PHASE II (1) (3)

SUPERSTRUCTURE - REGULAR

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH
A500	DIAPHRAGM	5	24					45'-8"
A501	DIAPHRAGM	5	72					44'-7"
A550	DIAPHRAGM	5	96					4'-0"
A600	DIAPHRAGM	6	33					2'-2"
A601	DIAPHRAGM	6	33					2'-4"
HA540	DIAPHRAGM	5	66	3'-1"	2'-0"	1'-4"		6'-5"
L400	DIAPHRAGM	4	300	1'-2"	1'-11"	1'-0"		7'-2"
L401	DIAPHRAGM	4	50	1'-2"	2'-2"	1'-0"		7'-8"
L402	DIAPHRAGM	4	50	1'-2"	2'-0"	1'-0"		7'-4"
LS400	DIAPHRAGM	4	154	1'-4"	1'-4"	1'-0"		7'-4"

SUPERSTRUCTURE - EPOXY

A400E	SLAB (TOP)	4	50					54'-8"
A401E	SLAB (TOP)	4	70					53'-6"
A500E	SLAB (BOTTOM)	5	200					55'-1"
A501E	SLAB (BOTTOM)	5	280					53'-11"
A502E	COUPLER BARS (SLAB)	5	3298					4'-0"
SERIES A514E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 3'-1" TO 58'-6" IN INC. OF 10¾" (63 BARS)				1939'-11"
SERIES A515E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 3'-0" TO 59'-4" IN INC. OF 10¾" (64 BARS)				1994'-8"
A516E	SLAB (TOP & BOTTOM)	5	2790					33'-1"
SERIES A517E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 28'-10" TO 32'-5" IN INC. OF 10¾" (5 BARS)				153'-2"
SERIES A518E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 29'-8" TO 32'-4" IN INC. OF 10¾" (4 BARS)				124'-0"
A519E	SLAB (TOP & BOTTOM)	5	32					6'-8"
SERIES A523E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 3'-4" TO 59'-8" IN INC. OF 10¾" (63 BARS)				1984'-6"
SERIES A524E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 3'-2" TO 59'-5" IN INC. OF 10¾" (64 BARS)				2002'-8"
SERIES A525E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 30'-0" TO 32'-8" IN INC. OF 10¾" (4 BARS)				125'-4"
SERIES A526E	SLAB (TOP & BOTTOM)	5	2	DIM "A" VARIES FROM 29'-9" TO 32'-5" IN INC. OF 10¾" (4 BARS)				124'-4"
A900E	SLAB (TOP)	9	210					58'-9"
A901E	SLAB (TOP)	9	294					57'-11"
A902E	SLAB (TOP)	9	204					27'-11"
A903E	SLAB (TOP)	9	102					25'-1"
A904E	SLAB (TOP)	9	102					23'-7"
A905E	SLAB (TOP)	9	102					24'-11"
A906E	SLAB (TOP)	9	102					25'-11"
M470E	SLAB / MEDIAN BARRIER	4	104					4'-5"

ABUTMENT NO. 1 - REGULAR

A400	ROADWAY BRACKET	4	2					46'-2"
A540	ABUTMENT BEAM	5	8					33'-11"
A541	ABUTMENT BEAM	5	8					60'-0"
A602	ENDWALL	6	6					35'-3"
A603	ENDWALL	6	6					60'-0"
A740	ABUTMENT BEAM	7	10					36'-5"
A741	ABUTMENT BEAM	7	10					60'-0"
H540	ROADWAY BRACKET	5	89	2'-2"	5"			3'-0"
H640	ENDWALL/ABUTMENT BEAM	6	91	1'-2"	3'-7"			8'-4"
HA640	ENDWALL	6	44	3'-1"	2'-0"	1'-4"		6'-5"
L540	ABUTMENT BEAM	5	41	2'-10"	7'-3"	1'-0"		17'-0"

DESIGNED BY D. JAMES/D. THOMPSON DATE
DRAWN BY ANGELA MOORE DATE
SUPERVISED BY D. JAMES/D. THOMPSON DATE
CHECKED BY JAMIE GILLESPIE DATE

JAMES + ASSOCIATES, INC.

PHASE II (1) (2) (3)

ABUTMENT NO. 1 - REGULAR

BAR	LOCATION	SIZE	NO. REQ'D.	BENDING DIMENSIONS A	B	C	D	LENGTH
SERIES								
L541	ABUTMENT BEAM	5	1	2'-10"		1'-0"		983'-4"
				DIM "B" VARIES FROM 5'-9" TO 7'-3" IN INC. OF ⅜" (50 BARS)				
YB500	ABUTMENT BEAM	5	144	2'-10"				4'-4"

ABUTMENT NO. 1 - EPOXY

A450E	COUPLER BAR	4	2					2'-6"
A550E	COUPLER BAR	5	16					4'-0"
A600E	ENDWALL	6	33					3'-2"
A601E	ENDWALL	6	182					3'-2"
A602E	ENDWALL	6	2					35'-3"
A603E	ENDWALL	6	2					60'-0"
A650E	COUPLER BAR	6	16					5'-8"
A750E	COUPLER BAR	7	20					6'-6"
F640E	ENDWALL / P.A.B.E.	6	90	1'-1"	1'-3"	1'-1"	1'-3"	3'-11"
R640E	ENDWALL / SLAB	6	91	2'-0"	2'-0"			4'-0"

ABUTMENT NO. 2 - REGULAR

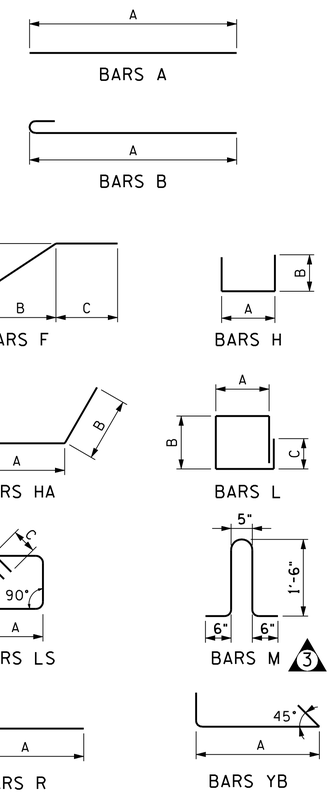
A403	ROADWAY BRACKET	4	2					46'-2"
A546	ABUTMENT BEAM	5	6					33'-11"
A547	ABUTMENT BEAM	5	6					60'-0"
A607	ENDWALL	6	6					35'-3"
A608	ENDWALL	6	6					60'-0"
A746	ABUTMENT BEAM	7	10					36'-5"
A747	ABUTMENT BEAM	7	10					60'-0"
H540	ENDWALL/ROADWAY BRACKET	5	89	2'-2"	5"			3'-0"
H640	ENDWALL	6	91	1-2"	3'-7"			8'-4"
HA640	ENDWALL	6	44	3'-1"	2'-0"	1'-4"		6'-5"
L544	ABUTMENT BEAM	5	4	2'-10"	3'-9"	1'-0"		14'-2"
SERIES								
L545	ABUTMENT BEAM	5	1	2'-10"		1'-0"		129'-2"
				DIM "B" VARIES FROM 3'-10" TO 3'-11" IN INC. OF ⅛" (9 BARS)				
SERIES								
L546	ABUTMENT BEAM	5	1	2'-10"		1'-0"		130'-8"
				DIM "B" VARIES FROM 3'-11" TO 4'-0" IN INC. OF ⅛" (9 BARS)				
SERIES								
L547	ABUTMENT BEAM	5	1	2'-10"		1'-0"		132'-2"
				DIM "B" VARIES FROM 4'-0" TO 4'-1" IN INC. OF ⅜" (9 BARS)				
SERIES								
L548	ABUTMENT BEAM	5	1	2'-10"		1'-0"		133'-8"
				DIM "B" VARIES FROM 4'-1" TO 4'-2" IN INC. OF ⅛" (9 BARS)				
L549	ABUTMENT BEAM	5	18	2'-10"	4'-2"	1'-0"		15'-0"
SERIES								
L550	ABUTMENT BEAM	5	1	2'-10"		1'-0"		132'-2"
				DIM "B" VARIES FROM 3'-11" TO 4'-1" IN INC. OF ¼" (9 BARS)				
SERIES								
L551	ABUTMENT BEAM	5	1	2'-10"		1'-0"		129'-2"
				DIM "B" VARIES FROM 3'-9" TO 3'-11" IN INC. OF ¼" (9 BARS)				
SERIES								
L552	ABUTMENT BEAM	5	1	2'-10"		1'-0"		126'-2"
				DIM "B" VARIES FROM 3'-7" TO 3'-9" IN INC. OF ⅛" (9 BARS)				

CONST. NO. BR-I-40-3(155)

PROJECT NO.	YEAR	SHEET NO.
11003-3134-94	2014	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	02-05-13	DWT	REVISED QUANTITIES
2	04-26-13	DWT	ADDED BARS F640E AND YB500
3	11-06-13	DWT	REVISED QUANTITIES AND ADDED BAR M DETAIL



R. DARRELL JAMES
REGISTERED
NO. 15281
STATE OF TENNESSEE
04/04/2014

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BILL OF STEEL
(PHASE II)

BRIDGE NO. 11-10040-05.63 (EB & WB)
INTERSTATE 40 OVER HARPETH RIVER
CHEATHAM COUNTY
2014

BR-113-59