STRUCTURE NO. 00603

SR 848

over

B & M RR,NAUGATUCK RIVER

THOMASTON

Indepth Inspection

on

11/22/2006

Inspected by Haks - 25

for Area 6

TEAM:	Forwarded to Senior	Mei Wong	Date	5/1/2007
SENIOR:	Reviewed by Senior	Mei Wong	Date	6/26/2007
	BMM Required		Yes	
	Town Bridge		No	
	Rating <= 5 (Items 58,59,60 or 62)		Yes	
	Forwarded to Supervisor	Samira Dumas	Date	6/26/2007
	Forwarded to "To Be Copied Drawer"	☐	Date	
	Date BRI-19 Entered	6/26/2007 (except for Deck Area - cannot enter)		
SUPERVISOR:	Reviewed by Supervisor	ADumas	Date	7/27/07
SUPPORT:	Date Copies Made	7/27/07	BMM No	07-230

pad 7/27/07

NBI: Yes

Bridge Number **00603**

Inspected By: K. GOODWIN & D. SHI

Sufficiency Rating 63.86
Previous Inspection Date 1/24/05

BS&E Received ☐ Data Entry By: M. Wong
Copies Made ☐ Data Entry Date: 6/26/07

STATE OF CONNECTICUT
DEPARTMENT OF TR. PORTATION
BRIDGE SAFETY & EVALUATION

STRUCTURE EVALUATION

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

SHEET_____ OF_____ (INSP. REPORT)

90) Inspection Date	Inspection Team	91) Frequency	Class:
011607	25 25	24	03
Indepth Insp	Deck Survey	Access	Flagman
1/24/05		11	4 12

CRITICAL FEATURE INSPECTIONS

	Type	Frequency	Team	Date	
Fracture:					
Uwater:		24 24	19 25	2/28/05	11/22/06
Special:					

RED FLAG

IDENTIFICATION

Bridge Name REYNOLDS BRIDG
Town Name THOMASTON Town Code 75730

5) Inventory Route:
A) Record Type 1 D) Route Number 00848
B) Signing Prefix 3 State Highway E) Directional Suffix 0 NA
C) Level of Service 1 Mainline

6) Feature Intersected B & M RR,NAUGATUCK RIVER
NAUGATUCK RIVER ¢ RR

7) Facility Carried SR 848

9) Location OFF EXIT 38 ROUTE 8

11) Milepoint 3.20 Miles
16) Latitude 41 deg 39 min 30.00 sec 41 deg 39 min 09 . sec
17) Longitude 73 deg 4 min 36.00 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 1 Concrete B) Design Type 11 Arch - Deck
45) Number of Spans, Main Unit 3
46) Number of Approach Spans 8
107) Deck Structure Type 1 Concrete Cast-in-Place
108) Wearing Surface/Protective System:
A) Type of Wearing Surface 6 Bituminous
B) Type of Membrane 2 Preformed Fabric
C) Type of Deck Protection 0 None

AGE AND SERVICE

27) Year Built 1928 106) Year Reconstructed 1987
42) Type of Service:
A) On 5 Highway-pedestria B) Under 7 RAILROAD-WATE
28) Number of Lanes:
A) On 2 B) Under 0
29) Average Daily Traffic 3200 3000 Half ADT?: No N
109) Percent Truck 5 %
30) Year of ADT 2002 2005
19) Bypass, Detour Length 8 miles 0

GEOMETRIC DATA

48) Length of Max Span 169 ft
49) Structure Length 488 ft
50) Curb or Sidewalk Widths:
A) Left 6.0 ft B) Right 6.0 ft
51) Brg Rdwy width,curb-curb 28.0 ft
52) Deck Width, Out-Out 42.3 ft
32) Approach Roadway Width 50 ft
33) Bridge Median 0 No Median
Deck Area 488 ft x 42.3 ft 20496 sqft 20642 sq
34) Skew Angle 0 deg
35) Structure Flared 0
10)Inv. Rte. Min. Vert Clearance 99 ft 99 in
47) Log Inv. Rte. Total Horiz Clr.: 28.0 ft
47) RLog Inv. Rte. Total Horiz. Clr.: ft
53) Min Vert Clearance Over Bridge 99 ft 99 in
54) Min Vert Under Clearance R Ref 27 ft 3 in Ref
55) Min Lat Under Clearance on Right R Ref 18.5 ft Ref
56) Min Lat Under Clearance on Left 0.0 ft

BRIDGE COMMENTS

PER CDOT ON 1/11/07, THIS BRIDGE WILL NOW BE LABELED PER THE BRIDGE PLANS FROM THE 1969 REPAIR PROJECT NO. 0140-0129 RATHER THAN PER THE ORIGINAL PLANS AS THE SPANS WERE NOT LABELED IN THE 1928 ORIGINAL PROJECT NO. 16B.

STRUCTURE EVALUATION

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

SHEET_____ OF_____ (INSP. REPORT

Bridge Number	00603	.BIS Length	
Town Name	THOMASTON	Yes 488	
Facility Carried	SR 848		
Feature Crossed	B & M RR,NAUGATUCK RIVER		

Inspected By: P. GOODWIN & D. SHI

CLASSIFICATION

112) NBIS Bridge Length	Yes		
104) Highway System	0	Off System	
26) Functional Class	16	Urban Minor Arterial	17
100) Defense Highway	0	Not Defense Highway	
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	1	State Highway Agency	
22) Owner	1	State Highway Agency	
Report Class	S	STATE	
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.	Project No.	Advertised

POSTED SIGNS & UTILITIES

Other Posted Signs 1	7	Sharp Curve			
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		tons	Actual P.L. 3S2 Truck		tons
Rec. P.L. Semi-TrailerTruck		tons	Rec. P.L. 3S2 Truck		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		mph			mph
Utility					

LOAD RATING AND POSTING

31) Design Load	0	Evaluation Code	E	
63) Operating Rating Type	2	Year of Evaluation	1980	
64) Operating Rating	70.0	70) Bridge Posting	5	
65) Inventory Rating Type	2	41) Structure Status	A	A
66) Inventory Rating	37.0	Open, no restriction		

CONDITION

		Rating	By
58) Deck	5	4	PDG
59) Superstructure	5	5	PDG
60) Substructure	6	6	PDG
61) Channel & Chan. Protection	6	6	PDG
62) Culverts	N	N	PDG

APPRAISALS

		Rating	By
67) Structure Evaluation	5	5	PDG
68) Deck Geometry	4	4	PDG
69) Under Clear Vert & Horiz	7	7	PDG
71) Waterway Adequacy	9	9	PDG
72) Approach Rdwy Alignment	3	3	PDG
113) Scour Critical	8		

Items 58 Thru 72 Checked By: DKC

36) Traffic Safety Features:

A) Bridge Railings	1	1
B) Transitions	1	0
C) Approach Guardrail	1	0
D) Approach Guardrail End	1	1

OTHER FEATURES

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

INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2015
Senior	consultant
Supervisor	consultant

REVIEWED BY D. Lacosho Date 2/21/07

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 00603 Agency ID: 00603 Sufficiency Rating: 0

IDENTIFICATION

State 1: 09 Connecticut Struc Num 8: 00603
Facility Carried 7: SR 848 Location 9: OFF EXIT 38 ROUTE 8
Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 3 State Hwy
Level of Service 5C: 1 Mainline Rte. Number 5D: 00848
Directional Suffix 5E: 0 N/A (NBI) % Responsibility : 0
SHD District 2: 04 County Code 3: Litchfield
Place Code 4: THOMASTON Mile Post 11: 3.200 mi
Feature Intersected 6: B & M RR,NAUGATUCK RIVER
Latitude 16: 41d 39' 09" Longitude 17: 073d 04' 36"
Border Bridge Code 98: Not Applicable (P)
Border Bridge Number 99: NA

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 8 Number of Spans Main Unit 45: 3
Main Span Material/Design 43A/B:
1 Concrete 11 Arch-Deck
Approach Span Material/Design 44A/B:
1 Concrete 11 Arch-Deck
Deck Type 107: 1 Concrete-Cast-in-Place
Wearing Surface 108A: 6 Bituminous
Membrane 108B: 2 Preformed Fabric
Deck Protection 108C: None

AGE AND SERVICE

Year Built 27: 1928 Year Reconstructed 106: 1987
Type of Service on 42A: 5 Highway-pedestrian
Type of Service under 42B: 7 Railroad-waterway
Lanes on 28A: 2 Lanes Under 28B: 0 Detour Length 19: 0.0 mi
ADT 29: 3,000 Truck ADT 109: 5 % Year of ADT 30: 2005

GEOMETRIC DATA

Length Max Span 48: 169.0 ft Structure Length 49: 488.0 ft
Curb/Sdwlk Wdth L 50A: 6.0 ft Curb/Sidewalk Width R 50B: 6.0 ft
Width Curb to Curb 51: 28.0 ft Width Out to Out 52: 42.3 ft
Approach Roadway Width 32: 50.0 ft (w/ shoulders) Median 33: 0 No median
Deck Area: 20,642. sq. ft ✓
Skew 34: 0.00 ° Structure Flared 35: 0 No flare
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: R Railroad beneath struc
Minimum Vertical Underclearance 54B: 27.3 ft
Minimum Lateral Underclearance Reference R 55A: R Railroad beneath struc
Minimum Lateral Undrclearance R 55: 18.5 ft
Minimum Lateral Undrclearance L 56: 0.0 ft

INSPECTION

Frequency 91: 24 months Inspection Date 90: 1/16/2007 Next Inspection: 01/16/2009
FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA
UW Frequency 92B: 24 months UW Inspection Date 93B: 11/22/2006 Next UW Inspection: 11/22/2008
SI Frequency 92C: NA SI Date 93C: NA Next SI: NA
Element Frequency: 24 months Element Inspection Date: 01/16/2007 Next Elem. Insp. Due: 01/16/2009

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic Temporary Structure 103: Unknown (NBI)
Highway System 104: 0 Not on NHS NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road Functional Class 26: 17 Urban Collector
Historical Significance 37: 3 Possibly eligible for
Owner 22: 1 State Highway Agency
Custodian 21: 1 State Highway Agency

CONDITION

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

LOAD RATING AND POSTING

Inventory Rating Method 65: 2 AS Allowable Stres Operating Rating Method 63: 2 AS Allowable Stress
Inventory Rating 66: HS20.6 Operating Rating 64: HS38.9
Design Load 31: 0 Other or Unknown Posting 70: 5 At/Above Legal Loads
Posting status 41: A Open, no restriction

APPRAISAL

Bridge Rail 36A: 1 Meets Standards Approach Rail 36C: 0 Substandard
Transition 36B: 0 Substandard Approach Rail Ends 36D: 1 Meets Standards
Str. Evaluation 67: 4 Deck Geometry 68: 4 Tolerable
Underclearance, Vertical and Horizontal 69: 7 Above Minimum
Waterway Adequacy 71: 9 Above Desirable Approach Alignment 72: 3 Intolerable - Correct
Scour Critical 113: 8 Stable Above Footing

PROPOSED IMPROVEMENTS

Bridge Cost 94: $ 1,000 Type of Work 75: 38 Other Structural
Roadway Cost 95: $ 1,000 Length of Improvment 76: 20.0 ft
Total Cost 96: $ 2,000 Future ADT 114: 3,120
Year of Cost Estimate 97: 1999 Year of Future ADT 115: 2020

NAVIGATION DATA

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

ELEMENT CONDITION STATE DATA

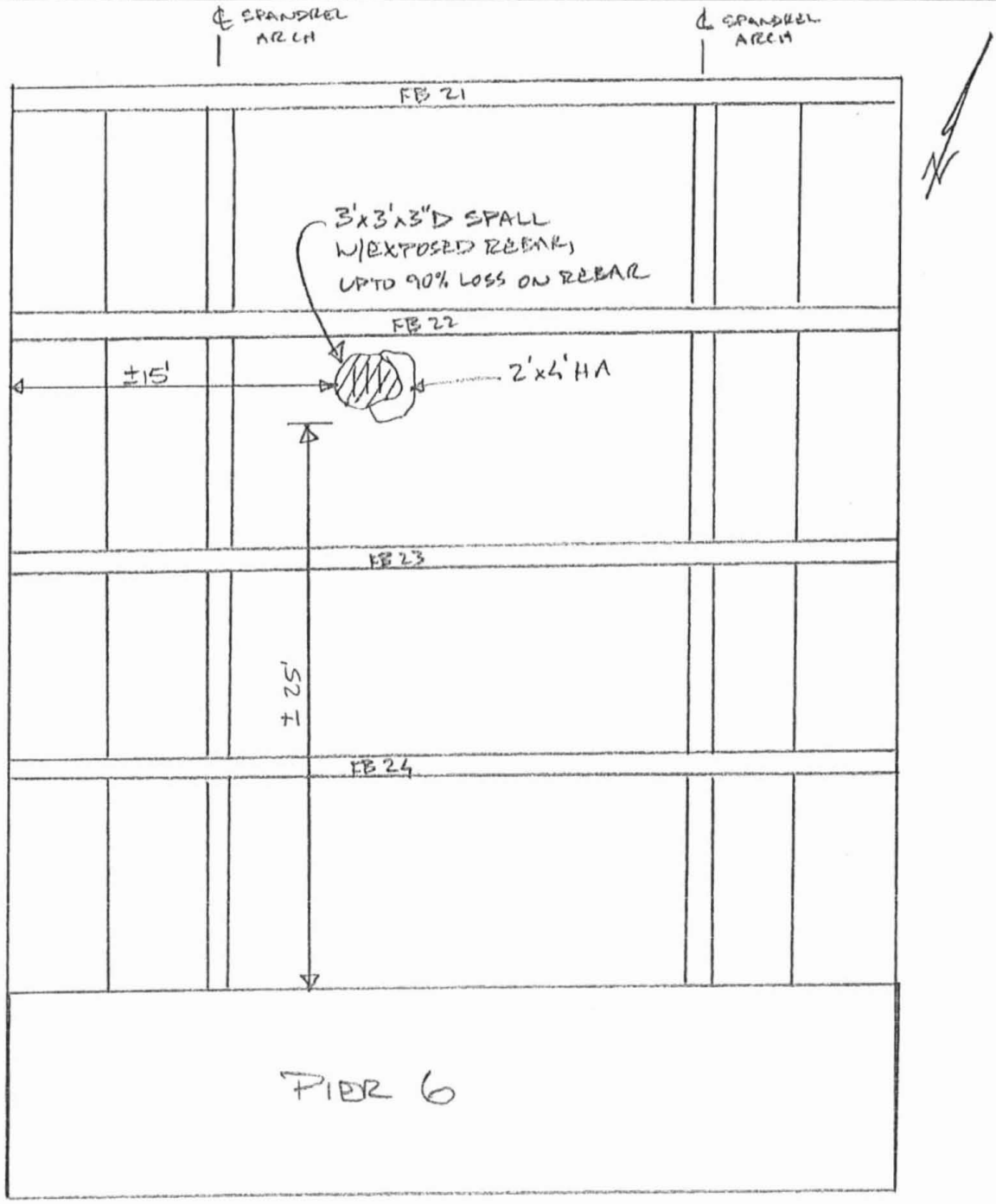
Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
0	14/3	P Conc Deck/AC Ovly	(SF)	14,940	0 %	0	100 %	14,940	0 %	0	0 %	0	0 %	0
0	40/3	P Conc Slab/AC Ovly	(SF)	4,648	0 %	0	100 %	4,648	0 %	0	0 %	0	0 %	0
0	56/3	Concrete sidewalk	sq.ft	5,856	100 %	5,856	0 %	0	0 %	0	0 %	0	0 %	0
0	110/3	R/Conc Open Girder	(LF)	0	100 %	0	0 %	0	0 %	0	0 %	0	0 %	0
0	144/3	R/Conc Arch	(LF)	794	89 %	707	5 %	38	5 %	42	1 %	7	0 %	0
0	155/3	R/Conc Floor Beam	(LF)	1,330	97 %	1,291	2 %	31	1 %	8	0 %	0	0 %	0

Structure Inventory and Appraisal Sheet (English Units)

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
0	205/3	R/Conc Column	(EA)	80	84 %	67	8 %	7	8 %	7	0 %	0	0 %	0
0	210/3	R/Conc Pier Wall	(LF)	0	100 %	0	0 %	0	0 %	0	0 %	0	0 %	0
0	215/3	R/Conc Abutment	(LF)	89	38 %	34	54 %	48	8 %	7	0 %	0	0 %	0
0	234/3	R/Conc Cap	(LF)	0	93 %	0	5 %	0	2 %	0	0 %	0	0 %	0
0	305/3	Asphaltic Plug Joint	(LF)	224	51 %	114	49 %	110	0 %	0	0 %	0	0 %	0
0	331/3	Conc Bridge Railing	(LF)	976	100 %	976	0 %	0	0 %	0	0 %	0	0 %	0
0	359/3	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
0	370/3	deck drainage system	(LF)	322	88 %	282	12 %	40	0 %	0	0 %	0	0 %	0
0	371/3	Free Fall Pipes, Scu	(EA)	8	100 %	8	0 %	0	0 %	0	0 %	0	0 %	0

FIELD NOTES

PROJ. NO. 170-2729	BRIDGE NO. 00603
DATE 1/17/07	SHEET 3/3
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW TDG, DS



SPAN 6, SOUTH END

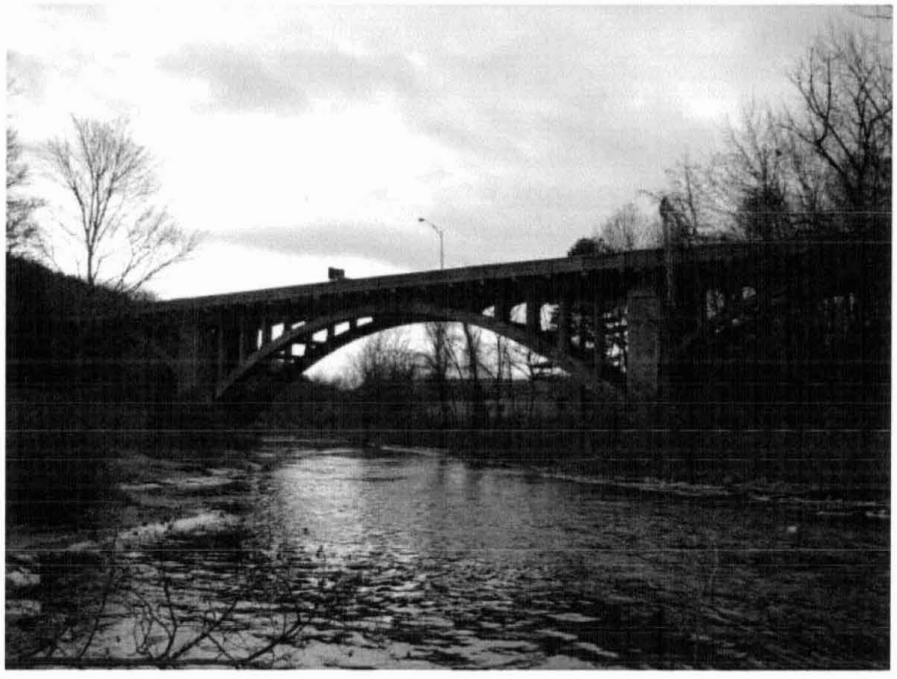
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

BRIDGE SAFETY INSPECTION
STATE PROJECT NO. 170-2729

BRIDGE NO. 00603

ROUTE 848 (WATERBURY ROAD)
OVER
NAUGATUCK RIVER & NAUGATUCK RAILROAD

THOMASTON, CONNECTICUT



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ROUTINE INSPECTION

January 16, 2007

STATE OF CONNECTICUT
DANIEL L. COLAVECCHIO
NO. 18533
LICENSED
PROFESSIONAL ENGINEER

P.E. Reviewer/Date: Daniel L. Colavecchio 2/21/07

HAKS Reviewer/Date: 2/21/07

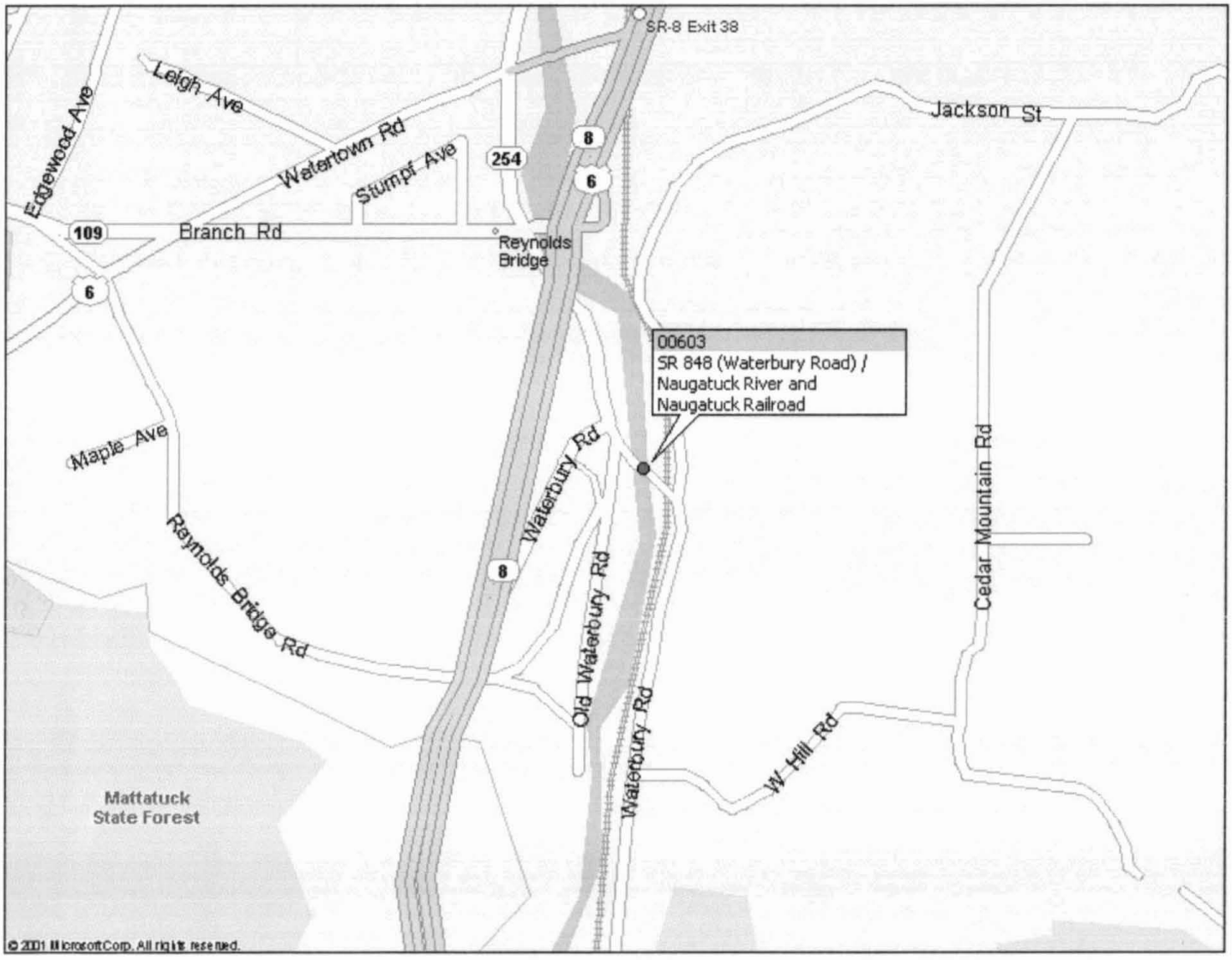
Prepared By: Garg Consulting Services, Inc.
ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

Submitted By: HAKS

Garg Consulting Services, Inc.
ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

BRIDGE SAFETY INSPECTION
STATE PROJECT NO. 170-2729

LOCATION MAP



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INSPECTION REPORT TRANSMITTAL FORM
FORM BRI-27, REV. 9/97

3

Structure No. 00603 Town: Thomaston

Inspectors: P. Goodwin, D. Shi, C. Lewis, J. Rowe Date: 1/16/07

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BRI-12, Fracture Critical Inspection Data Sheet	-
BRI-19, HWY Bridge SI&A Form	2
BRI-25, Under Entry SI&A Form	-
BRI-39, RR Bridge SI&A Form	-
BRI-49, Sign Structure SI&A Form	-
PONTIS Element Data Collection Form	2
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Calculations:	
Load Rating Evaluation	-
Quantities & Cost Estimate	-
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Appendix A – 2006 Underwater Inspection Report	24 sheets

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CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

EXECUTIVE SUMMARY

Bridge No. 00603 was built in 1928 and most recently rehabilitated in 1987 and carries SR 848 (Waterbury Road) over the Naugatuck River and Naugatuck Railroad in the town of Thomaston. It is an eleven-span bridge with an overall length of 488 feet and a curb-to-curb width of 28 feet. The main spans (5-7) superstructure consists of an open spandrel reinforced concrete arch supporting a reinforced concrete deck with bituminous concrete overlay. The approach spans (1-4 & 8-11) and at piers 4-7 superstructure is an integral deck reinforced concrete slab supported by floorbeams. Reinforced concrete abutments and piers support the superstructure. According to the information on file at Connecticut Department of Transportation the inventory rating is 37 tons and the operating rating is 70 tons (load type is unknown).

On November 22, 2006 Collins Engineers, Inc. performed an underwater inspection and found the substructure and channel & channel protection in satisfactory condition. During this routine inspection performed in January 2007, the bridge was found to be in fair condition.

Deck

The concrete deck is in poor condition. The sidewalks have random transverse hairline cracks and joint sealant is cracked and deteriorated. There are short or broken PVC weeps in span 2, west side; span 6, east side between floorbeams 21 and 22; and span 7, east side between floorbeams 26 and 27 that drain onto the superstructure below. The light pole in span 7 on the east parapet is twisted with up to a 5/16-inch gap between the pole base and parapet along the north edge. Asphaltic plug joints show evidence of leakage at piers 4-7. The above items have not exhibited significant change since the last inspection. The following items have changed since last inspection and/or are new deficiencies found during this inspection:

- The underside of deck has a total deterioration of 15.5% with a maximum of 22.4% in span 5. The deterioration consists of spalls up to 6 feet x 8 feet x 2 inches deep with up to 90% section loss of exposed rebar, hollow areas up to 9 feet x 1 foot, and large areas of mapcracking up to 70% of a bay with isolated efflorescence. 3(?)
- All scupper grates have been cleared of debris.
- Span 7, west scupper downspout has been realigned and reattached.
- Spans 5, 6, and 9 short weeps have been extended.
- Span 7 missing junction box cover has been replaced.
- Asphaltic plug joints have an increased number of adhesion cracks.
- There is active leakage through deck joints at piers 6 & 7, south elevation at the west end of the deck (at sidewalk interface).

Superstructure

The superstructure is in fair condition. Spandrel columns have random spalls up to 2 feet x 1 foot x 3 inches with exposed rebar (with no significant loss) and a 2-foot x 6-inch hollow area. Arch ribs have spalls up to 7 feet x 1 foot x 6 inches with up to 50% section loss on the exposed rebar, hollow areas up to 7 feet x 1 foot, and scattered longitudinal cracks open up to 1/8" wide. Spans 1-4 and 8-11 and at piers 4-7 concrete slab has approximately 6.6% total underside deterioration with a maximum of 19.2% at pier 6. The deterioration consists of spalls with exposed rebar up to 1 foot diameter x 2 inches deep, hollow areas up to 2 feet x 3 feet, and longitudinal and map cracks with isolated efflorescence throughout. Floorbeams

have isolated spalls up to 1 foot x 1 foot x 3 inches with exposed rebar, hollow areas up to 14 inches x 11 inches, random vertical hairline cracks that do not extend to the underside and diagonal hairline cracks near spandrel columns with isolated efflorescence. Floorbeam 29 has a full width transverse crack on the bottom at midspan that has shown no propagation since the previous inspection. There are areas of heavy efflorescence leakage at the interface with the deck at random locations. The floorbeams spanning pier columns have random vertical hairline cracks throughout with isolated efflorescence and isolated horizontal cracks open up to 3/16-inch on the fascia and ¼-inch on the underside, and isolated spalls up to 4 feet x 1 foot x 6 inches with exposed rebar. The above items have not exhibited significant change since the last inspection. The following item has changed since last inspection and/or is a new deficiencies found during this inspection:

- Floorbeam P4N underside at the west column has a 1-foot diameter x 1 inch deep spall with up to 90% section loss on the exposed rebar.

Substructure

The substructure is in satisfactory condition. The abutment stems have random vertical, horizontal, and diagonal hairline cracks with isolated efflorescence, scattered areas of mapcracking, and random spalls up to 3 feet x 6 inches x 1 inch with exposed rebar. Both abutment footings are exposed, 8 inches high at the north abutment and 8 feet high at the south abutment, and are founded on bedrock. The wingwalls have random areas of efflorescence and/or water leakage through mortar joints with <1% loose or missing mortar throughout. Pier columns have random hairline cracks, spalls up to 4 feet x 2 feet x 3 inches deep with exposed rebar, hollow areas up to 4 feet x 4 feet, and scattered areas of mapcracking. Pier 6 base above and below water line has severe scale up to 2 inches with 3/8-inch deep scale below the waterline typical. Pier 6 top of footing is exposed for 19 feet long with light scale on the exposed portions, and piers 8-10 footings are exposed up to 2 feet high. All piers are founded on bedrock. The above items have not exhibited significant change since the last inspection. The following item has changed since last inspection:

- Southwest wingwall near the west end has a shifted capstone due to a tree root behind the wingwall.

Channel and Channel Protection

The channel and channel protection are in satisfactory condition. Pier 6 top of footing and footing formwork are exposed for 19 feet long and are encased in ledge rock The channel bottom is primarily bedrock with random cobbles and sand.

Approach Condition

The approaches are in good condition. The southeast metal beam railing has ±20 feet of impact damage with 2 bent posts and the remaining rails have minor dents and scrapes. Both approaches have a full width x ½-inch wide crack.

Recommended repair:

Deck

1. Clean and patch deteriorated concrete in deck underside (1 CY) using full depth patching at areas of exposed rebar with losses (17 SF).
2. Repair the short or broken weeps (9 LF).
3. Seal the adhesion cracks in the asphaltic plug joints (110 LF).
4. Reseal the joints at the sidewalk interface at piers 6 and 7 (south joint), west side (1½ LF).

Superstructure

1. Clean and patch all deteriorated concrete in the arch ribs, spandrel columns, and floorbeams for spans 5-7 and slab underside for spans 1-4 and 8-11 and at piers 4-7 (2 CY).

Substructure

1. Clean and patch all deteriorated concrete in the abutments and piers (1 CY).

Channel and Channel Protection

1. Place rip rap over the exposed footing at the southwest corner of the pier (5 CY).

Approach

1. Replace the damaged metal beam rail at the southeast corner (20 LF).
2. Seal the full width transverse cracks at both approaches (60 LF).

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

INSPECTION TYPE: Routine **PREVIOUS INSPECTION DATE:** 1/24/2005 **SNOOPER REQUIRED:** Yes
INSPECTION PERFORMED BY: GCS **SNOOPER USED:** Yes

TOWN: THOMASTON **FEATURE CARRIED:** SR 848 **YEAR BUILT:** 1928
LOCATION: OFF EXIT 38 ROUTE 8 **FEATURE INTERSECTED** B & M RR,NAUGATUCK RIVER **YEAR REBUILT:** 1987
MAIN MATERIAL: Concrete **MAIN DESIGN:** Arch - Deck

INSPECTION VISITS:

Inspection Date:	1/16/2007	Start Time:	9:00 AM
Temperature:	35 °F	End Time:	3:00 PM
Inspection Date:	1/17/2007	Start Time:	9:00 AM
Temperature:	25 °F	End Time:	3:30 PM
Inspection Date:	1/18/2007	Start Time:	9:00 AM
Temperature:	35 °F	End Time:	2:00 PM

INSPECTORS:

Inspector:	P. Goodwin	Task:	Team Leader
Inspector:	D. Shi	Task:	Assistant team leader
Inspector:	C. Lewis	Task:	Assistant team leader
Inspector:	J. Rowe	Task:	Inspector

58. DECK

Reinforced concrete deck. Bituminous concrete overlay with waterproofing membrane.

OVERALL RATING 4

	RATING	
OVERLAY	7	Bituminous concrete with waterproofing membrane. Light accumulation of sand along curb lines. See sheet 16 and photo 13.
DECK STR. CONDITION	4	Rate spans 5-7 deck. Spans 1-4 & 8-11 and at piers 4-7 are concrete slab supported by floorbeams at piers and are rated under Superstructure-Stringers below. Reinforced concrete deck has 15.5% total deterioration on the underside with a maximum of 22.4% in span 5. The deterioration consists of spalls up to 6'x8'x2" (span 7 between FB's 30 & 31) with up to 90% section loss of exposed rebar (span 6 between FB's 22 & 23), hollow areas up to 9'x1' (span 6 between FB's 16 & 17) and large areas of mapcracking up to 70% of a bay (span 6 between FB's 17 & 18) with isolated efflorescence. There is evidence of prior leakage through the deck at scattered locations throughout (random areas with active leakage per previous inspection report). 3(?) See sheet 22 See sheets 20-24 & 29 and photos 14 & 15.
CURBS	7	Granite block curbs have random scrapes and chipping throughout. Average curb reveal is 9".
MEDIAN	N	
SIDEWALKS	6	Random transverse hairline cracks and areas of light scale. Joint sealant at deck joints is cracked and deteriorated. See sheet 16.
PARAPET	7	Vertical faced concrete has random vertical hairline cracks with isolated cracks open up to 1/8". Joint sealant is cracked and deteriorated throughout. Protective coating is cracked and peeling at scattered locations. See sheet 16.
RAILING	N	
PAINT	N	
FENCE	N	
DRAINS	7	All scupper grates have been cleared of debris since the previous inspection. Span 7, west scupp downspout near pier 7 has been reconnected with PVC elbow and duct tape. Previously short weeps in span 5, west side between FB1 and pier 4; span 6, east side between FB's 13 & 14 and 22 & 23; and span 9, west side have all been extended. Short or broken weeps remain in span 2, west side; span 6, east side between FB's 21 & 22; and span 7, east side

BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

58. DECK — Reinforced concrete deck. Bituminous concrete overlay with waterproofing membrane. **OVERALL RATING** 4

between FB's 26 & 27 and drain onto the superstructure below.

See sheets 16, 19-25, 89, 92, 95 & 98 and photos 16-19.

LIGHTING STANDARD 6 — Span 7, east parapet light pole is twisted with up to a 5/16" gap between the pole base and parap along the north edge. The pole is secure and shows no signs of active movement. Previously noted junction box cover with exposed wires in span 7 has been replaced.

See sheet 16 and photos 20 & 21.

UTILITIES TYPE/SIZE N

CONSTRUCTION JOINTS 6 — Transverse construction joints throughout have moderate to heavy efflorescence leakage throughout.

EXPANSION JOINTS 6 — Asphaltic plug joints have adhesion cracks throughout up to 2" wide and up to full width of the bridge. Active leakage or evidence of prior leakage exists throughout piers 4-7 interface at deck.

See sheet 16 and photo 22.

59. SUPERSTRUCTURE — Spans 5-7 are reinforced concrete open spandrel deck arch. Spans 1-4 & 8-11 are reinforced concrete slab. **OVERALL RATING** 5

RATING

BEARING DEVICES N — Sliding plate bearings between slab and piers and abutments are not visible.

STRINGERS 6 — Spans 1-4 & 8-11 and at piers 4-7 integral concrete slab rated.

Concrete slab has approximately 6.6% total underside deterioration with a maximum of 19.2% at pier 6. The deterioration consists of spalls with exposed rebar up to 1' dia x 2" deep (span 2), hollow areas up to 2' x 3' (spans 1 & 3), and longitudinal and map cracks with isolated efflorescen throughout.

See sheets 19, 25-28, 89, 92, 95 & 98.

GIRDERS 5 — Spans 5-7 arch ribs and spandrel columns rated.

MAM 2/22/07

Arch ribs have spalls up to 7' x 1' x 6" with up to 50% section loss on the exposed rebar (span 5, west arch between columns 6 & 7) and hollow areas up to 7' x 1' (span 5, west arch between columns 5 & 6). There are also scattered longitudinal cracks open up to 1/8" wide.

Struts between the arch ribs have random shallow rebar throughout and isolated hairline cracks.

Random spalls up to 2' x 1' x 3" with exposed rebar (span 6, column 10 east) and a 2' x 6" hollow area (span 6, column 11 east). There is no significant section loss on the exposed rebar. Scatter hairline cracks with isolated efflorescence.

Spandrel arches are secondary members that brace the spandrel columns. Spandrel arches have random spalls with exposed rebar and radial cracks with isolated efflorescence throughout. There is separation at interface with piers and abutments but gaps are per design.

See sheets 30-74 and photos 26 & 27.

FLOOR BEAMS 5 — Floorbeams span pier columns and spandrel columns.

Floorbeams have isolated spalls up to 2' x 8" x 1" with exposed rebar (FB23, south side under eas sidewalk) and hollow areas up to 14" x 11" (FB3, north side). There are random vertical hairline cracks along the length of the floorbeam fascias that do not extend to the underside and diagonal hairline cracks near spandrel columns with isolated efflorescence. FB29 has a full width transvers crack on the bottom at midspan that has shown no propagation since the previous inspection. There are areas of heavy efflorescence leakage through cold joints at the interface with the deck a random locations.

Pier floorbeams have random vertical hairline cracks throughout with isolated efflorescence and isolated horizontal cracks open up to 3/16" on the fascia and ¼" on the underside (FB-P6N).

Connecticut Department of Transportation

Bridge Inspection Report BRI-18

BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

59. SUPERSTRUCTURE

Spans 5-7 are reinforced concrete open spandrel deck arch. Spans 1-4 & 8-11 are reinforced concrete slab.

OVERALL RATING 5

Isolated spalls up to 4' x 1' x 6" with exposed rebar (FB-P4S). FB-P4N underside at the west column has a 1' dia x 1" deep spall with up to 90% section loss on the exposed rebar.

See sheets 38-74, 81-98 & 101-106 and photos 28-30.

TRUSSES-GENERAL	N	See "Girders" above.
TRUSSES-PORTALS	N	See "Girders" above.
TRUSSES-BRACING	N	
PAINT	N	
RUST	N	
MACHINERY MOV SPAN	N	
RIVETS & BOLTS	N	
WELDS & CRACKS	N	
TIMBER DECAY	N	
CONCRETE CRACKING	5	See above items.
COLLISION DAMAGE	8	
MEMBER ALIGNMENT	8	
DEFLECT. UNDER LOAD	N	(N) Normal (E) Excessive
VIBR. UNDER LOAD	N	(N) Normal (E) Excessive
STAND PIPES	N	
BARREL LADDERS	N	

ARE BARREL LADDERS OSHA COMPLIANT? NA

60. SUBSTRUCTURE

Reinforced concrete abutments and piers.

OVERALL RATING 6

	RATING	
ABUTMENTS-STEM	6	Random vertical, horizontal, and diagonal hairline cracks with isolated efflorescence. North abutment has scattered areas of mapcracking and south abutment has random spalls up to 3' x 6' x 1" with exposed rebar. See sheets 75 & 76.
ABUTMENTS-BACKWALL	N	
ABUTMENTS-FOOTINGS	7	Both abutment footings are founded on bedrock and are exposed, 8" high at the north abutment and 8' high at the south abutment. North abutment footing has no notable deficiencies. South abutment footing has random hairline cracks, mapcracks with efflorescence, moderate scale, and edge chipping along the top. See sheets 75 & 76 and photo 31.
ABUT.-SETTLEMENT	8	Abutments founded on bedrock.
ABUTMENTS-WINGWALLS	7	Stone masonry. There are random areas of efflorescence and/or water leakage through mortar joints with <1% loose or missing mortar throughout all wingwalls. South wingwalls have up to a 1/ gap at the interface with the abutment stem. Northwest wingwall has a 6" x 4" x 4" deep void at th interface with the abutment stem. Southwest wingwall near the west end has a shifted cap stone due to a tree root behind the wingwall. See sheets 77 & 78 and photo 32.

1/8" W

Connecticut Department of Transportation

Bridge Inspection Report BRI-18

BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

60. SUBSTRUCTURE

Reinforced concrete abutments and piers. **OVERALL RATING** 6

PIERS/BENTS-CAPS	N	See "Superstructure - Floorbeams" above.
PIERS/BENTS-PILE BENT	N	
PIERS/BENTS-COLUMN	6	Random hairline cracks, spalls up to 4' x 2' x 3" deep with exposed rebar (Pier 4, west column), hollow areas up to 4' x 4' (Pier 6, west column), and scattered areas of mapcracking. Pier 6 base above and below water line has severe scale up to 2" with 3/8" deep scale below the waterline typical, and failed patches. See sheets 79-106 and Appendix A.
PIERS/BENTS-FOOTINGS	6	Pier 6 top of footing is exposed 19' long with light scale on the exposed portions. Piers 8-10 footings are exposed up to 2' high. All pier footings are founded on bedrock. See sheets 99-106 and Appendix A.
PIERS/BENTS-SETTLEMent	8	Piers founded on bedrock.
EROSION-SCOUR	5	Erosion rated 6. Wingwall embankments are steep with minor erosion. Existing groundline aroun south abutment and piers 7-10 is significantly lower (±8') than what is shown on the plans. Note that all substructure units are founded on bedrock. Scour rated 5. Pier 6 top of footing is exposed 19' long. The flow angle of attack on the pier is approximately 50°. See attached underwater report (Appendix A). See sheets 75-106.
CONCRETE CRACK-SPALL	6	See above items.
STEEL CORROSION	N	
PAINT	N	
TIMBER DECAY	N	
COLLISION DAMAGE	8	
DEBRIS	8	

61. CHANNEL & CHANNEL PROTECTION

Channel bottom is bedrock, cobble, and sand with 0.8' max. penetration. Flow is 1 fps. See attached underwater report (Appendix A). **OVERALL RATING** 6

	RATING	
CHANNEL SCOUR	6	Pier 6 top of footing is exposed 19' long. The exposed footing and formwork are encased in ledge rock. See attached underwater report (Appendix A).
EMBANKMENT EROSION	8	
DEBRIS	7	Light, intermittent timber and man-made debris in the channel and random fallen timber on embankments.
VEGETATION	8	
CHANNEL CHANGE	6	Water flow angle of attack on Pier 6 is ±50°. No appreciable change in channel conditions. Pier 6 footing and footing formwork are exposed at the downstream north face of the pier. Changes in channel bottom elevation can be attributed to an irregular rocky channel bottom and the exact location of readings taken. See attached underwater report (Appendix A).
FENDER SYSTEM	N	
SPUR DIKES & JETTIES	N	
RIP RAP	8	

Connecticut Department of Transportation
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BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

62. CULVERTS & RETAINING WALL **OVERALL RATING** N

APPROACH CONDITION **OVERALL RATING** 7

	RATING	
APPROACH SLAB	N	This structure has no approach slabs.
RELIEF JOINTS	N	
APPROACH GUIDE RAIL	6	Metal beam rail at all corners. Southeast railing has ±20' of impact damage with 2 bent posts. Remaining rails have minor dents and scrapes. See photo 33.
APPROACH PAVEMENT	7	Both approaches have a full width x ½" wide crack. Bituminous sidewalk landings at all four corners are up to 4" lower than bridge sidewalks.
APPROACH EMBANKMENT	7	Approach embankments are steep with minor erosion.

TRAFFIC SAFETY FEATURES:

BRIDGE RAILINGS	1	
TRANSITIONS	0	Steel blockouts, MBR not stiffened, southeast finger shoe is overlapped incorrectly. See photo 34
APPROACH GUARDRAILS	0	Steel blockouts.
APPR. GUARDRAIL ENDS	1	

LOAD POSTING

SINGLE UNIT (TONS)		
HS (TONS)		
4 AXLE (TONS)		
3S2 (TONS)		
ADVANCE WARNING Y/N		
LEGIBILITY		
VISIBILITY/LOCATION		

MISC.

MIN VERT. UNDERCLR.	27'	3"	Minimum clearance over railroad.
POSTED CLR. UNDER BRIDGE	'	"	
POSTED CLR. ON BRIDGE	'	"	
ADVANCE WARNING (Y/N)	No		
SPEED LIMIT (IF ANY)	MPH		
CHARACTER OF TRAFFIC			Light, mixed.

ADDITIONAL NOTES

-Bridge ID is in good condition.
-The bridge is labeled from north to south with span 1 (formerly west approach span). Per CDOT on 1/11/07, this bridge will now b labeled per the bridge plans from the 1969 Repair Project No. 0140-0129 rather than per the original plans as the spans were not labeled in the 1928 Original Project No. 16B. See sheet 14 for structure labeling. Note: the inventory route log direction is north.
-BMM 01-356 items 1, 2, and 4 have been addressed, item 3 has been partially addressed.
-A 50' snooper was used to inspect the structure.

ADDITIONAL COMMENTS:

Connecticut Department of Transportation
Bridge Inspection Report BRI-18

BRIDGE #: 00603 **INSPECTION DATE:** 1/16/2007

Inspectors' Signatures:

1) [signature] Date: 02/21/07

2) [signature] Date: 02/21/07

3) Date: __/__/__

4) Date: __/__/__

P.E. Signature: [signature] Date: 02/21/07

P.E.#: 18533

Reviewed by: [signature] **CDOT** Date: 06/26/07

RECEIVED
FEB 23 2007
CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

TIME AT SITE

Bridge No. 00603

Proj. # 170-2729

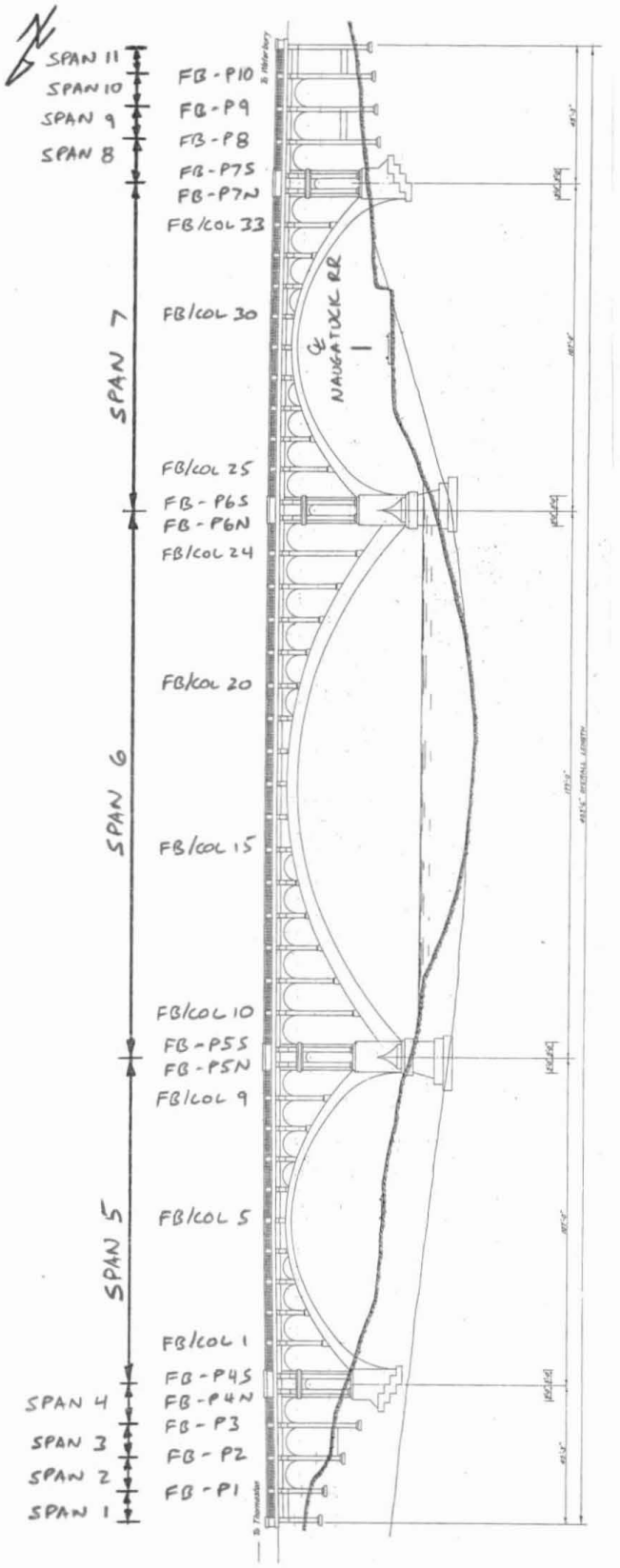
Garg Consulting Services, Inc.
ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

Sheet 13

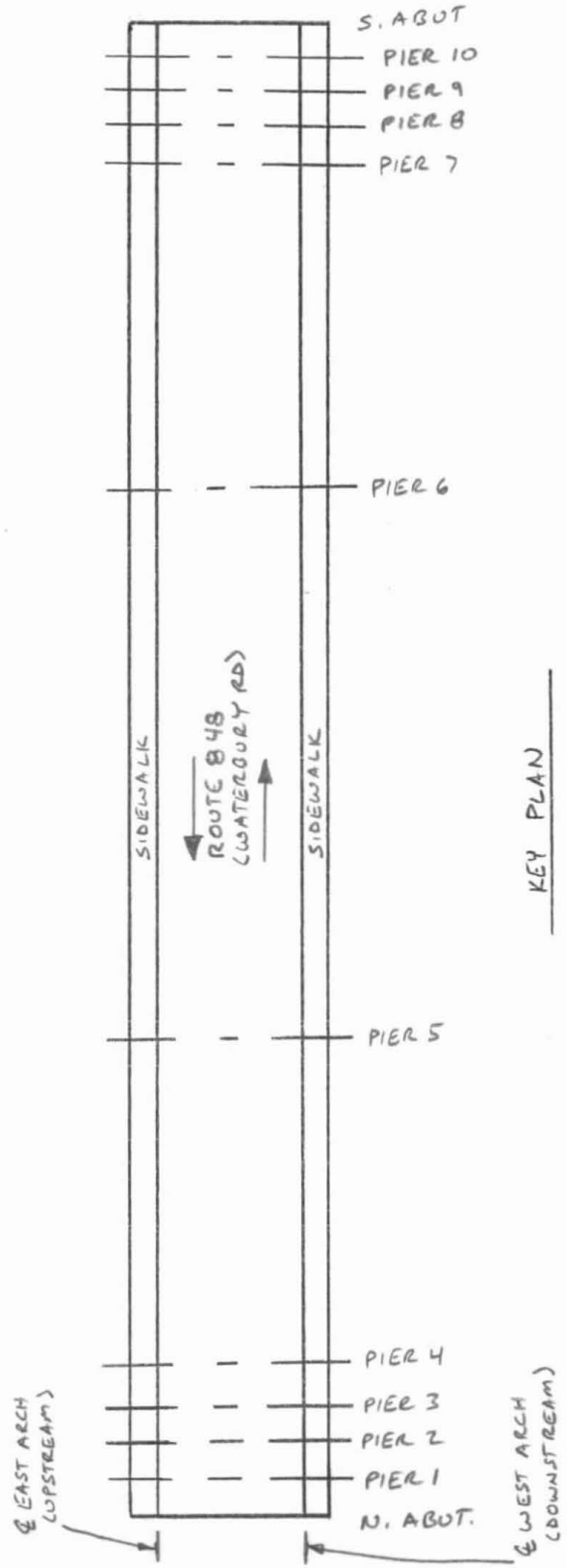
Date: 1/16/07	Crew: PG, CL, JR	
	Equipment Used: 50' Snooper, Cube, Crash Truck	
Time: 0900-1500	Local Police: Graham #9 (Name/Time) 0900-1500	Flagman: Sweeney #244 (Name/Time) 0830-1500
Work Done: Inspected spans 7-11.		
Date: 1/17/07	Crew: PG, DS	
	Equipment Used: 50' Snooper, Cube, Crash Truck, Safety Boat	
Time: 0900-1530	Local Police: Graham #9 (Name/Time) 0900-1530	Flagman: N/A (Name/Time)
Work Done: Inspected span 6.		
Date: 1/18/07	Crew: PG, CL, JR	
	Equipment Used: 50' Snooper, Cube, Crash Truck	
Time: 0900-1400	Police: Graham #9 (Name/Time) 0900-1400	Flagman: N/A (Name/Time)
Work Done: Inspected spans 1-5. Inspection of structure complete.		
Date:	Crew:	
	Equipment Used:	
Time:	Police: (Name/Time)	Flagman: (Name/Time)
Work Done:		
Date:	Crew:	
	Equipment Used:	
Time:	Police: (Name/Time)	Flagman: (Name/Time)
Work Done:		

FIELD NOTES

PROJ. NO. 170-2729	BRIDGE NO. 00603
DATE 1/6/07	SHEET 14
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, SR



WEST ELEVATION



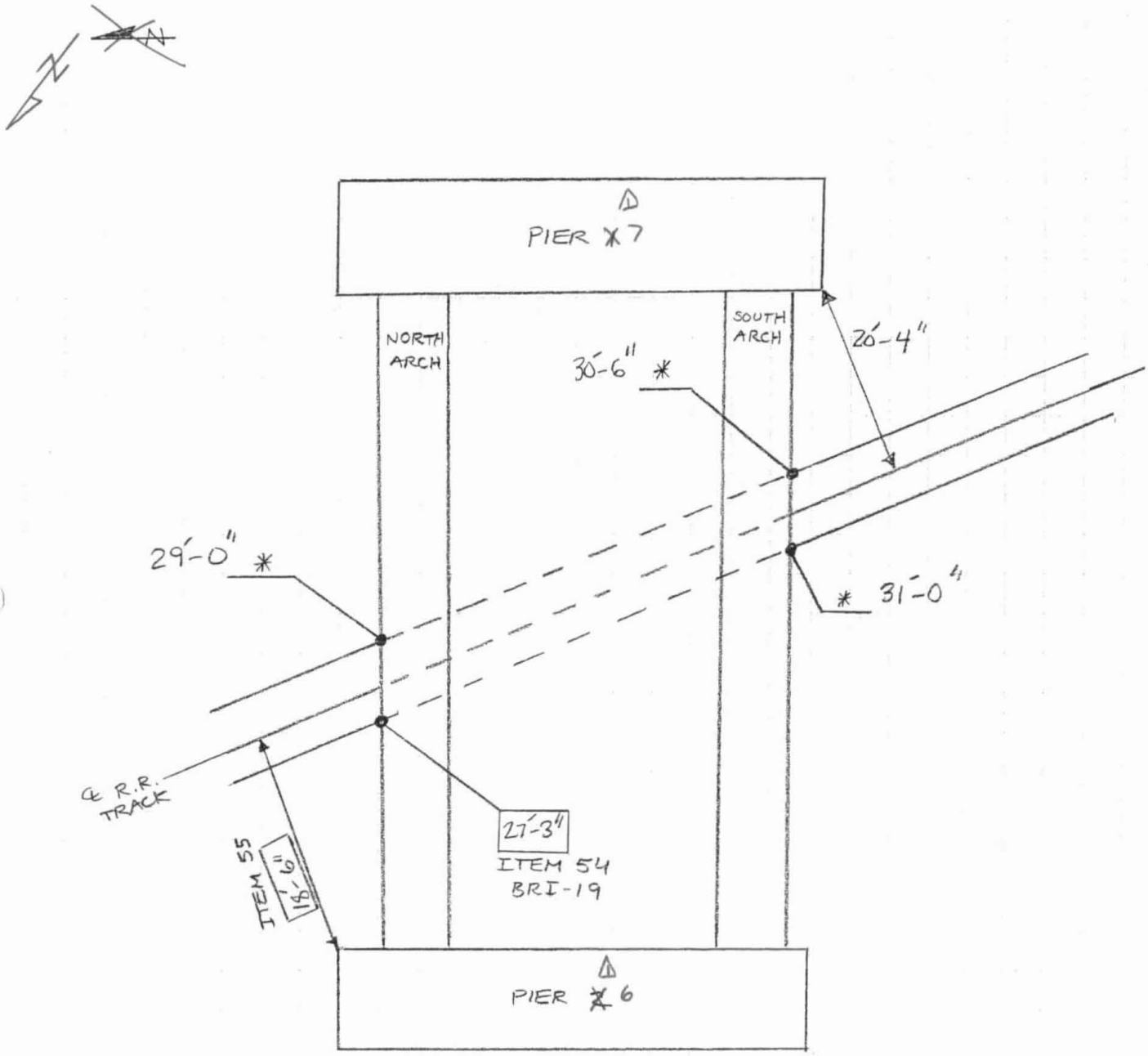
KEY PLAN

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340 BRIDGE NO 00603
DATE 1/27/05 SHEET #15
CREW DAL, MJW, PHH



* = VERTICAL MEASUREMENTS OVER 27'.

No change in measurements since previous inspection report.

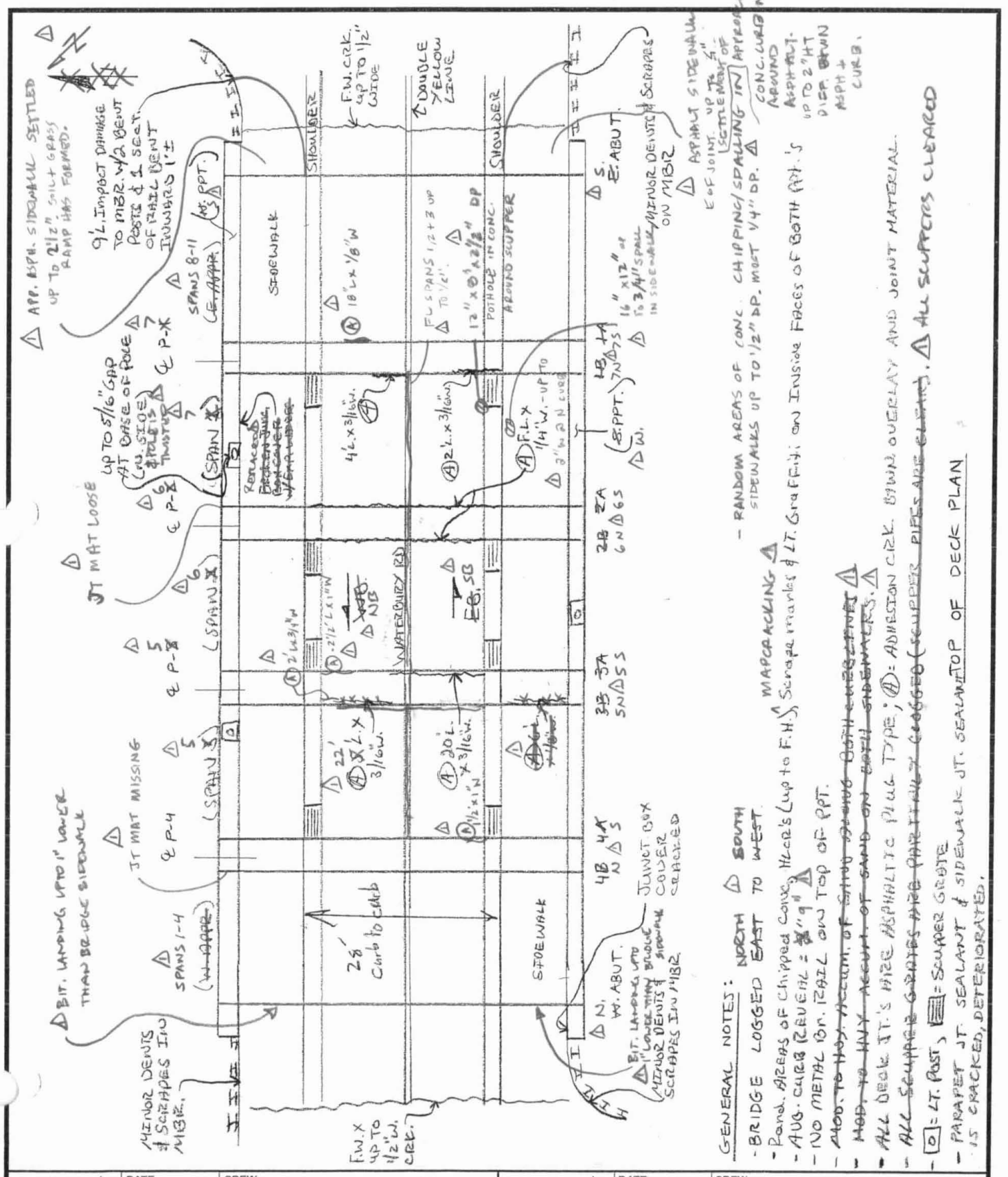
CLEARANCE DIAGRAM

REVISION 1	DATE 1/16/07	CREW PG, CL, JR - GLS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340. BRIDGE NO 00603
DATE 1/24/05 SHEET 5/16
CREW PHH, MHL, MTW

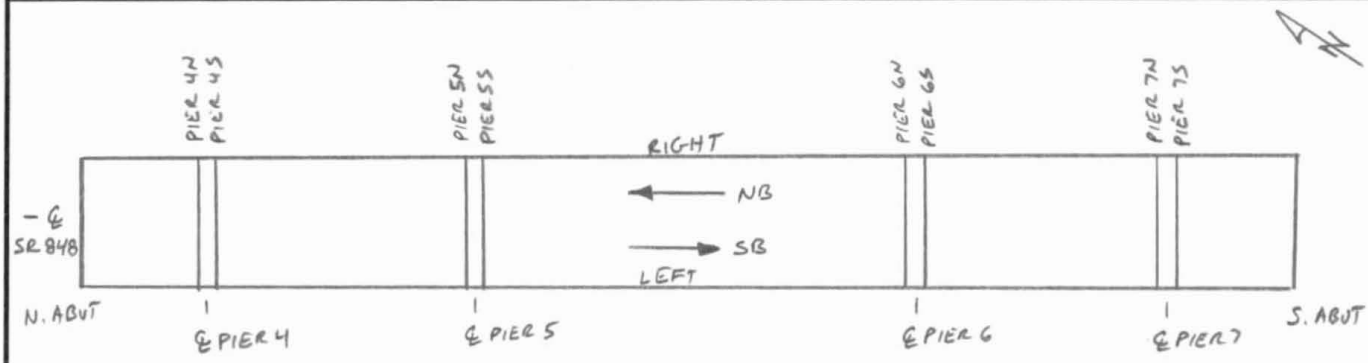


REVISION 1	DATE 1/16/07	CREW PG, CL, JR - GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

FIELD NOTES

PROJ. NO. 170-2729	BRIDGE NO. 00603
DATE 1/16/07	SHEET 17
CREW PG, CL, JR	

PREPARED BY: Garg Consulting Services, Inc.
ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS



LOCATION	WINTER MEASUREMENT < 50° F				SUMMER MEASUREMENT > 50° F				JOINT TYPE
	LEFT	RIGHT	TEMP	DATE	LEFT	RIGHT	TEMP	DATE	
PIER 4S	1 1/16	1 3/16	35°F	1/16/07					ASPH. PLUG
PIER 4N	1 1/2	1 1/8	↓	↓					↓
PIER 5S	1 5/16	1 1/8	↓	↓					↓
PIER 5N	1 5/16	7/8	↓	↓					↓
PIER 6S	1 3/16	1 1/16	↓	↓					↓
PIER 6N	1 3/8	1	↓	↓					↓
PIER 7S	1 3/4	1 3/8	↓	↓					↓
PIER 7N	1 9/16	1 1/8	↓	↓					↓

GENERAL NOTES

REGULAR INSPECTION [X]
Date: 01/16/07

SUMMER / WINTER JOINT MEASUREMENTS [ ]
Summer 20 __ __ Winter 20 __ __

JOINT MEASUREMENTS

Form BRI-17, Rev. 9/03

Bridge No.: 00603 St. Rte. 848 over Naugatuck River & Railroad **Town:** Thomaston

Measurements Taken By: CL

Measurements Reviewed By: PG

Deck Joint Location	Deck Joint Type[1]	Effect Span[2] (ft.)	Winter Measurements Temp °F	Winter Date: 1/24/05 Left (in.)	Winter Date: 1/24/05 Right (in.)	Summer Measurements Temp °F	Summer Date: 1/16/07 Left (in.)	Summer Date: 1/16/07 Right (in.)	Differential Movements Actual Left (in.)	Differential Movements Actual Right (in.)	Differential Movements by Formula	Comments	Difference Between Actual & Calc'd Mov't Left (in.)	Difference Between Actual & Calc'd Mov't Right (in.)
Pier 7N	Plug	41.5	10	1- 8/16	1- 1/16	35	1- 9/16	1- 2/16	1/16	1/16	- 1/16		- 2/16	- 2/16
Pier 7S	Plug	54.0	10	1-12/16	1- 7/16	35	1-12/16	1- 6/16	0	- 1/16	- 2/16		- 2/16	- 1/16
Pier 6N	Plug	54.0	10	1- 6/16	1- 5/16	35	1- 6/16	1	0	- 5/16	- 2/16		- 2/16	3/16
Pier 6S	Plug	90.0	10	1- 4/16	1- 6/16	35	1- 3/16	1- 1/16	- 1/16	- 5/16	- 3/16		- 2/16	2/16
Pier 5N	Plug	90.0	10	1- 7/16	1- 4/16	35	1- 5/16	14/16	- 2/16	- 6/16	- 3/16		- 1/16	3/16
Pier 5S	Plug	54.0	10	1- 6/16	1- 4/16	35	1- 5/16	1- 2/16	- 1/16	- 2/16	- 2/16		- 1/16	0
Pier 4N	Plug	54.0	10	1- 8/16	1- 3/16	35	1- 8/16	1- 2/16	0	- 1/16	- 2/16		- 2/16	- 1/16
Pier 4S	Plug	41.5	10	1- 3/16	1- 4/16	35	1- 1/16	1- 3/16	- 2/16	- 1/16	- 1/16		1/16	-0

1. The "Deck Joint Type" should be "plug" for Asphaltic Plug joints, "strip" for Strip Seals, "seg." for Segmental Joints, etc.
2. The "Effective Span" is the length contributing to expansion at the joint. This should be 0 at fixed joints of single span bridges.

Reviewer's Comments: Up to 1/4" lateral movement south of 5N and 1/4" lateral movement north of 5N.

Summer / Winter Joint Measurements: (IF ADDING OR REMOVING, SEND A COPY OF THIS FORM TO SUPERVISOR FOR REVIEW/APPROVAL WITH REASONS FOR CHANGE INDICATED)

[ ] **ADD** TO SUMMER/WINTER LIST SUPERVISOR APPROVAL: _____

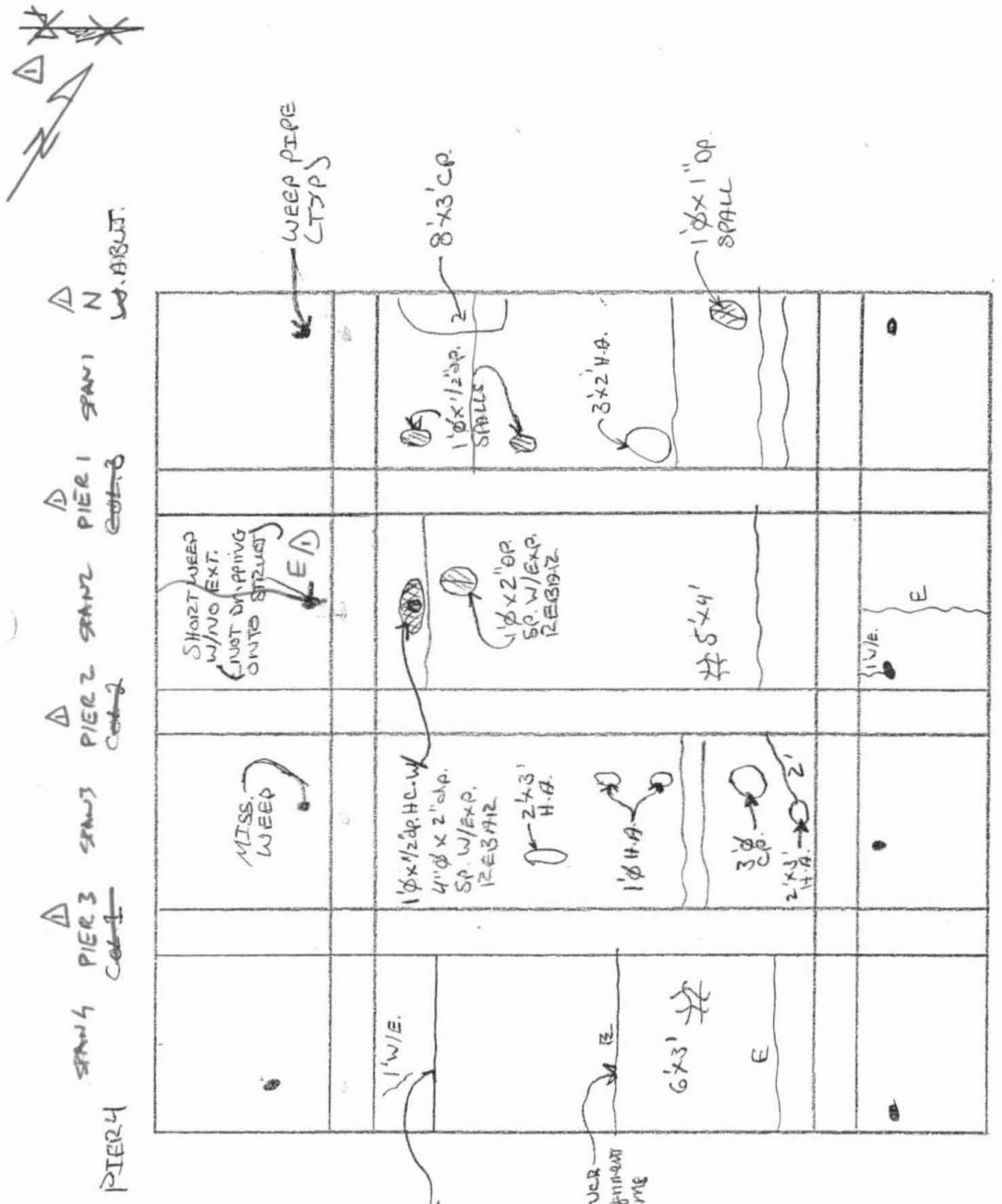
[ ] **REMOVE** FROM SUMMER/WINTER LIST MASTER LIST ENTRY: _____

File: 0603jnt(English), Revised September 2003

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET 2419
CREW DAL, MTW



GENERAL NOTES:

- ~ = HLR, E = W/EFFLO., C.P. = CONCRETE PATCH, # = MORTAR-LEAKING

UNDERSIDE OF DECK
~~WEST APPROACH~~
SPANS 1-4

REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

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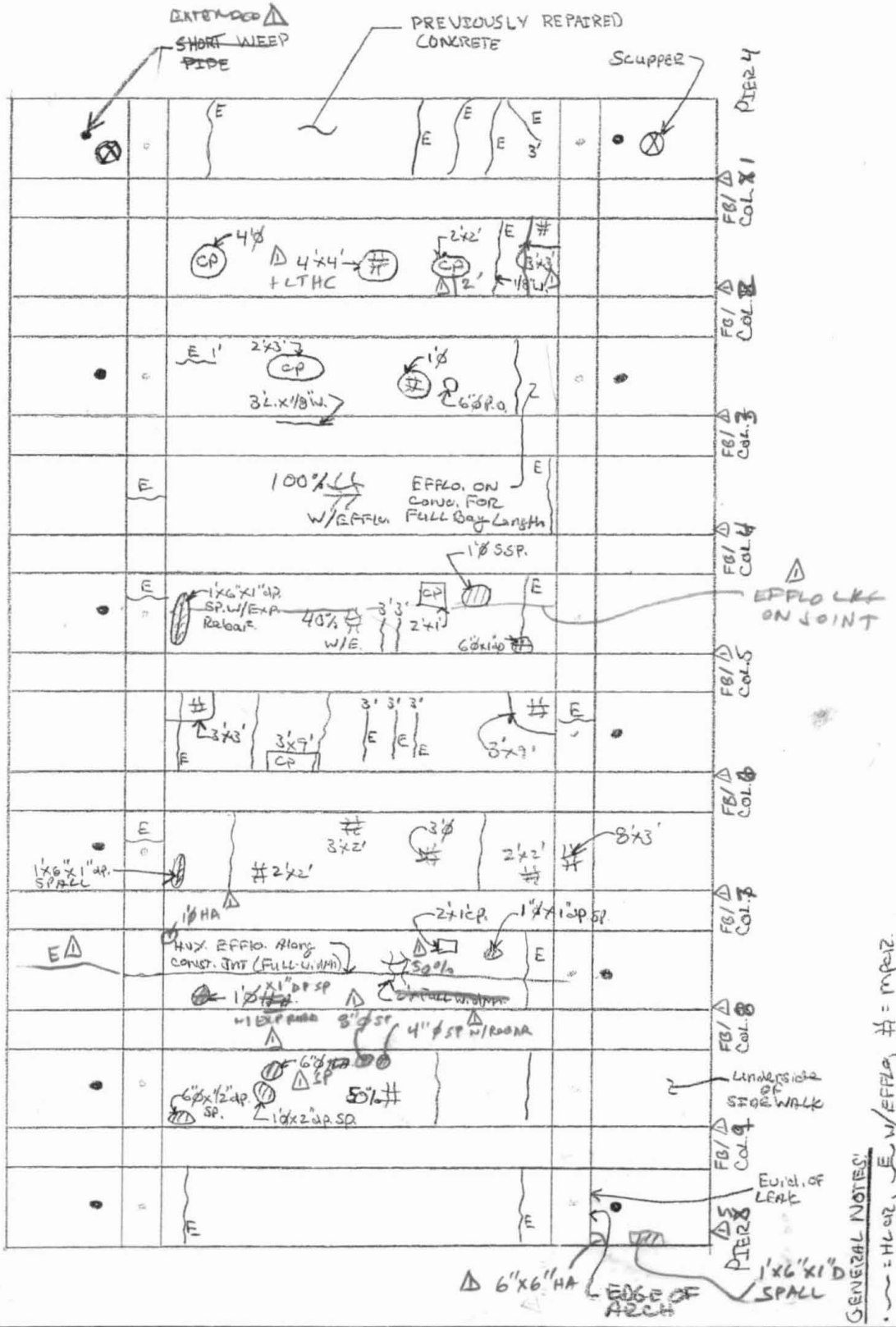
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET 20
CREW DAL, MJW



REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

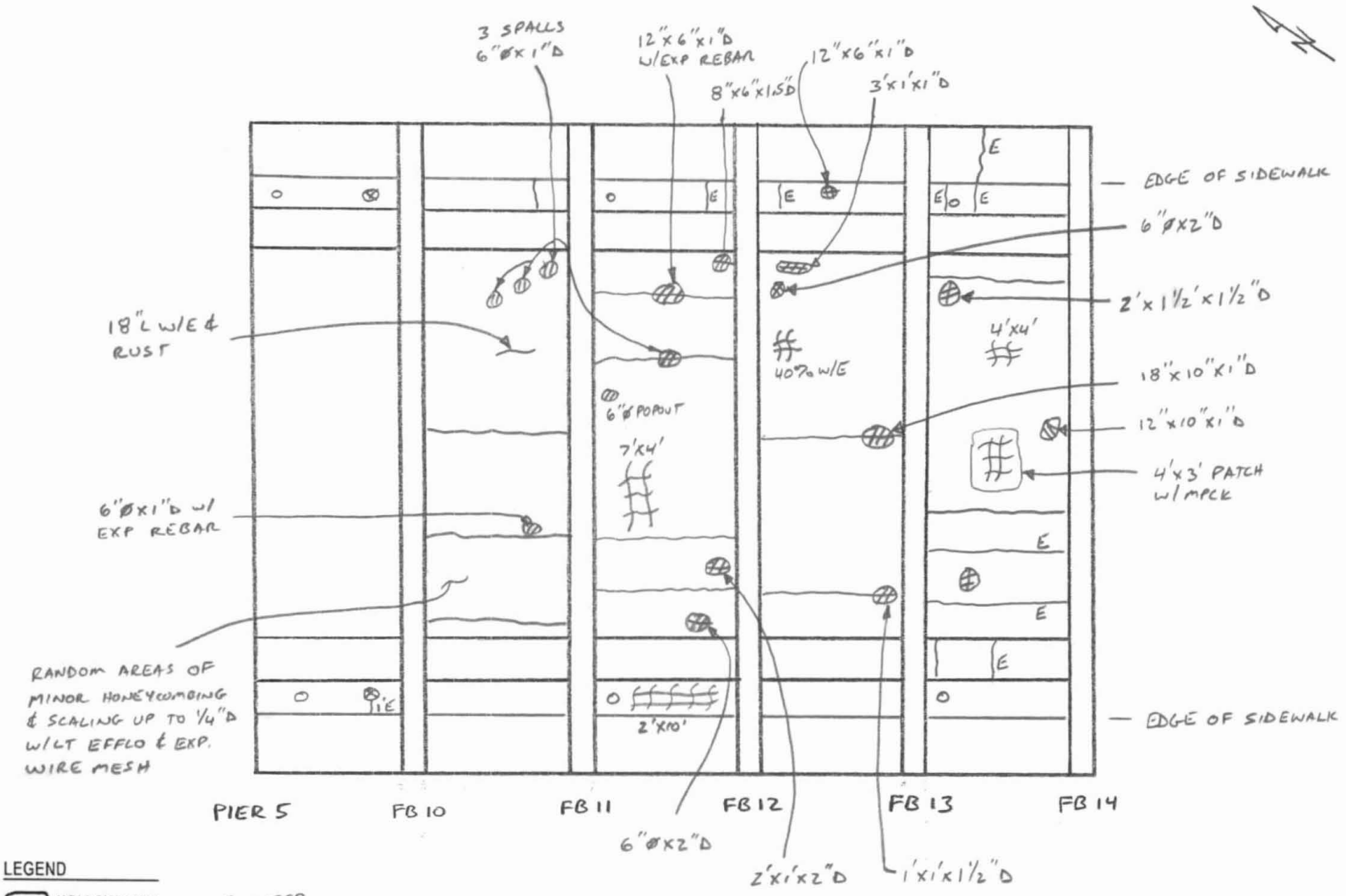
PROJ. NO. 170-2729

DATE: 1/17/07

CREW: PG, DS

BRIDGE NO. 00603

SHEET 21



LEGEND

- HOLLOW AREA — O - WEEP
- SHALLOW REBAR — ⊗ - SCUPPER
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR) — E : W/EFFLO
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

UNDERSIDE OF DECK SPAN 6 (PIERS - FB 14)

Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

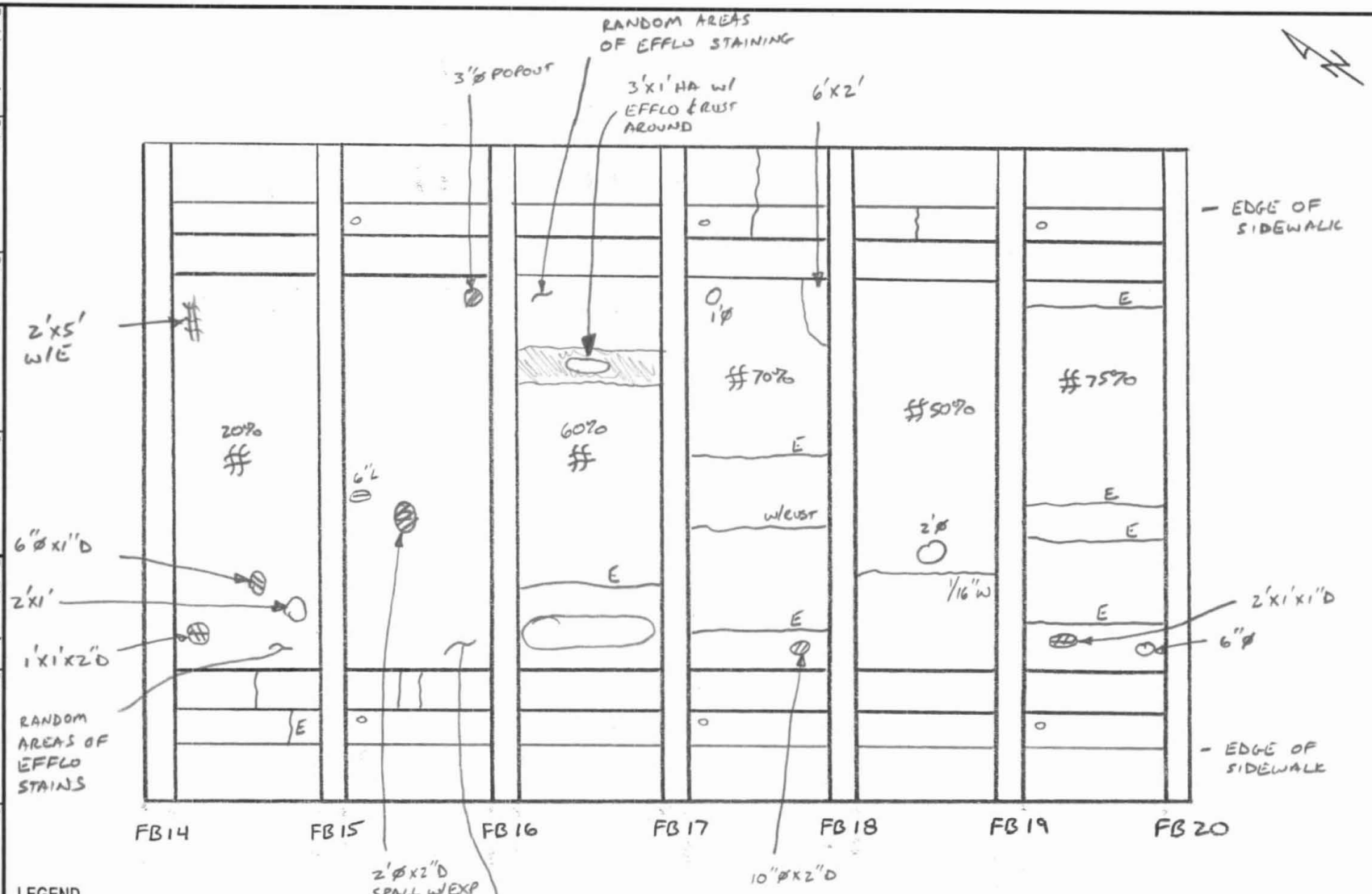
PROJ. NO. 170-2729

DATE: 1/17/07

CREW: PG, DS

BRIDGE NO. 00603

SHEET 22



LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

E - w/EFFLO

UNDERSIDE OF DECK SPAN 6 (FB14 - FB 20)

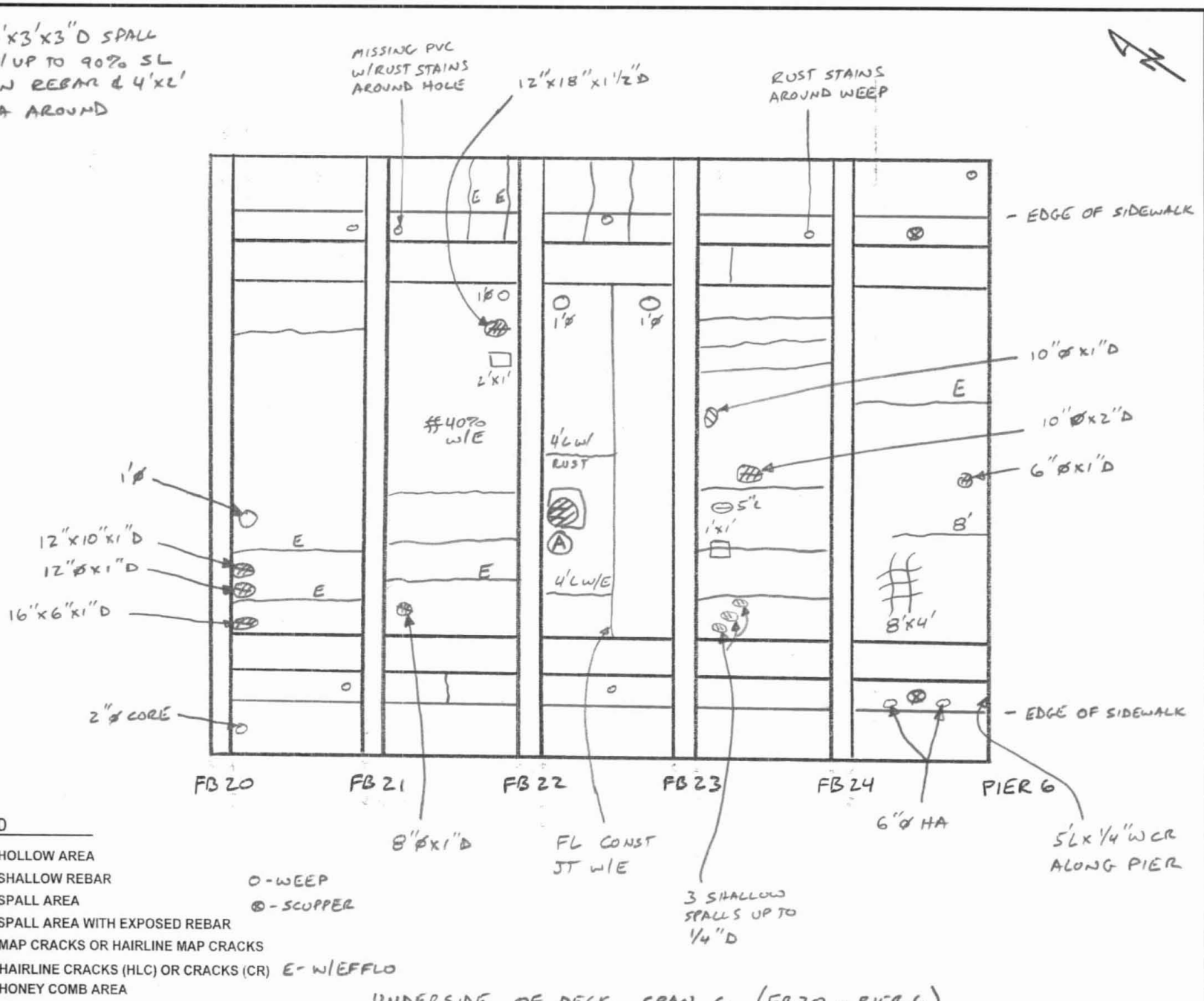
Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc.
ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS

PROJ. NO. 170-2729
DATE: 1/17/07
CREW: PG, DS

BRIDGE NO. 00603
SHEET 23



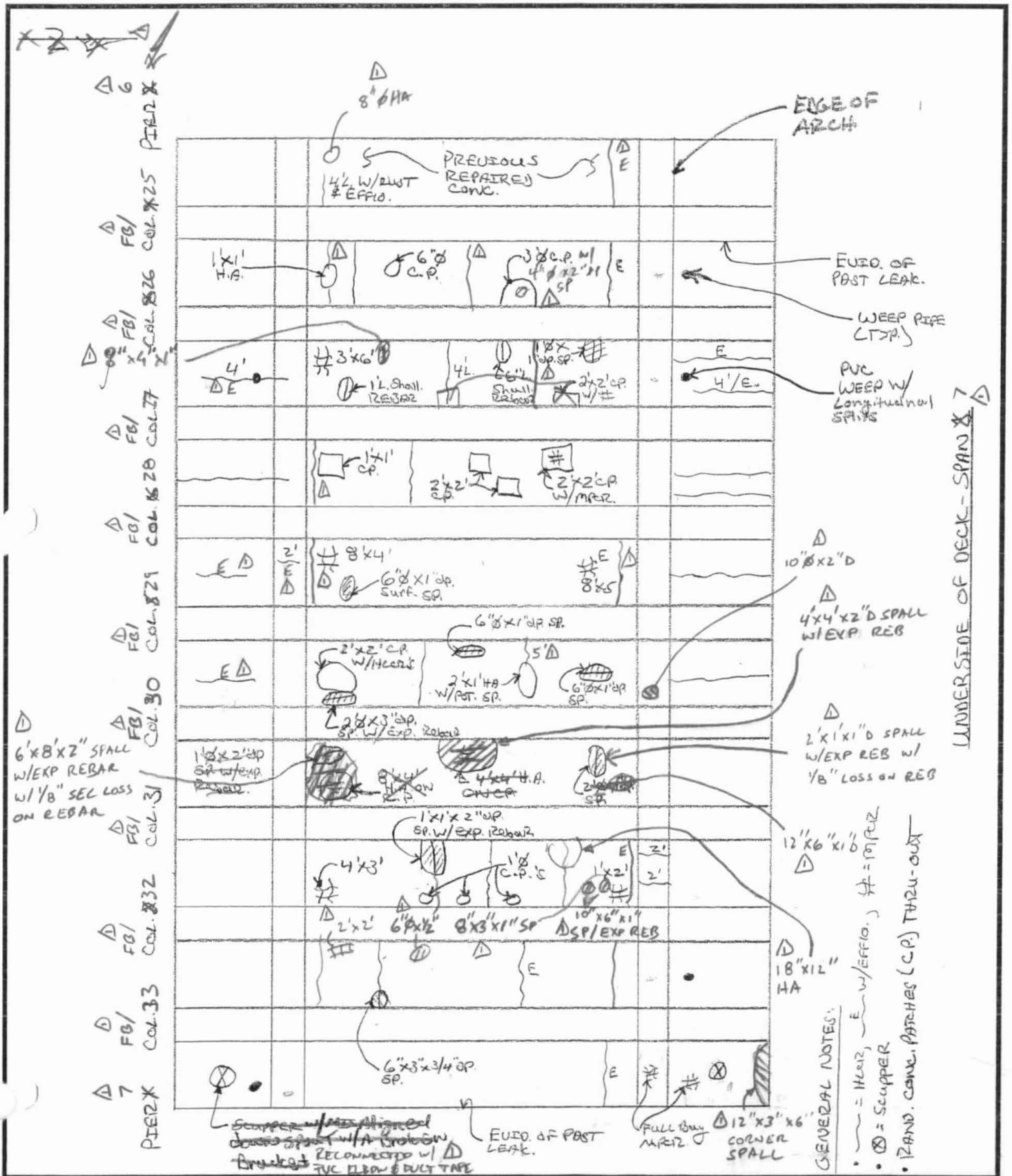
UNDERSIDE OF DECK SPAN 6 (FB 20 - PIER 6)

Revision	Date	Crew	Company

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 10 24
CREW PHH, DAL, MJW

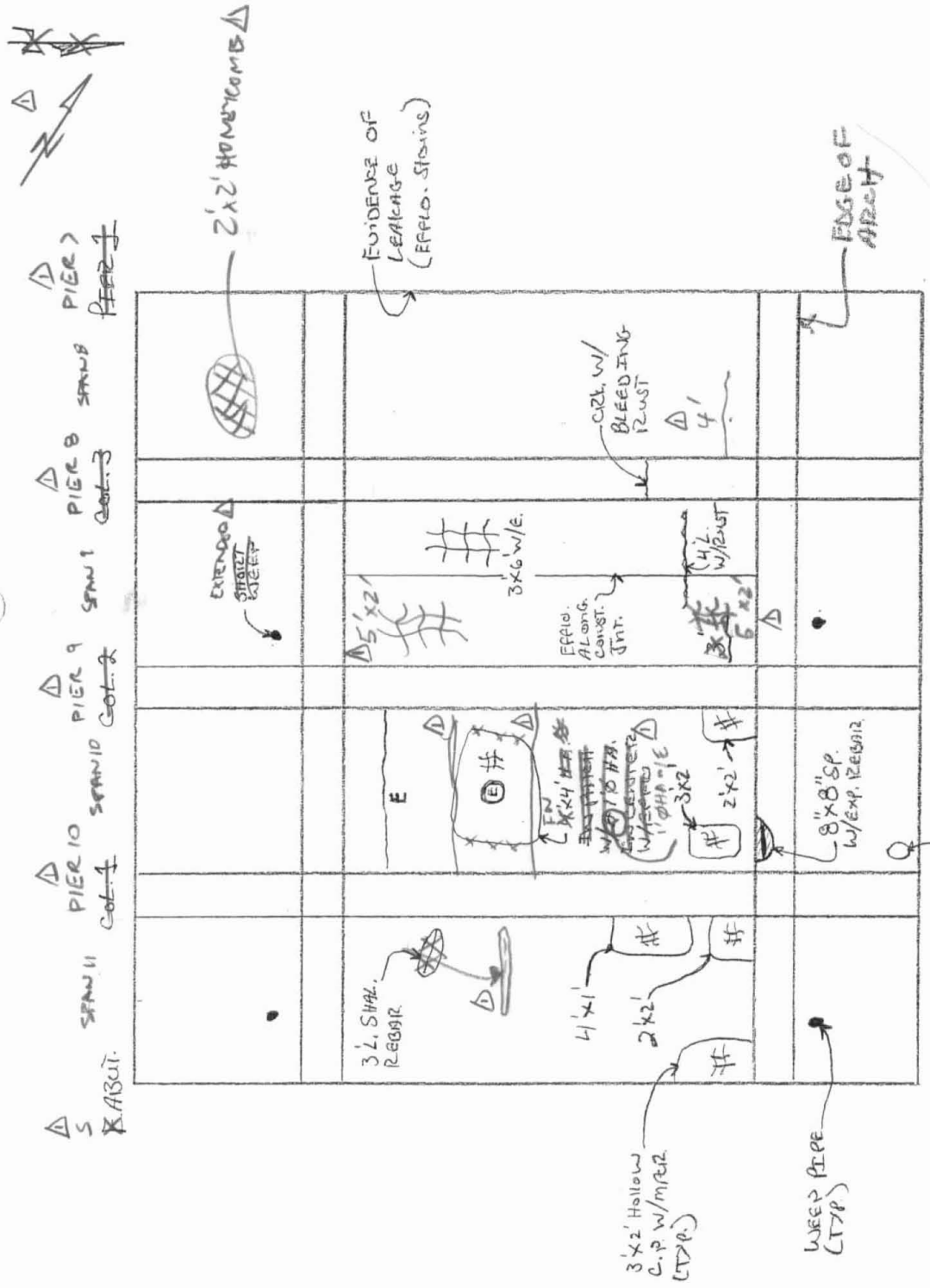


REVISION 1	DATE	CREW	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 25
CREW PHH, DAL, MJW



UNDERSIDE OF DECK
~~EAST APPROACH~~
SPANS 8-11

GENERAL NOTES:
- = HEAR, E = HEAR W/EFFLO., ⊕ = MAPCRACKING
- Rand. Conc. PATCHES THRU-OUT

REVISION 1	DATE 1/16/07	CREW PG, CL, JE- GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Bridge No.: 00603 Date: 1/16/07 Prepared By: JR Checked By: PG

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

	Deterioration By Span - In Square Feet										
	Span Number										
Deterioration Type	1	2	3	4	8	9	10	11			Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot: 2	Bot: 3	Bot: 3	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 8
Scale (Moderate to Severe Only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks: w/Efflorescence (use 6 in. width x length)	Bot: 11	Bot:	Bot: 9	Bot:	Bot:	Bot: 5	Bot:	Bot:	Bot:	Bot:	Bot: 25
w/o Efflo. (use 3 in. width x length)	Bot:	Bot: 5	Bot: 3	Bot: 10	Bot:	Bot: 5	Bot: 1	Bot: 1	Bot:	Bot:	Bot: 25
Map Cracking: w/Efflorescence (use full area)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 40	Bot: 18	Bot:	Bot:	Bot:	Bot: 58
w/o Efflo. (use 50% of area)	Bot: 9	Bot:	Bot: 10	Bot:	Bot: 7	Bot: 5	Bot: 10	Bot:	Bot:	Bot:	Bot: 41
Honeycombed Areas (only areas more than 1 1/2 in. deep)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Total Span Area (Square Feet)	415	415	415	415	415	415	415	415			3,320
% Spalled and Delaminated on Top	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%
% Deterioration on Bottom	4.82%	1.20%	5.78%	3.13%	2.41%	13.25%	6.99%	0.24%			4.73%

Bridge No.: 00603 Date: 1/16/07 Prepared By: JR Checked By: PG

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

	Deterioration By Span - In Square Feet										
	Span Number										
Deterioration Type	Pier 4	Pier 5	Pier 6	Pier 7							Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot: 1	Bot:	Bot:	Bot: 2	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 3
Scale (Moderate to Severe Only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks: w/Efflorescence (use 6 in. width x length)	Bot: 12	Bot:	Bot:	Bot: 6	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 18
w/o Efflo. (use 3 in. width x length)	Bot:	Bot:	Bot:	Bot: 3	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 3
Map Cracking: w/Efflorescence (use full area)	Bot:	Bot:	Bot: 64	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 64
w/o Efflo. (use 50% of area)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Honeycombed Areas (only areas more than 1 1/2 in. deep)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Total Span Area (Square Feet)	332	332	332	332							1,328
% Spalled and Delaminated on Top	0.00%	0.00%	0.00%	0.00%							0.00%
% Deterioration on Bottom	3.92%	0.00%	19.28%	3.31%							6.63%

Bridge No.: 00603 Date: 1/16/07 Prepared By: JR Checked By: PG

CONCRETE DETERIORATION WORKSHEET

Form BRI-10, Rev. 9/01

	Deterioration By Span - In Square Feet										
	Span Number										
Deterioration Type	1-4 & 8-11	P4-7									Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot: 8	Bot: 3	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 11
Scale (Moderate to Severe Only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks: w/Efflorescence (use 6 in. width x length)	Bot: 25	Bot: 18	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 43
w/o Efflo. (use 3 in. width x length)	Bot: 25	Bot: 3	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 28
Map Cracking: w/Efflorescence (use full area)	Bot: 58	Bot: 64	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 122
w/o Efflo. (use 50% of area)	Bot: 41	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 41
Honeycombed Areas (only areas more than 1 1/2 in. deep)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Total Span Area (Square Feet)	3,320	1,328									4,648
% Spalled and Delaminated on Top	0.00%	0.00%									0.00%
% Deterioration on Bottom	4.73%	6.63%									5.27%

Bridge No.: 00603 Date: 1/16/07 Prepared By: JR Checked By: PG

CONCRETE DETERIORATION WORKSHEET

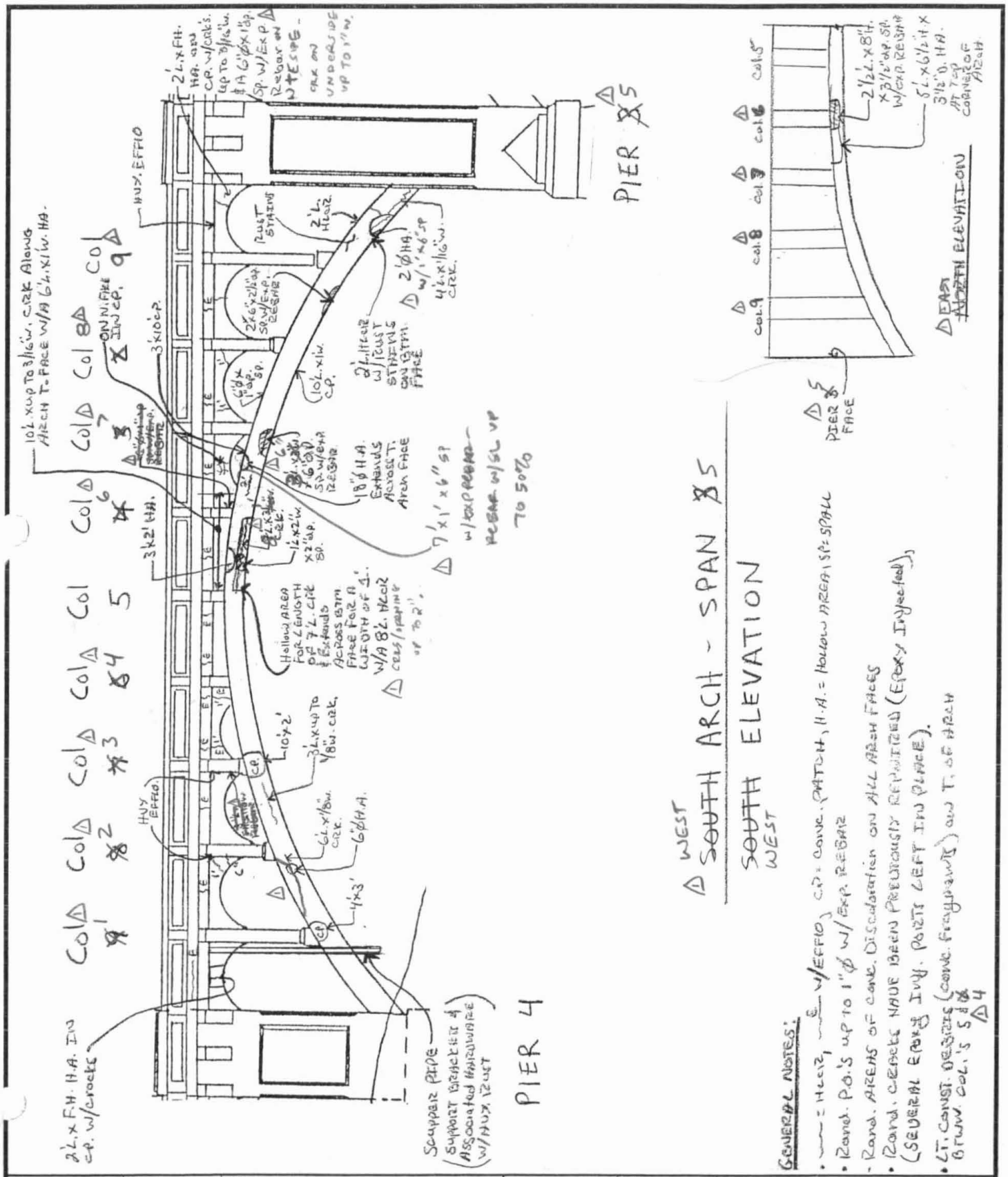
Form BRI-10, Rev. 9/01

	Deterioration By Span - In Square Feet										
	Span Number										
Deterioration Type	5	6	7								Total
Spalled and Delaminated Areas	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot: 8	Bot: 35	Bot: 74	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 117
Scale (Moderate to Severe Only)	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top:	Top: 0
	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Cracks: w/Efflorescence (use 6 in. width x length)	Bot: 62	Bot: 117	Bot: 17	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 196
w/o Efflo. (use 3 in. width x length)	Bot: 19	Bot: 67	Bot: 44	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 130
Map Cracking: w/Efflorescence (use full area)	Bot: 581	Bot: 342	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 923
w/o Efflo. (use 50% of area)	Bot: 259	Bot: 577	Bot: 106	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 942
Honeycombed Areas (only areas more than 1 1/2 in. deep)	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot:	Bot: 0
Total Span Area (Square Feet)	4,150	6,640	4,150								14,940
% Spalled and Delaminated on Top	0.00%	0.00%	0.00%								0.00%
% Deterioration on Bottom	22.39%	17.14%	5.81%								15.45%

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET 30
CREW MJW, DAL

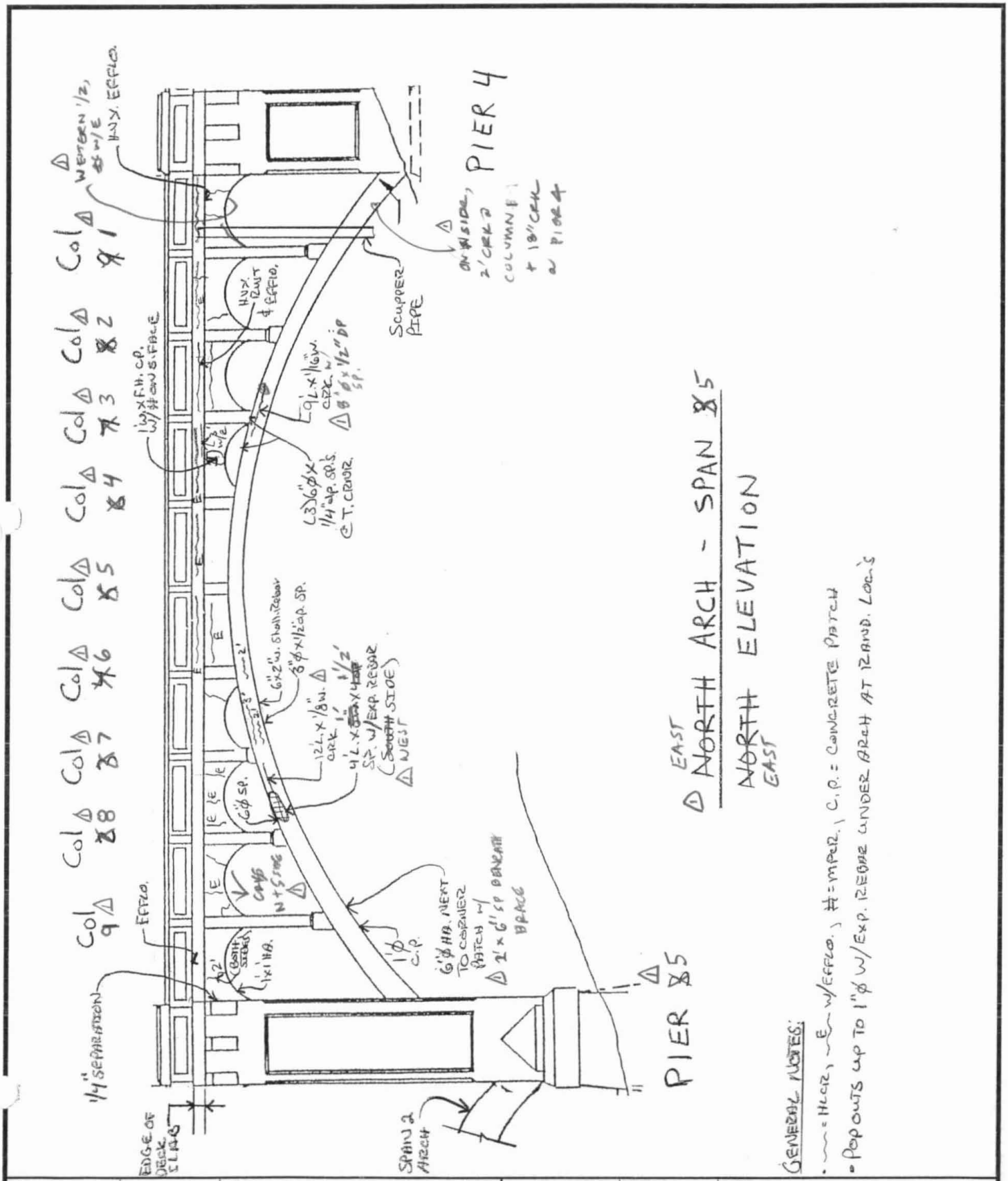


REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 11/25/05 SHEET 23 31
CREW DAL, MJW

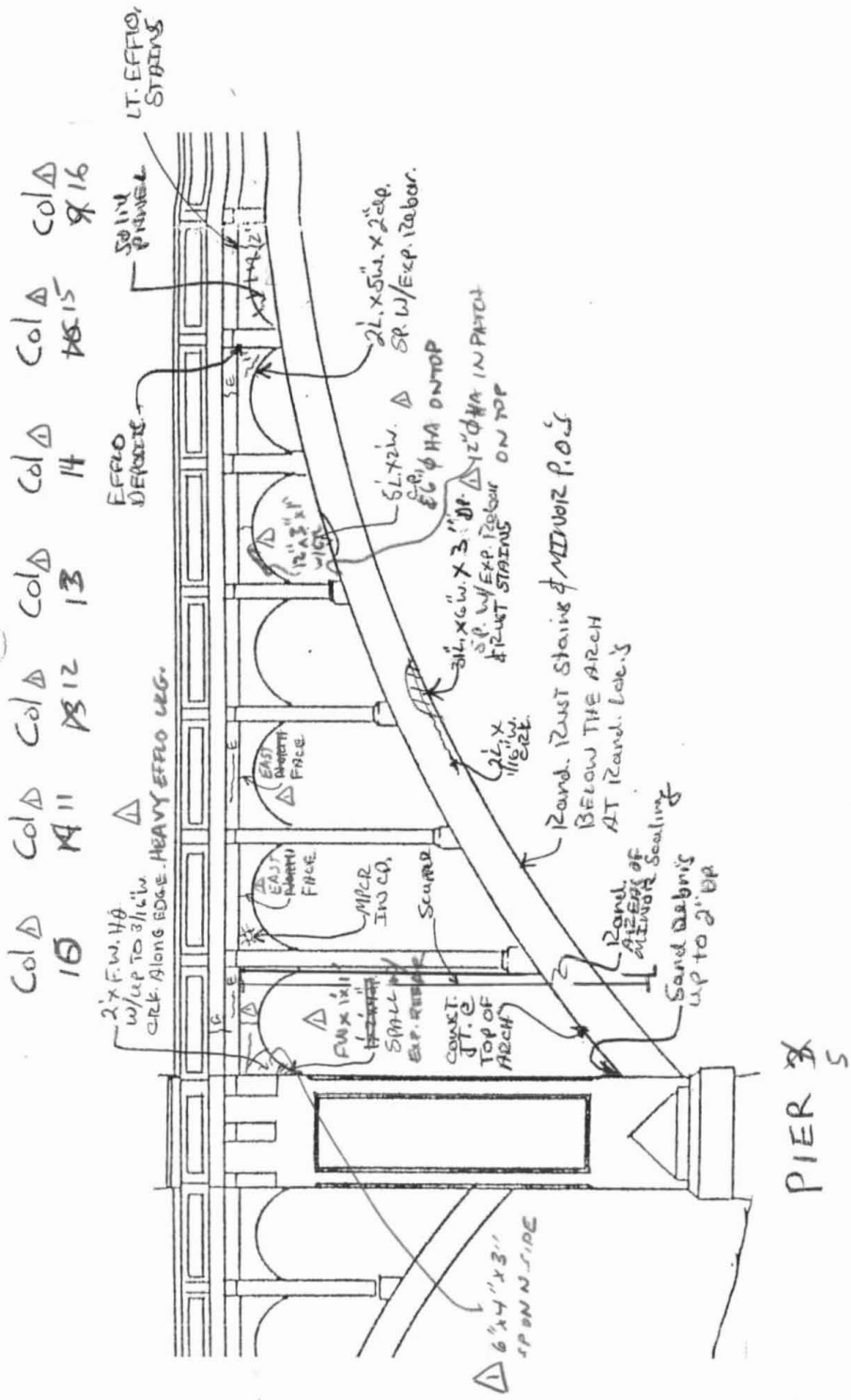


REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 3/7/05 SHEET 32
CREW MJW/DHL/PHH



WEST SOUTH ARCH - SPAN 6
WEST SOUTH ELEVATION

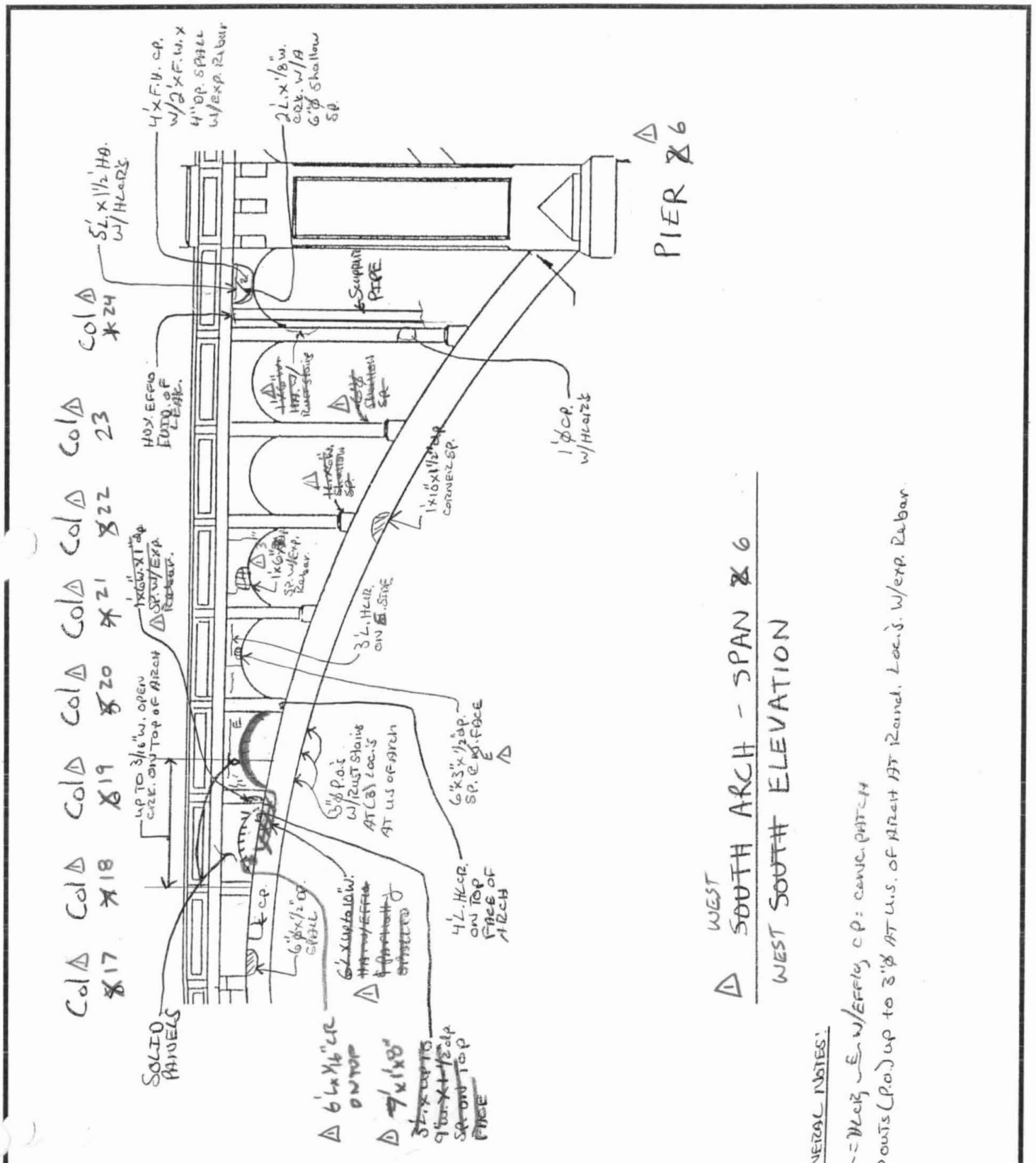
GENERAL NOTES:
• ~ = HLCR, E = W/EFFIO, CP = CONC. PATCH, HA = HOLLOW AREA, H = MARKER (MKR.)

REVISION 1	DATE 1/17/07	CREW PG, DS — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 3/7/05 SHEET ~~16~~ 33
CREW MJW, DAL, PHH

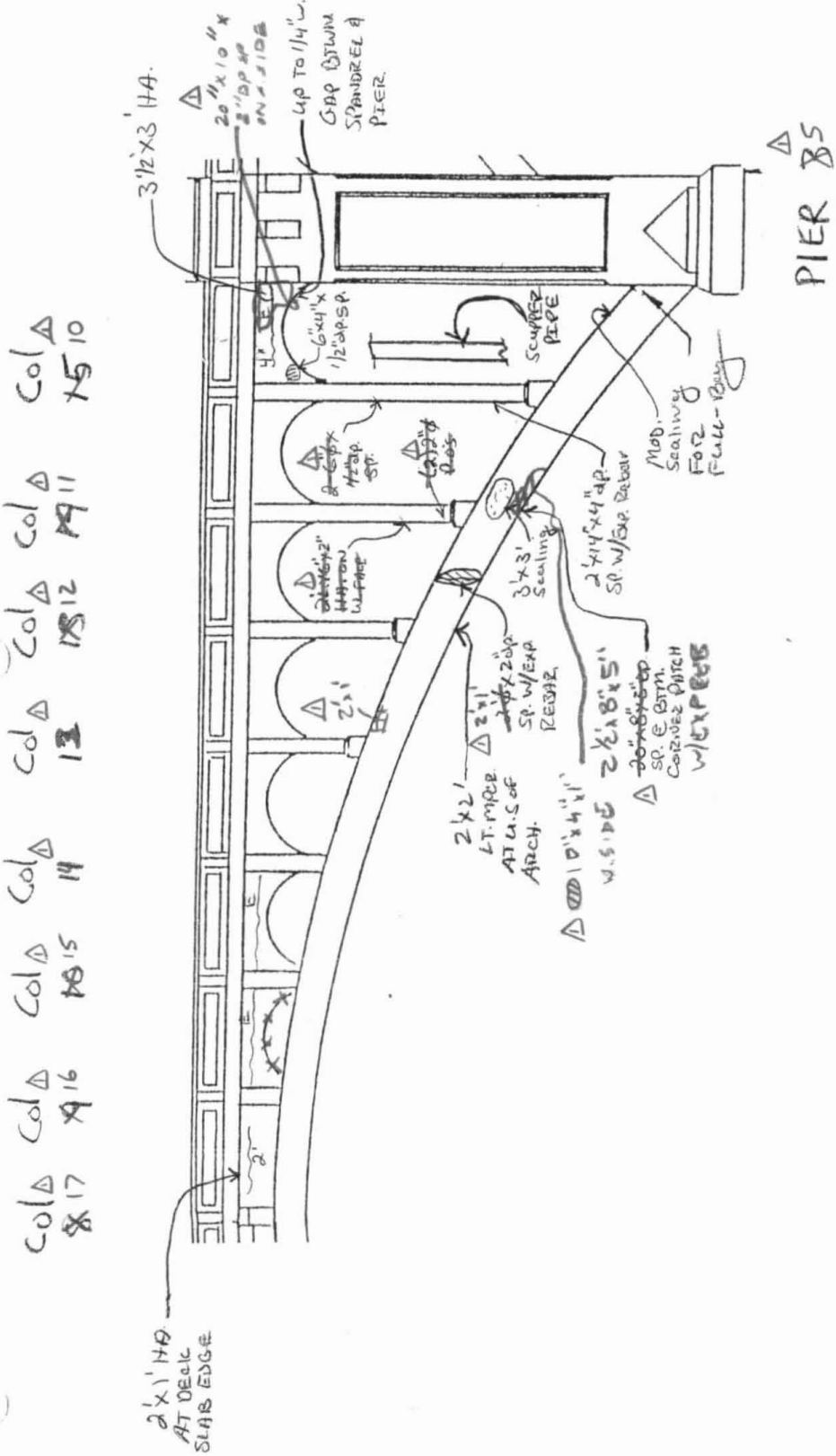


REVISION 1	DATE 1/17/07	CREW PG, DS – GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/24/05 SHEET 34
CREW MJW, DHL, PHH.



EAST ~~NORTH~~ ARCH - SPAN 26

EAST ~~NORTH~~ ELEVATION

GENERAL NOTES:

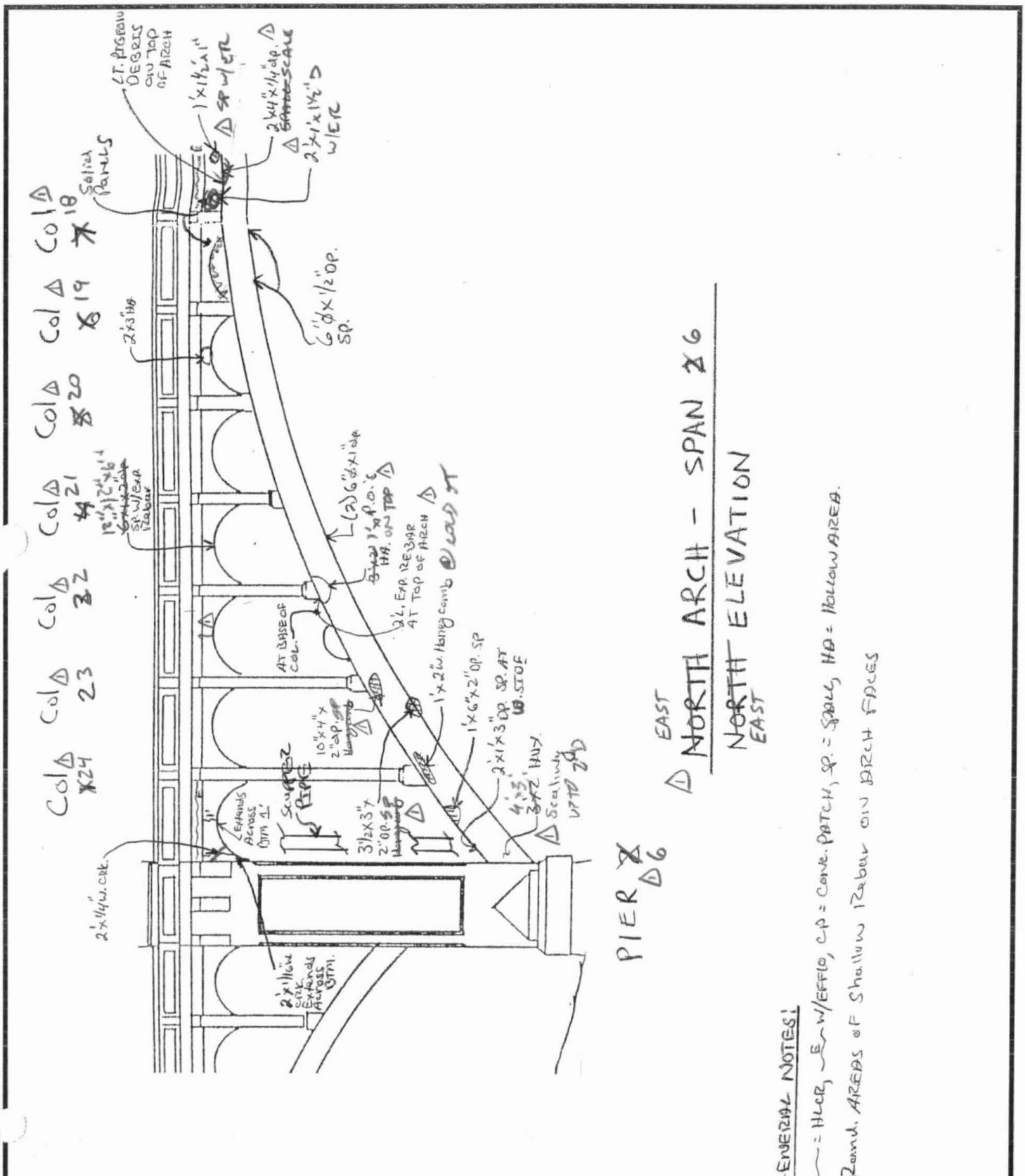
= HCCR, ⌒ W/EFFLO, CP = CONC. PATCH, HA = HOLLOW AREA, P.O. = POPOUT

REVISION 1	DATE 1/17/07	CREW PG, DS — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/24/05 SHEET 35
CREW MTW, DAL, PHH



EAST
~~NORTH~~ ARCH - SPAN 6
EAST
~~NORTH~~ ELEVATION

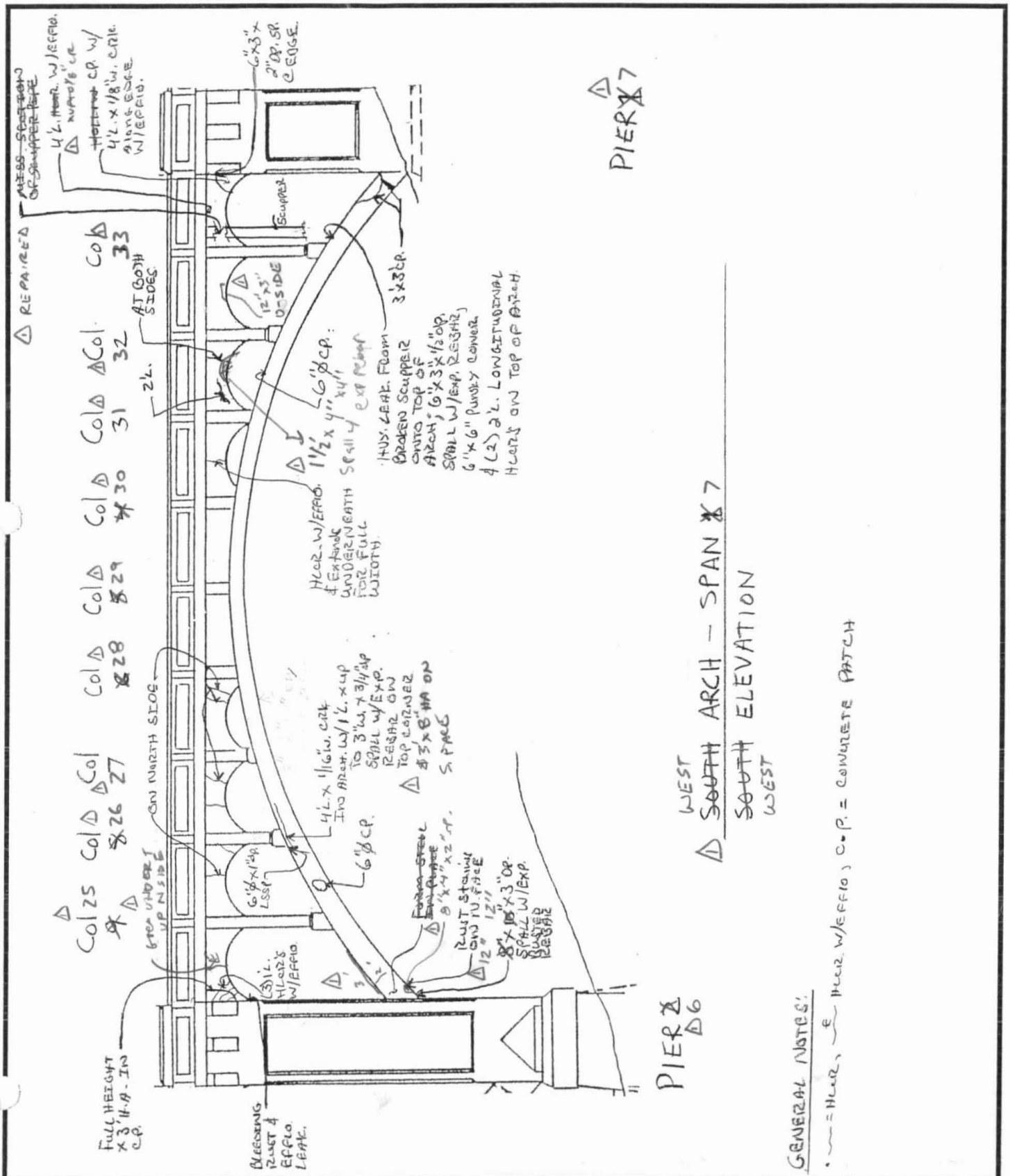
GENERAL NOTES:
- ~ = HLCR, E = W/EFFLO, CP = Conc. PATCH, SP. = SPALL, HB = Hollow Area.
- Rust. AREAS OF Shallow Rebar ON ARCH FACES

REVISION 1	DATE 1/17/07	CREW PG, DS - GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET #36
CREW PHH, DAL, MJW.

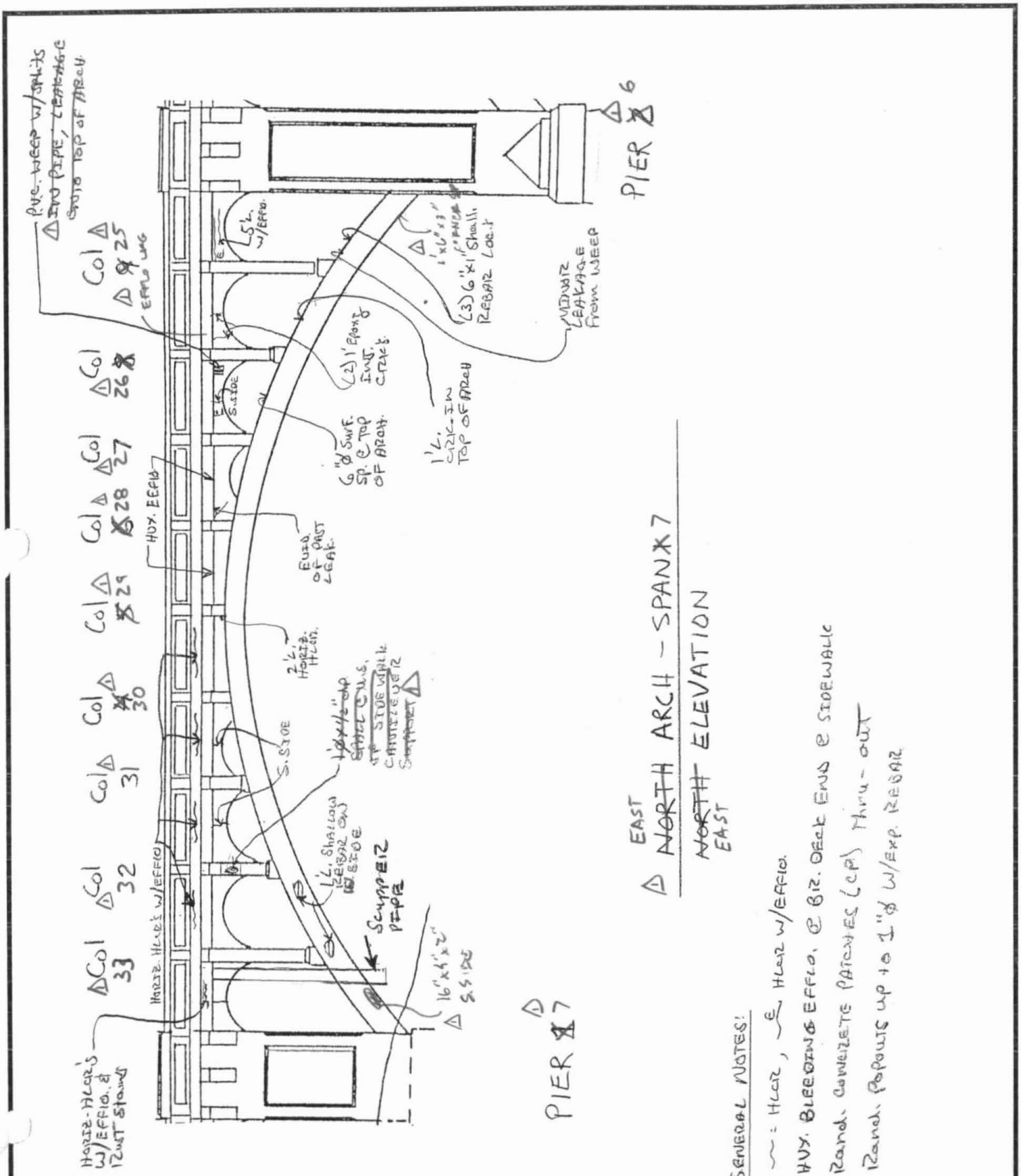


REVISION 1	DATE 1/16/07	CREW PG, CL, JR – GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 37
CREW PHH, DAL, MJW



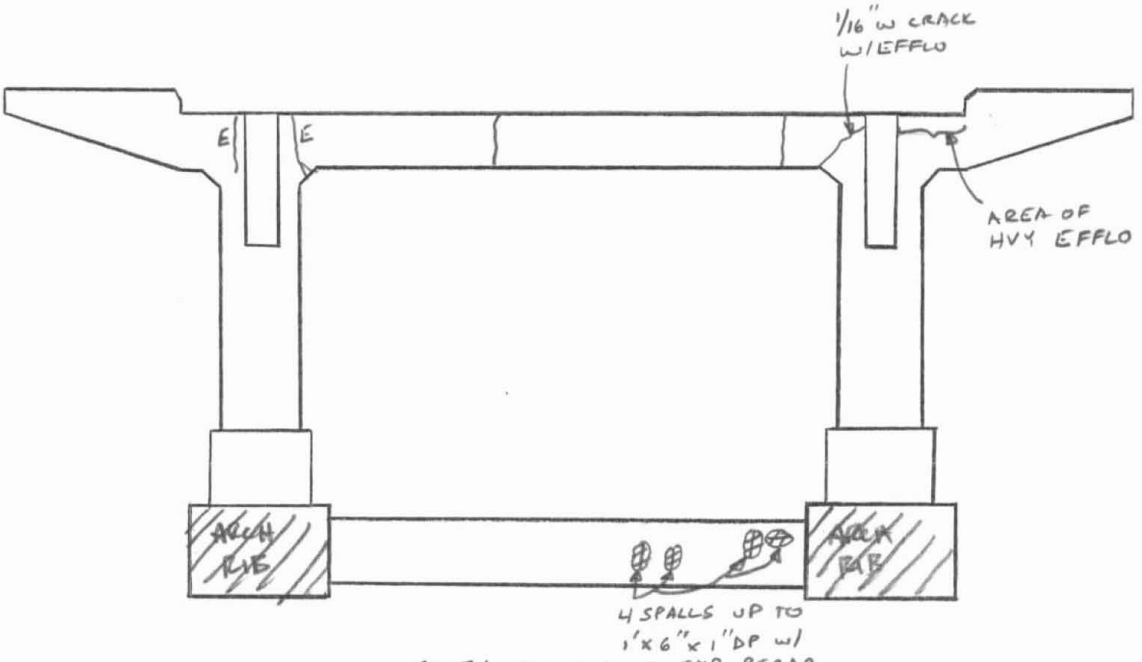
EAST
~~NORTH~~ ARCH - SPAN 7
~~NORTH~~ EAST
ELEVATION

GENERAL NOTES:
- ~ = HEAT, ⌒ HEAT W/EFFLO.
- HOR. BLEEDING EFFLO. @ BR. DECK END & SIDEWALK
- RAND. CONCRETE PATCHES (CP) THRU-OUT
- RAND. POPOUTS UP TO 1" Ø W/EXP. REBAR

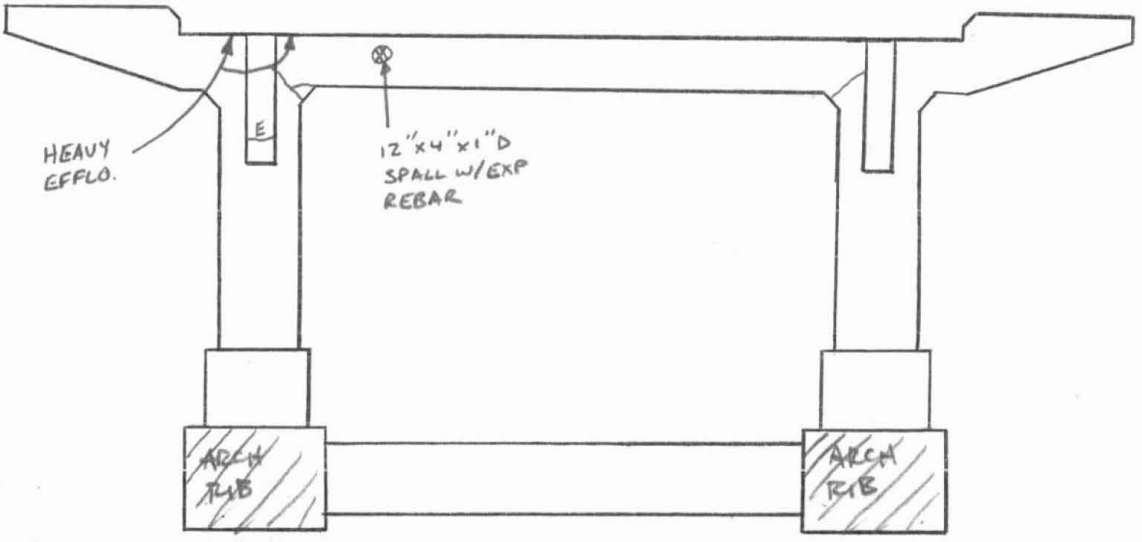
REVISION 1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

FIELD NOTES

FIELD NOTES	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/18/07	SHEET 3B
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

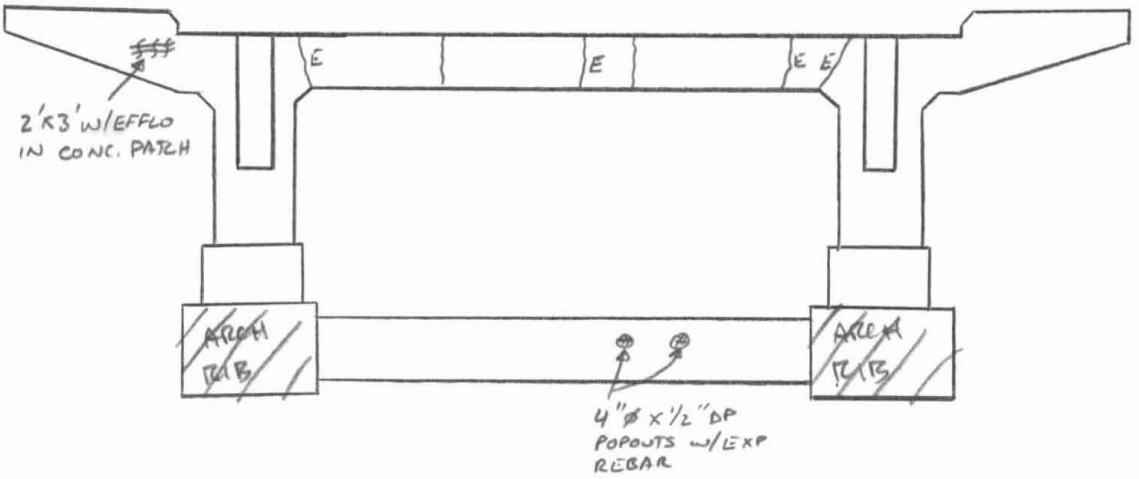
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 1

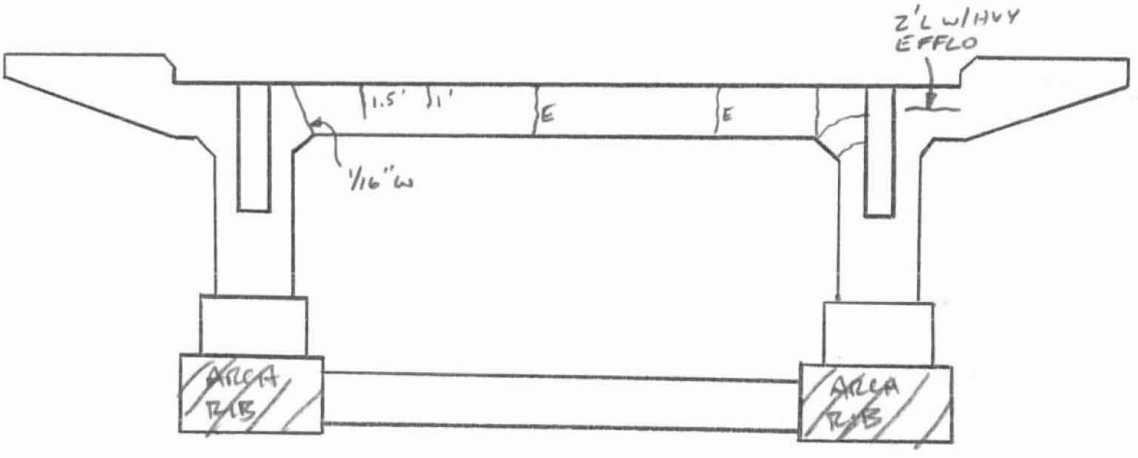
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/18/07	SHEET 39
	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

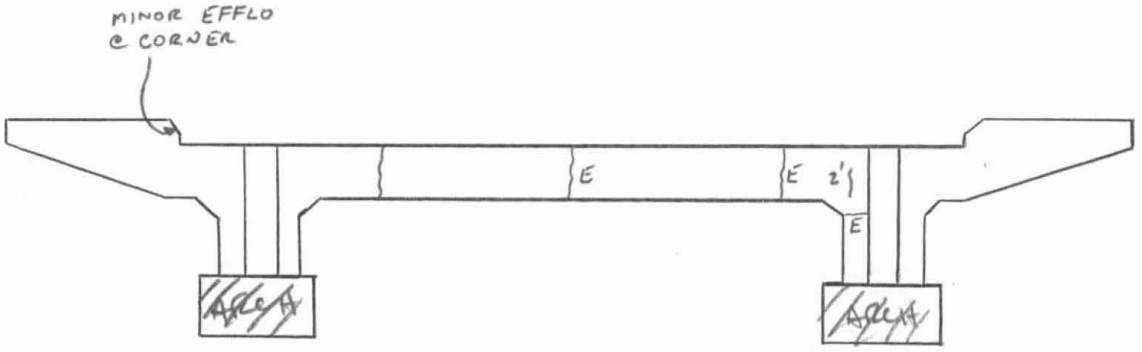
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 2

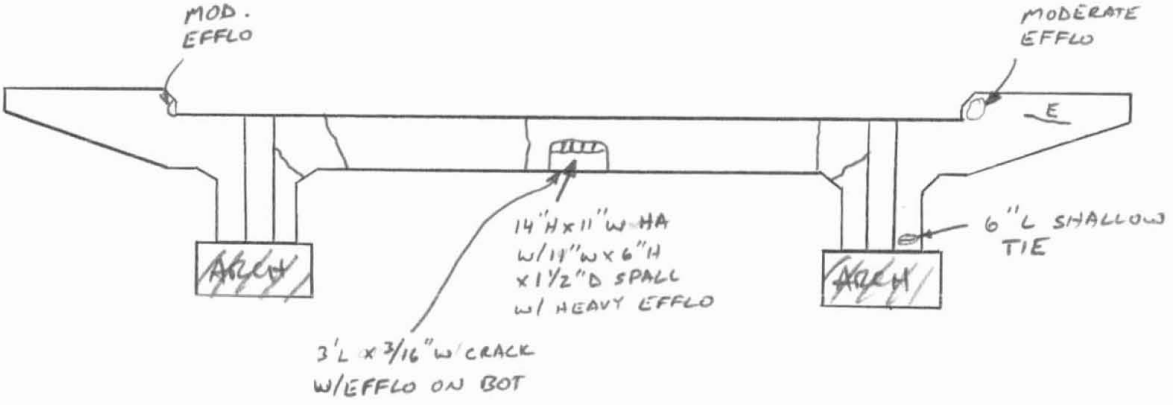
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/18/07	SHEET 40
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

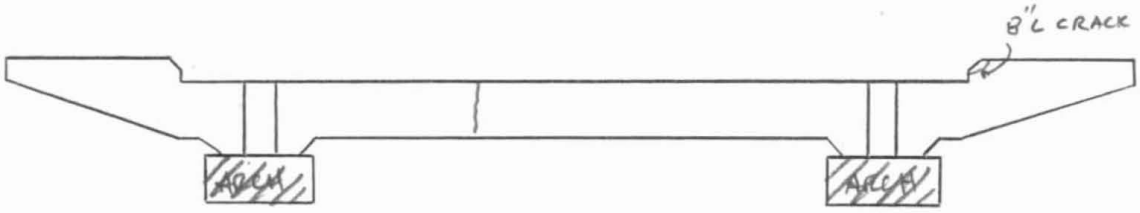
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 3

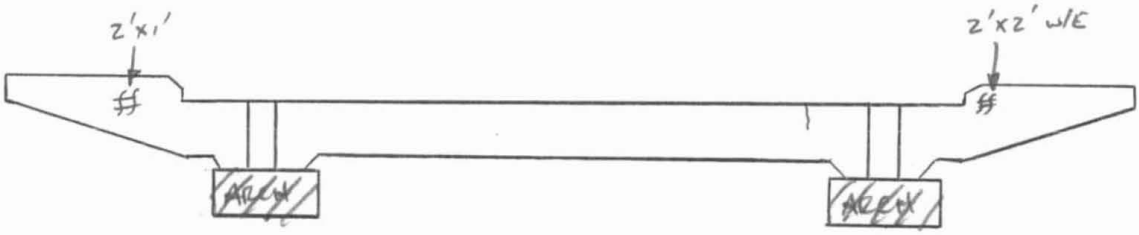
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/18/07	SHEET 41
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

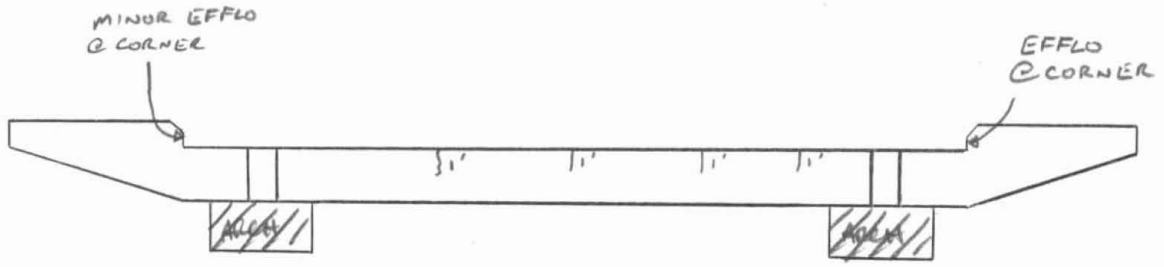
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 4

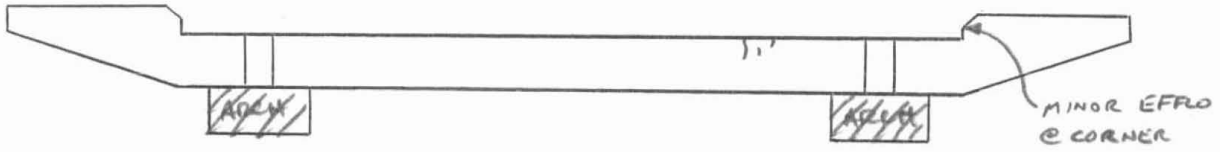
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/18/07	SHEET 42
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

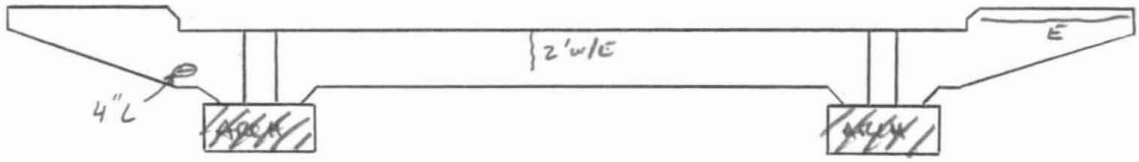
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 5

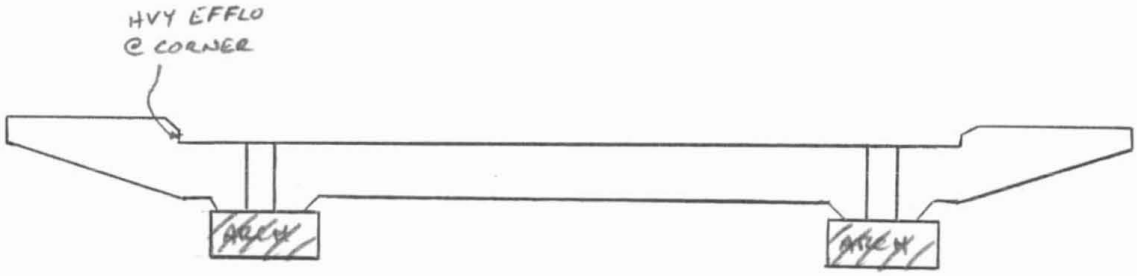
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/18/07	SHEET 43
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

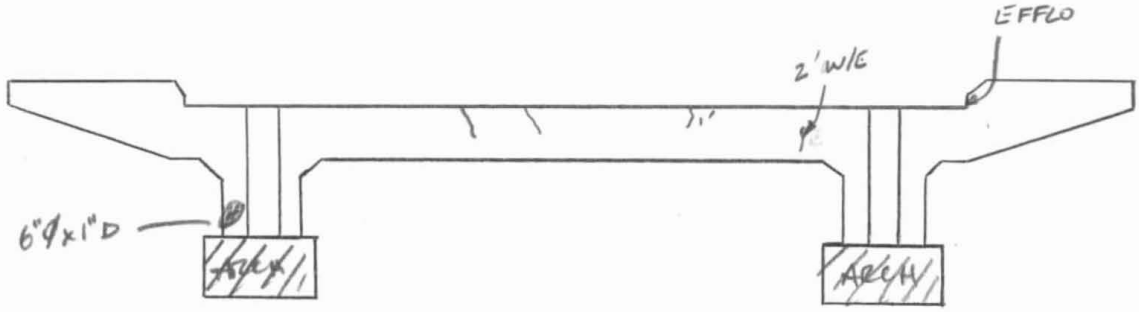
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 6

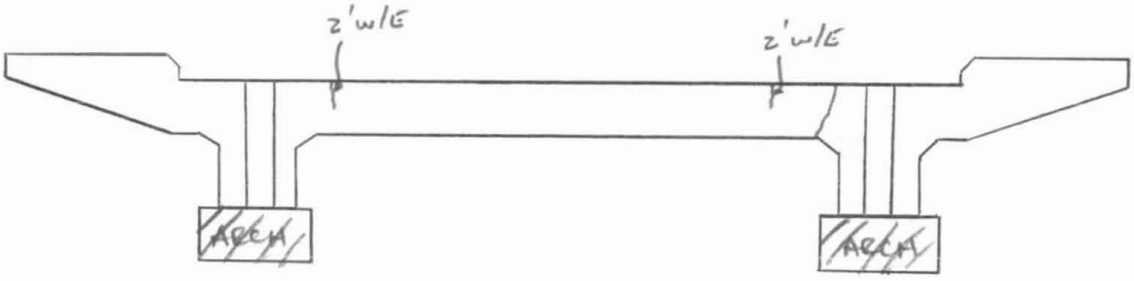
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170-2729	BRIDGE NO. 00603
DATE 1/18/07	SHEET 44
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, SR



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

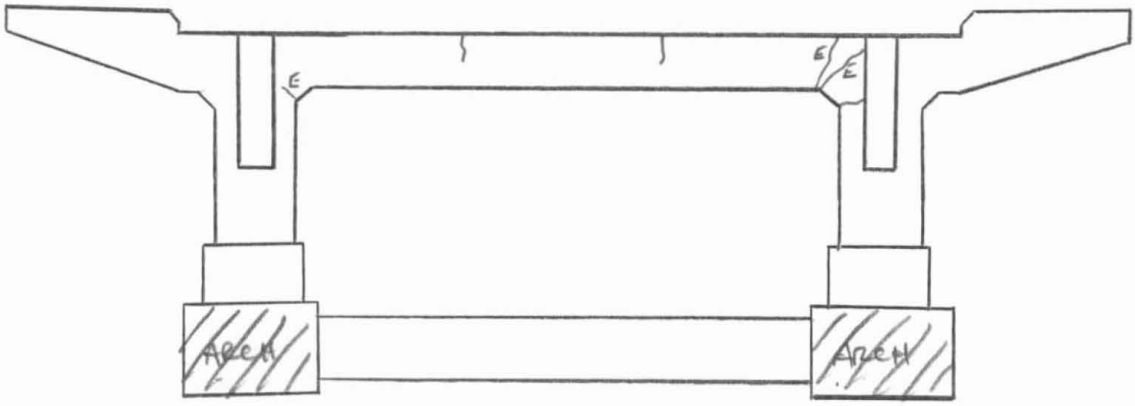
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 7

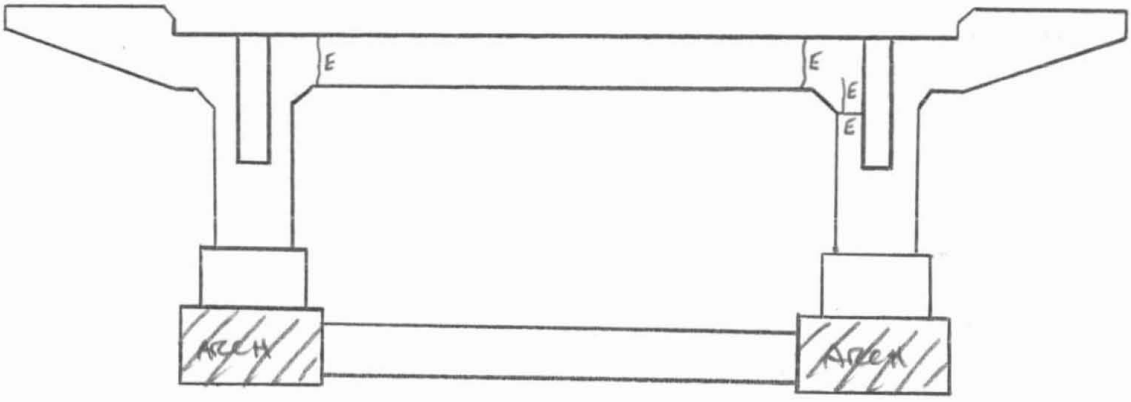
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/18/07	SHEET 45
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

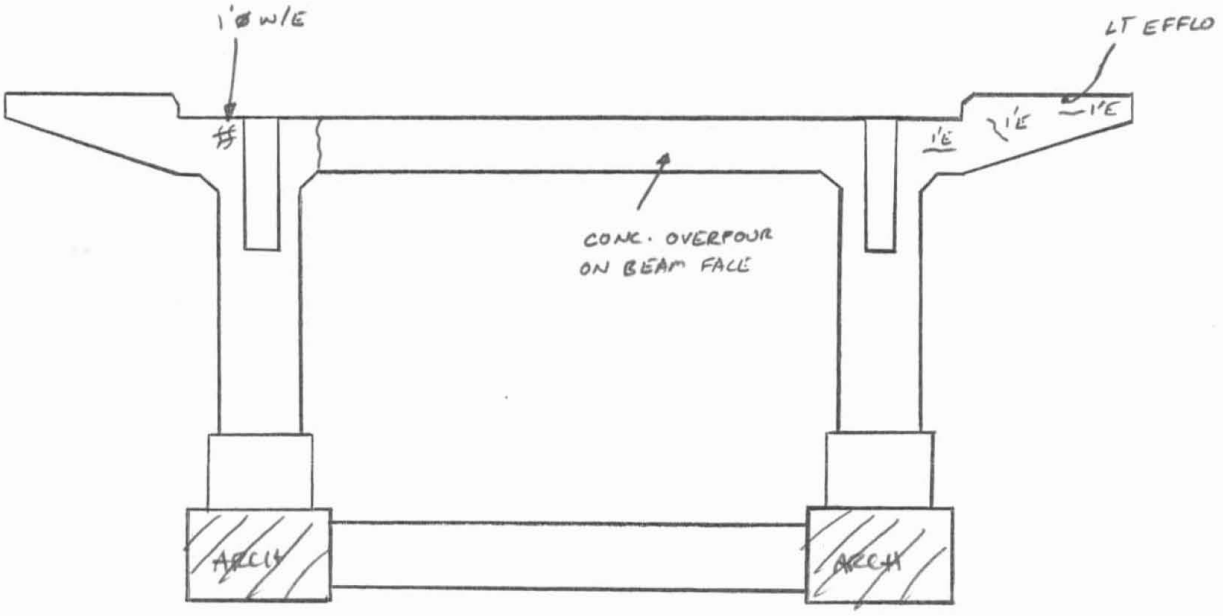
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 8

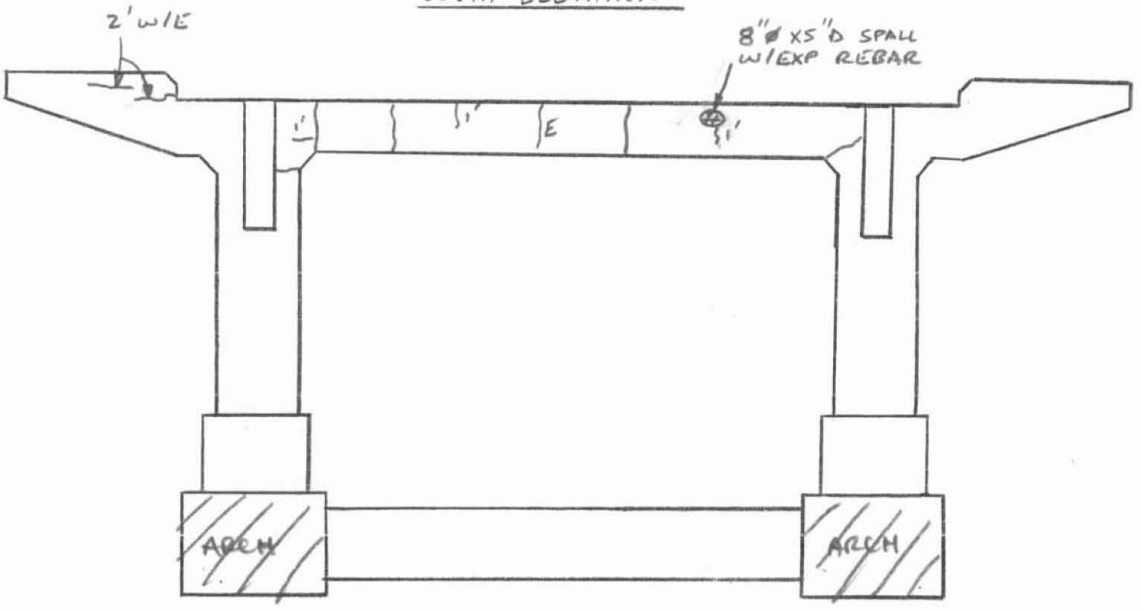
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/18/07	SHEET 46
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

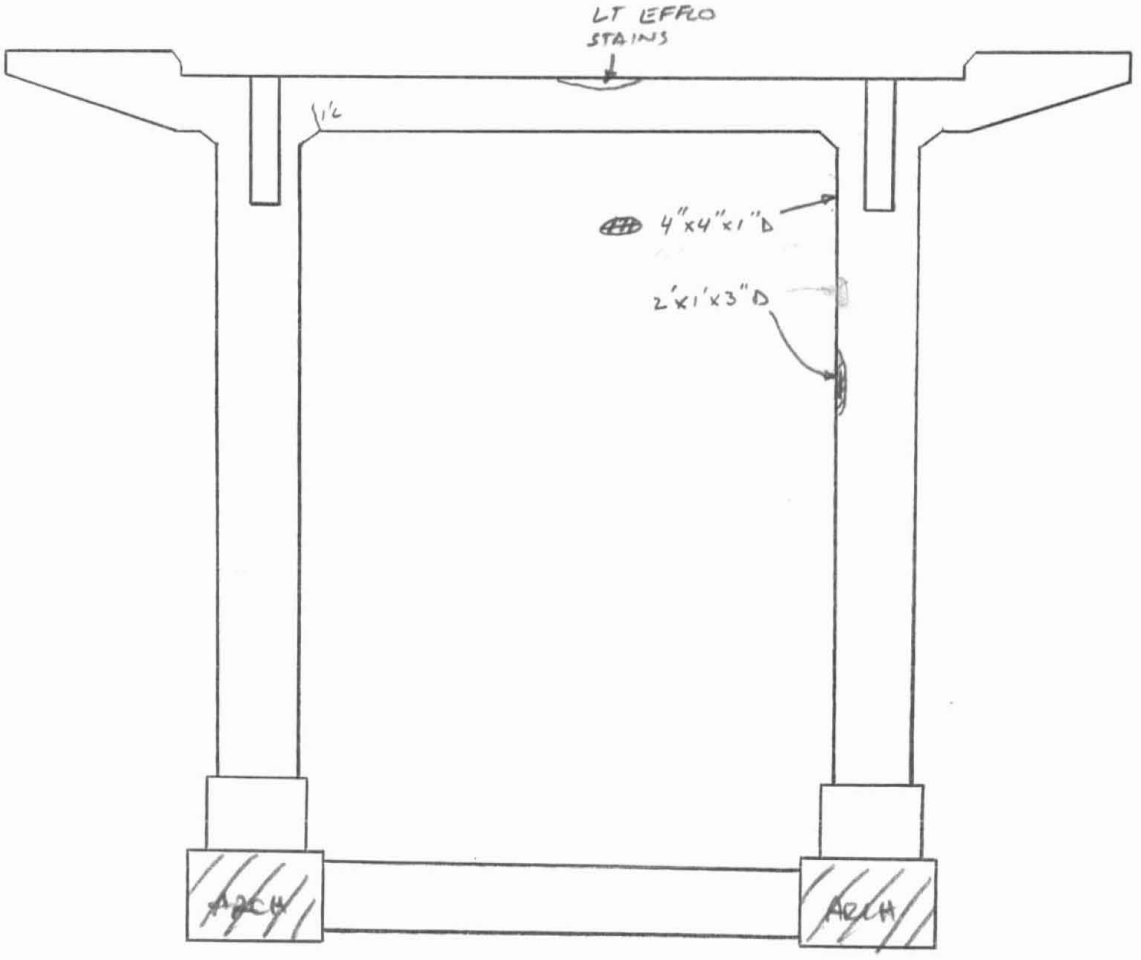
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 5 FLOORBEAM 9

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 47
	CREW PG, DS	



LEGEND

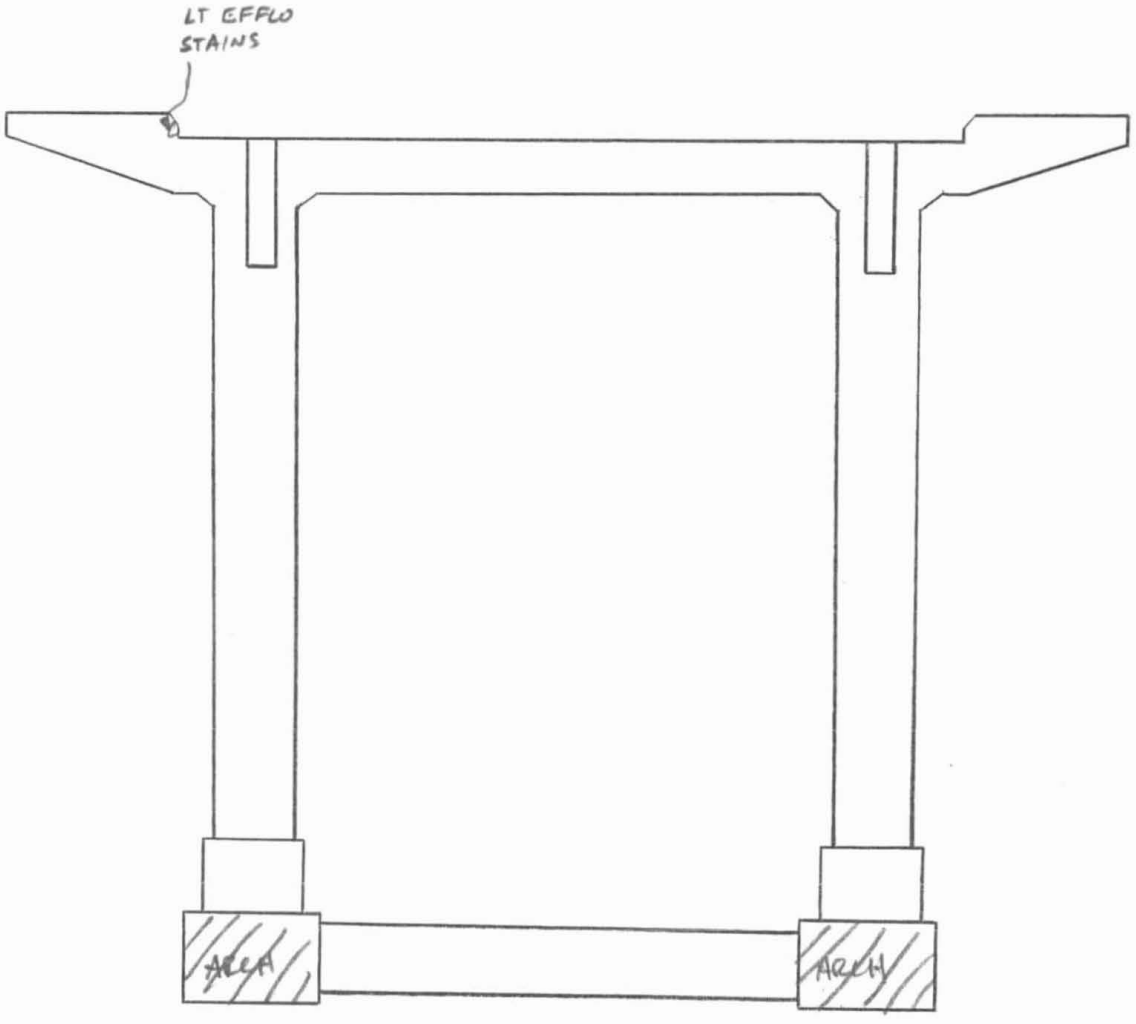
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOOR BEAM 10 SOUTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 4B
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

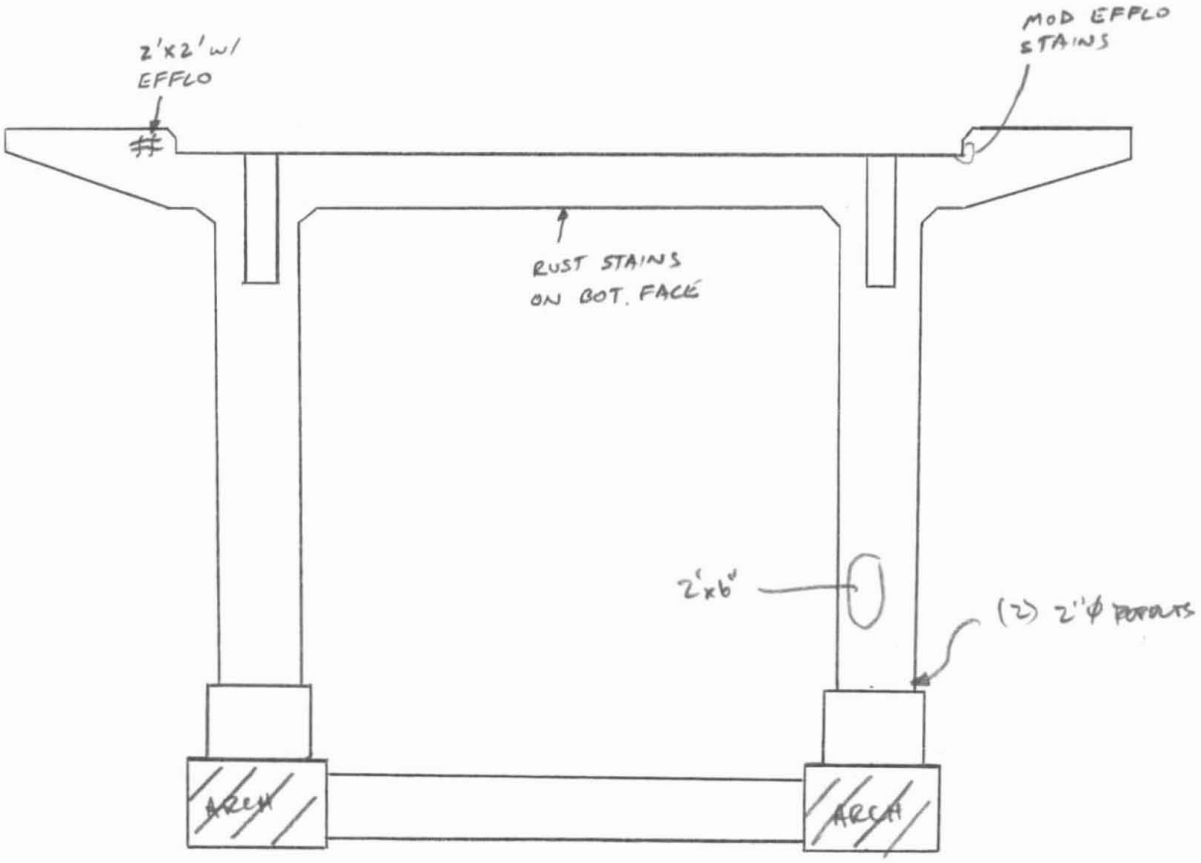
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOOR BEAM 10 NORTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 49
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

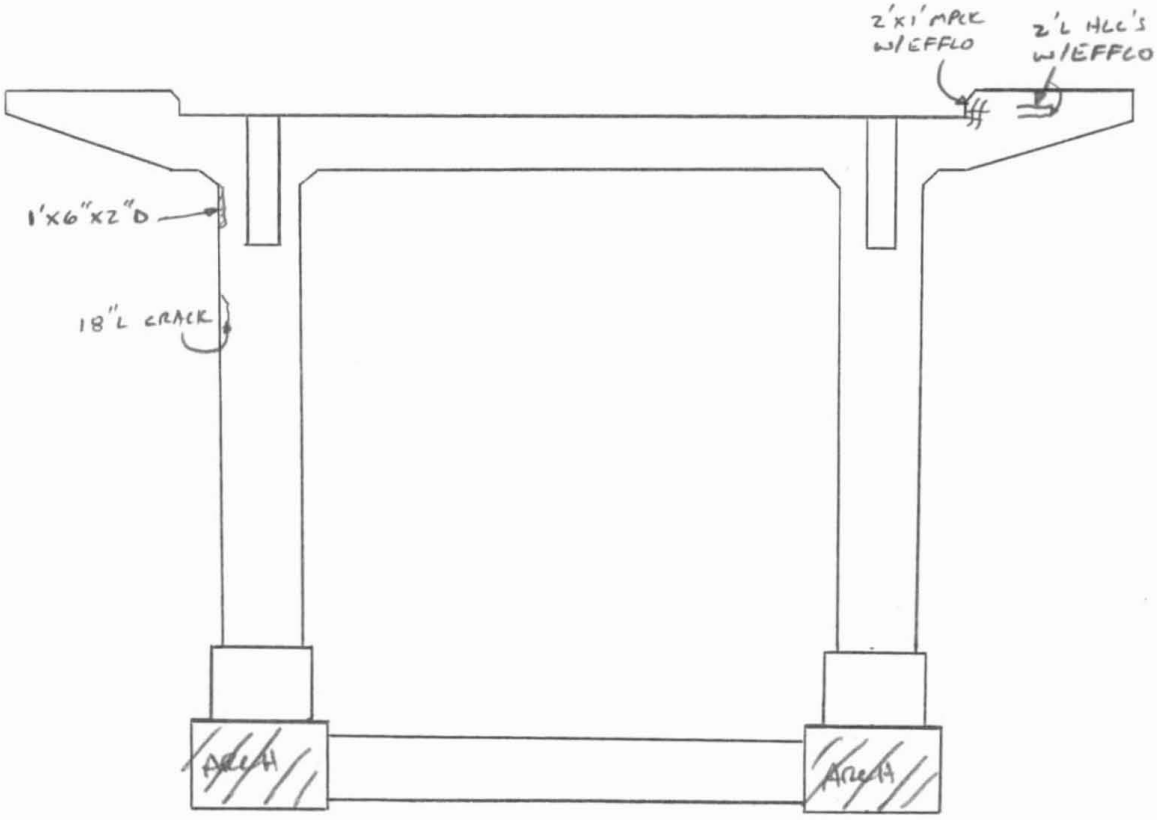
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 11 SOUTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 50
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

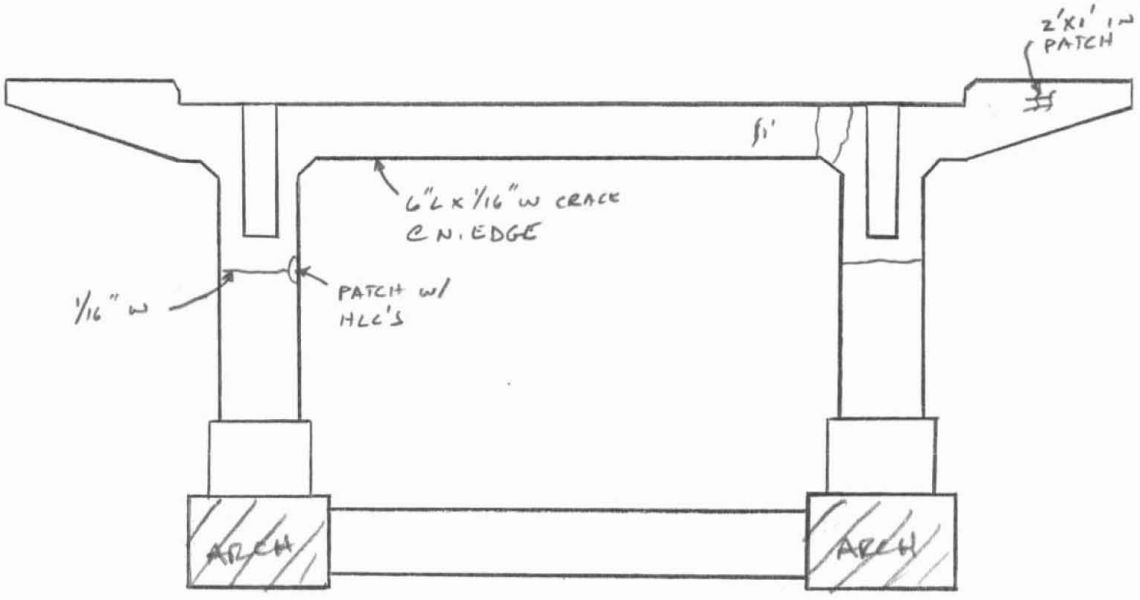
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 11 NORTH ELEVATION

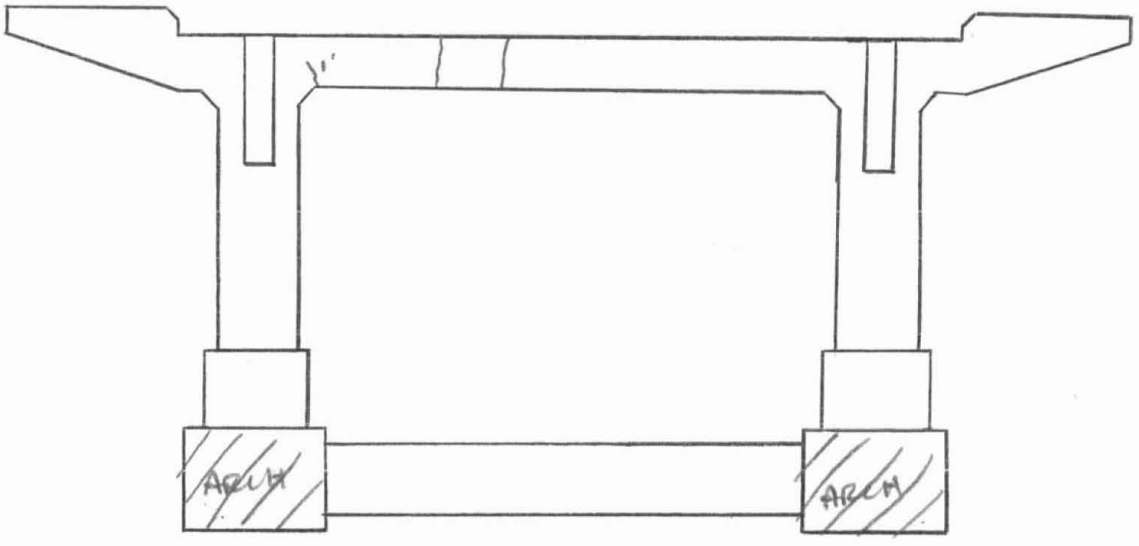
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 51
	CREW PG, DS	



NORTH ELEVATION



SOUTH ELEVATION

LEGEND

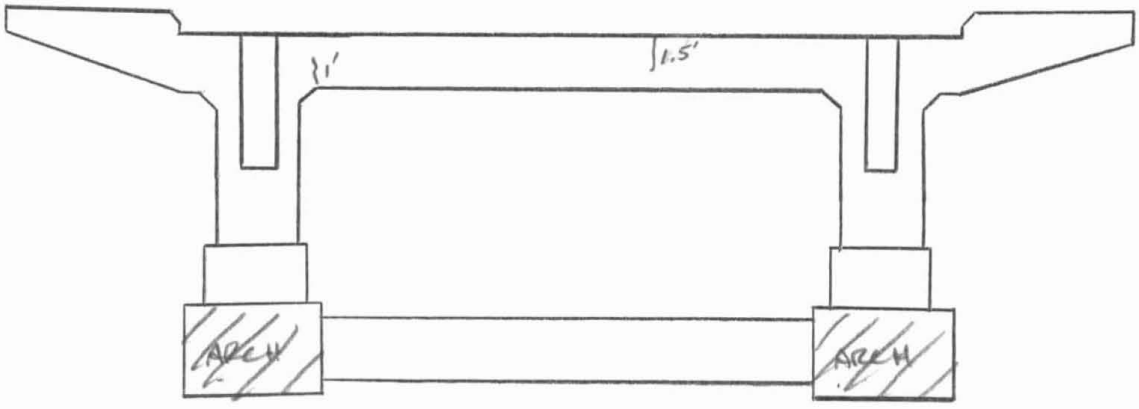
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 12

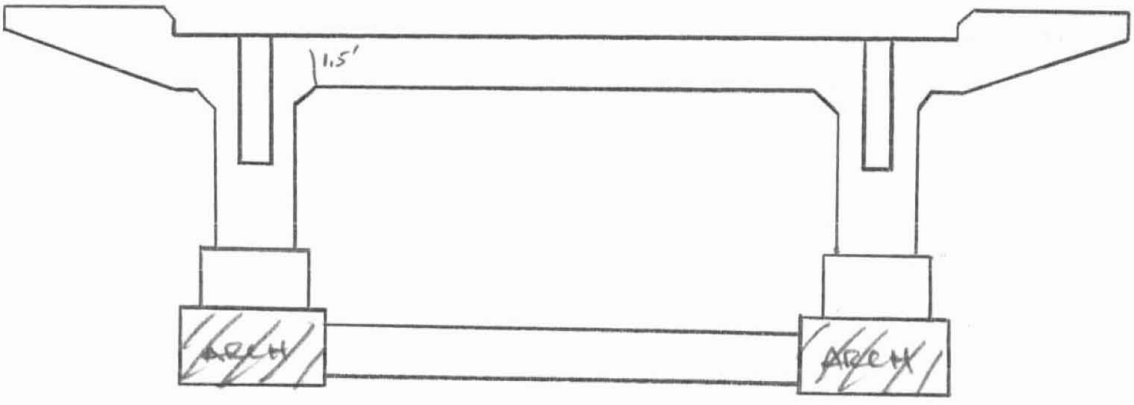
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 52
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

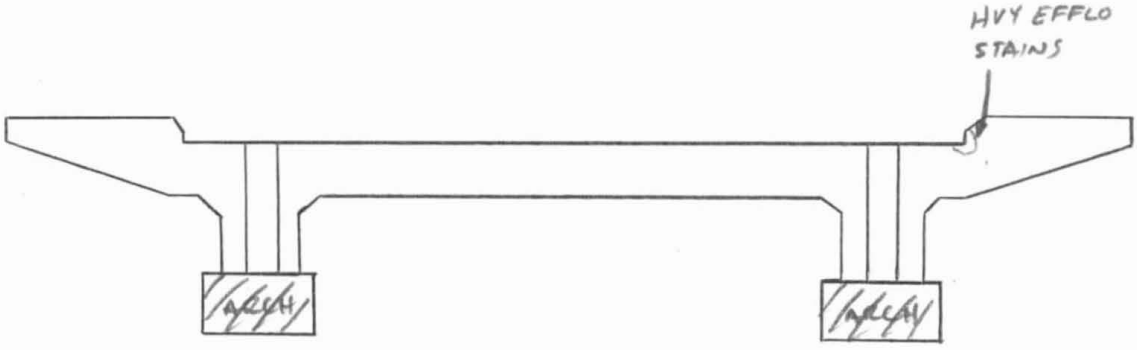
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 13

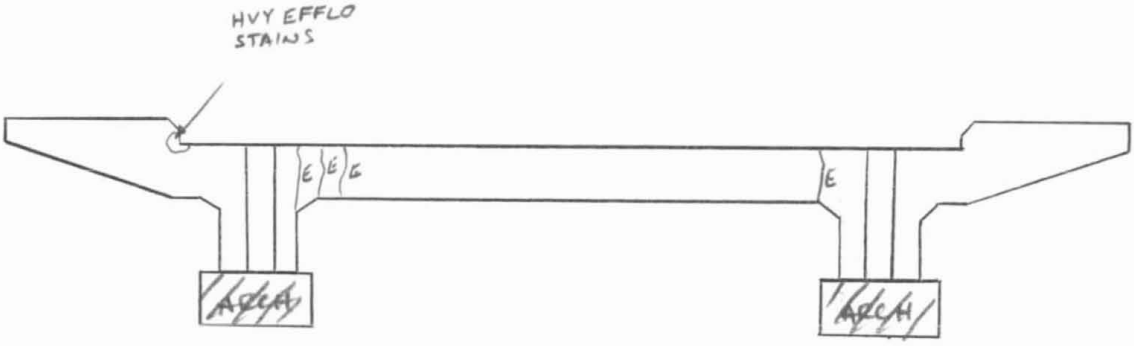
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 53
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

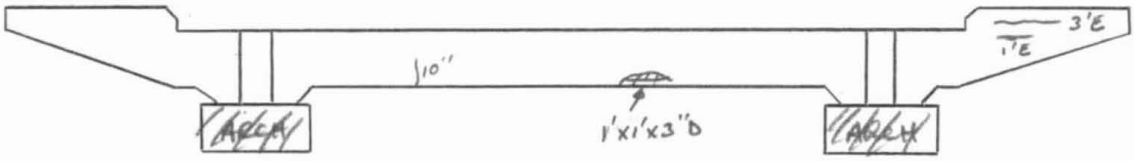
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 14

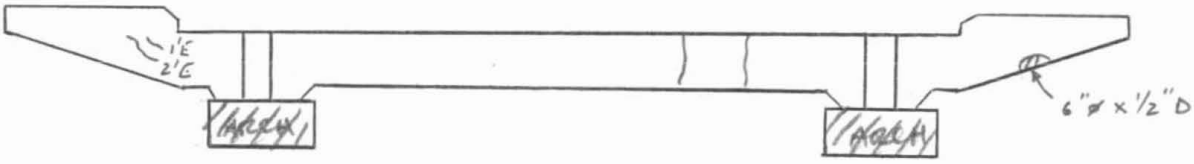
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 54
	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

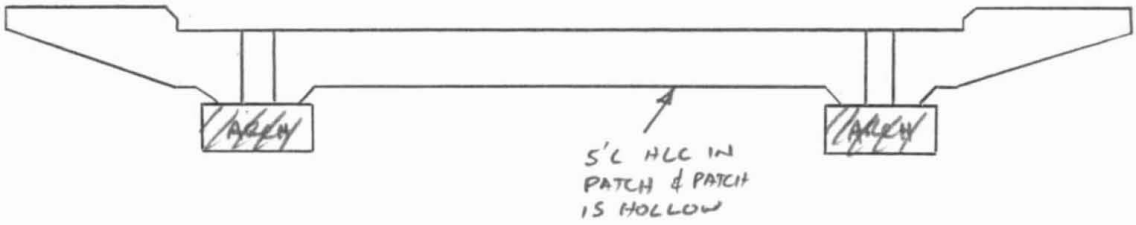
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 15

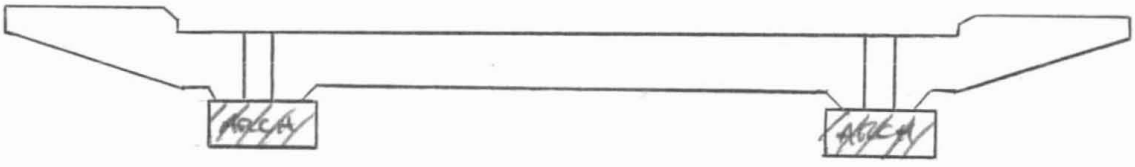
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/17/07	SHEET 55
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

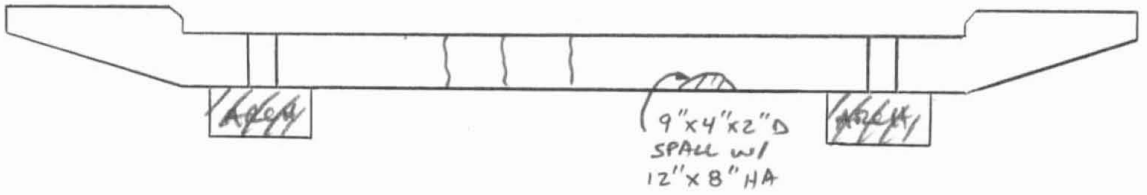
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 16

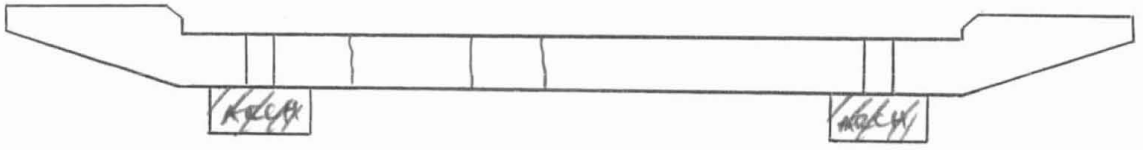
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170-2729	BRIDGE NO. 00603
DATE 1/17/07	SHEET 56
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

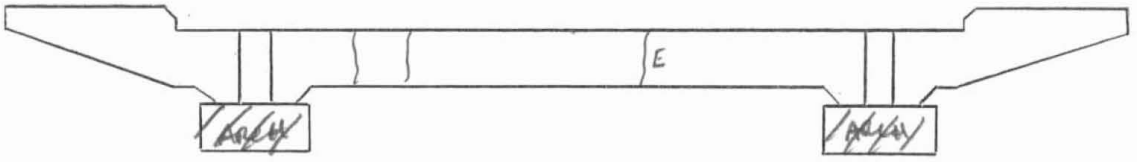
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 17

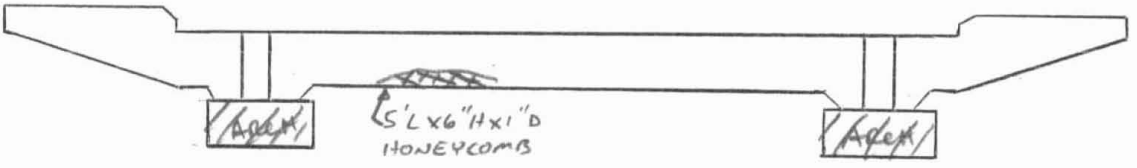
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/17/07	SHEET 57
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS



SOUTH ELEVATION



NORTH ELEVATION

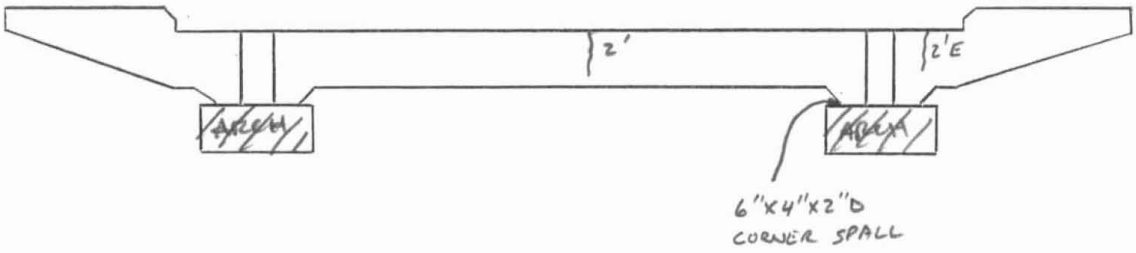
LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

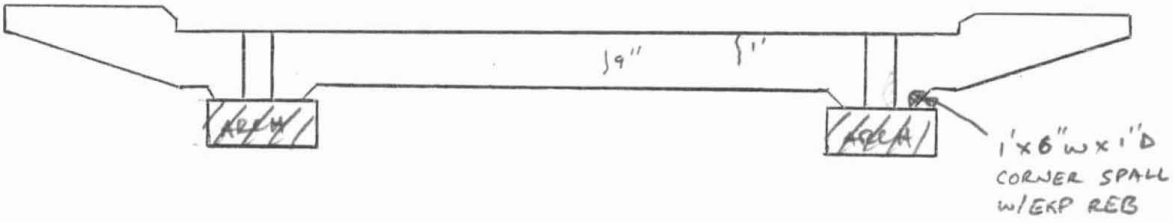
SPAN 6 FLOORBEAM 18

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 58
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

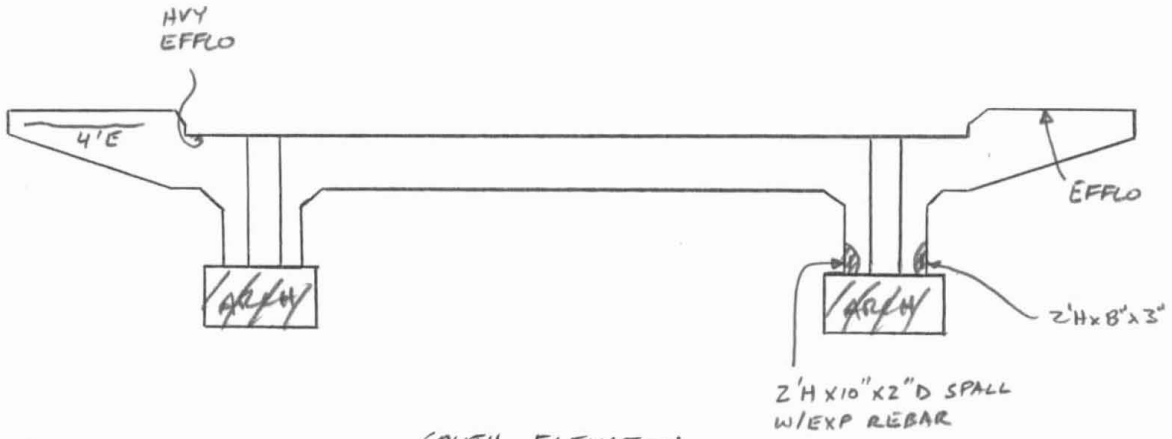
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 19

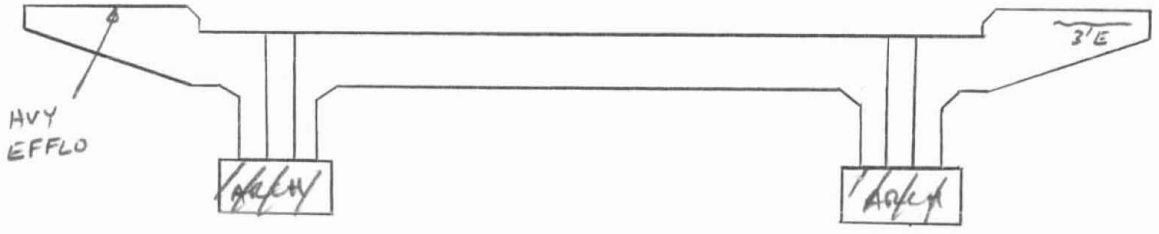
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 59
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

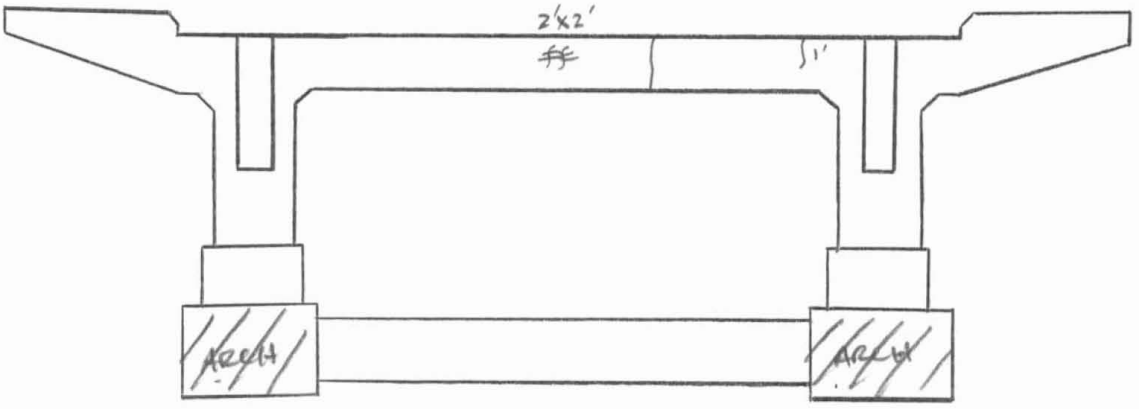
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 20

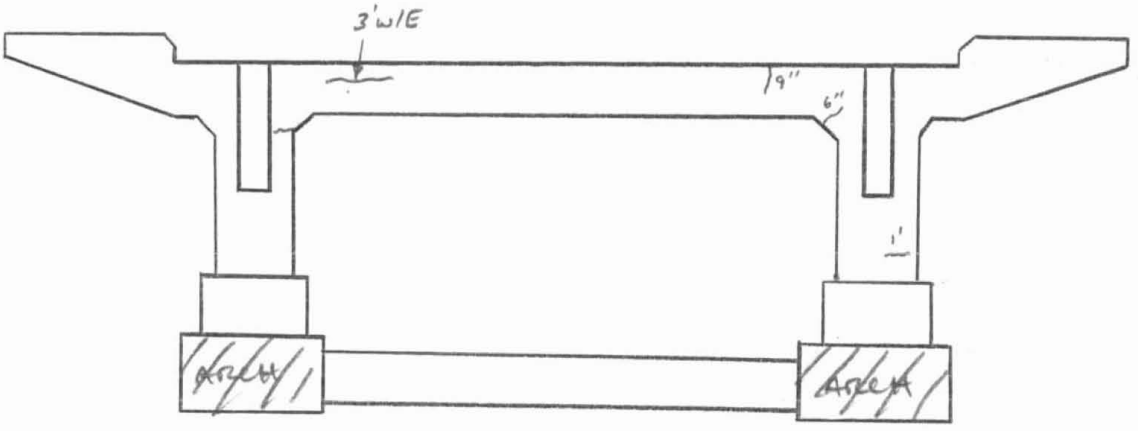
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 60
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

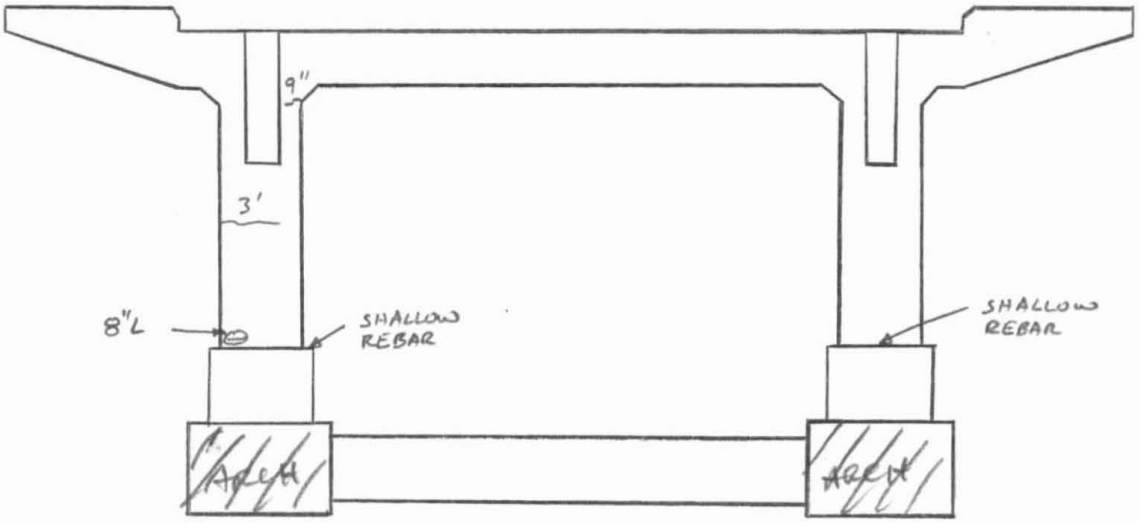
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 21

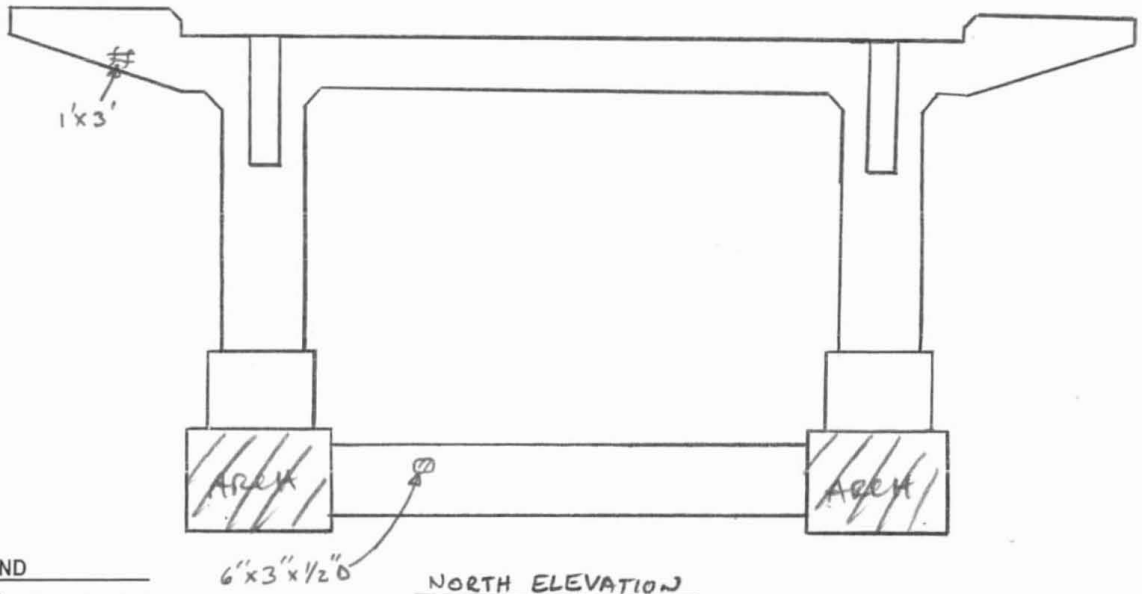
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 61
	CREW PG, DS	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

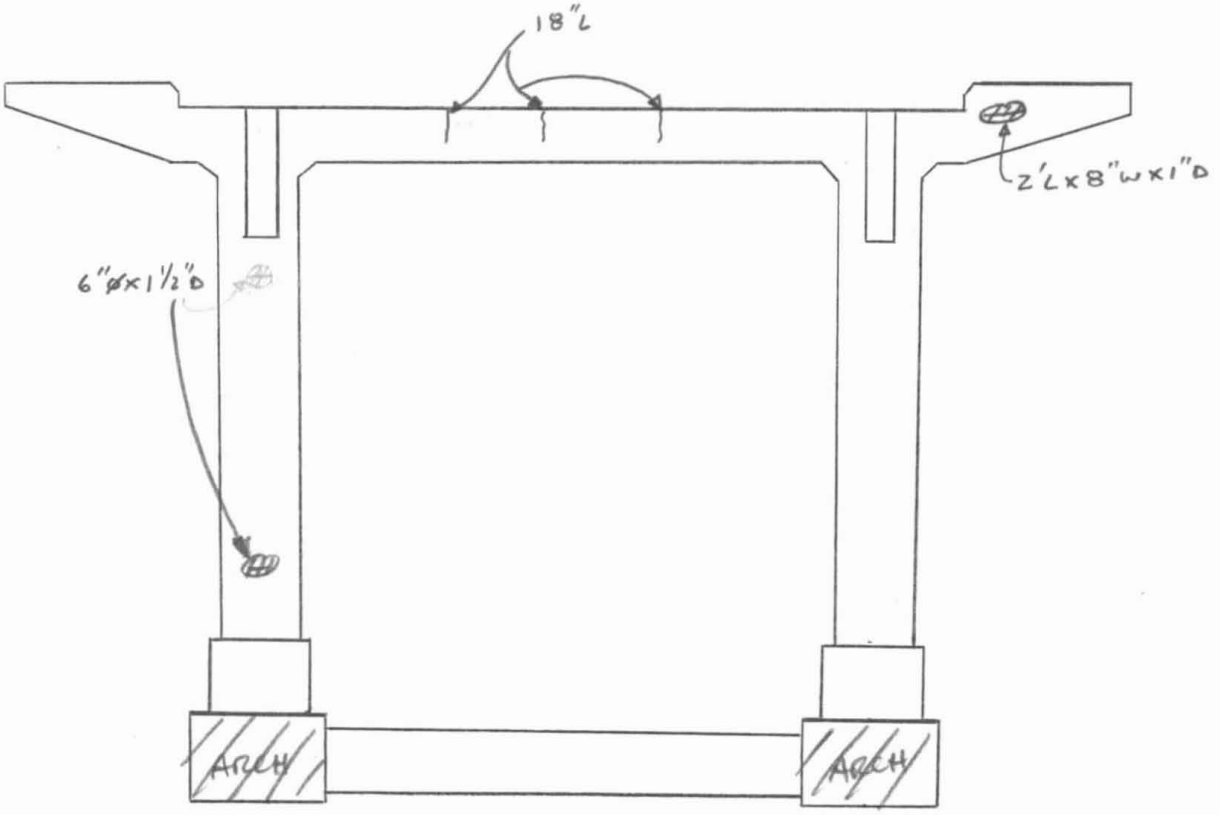
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 22

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 62
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

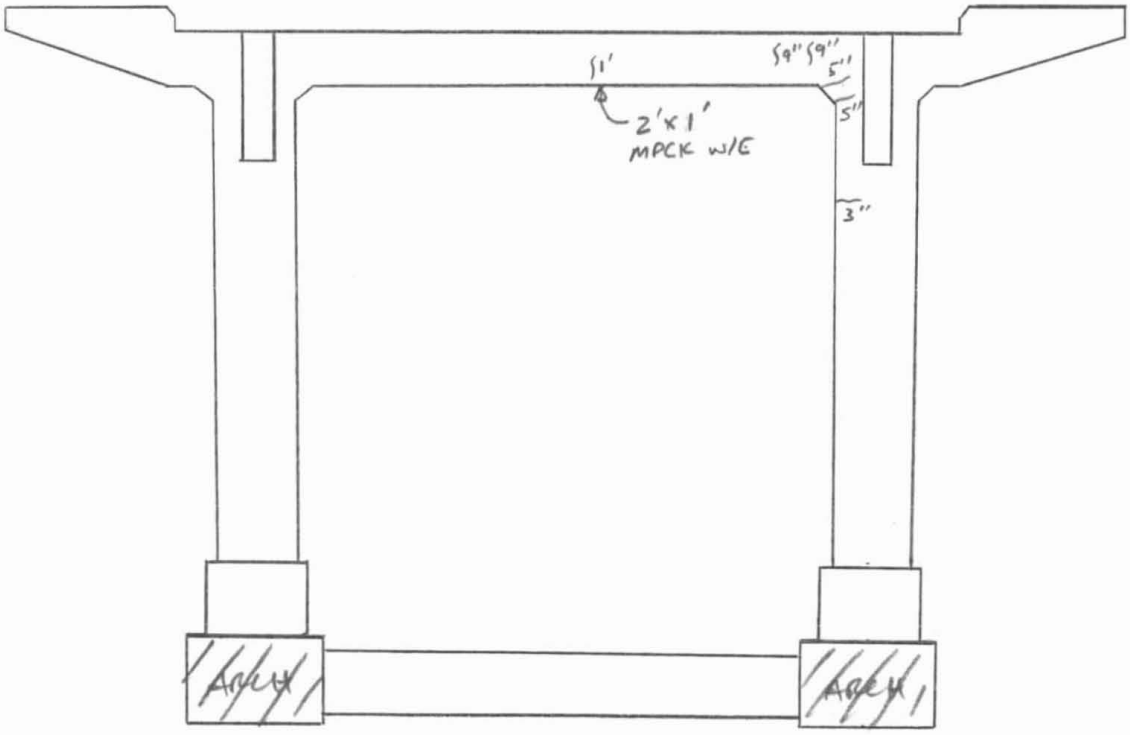
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 23 SOUTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 63
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

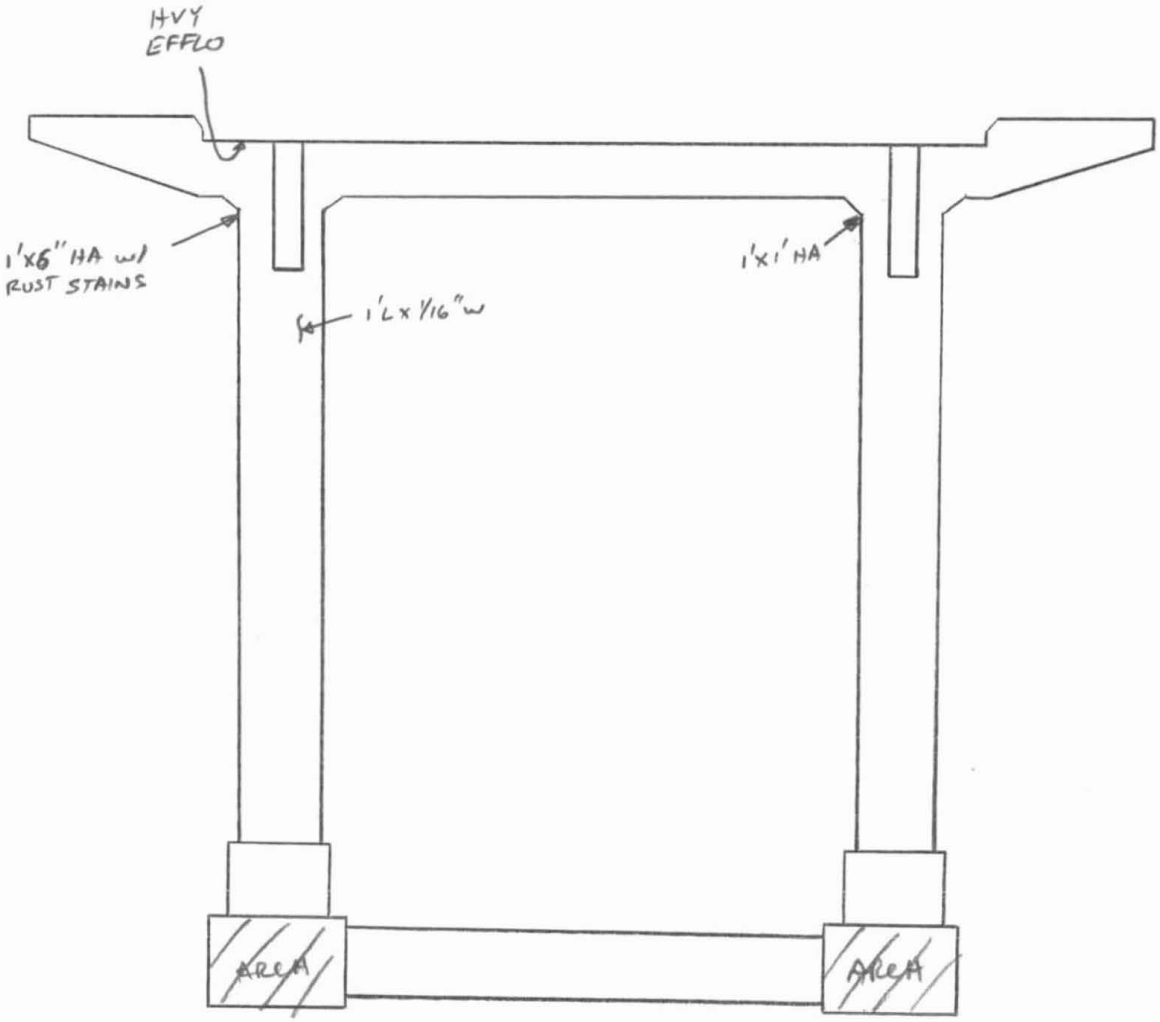
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOORBEAM 23 NORTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 64
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, DS	



LEGEND

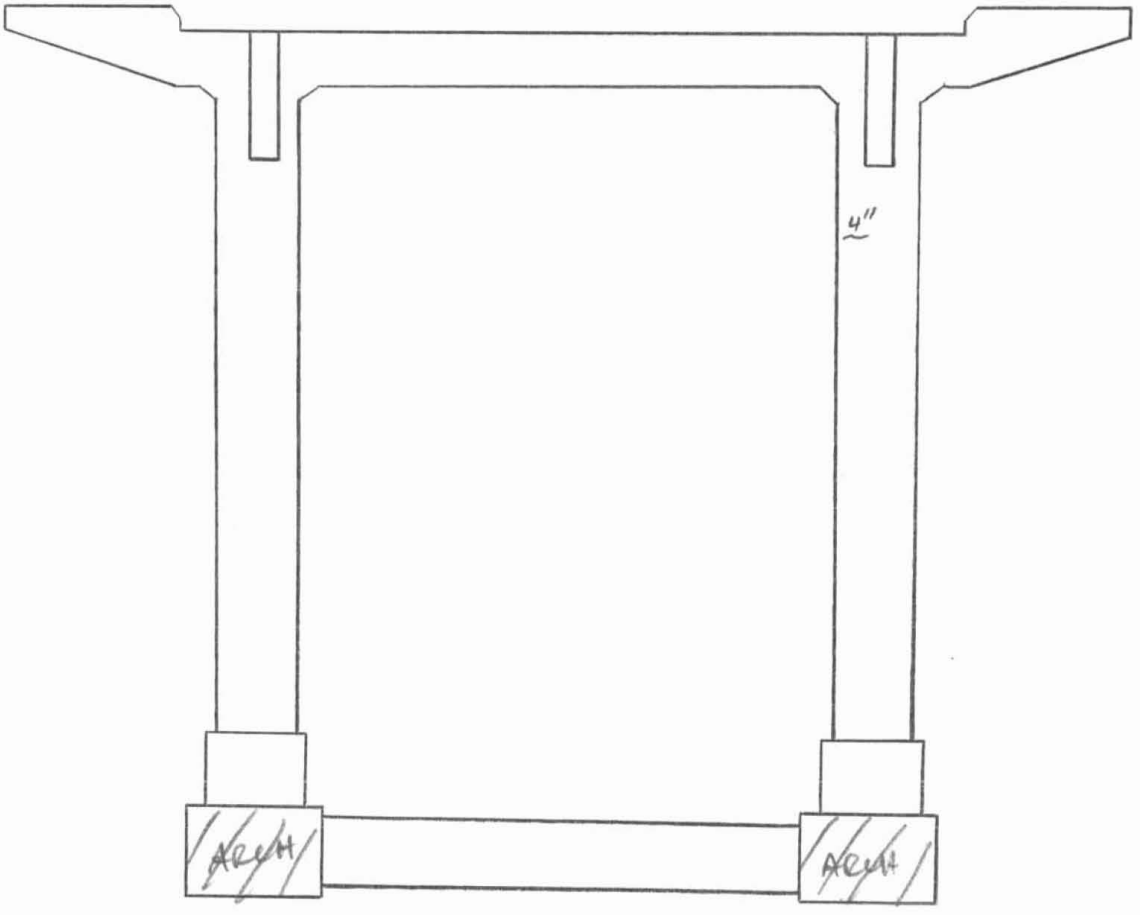
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOOR BEAM 24 SOUTH ELEVATION

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/17/07	SHEET 65
	CREW PG, DS	



LEGEND

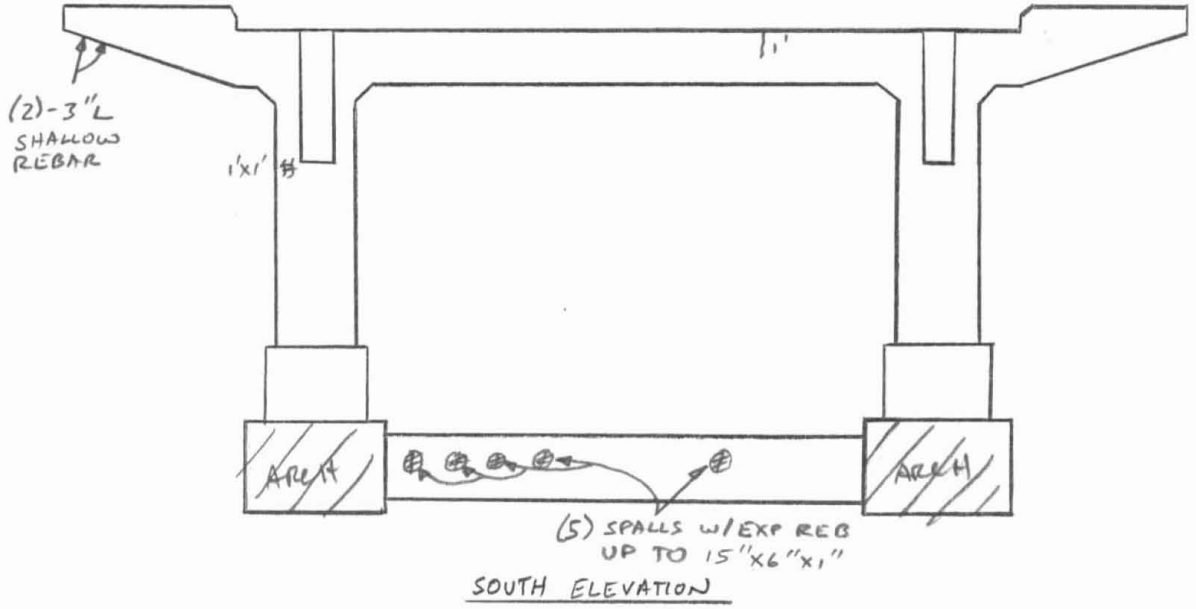
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 6 FLOOR BEAM 24 NORTH ELEVATION

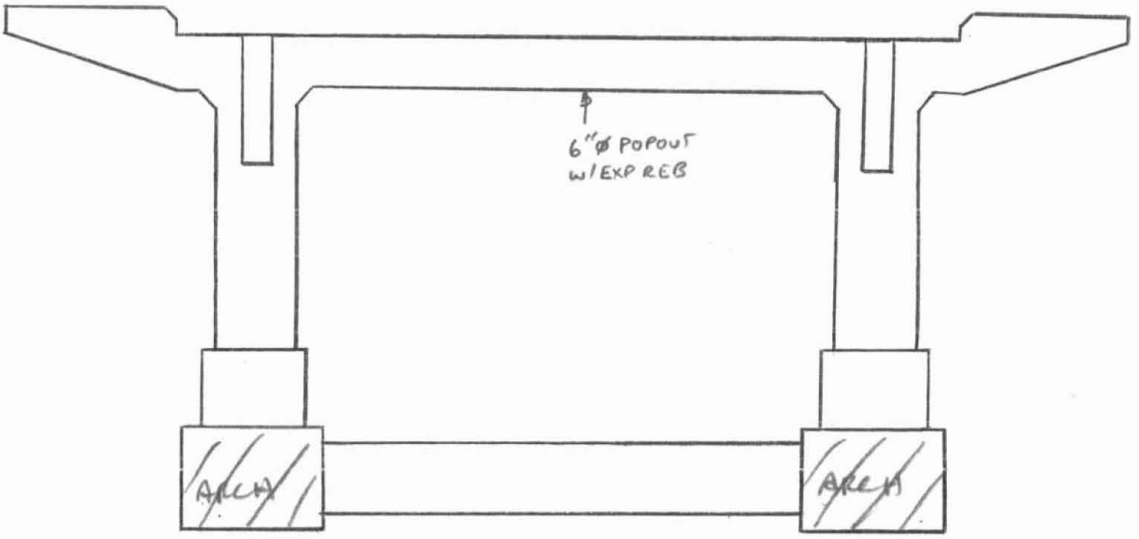
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PROJ. NO. 170- 2729	BRIDGE NO. 00603
DATE 1/16/07	SHEET 66
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

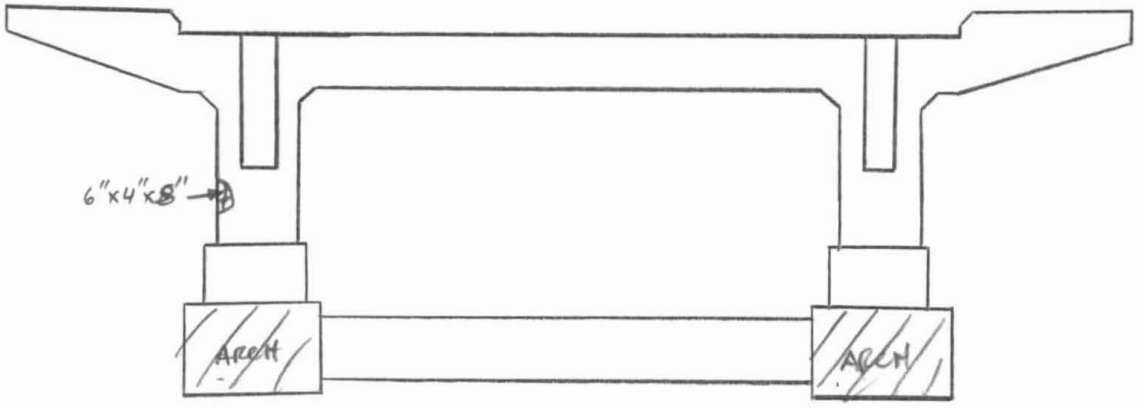
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 25

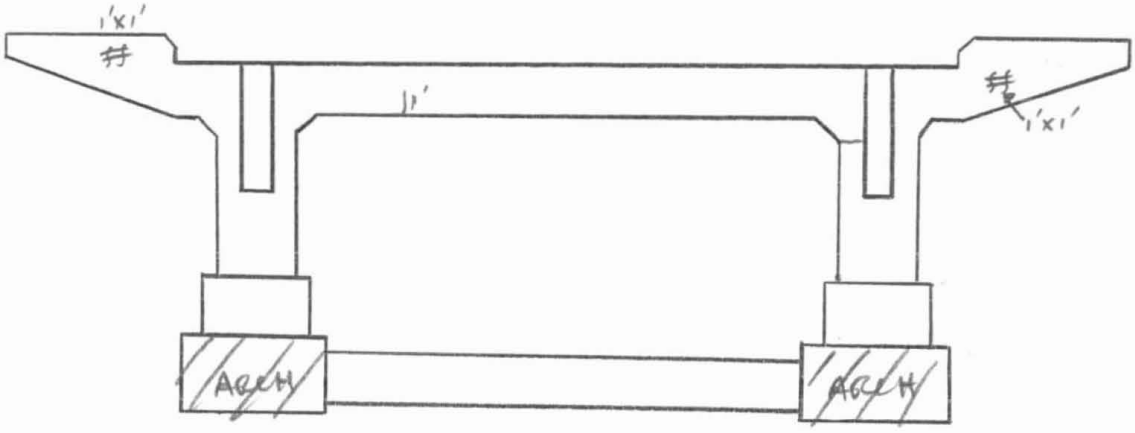
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 67
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

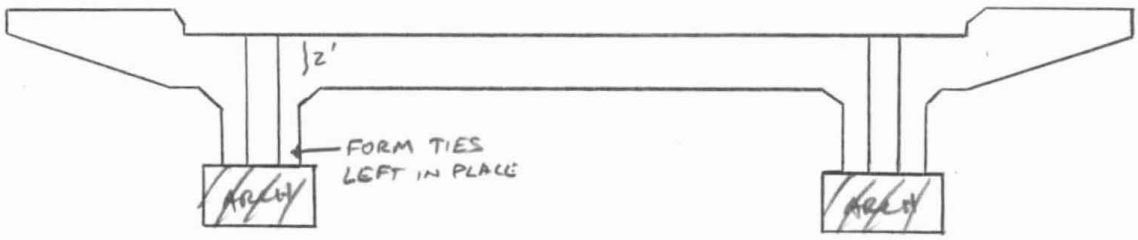
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 26

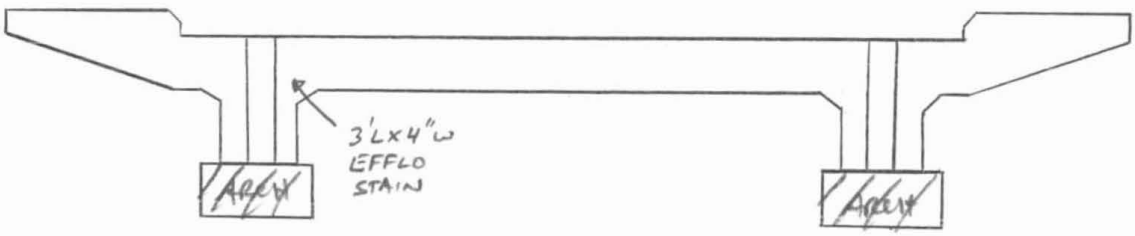
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 6B
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, SR	



SOUTH ELEVATION



NORTH ELEVATION

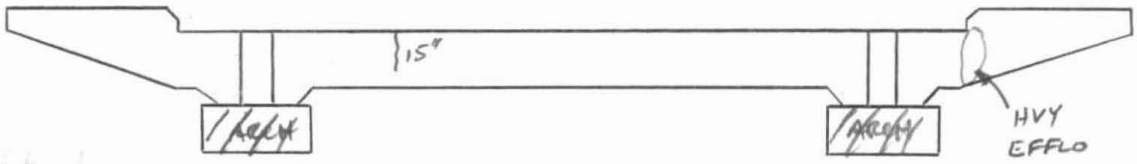
LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

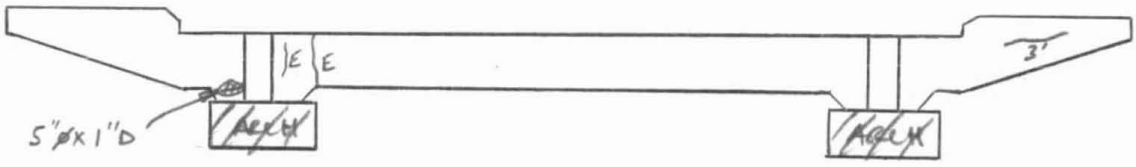
SPAN 7 FLOORBEAM 27

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 69
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

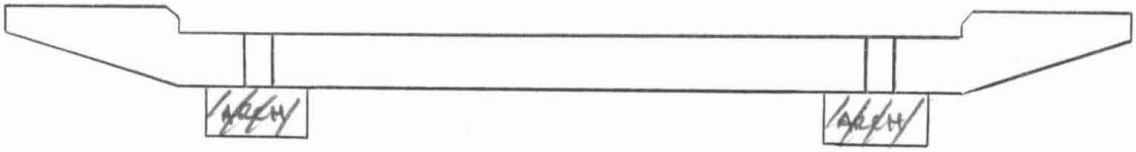
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 28

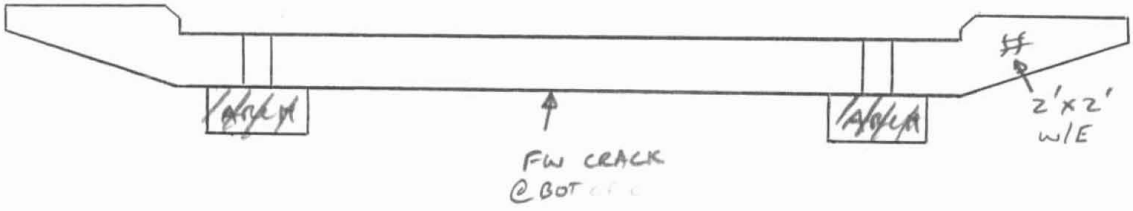
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 70
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

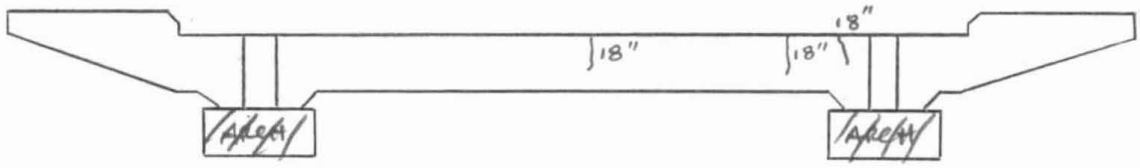
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 29

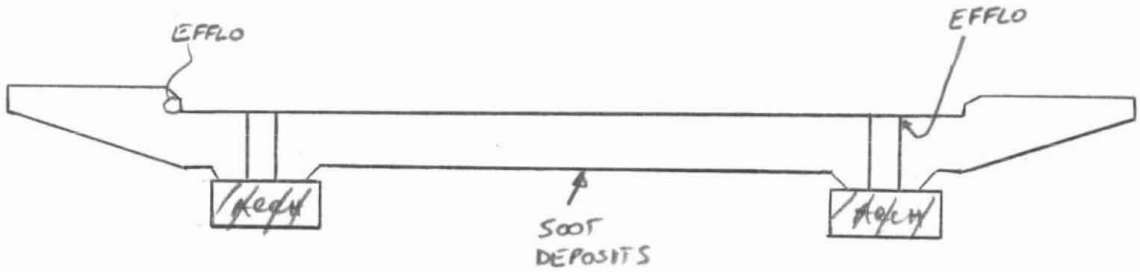
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 71
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

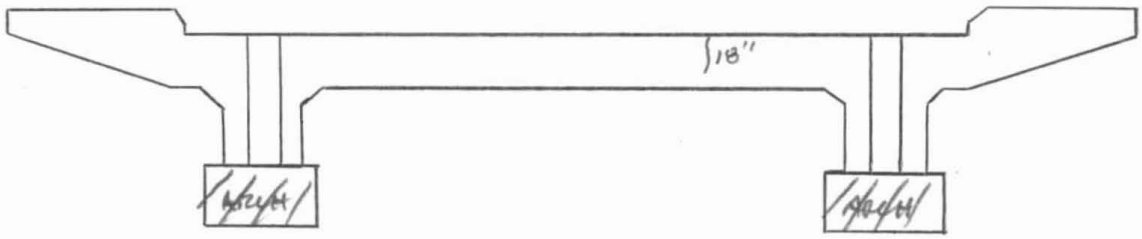
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 30

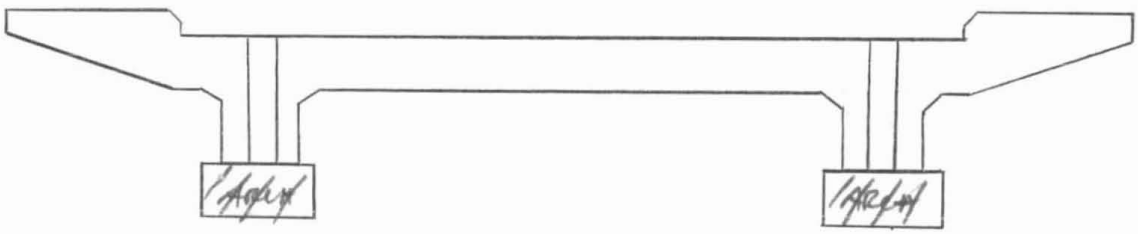
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 72
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, SR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

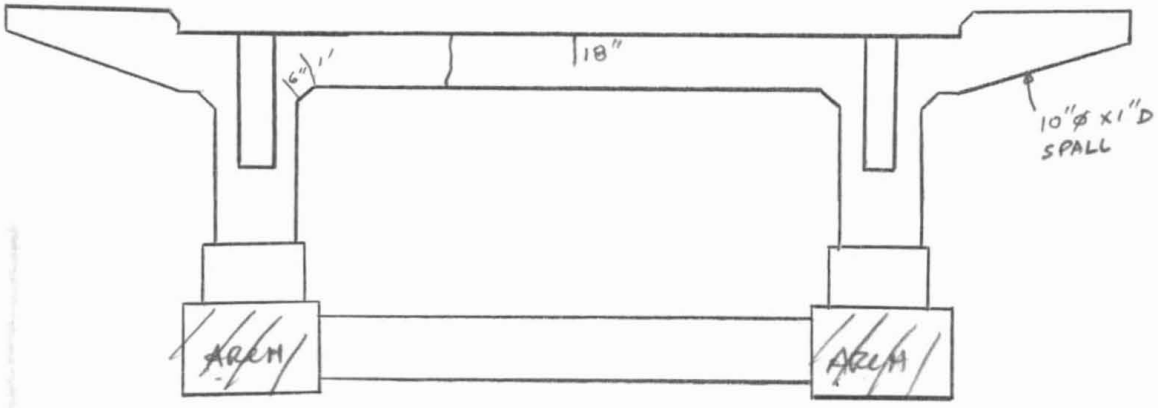
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 31

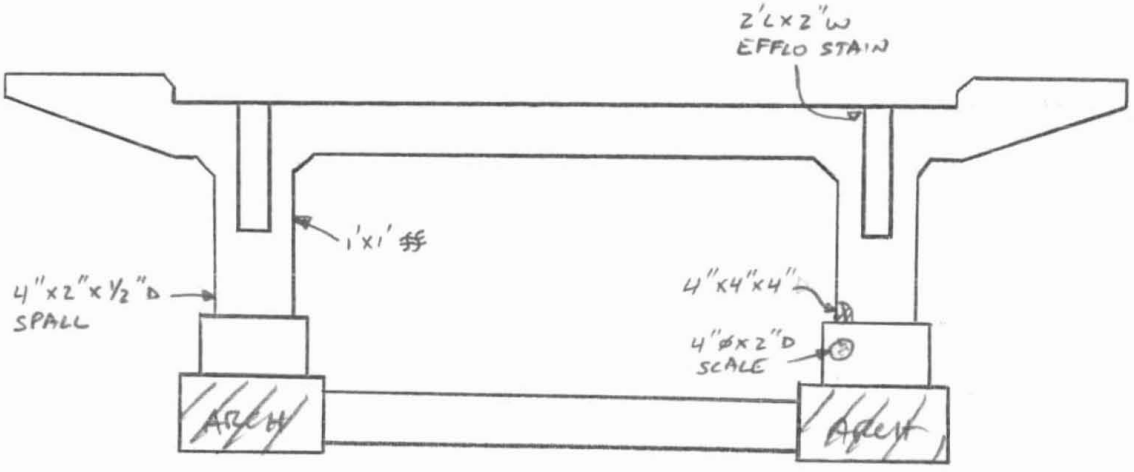
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

FIELD NOTES	PROJ. NO. 170- 2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 73
PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	CREW PG, CL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

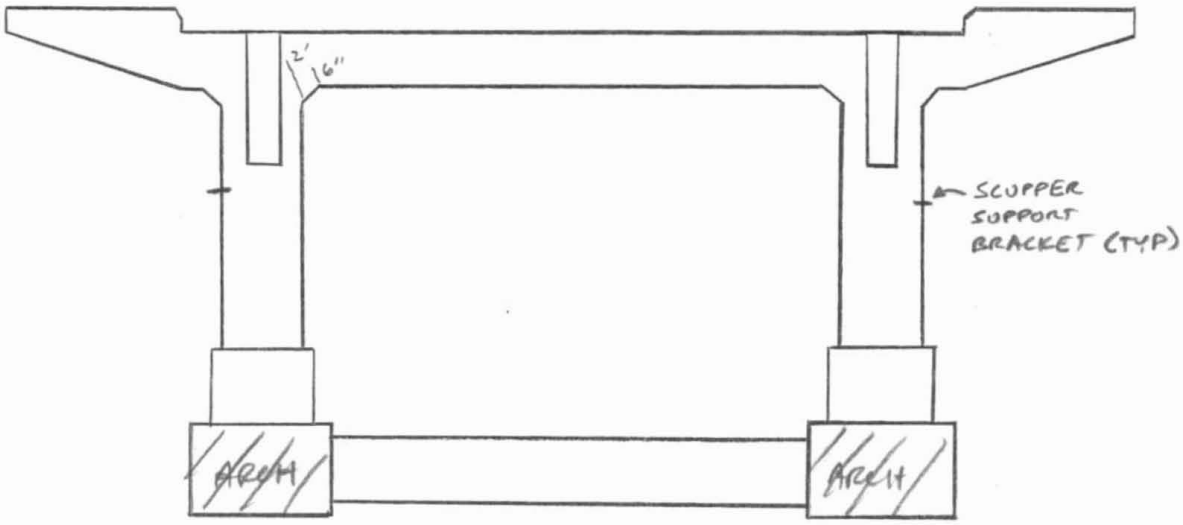
- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

SPAN 7 FLOORBEAM 32

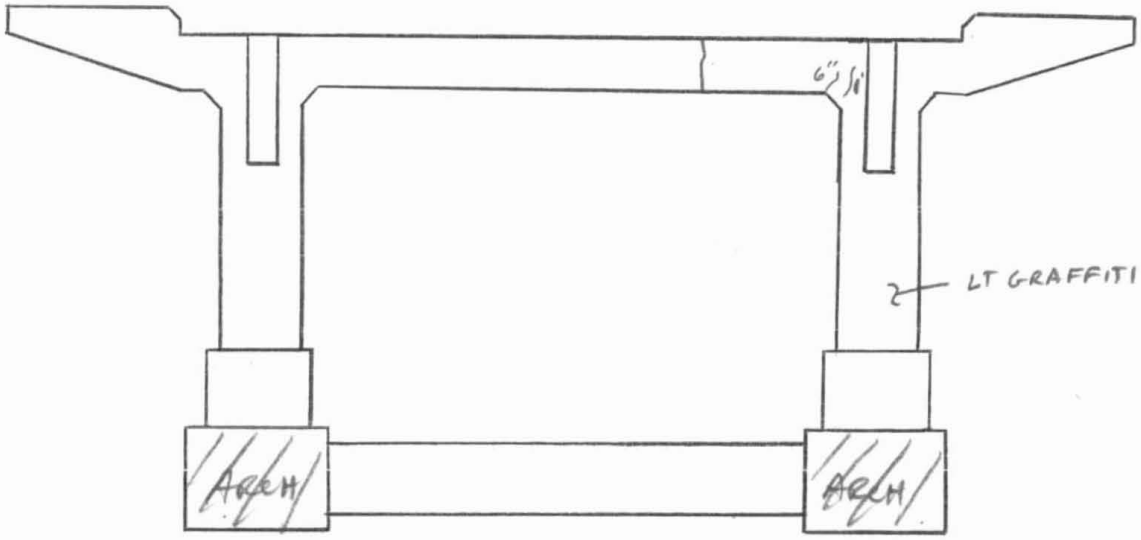
Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

FIELD NOTES

PREPARED BY: Garg Consulting Services, Inc. ENGINEERS • CONSULTANTS • CONSTRUCTION MANAGERS	PROJ. NO. 170-2729	BRIDGE NO. 00603
	DATE 1/16/07	SHEET 74
	CREW PG, LL, JR	



SOUTH ELEVATION



NORTH ELEVATION

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS OR HAIRLINE MAP CRACKS
- HAIRLINE CRACKS (HLC) OR CRACKS (CR)
- HONEY COMB AREA
- SCALE AREA (HVY, MED, OR LT)

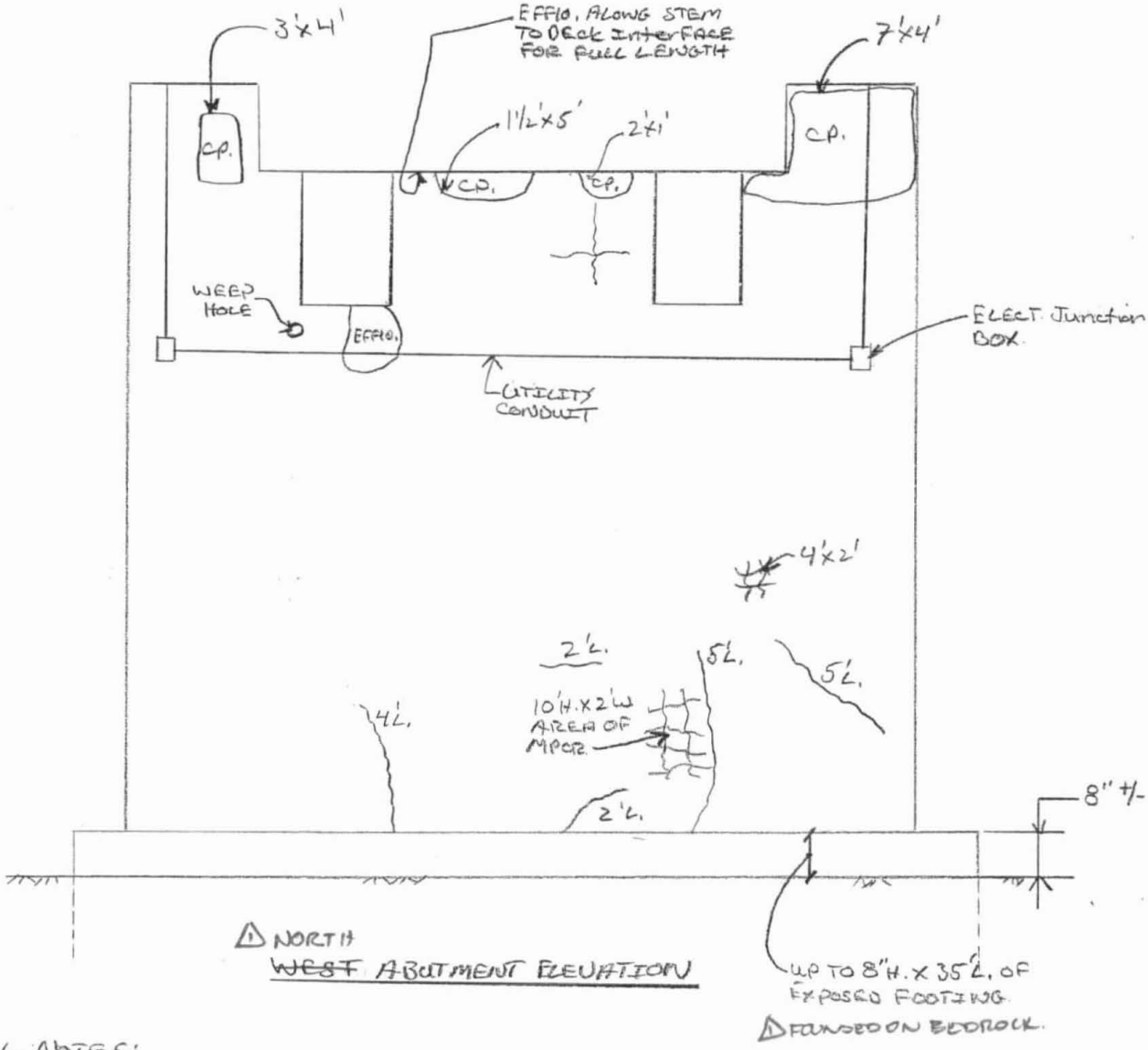
SPAN 7 FLOORBEAM 33

Revision	Date	Crew	Company	Revision	Date	Crew	Company
Revision	Date	Crew	Company	Revision	Date	Crew	Company

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET ~~72~~ 75
CREW DAL, MJW



△1 NORTH
~~WEST~~ ABUTMENT ELEVATION

GENERAL NOTES:

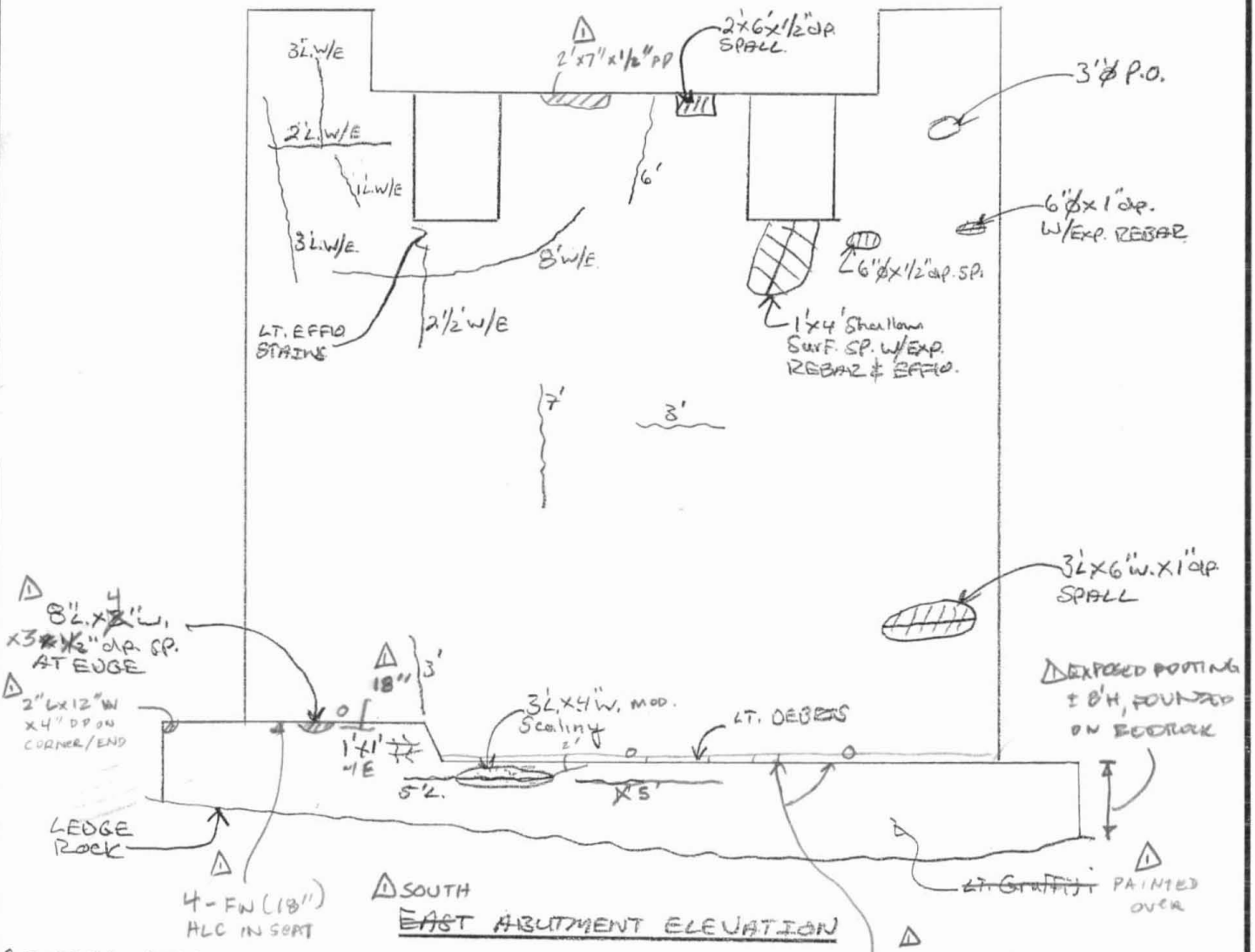
- ~ = HCCR, ~~#~~ = map cracking (MPCR), CP = conc. patch
- LT. Scaling ON STEM FACE
- Graffiti ON STEM FACE
- Rand. AREAS OF Paint PATCHES ON STEM FACE

REVISION △1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET ~~73~~ 76
CREW MJW, DRL, PHH



GENERAL NOTES:

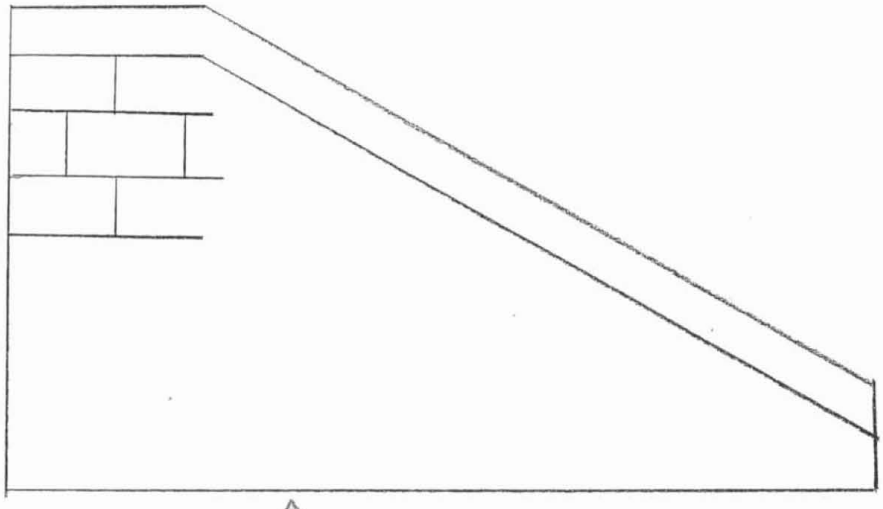
- ~ = HLCR, E w/EFFIO, ⋕ = mapcracking (MPCR) o = DRAINPIPE
- Rand. AREAS OF MPCR. W/O. EFFIO. ON STEM FACE
- Rand. HLCR'S W/ & W/O. EFFIO. ON STEM FACE
  FLUID. OF PREVIOUS LEAK. ON STEM FACE (MAINLY AT TOP)
  GRAFFITI ALONG BTM. FACE OF STEM.

REVISION 1	DATE 1/16/07	CREW PG, CL, JR - GLS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

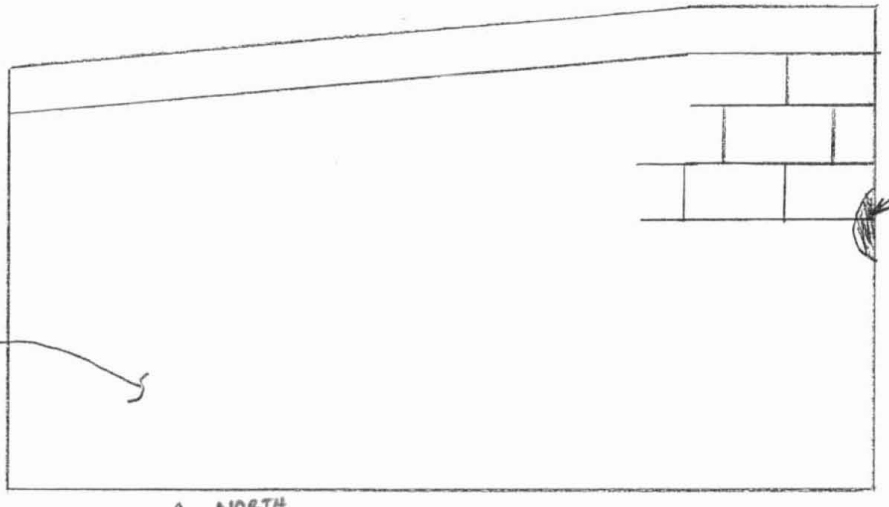
Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET ~~75~~ 77
CREW DAL, MJW.



△ EAST NORTH~~WEST~~ WINGWALL

GENERAL NOTES:
Rand. AREAS OF Previously Repointed MORTAR JT.'S
• LT. VEG. Growth Along WALL
• <1% LOOSE & MISSING MORTAR △



△ NORTH ~~SOUTH~~WEST WINGWALL

GENERAL NOTES:
Rand. AREAS OF Previously Repointed Mortar JT.'S
• MINOR EROSION AT WEST APPR. Embankment
• LT. VEG. GROWTH ALONG WALL

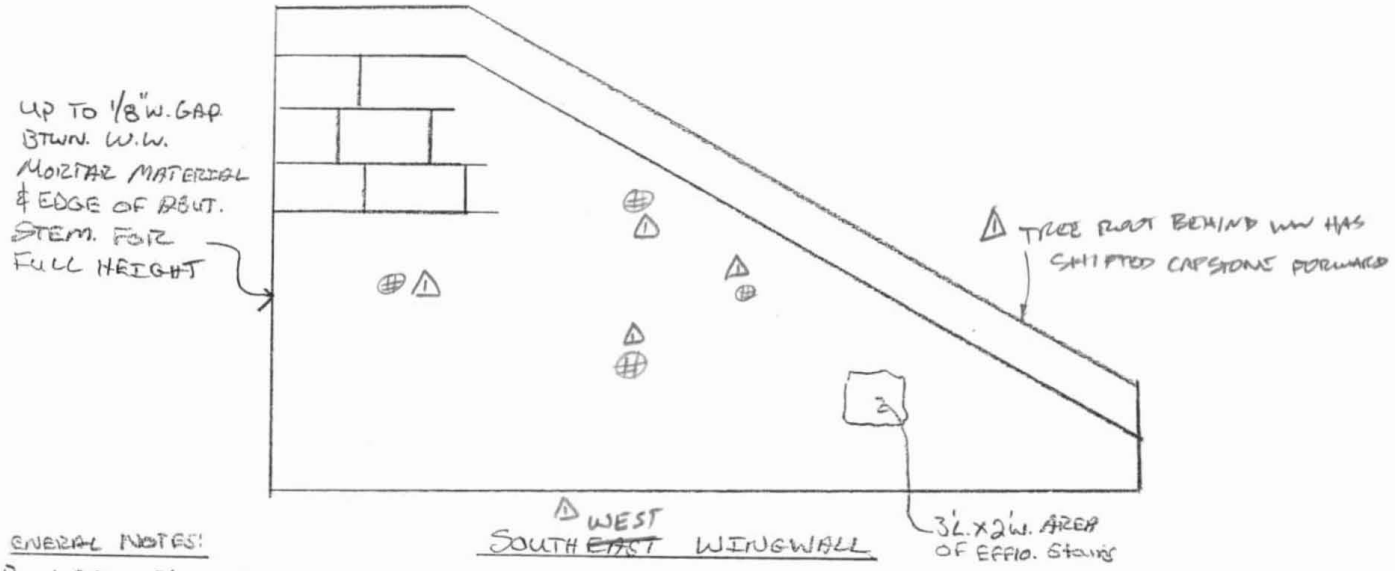
△ • <1% LOOSE & MISSING MORTAR

REVISION △1	DATE 1/18/07	CREW PG, CL, JR – GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

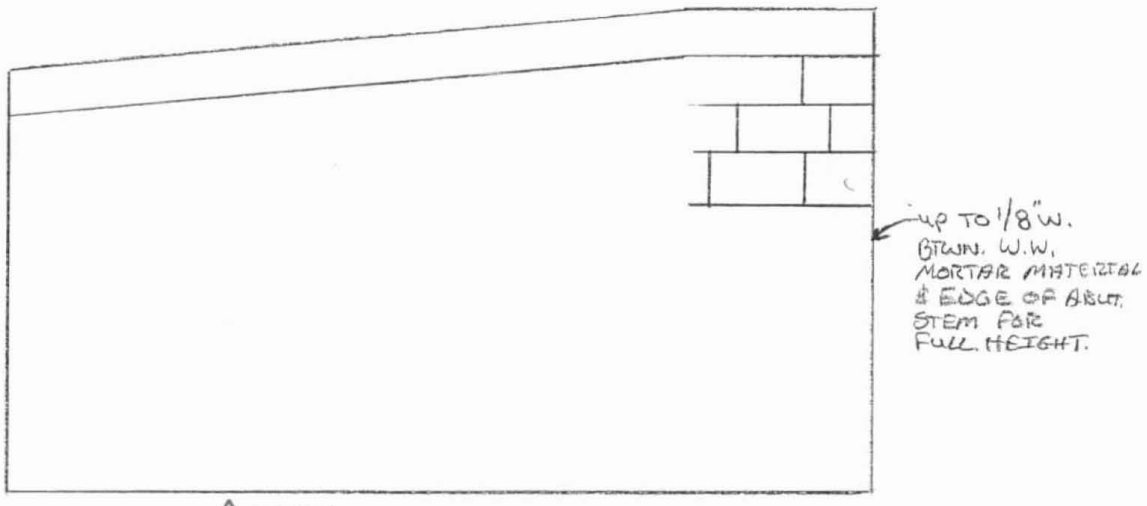
Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET 78
CREW PHH, DAL, MJW.



WEST
SOUTH ~~EAST~~ WINGWALL

GENERAL NOTES:
- Rand. EFFIO. STAINS THRU-OUT
- LT. VEG. GROWTH along wall
- <1% LOOSE & MISSING MORTAR



SOUTH
~~NORTH~~ EAST WINGWALL

GENERAL NOTES:
- HLCR'S IN MORTAR JOINTS
- EFFIO. STAINS @ Rand. JOINTS

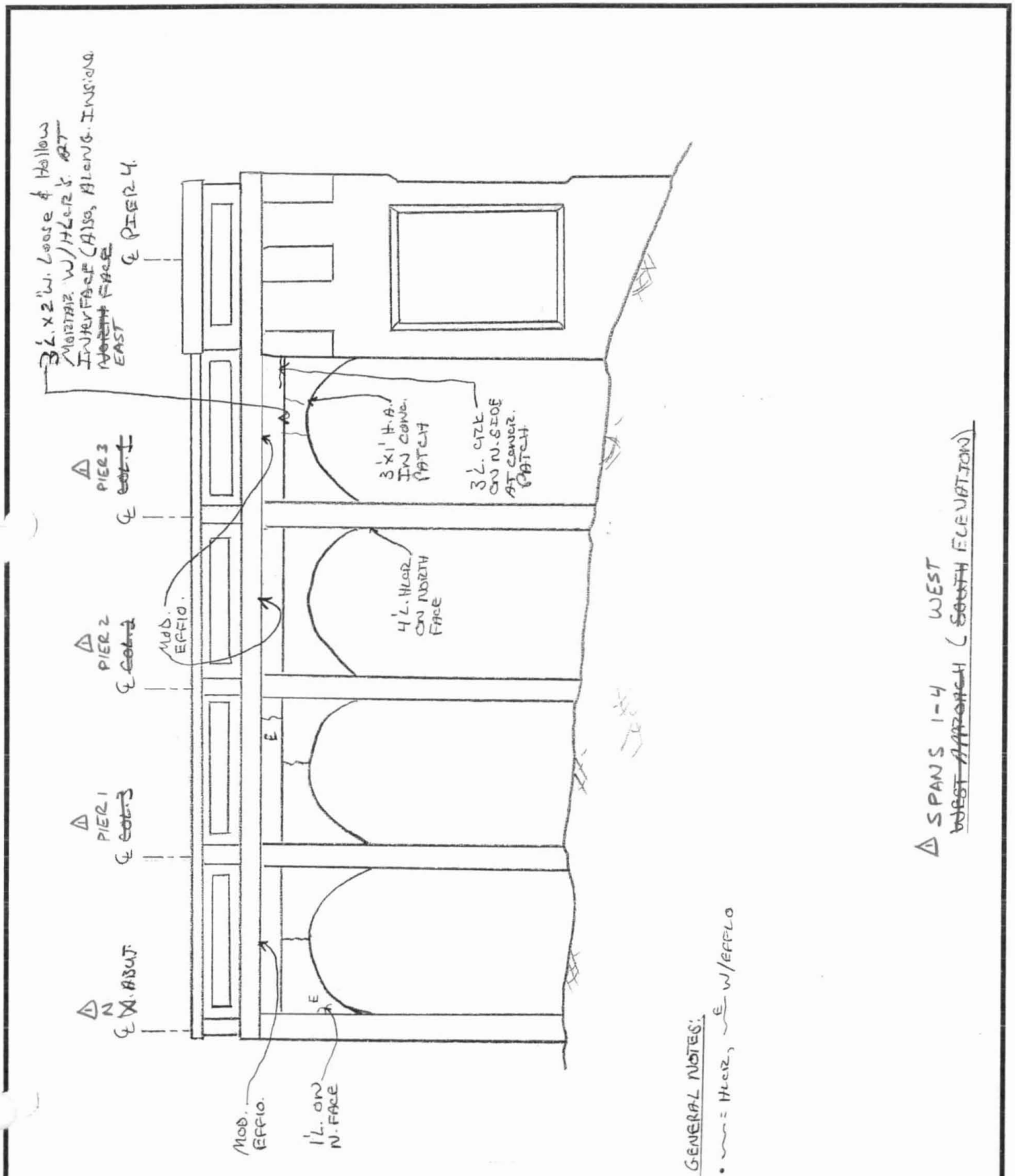
= ACTIVE LEAKAGE ON WALL
= <1% LOOSE & MISSING MORTAR

REVISION 1	DATE 1/18/07	CREW PG, CL, JR - GLS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340. BRIDGE NO 00603
DATE 1/28/05 SHEET ~~28~~ 79
CREW MTW, DAL



REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
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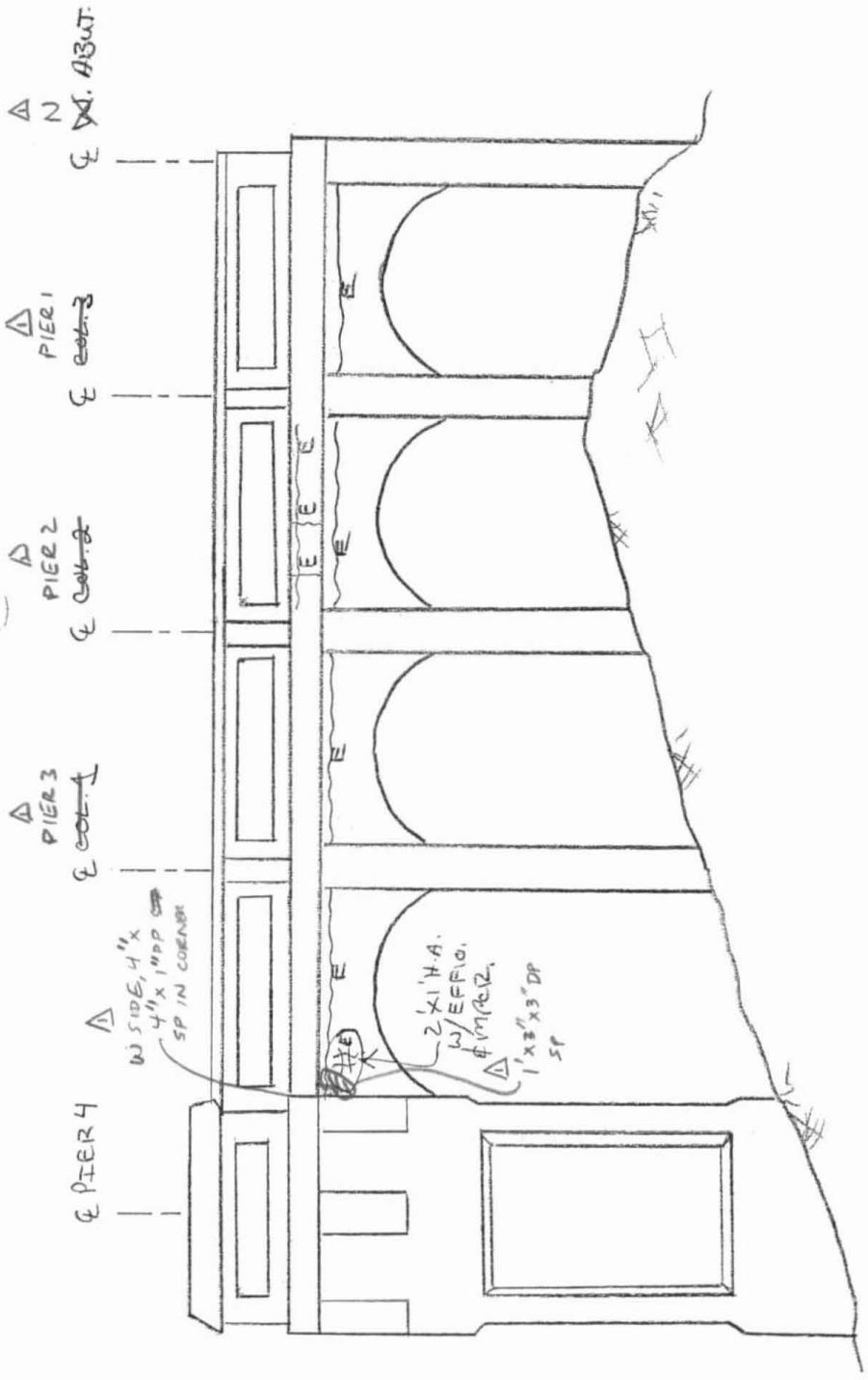
PROJECT NO 2340. BRIDGE NO 00603
DATE 1/25/05 SHEET 26 80
CREW DAL, MJW



GENERAL NOTES:

• ~ = VLCE, ℄ ~ W/EFFIO, #1 = MAR.

△ SPANS 1-4 EAST
~~WEST APPROACH~~ (~~NORTH~~ ELEVATION)

REVISION △1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

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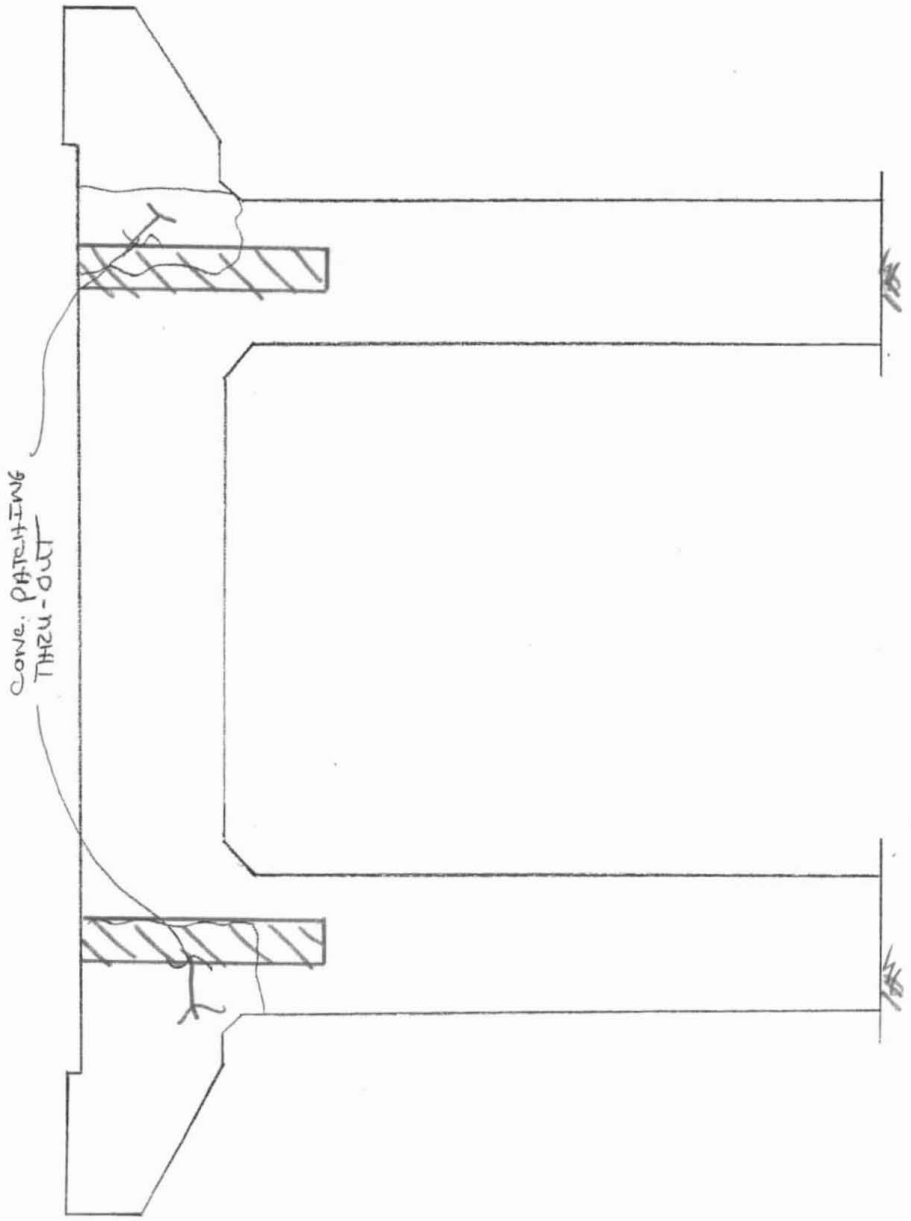
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET 34 81
CREW MJW, DAL

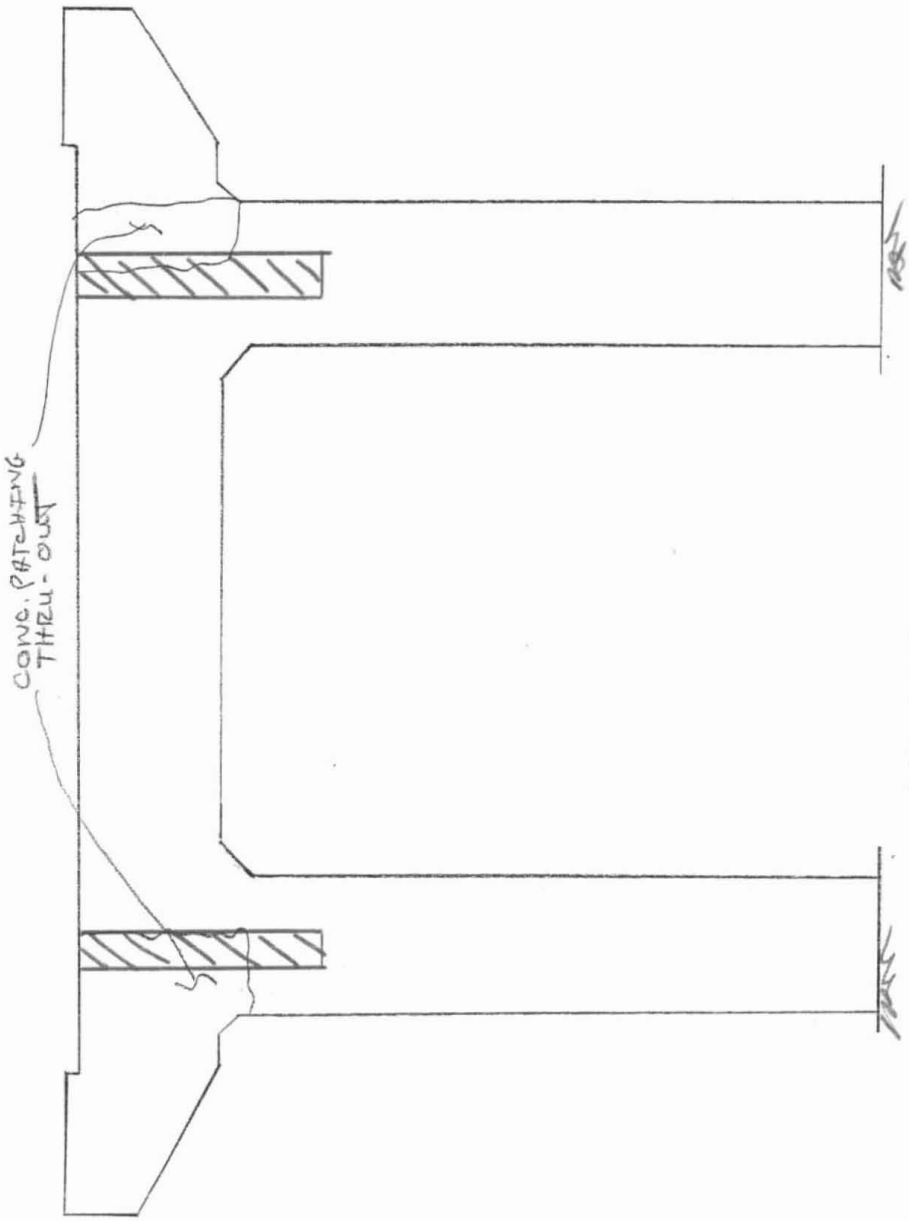


REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET ~~32~~ 82
CREW MJW, DAL



△1 PIER 1 & FEB SOUTH
~~Column~~ - EAST ELEVATION
~~WEST~~ APPROACH

REVISION △1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
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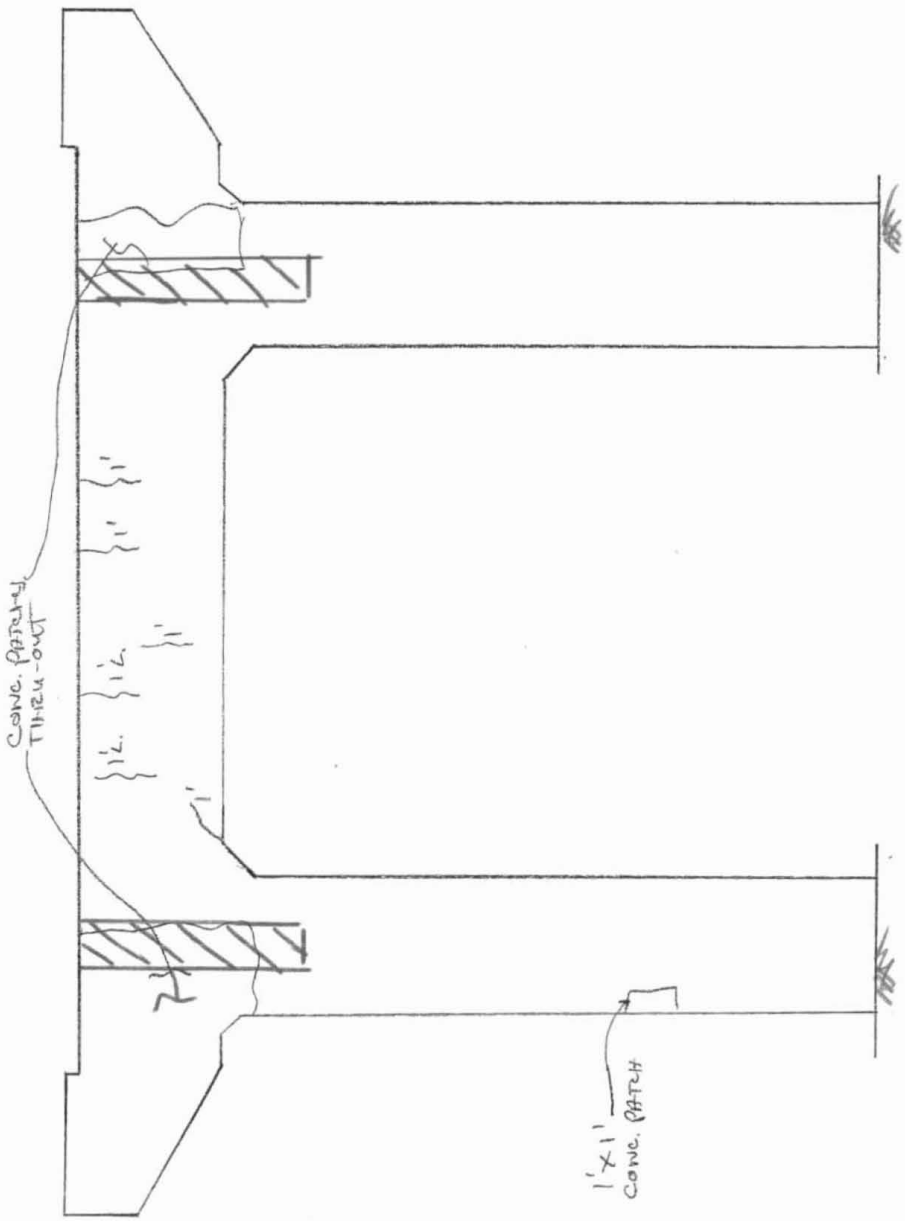
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET 36 B3
CREW MJW, DAL



△1 PIER 2 FACE NORTH
~~COLUMN 2 - EAST~~ ELEVATION
~~WEST APPROACH~~

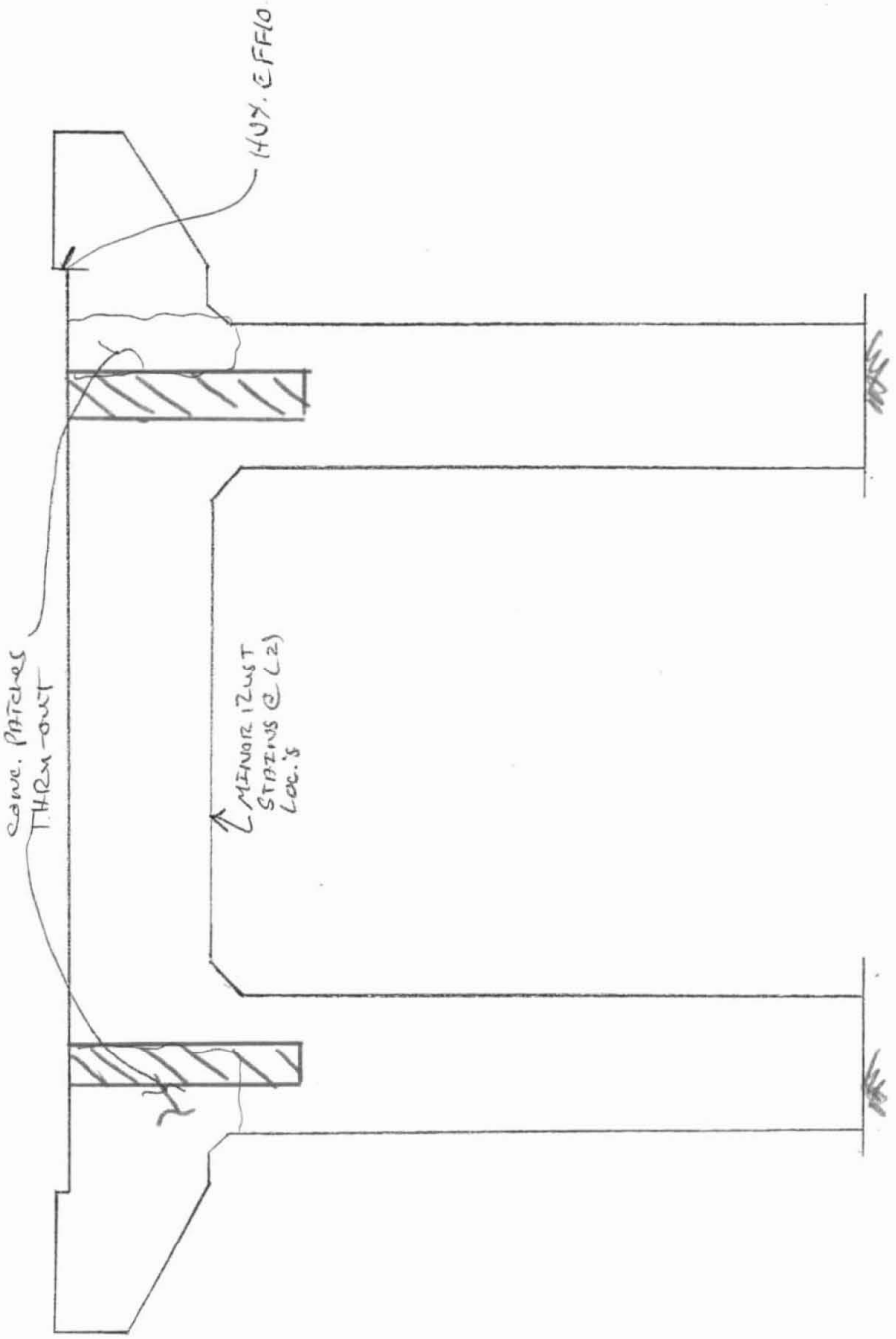
GENERAL NOTES:
• ~~~ : HEAT (SHRINKAGE CRACKS)

REVISION △1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET ~~35~~ 84
CREW MJW, DAL



① PIER 2 & PS-P2 SOUTH
~~COLUMNS 2 - EAST ELEVATION~~
~~WEST APPROACH~~

GENERAL NOTES:

REVISION 1	DATE 1/18/07	CREW PG, CL, JR — CCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

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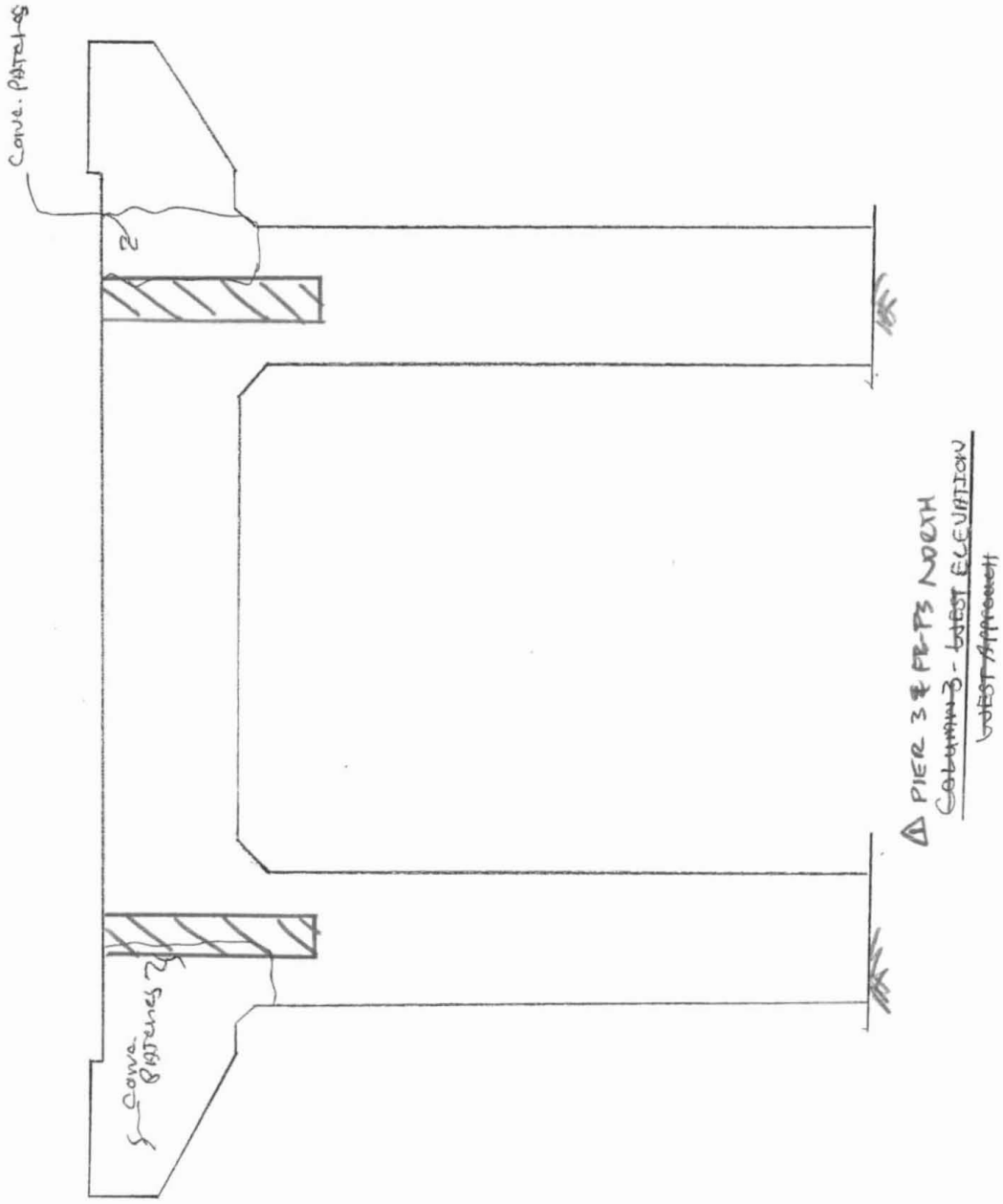
Field Notes

PROJECT NO 2340.00 BRIDGE NO 00603

DATE 1/28/05 SHEET 38 B5

CREW MTW, DAL



△ PIER 3 & PE-P3 NORTH
~~COLUMN 3 - WEST ELEVATION~~
~~WEST APPROACH~~

REVISION △1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

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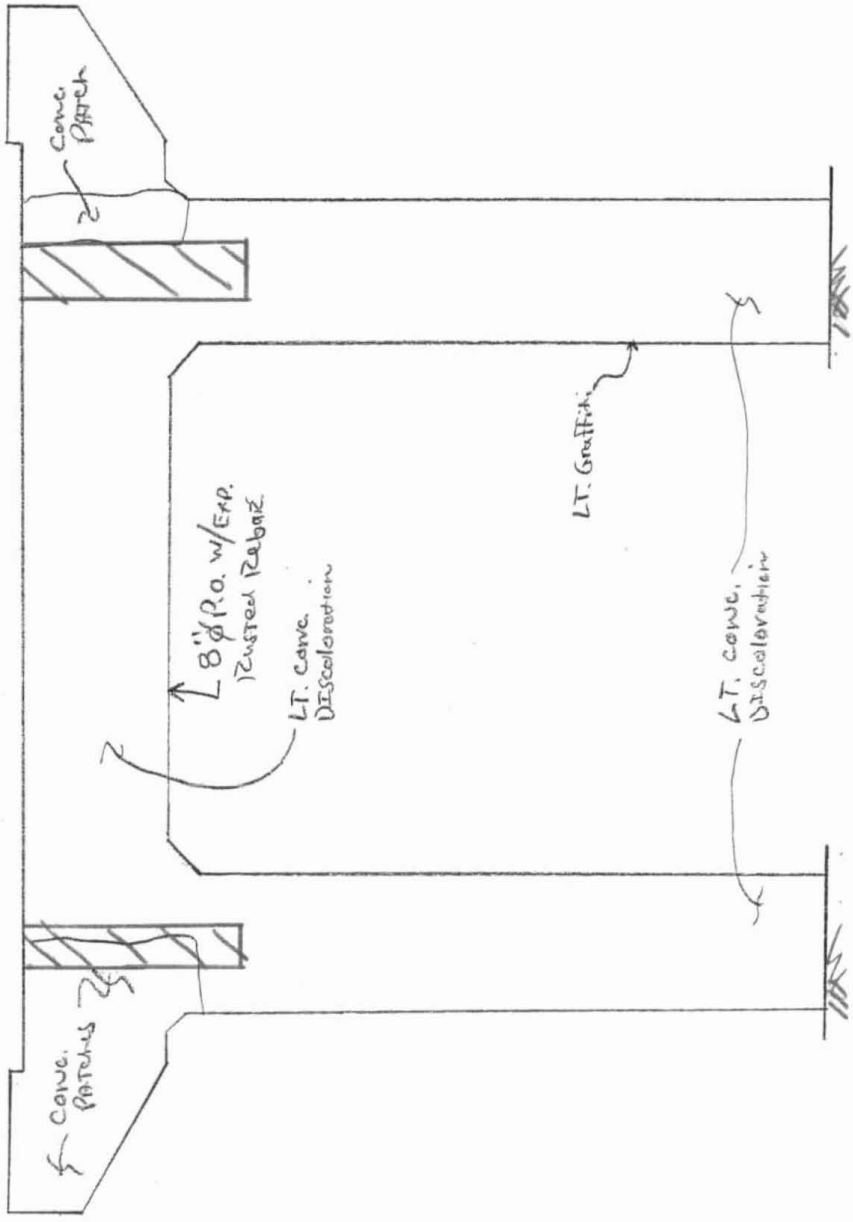
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET 37 B6
CREW MJW, DAL



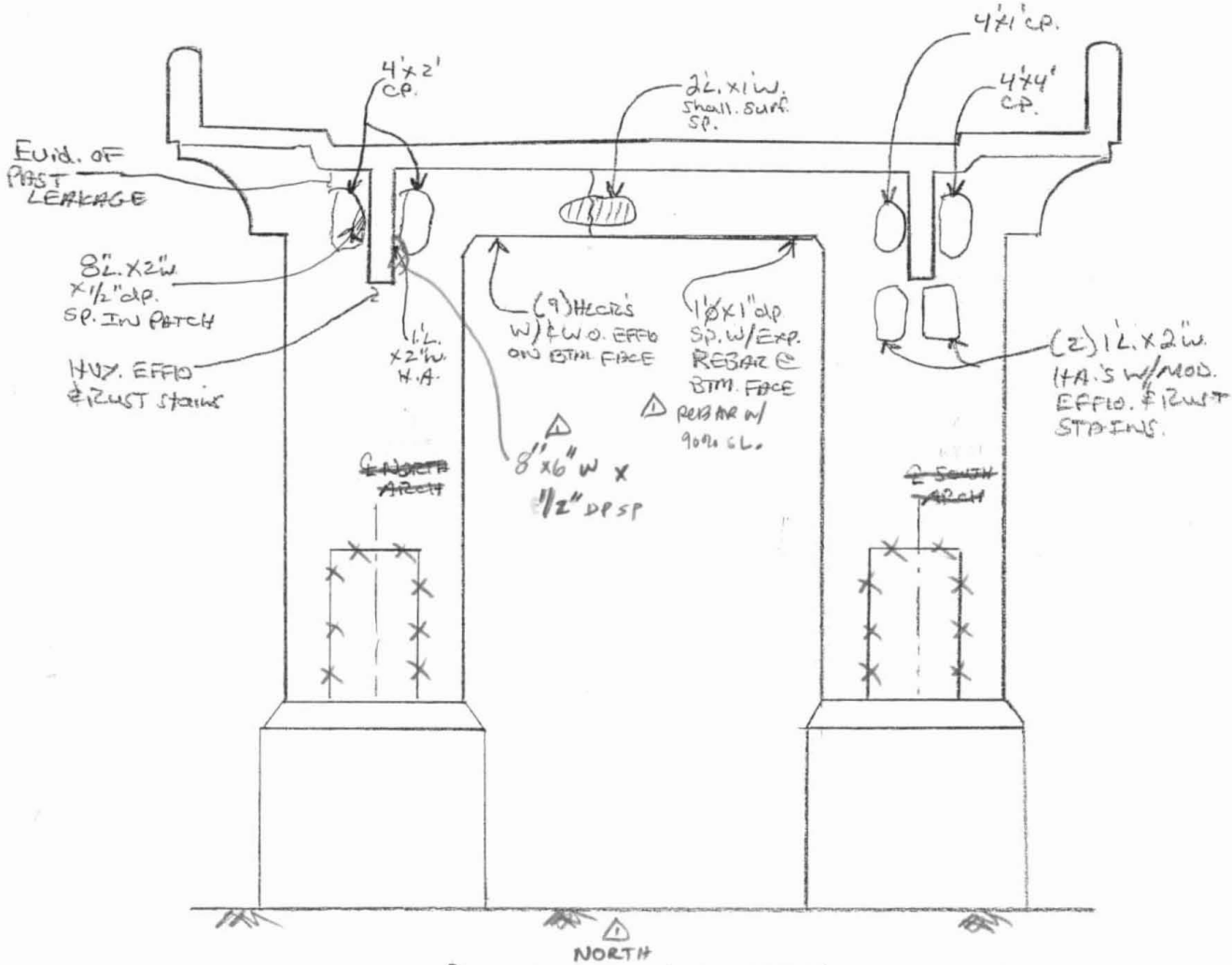
△ PIER 3 & PB-P3 SOUTH
~~COLUMN 3~~ - EAST ELEVATION
~~WEST APPROACH~~

REVISION △1	DATE 1/18/07	CREW PG, CG, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/28/05 SHEET ~~85~~ 87
CREW MJW, OAL



PIER 4 - ~~WEST~~ ELEVATION
℄ FE-P4N

GENERAL NOTES:

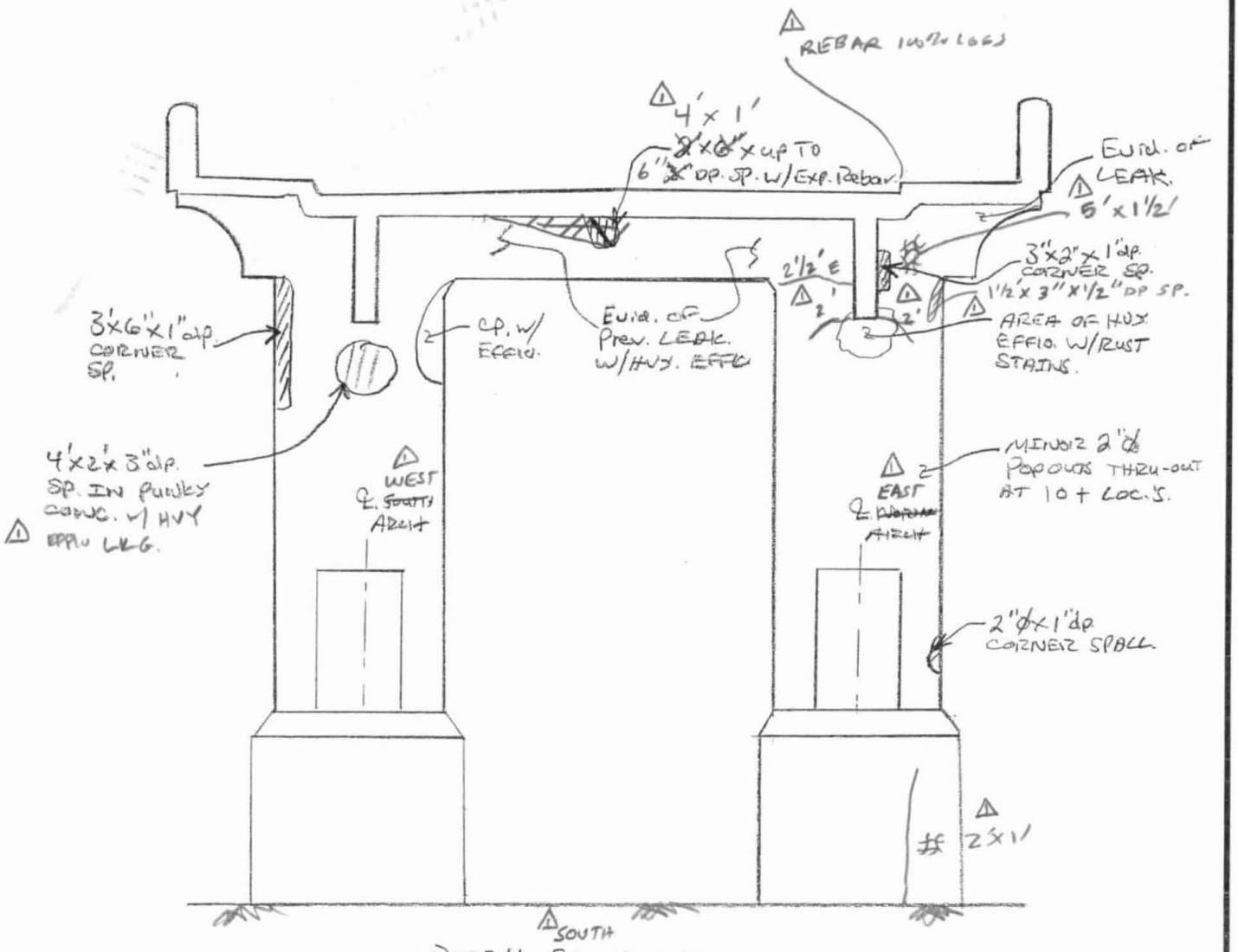
- ~~~ = HLCR, ~~~ w/ Effl., CP = Conc. Patch, SP. = Spall, HA = Hollow Area
- Evid. of previous leakage w/ stains on face of pier

REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00605
DATE 1/25/05 SHEET 86 88
CREW DAL, MTW



PIER 4 - ~~EAST~~ ELEVATION
~~& FB~~ P45

GENERAL NOTES:

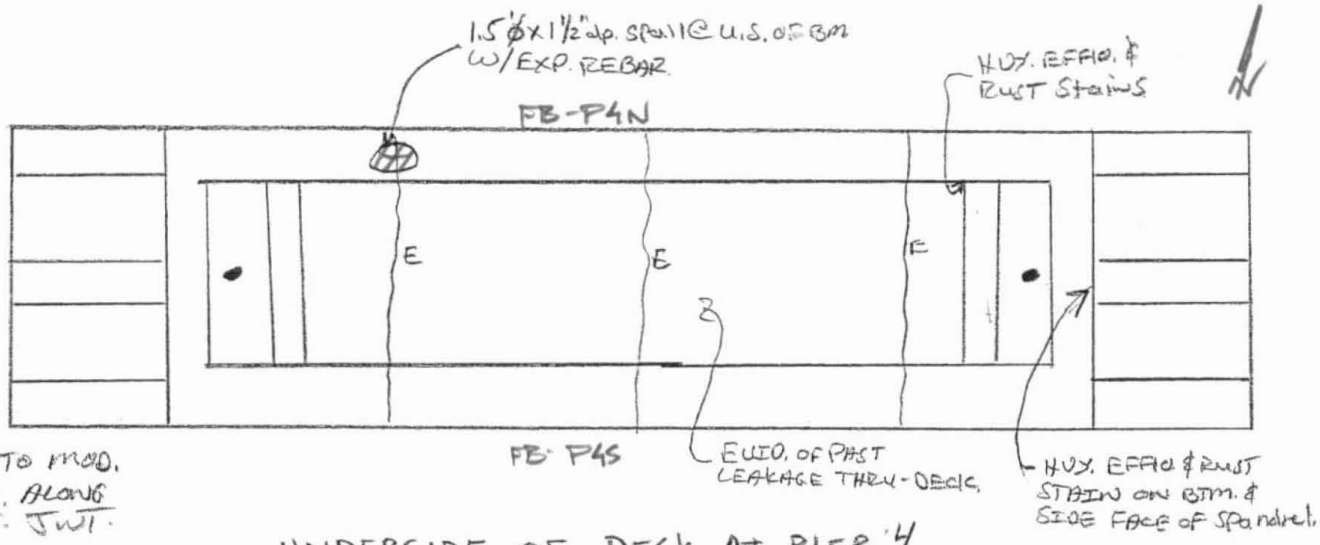
- ~~~ = HLCR, ~E~ = W/EFFLO, CP = CONC. PATCH, SP = SPALL
- EVID. OF PREVIOUS LEAKAGE W/ STAINS ON CAP & COL. FACES.

REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

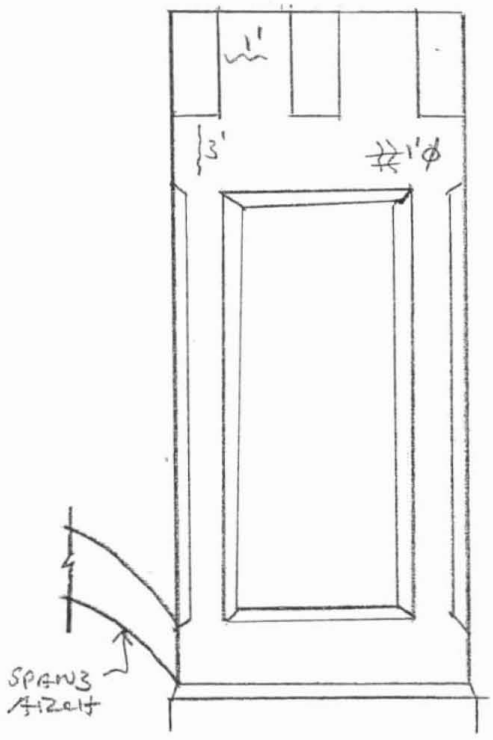
Field Notes

Lichtenstein
Consulting Engineers

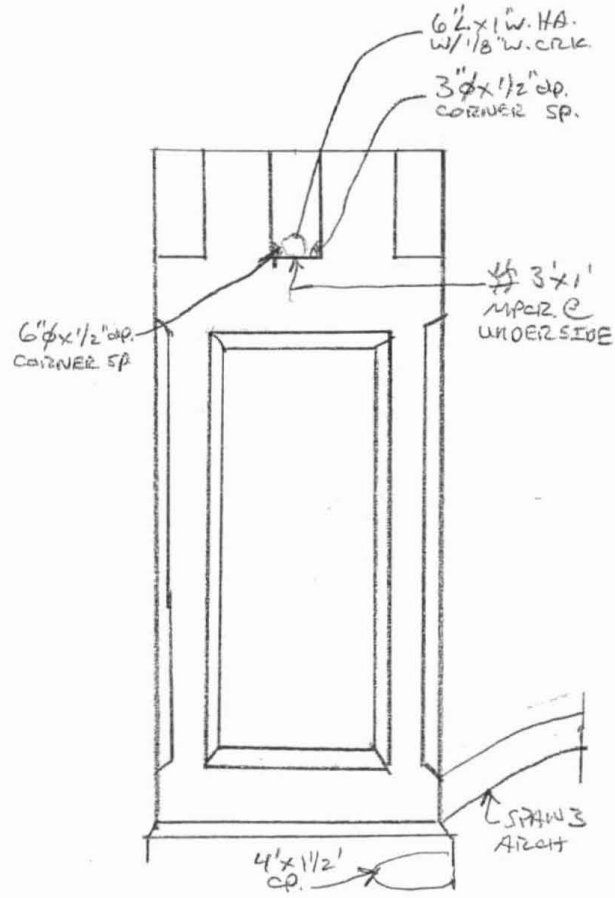
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET 87 89
CREW DAL, MJW



UNDERSIDE OF DECK AT PIER 4



1 EAST
~~NORTH~~ ELEVATION OF PIER 4



1 WEST
~~SOUTH~~ ELEVATION OF PIER 4

NOTES:
~ = Hlcr, — = w/effio, # = mpcr

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REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Lichtenstein
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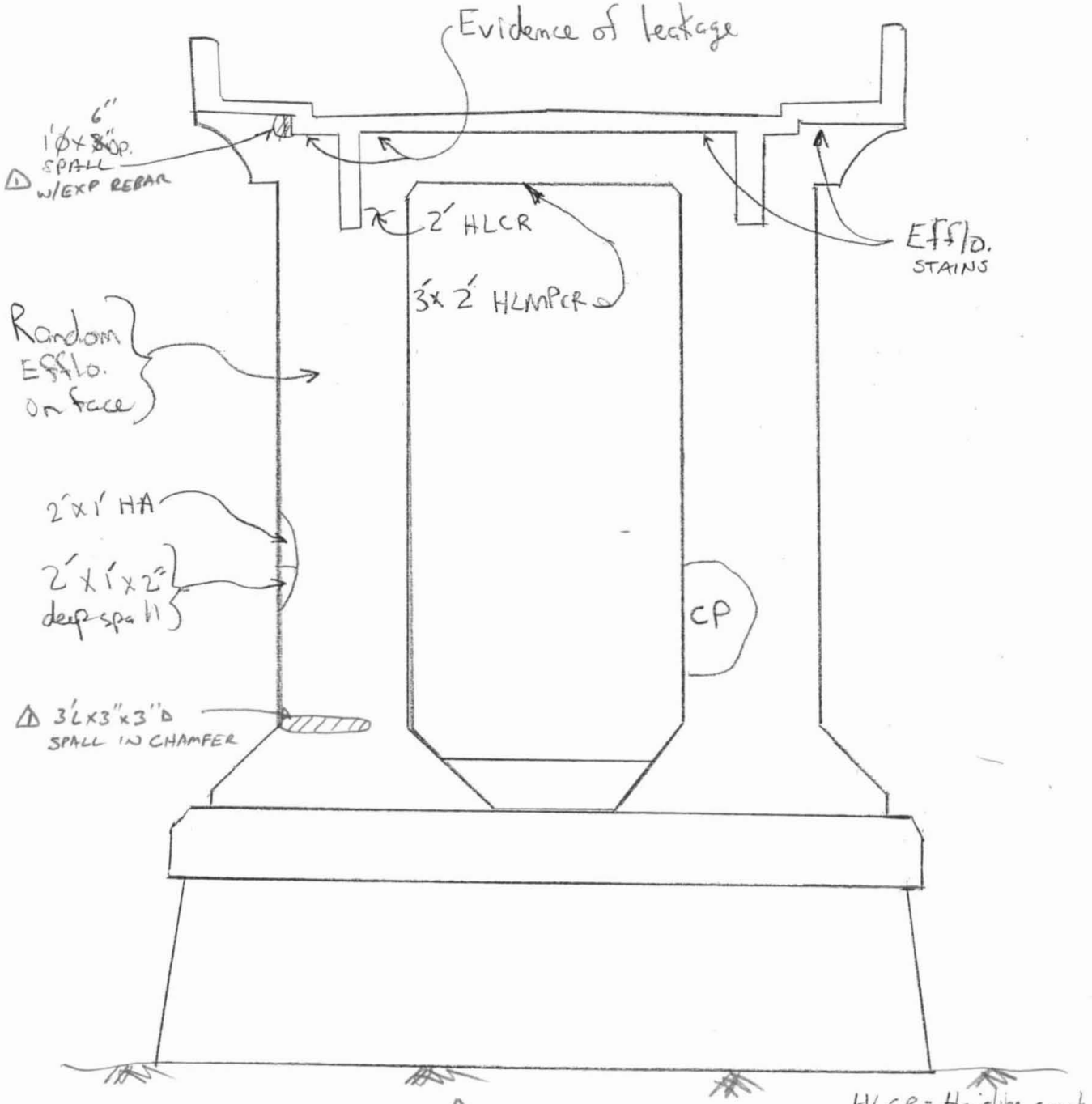
Field Notes

PROJECT NO 2340 BRIDGE NO 00603
DATE 1/25/05 SHEET ~~32~~ 90
CREW DAL, MJW



HLCR = Hairline crack
CP = Concrete Patch
HA = Hollow Area
HLMPCR = Hairline mapcracking

PIER ~~8~~ 5 - ~~WEST~~ NORTH ELEVATION
& PB-PSN

REVISION 1	DATE 1/18/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

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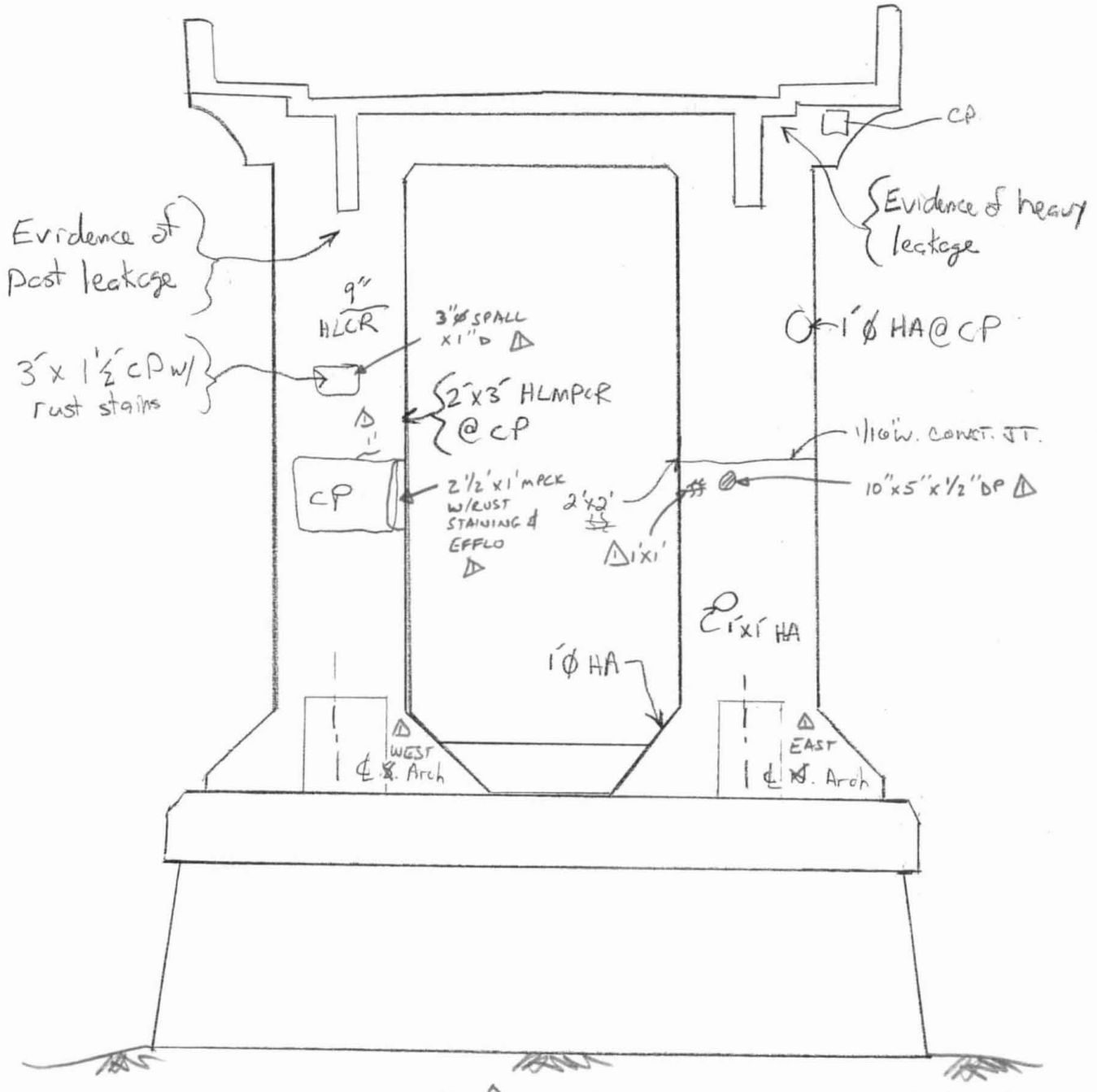
Consulting Engineers

Field Notes

PROJECT NO 2340 BRIDGE NO 00603
DATE 1/25/05 SHEET 8 of 9
CREW DAL, MJW



PIER ~~8~~ 5 - ~~EAST~~ SOUTH FACE

~~8~~ PB-P5S

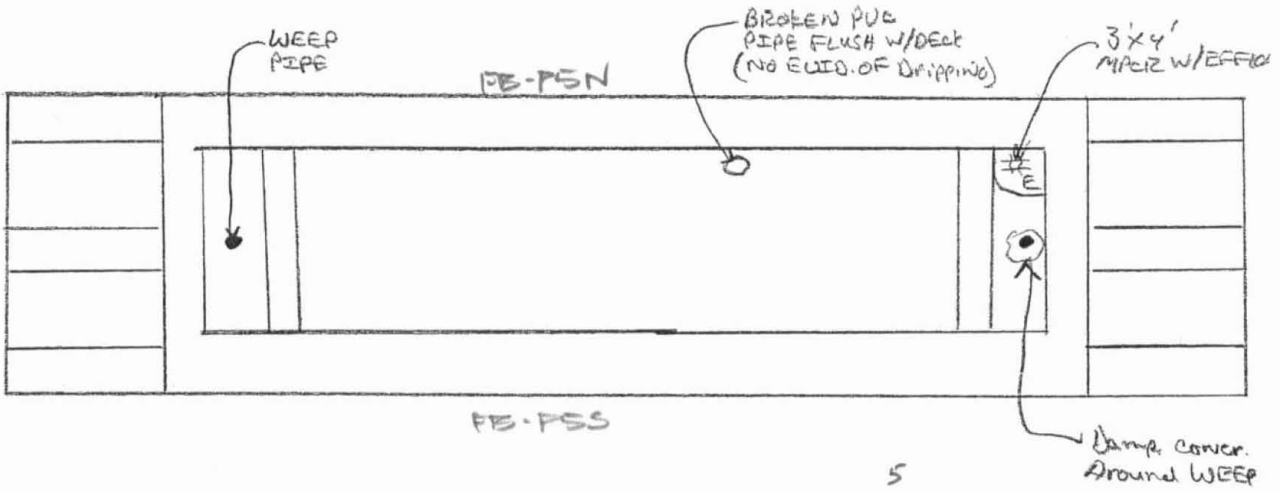
HA = Hollow Area
CP = Concrete Patch
HLMPCR = Hairline mapcracks (#)

REVISION 1	DATE 1/17/07	CREW PG, DS - GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

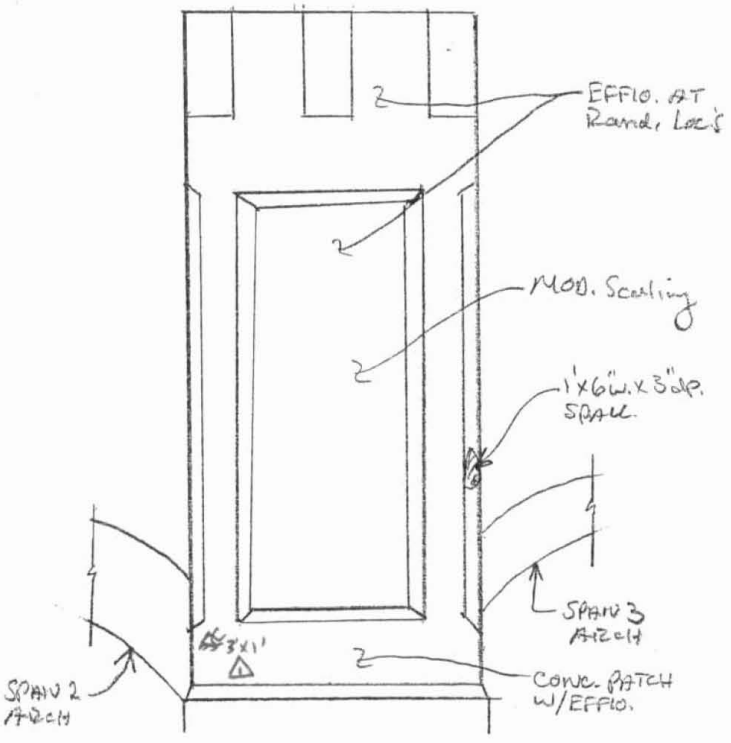
Field Notes

Lichtenstein
Consulting Engineers

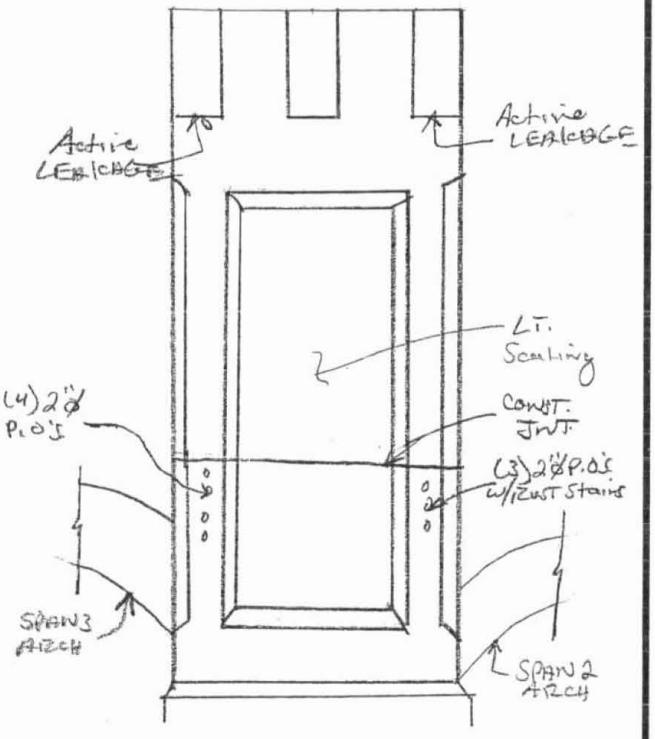
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/25/05 SHEET ~~84~~ 92
CREW MJW/DAL



UNDERSIDE OF DECK AT PIER ~~8~~ 5



△1 EAST
~~NORTH~~ ELEVATION OF PIER ~~8~~ 5



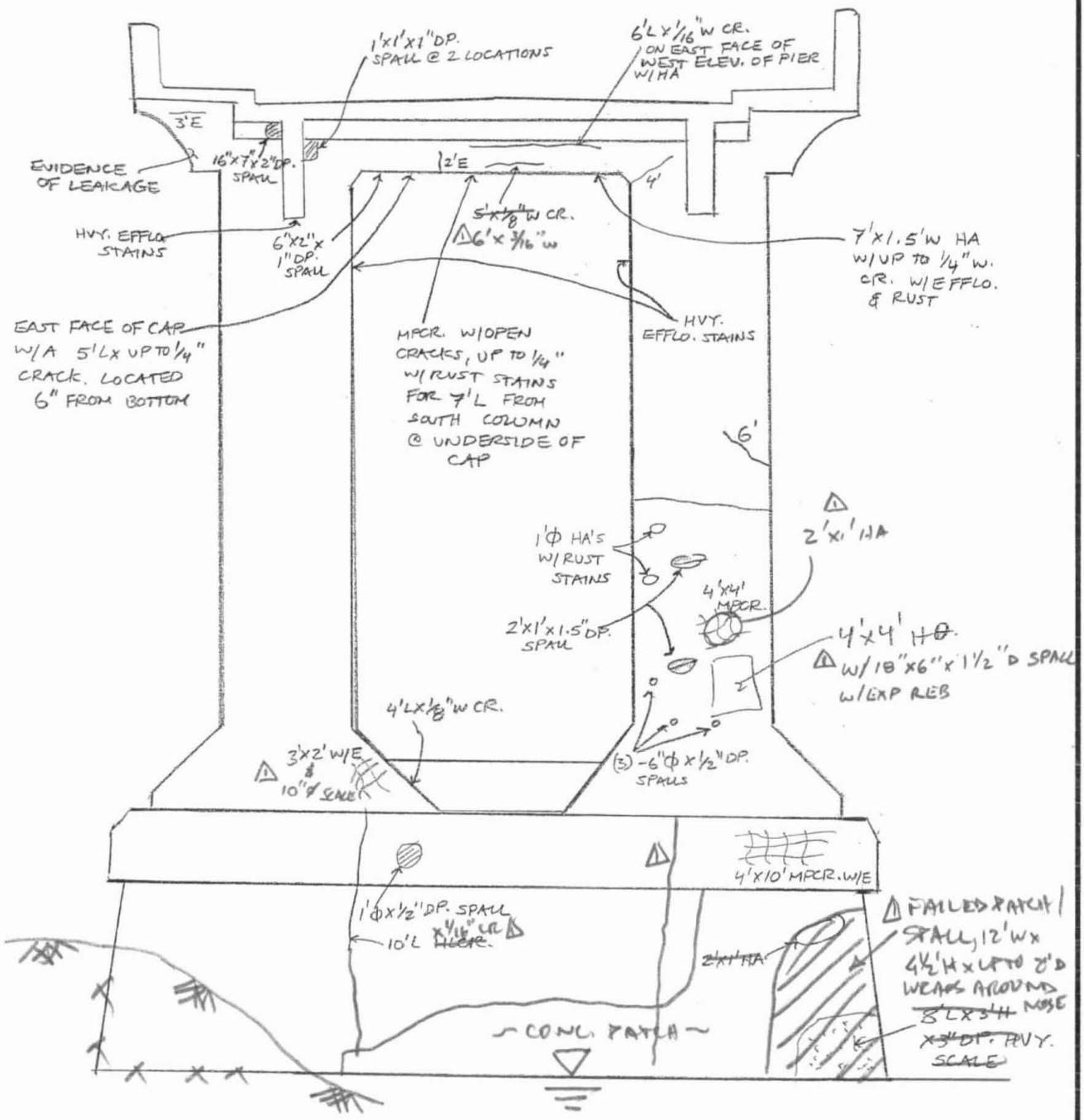
△1 WEST
~~SOUTH~~ ELEVATION OF PIER ~~8~~ 5

REVISION △1	DATE 1/17/07	CREW PG, DS — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/24/05 SHEET ~~79~~ 93
CREW MJW, DAL, PHH



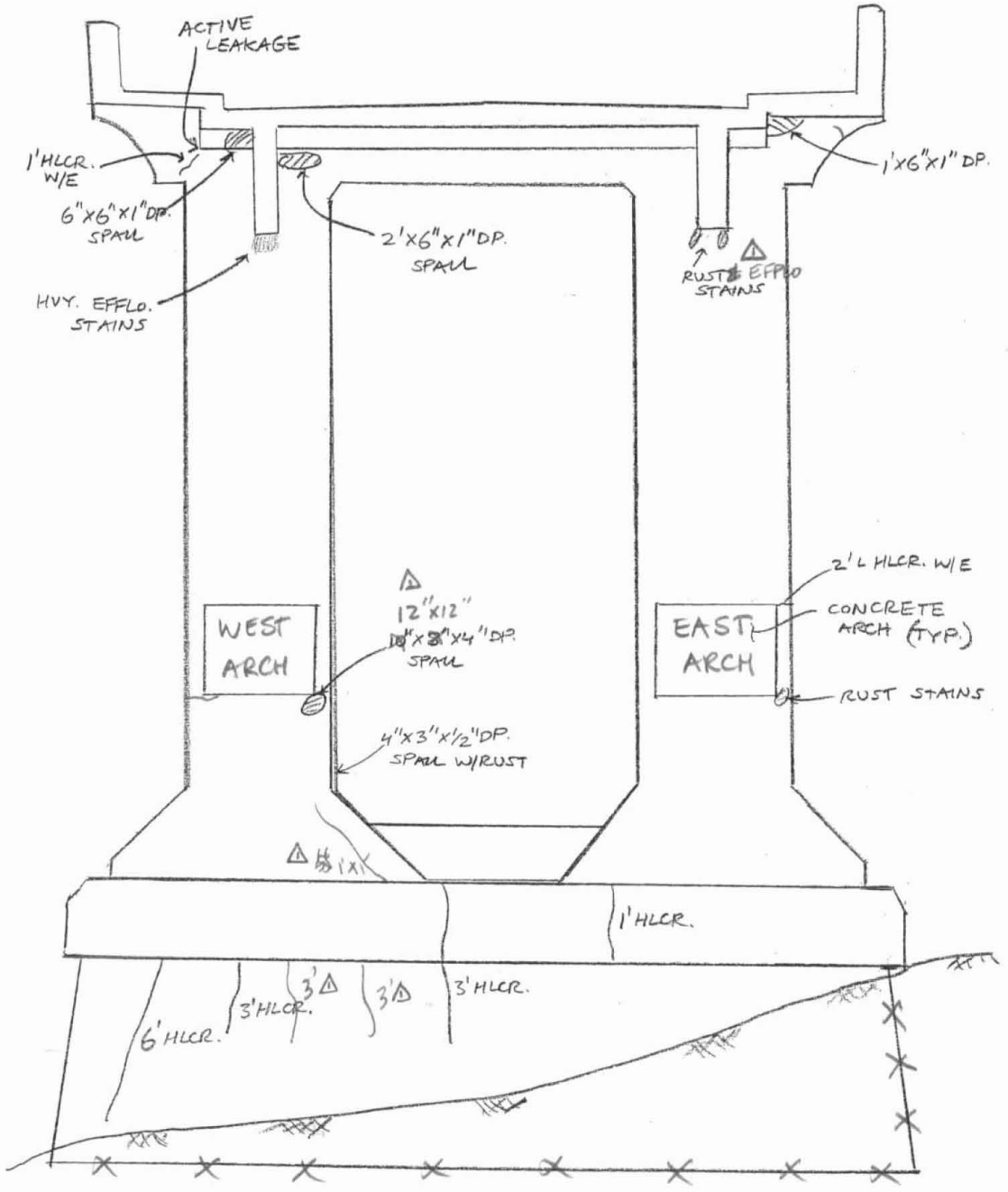
6 NORTH
PIER ~~2~~, ~~WEST~~ ELEVATION
& FB-P6N

REVISION 1	DATE 1/17/07	CREW PG, DS — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET ~~80~~ 94
CREW PHH, DAL, MJW



GENERAL NOTES:

- RANDOM POP OUTS, UP TO 1"ϕ (SHALLOW REBAR)
- GRAFFITI @ RANDOM LOCATIONS.

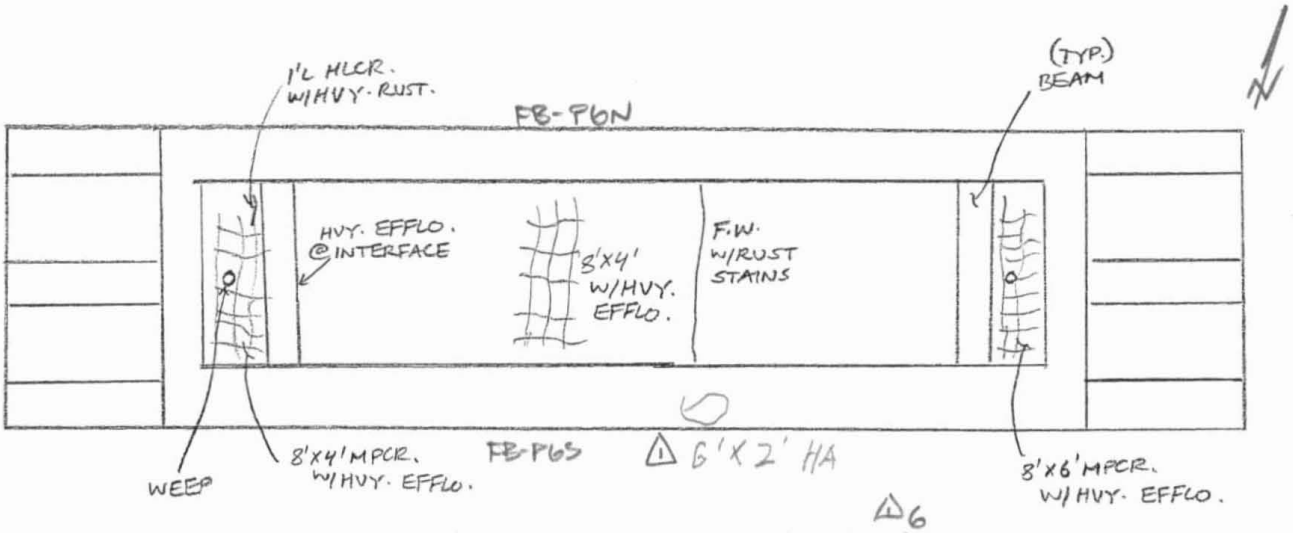
6 SOUTH
PIER ~~X~~, ~~EAST~~ ELEVATION
~~PB~~-P65

REVISION 1	DATE 1/17/07	CREW PG, DS — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

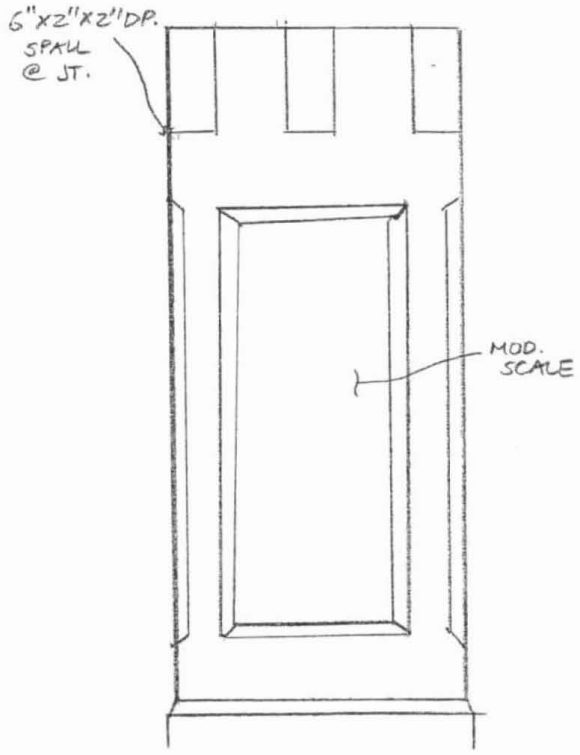
Field Notes

Lichtenstein
Consulting Engineers

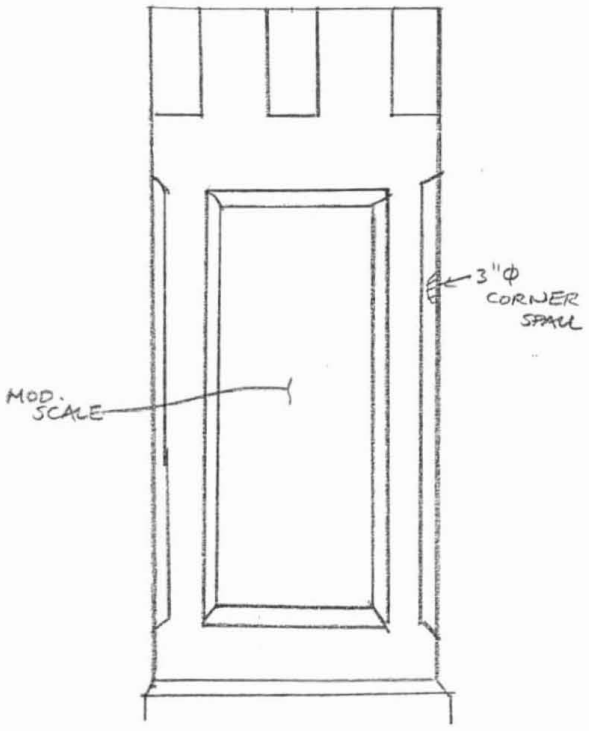
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/24/05 SHEET ~~81~~ 95
CREW MJW, DAL, PHH



UNDERSIDE OF DECK AT PIER ~~X~~ △6



△1 EAST ~~NORTH~~ ELEVATION OF PIER ~~X~~ △6



△1 WEST ~~SOUTH~~ ELEVATION OF PIER ~~X~~ △6

REVISION △1	DATE 1/17/07	CREW PG, DS — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

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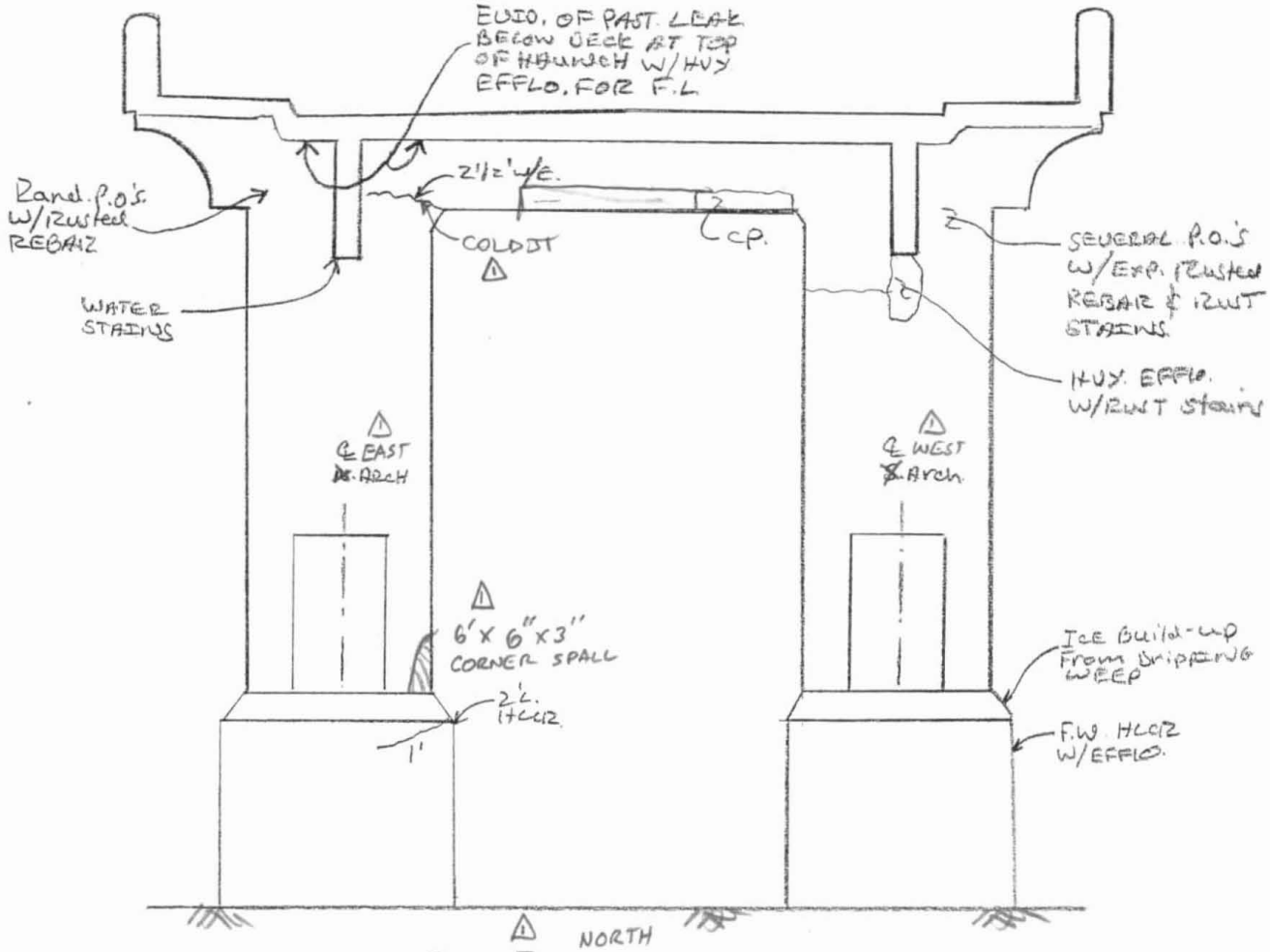
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00605
DATE 1/27/05 SHEET 76 96
CREW RHH, DAL, MJW



GENERAL NOTES:

• ~~~ = HAUNCH, ~~E~~ = W/EFFLO., CP. = Conc. PATCH.

REVISION 1	DATE 1/17/07	CREW PG, DS — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

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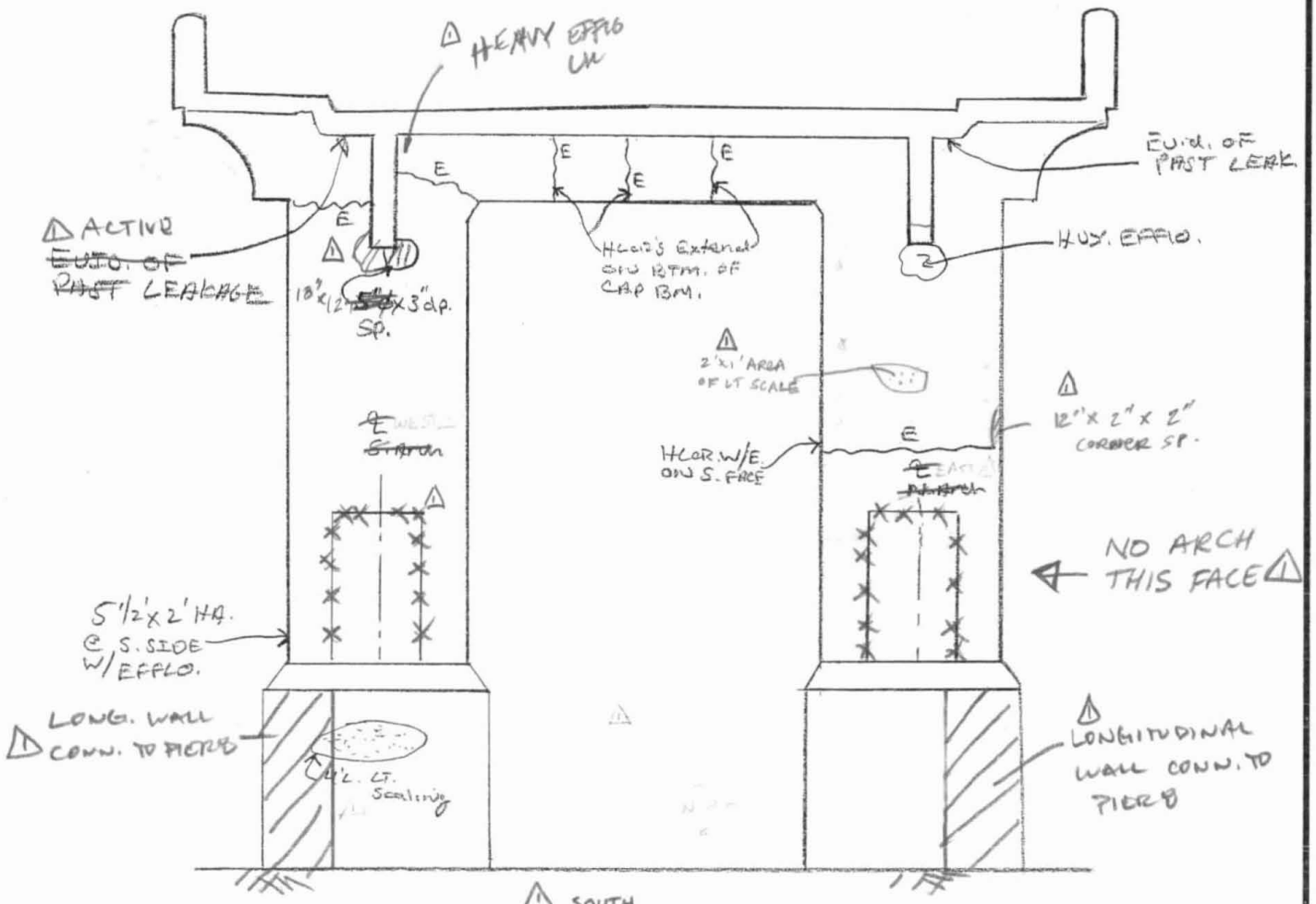
PROJECT NO 2340.00 BRIDGE NO 00605
DATE 1/27/05 SHEET 77 97
CREW RTH, DAL, MJW



SOUTH
PIER 7 - ~~EAST~~ ELEVATION
@ FB-975

GENERAL NOTES:

- ~~~ = HLCR, E = W/EFFLO.
- Rand. AREAS OF LT. Graffiti
- Rand. AREAS OF 8"Ø P.O's W/exp. TIE BARS W/RUST ALONG COL. FACES

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Field Notes

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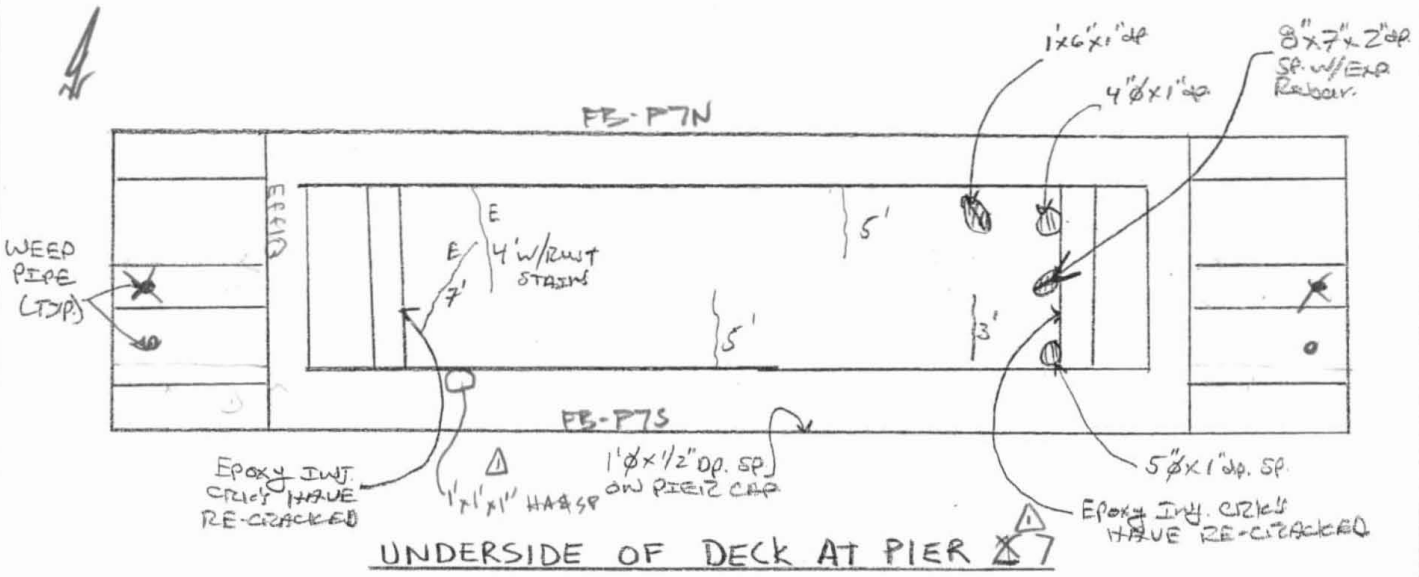
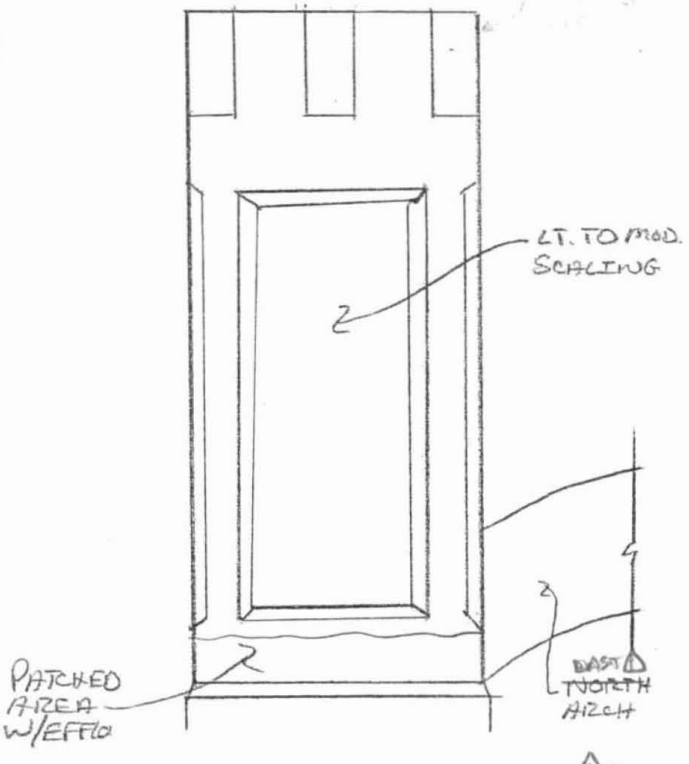
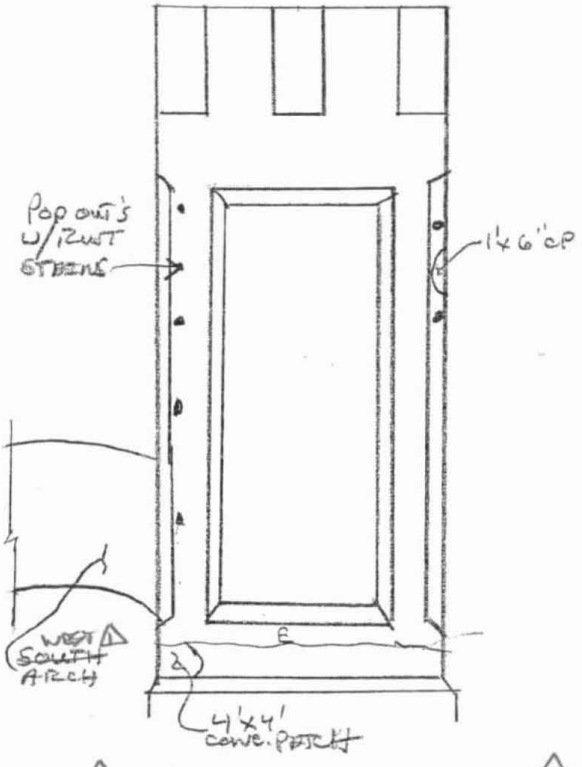
PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 78.98
CREW PHH, DAL, MJW



UNDERSIDE OF DECK AT PIER ~~X~~ 7



EAST ~~NORTH~~ ELEVATION OF PIER ~~X~~ 7



WEST ~~SOUTH~~ ELEVATION OF PIER ~~X~~ 7

REVISION 1	DATE 1/17/07	CREW PG, DS - GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

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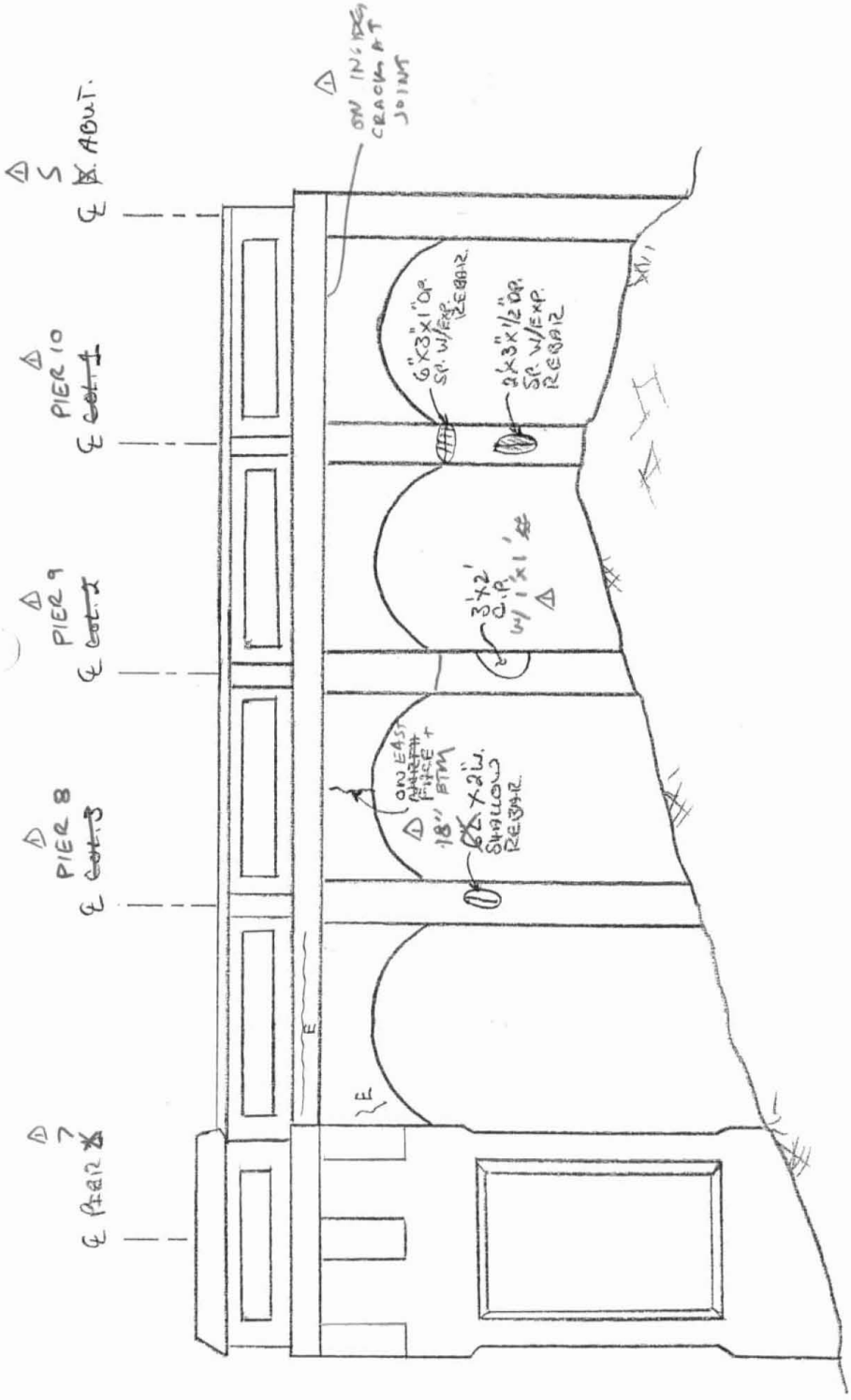
PROJECT NO 2340. BRIDGE NO 00603
DATE 1/27/05 SHEET 8 99
CREW PHH, DAL, MJW



SPANS 8-11 WEST
~~EAST APPROACH~~ (SOUTH ELEVATION)

GENERAL NOTES:
• ~~~ : HEAT, ~~ W/EPOXY.

REVISION 1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

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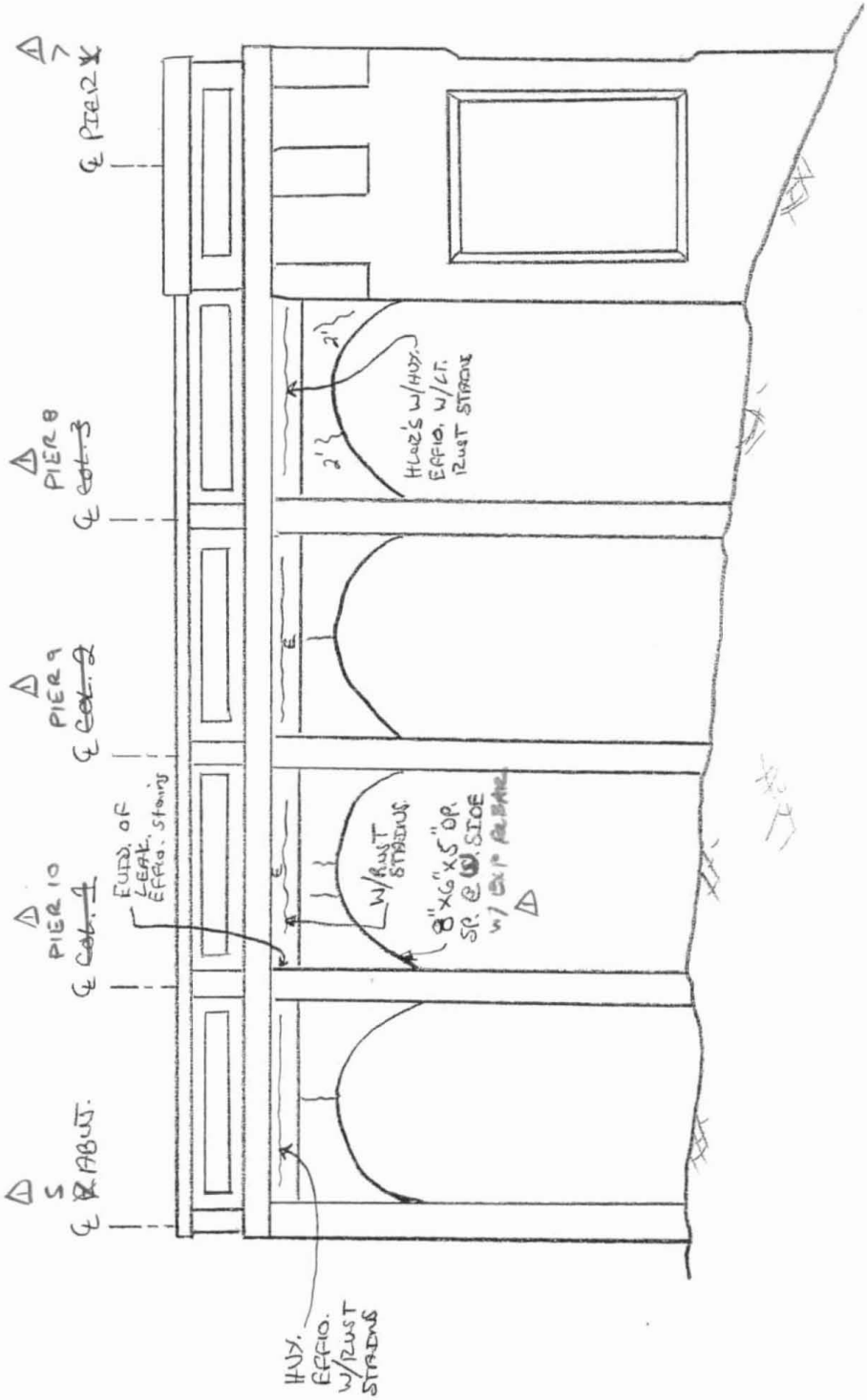
PROJECT NO 2340. BRIDGE NO 00603
DATE 1/27/05 SHEET ~~9~~ 100
CREW MJW, DAL, PHH



SPANS 8-11 EAST
~~EAST APPROACH~~ (~~ABOVE~~ ELEVATION)

GENERAL NOTES:
· ~ : HLOR, ℄ W/EFFIO.

REVISION 1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

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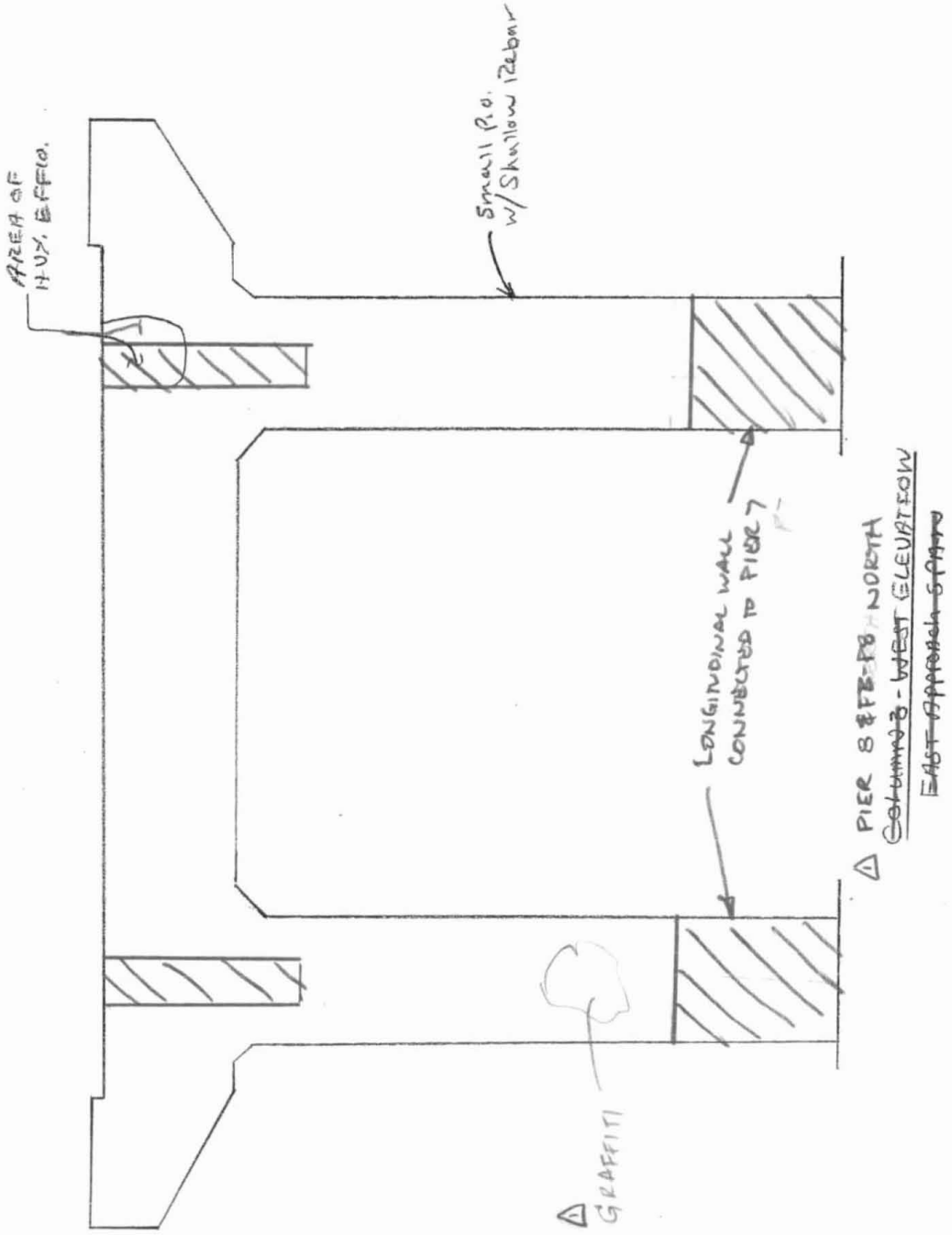
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 32 101
CREW MTW, DAL, PHH



△1 PIER 8 & PB-PB NORTH
~~COLUMN 3 - WEST~~ ELEVATION
~~EAST APPROACH SPAN~~

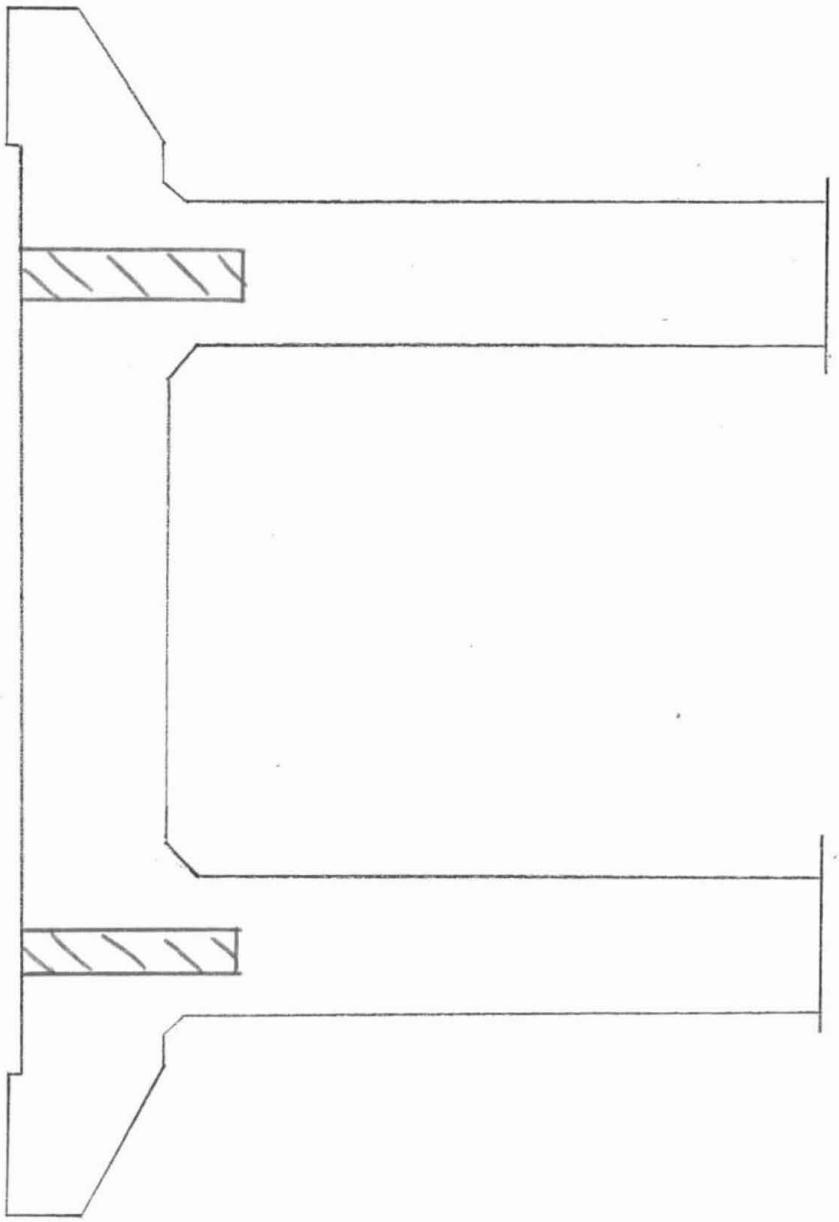
GENERAL NOTES:

REVISION △1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Lichtenstein
Consulting Engineers

Field Notes

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 31'102
CREW MJW, DAL, PHH



△ PIER 8 & PB-PB SOUTH
~~COLUMN 3~~ - EAST ELEVATION
~~EAST APPROACH SPAN~~

GENERAL NOTES:

- NO DEFIENCIES NOTED

REVISION △1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

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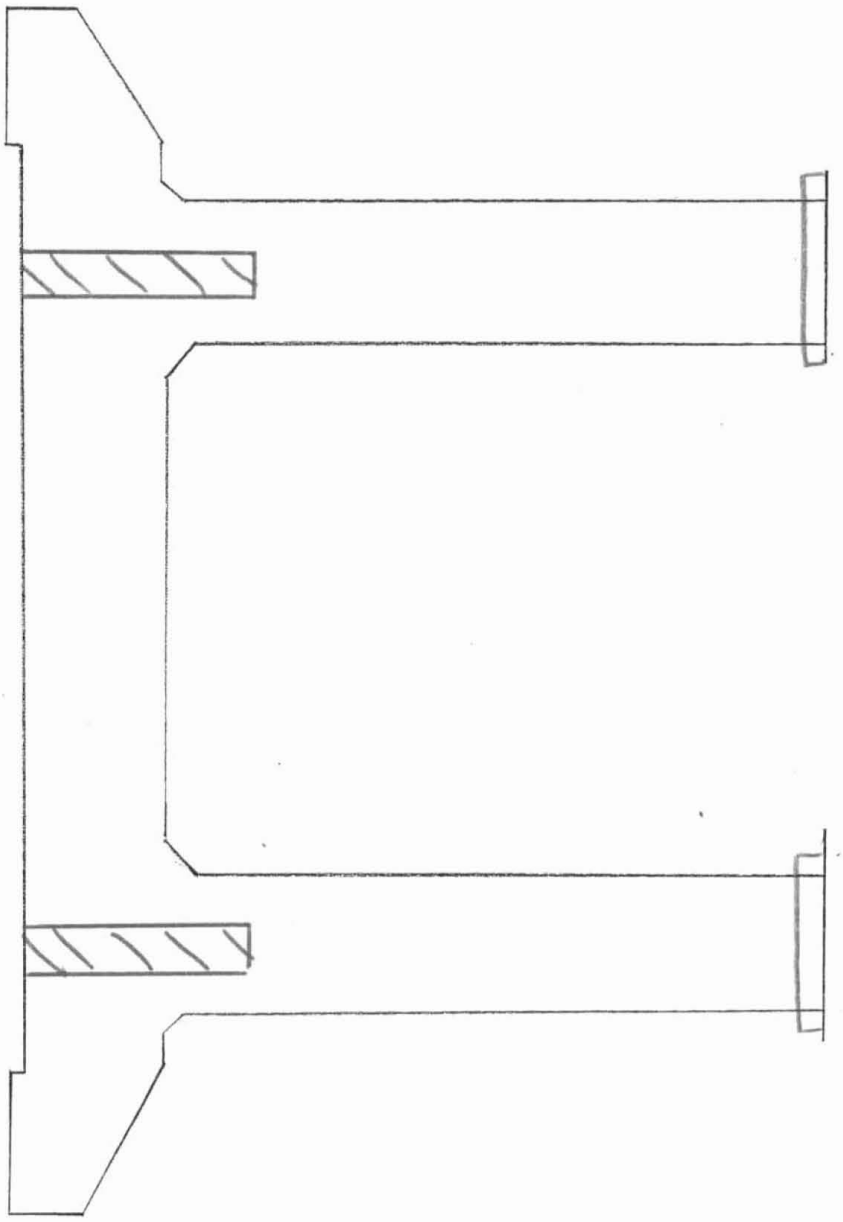
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET 30 103
CREW PHH, DAL, MJW



△ PIER 9 #FB-P9 NORTH
~~COLUMN 2 - WEST~~ ELEVATION
~~EAST APPROACH SPAN~~

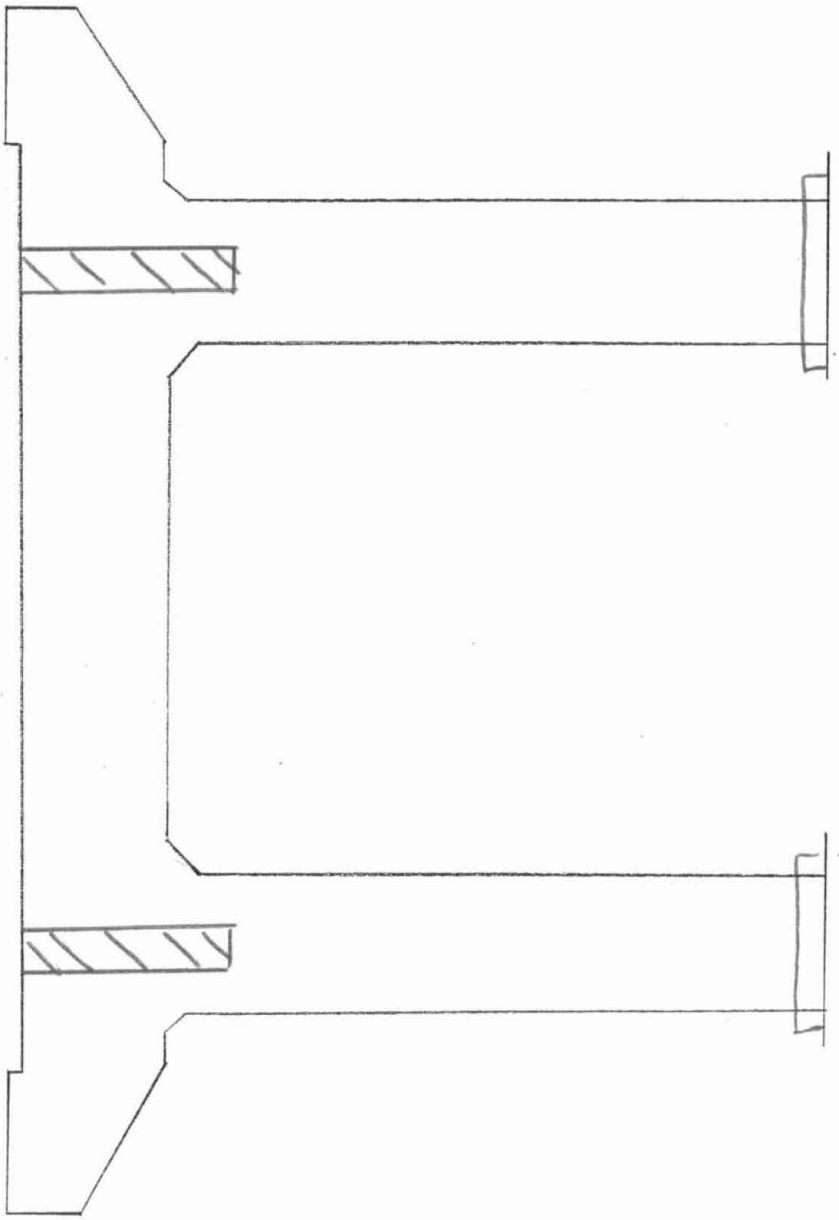
GENERAL NOTES:
• NO DEFIENCIES NOTED

REVISION 1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET ~~27~~ 104
CREW PHH, NAL, MJH



△ PIER 9 & PB-P9 SOUTH
~~COLUMN 2~~ - ~~EAST~~ ELEVATION
~~EAST APPROACH SPAN~~

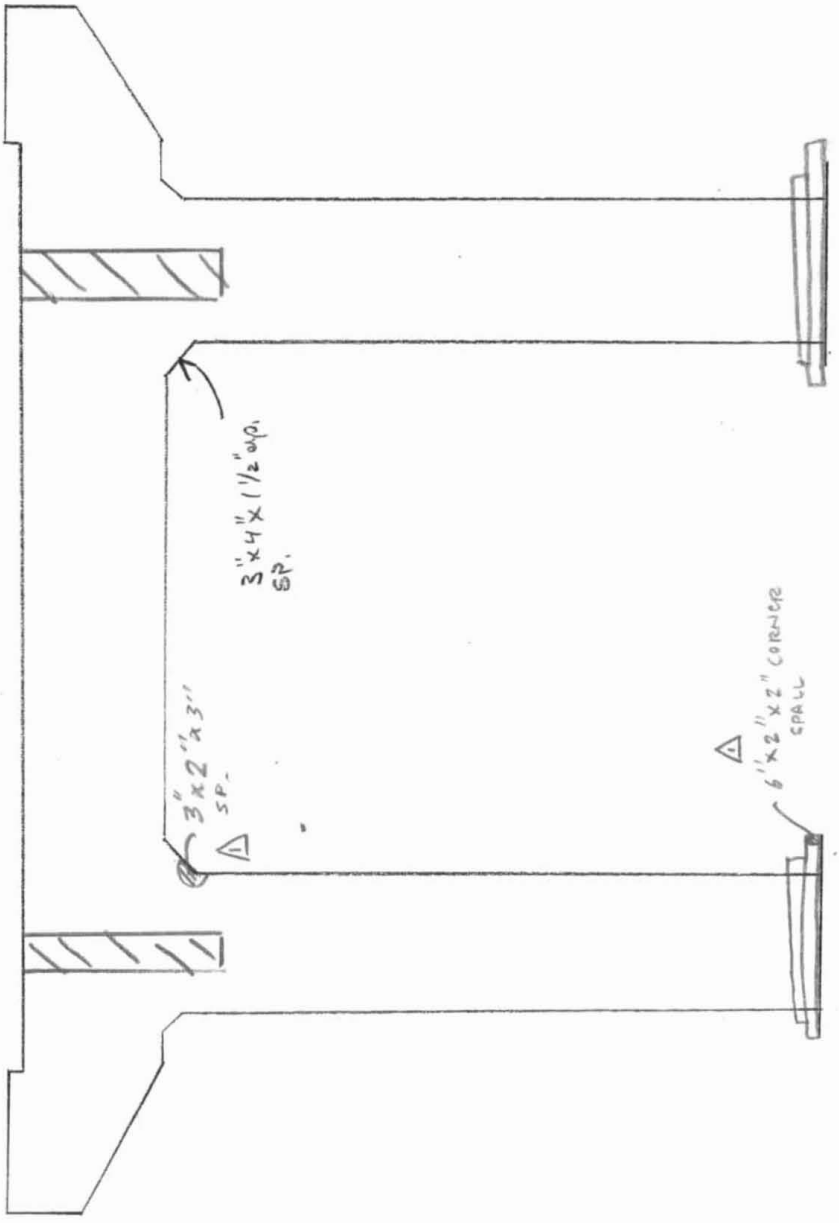
GENERAL NOTES:
- NO DEFIENCIES NOTED

REVISION △1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00 603
DATE 1/27/05 SHEET ~~28~~ 105
CREW PHH, DAL, MJW



△ PIER 10 ℄ PB-PID NOOTH
~~COLUMN 1~~ - ~~WEST~~ ELEVATION
~~EAST APPROACH SPAN~~

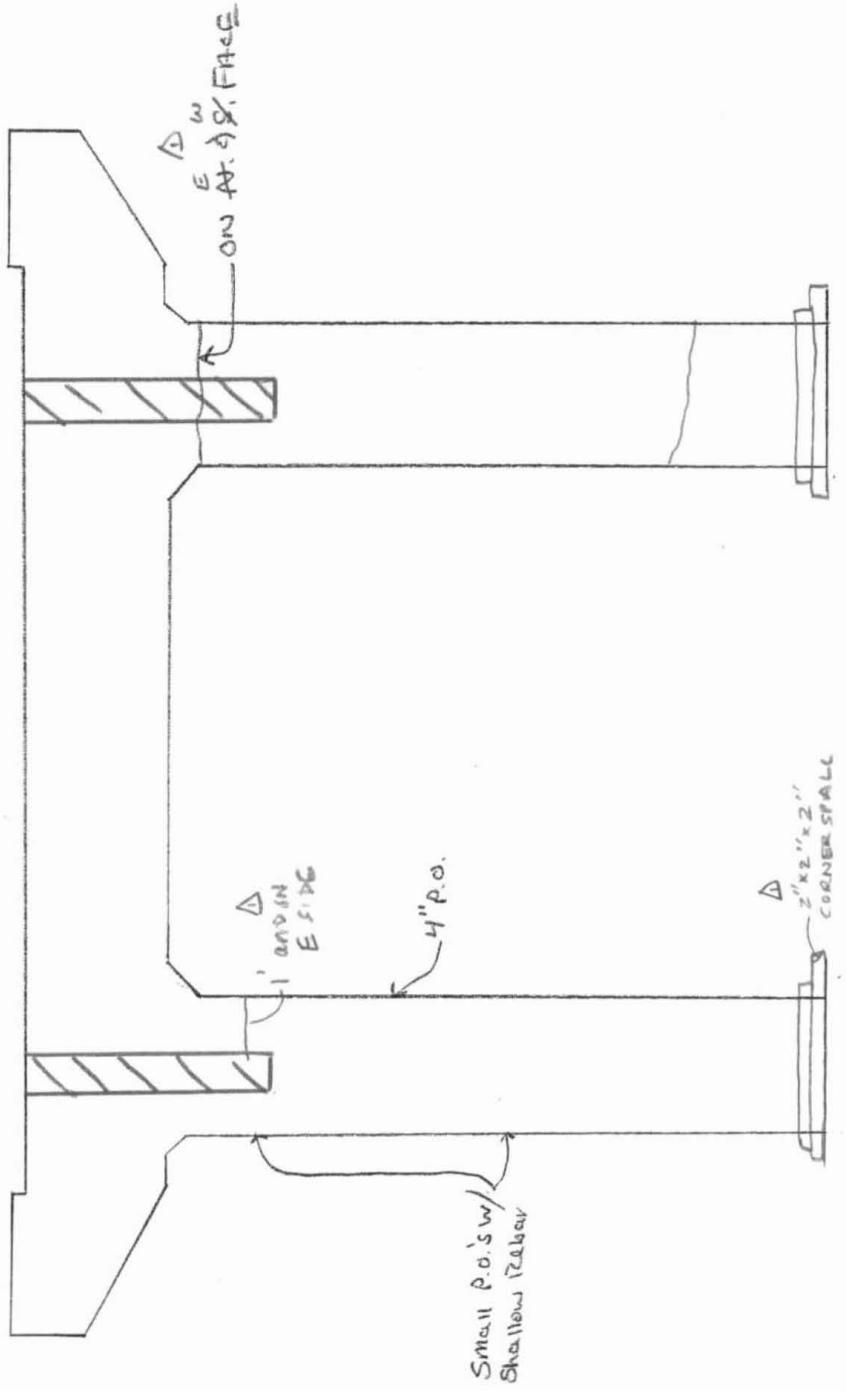
GENERAL NOTES:
△ PIER 10 SOUTH
• SEE ~~COLUMN 1~~ - ~~EAST~~ ELEV.

REVISION 1	DATE 1/16/07	CREW PG, CL, JR — GCS	REVISION 2	DATE	CREW
REVISION 3	DATE	CREW	REVISION 4	DATE	CREW

Field Notes

Lichtenstein
Consulting Engineers

PROJECT NO 2340.00 BRIDGE NO 00603
DATE 1/27/05 SHEET ~~27~~ 106
CREW PHH, DAL, MJW



△1 PIER 10 & PB-PID SOUTH
~~COLUMN~~ - ~~EAST~~ ELEVATION
~~EAST APPROACH SPAN~~

GENERAL NOTES:
- — = HZOR
- EXPOSED RUSHED CHAIRS @ 37M. OF COLUMNS

REVISION △1	DATE 1/16/07	CREW PG, CC, JR — GCS	REVISION △2	DATE	CREW
REVISION △3	DATE	CREW	REVISION △4	DATE	CREW

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System

Image Inventory

Bridge No. 0603 Date 1/16/07

Town: THOMASTON Photographer: PDG

Carried / Crossed: SR 8410 (WATERBURY RD) / NAUGATUCK RIVER & NAUGATUCK RR

Film Frame #	Image Description
1	SP6, E. ARCH @ P6 SPALL
2	P6 CAP, N. ELEV CRACKS
3	SP6 W SPANDREL ARCH BTWN FB24 & P6
4	SP6 COL'S 22 & 23 WEST, S. ELEV W/SPALLS
5,6	SP6 BTWN FB'S 22 & 23 SPALL
7	SP6 BTWN FB'S 21 & 22 EAST OF E. ARCH MISSING WEEP
8	SP6 FB 20 E COL S. FACE SPALLS
9	SP6 W. ARCH @ FB19 SPALL W/ EXP REB
10	SP6 FB15 SPALL
11	SP6 COL 15 E SPALL
12	SP6 E. ARCH BTWN COL'S 10 & 11 E SPALL
13	BRIDGE FROM S. APPROACH
14	SE APP RAILING W/ IMPACT DAMAGE
15	SW APP SIDEWALK SETTLEMENT
16	JT OVER S. ABUT
17	S. APP
18	SOUTH JT OVER P4
19	NORTH JT OVER P4
20	SP5 E. SCUPPER @ P4 SCUPPER CLEARED
21	SP5 E PPT JCT BOX COVER REPLACED
22	S JT OVER P5
23	N JT OVER P5
24	SP5 HP TOD LKG S
25	N. APPROACH

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System

Image Inventory

Bridge No. 0603 Date 1/18/07

Town: THOMASTON Photographer: DG

Carried / Crossed: SR 8/18 (WATERBURY RD) / NAUGATUCK RIVER & NAUGATUCK RR

Film Frame #	Image Description
26	BIN
27	BRIDGE FROM N. APP
28	N JT OVER P5
29	S JT OVER P5
30	SP7 BWN PBS 30 & 31 SPALLS IN DECK
31	S. ABUT
32	TYP U-SIDE SPS 8-11 (SP'S 1-4 SIMILAR)
33	TYP U-SIDE SP7 (SP'S 5 & 6 SIMILAR)
34	SP7 SW SUPPOR DRAIN REPAIRED
35	SP9 W SIDE WEEP EXTENDED
36	E. ELEV SP6
37	E. ~~ELEV~~ SPS 5-7
38	W. ELEV SPS 6 & 7
39	W. ELEV SP'S 8-11
40	PIERS 8-10
41	SE CORNER MBR OVERLAPPED INCORRECTLY
42	UPSTREAM CHANNEL FROM BRIDGE
43	DOWNSTREAM CHANNEL FROM BRIDGE
44	E ELEV SP'S 1-4
45	N. ABUT EXP FT G?
46	N. ABUT
47	SP7 E. PPT LIGHT STD TWISTED & GAP UNDER BASE
48	SW WW CAP SHIFTED FORWARD

PHOTO LOG

Form BRI-13, Rev. 9/97

Bridge Information System

Image Inventory

Bridge No. 0603 Date 1/18/7

Town: THOMASTON Photographer: CL

Carried / Crossed: SR 848 (WATERBURY RD) / NAUGATUCK RIVER & NAUGATUCK RR

Film Frame #	Image Description
49	SP5 @ P5, W SIDE OF W. SPANDREL ARCH. CRKS + SP IN ARCH
50	SP5 NEAR COLUMN 8, E ARCH, W. SIDE, SP W/ REBAR
51	SP5 ON W ARCH, E SIDE, BTWN COLUMN 6 + 7, SP W/ REBAR
52, 53	SP5, N FACE OF FB/ COLUMN 1, SPALL W/ REBAR - 100% LOSS

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Bridge No.	00603	**Town:**	Thomaston	**Inspected by:**	P. Goodwin
Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

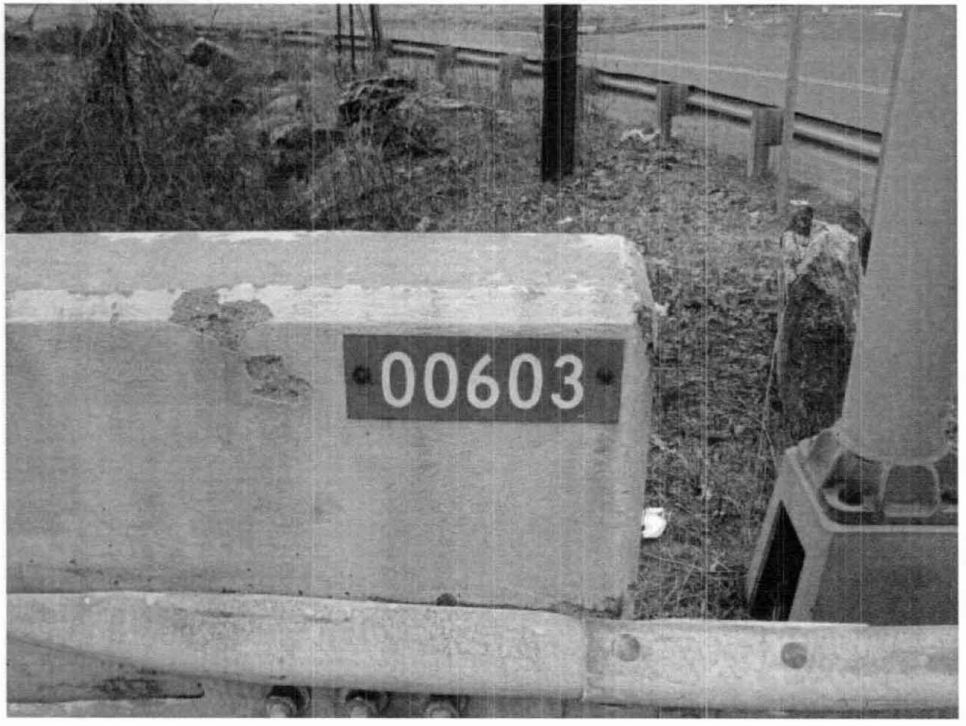

Photo #1:
Description: Bridge identification number. Note: light standard (not part of structure) at the approach is missing handhole cover.

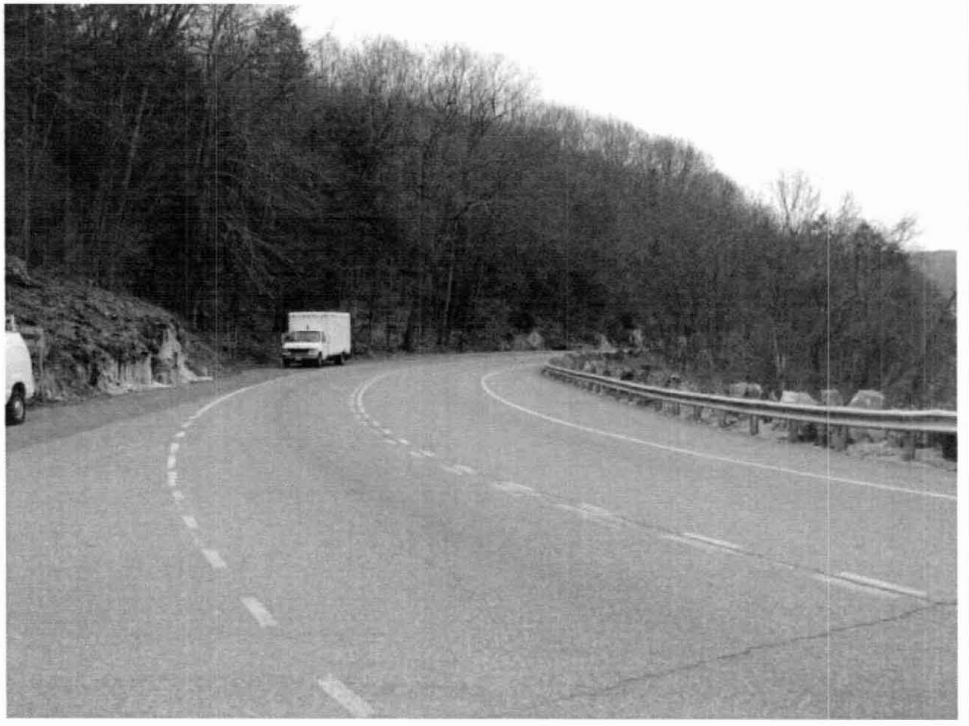

Photo #2:
Description: South approach from bridge.

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Bridge No.	00603	**Town:**	Thomaston	**Inspected by:**	P. Goodwin
Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

Photo #3:
Description: Bridge from south approach.

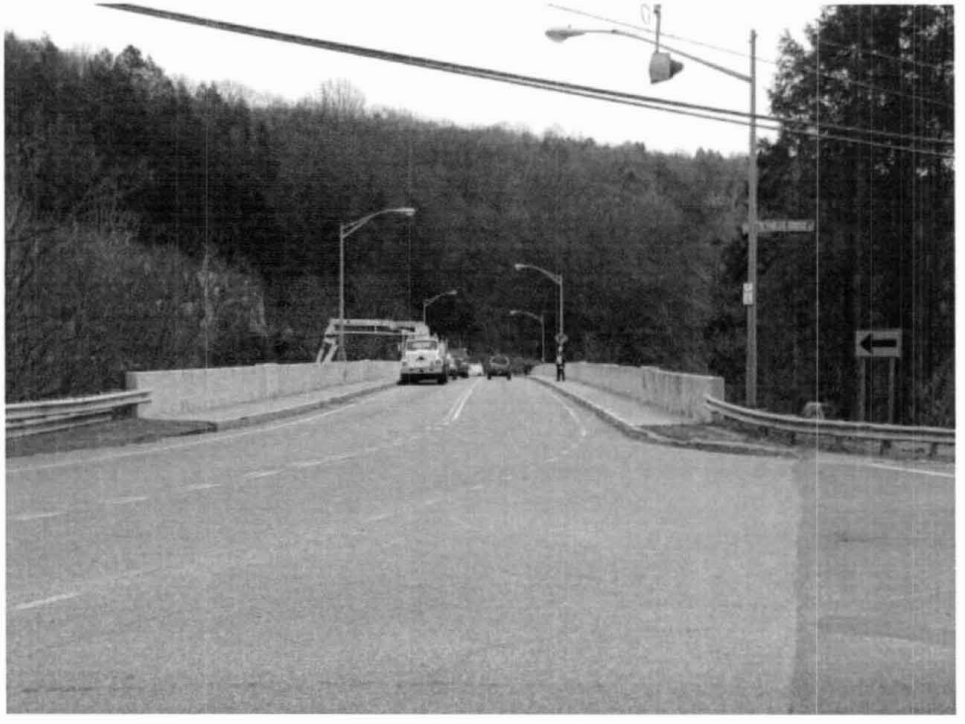

Photo #4:
Description: Bridge from north approach.

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Bridge No.	00603	**Town:**	Thomaston	**Inspected by:**	P. Goodwin
Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

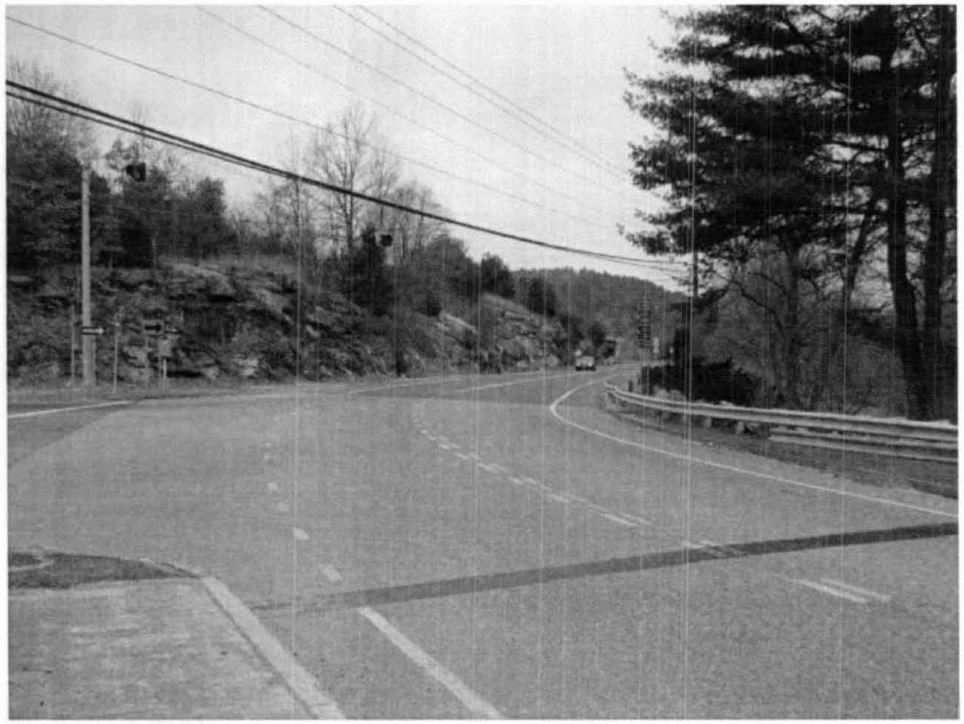

Photo #5:
Description: North approach from bridge.

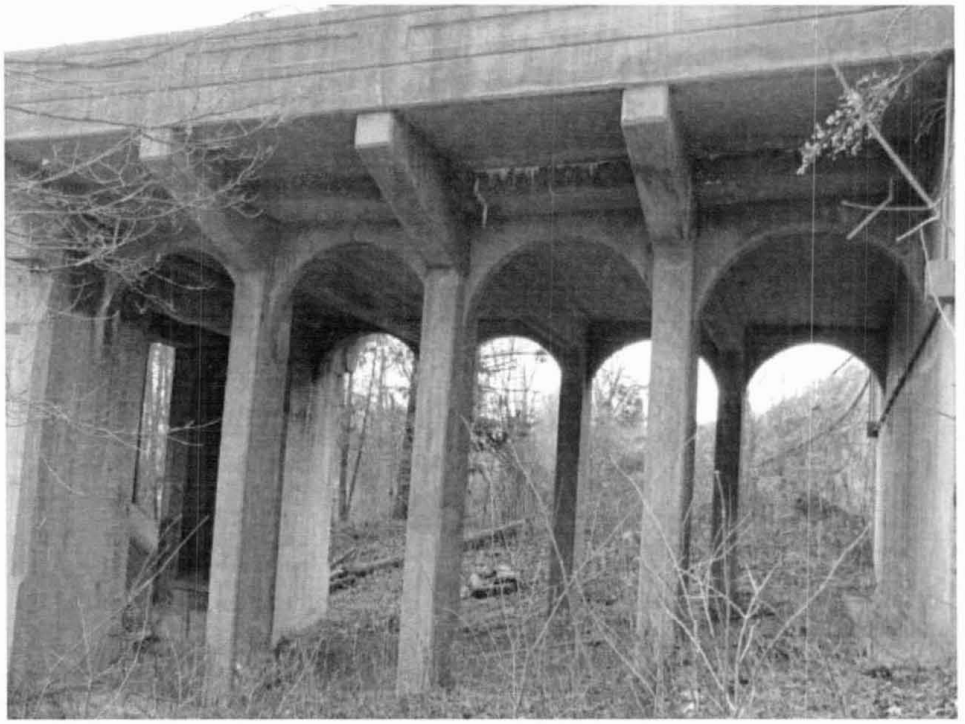

Photo #6:
Description: East elevation, spans 1-4.

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Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

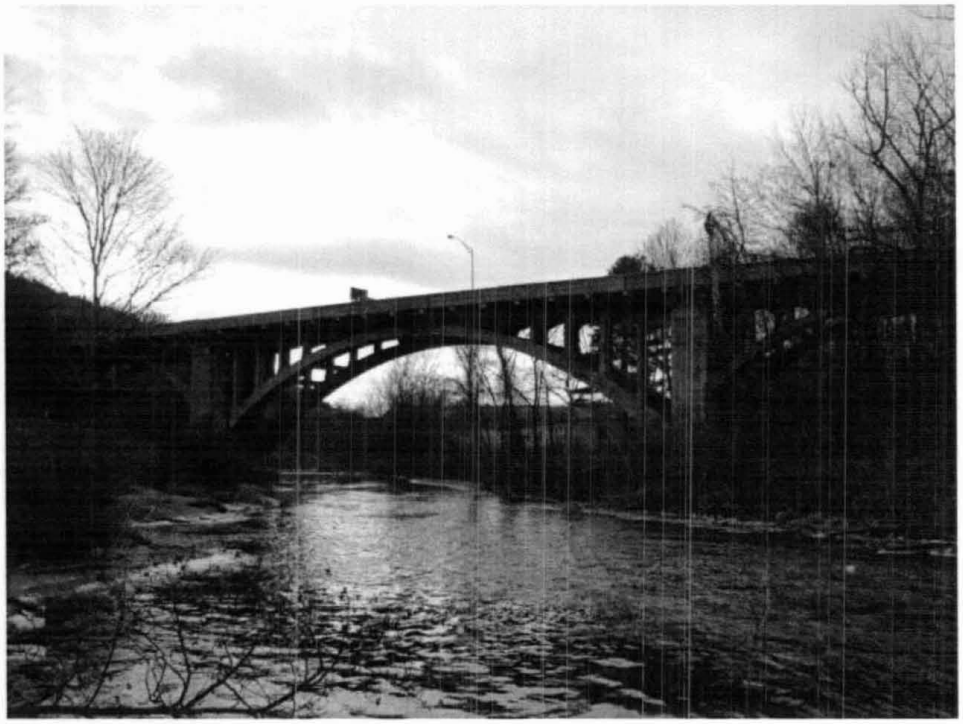

Photo #7:
Description: East elevation, spans 5-7.

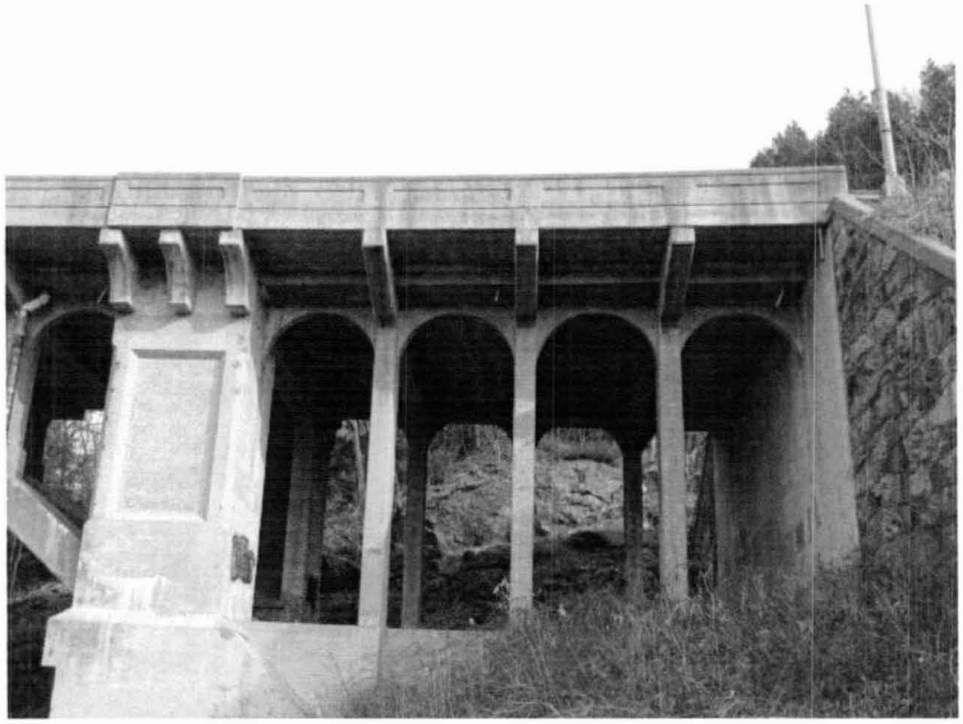

Photo #8:
Description: West elevation, spans 8-11.

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Bridge No.	00603	**Town:**	Thomaston	**Inspected by:**	P. Goodwin
Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

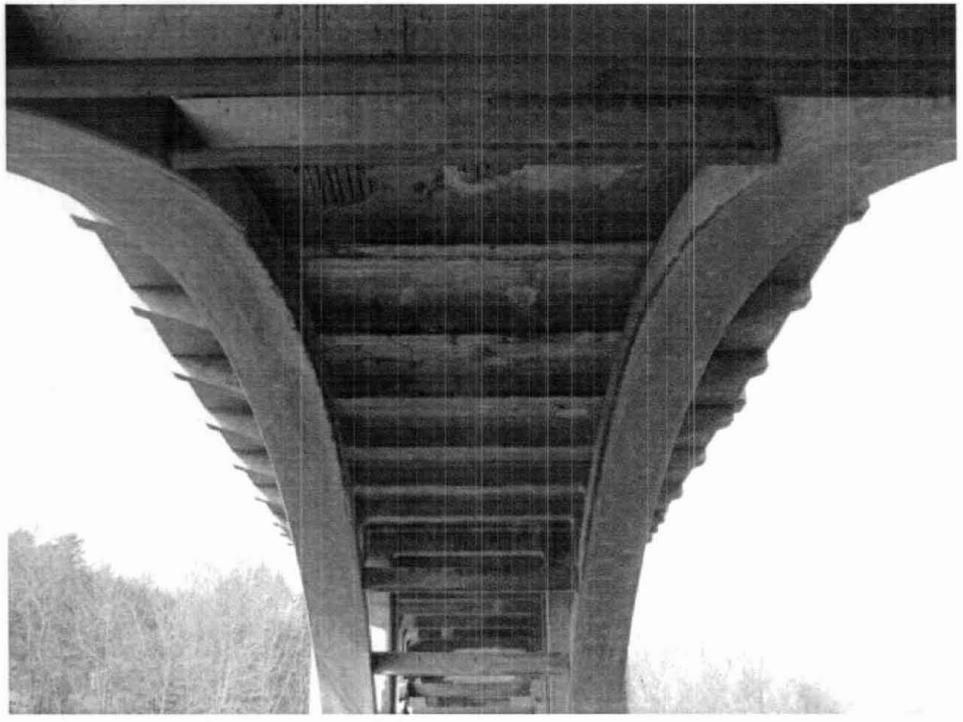

Photo #9:
Description: Typical underside, span 7 (spans 5 & 6 similar).

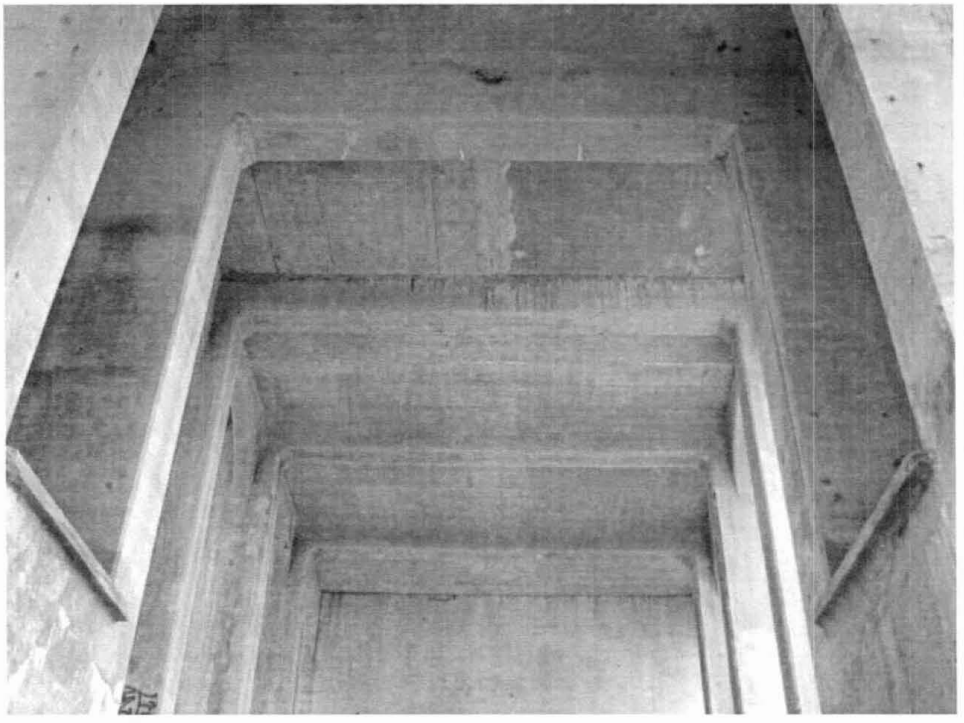

Photo #10:
Description: Typical underside, spans 8-11 (spans 1-4 similar).

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Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

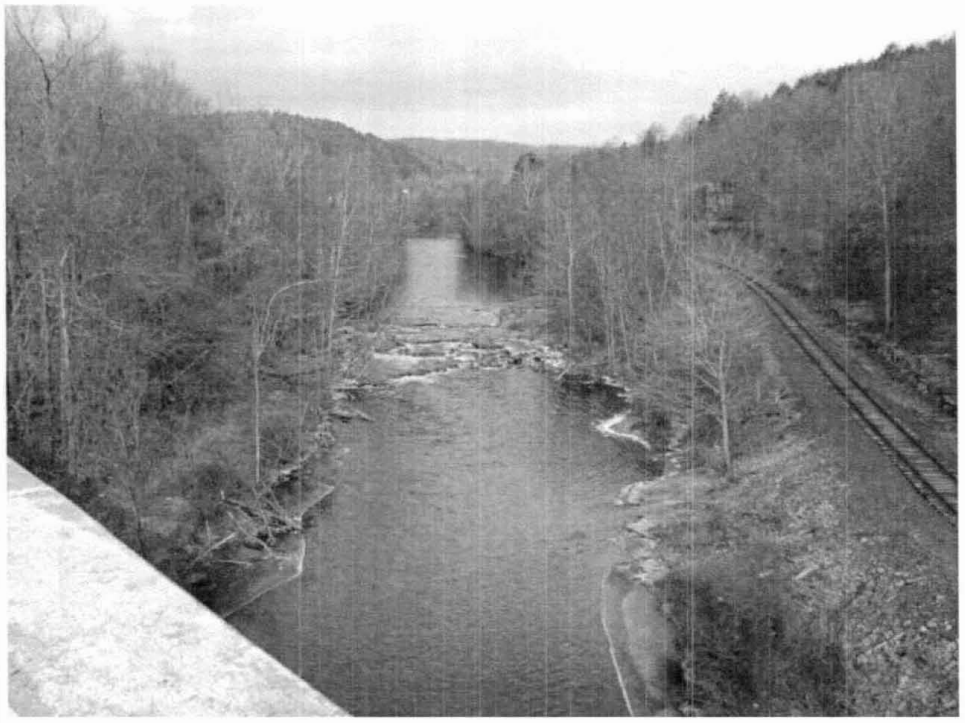

Photo #11:
Description: Upstream channel from bridge.

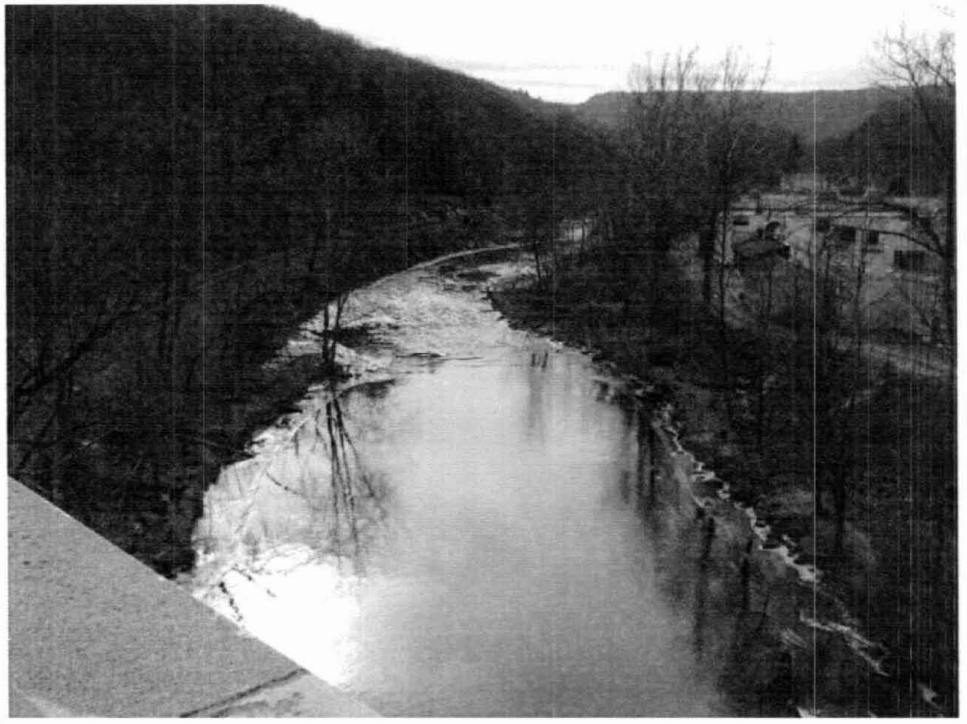

Photo #12:
Description: Downstream channel from bridge.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

Photo #13:
Description: Span 5, looking south. Typical top of deck.

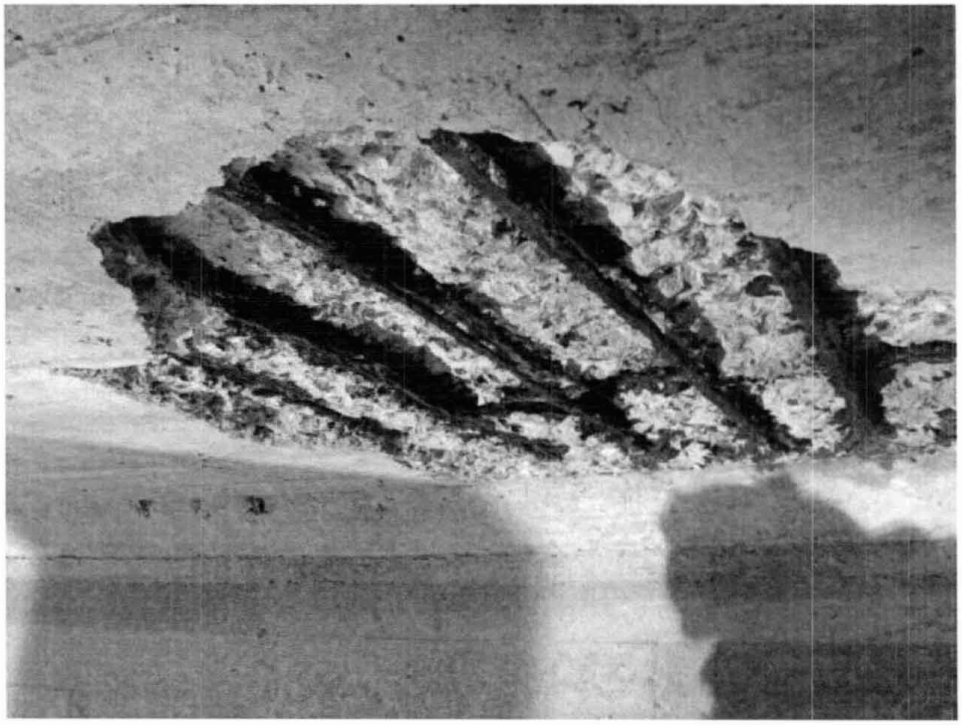

Photo #14:
Description: Span 6 between floorbeams 22 & 23. Spall in deck underside with extensive section loss on exposed rebar.

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Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

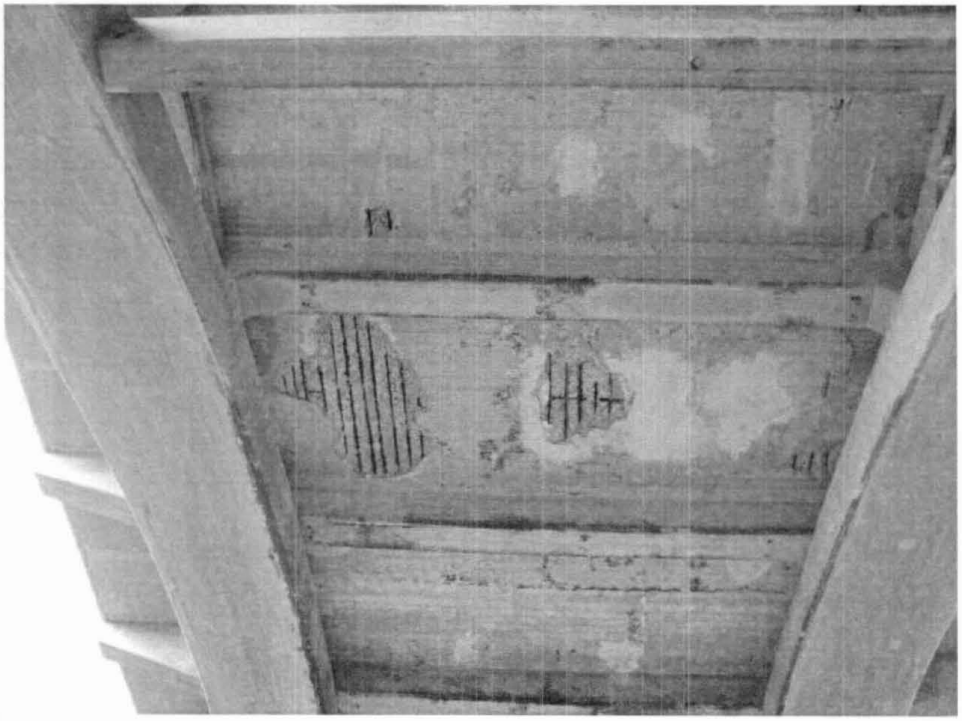

Photo #15:
Description: Span 7 between floorbeams 30 & 31. Spalls in deck underside with exposed reinforcing.

Photo #16:
Description: Span 5 at pier 4. East scupper has been cleaned of debris since the previous inspection.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

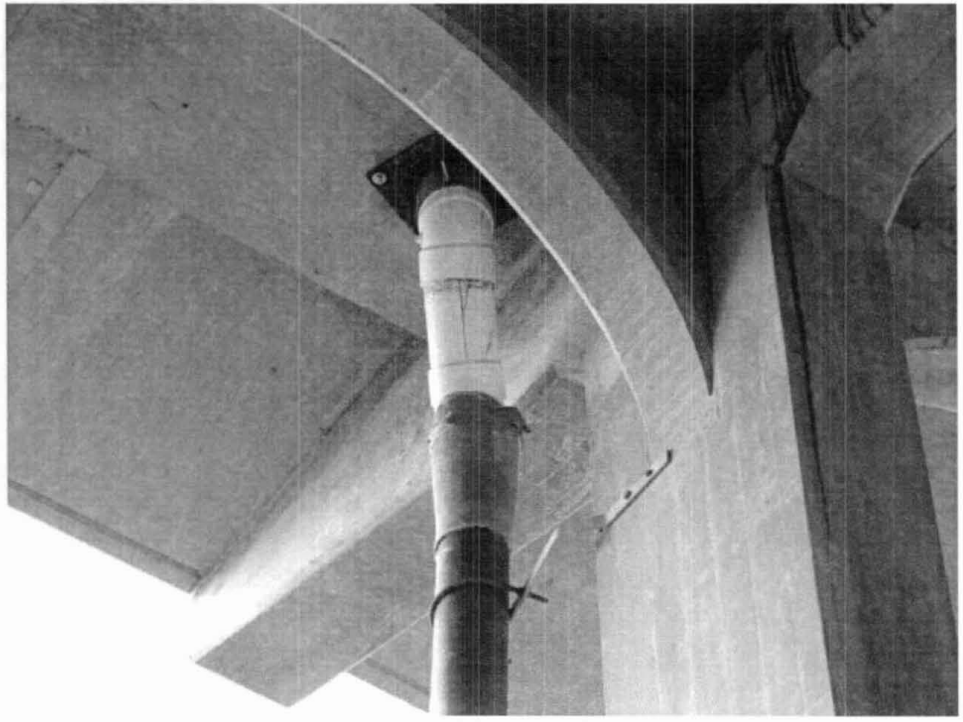

Photo #17:
Description: Span 7, southwest scupper downspout has been repaired.

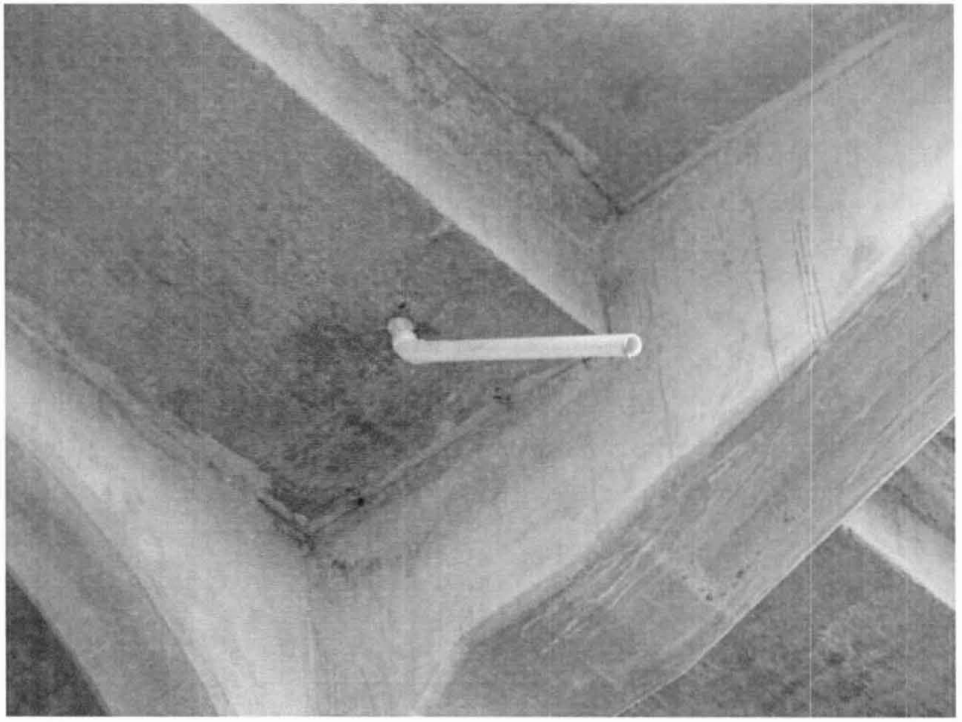

Photo #18:
Description: Span 9, west side weep has been extended.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

Photo #19:
Description: Span 6 between floorbeams 21 & 22. East weep is missing extension and drains onto superstructure below.

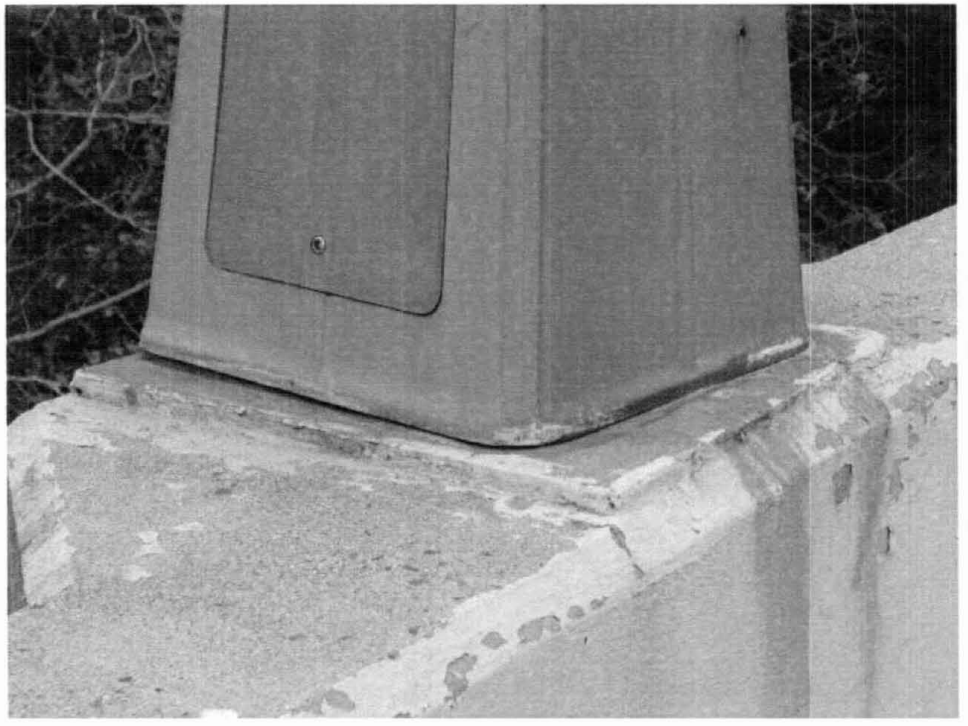

Photo #20:
Description: Span 7, east parapet light standard is twisted with a gap at the base.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

Photo #21:
Description: Span 7, east parapet. Junction box cover has been replaced.

Photo #22:
Description: North joint over pier 5. Full width adhesion crack along south edge.

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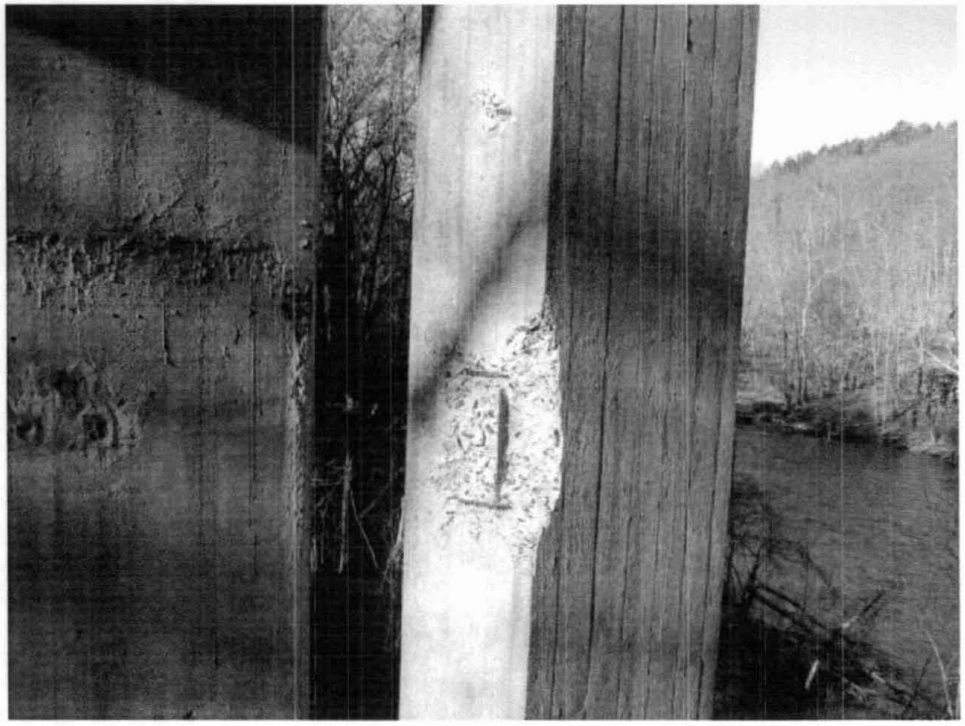

Photo #23:
Description: Span 6, column 10 east. Spall with exposed rebar in column.

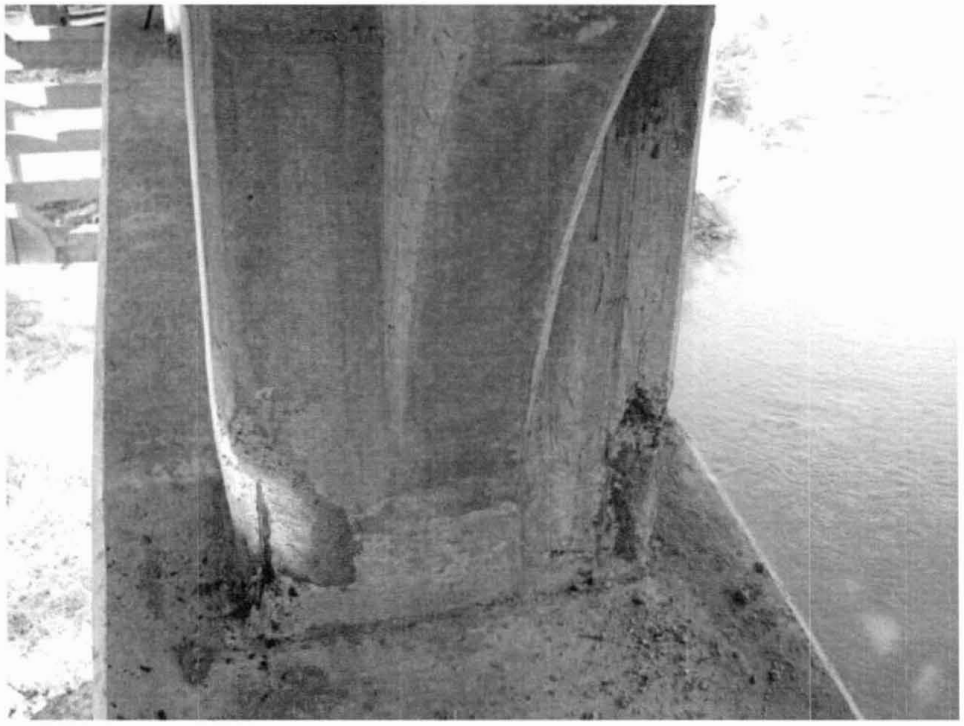

Photo #24:
Description: Span 6, column 20 east. Spalls with exposed rebar in column at interface with arch.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

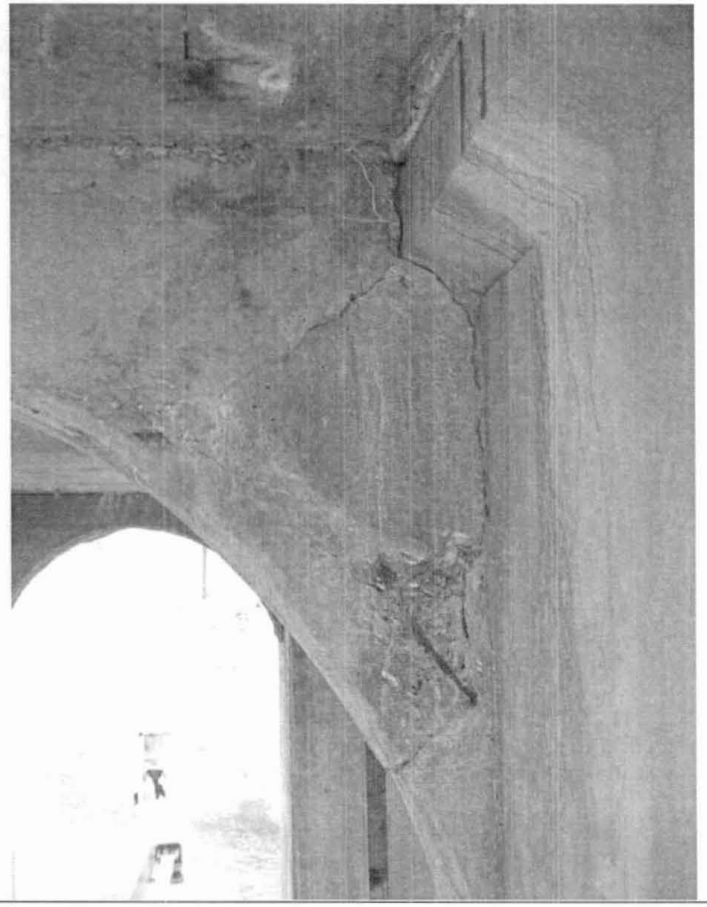

Photo #25:
Description: Span 5 at pier 5, west spandrel arch, west side. Cracks and spalls in spandrel arch.

Photo #26:
Description: Span 5, west (downstream) arch, east side between columns 6 & 7. Spall with exposed rebar in arch rib.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

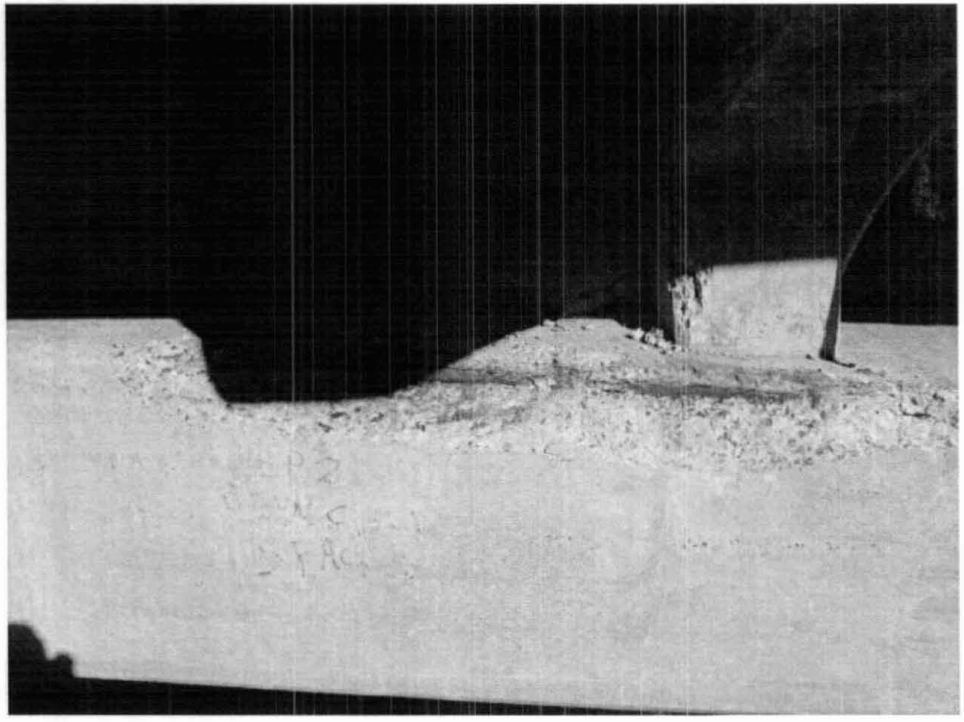

Photo #27:
Description: Span 6, west (downstream) arch at column 19. Spall with exposed rebar in arch rib.

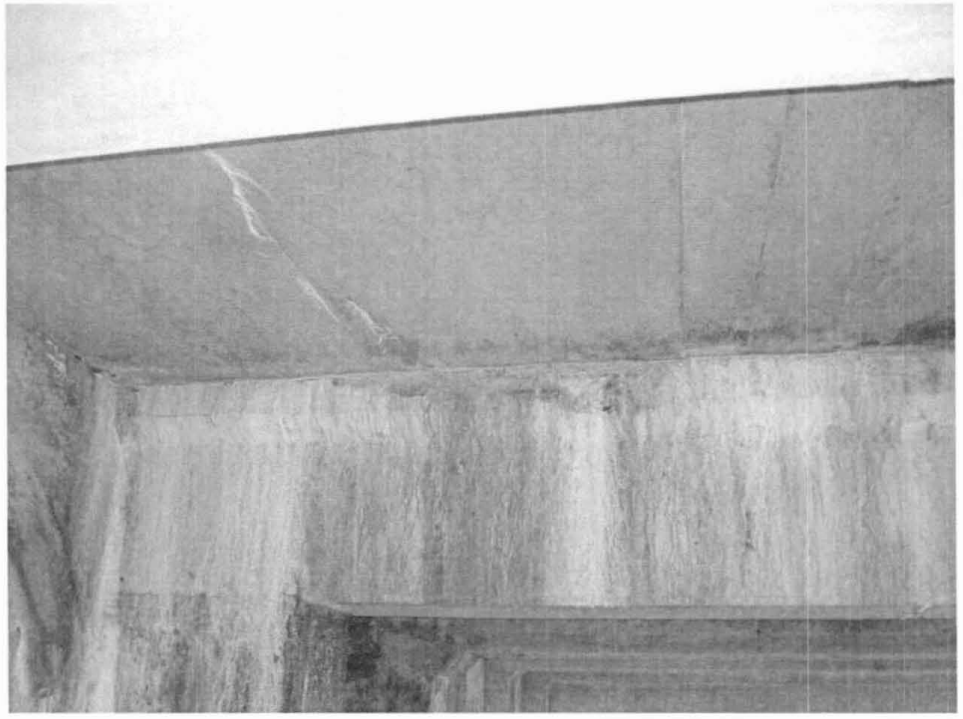

Photo #28:
Description: Span 5, floorbeam 1, north side. Heavy efflorescence leakage on face and spall with exposed rebar.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

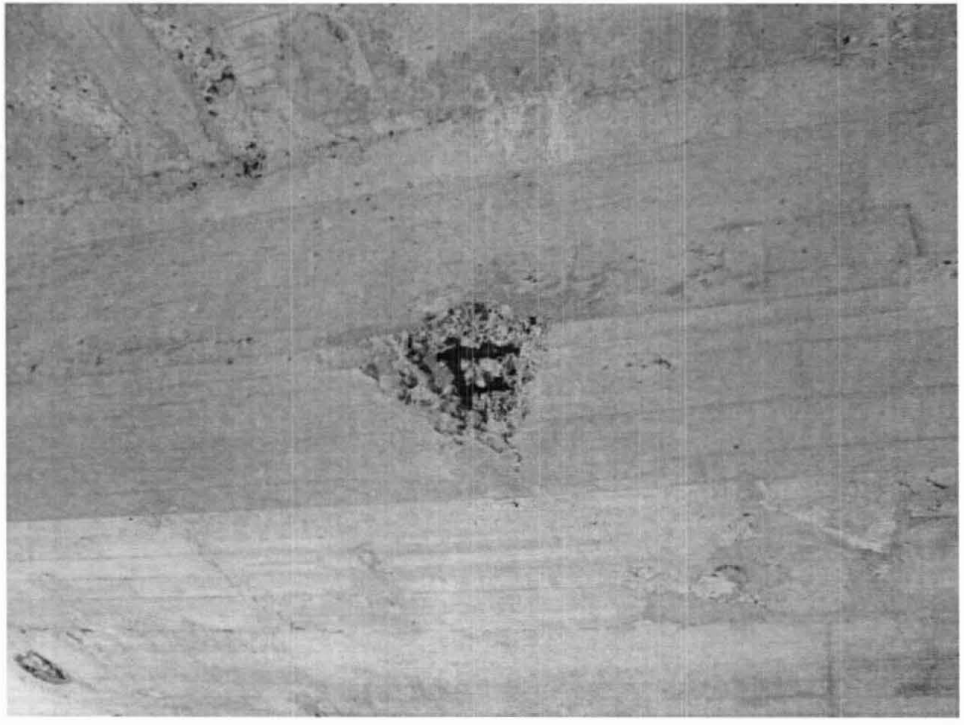

Photo #29:
Description: Span 6, floorbeam 15. Spall with exposed rebar in underside near midspan.

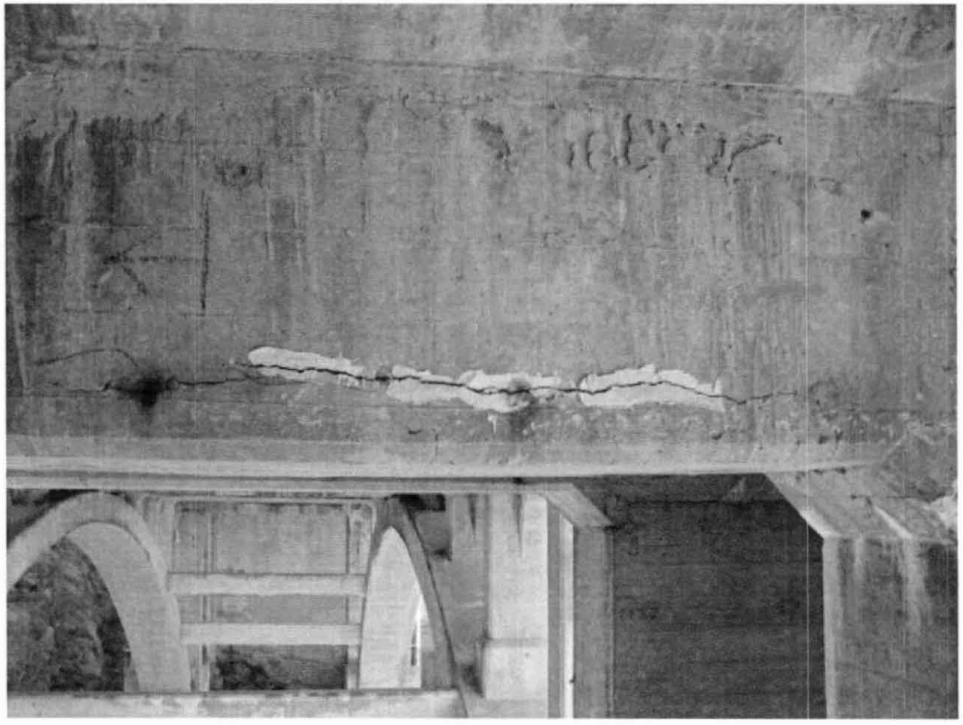

Photo #30:
Description: Floorbeam P6N, north elevation. Horizontal crack near bottom of floorbeam.

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Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

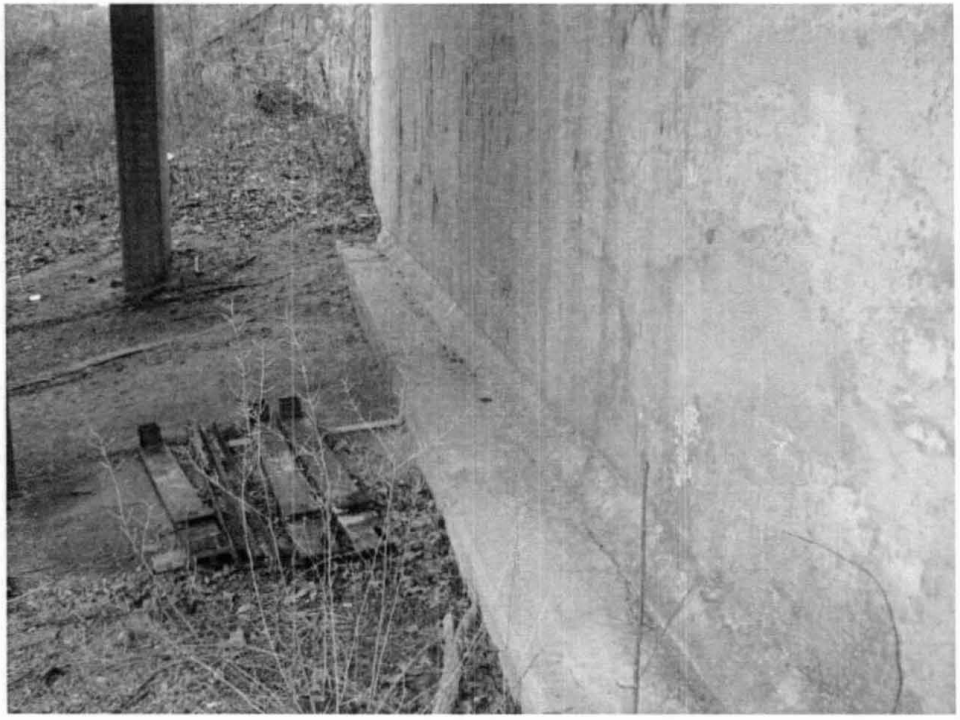

Photo #31:
Description: North abutment. Exposed footing for full width. Note: abutment is founded on bedrock.

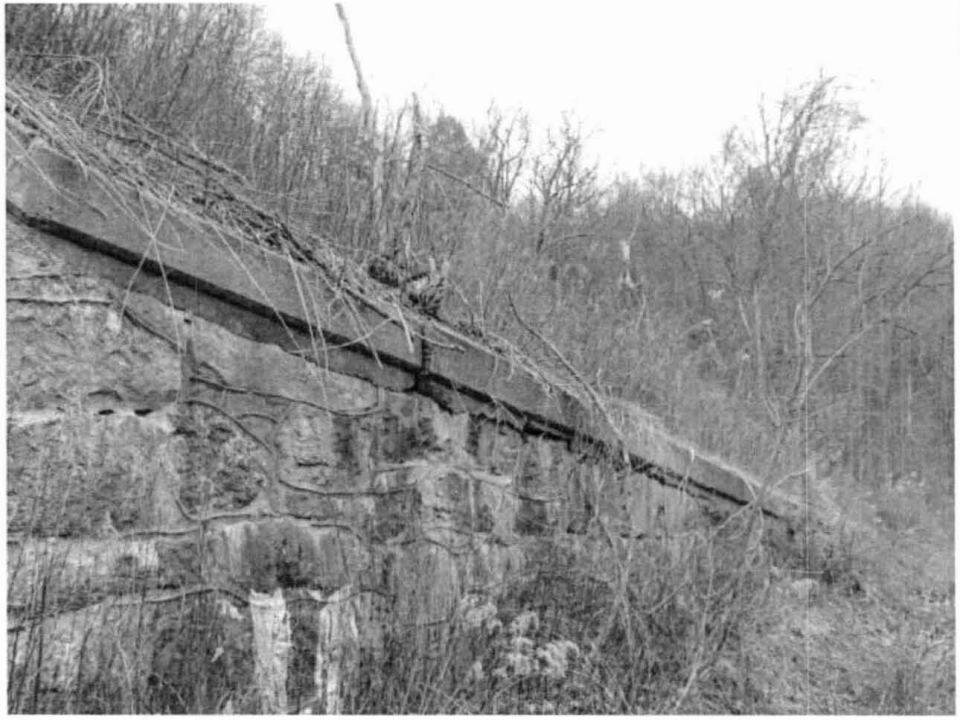

Photo #32:
Description: Southwest wingwall near west end. Capstone is shifted forward from vegetation root growth.

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Bridge No.	00603	**Town:**	Thomaston	**Inspected by:**	P. Goodwin
Feature Carried:	SR 848 (Waterbury Road)			**Inspected by:**	D. Shi
Feature Crossed:	Naugatuck River & Naugatuck Railroad			**Date Inspected:**	1/16/07

Photo #33:
Description: Southeast approach railing has impact damage with bent and disconnected posts.

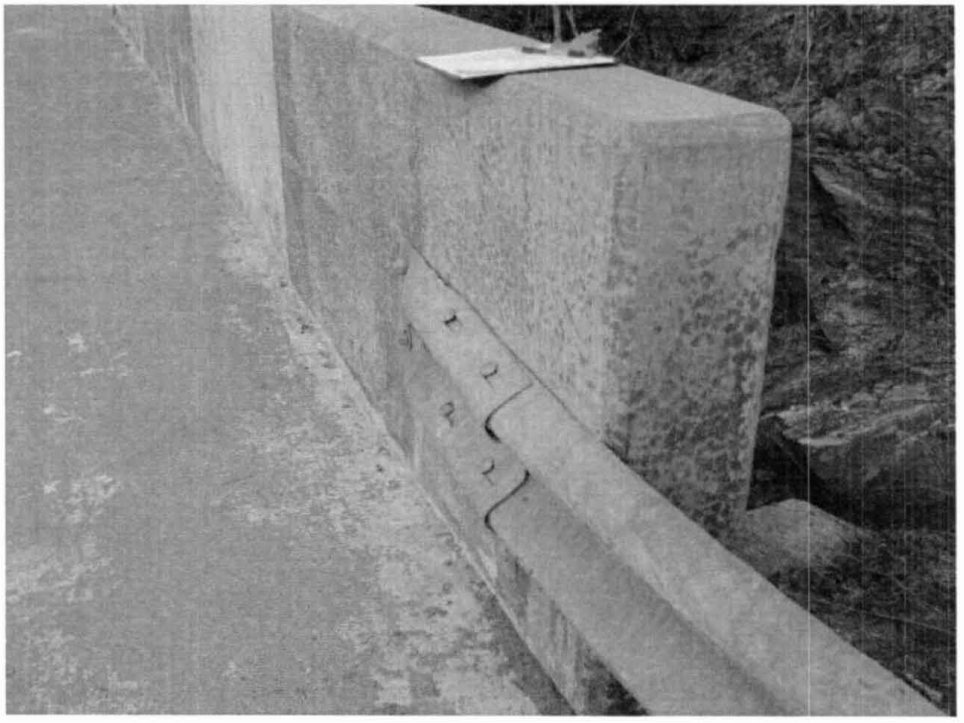
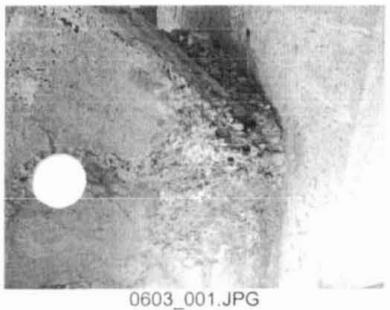


Photo #34:
Description: Southeast approach railing finger shoe at parapet is overlapped incorrectly (leading edge railing).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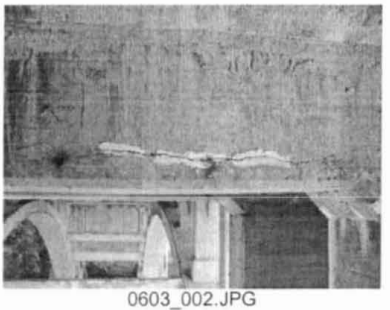
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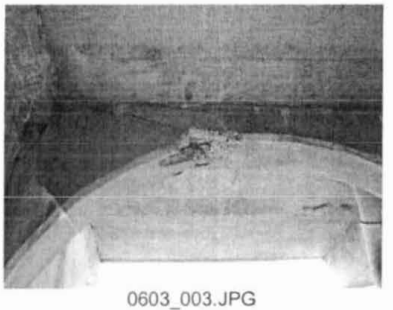
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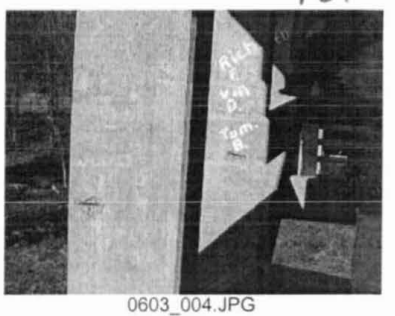
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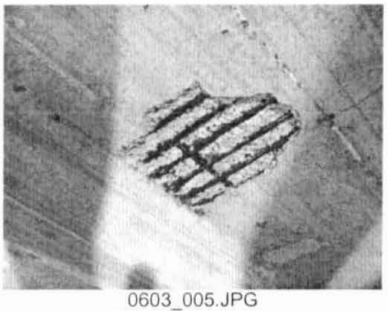
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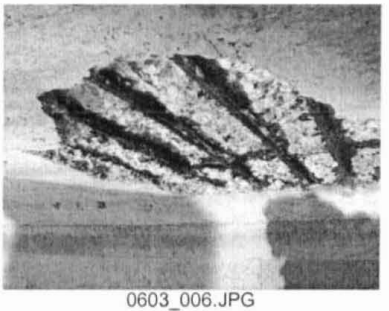
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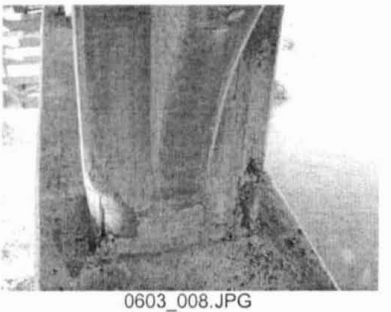
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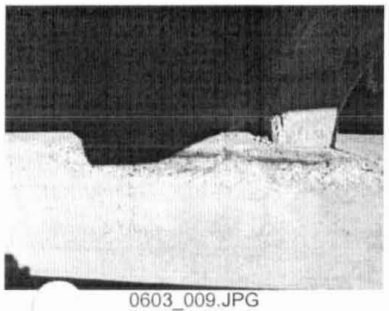
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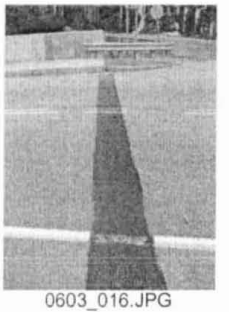
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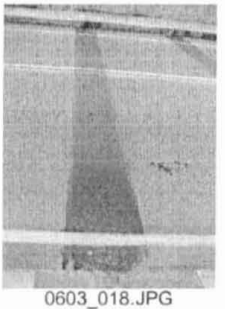
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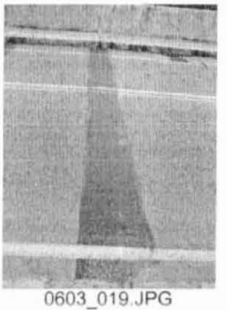
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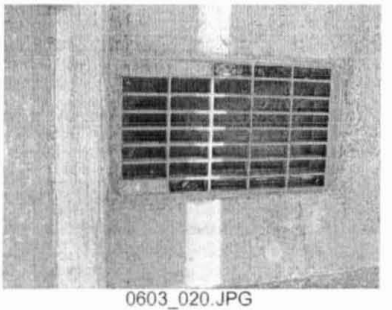
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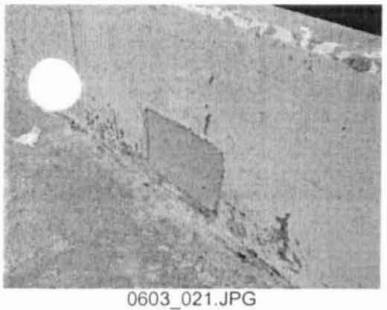
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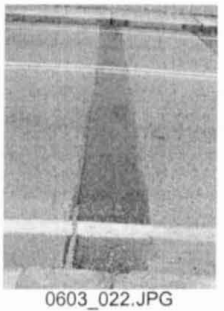
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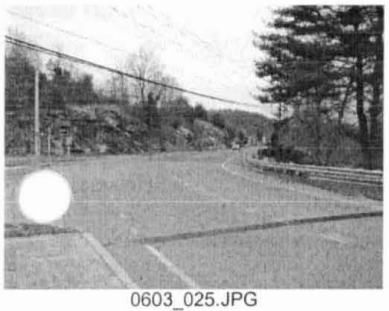
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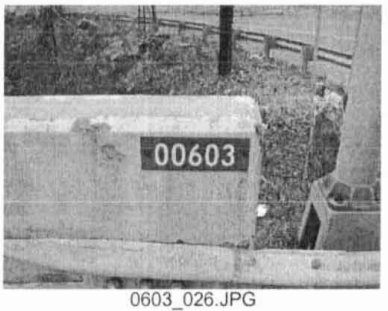

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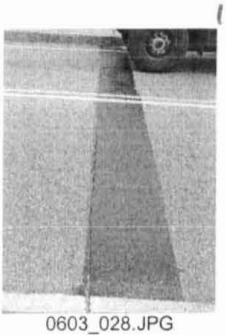
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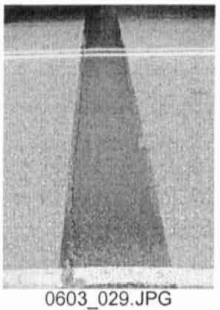
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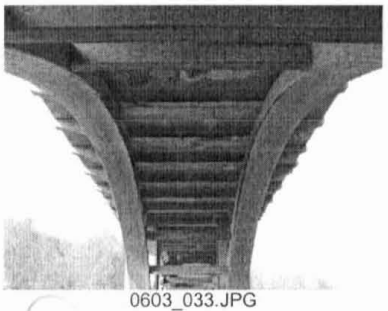
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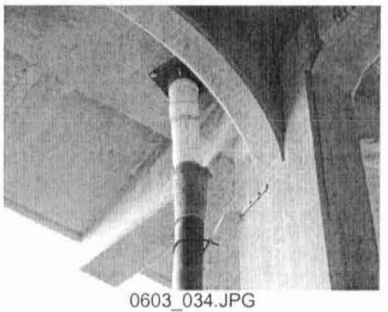
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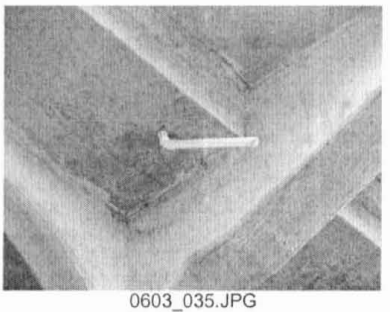
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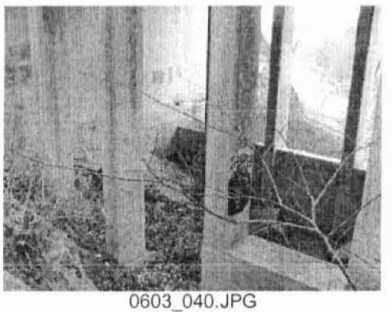
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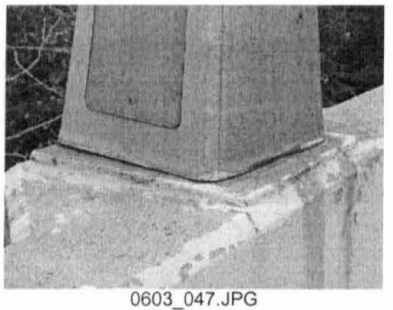
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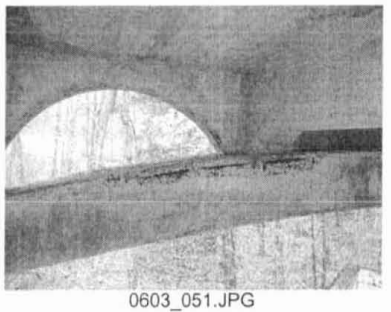
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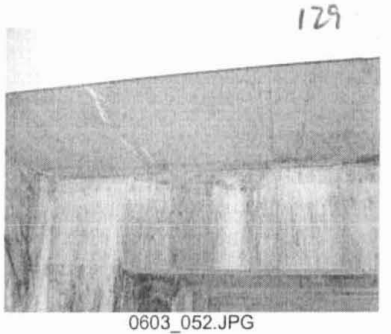
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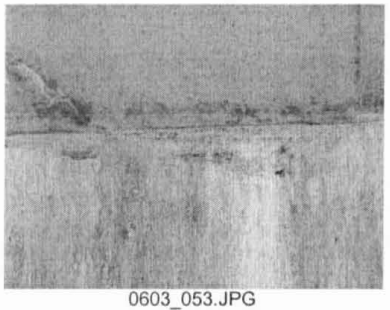
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APPENDIX A
UNDERWATER INSPECTION REPORT

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

BRIDGE SAFETY AND EVALUATION

Routine Underwater Inspection

Bridge No. 00603

S.R. 848 over Naugatuck River

Thomaston, Connecticut

Date Inspected: November 22, 2006

Prepared by:

COLLINS ENGINEERS INC.

1058 BROADWAY
ALBANY, NEW YORK 12204

Prepared for:

HAKS

306 INDUSTRIAL PARK ROAD, SUITE 201
MIDDLETOWN, CONNECTICUT 06457

Team Leader: Brandon Quadrini, P.E.
Connecticut P.E. No. 24668

Reviewed by: Eric Thorkildsen, P.E.
Connecticut P.E. No. 22213

1 Substructure Unit

TABLE OF CONTENTS

1 Page	Executive Summary
1 Page	BRI-59
2 Pages	BRI-58
3 Pages	CAD Drawings
1	Sounding Plan
2	North Elevation (Upstream Profile)
3	Pier 3 West Elevation
3 Pages	Photos
Appendix	Field Notes

EXECUTIVE SUMMARY
11/22/2006

Bridge No. 00603 carries State Route 848 over the Naugatuck River in Thomaston, Connecticut. The eleven span reinforced concrete arch bridge is 488 feet long. The bridge was originally constructed in 1928 with no record of major rehabilitation. The foundation type is unknown.

The overall condition of the substructure was satisfactory (Substructure Evaluation Rating = 6). The condition of main components, significant deficiencies, and repair recommendations are as follows:

Substructure: The substructure was in overall satisfactory condition (Overall Rating = 6) with failed areas of repair patching at the downstream nose and just below water along the north face. Imminent failure of the repair patch above water at the downstream nose was observed. Severe scaling at the downstream nose had up to 2" of penetration. Scaling with typically 3/8" of penetration was observed from the waterline down 2' along the north face of the pier. Deeper section loss with 1/2" of penetration was found randomly just below the waterline along the failed repair patch on the north face of the pier. Three hairline to 1/16" wide vertical cracks were found in the plinth cap at the downstream nose. Two hairline to 1/16" wide vertical cracks were found along the north face of the pier.

Channel and Channel Protection: The channel and channel protection were in satisfactory condition (Overall Rating = 6) with the top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock. No previous underwater repairs or undermining were observed. Maximum probe depth into the channel bottom was 0.8' into sandy infill over stone. The streambed is susceptible to minor change based on historical local scour activity, the water flow 50 degree +/- angle of attack, and heavy storm surges. The channel bottom is comprised of bedrock, boulders, large cobbles and sandy infill over stone. No designed scour countermeasures were observed around the piers.

Scour critical rating (Item 113) = 8

Bridge Recommendation:

1. Remove all loose and broken concrete and patch with low permeability high strength concrete (2 CY) formulated for at and below water applications.

2. Place riprap (5 CY) over the exposed footing at the southwest corner of the pier.

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-59 Form

Bridge No: 00603 **Date Inspected:** 11/22/2006

Job Number:		**Client:**	Connecticut D.O.T
Route:	S.R. 848 **Mile point:** 3.20	**City:**	Thomaston
FeatureCrossed:	Naugatuck River	**State:**	CT
Inspector:	Brandon Quadrini, P.E.	**Assistants:**	T. Goetz, S. Maloney
Time Arrived:	10:00 AM	**Time Departed:**	1:15 PM
Time In Water:	11:00 AM	**Time Out of Water:**	12:30 PM
Type of Inspection:	Underwater		
Year built:	1928 **Total Length:** 488'	**No. Spans:**	11
Bridge Type:	Reinforced Concrete Arch		
Total Number of Piers:	10	**Piers in the Water:**	1
Type of Piers:	Reinforced Concrete		
Abutments:	Rienforced Concrete		
Bottom Composition:	Bedrock, cobble, and sand with up to 0.8' penetration into the channel bottom.		
Previous U/W Insp:	2/28/2005		
Marine Growth:	None		
Max. Water Depth:	6.5'		
Max. Depth at Pier:	6.4'		
Current Strength:	1 fps		
U/W Visibility:	6'		
Type of Water:	Fresh		
Access to Bridge:	Shore		
Remarks:			

Inspection Equipment

Number of Boats:	0	**RR Protection:**	No
Boat Size:	0	**Equipment Comments:**	
Dive Station:	Yes		

Inspected by: Brandon Quadrini **Date:** 12/26/06

Inspected by: Tim Goetz **Date:** 12/26/06

D. reviewed by: Mei Wan Wong (CDOT) **Date:** 6/26/2007

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 00603

Inspection Date: 11/22/2006

Town: Thomaston

Route Carried: S.R. 848

Feature Crossed: Naugatuck River

ITEM	*RATING*	*REMARKS*
60. SUBSTRUCTURE	6	Failed areas of repair patching at the downstream nose and just below water along the north face. Imminent failure of the repair patch above water at the downstream nose was observed. Severe scaling at the downstream nose had up to 2" of penetration. Scaling with typically 3/8" of penetration was observed from the waterline down 2' along the north face of the pier. Deeper section loss with 1/2" of penetration was found randomly just below the waterline along the failed repair patch on the north face of the pier. Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock.
ABUTMENT 1:	N	WEST ABUTMENT: The abutment is located out of the water.
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
ABUTMENT 2:	N	EAST ABUTMENT: The abutment is located out of the water.
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
PIER NO. 6	6	Failed areas of repair patching at the downstream nose and just below water along the north face. Imminent failure of the repair patch above water at the downstream nose was observed. Severe scaling at the downstream nose had up to 2" of penetration. Scaling with typically 3/8" of penetration was observed from the waterline down 2' along the north face of the pier. Deeper section loss with 1/2" of penetration was found randomly just below the waterline along the failed repair patch on the north face of the pier. Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock.
PILES	N	
STEM	6	Severe scaling 12' wide centered at the downstream nose had typically 3/4" (up to 2") of penetration from 4.5' above the waterline to 2' below. Severe scaling at failed areas of concrete repair along the north face from the waterline down 2' had 3/8" to 1/2" of penetration. Two hairline to 1/16" wide vertical cracks were found along the north face of the pier. Three hairline to 1/16" wide vertical cracks were found in the plinth cap at the downstream nose.
FOOTING	6	Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock. Light scaling was observed on the exposed portion of the footing.

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 00603

Inspection Date: 11/22/2006

Town: Thomaston

Route Carried: S.R. 848

Feature Crossed: Naugatuck River

ITEM	RATING	REMARKS
SCOUR	5	Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. Th exposed footing and formwork were encased in ledge rock.
SETTLEMENT	7	Two hairline to 1/16" wide vertical cracks found in north face of pier. Three hairline to 1/16" wide vertical cracks found in plinth cap at downstream nose.
General remarks:		

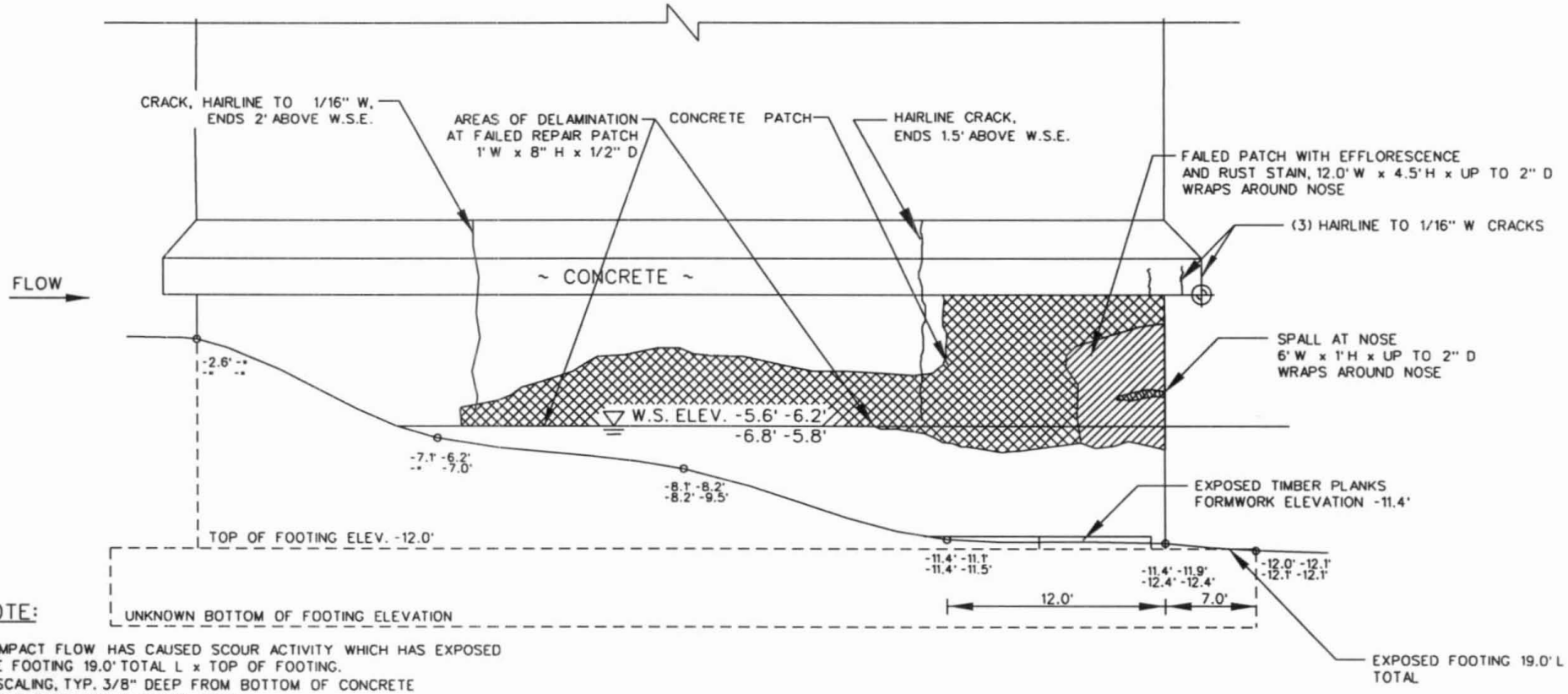
61. CHANNEL& CHANNEL PROTECTION:

	6	Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock. Water flow angle of attack was 50 degrees +/-.
CHANNEL SCOUR	6	Top of the footing and footing formwork exposed for 19' at the downstream north face of the pier. The exposed footing and formwork were encased in ledge rock. Water flow angle of attack was 50 degrees +/-.
EMBANKMENT EROSIO	8	
DEBRIS	7	Light intermittent timber debris and man-made debris was noted in the channel. Random fallen timber along banks.
VEGETATION	8	
NNEL CHANGE	6	Water flow angle of attack was 50 degrees +/-. No appreciable change in channel conditions. Footing and footing formwork exposed at the downstream north face of the pier. Changes in channel bottom elevation can be attributed to an irregular rocky channel bottom and the exact location of readings taken.
FENDER SYSTEM	N	
SPUR DIKES & JETTIE	N	
RIP RAP	8	
General remarks:		

Inspected by: _____ **Date:** 1/23/07

Inspected by: _____ For T.B.G. **Date:** 1-23-07

D.O.T. reviewed by: Mei Wan Wong **Date:** 6/26/07



NOTE:

1. IMPACT FLOW HAS CAUSED SCOUR ACTIVITY WHICH HAS EXPOSED THE FOOTING 19.0' TOTAL L x TOP OF FOOTING.
2. SCALING, TYP. 3/8" DEEP FROM BOTTOM OF CONCRETE REPAIR PATCH TO 2' BELOW W.S.E.
3. SCALING, TYP. 3/4" DEEP AT NOSE LOCATED 4.5' ABOVE W.S.E. TO 2' BELOW W.S.E.
4. FAILURE OF REPAIR PATCHING ABOVE W.S.E. AT DOWNSTREAM NOSE IS IMMINENT.

PIER NO. 6 (NORTH ELEVATION)

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

NOV, 2006 — -0.0' -0.0' — FEB, 2005

SEP, 2002 — -0.0' -0.0' — APR, 2000

LEGEND FOR MUDLINE ELEVATIONS

NOV, 2006

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 6 (NORTHWEST CORNER).

▽ W.S. ELEV. -5.6' -6.2' -6.8' -5.8'

• INDICATES NO INFORMATION

COLLINS ENGINEERS INC.
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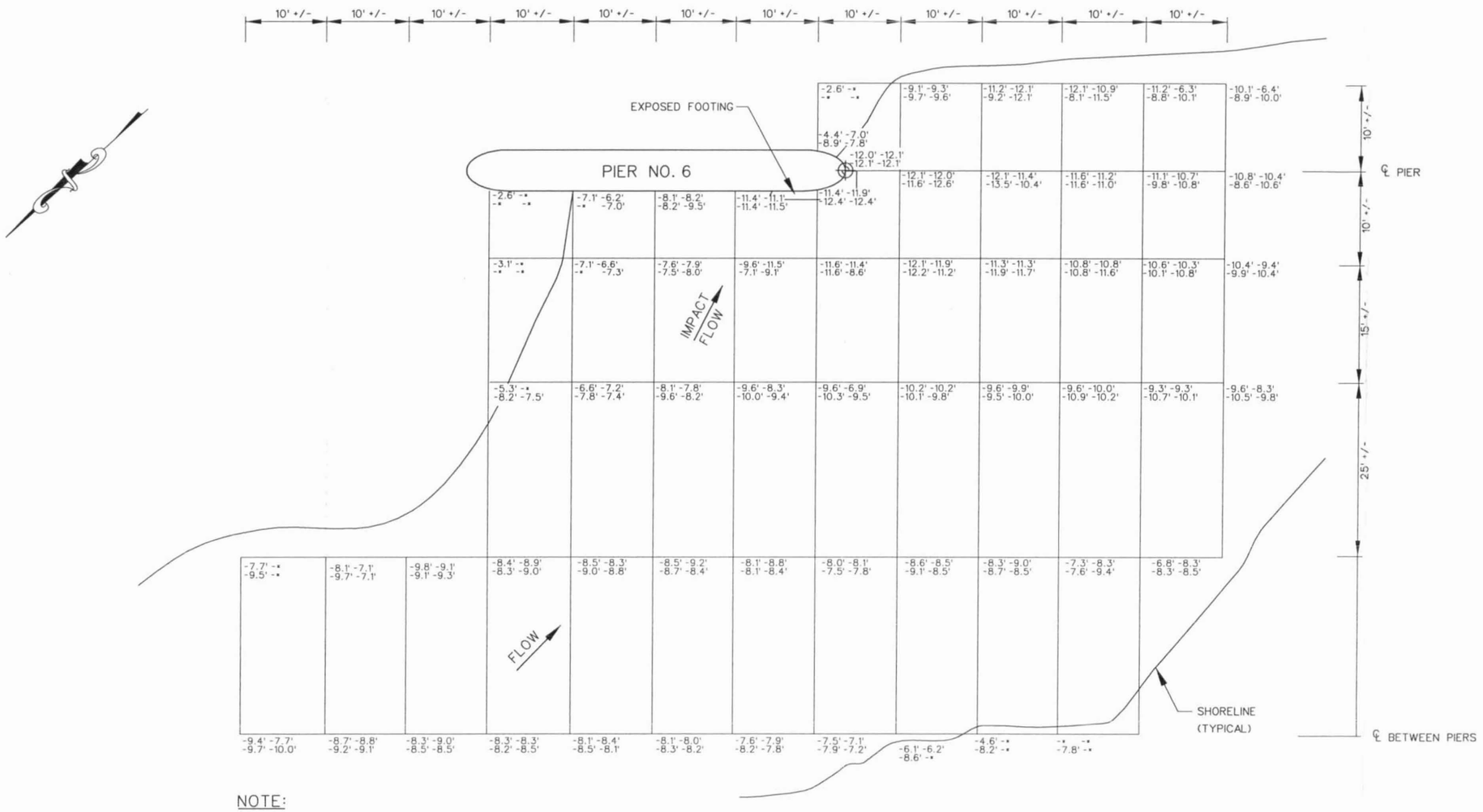
CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 00603
S.R. 848 OVER NAUGATUCK RIVER

THOMASTON — CONNECTICUT

PIER NO. 6 (NORTH ELEVATION)

INSPECTED BY: BO REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 11 / 22 / 06	DRAWING NO. 00603C



NOTE:

1. CHANGES IN CHANNEL BOTTOM ELEVATION LIKELY DUE TO IRREGULAR ROCKY CHANNEL BOTTOM AND EXACT LOCATION OF READINGS TAKEN.

PLAN
N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

NOV, 2006 → -0.0' -0.0' ← FEB, 2005
SEP, 2002 → -0.0' -0.0' ← APR, 2000

* INDICATES NO INFORMATION

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 6 (NORTHWEST CORNER).

▽ W.S. ELEV. -5.6' -6.2' -6.8' -5.8'

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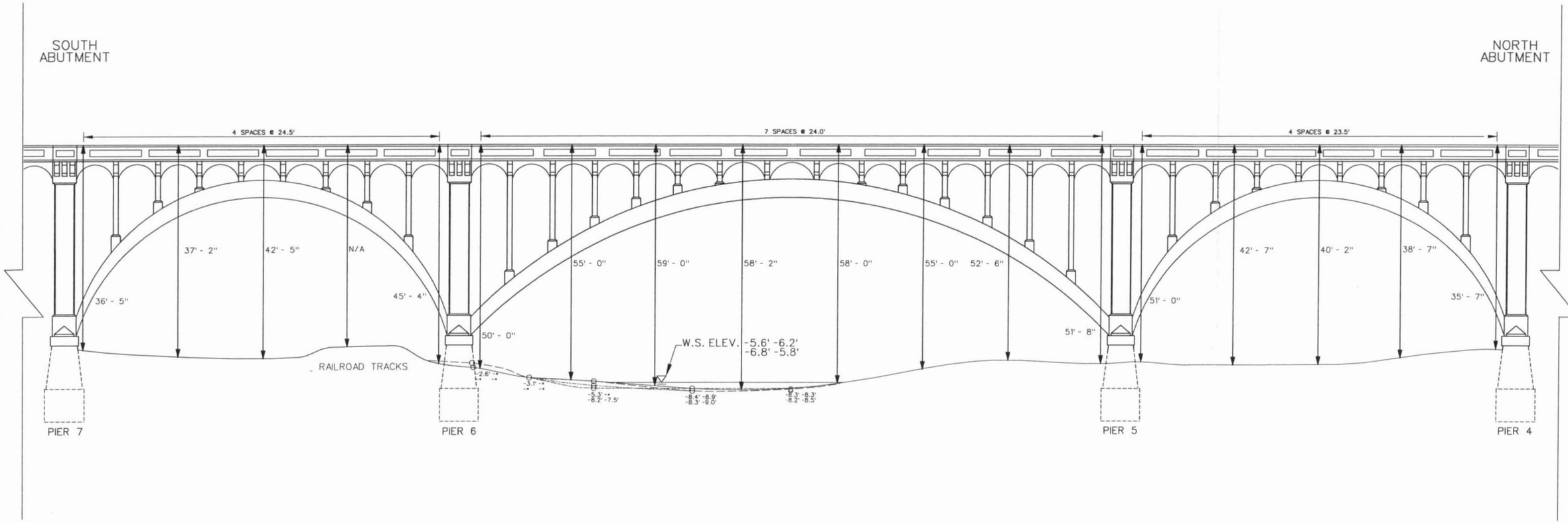
CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 00603
S.R. 848 OVER NAUGATUCK RIVER

THOMASTON — CONNECTICUT

PLAN

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 11 / 22 / 06	DRAWING NO. 00603A



EAST ELEVATION (UPSTREAM PROFILE)

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

NOV, 2006 — FEB, 2005
-0.0' -0.0'
SEP, 2002 — -0.0' -0.0' — APR, 2000

× INDICATES NO INFORMATION

LEGEND FOR MUDLINE ELEVATIONS

- NOV, 2006
- FEB, 2005
- SEP, 2002
- APR, 2000

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 6 (NORTHWEST CORNER).

▽ W.S. ELEV. -5.6' -6.2' -6.8' -5.8'

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 00603
S.R. 848 OVER NAUGATUCK RIVER

THOMASTON — CONNECTICUT

NORTH ELEVATION (UPSTREAM PROFILE)

INSPECTED BY: BQ REVISED BY: TG	SCALE: AS SHOWN	DATE OF INSPECTION 11 / 22 / 06	DRAWING NO. 00603B

Bridge No.:	00603	**Inspected by:**	Brandon Quadrini, P.E.
Town:	Thomaston	**Inspected by:**	T. Goetz, S. Maloney
Feature Carried:	S.R. 848	**Date Inspected:**	November 22, 2006
Feature Crossed:	Naugatuck River	**Project No.:**	**170-2357/2687**

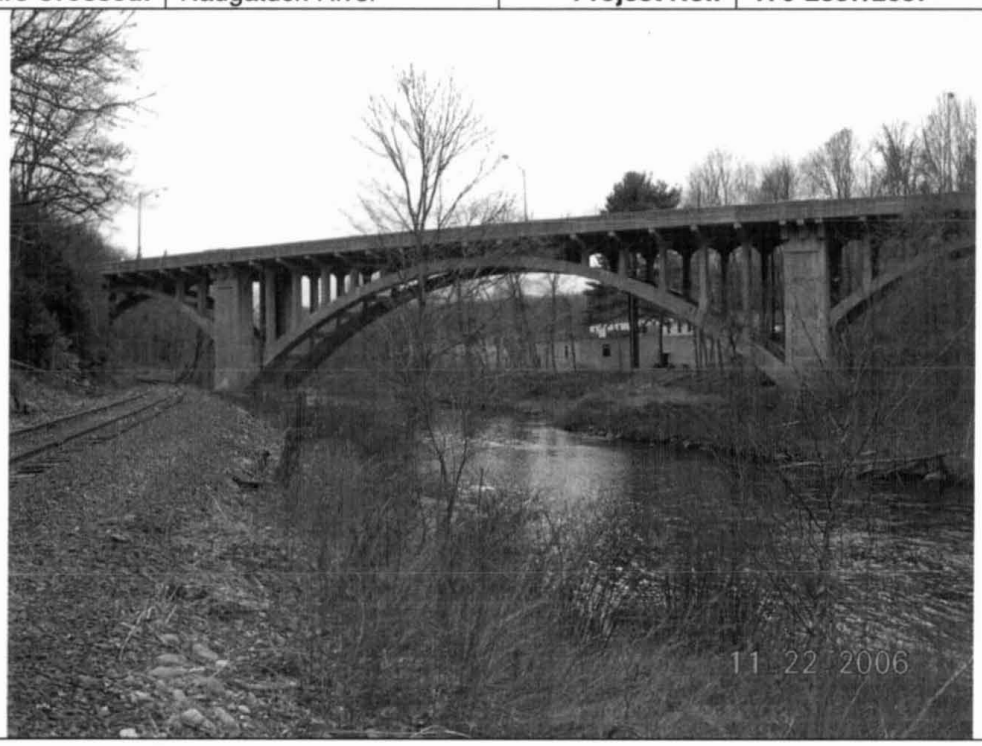

Photo #1: East Elevation (Upstream)

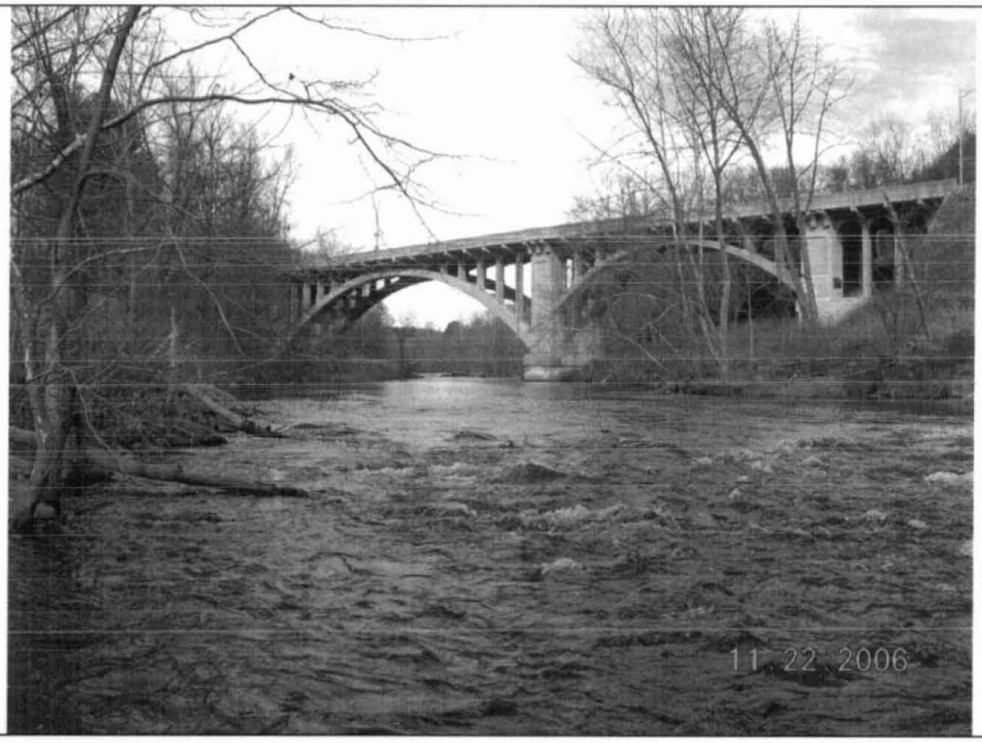

Photo #2: West Elevation (Downstream)

Bridge No.:	00603	**Inspected by:**	Brandon Quadrini, P.E.
Town:	Thomaston	**Inspected by:**	T. Goetz, S. Maloney
Feature Carried:	S.R. 848	**Date Inspected:**	November 22, 2006
Feature Crossed:	Naugatuck River	**Project No.:**	**170-2357/2687**

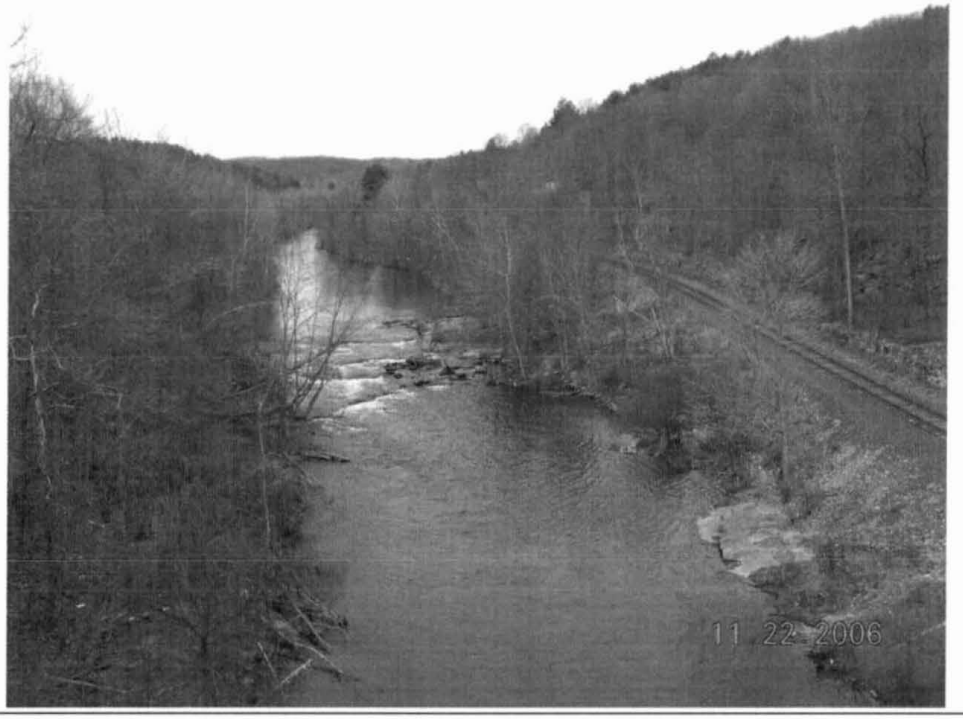

Photo #3: Looking Upstream – Note: Water flow angle of attack was approximately 50 degrees.

Photo #4: Looking Downstream

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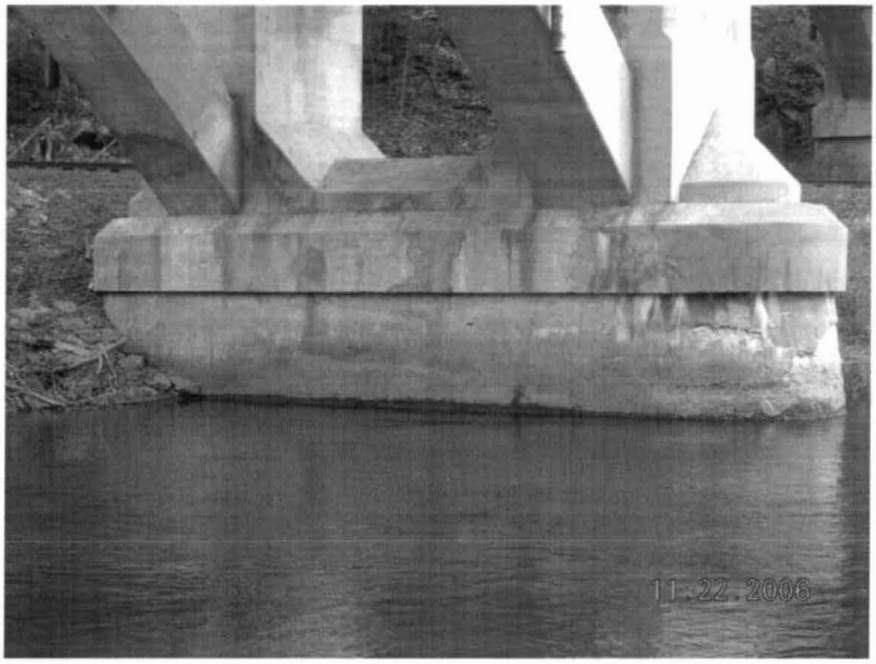

Photo #5: Pier 6 North Face – Note: Failed repair patch at downstream nose and randomly below the water surface along the west face.

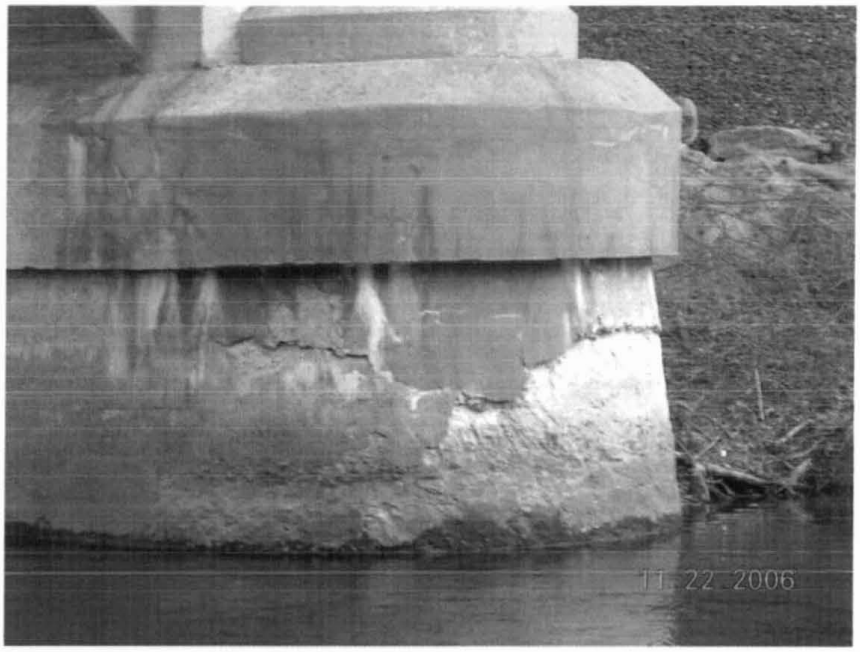

Photo #6: Pier 6 Downstream Nose – Note: Random hairline to 1/16" wide cracks in plinth cap. Failed repair patch at downstream nose. Failure of the repair patch above water is imminent.

APPENDIX

2006 Field Notes

CONNECTICUT DEPARTMENT OF TRANSPORTATION

BUREAU OF HIGHWAYS

BRIDGE SAFETY AND EVALUATION

Underwater Inspection

11/20/06
RR, TG, SM.
Arrive: 10:00 AM
Depart: 1:15 PM
In H_2O: 11:00 AM
out H_2O: 12:30 PM

WE DO 11 SPAN fascia
Reading?

L & R of N_2O
Not over RR

Bridge No. 00603

S.R. 848 Over Naugatuck River

Thomaston, Connecticut

Date Inspected: February 28, 2005

ENGINEERS
PLANNERS
ECONOMISTS

Wilbur Smith Associates

STATE OF CONNECTICUT
GEORGE L. JACOBS
No.19206
LICENSED
PROFESSIONAL ENGINEER

900 CHAPEL STREET, SUITE 1400
NEW HAVEN, CONNECTICUT

Team Leader: Chris Panning

Chris Panning

Reviewed by :George Jacobs, P.E.
Connecticut P.E. No.19206

Connecticut D.O.T. Reviewed by:

RK De Bishop

RECEIVED
MAR 11 2005
CONNECTICUT - DOT
BRIDGE SAFETY & EVALUATION

1 Substructure Units

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3 Pages	Photos
Appendix	Field Notes

EXECUTIVE SUMMARY
2/28/2005

Bridge No. 00603 carries Route 848 over the Naugatuck River in Thomaston, Connecticut. This 488 feet long, eleven span, reinforced concrete arch structure was constructed in 1928. No record of major rehabilitations was present at the time of inspection. **The foundation type is unknown.**

The overall condition of the substructure is Satisfactory (Substructure Evaluation Rating = **6**). The condition of the main components, observed deficiencies, and recommended actions for repairs are as follows:

Substructure The substructure is in Satisfactory condition (Overall Rating = **6**) with a large area of spalling with efflorescence and rust stains, 20'L x 7'H x 0.4'D around the South nose of Pier 3, and an adjacent large area of delamination. A vertical hairline to 1/16" wide crack was observed from the mudline to the top of the haunch on the West Elevation of Pier 3.

Channel and Channel Protection The channel and channel protection is in Satisfactory condition (Overall Rating = **6**) with local scour due to impact flow directed at the Southwest corner of Pier 3 exposing the top of the footing and timber plank formwork for 19' long. No previous underwater repairs were observed. The maximum penetration into the streambed was 0.8 feet. No undermining was observed during this inspection. The streambed is susceptible to change based on the impact flow and observed scour at the Southwest corner of Pier 3.

Scour critical rating (Item 113) = **8.**

Bridge Recommendations:

1) Hydrodemolish affected areas of the West and South faces of Pier 3, then patch with hydraulic concrete (2 CY).
2) Place rip-rap at the Southwest corner of Pier 3 (5CY).

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-59 Form

Bridge No: 00603 **Date Inspected:** 2/28/2005

Job Number:		**Client:**	Connecticut D.O.T
Route:	S.R. 848 **Mile point:** 3.20	**City:**	Thomaston
FeatureCrossed:	Naugatuck River	**State:**	CT
Inspector:	Chris Panning	**Assistants:**	Carlson/Haefner
Time Arrived:	7:30 AM	**Time Departed:**	10:00 AM
Time in Water:	8:15 AM	**Time Out of Water:**	9:45 AM
Type of Inspection:	Routine		
Year built:	1928 **Total Length:** 488'	**No. Spans:**	11 (3 Main spans)
Bridge Type:	Reinforced Concrete Arch		
Total Number of Piers:	10	**Piers in the Water:**	1
Type of Piers:	Reinforced Concrete		
Abutments:	Rienforced Concrete		
Bottom Composition:	Bedrock, cobble, and sand with up to 0.8' penetration into the mudline.		
Previous U/W Insp:	9/30/2002		
Marine Growth:	None		
Max. Water Depth:	5.9'		
Max. Depth at Pier:	5.9'		
Current Strength:	~~1/8 knot~~ 1.5/5		
U/W Visibility:	6'		
Type of Water:	Fresh		
Access to Bridge:	Shore		
Remarks:			

Inspection Equipment

Number of Boats:	0	**RR Protection:**	No
Boat Size:	0	**Equipment Comments:**	
Dive Station:	Yes		

Inspected by: Chris Panning **Date:** 3/7/05

Inspected by: Paul G. [illegible] **Date:** 03/07/05

Reviewed by: RK [illegible] **Date:** 4/26/05

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 00603

Inspection Date: 2/28/2005

Town: Thomaston

Route Carried: S.R. 848

Feature Crossed: Naugatuck River

ITEM	RATING	REMARKS
60. SUBSTRUCTUR	6	Spalling, 20.0' L x 7.0' H x 0.4' D at the south end of pier no. 3.
ABUTMENT 1:	N	WEST ABUTMENT: The abutment is located out of the water.
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
ABUTMENT 2:	N	EAST ABUTMENT: The abutment is located out of the water.
STEM		
FOOTING		
EROSION		
SETTLEMENT		
SCOUR		
WINGWALLS		
General remarks:		
PIER NO. 3	6	Spalling, 20.0' L x 7.0' H x 0.4' D at the south end of pier no. 3. Impact flow has caused scour activity which has exposed the top of the footing 19.0' L along the west elevation and south nose.
PILES	N	Not visible.
STEM	6	Spalling, 20.0' L x 7.0' H x 0.4' D at the south end of pier no. 3.
FOOTING	6	The exposed footing has light scaling. ✓
SCOUR	6	Impact flow has caused scour activity which has exposed the top of the footing 19.0' L along the west elevation and south nose. (Likely constructed that way)
SETTLEMENT	7	Hairline to 1/16" cracking was observed.
General remarks:		
1. CHANNEL& CHANNEL PROTECTION:	6	Impact flow has caused scour activity which has exposed the top of the footing 19.0' L along the west elevation and south nose.
INEL SCOUR	6	Impact flow has caused scour activity which has exposed the top of the footing 19.0' L along the west elevation and south nose.
EMBANKMENT EROSIO	8	

Connecticut Department of Transportation

UNDERWATER INSPECTION

BRI-58 Form

Bridge No: 00603

Inspection Date: 2/28/2005

Town: Thomaston

Route Carried: S.R. 848

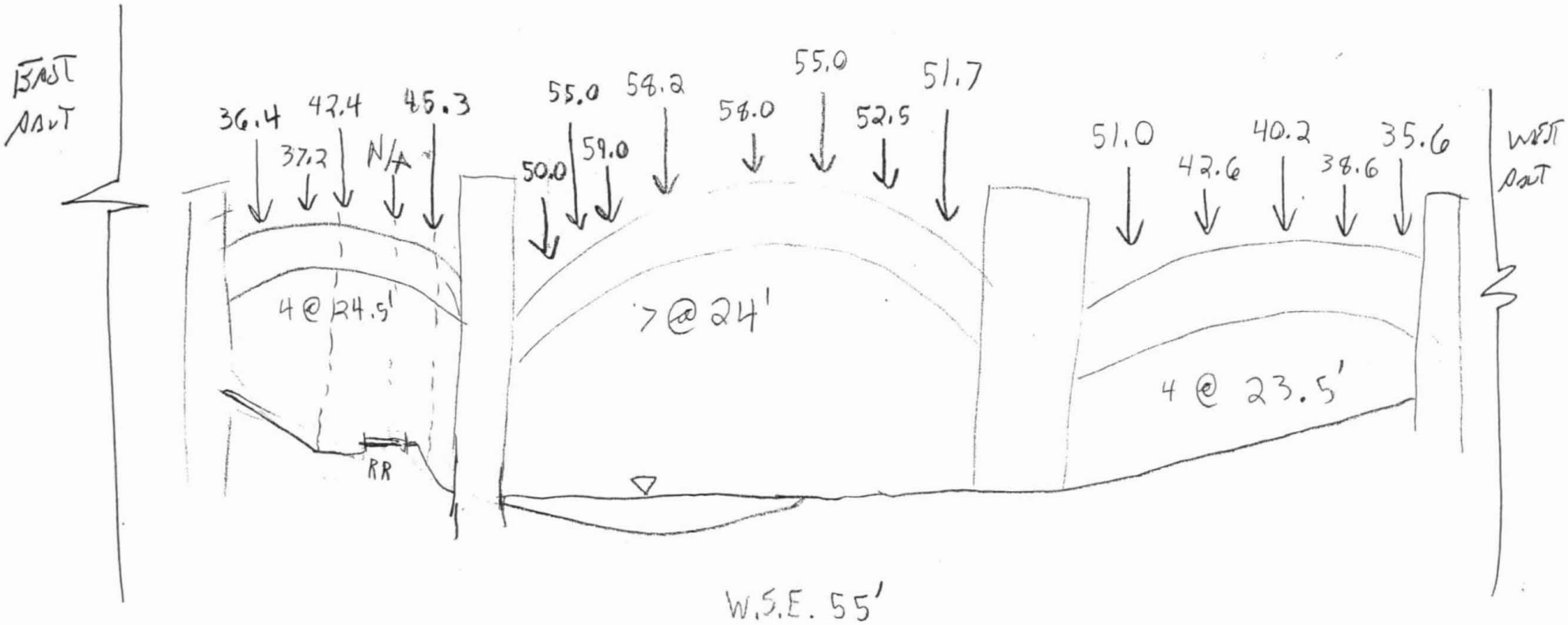
Feature Crossed: Naugatuck River

ITEM	RATING	REMARKS
DEBRIS	7	Light Intermittent timber debris and man-made debris was noted in the channel.
VEGETATION	8	
CHANNEL CHANGE	6	~~Impact flow~~ is directed at the southwest corner of Pier 3.
FENDER SYSTEM	N	Angle of attack
SPUR DIKES & JETTIE	N	
RIP RAP	8	
General remarks:		

Inspected by: [illegible] Date: 3/7/05

Inspected by: [illegible] Date: 03/07/05

D.( )reviewed by: RK De Bishop Date: 4/26/05

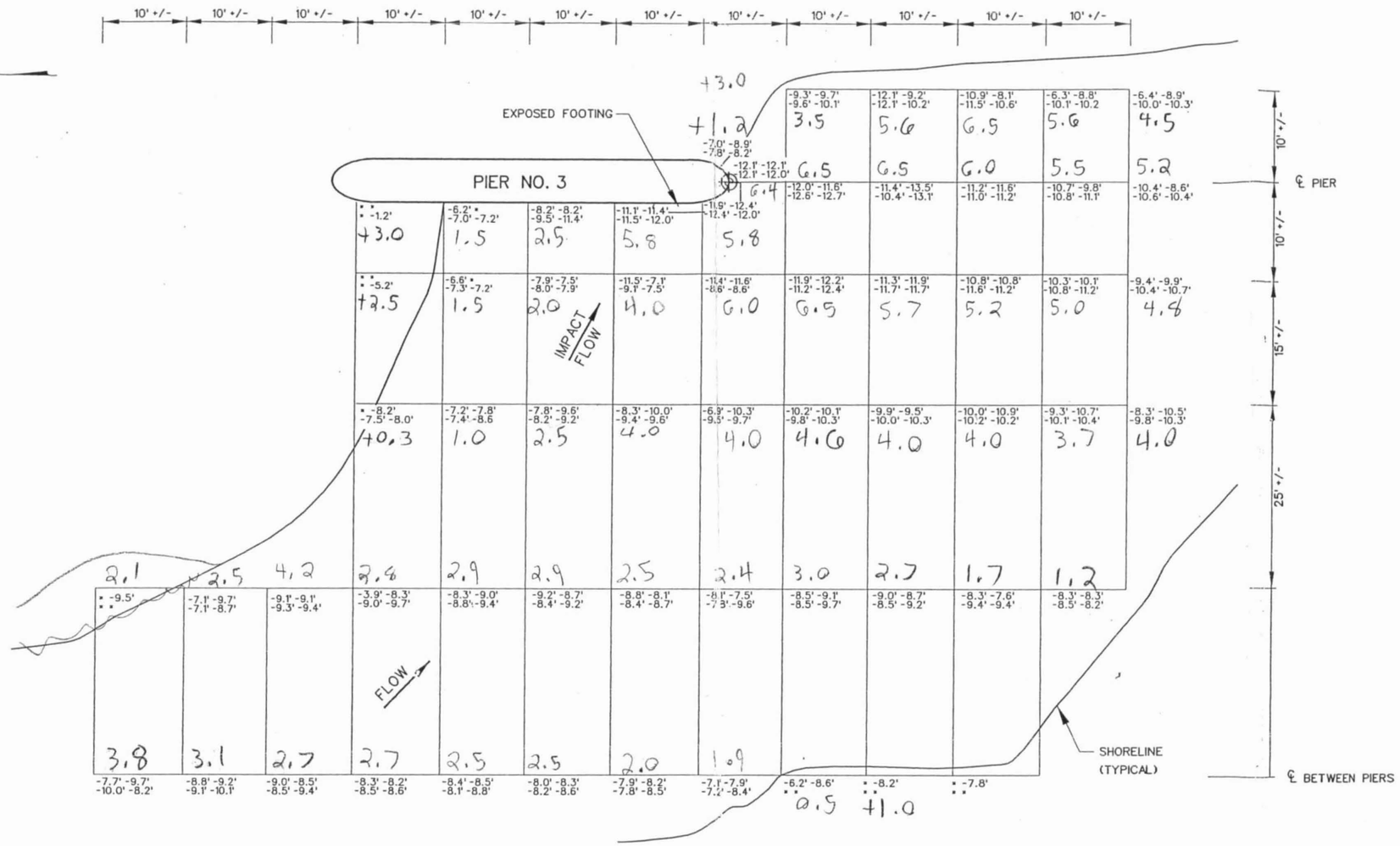


TAKEN TO TOP
OF CONC PARA

34
7/164
14
24

98
70.
168

042
4/168
16



LEGEND FOR BOTTOM ELEVATIONS

FEB, 2005 — -0.0' -0.0' — SEP, 2002
APR, 2000 — -0.0' -0.0' — 1997

× INDICATES NO INFORMATION

5'-7" DATUM 10:30AM
11-22-06

PLAN
N.T.S.

1 FPS CURRENT

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 3 (SOUTHWEST CORNER).

▽ W.S. ELEV. -6.2' -6.8'
-5.8' -6.2'

ENGINEERS PLANNERS ECONOMISTS
Wilbur Smith Associates
900 Chapel Street, Suite 1400
New Haven, CT. 06510-2802
Phone: 203-865-2191
Fax: 203-624-0484

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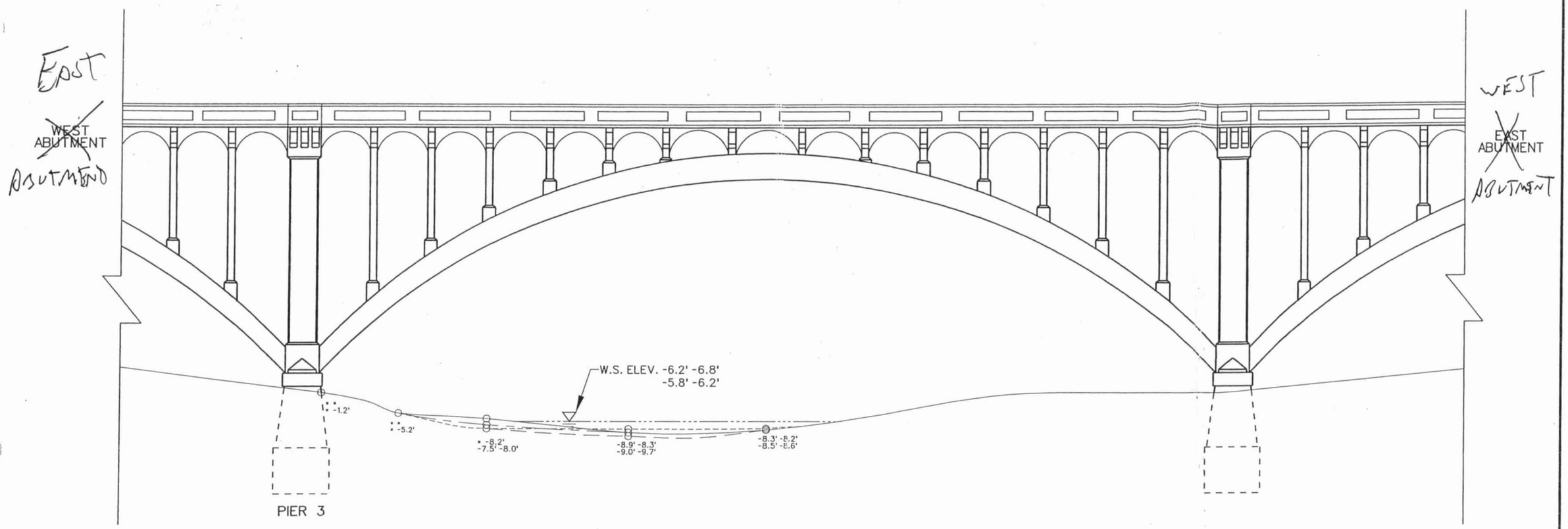
THOMASTON — CONNECTICUT

PLAN

INSPECTED BY: CP REVISED BY: RS	SCALE: AS SHOWN	DATE OF INSPECTION 02/28/05	DRAWING NO. 00603A



NORTH ELEVATION (UPSTREAM PROFILE)

N.T.S.

LEGEND FOR BOTTOM ELEVATIONS

FEB, 2005 → -0.0' -0.0' ← SEP, 2002

APR, 2000 ← -0.0' -0.0' → 1997

LEGEND FOR MUDLINE ELEVATIONS

- FEB, 2005
- SEP, 2002
- APR, 2000
- 1997

LEGEND FOR SYMBOLS

⊕ DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 3 (SOUTHWEST CORNER).

▽ W.S. ELEV. -6.2' -6.8'
-5.8' -6.2'

! × INDICATES NO INFORMATION

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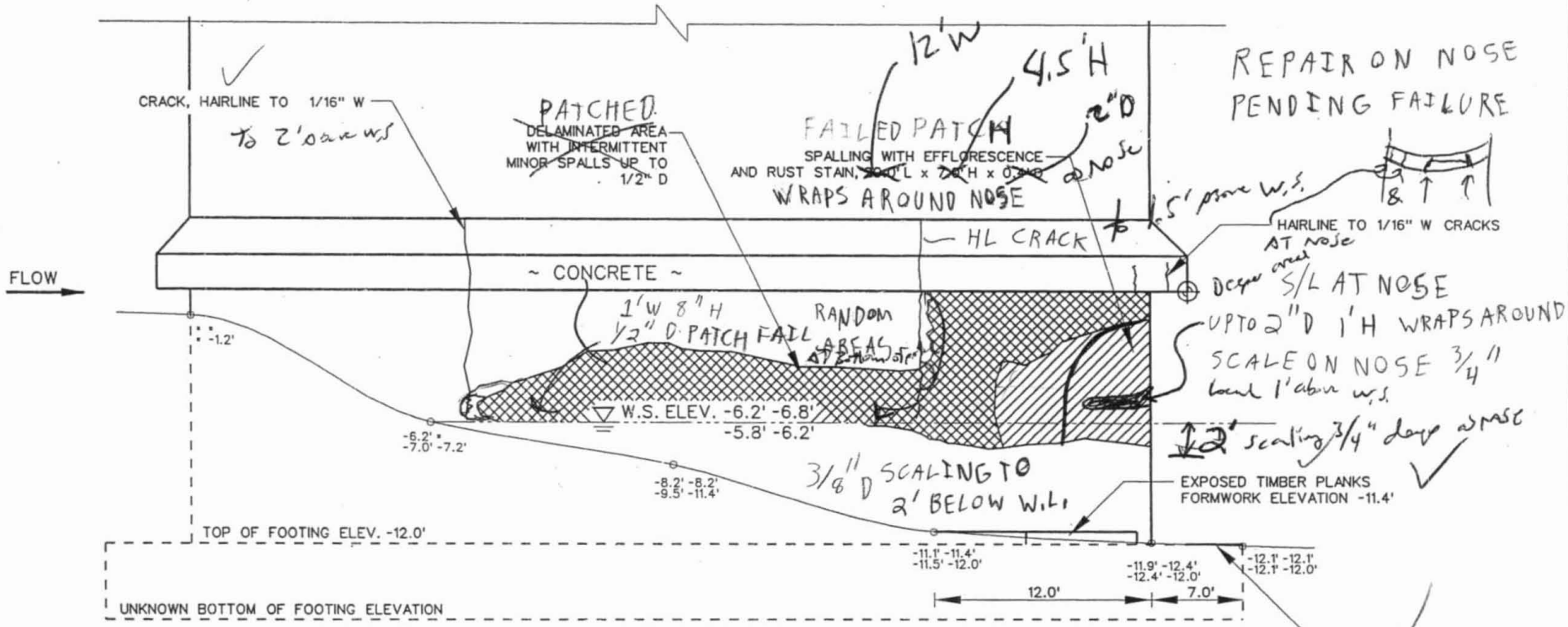
THOMASTON — CONNECTICUT

NORTH ELEVATION (UPSTREAM PROFILE)

INSPECTED BY: CP REVISED BY: RS	SCALE: AS SHOWN	DATE OF INSPECTION 02/28/05	DRAWING NO. 00603B



NOTE:

1. IMPACT FLOW HAS CAUSED SCOUR ACTIVITY WHICH HAS EXPOSED THE FOOTING 19.0' TOTAL L x TOP OF FOOTING.

1. Scaling typ. 3/8" deep from bottom of repair patch to 2' below W.S. (-1' to -2' below W.S.) on pier face.

PIER NO. 3 (WEST ELEVATION)

N.T.S.

2. Scaling typ. 3/4" deep (+4.5' to -2.0' b/L W.S.) (AT NOSE)

LEGEND FOR BOTTOM ELEVATIONS

FEB, 2005 — -0.0' -0.0' — SEP, 2002

APR, 2000 — -0.0' -0.0' — 1997

LEGEND FOR MUDLINE ELEVATIONS

FEB, 2005

LEGEND FOR SYMBOLS

DATUM ELEV. 0.0 TAKEN FROM THE BOTTOM OF THE HAUNCH ON PIER NO. 3 (SOUTHWEST CORNER).

W.S. ELEV. -6.2' -6.8' -5.8' -6.2'

* INDICATES NO INFORMATION

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CONNECTICUT DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 00603
S.R. 848 OVER NAUGATUCK RIVER
THOMASTON CONNECTICUT

PIER NO. 3 (WEST ELEVATION)

INSPECTED BY: CP REVISED BY: RS	SCALE: AS SHOWN	DATE OF INSPECTION 02/28/05	DRAWING NO. 00603C

PAGE 3 OF 3

PHOTOS

(2) ~~(4)~~ PIER 3 WEST FACE

(1) ~~(2)~~ D/S FACIA

(3) U/S

(4) D/S

(5) U/S Fascia LKS SW.