

DATE	
BY	

ITEM	BASE BID ITEM QUANTITY	UNIT	ALTERNATE ITEM QUANTITY	UNIT
Embankment (Granular F-III) Excavation (Class III)	2,324	CY	-	-
Concrete Grade 4.0 (Special) (AE)	740	CY	-	-
Concrete Grade 4.0 (AE)	880	CY	-	-
Concrete Masonry Coating	582	SY	-	-
Concrete Sealer	582	SY	-	-
Grout Control System	594	SY	-	-
Structural Steel (ASTM A709 Gr 50T 2) (Bridges)	348,433	LBS	-	-
Structural Steel (ASTM A500, Gr. B) (Collision Beam) Expansion Device (Sliding Plate)	17,946	LBS	-	-
Headed Stud Anchors	3,600	EA	-	-
Reinforcing Steel (Gr. 60)	117,200	LBS	-	-
Reinforcing Steel (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	-	-
Exhaustive Bearing Devices (1/2" x 1/2" x 1/2" Plates - Bridges)	8	EA	-	-
Steel Bearing Device (EXP)	8,912	LBS	-	-
Steel Bearing Device (FIX)	12,501	LBS	-	-
Bridge Handrail (Steel-Type 2)	261	LF	(180)	LF
Abutment Strip Drain	436	SY	-	-
Bridge Backwall Protection System (Type K)	436	SY	-	-
Waterproofing (Deck)	455	SY	-	-
Waterproofing - Plates - Bridges	138	SY	-	-
Remove Structures (Bridges)	1	EA	-	-

** Bollard Lighting handrail (Type 1 & 1A) bid with lighting package.

PNTE
 ARCHITECTS ENGINEERS PLANNERS

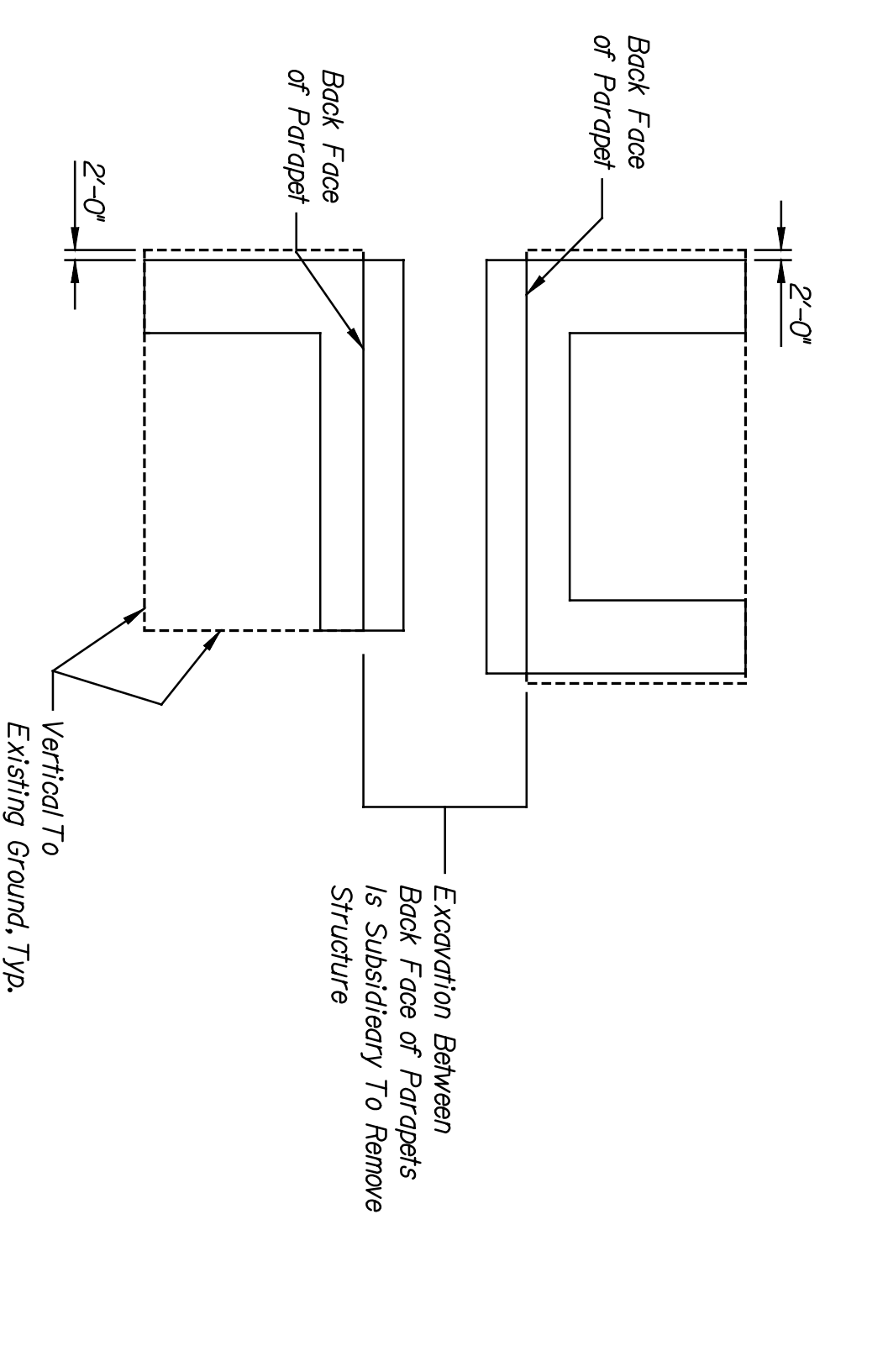
This sheet designed by:

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-Geotechnical Investigation Report, HNTB Corporation, September 2003.
- Wichita Central Corridor Railroad Grade Separation Project, Douglas Avenue to 21st Street, Wichita, Kansas-Hazardous Materials Screening Report, HNTB Corporation, September 2000.
- 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 (xx). 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 CRSI's 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:
 - F-Footing
 - A-Abutment
 - P-Pier
 - PM-Pier Wall
 - C-Curb
 - D-Dowel
 - PC-Pier Column
 - R-Railing
- NW = Bar Mark Sequence (00-99)

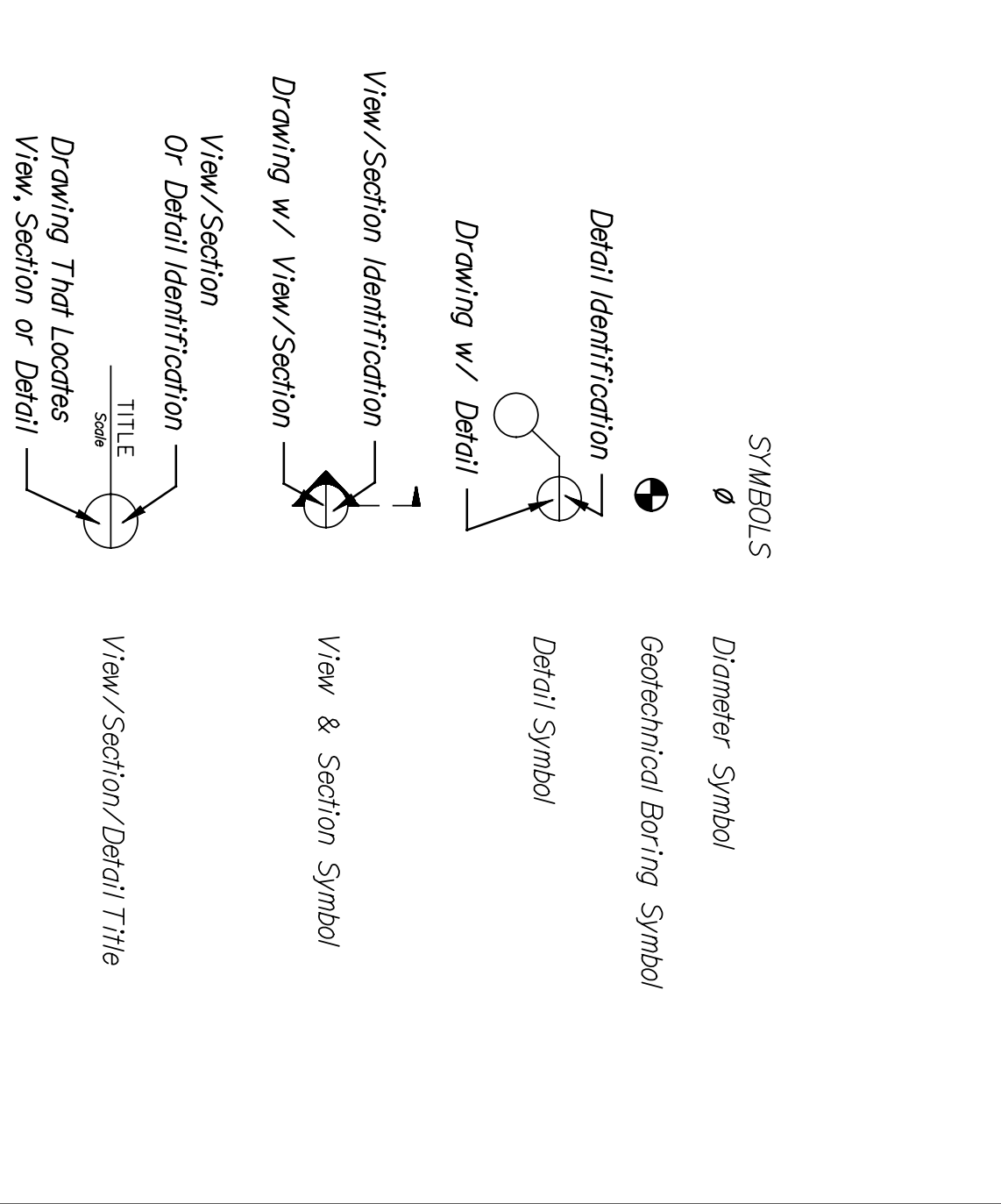
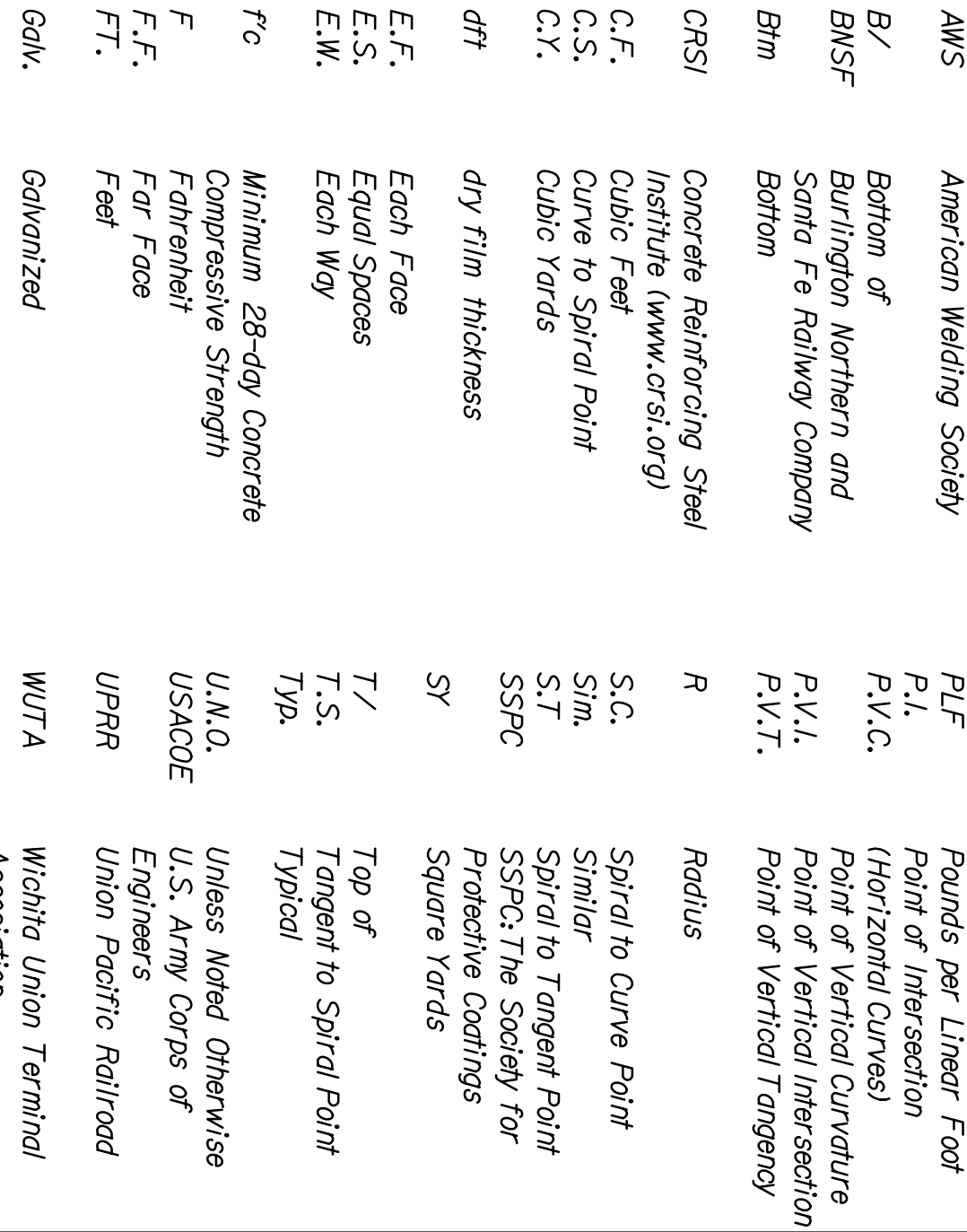
EMBAKMENT: Fill material located within the volume bounded by the back face the abutment, back face of the wingwall(s), ends of the wingwall(s) and above the limits of structural backfill shall be classified as embankment. Excavated materials not considered suitable for use as backfill or embankment shall be wasted off site. All embankment quantities are anticipated to be from an approved borrow site provided by the Contractor. Reuse of excavated materials in the embankment will only be permitted if the Contractor provides tests verifying the materials proposed for reuse meet the requirements for compacted granular fill. Embankment materials shall consist of compacted granular fill with a minimum effective internal friction angle of 32 degrees when tested by the standard direct shear test AASHTO T-236 utilizing a sample of the material compacted to 100% of maximum laboratory dry density of optimum moisture content. For all embankment materials placed on the project, except for the UPRR track construction work between 17th and 21st Streets, the moisture content of the fill at the time of placement and compaction shall be within the range of 3% below to 3% above the optimum moisture content value determined by the Standard Proctor (ASTM D-698). Embankment shall be compacted to at least 100% of the material's maximum Standard Proctor dry density (ASTM D-698). Embankment materials shall be free of organic material, debris and less than 10% by weight shall pass the no. 200 sieve. The fill shall be placed and compacted in lifts of 8 inches or less in loose thickness. Where the existing embankment is left in place, new embankment shall be stair-stepped into the existing embankment. The Contractor is responsible for furnishing and placing compacted granular fill that meets the design and performance requirements of the project. Payment for embankment shall be based on plan quantities. No additional payment will be authorized unless the Engineer approves embankment beyond the plan limits.

PROTECTIVE SHORING: Provide protective shoring as required by the BNSF Railway, Federal, state and local regulations. Provide protective shoring as indicated in the plans and specifications. 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.

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.

STATE	KANSAS	PROJECT NO.	472-84071	YEAR	2005	SHEET NO.	BL5.3	TOTAL SHEETS	
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ABBREVIATIONS:	IN.	Inches
AASHTO	1000 Pounds	
ACI	KSF	Kips per Square Foot
AISC	L.F.	Linear Feet
ANSI	Lbs.	Pounds
AREA	0.001 inches	
ASME	Min.	Minimum
ASTM	Max.	Maximum
AWS	N/A	Not Applicable
B/	N.F.	Near Face
BNSF	P.V.I.	Point of Vertical Intersection
Btm	P.V.T.	Point of Vertical Tangency
CRSI	R	Radius
C.F.	S.C.	Spiral to Curve Point
C.S.	Sim.	Similar
C.Y.	S.T.	Spiral to Tangent Point
dft	SSPC	SSPC: The Society for Protective Coatings
E.F.	SY	Square Yards
E.S.	T/	Top of
E.W.	T.S.	Tangent to Spiral Point
	Typ.	Typical
	U.N.O.	Unless Noted Otherwise
	USACOE	U.S. Army Corps of Engineers
	UPRR	Union Pacific Railroad
	WUTA	Wichita Union Terminal Association



CITY OF WICHITA
WICHITA CENTRAL CORRIDOR
ALTERNATE 5
2ND STREET
SUMMARY OF QUANTITIES AND GENERAL NOTES

SHEET NO.	OF	SCALE AS NOTED	APPD.	DATE	TRACED	DATE
DESIGNED	BY	DETAILS	BY	QUANTITIES	BY	DATE
DESIGN	BY	DETAIL	BY	QUANTITIES	BY	DATE