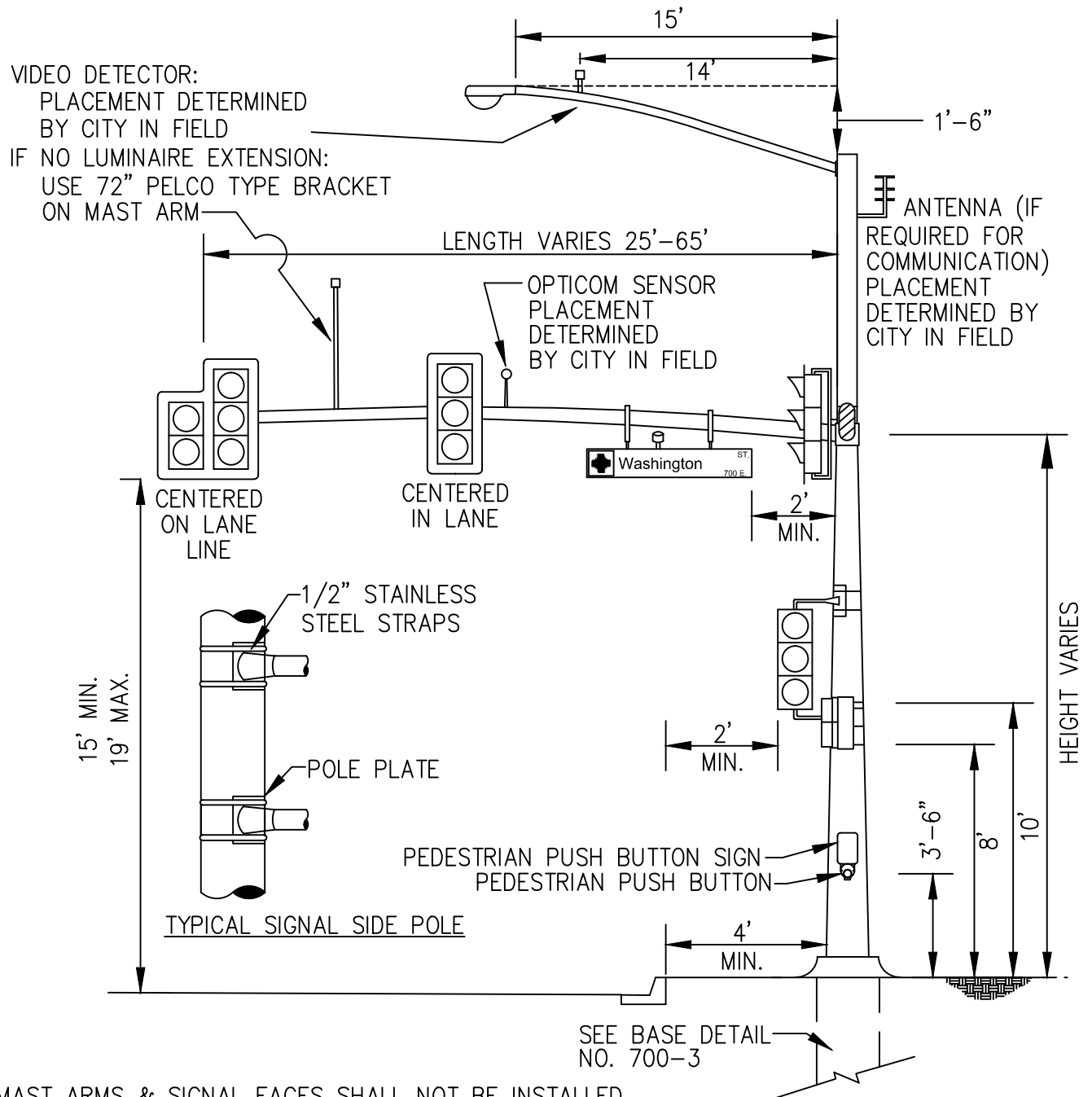


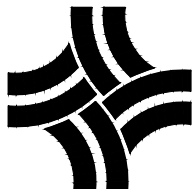
LUMINAIRE EXTENSION, ARM & WIRING TO BE INSTALLED BY CONTRACTOR

LUMINAIRE LIGHT, HOUSING, BULB, ETC., TO BE INSTALLED BY XCEL OR UNITED POWER



MAST ARMS & SIGNAL FACES SHALL NOT BE INSTALLED
UNTIL FIVE (5) DAYS OR LESS PRIOR TO ACTIVATION
UNLESS APPROVED BY THE TRAFFIC ENGINEER.

N.T.S.



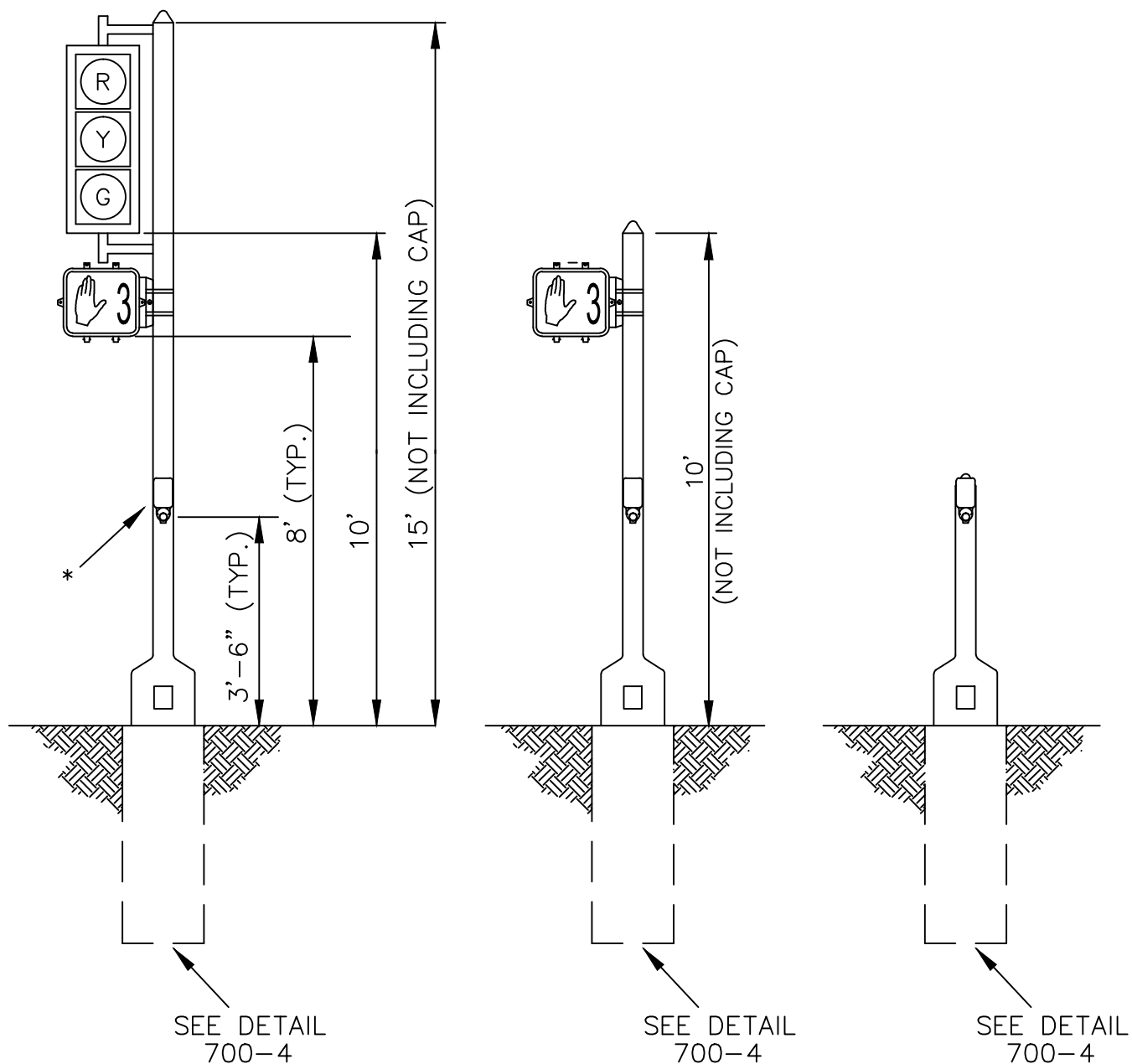
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL SIGNAL INSTALLATION

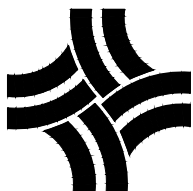
ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010

DRAWING NO.
700-1

* PEDESTRIAN PUSH BUTTON (TYPICAL)
 (PUSH BUTTON AND SIGN TO
 BE ORIENTED AS DIRECTED
 BY THE TRAFFIC ENGINEER)

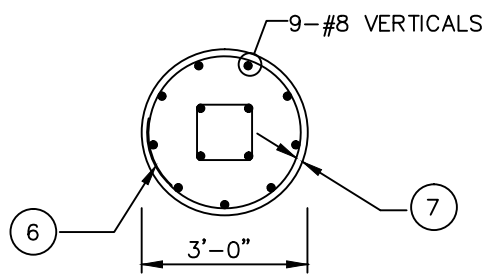


N.T.S.

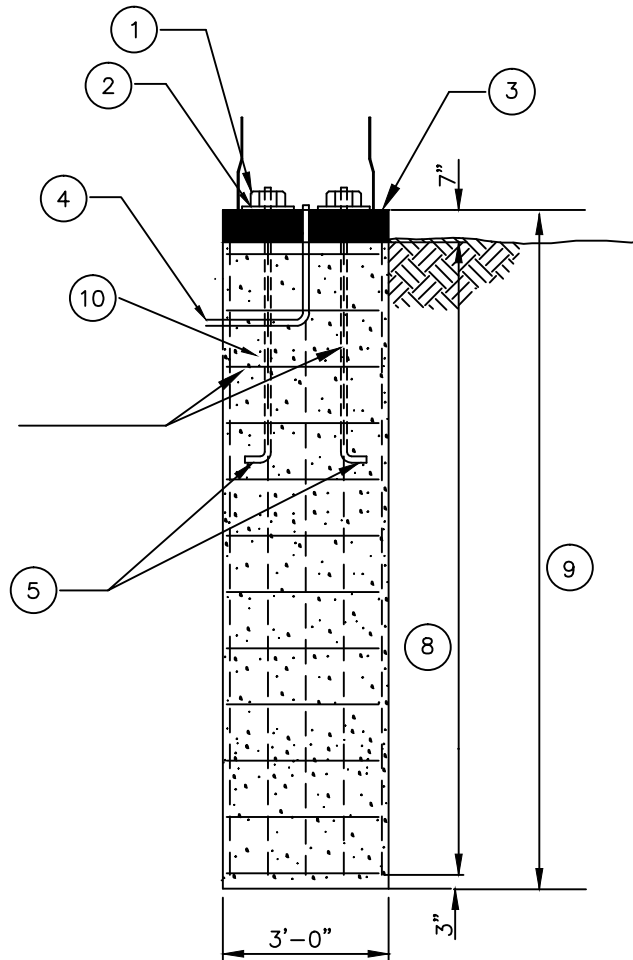


CITY OF THORNTON, COLORADO
 STANDARDS & SPECIFICATIONS
 TYPICAL PEDESTRIAN POLE
 INSTALLATION

ISSUED:
 FEBRUARY 2003
 REVISED:
 APRIL 2010
 DRAWING NO.
 700-2



2-#4 STIRRUPS
AT 6"± AROUND
ANCHOR BOLTS

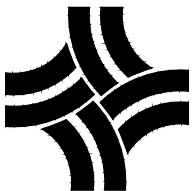


FOOTING NOTES

- | | |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| (1) HEX NUTS | (5) INSTALL ANCHOR BOLTS (FURNISHED WITH POLE) PER MANUFACTURER'S TEMPLATE PRINT (FURNISHED WITH ORDER) |
| (2) SQUARE NUTS | (6) MINIMUM OVERLAP 12" |
| (3) 4"-7" MIN. NON-SHRINKABLE GROUT OVER ROUGH FOUNDATION | (7) 1-1/2" CLEARANCE FOR HOOPS |
| (4) RIGID CONDUIT (24" MIN. DEPTH, 30" MIN. DEPTH UNDER ROADWAY) CONDUIT STUB FROM PULL BOX TO POLE SHALL BE 3" DIA. | (8) 15 - #4 HOOPS AT +/- 12" FOR 15' FTG.
12 - #4 HOOPS AT +/- 12" FOR 12' FTG. |
| | (9) USE 15' FOOTING FOR POLES WITH MAST ARMS 45' IN LENGTH OR LONGER.
USE 12' FOOTING FOR POLES WITH MAST ARMS LESS THAN 45' IN LENGTH. |
| | (10) ALL INSTALLATIONS TO BE PROPERLY GROUNDED. |

CAISSON DESIGNS REQUIRE THAT THE CAISSON BE FOUNDED IN COMPACT SAND, CLAY, OR SANDY CLAY. IF BY VISUAL INSPECTION OF THE HOLE OTHER MATERIAL IS PRESENT, THE CAISSON DESIGN SHALL BE MODIFIED AS DETERMINED BY THE RESPONSIBLE PARTY'S ENGINEER.

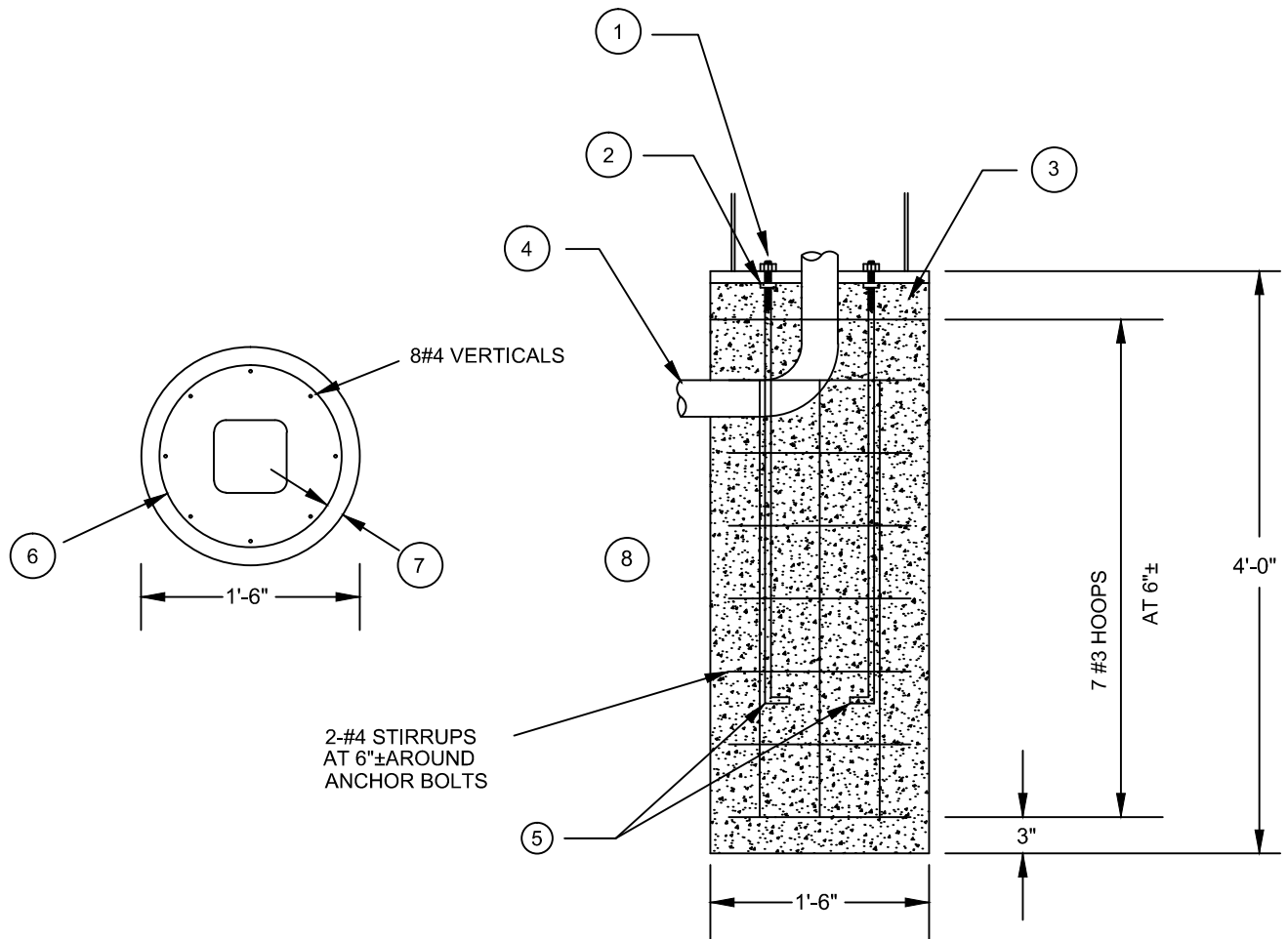
N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL TRAFFIC SIGNAL POLE FOOTING INSTALLATION

ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010
DRAWING NO.
700-3

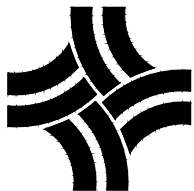


FOOTING NOTES

- | | |
|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| ① HEX NUTS | ⑤ INSTALL ANCHOR BOLTS (FURNISHED WITH POLE) PER MANUFACTURER'S TEMPLATE PRINT (FURNISHED WITH ORDER) |
| ② SQUARE NUTS | ⑥ MINIMUM OVERLAP 12" |
| ③ 4" - 7" MIN. NON-SHRINKABLE GROUT OVER ROUGH FOUNDATION | ⑦ 1-1/2" CLEARANCE FOR HOOPS |
| ④ RIGID CONDUIT (24" MIN. DEPTH, 30" MIN. DEPTH UNDER ROADWAY) CONDUIT STUB FROM PULL BOX TO POLE SHALL BE 3" DIA. | ⑧ ALL INSTALLATIONS TO BE PROPERLY GROUNDED. |

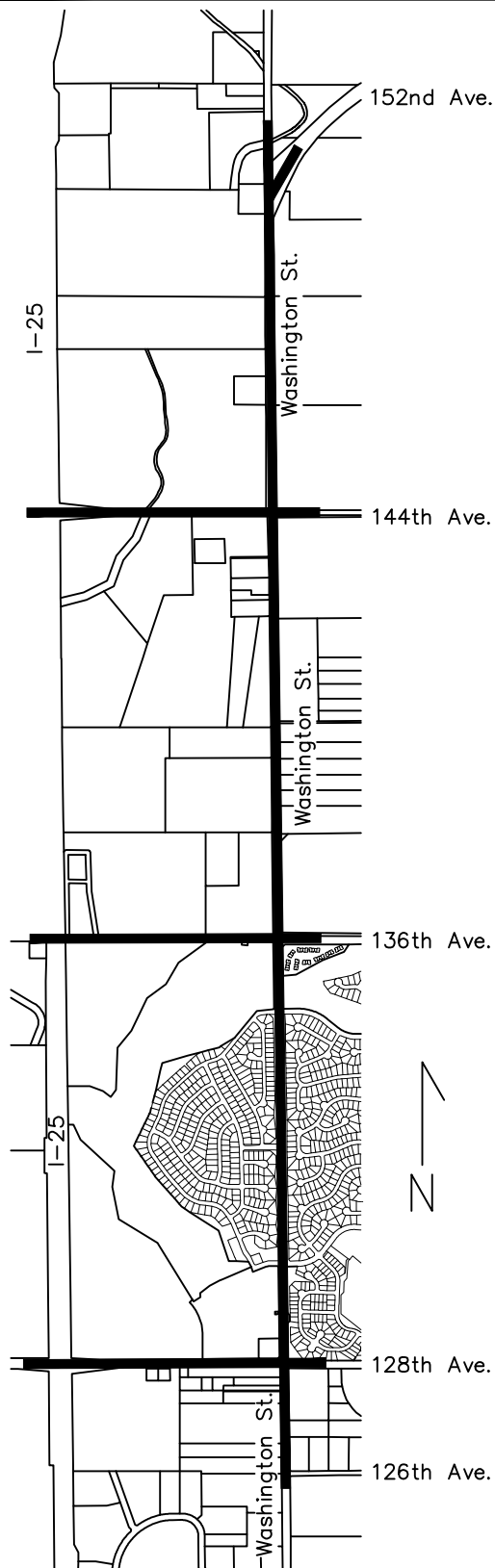
CAISSON DESIGNS REQUIRE THAT THE CAISSON BE FOUNDED IN COMPACT SAND, CLAY, OR SANDY CLAY. IF BY VISUAL INSPECTION OF THE HOLE OTHER MATERIAL IS PRESENT, THE CAISSON DESIGN SHALL BE MODIFIED AS DETERMINED BY THE RESPONSIBLE PARTY'S ENGINEER.

N.T.S.



CITY OF THORNTON, COLORADO STANDARDS & SPECIFICATIONS TYPICAL PEDESTRIAN POLE FOOTING INSTALLATION

ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010
DRAWING NO.
700-4



STREET LIGHTS AND TRAFFIC SIGNAL POLES
AND MAST ARMS

TOP COAT BEIGE FEDERAL COLOR #20227
(SEMI-GLOSS), AMERCOAT #450GL
ALIPHATIC POLYURETHANE IN CONJUNCTION
WITH AMERCOAT #71 POLYAMIDE CURED
EPOXY PRIMER

TRAFFIC SIGN POLES

POWDER COATED MOCHA BROWN FEDERAL
COLOR #10075, POWDER RESIN #10075

STRUCTURAL CONCRETE

BEIGE FEDERAL COLOR #30450

I-25 AND BIG DRY CREEK BRIDGE GIRDERS

DARK BROWN FEDERAL COLOR #30117

LETTERING ON I-25 BRIDGE, LIGHT
SCULPTURE CRADLES AT I-25, BIG DRY
CREEK BRIDGE, CORNER MONUMENTS, AND
LETTERS ON THE THORNTON ENTRY SIGN

TIGER DRYLAC METALLIC, POWDER COAT,
#49/90620, ANTIQUE/VEIN COPPER
(SEMI-GLOSS)

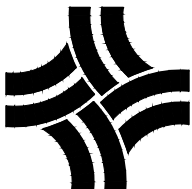
THORNTON ENTRY SIGN BACKGROUND COLOR

DAVIS COLOR MESA BUFF

WHITE SPHERE BRIDGE MONUMENTS

PPG GLACIER WHITE PEARL METALLIC,
CLEAR COAT: DELTA, #DCU 2070

N.T.S.



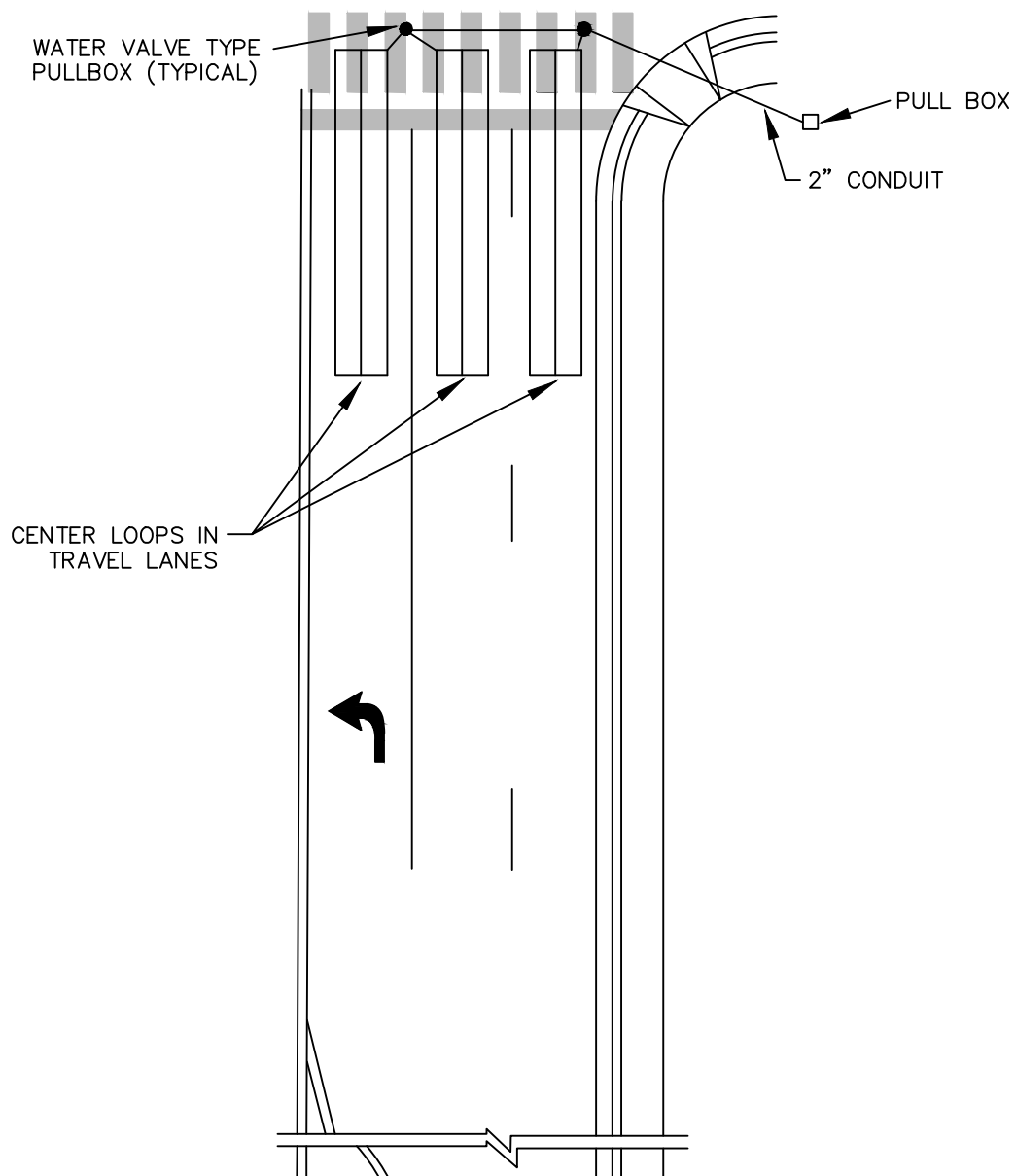
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

EXTERIOR COLORS
WASHINGTON ST CORRIDOR

ISSUED:
JANUARY 2005

REVISED:
APRIL 2010

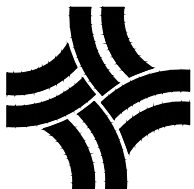
DRAWING NO.
700-5



NOTES:

1. THIS MAY ONLY BE USED WITH WRITTEN AUTHORIZATION OF THE TRAFFIC ENGINEER.
2. ALL LOOPS SHALL BE WIRED FOR SINGLE CHANNEL.
3. SEE PLANS FOR LOCATION AND LENGTH OF EACH DETECTOR.
4. CIRCULAR LOOPS MAY BE USED AS AN ALTERNATIVE.

N.T.S.

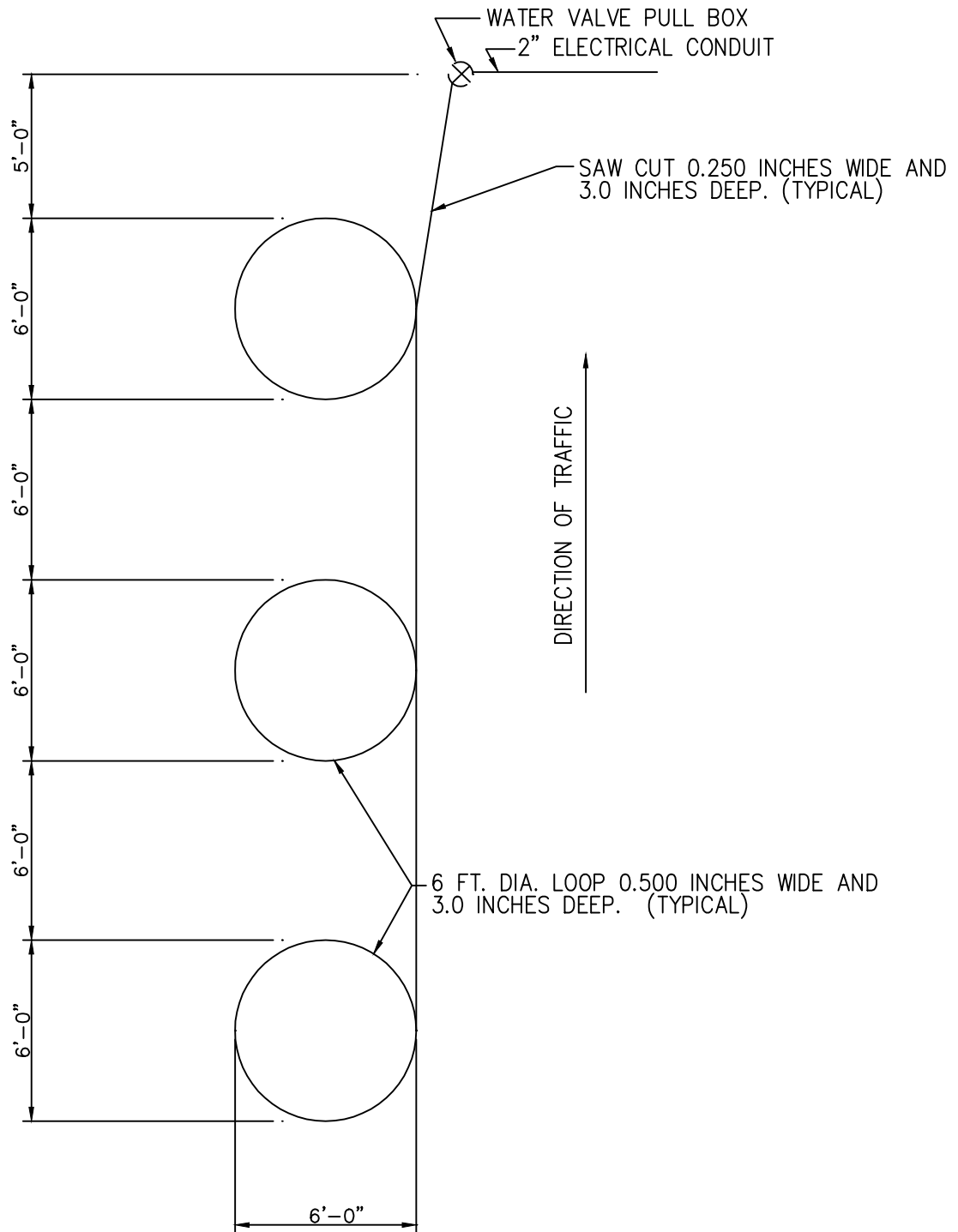


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL LOOP PLACEMENT DETAIL

ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010

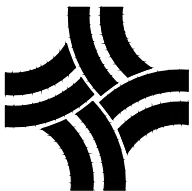
DRAWING NO.
700-6



NOTE:

THIS LOOP DETECTOR MAY ONLY BE USED WITH THE WRITTEN AUTHORIZATION OF THE TRAFFIC ENGINEER.
THIS LOOP DETECTOR CAN BE USED INSTEAD OF 6' x 40' QUADROPOLE LOOP SHOWN ON PLAN.

N.T.S.



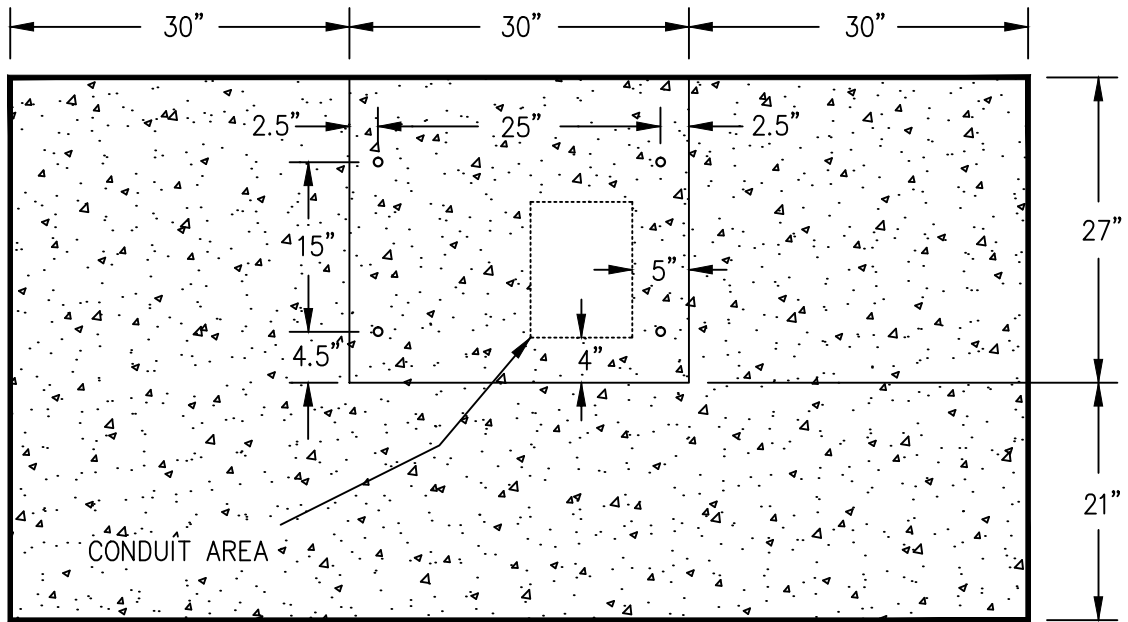
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL ALTERNATIVE ROUND
LOOP LAYOUT

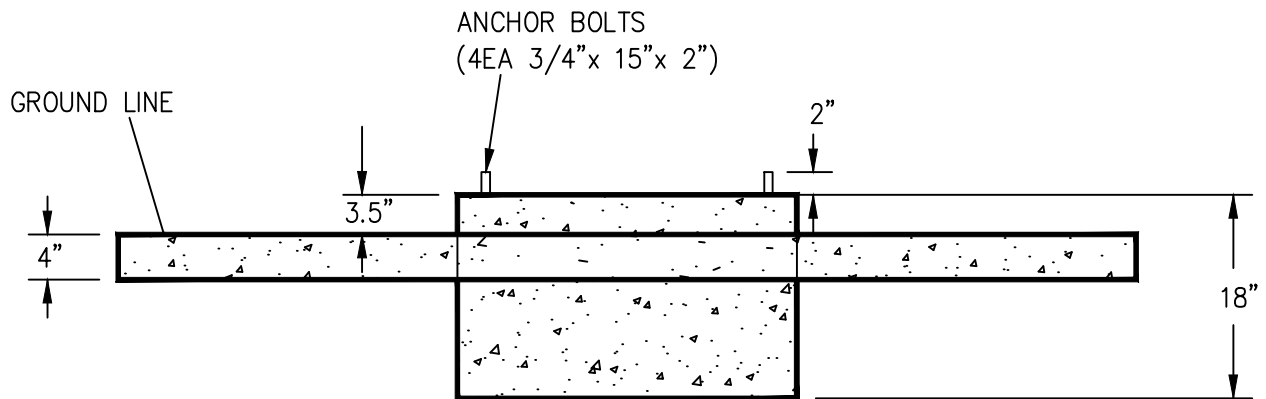
ISSUED:
FEBRUARY 2003

REVISED:
APRIL 2010

DRAWING NO.
700-7



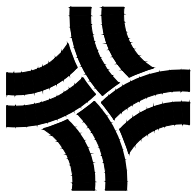
TOP VIEW



FRONT VIEW

NOTE: ALL CONCRETE TO BE CLASS D

N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS
336 CONTROLLER CABINET
FOUNDATION DETAILS

ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010
DRAWING NO.
700-9

TYPICAL LAYOUT

COLORS:

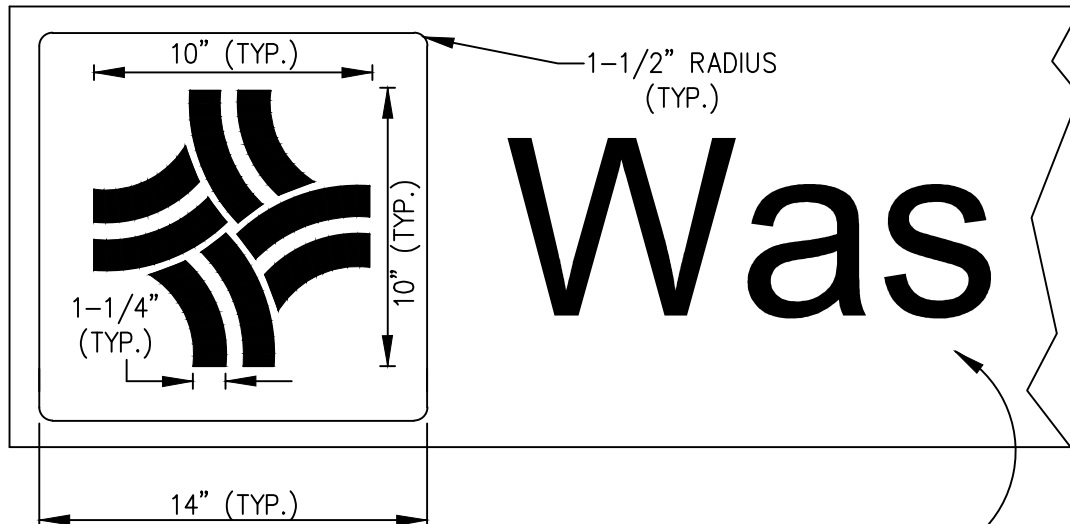
LOGO = PANTONE 300 INTENSE BLUE

LOGO BACKGROUND = WHITE

SIGN FIELD = PANTONE 3435c EMERALD GREEN

STREET NAME LETTERING = WHITE

HOUSING COLOR = PER DRAWING NO. 700-5



TEXT SIZE FOR STREET NAME TO AS LARGE AS POSSIBLE AND
AND STILL MAINTAIN A +/- 1" BORDER AROUND SIGN.

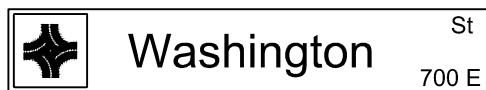
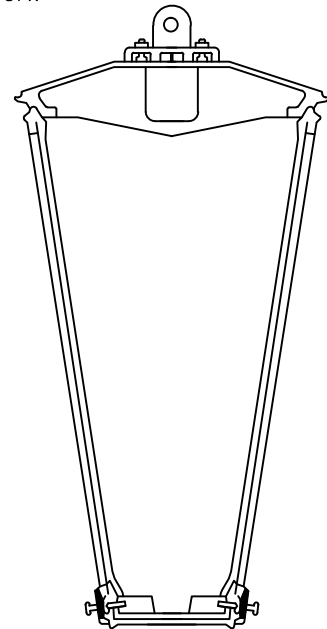
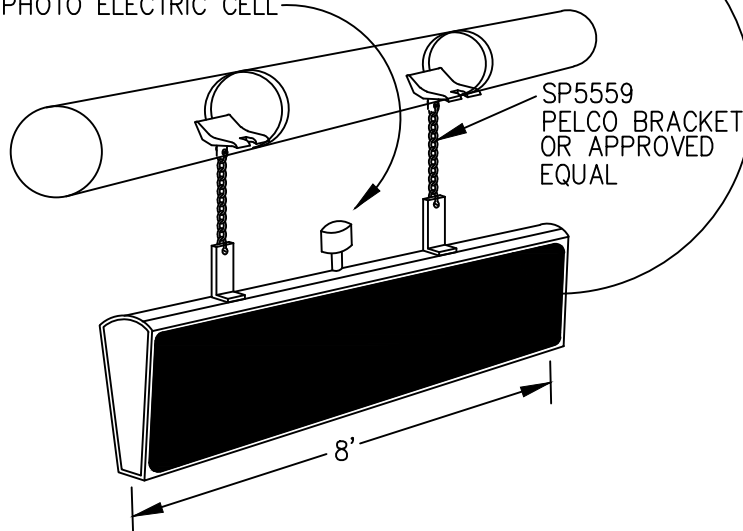
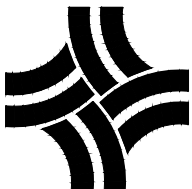


PHOTO ELECTRIC CELL



N.T.S.



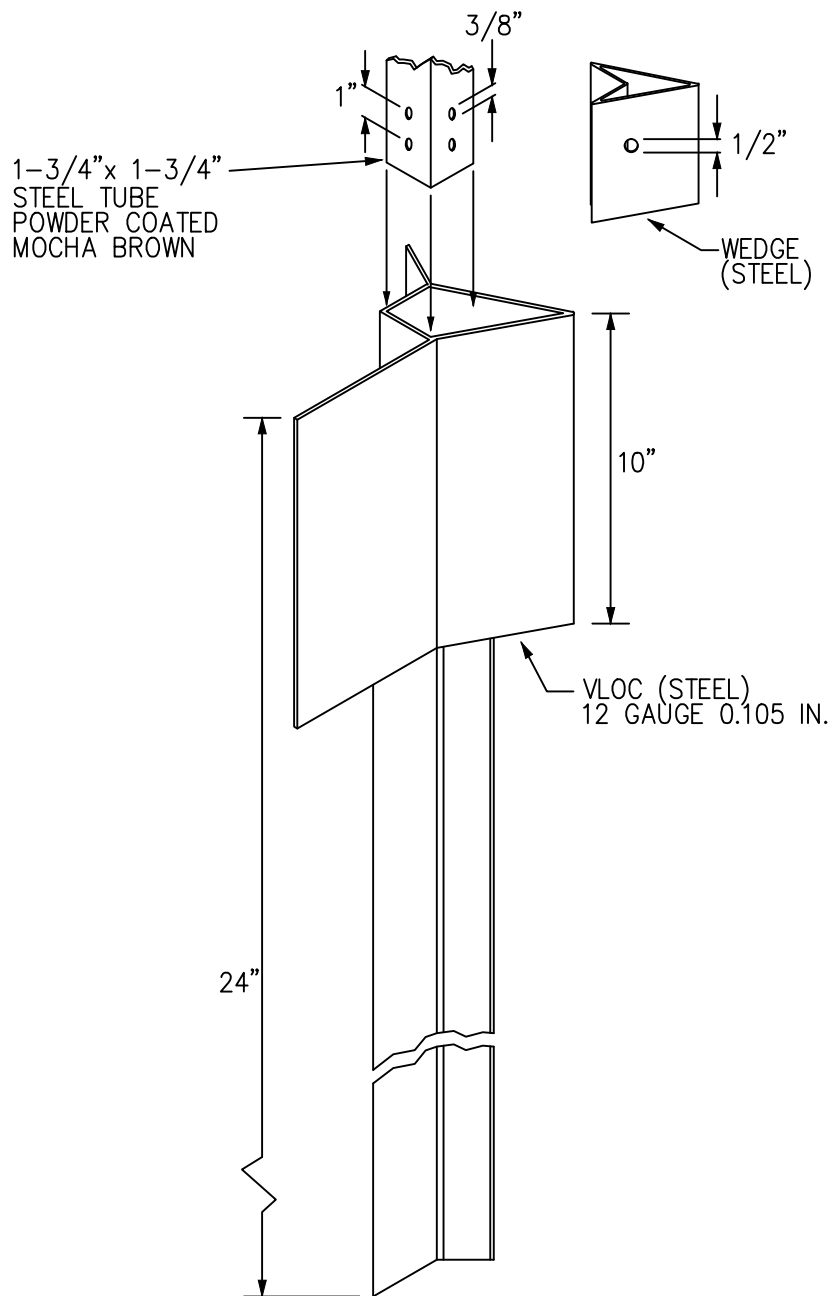
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL ILLUMINATED STREET
SIGN INSTALLATION

ISSUED:
FEBRUARY 2003

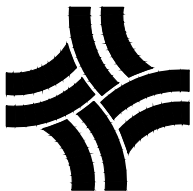
REVISED:
APRIL 2010

DRAWING NO.
700-10



- NOTE: ALL TUBINGS ARE #12 U.S. STD. GAUGE WALL THICKNESS.
SIGN POST INSTALLATION SHALL FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND THESE SPECIFICATIONS:
1. THE SIGN POST ANCHOR SHALL BE DRIVEN INTO THE GROUND TO 1" ABOVE THE GROUND. SIDEWALK SHALL BE POURED AROUND SIGN POST ANCHOR OR EXISTING SIDEWALK SHALL BE CORE DRILLED AND SEALED AROUND THE POST ANCHOR.
 2. INSERT SIGN POST INTO ANCHOR ASSEMBLY 6 INCHES AND INSTALL WEDGE.
 3. INSTALLED SIGN AND POST SHALL BE PLUMB AND FREE OF VERTICAL AND LATERAL MOVEMENT.

N.T.S.

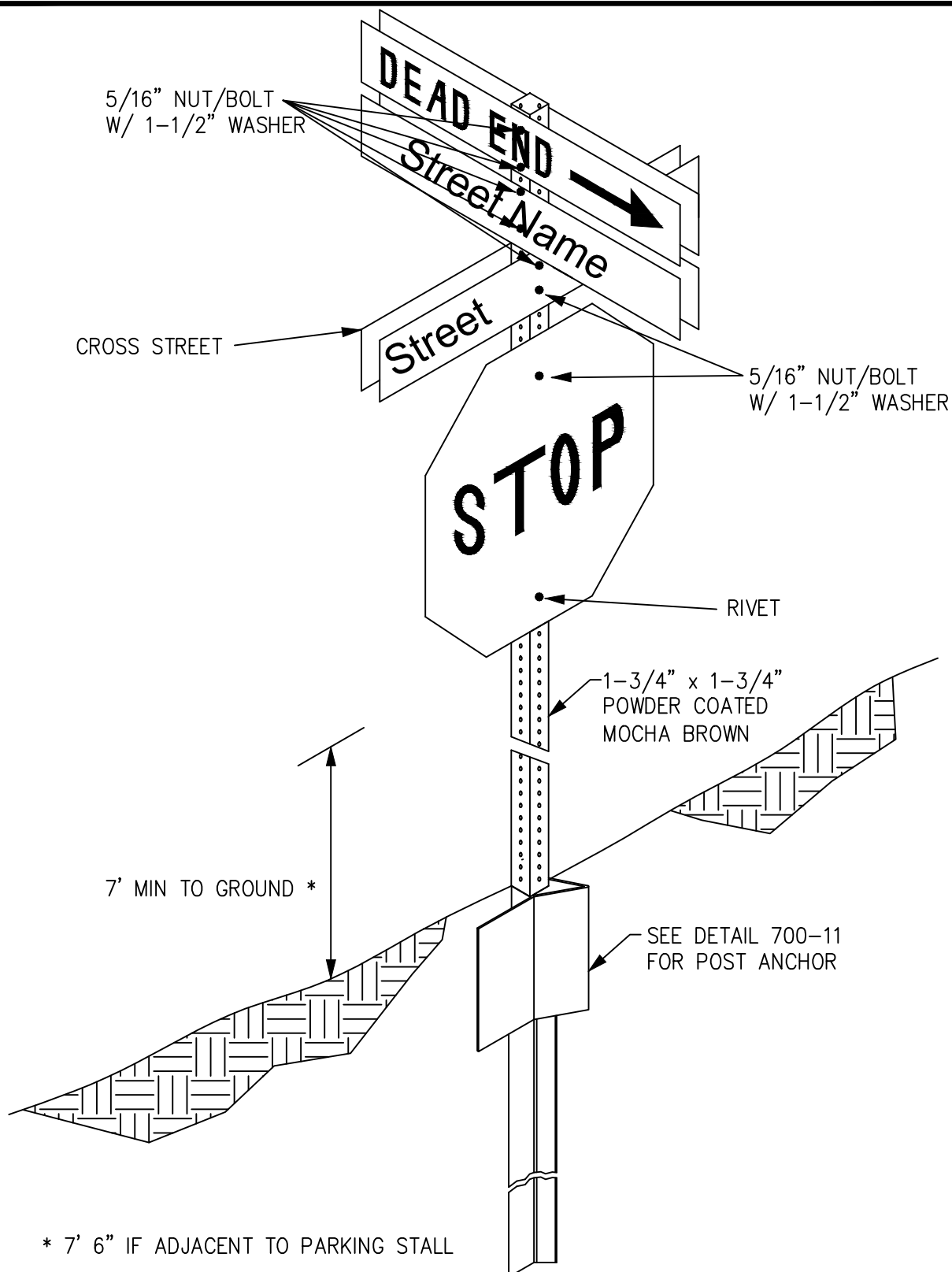


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

SIGN POST ANCHOR DETAIL

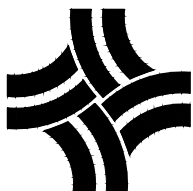
ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010

DRAWING NO.
700-11



NOTE: IF MOUNTED ON STREET LIGHT POLE, USE TWO (2) 1/2" BAND-IT STRAPS

N.T.S.

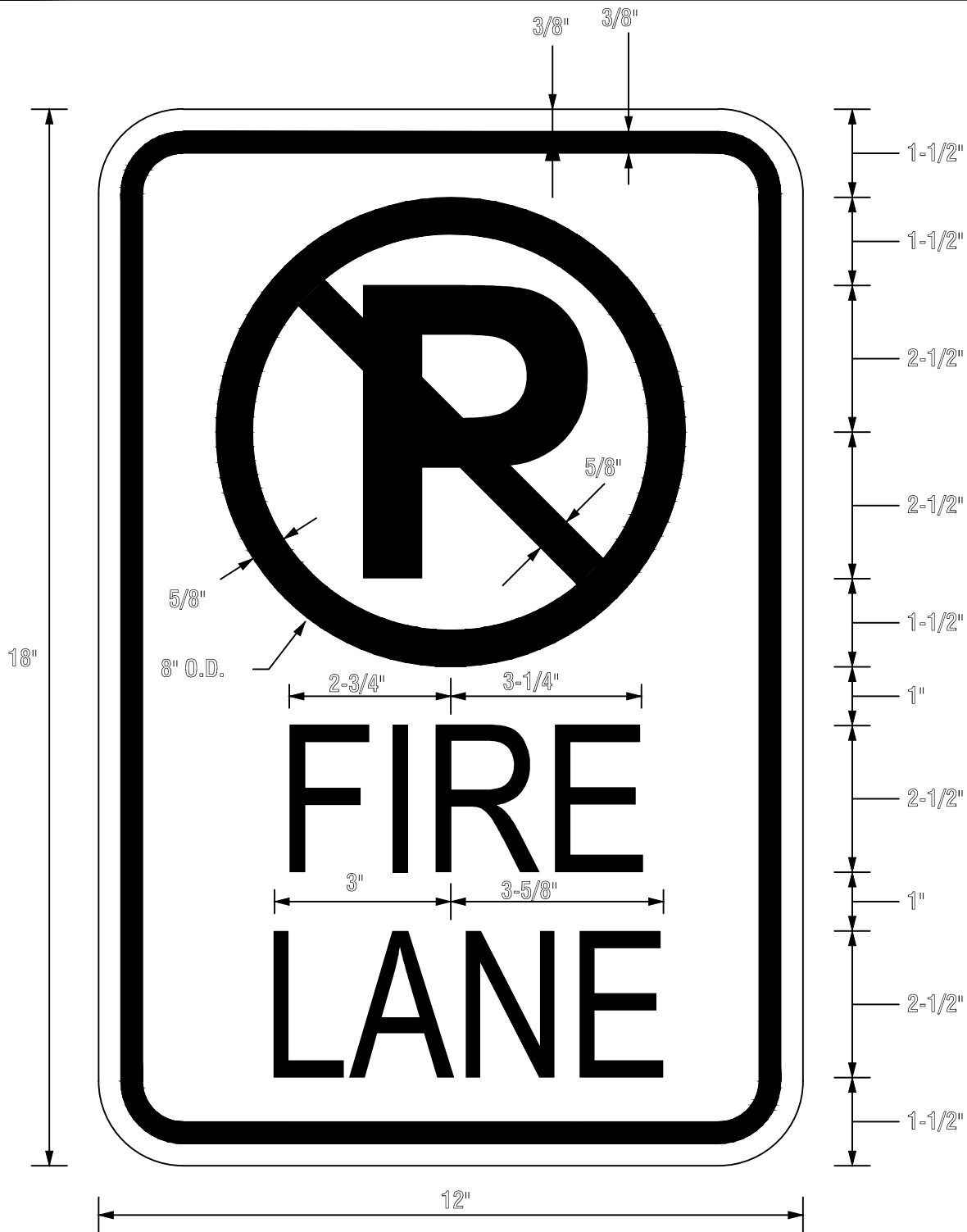


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

SIGN ASSEMBLY DETAIL

ISSUED:
FEBRUARY 2003
REVISED:
AUG 2012

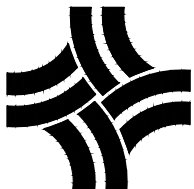
DRAWING NO.
700-12



COLORS:

FIRE LANE, CIRCLE, DIAGONAL - RED
 BACKGROUND - WHITE
 LETTER 'P', BORDER - BLACK

N.T.S.



CITY OF THORNTON, COLORADO
 STANDARDS & SPECIFICATIONS

FIRE LANE – NO PARKING
 REGULATORY SIGN

ISSUED:
 FEBRUARY 2005
 REVISED:
 APRIL 2010

DRAWING NO.
 700-13



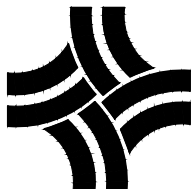
COLORS:

(TOP) RED BACKGROUND, WHITE LETTERING AND SNOWFLAKE

(MIDDLE) WHITE BACKGROUND, BLACK "P", RED CIRCLE & DIAGONAL

(BOTTOM) BLUE BACKGROUND, WHITE LETTERING

N.T.S.



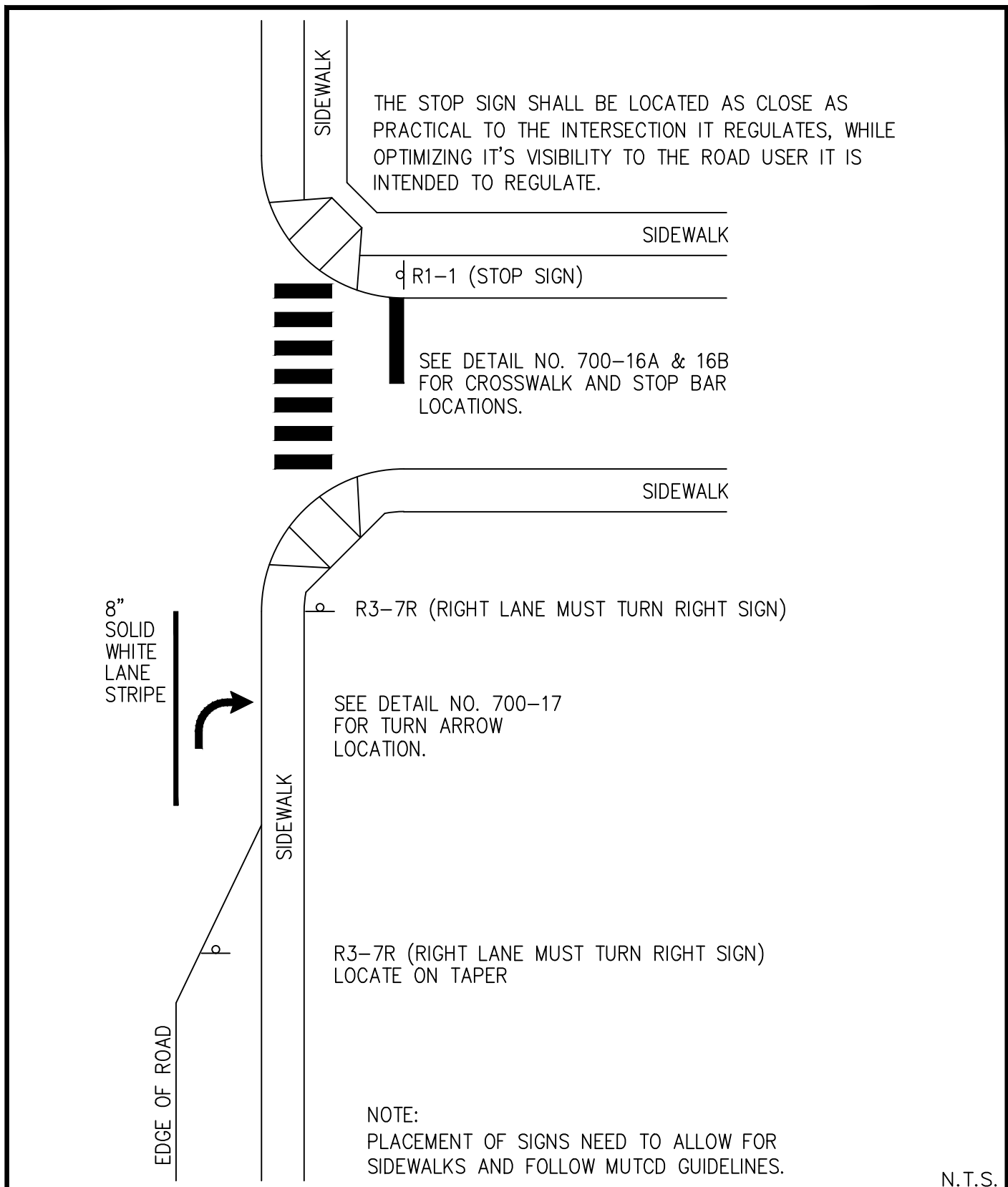
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

SNOW ROUTE – NO PARKING
REGULATORY SIGN

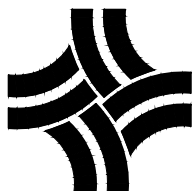
ISSUED:
FEBRUARY 2005

REVISED:
APRIL 2010

DRAWING NO.
700-13A



N.T.S.

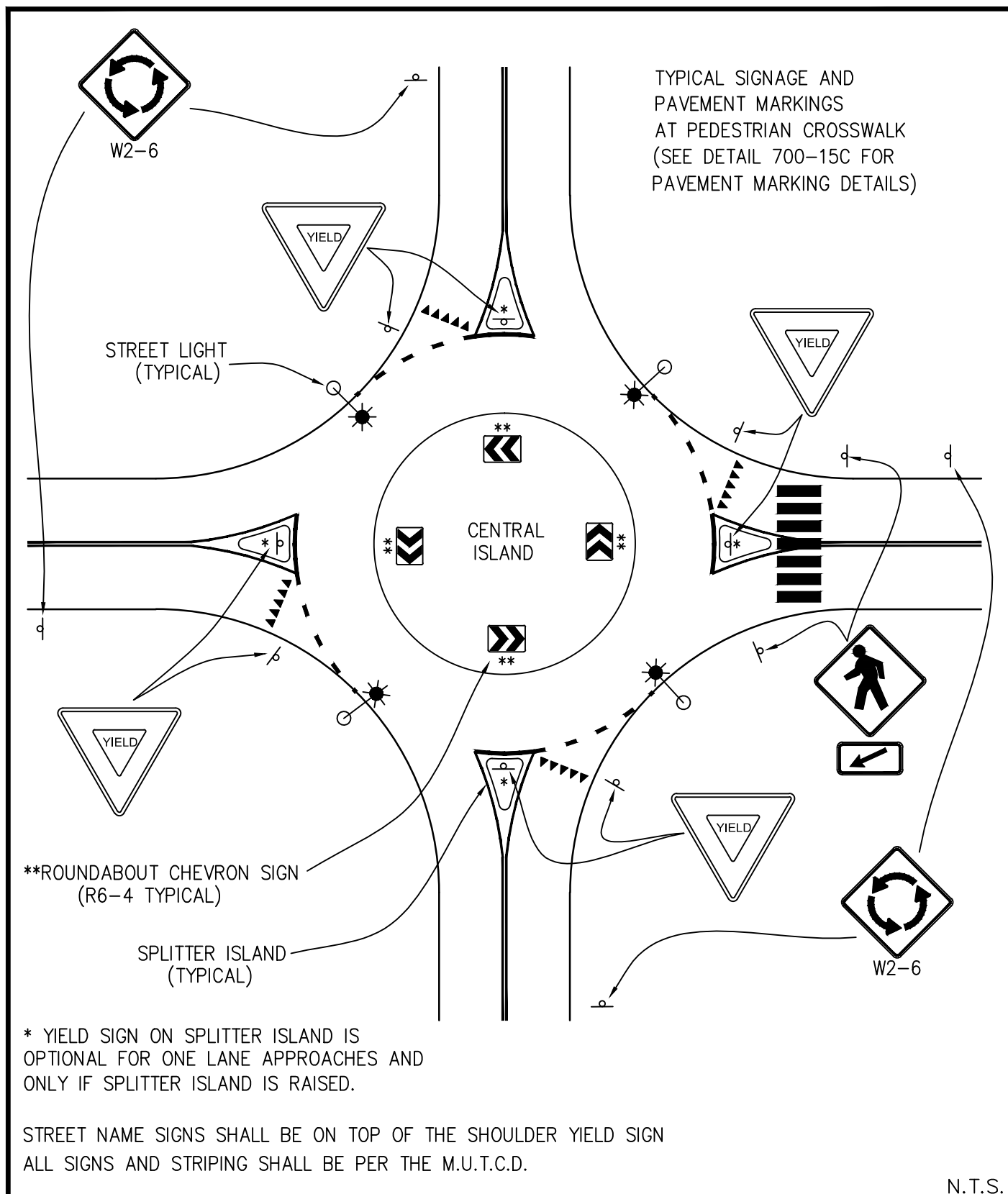


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

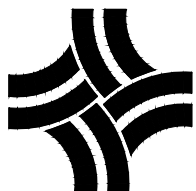
PAVEMENT MARKINGS AND SIGN
LOCATIONS DETAIL

ISSUED:
FEBRUARY 2005
REVISED:
APRIL 2010

DRAWING NO.
700-14



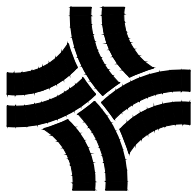
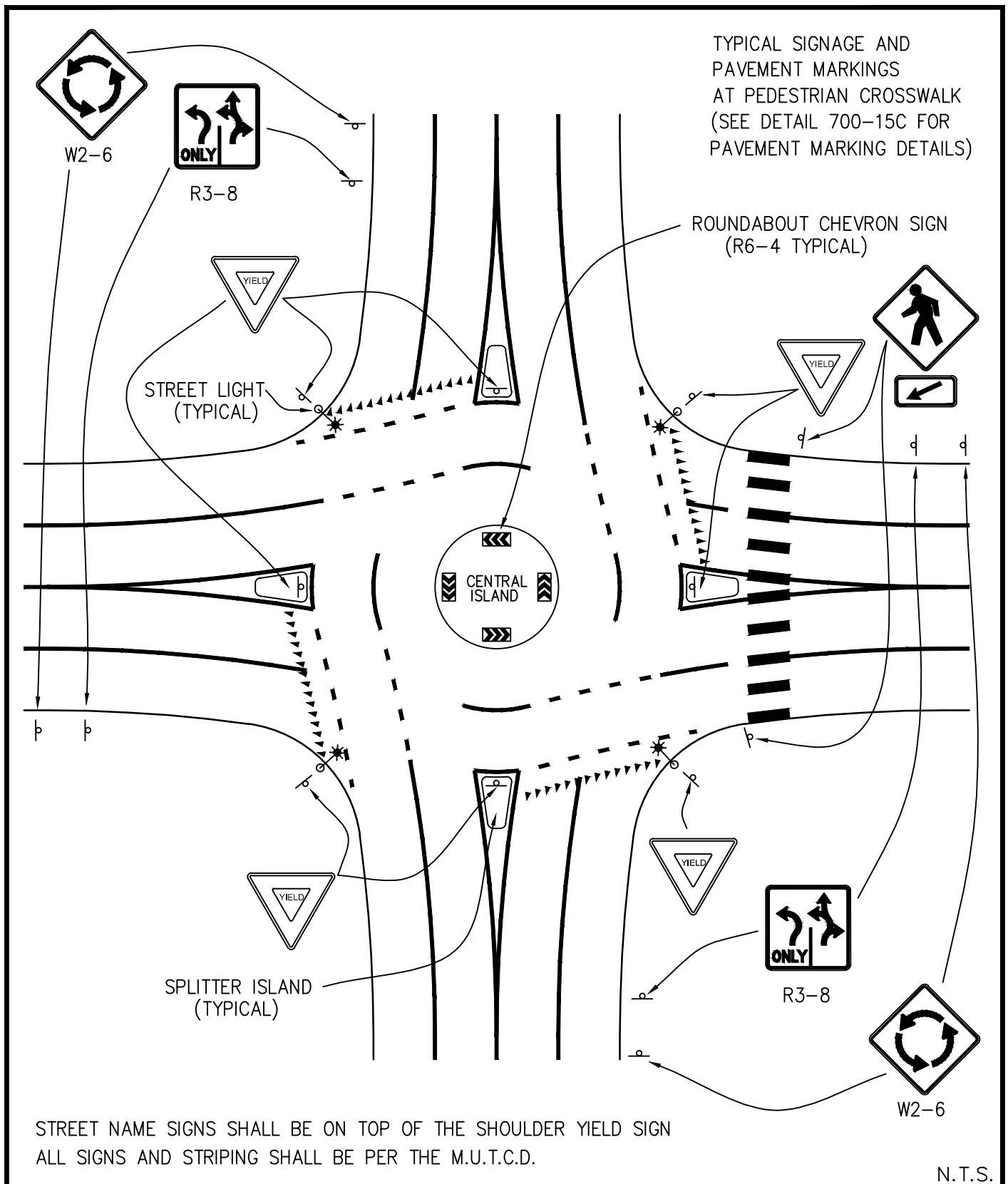
N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS
TRAFFIC CIRCLE SIGN AND
PAVEMENT MARKING STANDARDS
WITH STREET LIGHT PLACEMENT

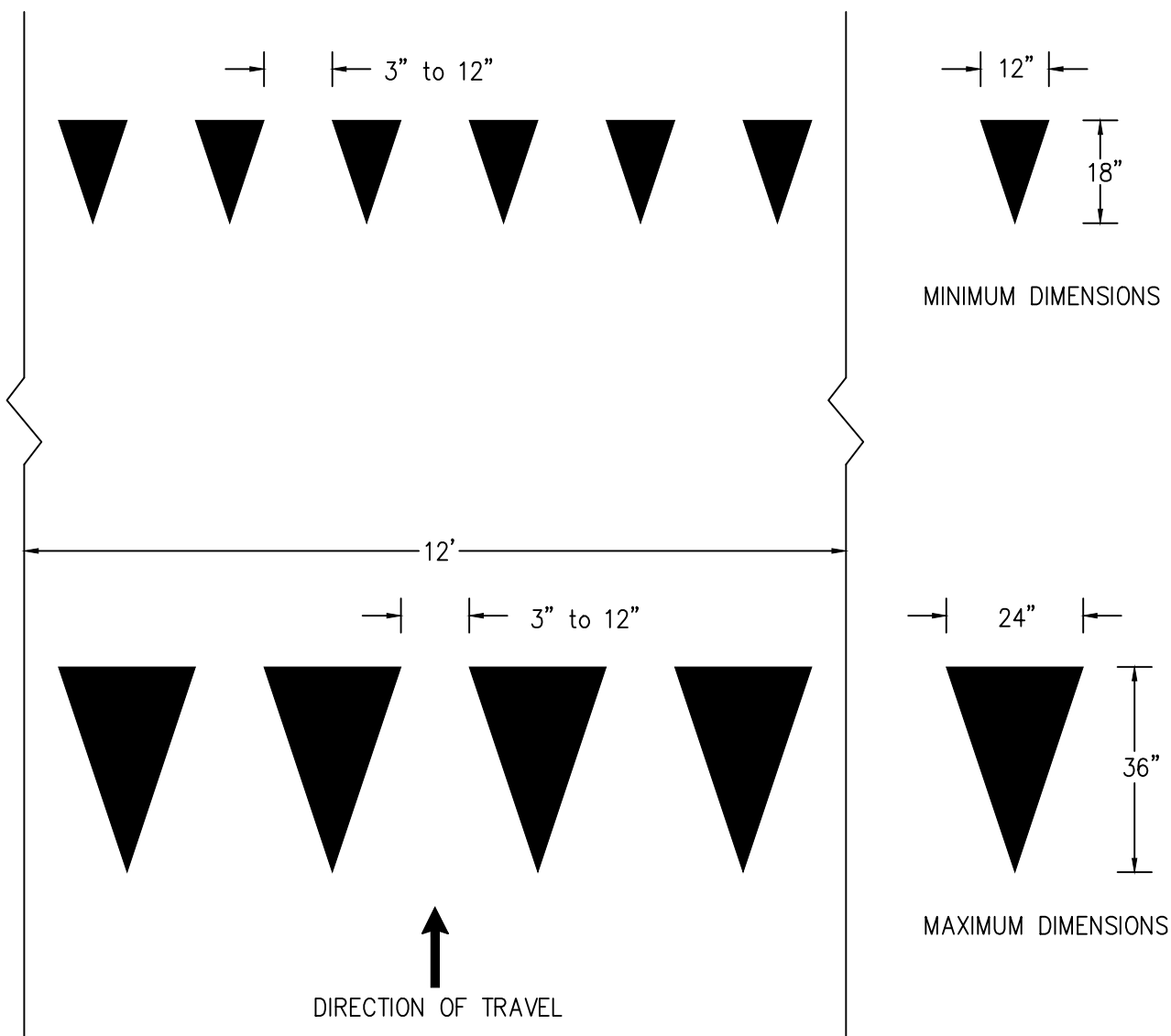
ISSUED:
FEBRUARY 2005
REVISED:
AUG 2012

DRAWING NO.
700-15A



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS
TRAFFIC CIRCLE/MULTI-LANE SIGNS &
PAVEMENT MARKING STANDARDS W/
STREET LIGHT PLACEMENT

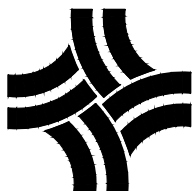
ISSUED:
JANUARY 2005
REVISED:
APRIL 2010
DRAWING NO.
700-15B



NOTES:

1. TRIANGLE LENGTH IS EQUAL TO 1.5 TIMES THE BASE DIMENSION.
2. YIELD LINES MAY BE SMALLER THAN SUGGESTED WHEN INSTALLED ON MUCH NARROWER, SLOW-SPEED FACILITIES SUCH AS SHARED-USE PATHS.

N.T.S.

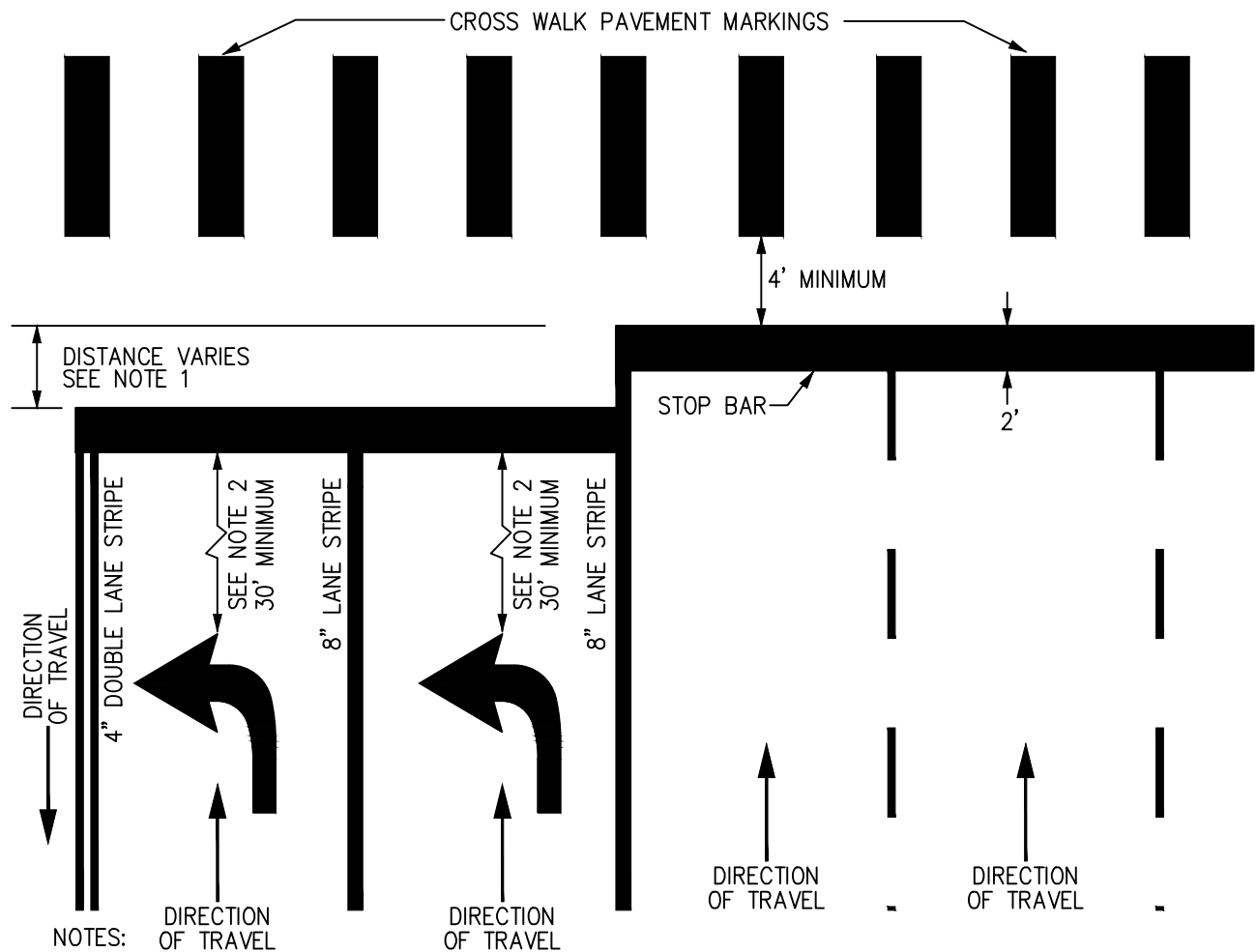


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL YIELD LINE LAYOUT FOR
STREETS AND HIGHWAYS

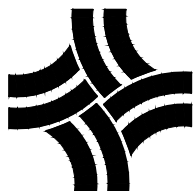
ISSUED:
JANUARY 2003
REVISED:
APRIL 2010

DRAWING NO.
700-15C



1. DISTANCE TO BE FIELD DETERMINED TO ACCOMMODATE TURNING RADIUS; LAYOUT TO BE APPROVED BY THE TRAFFIC ENGINEER PRIOR TO INSTALLATION.
2. 30' MINIMUM DISTANCE WHEN STORAGE LENGTH EXCEEDS 200 FEET, AND TWO TURN ARROWS ARE REQUIRED.

N.T.S.

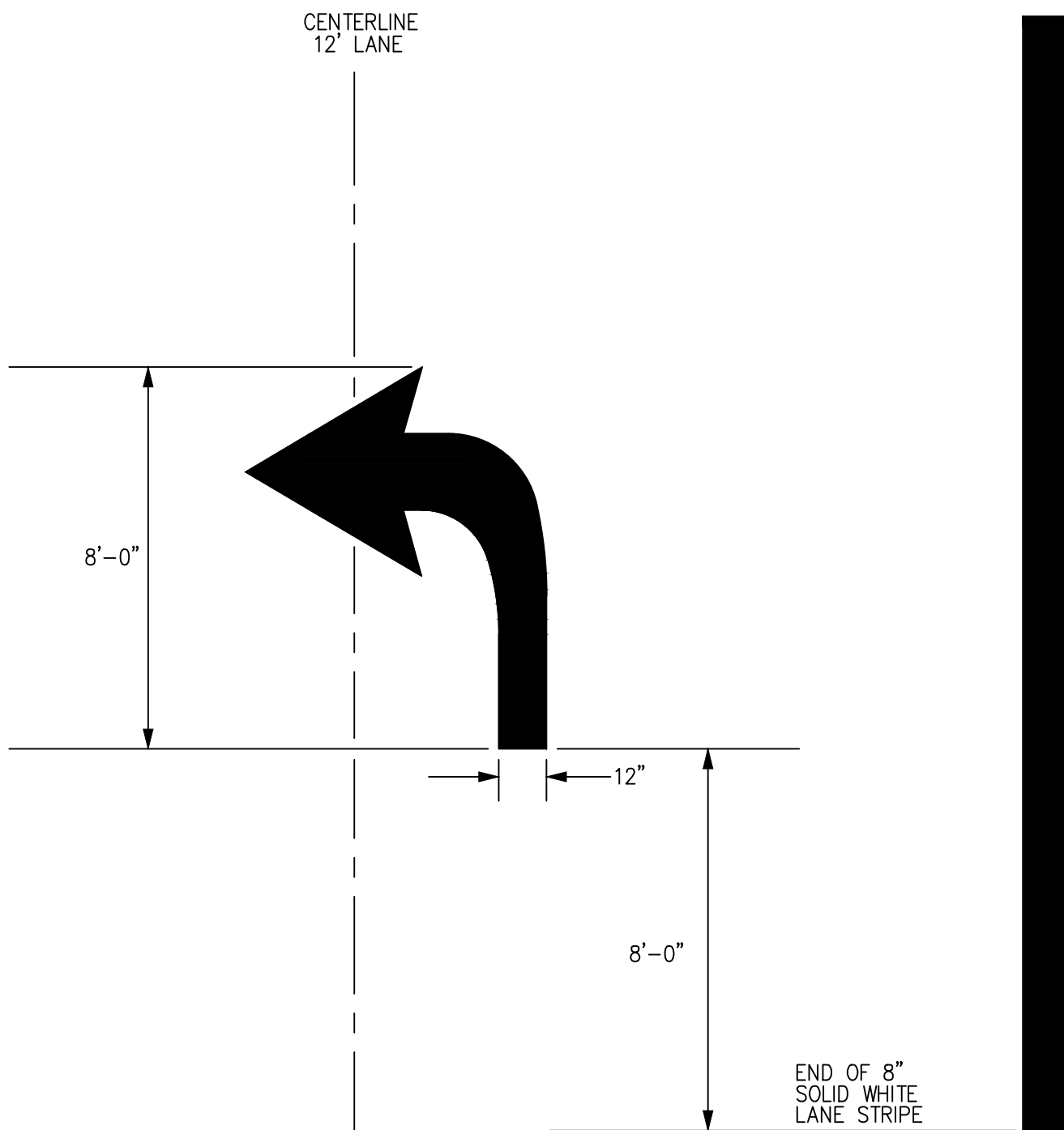


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

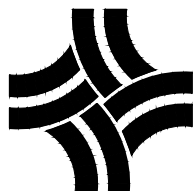
STOP BAR LAYOUT FOR DOUBLE LEFT TURNS

ISSUED:
FEBRUARY 2005
REVISED:
APRIL 2010

DRAWING NO.
700-16B



N.T.S.

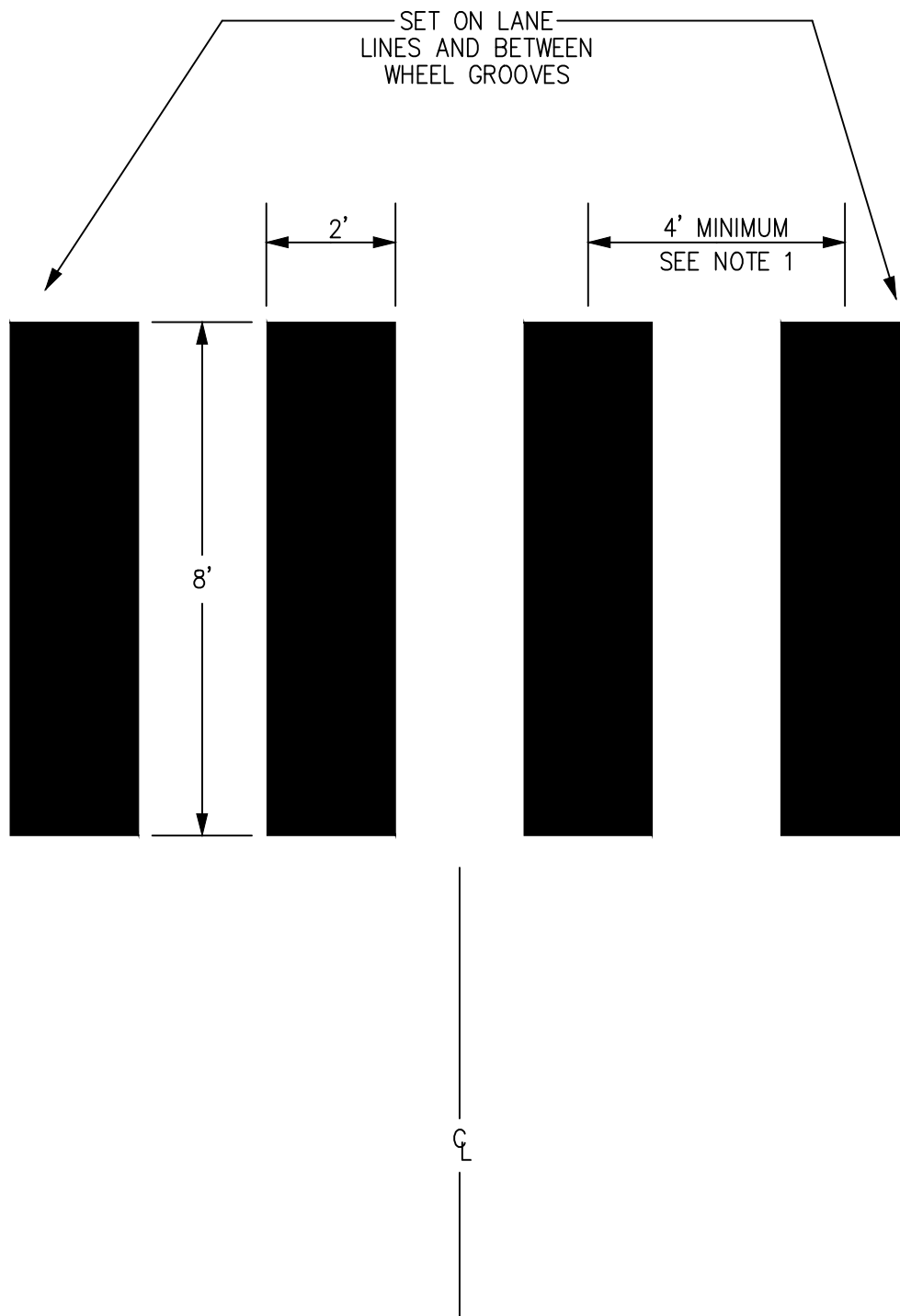


CITY OF THORNTON, COLORADO

STANDARDS & SPECIFICATIONS

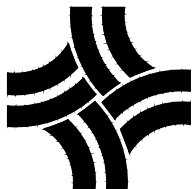
TURN ARROW PAVEMENT MARKING DETAIL

ISSUED: FEBRUARY 2003
REVISED: APRIL 2010
DRAWING NO. 700-17



FIELD ADJUST SPACING TO AVOID VEHICLE TIRE PATHS.

N.T.S.



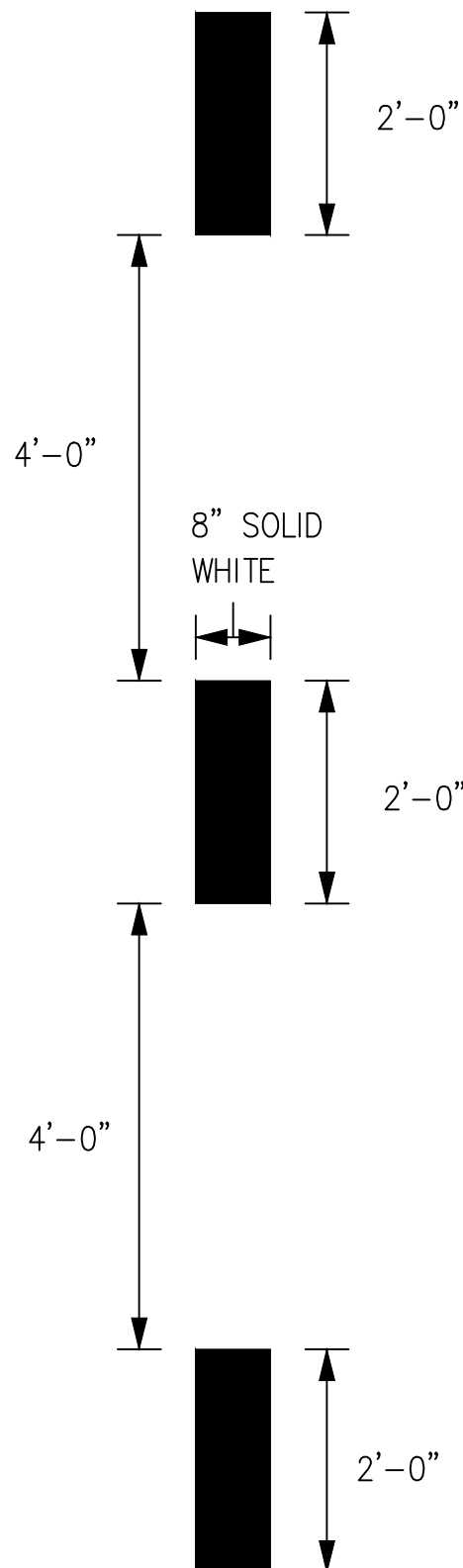
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

CROSSWALK PAVEMENT MARKING
DETAIL

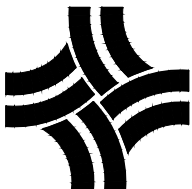
ISSUED:
FEBRUARY 2003

REVISED:
APRIL 2010

DRAWING NO.
700-18

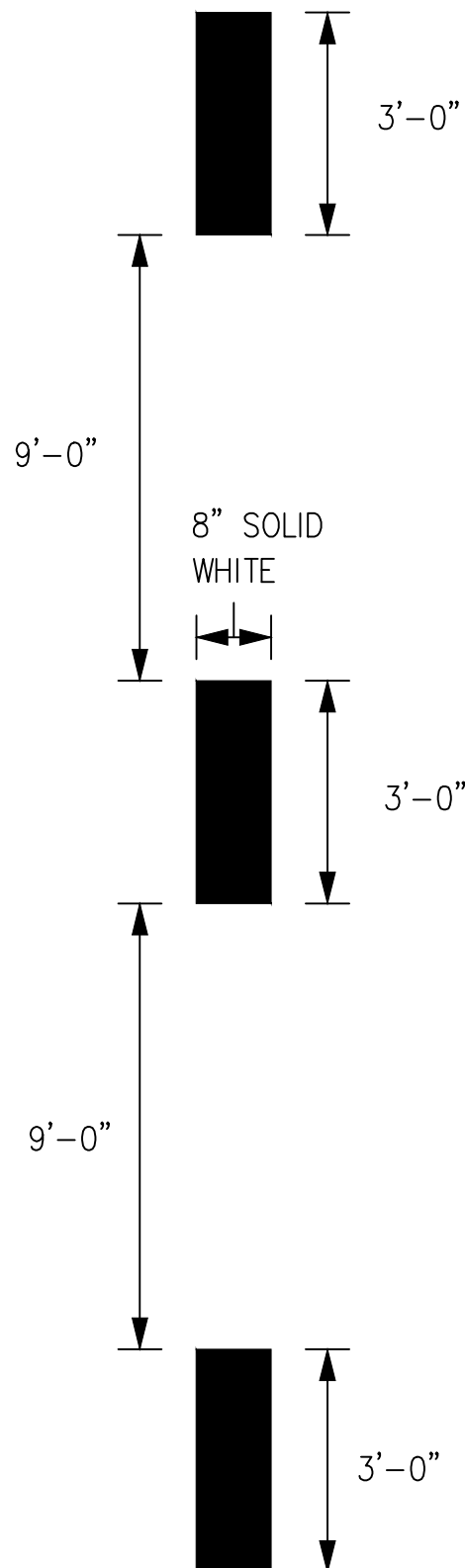


N.T.S.

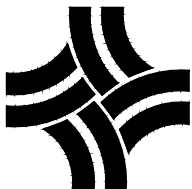


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS
INTERSECTION LANE USE
CONTROL PAVEMENT MARKING
DETAIL

ISSUED:
FEBRUARY 2003
REVISED:
APRIL 2010
DRAWING NO.
700-19A



N.T.S.

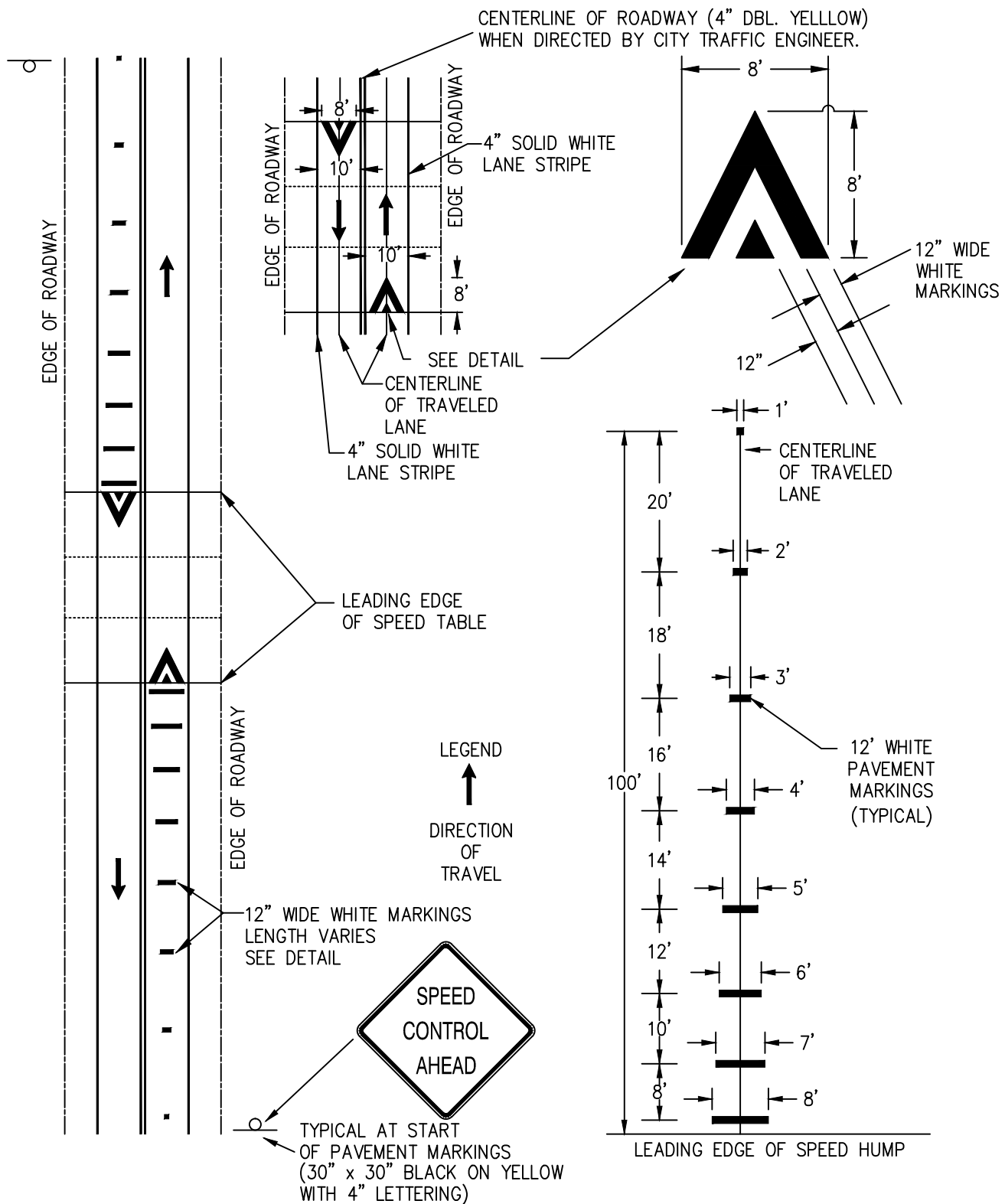


CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

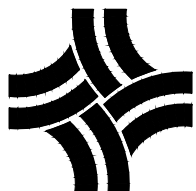
LANE DROP
PAVEMENT MARKING DETAIL

ISSUED:
SEPT 2012
REVISED:

DRAWING NO.
700-19B



N.T.S.



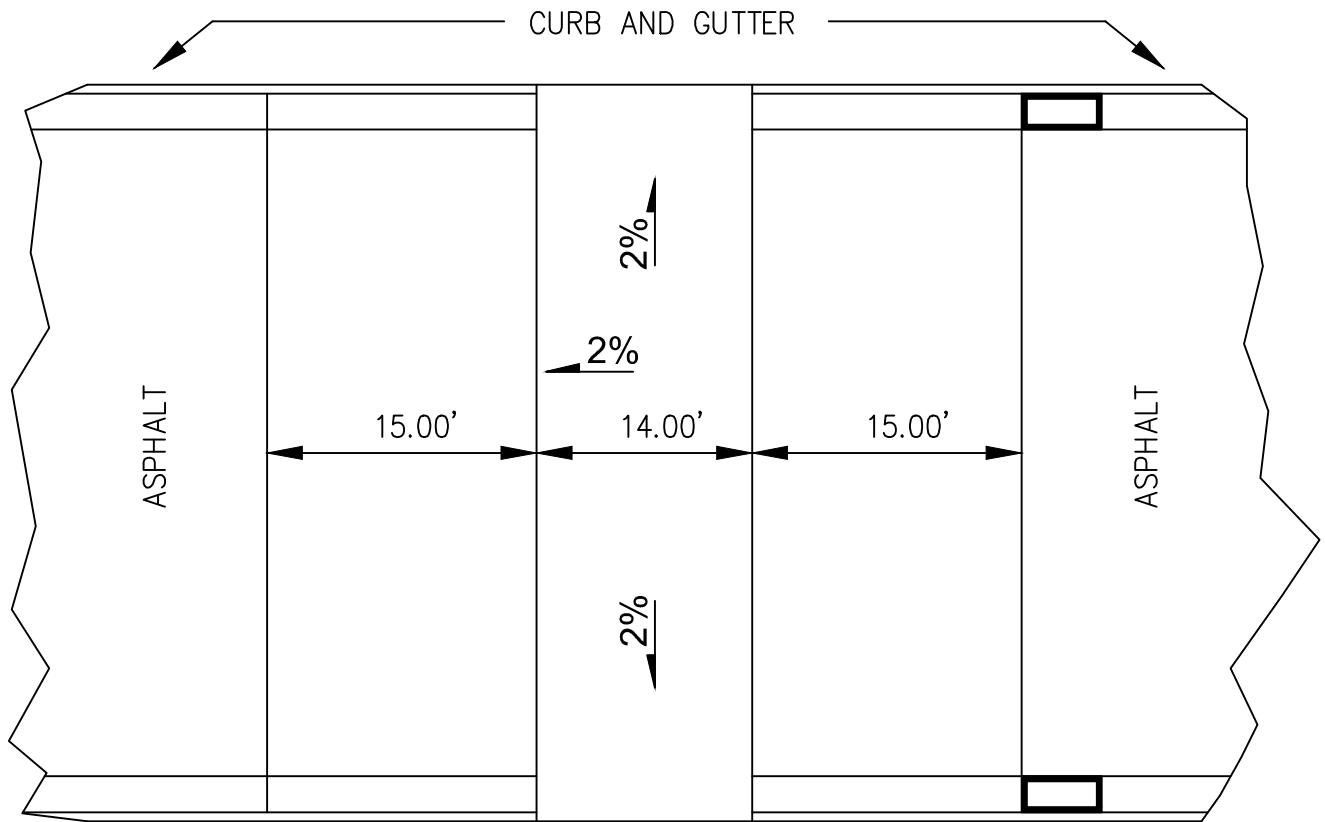
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL SPEED TABLE
(FOR 25 MPH SITE)

ISSUED:
FEBRUARY 2005
REVISED:
APRIL 2010

DRAWING NO.
700-20A

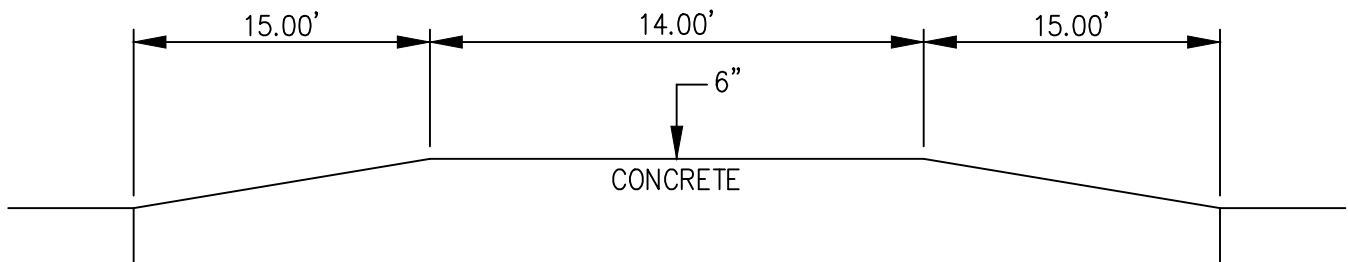
TYPICAL PLAN VIEW



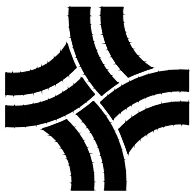
STORM INLETS REQUIRED AT
HIGH POINT OF APPROACH TO
SPEED TABLE

CHANGE IN GRADE AT SPEED TABLE RAMPS SHALL BE 3.33% +/- .25%

TYPICAL LONGITUDINAL SECTION



N.T.S.



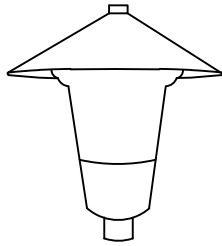
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

TYPICAL SPEED TABLE
(FOR 25 MPH SITE)

ISSUED:
FEBRUARY 2005
REVISED:
APRIL 2010

DRAWING NO.
700-20B

POST TOP LUMINAIRES



LUMINAIRE, POST TOP
MODERN STYLE
100 WATT COLOR BLACK

LUMINAIRES FOR STEEL DAVIT OR MAST ARM POLES



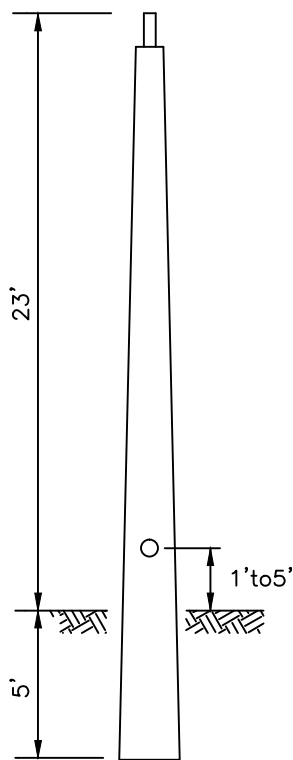
FLAT LENS

LIGHT EMITTING DIODE (LED) LUMINAIRES COLOR GRAY

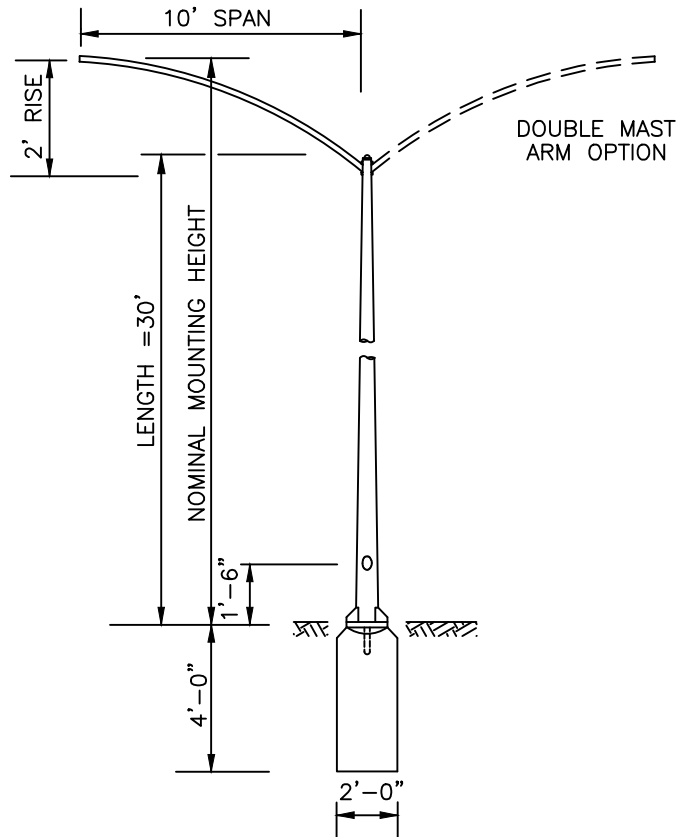
LOCATIONS	HPS EQUIVALENT WATTAGE
LOCAL	100
COLLECTORS	250
ARTERIALS *	250
INTERSECTIONS	400

STREET LIGHT SPACING SHALL BE INSTALLED AS INDICATED ON CONSTRUCTION PLANS.

* USE LED, 400W HIGH PRESSURE SODIUM EQUIVALENT, ALONG ARTERIALS NEXT TO COMMERCIAL AREAS WITH CITY APPROVAL

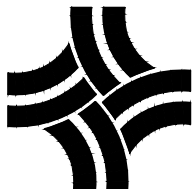


POLE, FIBERGLASS
DIRECT BURIED



STEEL MAST ARM POLE

N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

STREET LIGHTS DETAIL

ISSUED:
MAY 1993
REVISED:
APRIL 2010

DRAWING NO.
700-21

POLE

SMOOTH, STRAIGHT, STEEL 38' PAINTED POLE, 5.6" DIAMETER SHAFT, 4" x 8" HAND HOLE 48" FROM 13" POLE BASE PLATE, AND 11" TO 13" BOLT CIRCLE. FEDERAL COLOR # 20227 (SEMI-GLOSS) BEIGE
MOUNTAIN STATES LIGHTING PART NO. 28SRS-5.6/258 XX

ARM

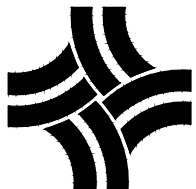
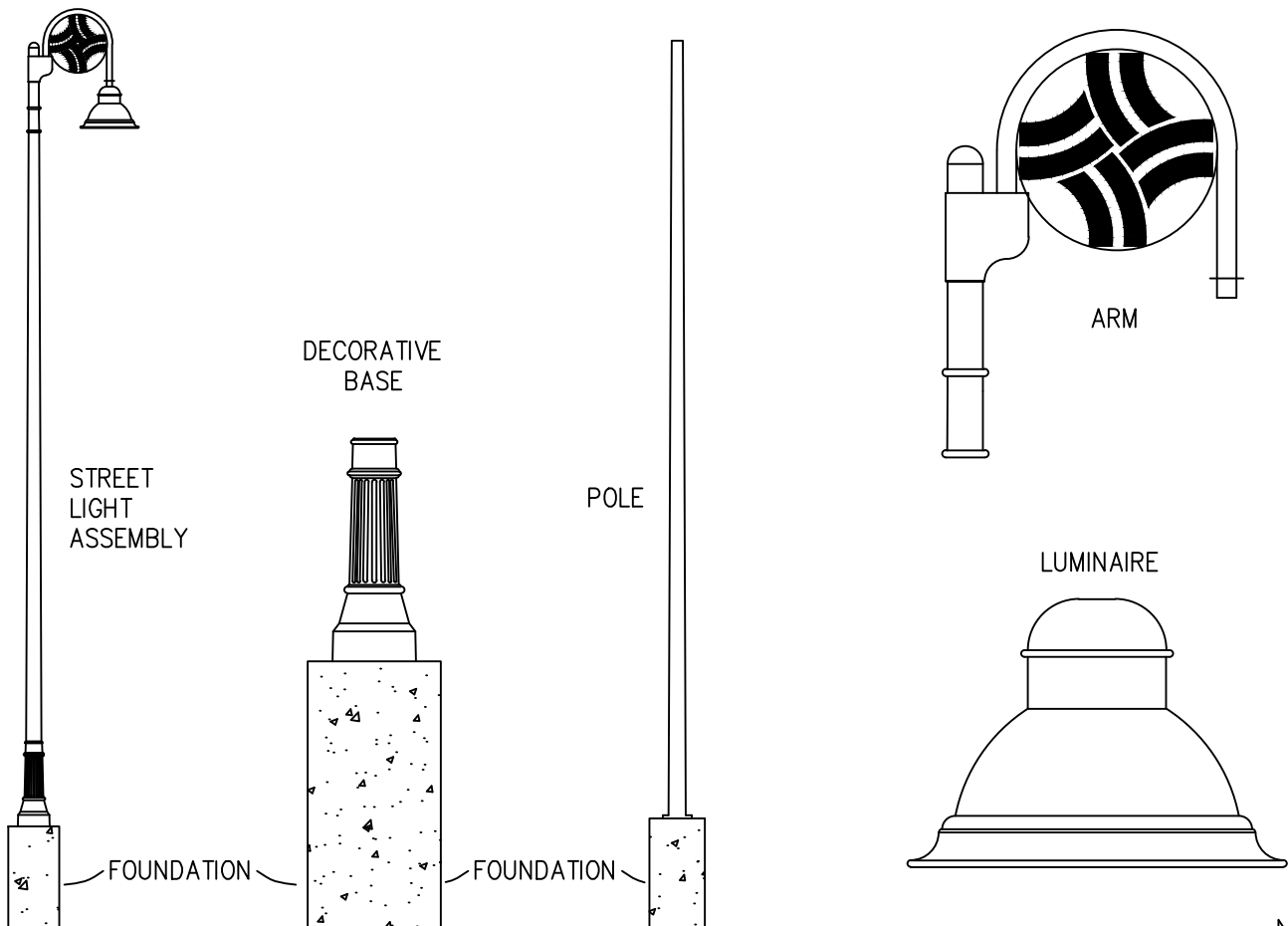
LUMINAIRE ARM, ALUMINUM, PAINTED, SLIP-OVER POLE FOR 9" WITH 5.6" OD, WITH BRACKET CAP SECURED WITH (3x) 1/4-20 STAINLESS STEEL SET SCREWS @ 120°. ARM IS ORDERED WITH BENT ALUMINUM DECORATIVE SCROLL. FEDERAL COLOR # 20227 (SEMI-GLOSS) BEIGE
LUMEC PART NO. LM1ACOLTXLMS (MODIFIED TO 30")
CITY LOGO SHALL BE REMOVABLE AND ANCHORED TO ARM USING STAINLESS STEEL BOLTS

LUMINAIRE

LED LIGHT, 250 WATT HIGH PRESSURE SODIUM EQUIVALENT, DOMUS FLAT LENS, 120/208/240/277 VOLT, MOGUL SOCKET, MULTI-TAP BALLAST, PENDANT MOUNT CLEAR GLASS TYPE III DISTRIBUTION. FEDERAL COLOR # 20227 (SEMI-GLOSS) BEIGE

DECORATIVE BASE

BASE, POLE, SPLIT ORNAMENTAL STANDARD, 16-1/2" DIAMETER x 40" HEIGHT, HIGH DENSITY ELASTOMER. FRANKLIN STYLE 16.5. FEDERAL COLOR # 20227 (SEMI-GLOSS) BEIGE
MOUNTAIN STATES LIGHTING PART NO. 16.5"W x 40"H-HDEB-XX



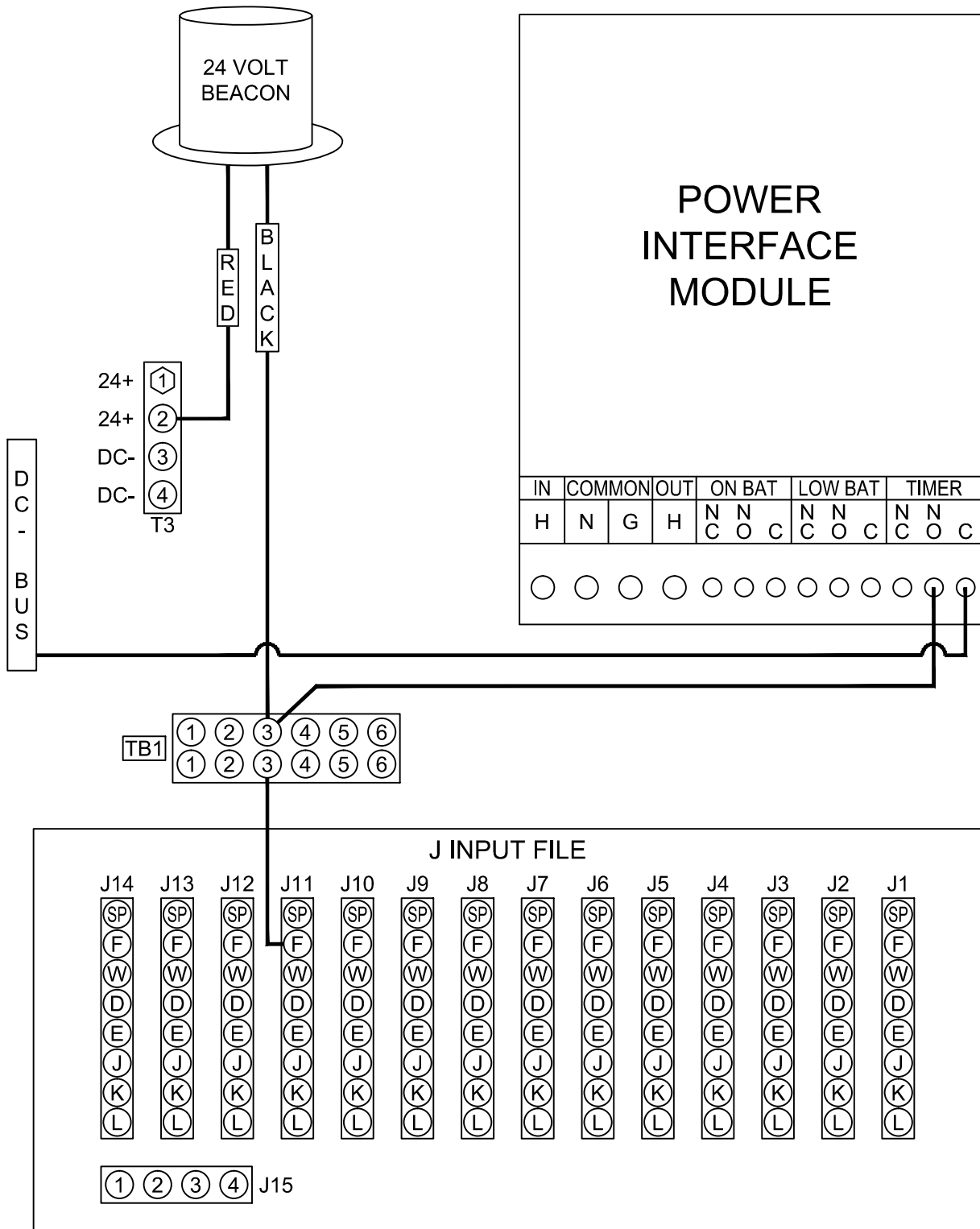
CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

STREET LIGHTS FOR WASHINGTON
STREET CORRIDOR

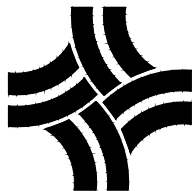
ISSUED:
JANUARY 2005

REVISED:
APRIL 2010

DRAWING NO.
700-22



N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

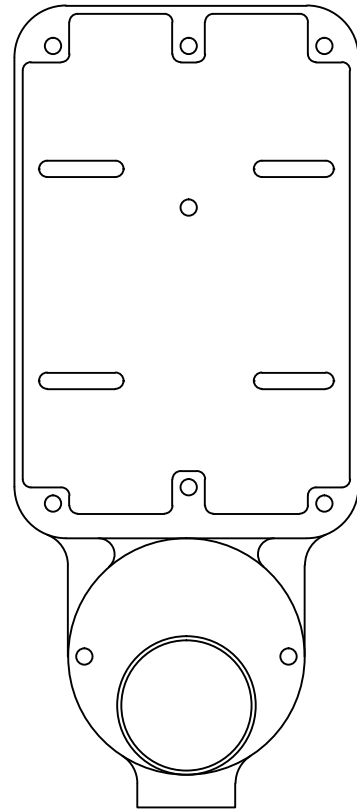
CONTROL CABINET
BEACON WIRING DETAIL

ISSUED:
SEPT 2012
REVISED:

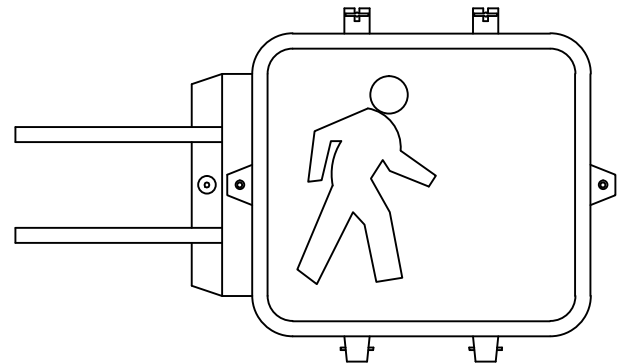
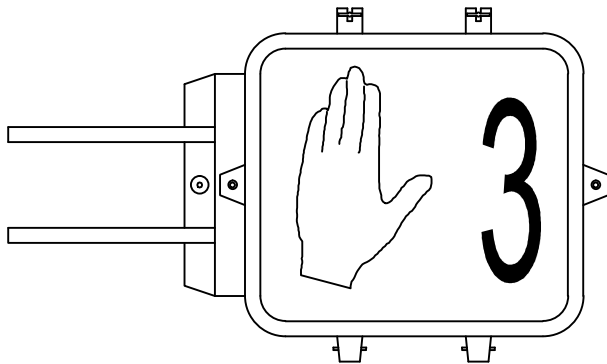
DRAWING NO.
700-23



PUSH BUTTON SIGN PLATE
(5" x 7-3/4")

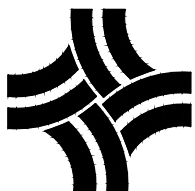


2" PUSH BUTTON &
PUSH BUTTON SIGN MOUNTING ASSEMBLY
(POLARA BULLDOG PUSHBUTTON)



ALL PEDESTRIAN
SIGNAL HEADS
(COUNTDOWN TYPE)

N.T.S.



CITY OF THORNTON, COLORADO
STANDARDS & SPECIFICATIONS

PEDESTRIAN TRAFFIC SIGNAL,
SIGN AND PUSH BUTTON

ISSUED:
SEPT 2012
REVISED:

DRAWING NO.
700-24