REPAIRS TO VARIOUS WELDED STEEL BRIDGES OTTAWA COUNTY, OHIO 1981-82

GENERAL NOTES:

1) EXISTING BRIDGE FLOOR SHALL BE REMOVED IN SUCH A MANNER SO AS NOT TO DAMAGE FLOOR JOISTS OR BEAMS OR ANY OTHER MEMBERS OF THE EXISTING STRUCTURE. CARE SHALL BE EXERCISED SO THAT EXISTING BRIDGE FLOOR AND PAVEMENT DOES NOT FALL INTO STREAM. ANY MATERIAL WHICH ACCIDENTALLY FALLS INTO STREAM AREA SHALL BE REMOVED AT CONTRACTOR'S EXPENSE.
3) APPROACH PAVEMENT SHALL BE REMOVED APPROXIMATELY 25 FEET ON EITHER END OF STRUCTURE TO A DEPTH OF ABOUT 2 INCHES.
4) ALL REMOVED MATERIAL (ITEMS 1, 2 & 3 ABOVE) SHALL BE DISPOSED OF IN A PROPER MANNER SUCH AS TRUCKING TO AN APPROVED LANDFILL.
5) UNIT COST FOR REMOVAL OF EXISTING BRIDGE FLOOR TO INCLUDE GRINDING OR SUITABLY REMOVING OLD WELD BEADS, IF REQUIRED.
6) ALL FLOOR JOISTS AND OTHER STEEL BRIDGE MEMBERS REMOVED (WITH THE EXCEPTION OF THE FLOORING) SHALL BE THE PROPERTY OF OTTAWA COUNTY, AND SHALL BE PLACED ON COUNTY TRUCKS FOR DISPOSITION BY OTTAWA COUNTY.
7) ITEM 407 TACK COAT TO BE APPLIED AT THE RATE OF 0.15 GAL. PER SQUARE YARD.
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9) ALL CORRUGATIONS IN STEEL BRIDGE FLOOR SHALL BE COMPLETELY FILLED WITH COMPACTED ITEM 404 ASPHALT CONCRETE BEFORE LAYING FINISH COURSE. FINAL GRADE SHALL CONFORM TO THE TYPICAL SECTION.
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11) BRIDGE FLOOR PLATES OVER 12 FOOT IN LENGTH MAY BE SPLICED BY WELDING TWO OR MORE UNITS END TO END. ALL SPLICES SHALL CONSIST OF CONTINUOUS BUTT WELDS ON BOTH SIDES OF THE PLATES, EXCEPT THAT WHEN SPLICES OCCUR OVER FLOOR JOISTS OR BEAMS, THAT PORTION WHICH WOULD ACTUALLY BEAR ON THE JOISTS OR BEAMS SHALL BE OMITTED OR GROUND FLUSH.
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SKEWED PLATES MAY BE SHOP FLAME CUT AS REQUIRED AND MARKED FOR ERECTION OR FIELD FLAME CUT. CONTRACTOR TO VERIFY SKEW ANGLE BEFORE CUTTING. IN THE CASE OF FIELD CUTTING, THE CUT EDGE ON GALVANIZED FLOORING SHALL BE TREATED WITH A COLD APPLIED GALVANIZED COMPOUND.
ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "5" GAUGE 2"×6" CORRUGATED STEEL BRIDGE FLOOR.
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15) BONDING AGENT BETWEEN NEW CONCRETE AND OLD TO BE SIKADUR HI-MOD OR APPROVED EQUAL.
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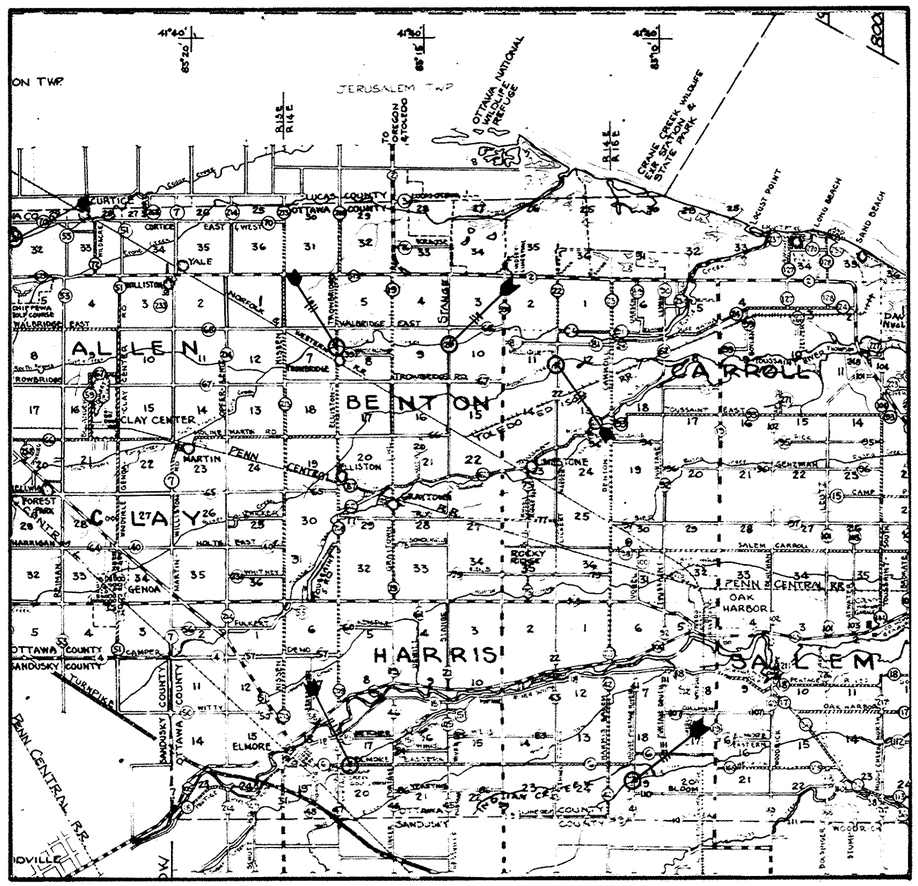

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GENERAL NOTES CONT'D

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EXISTING BRIDGE DATA:

1) BRIDGE NO. BEN-21-4.80 ~ STANGE ROAD, NO. 21 OVER TURTLE CREEK.
SIZE OF FLOOR JOISTS: W12×30
SKEW: 23°-40' - RIGHT FORWARD
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SIZE OF FLOOR JOISTS: W10×26
SKEW: 21°-50' - RIGHT FORWARD
3) BRIDGE NO. BEN-22-4.35 ~ LICKERT-HARDER ROAD, NO. 22 OVER PACKER CREEK.
SIZE OF FLOOR JOISTS: W 12×30
SKEW: 18°-20' - RIGHT FORWARD
4) BRIDGE NO. ALL-54-3.64 ~ BILLMAN ROAD, NO. 54 OVER CEDAR CREEK.
SIZE OF FLOOR JOISTS: W 12×30
SKEW: 0°-0'
5) BRIDGE NO. HAR-6-0.72 ~ ELMORE EAST ROAD, NO 6 OVER SUGAR CREEK.
SIZE OF FLOOR JOISTS: W 12×30
SKEW: LEFT FORWARD - 17°30'

CONCRETE REPAIR DATA:

1) BRIDGE NO. BEN. 208-4.70. OVER TURTLE CREEK
2) BRIDGE NO. HAR. 6-0.72 OVER SUGAR CREEK.

WORK TO COMMENCE FIRST ON ABOVE TWO STRUCTURES AND BE SUBSTANTIALLY COMPLETED BEFORE STARTING WORK ON STEEL BRIDGE REPAIRS.

NOTE:

BRIDGE NO. FIVE, WAS ADDED TO THE LIST IN THE SPRING OF 1982, UNDER SEPARATE CONTRACT.

SEAL

OTTAWA COUNTY ENGINEER'S OFFICE
PORT CLINTON, OHIO

REPAIRS TO VARIOUS WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO

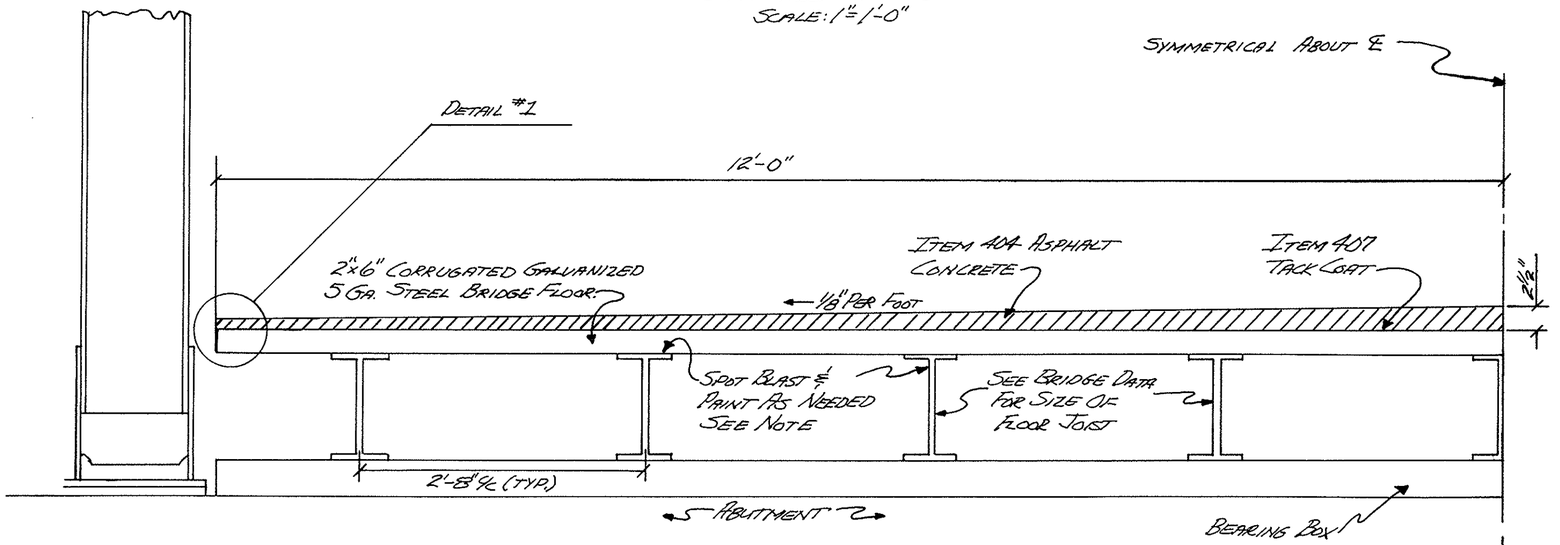
DESIGNED BY: ROBERT C. STEINMILLER
DRAWN BY: JEFF UNDERWOOD
APPROVED BY: John M. Gogcun
OTTAWA COUNTY ENGINEER

SEAL

REVISIONS:

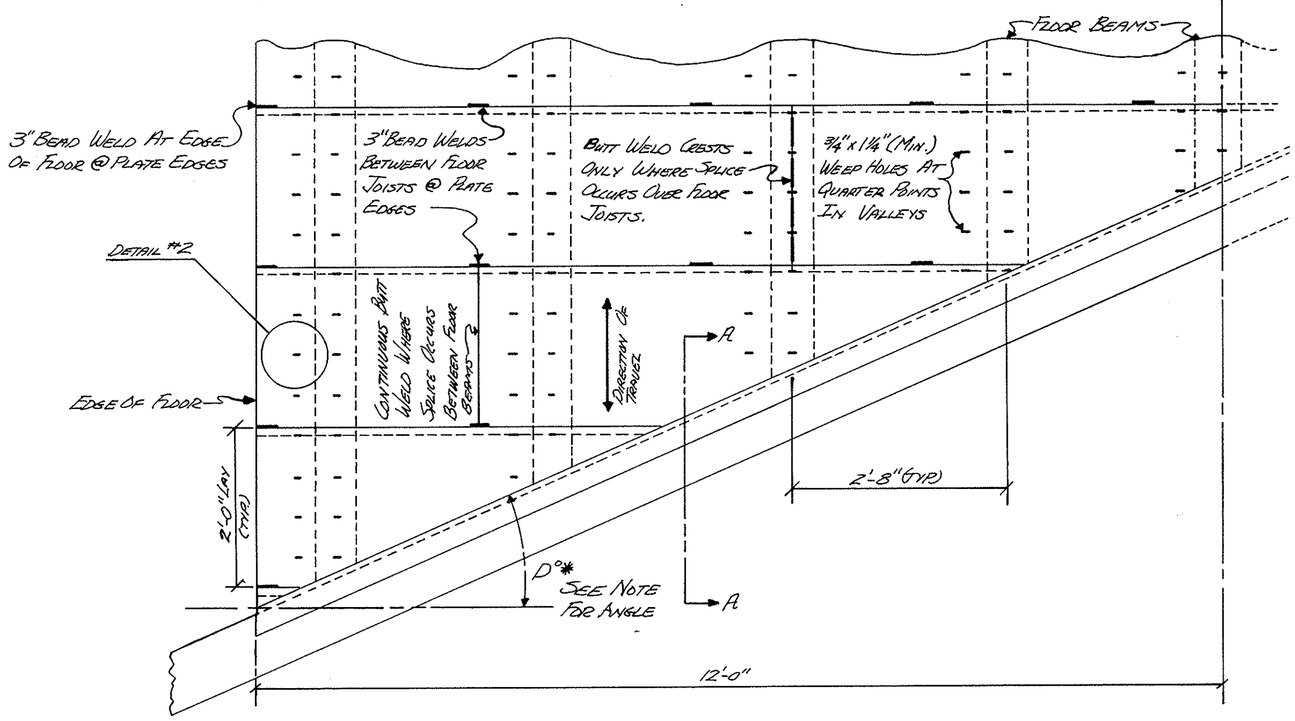
TYPICAL SECTION

BRIDGE NO. BEN-21-4.80
BRIDGE NO. BEN-22-4.35
BRIDGE NO. SAL-41-0.70
BRIDGE NO. ALL-64-3.64
SCALE: 1"=1'-0"



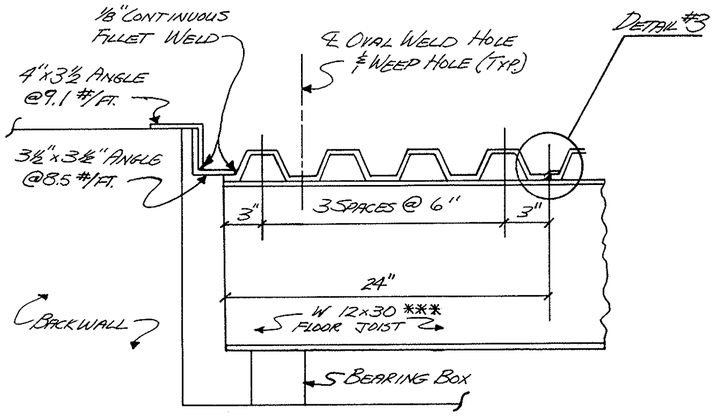
GENERAL PLAN

BRIDGE NO. BEN-21-4.80
BRIDGE NO. BEN-22-4.35
BRIDGE NO. SAL-41-0.70
SCALE: 3/4" = 1'-0"



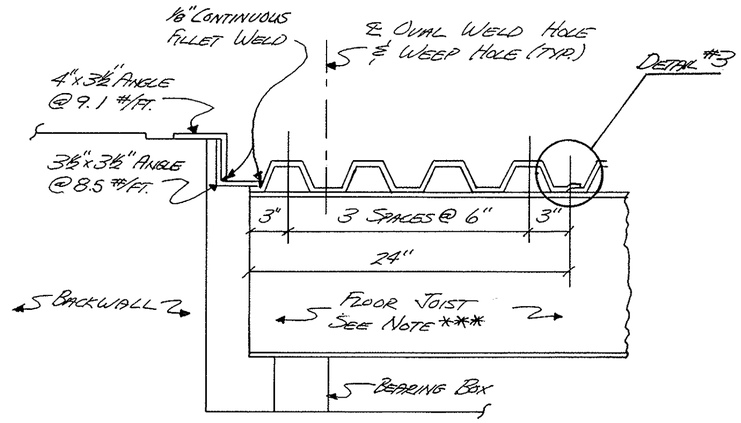
SECTION A-A

BRIDGE NO. BEN.21-4.80
SCALE: 1½"=1'-0"



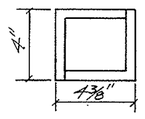
SECTION A-A

BRIDGE NO. BEN. 22-4.35
BRIDGE NO. SAL. 41-0.70
SCALE: 1½"=1'-0"



BEARING BOX DETAIL

TYPICAL
SCALE: 2"=1'-0"



NOTES:

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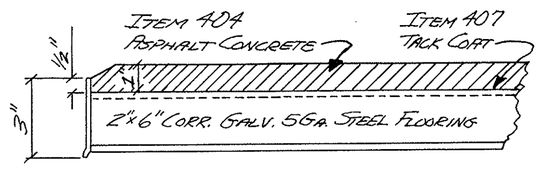
*** IF REQUIRED UNDER DIRECTION OF ENGINEER.

DETAIL #1

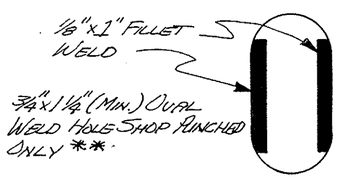
SCALE: 3"=1'-0"



10 GA. END DAMS FURNISHED SEPARATELY & FIELD WELDED TO FLOOR AFTER ERECTION

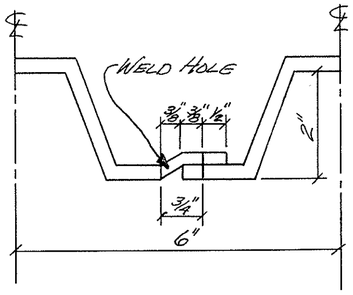
DETAIL #2

SCALE: FULL



DETAIL #3

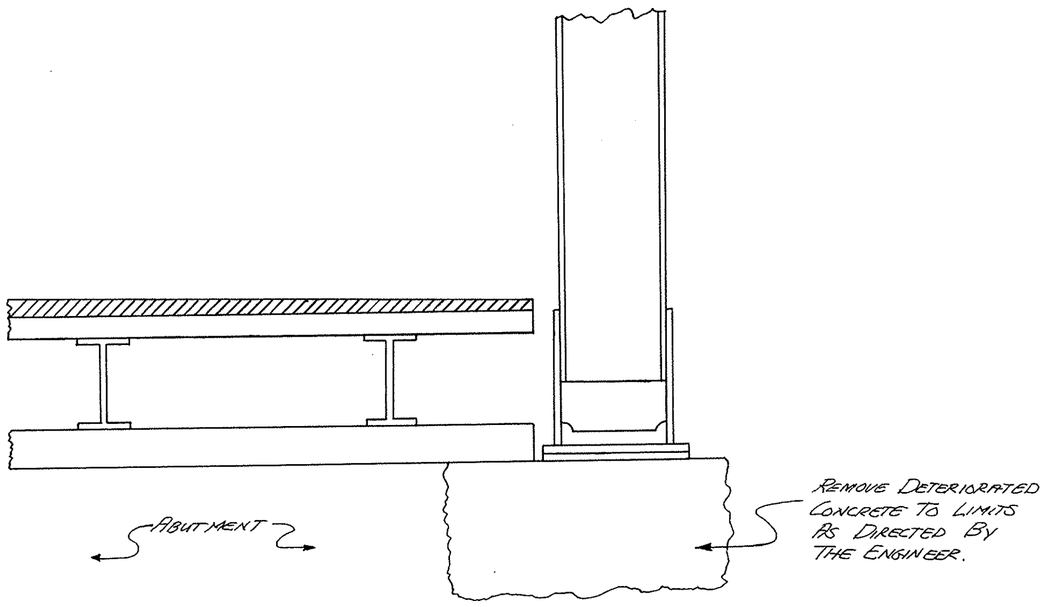
SCALE: ½ SCALE



OTTAWA COUNTY ENGINEER'S OFFICE PORT CLINTON, OHIO
REPAIRS TO VARIOUS WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO
DESIGNED BY: ROBERT C. STEINMILLER DRAWN BY: JEFF UNDERWOOD APPROVED BY: [signature] OTTAWA COUNTY ENGINEER
REVISIONS:

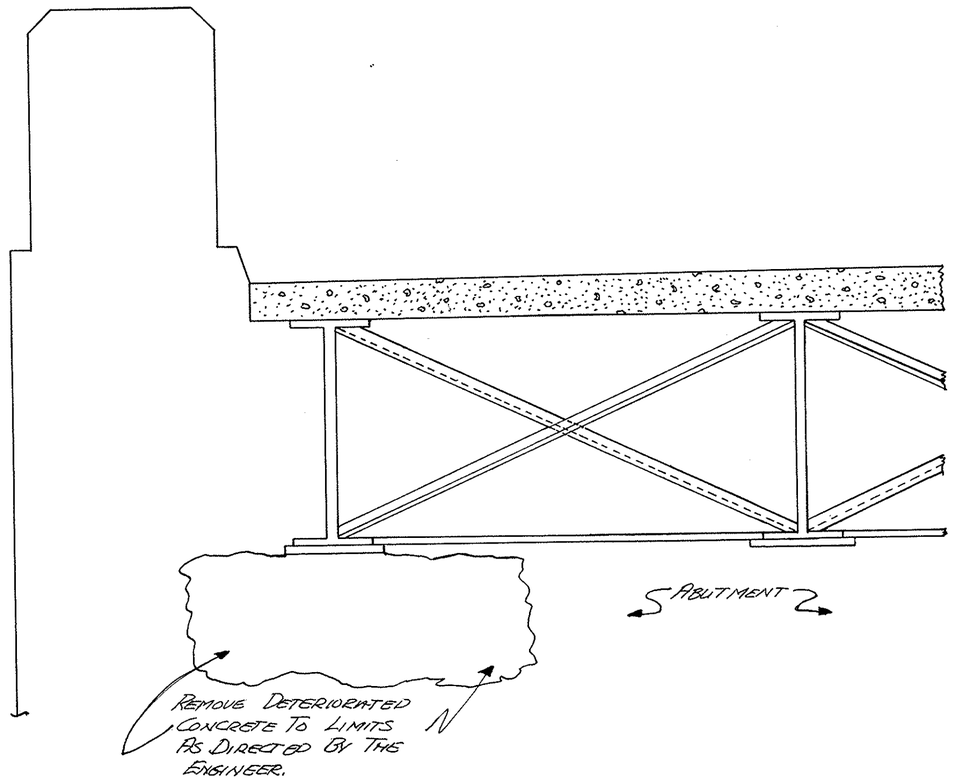
CONCRETE REPAIR:

BRIDGE NO. HAR 6-0.72
BRIDGE NO. SAL 41-0.70
SCALE: 1"= 1'-0"



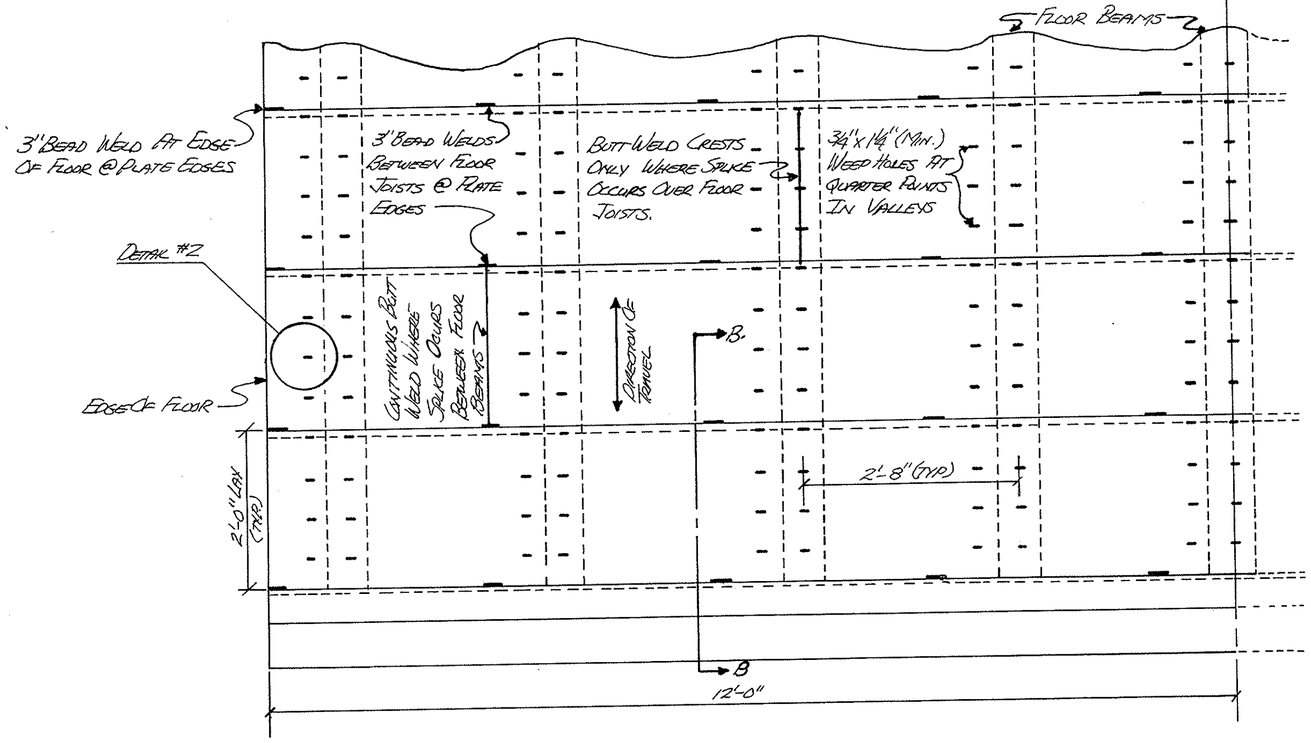
CONCRETE REPAIR:

BRIDGE NO. BEN 208-4.70
SCALE: 3/4"= 1'-0"



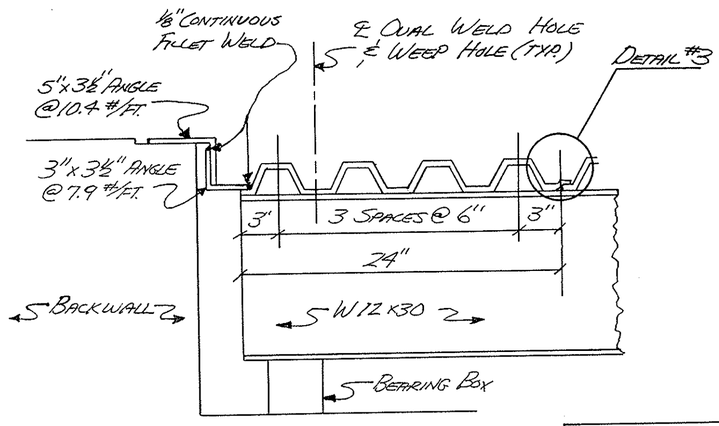
GENERAL PLAN

BRIDGE NO. ALL - 5A-3.64
SCALE: 3/4"= 1'-0"



SECTION B-B

BRIDGE NO. ALL-5A-3.64
SCALE: 1 1/2"= 1'-0"



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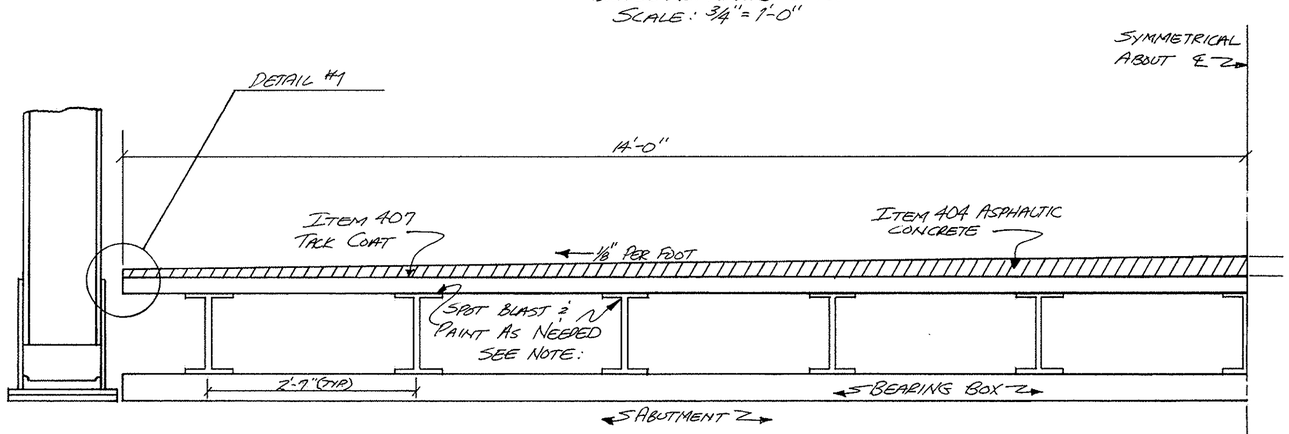
REVISIONS:	

TYPICAL SECTION

BRIDGE NO. HAR.6-0.72
SCALE: 3/4"=1'-0"



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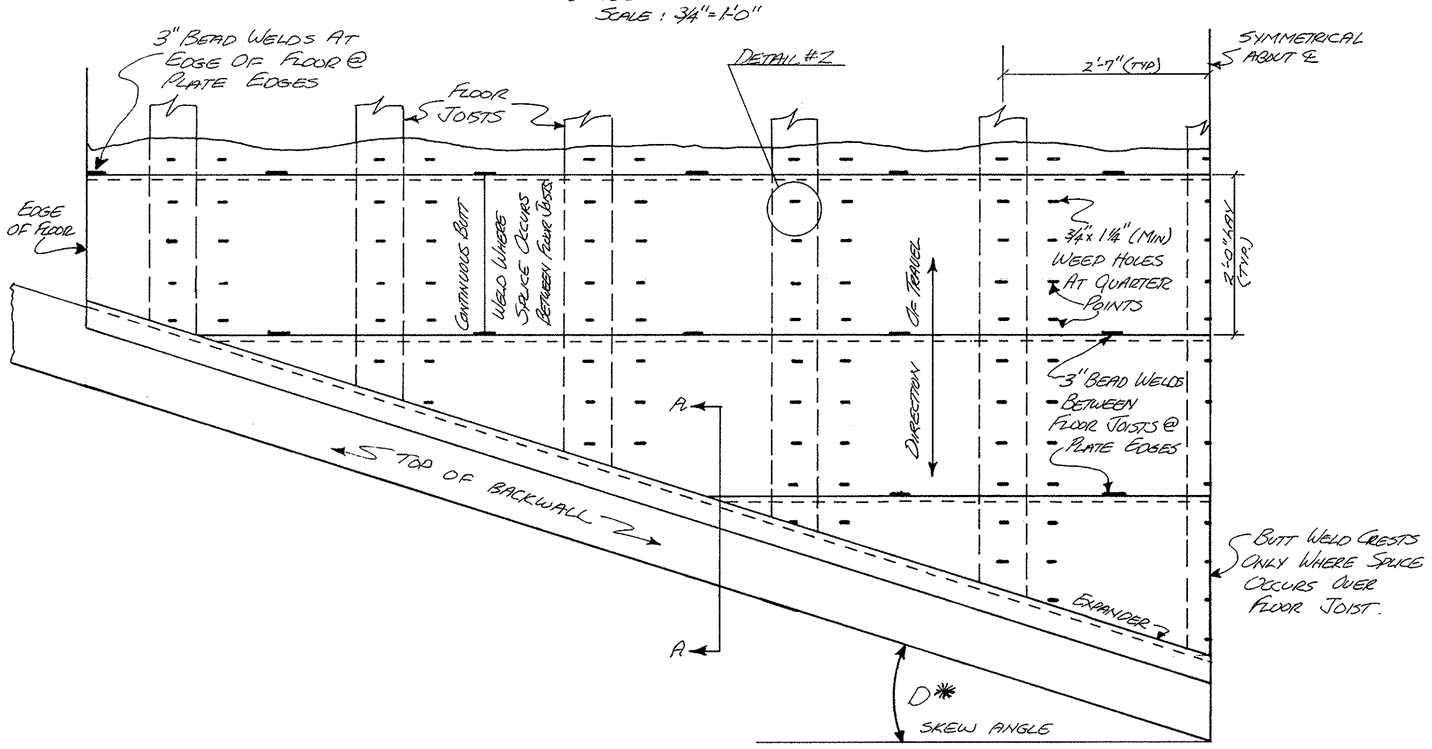
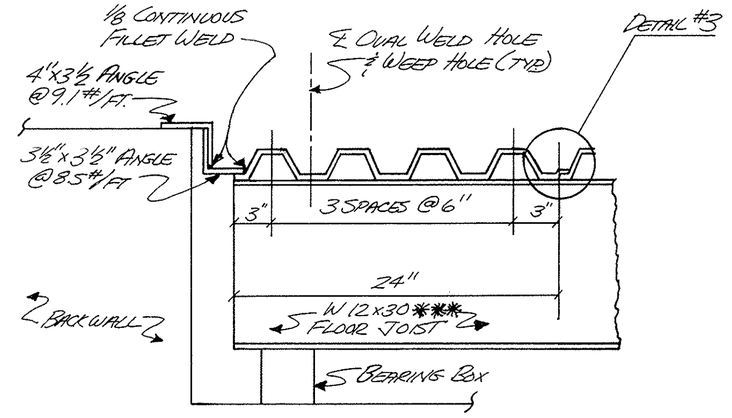


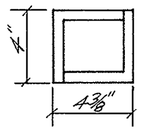
SECTION A-A

BRIDGE NO. HAR.6-0.72
SCALE: 1 1/2"=1'-0"



BEARING BOX DETAIL

TYPICAL
SCALE: 2"=1'-0"



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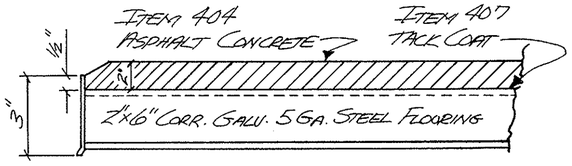


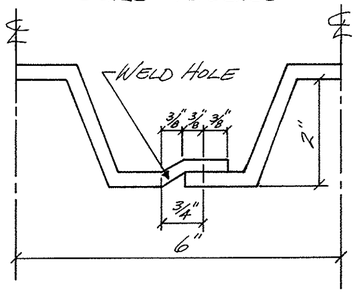
10GA END DAMS FURNISHED SEPARATELY & FIELD WELDED TO FLOOR AFTER ERECTION

DETAIL #2

SCALE: FULL

DETAIL #3

SCALE: 1/2 SCALE



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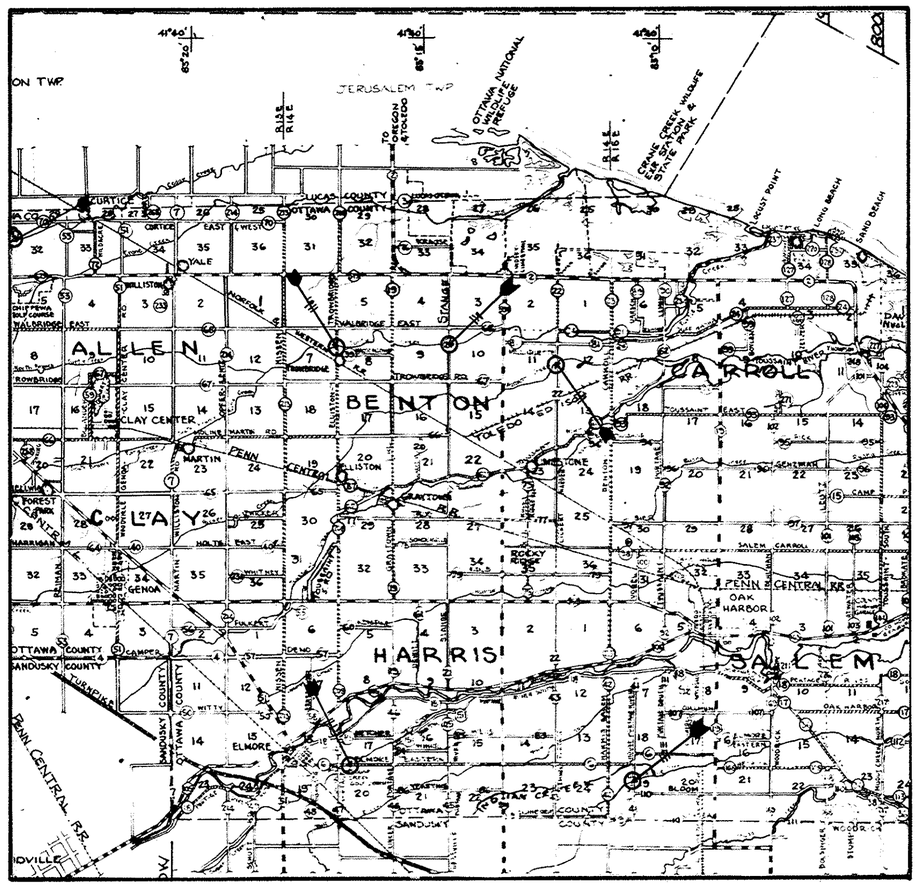

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5) BRIDGE NO. HAR-6-0.72 ~ ELMORE EAST ROAD, NO 6 OVER SUGAR CREEK.
SIZE OF FLOOR JOISTS: W 12×30
SKEW: LEFT FORWARD - 17°30'

CONCRETE REPAIR DATA:

1) BRIDGE NO. BEN. 208-4.70. OVER TURTLE CREEK
2) BRIDGE NO. HAR. 6-0.72 OVER SUGAR CREEK.

WORK TO COMMENCE FIRST ON ABOVE TWO STRUCTURES AND BE SUBSTANTIALLY COMPLETED BEFORE STARTING WORK ON STEEL BRIDGE REPAIRS.

NOTE:

BRIDGE NO. FIVE, WAS ADDED TO THE LIST IN THE SPRING OF 1982, UNDER SEPARATE CONTRACT.

SEAL

OTTAWA COUNTY ENGINEER'S OFFICE
PORT CLINTON, OHIO

REPAIRS TO VARIOUS WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO

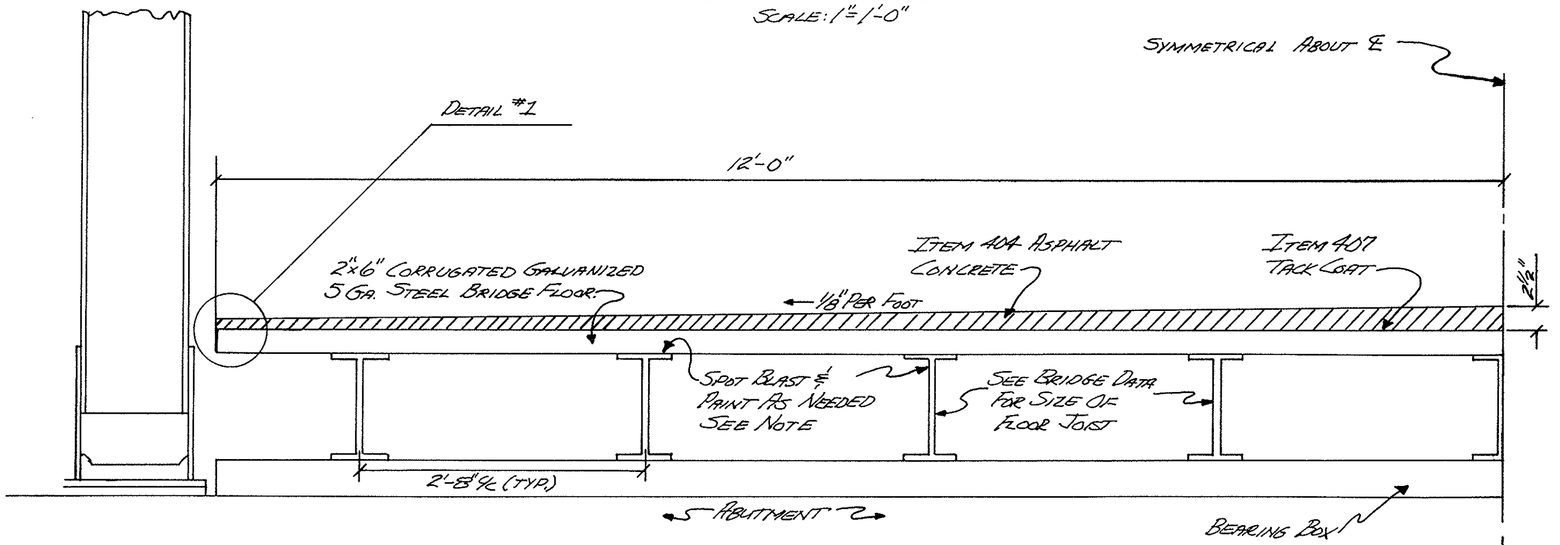
DESIGNED BY: ROBERT C. STEINMILLER
DRAWN BY: JEFF UNDERWOOD
APPROVED BY: John M. Gogcun
OTTAWA COUNTY ENGINEER

SEAL

REVISIONS:

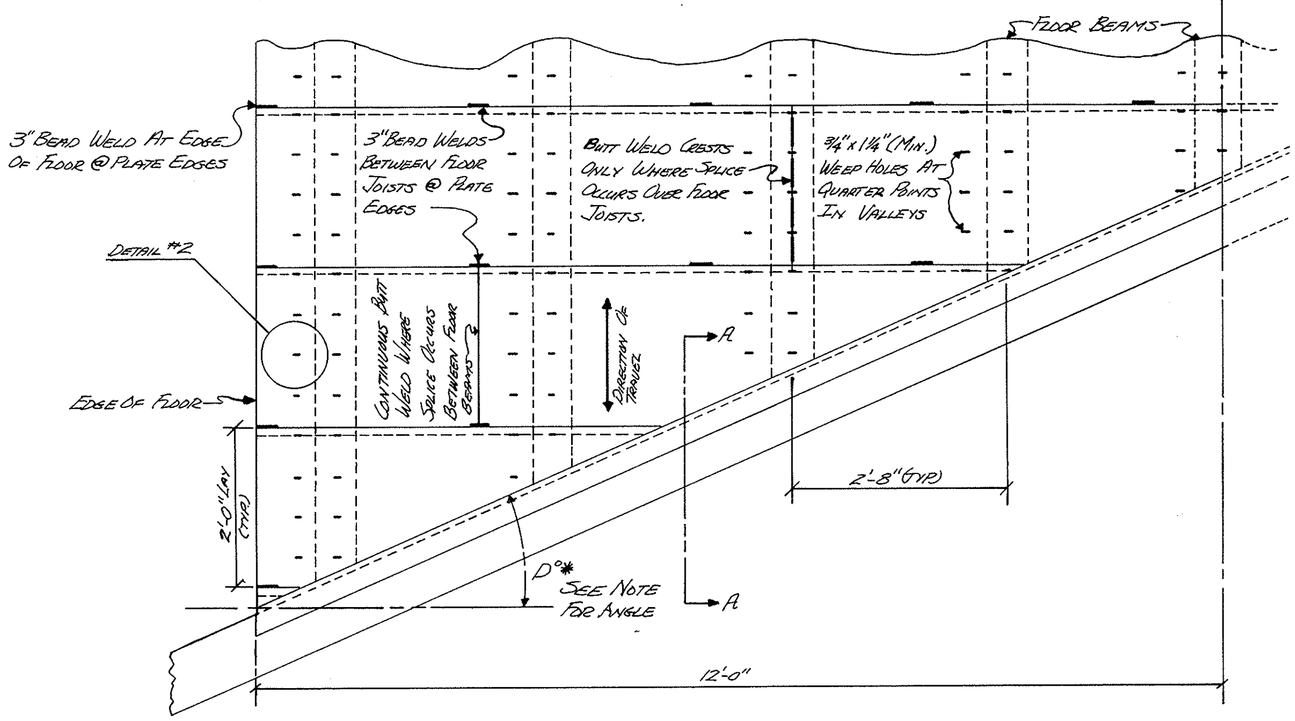
TYPICAL SECTION

BRIDGE NO. BEN-21-4.80
BRIDGE NO. BEN-22-4.35
BRIDGE NO. SAL-41-0.70
BRIDGE NO. ALL-64-3.64
SCALE: 1"=1'-0"



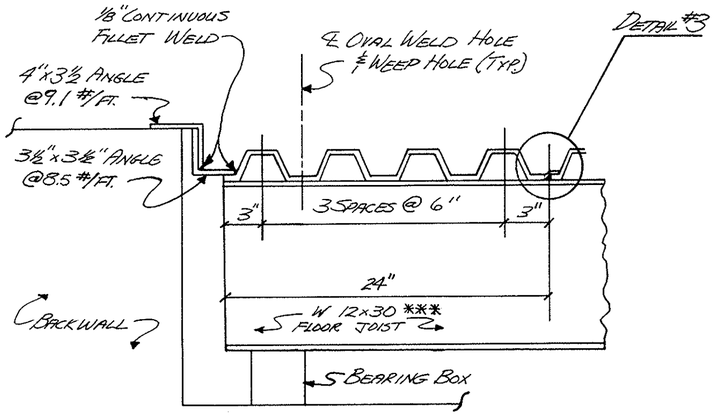
GENERAL PLAN

BRIDGE NO. BEN-21-4.80
BRIDGE NO. BEN-22-4.35
BRIDGE NO. SAL-41-0.70
SCALE: 3/4" = 1'-0"



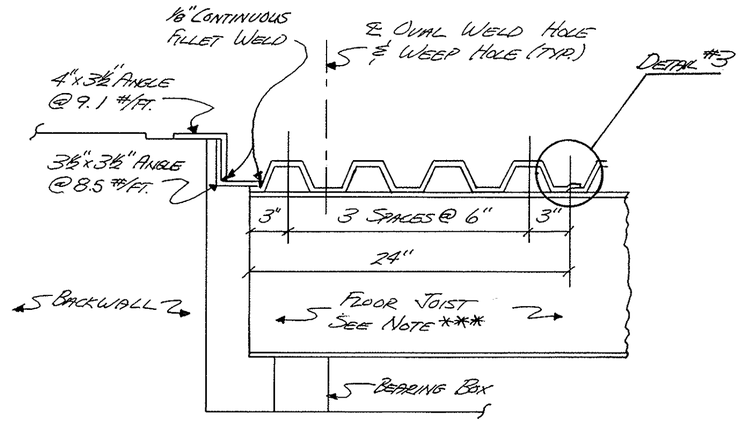
SECTION A-A

BRIDGE NO. BEN.21-4.80
SCALE: 1½"=1'-0"



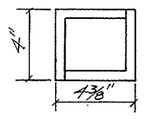
SECTION A-A

BRIDGE NO. BEN. 22-4.35
BRIDGE NO. SAL. 41-0.70
SCALE: 1½"=1'-0"



BEARING BOX DETAIL

TYPICAL
SCALE: 2"=1'-0"

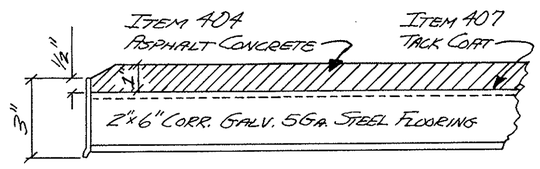


NOTES:

* SEE BRIDGE DATA FOR ANGLE.
** A 15/16" DIAMETER ROUND WELD HOLE WITH 3/16"x3" FILLET WELD MAY BE USED INSTEAD OF OVAL WELD HOLE. HOLE TO BE SHOP PUNCHED ONLY.
*** IF REQUIRED UNDER DIRECTION OF ENGINEER.

DETAIL #1

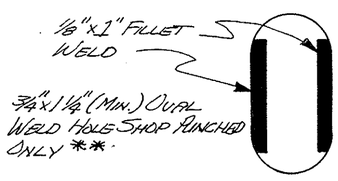
SCALE: 3"=1'-0"



10 GA. END DAMS FURNISHED SEPARATELY & FIELD WELDED TO FLOOR AFTER ERECTION

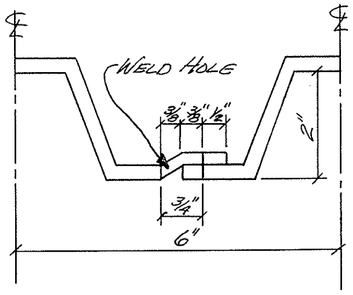
DETAIL #2

SCALE: FULL



DETAIL #3

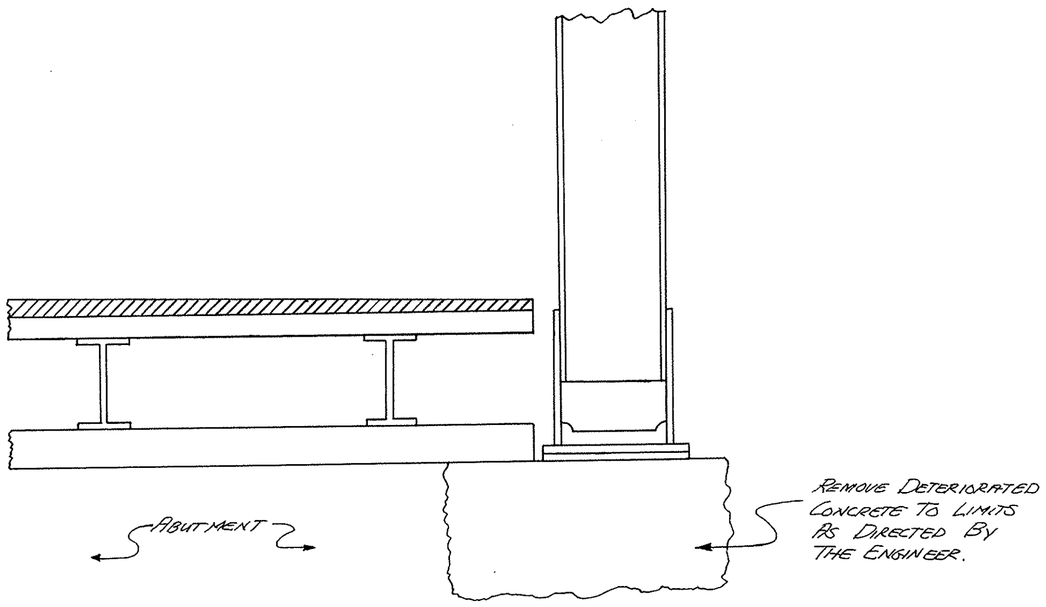
SCALE: ½ SCALE



OTTAWA COUNTY ENGINEER'S OFFICE PORT CLINTON, OHIO
REPAIRS TO VARIOUS WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO
DESIGNED BY: ROBERT C. STEINMILLER DRAWN BY: JEFF UNDERWOOD APPROVED BY: [signature] OTTAWA COUNTY ENGINEER
REVISIONS:

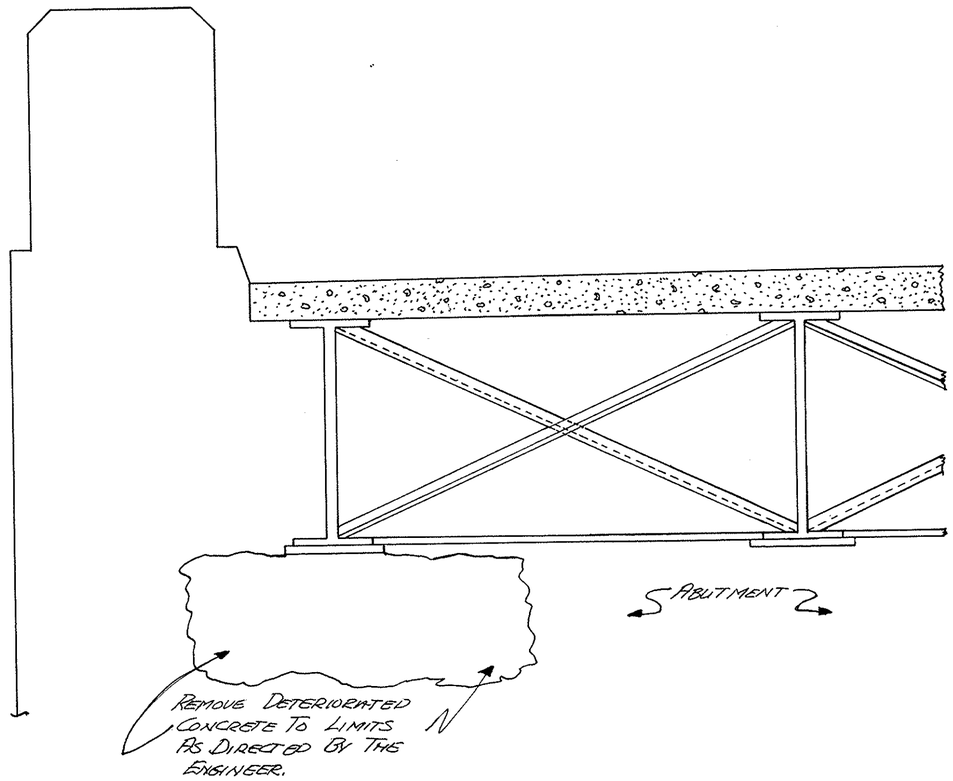
CONCRETE REPAIR:

BRIDGE NO. HAR 6-0.72
BRIDGE NO. SAL 41-0.70
SCALE: 1"= 1'-0"



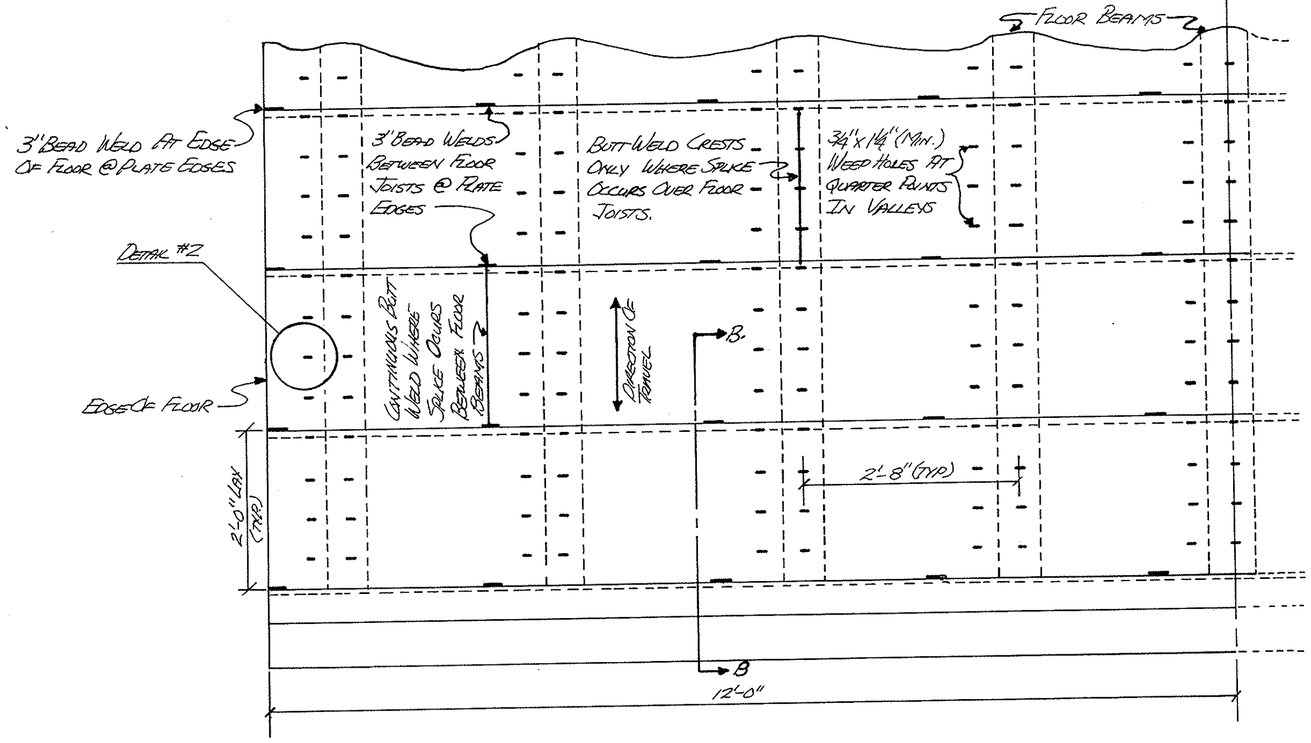
CONCRETE REPAIR:

BRIDGE NO. BEN 208-4.70
SCALE: 3/4"= 1'-0"



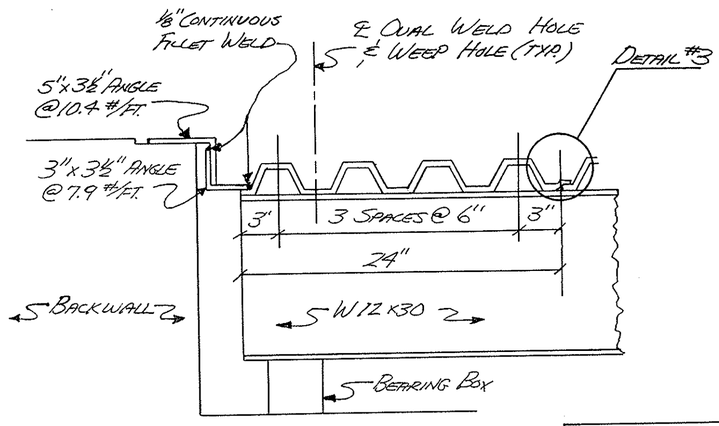
GENERAL PLAN

BRIDGE NO. ALL - 5A-3.64
SCALE: 3/4"= 1'-0"



SECTION B-B

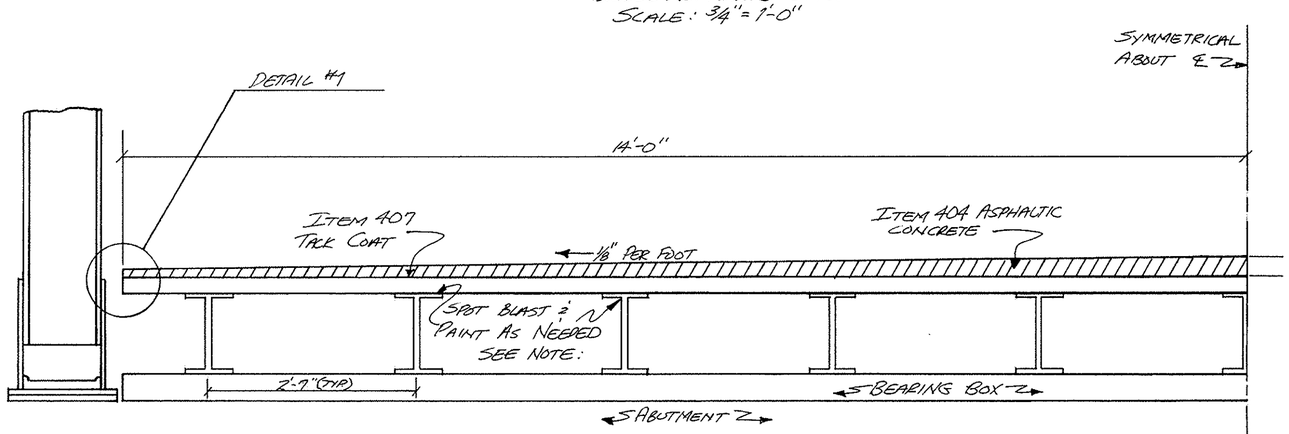
BRIDGE NO. ALL-5A-3.64
SCALE: 1 1/2"= 1'-0"



OTTAWA COUNTY ENGINEER'S OFFICE PORT CLINTON, OHIO	
REPAIRS TO VARIOUS WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO	
DESIGNED BY: ROBERT C. STEINMILLER DRAWN BY: JEFF UNDERWOOD APPROVED BY: [signature] OTTAWA COUNTY ENGINEER	
REVISIONS:	

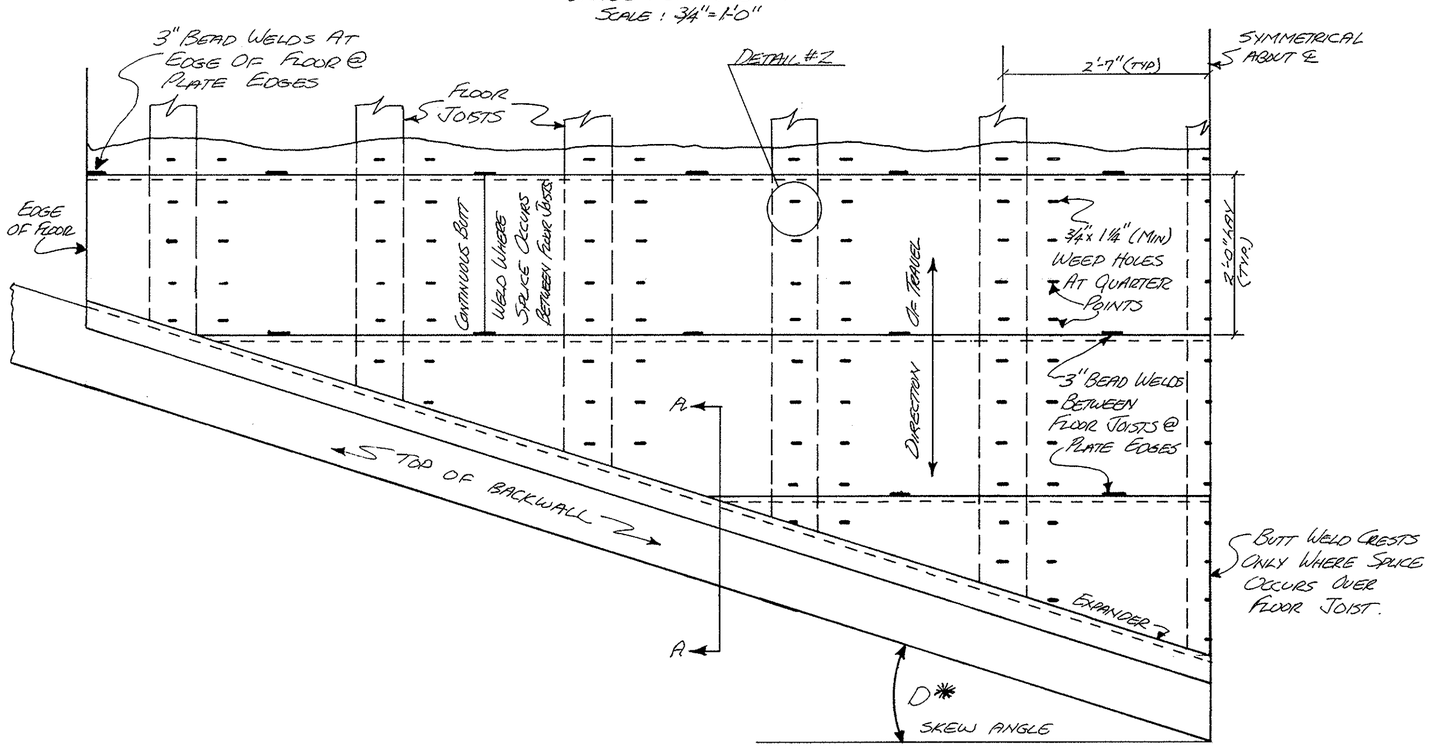
TYPICAL SECTION

BRIDGE NO. HAR.6-0.72
SCALE: 3/4"=1'-0"



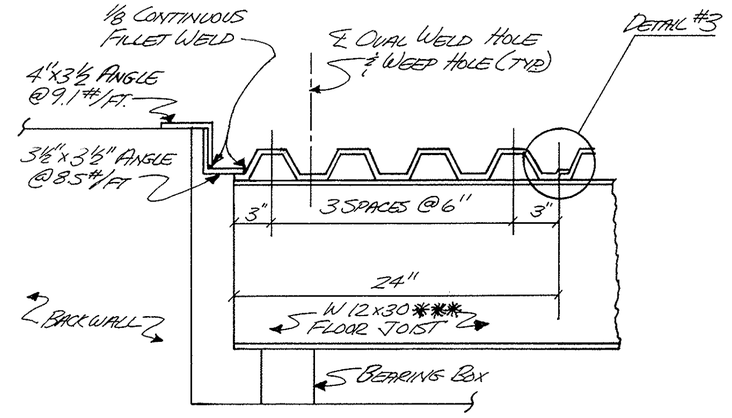
GENERAL PLAN

BRIDGE NO. HAR.6-0.72
SCALE: 3/4"=1'-0"



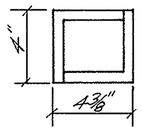
SECTION A-A

BRIDGE NO. HAR.6-0.72
SCALE: 1 1/2"=1'-0"



BEARING BOX DETAIL

TYPICAL
SCALE: 2"=1'-0"



NOTES:

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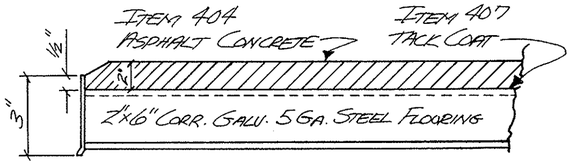
DETAIL #1

SCALE: 3"=1'-0"



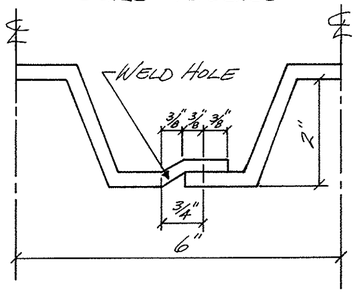
10GA END DAMS FURNISHED SEPARATELY & FIELD WELDED TO FLOOR AFTER ERECTION

DETAIL #2

SCALE: FULL

DETAIL #3

SCALE: 1/2 SCALE



OTTAWA COUNTY ENGINEER'S OFFICE PORT CLINTON, OHIO
REPAIRS TO WELDED STEEL BRIDGES IN OTTAWA COUNTY, OHIO
DESIGNED BY: ROBERT C. STEINMILLER DRAWN BY: JEFF UNDERWOOD APPROVED BY: _____ OTTAWA COUNTY ENGINEER
REVISIONS: