STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone:

January 23, 2012

RECEIVED
JAN 25 2012
BOROUGH CLERK

The Honorable Robert A. Mezzo
Mayor
Borough of Naugatuck
229 Church Street
Naugatuck, CT 06770

Dear Mayor Mezzo:

Subject: Bridge Inspection Report
Bridge No. 04214, Maple Street over Naugatuck River
Borough of Naugatuck

The Department of Transportation (Department) has completed its special inspection activities for the subject bridge. This inspection was limited to the inspection of the underside of the arch spans and no significant changes were noted. The Department will keep up its inspection of this structure until it is repaired or replaced, but only forward inspection reports when major changes occur.

Please note that this structure is rated serious as of 2007. The Department is aware that this bridge will be rehabilitated under Project No. 9087-4214, which has a tentative award date of March 30, 2012. For information concerning possible funding for this structure, please contact the Council of Governments of the Central Naugatuck Valley.

It is the Department's belief that serious bridge problems can be prevented or minimized by timely corrective action. Please review the reports for all deficiencies which are considered routine maintenance that should be corrected. The State process of inventory and inspection in no way relieves the Borough of its responsibility for bridge maintenance in accordance with Section 13a-99 of the Connecticut General Statutes.

If you have any questions, please contact Mr. Robert P. Zaffetti, Manager of Bridge Safety and Evaluation, at (860) 594-3156.

Very truly yours,

Scott A. Hill, P.E.
Manager of Bridges and Facilities
Bureau of Engineering and Construction

Enclosures

cc: Mr. Ted Aldieri, FHWA
Mr. Peter Dorpalen, Council of Governments of the Central Naugatuck Valley

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Printed on Recycled or Recovered Paper

Bridge Number 04214

Inspected By: S. ELBASTAWISY & C. KOLASA

Sufficiency Rating 7.00
Previous Inspection Date 8/25/2010

BS&E Received ☐ Data Entry By: Leo Cain Jr.
Copies Made ☐ Data Entry Date: 11/28/11

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

SHEET 1 OF 2 FORM BRI-19 REV 10/00

SHEET 1 OF 2

L.C.C. 11/28/2011 08/25/2010 5

90) Inspection Date	Inspection Team	91) Frequency	Class:
09 24 11	5 24	24	02
Indepth Insp	Deck Survey	Access	Flagman
8/25/2010	1/1/1900	17 17	05

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date
Fracture:				
Uwater:		24	51	8/30/2010
Special:	Z Z	12 12	5 24	09/24/11

RED FLAG

IDENTIFICATION

Bridge Name WHITTEMORE MEM
Town Name NAUGATUCK Town Code 49950

5) Inventory Route:
A) Record Type 1
B) Signing Prefix 5 City Street
C) Level of Service 0 None of the bel
D) Route Number 00000
E) Directional Suffix 0 NA

6) Feature Intersected NAUGATUCK RIVER

7) Facility Carried: MAPLE STREET

9) Location OFF EXIT 27 ROUTE 8 SB

11) Milepoint 0.43 Miles
16) Latitude 41deg 29 min 24.00 sec deg min sec
17) Longitude 73deg 3 min 12.00 sec deg min sec

98) Border Bridge:
A) State Code
B) Percent Responsibility %
C) Border Town Name

99) Border Bridge Structure No

STRUCTURE TYPE AND MATERIAL

43) Structure Type, Main:
A) Material 1 Concrete
B) Design Type 11 Arch - Deck

44) Structure Type, Approach:
A) Material 0 Other
B) Design Type 0 Other

45) Number of Spans, Main Unit 3
46) Number of Approach Spans 0
107) Deck Structure Type N Not Applicable
108) Wearing Surface/Protective System:
A) Type of Wearing Surface N Not Applicable
B) Type of Membrane N Not Applicable
C) Type of Deck Protection N Not Applicable

AGE AND SERVICE

27) Year Built 1912
106) Year Reconstructed 1956
42) Type of Service:
A) On 5 Highway-pedestrian
B) Under 5 WATERWAY
28) Number of Lanes:
A) On 4
B) Under
29) Average Daily Traffic 20288
Half ADT?: No
109) Percent Truck 4%
30) Year of ADT 2010
19) Bypass, Detour Length 2miles

GEOMETRIC DATA

48) Length of Max Span 66ft
49) Structure Length 180ft
50) Curb or Sidewalk Widths:
A) Left 10.0ft
B) Right 10.0ft
51) Brg Rdwy width,curb-curb 40.1ft
52) Deck Width, Out-Out 64.3ft
32) Approach Roadway Width 40ft
33) Bridge Median 0 No Median
Deck Area 11574 sqft

34) Skew Angle 0deg
35) Structure Flared 0
10)Inv. Rte. Min. Vert Clearance 99ft 99in
47) Log Inv. Rte. Total Horiz Clr.: 40.1ft
47) RLog Inv. Rte. Total Horiz. Clr.: ft
53) Min Vert Clearance Over Bridge 99ft 99in
54) Min Vert Under Clearance N Ref 0ft 0in Ref
55) Min Lat Under Clearance on Right N Ref 99.9ft Ref
56) Min Lat Under Clearance on Left 0.0ft

BRIDGE COMMENTS

Proj.#9087-4214 Local Bridge Contract awarded 3/30/2011, but check on bridge 9/21/2011 showed no construction started. Special Insp scheduled for 8/25/2011 will have to be done. Assigned to AI who has UBIE scheduled nearby. - NTS 9/21/2011

SPECIAL "Z": INSPECTION OF UNDERSIDE OF ARCH

New tentative award date: 3/30/2012.
L.C.C. 11/28/11

STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRI-19 REV 10/00

SHEET 2 OF 2

Bridge Number	04214	NBIS Length	
Town Name	NAUGATUCK	Yes	180
Facility Carried	MAPLE STREET		
Feature Crossed	NAUGATUCK RIVER		

Inspected By: S. ELBASTAWISY & C. KOLASA

CLASSIFICATION

112) NBIS Bridge Length	Yes	
104) Highway System	0	Off System
26) Functional Class	17	Urban Collector
100) Defense Highway	0	Route is not a STRAHNET Route
101) Parallel Structure	N	No parallel structure exists
102) Direction of Traffic	2	2-way traffic
103) Temporary Structure		
110) Designated National Network	0	Not on national network
20) Toll	3	On Free Road
21) Maintain	3	Town or Township Highway Agency
22) Owner	3	Town or Township Highway Agency
Report Class	L	LOCAL
37) Historical Significance	3	Possibly eligible for National Register

WATERWAY

DrainageBasinCode	6900	
38) Navigation Control	0	No navigation control on waterway
39) Navigation Vert Clr.	0	40) Navigation Horiz Clr. 0
116) Vert-Lift Brg Nav Min		
111) Pier Abutment Protection		

PROPOSED IMPROVEMENTS

75A) Type of Work Proposed		
75B) Work Done By		
76) Length of Struct. Improvement		ft
94) Bridge Improvement Cost	$	
95) Roadway Improvement Cost	$	
96) Total Project Cost	$	
97) Year of Improvement Cost Est.		
114) Future ADT		115) Year Future ADT

List No. LB Project No. 9087-4114 Advertised 2/28/2011

POSTED SIGNS & UTILITIES

Other Posted Signs 1					
Other Posted Signs 2					
Actual P.L. Single Unit Truck		tons	Actual P.L. 4Axle Truck		tons
Rec. P.L. Single Unit Truck		tons	Rec. P.L. 4Axle Truck		tons
Actual P.L. Semi-TrailerTruck	32	tons	Actual P.L. 3S2 Truck	40	tons
Rec. P.L. Semi-TrailerTruck	32	tons	Rec. P.L. 3S2 Truck	40	tons
Rec. P.L. All Vehicles		tons	Actual P.L. All Vehicles		tons
Posted Vert Clearance On Bridge		ft in			ft in
Posted Vert UnderClearance		ft in			ft in
Posted Speed Limit	25	mph			mph
Utility					
Utility	3	Electric			

LOAD RATING AND POSTING

31) Design Load	0	Evaluation Code	L	
63) Operating Rating Type	1	Year of Evaluation	2000	
64) Operating Rating	32.0	70) Bridge Posting	3	
65) Inventory Rating Type	1	41) Structure Status	P	
66) Inventory Rating	19.1			

CONDITION

		Rating	By
58) Deck	N		
59) Superstructure	3	3	LCC
60) Substructure	4		
61) Channel & Chan. Protection	5		
62) Culverts	N		

APPRAISALS

		Rating	By
67) Structure Evaluation	3	3	LCC
68) Deck Geometry	2		
69) Under Clear Vert & Horiz	N		
71) Waterway Adequacy	7		
72) Approach Rdwy Alignment	6		
113) Scour Critical	3		

11/23/11 L.C.C.

Items 58 Thru 72 Checked By:

36) Traffic Safety Features:

A) Bridge Railings	0	
B) Transitions	0	
C) Approach Guardrail	0	
D) Approach Guardrail End	0	

OTHER FEATURES

Fence Required	No		Barrel Ladder	No
Fence Present	No		Stand Pipes	No
Fence Height	0.0 ft	ft	Cat Walks	No
Fence Type			Movable Inspection System	No
Fence Material			Loose Concrete Checked?	No
Fence Top Type				

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2020
Senior	Leo Cain Jr
Supervisor	Theodore Lapierr

REVIEWED BY: [signature] Date 11/8/2011

CONNECTICUT
DEPARTMENT OF TRANSPORTATION

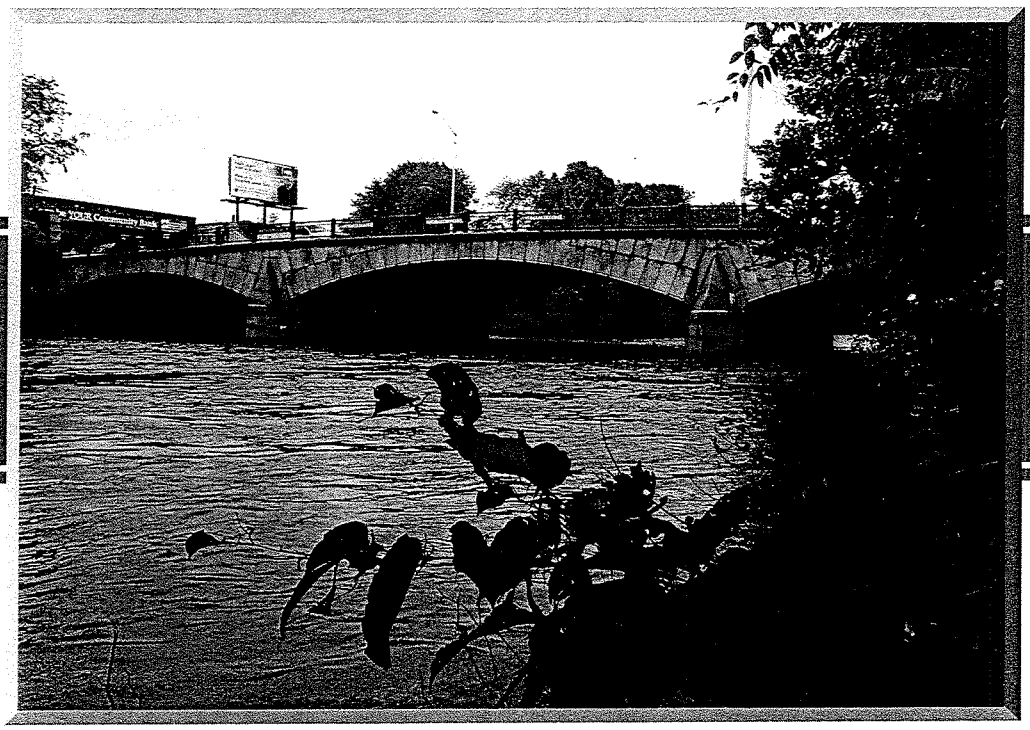
RECEIVED
NOV 10 2011
CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

BRIDGE SAFETY INSPECTION
STATE PROJECT NO. 170-3013

SPECIAL INSPECTION REPORT FOR BRIDGE NO. 04214

CARRYING MAPLE STREET
OVER
NAUGATUCK RIVER
NAUGATUCK, CONNECTICUT

STONE MASONRY/CONCRETE ARCH



INSPECTED SEPTEMBER 24, 2011

Prepared by:

AI Engineers, Inc.

919 Middle Street
Middletown, CT 06457

STATE OF CONNECTICUT
BASIL B. BANTIMBA
No. 23092
LICENSED
PROFESSIONAL ENGINEER

11/08/2011

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

FORM BRI-27

Structure No. **04214**

Inspectors: SE, CK, DS & ZRI (AI Engineers, Inc.)

Town Naugatuck

Date 9/24/2011

TABLE OF CONTENTS

Loose Forms (not bound in report)

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BRI-12, Fracture Critical Inspection Data Sheet	0
BRI-19, Hwy Bridge SI&A Form	2
BRI-25, Under Entry SI&A Form	0
BRI-39, RR Bridge SI&A Form	0
BRI-49, Sign Structure SI&A Form	0
PONTIS Element Data Collection Form	0
Plan Sheets ..... Check here if already on file ☐	0

Bound Report Pages

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BRI-48, Sign Structure Inspection Form	0
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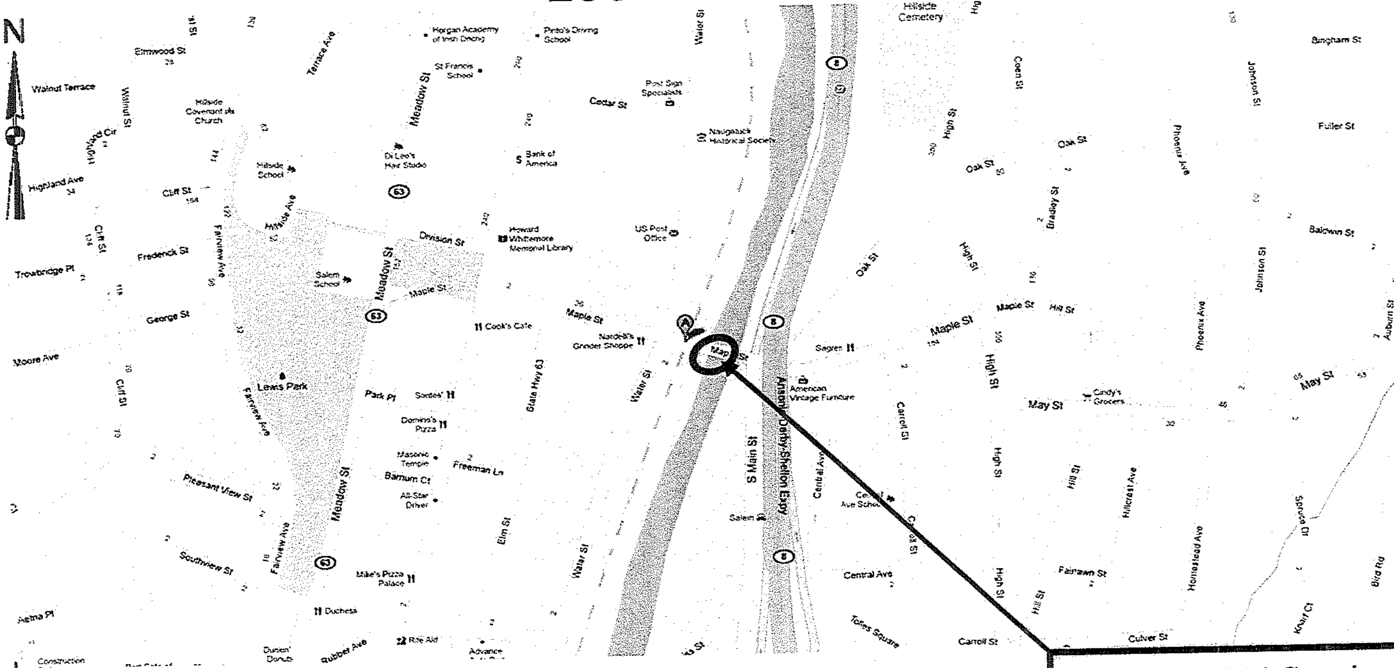
Quantities & Cost Estimate	0
Photo Sheets	4
Photos	8
Back-up Material	0
Location Map	1

AI Engineers, Inc.

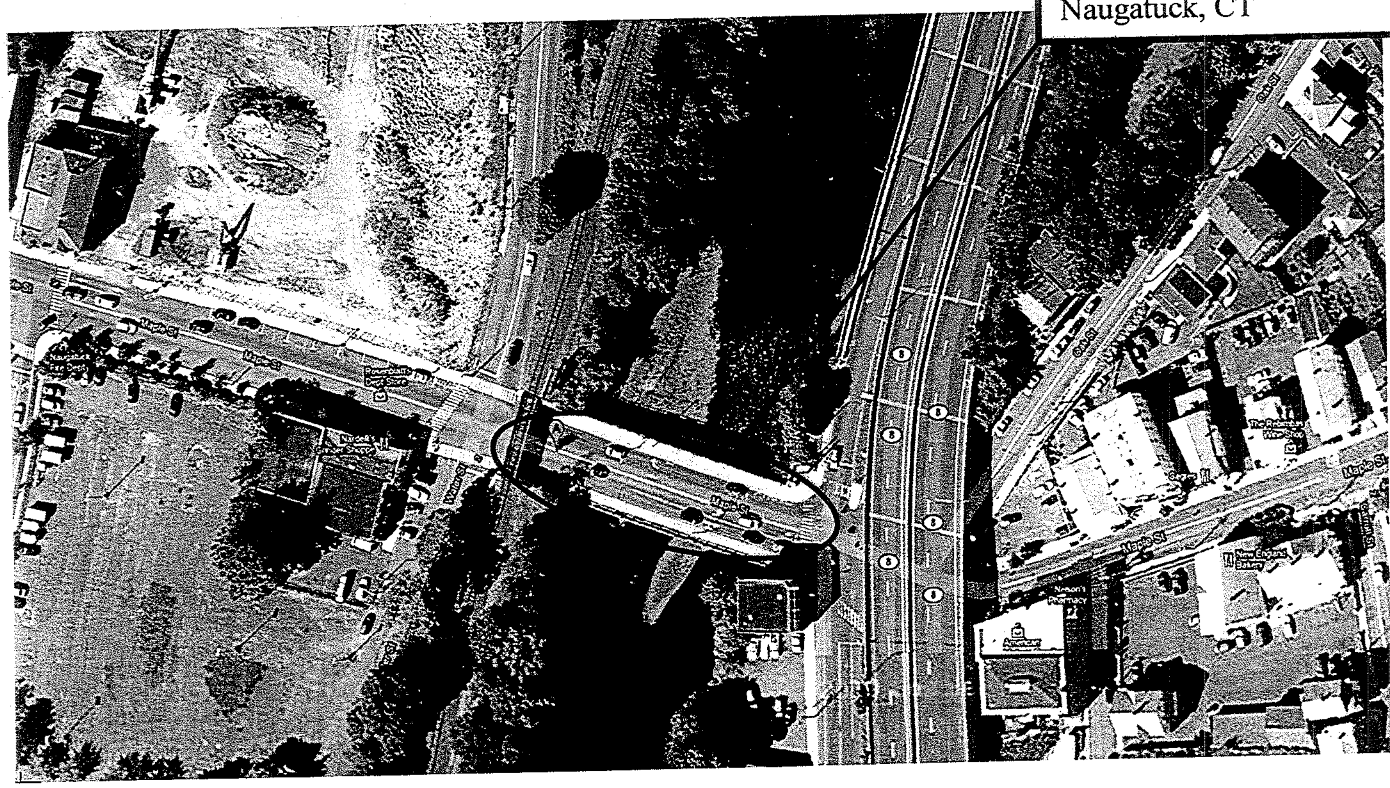
BRIDGE SAFETY INSPECTION
STATE PROJECT NO. 170-3013

LOCATION MAP



Bridge # 04214 Carrying
Maple Street over
Naugatuck River
Naugatuck, CT

AERIAL VIEW



EXECUTIVE SUMMARY

September 24, 2011

Bridge No. 04214 was built in 1912. It carries Maple Street over Naugatuck River in Naugatuck, Connecticut. The three span bridge consists of concrete and stone masonry arch supported by reinforced concrete abutments and piers. The overall length is 180' and the curb-to-curb width is 40.1'. As per information in the Connecticut Department of Transportation files, the inventory rating for an AASHTO HS-20 loading is 19.1 tons.

A special inspection was performed in September 2011 to monitor the severe concrete deterioration on the underside of concrete and stone masonry arches.

Superstructure

The superstructure is in serious condition. (Rating =3).

1. The underside of the stone masonry panels exhibit areas of active water leakage and areas of moderate to heavy efflorescence stains along the mortar joints with maximum efflorescence near the ends of all the spans. No recommendations for repairs at this time.

2. The underside of the concrete panels exhibit transverse hairline cracks up to full width of the panels with and without efflorescence at random locations with maximum cracks in span 2 and hollow areas up to full length x 2' wide in span 1. There are numerous spalls and/or scaling up to full length x up to 7.5' wide x up to 14" deep with and without exposed rebars and punky concrete in span 3. There is penetration up to 24" deep near the crown at the south edge of the concrete panel 3 in span 2. The exposed rebar in the spall at the north edge of concrete panel 1 in span 3 exhibits section loss up to 1/8" for 3' long. The exposed rebars in the spall at the south edge of the concrete panel 3 in span 3 exhibits section loss with rebar necked down to 1/8" x 3/8" for 4' long at 8' from the east abutment in the south end rebar, the next adjacent rebar is necked down to 3/4" and the remaining rebars in the same spall exhibit section loss up to 1/16". The underside of the concrete arch deterioration covers a maximum of 27.4% of the span 1 area and 21.9% of the total area. Monitor the underside of arch at 6 month intervals. Repair/patch deteriorated concrete (15 CY). Consideration should be given to replace the superstructure.

8

Connecticut Department of Transportation

Bridge Inspection Report BRI-20

Bridge #: 04214 **Inspection Date: 09/24/2011**

Inspection Type:	Special	**Previous Inspection Date:**	8/25/2010	**Snooper Required:**	Yes
Inspection Performed By:	AI Engineers	**Feature Carried:**	MAPLE STREET	**Snooper Used:**	Yes
Town:	NAUGATUCK	**Feature Intersected:**	NAUGATUCK RIVER	**Year Built:**	1912
Location:	OFF EXIT 27 ROUTE 8 SB	**Main Design:**	11 - Arch - Deck	**Year Rebuilt:**	1956
Main Material:	1 - Concrete				

Special Insp Type:	Z
Special Insp Freq:	12
Fracture Insp Type:	-
Fracture Insp Freq:	-
BUW Insp Freq:	24

Visits

Visit Date:	Temp:	Start Time:	End Time:
9/24/2011	71	6:00:00 AM	2:00:00 PM
10/7/2011	69	8:30:00 AM	12:30:00 PM

Inspectors:

Inspector:	Task:
S. Elbastawisy	Lead Inspector
C. Kolasa	Inspector
D. Schneider	Inspector
Z. Ismail	Inspector

Feature Inspected: Underside of concrete and stone masonry arch.

Underside of the Arch:
The underside of the arch consists of 10' wide stone masonry sections along both fasciae and the middle portion is the concrete arch.

Stone Masonry Panels: The underside of the stone masonry panels exhibit areas of active water leakage and areas of moderate to heavy efflorescence stains along the mortar joints with maximum efflorescence near the ends of all the spans. See photo 3.

Concrete Panels: The underside of the concrete panels exhibit transverse hairline

Inspection Results:

cracks up to full width of the panels with and without efflorescence at random locations with maximum cracks in span 2 and hollow areas up to full length x 2' wide in span 1. See photo 2. There are numerous spalls and/or scaling up to full length x up to 7.5' wide x up to 14" deep with and without exposed rebars and punky concrete in span 3. See photo 6. There is penetration up to 24" deep near the crown at the south edge of the concrete panel 3 in span 2. See photo 7. The exposed rebar in the spall at the north edge of concrete panel 1 in span 3 exhibits section loss up to 1/8" for 3' long. The exposed rebars in the spall at the south edge of the concrete panel 3 in span 3 exhibits section loss with rebar necked down to 1/8" x 3/8" for 4' long at 8' from the east abutment in the south end rebar, the next adjacent rebar is necked down to 3/4" and the remaining rebars in the same spall exhibit section loss up to 1/16". See photo 7. The maximum deterioration in the underside is along the north edge of concrete panel 1, along the south edge of concrete panel 3 and near both ends of the longitudinal construction joints (typical all spans). The longitudinal construction joints exhibit active water leakage up to full length of the joints and random longitudinal joints are separated up to 1/8" for full length. See photos 2 &3. The clay drains at both ends of panels 1 and 3 in all the spans are leaking on to the ends at the abutments and piers and are causing heavy deterioration. The underside of the concrete arch deterioration covers a maximum of 27.4% of the span 1 area and 21.9% of the total area.

Construction Joints: There are longitudinal construction joints at the underside of the arch in all the spans. The construction joints exhibit areas of active leakage up to full length of the joints with heavy efflorescence and numerous spalls and/or scaling areas along the joints. The construction joints are separated up to 1/8" for full length. The maximum deterioration is along the joints located near the curblines.

See field notes sheets 2-5 and photos 4, 5 & 8.

Action To Be Taken:

1. Monitor the underside of arch at ~~6 month~~ intervals. 12 month L.C.C. 11/28/11
2. Repair/patch deteriorated concrete.
3. Consideration should be given to replace the superstructure.

inspectors' signatures:

1) Sameh Elbastawisy, PE — date: 11/08/2011

2) CHRISTOPHER KOLASA — date: 11/08/2011

3) _____ — date: ----/----/---

4) _____ — date: ----/----/---

p.e. signature: _____ — date: ----/----/---

p.e.#: 23092 — date: 11/8/2011

reviewed by: Leo Carr Jr — date: 11/28/11

conndot ---

AI Engineers, Inc.	JOB NO: 170-3013	BRIDGE NO: 04214
FIELD TIME LOG	DATE: SEE BELOW	SHEET 1 OF 8

		DESCRIPTION	TIME AT SITE
DATE: 9/24/2011			
WEATHER: RAINY 71F	CREW:	SE, CK, DS	6:00 AM to 2:00 PM
EQUIP. LIST: AI WHITE TRUCK	SNOOPER:	75' McCLAIN	6:00 AM to 2:00 PM
AI WHITE VAN	TMA TRUCK:	McCLAIN	6:00 AM to 2:00 PM
	RR FLAGMAN:		to
VISITOR: —	TROOPER:	TOWN POLICE: G. DEAN (LT4)	6:00 AM to 2:00 PM

TC & NOTES: U/S OF DECK IN SPANS 1&2 Completed

		DESCRIPTION	TIME AT SITE
DATE: 10/07/2011			
WEATHER: SUNNY 69°F	CREW:	SE, ZRI	8:30 AM to 12:30 PM
EQUIP. LIST: AI WHITE Truck	SNOOPER:	McCLAIN 60'	8:30 AM to 12:00 PM
	TMA TRUCK:	McCLAIN	8:30 AM to 12:00 PM
	RR FLAGMAN:	—	to
VISITOR: —	TROOPER:	TOWN POLICE: G. DEAN (LT4)	8:30 AM to 12:30 PM

TC & NOTES: RIGHT LANE CLOSURE ON MAPLE STREET. INSPECTED SPAN 3. INSPECTION 100% COMPLETED.

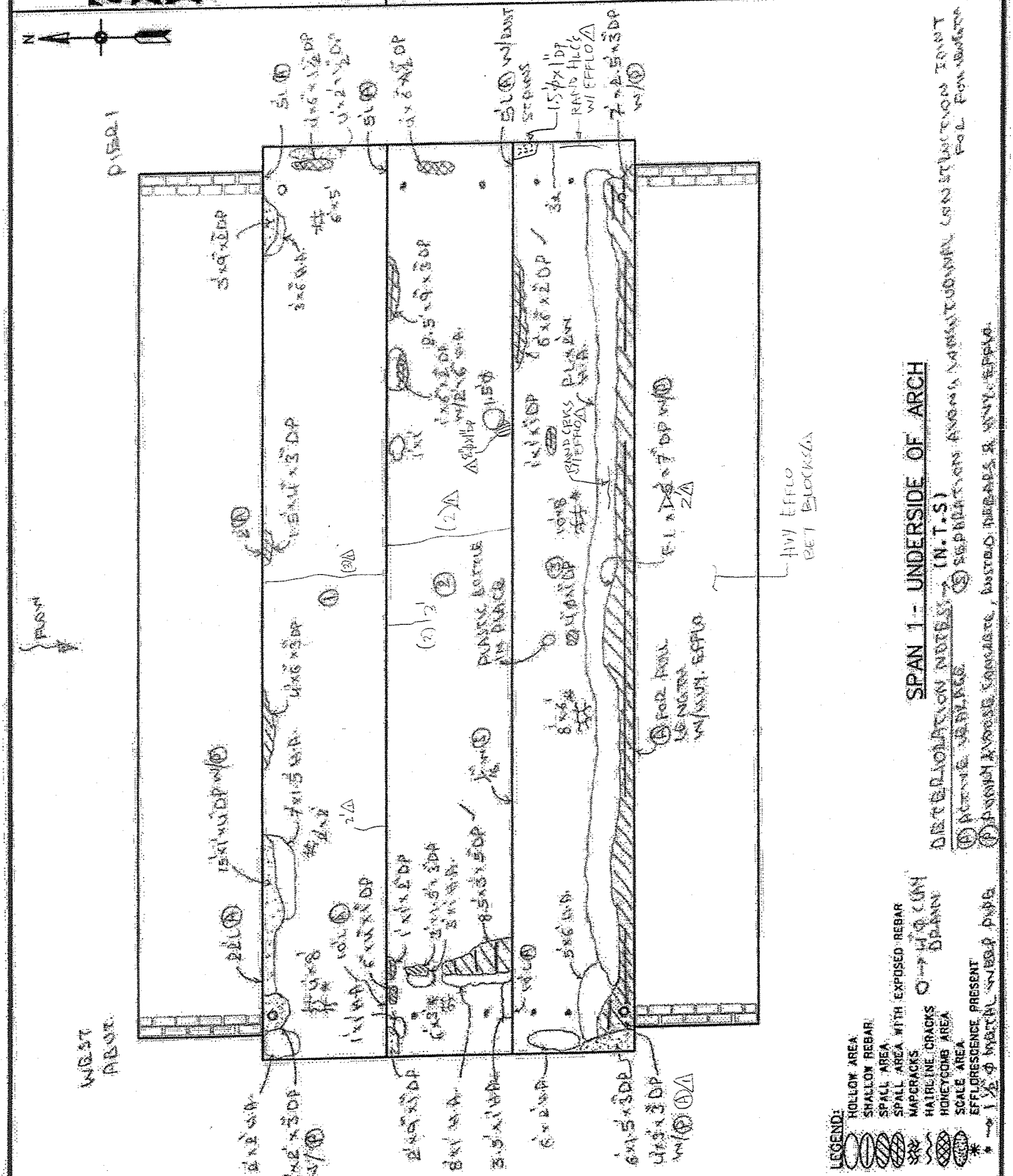
		DESCRIPTION	TIME AT SITE
DATE:			
WEATHER:	CREW:		to
EQUIP. LIST:	SNOOPER:		to
	TMA TRUCK:		to
	RR FLAGMAN:		to
VISITOR:	TROOPER:		to

TC & NOTES:

		DESCRIPTION	TIME AT SITE
DATE:			
WEATHER:	CREW:		to
EQUIP. LIST:	SNOOPER:		to
	TMA TRUCK:		to
	RR FLAGMAN:		to
VISITOR:	TROOPER:		to

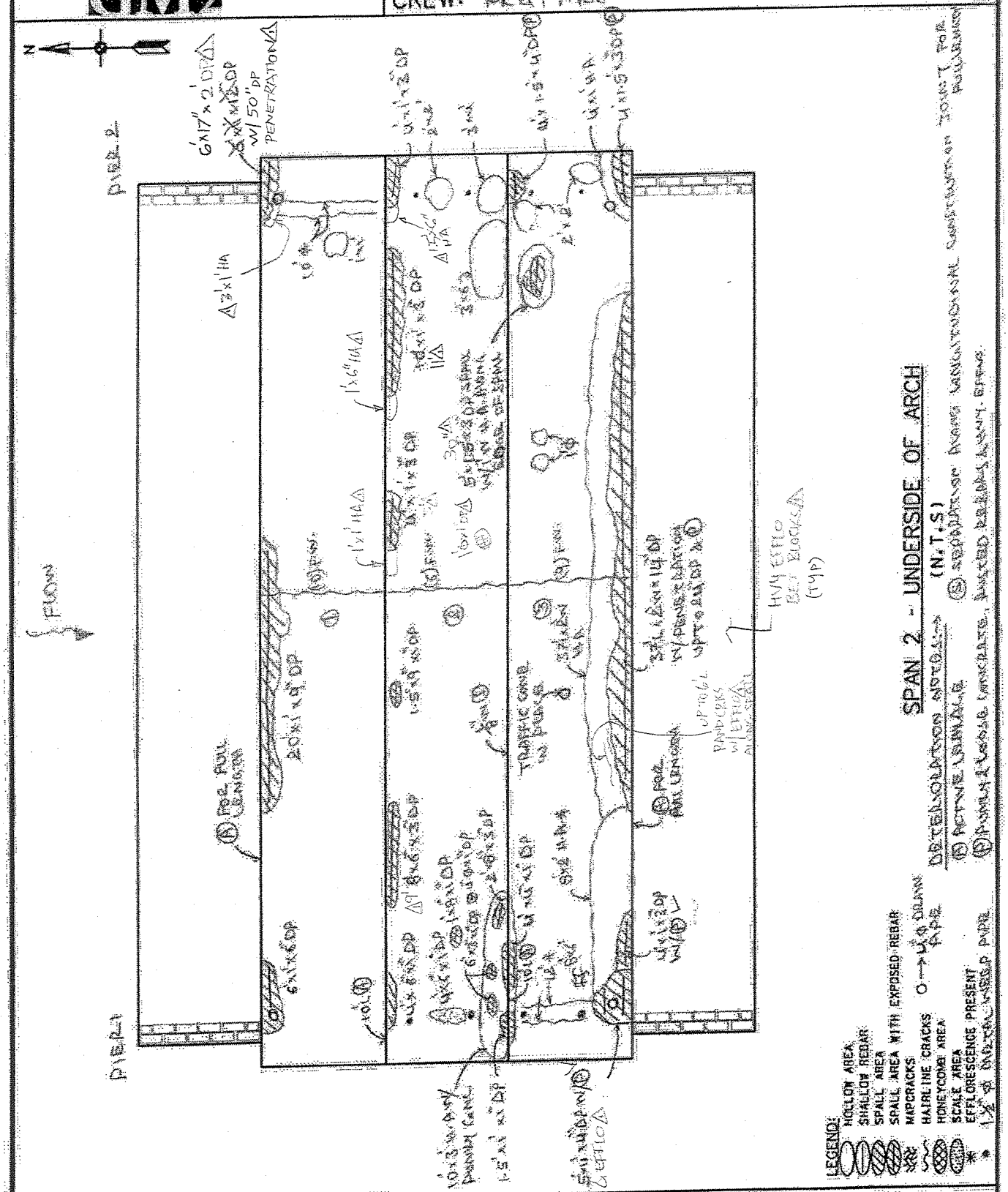
TC & NOTES:

FIELD NOTES	JOB NO. 170-3013	BRIDGE NO. 04214
	DATE: 08/25/2010	SHEET ~~22~~ 2 OF ~~75~~ 8
	CREW: DKG, AKC	



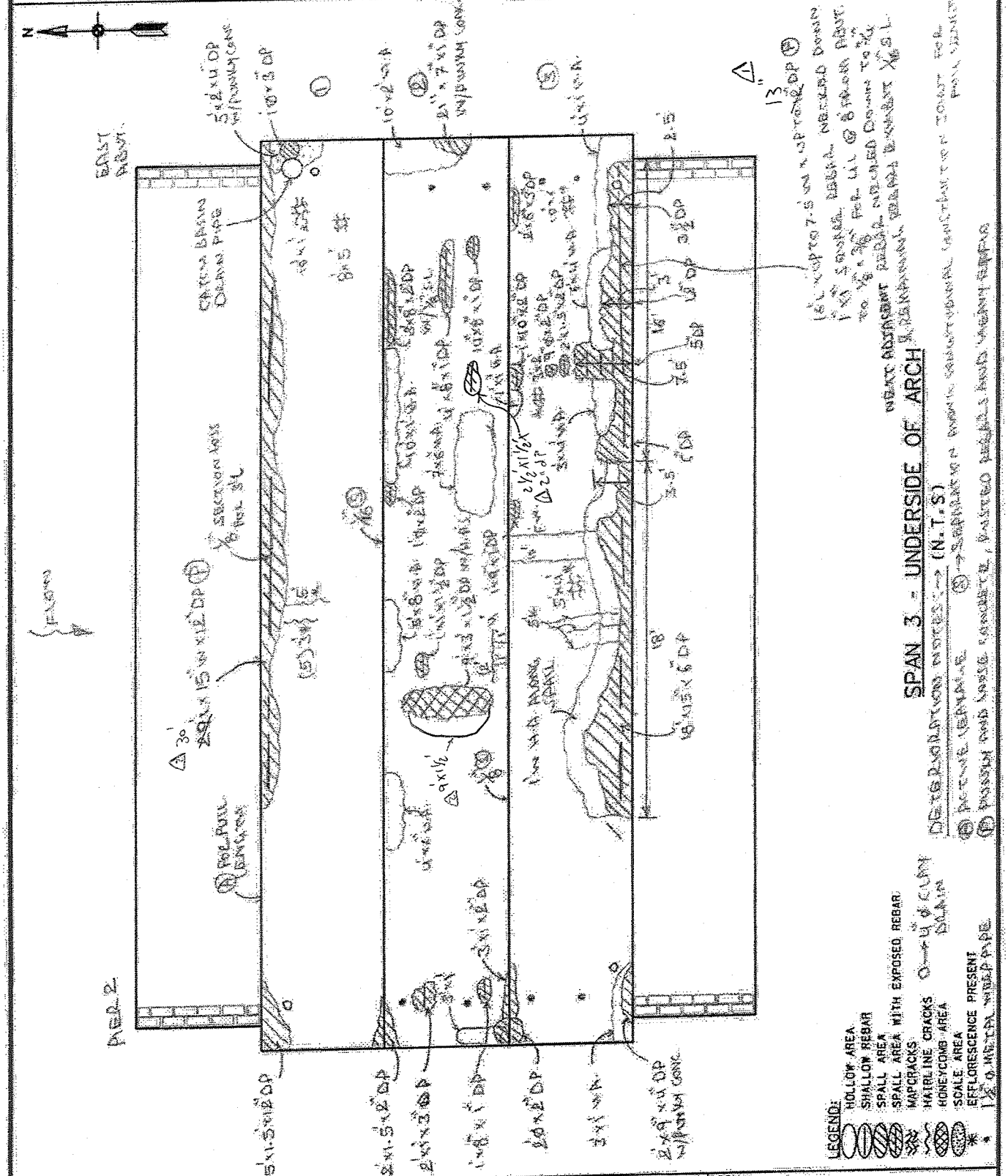
REVISION 1	DATE 09/24/2011	CREW SE, CK, DS (AI ENG)	REVISION 3	DATE	CREW
REVISION 2	DATE	CREW	REVISION 4	DATE	CREW

FIELD NOTES	JOB NO. 170-3013	BRIDGE NO. 04214
	DATE: 08/25/2010	SHEET ~~83~~ 3 OF ~~75~~ 8
	CREW: PLL, PKC	



REVISION 1	DATE 9/24/2011	CREW SE, CK, DS (AL ENG)	REVISION 3	DATE	CREW
REVISION 2	DATE	CREW	REVISION 4	DATE	CREW

FIELD NOTES	JOB NO. 170-3013	BRIDGE NO. 04214
	DATE: 08/25/2010	SHEET ~~24~~ 4 OF ~~75~~ 8
	CREW: PKG, ARC	



REVISION	DATE	CREW	REVISION	DATE	CREW
1	10/07/11	SE, ZRI (AI ENG.)	3		
2			4		

AJ Engineers, Inc.

Bridge Number : 04214 Date: 09/24/11 Prepared by: SE Checked By: CK

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

	Deterioration By Span- In Square Feet										
	Span Number										
Deterioration Type	1	2	3								Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:
	Bot: 329	Bot: 311	Bot: 363	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 1003
Scale (Moderate to Severe only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot: 40	Bot: 10	Bot: 2	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 52
Cracks: w/ Efflorescence (use 6in. width x length	Bot: 2	Bot: 33	Bot: 27	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 62
w/o Efflo. (use 3in. width x length)	Bot: 37	Bot: 8	Bot: 90	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 135
Map Cracking: w/Efflorescence (use full area)	Bot: 178	Bot: 96	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 274
w/o Efflo. (use 50 % of area)	Bot: 18	Bot: 20	Bot: 24	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 62
Honeycombed Areas (only areas more than 1-1/2in. deep)	Bot: 4	Bot: 27	Bot: 0	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 31
TOTAL	608	505	506								1619
Total Span Area (Square Feet)	2215	2968	2215								7398
% Spalled and Delaminated on Top											
% Deterioration on Bottom	27.4%	17.0%	22.8%								21.9%

AI Engineers, Inc.

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System

Image Inventory

Bridge No. 04214 Date: 09/24/2011

Town: NAGAUTUCK Photographer: SE

Carried / Crossed: MAPLE ST of NAUGATUCK RIVER

Film Frame #	Image Description
26	BR ID
39, 27, 37	SPALL AT UNDERSIDE of ARCH NEAR S. END, SPAN 2
28	~ ~ ~ ~ ~ ~ ~ AT P-1, SP-2
29	SPALL/SCALING AT S. END of P-1 (E. ELEV.)
30	~ ~ ~ ~ SPAN 2 ~
31	TYP UNDERSIDE AT S. END, SPAN 2
32	SPALL AT UNDERSIDE AT N. END ALONG P-2, SPAN 2
33	SPALL ~ ~ ~ ~
34	SPALL AT N. END of P-2 (W. ELEV.)
35	SPALL ~ UNDERSIDE of ARCH NEAR P-2, SPAN 2
36	E. EV. of P-1
38	W. ~ ~ P-2
40, 44	SPALL AT UNDERSIDE, SPAN-1 AT S. END
41	~ ~ ~ ~ ALONG W. ABUT
42	SPALL W/ EXP REPAIRS AT UNDERSIDE of ARCH, SPAN-1, W. END.
43	SPALL AT U-SIDE, N. END, SP-1
47, 45	W. ELEV. P-1
46	W. ABUT.
48	MVY EFFL AT MAS ARCH PORTION, SP-1
51, 49, 50	S. ELEV.

AI Engineers, Inc.

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System

Image Inventory

Bridge No. 04214

Town: NAUGATUCK

Carried / Crossed: MAPLE STREET of NAUGATUCK RIVER

Date: 10/07/2011

Photographer: SE

Film Frame #	Image Description
1	NEW SPALL W/ EXP REBAR AT UNDERSIDE of SPAN 3
2, 3	SPALL W/ EXP REBAR AT CONC PORTION ALONG STONEMAN (S. SIDE) / SPAN 3
4	SPALLS W/ EXP REBARS AT UNDERSIDE, NEAR E. END, SPAN 3
5	TYP UNDERSIDE, SPAN 3
10, 6, 7, 9	BEAVER
8	SOUTH FASCIA W/ SPALLS
11	HA's, HC & SPALLS AT UNDERSIDE of SPAN 3
12	SPALLS W/ EXP REBAR AT UNDERSIDE of SPAN 3, N. FASCIA.
13	E. ABUT.

AI Engineers, Inc.

BRIDGE NO. 04214

FIELD PHOTO LOG THUMBNAILS

SE 9-24-11

Picture 026

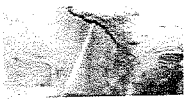
Picture 027

Picture 028

Picture 029

Picture 030

Picture 031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Picture 033

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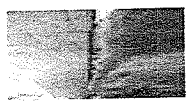
Picture 035

Picture 036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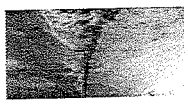
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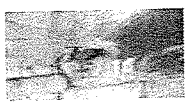

Picture 041

Picture 042

Picture 043

Picture 044

Picture 045

Picture 046

Picture 047

Picture 048

Picture 049

Picture 050

Picture 051

SE 10-07-11

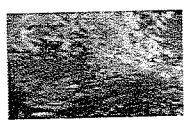
SE 10-07-11 001

SE 10-07-11 002

SE 10-07-11 003

SE 10-07-11 004

SE 10-07-11 005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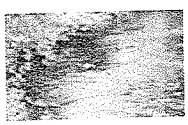
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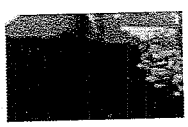
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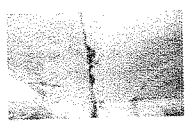
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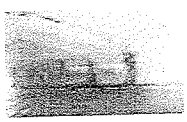
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AI Engineers, Inc.

DATE:	9/24/2011
JOB NO.:	170-3013
BRIDGE IDENTIFICATION:	04214
FEATURE CARRIED:	Maple Street
FEATURE CROSSED:	Naugatuck River
LOCATION:	Naugatuck

Photo # 1: Bridge Identification Number.

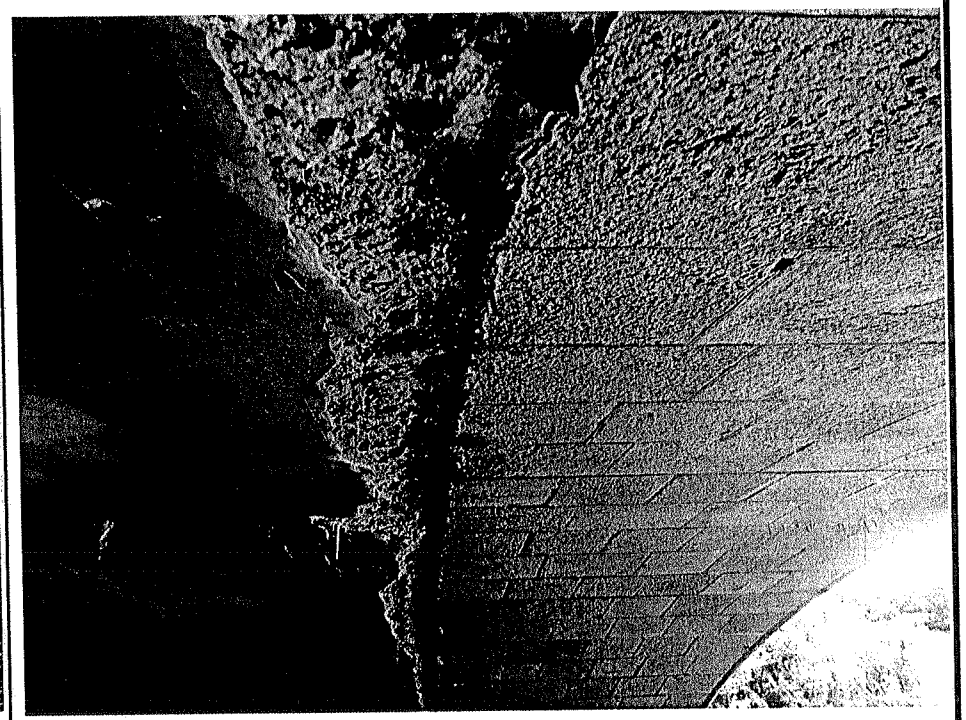

Photo # 2: Large hollow area with adjacent spall/scaling with exposed rebars, punky concrete and heavy efflorescence stains along the south edge of concrete panel 3 in span 1.

AI Engineers, Inc.

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LOCATION:	Naugatuck

Photo # 3: Large spall/scaling with exposed rebars, punky concrete and heavy efflorescence stains along the south edge of concrete panel 3 in span 2. Note: Efflorescence along mortar joints at the stone masonry panel.

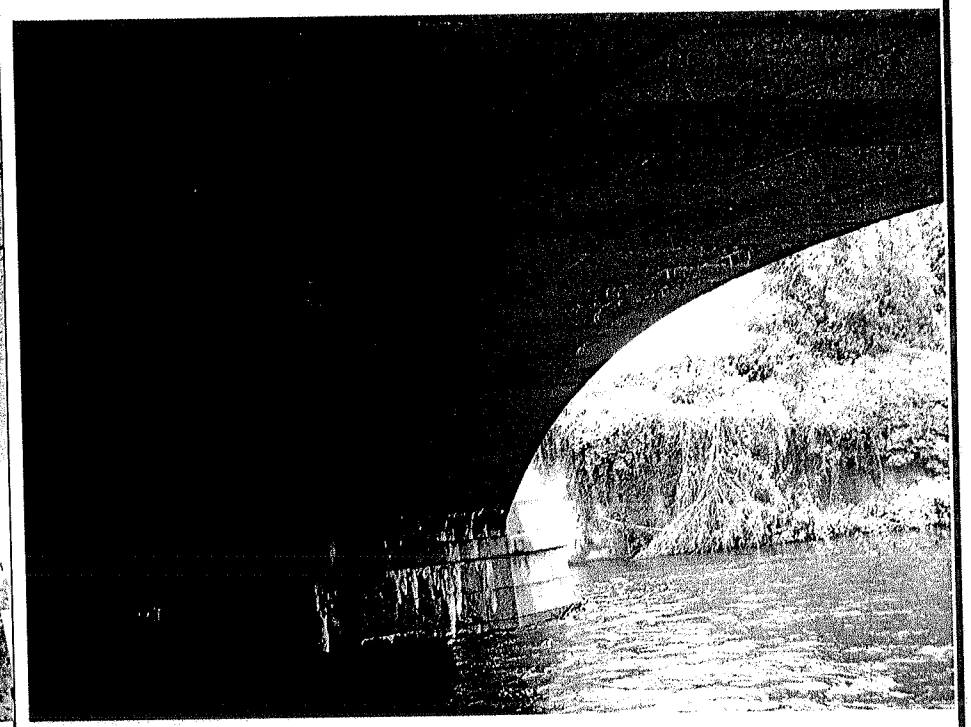

Photo # 4: Large spall/scaling with exposed rebars, punky concrete and heavy efflorescence stains along the north edge of concrete panel 1 in span 2.

AI Engineers, Inc.

DATE:	9/24/2011
JOB NO.:	170-3013

BRIDGE IDENTIFICATION:	04214
FEATURE CARRIED:	Maple Street
FEATURE CROSSED:	Naugatuck River
LOCATION:	Naugatuck

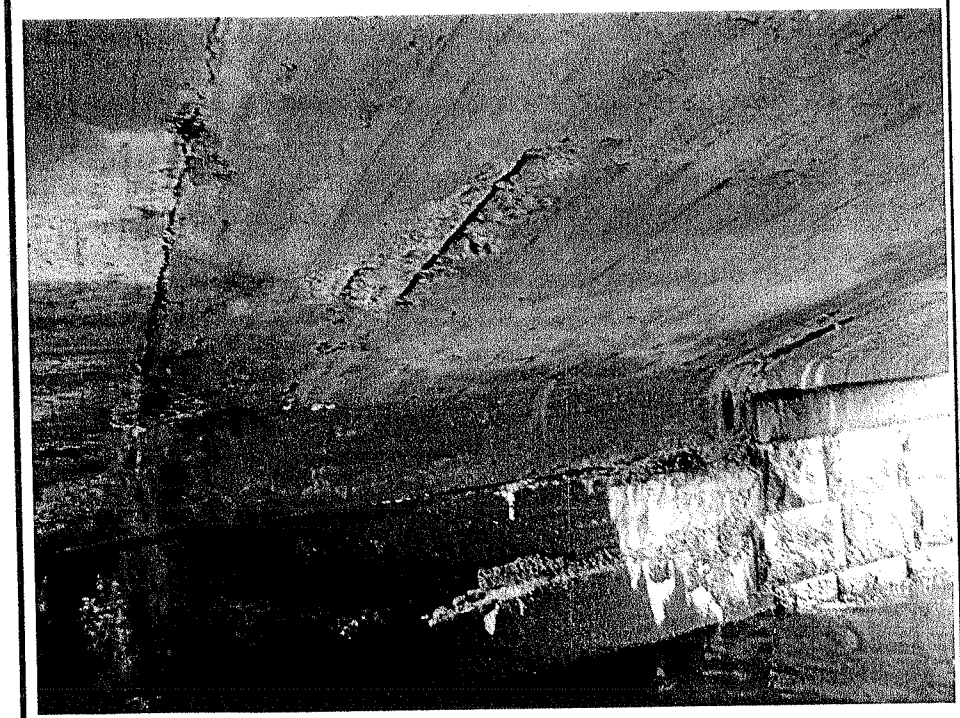

Photo # 5: Large spall/scaling with exposed rebars at the underside of concrete panel 3 near pier 2.

Photo # 6: Large spall/scaling with exposed rebars along the south edge of concrete panel 3 in span 3.

AI Engineers, Inc.

DATE:	**9/24/2011**
JOB NO.:	**170-3013**

BRIDGE IDENTIFICATION:	**04214**
FEATURE CARRIED:	**Maple Street**
FEATURE CROSSED:	**Naugatuck River**
LOCATION:	**Naugatuck**

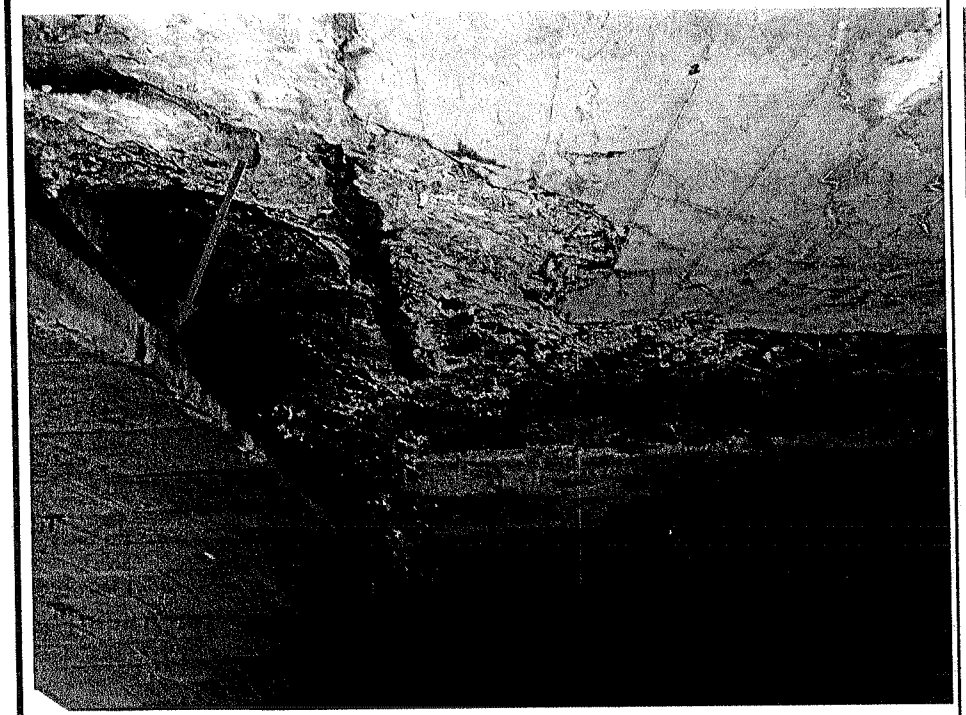

Photo # 7: **See Photo #6 description. Note: Exposed rebar with section loss. Also, note penetration up to 24" deep near the crown.**

Photo # 8: **Large spall/scaling with exposed rebars along the north edge of concrete panel 1 in span 3.**