

| FIHWA REGION NO. | STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
|------------------|--------|---------------------------------|------|-----------|--------------|
| | KANSAS | 87N-0288-01, FPA# CMQ-N028(801) | 2002 | 13 | 18 |

- MAINTENANCE:**
THE CONTRACTOR SHALL MAINTAIN ALL SIGNS AND DEVICES IN THEIR PROPER POSITION AND CLEAN OR REPLACE ANY DAMAGED OR ILLEGIBLE SIGN OR DEVICE AS DIRECTED BY THE ENGINEER.
- EXISTING SIGNS:**
IF EXISTING SIGNS THAT ARE TO REMAIN (WHETHER DENOTED ON THE PLANS OR NOT) INTERFERE WITH CONSTRUCTION WORK, THE CONTRACTOR SHALL REMOVE, STORE, AND RESET THE SIGNS. THIS SHALL BE SUBSIDIARY TO OTHER TRAFFIC CONTROL BID ITEMS. SIGNING DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONFLICTING SIGNS AND SIGNS NOT IN USE:**
SIGNS THAT ARE IN CONFLICT WITH THE TRAFFIC CONTROL PLAN OR DO NOT APPLY TO THE TRAFFIC OPERATIONS SHALL BE IMMEDIATELY REMOVED, TURNED SO NOT VISIBLE TO TRAFFIC FROM ANY DIRECTION, OR COMPLETELY COVERED WITH ADEQUATE OPAQUE WATERPROOF MATERIAL. TAPE SHALL NOT BE APPLIED TO THE FACE OF THE SIGN. SIGNS NOT IN USE FOR A PERIOD LONGER THAN TWO WEEKS SHALL BE REMOVED, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- TEMPORARY AND POST MOUNTED SIGNS:**
TRAFFIC CONTROL SIGNS THAT ARE ANTICIPATED TO REMAIN IN PLACE FOR 3 DAYS OR LESS ARE CONSIDERED "TEMPORARY". TEMPORARY SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 300 mm. TRAFFIC CONTROL SIGNS IN PLACE FOR OVER 3 DAYS ARE REQUIRED TO BE MOUNTED ON WOOD POSTS (100 mm X 100 mm MIN.), OR EQUIVALENT APPROVED BY KDOT BUREAU OF TRAFFIC ENGINEERING, AT A MINIMUM HEIGHT OF 2.1 m. A MINIMUM OF 1050 mm OF THE WOOD POST MUST BE BELOW THE GROUND SURFACE WITH ADEQUATE BACKFILL AND COMPACTION.
- SHEETING:**
ALL ORANGE SIGNS SHALL BE RETROREFLECTORIZED WITH FLUORESCENT ORANGE PRISMATIC GRADE SHEETING. ALL OTHER SIGNS SHALL BE RETROREFLECTORIZED WITH TYPE III HIGH PERFORMANCE SHEETING OF STANDARD COLORS.
- ROLL-UP SIGNS:**
ROLL-UP SIGNS MAY BE USED FOR TEMPORARY WARNING SIGNS. THEY MUST BE FLUORESCENT ORANGE PRISMATIC GRADE RETROREFLECTIVE SIGNS OF OPAQUE MATERIAL. MESH SIGNS ARE NOT ALLOWED.
- SIGNS INVOLVING SPEEDS:**
THE M4-20(WORK ZONE), R2-1(SPEED LIMIT), R2-5E(REduced SPEED AHEAD) SHOULD BE USED ONLY IF THE ENGINEER DETERMINES THAT A REDUCED SPEED IS REQUIRED THROUGHOUT THE PROJECT.

THE M4-20(WORK ZONE) AND R2-1(SPEED LIMIT) SHALL BE INSTALLED THROUGHOUT THE LENGTH OF THE PROJECT AS DIRECTED BY THE ENGINEER AND BE PAID FOR AT THE "EACH PER DAY" BID FOR THE SIZE OF SIGN USED.

FOR SPEEDS OF 30 MPH OR LESS ON TURNS OR REVERSE TURNS, USE THE W1-1 (TURN) OR W1-3(CURVE), RESPECTIVELY. FOR SPEEDS OF 35 MPH OR MORE ON CURVES OR REVERSE CURVES, USE THE W1-2(CURVE) OR W1-4(CURVE) RESPECTIVELY.

THE W13-1(MPH) IS TO BE ELIMINATED IF THE ADVISORY SPEED IS WITHIN 5 MPH
- OBJECT MARKING:**
OF THE SPEED LIMIT.
WHERE PERMANENT TYPE 3 OBJECT MARKERS ARE NOT ALREADY IN PLACE, ORANGE AND WHITE FIXED VERTICAL PANELS SHALL BE ERECTED TO DELINEATE EXPOSED BRIDGE ENDS.

- SIGNS CONTROLLING WORK AREA:**
THE G20-2A(ENd ROAD WORK) SHOULD BE PLACED 150 m FROM THE ENd OF THE ACTUAL WORK AREA, NOT NECESSARILY AT THE EXTREME LIMITS OF THE PROJECT. WHERE TWO WORK AREAS ARE LESS THAN 1.6 km APART IN RURAL AREAS OR 0.4 km APART IN URBAN AREAS, THE G20-2A(ENd ROAD WORK) FOR THE FIRST WORK AREA AND THE W20-1(ROAD WORK) FOR THE SECOND WORK AREA SHOULD BE ELIMINATED. THE G20-1(ROADWORK NEXT X MILES) IS TO BE USED IF THE PROJECT EXCEEDS 3.2 km. THE LENGTH SHOWN AS "X" SHALL BE TO THE NEAREST WHOLE MILE. WHERE THE ROAD IS OPEN BEYOND THE POINT OF CLOSURE, EITHER THE R11-3 (ROAD CLOSED ___ MILES AHEAD LOCAL TRAFFIC ONLY) OR THE R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHOULD BE SUBSTITUTED FOR THE R11-2(ROAD CLOSED).

- WARNING LIGHTS ON SIGNS:**
WARNING LIGHTS SHALL COMPLY WITH THE CURRENT ITE PURCHASE SPECIFICATIONS FOR FLASHING AND STEADY BURN WARNING LIGHTS. TYPE B HIGH INTENSITY LIGHTS ARE TO BE USED ON CONSTRUCTION WARNING SIGNS AS DIRECTED BY THE ENGINEER.

THEY SHALL NOT BE INSTALLED ON SIGNS MOUNTED LESS THAN 2.1 m HIGH HIGH ON TEMPORARY SUPPORTS. THEY SHALL BE MAINTAINED SO THAT THEY ARE CAPABLE OF BEING VISIBLE ON A SUNNY DAY FROM A DISTANCE OF 300 m WHEN VIEWED WITHOUT THE SUN DIRECTLY ON OR BEHIND THE DEVICE.

SIGN LAYOUT INFORMATION

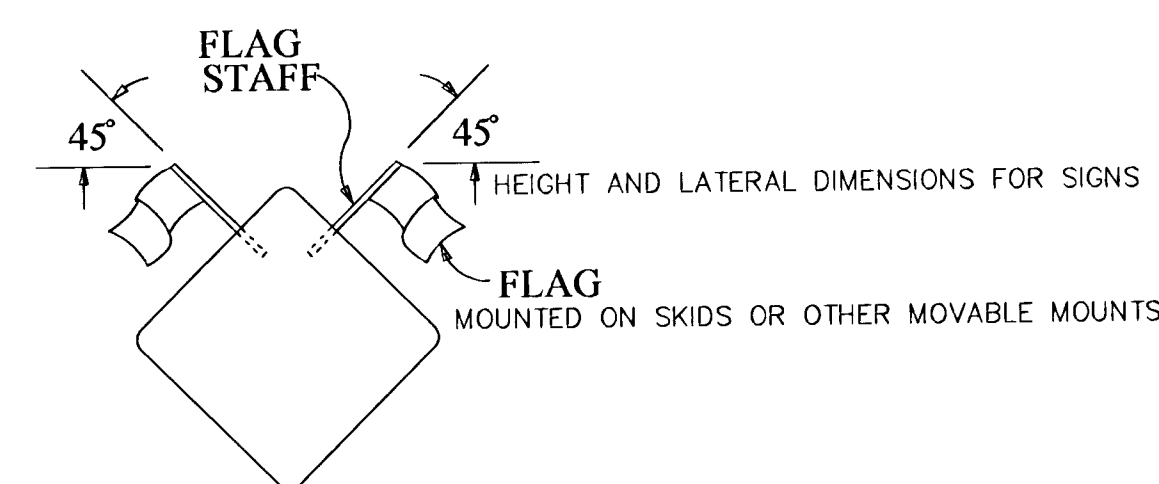
| | | | | |
|--|-----------|--------------------------------|-----------|-------------|
| <p>W20-7b 1200 mm x 1200 mm (BLACK/ORANGE)</p> | 175 C | <p>R2-5e (BLACK/WHITE)</p> | 100 C | 200 C |
| | 175 C | | 100 C | 200 C |
| | 175 C | | 250 E | 400 E |
| <p>M4-20 (BLACK/ORANGE)</p> | 75 C | <p>R2-5e (BLACK/WHITE)</p> | 600 X 900 | 1200 X 1800 |
| | 600 X 150 | | 150 C | 1200 X 300 |

TEXT DIMENSIONS ARE IN mm- SERIES "C" FONT

ADVANCE WARNING SIGN SPACING (IN METERS):

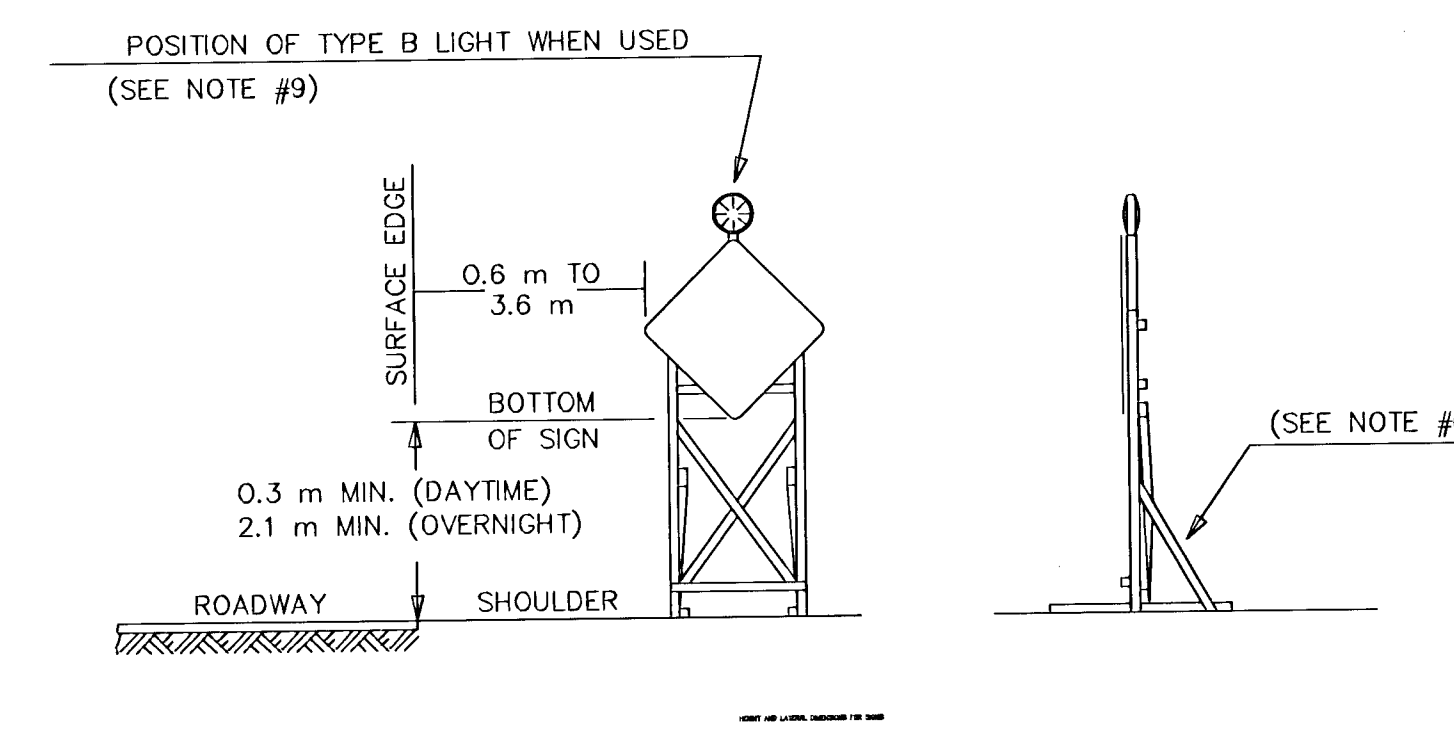
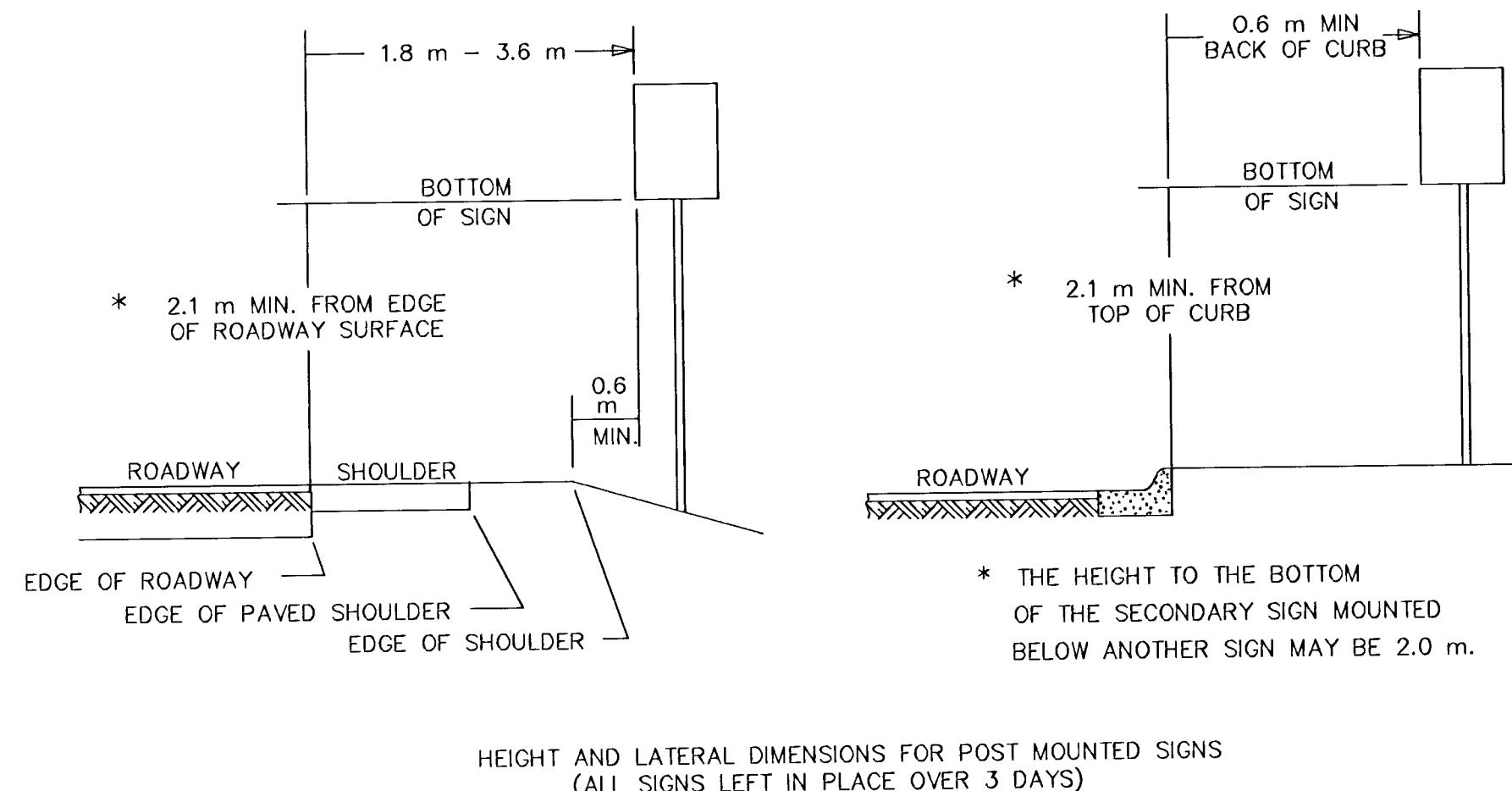
| | A | B | C |
|--------------------------|-----|-----|-----|
| URBAN (40 MPH OR LOWER) | 60 | 60 | 60 |
| URBAN (45 MPH OR HIGHER) | 115 | 115 | 115 |
| RURAL | 150 | 150 | 150 |
| EXPRESSWAY/FREEWAY | 300 | 525 | 800 |

THE SPACING BETWEEN ANY SIGNS MAY BE ADJUSTED AS APPROVED BY THE ENGINEER IN ORDER TO MAXIMIZE VISIBILITY.
IN NO CASE SHALL THE SPACING BETWEEN ANY SIGNS BE LESS THAN 30 m.



TWO (2) 450 mm x 450 mm FLUORESCENT RED-ORANGE FLAGS ARE TO BE ATTACHED IN THE POSITION SHOWN ON THE W1-1(TURN), W1-2(CURVE), W1-3(REVERSE TURN), W1-4(REVERSE CURVE), W3-3(SIGNAL AHEAD), W4-2(LANE REDUCTION), W20-4(ONE LANE ROAD), W20-5(LANE CLOSED),

W20-7A(FLAGGER), AND W20-7B(BE PREPARED TO STOP) SIGNS AND ANY OTHER ACTION SIGNS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE FLAGS AND STAFFS ARE TO BE ATTACHED IN SUCH A MANNER THAT THE SIGN WILL NOT BE OBSCURED. THE FLAGS MAY BE EITHER A CLOTH OR VINYL MATERIAL. THE FLAGS SHALL BE SUBSIDIARY TO THE CONSTRUCTION SIGN BID ITEMS.



KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SIGNS

TE710SI 9/1/00

| | | | | | |
|-----------|--------|-----------|-----|------------|--------------------|
| DESIGNED | L.E.R. | DETAILED | KDS | APPD | Michael F. McKenna |
| DESIGN CK | | DETAIL CK | | QUANTITIES | TRACED |
| | | | | QUANT CK | TRACED |