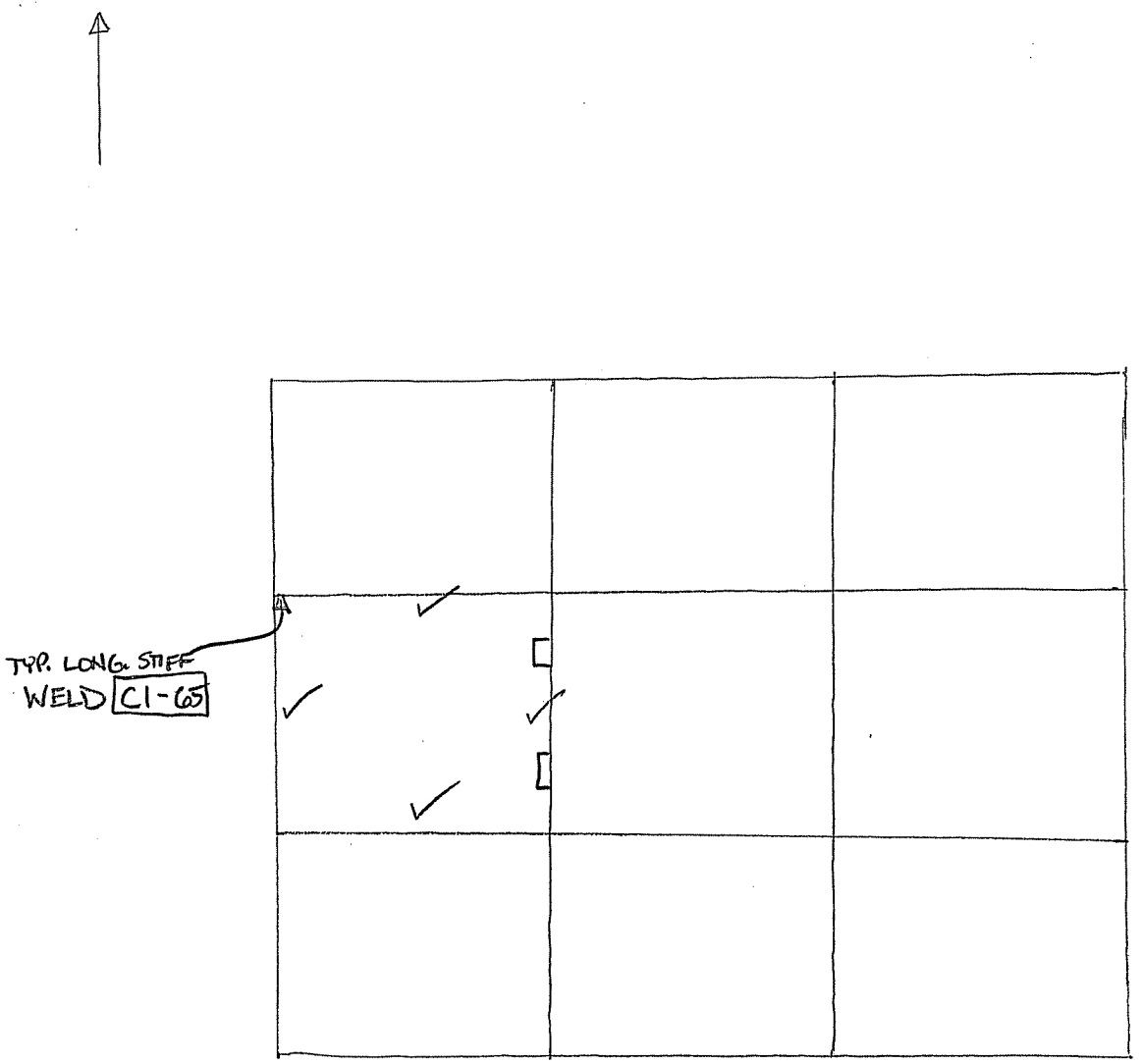
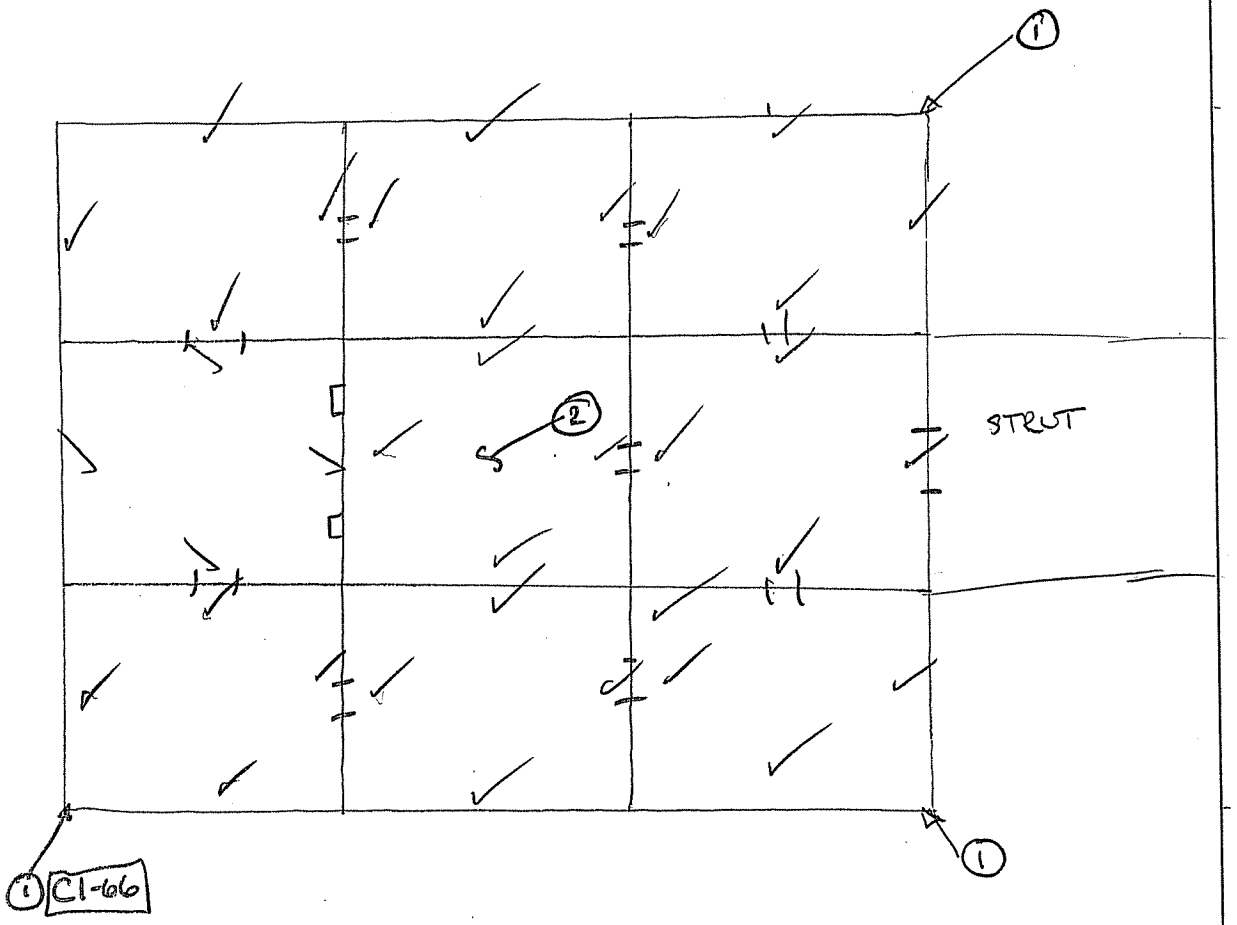


PIER 3
W COLUMN
TIER 5

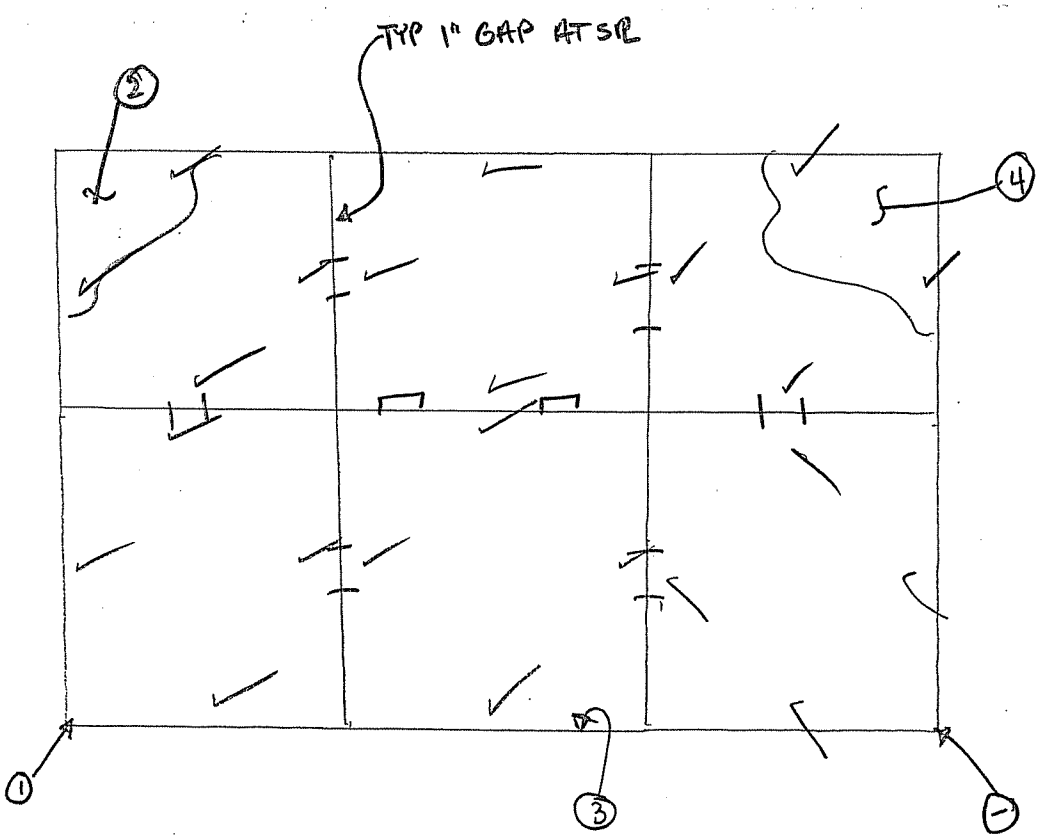
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC BS	3/5/08	5 of 19
		of



PIER 3
W COLUMN
TIER 6

1 SIGNS WATER INFIL.; MOD. RUST (SEMI ACTIVE) NEG. LOSS
2 PIGEON DEBRIS ON FLOOR

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	6 of 19
		of

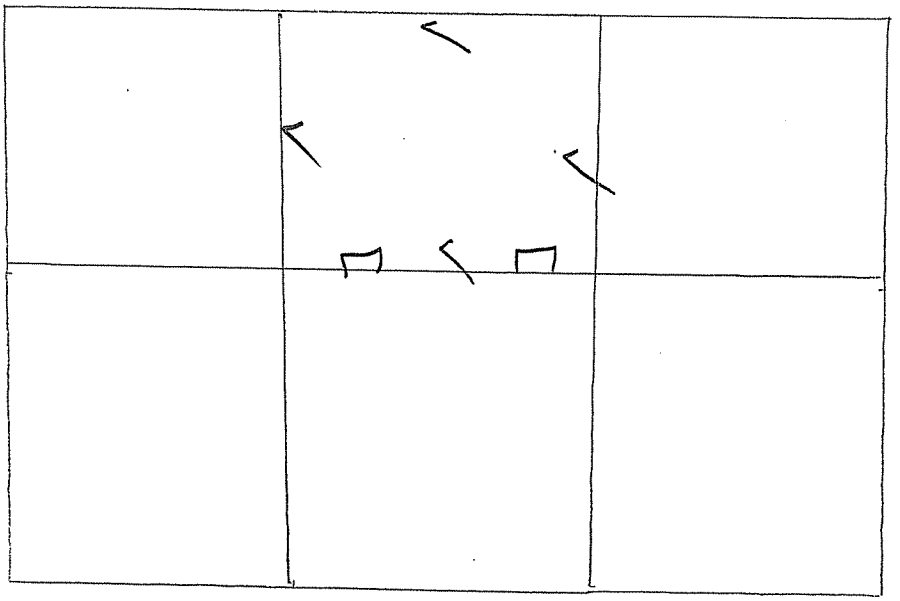


PIER 3
W COLUMN
TIER 7

N

1. HUY LAMINATING RUST AT STIFF LOC.; SEMI ACTIVE COR
2. MOISTURE ON FLOOR DIA
3. STAINING FROM UTILITY & SPLICE @ (ABRASION DUST FROM GRINDING)
4. MOISTURE ON DIA. E W/ PITTING UP TO 1/16"

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BAC, BS	3/5/08	7 of 19
		of



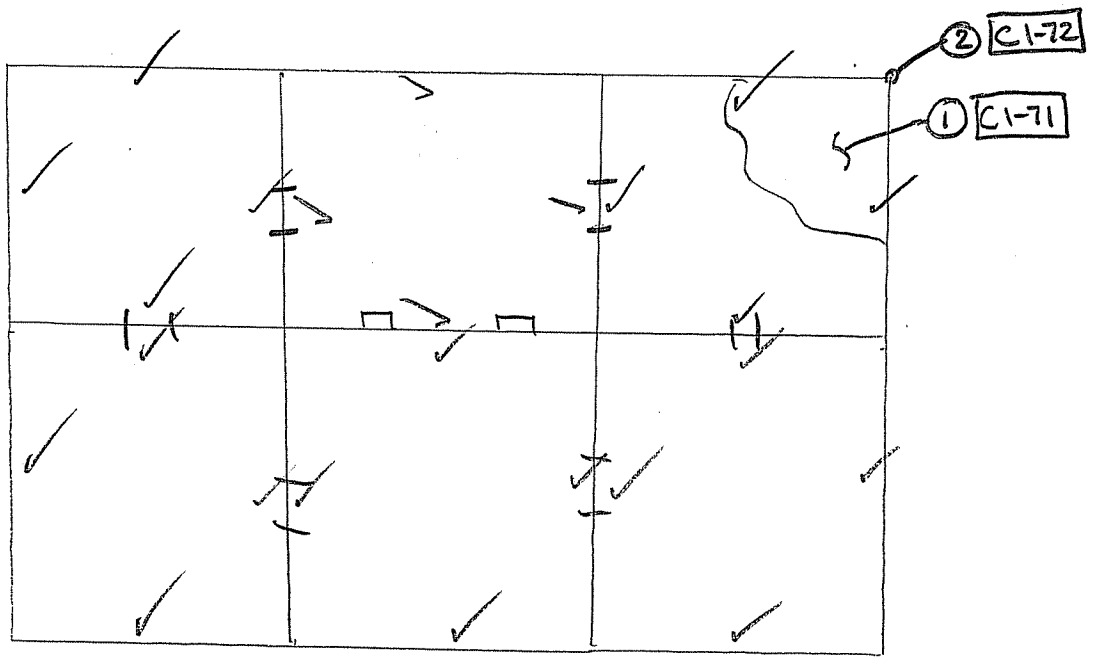
PIER 3

W COLUMN

TIER 8

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	8 of 19
		of

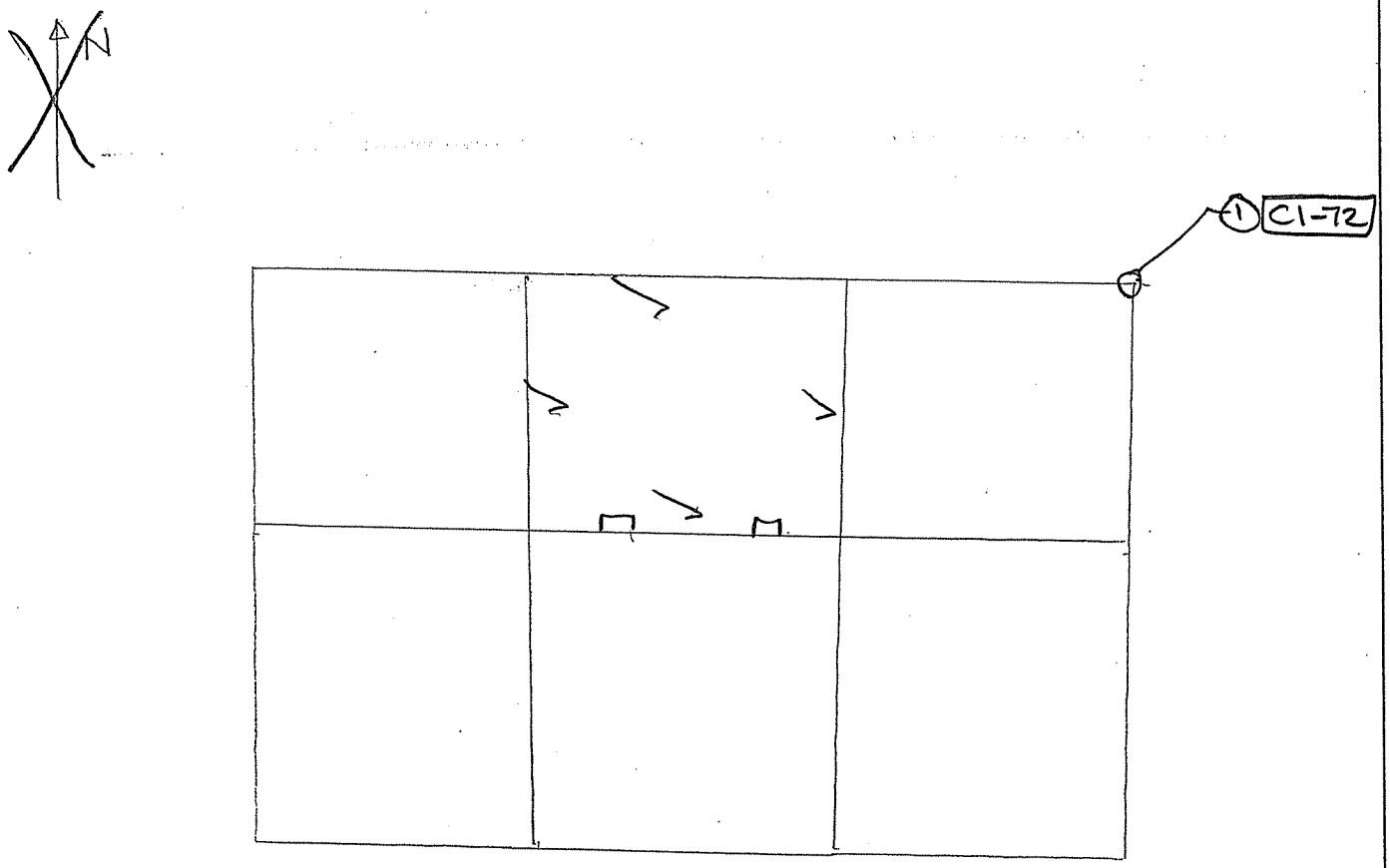


PIER 3
W COLUMN
TIER 9

N

① MOISTURE ON FLOOR DIA. W/ 1/16" PITTING
② WATER INFILTRATION BY TIER 10 W/ SEMI ACTIVE RUST

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	9 of 19
		of

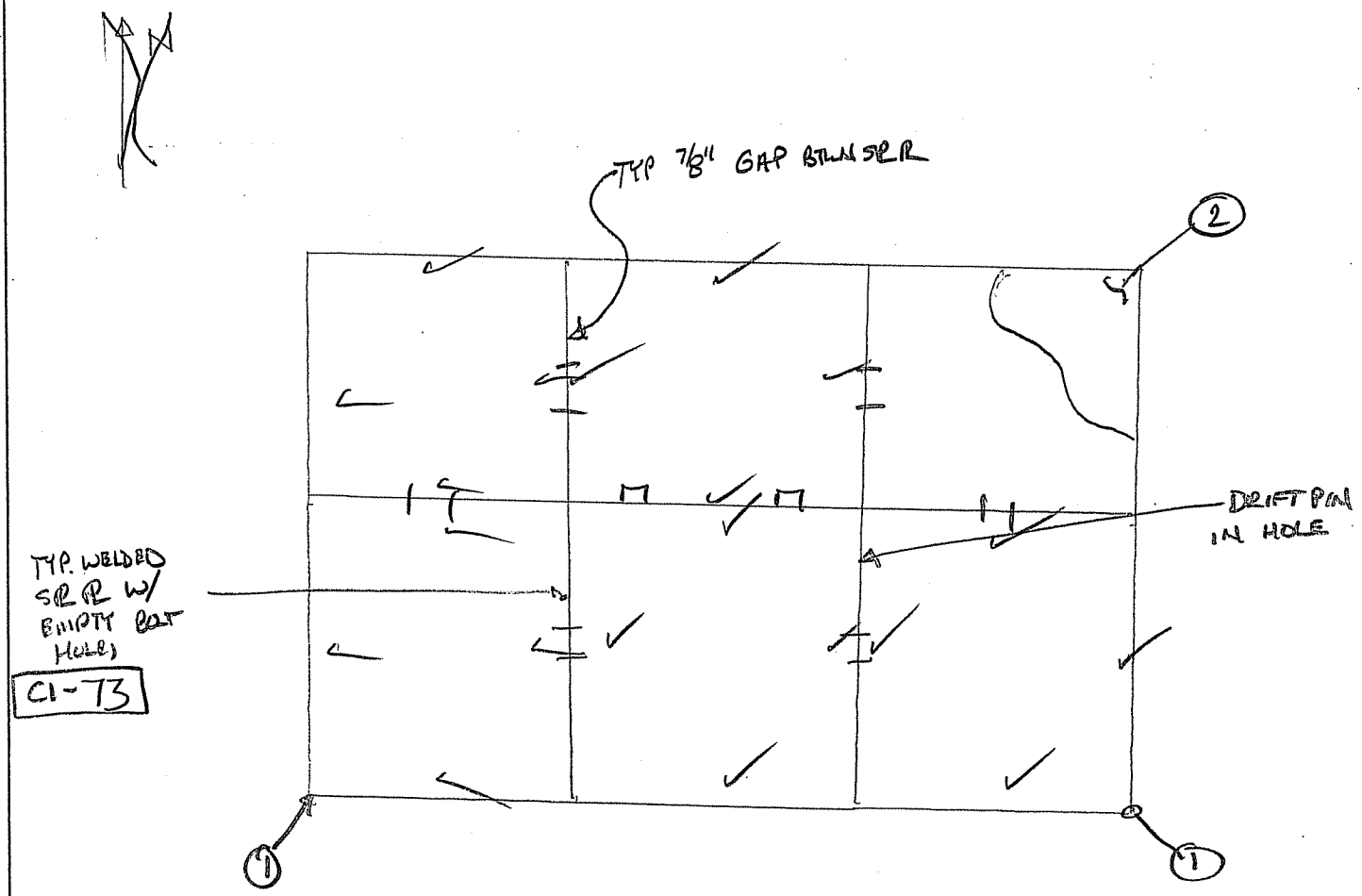


PIER 3
W COLUMN
TIER 10

N

1 FROM T9
WATER INFILITRATION W/ ACTIVE RUST LT RUST

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	10 of 19
		of



PIER 3
W COLUMN
TIER 11

N

1 IND. OF PREVIOUS WATER INFIL., SEMI/ACTIVE RUST
2 MOISTURE ALONG ROT. DIA PL W/ EVIDENCE INFL. SPL @ CORNER

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	11 of 19
		of

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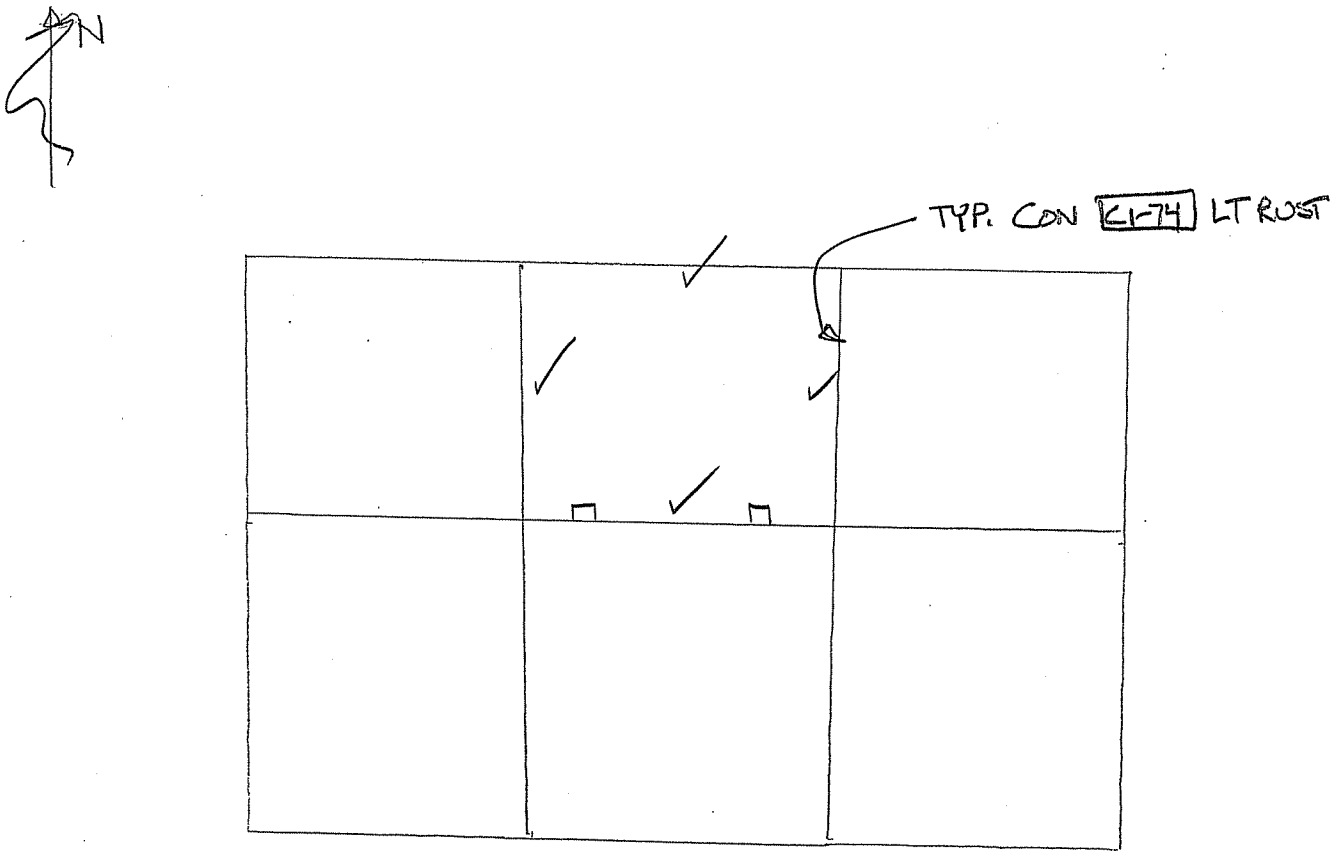
333



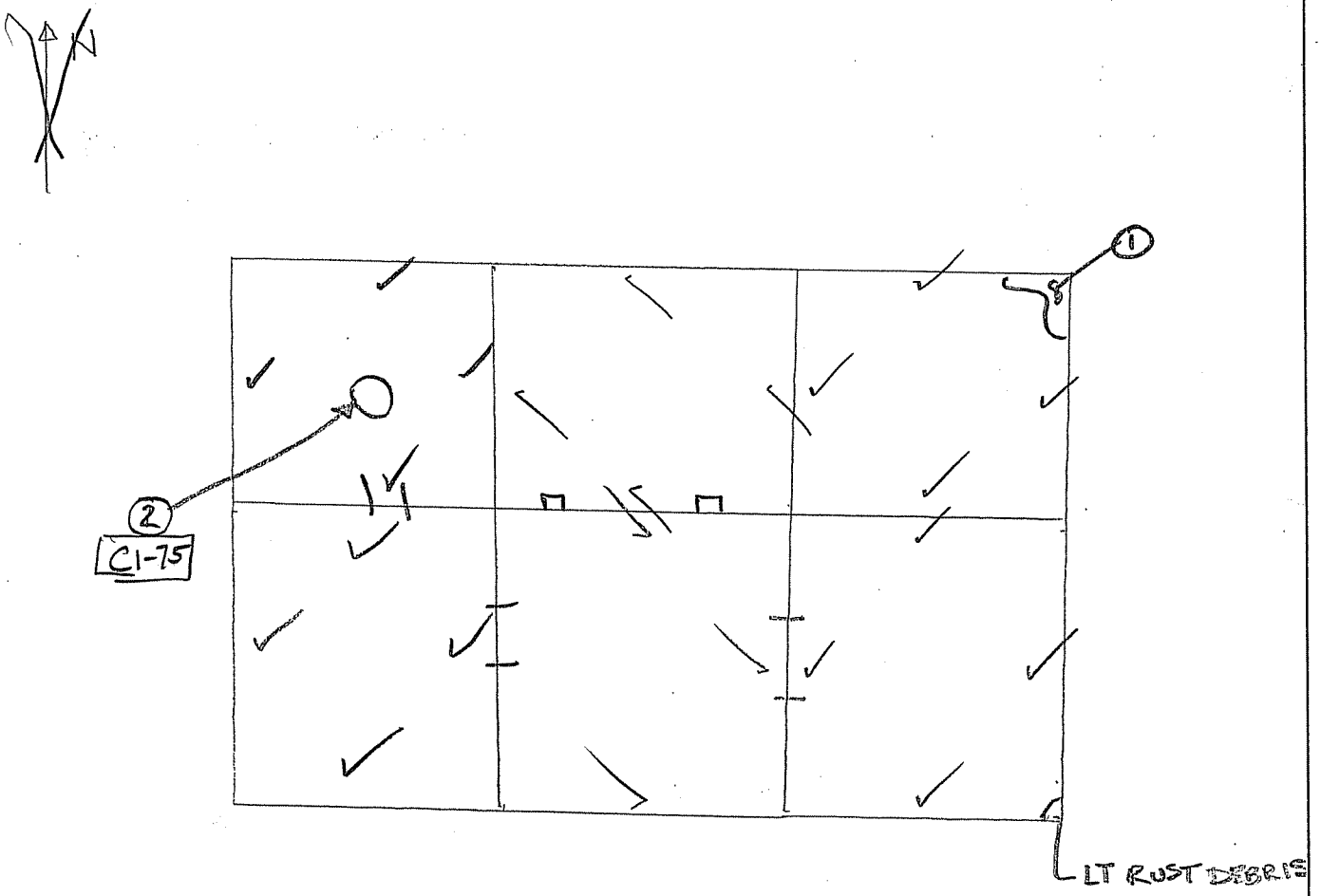
PIER 3

W COLUMN

TIER 12

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	12 of 19
		of

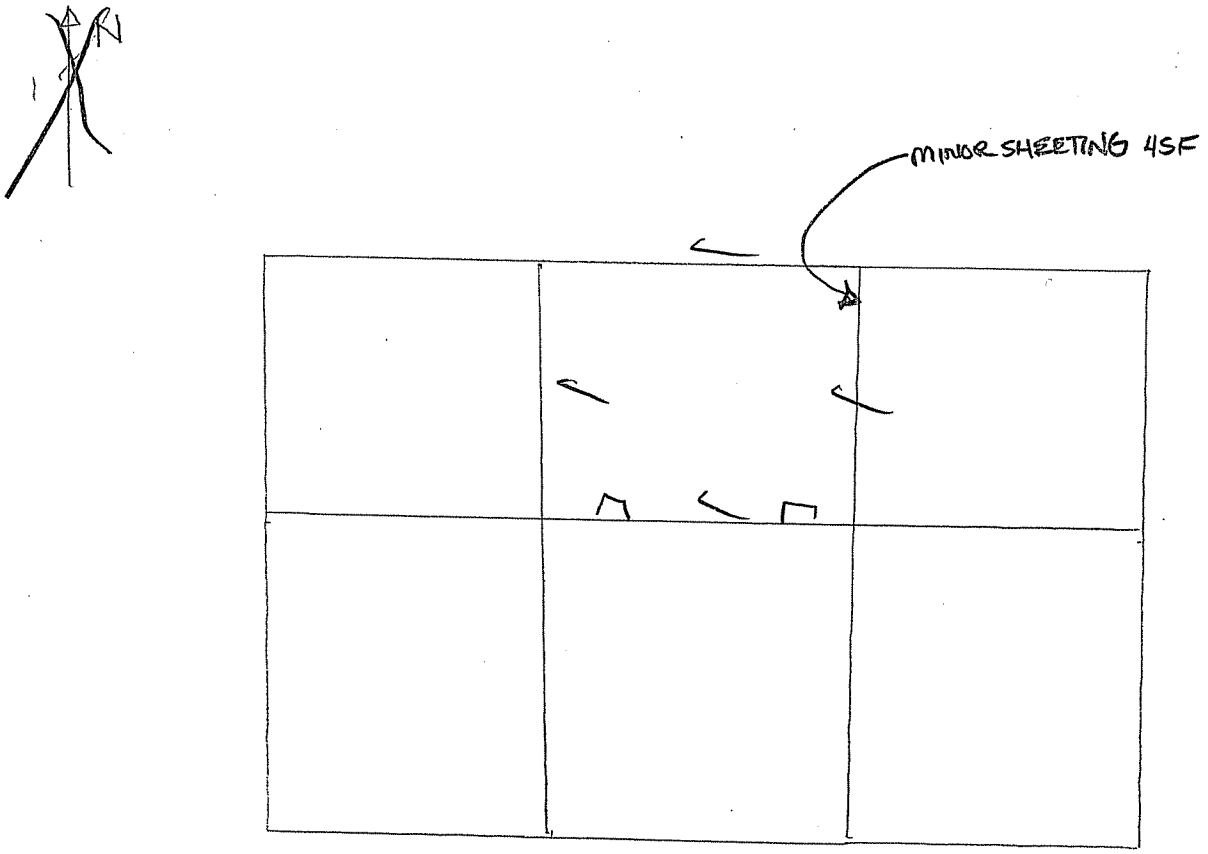


PIER 3
W COLUMN
TIER 13

N →

① MOISTURE W/INGRESS IN CORNER C1-76
② ACCESS HOLE NOT FULLY WELDED, FLEXES ~½"

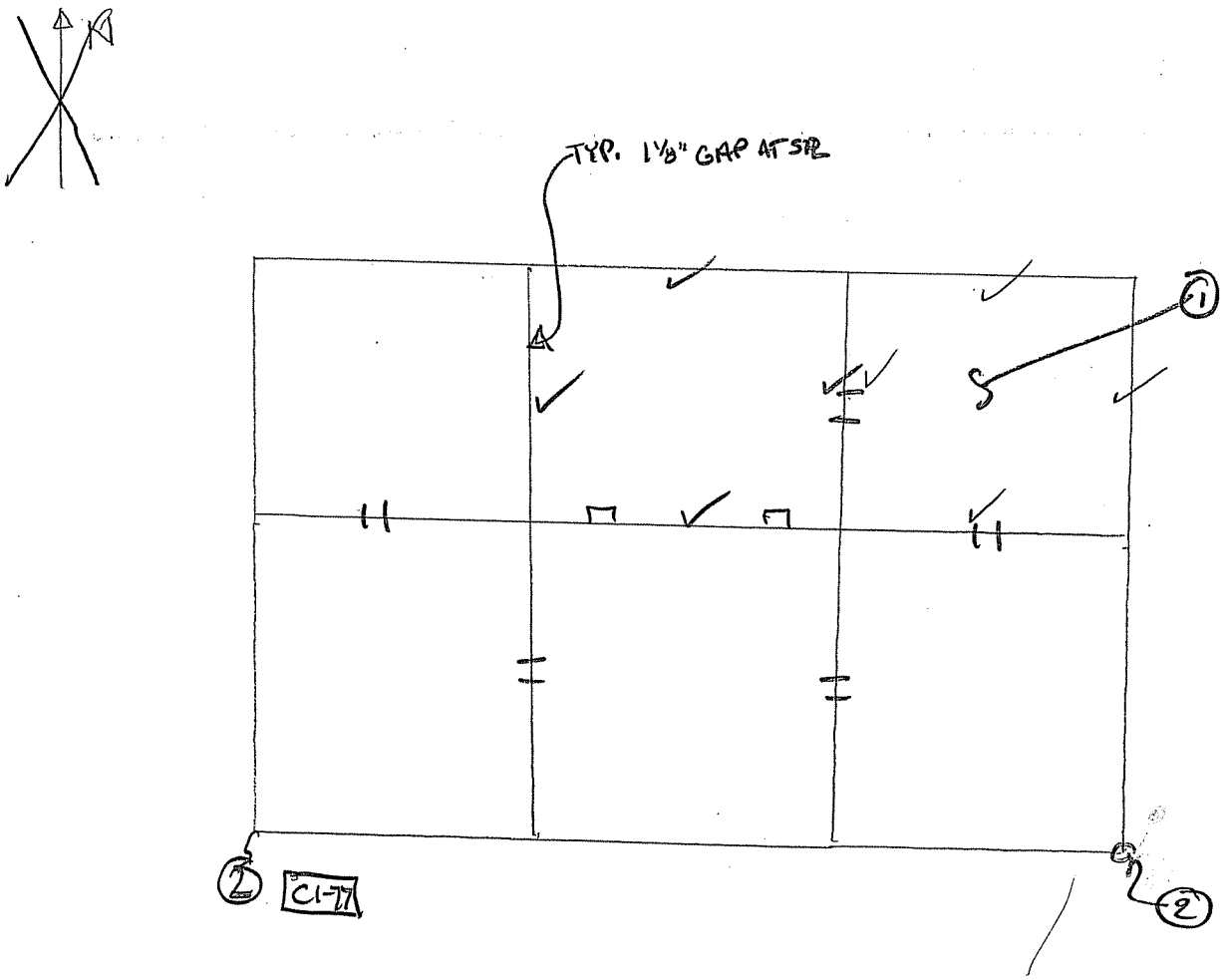
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
	CREW:	DATE:	SHEET:
	BRC, BS	3/5/08	13 of 19
			of



PIER 3
W COLUMN
TIER 14

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	14 of 19
		of



PIER 3

W COLUMN

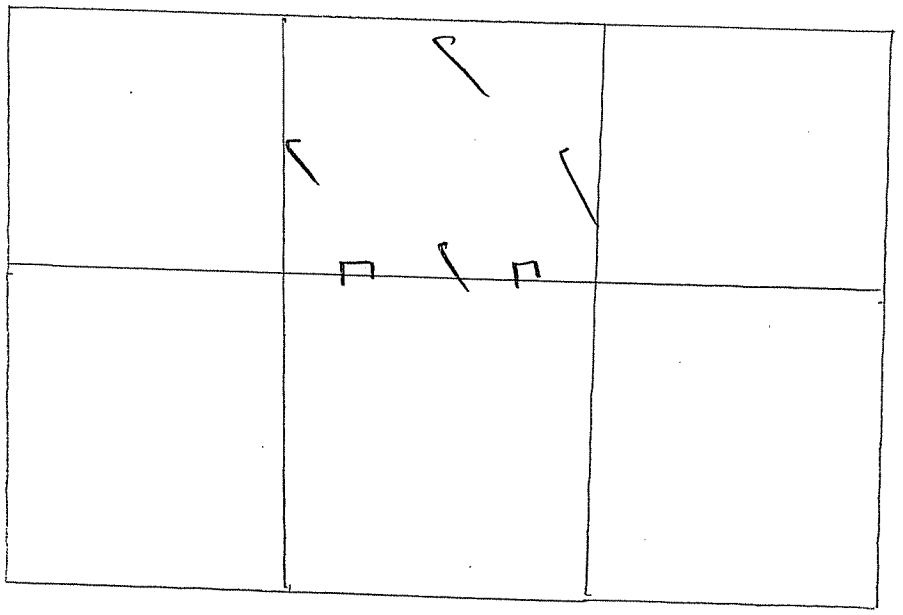
TIER 15

N

1 MOISTURE ALONG BOT DIA PL, COMING FROM NW CORNER SPL

2 DEBRIS, & INDICATIONS WATER INFIL FROM CORNER

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
	JOB: P710070019	
CREW:	DATE:	SHEET:
BKL, BS	3/5/08	15 of 19
		of

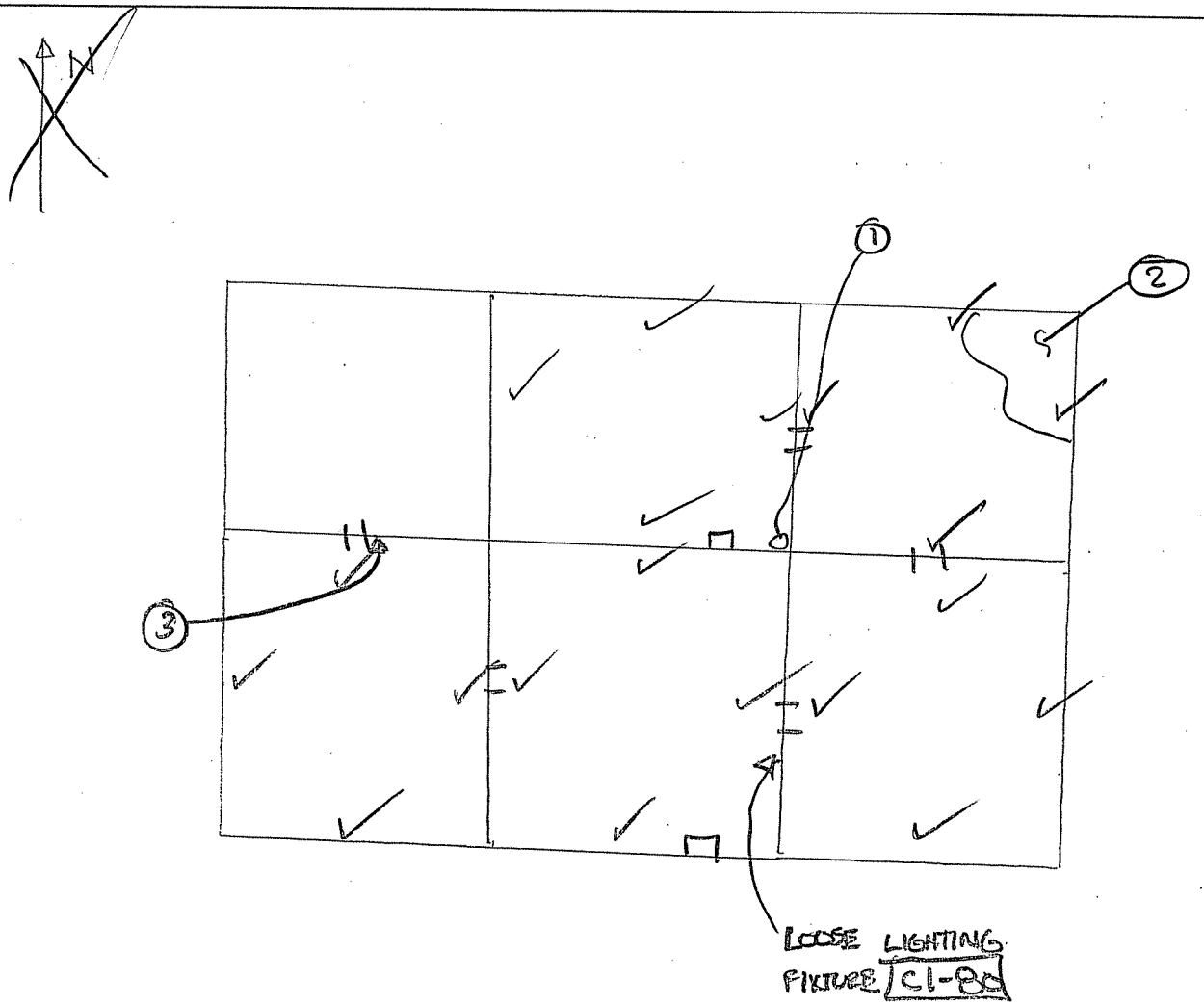


PIER 3
W COLUMN
TIER 16

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	16 of 19
		of

282
333



PIER 3

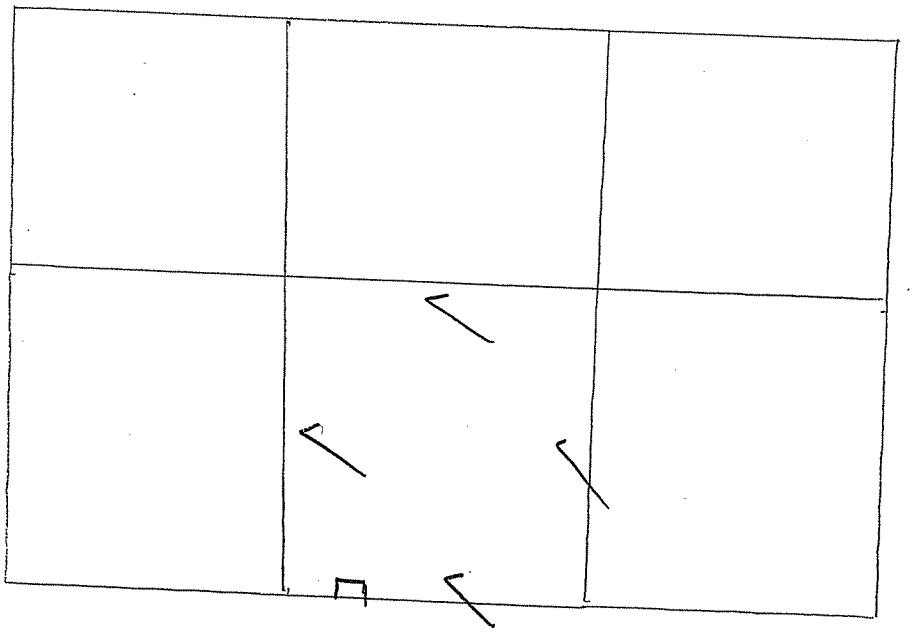
— COLUMN

TIER 17

N

1. CONDUIT FACE LOOSE & MISSING TOP [C1-7B]
2. MOISTURE ON BOT. DIA., STAINING/SEMI ACTIVE RUST IN CORNER
3. HORIZ. RUST STAINING (FROM FABRICAT) UNDER ACCESS HATCH [C1-7]

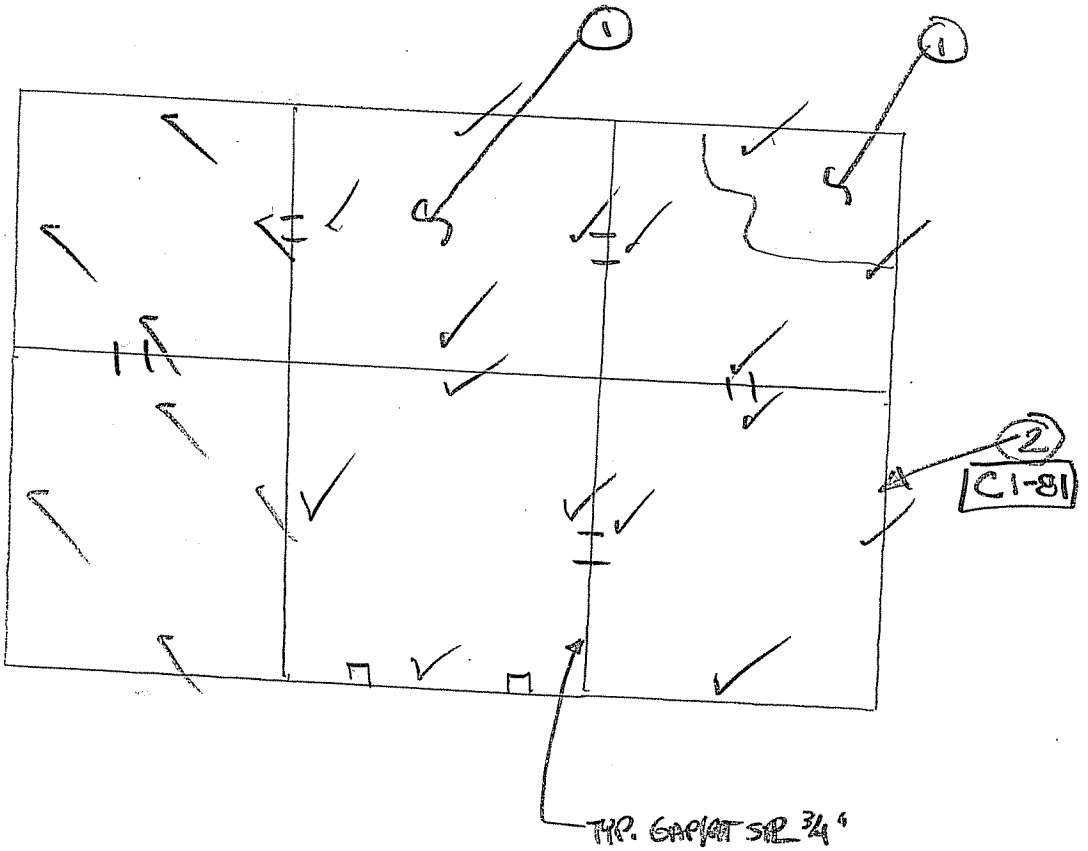
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BRC, BS	3/5/03	17 of 19



PIER 3
W COLUMN
TIER 18

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/5/08	18 of 19
		of



PIER 3
W COLUMN
TIER 19

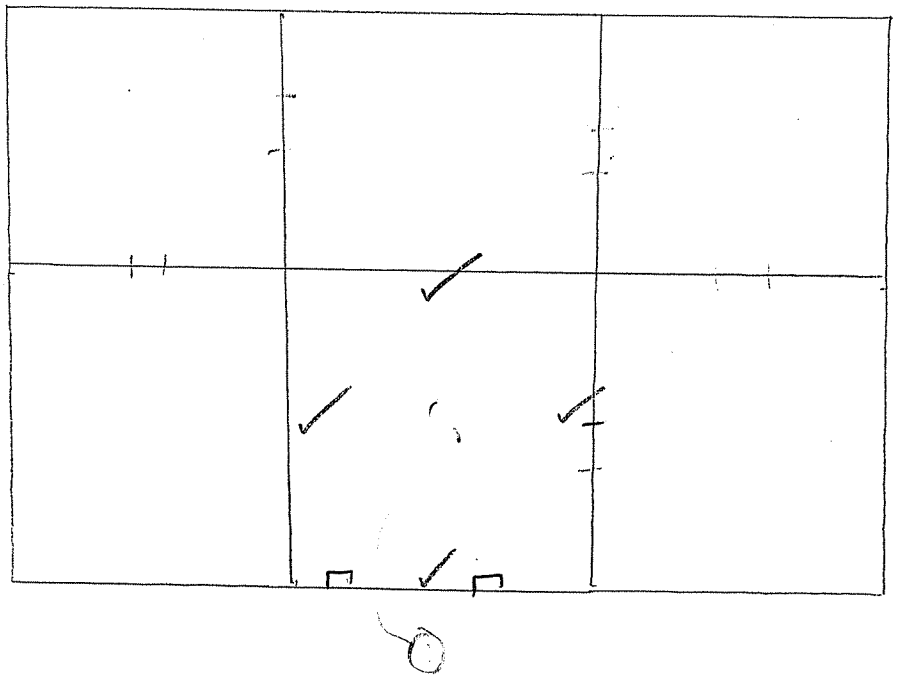
N

1. MOISTURE ON BOT. FLA.
2. TYP. LT RUST / SHEETING ALONG SPL PLATES

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems
JOB: P710070019	
CREW:	DATE:	SHEET:
BKG, BS	3/5/08	19 of 19
		of

275
333

N



PIER 3

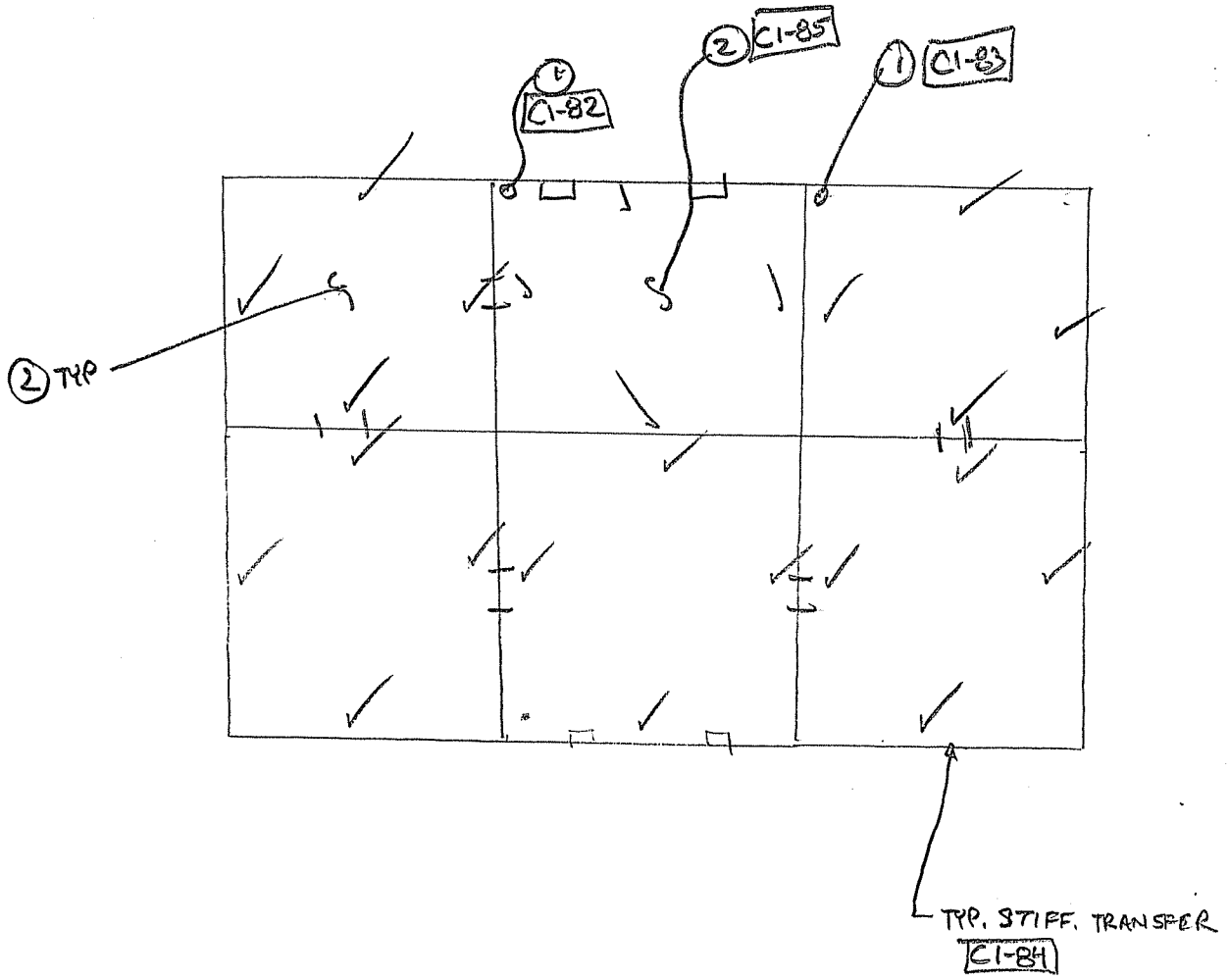
W COLUMN

TIER 20

N

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	1 of 12
		of

2T6
333



PIER 3

W COLUMN

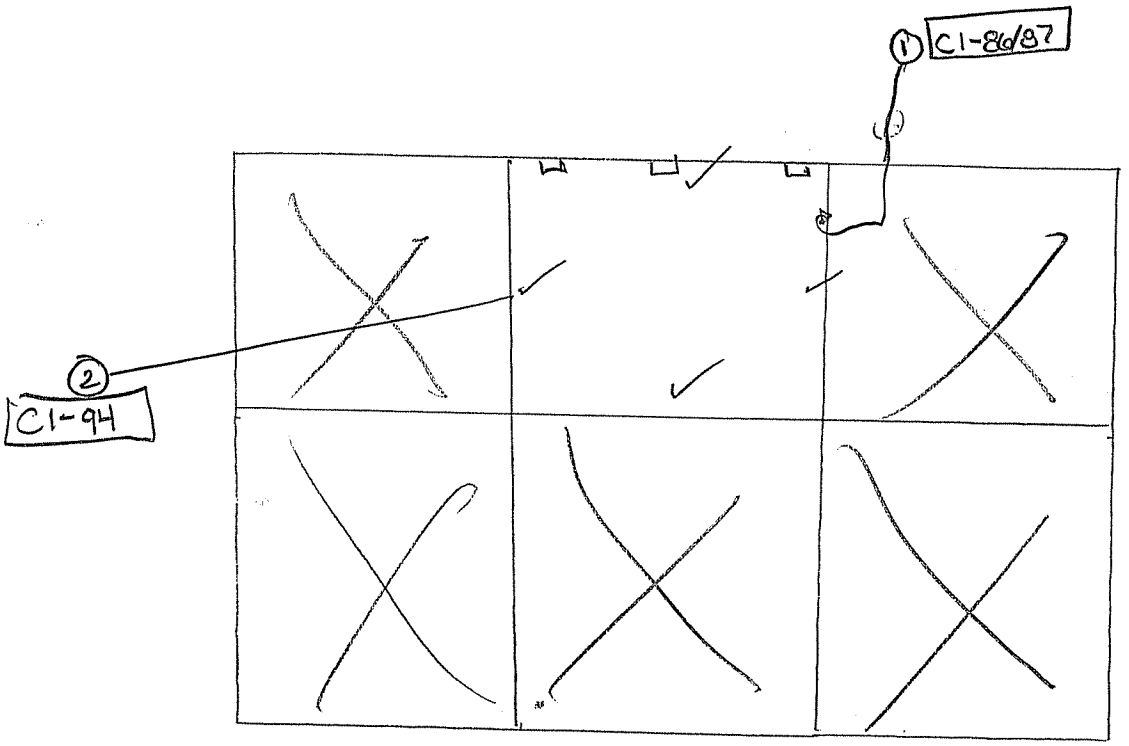
TIER 21

NORTH

1 MISSING ELECTRIC CONDUIT COVER C1-82

2 TYP RUST STAINING INDICATING HVY MOISTURE ON TOP DIA-P

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BRC, BS	3/6/08	2 of 12
		of



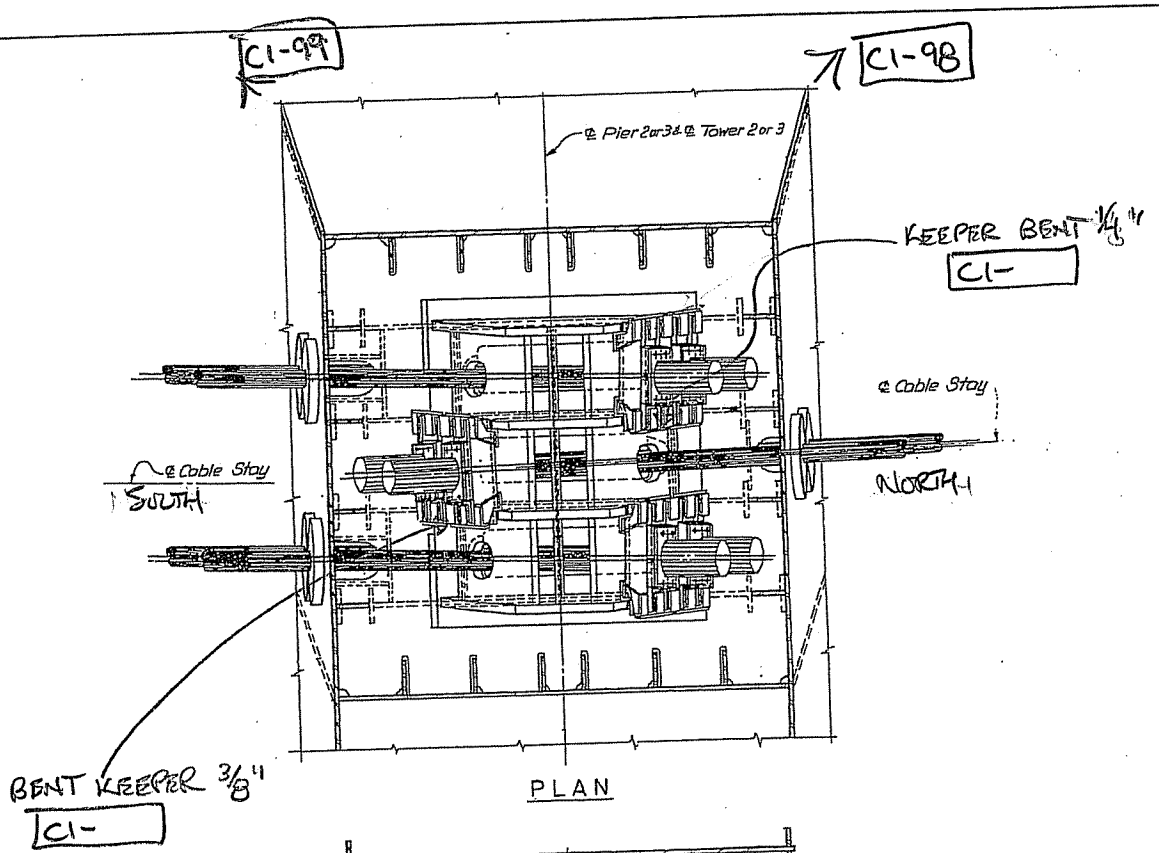
PIER 3
W COLUMN
TIER 22

← NORTH

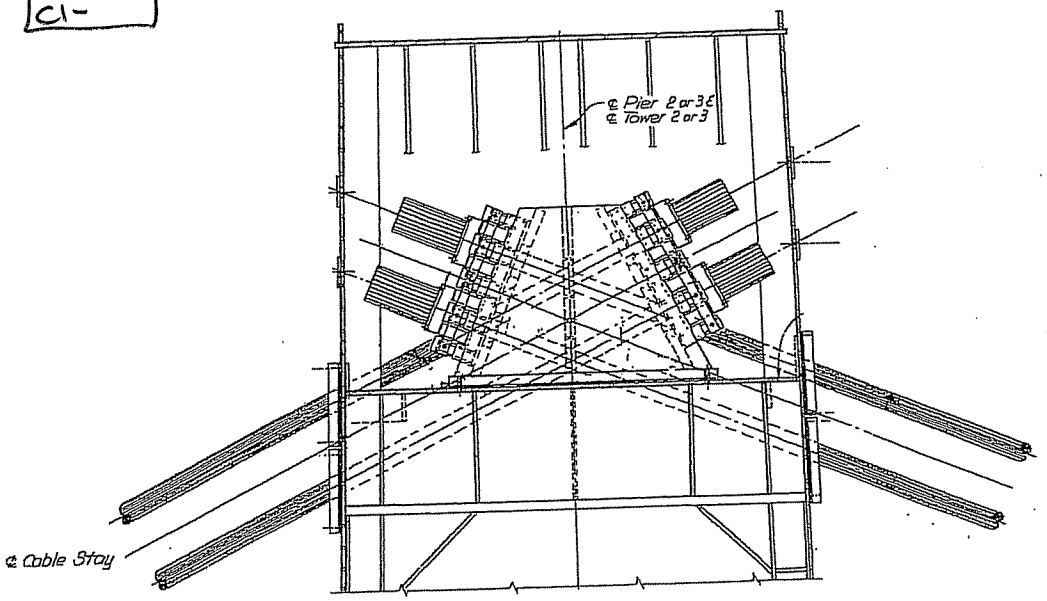
1 1/16" GAP BETWEEN K.B. & COL
2 O-RING ON LOWER CABLE LOOSE ON UPPER HALF 1/2" GAP

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	3 of 12
		of

ART 333

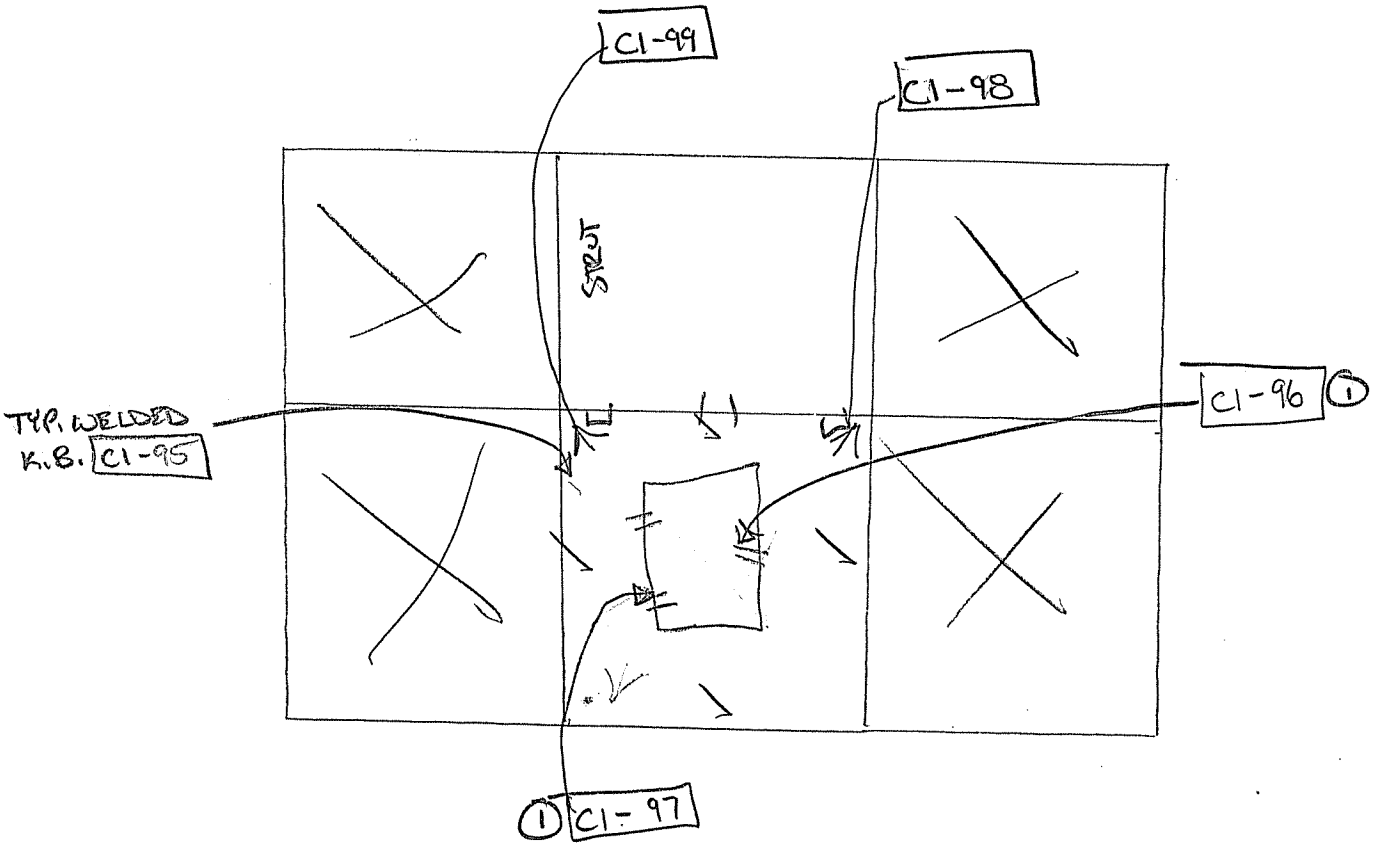


PLAN



PIER 3; W. COL.
TIER 23

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	5 of 12
		of



PIER 3

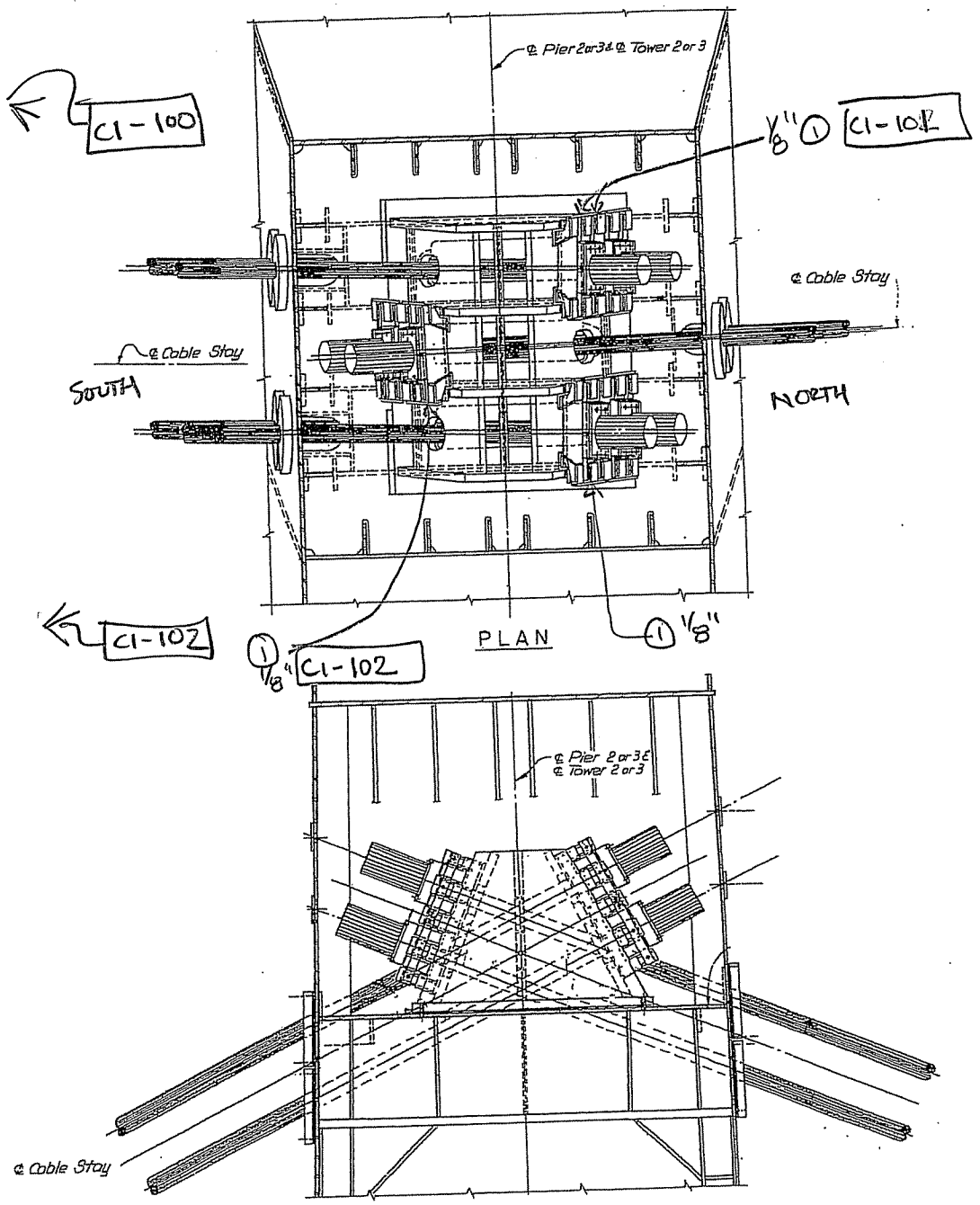
W COLUMN

TIER 23

NORTH

① BENT KEEPER R SEE DTL SHEET

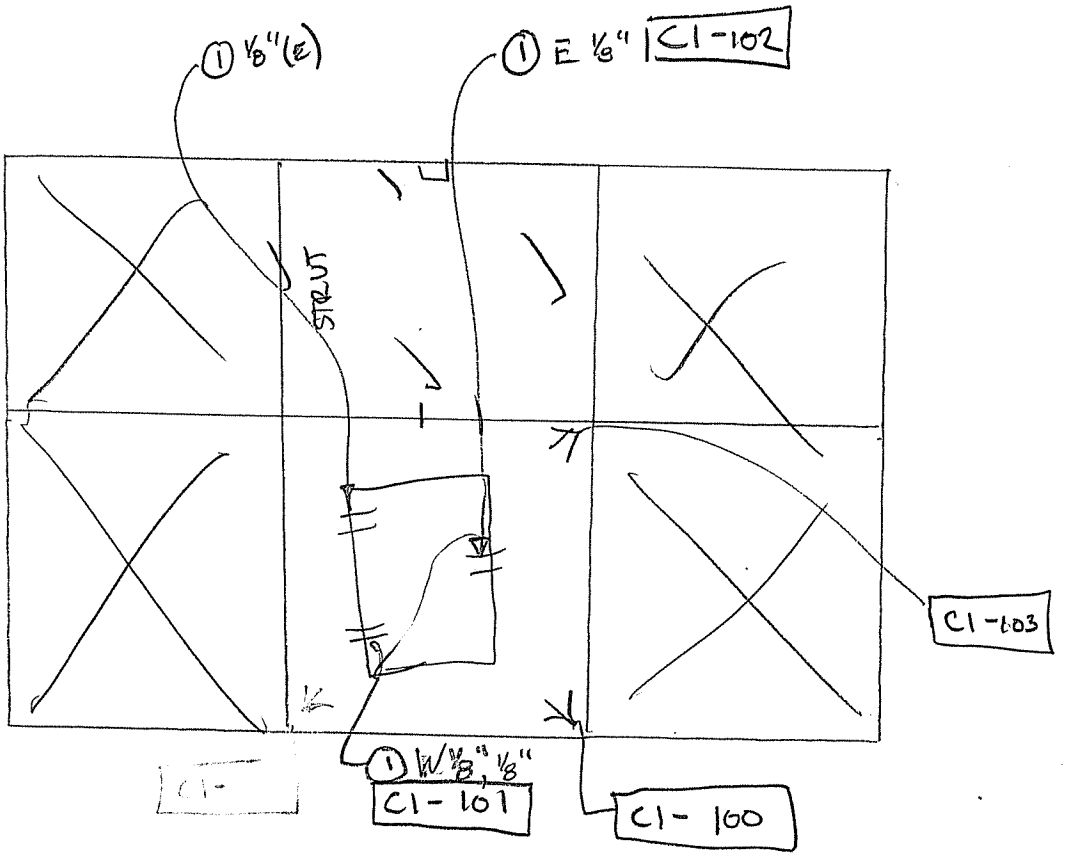
CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	4 of 12
		of



PIER 3, W. COL
TIER 2H

① BENT KEEPER

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	7 of 12
		of



PIER 3
W COLUMN
TIER 24

NORTH

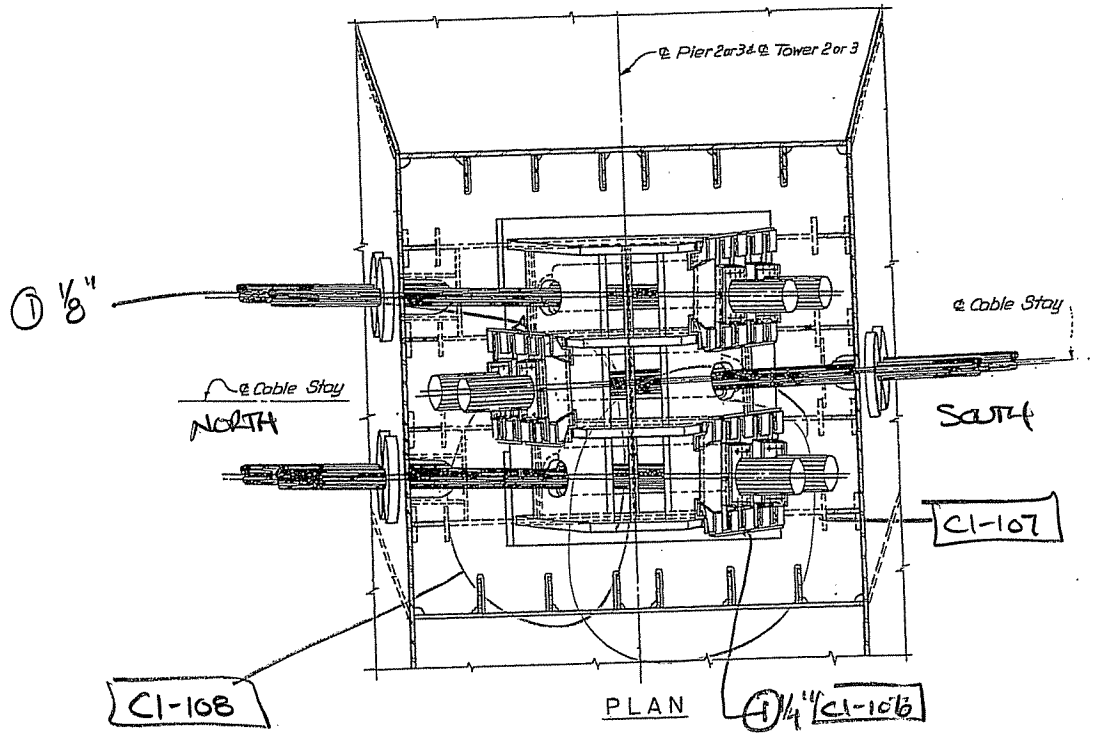
① BENT KEEPER R

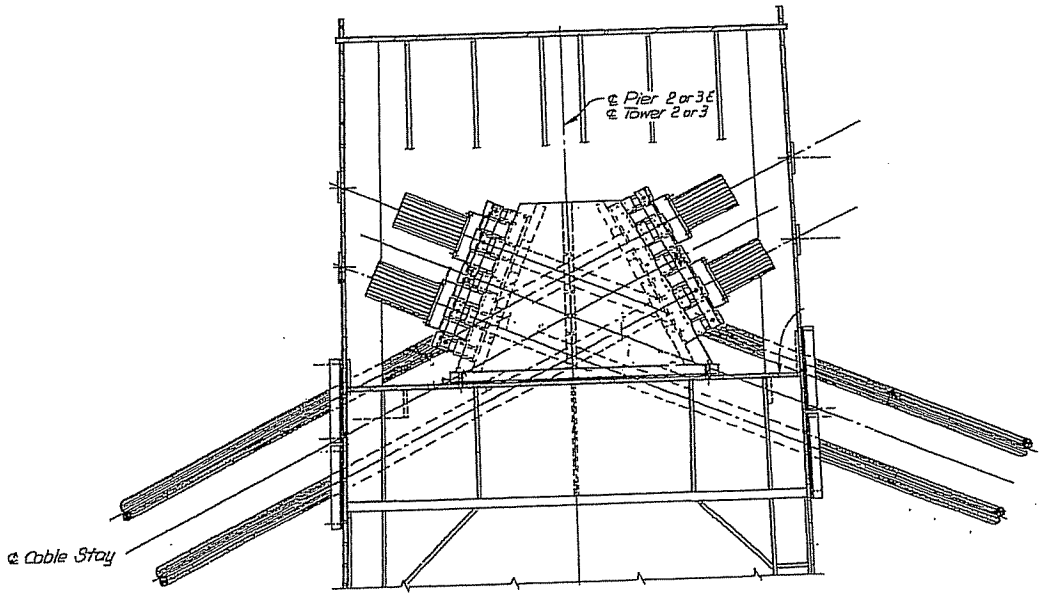
TYP. LT RUST

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA
NOTES BY:	TranSystems

JOB: P710070019

CREW:	DATE:	SHEET:
BKC, BS	3/6/08	6 of 12
		of





PIER 3, W. COL
TIER 25

① BENT HELPER

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
TOWER 3		
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	9 of 12
		of

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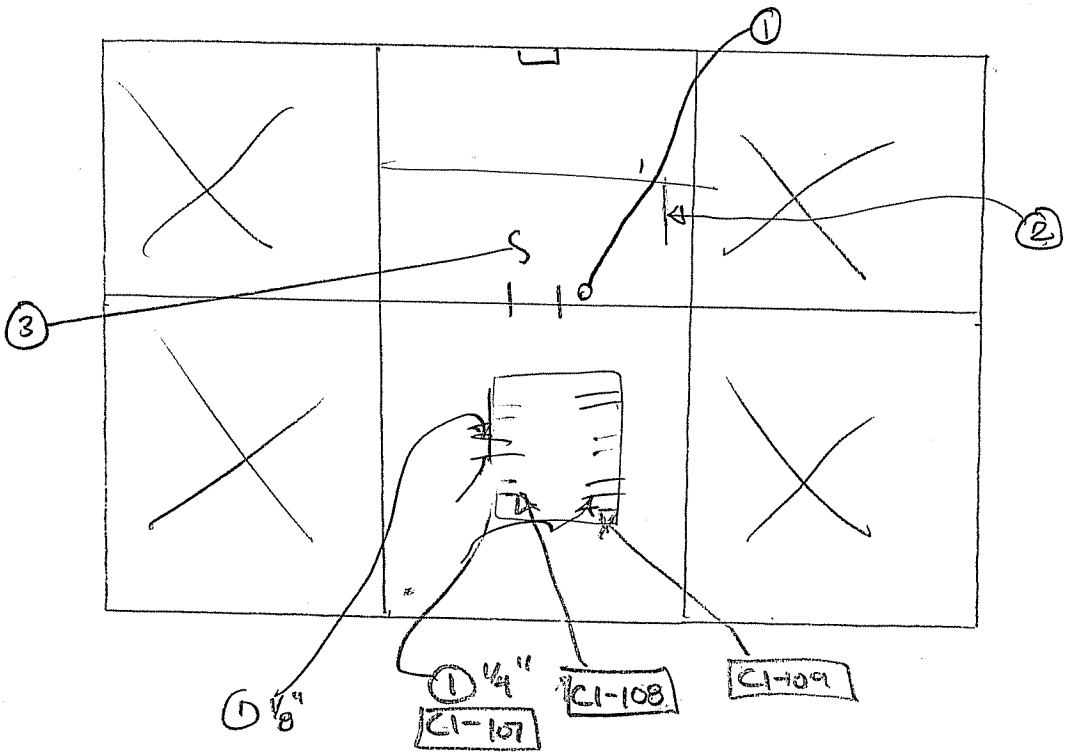
333



PIER 3

W COLUMN

TIER 25

NORTH

1. LOOSE WIRESTW/ MISSING COVER C1-105
2. FIELD SP UNEVEN/GEN SHOT C1-104
3. 1/16" LMO PITTING ON FLOOR DIA.
4. BENT KEEPER PL

CTLGroup	Bridge No: Luling Bridge City/Town: Luling, LA	
NOTES BY:	TranSystems	
JOB: P710070019		
CREW:	DATE:	SHEET:
BKC, BS	3/6/08	8 of 12
		of

PHOTO LOG	JOB # P710-07-009	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C1	DATE: 3/3/08 3/4/08	CREW: BKC; MSJ

	DATE	PHOTO #	PHOTO DESCRIPTION
	3/3/08	C1-1	SPLICE PLATE TYPICAL, LIGHT RUST NW CORNER BAY, TIER 1
	3/3	C1-2	ANCHOR BOLT TYP. WEST CENTER CHAMBER TIER 1
	3/3	C1-3	TYPICAL HEAVY PIGEON DEBRIS WEST CENTER CHAMBER TIER 1
		C1-4	TYPICAL RUST SE CHAMBER, SE CORNER TIER #2 (CORNER WELD)
		C1-5	POOR WELD, TIER 3, EAST TOWER, CENTER EAST BAY, NORTHWEST CORNER
		C1-6	CLOSE UP OF ~~CRACK~~ IN C1-5 POOR WELD
		C1-7	CLOSE UP OF CRACK IN C1-5 POOR WELD
		C1-8	"
	✓	C1-9	SOUTHER CENTER BAY TIER 4 SPLICE PLATE WELDED TO NORTH WALL (TYPICAL AT NORTH CENTER BAY ALSO)
		C1-10	NORTH WEST BAY, CORNER WELD TIER 4, RUST BELOW STIFFENER
		C1-11	"
		C1-12	Center West Bay South Face - Pipe through webs Tier 6
		C1-13	STRUT AT TIER 6 NORTH WALL TYPICAL DETAIL BOTTOM FLOOR CHAMBER 3
		C1-14	STRUT AT TIER 6, NORTH WALL TYPICAL DETAIL TOP FLOOR CHAMBER 3
		C1-15	STRUT AT TIER 6, CHAMBER 4, ANCHOR BOLTS FOR BOX GIRDERS AT TOP OF CHAMBER
		C1-16	STRUT AT TIER 6, CHAMB. 13, TYP. RUST ALONG NORTH WALL
		C1-17	GAP IN WALLS AT TIER 7 CENTER EAST BAY
		C1-18	"
		C1-19	Tier 10, Center EAST BAY S. WALL TYPICAL CONDITION
		C1-20	"
1	3/4/08	C1-21	TIER 11, P2 COL. E, CE BAY TYP WELD DTLS ALONG E. WALL
2		C1-22	" "
3-4		C1-23 & C1-24	" "
5-7		C1-25 / C1-27	NE BAY, T12, P2, E. COL; 1/16" PITTING ALONG E. WALL
8-9		C1-28 / C1-29	TYP. WATER INGRESS W/ RUST (SHOT T11, SW BAY, P2, COLE
10		C1-30	T13, SW BAY, W. WALL, COL E, P2; TYP LT-MOD RUST ON EXT. WALL
11		C1-31	T13, NW BAY, P2, E COL, 3'ϕ DRILLED HOLE (80-90%) FLXD
12		C1-32	T13, NW BAY, P2, E COL, WATER COMING IN NW CORNER
13		C1-33	" " TYP. MOD. RUST ALONG SPL, NEG. SEC LOSS
14-15		C1-34/35	T19, SE BAY, P2, E. COL MOD. ALONG BOTTOM W/ PITTING UPTO 1/8"
16		C1-36	T19, NW BAY, P2, E. COL, TYP. MOD. RUST, NEG LOSS
17		C1-37	T21, P2, E. COL, NW BAY OPEN CONDUIT S/W CORNER
18		C1-38	" " TYP RUST INDICATING CONDENSATION
19		C1-39	T22, P2, E. COL TYP CABLE/WALL CON.
20		C1-40	" " TYP. KNEE CON
21		C1-41	" " TYP S. WALL ELEV.
22-23		C1-42/43	T23, P2, E. COL, N. CABLE ANCHORAGE, W. KEEPER BENT
24		C1-44	" " S. W. CABLE ANCHORAGE, MISSING CABLE CAP
25		C1-45	" " TYP KNEE BRACE
		C1-46	T24, P2, E COL, ANCHORAGE SLIGHT BOLT (1/4") ON E/W SIDE
27		C1-47	T25, P2, E COL, GEN. ANCHOR
28		C1-48	" " 295 NW ANCHORAGE
29		C1-49	" " 333 S ~~PASS~~ CABLE/FLOOR CON.

PHOTO LOG

JOB # P710-07-0019	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C1	DATE: 3/4/08	CREW: BKC, MJS 3/4 - BKC, BS 3/5-3/6

	DATE	PHOTO #	PHOTO DESCRIPTION
30	3/4/08	C1-50	TOWER 3, S. ELEV.
31-33	3/4/08	C1-51/53	BRIAN / MATT DEMONSTRATING RAIL STURDINESS
34/35	3/4/08	C1-54/55	TOP STRUT P2, TIER 23 SWEST CHAMBER, SOUTH END; SPL. PL (BOT) 20% LOSS ON NUTS/BOLTS & TO 1/8" PITTING @
36	3/4/08	C1-56	P2, W COL, TIER 4, SW CHAMBER TYP. WALL COND (WESTWALL SHOT)
37	3/4/08	C1-57	" " NC CHAM. TYP. BOT DIA. TOWER COND. LT RUST
1	3/5/08	C1-58	P3, W COL, T2; SW BAY; SW MISSING BOLT ON SR. PL.
2		C1-59	" " CE BAY; EW ~12" OF SAND/DEBRIS
3		C1-60	" " CW BAY; TYP. ANCHOR BOLT
4		C1-61	" " " ", DAMAGED LADDER RUNG
5		C1-62	P3, W COL, T2, SE BAY, MOD RUST IN CORNER (SE)
6		C1-63	P3, W COL T3, CW BAY, DOUBLE PASS ON WELD TO LONG STIFF
7		C1-64	P3, W COL T4, CE BAY, TYP. COND. OF WALLS / SPLICES
8		C1-65	P3, W COL T5, CW BAY, TYP. LONG STIFF WELD
9		C1-66	P3, W COL T6, SW BAY, TYP. MOD. RUST / SEMI ACTIVE
10		C1-67	P3, W COL T7, SE BAY, MOD. RUST IN SE CORNER (SEMI-ACTIVE)
11-13		C1-68 → 70	" " , CE BAY, STAINING & ABRASION DUST FROM UTILITY.
14		C1-71	P3, W COL T9, NW BAY; MOISTURE ON BOT DIA PL w/ UP TO 1/16" PITT
15		C1-72	" ", MOISTURE ON CORNER BY TIER 10, W/SEMI ACTIVE COR.
16		C1-73	P3, W COL T11, CE BAY; TYP. SR PL BELOW GAP. WELDED (NO RUST)
17		C1-74	P3, W COL T12, CW BAY; TYP. WALL COND. (LT RUST / STAINING
18		C1-75	P3, W COL T13, SW BAY, LOOSE ACCESS HATCH NOT FULLY WELDED
19		C1-76	" " " NW BAY, MOISTURE & TYP. BAY COND. (LT RUST)
20		C1-77	" " T15 SE BAY, RUST STAINING IND. MOISTURE & DEBRIS
21		C1-78	" " T17, CW BAY, ELECTRIC CONDUIT MISSING 2 & TOP
22		C1-79	" " T17, SE BAY, HORIZ. RUST. STAINING FROM FABRICATION
23		C1-80	" " CE BAY, LOOSE LIGHTING FIXTURE N. WALL
24	3/5/08	C1-81	" " T19, NE BAY, TYP. LT RUST / SHEATING ON SR. PLATES
1	3/6/08	C1-82	P3, W. COL T21, CE BAY, MISSING ELECTRICAL COVER
2	3/6/08	C1-83	" " SE BAY, " "
3		C1-84	" " SW BAY, TYPICAL STIFF TRANSFER / WALL COND.
4		C1-85	" " CE BAY, TYP. INDICATIONS OF HUM. CONDENSATION (RUST IN DROPLET SHAPE)
5-6		C1-86/87	P3, W COL T22, SE CORNER, 1/16" GAP BTWN KNEE & COL
7		C1-88	" " NW CORNER GEN. SHOT
8		C1-89	" " SW CORNER GEN. SHOT
9		C1-90	" " SE CORNER GEN. SHOT
10		C1-91	" " NE CORNER GEN. SHOT
11		C1-92	" " SW CORNER GEN SHOT
12		C1-93	" " NW CORNER GEN SHOT
13		C1-94	" " N. WALL, LOWER CABLE 1/8" GAP ON TOP
14		C1-95	P3, W COL, T23, N WALL, TYP. WELDED K.B.
15		C1-96	" " S. ANCHOR BENT KEEPER 3/8" (E. SIDE)
16		C1-97	" " N. AW ANCHOR BENT KEEPER 1/4" (E. SIDE)
17		C1-98	" " 246 SE CORNER LOOKING NW
18		C1-99	" " 333 NE CORNER LOOKING SW

PHOTO LOG

TranSystems

JOB # P710-07-0019	BRIDGE: HALE BOGGS	
CAMERA # C1	DATE: 3/6/08 3/7/08	CREW: BKC, BS 3/6 BKC, BS 3/7/08

	DATE	PHOTO #	PHOTO DESCRIPTION
19	3/6/08	C1-100	P3, T24, SW CORNER LOOKING NE
20		C1-101	" " NW ANCHOR BENT PL 1/8"/1/8"
21		C1-102	" " SOUTH ANCHOR BENT PL 1/8"
22		C1-103	" " SE CORNER LOOKING NW
23		C1-104	P3 T25, STRUT BAY, UNEVEN FIELD SPLICE, BRACE
24		C1-105	"P3, " ", MISSING ELEC. COVER, LOOSE WIRES
25		C1-106	" " SW ANCHOR 1/4" BENT KEEPER W. SIDE
26/27		C1-107/108	" " ANCHOR ASSEMBLY LOOKING WEST (S THEN NORTH)
28		C1-109	N. APPROACH FROM P3
29		C1-110	W. CHANNEL APPROACH P3
30		C1-111	P2 N. ELEV
31		C1-112	E. CHANNEL APPROACH FROM P3
32		C1-113	BRIAN DEMONSTRATING SAFETY RAIL STRENGTH
33		C1-114	E.B.G. @ 1D3 TO FS2 SPAN 1, CONDUIT ACCESS HOLE
34		C1-115	E. TUB EAST OF FB6 SPAN 1, DECK SPLICE (FS2)
35		C1-116	E. TUB, FB6 SPAN 1, FE BEAM BRACE CON
36		C1-117	E. TUB, FB6, N ELEV SPAN 1, TYP. FB
37		C1-118	E TUB, FB6 SPAN 1, FB/CROSS BRACE CON
38		C1-119	E TUB, FB6, SPAN 1, FB/WEB/TOP DECK CON
	45	C1-120-126	E TUB SPAN 1, E. OF FB6 FS2 DECK MISSING BOLT BY W./WEB
46-48		C1-127/129	E TUB SPAN 1, DIA. 4 S. ELEV. (BOT, TOP WEST; TOP EAST)
49		C1-130	E TUB SPAN, DIA 4 (N. OF) TYP UNDERSIDE OF DECK
50		C1-131	E. TUB SPAN, NORTH OF 1D4 2nd PASS ON LONG. STIFF - TYP LONG STRAND
51-52		C1-132/133	@ FB 8 SOUTH SIDE, WELDMENT IRREGULARITIES
	53	C1-134	E. TUB SPAN 1 N. OF DIA 4, TYP. BOT FE SHOT
54	5	C1-135	E. TUB SPAN 1 S. ELEV DIA 5
55/56		C1-136/137	E. TUB SPAN 1, BTWN FB 9/DIA 5; ISO. ALENGTHS (6"-1') UNDERCUT BTN TOP FE & WEB
1	3/7/08	C1-138	E. TUB SPAN 1, N. OF DIA 5, BENT LONG STIFF'S (2½")
2		C1-139	" " FS 3, 3 LOOSE NUTS
3		C1-140	" " N OF FS 3 TYP 2" ϕ PLUGGED HOLES
4-6		C1-141-143	" " S. ELEV.
7		C1-144	" " W. WEB S. OF CG1 GEN. SHOT SNIPE & 3-2" ϕ PLUGGED
8		C1-145	" " " DTL SHOT 2-2" ϕ HOLE (PLUG)
9		C1-146	" " DTL SHOT 1-2" ϕ PLUG HOLE
10-11		C1-147/148	" " S. ELEV. CG1
12-14		C1-149/151	SPAN 1, CROSS GIRDER 1 EAST ANCHORS, EAST SIDE (GEN SHOTS)
15		C1-152	" " WEST ANCHOR, EAST SIDE LEAKING BOT.
16		C1-153	" " " LOOSE RUBBER
17		C1-154	" " BAY 7 LOOKING EAST
3		C1-155	" " BAY 7 LOOKING WEST
19		C1-156	" " BAY 6 RA MISSING BOLT DRIFT PIN
20		C1-157	" " BAY 5 GEN SHOT ~~RA~~ RA
21		C1-158	" " " " RC

39 120
40 121
41 122
42 123
43 124
44 125
45 126

PHOTO LOG

Trans Systems	JOB # 710-07-0019	BRIDGE: HALE BOGGS	
	CAMERA # C1	DATE: 3/7/07	CREW: BRC, BS

	DATE	PHOTO #	PHOTO DESCRIPTION
22	3/7/08	C1-159	EG 1, SPAN 1, BAY 3 RA; 3 MISSING BOLTS, 4 PARTIALLY ON
23		C1-160	" " BAY 1 GEN SHOT OF ANCHORS LOOKING RB
24		C1-161	" " BAY 2 MISSING BOLT TOP ANCHOR COV. R
25		C1-162	" " 3" ø HOLE RA.
26/27		C1-163/164	E TUB SPAN 1, W. WEB BOT SNIPE BY CG1
28		C1-165	" " 2" ø HOLE & PLUG BY CG1
29		C1-166	" " TOP 2-3" ø HOLE & PLUG BY CG1
30		C1-167	E TUB PIER 1 PIN & ELEV GEN SHOT
31-33		C1-168-170	PIER 1 TYP. COND. (PIGEON DEBRIS ~1-2") GETTING IN VIA GAPS ON TUB DIA. STIFF
34		C1-171	SPAN 3 E. TUB N OF CG2, TYP. DRILLED HOLE W/PLUG
35		C1-172	E. TUB, SPAN 3, DECK AT FS6, MISSING NUT
36		C1-173	" " S. OF FS 6, TYP. PLUGGED 2" ø HOLES (SHOT W/WEB)
37		C1-174	" " N OF FB 20, 2 LOOSE BOLTS GEN E. WEB HORIZ STIFF.
38-39		C1-175/176	" " N OF FB 20, TYP. INT. STIFF BRUN FB'S
40-48		C1-177-185	E. BOX GIRDER SPAN 3, E. WEB 2ND STIFF N OF ID 9, 1" CR IN WELD MAT BRUN TOP STIFF TOP FF
49-55		C1-186-192	" " " 1ST STIFF S OF ID 10 1½" CR IN WELD MAT & TOP FF
56		C1-193	E BOX GIR, BOT FF IN BAY 8 OF ID 10 (TYPICAL COND)
1-5	3/8/08	C1-194-198	E BOX GIR, E. WEB, 1 STIFF N. ID 10 1" CR IN WELD BRUN STIFF TOP FF
6-8		C1-199-201	" " W WEB, FB 23 UNDER CUT IN TOP FF & FB AT WEB JUNCTURE
11		C1-202-204	" " E. WEB, 2 STIFFS. ID 11 1½" CR IN WELD & TOP FF
12-13		C1-205/206	" " W. WEB, S OF ID 11 TYP. COND.
14		C1-207	" " E. WEB, S OF FB 25 TYP LARGE DELAM SHEETS CORROT
15-16		C1-208/209	" " UNDER SIDE OF DECK AT FS 7, 2 MISSING NUTS/TYP. COND
17		C1-210	" " FB 26 S. OF CG #3, E. WEB, 1-2" ø HOLE & SNIPE
18		C1-211	" " W. WEB 1-2" ø HOLE, 1-3" HOLE
19-22		C1-212-215	" " S. ELEV CG3
1	3/10/08	C1-216	E. CROSS GIR. 3, BAY 7, TYP LEAKING ANCHOR (SHOT LOWER)
2	3/10/08	C1-217	" " " " TYP LOOSE SEAL (SHOT LOWER)
3-5		C1-218-220	" " GEN SHOTS ANCHORAGE & BAY (LOOKING EAST)
6/7		C1-221/222	" " BAY 6 GEN SHOTS LOOKING WEST
8		C1-223	" " BAY 5 GEN SHOT LOOKING EAST
9		C1-224	" " BAY 4 SR R AT RA/B
10		C1-225	" " " RA MOD. RUST AT W. END
11		C1-226	" " BAY 3 WEST GEN SHOT W. END DIA.
12/13		C1-227/228	" " BAY 2 GEN SHOT W. END DIA.
14		C1-229	" " BAY 1, RB RUST STAINING
15		C1-230	" " RA 3" ø FOR CONDUIT
16		C1-231	" " WATER LEAKING & DISLODGED SEAL
17		C1-232	" " GEN SHOT LOOKING AT TOP OF ANCHORAGE
		C1-233	E. BOX GIR WIND FERRING, FB 36, DAMAGED PIGEON NETTING
19		C1-234	" " TYP. PIGEON DEBRIS
20		C1-235	" " TYP. SUPPER HOLE IN RB
21-26		C1-236-241	" " TYP. FB CON. SIELEV FB 36 SHOWN

PHOTO LOG

JOB # 710-07-0019	BRIDGE: HALE BOGGS	
CAMERA # C1	DATE: 3/10/08	CREW: BKC, CTT

	DATE	PHOTO #	PHOTO DESCRIPTION
21	3/10/08	C1-242	B. BOX GIR, WIND FERRING W/ 100% LOSS 3"x2" PL B
28		C1-243	" " PL B 100% LOSS 30"L x 2" TALL
29		C1-244	" " N. FB 36 2'6" x 6" HOLE IN FERRING PL B
30/31		C1-245/246	" " " " 2"x1" HOLES PL A
32-35		C1-247-250	" " TYP. PAPER THIN W/ SMALL HOLES PLATE FB36
36		C1-251	" " TYP PL C SHOT BTW FB 37/TD15
37		C1-252/253	" " FB 38 ACROSS WELD
	3/11/08	C1-254	Flaking Rust, lower corner of lower strut to tower connection, North Tower, West Face
		C1-255/256	I.R. AT SPLICE CONNECTION, NORTH FACE, NW corner, North Tower
		C1-257	21-8" x 4" 100% Section loss At plate B of E. Girder wind Ferring
		C1-258	100% section loss, E Girder, wind Ferring, At FB 39, 12" x 4" Plate B
		C1-259	Pitting & 100% section loss, 1"ϕ & 1/2"ϕ holes, E Girder, Wind ferring @ FB 39 Plate B
		C1-260/261	100% Section loss at FB 41, looking South, E Girder, wind Ferring, Plate B.
		C1-262	100% Section loss at FB41 to FB42 looking North, E Girder, Wind Ferring
		C1-263	E Girder, Wind Ferring FB41 Bent Bottom flange, Looking North
		C1-264	E Girder, wind Ferring, FB41, 100% loss in Ferring
		C1-265	E Girder, wind Ferring FB41 Bent bottom Flange, Looking South
		C1-266	UP INDICATION 3/4 OF WAY UP EAST TOWER FACE TOWER 3
		C1-267	SHOT OF EAST FACE, TOWER 3 LOOKING DOWN ON B/S. EMPLOYEE
	3/12/08	C1-268	E Girder, E WALL BAY CG5 TO ID21, RUST, MINOR SECTION LOSS IN BOLTS? NUTS IN SPLICE PLATE AT TOP OF WALL
		C1-269	E GIRDER, BROKEN LADDER CLIP FROM C.G. 5 INTO BAY
		C1-270	E GIRDER, E. SIDE OF ID21, CONDUIT RUBBING ON DIA.
		C1-271	Pack Rust @ 2nd Field Splice From bottom SW corner Tower 3, West face of East leg
		C1-272	" " "
		C1-273	" " "
		C1-274	South Face lower Strut Tower 3 East End
		C1-275	" "
		C1-276	General Shot Top Splice South Face, looking down Tower 3, East leg
		C1-277	Cable Anchors Tower 3 South Face, East leg, lower cable of top anchorage
		C1-278	" " "
		C1-279	" " "
		C1-280	Broken Wire Screen @ cable anchor Tower 3 South Face, "
		C1-281	Very Top Cable Intact Screen Tower 3 south Face, east leg
		C1-282	Pigeon Excrement & dirt on Wind Ferring Plate B @ Stiff @ FB43 E. Girder
		C1-283	Heavy Pitting 100% section loss near 2nd St. From Top PL B N. of FB43 E. Ferring, E Girder
		C1-284	7"x4" heavy pitting section loss PL B E wind Ferring @ Top longitudinal btwn FB44 & ID18, E Girder
		C1-285	General Shot E Ferring PL B looking South, E Girder
		C1-286	East Ferring Underside of deck missing nut @ bracket btwn FB47 & FB48, E. Girder
		C1-287	Hole in Weld @ ID19 South side @ underside of deck, edge of deck, debris E. Ferring E Girder
		C1-288	" "
		C1-289	3 missing screens E. Ferring Underside of deck @ FS 12 3 closest to edge of deck, E. Girder

PHOTO LOG

JOB #	BRIDGE: Hale Boggs	
CAMERA # 1	DATE: 3/13/08 3/14/08	CREW: SWB/PGN/CTY

TranSystems

DATE	PHOTO #	PHOTO DESCRIPTION
3/13/08 1	CI-290	EAST BOX GIRDER, BTWN FB52 & 53 D-METER MEASUREMENTS
2	CI-291	" " " " "
3	CI-292	E. BG, EAST WEB CRACK @ TOP STIFFENER WEB, PROPAGATED 1" INTO TOP FLG
4	CI-293	" " " " " " "
5	CI-294	" " " " " " "
6	CI-295	" " " " " " "
7	CI-296	E. BG, WEST WEB, GAP UP TO 1/4" BTWN TOP FLG & SPLICE PLATE
8	CI-297	E. BG, WEST WEB, GOUGE IN WEB PLATE, UP TO 1/8" DEEP, NEAR TOP FLANGE
9	CI-298	E. FERRING BTWN CG5 & 6 - MISSING SCREW @ DECK RIB
10	CI-299	" " " " " " "
3/14/08 1	CI-300	Typ. Pitting on Tower (W. Face Tower 3 West leg)
2	CI-301	W. side of cable guide for cable 9 Tower 3 West leg
3	CI-302	" " 8 " "
4	CI-303	" " 7 " "
3/17/08 1	CI-304	EAST BOX GIRDER BEARINGS @ PIER 15
2	CI-305	EAST B.G., GOUGE IN EDGE OF BOTTOM FLANGE NEAR FB1
3	CI-306	TYPICAL EXT. DIAPHRAGM (EXT. DIAPH #3, SOUTH FACE)
4	CI-307	" " "
5	CI-308	EXTERIOR DIAPHRAGM SPLICE (EXT. DIAPH #2, NORTH FACE)
6	CI-309	SPLICE @ FB4, BOTTOM FLANGE "BENT" / SLIGHT MISALIGNMENT
7	CI-310	TYPICAL EXT. DIAPHRAGM (EXT. DIAPH. #2, NORTH FACE)
8	CI-311	GAP IN WELD BTWN FB WEB & TOP FLANGE // LEAKAGE @ EAST EXTERIOR
9	CI-312	" " " " " " "
10	CI-313	TYPICAL PITTING @ GIRDER EXTERIOR
11	CI-314	EAST CANTILEVER OF FB9, BOTTOM FLANGE @ SPLICE BENT
12	CI-315	" " " " " "
13	CI-316	EAST CANTILEVER OF FB11, BOTTOM FLANGE @ SPLICE BENT
14	CI-317	ARRESTED CRACK @ BOX GIRDER SPLICE / CROSS GIRDER CONNECTION
15	CI-318	" " " " "
16	CI-319	GAP @ UPPER DIAGONAL PLATE @ CG1 / E.BG, WEST FACE (1/8" GAP)
17	CI-320	" " " "
18	CI-321	EAST BOX GIRDER / CROSS GIRDER / CONNECTION (WEST FACE)
19	CI-322	" " " "
20	CI-323	" " " " "
21	CI-324	EAST BOX GIRDER / CROSS GIRDER / CONNECTION (FROM SOUTH)
22	CI-325	TYPICAL DEBRIS @ EXTERIOR OF CG1 / EAST BOX GIRDER
23	CI-326	EAST BOX GIRDER - WEST WEB w/ TWO DENTS UP TO 1/8" DEEP
24	CI-327	" " " " "
25	CI-328	TWO VOIDS IN FB. WEB / TOP FLG WELD @ FB14
26	CI-329	LEAKAGE FROM DECK @ SPLICE @ ID8
27	CI-330	" " " " "
28	CI-331	HEAVY FLAKING RUST @ CROSS GIRDER 2 @ CONN. TO EAST BOX GIRDER

PHOTO LOG	JOB # P710070019	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C 1	DATE: 3/17/08	CREW:

DATE	PHOTO #	PHOTO DESCRIPTION
3/17/08 29	C1-332	EAST BOX GIRDER CONNECTION TO CROSS GIRDER 2, EAST SIDE w/ 1/4" LOSS
30	C1-333	ALONG PLATE.
31	C1-334	" " " "
	C1-335	EBG; FS7; MISSING PIGEON CAGES AT U/S DECK RIBS
33	C1-336	U/S [illegible]
	C1-337	E.G., E.ST. [illegible] 1" R.S.
	C1-338	U/S DECK AT FB 23
	C1-339	
	C1-340	
	C1-341	
	C1-342	
	C1-343	
	C1-344	
	C1-345	
	C1-346	
	C1-347	
	C1-348	
	C1-349	
	C1-350	
	C1-351	
	C1-352	
	C1-353	
	C1-354	
	C1-355	
	C1-356	
3/21/08	C1-357	GENERAL SHOT E. SIDE COLUMN 2; SOUTH FACE AT UNDERSIDE ABOVE BEARINGS
	C1-358	SOUTH KICK R NEAR N.E. TOWER AT TOP OF BOTTOM STRUT / 100.1' LOSS 8" W x 2" H
		W/I.R AT TOP OF COVER PLATE
	C1-359	EAST WIND FERRING; N. FB35 / 100.1' LOSS 32" L x 5" HIGH
	C1-360	NORTH END EAST W. FERRING MISSING PIGEON CAGES / 100.1' LOSSES TO CAGE BRACING
	C1-361	" " " "
	C1-362	MULTIPLE 100.1' LOSSES UP TO 1 1/2" Ø E. WIND FERRING ALONG FB36
	C1-363	100.1' LOSS 25" L x UP TO 12" HIGH. E. WIND FERRING NEAR FB36
	C1-364	GENERAL SHOT E. WIND. FERRING; NEAR TOWER 2
	C1-365	FB 39 NEAR E. BOX GIRDER / 3/16" IR. AT BOTTOM FLANG COVER R
	C1-366	GENERAL SHOT EAST WIND FERRING AT TOP FACE
	C1-367	BENT CORNER; E. WIND FERRING AT FB 38 NEAR BASE OF BOX GIRDER
	C1-368	1/4" SCREW HOLE; U/S DECK W/ SURFACE RUST B/T ID 17 - FB 41
	C1-369	100.1' LOSS NEAR FB 39 / EAST WIND FERRING
	C1-370-371	Splice South side Tower 3 WEST (Splice above lowest set of cables)
	C1-372	Elevation View of cables at Top of Tower 3 South East
	C1-373	Tower 3 looking South onto bridge

301
333

PHOTO LOG	JOB # P710070019	BRIDGE: Hale Boggs	
TranSystems	CAMERA # C1	DATE: 3/21/08 to 3/25/08	CREW: WRW/CTY/CRS

DATE	PHOTO #	PHOTO DESCRIPTION
3/21/08	C1-374	Tower 3 looking South onto bridge
	C1-375	Typical cable sheath
	C1-376	3/4" I.R. AT Top Cable 9 South Face Tower 3 West leg
3/22/08	C1-377	100% section loss on Exterior E. face E. Wind Ferring N. of CG 4
	C1-378	I.R. up to 3/4" Exterior E. face of Wind Ferring East @ splice plate just N. of CG 4
	C1-379	Cr. @ crack Arrest hole Ext. West Web of E.B.G @ lowest hole below diagonal splice
3/24/08	C1-380	Missing bolts on plate
	C1-381	FB 52 Bottom flange, loss on splice plate
	C1-382	Loss on connection plate FB 57
	C1-383	Deck splice plate over-laps other plate
	C1-384	Misaligned connection on east plate of FB 60
	C1-385	Wind farring damaged
	C1-386	Loss on deck splice plate
	C1-387	ID 27 bolts on splice connection, loss no threads on bolt
	C1-388	Plate on farring, loss around edges
	C1-389	Bracket for deck gap on nut and plate
	C1-390	Gap in caulk around cables
	C1-391	Caulk around cables cracking
	C1-392	Loss on plate around edges
	C1-393	FB 77 missing nut on bracket for deck
	C1-394	FB 78 missing bolt on splice plate
1-2 3/25/08	C1-395/396	2 WF Rust pack first splice off deck (1"), P2, E.COL., W.F.
3	C1-397	PIER 2, EAST COL, W.F. 1st FS OFF DECK TYP. COND
4-5	C1-398-399	" " 2ND F.S. 1" ~~GAP~~ P.R. BTWN FS & WEB
6	C1-400	" " 4th F.S FROM DECK LOWER CABLES, ANCHORAGE ASSEMBLY
7	C1-401	" " MIDDLE ANCHORAGE, S.F., 1/2" P.R.
8	C1-402	PIER 2 LOWER STRUT. S.F. LOSS OF KICKGUARD LT-M @ RUST
9	C1-403	E. TUB. E WEB BTWN FB 83/84, 100%/0 SEC. LOSS 5'x6"
10	C1-404	TYP. ELEV OF ID 35 S. ELEV
11-12	C1-405/406	TYP. BOLT COND. THREADS/NUTS MINOR LOSS, FB 85 S.F.
13	C1-407	E. TUB, E. WEB, BY FB 85. TYP ~30"x3" 100% SEC LOSS
14	C1-408	" " SHOT FB 86 TYP LOSSES ALONG FERRINGHT STIFF
15	C1-409	BTWN FB 87/88, BTWN E/W TUB MISSING NUT.
16	C1-410	S.F. ELEV. PIER 3 DIA. BTWN E/W. TUBS.
17	C1-411	N. ELEV. FB 91, E. TUB, E. WEB. TYP. COND
18	C1-412	1" Ø HOLE ON E TUB, W. WEB W/COVER
19	C1-413	BTWN FB 95/96, BTWN TUBS, BRACKET FROM DECK
20	C1-414	N. ELEV FB 95, BTWN TUBS
21	C1-415	GEN SHOT E. TUB, E. WEB BTN FB 96/ID 40
22	C1-416	GEN SHOT N. ELEV C. GIR. 10, ON. EAST SIDE

PHOTO LOG	JOB #	BRIDGE: Hale Boggs - Luling, LA	
TranSystems	CAMERA # C1	DATE: 3/26/08 -	CREW: SGB, JHR

DATE	PHOTO #	PHOTO DESCRIPTION
3/26/08	C1-417	Looking N. from pier 2 typical
	C1-418	Lon. cracking in pavement 2" E. of SWL, repeating pattern 15'-6" apart (pic. look S.)
	C1-419	Lon. cracking in pavement E. lane, W. wheel line, 2 cracks, pattern 6" apart parallel
	C1-420	Typical median barrier & top of deck looking N.
	~~C1-421~~	~~Typical top of deck looking N.~~
#5	C1-421	Typical pack rust deformation at top of splice PL E. Tower E. face
#6	C1-422	Typical view of E.T. E face from just above deck level
#7	C1-423	Typical view of E.T. E. face S.E. corner
#8	C1-424	General picture of deck lk. S from E.T. E face
#9	C1-425	Changes in PL thickness just below splice 7 E.T. E. face SE corner
#10	C1-426	Electric chord hanging at top ET P2 ~~X~~ E. face
#11	C1-427	Typ. Cond. rust pack at splice PL from top P2 ET SE cor. E face
#12	C1-428	Gen. picture from base P2 ET E face.
13	C1-429	Gen pic. East Elev. P2 ET E face looking E.
#14	C1-430	Gen Pic Deck from P2 ET E face lk. N
	C1-431	CG 10 missing bolt bottom flange
	C1-432	P.R. bottom CG10 and flange connection
	C1-433	Missing 2 nuts on bracket connecting deck to E.S. BG side.
	C1-434	Missing 1 nut on bracket E. BG, N. FB 100 to connect BG to deck
	C1-435	" " , N. FB 101 to connect FB to deck 1/8" Gap R to FL
3/27/08	C1-436	Gen Picture at CG7 lk N of N. bound deck
2	C1-437	N.B. Deck at CG 8 - typ. long. ck. at SWL see yellow keil crows feet (lk So.)
3	C1-438	6' long long crk 30' S CG 8 (lk So.)
4	C1-439	Patches in West Travel Lane lk N just So. and at C.G. 9
5	C1-440	INTermediate lg. cks btw reg. spaced long ck 30-45' S. CG. 9
6	C1-441	Gen Pic at C.G. 9 lk N of N. Bd. Deck
7	C1-442	Pop out 25' S CG. #9 in center East Travel lane.
8	C1-443	Long. crks at SWL lk N from CG. 9
9	C1-444	Typ. long. ck 45' S of P. 3.
10	C1-445	long cks parrallel in west wheel line East Lane N. Bd. (P3 shadow in foreground)
11	C1-446	patch in East Lane NBd 30' So. C.G. 10 14'-6" x 12'-6" (1xw).
12	C1-447	2-6' long crk 60' N. CG. 10 in W. Wheel Line East Lane. 1/8"-1/2" wide.
13	C1-448	parrallel long. crks just So. of CG. 10 in W. Wheel line EL. N. Bd.
14	C1-449	n. end bot E. splice PL horizontal brace btw. P2 East and W. Tower legs
15	C1-450	Top N. ~~top~~ splice PL horizontal brace/br. seat btw. P2 E. & W. Tower legs drainage
16	C1-451	Missing bird screen S. end wind ferring main span east wind ferring P2 at
17	C1-452	Typ. debrie N. end top E. splice plate horizontal brace P2 btw E & W. Tower legs.
18/19	C1-453-454	N end E. top splice plate debrie and bolt head loss 10-20% P2 btw E & W. Tower legs.
20	C1-455	(So. end not as bad) Protruding bolt head 6th splice PL P2 E Tower W. face 9th bolt from N. end
21	C1-456	lk. up from bot. anchorages P2 E tower N face
22/23	C1-457/458	Views of E face W. leg P2 ~~from~~ from E. tower

PHOTO LOG

JOB # P710070019	BRIDGE: Hale Boggs Luling, La.	
CAMERA # C-1	DATE: 3/27 – 3/28	CREW: SGB

TranSystems

DATE	PHOTO #	PHOTO DESCRIPTION
3/27/08	C1-459	Moisture build up E. CG 11 top near E from BG
	C1-460	Crack in Crack arrest hole
	C1-461	FS 28, E.S. misaligned BG connection approx. 5/8"
	C1-462	P.R ID45 E. splice 1st ST. from bottom
	C1-463	W.S. BG, 1" N. FS29 missing plug, S. end BG lon. splice.
	C1-464	B.S. BG wall, below FB112, hole in wall w/ loose bolt in it.
	C1-465	Pier 4 top of concrete, N.S., spalled edge by handrail mounts
3/27/08	C1-466	ID 47 W. FB outside BG, P.R. and misaligned bottom E
	C1-467	FB117 W.S. of BG, bottom splice on E, 1/8" loss on btm. R
1	C1-468	missing bird screen at 1st rib west of E. box N of ID37 at splice FS23
2	C1-469	E. Wind ferring, C btw. FB83-FB84
3/28/08 3	C1-470	hole btw. FB83 & 84 near bot. C
4/5	C1-471 & 472	General cond. of 1/2" ϕ or L holes at top rib btw. FB's or ID's.
6	C1-473	holes just south FB85 at bot C
7	C1-474	6" x 26" h. just N. ID36.
8	C1-475	Gen. cond's. at ID36 bot. half of C
9	C1-476	Looking down at C at FB89
10	C1-477	Top of wind ferring lk. S from FB89
11	C1-478	Missing bird screen at N end E wind ferring P3
12	C1-479	discolloration at end FB90 Ferring Connection
13	C1-480	General Photo of Ferring # C Lk. S from P3
14	C1-481	General Photo of Ferring # D Lk N to P3 at ≈ ID 37
15	C1-482	Meander in h.l. crk. at SWL ≈ 30' S. of PIN
16	C1-483	H.L. crk 4' west of SWL ≈ 60' S of PIN Lk. N.
17	C1-484	H.L. crks in West W.L. of East L. Lk. S.
18	C1-485	minor rustpack at bot. splice pl FB119.
19	C1-486	missing bolt at splice deck btw ID50 and FB121
20	C1-487	missing bird screen.
21	C1-488	missing not
22	C1-489	missing bird screens at F.S. 32
23	C1-490	hole in rib 4th West of E. box N. of F.S. 32 ; 5/8" ϕ
24/25	C1-491/492	Concrete fordeck joint leaching w/ drip line down E box # A
26	C1-493	Concrete fordeck joint on east side E. box at Pier 1N
27	C1-494	General Picture of outside of bridge rail just S Pier 1N lk N
28	C1-495	Typical pop out in deck wearing surface btw CG12 and Pier 1N

PHOTO LOG	JOB #	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C1	DATE: 3/31/08	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
1	3/31/08	C1-496	W. WIND FERRING INT. N. FB61 8"x4" HOLE ON FERRING BY 3rd STIFF TOP
2		C1-497	" " S. FB61, 3" ϕ, 1/8" DENT W/GOUGE 1/8" Dx1/16" W
3		C1-498	" " TYP. FERRING COND. LT DEBRIS ON STIFF
4		C1-499	" " TYP. FB (N. ELEV FB60 SHOT)
5		C1-500	W. END CG 6, N. TOP PL 5' PITTING 4"-8" WIDE UP TO 3/16" DEEP
6		C1-501	W. WIND FERRING INT. TYP. LT ROA DEBRIS ON UPPER STIFFS
7		C1-502	" " BTWN CG 6/7, BY FB65 TYP. WATER DRAIN MARKS
8		C1-503	" " TYP. FB SPLICE SHOT AT FB65
9		C1-504	" " BTWN ID27 & CG 7 MOD TO HVY DEBRIS ON LOWER STIFF
10		C1-505	W. WIND FERRING INT BTWN CG 7-8; 100% LOSS FERRING 3'x4" 3rd STIFF FRM
11		C1-506	" " TYP LT DEBRIS ON TOP OF STIFF ID28/29
12		C1-507	" " TYP MOD-HVY DEBRIS ON TOP OF STIFF ID28/667
13		C1-508	" " GEN SHOT W. WEB BOX GIR @ FS 18
14		C1-509	S. CG 8 ON WEST SIDE UP TO 1/4" PITTING ON TOP PL FOR 3' L & UP TO 1" WIDE
15		C1-510	W. WIND FERRING INT. BTWN CG 7 & 8; TYP LT DEBRIS ON STIFF ID 29-31
16		C1-511	" " TYP FB (SHOT FB73
4/1/08	1	C1-512	P.2. West Col. weld at NE corner ≈20' bellow 1st splice above deck
	2	C1-513	P.2. West Col. Gen. photo along Sp. PL. lk West
	3	C1-514	P2 West Col. N. face Gen. photo at hor. weld lk West
	4	C1-515	P2 West Col. N face West Side box E. Cable CG 4.
	5	C1-516	P2 West Col. N. face Gen Picture top of housing CG. #4
	6/7	C1-517/518	P2 West Col. N. face Pictures gasket for Cable/Housing interface CG#5 (West Housing)
	8	C1-519	P2 W. Col. NF CG. #5 Missing bolt bot. of Housing.
	9	C1-520	P2 W. Col. N.F. CG. #6 Pack Rust top pl. at bot. ~~hous~~ cable housing.
	10	C1-521	P2 W. Col. E.F. Top of splice PL. gen. cond. of pack rust causing plate def. btw. bolts
	11	C1-522	P2 W. Col. NE Cor. pack rust at cor. splice plates (1st splice from deck)
	12	C1-523	P2 W Col. NW Cor. Pack rust w/sec. loss on north splice PL West edge.
	13	C1-524	Mult. pass weld at P2 W. Col. W face NW corner 10' above second splice from base
	14	C1-525	Dent and gouge P2 W Col. W. face ≈ 5' S of NW corner ≈ 15-20' up from splice
	15	C1-526	JHR Typ. Weather Cond. for day P2 W Col. West face
	16	C1-527	P2 W. Col. SW Cor. Pack rust & sec. loss Sp. PL W end
	17	C1-528	P2 W. COL SW COR. TYP. WELDED SP IN GOOD COND
	18	C1-529	P2 W. Col. N face S. Cor staining on face of Col.
	19	C1-530	P2 W. COL. W. FACE ~~P2~~ SAFETY CHECK
	20	C1-531	Patch just N P2 in ℄ W Lane 4'x9' long
	21	C1-532	Plugged Drain Hole ≈130' N P2
	22	C1-533	long crack at SWL spaced at ≈ 15' intervals
	23	C1-534	close up of long crk
	24	C1-535	Typical Photo of rusting of median and vehicle colision in foreground lk N
	25	C1-536	Typ. Photo of West Br. Rail w/rusting of surface at CG#5
	26	C1-537	Bent top of Ferring PL 2'-3" long just N CG#5
	27	C1-538	Long Crks in straight line along E wheel L. W. Lane N CG 6

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PHOTO LOG

TranSystems

JOB # P710070019	BRIDGE: Luling Br. ; Luling LA	
CAMERA # C1	DATE: 4/1/08 & 4/2/08	CREW: JHK/BC

DATE	PHOTO #	PHOTO DESCRIPTION
4/1/08	C1-539	Patches in Left Lane S.B. just S. of ℄ Main Span
29	C1-540	Map crking in right shoulder at ℄ main span
30	C1-541	Damage Possible from car fire at West side W. Shoulder just N G.G. 7
4/1/08 31	C1-542	Deformation top of wind ferring at br. rail just N ℄ main span.
4/2/08 1	C1-543	Long Crk at SWL just N. CG #3
2	C1-544	Long Crk in E.W.L. Right Lane S. Bnd. just N.CG. #3
3	C1-545	Typ. Photo of center median colission damage and light post foundation lk. N from CG #3
4	C1-546	Typ. Photo of " " scuff marks and rusting lk S. from CG. #3
5	C1-547	Typ. Pavement along shoulder lk S from CG #3
6	C1-548	Typ. Roadway lk S from CG #3
7	C1-549	Long cracks at shoulder (E. edge) just West SWL
8	C1-550	General Roadway lk S from just N CG #2 (So Bound)
9	C1-551	Patch in ℄ Roadway and Right Lane 2'x 55' just S. starting CG #2
10	C1-552	Long cracks at shoulder (E. Edge) just W. SWL from C.G. #2
11	C1-553	4"Ø repair of hole in ℄ of Right Lane So. Bound at CG #1
12	C1-554	General Photo lk S from CG #1
13	C1-555	General Photo lk N from CG #1
14	C1-556	Ding in SE corner P2 West Col.
15	C1-557	~~End~~ P2 West Col. S end Lower Strut weld to E face.
16/17	C1-558/559	~~End~~ P2 West Col. SE corner end of splice plate and general cond. S splice
18	C1-560	Typ. photo of orange color at the base of the splice ℞ bolts.
19	C1-561	P2 West Col. CG #3 Lower ~~to~~ cable housing/gap btw gasket & cable.
20	C1-562	P2 West Col. S.F. cross girder #2 holes below lower housing w/top filled w/ bolt shank
21	C1-563	P2 W. Col. S.F. cross girder #1 sheared bolts W. Lower Housing
22	C1-564	P2 W. Col. S.F. CG. #1 sheared bolts E Lower housing.
23	C1565	Long crks at interface of lane and shoulder pvmt. S of CG #1/lk S.
24	C1-566	Vehicle colision Damage S of CG #1 in median barrier lk N.
25	C1-567	Transverse Cracks left lane of S. bound ≈ midway btw CG #1 and P1S
26	C1-568	Br. Jt. at P1S S. bnd. lanes lk. E
27	C1-569	Gravel in Br. Jt. P1S Right Shoulder
28	C1-570	Gravel in Br. Jt. P1S Left Shoulder
29	C1-571	Thri Beam at Br. Rail P1S lk W.
30	C1-572	General Photo S Bnd. Approach to P1S lk S
31	C1-573	Geenerl Photo S. Bnd. Lk. N. from P1S Exp. Jt.
32	C1574	holes at S end West Web horizontal field splice no cracks noted
33	C1-575	West Box bot flg to E web typ. weld at FB'107
34	C1-576	West Box typ. weld close up. bot. flg to east web

PHOTO LOG	JOB # P710070019	BRIDGE: Luling Br. ; Luling, LA	
TranSystems	CAMERA # C1	DATE: 4/3/08	CREW: JHK

DATE	PHOTO #	PHOTO DESCRIPTION
4/3/08	C1-577	N end support brackets for horizontal splice PL just N ID 44 welded to W. Box E web
2	C1-578	ID 44 vert. splice plate adj. to W. Box lk S.
3	C1-579	Transition weld in E web W. Box N CG. 11
4	C1-580	Closeup of transition weld at bot. web.
5	C1-581	S. ID 44 horizontal splice plates welded to W. Box E. Web
6	C1-582	CG 11 pitting at connect to West Box W. Web.
7	C1-583	CG 11 close up of pitting
8	C1-584	CG 11 Drainage at top CG along N face
9	C1-585	FB Pack rust bot. splice PL
10/11	C1-586/587	General Elev. CG 11 West end from N.
12	C1-588	CG11 - lower cable gasket ring bolt missing cotter pin.
13	C1-589	CG11 - Lower cable gasket caulking crack
14	C1-590	CG 11 - West end - cable attachment gaskets lk N
15	C1-591	Just N FS 27 at S. end horizontal splice PL arrested cracks at drilled holes
16/17	C1-592/593	Bot hole w/ arrested crk. / Top hole w/ arrested crk S. end hor. splice PL.
18	C1-594	Top hole crk arrested S end hor. splice just N. FS 27
19	C1-595	Bolt loose/frozen bot. West splice PL ID 43
20	C1-596	Pack rust 1/4" at S edge bot. con. of ID 43 to E. side W. Box.
21	C1-597	Gen photo S. Brace for channel light at ID 42.
22/23	C1-598/599	Just S ID 42 light anchorage gen. photo / NE bolt not tight.
24	C1-600	bolt missing in deck splice just N ID 41
25/26	C1-601/602	hole below Inclined splice just N CG 10 arrested crk.
27	C1-603	four missing bolts bot. flg. just S FS 26
28	C1-604	Crk at hole below inclined splice just N CG10 E. web arrested
29	C1-605	Missing cotter pin low. w cable conn. to CG 10 west end.
30/31	C1-606/607	torch cut bolt hole hor. splice just S CG10 in E. Web.
32	C1-608	missing bolt top deck support just S FS 25 east web W. box
33	C1-609	Pack rust at bot flg splice plate FS 25 W. box
34	C1-610	Two missing bolts hor. deck support just S. FS 25
35	C1-611	missing bolt in so. hori deck support E web just S. FS 24
36/37	C1-612/613	Plugged hole just S FB 91 west box E web.
38/39/40	C1-614-616	Bot welded connection IN box E web / Bot flg. to lower brace P3 Tower
41	C1-617	Missing bolt Deck support just S FS 24
42	C1-618	hole just S. FB 91 West Box W. web. plug has rusted away on outside of hole
43	C1-619	series of pin holes connecting holes just N FB 89
44	C1-620	" " " " " " just S ID 37
45	C1-621	Top wind ferring lk. S from P3 West side West Box
46	C1-622	So. Bound Roadway lk N to North Approach w/ N st. in foreground

PHOTO LOG

TranSystems

JOB # P710070019	BRIDGE: Luling Br. ; Luling, LA	
CAMERA # C1	DATE: 4/4/08	CREW: PN

	DATE	PHOTO #	PHOTO DESCRIPTION
1	4/4/08	C1-623	Wind Fairing at ID35 - West
2		-624	Wind Fairing at FB85 - West
3		-625	Missing Deck Screens at FS22
4		-626	Minor impacted rust at BF Field Splice - FB 80
5		-627	Lighting conduit + SUPport at FB77
6		-628	Impacted rust at corner of cross-girder 8 - NW Interior
7		-629	do
8		-630	1/4" vertical mis-aligment of transverse ID BF field splice w IR
9		-631	do
11		-633	Splice plate at fairing CG8 - South Side West
10		-632	WIND FERRING BTWN FB72/73, 6'x3" LOSS
12		634	" " AT FB71, FLAME CUT AT END OF PL
13/14		635/636	" " S. OF ID 29 10'x2" 100% SEC LOSS
15		637	" " TYP COND AT FB 68
16/17		638/39	CG 7, N.F. CABLE CAULK IN GOOD COND
18		640	BOT FL, W. GIR MIS. ALIGNED PL, N OF ID 28
19		641	BOT FL/ID 29 CON W. GIR I.R. 1/4" W/LOSS UP TO 1/8"
20		642	BTWN EGW GIR, N. ELEV ID 28
21		643	BTWN EGW GIR, ID 29 TYP. SPL DTL
22		644	BTWN CG7/ID27 AT FS 17, 1/4" MISALIGNED
23		645	BTWN ID 26/27, BY TUB, DECK PAN 20' S OF ID27
24-25		646-647	FB64, LAM RUST AT SPL W/NEG. LOSS
26/27		648-649	NAVIGATION LIGHT ON WEST SIDE AT MID SPAN
1	4/5/08	650	NAVIGATION LIGHT ON WEST SIDE AT MID SPAN (S. ELEV)
2		651	W. WIND FERRING SPL PL N. OF CG6
3		652	ID 25 BTWN E/W GIR. LEECHING ONTO ID FROM DECK
4		653	BTWN E&W GIR (WEST SIDE) LEECHING FROM DECK AT FS 16
5		654	NAVIGATION LIGHT ON WEST SIDE AT MID SPAN (S. VIEW)
6		655	CG 6, CABLES /GROUT IN TYP. GOOD COND.
7		656	W. WIND FERRING, LEECHING BY CG6
8		657	W. WIND FERRING, BTWN FB56/57, 2'x3" HOLE W/STAINING
9		658	W. WIND FERRING, S. OF FB 54, 8"L x 3"T
10		659	SHIP PASSING UNDERNEATH/CLEARANCE
11		660	W. WIND FERRING SPL AT CG 5, W/UP TO 1/2" I.R.
12		661	W. WIND FERRING LEECHING ONTO CG5
13		662	LEECHING THROUGH DECK, BY ID 23, BTWN GIR'S BY GIR WEST
14		663	TYP. COND OF FB, SHOT N. ELEV FB 55
15		664	TYP. COND. W. GIR. E. WEB SHOT BY FB55
16		665	DECK SPL AT FS14, UNDERSIZED BOLTS, ONE BOLT SHEARED OFF BY W. GIR
17		666	N OF CG5, W. GIR. E. WEB 3" Ø PLUG HOLE AT WEB TRANSITION
18		667	CG5, GAP BTWN CAULK & CABLES ON W. SIDE
19		668	W. WIND FERRING, 10'Lx3"T 100% SEC. LOSS, BY FB47
20		669	W. WIND FERRING, 25'Lx4" T SEC. OF PAPER THIN W/HOLED BTWN ID19/FB

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PHOTO LOG	JOB # 8710-07-0007	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C1	DATE: 4/5/08	CREW: BAK

	DATE	PHOTO #	PHOTO DESCRIPTION
21	4/5/08	C1-670	W. WIND. FERRING AT FB47 TYP. COND
22		C1-671	" " CG4 LEECHING FROM FERRING
23/24		C1-672/673	LIGHT ANCH CHOCK ASSEMBLY SOUTH OF ID 20, S. TOP NUTS LOOSE, SE ANCH ROD/NUTS [illegible]
25		C1-674	ID 18 BY W. GIR LEECHING FROM DECK
26		C1-675	MIS-ALIGNED FS 1/4" AT FS12 ON W. GIR.
1	4/7/08	C1-676	CG4, CR'S IN CAULK AT BOT
2		C1-677	LEECHING IN FERRING AT FB42
3		C1-678	100% SEC. LOSS. W. WIND FERRING BTWN ID 17 / FB40
4		C1-679	GEN. SHOT WIND FERRING BY FB40
5		C1-680	W. WIND FERRING, LEECHING AT ID 16
6		C1-681	W. WIND FERRING 100% SEC. LOSS 2'L x 4 1/2" H
7		C1-682	W. WIND. FERRING; DOUBLE DRILLED HOLE SCUPPER
8		C1-683	W. WIND. FERRING; LEECHING SIGNS AT BASE FB 35
9		C1-684	W. WIND FERRING; DAMAGED / MISSING SCREENING AT P2
10		C1-685	W. TUB JUST N. OF FB42, TYP. DRILLED HOLES
11		C1-686	W. ID 17, I.R. AT WEST SP 1/4"
12		C1-687	FB 40, LEACHING THROUGH DECK W/ MOD. RUST
13		C1-688	FB 39, 1/4" I.R. AT SP A AT WEST SIDE
14		C1-689	FB37, MISSING NUT AT FB37 BY W. GIR.
15		C1-690/91	N. ELEV. LOWER STRUT P2
17		C1-692	2 LOOSE NUTS ON W. DECK SPL BTWN ID15 / FB36
18		C1-693	LOOKING NORTH UNDER BRIDGE NE
19		C1-694	GEN. SHOT TOP OF WIND FERRING
20		C1-695	W. GIR. W. SIDE TYP. FB CON (ID 13 SHOT)
21		C1-696	TYP. SCUPPER CON. SHOT BTWN FB29/30 W. SIDE
22		C1-697	BTWN GIR.'S S. OF P2 CATWALK W/ MACHINARY
23		C1-698	FS9 BTWN GIR. BOT OF DECK
24/25		C1-699/700	S. ELEV OF P2, LOWER STRUT
26		C1-701	W. GIR./E WEB BOT. WELD IN GOOD COND.
27		C1-702	W. GIR./CG 3; LEECHING N. FACE
28/29		C1-703/704	W. GIR FASCIA BEAM MISALIGNED BOT FL AT SP
29/30		C1-705	W GIR. W. WEB, BOT CG3, REM STIFF / DRILLED HOLE
31/32		C1-706/707	CG 3, W. SIDE CR'S IN CALLK OF CABLES / INSTRUMENT WIRING
33		C1-708	W. GIR. E WEB 4 MISSING BOLTS W/ UP TO 1/4" I.R. BY ID11
34		C1-709	FB21, S. ELEV TYP. COND BTWN GIR (W. SIDE)
35		C1-710	W. GIR. E. WEB, 2"Ø & 3"Ø PLUGGED HOLES N. OF CG2
36		C1-711	W. GIRD / CROSS GIRDER 2 CONNECTION, PACK RUST @ SOUTH OF C.G. 2
37/38		C1-712/713	W GIRDER FB17, BENT BOTTOM FLANGE
38/39		C1-714	HOLE IN WEST SIDE OF CG. 1 FOR CABLES, NOT PLUGGED
	40	C1-715	CABLES FOR WEST SIDE OF CG-1
	41	C1-716	WEST MOST LOWER CABLE @ CG 1 GENERAL CONDITION
	42	C1-717	BTWN GIRDERS, FS 5, DECK SPLICE LEACHING
	43	C1-718	BTWN GIRDERS @ N SIDE ID8 304, LEACHING

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PHOTO LOG

TranSystems

JOB # P710070019	BRIDGE: HALE BOGGS	
CAMERA # C1	DATE: 4/	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
44		C1-719	BOTTOM OF LIGHT POLE BRACKET S. OF ID7 MISSING NUTS @ BTM of DECK
45		C1-720	BELOW LIGHT POLE BRACKET S. OF ID7, DIGEON DEBRIS
46		C1-721	FB14, N FACE, SLIGHT BEND IN BTM FLANGE @ SPLICE
1	4/8/08	C1-722	SCREENED HOLE, WEST GIRDER EXTERIOR, S. OF FB6
2		C1-723	W. GIRDER, LOOKING SOUTH, EXTERIOR FLOORBEAMS, @ FB6
3		C1-724	S ELEVATION, CG #1 WEST SIDE
4		C1-725	UNDERSIDE OF GIRDERS FROM SOUTH OF CG 1 LOOKING S
5		C1-726	W GIRDER, EAST EXTERIOR 2" ø HOLES @ END OF HOR. WEB SPLICE
6		C1-727	BTWN GIRDERS @ FS #3 UNDERSIDE OF DECK, LEACHING
7		C1-728	N. FACE OF ID4 GENERAL ELEVATION
8		C1-729	N OF ID2, DECK SPLICE, MINOR LEACHING
9		C1-730	UNDERSIDE OF DECK, LIGHT POLE ATTACHMENT, N. OF ID1, NO NUTS @ DECK
10		C1-731	LOOKING N. @ BRIDGE FROM PIER 15.
11		C1-732	LVC CRACK 2 1/4" E. TUB, E. GIRDER SIDE
12		C1-733	LVC CRACK 2 1/2" E TUB, E. GIRDER SIDE
13		C1-734	LVC CRACK 2 1/2" E TUB, E. GIRDER SIDE
1-3	4/9/08	C1-735-737	Underside of deck @ south end showing taper of box girders to accomodate ramps, looking N.
4-8		C1-738-742	W. Elev looking E
9		C1-743	W. Elev Tower 2
		C1-744	W. Elev Tower 3
11-15		C1-745-749	Tower 3 pier looking E
16-19		C1-750-753	Tower 3 pier looking W
20-22		C1-754-756	Pier 4 looking NW
23-26		C1-757-760	Pier 4 looking N W. end
27		C1-761	under bridge looking W. up River
28-30		C1-762-764	Tower 2 N. elev W. end
31		C1-765	Tower 2 N. elev E. end
32-35		C1-766-769	E. elev looking West of bridge

PHOTO LOG

TranSystems

JOB #	BRIDGE: Hale Boggs	
CAMERA # C2	DATE: 3/3 - 3/4	CREW: CRS / BS

DATE	PHOTO #	PHOTO DESCRIPTION
3/3	C2-1	Tobin ??
	C2-2	
	C2-3	
	C2-1	General View Tier 26 Looking North
	C2-2	General View Tier 26 Looking South
	C2-3	General View Tier 26 Looking South
	C2-4	General View Tier 26 Looking South
	C2-5	General View Tier 26 Looking North
	C2-6	100% Loss on Hatch Frame; West Hatch looking West
	C2-7	1/16" Loss x 10" around Kick Plate on South Side
	C2-8	100% Loss in Railing @ S.E Corner; Tier 26
	C2-9	General View Tier 26 Looking West
	C2-10	Tier 23 Cable Connect; Cable End Sheared off Bolt
3/4	C2-11	W. Column Tier 25; Tower 2; Leakage From Splice PL
	C2-12	Tier 25; West Column; Pier 2 Missing PL on Conduit
	C2-13	Tier 25; Cable Connect; Sheared off Bolt @ Cable Cap
	C2-14	Overall Shot; Cable Connect; Tier 25; West Column; Tower 2
	C2-15	" " " " " " "
	C2-16	" " " " Tier 24; " "
	C2-17	" " " " " " "
	C2-18	Tier 24; Cable Connect; West Tower; Pier 2; Sheared off Bolt
	C2-19	Typical Leakage; Const. Holes @ Tier 25 Floor w/ EFFlo on wall
	C2-20	Active Leak; Top of Strut w/ Moisture on Tier 23; W. Col. Pier 2
	C2-21	Moisture on Tier 23 From Leak @ Top of Strut; W. Col. Pier 2
	C2-22	Overall Top Strut Interior Tower 2
	C2-23	Overall Shot; Tier 25 Cable Connection; Tower 2; W. Column;
	C2-24	Gap in Brace PL; Tier 22 North Wall; Tower 2; W. Column
	C2-25	" " " " " " " "
	C2-26	(Typ) Tier 22 Light out w/ Missing Cover glass
	C2-27	Typical Rust Staining on Cell Wall Tier 21; W. Col Tower 2
	C2-28	Small gap at Splice w/ Staining Tier 19; W. Column Tower 2
	C2-29	Tier 19 Looking up @ Multiple Tiers (Typ); W. Column Tower 2
	C2-30	Tier 18; W. Column; Tower 2 Open Conduit Box
	C2-31	View Tier 17 Looking up; West Column Tower 2
	C2-32	Tier 17 Conduit w/ Missing Cover PL; West Column Tower 2
	C2-33	Tier 17-18 Staining / Dampness; Tower 2; West Column
	C2-34	Tier 15; W. Column; Tower 2 Gap @ Splice w/ EFFlo / Moist Staining
	C2-35	Tier 13; W. Column; Tower 2; Moisture From Base Tier 15
	C2-36	" " " " " "
	C2-37	Tier 11; W Column; Tower 2; Rust / Moisture Staining From Splice Gap
	C2-38	Tier 7; W Column; Tower 2; Rust Build-up @ cross web From Leak
	C2-39	@ Splice " " "
	C2-40	Tier 6; Rust Build-up @ Corner From Splice; West Column; Tower 2

PHOTO LOG	JOB # P710070019	BRIDGE: HALE BOGGS BRIDGE	
TranSystems	CAMERA # C2	DATE: 3/4 - 3/6/08	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
		41	Typical Moisture on Wall Tier 2 ; W. Column ; Tower 2
		42	Tier 1 Anchor Bolts ; West Column ; Tower 2
		43	S.W Anchor Bolts w/ Moisture @ Corner ; Tier 1 ; W. Col. Tower 2
		44	Heavy Pigeon Droppings ; Tier 1 ; West Column Tower 2
		45	Loose Conduit @ Tier 1 Near Stairs ; West Column Tower 2
1	3/5	46	Tower 3 E Column, SW Chamber splice plate and anchor bolt SW corner
2		47	SW Corner 5 " SHOWING TYPICAL CORNER WELD CONDITION
3		48	" " CENTER WEST CHAMBER WEST WALL → SHOWING HATCH
4		49	" " Tier 2 CENTER EAST CHAMBER, BROKEN LIGHT
5		50	" " Tier 2 SW BAY, SW Corner SHOWING RUST IN CORNER
6		51	" " Tier 3 " "
7		52	" " Tier 4 SW Bay, SW Corner splice plate rust
8		53	" " Tier 6 SW Bay SW corner, rust buildup at Floor
9		54	" " Tier 6 " " stiffener showing moisture
10		55	" " Tier 6 " " SW corner weld
11		56	Lower Strut, chamber 3 from East, Anchor bolts
12-13		57-58	Tower 3 E Col. Tier 7, SW chamber SW Corner, Showing rust & moisture
14		59	" " Tier 8 Center East chamber, conduit problems
		60	" " Tier 9 Center West chamber North wall, typ. condition
16		61	" " Tier 11 NE Bay, showing rust laminations, West wall
17		62	" " Tier 15 Center East Bay, Ceiling of Bay
18		63	" " Tier 15 N.W. Bay @ NW Corner, showing rust debris
19		64	" " Tier 17 S.W. Bay West wall, Typical Ext. Wall condition
20		65	" " Tier 19 Center West Bay, Splice plates showing Rust lamination
21		66	" " " South West Bay, Close up of corner showing staining from
22		67	" " " water
22		67	" " Tier 21 NW Bay N. Wall, Bottom of W-shape stiffeners supporting Lowest cable anchorage
1	3/6	1 C2-68	Injection Port in Cable ; Tier 22 E Column ; Pier 3
		2 C2-69	General Shot Tier 22 w/ cables ; E. Column ; Pier 3
		3 C2-70	General Shot ; Saddle Tier 23 ; E. Column Pier 3
		4 C2-71	Large Nest Tier 23 ; Tower 3 ; E. Column
		5 C2-72	Missing Bolt @ Cable Shield ; Tier 23 ; Tower 3 ; E Column
		6 C2-73	General Shot ; Saddle Tier 24 ; E. Column Pier 3
		7 C2-74	Injection Ports in Cables ; Tier 24 Saddle ; E. Colum ; Pier 3
		8 C2-75	Pigeon Droppings on S. Cables Tier 24 ; East Column ; Pier 3
		9 C2-76	Overall Shot, Saddle Tier 25 ; East Column ; Pier 3
		10 C2-77	Gap in Cable Cassing " " "
		11 C2-78	" " " " " "
		12 C2-79	Pigeon Droppings (Typical Floor Tier 25)
		13 C2-80	Barge From Tier 26 " Pier 3
		14 C2-81	Carey From Tier 26

PHOTO LOG	JOB # P710070019	BRIDGE: HALE BOGGS BRIDGE	
TranSystems	CAMERA # C2	DATE: 3/6, 3/7, 3/8/08	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
	15	C2-82	CTL working on Adjacent Cables
	16	C2-83	Top of Deck Looking North From Tower 3
	17	C2-84	Zoom in on Scott From Tower 3
	18	C2-85	Matt Johnson From Top of Tower 3
	19	C2-86	Corrosion @ West Hatch Pier 26 ; Tower 3 (Typ)
	20	C2-87	Navigation Light ; Pier 26 Tower 3
	21	C2-88	Typical Splice Chamber 3 Top Strut ; Pier 3
	22	C2-89	Typical View Center Bay Top Strut ; Pier 3
	23	C2-90	Bay 1 ; Top Strut ; Tower 2 ; Rust / EFFlo @ corner
	24	C2-91	Typical Floor of Bottom Strut Chamber ; Tower 2
	25	C2-92	Heavy Rust @ Splice in Chamber 1 ; Bottom Strut
	26	C2-93	up to 1/2" Loss on Splice Bolts on Floor/Wall ; Chamber 1
	27	C2-94	@ Bottom Strut Tower 2 "
		C2-95	Broken Railing / Losses to Kick Pl on Top of Bottom Strut ; Tower 2
		C2-96	" " " " " " "
		C2-97	Cap off Bottom of Nav. Light @ West Side
		C2-98	Typical View ; web Stiffeners Bay Pier 1 - ID1 ; East Box Girder
		C2-99	Typical Bay Looking South Pier 1 - ID1 ; East Box Girder
		C2-100	Collection of Rust @ Web-Base Angle @ Splice Between FB2-FB3 East Girder
		C2-101	Asphalt Debris in Bay ID1-ID2 East Box Girder
		C2-102	Drill Holes U/S Deck in Bay ID1-ID2 East Box Girder
		C2-103	Typ Field Splice Plates @ FS1 in Bay ID1-ID2
		C2-104	Cieling / US Deck (Typ) Bay ID2-ID3 ; East Box Girder
		C2-105	FB 4 Connection to West Web in Bay ID2-ID3 ; East Box G.
1	3/7/08	C2-106	BAY ID5-ID6, Plugs in holes on West web of E box girder
2		C2-107	BAY ID5-ID6, FS4, Deck Splice, missing nut at splice plate
3		C2-108	BAY ID5-ID6, STIffener to deck weld, undercut typical at several locations
4		C2-109	overall shot of bay ID6-ID7, looking north from ID6.
		C2-110	Drill Hole Near ID7 in bay ID7-ID8 W/Asphalt ; East Box Girder
		C2-111	2 Missing Bolts in Girder Base Near ID8 ; East Box Girder
		C2-112	Drill Hole Near ID8 in Bay ID7-ID8 ; East Box Girder
		C2-113	Asphalt Collection on Floor due to Drill Hol in U/S Deck
		C2-114	Angle PL horizontal Leg Not Flush w/ web Stiffener ; E. Girder ID1-ID2 @ FS1
	3/8/08 1	C2-115	Missing Bolt Holes Near ID8 In ID8-CG2 ; East Girder
	2	C2-116	Missing Nut / washer ; @ FS5 ; East Girder @ U/S Deck
	3	C2-117	Plug holes ; west Wast ; East Girder Near FS5
	4	C2-118	Gap in Stiffener From Splice Plate @ East Web ; East Girder @ FS5
	5	C2-119	No Weld @ Stiffener - orthotropic Deck Near CG2 in ID8-CG2 ; E. G.
	6	C2-120	Heavy Corrossion ; Exterior CG2 @ PL A/B Near East web ; East Girder
	7	C2-121	" " " " " " "
	8	C2-122	Light Rust W. Wall Bay 3 @ CG8
	9	C2-123	General Shot Bay 3 CG2 looking West

PHOTO LOG	JOB # P71007 0019	BRIDGE: HALE BOGGS BRIDGE	
TranSystems	CAMERA # C2	DATE:	CREW:

DATE	PHOTO #	PHOTO DESCRIPTION
3/8/08	C2-124	General Shot; Bay 2 Plate B/C corner Near Bay 1; CG 2
	C2-125	Empty Bolt Holes @ East Cable Anchorage to CG2
	C2-126	General Shot Cable Anchorage; East Cable; CG2
	C2-127	Rubber Seal Recently Repaired East Anchorage CG2
	C2-128	" " " " " " "
	C2-129	Water Leakage @ BTM Cable East Anchorage CG2
	C2-130	General Shot Splice Plate; Wall D CG2; Bay 4
	C2-131	General Shot Bay 4 Looking East; CG2
	C2-132	Angle B-C @ CG2 in Bay 4; Heavy Rust
	C2-133	General Shot; West Wall Bay 5 CG2
	C2-134	Bolt w/ Missing Nut; Bay 6 on R A CG2
21	C2-135	Moisture @ Base of CG 2; Bay 6
	C2-136	Loose Rubber / Falling out; West Anchorage CG2 (Top)
	C2-137	" " " " " " (Bottom
	C2-138	Leakage / Rust From Bottom Cable; West Anchorage @ CG2
	C2-139	Fabricated Hole 3" Ø West Anchorage; CG2
	C2-140	Plate A Exterior @ CG2 General Photo Splice Plate; W.G.
1	3/10/08 C2-141	Outside of Plate A) C.G.3, showing gap in splice connection. AT EAST GIRDER
	C2-142	Plugged holes in East wall of east box girder at end of connection.
	C2-143	Typical Field splice with flaking rust. West wall EAST GIRDER
	C2-144	Loose bolt in splice plate (FS 8). West web wall, EAST GIRDER
	C2-145	Typical web rust sheeting (East wall) EAST GIRDER
	C2-146	Collection of Rust From FS8 @ Base of web on Bolts; East web wall, EAST GIR
7-9	C2-147 - C2-149	Crack in Deck to Stiffener located 2 stiffeners north of ID12. Approximate Length is 1". EAST WALL of E. GIR.
10-11	C2-150 to C2-151	crack in Deck to Stiffener located 1 stiffener North of FB 29 (3/4" long) E. WALL E. GIR
12	C2-152	Top of floorbeam 29, looking North, general condition, E. GIR.
13-15	C2-153 to C2-155	1 1/2" crack in stiffener to Deck weld, 1 stiffener North of ID13. E. WALL, E GIR
16-18	C2-156 to C2-158	1" crack in stiffener to deck weld, 1 stiffener North of FB 31, E. WALL, E. GIR
19-22	C2-159 to C2-162	3/4" crack in stiffener to deck weld, 1 stiff. S of ID14, E. WALL, E. GIR
23	C2-163	Floor showing sand and rust debris EAST GIR.
24	C2-164	Typ. West web wall, E. GIR.
25	C2-165	Broken cable tray, E. GIR.
26	C2-166	Typ condition ID14 E. GIR.
27	C2-167	Loose bolt in FS9, West web wall, E. GIR.
28	C2-168	Typical Sheet / Flake rust being accumulated on walls and top of stiffeners, E. GIR
29	C2-169	Typical condition of deck plate, E. GIRDER
30	C2-170	E Girder, at tower 2, Looking North
31-32	C2-171 to C2-172	Anchor bolts at tower 2 from inside E. Box Girder
33-34	C2-173 to C2-174	Crack in stiffener, at West wall of east girder 1st stiffener N of T. 2
	C2-175	loose bolt in west web wall splice (FS 10), E. GIRDER
	C2-176	Two bolts missing in splice plate S. of F.S. 10 EAST WALL, E. GIR.
	C2-177	Typ. location, square bolt pattern missing bolts (occurs at (3) locations in bay) E. GIR.

3 of 33

PHOTO LOG	JOB #	BRIDGE: Hale Boggs Bridge	
TranSystems	CAMERA # C2	DATE: 3/10-3/11/08	CREW: CRS/CTY

DATE	PHOTO #	PHOTO DESCRIPTION
3/10/08	C2-178 to	C2-180 Crack in stiffener to deck weld, E Gird. E Wall, 1st stiffener
		N. of ID 15
	C2-181	Elevation of ID 15 Looking South, E. Gir
3/11/08 1	C2-182	Small crack; Deck-Web Stiffener N. of FB 37; East B.G.; East web
2	C2-183	" " " " " "
3	C2-184	" " ; " N. of FB 38 ; " "
4	C2-185	" " " " " " (close-up)
5	C2-186	Small crack; Deck-Web Stiffener weld; N. of ID 16; E. B.G.; East Web
6	C2-187	" " " " " "
7	C2-188	Small crack; Deck-web stiffener weld; N. of FB 39; E.B.G.; East Web
8	C2-189	" " " " " " "
9	C2-190	Deep undercut; Deck-web Stiffner weld; N. of FB 39; E.B.G.; West web
10	C2-191	Small crack; Deck-web stiffener weld; N. of FB 40; E. B.G.; East Web
11	C2-192	" " " " " " " "
12	C2-193	Small crack; Deck-web stiffener weld; S. of ID 17; E.B.G.; East web;
13	C2-194	only on North side of weld "
14	C2-195	Typical Accessible Wind Festing; B/T ID 16 - FB 39; E.B.G.; East Web
15	C2-196	Small Crack; Deck-Web stiffener weld; N. ID 17; E.B.G.; East Web
16	C2-197	" " " " "
17	C2-198	1/8" Impact Rust btwn Deck + R. + South side of St. S of FB 41; E.B.G.; East Web
18	C2-199	" "
20	C2-201	Missing plug @ hole; diagonal splice; E.B.G., East Web; btwn FB 41-42
21	C2-202	Typical A-B corner @ East Wall Bay 4 CG4; Light Rust Staining
22	C2-203	Bay 3; CG4; Typical Debris Build-up @ Bottom Angle
23	C2-204	CG4; East Cable Anchorage; Leaking From Cable Stay Ends
24	C2-205	" " " " " " "
19	C2-200	Plate @ U/S Deck starting @ S. Stiff. From FB 41; E.B.G.
25	C2-206	CG4; East Cable Anchorage; Leaking / Loss @ Cable Stay End; Bay 2
26	C2-207	Upper Cable Bay 2 @ CG4; East Anchorage / Efflo / Leakage
27	C2-208	Upper Cable Bay 1 @ CG4; East Anchorage; Leakage @ cable end
28	C2-209	Lower cable; Bay 1; CG4; East Anchorage; Leakage / Loss @
29	C2-210	Cable-Stay End " " "
30	C2-211	Leakage Through Bay 1 CG4; East Anchorage; Lower Cable R's
31	C2-212	Loose Bolts Bay 3; CG4 @ East Wall
32	C2-213	RAT!!
33	C2-214	CG4 Bottom Cable; West Anchorage / Leakage; Bay 8
34	C2-215	" " " " " / Cable Stay End Leakage; Bay 8
35	C2-216	Padding Falling out CG4 Bay 8 West Anchorage / Bottom Cable
36	C2-217	CG4 Top Cable; West Anchorage / Efflo; Bay 8
37	C2-218	CG4 Bottom Cable; West Anchorage / Bay 9 - Leakage
38	C2-219	" " " " "
39	C2-220	" Top " " " - Padding Falling out
40	C2-221	Loose Bolts; Bay 7 CG4 West Wall

PHOTO LOG	JOB #	BRIDGE: Hale Boggs Bridge	
TranSystems	CAMERA # C2	DATE: 3/11/08	CREW: CRS/CTY

DATE	PHOTO #	PHOTO DESCRIPTION
3/11/08 41	C2-222	2 Missing Bolts Plate A CG4 Bay 6 Top
42	C2-223	Sheared Bolt @ bottom Plate D CG4 Bay 5 bottom
3/12/08	C2-224	EAST BOX; FS12 2 BOLTS UNDERTHREADED @ EAST WEB (BTWN CG4 & ID18)
	C2-225	EAST BOX; FS12 1 BOLT MISSING @ WEST WEB (BTWN CG4 & ID18)
	C2-226	EAST BOX, EAST WEB UNDERCUT WELD @ TOP FLANGE/STIFFENER (CG4/ID18)
	C2-227	EAST BOX, EAST WEB MISSING BOLT @ TOP FLANGE (CG4 - ID18)
	C2-228	EAST BOX, EAST WEB CRACK IN 1ST STIFF. WELD SOUTH OF ID19 (ID18 - ID19)
	C2-229	" " " " " " "
	C2-230	" " " " " "
	C2-231	EAST B.G. - EAST WEB CRACK @ STIFFENER PROP. INTO BASE METAL
	C2-232	" " " " " " " " "
	C2-233	EAST B.G. - EAST WEB CRACKS IN WELD @ 1ST STIFF NORTH OF ID19 (S. SIDE)
	C2-234	" " " " " " (N. SIDE)
	C2-235	EAST BG - EAST WEB CRACKS @ 1ST STIFF, WELD N OF ID19 PROP 1 7/8" INTO BASE ON SOUTH
	C2-236	" " " " " " ", BOTH CRACKS PROP INTO BASE METAL
61	C2-237	MEDIUM GRAINED/FLAKING RUST UP TO 10" ALONG LONG STIFF, EBG BTWN ID19-20
	C2-238	EAST BG - EAST WEB CRACK @ 1ST STIFF WELD N of FB 47; NO PROP.
	C2-239	EAST BG - WEST WEB GAP BTWN TOP FLANGE/DECK & SPLICE PLATE @ FS13
	C2-240	EAST BG - WEST WEB GAP BTWN TOP FLANGE/DECK & SPLICE PLATE w/ UNDERTHREADED BOLT @ FS 13
3/13/08	C2-241/242	CRACK IN C.G. 5. CRACK IS LONGITUDINAL ALONG WELD LENGTH OF 2'6"
	C2-243/244	6/8 UNDERTHREADED BOLTS WITH 1 LOOSE BOLT, C.G. 5 BAY 7, NEAR W. WALL
	C2-245/6	C.G. 5 BAY 8 WEST ANCHORAGE, TOP CABLE LEAKAGE AT CABLE STAY ℄
	C2-246	" BAY 9 WEST ANCHORAGE, TOP CABLE
	C2-247	C.G. 5 BAY 1, EAST ANCHORAGE, PLATE D, SHOWING WATER DRIPPING FROM CABLE
	C2-248	C.G. 5, BAY 1, EAST ANCHORAGE, BOTTOM CABLE, LEAKING WATER
3/14/08	C2-249	CG6, BAY 3; WEST WALL; 1 1/4" VERTICAL H.L. CRACK @ STIFFENER WELD
	C2-250	" " " " "
	C2-251	CG6, WEST END ANCHORAGE, TOP CABLE, MISSING BOLT IN COVER PLATE.
	C2-252	CG6, WEST END ANCHORAGE, BOTTOM CABLE, MISSING RUBBER SEAL AND LEAKAGE
	C2-253	E GIR, FS16, West wall stiffener splice, MISSING BOLT
	C2-254	E GIR, FS16, LOOSE BOLT IN EAST WALL WEB SPLICE
	C2-255	E GIR, FS16, LOOSE BOLT IN DECK SPLICE PLATE
	C2-256	E GIR, GENERAL SHOT ID25 - ID26
	C2-257	"TEXT" ID26 & BRIDGE E. GIRDER
	C2-258	(TYP) 2 BOLTS @ STIFF/FLANGE WELD; E. GIRDER/W. WEB B/T ID26-ID27
	C2-259	MISSING BOLT IN E. Girder, West web splice plate, stiffener splice.
	C2-260	C.G. 7 East Anchorage, Plate B, WATER OF FLOW FROM LEAKING CABLE ANCHORAGE
	C2-261	C.G. 7 EAST ANCHORAGE, LOWER CABLE, WATER LEAKAGE & LIGHT RUST

PHOTO LOG

JOB #	BRIDGE: HALE BOGGS	
CAMERA # C2	DATE: 3/15/08 –	CREW: CRS/CTY/SGB

TranSystems

DATE	PHOTO #	PHOTO DESCRIPTION
3/15/08	C2-262	E. GIRDER @ PIER 3 DIAPHRAM BFI ; CONDUIT RUBBING AGAINST HOLE
3/15/08 2	C2-263	E. GIRDER - EAST WEB, 1ST STIFFENER SOUTH OF ID39, CRACK @ TOP WELD
3	C2-264	" " " " " "
4	C2-265	E. GIRDER - EAST WEB, 2ND STIFFENER SOUTH OF ID40, CRACK @ TOP WELD
5	C2-266/267	E GIRDER, EAST WEB, STIFFENER BETWEEN FB95 & FB96. CRACK @ TOP OF STIFFENER
		TOTAL LENGTH EXTEND 7/8" ON NORTH & 1 1/8" ON SOUTH SIDE OF STIFFENER
8	C2-269	E. GIRDER, EAST WEB, 2ND STIFFENER SOUTH OF ID40, CRACK PROPAGATED 3/4" INTO FLANGE
9	C2-270	E. GIRDER, EAST WEB @ FS 25 NUTS @ NORTH FLANGE PLATE UNDERTHREADED
10	C2-271	" " " " " " " "
11	C2-272	" " " " " " "
12	C2-273	E. GIRDER, EAST WEB @ FS 25, GAP BTWN FLANGE & SPLICE PLATE
3/17/08 1	C2-277	E. GIRDER, EAST WEB B/T EG7-ID28, 1/2" LONG CRACK ~~PROP. FROM~~ CRACK ARREST HOLE
2	C2-278	" " " "
3	C2-279	E. GIRDER; WEST WEB; @ FS18 / 1ST & 2ND STIFF. DOWN FROM FLG. 3 NUTS CUT
4	C2-280	DUE TO CLOSENESS TO STIFFENER " "
5	C2-281	E. GIRDER; EAST WEB; 1ST STIFF N. of FB72 / 3/8" LONG CRACK PROP. FROM WELD
6	C2-282	" " " " "
7	C2-283	SAMPLE PIECE / UP TO 1/8" RUST @ 3FT² AREA @ BASE; E. GIRDER; BETWEEN FB73 - ID31
8	C2-284	2 LOOSE BOLTS AT GIRDER SPLICE; EAST GIRDER; W. WEB BET. ID31 - C6-8
9	C2-285	CG8 EAST ANCHORAGE BOTTOM CABLE / MISSING RUBBER SEAL
10	C2-286	CG8 " " " " / LEAKAGE FROM CABLE END
11	C2-287	CG8 CENTER SPLICE AT RD 1/8" B/T L PL and BASE SPLICE PLATE
	C2-288	" " " " "
	C2-289	WELD CRACK X FULL HEIGHT OF WELD; CG8 BAY 6 AT EAST WALL
	C2-290	CG8 WEST ANCHORAGE; BAY 8; BOTTOM CABLE / LOOSE RUBBER; LEAKAGE
	C2-291	CG8 " " ; BAY 9 ; " / LEAKAGE
	C2-292	FB 73 IN EAST WIND FERRING COVER PL w/ UP TO 1/8" BEND
	C2-293	" " " " " "

PHOTO LOG

JOB #	BRIDGE:	
CAMERA #	DATE:	CREW:

TranSystems

DATE	PHOTO #	PHOTO DESCRIPTION
3/18	1 C2-294	BOWING IN W. FERRING B/T FB 61-62 ; EAST SIDE
	2 C2-295	TD 25 ; EAST WIND FERRING ; UP TO 3/16" GAP @ DIAG. BRACE / GUSSET
	3 C2-296	" " " " "
	4 C2-297	BOWING IN W. FERRING B/T FB61-62 ; EAST FACE
	5 C2-298	UP TO 1/8" BEND @ FB 63 ; BTM FLNG. EAST W. FERRING
	6 C2-299	Missing bolt on E. Web near floor just N. of FB 75 E.B.G.
	7 C2-300	Bolt sheared off of PL @ underside of deck South of Stiff. that is S. of FB 76 E. Web E.B.G
	8 C2-301	Plate deflected 1/16" + bolt head down 1/4" at underside of top long. St. @ FS. 20 E web E.B.G.
	9 C2-302	Nut backed off from bolt 1/2" @ underside of deck FS 20 E side E.B.G. Tar leaking through
	10 C2-303	Bolt sheared off @ Floor FS. 20 btwn 2 East St. on floor E.B.G.
	11 C2-304	2ND STIFF S. ID 34 CRACK @ WELD W/ FLANGE E. GIRDER ; E. WEB
	12 C2-305	" " " "
	13 C2-306	" " " "
	14 C2-307	" " " "
	15 C2-308	HORIZONTAL STIFF. WELD ; E. GIRDER ; W. WEB B/T ID34 - CG9
	16 C2-309	FB 85, EAST CANTILEVER SPLICE, 2 ATTACH FLANGE BENT
	17 C2-310	" " " " "
3/19	1 C2-311	EAST BOX GIRDER EAST WEB CRACK @ 1ST STIFF SOUTH OF ID36 ; DROP INTO FLANGE
	2 C2-312	" " " " "
	3 C2-313	INTERIOR EAST WIND FERRING ; END OF FERRING NEAR PIER 3
	4 C2-314	" " " " SCREENING MISSING @ OPEN END ALLOWING PIGEONS INTO FERRING
	5 C2-315	" " " " HEAVY BUILD-UP OF DEBRIS (MOSTLY PIGEON EXCREMENT
	6 C2-316	" " " " ; TYPICAL DEBRIS ALONG FERRING RIBS
	7 C2-317	" " " ; TYPICAL INTERIOR OF FERRING
	8 C2-318	" " " ; TYPICAL FERRING / FASCIA
	9 C2-319	" " " ; TYPICAL DECK / FB SPLICE IN FERRING
	10 C2-320	" " " ; TYPICAL LOWER FERRING / GIRDER CONNECTION
	11 C2-321	; TYPICAL CRACK ARREST HOLES @ BOX GIRDER SPLICE
	12 C2-322	; TYPICAL BOX GIRDER / CROSS GIRDER CONNECTION
	13 C2-323	E.B.G / EAST WEB @ 1ST STIFFENER NORTH OF ID36 - CRACK @ TOP WELD DROP INTO FLANGE
	14 C2-324	" " " " " " " " " "
	15 C2-325	" " " " " " " " " "
	16 C2-326	EAST BOX GIRDER ; INSTRUMENTATION ATTACHED TO U/S FLANGE NEAR FB90
	17 C2-327	" " " " " " "
	18 C2-328	EBG - DISCONNECTED CONDUIT NEAR EAST WEB @ FB90
	19 C2-329	EBG / EAST WEB TOP WELD @ 1ST STIFF SOUTH OF ID42 CRACKED ; DROP INTO FLG
	20 C2-330	" " " " " " "
	21 C2-331	" " " " " "
	22 C2-332	" " " " " "
	23 C2-333	CABLE TRAY MISSING COVER ; E. BOX GIRDER B/T ID42-43
	C2-334	EBG / EAST WEB TOP WELD @ 2ND STIFF NORTH OF ID43 CRACKED ; PROP INTO FLANGE
	C2-335	" " " " " "
	C2-336	" " " " " "

PHOTO LOG	JOB # P710070019	BRIDGE: Hale Boggs	
TranSystems	CAMERA # C2	DATE: 3/19 / 3/20 3/21 / 3/24	CREW: SWB/CRS/CTY/SGB/WRW

DATE	PHOTO #	PHOTO DESCRIPTION
3/19/08	C2-337	POROSITY C CROSS GIRDER WELD BTWN PLATES B&C - CROSS GIRDER 11
	C2-338	EBG. WEST WEB 1/2" GAP AT TOP FLANGE ; 1ST STIFF N. ID 44
	C2-339	EBG ; EAST WEB ; 1ST STIFF S. ID 45 CRACK 1/8" PROP INTO FLANGE
	C2-340	" " " " " " "
	C2-341	EBG ; EAST WEB ; 1ST STIFF N. FB107 CRACK / 3/4 PROP. INTO FLANGE AT SOUTH
	C2-342	" " " " " " "
3/20/08	C2-343	Wes
	C2-344	E.B.G. E.ST, 1st Stiffener N. ID45, Crack in weld prop. into Flange 1" B.S.
	C2-345	" " " "
	C2-346	Crack in weld Prop into FL 1" N., 3/4" S. St. N. FB110 E.B.G. E. Face
	C2-347	Crack in Welds and FL @ St. N. of FB109 E.B.G. E. side
	C2-348	" " " "
	C2-349	No weld btwn top of long. weld st. (4 from bottom) and N. side ID 46 E side E.B.G.
	C2-350	" " " "
	C2-351	Bull pin stuck in bolt hole plate B. connection
	C2-352	Rust on sockets and leak on bottom
	C2-353	Bolt cut off by torch on plate B connection
	C2-354	Two bull pins stuck in bolt holes plate B connection
	C2-355	Melted/Torched Bull pin remaining in bolt hole Bay 7 RB East End CG12
	C2-356	Debris accumulated in bottom CG12 at E&W ends up to 4"
Fri 3/21/08	C2-357	Crack @ top of St. N. FB119 E.B.G. E side prop. 1" into FL S. side, 1/2" into FL N. side.
	C2-358	Typical Tub Framing E.B.G. btwn ID51 & Pier 1N
	C2-359	" "
	C2-360	" "
	C2-361	" "
	C2-362	" "
	C2-363	" "
1-13 3/22/08	C2-364-376	EXP. JT AT N. END BY P1N, ON E. SIDE ON NB
14 3/24/08	C2-377	W. TUB, BTWN P1S, AND ID1, TYP. ELEV FB1
15	C2-378	" " TYP. UNDERSIDE OF DECK
16	C2-379	" " ON BOT FL AT STIFF INT. SLAG MAT (WELD INCREASED COND)
17	C2-380	" " BY W. WEB AT P1S DIA. 6" x 1" T x 1/4" LAMINATE
18	C2-381	W. TUB, TYP. Debrie on N side field splice plate FS1
19	C2-382	" " " Debrie at base of west web splice plate FS1
20	C2-383	" " " condition of west web splice plate (east web splice pl similar), FS1
21	C2-384	" " Stiffener N. ID2 on west web top weld north side crack 1/2"
22	C2-385	" " Stiffener N. ID2 on west web top weld south side " "
23-25	C2-386-388	W. TUB, FB5, N. ELEV. TYP. COND.
26-30	C2-389/393	W TUB, BTWN ID 3-4, W. WEB. CR AT 1 STIFF N ID3, 3 1/2" IN FL
31	C2-394	" " TYP. MULTIPASS ON WELD

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PHOTO LOG	JOB # P701070019	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C2	DATE: 3/25	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
	3/25/08	C2-395	Missing bolt CG#1 W. plate
		C2-396	missing bolt west stiff. E
		C2-397	West Stiff 1st stiff N. FB 12 crack in weld S.S.
		C2 398	" " N.S.
		C2-399	Crack in weld Disp. 1½ south and 2" North into flange 1st stiff N FB 15
		C2-400	ID 7 N. face E.S., very top at deck connection incomplete weld.
1	3/26/08	C2-401	PIER 2 PIN UPPER, AT WEST TUB, W.E.
2-4		C2-402-404	WEST TUB, W. WEB, 2nd STIFF N OF ID 8, 3½" CR INTO BASE PAST WELDS
5		C2-405	" " FS 5 LT DEBRIS ALONG BOT FL.
6-9		C2-406-409	WEST TUB S. ELEV. CG 2 (GEN SHOT) (W. WEB, CG 2, E WEB)
10		C2-410	WEST TUB BTWN CG 2/ID 9 GEN SHOT BTM OF DECK
11		C2-411	" " FS 6 GEN SHOT OF WEB/FS
12		C2-412	WEST TUB BTWN ID 9/10, TYP. LT DEBRIS ON FLOOR/LAM. RUST
13		C2-413	" " TYP. LAM. RUST ALONG WEBS
14		C2-414	" ", FB 21, W. WEB POROSITY IN WELD BTWN TOP FL & WEB
15-16		C2-415-416	" ", 2 STIFF N. OF ID 9, 4" CR TOT (NEG) IN BASE METAL
17-19		C2-417-419	" " BTWN ID-10/11, 1 STIFF N ID 10, 2" CR. INTO B.M.
20		C2-420	" " TYP LT DEBRIS ALONG FLOOR/LAM RUST
21		C2-421	" " BTWN ID 11/CG3 TYP. UNDERSIDE OF DECK
22		C2-422	" " TYP. FB COND FB 25 N. ELEV SHOT
23		C2-423	" " TYP. FLOOR COND. LT DEBRIS
1-4	3/27/08	C2-424-427	WEST TUB, E. WEB, AT FS4, CR FULL DEPTH ENTERING STRESS RELIEF
5		C2-428	WEST TUB, W. WEB, 1 STIFF S. OF CG3 ¼" GAP BTWN STIFF/TOP FL
6		C2-429	WEST TUB, BTWN CG3 & ID 12, MOD. LAM. RUST ON WEB (NEG LOSS)
7		C2-430	" ", LT DEBRIS ALONG BOT FL.
8		C2-431	" " BTWN ID 12/13 TYP. MOD. LAM. RUST ON WEBS
9		C2432	" " TYP. MOD LT/MOD DEBRIS ON BOT FL.
10		C2-433	" " TYP. MULT. PASS WELD. SHOT W. WEB/TOP FL
11		C2-434	WEST TUB BTWN ID 13/14 TYP COND. BOT OF DECK P.P.
12		C2-435	" " TYP. LT ~~RUST~~ LAM. RUST ALONG WEB
13-16		C2-436-439	" " 1st STIFF N OF ID 13, W. WEB 2½" CR IN BASE METAL
17		C2-440	WEST TUB BTWN ID 14, P2 TYP. MOD DEBRIS ON BTM FL
18		C2-441	" " TYP. MOD. LAM RUST ALONG WEBS
19		C2-442	" " N. ELEV FB 33
20		C2-443	" " S. ELEV P2
21-22		C2-444-445	WEST TUB, INT OF P2, WEST CHAMBER TYP. COND

PHOTO LOG

TranSystems

JOB # P701-07-0019	BRIDGE: HALE BOGGS	
CAMERA # 2	DATE: 3/28 - 4/1	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
1	3/28/08	C2-446	WEST TUB BTWN P2 ID 15, TYP MOD. LAM. RUST ABOVE STIFF ~6"
2		C2-447	" " TYP LT DEBRIS & MOD. LAM RUST ALONG BTM PL
3-4		C2-448/49	" " N. OF FS 10 MISSING WELD ALONG SP. PL STIFF
5		C2-450	" " S. OF FS 10 POOR WELD BTWN SP PL / STIFF
6-9		C2-451-454	" " N. OF FB 35 3½" CR BTWN LIFT, LUG & DECKPAN
10		C2-455	Light sheeting E. web, W. TUB BTWN ID 15/16
11		C2-456	W. TUB, BTWN ID 15/16, N. ELEV FB 37
12		C2-457	W. TUB BTWN ID 16/17 TYP. 4 HOLES UNDER STIFF.
13		C2-458	" " TYP. UNDERSIDE OF DECK
14-15		C2-459/60	W. TUB BTWN ID 17 / CG4, E. WEB, N. OF SPL 2 LOOSE BOLTS
16-19		C2-461-464	" " E. WEB CR. IN STRESS RELIEF HOLE NO PROP.
20		C2-465	" " N. ELEV. OF ID 17.
21		C2-466	W. TUB, W. WEB ABOVE CG4 (SLIGHTLY NORTH) ABRASION DIST BTWN STIFF/TOP PL
22		C2-467	W. TUB, BTWN CG4 & ID 18 N. ELEV CG4
1	3/29/08	C2-468	W. TUB BTWN CG4 & ID 18, W. WEB / TOP FF MULTIPLE PASS / DIS CONT.
2-4		C2-469-471	W. TUB 3' N. OF ID 18, NEAR W. WEB 1½" CR BTWN LIFTING LUG & DECKPAN
5-8		C2-472-475	W. TUB, W. WEB BTWN ID 18/19, 2ND STIFF N. ID 18 3½" B.M CR
9		C2-476	" " BTWN ID 18/19 TYP. FLOOR COND
10		C2-477	" " TYP. WEB COND (E. WEB SHOT)
11		C2-478	W. TUB BTWN ID 19/20, S. ELEV ID 20
12		C2-479	" " TYP BOT OF DECK
13-16		C2-480-483	" " W. WEB, 1ST STIFF N. FB 47, 4¾" CR B.M.
17		C2-484	W. TUB BTWN ID 18/19, W. WEB, LONG STIFF BENT ~ ¾" NEAR ID 19
18-19		C2-485-486	W. TUB BTWN ID 20 - CG5; E. WEB CR INTO HOLE 1½" TO S. OF CG5
20-21		C2-487-488	" " W. WEB CR INTO HOLE 1¾" " "
22		C2-489	" " ~~TO~~ N. OF ~~FS~~ FS 13 MISSING BOLTS
23		C2-490	" " GEN SHOT OF W. WEB.
24		C2-491	" " W. WEB FS 13 GEN SHOT
1	3/31/08	C2-492	General shot W. Girder, C.G. #5 looking South
2/3		C2-493/494	Crack in stiff to deck weld btwn FB 52/53 1½" BM South 7/8" BM N. W. Gir. / W. WEB
4		C2-495	W. GIR. ID 21, LOOKING SOUTH
5/6		C2-496/497	W. GIR., W WEB, 1 STIFF. S. OF FB 54, 3⅜" CRACK IN STIFF TO DECK WELD
7-8		C2-498/499	W GIRDER, WEST SIDE OF DECK, 2½" TOTAL LENGTH CRACK IN LUG TO DECK WELD
9		C2-500	W GIRDER ACCESS DOOR TO WIND F. BROKEN HANDLE
10		C2-501	W GIRDER, N. FACE OF FB 56
11		C2-502	W Girder, South Face C.G. 6 General Condition
12		C2-503	W Girder, E. Web Splice with C.G. 6
1	4/1/08	C2-504	W Girder, W Wall FB 59 SPLICE, MISSING TWO BOLTS
2		C2-505	W Girder, E Wall, N of ID 25
3		C2-506	W GIRDER, E WALL AND FLOOR NEAR ID 27
4		C2-507	W GIRDER WEST WALL 3"Φ PLUG @ END OF HORIZONTAL STIFFENER
5		C2-508	W GIRDER, WEST WALL, MISSING FOAM ROLL TO PLUG HOLE
		C2-509/510	W GIRDER, DECK, LIFTING LUG WELD CRACK APP. 1¾" IN W.M.

PHOTO LOG

JOB #	BRIDGE:	
CAMERA #	DATE:	CREW:

	DATE	PHOTO #	PHOTO DESCRIPTION
	4/1/08	C2-511	W. GIRDER, UNDERSIDE OF DECK, NEAR ID 29
1	4/2/08	C2-512	BROKEN CONDUIT BRACKET ATT STIFFENER, W GIRDER
2		C2-513	W GIRDER, NORTH FACE C.G. #8
3		C2-514	W GIRDER, WEST SIDE, MISSING NUT @ DIAGONAL STIFFENER
4		C2-515	W. GIRDER, EAST WEB, SOUTH OF FB 77, RUST SHEETING @ STIFFENER
5		C2-516	W. GIRDER, UNDERSIDE OF DECK, SOUTH OF FB. 78.
6		C2-517	W. GIRDER, FLOOR @ ID 33, SHOWING RUST SHEETING
7		C2-518	W GIRDER, ACCESS TO WIND FERRING, NORTH OF ID 33.
8		C2-519	W GIRDER, W WEB, BROKEN WELD TIP @ STIFFENER TO DECK WELD
9		C2-520	W. GIRDER, W. WEB SPLICE GENERAL ELEVATION
10		C2-521	W GIRDER, W WEB, BROKEN CONDUIT BRACKET
11		C2-522	W GIRDER, S. FACE F.B. 87 GENERAL ELEVATION
1	4/3/08	C2-523	W GIRDER, FS23, W. WEB, TOP HOR. STIFF. SPLICE IS BENT
2-4		C2-524/526	W GIRDER, LIFTING LUG ATTACHED TO DECK, CRACK IN WELD (2 3/4" LONG)
5		C2-527	W GIRDER, SOUTH FACE ID 38, BROKEN LADDER RUNG
6		C2-528	W GIRDER, E WALL ELEVATION JUST SOUTH OF FB 91.
7		C2-529	W GIRDER, W WALL, RUST SHEETING, N OF FB 93
8-9		C2-530/531	W GIRDER 3 1/4" B.M. CRACK IN LUG TO DECK WELD
10-12		C2-532/534	W GIRDER 5" BM CRACK IN STIFF. BTWN FB95 & FB96 (WEST WALL)
1	4/4/08	C2-535/536	W GIRDER, WEST WALL, SOUTH OF CG10, POOR WELD @ BRACKET
3		C2-537	W GIRDER, UNDERSIDE OF DECK @ FS 25, GENERAL CONDITION
4		C2-538	W GIR., BTWN CG10/ID41 LT DEBRIS W/MOISTURE ON BOTTOM BY WELD
5		C2-539	" " FS26, DECK PAN SPL DETAIL
6		C2-540	W. GIR BTWN ID41/42, N. ELEV FB100
7-9		C2-541-543	" " CR. 1ST STIFF N. OF FB101 4"
10-13		C2-544/547	W GIR 3" CRACK IN BM OF WELD BETWEEN LUG AND DECK
14		C2-548	W GIRDER, WEST WEB SPLICE, BOLTED SPLICE PLATE
15		C2-549	W GIRDER, WEST WEB, MISSING FOAM PLUG
16-19		C2-550/553	W GIRDER @ CG11, WEST SIDE, RUST AT CROSS GIRDER AND SPLICE
20		C2-554	W GIRDER, SOUTH FACE OF ID44, RUST SHEETING
21		C2-555	W GIRDER, MODERATE RUST ON FLOOR N OF ID44
22-25		C2-556/557	W GIRDER 2 1/4" BM CRACK IN LUG TO DECK WELD N OF FS 107
1-4	4/5/08	C2-558-561	W. GIR, W. WEB S. OF CG11, CRACKS GOING TO STRESS RELIEF HOLES (FULL DEPTH)
5-7		C2-562-564	W. GIRDER, W. WEB, 1ST STIFF N. OF ID45, 4 1/4" B.M. CR.
8		C2-565	W. GIR. BTWN ID45/46, TYP. COND./N. ELEV FB110
9		C2-566	W GIRDER, WEST FB 111/WEB/STIFF. WELD INTERSECTING WELD
10		C2-567	W GIRDER, EAST WEB, CRACK GOING INTO STRESS RELIEF HOLE.
11		C2-568	W GIRDER BOLTED & WELDED CONNECTION @ FB 112
12		C2-569	W GIRDER, W WALL, N OF ID46, RUST SHEETING
13		C2-570	W GIRDER, E. WEB, PIGEON DEBRIS
14		C2-571	W GIRDER, E WEB DIAGONAL SPLICE, DRIFT PINS INSTEAD OF BOLTS
15		C2-572	FLOOR OF BAY @ PIER 4 CONNECTING EAST & WEST GIRDERS

PHOTO LOG

JOB #	BRIDGE: Hale Boggs	
CAMERA #	DATE: 4/8/08	CREW: BRC/BS/CTY/MJJ

Tran Systems

	DATE	PHOTO #	PHOTO DESCRIPTION
16	4/5/08	C2-573	
17		C2-574	
18		C2-575	BENT LADDER RUNG @ PIER 4 WEST GIRDER, N FACE OF DIA., EAST SIDE
19		C2-576	WEST GIRDER, TOP OF CROSS GIRDER 12, NW SPLICE, MISSING BOLT.
20		C2-577	W. GIRDER, WEST SIDE TOP OF CG12, PACK RUST
21		C2-578	W GIRDER, EAST WALL DIAGONAL SPLICE, 2 MISSING BOLTS
22-23		C2-579/580	W GIRDER, CONDUIT ATTACHMENT TO WEST WALL, SHOWING ABRASION
24		C2-581	W GIRDER, EN WEB, ELEC. JUNCTION BOX MISSING BOLTS
25		C2-582	W GIRDER, FLOOR BENT LONG. STIFFENER
1-2	4/7/08	C2-583/584	I-310 SOUTHBOUND TRAFFIC CONTROL, CHANGEABLE MESSAGE BOARD
3		C2-585	I-310 SOUTHBOUND TRAFFIC CONTROL, ROAD WORK AHEAD SIGNS
4		C2-586	I-310 SOUTHBOUND TRAFFIC CONTROL, RIGHT LANE CLOSED AHEAD SIGNS
5		C2-587	I-310 SOUTHBOUND, TRAFFIC CONTROL, MERGE SIGNS
6-7		C2-588/589	I-310, SOUTHBOUND, TRAFFIC CONTROL, ARROW BOARD & TAPER
8		C2-590	I-310 SOUTHBOUND CRASH VEHICLE
9		C2-591	RESCUE BOAT, FROM SOUTHBOUND SHOULDER OF BRIDGE
10		C2-592	I-310 SOUTHBOUND, LOOKING SOUTH @ TOWER 3
11		C2-593	I-310 SOUTHBOUND, LOOKING NORTH, BRIDGE APPROACH
12		C2-594	I-310 SOUTHBOUND, LOOKING SOUTH, SNOOPER AND EQUIPMENT
13		C2-595	I-310 SOUTHBOUND, LOOKING NORTH, TOWER 2
14		C2-596	I-310 SOUTHBOUND, LOOKING SOUTH, BRIDGE APPROACH
15		C2-597	RESCUE BOAT, FROM SOUTHBOUND SHOULDER OF BRIDGE
16		C2-598	W GIRDER, WEST WEB, 1 1/2" CR. IN WM IN STIFF. between FB's 119, 120, N. SIDE
17		C2-599	W GIRDER, ALUMINUM FRAME IN BAY
18-20		C2-600/602	W GIRDER 4" CRACK IN STIFF TO DECK BM. North of FB122
21		C2-603	W GIRDER, DECK, WEST SIDE, 2'4" CRACK IN BM @ LUG
22-23		C2-604/605	W GIRDER, END CONC. DIA. SHOWING CRACKS & EFFLORESENCE
24		C2-606	GENERAL SHOT W. GIRDER, LAST BAY, LOOKING NORTH
25-27		C2-607/609	GENERAL VIEW OF PEEPER ALONG WEST SIDE AT C.G.1
28-29		C2-610/611	GENERAL OVERALL VIEW OF PEEPER ALONG WEST SIDE AT C.G.1
1-3	4/8/08	C2-612/614	TIER 11 - NE CORNER TEST LOCATIONS Tower 2 E. leg
4-7		C2-615/618	TIER 11 - SW CORNER TEST LOCATIONS Tower 2 E. leg
8-10		C2-619-621	TIER 15 - NE corner Test conditions Tower 2 E. leg
11-13		C2-622-624	TIER 15 - SW corner Test conditions Tower 2 E. leg
14-19		C2-625-630	TIER 19 Test Conditions 1 per bay starting in NW corner and going Clockwise Tower 2 E. leg
20-21		C2-631-632	Typ. corner setup for 6 Meter Tower 3 E leg Tier 6 (NE bay shown)
22-23		C2-633-634	Typ. Int. bay setup Tower 3 E leg Tier 6 NC bay shown
24		C2-635	Center West bay West Wall Tower 3 E leg Tier 6 (by Strut)
25		C2-636	Center center bay E Wall Tower 3 E leg Tier 6

PHOTO LOG

JOB #	BRIDGE:	
CAMERA #	DATE:	CREW:

TranSystems

DATE	PHOTO #	PHOTO DESCRIPTION
4/9/08	C2-637	LOCATION B BETWEEN FB7 AND ID5 FOR D-METER TEST
	C2-638	DIGITAL PLUNGER SETUP @ FB9 AND ID5 EAST SIDE
	C2-639	FLOOR OF 2nd TEST AREA, WEST GIRDER BTWN FB13 & ID6
	C2-640	WEB " " " " " " " WEST WEB
	C2-641	FLOOR OF 3rd TEST AREA, WEST GIRDER, BTWN ID11 & FB26
	C2-642	WEB " " " " " " " " EAST WEB
	C2-645	Floor of 5th Test Area, West Girder BTWN ID19 & FB46
	C2-646	Web " " West Web
	C2-647	Web " " East Web
	C2-648	Floor of 6th Test Area West Girder just South of FB65
	C2-649	Web " " W. Web
	C2-650	E. Web " "
	C2-651	Floor of 7th Test Area West Girder btwn FB80 and ID34
	C2-652	W Web " "
	C2-653	E. Web " "
	C2-654	Floor of 8th Test Area West Girder btwn Tower 3 + FB91
	C2-655	W. Web " "
	C2-656	E. Web " "
	C2-657	Floor of 9th Test location West Girder btwn FB103 and ID43
	C2-658	W. Web " "
	C2-659	E. Web " "
	C2-660	Floor of 10th Test location West Girder btwn FB118 and ID49
	C2-661	W. Web " "
	C2-662	E. Web " "
	C2-663	Floor at 1st Test location E Girder Btwn FB115 and ID 47
	C2-664	E. Web " "
	C2-665	W. Web " "
	C2-666	Floor at 2nd Test location just north of ID 45 East Girder
	C2-667	E. Web " "
	C2-668	W. Web " "
69	C2-669	Floor at 3rd Test location E girder btwn ID41 and FB99
70	C2-670	E Web " "
71	C2-671	W. Web " "
	C2-643	FLOOR OF 4th TEST AREA, BTWN FB35 & 36,
	C2-644	WEB OF 4th TEST AREA, BTWN FB35 & 36
4/10/08	C2-672	E. GIRDER W. WEB BTWN ID35 & 36
	C2-673	" FLOOR "
	C2-674	" E WEB "
	C2-675	" W WEB BTWN CG#6 & ID32
	C2-676	" FLOOR "
	C2-677	" E. WEB "

PHOTO LOG

JOB #	BRIDGE:	
CAMERA #	DATE:	CREW:

TranSystems

	DATE	PHOTO #	PHOTO DESCRIPTION
	4/10/08	C2-678	E GIRDER W. WEB BTWN ID26 & ID27
		C2-679	" FLOOR "
		C2-680	" E WEB "
		C2-681	E GIRDER W. WEB BTWN ID22 & ID23
		C2-682	" FLOOR "
		C2-683	" E. WEB "
		C2-684	E GIRDER W WEB BTWN ID13 & 14
		C2-685	" FLOOR "
		C2-686	" E. WEB "
		C2-687	E GIRDER W. WEB BTWN ID6 & ID7
		C2-688	" FLOOR "
		C2-689	" E. WEB "
		C2-690	E. GIRDER W. WEB BTWN ID3 & ID4
		C2-691	" FLOOR "
		C2-692	" E. WEB "
22	4/10/08	C2-693	PIER 1N, E. GIR. E. BRG, BROKEN KEEPER NW CORNER
23		C2-694	" " SPALL ON N.F. 1'L x 6"T
24		C2-695	" " FROZEN KEEPER W/GAUGE IN IT
?		C2-696	" " SPALL S.F. PEDESTAL F.H. x F.W.
		C2-697	" " NE ELEV.
27		C2-698	PIER 1N, E.GIR. W. BRG. BROKEN/MISSING KEEPER IN NW CORNER
28		C2-699	" " 6½" x 2½" CUT PIECE IN R IN N.W. CORNER
29		C2-700	" " N.E. ELEV
30		C2-701	" " INDICATIONS OF MOV. 6" ON SLIDE R, N. SIDE
31		C2-702	PIER 1N, W. GIR. E. BRG, 3'L x FH PEDESTAL SPALL, N.F.
32		C2-703	" " CUT OUT IN R, NS CORNER 6½" x 2½"
33		C2-704	" " NW KEEPER, BENT OUT OF PLANE
34		C2-705	" " NE ELEV.
35		C2-706	PIER 1N, W.GIR. W.BRG, NE SPALL ON PEDESTAL F.H. x 2'L
36		C2-707	" " BENT NW KEEPER
37		C2-708	" " NW ELEV

PHOTO LOG	JOB # P710070019	BRIDGE: Hale Boggs Bridge	
TranSystems	CAMERA # C3	DATE: 3/4/08	CREW: SD

DATE	PHOTO #	PHOTO DESCRIPTION
3/4/08	C3-1	East Elev. of East Brg. @ Pier 2/Tower 2 of Box Girder
	C3-2	Close up of E. Elev. of Brg. Assembly of East Brg @ Pier 2
	C3-3	East Elev. of N. Keeper plates @ East Brg @ Pier 2
	C3-4	West Elev of East Brg @ Pier 2
	C3-5	West Elev of North Keeper PL's of west Brg Assem. of East Brg. @ Pier 2
	C3-6	West Elev of East Brg, Assemb. of West Brg @ Pier 2
	C3-7	East Elev. of West Brg. Assemb. of West Brg. @ Pier 2
	C3-8	West Elev. of West Brg @ Pier 2
	C3-9	West Elev. of North Keeper PL of West Brg, Assemb of West Brg, Pier 2
	C3-10	East Elev. of West Brg @ Pier 2
	C3-11	SE Stiffener of Center Keeper assembly @ Pier 2 bent to the west
	C3-12	South Elev. of East Side of center Keeper @ Pier 2
	C3-13	SE Elev. of Center Keeper @ Pier 2
	C3-14	NE Elev. of Center Keeper @ Pier 2
	C3-15	North Elev of West Side of Center Keeper @ Pier 2
	C3-16	West Elev of Center Keeper @ Pier 2
	C3-17	Bottom of 2nd post from West End of North Railing on Pier 2 lower strut
	C3-18	West end of Rail on top of Pier 2 Lower strut (4 visible posts detached)
	C3-19	Looking South From Pier 2 Lower strut (west Elev.)
	C3-20	Looking North From Pier 2 Lower strut (West Elev.)
	C3-21	East Brg for East Box Girder @ Pier 1S w/ missing Keeper PL
	C3-22	East Elev. of East Brg for East Box girder @ Pier 1S w/ spall
	C3-23	East Elev of East Brg for East Box girder Pier 1S
	C3-24	South Elev. of East Brg for East Box girder @ Pier 1S
	C3-25	SW Keeper PL in contact w/ horiz. Pl @ East Brg, East Box Pier 1S
	C3-26	SE Corner of West Brg of E. Box Girder @ Pier 1S
	C3-27	NW Elev. of West Brg of E. Box Girder @ Pier 1S w/ missing NE Keeper
	C3-28	West Elev. of West Brg of E. Box Girder @ Pier 1S
	C3-29	SW Keeper in Contact w/ horiz. plate @ West Brg of E. Box Girder Pier 1S
	C3-30,31	Looking North @ boat under Bridge
	C3-32	East Elev of E. Brg for West Box Girder @ Pier 1S
	C3-33	SW Corner of E. Brg for West Box Girder @ Pier 1S
	C3-34	South Elev. of E. Brg for West Box Girder @ Pier 1S West Side in Contact
	C3-35	SE Elev. of West Brg of West Box Girder @ Pier 1S (spall)
	C3-36	SW Keeper of West Brg of West Box Girder @ Pier 1S w/ Previous Contact
	C3-37	West Elev. of West Brg of West Box Girder Pier 1S
	C3-38	North Elev of West Brg of West Box Girder Pier 1S (spall)
	C3-39-41	Pier 1S Approach Span Brgs over contracted (≈ 2 1/2 to the south) (1 5/8" H. Gap @ N. End)
3/5/08	C3-42	E. Elev. of E. Box Girder Brg @ Pier 3
	C3-43	NE Elev. of E. Brg of E. Box Girder @ Pier 3
	C3-44	SE Elev. of E. Brg of E Box Girder @ Pier 3
	C3-45	SE Elev of W. Brg of E. Box Girder @ Pier 3

PHOTO LOG	JOB # P710070019	BRIDGE: Hale Boggs Bridge	
TranSystems	CAMERA # C3	DATE: 3/5/08	CREW: SD

DATE	PHOTO #	PHOTO DESCRIPTION
3/5/08	C3-46	Measurement A @ E. Brg. of E. Box Girder @ Pier 3 (2 5/8")
	C3-47	Ship under Main Span Looking South
	C3-48	NW Keeper of W. Brg Assembly for E. Box Girder @ Pier 3 (Contact)
	C3-49	W. Elev. of W. Brg Assembly for E. Box Girder @ Pier 3
	C3-50	W. Elev. of W. Brg for E. Box Girder @ Pier 3 (overall)
	C3-51	E. Elev of E. Brg For W. Box Girder @ Pier 3 (Overall)
	C3-52	NE Elev. of E. Brg For E. Box Girder @ Pier 3
	C3-53	SE Elev. of E. Brg For E. Box Girder @ Pier 3
	C3-54	NW Keeper of W. Brg Assembly for W. Box Girder @ Pier 3 (Contact)
	C3-55	W. Elev. of W. Brg Assembly For W. Box Girder @ Pier
	C3-56	W. Elev. of W. Brg Assembly For W. Box Girder @ Pier (overall)
	C3-57	Pier 3 Lower Strut Railing @ West End (Last 2 posts Each Side disconnected)
	C3-58	Pier 3 Lower strut Railing post disconnected (2nd post from West end on N. side shown)
	C3-59	W. Elev. of Center Keeper Assembly @ Pier 3
	C3-60	N. Elev. of West Side of Center Keeper Assembly @ Pier 3
	C3-61	N. Elev. of East Side of Center Keeper Assembly @ Pier 3
	C3-62	E. Elev. of Center Keeper Assembly @ Pier 3
	C3-63	Pier 3 Lower Strut Railing @ E. End Looking East (Last 2 post on N. side & Last post on S. side disconnected)
	C3-64	CTL Inspection buggy @ Cable 2 East side
	C3-65	CTL Inspection buggy @ Cable 2 East Side
	C3-66	Looking South From North Approach
	C3-67	Looking South From North Approach
	C3-68	East Elev. of Bridge Looking North
	C3-69	East Elev. of Main Span
	C3-70	East Elev. of Tower / Pier 2
	C3-71	SouthEast Elev. of Tower / Pier 3
	C3-72	East Elev. of Span 1
	C3-73	East Elev. of span 2
	C3-74	U/S of span 1 Looking South
	C3-75	U/S of span 2 Looking North
	C3-76	East End of CG2 in span 2
	C3-77	Looking North @ Pier 2 & Span 3
	C3-78	West Elev of Span 3 Looking North
	C3-79	West Elev of Span 3 Looking East
3/6/08	C3-80	CTL Inspector on Cable 6, East, @ Pier 2 North Face
	C3-81	South Elev. of Tower / Pier 3
	C3-82	Cable 7 East Looking north
	C3-83	Cable 8 East Looking North
	C3-84	Typ cond. of NB Roadway, Span 3 Shown
	C3-85	Typ cond of NB Roadway, Exterior parapet
	C3-86	Cable 9 East Looking North
	C3-87	Typ NB Roadway Looking South in span 3

PHOTO LOG	JOB # P710070019	BRIDGE: Hale Boggs Bridge	
TranSystems	CAMERA # C3	DATE: 3/6/08	CREW: SD

DATE	PHOTO #	PHOTO DESCRIPTION
3/6/08	C3-88	Ship going under Bridge
	C3-89	Cable 10 East Looking South
	C3-90	Cable 11 East Looking South
	C3-91	Cable 12 East Looking South
	C3-92	Insp. @ top of Tower 3, N. Elev.
	C3-93	N. Elev. of Tower 3
	C3-94,95	NB Roadway deck Joint @ Pier 1N
	C3-96	U/S of 3rd Long. Bars from East of Mod. Deck Joint @ Pier 1N
	C3-97	U/S of Pier 1S Deck Joint Looking West
	C3-98	N. Elev. of Pier 4
	C3-99	E. Elev. of E. Brg For E. Box Girder pier 1N
	C3-100	Bent NW keeper PL on E. Brg For E. Box Girder @ Pier 1N
	C3-101	Missing NW Keeper PL on W. Brg For E. Box Girder @ Pier 1N
	C3-102	West Elev. of W. Brg of East Box Girder @ Pier 1N
	C3-103	E. Elev. of E. Brg For W. Box Girder @ Pier 1N
	C3-104	NW side of E. Brg For W. Box Girder @ Pier 1N with Rubber Squeezing out
	C3-105	Bent NW Keeper PL on W. Brg For W. Box Girder @ Pier 1N
	C3-106	W. Elev. of W. Brg For W. Box Girder @ Pier 1N
	C3-107	NEW Inspection Vehicles
	C3-108	East Box Girder Interior Looking North From ID2
	C3-109	" " " " " " " "
	C3-110	South Elev. of ID2 in East Box Girder
	C3-111,112	" " " " " " " "
	C3-113	S. Elev. of CG1 From East Box Girder
	C3-114	Typical Deck Splice (E. Box Girder adjacent to S. Face of CG1)

PHOTO LOG	JOB #	BRIDGE: Luling	
TranSystems	CAMERA # C3	DATE: 3/10	CREW: CRS / SWB

DATE	PHOTO #	PHOTO DESCRIPTION
3/10	C3-115	I.R @ N.E Corner/Leg; Tower 2; East Column Exterior; Splice 4
	C3-116	I.R @ N.E Corner/Leg; Tower 2; East Column Exterior; Splice 5
	C3-117	I.R @ N.E Corner/Leg; Tower 2; East Column Exterior; Splice 5
	C3-118	I.R @ N.E. Corner/Leg; Tower 2; East Column Exterior; Splice 6
	C3-119	UP to 3/16" I.R around Lower Cable 10 Anchorage; N. Cable; Tower 2 East
	C3-120	" " " " " " " "
	C3-121	" " 3/8" " " Upper Cable 10, " " "
	C3-122	" " " " " " "
	C3-123	" " " " " " "
	C3-124	Missing Pigeon Screen @ Lower Cable 11; East Column; Tower 2; North
	C3-125	Cable 11/12 Missing Pigeon Screens; North Side; East Column; Tower 2
	C3-126	Gap @ Plate 11 upper Anchorage; North Side; E. Column; Tower 2
	C3-127	Vertical Splice @ upper Strut; North Exterior; Column East; Tower 2
	C3-128	" " " " " "
	C3-129	Missing Bolt @ 11 upper Anchorage; North Ext.; East Column; Tower 2
	C3-130	1/4" Gap at @ Cable 12 upper East; North Ext.; East Column; Tower 2
	C3-131	I.R. @ 12 upper West Anchorage; North Ext; East Column; Tower 2
	C3-132	General view cable 10 upper; North Ext; East Column; Tower 2
	C3-133	U/S upper Strut; Tower 2 From East Column; Flaking Rust
	C3-134	U/S splice @ upper Strut; Tower 2 From East Column.
3/13	C3-135	NORTH ELEV., TOWER 3; WEST LEG @ CABLE 10
	C3-136	" " " @ CABLE 11
	C3-137	" " " @ CABLE 11 LOOKING DOWN @ CABLE 10
	C3-138	" " " LOOKING @ SET OF CABLES 12; MISSING BIRD SCREEN
	C3-139	" " " LOOKING ACROSS AT STRUT
	C3-140	TOWER 3, WEST LEG, WEST ELEVATION, 1"Ø HOLE
	C3-141	TOWER 3, WEST LEG, WEST ELEVATION, SHOWING POSSIBLE WELD ON TOWER FACE
8/20/08	C3-142	EXP JOINT @ PIER 1, N.B
	C3-144	TYP RAIL DETAIL - N.B
	C3-145	TYP TOP OF DECK NB - SPAN 1
	C3-146	MISSING BOLT E. RAIL SPAN 1
	C3-147	PATCH IN W.S. NB - SPAN 1
	C3-143	ISOLATED MAP CR IN ASPH. NB, S. OF CG1
	C3-148	PIER 15 LOOKING SOUTH (N.B.)
	C3-149	TYP. RAILING AT TRANSITION (N.B.)
	C3-150 THRU 152	MODULAR JOINT AT P15, FILLED W/ DEBRIS AT E. END, HVY DEBRIS REST
	C3-153	MISSING NUT ON E. RAILING, 10'S OF P15.
	C3-154	MISSING ANCHR BOLTS ON E. RAILING AT STL/CONC. RAIL SWITCH
	C3-155	N.B., E. RAIL. AT STL/CONC SPLICE, 1'L x 3'D x FULL WIDTH SPALL
	C3-156	TOP OF DECK N.B AT P15, LOOKING NORTH
	C3-157	130' MAP CR IN ASPH NB, S. OF CG1
	C3-158	TYP. STL RAIL ALONG E. RAIL N.B. BTWN CG1 & P15

PHOTO LOG	JOB # P710070019	BRIDGE: LULING BRIDGE, LULING, LA	
TranSystems	CAMERA # 3	DATE: 3/27/08 3/28 & 3/29	CREW: JHR SGB

DATE	PHOTO #	PHOTO DESCRIPTION
3/27/08		
1	C3-159	6' long, crk 1' E. lanelines just N. P1 S jt.
2	C3-160	long and trans. cks 30' S CG #1
3	C3-161	short long cks at SWL just S of and at CG #1
4	C3-162	≈60' N CG #1 short long cks at SWL start going to 1/2
5	C3-163	patch w/ long crks. West W.L. E. Lane NB
6	C3-164	at ≈22' N CG #2 photo of short long. cks at SWL
7	C3-165	patches in W.W.L. E. Lane NB just S CG. #11
8	C3-166	2'-6" w x 3' long depression in EWL E. Lane 90' S CG #12; 3/4" deep
9	C3-167	transition btw. pvmt. & conc. ≈60' S. CG #12
10	C3-168	Continuation of long crks into conc. surface; become continuous in conc. Lk N 60' S CG #12
11	C3-169	fines and gravel in E end of jt.
12	C3-170	overall photo of Jt. Lk W.
3/27/08 13	C3-171	Missing section of jt. 3rd Armor line from N
14	C3-172	Crack in 2nd Armor line from N.
3/28/08	C3-173	Gen. of W. web exterior start at WF N. tower 2
	C3-174	Gen of W. FB36 exterior in E. WF "
	C3-175	Gen of W WF. & Stiffeners w/ pigeon dropping N. tower 2
	C3-176	W. WF S. end missing pigeon screens at the end.
	C3-177	W. WF N. FB36 lamination w/ area of 100% loss
	C3-178	Gen W BG, W WF ID 15
3/29/08	C3-179	W. BG, W. WF, S of WF 1'-6" fascia beam bent.
	C3-180	W. BG. W. WF, Top sec. B, 2nd ST. down, debris build up from road.
	C3-181	CG 4, W.S., W. of BG, diagonal ST between CG & Deck FL, abrasion dust
	C3-182	W. BG, W. WF, 1st ST below sec A, lamination along ST.
	C3-183	W BG, W. WF, ID 19, trans. ST for WF panel is kinked. also FB 49
	C3-184	W BG, W. WF, FB48 & ID 20, 3rd purlin from btm has deformation.
	C3-185	W. BG, W.S. ID 22, bracket connecting beam to deck FL, missing bolt, bolts are short
	C3-186	W. WF, FD 53, Trans ST for WF panel, 1st purlin from top has sec. loss S. face
	C3-187	CG 5, W.S., Top on N. edge debris and moisture collected on top
	C3-188	Gen of interior W. WF looking S. FD 54
	C3-189	Gen " " " N. FB 55
	C3-190	W. BG, W.S. between FB 54 and FB 55, pitting on web, 2" dia. 1/16" d

PHOTO LOG	JOB # P710070019	BRIDGE: Luling Bridge Luling, LA	
TranSystems	CAMERA # C3	DATE: 3/31/08	CREW: JHR 4-40 / BC & JHR 1-3

DATE	PHOTO #	PHOTO DESCRIPTION
3/31/08	C3-191	PIER 2, 2nd FS FROM BOT, W. COL, NE CORNER 7/8" P.R.
2-3	C3-192/193	P2. W. COL. NE CORNER 1/4" DIFF ON STROT POT PL'S AT SR
4	C3-194	West Box just S. PIN Bottom holes in PL B 1 1/2" ϕ
5	C3-195	Anchorage for light standard ? just S FB122
6	C3-196	General Photo underside west overhang at FS 31 lk N to Pier 1N
7	C3-197	General " " " " " " " lk S to Pier 4
8	C3-198	Falcon on CG12 west end.
9	C3-199	Plugged holes West Box EastWeb at N. end splice CG12 N side
10	C3-200	General Picture splice from N end lk. South E. Web West Box
11	C3-201	Plugged holes West Box Eastweb at S. end splice C.G12 N side
12	C3-202	Plugged hole below inclined splice PL in E. web West box N CG12
13	C3-203	General Photo S. bot splice PL's in E. web west box N CG. 12
14	C3-204	General lk along bot S edge CG. 12 to E. box at N side Pier 4
15	C3-205	Base of Pier 4 W brg W. Box
16	C3-206	Pier 4 E brg. E box bird grate is loose on N side
17	C3-207	Pier 4 Center Brg
18	C3-208	Pier 4 W Brg W. box brg grate is loose on N. side
19	C3-209	Pier 4 E and Center Brgs from N side
20	C3-210	Gen Pict. Pier 4 W. Brg. West Box
21	C3-211	Gen Pict. Top splice PL CG. 12 at West Web West Box
22	C3-212	Gen Pict. W end CG 12 from N side
23	C3-213	Gen Pict. NCG12 from N. Side lk S.
24	C3-214	S bound Jt. East and West lanes - jt armor alignment
25	C3-215	E Shoulder S. Bound Jt. - gravel
26	C3-216	Brakedown lane S. Bound Jt. - gravel
27	C3-217	1' sec. of comp. seal coming free of armor on north side (2nd seal from N.)
28	C3-218	Gen photo so. bd. deck from just N PIN
29	C3-219	Long crks West Wheel Line
30	C3-220	Long crks East Wheel Line
31	C3-221	Print Transition ≈ 80' S. of Pier 4
32	C3-222	long. crks at SWL or just west of it.
33	C3-223	long crks at SWL or just west of it.
34	C3-224	patch West Lane So. Bd. 20' S. Pier 3
35	C3-225	transverse and long. gouges in E. Lane approx 30' long
36	C3-226	intermittant gouges 3-4' long from SWL across W Lane to C3-225
37	C3-227	intermittant long. crks < 1' long on ≈15' ℄'s at SWL
38/39	C3-228/229	3.5' x 20' patch W.W.L. of West Lane w/ wide long crks.
40	C3-230	Gen Photo of SB Lanes from just S CG8 Lk N.

PHOTO LOG

PHOTO LOG	**JOB #** P71007019	**BRIDGE:** HALE BOGGS	
TranSystems	**CAMERA #** C3	**DATE:** 4/2/08	**CREW:** 4/2/08 BKC/SHR 4/3/08 RGN/BKC

	DATE	PHOTO #	PHOTO DESCRIPTION
1	4/2/08	C3-231	W. WIND FERRING, BTWN CG 8/9, TYP. RUST STAINING/WATER INFIL TRAN
2		C3-232	" " TYP. LT DEBRIS ON STIFF
3		C3-233	" ", S. OF FB 77 TYP. 100% SEC. LOSS 6" HIGH 3-4' LONG
4		C3-234	" ", MOD DEBRIS ON TOP OF STIFF BY CG8
5		C3-235	" ", FS21 TYP. COND.
6		C3-236	" ", S. ELEV FB 79, TYP. COND
7		C3-237	W. WIND FERRING BTWN CG9/PIER 3. SIGNS OF WATER INFILTRATION (FB 86)
8		C3-238	" " TYP. LOSS INSIDE FERRING, SHOT FB 85 2ND STIFF RST
9		C3-239	" " TYP. LT DEBRIS ON TOP OF STIFF
10		C3-240	" " TYP. MOD. DEBRIS ON TOP OF STIFF
11		C3-241	Photo of top of F.S. 23
12		C3-242	Poto of heavy debrie N FB 89
13		C3-243	Missing netting N end wind ferring at FB 90
1	4/3/08	C3-244	E. TUB AT PIER 1, E. ELEV OF TOP PIN.
2		C3-245	E. TUB AT PIER 1, W. ELEV OF TOP PIN.
3		C3-246	E. TUB AT PIER 1, BOT PIN. I.R. ON E.F. OF NUT
4		C3-247	" " ELEV OF EAST NUT (E. ELEV)
5		C3-248	" " TYP. COND WEST NUT
6		C3-249	" " WEST ELEV OF NUT
		C3-250	" " DOUBLE NUTS W/ NO THREADS SHOWING
8		C3-251	WIND LOCK AT PIER 1, E. ELEV
9		C3-252	" " E. PIN BEARING? SEC A-A N. ELEV
10		C3-253	" " W. PIN BEARING? SEC A-A N. ELEV
11		C3-254	" " W. ELEV.
12		C3-255	W. TUB AT PIER 1, BOT PIN. I.R. 3/4" UP TO E. FACE
13		C3-256	W. TUB AT PIER 1 BOT PIN. E. ELEV
14		C3-257	W. TUB AT PIER 1; ASSEMBLY W/NEG. 1 THREAD COUNT
15		C3-258	W. TUB AT PIER 1; BOT PIN I.R. UP TO 3/8" W. FACE
16		C3-259	W. TUB AT PIER 1; BOT PIN W. ELEV
17		C3-260	W. TUB AT PIER 1, TOP PIN, E. ELEV
18		C3-261	" " EAST NUT 1/4" GAP BTWN NUT/WASHER
19		C3-262	" " W. ELEV
20		C3-263	W. TUB AT PIER 4, TOP PIN. E. ELEV.
21		C3-264	" " TOP PIN W. ELEV.
22		C3-265	" " TOP PIN WELDED WASHERS TO HANGER
23/24		C3-266/267	W. TUB AT P4, BOT PIN, BROKEN/BENT WIND SCREEN
25		C3-268	" " W. ELEV
26		C3-269	" " 3/8" PACK RUST ON E. SIDE
27		C3-278	" " E. ELEV
		C3-270	P4 WIND LOCK W. ELEV
28-31		C3-271-274	P4 WIND LOCK, WEST PIN. SIGNS OF MOVEMENT & LIGHT
32-33		C3-275 "276	" EAST PIN SIGNS OF MOVEMENT
34		C3-277	P4 WIND LOCK E. ELEV

4/2/08

4/3/08

332

333

PHOTO LOG

JOB #	BRIDGE: HALE BOGGS	
TranSystems	CAMERA # C3	DATE: 4/3/08	CREW: BKC PGM

	DATE	PHOTO #	PHOTO DESCRIPTION
	4/3/08	C3-279	E. TUB, PIER 4, BOT PIN W. ELEV
37		C3-280	" " BAST NUT PACK RUST UP TO 5/8"
38		C3-281	" " E. ELEV
39-41		C3-282-284	" BROKEN WELDS/SCREW / RENT FLOORING
42		C3-285	E. TUB PIER 4, TOP PIN W. ELEV
43		C3-286	" " E. ELEV
36		C3-278	EAST ELEV OF PIN NUT AT WEST TUB AT P4
1-4	4/9/08	C3-287-290	DUSK SHOTS OF BRIDGE FROM WEST
5-10		C3-291-296	DUSK SHOTS OF NAVIGATION FROM EAST
11-15		C3-297-301	DUSK SHOTS LOOKING N. FROM EAST SIDE

Appendix F

Complete Set of Inspection Photos

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-001

C1-002

C1-003

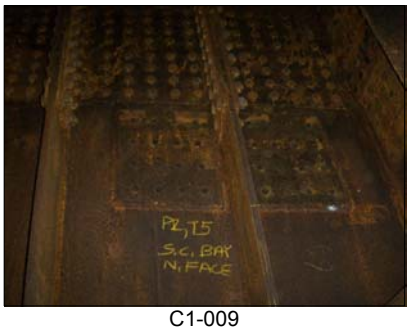
C1-004

C1-005

C1-006

C1-007

C1-008



C1-009

C1-010

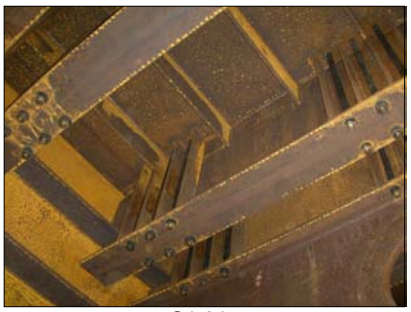
C1-011

C1-012

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-013

C1-014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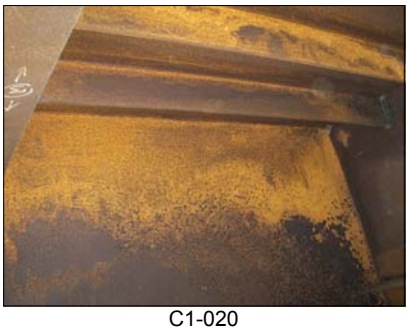
C1-016

C1-017

C1-018

C1-019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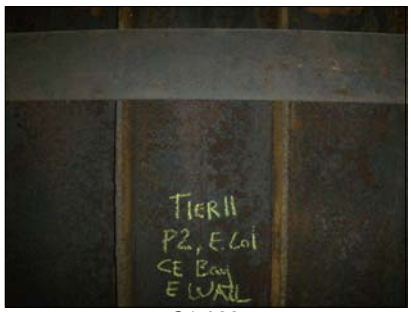
C1-021

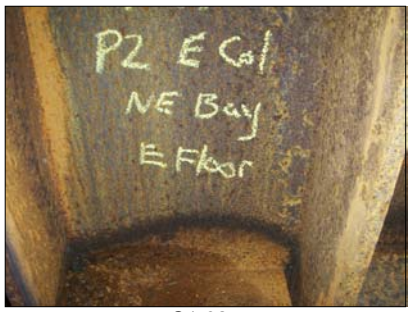


C1-022

C1-023

C1-024

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1



C1-025

C1-026

C1-027

C1-028

C1-029

C1-030

C1-031

C1-032

C1-033

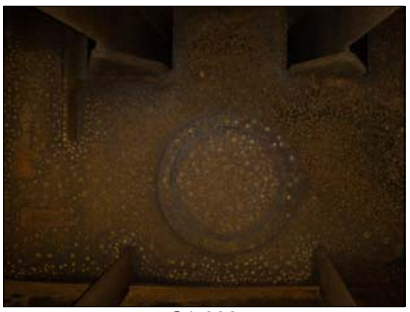
C1-034

C1-035

C1-036

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-037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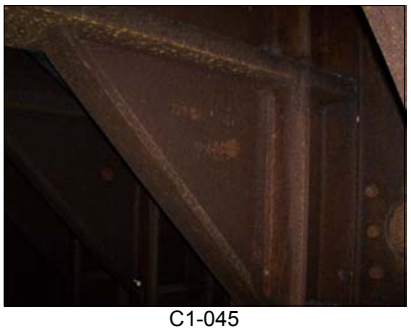
C1-040

C1-041

C1-042

C1-043

C1-044


C1-045

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C1-048

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

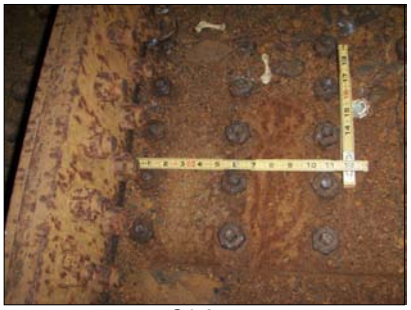
C1-049

C1-050

C1-051

C1-052

C1-053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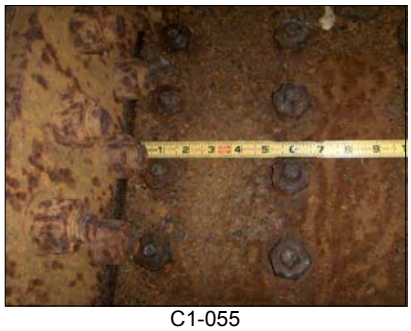
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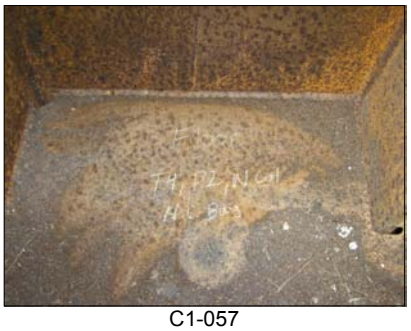
C1-057

C1-058

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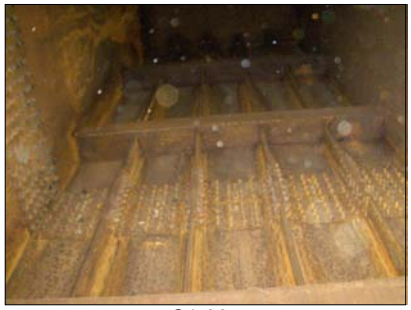
C1-060

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-061

C1-062

C1-063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C1-065

C1-066

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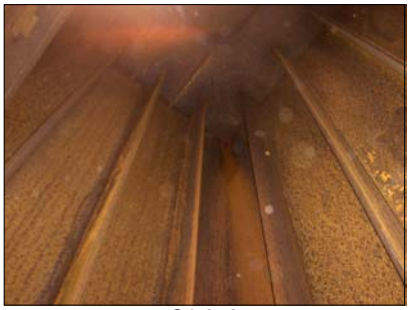
C1-069

C1-070

C1-071


C1-072

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-073

C1-074

C1-075

C1-076

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C1-079

C1-080

C1-081

C1-082

C1-083

C1-084

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-085

C1-086

C1-087

C1-088

C1-089

C1-090

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C1-095

C1-096

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-097

C1-098

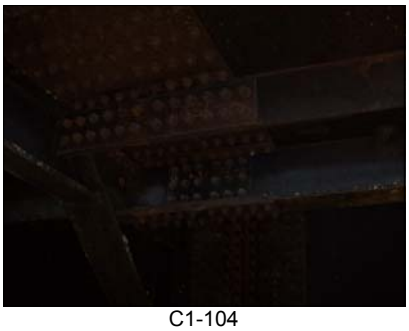
C1-099

C1-100

C1-101

C1-102

C1-103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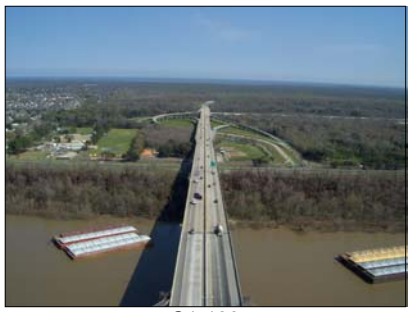
C1-106

C1-107

C1-108

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1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C1-110

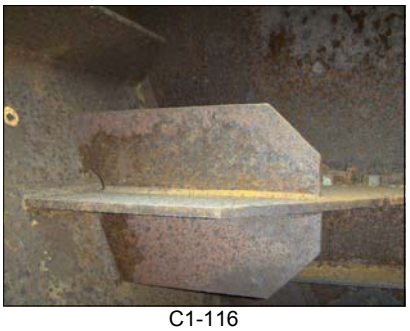
C1-111

C1-112

C1-113

C1-114

C1-115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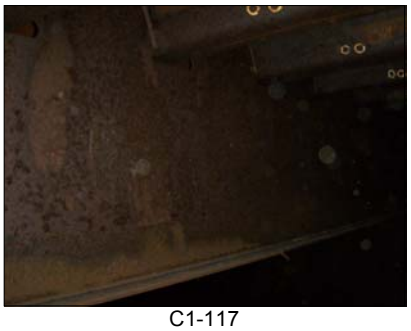
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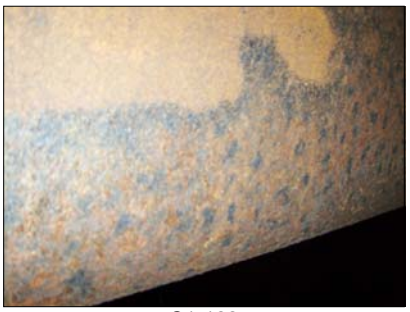
C1-118

C1-119

C1-120

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-121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C1-123

C1-124

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C1-127

C1-128

C1-129

C1-130

C1-131

C1-132

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-133

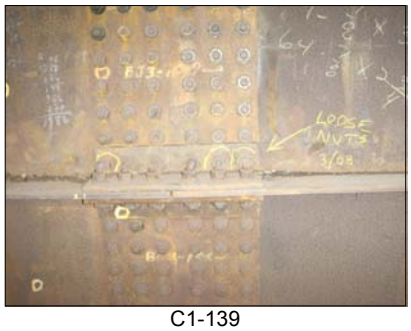
C1-134

C1-135

C1-136

C1-137

C1-138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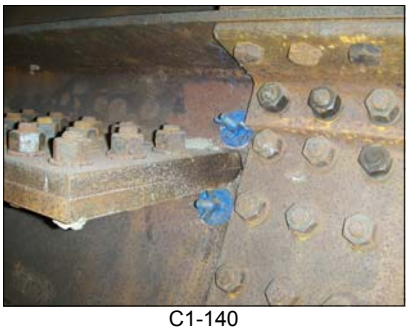
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C1-141

C1-142

C1-143

C1-144

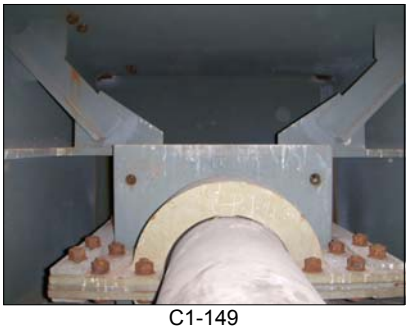
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-145

C1-146

C1-147

C1-148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C1-150

C1-151

C1-152

C1-153

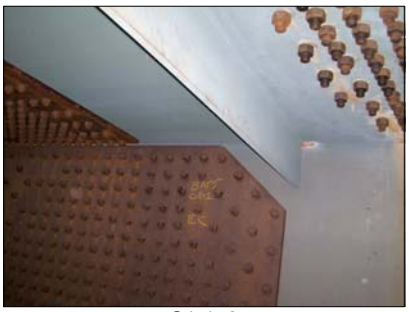
C1-154

C1-155

C1-156

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-157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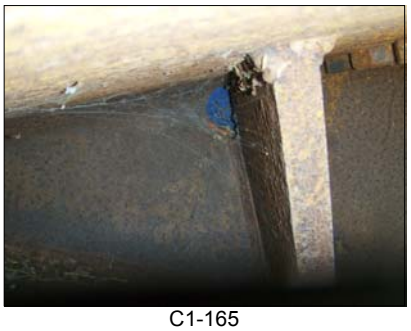
C1-160

C1-161

C1-162

C1-163

C1-164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C1-166

C1-167

C1-168

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-169

C1-170

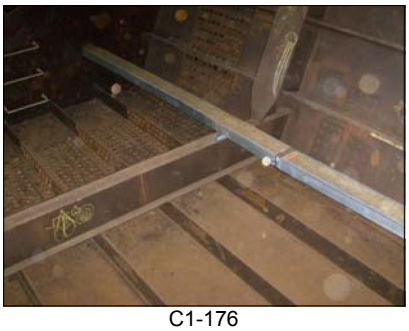
C1-171

C1-172

C1-173

C1-174

C1-175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C1-178

C1-179

C1-180

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-181

C1-182

C1-183

C1-184

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C1-190

C1-191

C1-192

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

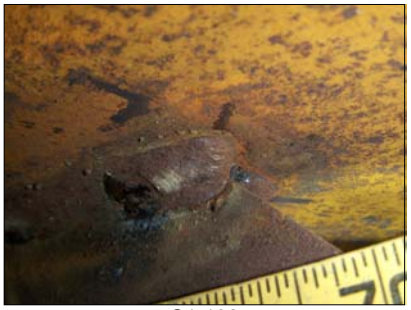
C1-193

C1-194

C1-195

C1-196

C1-197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C1-199

C1-200

C1-201

C1-202

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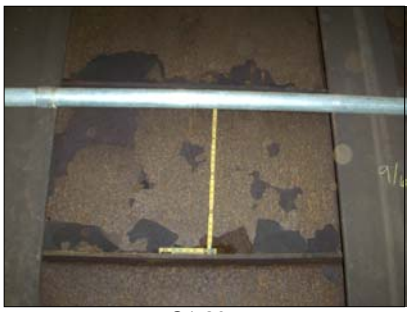
C1-204

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-205

C1-206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C1-209

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C1-211

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C1-214

C1-215

C1-216

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

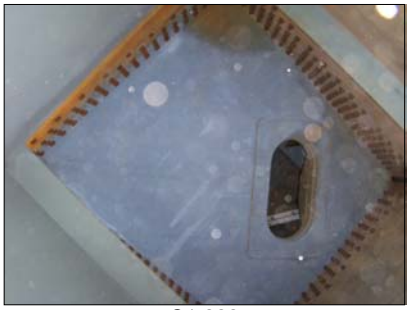
C1-217

C1-218

C1-219

C1-220

C1-221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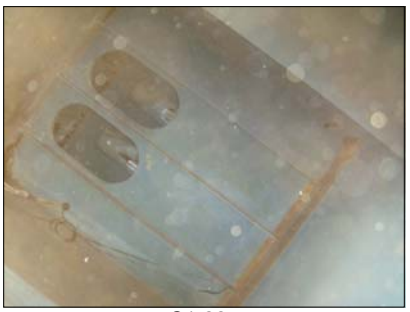
C1-224

C1-225

C1-226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C1-228

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-229

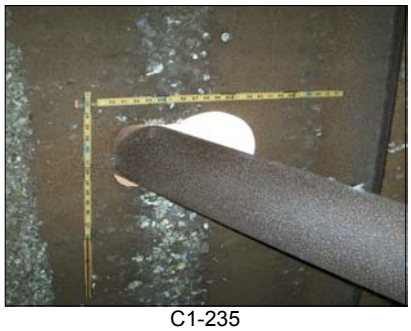
C1-230

C1-231

C1-232

C1-233

C1-234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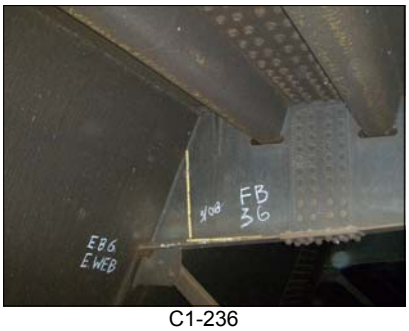

C1-236

C1-237

C1-238

C1-239

C1-240

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-241

C1-242

C1-243

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C1-250

C1-251

C1-252

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-253

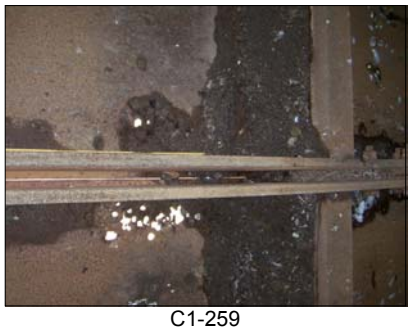
C1-254

C1-255

C1-256

C1-257

C1-258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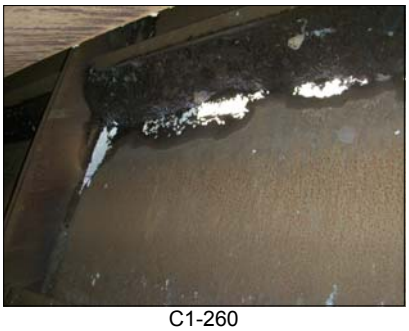
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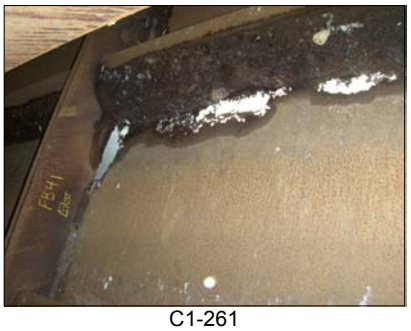
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C1-262

C1-263

C1-264

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-265

C1-266

C1-267

C1-268

C1-269

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C1-271

C1-272

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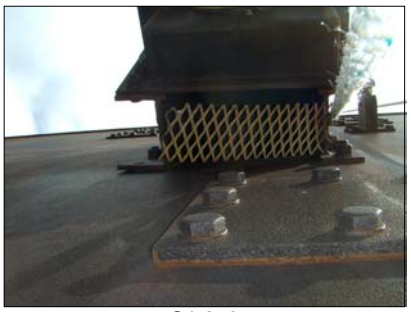
C1-275

C1-276

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-277

C1-278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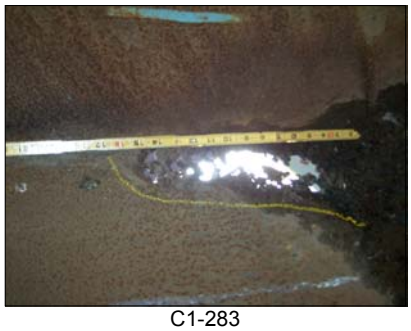
C1-280

C1-281

C1-282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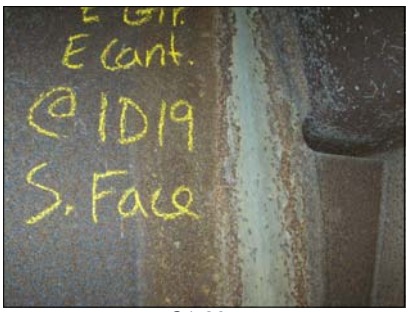
C1-284

C1-285

C1-286



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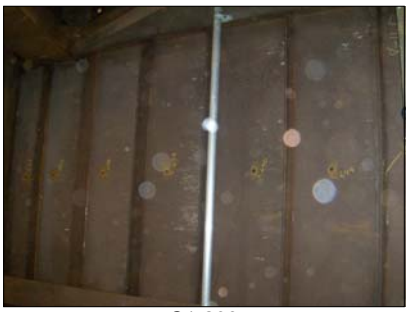
C1-288

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-289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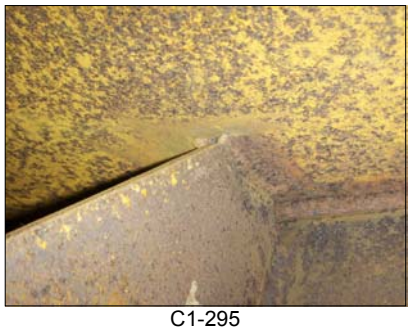
C1-292

C1-293

C1-294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C1-296

C1-297

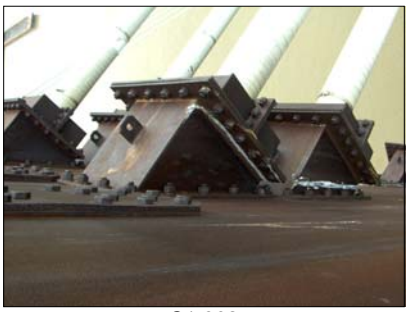
C1-298

C1-299

C1-300

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-301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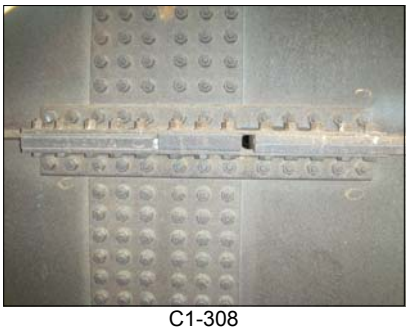
C1-304

C1-305

C1-306

C1-307


C1-308

C1-309

C1-310

C1-311

C1-312

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-313

C1-314

C1-315

C1-316

C1-317

C1-318

C1-319

C1-320

C1-321

C1-322

C1-323

C1-324

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

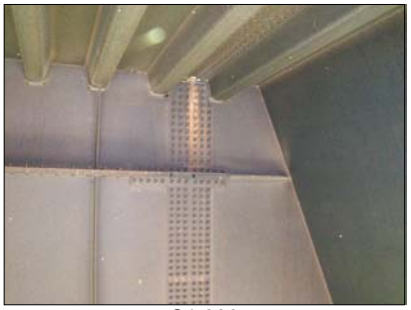
C1-325

C1-326

C1-327

C1-328

C1-329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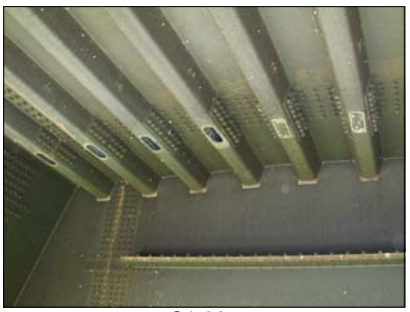
C1-332

C1-333

C1-334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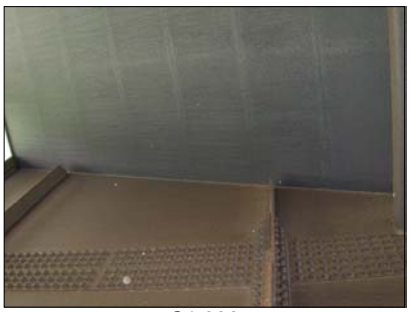

C1-336

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-337

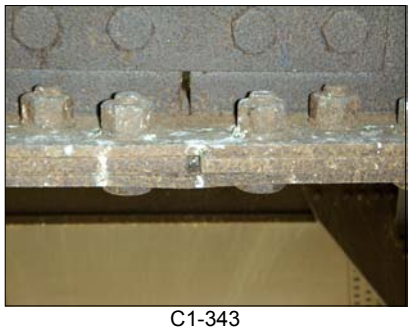
C1-338

C1-339

C1-340

C1-341

C1-342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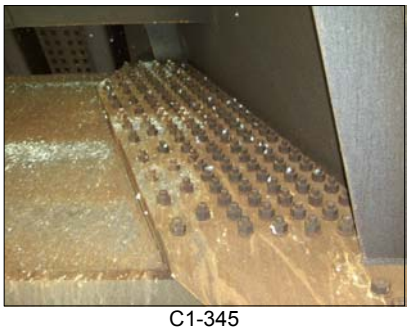
C1-344


C1-345

C1-346

C1-347

C1-348

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-349

C1-350

C1-351

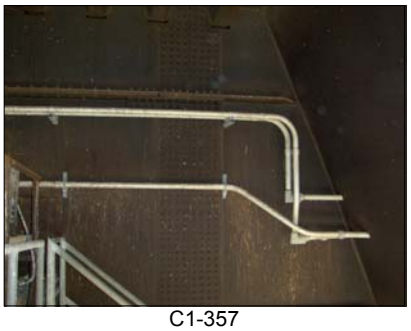
C1-352

C1-353

C1-354

C1-355

C1-356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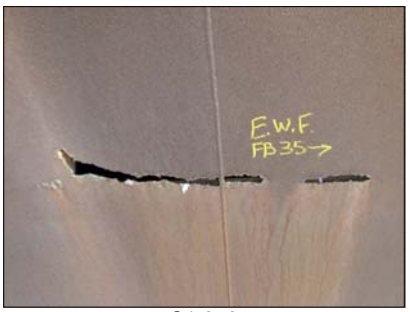
C1-358



C1-359

C1-360

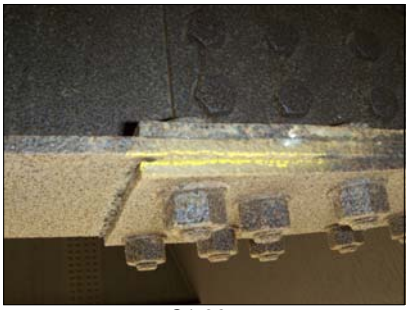
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-361

C1-362

C1-363

C1-364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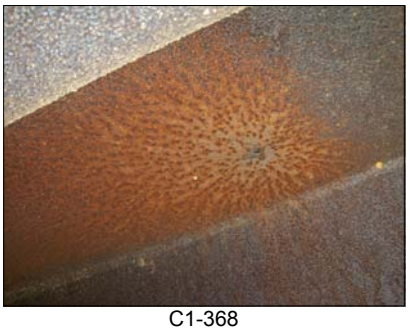
C1-366

C1-367


C1-368

C1-369

C1-370

C1-371

C1-372

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-373

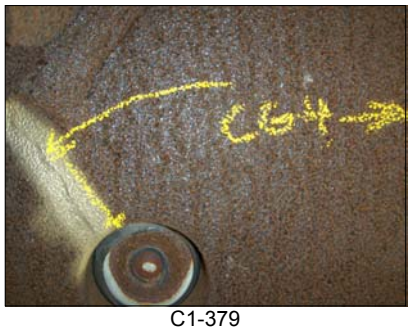
C1-374

C1-375

C1-376

C1-377

C1-378



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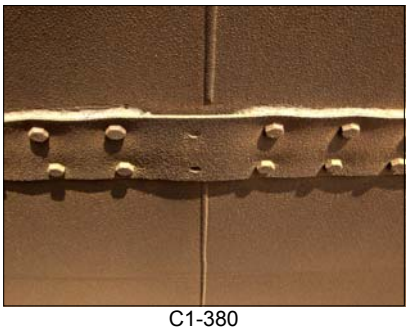
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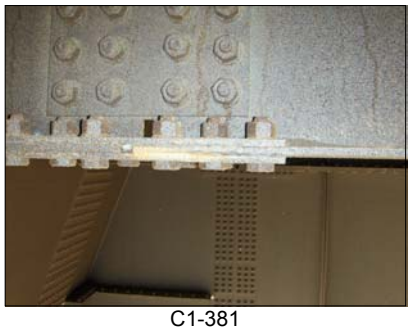
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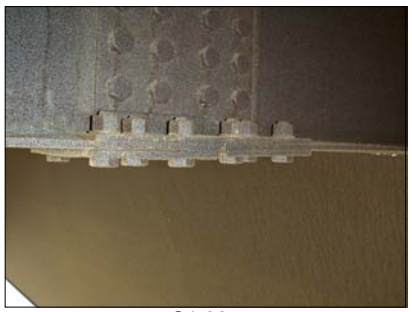
C1-382

C1-383


C1-384

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-385

C1-386

C1-387

C1-388

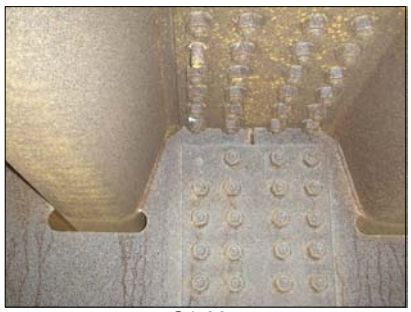
C1-389

C1-390

C1-391

C1-392

C1-393


C1-394

C1-395

C1-396

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-397

C1-398

C1-399

C1-400

C1-401

C1-402

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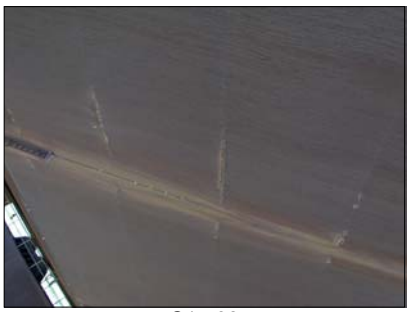
C1-406

C1-407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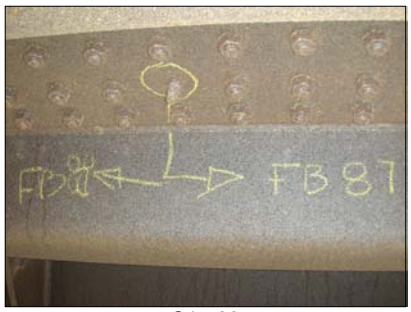
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1



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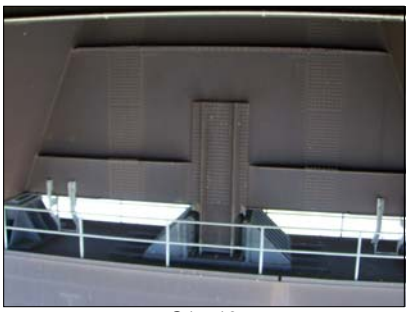
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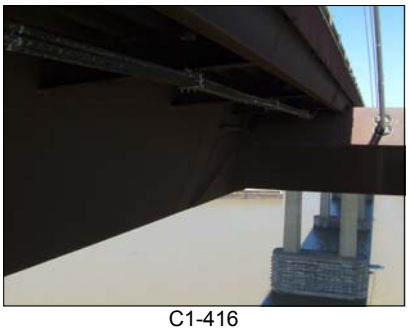
C1-411

C1-412

C1-413

C1-414

C1-415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C1-417

C1-418

C1-419

C1-420

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-421

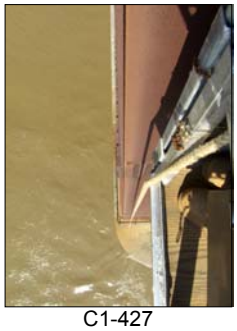
C1-422

C1-423

C1-424

C1-425

C1-426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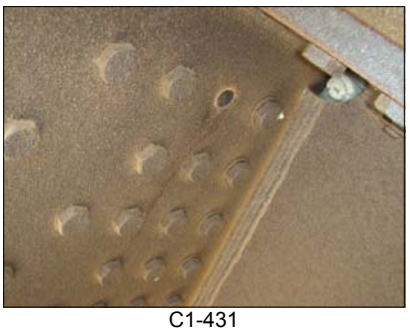
C1-428

C1-429

C1-430


C1-431

C1-432

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-433

C1-434

C1-435

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C1-437

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C1-444

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-445

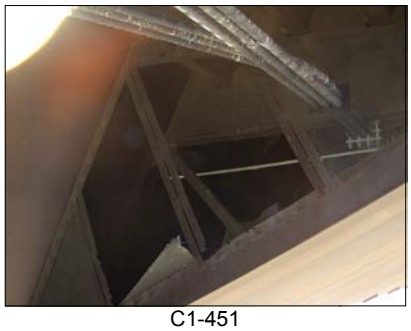
C1-446

C1-447

C1-448

C1-449

C1-450


C1-451

C1-452

C1-453

C1-454

C1-455

C1-456

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-457

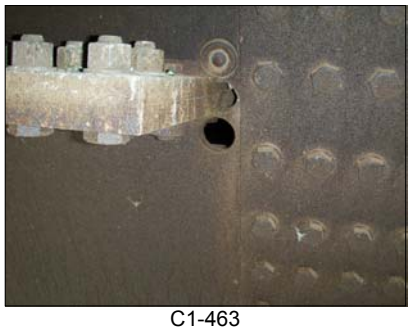
C1-458

C1-459

C1-460

C1-461

C1-462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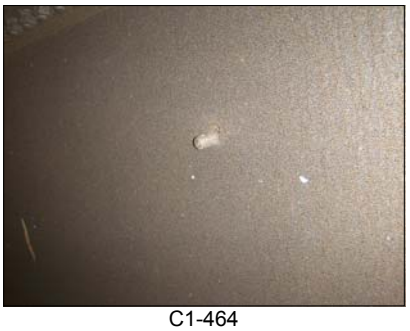

C1-464

C1-465

C1-466

C1-467

C1-468

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-469

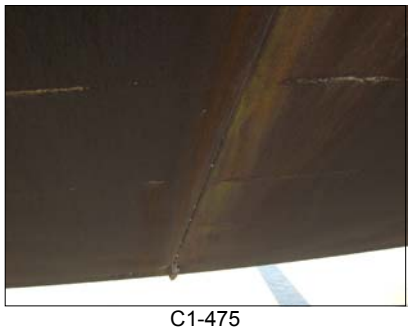
C1-470

C1-471

C1-472

C1-473

C1-474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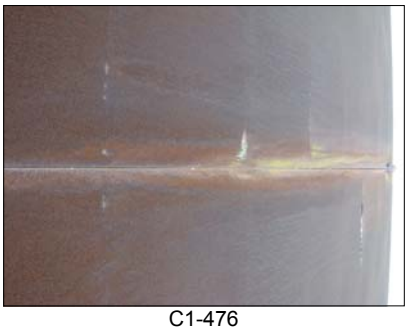

C1-476

C1-477

C1-478

C1-479

C1-480

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-481

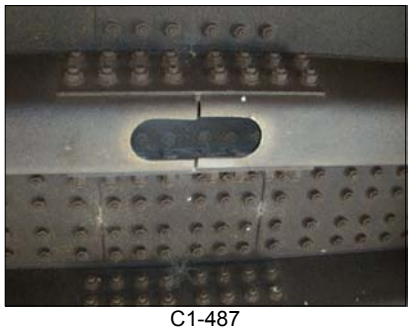
C1-482

C1-483

C1-484

C1-485

C1-486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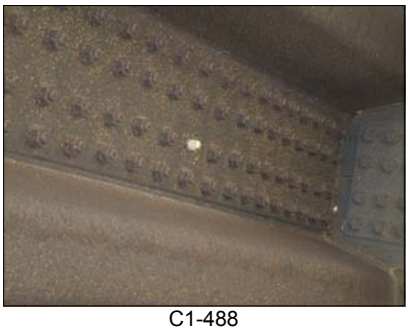
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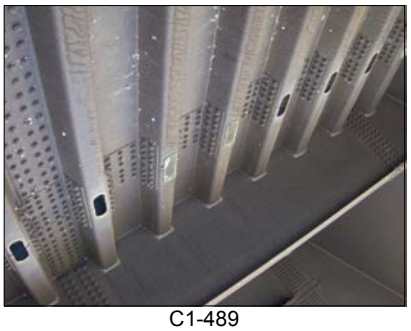
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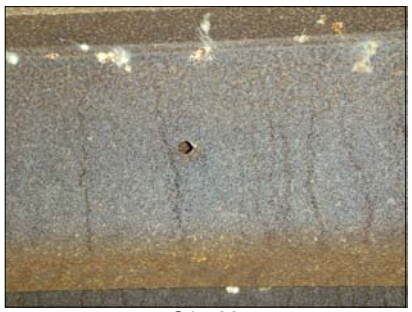
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C1-491

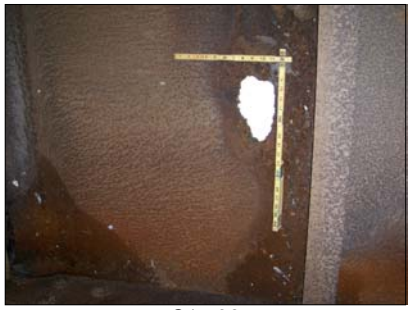
C1-492

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-493

C1-494

C1-495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C1-497

C1-498

C1-499

C1-500

C1-501

C1-502

C1-503

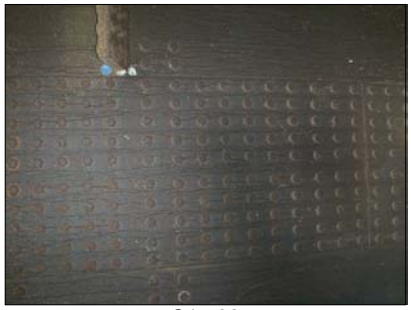
C1-504

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-505

C1-506

C1-507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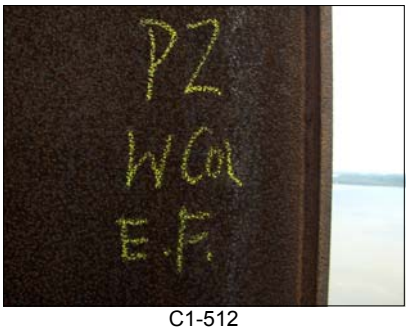
C1-509

C1-510

C1-511



C1-512

C1-513

C1-514

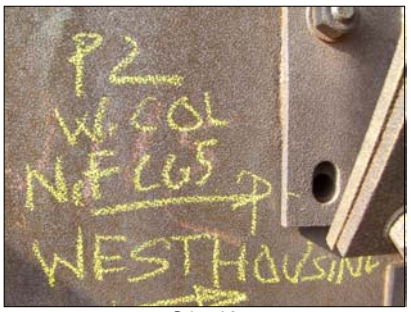
C1-515

C1-516

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-517

C1-518



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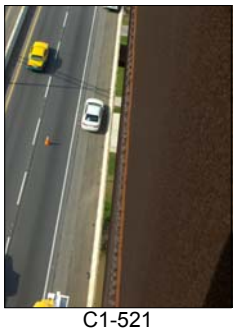
C1-520


C1-521

C1-522

C1-523

C1-524

C1-525

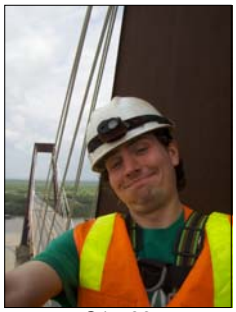
C1-526

C1-527

C1-528

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-529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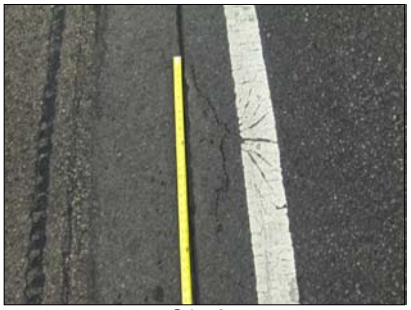
C1-531

C1-532

C1-533


C1-534

C1-535

C1-536

C1-537

C1-538

C1-539

C1-540

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-541

C1-542

C1-543

C1-544

C1-545

C1-546

C1-547

C1-548

C1-549

C1-550

C1-551

C1-552

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-553

C1-554

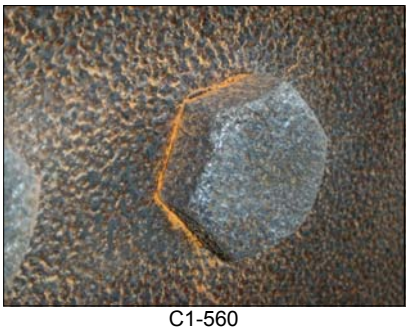
C1-555

C1-556

C1-557

C1-558

C1-559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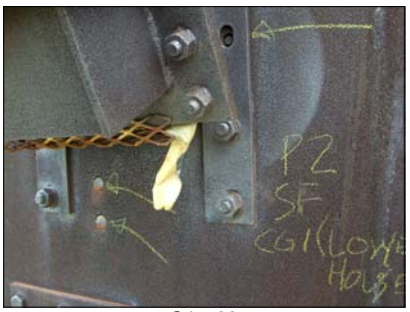
C1-561

C1-562



C1-563

C1-564

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-565

C1-566

C1-567

C1-568

C1-569

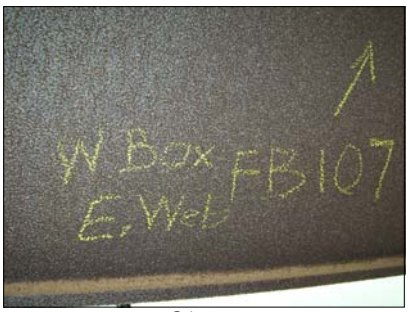
C1-570

C1-571

C1-572

C1-573

C1-574



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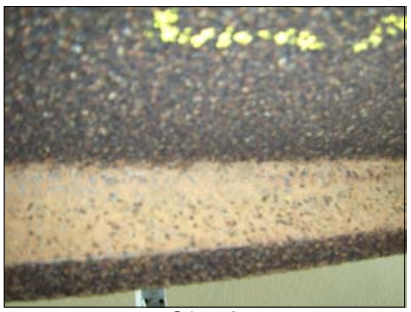
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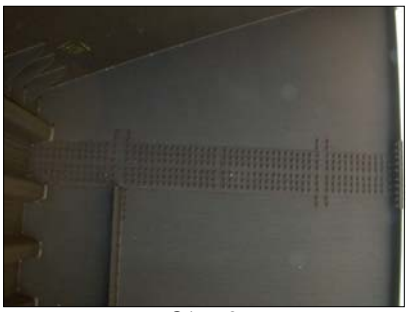
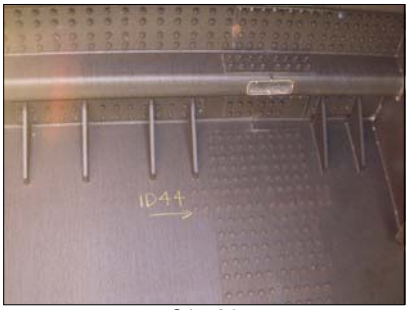
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-577


C1-578

C1-579

C1-580



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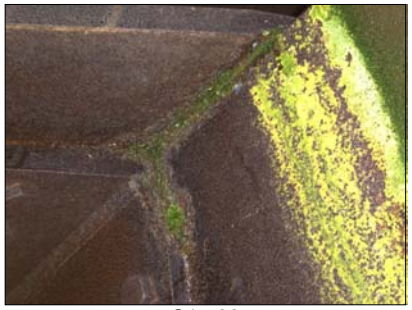
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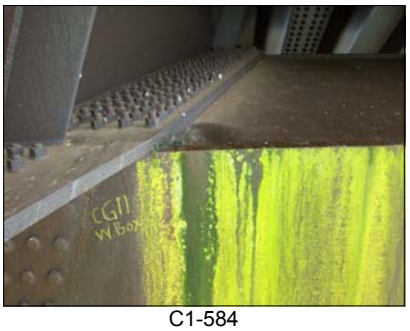
C1-583



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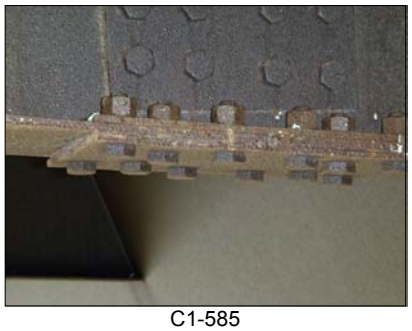

C1-585

C1-586

C1-587

C1-588

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-589

C1-590

C1-591

C1-592

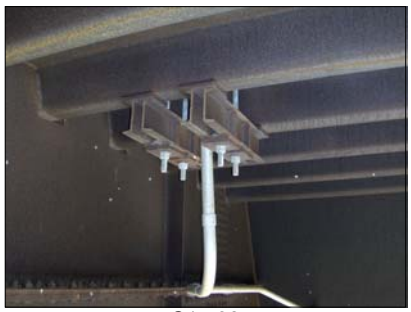
C1-593

C1-594

C1-595

C1-596

C1-597


C1-598

C1-599

C1-600

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-601

C1-602

C1-603

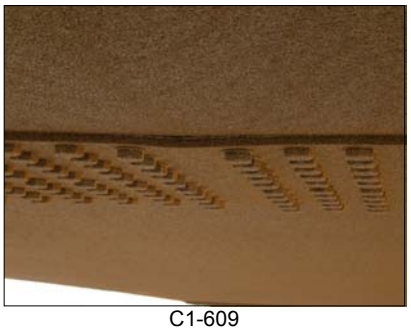
C1-604

C1-605

C1-606

C1-607

C1-608


C1-609

C1-610

C1-611

C1-612

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-613

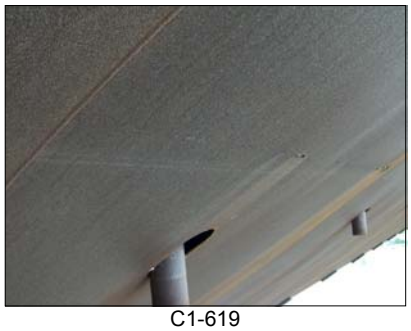
C1-614

C1-615

C1-616

C1-617

C1-618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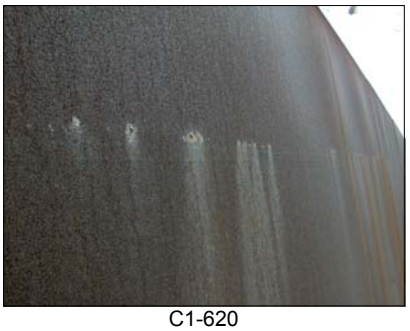

C1-620

C1-621

C1-622

C1-623

C1-624

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

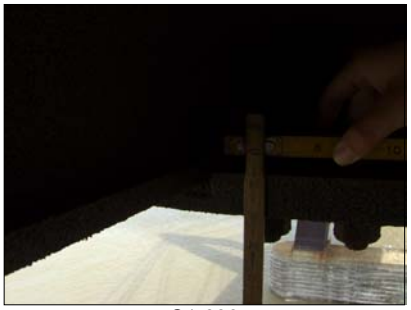
C1-625

C1-626

C1-627

C1-628

C1-629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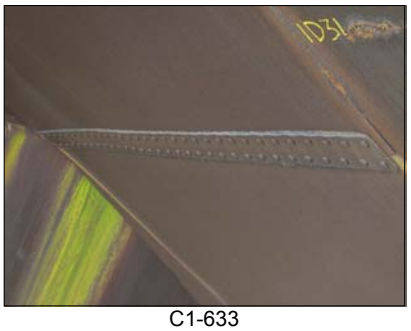
C1-631

C1-632



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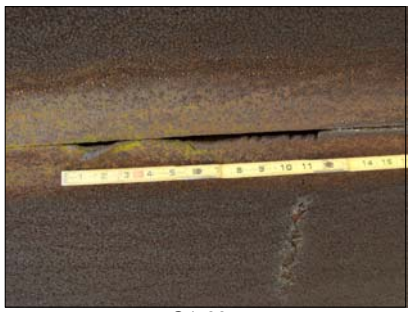
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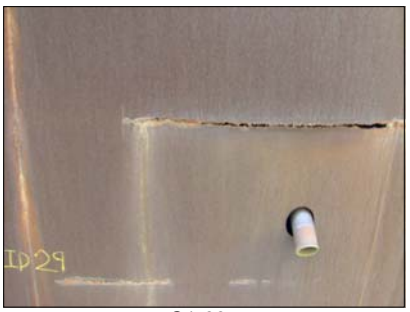


C1-635

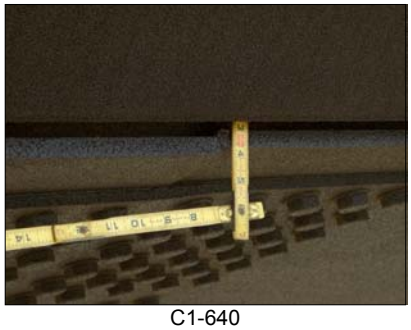
C1-636

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-637

C1-638

C1-639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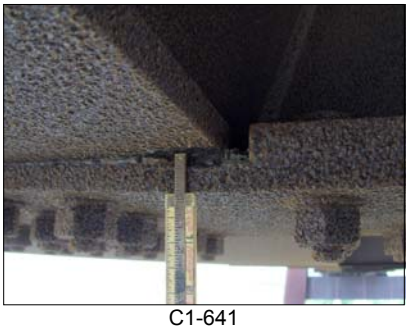
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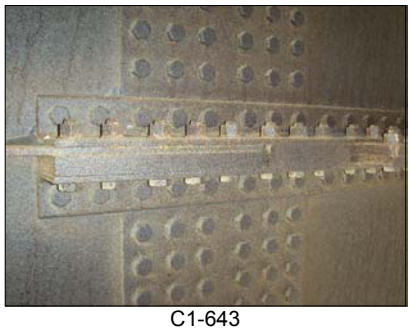
C1-642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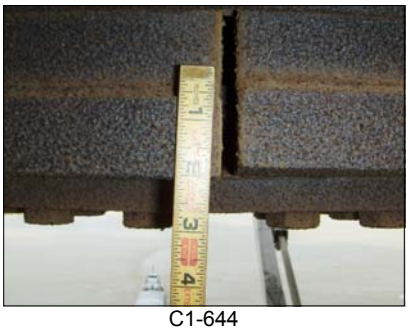

C1-644

C1-645

C1-646

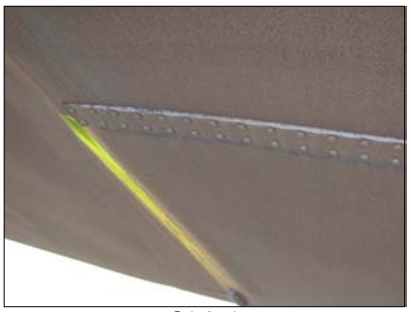
C1-647

C1-648

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-649

C1-650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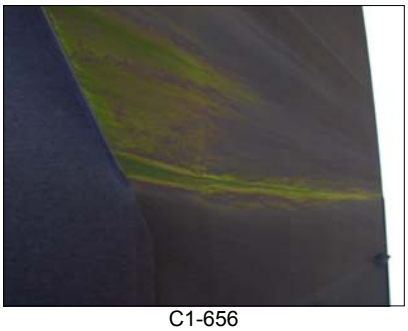
C1-652

C1-653

C1-654

C1-655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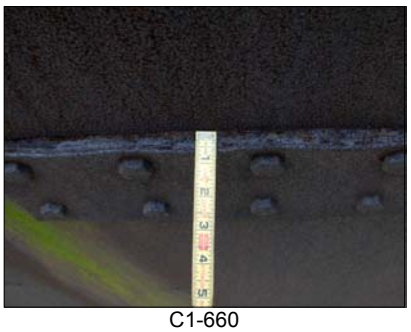
C1-657

C1-658

C1-659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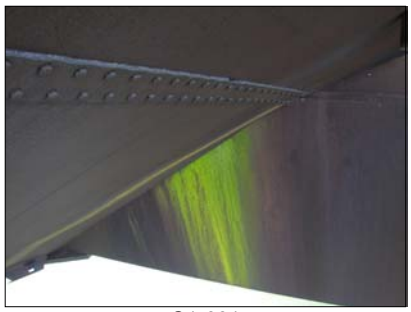
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1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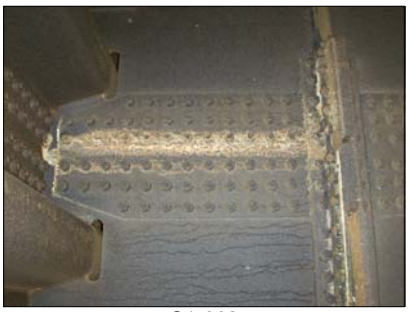
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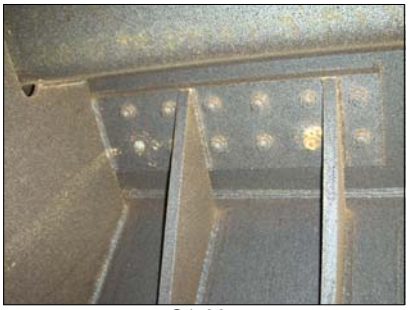
C1-663

C1-664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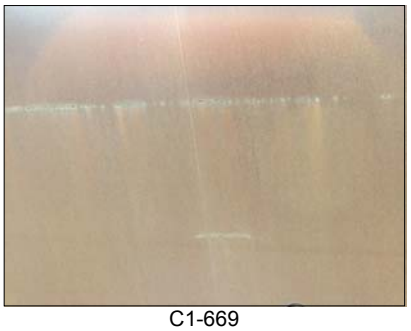
C1-666

C1-667

C1-668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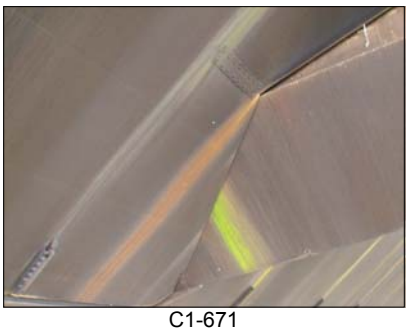
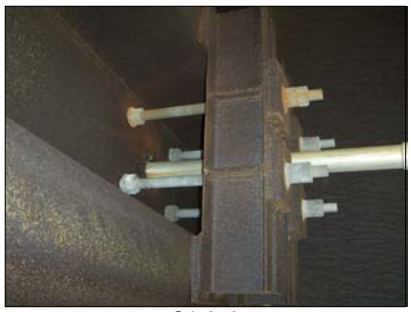
C1-670


C1-671

C1-672

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1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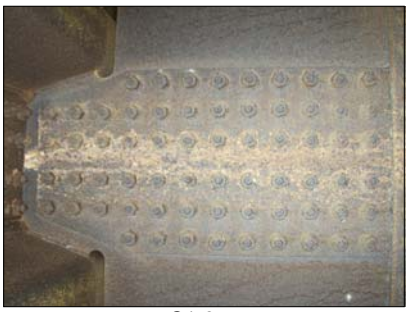
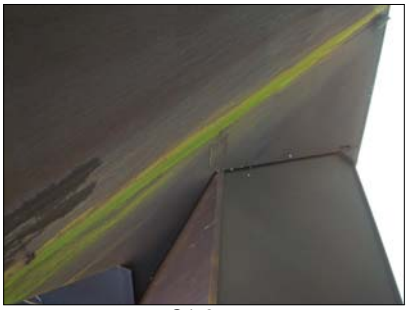

C1-674

C1-675

C1-676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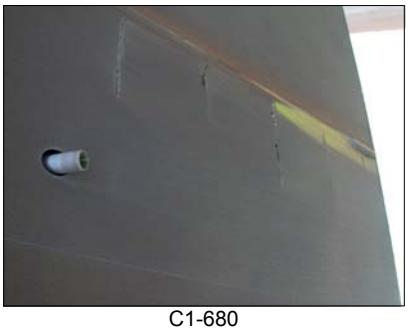
C1-678

C1-679


C1-680

C1-681

C1-682

C1-683

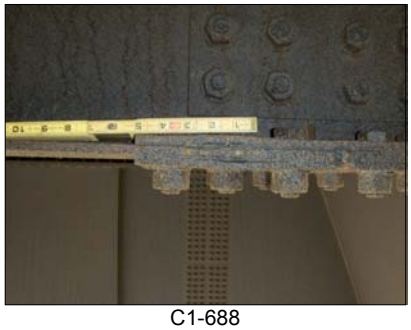
C1-684

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

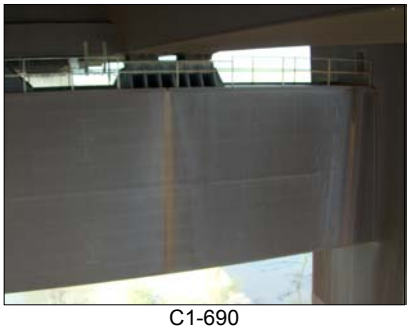
C1-685

C1-686

C1-687


C1-688

C1-689


C1-690

C1-691

C1-692

C1-693

C1-694

C1-695

C1-696

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

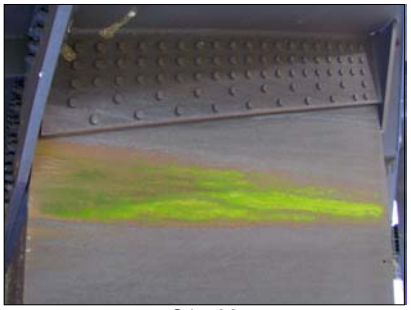
C1-697

C1-698

C1-699

C1-700

C1-701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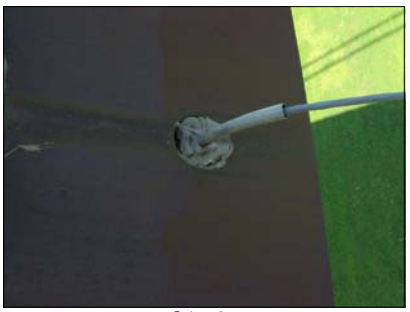
C1-703

C1-704

C1-705

C1-706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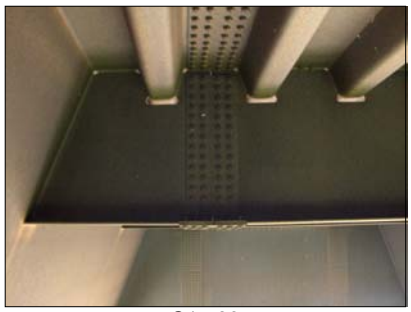
C1-708

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1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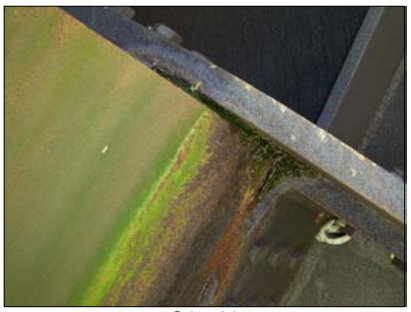
C1-710


C1-711

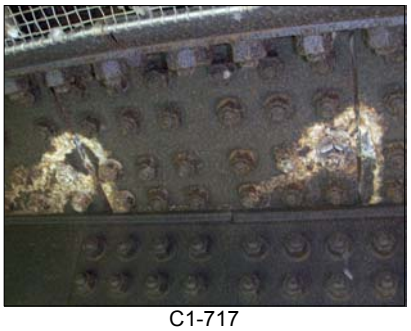
C1-712

C1-713

C1-714

C1-715

C1-716


C1-717

C1-718

C1-719

C1-720

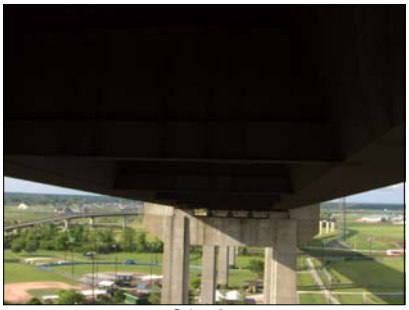
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-721

C1-722

C1-723

C1-724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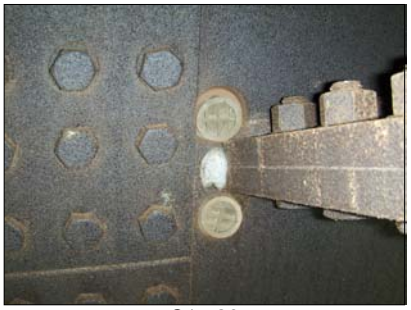
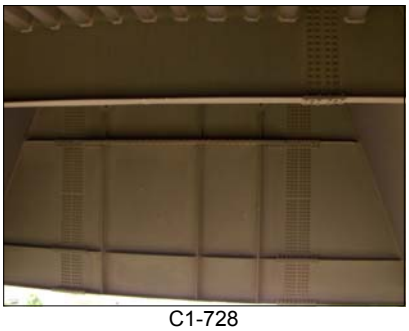
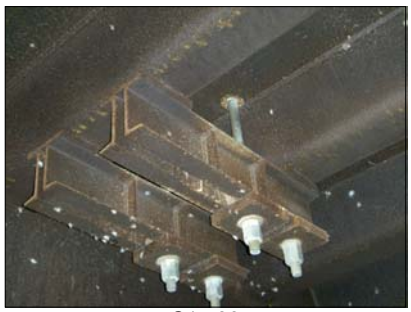

C1-726

C1-727


C1-728

C1-729


C1-730

C1-731

C1-732

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-733

C1-734

C1-735

C1-736

C1-737

C1-738

C1-739

C1-740

C1-741

C1-742

C1-743

C1-744

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-745

C1-746

C1-747

C1-748

C1-749

C1-750

C1-751

C1-752

C1-753

C1-754

C1-755

C1-756

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-757

C1-758

C1-759

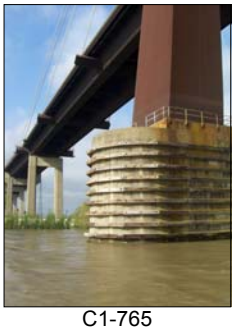
C1-760

C1-761

C1-762

C1-763

C1-764


C1-765

C1-766

C1-767

C1-768

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C1

C1-769

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-001

C2-002

C2-003

C2-004

C2-005

C2-006

C2-007

C2-008

C2-009

C2-010

C2-011

C2-012

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-013

C2-014

C2-015

C2-016

C2-017

C2-018

C2-019

C2-020

C2-021

C2-022

C2-023

C2-024

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-025

C2-026

C2-027

C2-028

C2-029

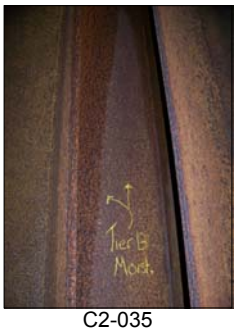
C2-030

C2-031

C2-032

C2-033

C2-034



C2-035

C2-036

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-037

C2-038

C2-039

C2-040

C2-041

C2-042

C2-043

C2-044

C2-045

C2-046

C2-047

C2-048

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-049

C2-050

C2-051

C2-052

C2-053

C2-054

C2-055

C2-056

C2-057

C2-058

C2-059

C2-060

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-061

C2-062

C2-063

C2-064

C2-065

C2-066

C2-067

C2-068

C2-069

C2-070

C2-071

C2-072

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-073

C2-074

C2-075

C2-076

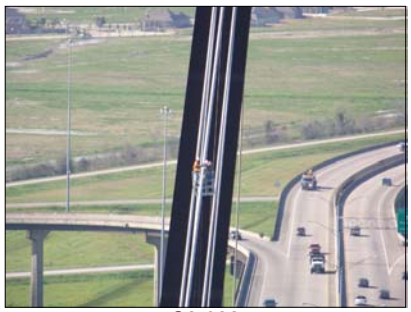
C2-077

C2-078

C2-079

C2-080

C2-081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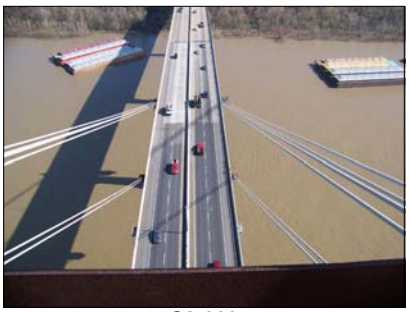
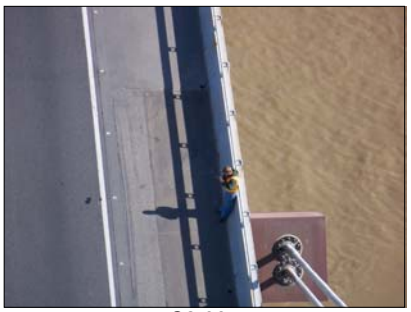

C2-083


C2-084

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

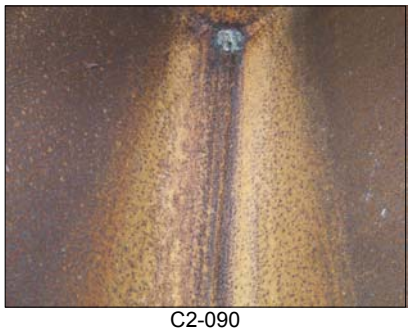
C2-085

C2-086

C2-087

C2-088

C2-089


C2-090

C2-091

C2-092

C2-093

C2-094

C2-095

C2-096

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-097

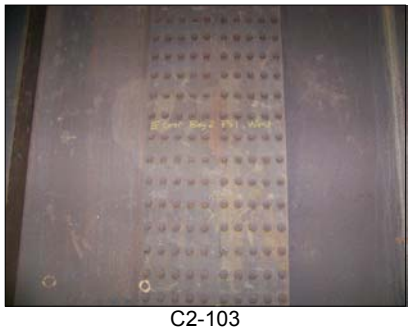
C2-098

C2-099

C2-100

C2-101

C2-102


C2-103

C2-104

C2-105

C2-106

C2-107

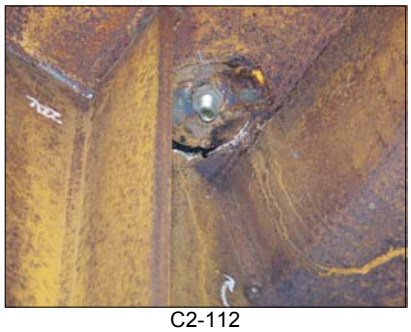
C2-108

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

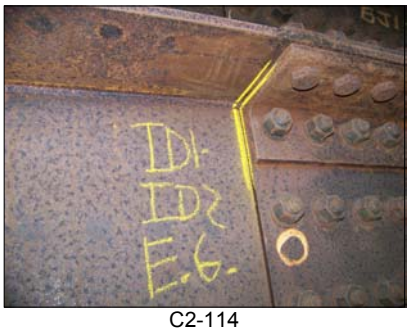
C2-109

C2-110

C2-111


C2-112

C2-113



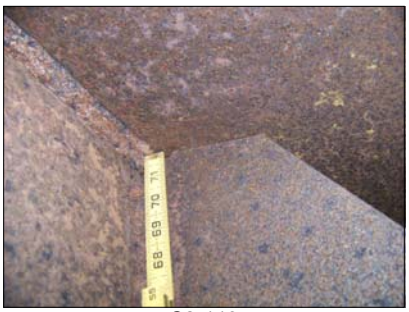
C2-114

C2-115

C2-116

C2-117

C2-118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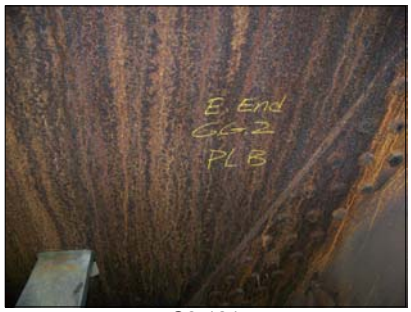
C2-120

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2



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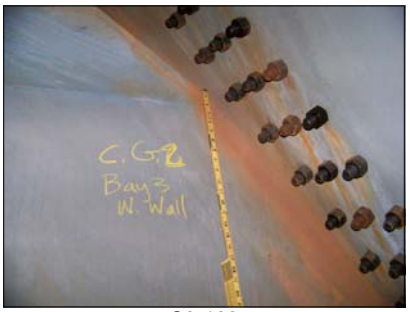


C2-122

C2-123

C2-124

C2-125

C2-126

C2-127

C2-128

C2-129

C2-130

C2-131

C2-132

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-133

C2-134

C2-135

C2-136

C2-137

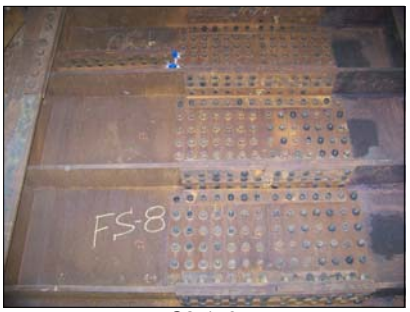
C2-138

C2-139

C2-140

C2-141

C2-142



C2-143

C2-144

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-145

C2-146

C2-147

C2-148

C2-149

C2-150

C2-151

C2-152

C2-153

C2-154

C2-155

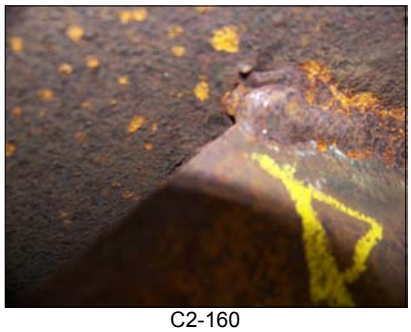
C2-156

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-157

C2-158

C2-159


C2-160

C2-161

C2-162

C2-163

C2-164

C2-165

C2-166

C2-167

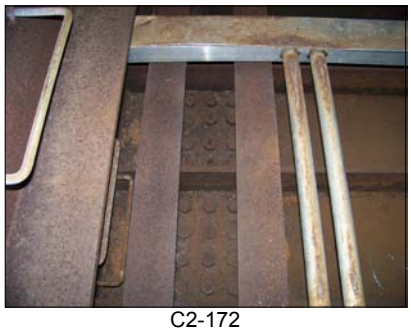
C2-168

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-169

C2-170

C2-171


C2-172

C2-173

C2-174

C2-175

C2-176

C2-177

C2-178

C2-179

C2-180

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-181

C2-182

C2-183

C2-184

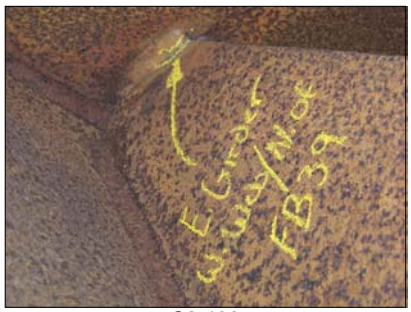
C2-185

C2-186

C2-187

C2-188

C2-189



C2-190

C2-191

C2-192

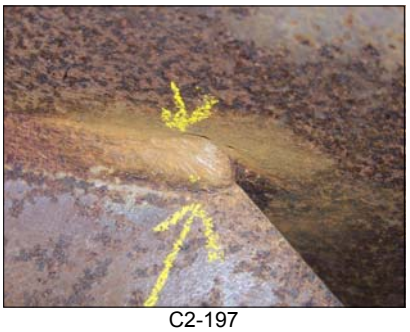
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-193

C2-194

C2-195

C2-196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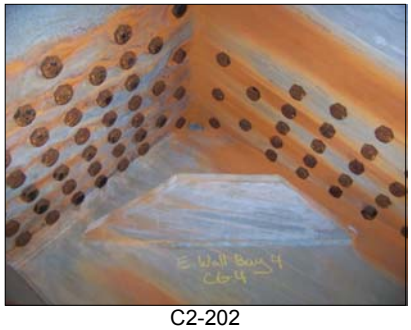
C2-198

C2-199

C2-200

C2-201


C2-202

C2-203

C2-204

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-205

C2-206

C2-207

C2-208

C2-209

C2-210

C2-211

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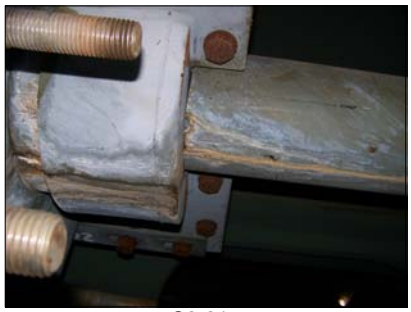
C2-215

C2-216

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2


C2-217

C2-218

C2-219

C2-220

C2-221

C2-222

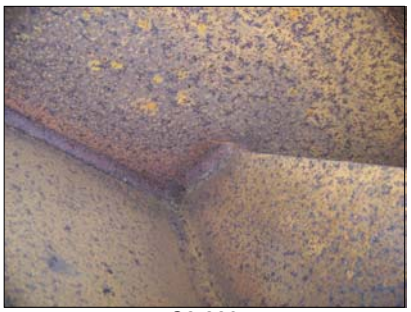
C2-223

C2-224

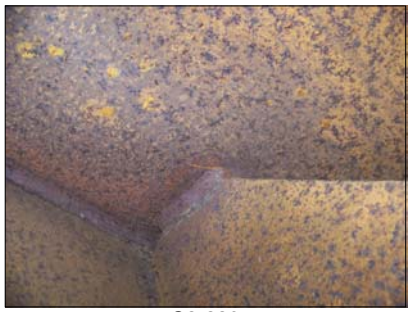
C2-225

C2-226

C2-227

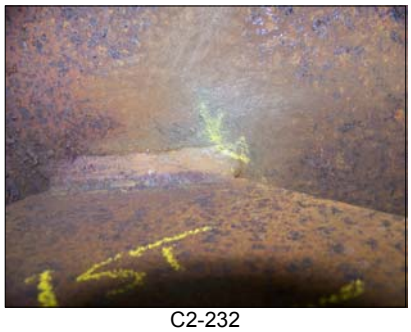

C2-228

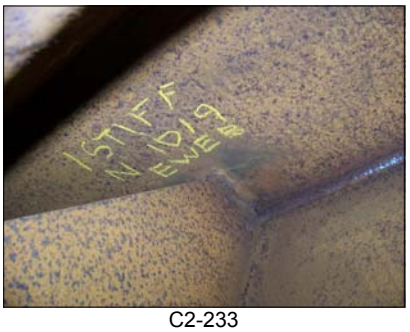
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2


C2-229

C2-230

C2-231


C2-232

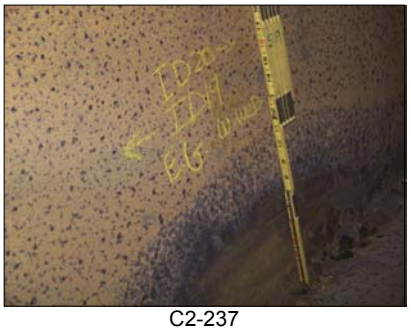


C2-233

C2-234

C2-235

C2-236


C2-237

C2-238

C2-239

C2-240

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-241

C2-242

C2-243

C2-244

C2-245

C2-246

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C2-248

C2-249

C2-250

C2-251

C2-252

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

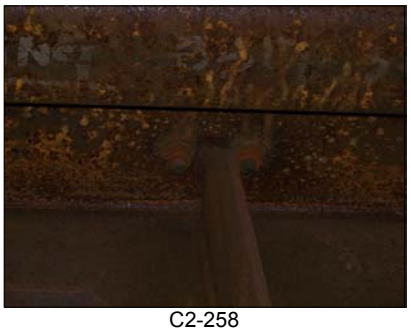
C2-253

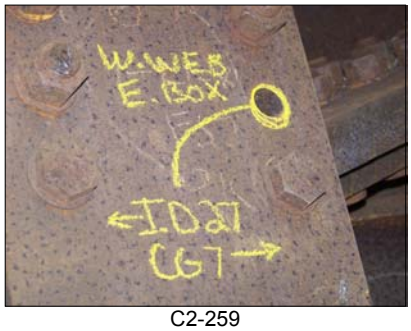
C2-254

C2-255

C2-256

C2-257


C2-258



C2-259

C2-260

C2-261

C2-262

C2-263

C2-264

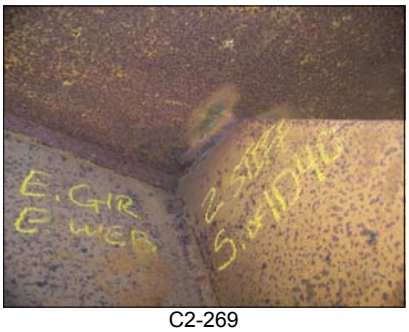
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-265

C2-266

C2-267

C2-268



C2-269

C2-270

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C2-276

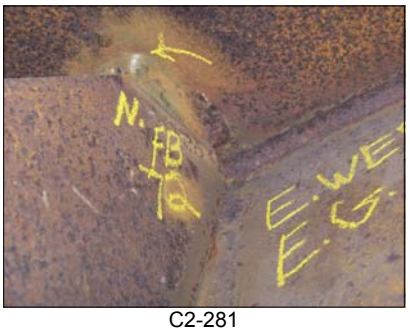
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-277

C2-278

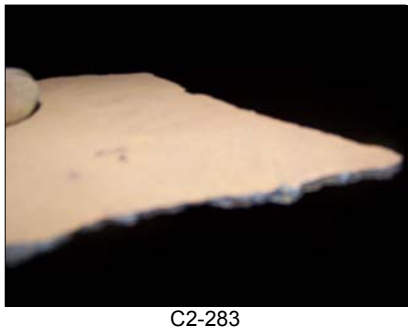
C2-279

C2-280



C2-281

C2-282


C2-283

C2-284

C2-285

C2-286

C2-287

C2-288

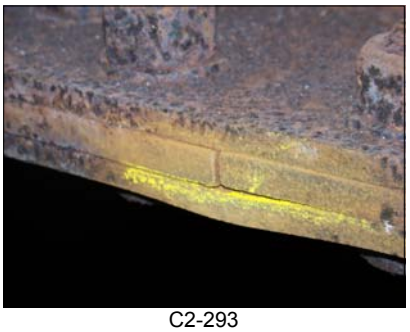
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-289

C2-290

C2-291

C2-292


C2-293

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C2-300

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-301

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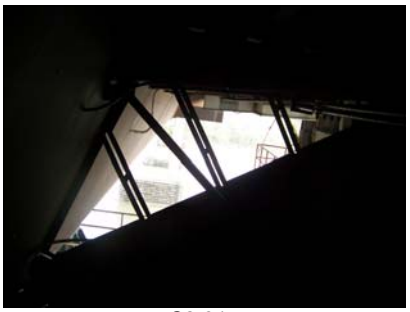
C2-312

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-313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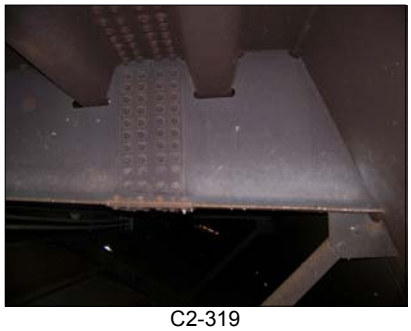
C2-318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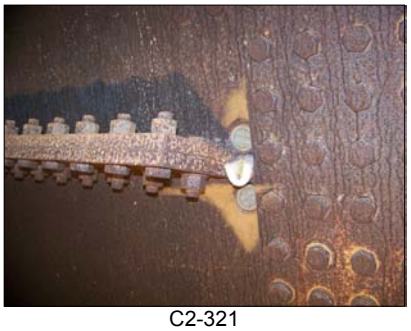
C2-321

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-325

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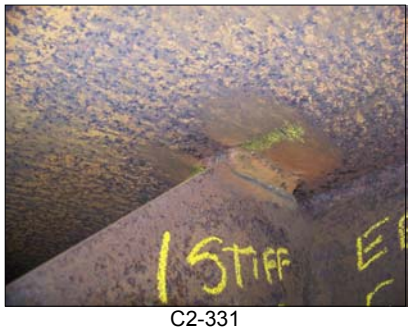
C2-330



C2-331

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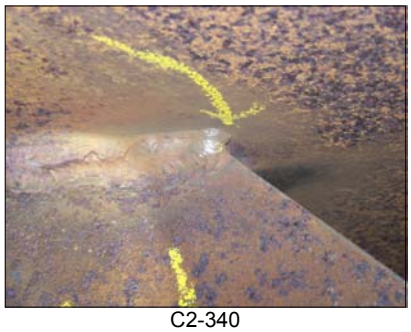
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-337

C2-338

C2-339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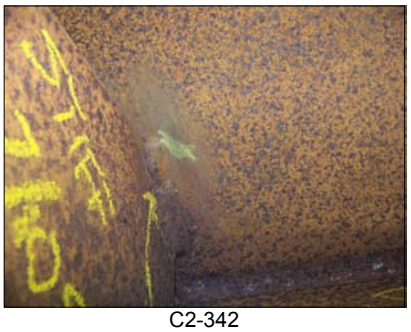
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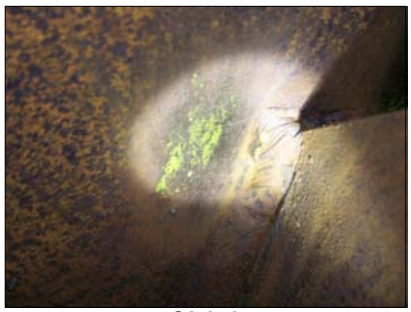
C2-345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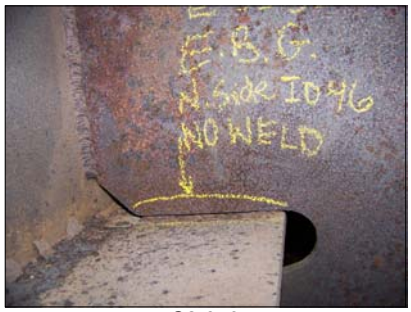
C2-348

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2



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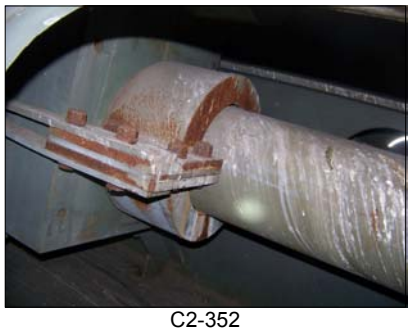
C2-351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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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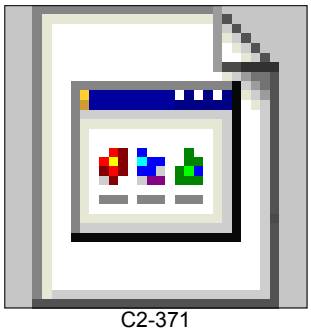
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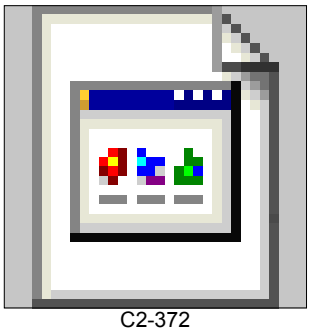
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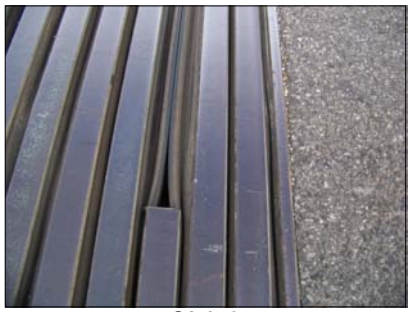
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2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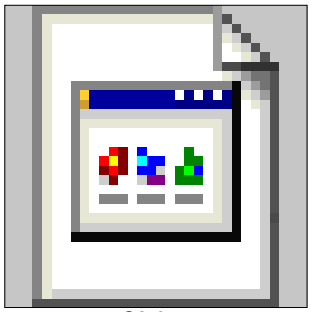
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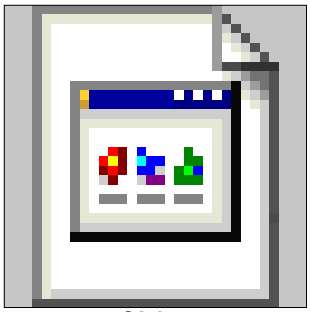
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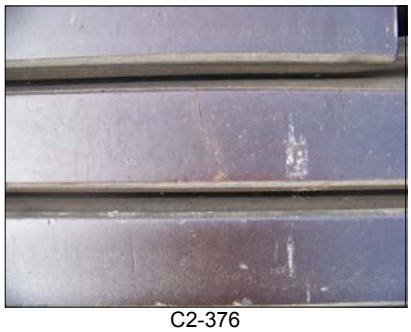
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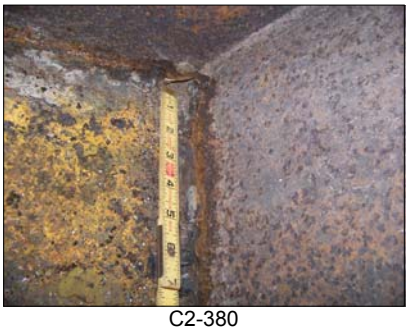
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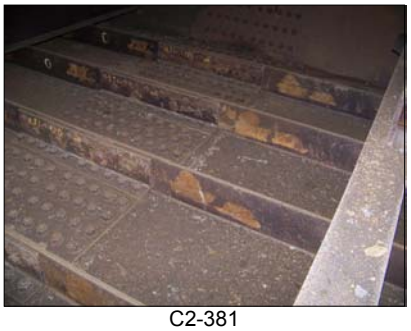
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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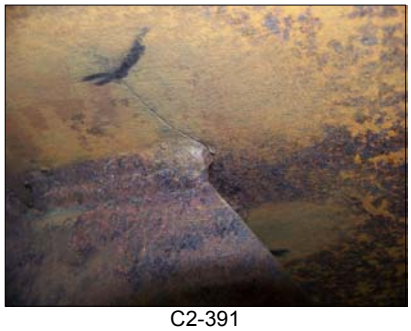
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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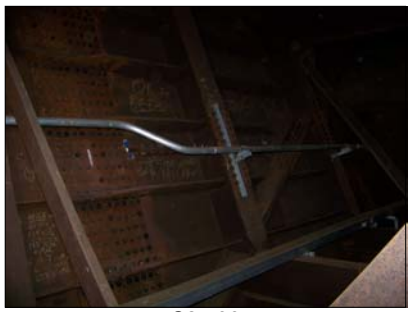
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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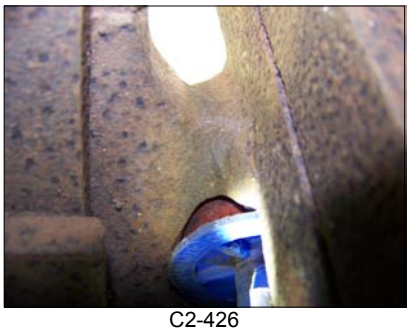
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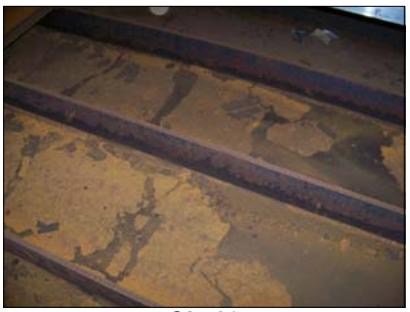
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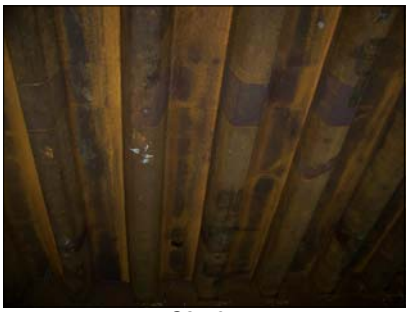
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-433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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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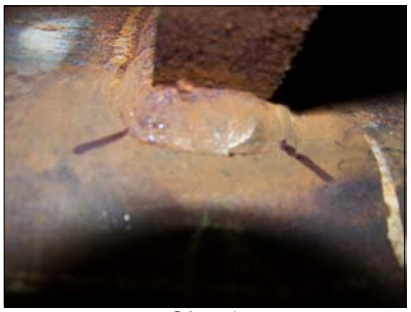
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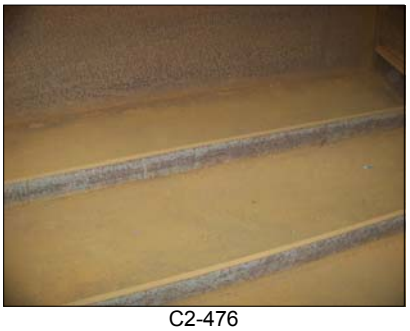
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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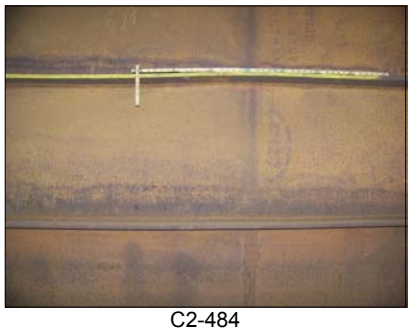
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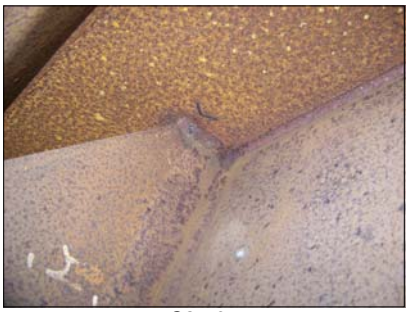
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-493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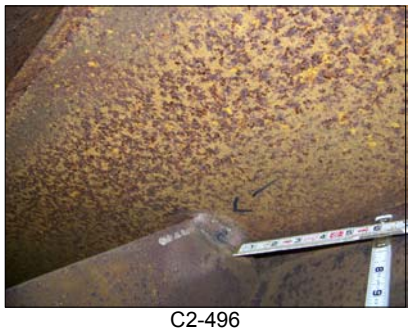
C2-495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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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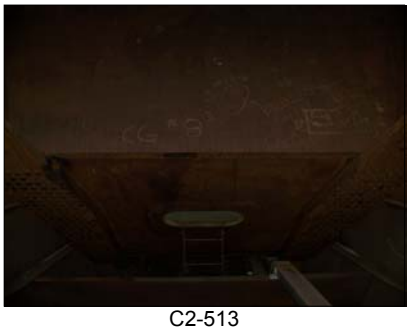
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-517

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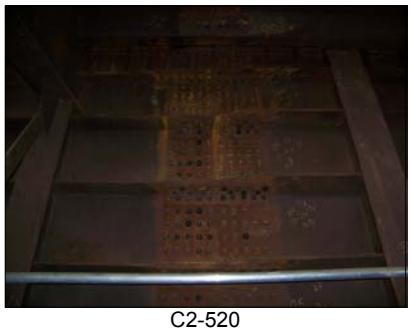
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-529

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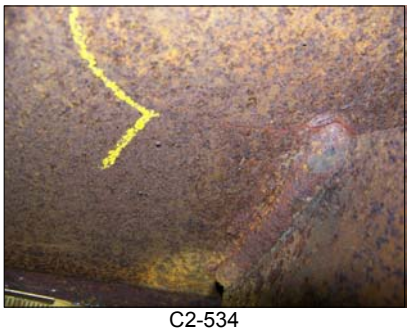
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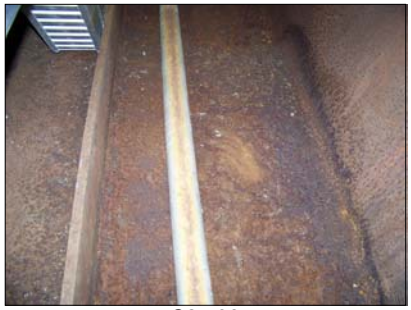
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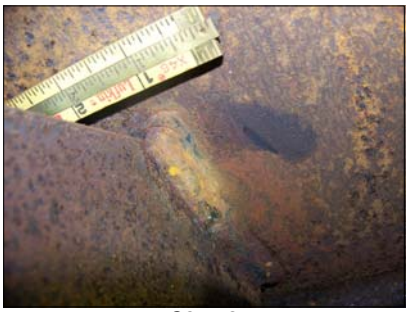
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-541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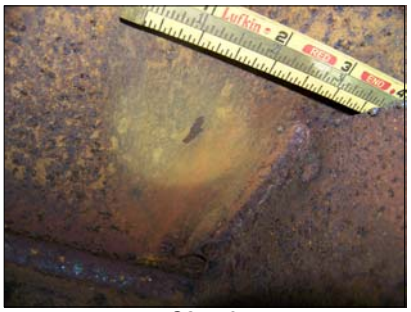
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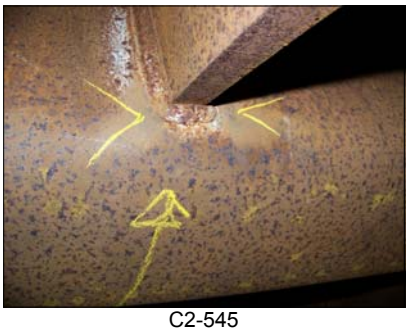
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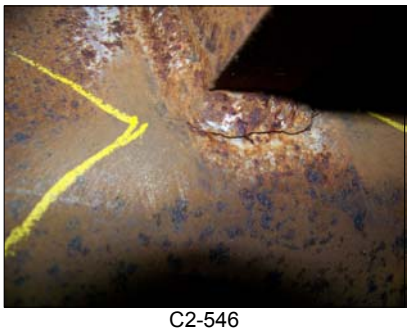
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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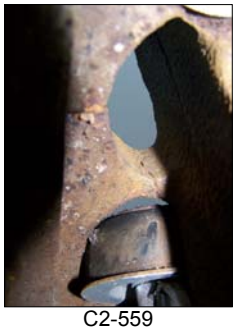
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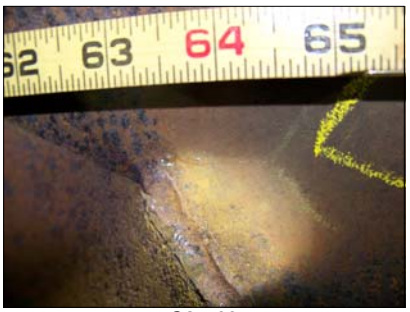

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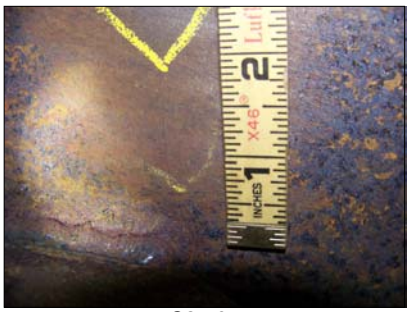
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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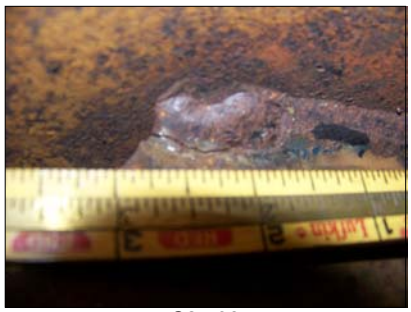
C2-598

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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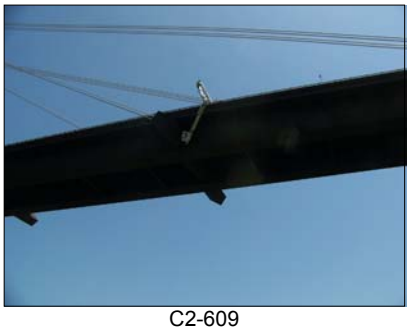
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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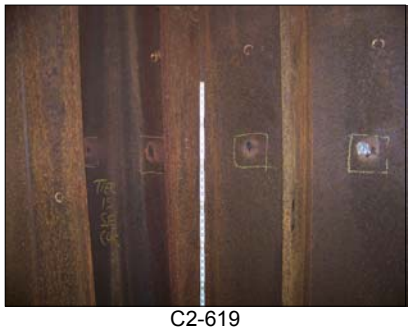
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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

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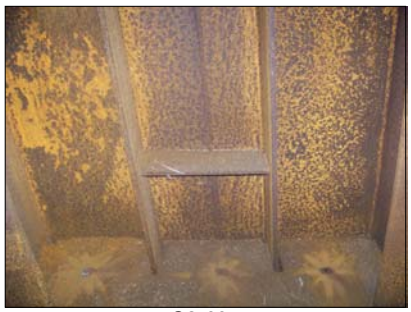
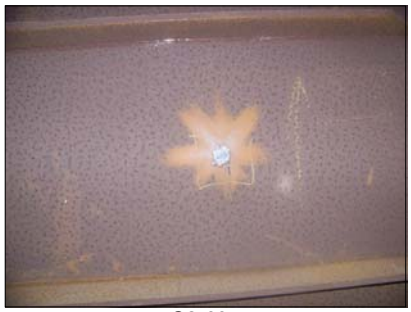

C2-634

C2-635

C2-636

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2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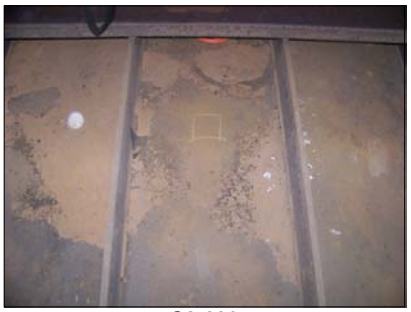
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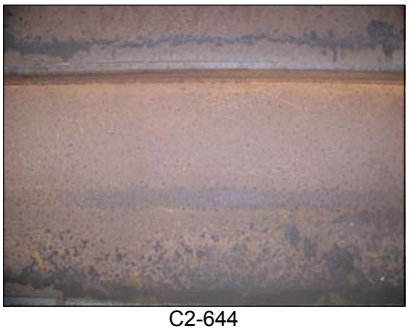
C2-642

C2-643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C2-645

C2-646

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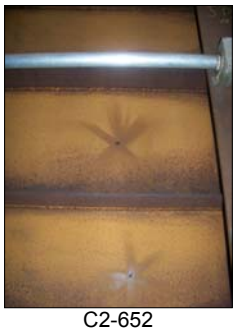
C2-648

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-649

C2-650

C2-651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C2-660

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-661

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C2-663

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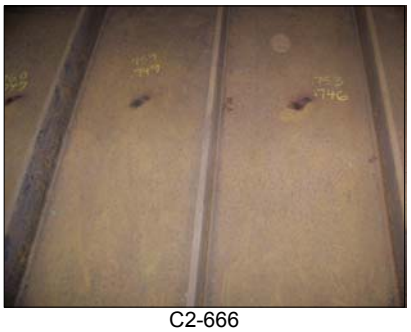
C2-665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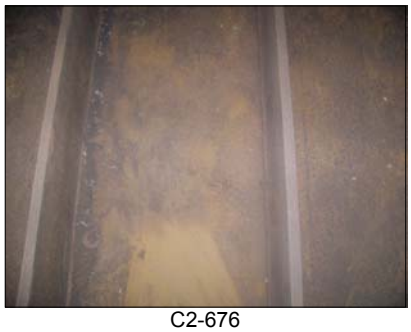
C2-672

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-673

C2-674

C2-675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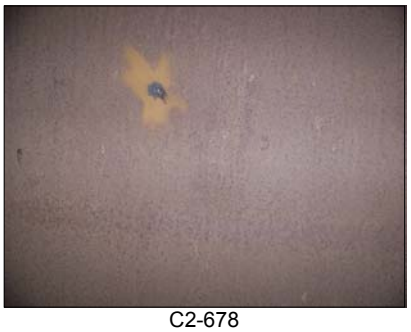
C2-677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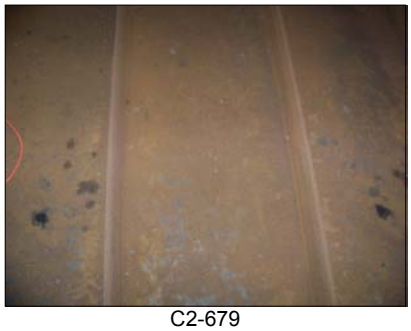
C2-679

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C2-684

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-685

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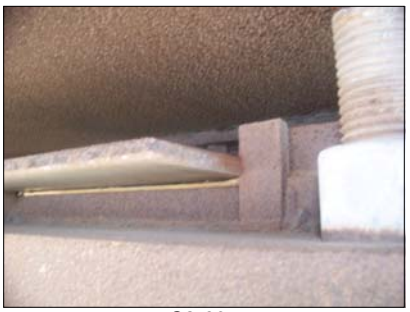
C2-692

C2-693

C2-694


C2-695

C2-696

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-697

C2-698

C2-699

C2-700

C2-701

C2-702

C2-703

C2-704

C2-705

C2-706

C2-707

C2-708

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C2

C2-709

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-001

C3-002

C3-003

C3-004

C3-005

C3-006

C3-007

C3-008

C3-009

C3-010

C3-011

C3-012

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-013

C3-014

C3-015

C3-016

C3-017

C3-018

C3-019

C3-020

C3-021

C3-022

C3-023

C3-024

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-025

C3-026

C3-027

C3-028

C3-029

C3-030

C3-031

C3-032

C3-033

C3-034

C3-035

C3-036

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-037

C3-038

C3-039

C3-040

C3-041

C3-042

C3-043

C3-044

C3-045

C3-046

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C3-048

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-049

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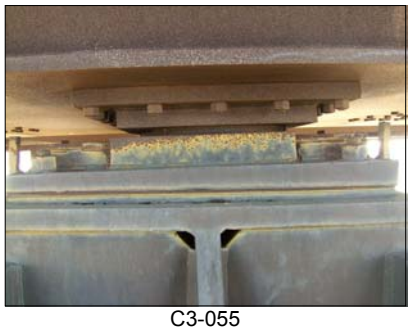
C3-054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C3-059

C3-060

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-061

C3-062

C3-063

C3-064

C3-065

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C3-070

C3-071

C3-072

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-073

C3-074

C3-075

C3-076

C3-077

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C3-080

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C3-082

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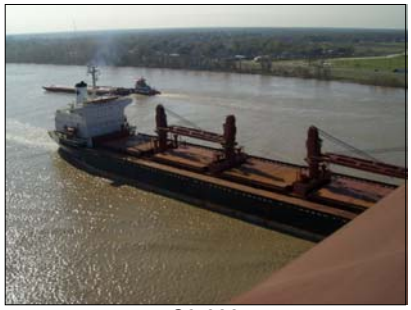
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-085

C3-086

C3-087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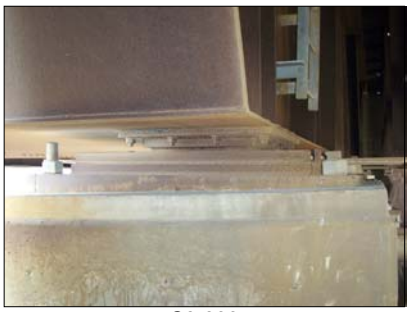
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-097

C3-098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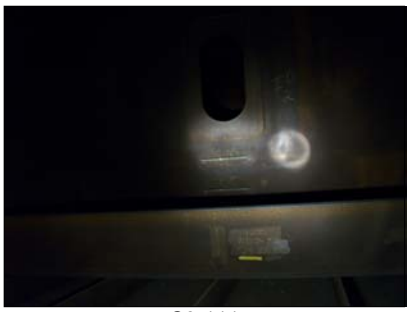
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-109

C3-110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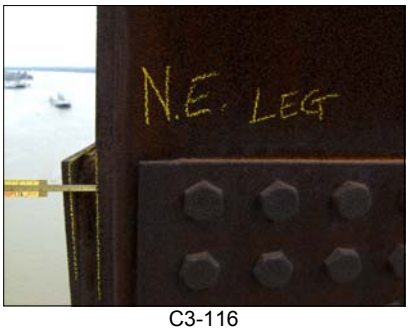
C3-112

C3-113

C3-114

C3-115



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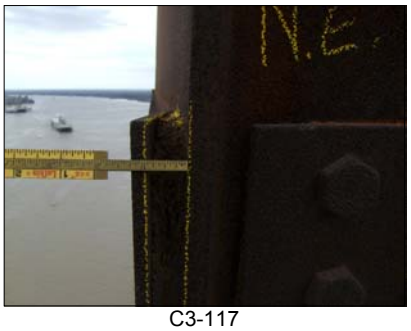

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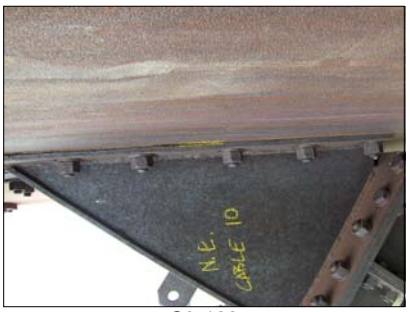
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-121



C3-122

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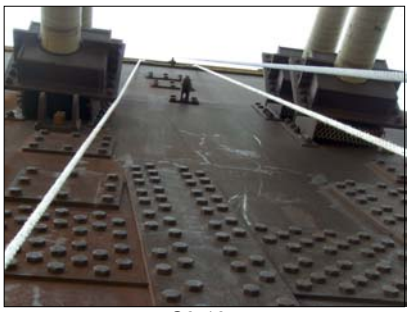
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-133

C3-134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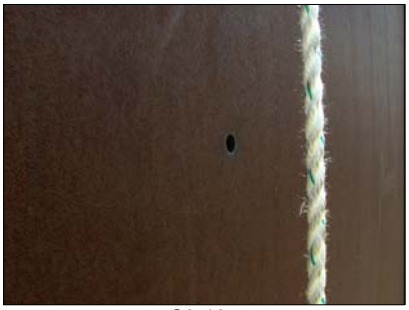
C3-136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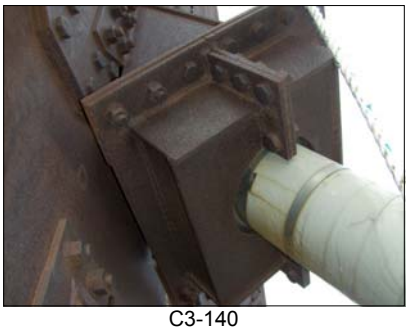
C3-138

C3-139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C3-142

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C3-144

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

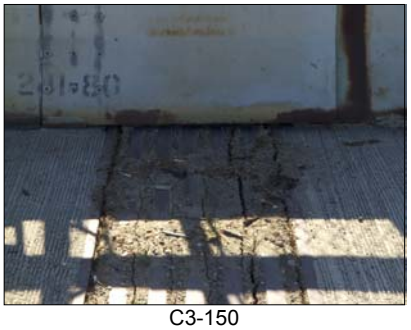
C3-145

C3-146

C3-147

C3-148

C3-149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C3-156

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-157

C3-158

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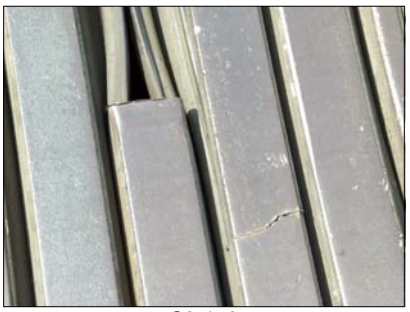
C3-168

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-169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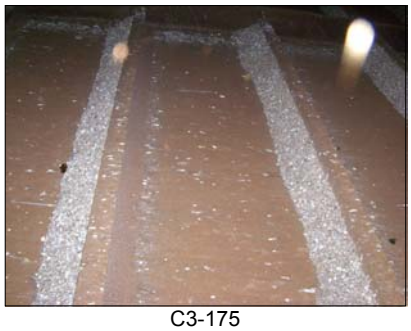
C3-174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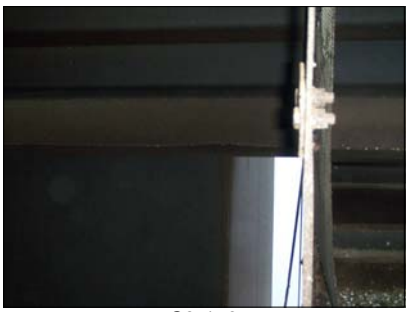
C3-178


C3-179

C3-180

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-181

C3-182

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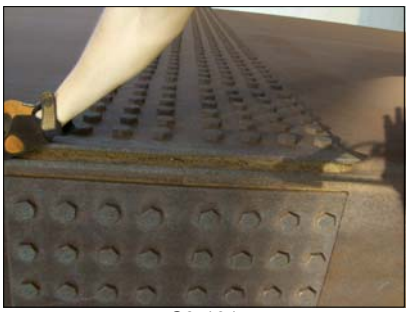
C3-190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C3-192

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-193

C3-194

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C3-197

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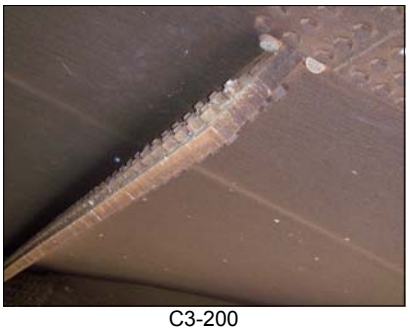
C3-199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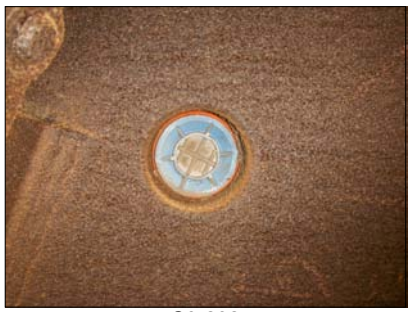
C3-201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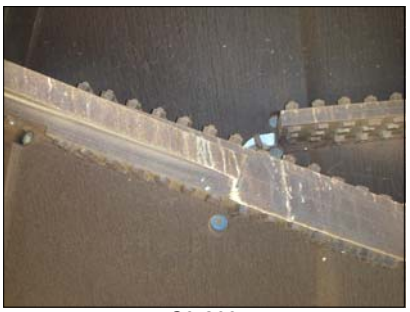
C3-203

C3-204

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-205

C3-206

C3-207

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-217

C3-218

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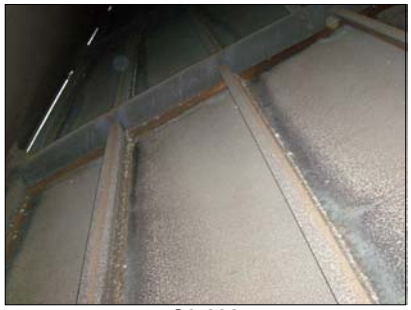
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-229

C3-230

C3-231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C3-240

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-241

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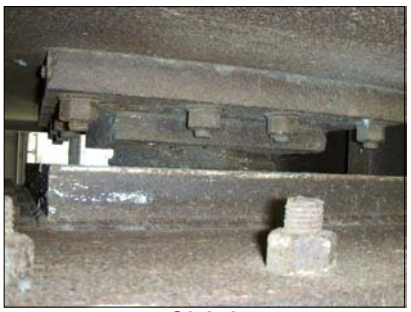
C3-250

C3-251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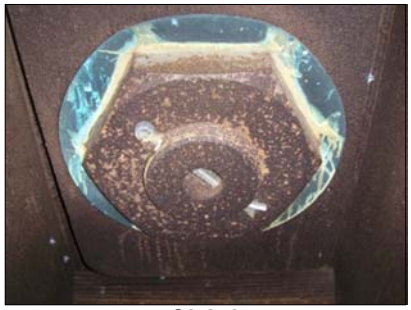
Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-253

C3-254

C3-255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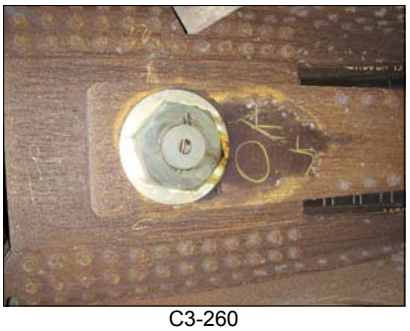
C3-259


C3-260

C3-261

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C3-263

C3-264

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-265

C3-266

C3-267

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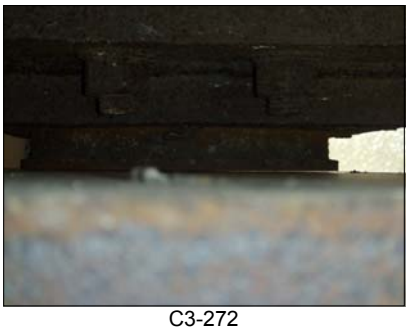
C3-271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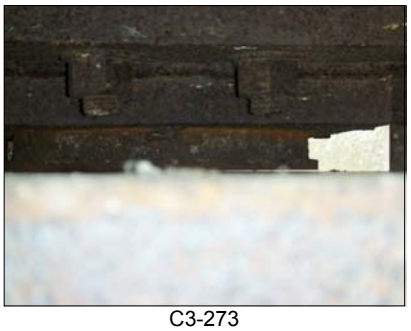
C3-273

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-277

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Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-289

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C3-299

C3-300

Hale Boggs Memorial Bridge
I-310 over Mississippi River
Inspection Photos Roll C3

C3-301