

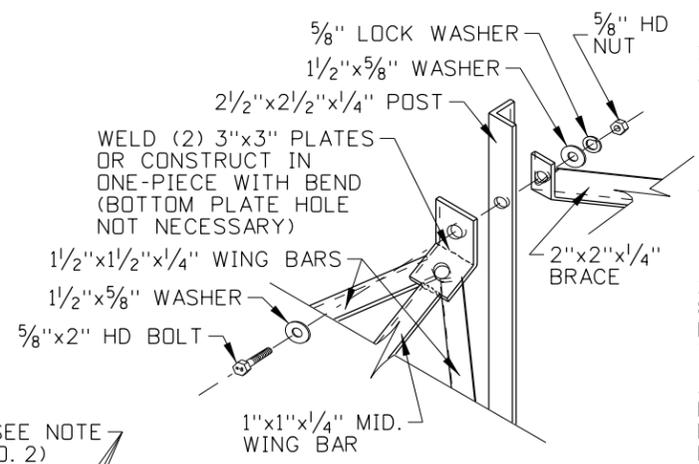
WING BRACE DETAILS

MATERIALS TABLE				
BAR	NUMBER OF BARS	TYPE	* b LENGTH(S)	BAR SIZES IN INCHES
B-1	2	∟	5'-8"	1 1/2 x 1 1/2 x 1/4
B-2	3	∟	1'-6", 2'-8", & 3'-10"	1 x 1 x 1/8
B-3	1	FLAT	5'-0"	1 x 1/4
B-4	1	∟	VARIES	2 x 2 x 1/4
POST	1	∟	8'-0"	2 1/2 x 2 1/2 x 1/4
PLATE	5	FLAT	3" LENGTHS OR DIA.	3" x 3" x 1/4
PIN	2	ROUND	* c 18" / 24"	3/4 DIA.

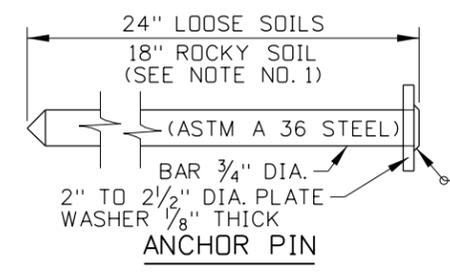
* b (SEE NOTE NO. 3)
* c (SEE NOTE NO. 1, ALT. A)

NOTES

1. SECURE CATTLE GUARD WINGS TO PAVEMENT.
ALTERNATE A:
DRIVE (3) 3/4" DIA. ANCHOR PINS THROUGH WING FEET PLATE HOLES INTO 1" PRE ROTO-DRILLED HOLES IN THE ASPHALT OR CONCRETE PAVEMENT. DRIVE THE ANCHOR PIN HEAD FLUSH TO THE WING FOOT. THE ANCHOR PIN LENGTH MAY BE ADJUSTED FOR THE SOIL TYPE.
ALTERNATE B:
PLACE A 3/8" TURNBUCKLE FASTENED WITH MIN. 10 GAUGE WIRE BETWEEN THE WING CENTER MEMBER AND THE BRACE POST. TIGHTEN TURNBUCKLE TO PRESS WING FEET TO ROADWAY PAVEMENT.
2. TIE A MINIMUM OF (3) WIRES FROM THE BRACE POST TO THE WING B-2 & B-3 BAR INTERSECTIONS FOR BARBED WIRE INSTALLATIONS. MESH WIRE FENCES WILL REQUIRE A SECTION OF WIRE MESH TIED FROM THE B-2 BAR TO THE BRACE POST.
3. WHEN RETROFITTING AN EXISTING CATTLE GUARD INSTALLATION, REPLACE THE BRACE POST AND B-4 MEMBERS. PROVIDE LONGER WING BAR MEMBERS WHEN THE DISTANCE FROM THE ROADWAY SHOULDER TO THE POST EXCEEDS 3'-0", THE POST HEIGHT EXCEEDS 4'-3", OR BOTH.
4. PAVE THE AREA BETWEEN THE CATTLE GUARD WINGS AND THE 1:1 TAPER. THE PAINTED CATTLE GUARD CAN BE PLACED ON A GRAVEL SURFACE ROADWAY IF THE MARKED AREA IS PAVED AS SHOWN.
5. THE PAINTED CATTLE GUARD MARKINGS ARE PAINTED WITH ITD FORMULA NO. 14 OR OTHER MARKINGS AS APPROVED BY THE ENGINEER.
6. ALL THE EXPOSED STEEL SURFACES BELONGING TO THE CATTLE GUARD WINGS SHALL BE GALVANIZED.
7. NOT TO SCALE.



BOLTING DIAGRAM



ANCHOR PIN (3) REQUIRED FOR EACH WING

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	8-04	MSM					
2	10-05	MSM					
3	12-12	RDL					

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
CADD FILE NAME: f1c_1212.std
DRAWING DATE: JANUARY, 2004

IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS
HIGHWAYS PROGRAM OVERSIGHT ENGINEER
ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING
CATTLE GUARD TYPE C
PAINTED CATTLE GUARD

English
STANDARD DRAWING NO.
F-1-C
SHEET 1 OF 1

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho
ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: DECEMBER 17, 2012