TOTAL SHEETS	SHEET NO.
57	37

SHEET NO. 4 OF 24 SHEETS

REGISTERED ROUTE	SECTION
F.A.S. 1539	37 Q
PEN. ROAD DIST. NO.	COUNTY: MACON 66 19
ILLINOIS	PROJECT S-(539-1 (1)

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21 #6-a_1 @ 7" Top
21 #6-a_2 @ 7" Bottom
Order full length - Cut to fit skew & use remainder of bars in opposite end

248'-7⅛" End to End of Slab

203 #6-a_1 @ 1'-2" Top — 203 #6-a_2 @ 1'-2" Bottom

202 #6-a Alternate with a

5¼" — 11'-8" — 7'-2"

3 #6-a_3 @ 7" Top of Slab

6 #3-b_7 3 Lengths — 6 #4-b_8 1 Length — 6 #4-b_9 1 Length — 8 #4-b_9 2 Lengths (Entire Span)

Skew 20°-00'

40 Floor Drains @ ± 6'-0" - Both Curbs
Space to miss diaphragms & piers
(See Detail Sheet #3 of 23)

℄ Bearing Pier #4 Beam Spans

℄ Roadway

℄ Bearing Pier #5

℄ Bearing Pier #6

℄ Bearing Abut. #2

℄ Span

30'-0" — 36'-0"

Bars in curb each side of bridge are identical

46 #5-b_{13} @ 6" Top of Slab between ℄ bars over Piers #5 & #6

25 #5-b_{12} @ 1'-6" (4 Lengths) Top of Slab
46 #5-b_{13} Spaced as Shown on Cross Sections (3 Lengths) Bottom of Slab

10'-0" — 15'-9" — 15'-9" — 10'-0"

3 #6-a_3 @ 7" Top of Slab

6 #6-a_4 @ 6"

4 #5-b_{15} — 4 #5-b_{16} — 4 #5-b_{16} — 4 #5-b_{16} — 4 #5-b_{17} — 4 #5-b_{17} — 4 #5-b_{11} — 4 #5-b_{11} — 4 #5-b_{13} — 4 #5-b_{15}

2 Panels @ 7'-6"
2 Panels @ 12'-0"
2 Panels @ 16'-0"
3 Panels @ 16'-6"
109'-0"

Joints in Parapet — 15'-7⅞" — 16'-6" — 16'-6" — 16'-6" — 16'-0" — 16'-0" — 14'-0" — 14'-0" — 7'-6" (½ Panel) — 19'-4½"

1'-3⅝" — 1'-3⅝"

9" — 76'-0" Span #5 — 95'-0" Span #6 — 76'-0" Span #7 — 2'-7"

249 #5-V_{22} @ 1'-0" (Each Face) 2 Additional at each railing post (Inside Face)

124 #4-S_3 @ 2'-0" Each Curb — 123 #4-S_4 Alternate with S_3

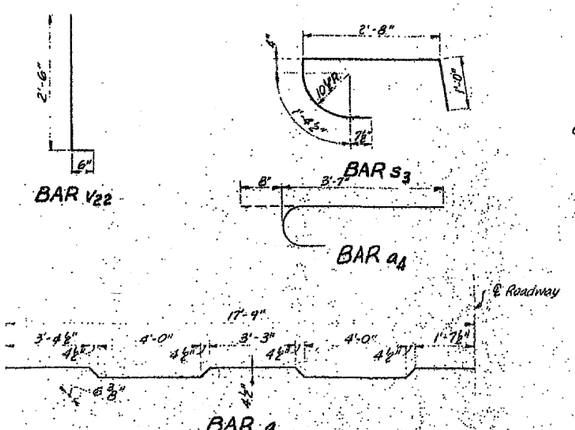
247'-0" ℄ Bearing Pier #4 to ℄ Bearing Abut. #2

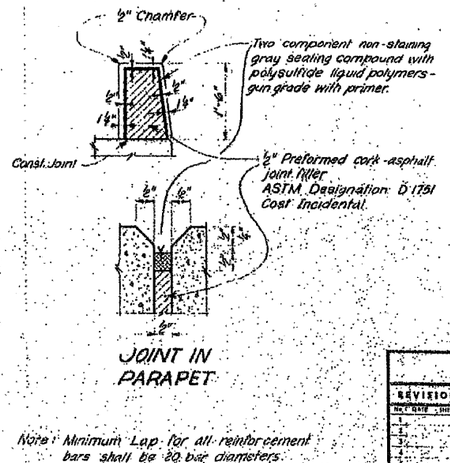
BILL OF MATERIAL

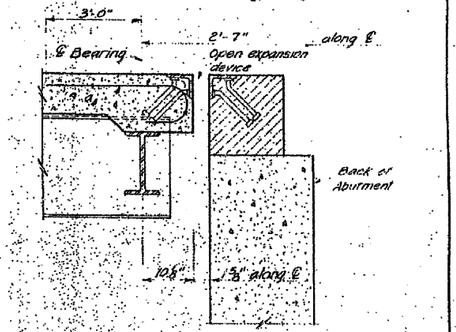
Bar	Size	Length	Shape	Number Required: Girder Spans	Beam Spans	Total
a	#6	36'-9"		376	202	578
a_1	#6	35'-6"		398	224	622
a_2	#6	35'-0"		398	224	622
a_3	#6	7'-6"		6	6	12
a_4	#6	4'-3"	⊏	138	138	276
b	#3	31'-0"		1065	0	1065
b_1	#6	35'-9"		146	0	146
b_2	#5	32'-0"		0	568	568
b_3	#6	25'-9"		0	46	46
b_4	#4	25'-0"		72	0	72
b_5	#4	27'-3"		72	0	72
b_6	#4	35'-6"		48	0	48
b_7	#4	22'-3"		0	72	72
b_8	#4	11'-9"		0	48	48
b_9	#4	35'-0"		0	24	24
b_{10}	#5	17'-6"		16	0	16
b_{11}	#5	13'-9"		112	32	144
b_{12}	#5	13'-3"		48	0	48
b_{13}	#5	14'-0"		32	8	40

Bar	Size	Length	Shape	Number Required: Girder Span	Beam Span	Total
b_{14}	#5	19'-9"		92	0	92
b_{15}	#5	16'-0"		0	16	16
b_{16}	#5	16'-3"		0	48	48
b_{17}	#5	11'-9"		0	32	32
S_3	#4	6'-0"	⊏	452	248	700
S_4	#4	1'-0"		450	246	696
V_{22}	#5	3'-0"		2032	1120	3152

Reinforcement Bars	Lb.	189,000
Structural Steel	Lb.	804,000
Class x Concrete	Cu. Yd	779.7
Aluminum Handrail	Lin. Ft.	1402
Protective Coat	Sq. Yd	3130







Note: Minimum Lap for all reinforcement bars shall be 20 bar diameters.

CONCRETE DECK - BEAM SPANS

REVISIONS			
NO.	DATE	SHEETS	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

MACON COUNTY
F.A.S. RT. 1539 SECTION 37 Q

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY: JC DATE: 3-63
CHECKED BY: FML DATE: 4-63
SHEET NUMBER
PROJECT NO.
SHEET NO.

FOR INFORMATION ONLY