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Plotted on: 06-JAN-2005 13:13 *Time\$
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 Design Filename: k:\b29049\bridgesDec2004\White Concrete Alternate\02ndstreet\drawings\sl00.dgn.

SUMMARY OF BRIDGE QUANTITIES				
ITEM	BASE BID ITEM QUANTITY	UNIT	ALTERNATE NO. 1 ITEM QUANTITY	UNIT
Embankment (Granular F-111) Excavation (Class III)	2,324	CY	-	-
Concrete Grade 4.0 (AE) (Special)	0	CY	740	CY
Concrete Grade 4.0 (AE)	368	CY	-	-
Concrete Grade 4.0 (AE)	880	CY	(740)	CY
Concrete Masonry Coating	582	SY	(582)	SY
Concrete Saddle	582	SY	-	-
Graffiti Control System	594	SY	-	-
Structural Steel (ASTM A709 Gr 50T2) (Bridge)	348,433	LBS	-	-
Structural Steel (ASTM A709 Gr 50T2) (Pier-Bridge)	70,754	LBS	-	-
Structural Steel (ASTM A500, Gr B) (Collision Beam)	17,946	LBS	-	-
Expansion Device (Sliding Plate)	127	LF	-	-
Headed Stud Anchors	3,600	EA	-	-
Reinforcing Steel (Gr. 60) (Epoxy-Coated)	29,410	LBS	-	-
Steel Piles (HP 14X89)	9,711	LF	-	-
Test Pile (Special) (HP 14X89)	364	LF	-	-
Dynamic Pile Test	4	EA	-	-
Temporary Shoring	1	LS	-	-
Eligible Bearing Devices (178) (Pier-Bridge)	8	EA	-	-
Steel Bearing Device (EXP)	8,912	LBS	-	-
Steel Bearing Device (FIX)	12,501	LBS	-	-
Bridge Handrail (Steel-Type 2, 2A)	261	LF	-	-
Abutment Strip Drain	436	SY	-	-
Bridge Backwall Protection System	436	SY	-	-
Pipe Underdrains (4.0") (Type K)	150	LF	-	-
Waterproofing (Deck)	455	SY	-	-
Waterproofing (Pier/Bridges)	138	SY	-	-
Remove Structures (Bridges)	1	EA	-	-

This sheet designed by:

PNTE

ARCHITECTS ENGINEERS PLANNERS

BRIDGE GENERAL NOTES

RAILROAD BRIDGE DESIGN SPECIFICATIONS: AREMA Manual for Railway Engineering, 2002.

CONSTRUCTION SPECIFICATIONS: Wichita Central Corridor Railroad Grade Separation Project, 25th Street to Waterman, Wichita, Kansas-Proposed Specifications, HNTB Corporation, 2005.

MATERIAL and TESTING SPECIFICATIONS: The material and test specifications, current as of the publication of the project specifications, will be used. In cases of discontinuance or material changes to the specification, the engineer will be contacted for guidance.

REFERENCES:

Wichita Central Corridor Railroad Grade Separation Project, Douglas Avenue to 21st Street, Wichita, Kansas-Hazards Materials Screening Report, HNTB Corporation, September 2003.
 BNSF Railway Guidelines, 2002.

BNSF Railway / Union Pacific Railroad Standard Drawings

Engineering and Shop Drawings for Existing Bridges at 2nd Street, 1st Street and Douglas Avenue.

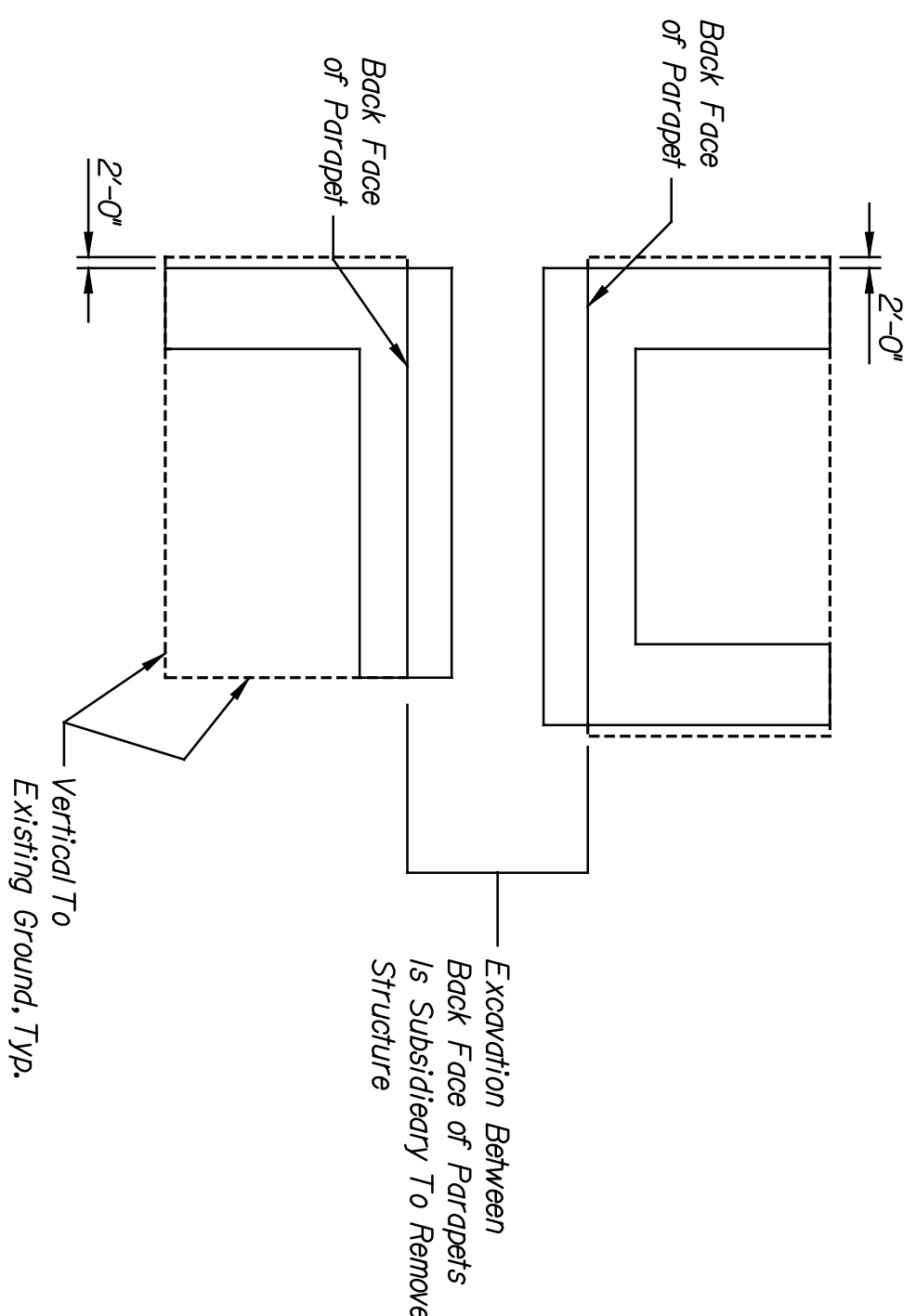
HORIZONTAL & VERTICAL GEOMETRY CONTROL: Refer to Railroad and Street plans for horizontal and vertical geometry control.

The track profile grade is at the top of rail.

All elevations shown are U.S.G.S. Datum (NGVD 29) City Datum = U.S.G.S. Datum - 1187.41.

STRUCTURAL EXCAVATION: Structural excavation shall be in accordance with the plans and specifications.

STRUCTURAL BACKFILL: Structural backfill shall be located within the limits identified in the plans and specifications. Structural backfill shall meet or exceed the requirements of Embankment.



EXCAVATION FOR PAYMENT LIMITS

Abutment Footing Plan Shown

*NOTES:
 Negative quantities are denoted by the number surrounded by parentheses (x).
 Negative quantities are subtractions from the base bid quantities, all other quantities are additions. The extension of the negative quantities on the official bid tab will reduce the overall cost of the Alternate. This project will be awarded to the Contractor with the lowest and best total base bid amount plus alternates selected by the City; the total of which is within the Owner's approved budget.

REINFORCING: All bar bending dimensions and tolerances are in accordance with CRS/IS Manual of Standard Practice.

Reinforcing bars will be designed as follows: SSCOMW
 SS - Bar Size (No. 3 to No. 18)

CC - Component Designator, as follows:

A-Abutment F-Footing
 P-Pier PB-Pier Beam
 PM-Pier Wall S-Slab/Deck
 C-Curb R-Railing

PC-Pier Column

D-Dowel

A #11 Bar, located in the abutment, 12th bar in bar size/location sequence

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STATE	KANSAS	PROJECT NO.	472-84011	YEAR	2005	SHEET NO.	W05.3	TOTAL SHEETS	
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ABBREVIATIONS:	AASHTO	American Association of State Highway & Transportation Officials	IN.	Inches
	ACI	American Concrete Institute	KIP	1000 Pounds
	AISC	American Institute of Steel Construction	KSF	Kips per Square Foot
	ANSI	American National Standards Institute	L.F.	Linear Feet
	AREMA	American Railway Engineering and Maintenance-of-Way Association	Lbs.	Pounds
	ASME	American Society of Mechanical Engineers	0.001 inches	Minimum
	ASTM	American Society of Testing and Materials	Max.	Maximum
	AWS	American Welding Society	N/A	Not Applicable
	B/	Bottom of Burlington Northern and Santa Fe Railway Company Bottom	N.F.	Near Face
	BNSF	Bureau of National Standards	P.C.F.	Pounds per Cubic Foot
	Btm	Bottom	P.L.F.	Pounds per Linear Foot
	CRSI	Concrete Reinforcing Steel Institute (www.crsi.org)	P.V.C.	Point of Intersection (Horizontal Curves)
	C.F.	Cubic Feet	P.V.I.	Point of Vertical Curvature
	C.S.	Curve to Spiral Point	P.V.T.	Point of Vertical Intersection
	C.Y.	Cubic Yards	R	Radius
	dft	dry film thickness	S.C.	Spiral to Curve Point
	E.F.	Each Face	S.C.	Similar
	E.S.	Equal Spacing	S.T.	Spiral to Tangent Point
	E.W.	Each Way	SSPC	SSPC: The Society for Protective Coatings
	F	Minimum 28-day Concrete Compressive Strength	SY	Square Yards
	F.F.	Fairment	T/	Top of
	FT.	For Face	T.S.	Tangent to Spiral Point
	Golv.	Golvonized	T.Y.	Typical
			U.N.O.	Unless Noted Otherwise
			USACOE	U.S. Army Corps of Engineers
			UPRR	Union Pacific Railroad
			WUTA	Wichita Union Terminal Association

PROTECTIVE SHORING: Provide protective shoring as required by the BNSF Railway, federal, state and local regulations.

Additional shoring may be required.

Protective shoring plans & calculations shall be designed and sealed by a professional engineer licensed in the State of Kansas.

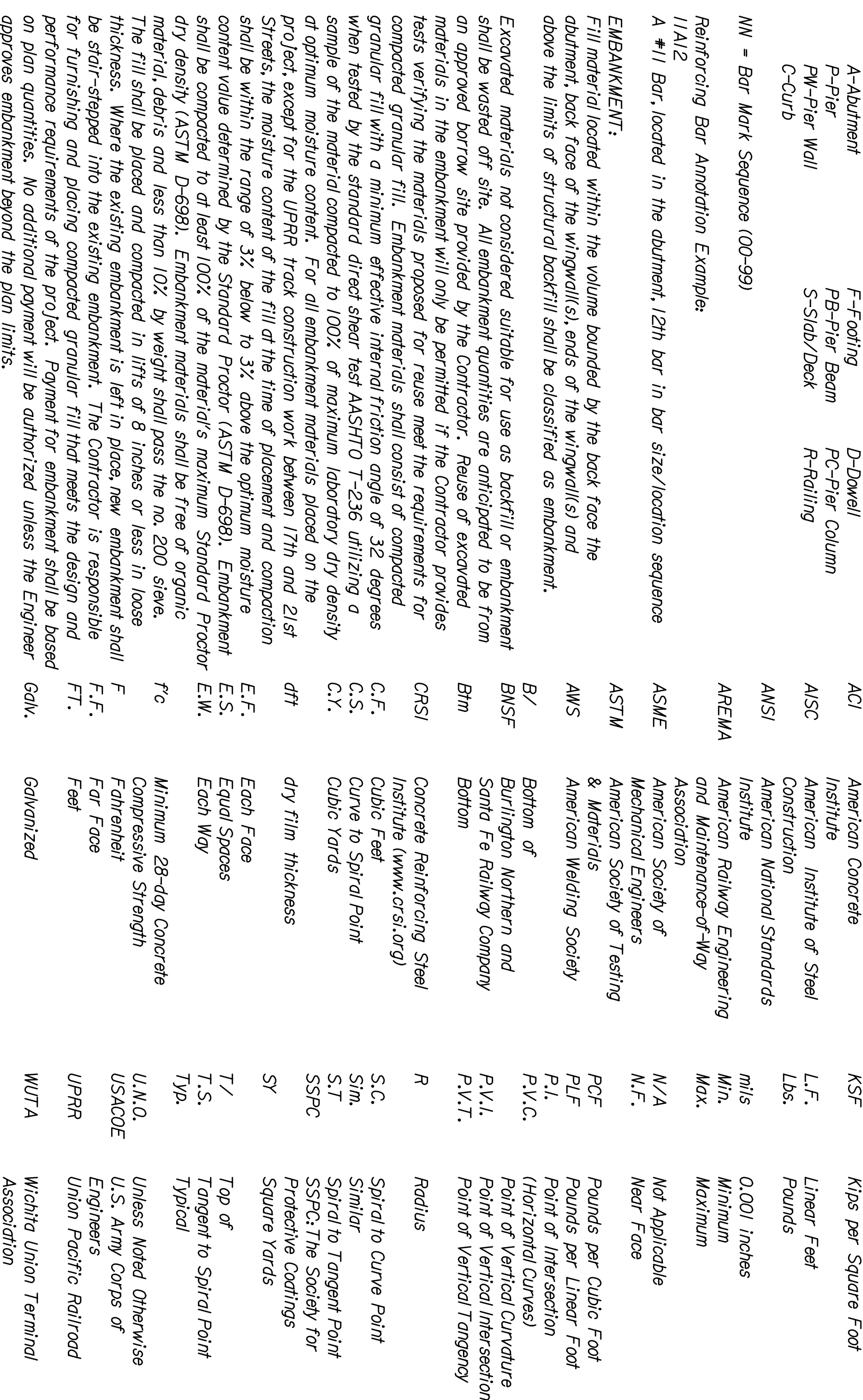
Protective shoring calculations, plans and details shall be submitted eight (8) weeks prior to commencing shoring operations.

Protective shoring calculations, plans and details shall be submitted to the Engineer and distributed to the BNSF, UPRR and WUTA for approval.

Protective shoring construction shall not begin until approved by the Engineer and the railroads.

QUANTITIES: Items not listed separately in the Summary of Bridge Quantities are subsidiary to other items.

QUALITY CONTROL: Prior to placing structural steel, verify that the bridge seat elevations are equal to the plan elevation +/- 1/8" and submit the documentation of the elevations to the Engineer.



Alternate 1 - White Concrete

Sheets W05.3 & W05.6 replace sheets B5.3 & B5.6

Respectively. For all other plan details, see Sheets

B5.1 through B5.29.

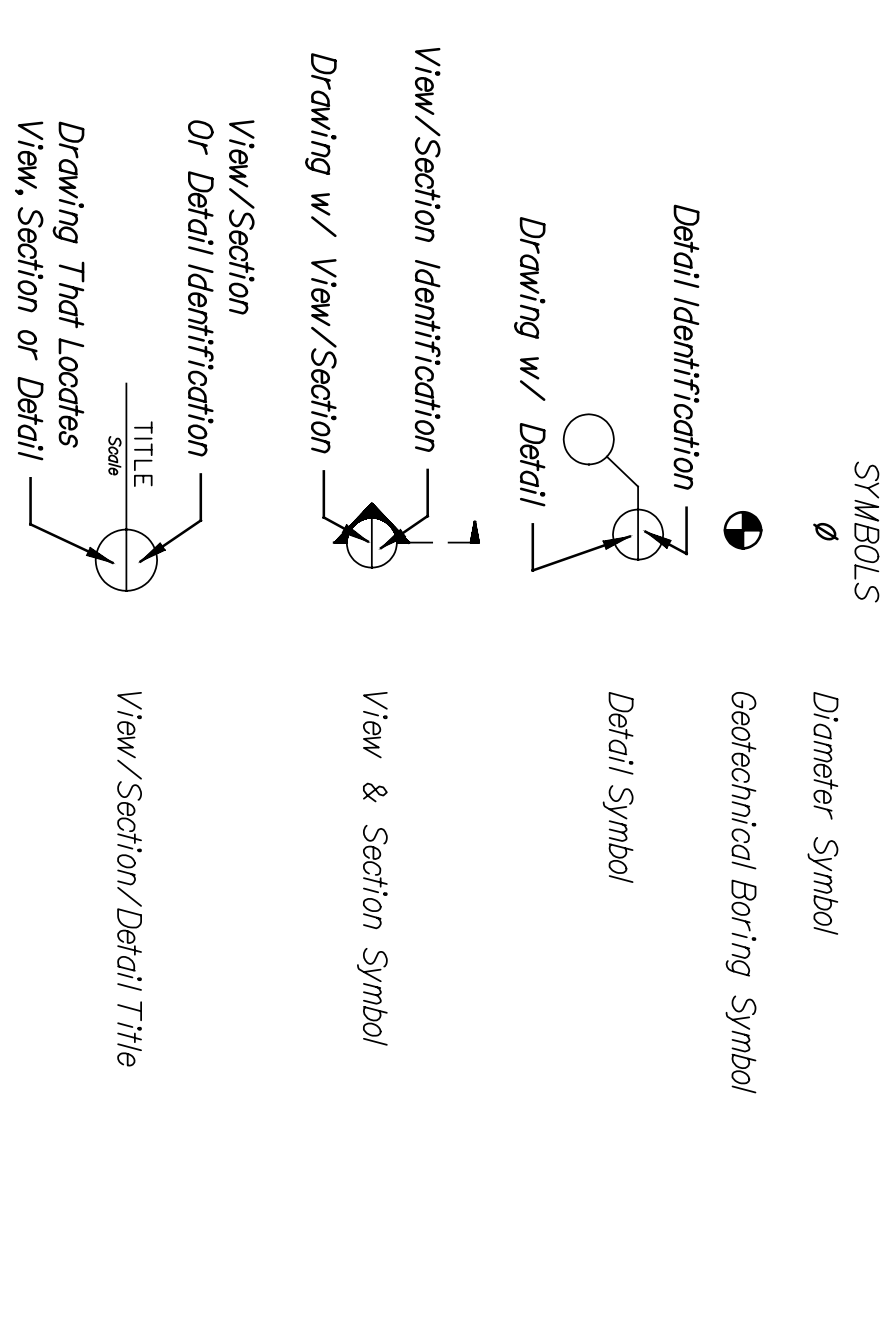
Explanation: The bridge abutments are cast using

Concrete Grade 4.0 (AE) (Special) with a concrete

saddle and graffiti control protection on the exposed

surfaces. The purpose of this alternate is to provide

an integrally colored white cement concrete.



Water Surface Elevation Symbol

NO.		DATE		REVISIONS	
1					
2					
3					

SHEET NO.		SCALE AS NOTED		APPD.	
DESIGNED	BY	DETAILS	BY	QUANTITIES	BY
CHKD	BY	CHKD	BY	CHKD	BY
DATE	DATE	DATE	DATE	DATE	DATE

CITY OF WICHITA	
WICHITA CENTRAL CORRIDOR	
ALTERNATE 1	
2ND STREET	
SUMMARY OF QUANTITIES AND GENERAL NOTES	

PROJECT NO.		472-84011	
YEAR		2005	
SHEET NO.		W05.3	
TOTAL SHEETS			