



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
05900367

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
MICHAEL AUSTIN
304-558-2402

PROPOSER

*709055926 304-464-4441
CARR CONCRETE CORPORATION
PO BOX 265

WAVERLY WV 26184-0265

SHIP TO

DIVISION OF HIGHWAYS
JOBSITE
SEE SPECIFICATIONS

RECEIVED

FEB 12 2009

BY:

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/10/2009				

BID OPENING DATE: **02/25/2009** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		210-16	36,312.00	36,312.00
<p>CONCRETE BEAMS, CHANNELS, PRESTRESSED</p> <p>TO PROVIDE PRESTRESSED CONCRETE BOX BEAMS FOR WEIMER BRIDGE PROJECT #S312-28/7-12.02 IN GRANT COUNTY FOR THE WEST VIRGINIA DIVISION OF HIGHWAYS PER THE ATTACHED SPECIFICATIONS AND DRAWINGS.</p> <p>EXHIBIT 10</p> <p style="text-align: right;">REQUISITION NO.: 05900367</p> <p>ADDENDUM ACKNOWLEDGEMENT</p> <p>I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.</p> <p>ADDENDUM NO.'S:</p> <p>NO. 1</p> <p>NO. 2</p> <p>NO. 3</p> <p>NO. 4</p> <p>NO. 5</p> <p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p>						

RECEIVED

2009 FEB 24 A 10:00

PURCHASING DIVISION
STATE OF WV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE *R. Burr Stanley* TELEPHONE **304-464-4441** DATE **2/23/09**

TITLE **Project Manager** FAX **55-0685425** ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this Contract may be deemed null and void, and terminated without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

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VENDOR

*709055926 304-464-4441
 CARR CONCRETE CORPORATION
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 WAVERLY WV 26184-0265

SHIP TO

DIVISION OF HIGHWAYS
 JOBSITE
 SEE SPECIFICATIONS

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/10/2009				

BID OPENING DATE: 02/25/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p style="text-align: center;"> <i>RE: Ben Stanley</i> SIGNATURE <i>Carr Concrete Corp.</i> COMPANY <i>2/23/09</i> DATE </p> <p>REV. 11/96</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;"> DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130 </p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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DIVISION OF HIGHWAYS
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02/10/2009				

BID OPENING DATE: 02/25/2009 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
BUYER:				33		
RFQ. NO.:				05900367		
BID OPENING DATE:				2/25/09		
BID OPENING TIME:				1:30 pm		
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:						
				304-464-4013		
CONTACT PERSON (PLEASE PRINT CLEARLY):						
				Burr Stanley		
***** THIS IS THE END OF RFQ 05900367 ***** TOTAL:						\$36,312.00

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SPECIFICATIONS

The following sections of the West Virginia Department of Transportation, Division of Highways Standard Specifications Road and Bridges, adopted 2000 as modified by the January 1, 2003 Supplemental Specifications shall apply to the administration of this requisition: Sections 101, 102.4, 102.5, 105.1, 105.3, 105.4, 105.10, 105.11, 105.12, 105.13, 106.3, 106.4, 106.5, 106.6, 106.7, 106.9, 107.1, 107.2, 107.3, 107.14, 107.19, 107.20, 108.8, 108.9, 109.1, 109.2 and 109.20.

All items supplied under this requisition shall meet the requirements of the “West Virginia Department of Transportation, Division of Highways Standard Specifications Road and Bridges, adopted 2000, as modified by the January 1, 2003 Supplemental Specifications.

All Prestressed Concrete Box Shaped Beams shall be manufactured in accordance with West Virginia Department of Transportation, Division of Highways **Standard Bridge Plan Sheets dated 9/96** as follows:

<u>Item Description</u>	<u>Standard Sheet No</u>	<u>Revision Date</u>
17” Box Beam	BR-B17A & BR-B17B	9/96
Beam Details	BR-B100, BR-B101, BR-B102 & BR-B104	9/96
Post-Tensioning Details	BR-B103	9/96

Alternates to the above Division of Highways standards will be permitted if approved by the District Five Bridge Engineer. Alternate designs must be submitted for approval on the Design Data Charts provided as a part of the quotation sheets for this requisition and must be approved prior to award of this requisition purchase order. In addition to the design criteria contained on the Division of Highways Standard Bride Plan Sheets referenced above, all alternate designs must be based on the following criteria:

- A. Two lane bridge with a deck width of 24’-0” out to out and roadway width of 23’-0” rail to rail.
- B. Guardrail superimposed dead load of 30 pounds per linear foot assumed to be applied equally to all beams.
- C. Future wearing surface superimposed dead load of 50 psf applied equally to all beams.

D. Live loading of 1.25X HS20-44 (HS25).

The terms "Contractor" and "Vendor" used in the above specifications or this requisition are interchangeable. Contractor shall mean Vendor and Vendor shall mean Contractor.

West Virginia Department of Transportation, Division of Highways Standard Specifications Road and Bridges, adopted 2000 and Supplemental Specifications dated January 1, 2003 may be obtained from:

WEST VIRGINIA DIVISION OF HIGHWAYS
CONTRACT ADMINISTRATION DIVISION
1900 KANAWHA BLVD, EAST
BLDG. 5, ROOM A-729
CHARLESTON, WV 25305
PHONE (304) 558-2871

West Virginia Department of Transportation, Division of Highways Standard Bridge Plan Sheets may be obtained from:

WEST VIRGINIA DIVISION OF HIGHWAYS
DISTRICT FIVE HEADQUARTERS, BRIDGE DEPT.
P.O. BOX 99
BURLINGTON, WV 26710-0099
PHONE (304) 289-2220

ACCEPTANCE

Cracks developing in a beam may be cause for rejection of the beam. Cracks that are not detrimental to the structural integrity of the beam, as determined by the Division of Highways, may be accepted under the following conditions:

- 1) Cracks of 0.004 inch or less shall be treated with a second coat of a Division of Highways approved concrete sealer.
- 2) Cracks of greater than 0.004 inch shall be treated by a Division of Highways approved epoxy injection methods.

All concrete sealer and epoxy injection required for acceptance shall be preformed at no additional cost to the Division of Highways.

DELIVERY

Upon receipt of a State Purchase Order the Vendor shall submit shop drawings to the District Five Bridge Engineer within twenty (20) calendar days. Shop drawings must be approved the Division of Highways prior to the manufacture of any beam sections.

All beam sections and accessories shall be available for delivery to the specified delivery site within (60) calendar days after Vendor's receipt of approved shop drawings.

The Division of Highways requires that half of the beam sections be delivered at a time due to phased construction.

Should the Vendor fail to meet the above delivery schedule, liquidated damages will be assessed in accordance with Section 108.7 of the current Division of Highways Standard Specifications Road and Bridges.

Prior to delivery, all Beams, Accessories, and Optional Items shall be inspected for acceptance in accordance with Section 603 of the Division of Highways Standard Specifications Road and Bridges adopted 2000 as modified by the January 1, 2003 Supplemental Specifications.

VENDOR INVOICE

Vendors invoices must be submitted in original and one copy and contain the following:

- a. Division of Highways Requisition Purchase Order number.
- b. Total quantity and unit price with the total cost of each Item.

NOTE: Under no circumstance will the West Virginia Division of Highways, accept or pay for quantities of material in excess of the quantity stated on the Requisition Purchase Order.

PARTIAL PAYMENT OF APPROVED BEAMS

Upon completion of manufacture and approval by the Division of Highways of all Beams, specified on the Requisition Purchase Order, the vendor may invoice and the Division will pay for the cost of manufacturing the beams, not to exceed 65% of the total cost of the delivered Beams. Partial payment for Beams shall be subject to the following conditions:

- a. The vendor must request partial payment and furnish an official invoice for the manufactured and approved beams.

- b. The partial payment invoice shall be accompanied by a surety bond equal to the invoiced amount guaranteeing delivery of all items specified on the Requisition Purchase Order.
- c. The vendor shall furnish a statement of approved beam condition and exact storage locations.
- d. The vendor shall furnish a legal right-of-entry onto the storage site to Division of Highways' employees and/or agents for the purpose of inspecting, sampling, testing and removing any or all Beams.
- e. The vendor shall certify that the stored beams are suitably marked and identified as property of the Division of Highways and will not be used for any purpose not designed by the Division.

PRESTRESSED CONCRETE BOX BEAMS & ASSOCIATED HARDWARE

WEIMER BRIDGE

STATE PROJECT NO. S312-28/7-12.02

<u>ITEM</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>Unit Price</u>	<u>AMOUNT</u>
01.	2 EACH	EXTERIOR BEAMS 17" depth x 36" width x 33'-6" overall length (32'-0" c-c bearing anchor bolt holes). With all guardrail & hardware attached.	<u>4174.00</u>	<u>8348.00</u>
02.	6 EACH	INTERIOR BEAMS 17" depth x 36" width x 33'-6" overall length (32'-0" c-c bearing anchor bolt holes).	<u>4174.00</u>	<u>25044.00</u>
03.	16 EACH	ELASTOMERIC BEARING PADS (3/4" thick x 5" x 24").	<u>60.00</u>	<u>960.00</u>
04.	16 EACH	NO. 8 DEFORMED ANCHOR BOLT (Grade 60) bar. 1" diameter x 2'-0" length.	<u>10.00</u>	<u>160.00</u>
05.	75 LF	PREFORMED JOINT FILLER (1" thick x 17").	<u>8.00</u>	<u>600.00</u>
06.	4 EACH	POST TENSIONING BARS (1" diameter, threaded, 2 - 27' full length bars + 2 - 15', with all plates, hex nuts and other hardware as required).	<u>300.00</u>	<u>1200.00</u>
TOTAL				<u>\$36,312.00</u>

EXTERIOR BEAMS ARE TO BE SHIPPED COMPLETE WITH ALL GUARDRAIL, INSERTS, GUARDRAIL POSTS, AND GUARDRAIL ATTACHED.

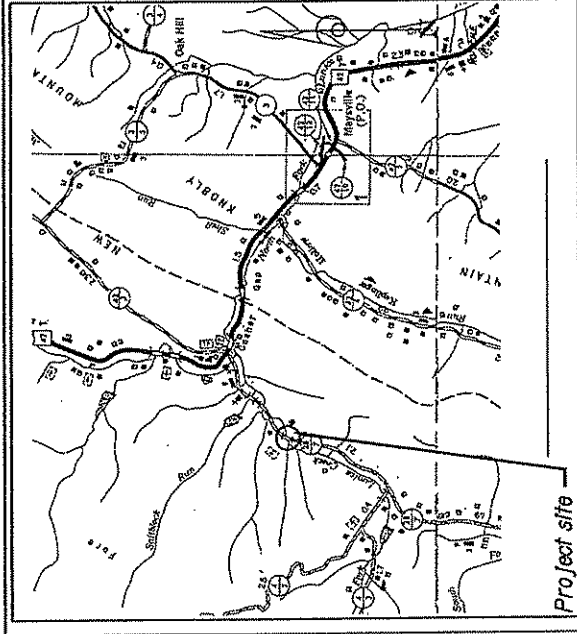
ALL BEAMS AND OTHER ITEMS ARE TO BE IN ACCORDANCE WITH THE ATTACHED PLANS AND SPECIFICATIONS FOR THIS PROJECT.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR CONSTRUCTION

OF WEIMER BRIDGE

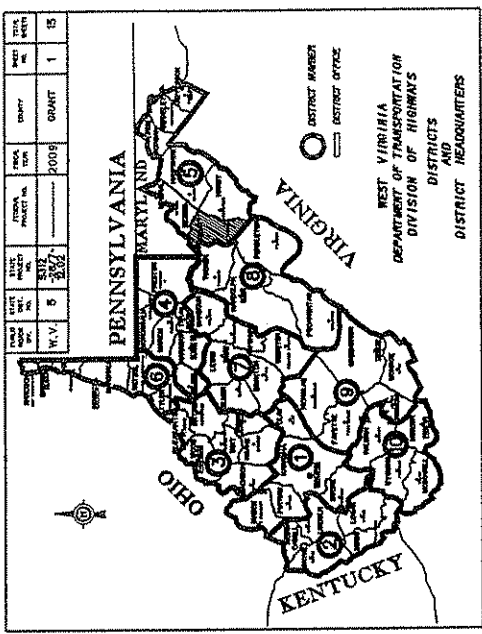
STATE PROJECT NO. S312-28/7-12.02
ROUTE NO. CO. 28/7 (SLS)
GRANT COUNTY

TOTAL PROJECT LENGTH • 4000 FT. • 0.01 MI.



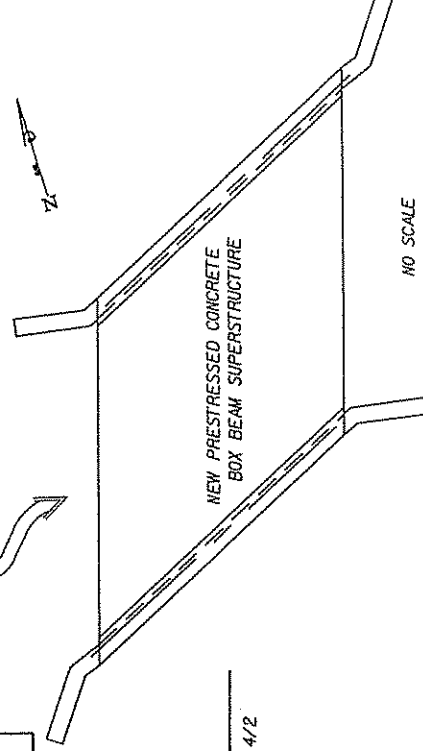
Project site

UTILITIES ENCOUNTERED
NONE

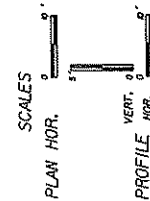


TYPE OF CONSTRUCTION
BRIDGE NO. 12-28/7-12.02
REHABILITATE

TO JCT. WV42



TO JCT. CR 4/2



DESIGN DESIGNATION	
A. D. T. (LEADS) - 680	
A. D. T. (LEADS) - 1"	
D. H. Y.	
0	
T.	
Y.	

CONVENTIONAL SIGNS

- STATE LINE
- COUNTY LINE
- PROPOSED NEW LINE
- PROPERTY LINE
- PROPOSED FENCE
- CODE OF STREAM
- PROPOSED BOARD WALK
- CUSTOMER OWNED WALK
- ROADWAY
- WATER LINE
- TELEPHONE WIRE
- ELECTRIC WIRE
- TELEPHONE POLE
- POWER POLE
- CORNER POWER AND TELEPHONE POLE
- STAKE
- STAKE
- RIGHT OF WAY MARKER

INDEX TO SHEETS

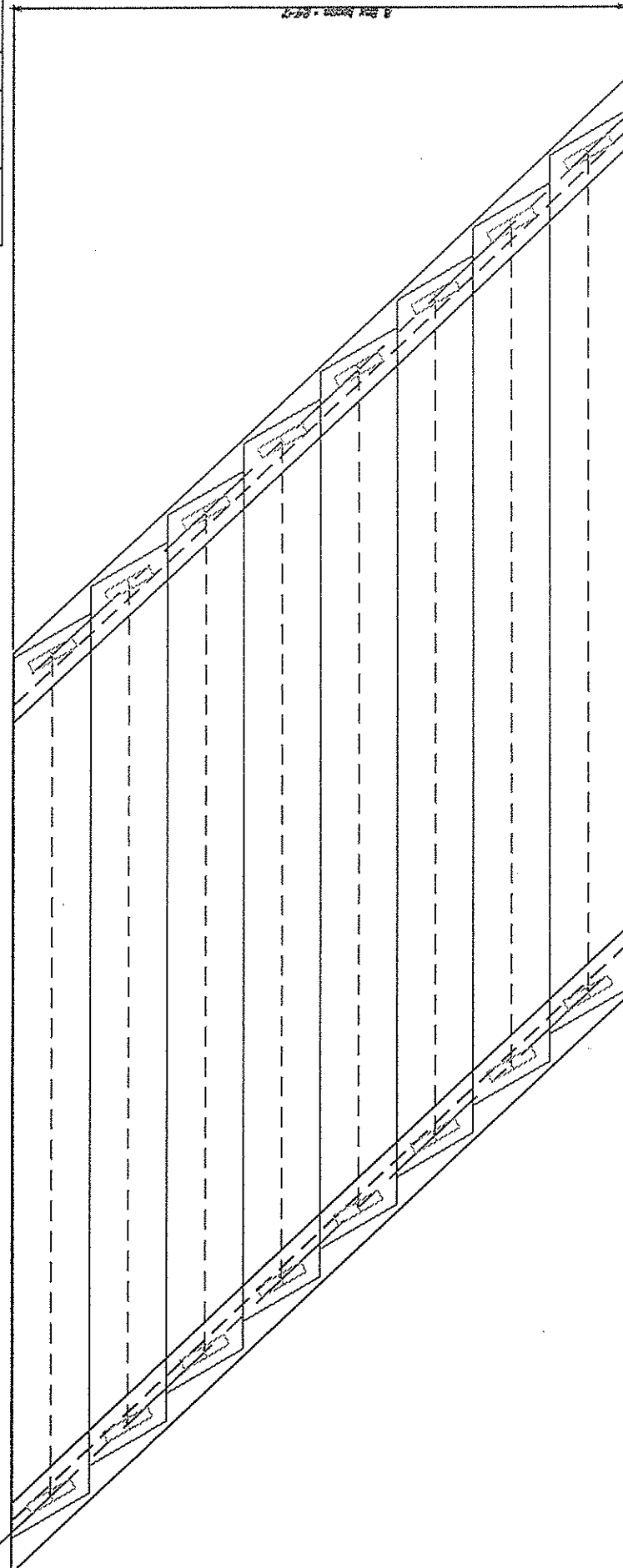
NO.	DESCRIPTION
1	TITLE SHEET
2	QUANTITIES
3	GENERAL NOTES
4	MAINTENANCE OF TRAFFIC
5	PLAN SHEET
6	PROFILE SHEET & TYPICAL SECTION
7-13	BRIDGE PLANS

NO.	DATE	REVISIONS

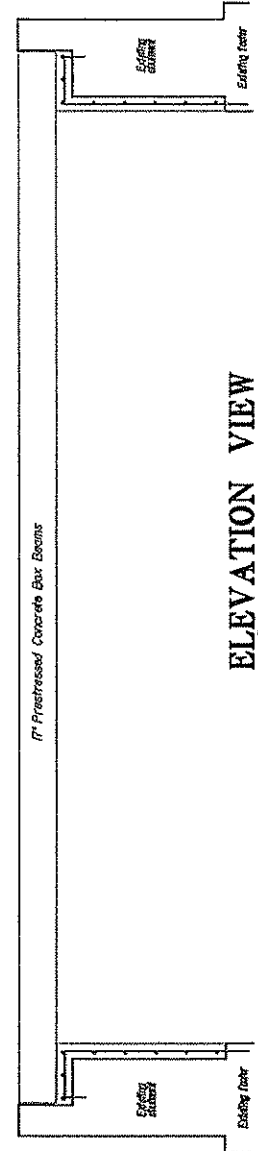
RECOMMENDED DESIGNER

APPROVED DISTRICT BRIDGE ENGINEER

STATE PROJECT NUMBER	5332-207-12.02	SECTION NUMBER	5	SHEET NUMBER	5	TOTAL SHEETS	11
COUNTY	GRANT	SCALE	AS SHOWN				



LAYOUT
SCALE: 1/4" = 1'-0"



ELEVATION VIEW
@ C ROADWAY
SCALE: 1/4" = 1'-0"

W.VA. DEPARTMENT OF HIGHWAYS
STRUCTURES DIVISION
WEIMER BRIDGE
OVER
NORTH FORK LUNICE CREEK
IN
GRANT COUNTY
LAYOUT & ELEVATION

DATE	1-09
BY	1-09
CHECKED	
APPROVED	

SHEET 1 OF 10
DRAWING NO.
12-207-12.02

STATE	PROJECT NUMBER	COUNTY	SHEET TOTAL
NO. 1	0	GRANT	14
DATE	DATE OF SURVEY	DATE OF PRINT	
11/14/00	08/12-08/17-12-02	08/14/02	

CONTROL ELEVATIONS

CODE	ADJUSTMENT	ADJUSTMENT 2
1	N/A	N/A
2	N/A	N/A

CONTROL ELEVATIONS ESTABLISHED FROM

CONTROL STATIONING

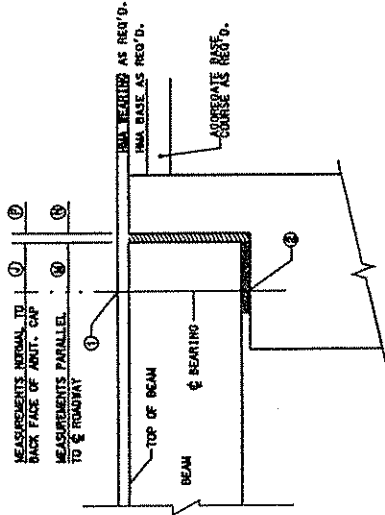
CODE	LOCATION	STATION VALUE
1	ROADWAY AT	N/A
2	ADJUSTMENT	N/A
3	BEARING	N/A
4	ADJUSTMENT	N/A

CONTROL STATIONING ESTABLISHED FROM

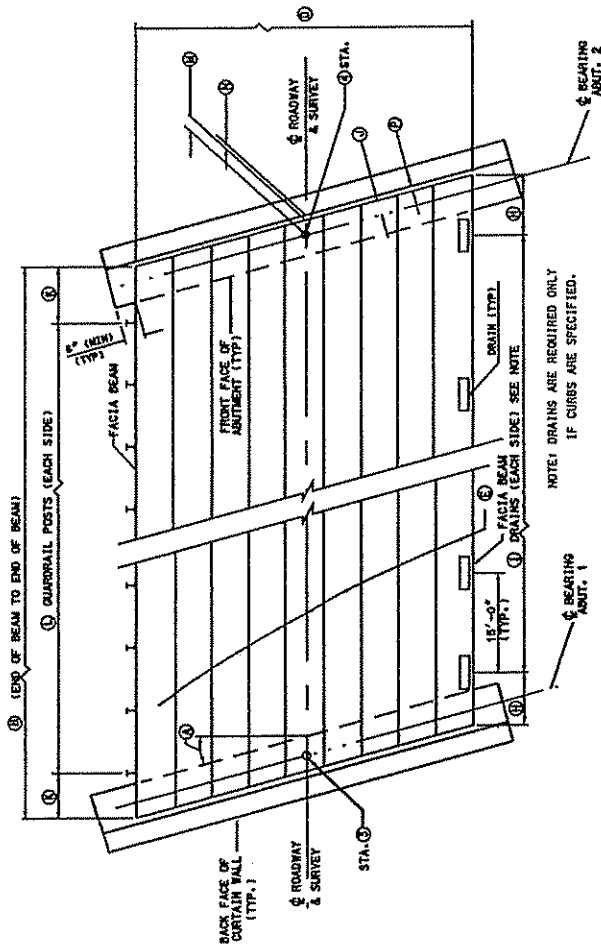
CONTROL DIMENSIONS

DIMENSION	CODE	VALUE
SKED CROSSING	A	4" W
LEADER OF BEAM DET-TO-OUT	B	32'-4"
DECK WIDTH DET-TO-OUT	D	24'-0"
NUMBER OF BEAMS	E	0
BEAM LENGTH & BEARING TO	F	32'-0"
BEARING FROM END OF BEAM TO	H	N/A
NUMBER OF DRAINS - BEAR SIZE	I	N/A
PERPENDICULAR DISTANCE FROM	J	14"
DISTANCE FROM END OF BEAM TO	K	1'-0"
FIRST GUARDRAIL POST	L	11
NUMBER OF GUARDRAIL POSTS	M	11
DISTANCE FROM BEARING TO END	N	8"
OF BEAM (PERPENDICULAR TO	O	14"
BEARING) PARALLEL TO	P	14"
PERPENDICULAR WIDTH OF EXPANSION	Q	1"
JOINT	R	0.000

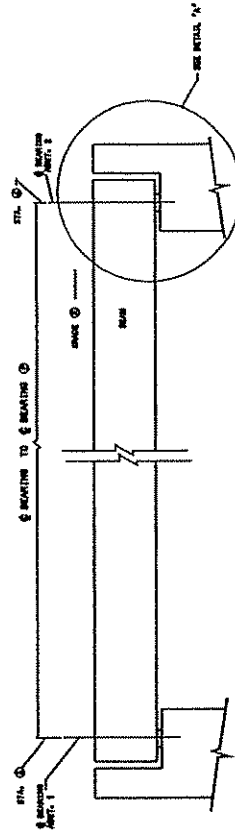
* IF BEARING REFERENCE IS OBLIQUE, REFLECTED ELEVATIONS SHALL BE TAKEN AT THE TOP SURFACE OF THE BEAM.



CONTROL ELEVATIONS & BEARING DIMENSIONS ALONG & ROADWAY
DETAIL "A"



SUPERSTRUCTURE LAYOUT PLAN



SUPERSTRUCTURE ELEVATION ALONG & ROADWAY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - STRUCTURES

WEIMER BRIDGE
OVER
NORTH FORK LUNICE CREEK
IN
GRANT COUNTY

SUPERSTRUCTURE PLAN

CONTRACT NO. 02-02
SCALE: 1" = 10'-0"
PROJECT NO. 02-02
DATE: 8-14-02
DRAWN BY: [Name]
CHECKED BY: [Name]
APPROVED BY: [Name]
BRIDGE NUMBER: 12-287-12-02
BRIDGE DESIGNER: [Name]

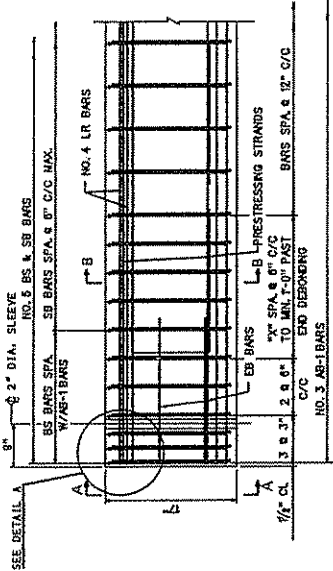
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - STRUCTURES
PROJECT NO. 02-02
CONTRACT NO. 02-02
DATE: 8-14-02
DRAWN BY: [Name]
CHECKED BY: [Name]
APPROVED BY: [Name]

SHEET BR-1A

PUBLIC WORKS	DATE	PROJECT NUMBER	COUNTY	SHEET NO.	TOTAL SHEETS
1/14	5	5812-2877-12.02	GRANT	13	20

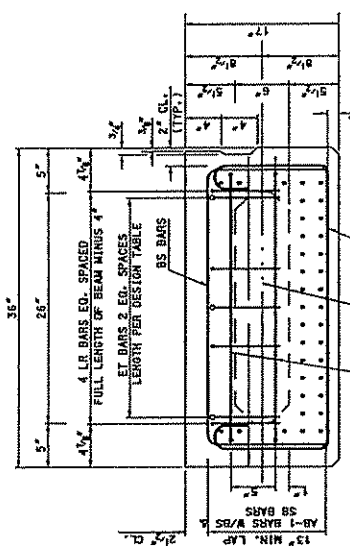
NOTES

1. ALL NON-PRESTRESSING REINFORCING BARS SHALL BE GRADE 60.
2. SHALL BE AS SHOWN ON THIS SHEET UNLESS OTHERWISE SHOWN.
3. ALL REINFORCING STEEL BARS SHALL BE EPOXY COATED.
4. ALL STRANDS SHALL BE ENCLOSED INSIDE STRIPS OF 2" DIA. AND 1/2" THICK.
5. THIS SHEET TO BE USED WITH STANDARD SHEET NUMBERS BR-1 OR BR-1A, BR-2 OR BR-2A, BR-3 OR BR-3A, BR-4 OR BR-4A, BR-5 OR BR-5A, BR-6 OR BR-6A, BR-7 OR BR-7A, BR-8 OR BR-8A, BR-9 OR BR-9A, BR-10 OR BR-10A, BR-11 OR BR-11A, BR-12 OR BR-12A, BR-13 OR BR-13A, BR-14 OR BR-14A, BR-15 OR BR-15A, BR-16 OR BR-16A, BR-17 OR BR-17A, BR-18 OR BR-18A, BR-19 OR BR-19A, BR-20 OR BR-20A, BR-21 OR BR-21A, BR-22 OR BR-22A, BR-23 OR BR-23A, BR-24 OR BR-24A, BR-25 OR BR-25A, BR-26 OR BR-26A, BR-27 OR BR-27A, BR-28 OR BR-28A, BR-29 OR BR-29A, BR-30 OR BR-30A, BR-31 OR BR-31A, BR-32 OR BR-32A, BR-33 OR BR-33A, BR-34 OR BR-34A, BR-35 OR BR-35A, BR-36 OR BR-36A, BR-37 OR BR-37A, BR-38 OR BR-38A, BR-39 OR BR-39A, BR-40 OR BR-40A, BR-41 OR BR-41A, BR-42 OR BR-42A, BR-43 OR BR-43A, BR-44 OR BR-44A, BR-45 OR BR-45A, BR-46 OR BR-46A, BR-47 OR BR-47A, BR-48 OR BR-48A, BR-49 OR BR-49A, BR-50 OR BR-50A, BR-51 OR BR-51A, BR-52 OR BR-52A, BR-53 OR BR-53A, BR-54 OR BR-54A, BR-55 OR BR-55A, BR-56 OR BR-56A, BR-57 OR BR-57A, BR-58 OR BR-58A, BR-59 OR BR-59A, BR-60 OR BR-60A, BR-61 OR BR-61A, BR-62 OR BR-62A, BR-63 OR BR-63A, BR-64 OR BR-64A, BR-65 OR BR-65A, BR-66 OR BR-66A, BR-67 OR BR-67A, BR-68 OR BR-68A, BR-69 OR BR-69A, BR-70 OR BR-70A, BR-71 OR BR-71A, BR-72 OR BR-72A, BR-73 OR BR-73A, BR-74 OR BR-74A, BR-75 OR BR-75A, BR-76 OR BR-76A, BR-77 OR BR-77A, BR-78 OR BR-78A, BR-79 OR BR-79A, BR-80 OR BR-80A, BR-81 OR BR-81A, BR-82 OR BR-82A, BR-83 OR BR-83A, BR-84 OR BR-84A, BR-85 OR BR-85A, BR-86 OR BR-86A, BR-87 OR BR-87A, BR-88 OR BR-88A, BR-89 OR BR-89A, BR-90 OR BR-90A, BR-91 OR BR-91A, BR-92 OR BR-92A, BR-93 OR BR-93A, BR-94 OR BR-94A, BR-95 OR BR-95A, BR-96 OR BR-96A, BR-97 OR BR-97A, BR-98 OR BR-98A, BR-99 OR BR-99A, BR-100 OR BR-100A.
6. WHEN STRANDS NO'S 28 AND 30 ARE USED, SEE SHEET BR-801 FOR DETAIL OF 2" DIA. ANCHOR SLEEVE.



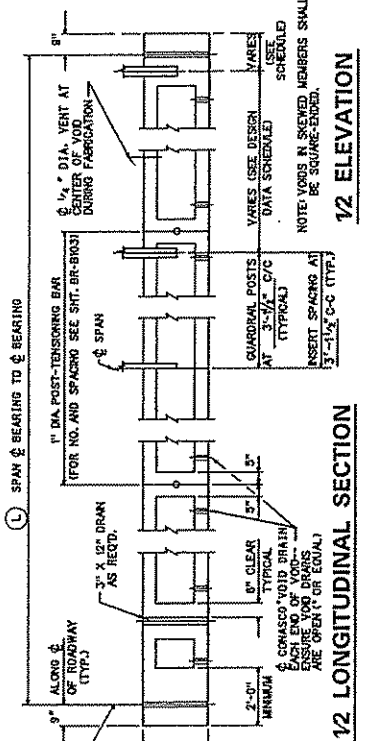
REINFORCING STEEL ELEV. VIEW

NOTE: SEE SHEET BR-801 FOR REINFORCING DETAIL AS SHOWN FOR SKewed BEAMS.

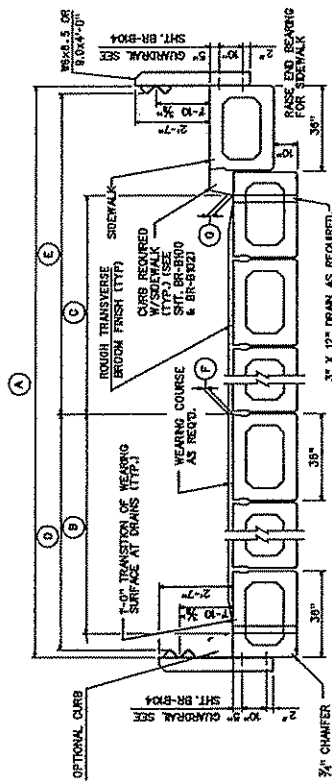


SECTION A-A

TYPICAL BEAM REINFORCEMENT

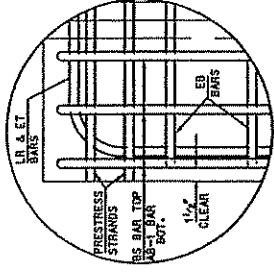


12 LONGITUDINAL SECTION



12 ELEVATION

NOTE: CURB NOT TO BE USED WITH GUARDRAIL. BOTTOM OF CURB WITH NEAREST MATERIAL REMOVE BY GUARDRAIL SET-OUT DETAIL ON STANDARD DETAIL SHEET BR-804.



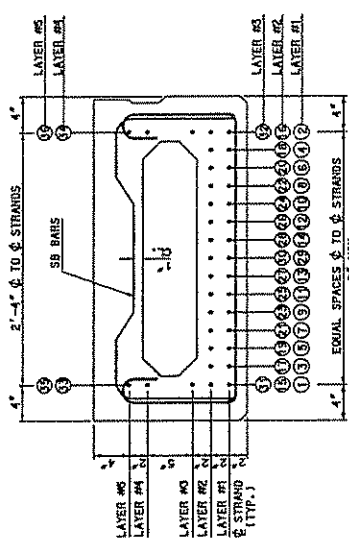
DETAIL A

CONTROL DIMENSIONS

CODE	DESCRIPTION	VALUE	DESCRIPTION	VALUE
A	DECK WIDTH, OUT TO OUT	24'-0"	VALUE	
B	DISTANCE FROM ROADWAY TO FACE OF CURB (NO SIDEWALK)	N/A	HOT-LAD BITUMINOUS CONCRETE REQUIRED (YES OR NO)	YES
C	DISTANCE FROM ROADWAY TO FACE OF CURB (WITH SIDEWALK)	N/A	GUARDRAIL REQUIRED (YES OR NO)	YES
D	DISTANCE FROM ROADWAY TO FACE OF GUARDRAIL (NO SIDEWALK)	12'-0"	DRAINS REQUIRED (YES OR NO)	NO
E	DISTANCE FROM ROADWAY TO FACE OF GUARDRAIL (WITH SIDEWALK)	N/A	CURTAIN WALL REQUIRED (YES OR NO)	YES
F	THICKNESS OF WEARING COURSE AT FACE OF ROADWAY	3"	GUARDRAIL BLOCKOUT REQUIRED (YES OR NO)	NO
G	THICKNESS OF WEARING COURSE AT FACE OF CURB	1"		
H	SPAN LENGTH, ϕ BEARING TO ϕ BEARING	32'		
I	OPTIONAL 10" CURB TO BE INCLUDED (YES OR NO)	NO		
J	OPTIONAL PARAPET TO BE INCLUDED (YES OR NO) (REQUIRES SPECIAL DESIGN)	NO		
K	TOE PLATE REQUIRED (YES OR NO)	NO		

SECTION B-B

TYPICAL BEAM PRESTRESSING



THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS-STRUCTURES

WEINER BRIDGE
OVER
NORTH FORK LUNICE CREEK
IN
GRANT COUNTY

17" PRESTRESSED BOX BEAM
DESIGN & ASSEMBLY DETAILS
12-28/7-12.02

DESIGNED BY: *James & Johnson*
CHECKED BY: *J. Johnson*
DATE: 4-14-95

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS-STRUCTURES
17" PRESTRESSED CONCRETE
BOX BEAMS
STANDARD SHEET BR-B7A

PUBLIC WORKS DIVISION	STATE OF VIRGINIA	PROJECT NUMBER	COUNTY	SHEET TOTAL
MVA	6	2812-247-12-02	GRANT	NO. 14
				OF 29

MIN. CONCRETE STRENGTH @ DETENSION = 4,000 PSI.
 MIN. CONCRETE STRENGTH @ 28 DAYS = 5,000 PSI.
 JACKING FORCE /OY RELAX STRAND = 30,860 LBS.

DESIGN DATA FOR 17" DEPTH BOX BEAM

SPAN LENGTH ϕ TO ϕ BEARING	SPAN LENGTH ϕ TO ϕ BEARING												
	20'	22'	24'	26'	28'	30'	32'	34'	36'	38'	39'-6"	33'	(4)
OVERALL LENGTH ALONG ϕ ROADWAY	37'-6"	39'-6"	41'-6"	43'-6"	45'-6"	47'-6"	49'-6"	51'-6"	53'-6"	55'-6"	57'-6"	59'-6"	61'-6"
NO. OF GRADE 210, 1/2" DIA. LOW RELAX. STRANDS, AREA/STRAND = 0.183 SQ. IN.	6	8	8	8	8	10	12	14	14	16	16	16	16
STRAND POSITION NUMBER	1-2, 11, 12, 15, 16, 35 & 36	1-2, 11, 12, 15, 16, 35 & 36	1-2, 11, 12, 15, 16, 35 & 36	1-2, 11, 12, 15, 16, 35 & 36	1-2, 11, 12, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36	1-2, 7, 8, 9, 10, 13, 14, 15, 16, 35 & 36	1-2, 7, 8, 9, 10, 13, 14, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36	1-2, 5, 6, 7, 10, 13, 14, 15, 16, 35 & 36
PRESTRESSING FORCE AT DETENSION (KIPS/BEAM)	182	241	241	241	241	298	355	413	413	468	468	468	468
FINAL PRESTRESSING FORCE (KIPS/BEAM)	169	221	222	221	213	271	322	369	369	412	412	412	412
ULTIMATE DESIGN MOMENT (FT-KIPS/BEAM)	202	225	249	282	322	361	402	442	485	525	525	525	525
ULTIMATE RESISTING MOMENT (FT-KIPS/BEAM)	209	279	279	293	348	372	420	476	490	555	555	555	555
TOTAL NUMBER OF DEBONDED STRANDS	-	-	-	-	-	-	-	-	-	-	-	-	-
LAYER 1-DEBONDED STRAND POSITION NUMBER AND LENGTH FROM EACH END	-	-	-	-	-	-	-	-	-	-	-	-	-
LAYER 2-DEBONDED STRAND POSITION NUMBER AND LENGTH FROM EACH END	-	-	-	-	-	-	-	-	-	-	-	-	-
END TENSION STEEL EACH END (SIZE & LENGTH)	3-#4 X 7'-0"	3-#4 X 7'-0"	3-#4 X 7'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"	3-#4 X 7'-0"	3-#4 X 7'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"	3-#4 X 8'-0"
CAMBER (ft)	0.03	0.08	0.08	0.11	0.14	0.22	0.27	0.37	0.43	0.51	0.51	0.51	0.51
ERECTION, INCHES \rightarrow UPWARD (in)	0.05	0.72	0.11	0.15	0.20	0.32	0.39	0.55	0.63	0.93	0.93	0.93	0.93
FINAL, INCHES \rightarrow UPWARD (in)	0.04	0.13	0.10	0.13	0.11	0.31	0.37	0.54	0.57	0.93	0.93	0.93	0.93
WEIGHT OF TYPICAL BEAM INCLUDING DIAPHRAGM (TONS) (1), (2)	5.6	6.1	6.6	7.1	7.6	8.1	8.6	9.1	9.6	10.0	10.0	10.0	10.0
NO. OF INSERTS	7	8	8	8	9	10	11	12	12	13	13	11	11
NO. OF BEAM TO WHICH EACH FIRST INSERT EACH END	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#	1-#
ϕ OF FIRST INSERT TO ϕ SECOND INSERT EACH END	2'-0"	2'-2 1/4"	1'-7 1/2"	2'-7 1/2"	2'-0 1/4"	3'-0 1/4"	2'-8"	3'-0 1/4"	2'-10 1/4"	2'-4 1/2"	2'-4 1/2"	3'-3 3/4"	3'-3 3/4"

NOTES:

- BEAM WEIGHTS LISTED IN DESIGN TABLES ARE APPROXIMATE AND ARE BASED ON ZERO SKEW AND DIAPHRAGMS SPA & 18'-0" C-C MAX. ADDITION OF SKEW AND EXTRA DIAPHRAGMS WILL INCREASE WEIGHT.
- FOR STANDARD CURB, ADD 93 LBS. (0.05 TONS PER CURB, PER FOOT OF BEAM).
- CAMBER VALUES LISTED IN DESIGN TABLE ARE APPROXIMATE AND ARE FOR COMPARISON PURPOSES ONLY. THE DIRECTOR OF STRUCTURES DIVISION SHALL BE NOTIFIED OF ANY CORRECTIONS TO THE TOTAL BEARING ON THE PADS AND A LEVEL TOP BEAM SURFACE. METHOD OF CORRECTION SHALL BE PRE-APPROVED BY DIRECTOR OF STRUCTURES DIVISION.
- DATA LISTED IN THE DESIGN TABLE MAY NOT BE VALID FOR SPAN LENGTHS THAT FALL BETWEEN THE SPAN LENGTHS LISTED. IF DIFFERENCES ARE ENCOUNTERED, CALCULATE AND ENTER SPECIFIC DATA FOR BEAM LENGTH REQUIRED IN THIS COLUMN.
- THIS SHEET TO BE USED WITH STANDARD SHEET NUMBERS BR-1 OR BR-1A, BR-B7A OR BR-B, OR BR-B7B.
- MAXIMUM BEAM SKEW SHALL BE 30 DEGREES.
- BEAM WEIGHTS LISTED IN DESIGN TABLES ARE APPROXIMATE AND ARE FOR COMPARISON PURPOSES ONLY. THE DIRECTOR OF STRUCTURES DIVISION SHALL BE NOTIFIED OF ANY CORRECTIONS TO THE TOTAL BEARING ON THE PADS AND A LEVEL TOP BEAM SURFACE. METHOD OF CORRECTION SHALL BE PRE-APPROVED BY DIRECTOR OF STRUCTURES DIVISION.
- BEAM FABRICATOR SHALL NOTIFY CONTRACTOR THAT BEAM ENDS ARE TWISTED PRIOR TO SHIPPING OF BEAMS.

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS-STRUCTURES

WEIMER BRIDGE
 OVER
 NORTH FORK LUNICE CREEK
 IN
 GRANT COUNTY
 DESIGN TABLE FOR 17"
 PRESTRESSED BOX BEAM

BRIDGE NUMBER 12-287-12-02

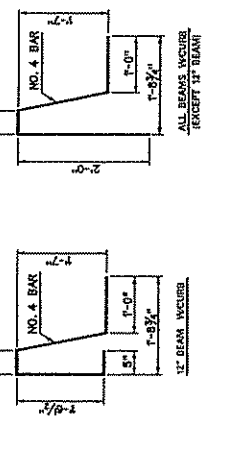
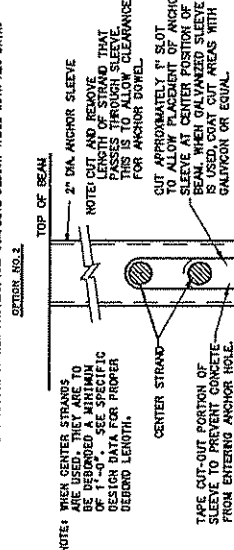
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS-STRUCTURES
 DESIGN TABLE FOR 17"
 PRESTRESSED BOX BEAM

STANDARD SHEET BR-919B

FEDERAL ROAD DISTRICT NO.	PROJECT NUMBER	COUNTY	SHEET NO.	TOTAL SHEETS
0	316-247-12-02	GRANT	14	20

SECTION NO. 1

TO ACCOMMODATE THE 2" DIAMETER ANCHOR SLEEVE WHEN CENTER STRANDS 1) 12/16 W/10 OR 18/16 W/10 ARE USED, STRANDS IN LAYER 1 AND 2 MAY BE SPACED HORIZONTALLY TO AVOID INTERFERENCE WITH ANCHOR SLEEVES. WHEN NECESSARY TO MOVE STRANDS VERTICALLY, THE ENGINEER SHALL CHECK DESIGN OF NEW PATTERN AND COMPLETE DESIGN TABLE WITH NEW DATA.

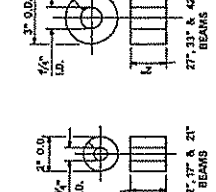


LENGTH PER DESIGN TABLE

BEAM NO.	17" BEAM	17" BEAM	17" BEAM	21" BEAM	27" BEAM	33" BEAM	42" BEAM
NO. 1	0'-7"	0'-9"	0'-11"	1'-5"	1'-7"	1'-9"	2'-5"
NO. 2	0'-7"	0'-9"	0'-11"	1'-5"	1'-7"	1'-9"	2'-5"
NO. 3	0'-7"	0'-9"	0'-11"	1'-5"	1'-7"	1'-9"	2'-5"
NO. 4	0'-7"	0'-9"	0'-11"	1'-5"	1'-7"	1'-9"	2'-5"

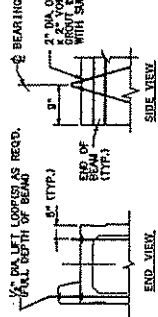
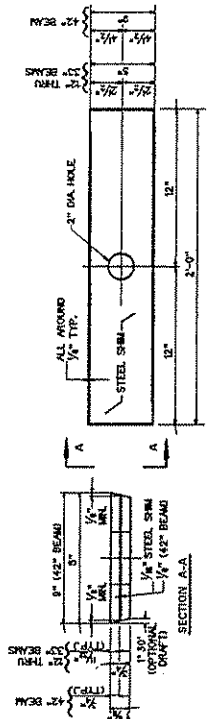
ANCHOR SLEEVE DETAILS

USE WHEN CENTER STRAND IS SPECIFIED



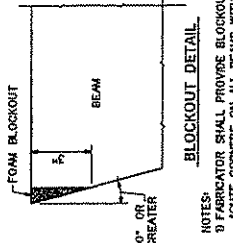
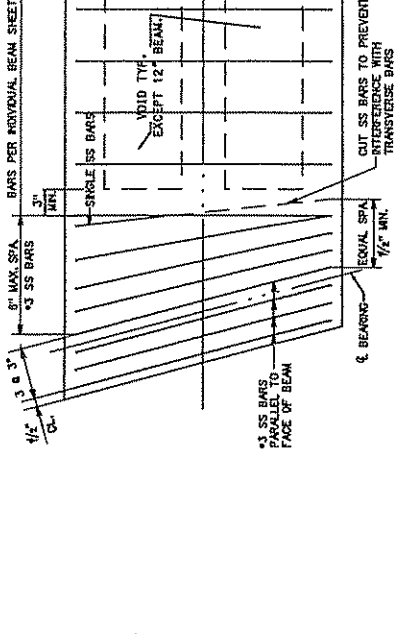
ELASTOMERIC BEARING PAD DETAIL

NOTES: THE BEARING PAD SHALL CONFORM TO AASHTO SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 14, DIVISION 14, WITH A DUREMETER HARDNESS OF 60.



LIFT DETAILS

NOTE: LIFTING LOOPS SHALL NOT BE EPXY COATED. ON STEEL BEAMS, LIFTING DEVICES SHALL BE LOCATED IN A LINE PARALLEL TO THE CENTRELINE OF BEAM.



BLOCKOUT DETAIL

NOTES:
 1) FABRICATOR SHALL PROVIDE BLOCKOUT OF ACUTE CORNERS ON ALL BEAMS WITH SKEWS OF 10 DEGREES OR GREATER.
 2) AFTER DIRECTION, ALL INTERIOR BLOCKOUTS SHALL BE FILLED WITH GROUT IN ACCORDANCE WITH SECTION 74.03 OF THE STANDARD SPECIFICATIONS.

REINFORCING BAR DETAIL

NOTES

1. MINIMUM BAR BENDING DIAMETER SHALL BE 6 BAR DIAMETERS, EXCEPT THAT NO. 3 BAR AND NO. 4 BARS THE MINIMUM BAR BENDING DIAMETER SHALL BE 4 BAR DIAMETERS. ALL DIMENSIONS ARE OUT TO OUT.

2. IF OPTIONAL SPlicing OF LR AND ET BARS IS USED, TERMINATION OF LAP SPlice SHALL BE NO CLOSER TO THE END OF THE BEAM THAN 1/10 OF THE BEAM LENGTH. ALL LAP SPlices SHALL BE CONTACT TYPE.

LAP SPlice TABLE

BAR NO.	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7
GRADE 60	20"	28"	33"	38"	43"

NOTE: THIS SHEET TO BE USED WITH STANDARD SHEET BR-1 OR BR-1A BR-S12A BR-S12B, BR-817A BR-817B, BR-821A, BR-821B, BR-827A, BR-827B, BR-833A, BR-833B, BR-842A, BR-842B, BR-850A, BR-850B, BR-850C, AND BR-850D AS APPLICABLE.

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS-STRUCTURES

PROJECT NO. 0-11
 DRAWING NO. 0-11
 DATE 7-3-08
 SHEET NO. 14

WEIMER BRIDGE
 OVER
NORTH FORK LUNICE CREEK
 IN
GRANT COUNTY
PRESTRESSED CONCRETE BEAM
DESIGN & ASSEMBLY DETAILS

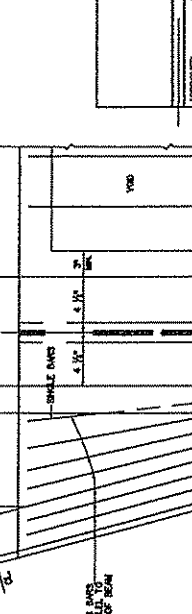
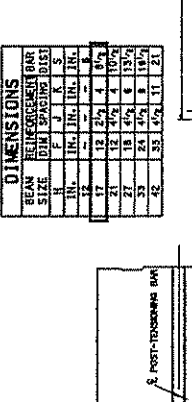
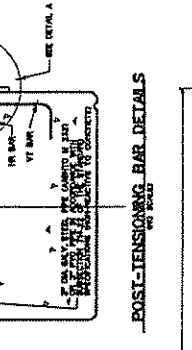
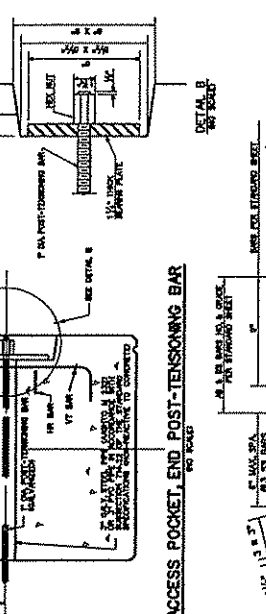
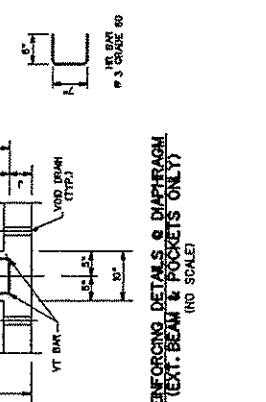
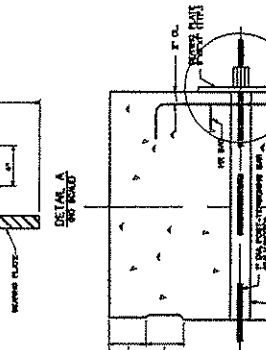
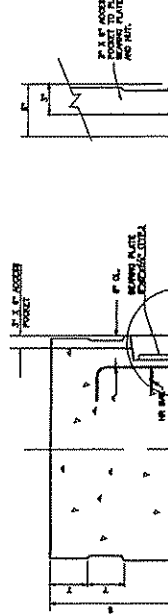
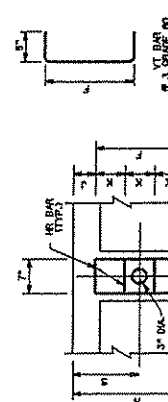
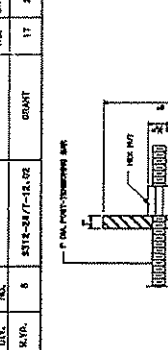
BRIDGE NUMBER
 16-287
 DESIGN NO.
 17

DESIGNED BY: *Forrest E. Anderson*
 CHECKED BY: *Forrest E. Anderson*
 DATE: 4-1-08

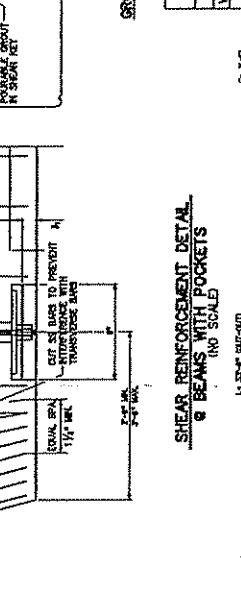
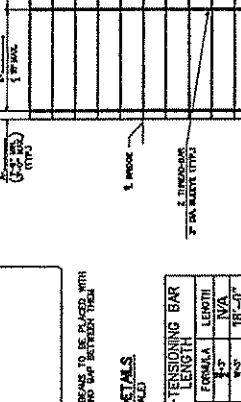
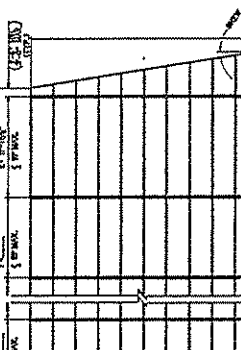
WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS-STRUCTURES
 PRESTRESSED CONCRETE BEAM
 DESIGN & ASSEMBLY DETAILS

STANDARD SHEET BR-812A

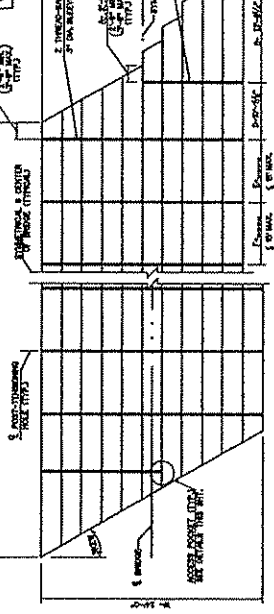
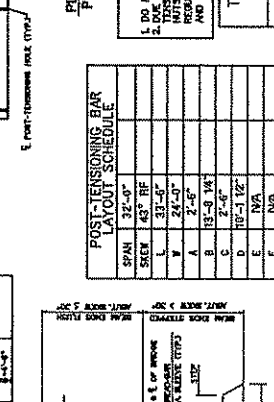
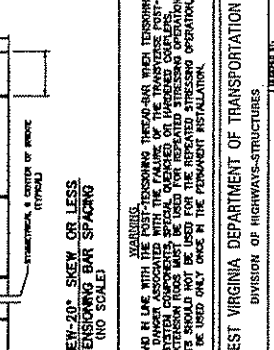
STATE	PROJECT NUMBER	DISTRICT	SHEET TOTAL
N.C.	5187-28/7-12.02	02A2T	NO. OF SHEETS
DATE	NO. OF SHEETS	DATE	NO. OF SHEETS
7/12/02	17	7/12/02	17



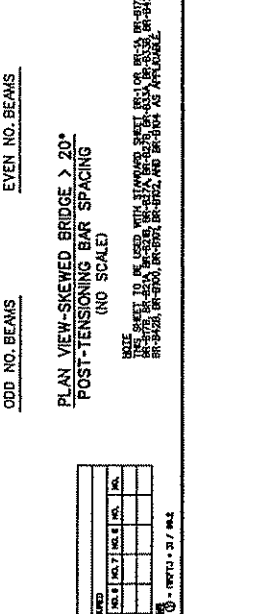
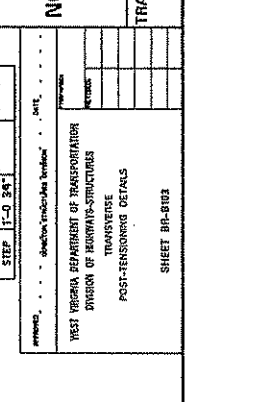
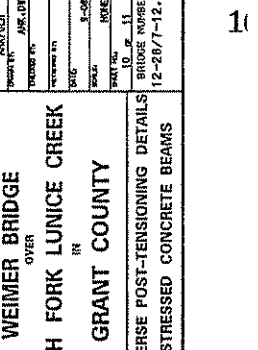
DIMENSIONS	
BEAM SIZE	REINFORCEMENT BAR DIMENSIONS (DIST)
18"	F 1 1/2
21"	F 1 1/2
24"	F 1 1/2
27"	F 1 1/2
30"	F 1 1/2
33"	F 1 1/2
36"	F 1 1/2
39"	F 1 1/2
42"	F 1 1/2



POST-TENSIONING BAR LENGTH	
BAR	LENGTH
VT	18'-0"
VT	18'-0"
VT	18'-0"
VT	18'-0"



POST-TENSIONING BAR SCHEDULE	
SPAN	SCHEDULE
1	VT 18'-0"
2	VT 18'-0"
3	VT 18'-0"
4	VT 18'-0"
5	VT 18'-0"
6	VT 18'-0"
7	VT 18'-0"



GROUT STRENGTH TABLE	
DATE	STRENGTH
7/12/02	3000 PSI
7/12/02	3000 PSI
7/12/02	3000 PSI
7/12/02	3000 PSI

GENERAL NOTES

1. POST-TENSIONING THREAD-BARS TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR POST-TENSIONING OF CONCRETE BEAMS. CALCULATED THEORETICAL ELONGATION FOR 3000 PSI STRESS AND FOR 1" DIA IS 0.088 INCHES.
2. ALL POST-TENSIONING THREAD-BARS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR POST-TENSIONING OF CONCRETE BEAMS. CALCULATED THEORETICAL ELONGATION FOR 3000 PSI STRESS AND FOR 1" DIA IS 0.088 INCHES.
3. ALL POST-TENSIONING THREAD-BARS, NUTS, BEARING PLATES, COVERS AND ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR POST-TENSIONING OF CONCRETE BEAMS. CALCULATED THEORETICAL ELONGATION FOR 3000 PSI STRESS AND FOR 1" DIA IS 0.088 INCHES.
4. ALL REINFORCING STEEL SHALL BE GRADE 60 AND EPOXY COATED.
5. EACH REINFORCING CONCRETE BEAM SHALL BE TREATED BY MANUFACTURER AT THE TIME OF CASTING TO PROTECT AGAINST CORROSION. ALL REINFORCING STEEL SHALL BE TREATED BY MANUFACTURER AT THE TIME OF CASTING TO PROTECT AGAINST CORROSION. ALL REINFORCING STEEL SHALL BE TREATED BY MANUFACTURER AT THE TIME OF CASTING TO PROTECT AGAINST CORROSION.
6. AFTER COMPLETION OF SLAB TREATMENT BY MANUFACTURER, A MINIMUM OF FIVE WORKING DAYS BEFORE THE CONCRETE BEAM IS CAST. THE MANUFACTURER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONCRETE BEAM FROM WEATHER AND ALL OTHER HAZARDOUS CONDITIONS. THE MANUFACTURER SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONCRETE BEAM FROM WEATHER AND ALL OTHER HAZARDOUS CONDITIONS.
7. SHEAR REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR SHEAR REINFORCEMENT OF CONCRETE BEAMS. CALCULATED THEORETICAL ELONGATION FOR 3000 PSI STRESS AND FOR 1" DIA IS 0.088 INCHES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONCRETE BEAM FROM WEATHER AND ALL OTHER HAZARDOUS CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE CONCRETE BEAM FROM WEATHER AND ALL OTHER HAZARDOUS CONDITIONS.

PROCEDURES

1. BEAMS ARE TO BE SET WITH NO GAP BETWEEN THEM.
2. AFTER ALL BEAMS ARE SET, THE BEAMS SHALL BE PULLED TOGETHER TRANSVERSELY BY APPLYING A SLIGHT POST-TENSIONING FORCE, APPROXIMATELY 3,000 POUNDS.
3. FILL THE SHEAR KEY GAP WITH THE PRE-APPROVED GROUT MIXTURE.
4. AFTER GROUT HAS BEEN PLACED FOR A MINIMUM OF 24 HOURS, APPLY BOX TO END OF EACH BEAM. AFTER ALL THREAD-BARS ARE TENSIONED TO BOX OF THE POST-TENSIONING FORCE, APPLY REMAINING PERCENTAGE OF FINAL POST-TENSIONING FORCE, TENSIONING IN SAME SEQUENCE AS ABOVE.
5. MEASURE AND RECORD, ON THE SPACE PROVIDED ON THE PLANS, THE ACTUAL TOTAL ELONGATION OF EACH THREAD-BAR. COMPARE THE ACTUAL ELONGATION TO THE PREDICTED ELONGATION. A SIGNIFICANT DIFFERENCE IN ACTUAL ELONGATION VERSUS PREDICTED ELONGATION COULD INDICATE IMPROPER JACKING TECHNIQUES, IMPROPER MAKE THAN 15%, THEN THE JACK WILL BE RECALIBRATED AND THE JACKING TECHNIQUES EVALUATED. IF, AFTER RECALIBRATION OF THE JACKS AND ASSURANCE THAT THE JACKING TECHNIQUES ARE SATISFACTORY, THE ELONGATION DIFFERENCE IS MORE THAN 10% FROM THE ESTIMATED ELONGATION, THEN THE ENGINEER WILL BE CONTACTED FOR NOTICE.
6. USING SAW, TRIM EXCESS THREAD-BARS LEAVING A MINIMUM OF 4" EAST THE NUT, DO NOT TRIM THREAD-BARS BY TORCH CUTTING. TOUCH UP TRIMMED ENDS WITH GALVANIZING OR EQUAL.
7. INSTALL ANCHOR DOVELS AT EACH END.

NOTES

1. SHEAR REINFORCEMENT DETAIL FOR BEAMS WITH ACCESS POCKETS ARE PER STD. SHEET.
2. TENSIONING IS PER STD. BEAM SHEET.
3. POST-TENSIONING BARS SHOULD BE SPACED TO AVOID INTERFERENCE WITH QUADRANT INSORTS.

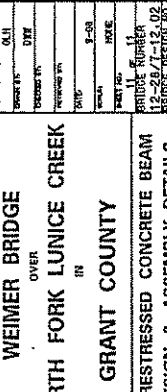
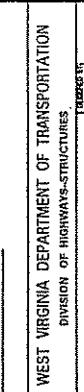
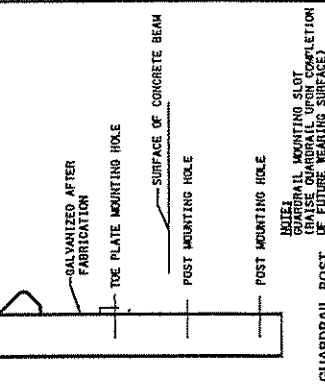
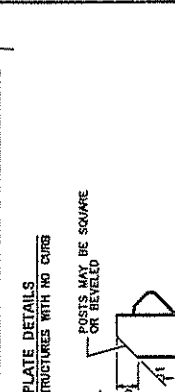
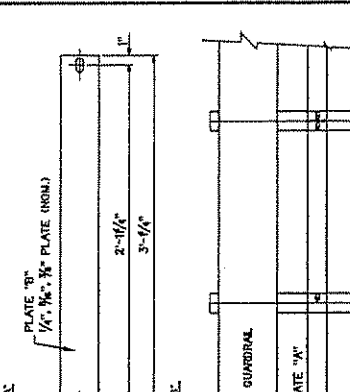
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS-STRUCTURES
WEIMER BRIDGE
OVER
NORTH FORK LUNICE CREEK
IN
GRANT COUNTY
TRANSVERSE POST-TENSIONING DETAILS
PRESTRESSED CONCRETE BEAMS

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS-STRUCTURES
TRANSVERSE POST-TENSIONING DETAILS
SHEET BR-503

DATE: 7/12/02
DRAWN BY: JMS/BJJ
CHECKED BY: JMS/BJJ
APPROVED BY: JMS/BJJ

BRIDGE NUMBER: 12-28/7-12.02

SHEET TOTAL	PROJECT NUMBER		COUNT	SHEET NO.	TOTAL SHEETS
	5112-287-12.02	GRANT			
STATE	PROJECT NUMBER	COUNTY	DATE	BY	NO.
V.A.	5112-287-12.02	GRANT	12-29-71	12	12



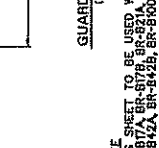
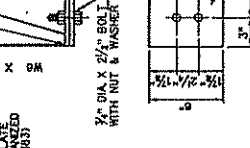
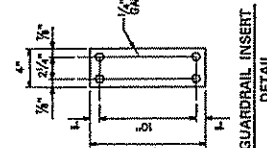
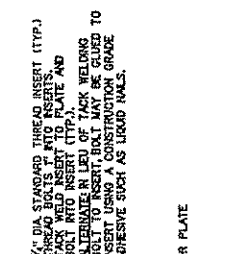
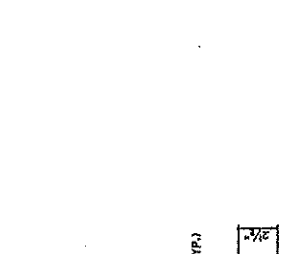
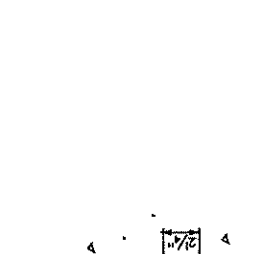
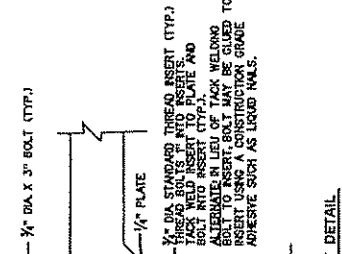
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS-STRUCTURES

WEIMER BRIDGE
OVER
NORTH FORK LUNICE CREEK
IN
GRANT COUNTY

PRESSED CONCRETE BEAM
DESIGN & ASSEMBLY DETAILS

STANDARD SHEET BR-904



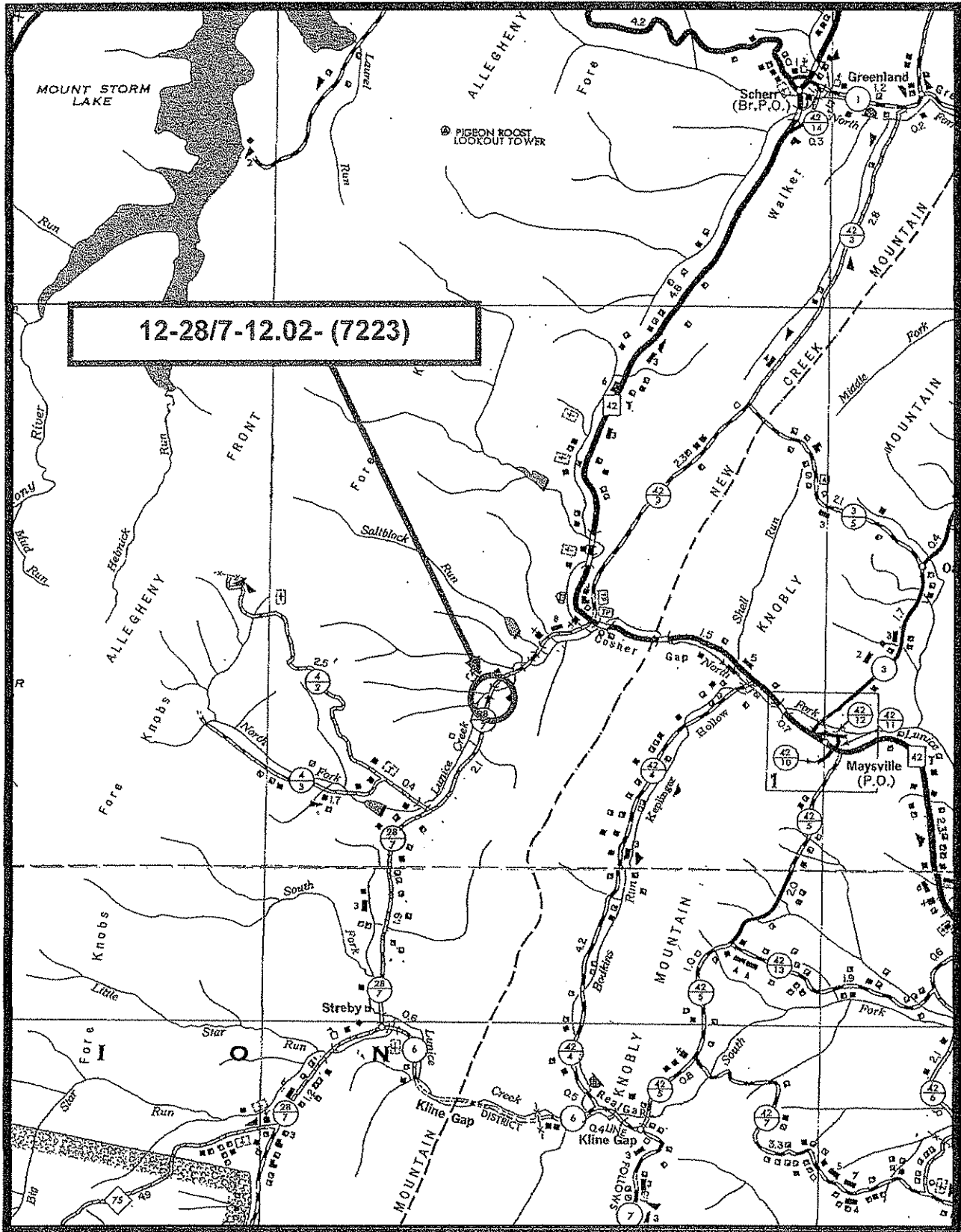
- NOTES:
1. ENTIRE ASSEMBLY IS TO BE HOT-DIPPED GALVANIZED. ALTERNATE IN LIEU OF HOT-DIP GALVANIZING GUARDRAIL INSERT ASSEMBLY MAY BE ELECTRO-DEPOSITED ZINC COATED TYPE 2, CLASSIFICATION NO. 22.
 2. ANY DAMAGE TO GALVANIZED AREAS SHALL BE TOUCHED UP WITH GALVANIZING OR EQUAL.
 3. WHEN THE GUARDRAIL POST IS LOCATED OVER THE BRIDGE SEAT (ON 12" BEAMS ONLY) THE ANCHOR PLATE AND FOUR BOLTS SHALL BE OMITTED. INSTALL IN ACCORDANCE WITH THE "GUARDRAIL ANCHOR OVER BRIDGE SEAT" DETAIL THIS SHEET.

NOTE:

- THIS SHEET IS TO BE USED WITH STANDARD SHEETS BR-901, BR-902, BR-903, BR-904, BR-905, BR-906, BR-907, BR-908, BR-909, BR-910, BR-911, BR-912, BR-913, BR-914, BR-915, BR-916, BR-917, BR-918, BR-919, BR-920, BR-921, BR-922, BR-923, BR-924, BR-925, BR-926, BR-927, BR-928, BR-929, BR-930, BR-931, BR-932, BR-933, BR-934, BR-935, BR-936, BR-937, BR-938, BR-939, BR-940, BR-941, BR-942, BR-943, BR-944, BR-945, BR-946, BR-947, BR-948, BR-949, BR-950, BR-951, BR-952, BR-953, BR-954, BR-955, BR-956, BR-957, BR-958, BR-959, BR-960, BR-961, BR-962, BR-963, BR-964, BR-965, BR-966, BR-967, BR-968, BR-969, BR-970, BR-971, BR-972, BR-973, BR-974, BR-975, BR-976, BR-977, BR-978, BR-979, BR-980, BR-981, BR-982, BR-983, BR-984, BR-985, BR-986, BR-987, BR-988, BR-989, BR-990, BR-991, BR-992, BR-993, BR-994, BR-995, BR-996, BR-997, BR-998, BR-999, BR-1000.

BR-904

BRIDE INSPECTION REPORT SHEET



VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

- 1. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
- 2. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
- 3. Application is made for 2.5% resident vendor preference for the reason checked:
 Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
- 4. Application is made for 5% resident vendor preference for the reason checked:
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
- 5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
- 6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (*West Virginia Code*, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Carr Concrete Corp. Signed: RP "Burr" Stanley
 Date: 2/25/09 Title: Project Manager

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

VENDOR OWING A DEBT TO THE STATE:

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code*. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the *West Virginia Code* and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the *West Virginia Code* may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

Under penalty of law for false swearing (*West Virginia Code* §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

Vendor's Name: Carr Concrete Corp.

Authorized Signature: *RE "Burr" Stanley* Date: 2/25/09