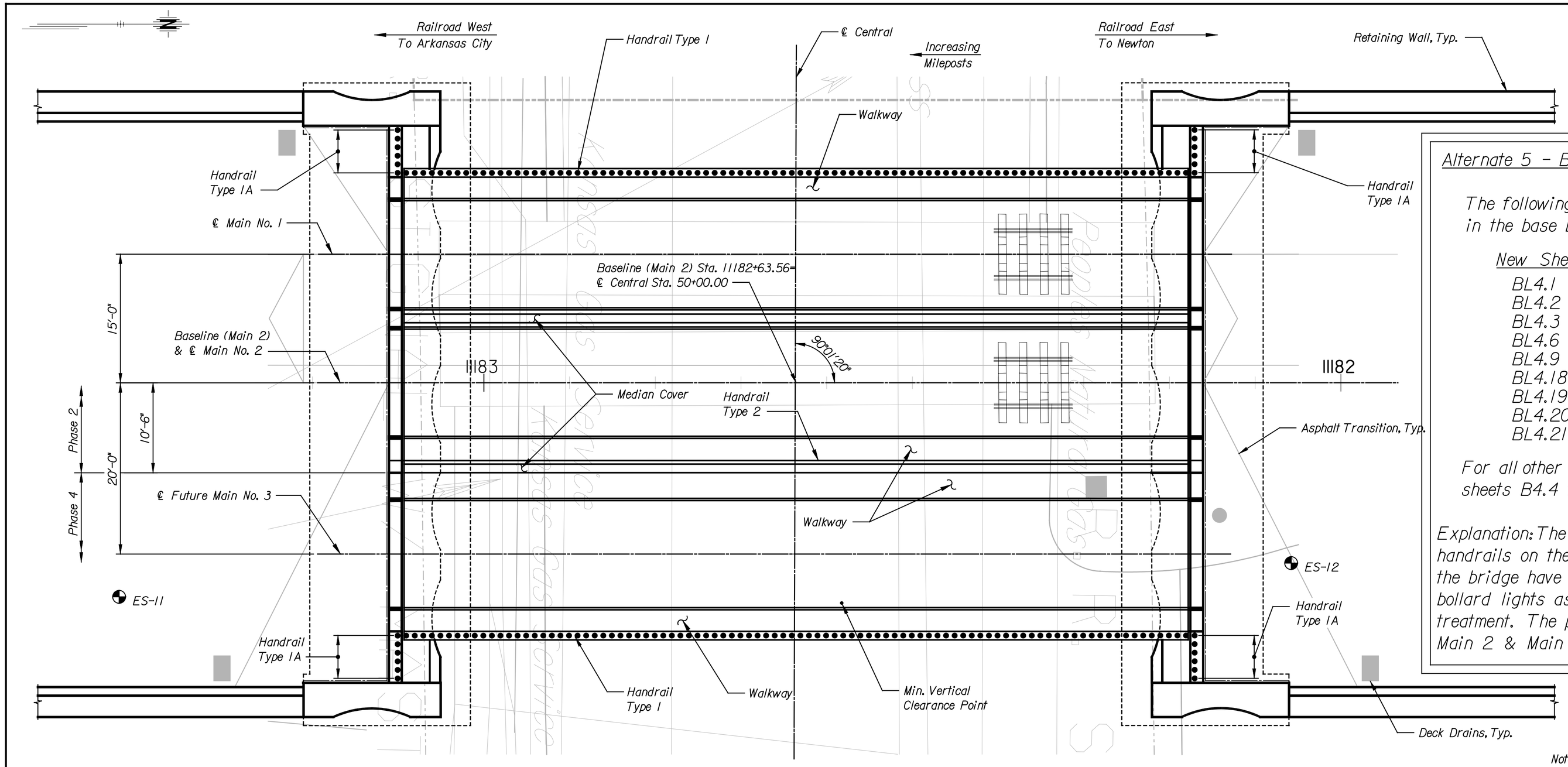
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84071	2005	BL4.1	



PLAN
Scale: 1/8" = 1'-0"

Alternate 5 - Bollard Handrail

The following sheets are replaced in the base bid plans:

New Sheet	Old Sheet
BL4.1	B4.1
BL4.2	B4.2
BL4.3	B4.3
BL4.6	B4.6
BL4.9	B4.9
BL4.18	B4.18
BL4.19	B4.19
BL4.20	B4.20
BL4.21	B4.21

For all other plan details, see sheets B4.4 through B4.28.

Explanation: The standard pipe handrails on the outer walkways of the bridge have been replaced with bollard lights as an aesthetic treatment. The pipe handrail between Main 2 & Main 3 remains unchanged.

Note:
Collision beam not shown for clarity.

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

RAILROAD BRIDGE DESIGN LOADS:
Dead Load:
Unit Weight of Ballast, 120 pcf
Unit Weight of Backfill, 120 pcf
Unit Weight of Concrete, 150 pcf
Unit Weight of Steel, 490 pcf

Live Load:
Cooper's E80 and Alternate Live Load with diesel impact for rolling equipment without hammer blow.

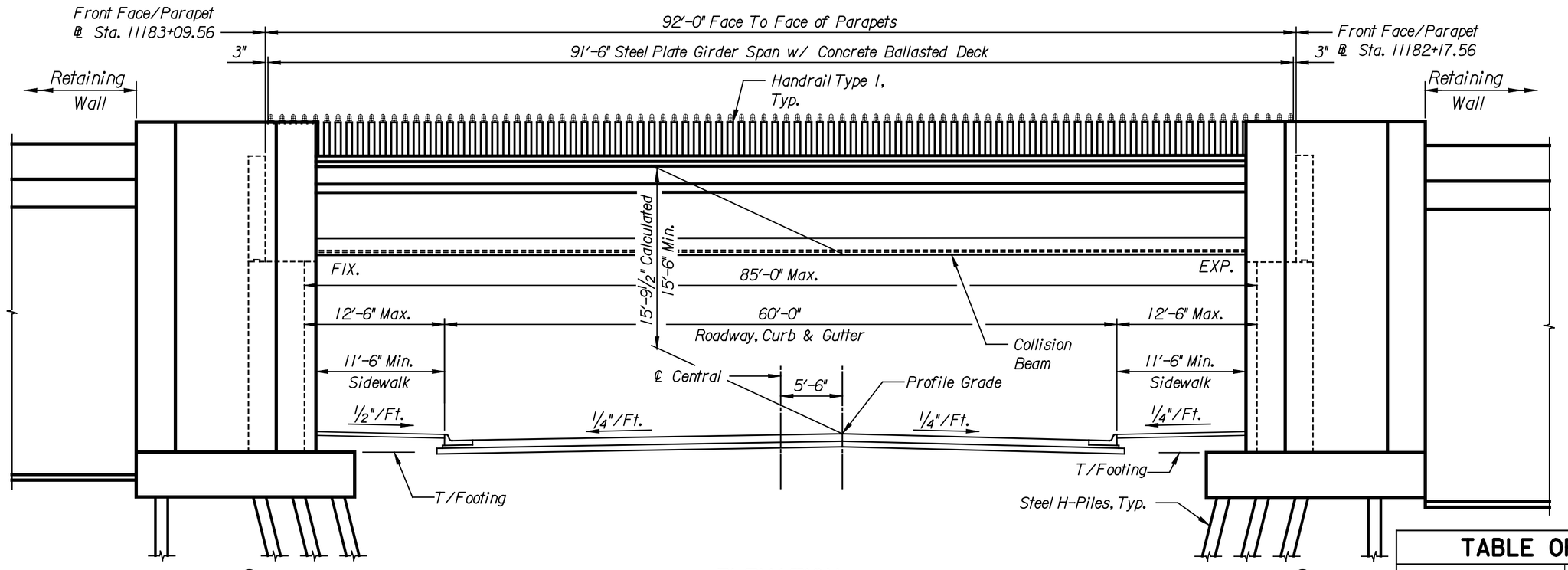
Seismic:
Site Coefficient, 1.0

Temperature:
Design Temperature, 60 degrees F
Design Temperature Range
Rise 50 degrees F
Fall 80 degrees F
Minimum Service Temperature Zone, Zone 2

Longitudinal Force:
As specified in AREMA.

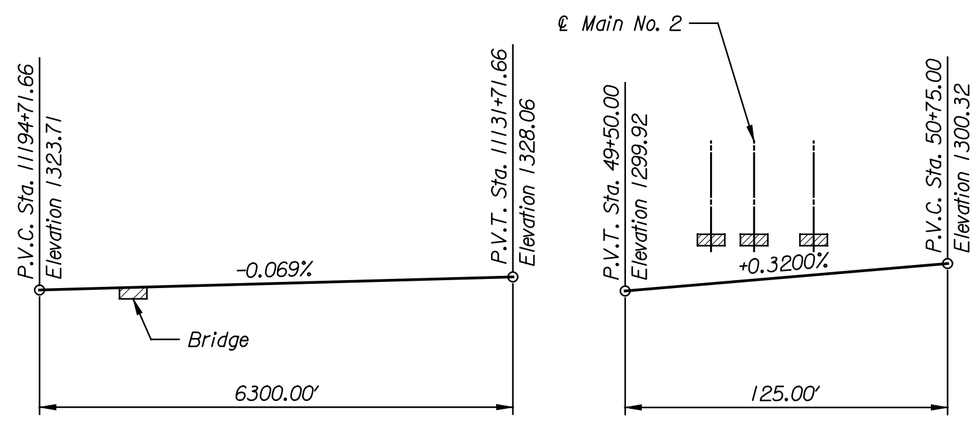
Other Loads:
As specified in AREMA.

REFERENCES:
Railroad Alignments, Refer to R1.2-R1.4, R2.2, R3.2-R3.4, R4.2-R4.3, R1.20, R2.15, R3.22, R4.13.
Roadway Plan, Refer to S3.7.
Paving Plan, Refer to S7.4.
Lighting Plan, Refer to L4.03.
Retaining Walls, Refer to W1.1,W4.7, W4.10.
Asphalt Transition, Refer to R5.1.



ELEVATION
Scale: 1/8" = 1'-0"

Note:
Roadway Elevation is looking downstation
Vertical clearance calculated to collision beam.



TRACK PROFILE
Not To Scale

CENTRAL PROFILE
Not To Scale

TABLE OF ELEVATIONS FOR SUBSTRUCTURE

DESCRIPTION	ABUT. NO. 2		ABUT. NO. 1	
	STATION	ELEVATION	STATION	ELEVATION
TOP OF RAIL @ FF PARAPET	11183+09.56	1324.52	11182+17.56	1324.58
BEARING SEAT @ ℄ BEARING	11183+08.39	1315.45	11182+18.73	1315.43
TOP OF FOOTING	N/A	1297.95	N/A	1298.18

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

CITY OF WICHITA

WICHITA CENTRAL CORRIDOR
ALTERNATE 5
CENTRAL
GENERAL PLAN AND ELEVATION

SHEET NO.	OF	SCALE AS NOTED	APP'D		
DESIGNED	FKD	DETAILED DJJ	QUANTITIES DJJ	TRACED	DJJ
DESIGN CK.	DMH	DETAIL CK. JWH	QUAN.CK. DMH	TRACE CK.	DMH

LOCATION:
BNSF BR. 211.8 LINE SEGMENT 7400
WICHITA, KS

This sheet designed by:

HNTB
ARCHITECTS ENGINEERS PLANNERS

DATE | BY

Plotted on: 04-JAN-2005 11:48 $time$
scindrell Plot Queue: $queue$
Plot Scale: $scale$ Pen Table: $pentable$
Design Filename: k:\k29049\bridges\Dec2004\Bollard Lighting Alternate\Central\drawings\c0dsgn.