



**TYPICAL CURB & GUTTER SECTION (WITH OR WITHOUT SIDEWALK)**

**ELEVATION VIEW**

**TYPICAL SECTION (WITH GUARDRAIL)**

**NOTES**

- LAYOUT OF HIGHWAY-RAILROAD GRADE CROSSING SIGNAL SHALL BE CONSISTENT WITH THE STANDARDS OF THE RAILROAD COMPANY AND PART 8 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (AS ADOPTED BY THE STATE). THE RAILROAD COMPANY WILL DESIGN THE STRUCTURE AND OTHER COMPONENTS OF THE RAILROAD CROSSING SIGNAL. THE RAILROAD COMPANY WILL DETERMINE THE NEED FOR AND THEN DESIGN ANY ADDITIONAL SUPPORT STRUCTURE.
- POST LOCATION AND LENGTH OF CANTILEVER SPAN SHALL BE AS SHOWN ON PLANS. CANTILEVER SPAN IS PERPENDICULAR TO ROADWAY UNLESS OTHERWISE NOTED ON THE PLANS. ALL PARTS OF THE RAILROAD CROSSING SIGNAL, INCLUDING GATE ARM IN THE UPRIGHT POSITION, SHALL BE A MINIMUM OF 10 FEET, MEASURED PERPENDICULAR FROM THE NEAREST RAIL OF THE RAILROAD TRACKS.
- TOP OF THE SIGNAL FOUNDATION SHALL BE FLUSH WITH TOP OF CURB OR TOP OF SIDEWALK. THE GROUND SURFACE SHALL BE GRADED TO WITHIN 4 INCHES BELOW THE TOP OF THE SIGNAL FOUNDATION TO A MINIMUM DISTANCE OF 1 FOOT BEYOND THE SIGNAL FOUNDATION.
- A FLASHING-LIGHT SIGNAL CONSISTS OF TWO LIGHTS HAVING 12-INCH LENS WITH RED LIGHT EMITTING DIODES (LED) MOUNTED IN A HORIZONTAL LINE THAT FLASH ALTERNATELY WHEN ACTIVATED. THE FLASHING RATE IS 35 TO 65 FLASHES PER MINUTE.
- NUMBER OF FLASHING-LIGHT SIGNALS SHALL BE AS SHOWN ON THE PLANS. FLASHING-LIGHT SIGNALS SHALL BE MOUNTED BACK TO BACK ON THE POST AND BACK TO BACK AT THE END OF THE CANTILEVER SPAN. FLASHING-LIGHT SIGNALS SHALL BE MOUNTED ABOVE THE CENTER OF EACH LANE ON THE CANTILEVER SPAN. OTHER FLASHING-LIGHT SIGNALS, IF NECESSARY, SHALL BE PLACED FOR THE BEST VISIBILITY TO OTHER APPROACHING ROADWAY OR PEDESTRIAN TRAFFIC.
- WHERE THERE IS SIDEWALK, THE FLASHING-LIGHT SIGNALS ON THE POST SHALL BE A MINIMUM OF 7 FEET ABOVE THE TOP OF SIDEWALK.
- WHEN GATES ARMS ARE USED, LENGTHS SHALL BE AS SHOWN ON THE PLANS. THE TIP OF A GATE ARM IN THE DOWN POSITION SHALL BE WITHIN 1 FOOT EITHER SIDE OF THE EDGE OF LANE AND A MINIMUM OF 8 FEET MEASURED PERPENDICULAR FROM THE NEAREST RAIL OF THE RAILROAD TRACK. GATE ARMS LONGER THAN 28 FEET REQUIRE APPROVAL FROM THE RAILROAD COMPANY. THE GATE ARM SHALL BE FULLY RETRO REFLECTORIZED ON BOTH SIDES WITH VERTICAL STRIPES ALTERNATELY COLORED RED AND WHITE AT 16-INCH INTERVALS MEASURED HORIZONTAL AND HAVE AT LEAST THREE RED LIGHT EMITTING DIODES (LED) ON TOP OF THE GATE ARM. THE GATE ARM LIGHTS, WHEN ACTIVATED, SHALL FLASH ALTERNATELY IN UNISON WITH THE FLASHING-LIGHT SIGNALS EXCEPT FOR THE LIGHT NEAREST THE TIP OF THE GATE ARM WHICH SHALL BE ILLUMINATED CONTINUOUSLY.
- AAR/DOT IDENTIFICATION TAG SHALL BE ATTACHED TO POST IMMEDIATELY BELOW THE FLASHING-LIGHT SIGNAL OR ON THE OUTSIDE OF THE SIGNAL HOUSE.
- CROSS BUCK (R15-1) SIGNS SHALL BE MOUNTED BACK TO BACK ON THE POST. A CROSS BUCK SIGN SHALL BE MOUNTED BETWEEN THE FLASHING-LIGHT SIGNALS ON THE CANTILEVER SPAN.
- SUPPLEMENTAL NUMBER OF TRACKS (R15-2) SIGNS SHALL BE MOUNTED BACK TO BACK ON THE OUTSIDE OF THE POST AT A POSITION BETWEEN THE CROSS BUCK SIGNS AND THE FLASHING-LIGHT SIGNAL WHEN THERE ARE TWO OR MORE RAILROAD TRACKS. THIS SIGN IS OPTIONAL WHEN GATE ARMS ARE USED.
- BELLS OR OTHER AUDIBLE WARNING DEVICES MAY BE INCLUDED WHICH WILL OPERATE IN CONJUNCTION WITH THE FLASHING-LIGHT SIGNALS.
- THE NEED FOR GUARDRAIL SHALL NOT BE BASED SOLELY UPON THE ROADSIDE OBSTACLE OF A RAILROAD CROSSING SIGNAL UNLESS REQUESTED BY THE RAILROAD COMPANY.
- NOT TO SCALE.

REVISIONS								
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	07-10	EBG						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

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DRAWING DATE: MARCH, 2004

**IDAHO TRANSPORTATION DEPARTMENT**



BOISE IDAHO

ORIGINAL SIGNED BY: LOREN THOMAS  
ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

ORIGINAL SIGNED BY: TOM COLE  
CHIEF ENGINEER

STANDARD DRAWING  
**HIGHWAY - RAILROAD GRADE CROSSING SIGNAL TYPE 2**

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

**English**

STANDARD DRAWING NO. **R-1-B**

SHEET 1 OF 1

ORIGINAL SIGNED BY: CARL D. MAIN  
DATE ORIGINAL SIGNED: JULY 12, 2010