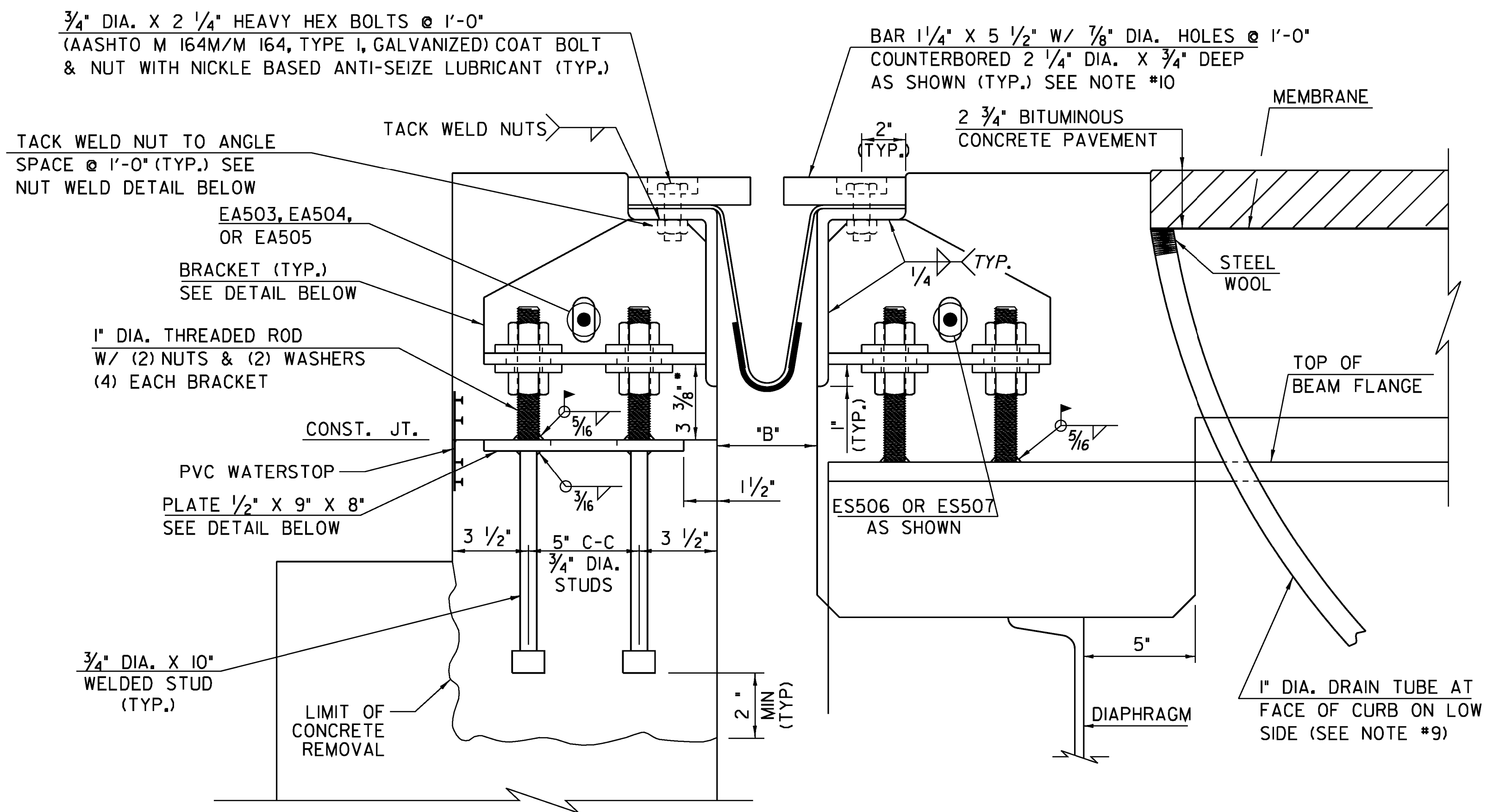
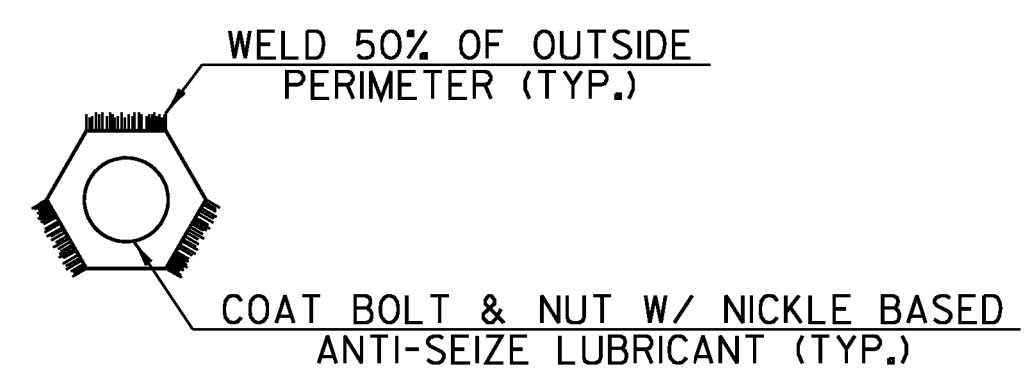


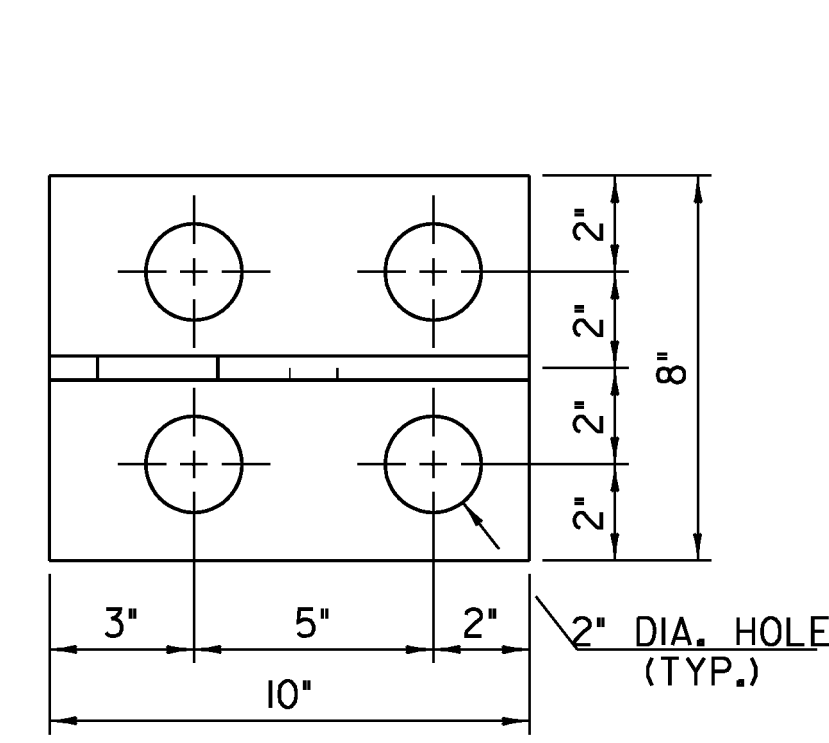
TYPICAL SECTION BETWEEN BEAMS
SCALE: 3" = 1'-0" (NORMAL TO ϕ BEARING)



TYPICAL SECTION AT BEAMS
SCALE: 3" = 1'-0" (NORMAL TO ϕ BEARING)



NUT WELD DETAIL
N.T.S.



BRACKET PLAN
SCALE: 3" = 1'-0"

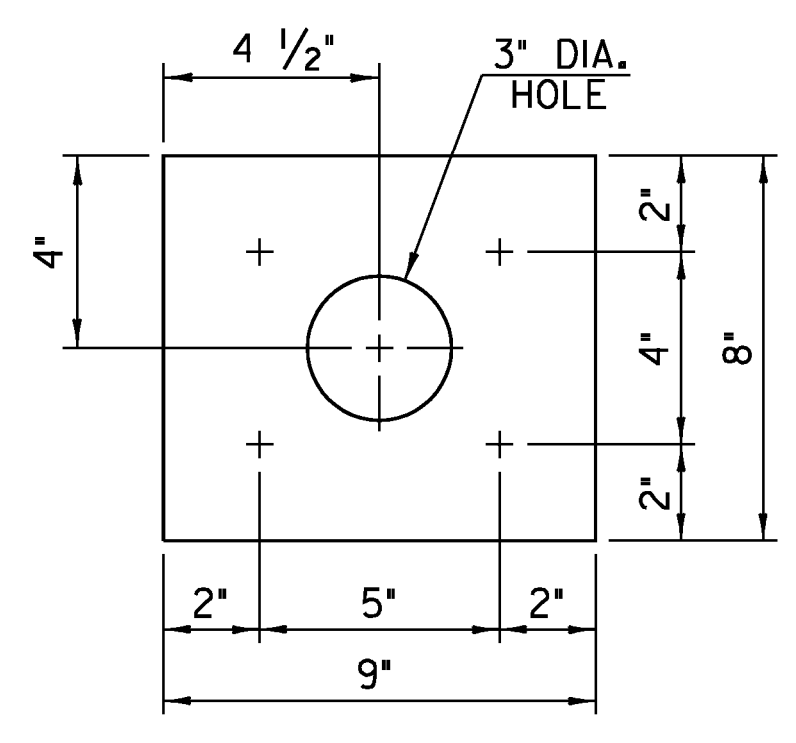
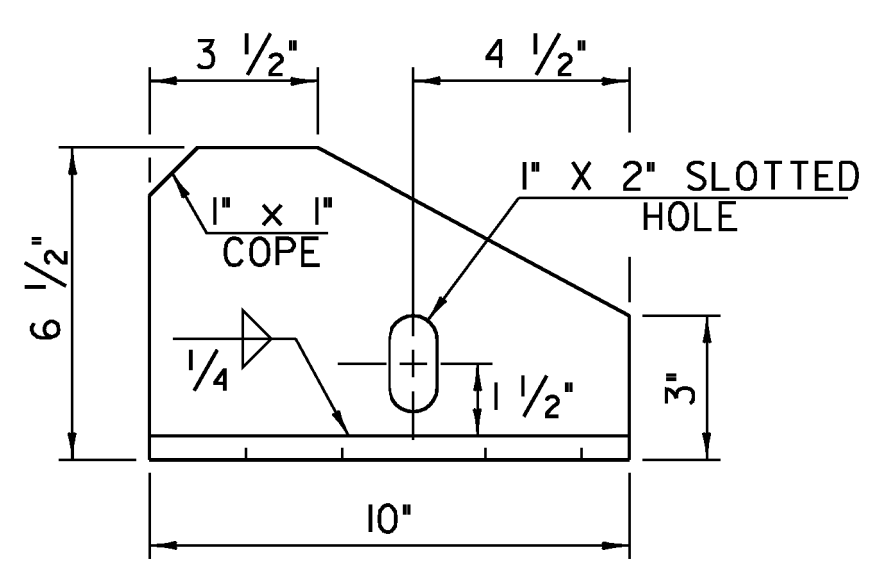
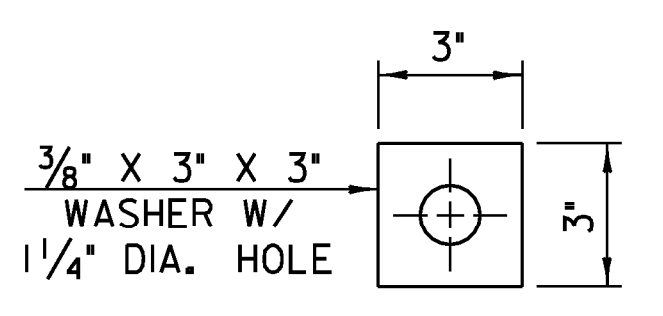


PLATE PLAN
SCALE: 3" = 1'-0"



BRACKET ELEVATION
SCALE: 3" = 1'-0"



WASHER FOR BRACKET
SCALE: 3" = 1'-0"

ALL PLATES 1/2"

- DETAILS ON THIS SHEET ARE FOR ITEM 516. II "BRIDGE EXPANSION JOINT, VERMONT".
- PREFORMED FABRIC MATERIAL SHALL BE CONTINUOUS AND SHALL CONFORM TO SUBSECTION 707.07.
- BUTYL RUBBER TAPE SHALL CONFORM TO AASHTO SPECIFICATION M-198, TYPE II.
- THE FINAL FINISH OF THE EXPANSION DEVICE SHALL BE COVERED DURING THE PLACING OF BRIDGE DECK CONCRETE.
- ALL STEEL COMPONENTS SHALL BE AASHTO M 270M/M 270, GRADE 250 (GRADE 36) GALVANIZED OR METALIZED AS PER SUBSECTION 516.04 UNLESS OTHERWISE SPECIFIED, EXCEPT FOR THREADED RODS AND NUTS WHICH WILL BE ASTM A307.
- THE ITEM "BRIDGE EXPANSION JOINT, VERMONT" SHALL INCLUDE THE FABRICATION AND ERECTION OF THE COMPLETE JOINT ASSEMBLY INCLUDING ALL STEEL PLATES, BRACKETS, ANGLES, WELDED STUDS OR RODS, PREFORMED FABRIC DRAIN MATERIAL AND PLASTIC DRAIN TUBES, BUTYL RUBBER TAPE AND ANY OTHER MISCELLANEOUS MATERIAL NECESSARY TO INSTALL JOINT.
- THE 4" X 8" X 1/2" ANGLES SHALL BE FURNISHED AS TWO PIECES. A FIELD WELDED BUTT SPLICE JOINT IS REQUIRED AT THE LIMIT OF PHASE I NEW CONSTRUCTION. 1 1/4" X 5 1/2" BARS EACH SIDE OF THE JOINT SHALL BE PROVIDED IN TWO PIECES.
- COAT CONCRETE CONTACT SURFACES WITH MORTAR TYPE 4 MEETING THE REQUIREMENTS OF SUBSECTION 707.03. PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 516. II "BRIDGE EXPANSION JOINT, VERMONT".
- A 1" DIAMETER PLASTIC DRAIN TUBE (PER STD. SPEC. 740.01) SHALL BE INSTALLED AS SHOWN AT THE FACE OF CURB. THE UPPER END IS TO BE PLUGGED WITH STEEL WOOL AND THE LOWER END IS TO EXTEND BELOW THE BOTTOM OF THE ADJACENT BEAMS. THE DRAIN TUBES SHALL BE FASTENED TO THE BEAMS USING A METHOD APPROVED BY THE ENGINEER.

- FILL COUNTERBORED HOLES WITH HOT POURED JOINT SEALER (STD. SPEC. 707.04) AFTER BOLT INSTALLATION. PAYMENT FOR THE WORK SHALL BE INCIDENTAL TO ITEM 516. II.
- PAYMENT FOR WATERSTOP SHALL BE INCIDENTAL TO CONCRETE PAY ITEM.
- A DRIP BEAD OF 1/4" X 7" STRIP OF PREFORMED MATERIAL SHALL BE CEMENTED TO THE BOTTOM OF THE FABRIC TROUGH USING AN ADHESIVE APPROVED BY THE MANUFACTURER. THE DRIP BEAD SHALL BE APPLIED 1' FROM THE DOWNSPOUT END OF THE TROUGH.
- FABRIC TROUGH SHALL BE THOROUGHLY CLEANED AND FLUSHED AFTER PAVING OPERATION.
- FABRIC TROUGH SHALL BE ONE CONTINUOUS UNIT AND SHALL BE INSTALLED AFTER COMPLETION OF PHASE II CONSTRUCTION.
- THE EXPANSION JOINT SHALL BE SHOP ASSEMBLED AND SHIPPED AS TWO UNITS, CORRESPONDING TO PHASE I AND PHASE II CONSTRUCTION. THEN WELDED IN THE FIELD. (SEE SHEET 21).
- FABRIC TROUGH SHALL BE INSTALLED SO THAT MINIMUM SLOPE IS 1/2" FOR POSITIVE DRAINAGE.
- THREADED ROD AND ASSOCIATED NUTS AND WASHERS SHALL CONFORM TO SUBSECTION 714.04.

TEMP (°F)	*A* DISTANCE		*B* DISTANCE	
	ABUT #1	ABUT #2	ABUT #1	ABUT #2
-30	1 9/16"	2 11/16"	4 9/16"	5 11/16"
-15	1 7/16"	2 7/16"	4 7/16"	5 7/16"
0	1 5/16"	2 1/4"	4 5/16"	5 1/4"
15	1 1/4"	2"	4 1/4"	5"
30	1 1/8"	1 3/4"	4 1/8"	4 3/4"
45	1"	1 1/2"	4"	4 1/2"
60	7/8"	1 1/4"	3 7/8"	4 1/4"
75	3/4"	1"	3 3/4"	4"
90	11/16"	3/4"	3 11/16"	3 3/4"
105	5/16"	9/16"	3 5/16"	3 5/16"

A AND *B* ARE THE SETTINGS BEFORE DEAD LOADS ARE IN PLACE.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town of BERKSHIRE	Bridge No. 30
Highway No. VT 118	Log Sta.
VT 118 OVER MISSISSQUOI RIVER	
EXPANSION JOINT DETAILS	
Designed By J Howe	Drawn By J Davis
Checked By R Hebert	Date 4/2/09
Bridge Design Supervisor Date 	
PROJECT BERKSHIRE	PROJECT NO. BHF 028319JS
I.G.C. Info. 	ZC304EJDDGN
Bridge Sheet No. 	Sheet 22 of 41