



TYPICAL GRATE

~ NOTES ~

- ① ADDITIONAL "a" BARS: 1 REQUIRED FOR 15° SKEW, 2 REQUIRED FOR 30° SKEW.
- 2. ALL COMPONENTS ARE 1" X 2" STRUCTURAL STEEL BARS.
 - Ⓐ EQUALLY SPACE BARS NO. 2.
 - Ⓑ LENGTH OF GRATE SHALL BE EITHER 2'-0" OR 3'-0".
- 3. FOR SLOPED BOX DETAILS SEE CUR. STD. DWG. RDB-100.

1" X 2" STRUCTURAL STEEL BARS

BOX SIZE	GRATE		BAR NO. 1	BAR NO. 2		LBS STRUCTURAL STEEL	
	NO.	LG.	LENGTH	NO. BARS	LENGTH	EACH GRATE	TOTAL
15" - 18"	1	2'-0"	2'-5"	3	1'-10"	70	161
	2	3'-0"			2'-10"	91	
24"	1	2'-0"	3'-0"	4	1'-10"	91	300
	2	2'-0"			2'-10"	118	
	3	3'-0"					

NO. 4 REINFORCEMENT BARS

PIPE SIZE	① BAR a		BAR b		BAR c1		BAR c2		BAR c3		BAR d		TOTAL STEEL	CLASS A CONC.
	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	NO.	LG.	LBS.	CU. YDS.
15"														
18"	12	2'-5"	4	8'-6"	0	0	6	1'-0"	4	1'-6"	4	4'-3"	62	1.2
24"	14	3'-0"	4	10'-6"	2	1'-0"	6	1'-3"	6	2'-0"	4	6'-3"	87	1.83

USE WITH CUR. STD. DWG. RDB-100

KENTUCKY
DEPARTMENT OF HIGHWAYS

GRATES FOR SLOPED BOX OUTLET TYPE 1

STANDARD DRAWING NO. RDB-101-05

SUBMITTED *William S. Galbraith* 12-01-15
DIRECTOR, DIVISION OF DESIGN DATE

APPROVED *[Signature]* 12-01-15
STATE HIGHWAY ENGINEER DATE