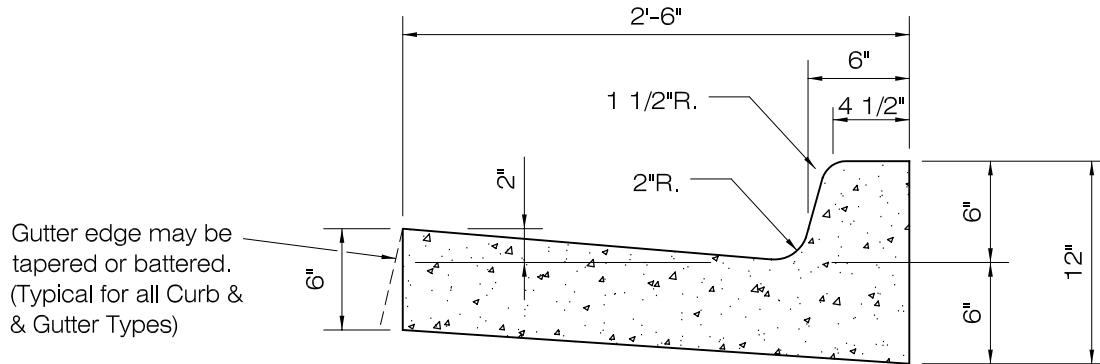
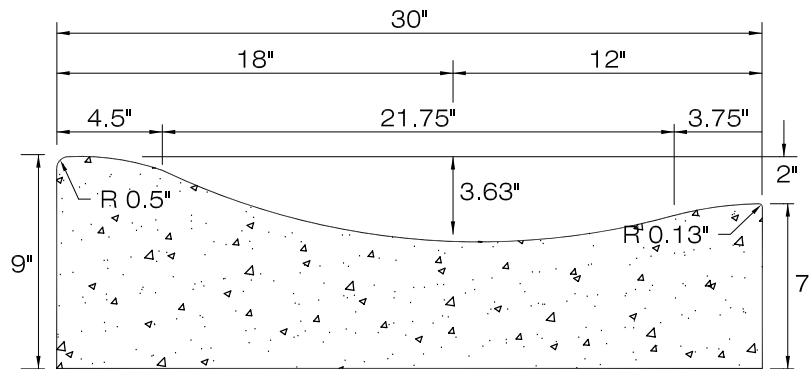


APPENDIX A – STANDARD DRAWINGS

701	Curb and Gutter	1407	Handicap Parking Requirements (as per “ADA”)
702	Curb and Gutter/Sidewalk	1408L	Bicycle and Parking Pavement Markings – Loveland (GMA and City Limits)
702L	Curb and Gutter/Sidewalk (Loveland)	1409L	Bicycle/Parking Sign – Loveland (GMA and City Limits)
703	Median (Island Curbs)	1410	Bicycle Lane Approaching Vehicle Right Turn Lane
704B	Standard Details for Raised Median	1411	Street Name Sign
705	Standard Details for Raised Median	1412	Urban Roundabout Sign Details
705A	Standard Details for Raised Median	1412L	Future Road Extension Sign (Loveland)
706.1	Standard Driveway Approach (Type I)	1413	Standards Temporary Dead End Barricades
706.2	Standard Driveway Approach (Type II)	1414	Cantilever Arm Bracket for Flat or Extruded Blades
706.3	Standard Driveway Approach (Type II Bypass)	1415	Delineator Detail
707.1	Standard Driveway Approach (High Volume Drive, Type III)	1416L	Signs and Pavement Markings for Speed Tables – Loveland (City Limits only)
707.2	Standard Driveway Approach (High Volume Drive, Type IV)	1417L	Signs and Pavement Markings for Raised Crossings – Loveland (City Limits only)
708	Street Intersection Crossspan	1418	Fire Access Road Signs
709	Standard Details for Drainage Under Sidewalk	1419	Fire Apparatus Access Road Stenciling & Fire Lane Sign Installation
710	Asphalt Paving Detail (Crossspan)	1420	New FHWA Arrows (Elongated)
711	Bus Bay and Stop Standard	1421	Rectangular Rapid Flashing Beacon (RRFB)
712L	Concrete Details – Loveland Affordable Housing Only	1422	Conduit and Pull Box For Fiber Optic Lines
713.1F	Subdrain Service Wye Detail – Fort Collins (GMA and City Limits)	1601	Standard Sidewalk
713.1L	Subdrain Service Wye Detail – Loveland (GMA and City Limits)	1602	Sidewalk Detail
713.2F	Subdrain Main Installation Details – Fort Collins (GMA and City Limits)	1603	Access Ramp Details
713.2L	Underdrain Main – Bedding Requirements – Loveland (GMA and City Limits)	1604	Detached Walk/Intersection Detail
801	Standard Details for Raised Median Geometry	1605	Detached Walk/Intersection Detail
802	Forced Turn Barrier (Splitter Island)	1606	Pedestrian Ramp Detail (For New Construction and Alterations)
802.1L	Right-In Right-Out Access (Loveland)	1607	Access Ramp Scoring
802.2L	Roundabout Truck Apron Curb (Loveland)	1608	Median Islands and Pedestrian Refuge Area
803	Alley Intersections	1609L	Raised Speed Table – Loveland (GMA and City Limits)
901	Access on Rural Roadways (without Curb and Gutter)	1610	Decorative Concrete Crosswalk (Patterned/Colored Concrete)
1101	Handrail Details	1611	Enhanced Asphalt Crosswalk (Patterned/Colored Asphalt)
1102L	Oklahoma TR-1 Bridge Railing – Loveland (GMA and City Limits)	1612	Enhanced Concrete Crosswalk (Construction Detail)
1103L	Safety-Shaped Concrete Bridge Railing – Loveland (GMA and City Limits)	1613	Raised Crosswalk Detail
1104L	Nevada Concrete Safety Shape – Loveland (GMA and City Limits)	1701	Bicycle Rack Details
1105L	Texas Type HT – Loveland (GMA and City Limits)	1702	Bicycle Rack Details
1106L	Texas Type TT – Loveland (GMA and City Limits)	1703	Bicycle Rack Details
1107	Type C Aluminum Bridge Railing	1704	Bicycle Rack Foundation Details
1108	Bridge Railing/Parapet Wall Configuration Detail	1705	Bicycle Rack Details
1201	Standard Manhole Cover	1706F	Bicycle Rack Details – Fort Collins (GMA and City Limits)
1202	Sleeve Locations	1707	Bicycle Rack Details
1401	Sign Post	1801F	14’ Local Speed Hump – Fort Collins (GMA and City Limits)
1402a	No Parking Bike Lane Sign Detail	1802F	22’ Speed Hump – For Collins (GMA and City Limits)
1402b	No Parking Anytime Sign Detail	2201	Trench Detail
1403	Standard Pavement Markings	2501	Sidewalk Details
1404	Standard Pavement Markings with Turn Lane		
1405	Pavement Markings for Bike Crossing		
1406	Typical Bicycle Lane Pavement Markings		



VERTICAL



ROLL-OVER
(LOVELAND)

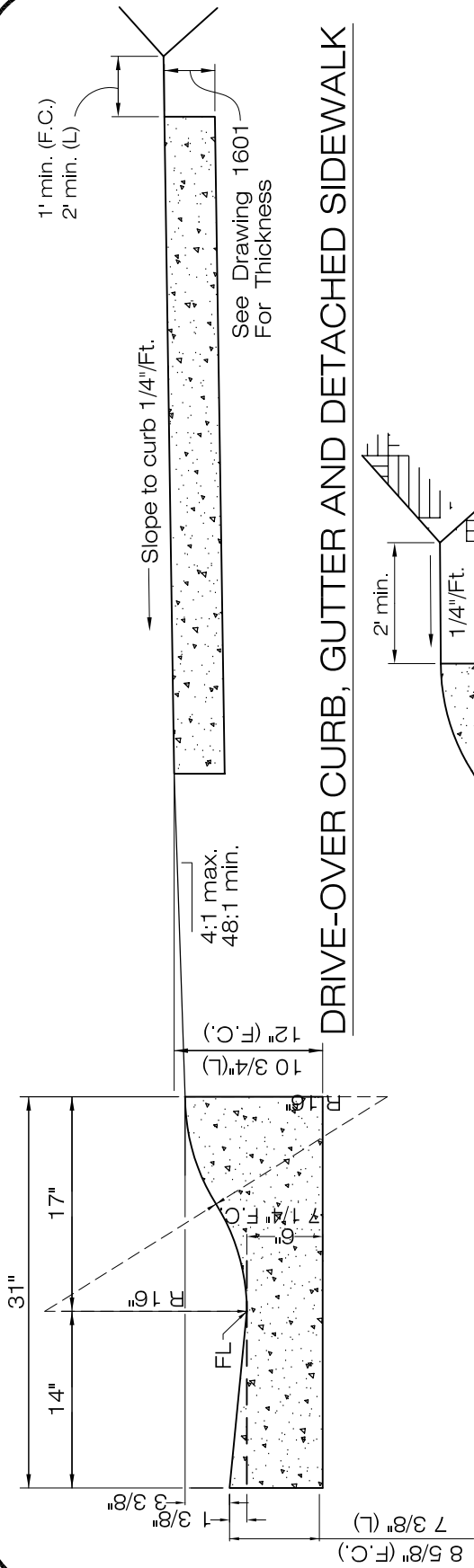
CURB AND GUTTER

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

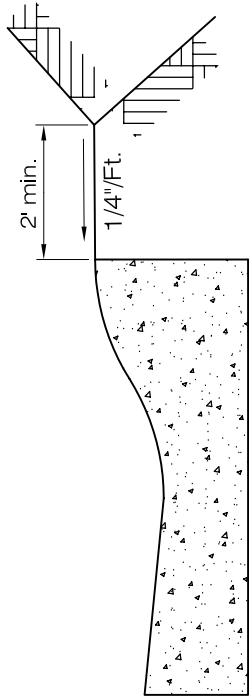
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 03/01/02

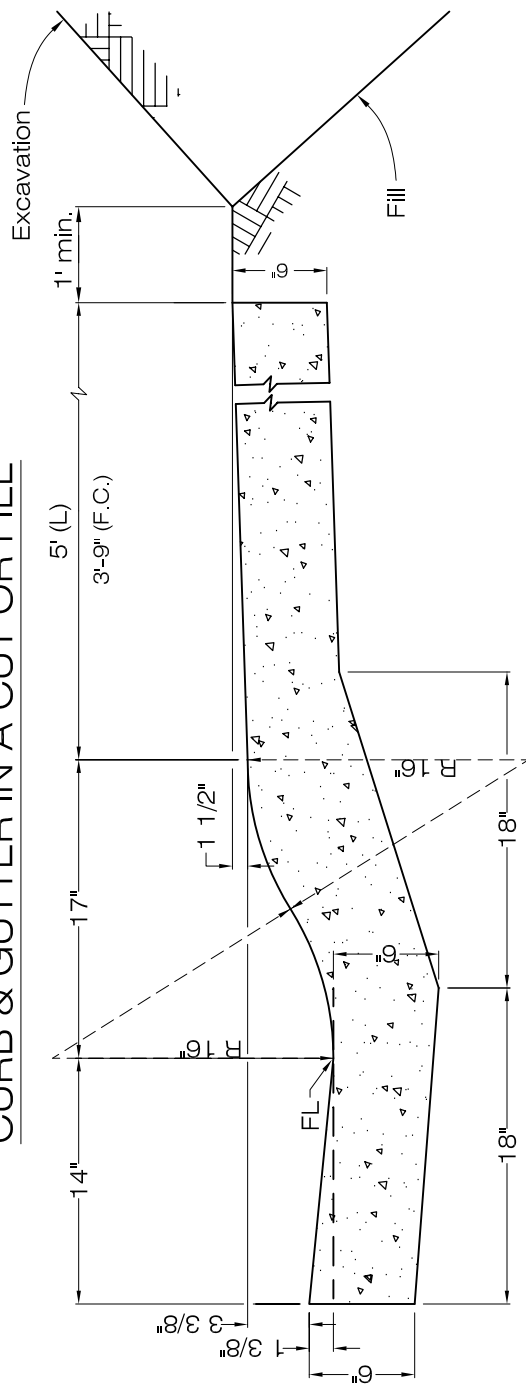
DRAWING
701



DRIVE-OVER CURB, GUTTER AND DETACHED SIDEWALK



CURB & GUTTER IN A CUT OR FILL



DRIVE-OVER CURB, GUTTER AND ATTACHED SIDEWALK

CURB AND GUTTER/SIDEWALK

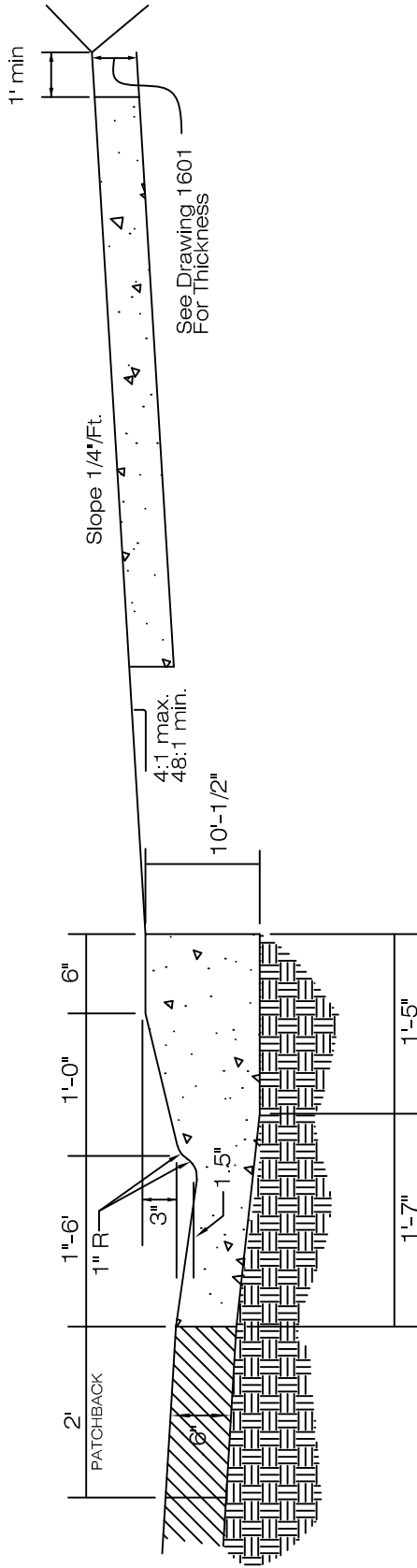
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

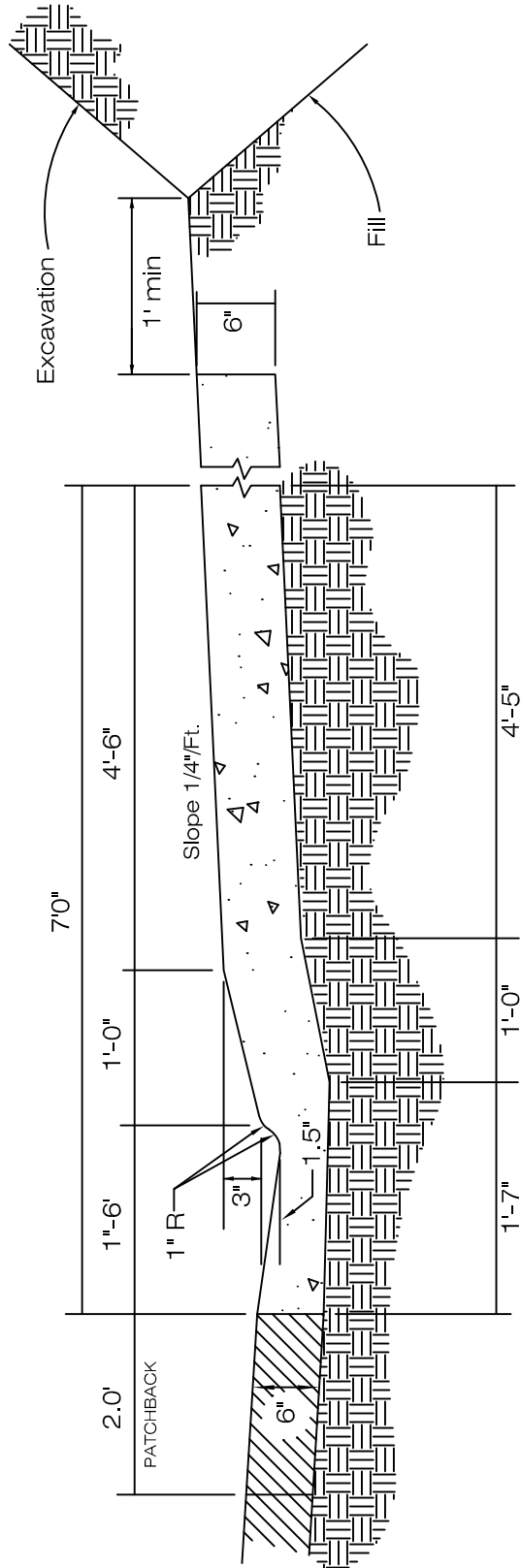
REVISION NO: 1
DATE: 03/01/02

DRAWING
702

LOVELAND ONLY



DRIVE-OVER CURB, GUTTER & DETACHED SIDEWALK



DRIVE-OVER CURB, GUTTER & ATTACHED SIDEWALK

- NOTES:
- GUTTER SLOPE- 1/2" IN 1'-6"
 - WALK SLOPE- 1/4" IN 1'-0"
 - RESIDENTIAL ONLY
 - TOTAL FLOWLINE DEPTH = 4.5" (3" + 1.5")
 - COMBINATION CURB, GUTTER & ATTACHED SIDEWALK REQUIRES CITY ENGINEER APPROVAL

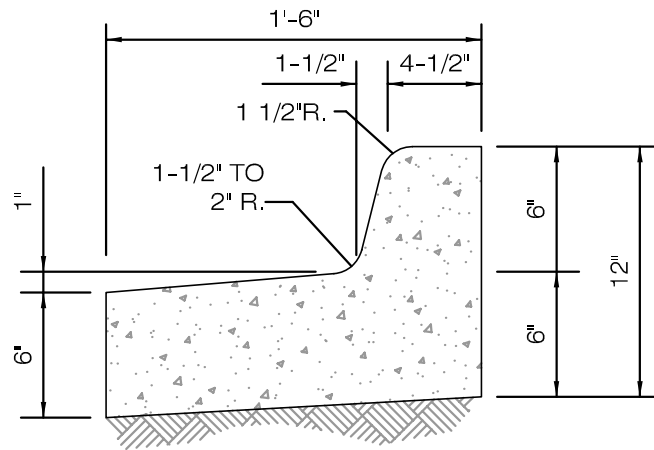
DRIVE-OVER CURB, GUTTER & SIDEWALK

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

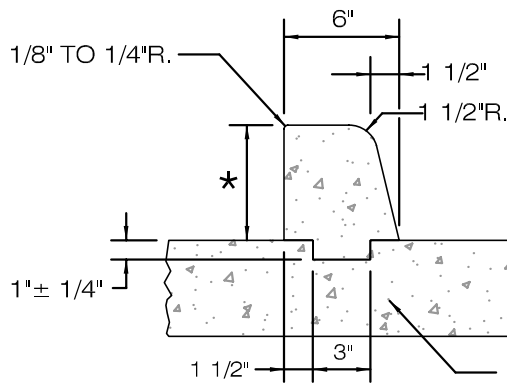
CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/01/21

DRAWING
702L

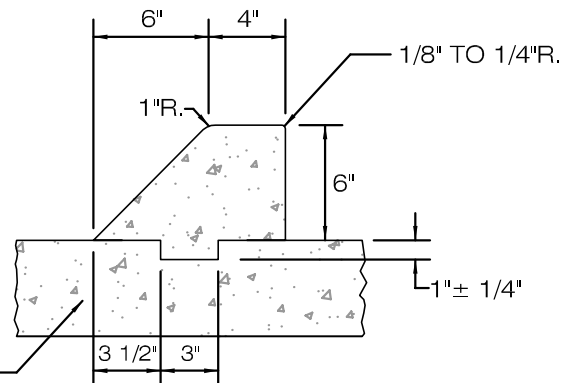


OUT FALL CURB & GUTTER
(FORT COLLINS ONLY)



* 6" w/concrete pavement
8" w/asphalt

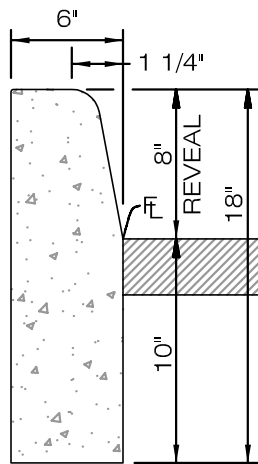
ASPHALT OR
CONCRETE PAVEMENT



BARRIER CURB (KEY WAY OR EPOXY) MOUNTABLE CURB (KEY WAY OR EPOXY)

(SECTION B)

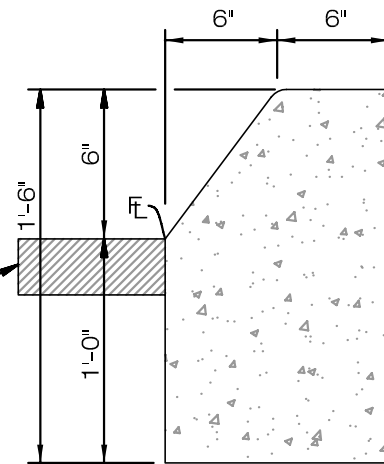
(SECTION M)



8" BARRIER CURB

(CDOT TYPE 2 SECTION B M-609-1 CURB W/8" REVEAL)

ROADWAY
PAVEMENT



6" MOUNTABLE CURB

Notes:

- Bottom of curb shall be poured to a depth no less than on the compacted subgrade of the pavement.
- Raised center medians shall be 8" barrier curb or 8" epoxy curb only.

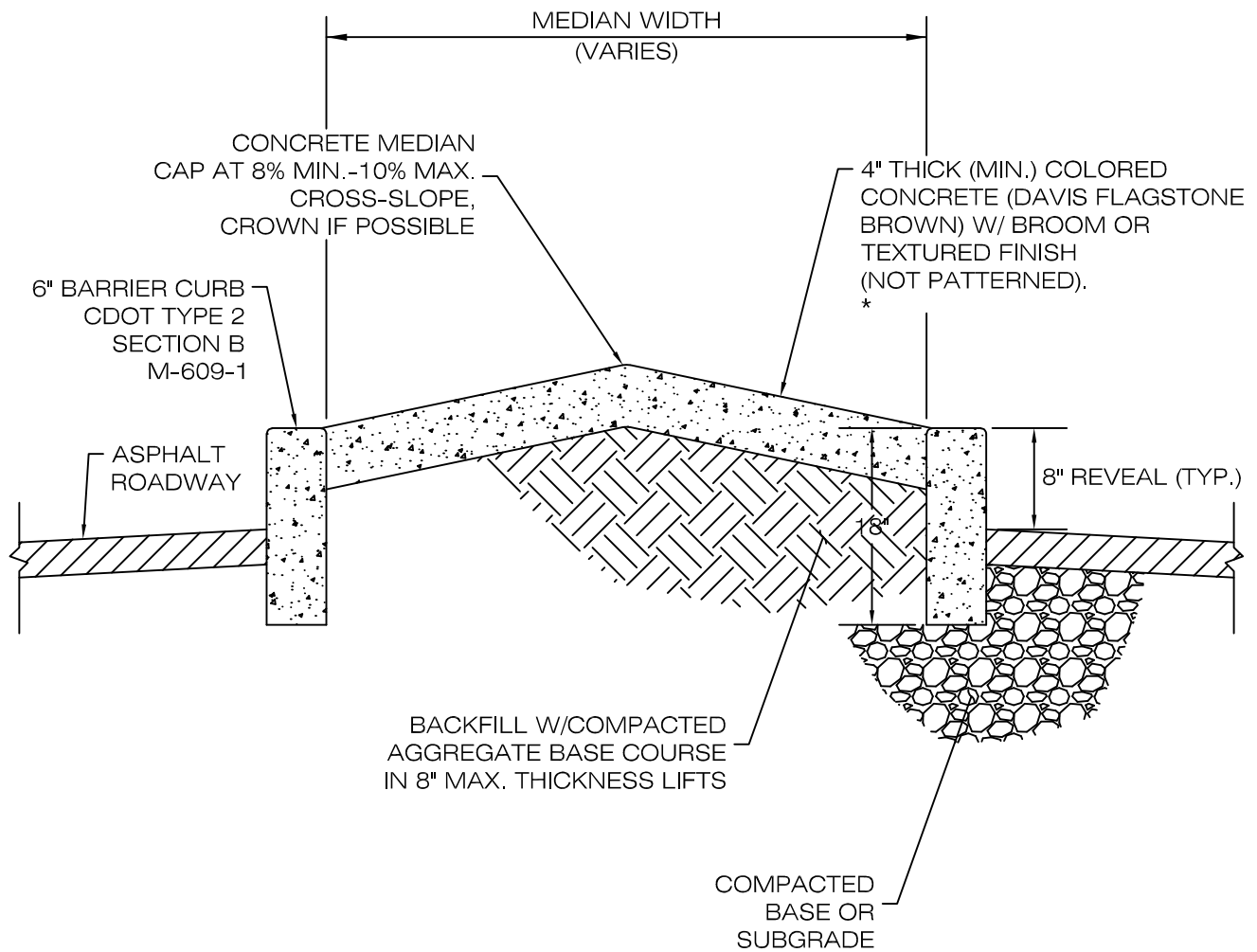
MEDIAN (ISLAND CURBS)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
703



NOTES:

1. For areas where the median area is less than 5.5' wide and landscaping cannot be achieved.
2. May be used for portions where the median area is > 5.5' if a variance is granted by the local entity engineer.
3. Glue down curb may be used only if approved by the local entity engineer.

* Design engineer to specify control joint pattern to prevent cracks.

STANDARD DETAILS FOR RAISED MEDIAN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

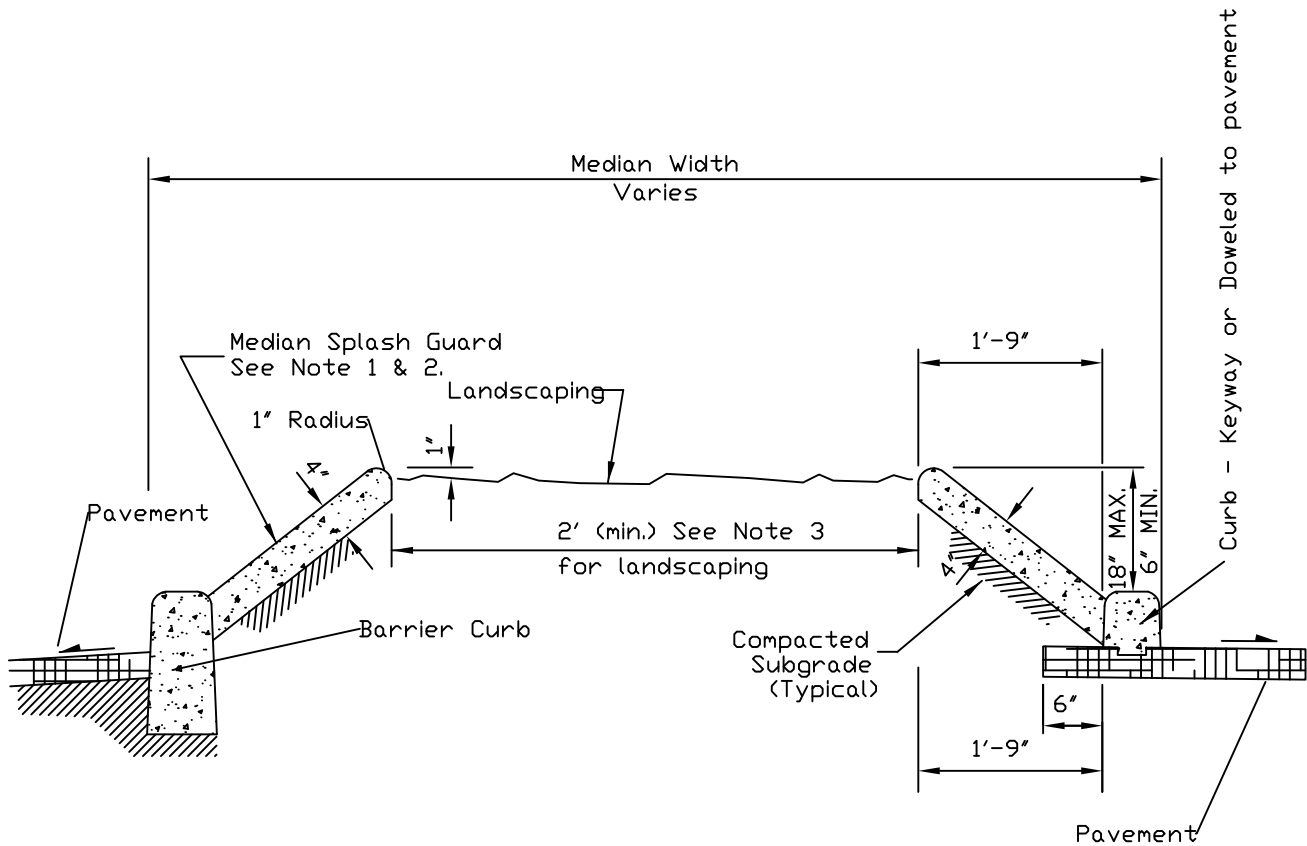
CONSTRUCTION
DRAWINGS

REVISION NO:

DATE: 08/01/21

DRAWING

704-B



NOTES:

1. All Splash Guard shall be constructed of stamped concrete, colored concrete or equivalent, or exposed aggregate as required by the Local Entity.
2. Use 10' joint spacing on the Splash Guard concrete (match C&G joints).
3. For the portions of medians where the landscape area is less than 2' wide, the landscape area shall be paved in concrete (same material as the Splash Guard)
4. Any median trees shall be trimmed so the minimum branch height is 8' above the pavement.
5. A drainage system may be required whenever an irrigation system is proposed within the median.
6. Concrete color shall be Davis Flagstone Brown in Loveland.
7. Glue down curb may be used only if approved by the local entity engineer.

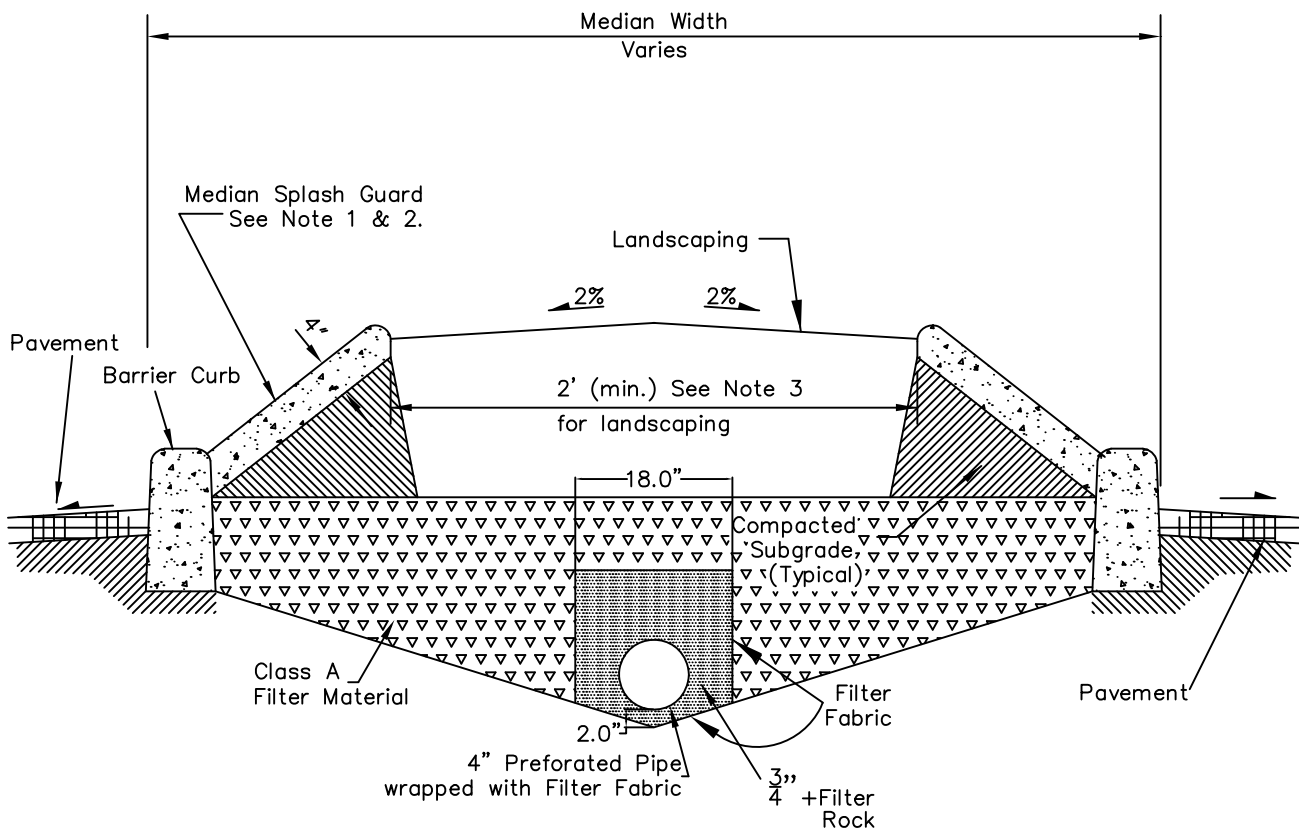
STANDARD DETAILS FOR RAISED MEDIAN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/01/21

DRAWING
705



NOTES:

1. All Splash Guard shall be constructed of stamped concrete, colored concrete or equivalent, or exposed aggregate as required by the Local Entity.
2. Use 10' joint spacing on the Splash Guard concrete (match C&G joints).
3. For the portions of medians where the landscape area is less than 2' wide, the landscape area shall be paved in concrete (same material as the Splash Guard)
4. Any median trees shall be trimmed so the minimum branch height is 8' above the pavement.
5. A drainage system may be required whenever an irrigation system is proposed within the median.
6. Concrete color shall be Davis Flagstone Brown in Loveland.
7. Glue down curb may be used only if approved by the local entity engineer.

LANDSCAPING AND DRAIN DETAILS FOR RAISED MEDIAN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

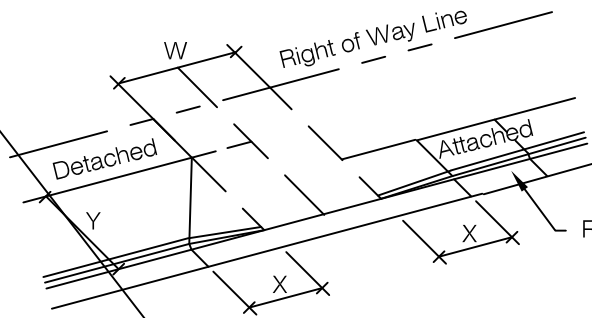
CONSTRUCTION
DRAWINGS

REVISION NO:

DATE: 08/01/21

DRAWING

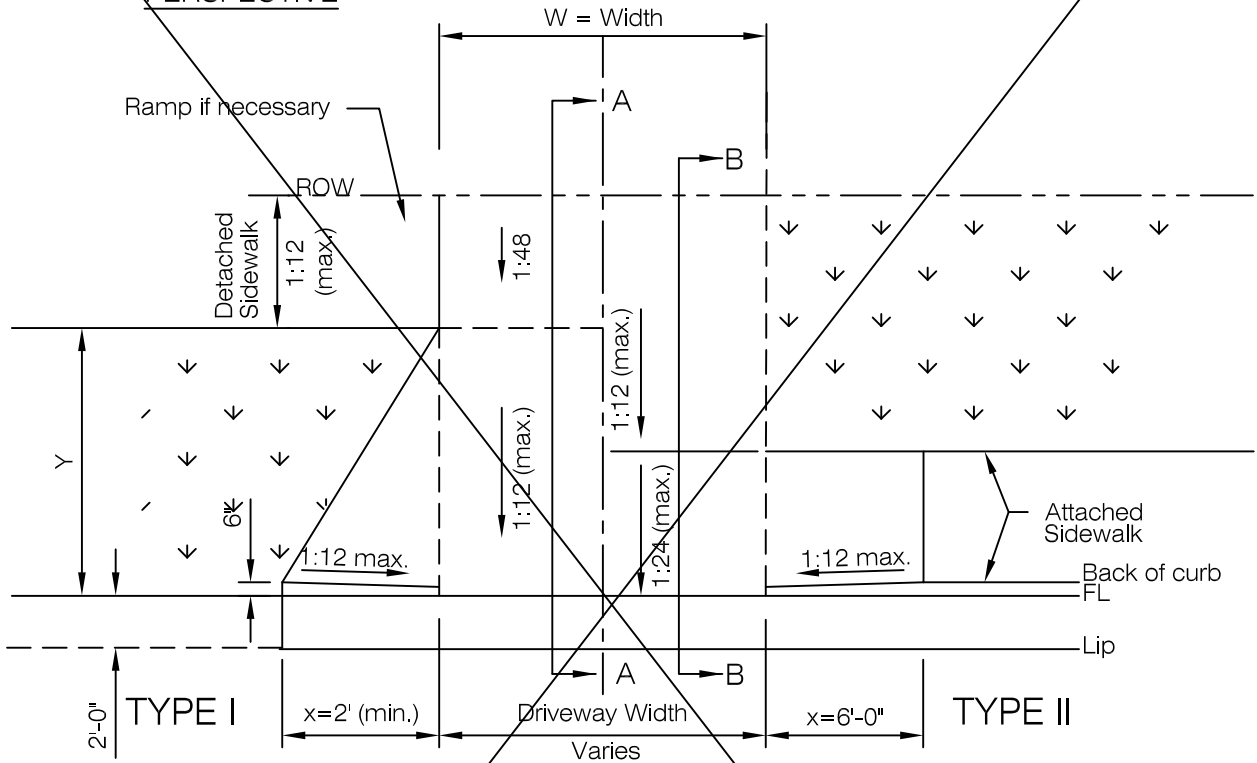
705a



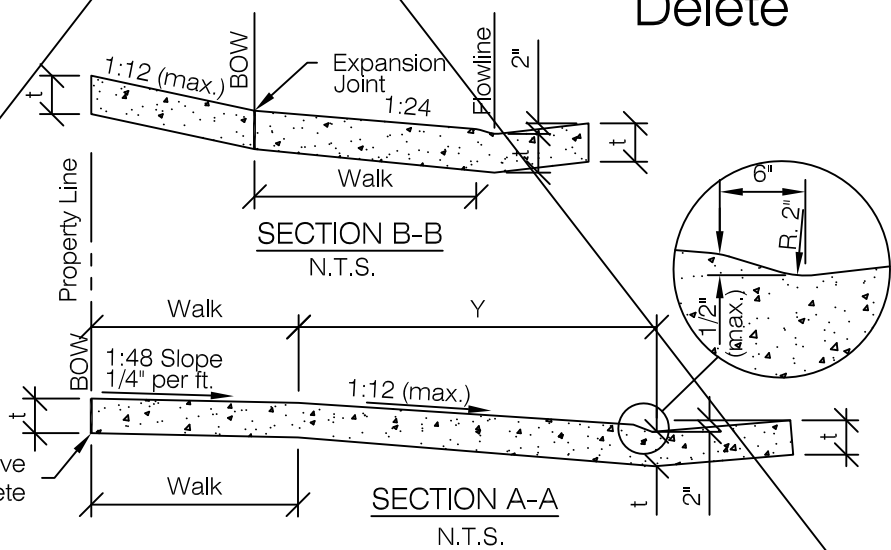
X = Curb Transition Length
 Y = Parkway Width in Type I Approach
 W = Driveway Width (See Drawing 707)
 t = Concrete Thickness - minimum 6"
 Type I = With Detached Sidewalk
 Type II = With Attached Sidewalk

Refer to Chapter 25 for minimum removal dimensions.

PERSPECTIVE



Delete



NOTE:

1. Concrete driveway must be provided to the property line.

Expansion Joint if drive continues as concrete

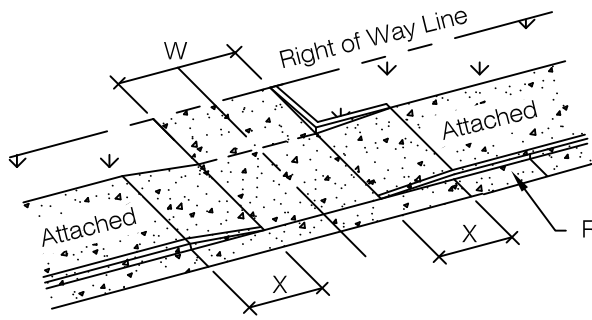
STANDARD DRIVEWAY APPROACH (TYPES I & II)

LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS

CONSTRUCTION
 DRAWINGS

REVISION NO: 3
 DATE: 02/17/15

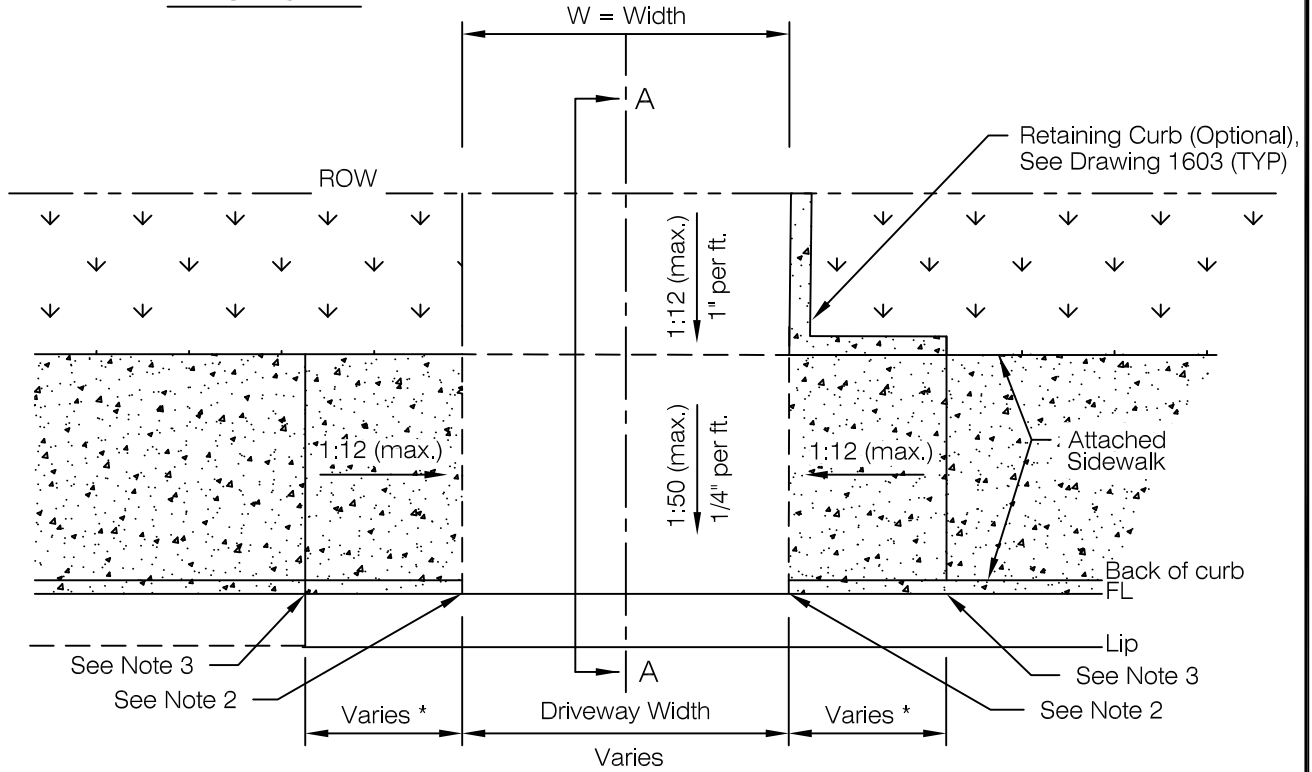
DRAWING
 706



X = Curb Transition Length, Varies*
 W = Driveway Width (See Drawing Series 707)
 T = Concrete Thickness - 6" Residential,
 8" Commercial.

Refer to Chapter 25 for minimum removal dimensions.

PERSPECTIVE

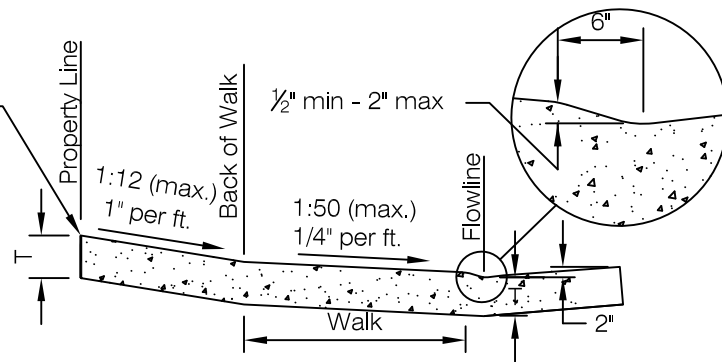


* Ramp length not to exceed 15'-0", slope must be uniform.

Expansion Joint if driveway continues as concrete

NOTE:

1. Concrete driveway shall be provided to the property line.
2. 0" Curb Height, See Section A-A
3. Full Curb and Gutter, See Standard Drawing 701.



SECTION A-A
N.T.S.

NOT TO SCALE

STANDARD DRIVEWAY APPROACH ATTACHED WALK (TYPE II)

**LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS**

**CONSTRUCTION
 DRAWINGS**

**REVISION NO: 1
 DATE: 02/17/15**

**DRAWING
 706.2**

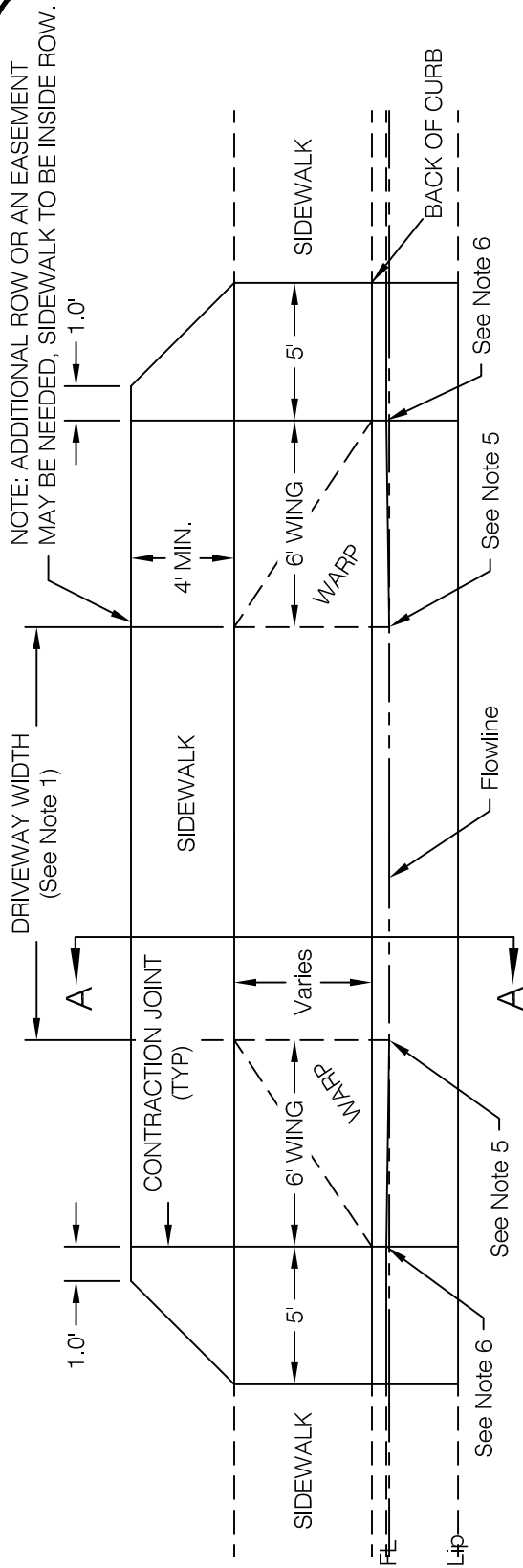
DRIVEWAY WITH ADA BYPASS SIDEWALK (TYPE II BYPASS)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

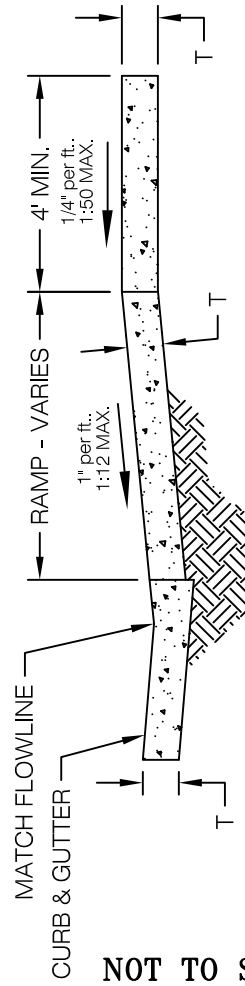
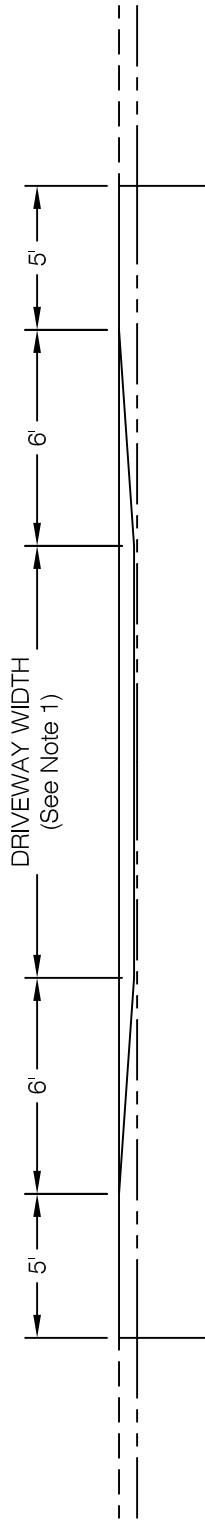
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 02/17/15

DRAWING
706.3



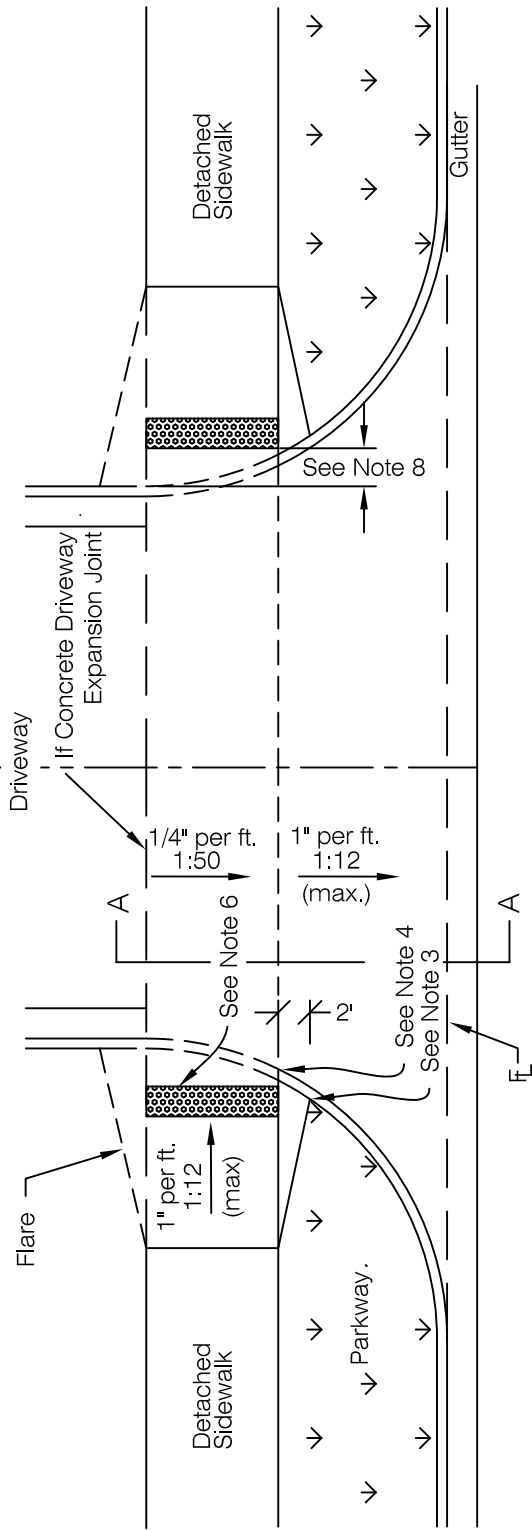
DRIVEWAY WITH SIDEWALK ATTACHED TO CURB



NOTES:

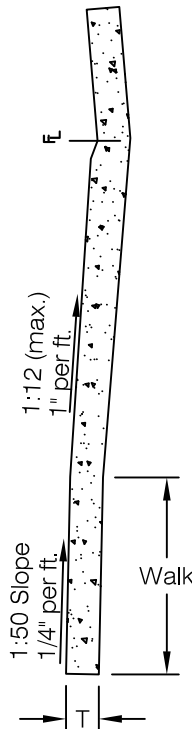
1. See LCUASS Drawing Series 707 for driveway width.
2. Concrete class per LCUASS Section 22
3. Rough broom finish full width of ramp and wings. Trowel and use light hair broom finish for sidewalk area
4. T = 6' for residential and 8' for commercial
5. 0" curb height. See Section A-A
6. Standard curb and gutter section, See Standard Drawing 701

NOT TO SCALE



TYPE III

DETACHED WALK



SECTIONS A-A

N.T.S.

NOTES:

1. 6' wide pan for residential streets.
2. All intersections to have access ramps.
3. Standard Curb and Gutter Section, See Standard Drawing 701
4. 0" Curb Height, See Section A-A
5. All of these pedestrian improvements shall be in ROW or a pedestrian or public access easement.
6. Detectable Warning to extend the full width of the ramp and be 2'-0" in the direction of travel. Maximum slope in the direction of travel shall be no more than 5.0 percent (1:20). Material to be approved by local engineer
7. T = 6" for residential and 8" for commercial.
8. Distance from back of curb to the beginning of Detectable Warning cannot be greater than 5'-0"

NOT TO SCALE

DRIVEWAY WIDTHS

CLASSIFICATION	APPROACH TYPE	MINIMUM WIDTH	MAXIMUM WIDTH
RESIDENTIAL:			
Single Family ●	I or II	12'	24' *
Multi Family ●	I, II, III, or IV	24'	36' * *
Commercial	I, II, III, or IV	24'	36' * *
Industrial	I, II, III, or IV	24'	36'

● High volume driveways (Type III or IV) allowed for 350 or greater trip ends/day.

* 30' maximum for 3 car garages.

* * No single opening shall exceed 36'. Wider driveways shall be divided w/a median not less than 6' wide.

STANDARD DRIVEWAY APPROACH (HIGH VOLUME DRIVE TYPE III)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 02/17/15

DRAWING
707.1

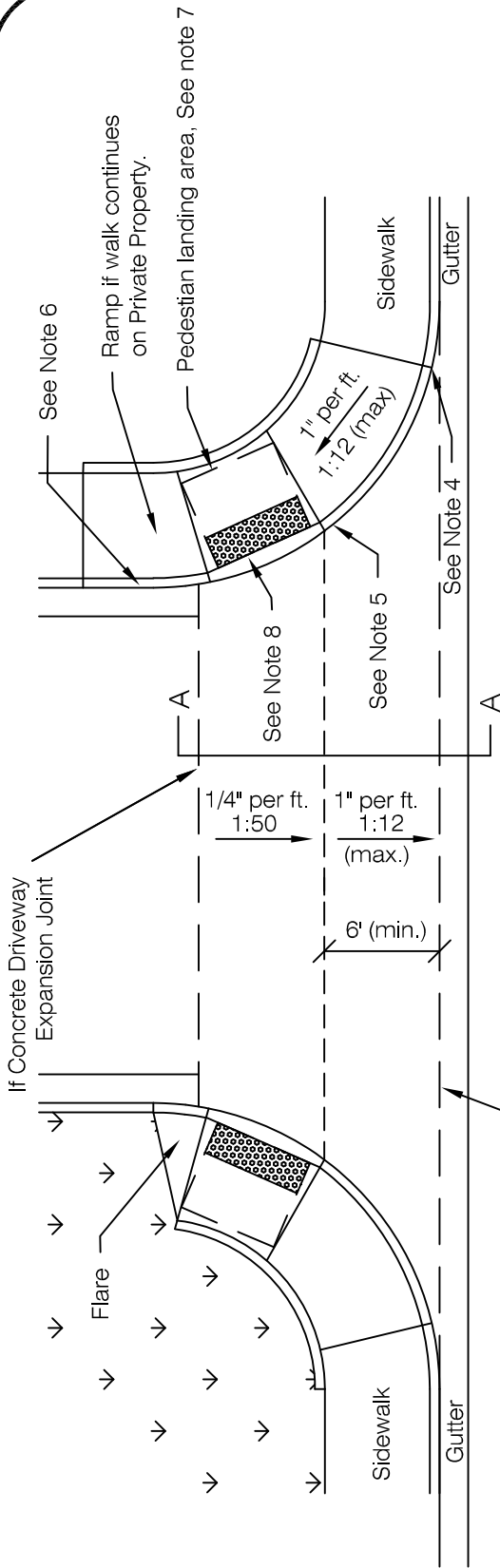
STANDARD DRIVEWAY APPROACH (HIGH VOLUME DRIVE TYPES IV)

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

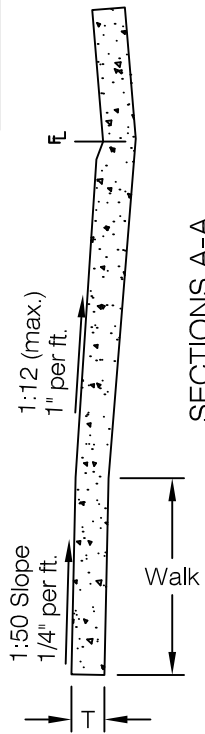
**CONSTRUCTION
DRAWINGS**

REVISION NO: 1
DATE: 08/01/21

**DRAWING
707.2**



TYPE IV ATTACHED WALK



- NOTES:**
1. For construction of access ramps, see Standards detail 1603.
 2. 6' wide pan for residential streets.
 3. All intersections to have access ramps.
 4. Standard Curb and Gutter Section, See Standard Drawing 701.
 5. 0" Curb Height, See Section A-A
 6. All of these pedestrian improvements must be in ROW or a pedestrian or public access easement.
 7. Pedestrian landing area, minimum required 4 ft length x 4 ft width, max slope in any direction is 1:50 or 1/4" per foot.
 8. Detectable Warning to extend the full width of the landing area and be 2.0' in the direction of travel beginning 6" from flowline. Material to be approved by the local engineer.
 9. T = Concrete thickness, 6" for Residential and 8" for Commercial

NOT TO SCALE

DRIVEWAY WIDTHS

CLASSIFICATION	APPROACH TYPE	MINIMUM WIDTH	MAXIMUM WIDTH
RESIDENTIAL:			
Single Family ●	I or II	12'	24' *
Multi Family ●	I, II, III, or IV	24'	36' * *
Commercial	I, II, III, or IV	24'	36' * *
Industrial	I, II, III, or IV	24'	36'

- High volume driveways (Type III or IV) allowed for 350 or greater trip ends/day.
- * 30' maximum for 3 car garages.
- * * No single opening shall exceed 36'. Wider driveways shall be divided w/a median not less than 6' wide.

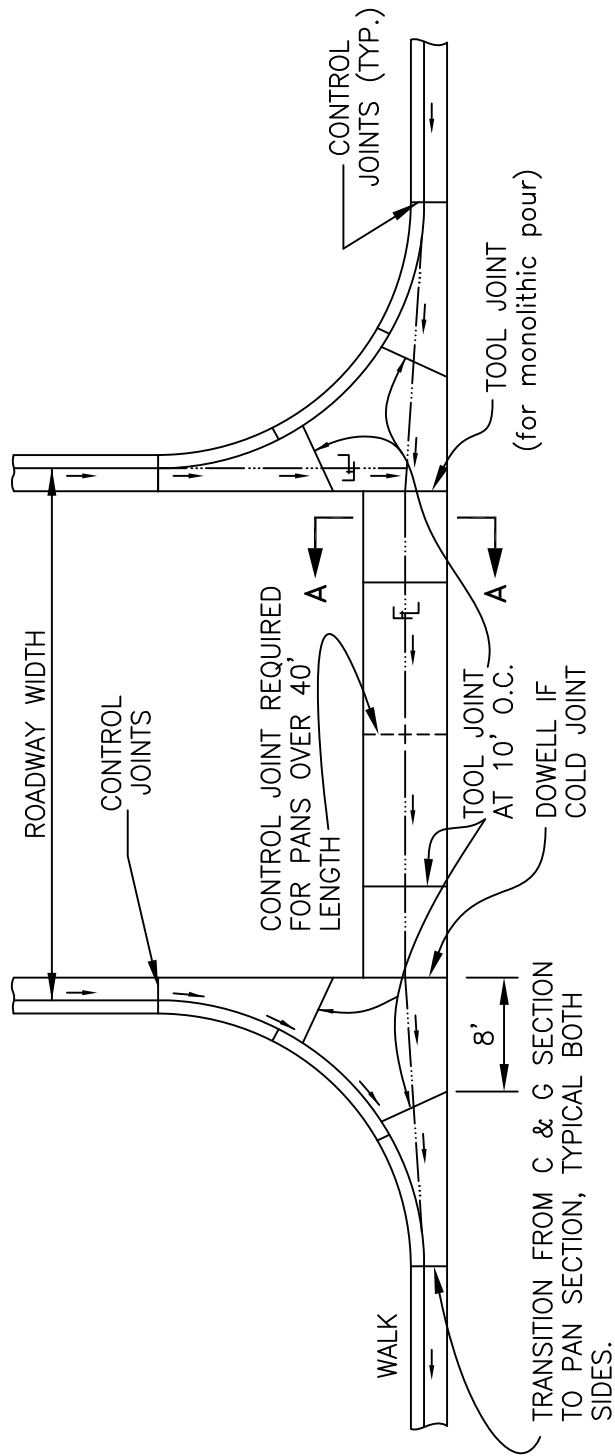
STREET INTERSECTION CROSSPAN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

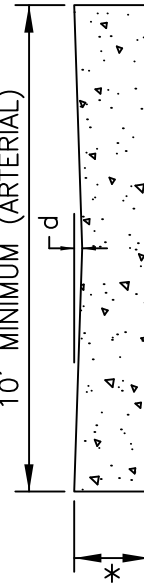
REVISION NO: 2
DATE: 08/01/21

DRAWING
708



PLAN VIEW

6' MINIMUM (LOCAL)
8' MINIMUM (COLLECTOR)
10' MINIMUM (ARTERIAL)



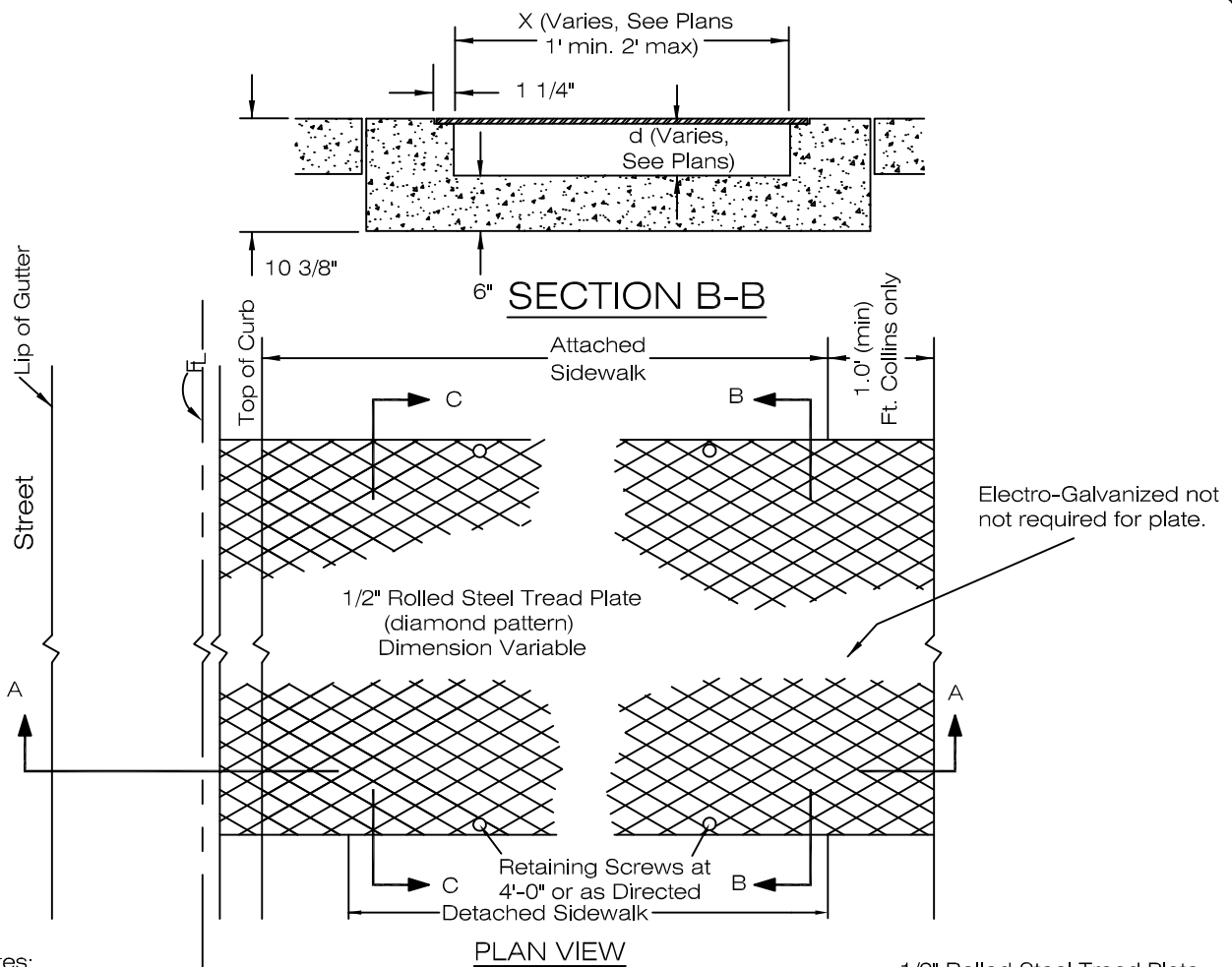
* 8" MIN. FOR RESIDENTIAL; USE CONCRETE PAVEMENT DESIGN + 1/2" FOR COLLECTOR & ARTERIALS.

SECTION A-A

NOTE: ALL INTERSECTIONS TO HAVE ACCESS RAMPS

PARALLEL STREET CLASSIFICATION	W CROSS PAN WIDTH	LOVELAND DEPTH OF INVERT		FT. COLLINS DEPTH OF INVERT
		d (MIN.)	d (MAX.)	
Arterial	10'	1 1/4"	2 1/2"	1 1/2"
Collector	8'	1"	2"	1 1/8"
Local	6' **	3/4"	1 1/2"	7/8"

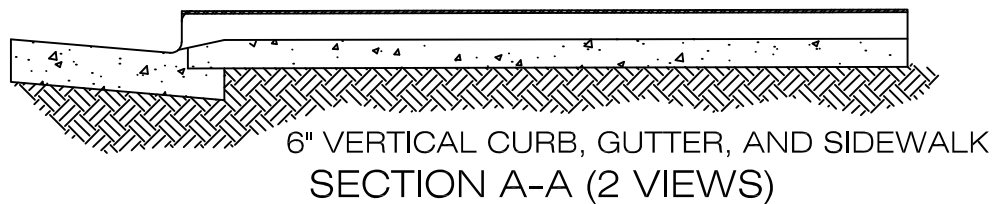
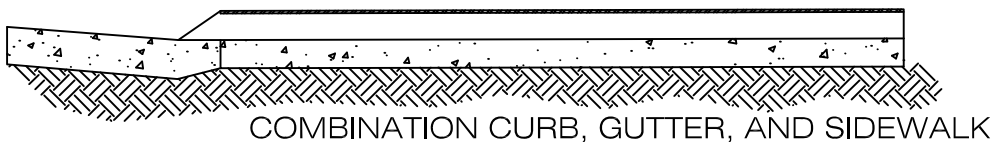
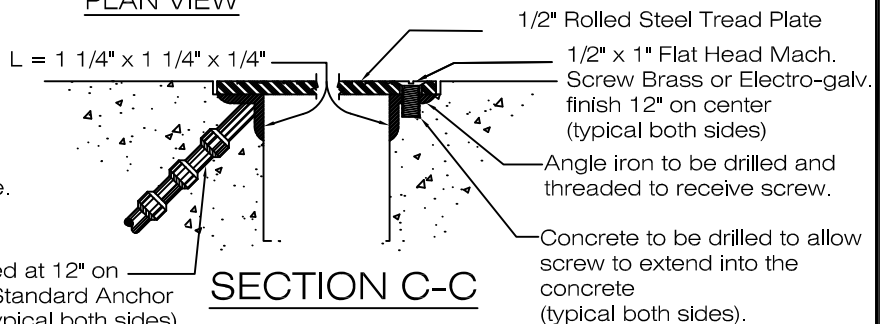
** 8' MIN. WIDTH WHERE CROSSING A COLLECTOR ROADWAY.



Notes:

1. Length of steel plate varies.
2. Chase and cover plate run from Right of Way line to flow line unless approved by the Engineer. With curb walk, cover plate extends from property line to top of walk face.

3" #4 Bar Welded at 12" on center, Nelson Standard Anchor or equivalent. (typical both sides)



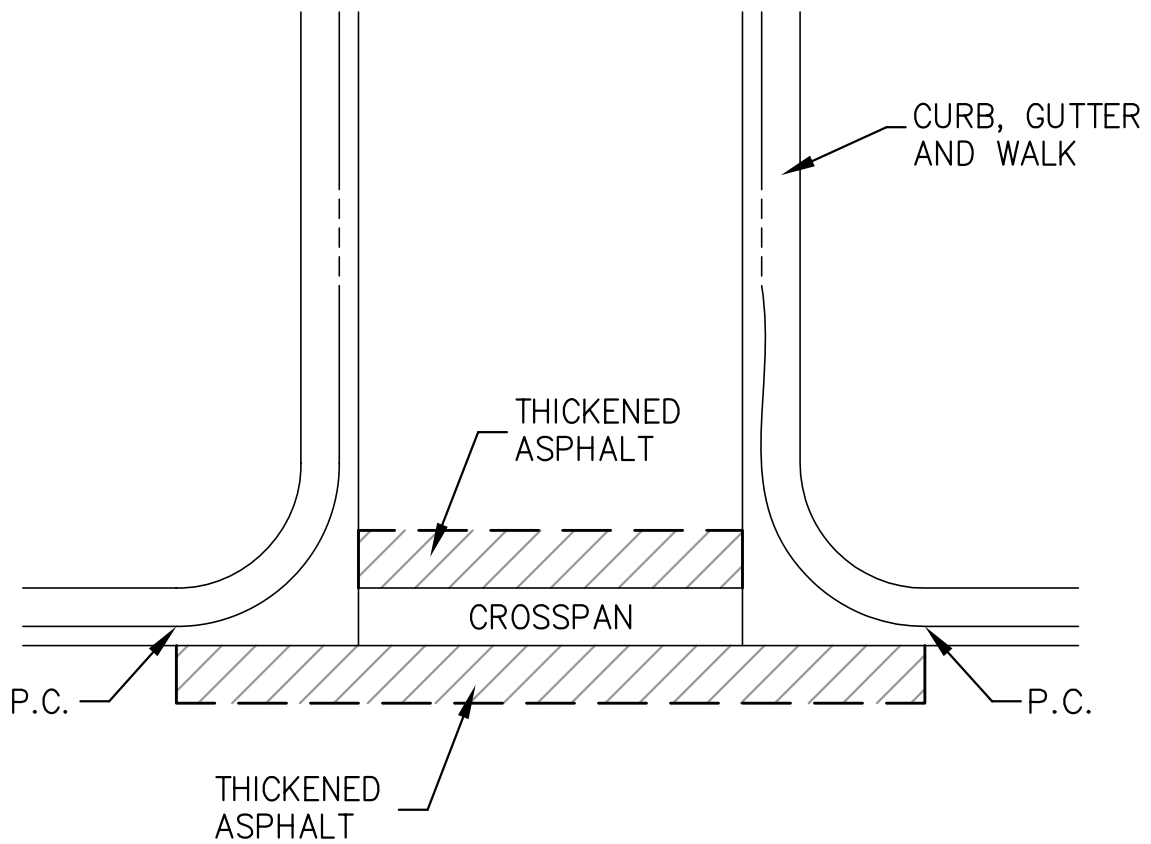
STANDARD DETAILS FOR DRAINAGE UNDER SIDEWALK

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

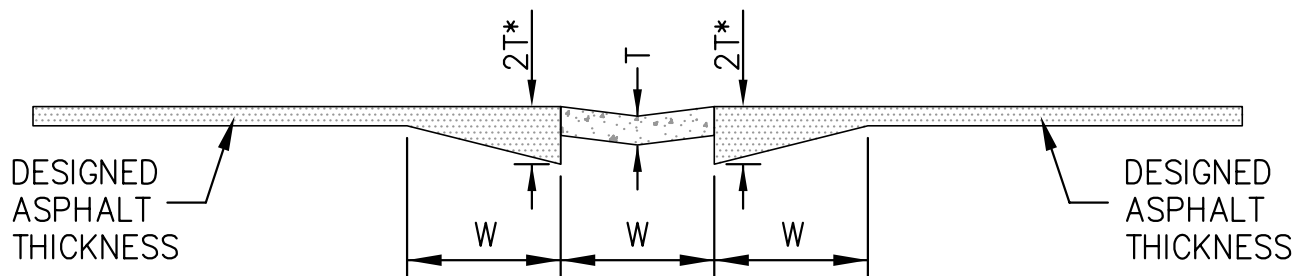
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 08/01/21

DRAWING
709



T = THICKNESS OF CROSSSPAN
 W = WIDTH OF CROSSSPAN



*-If subgrade is flyash treated, use T instead of 2T.

ASPHALT PAVING DETAIL (CROSSSPAN)

LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS

CONSTRUCTION
 DRAWINGS

REVISION NO: 1
 DATE: 04/01/07

DRAWING
 710

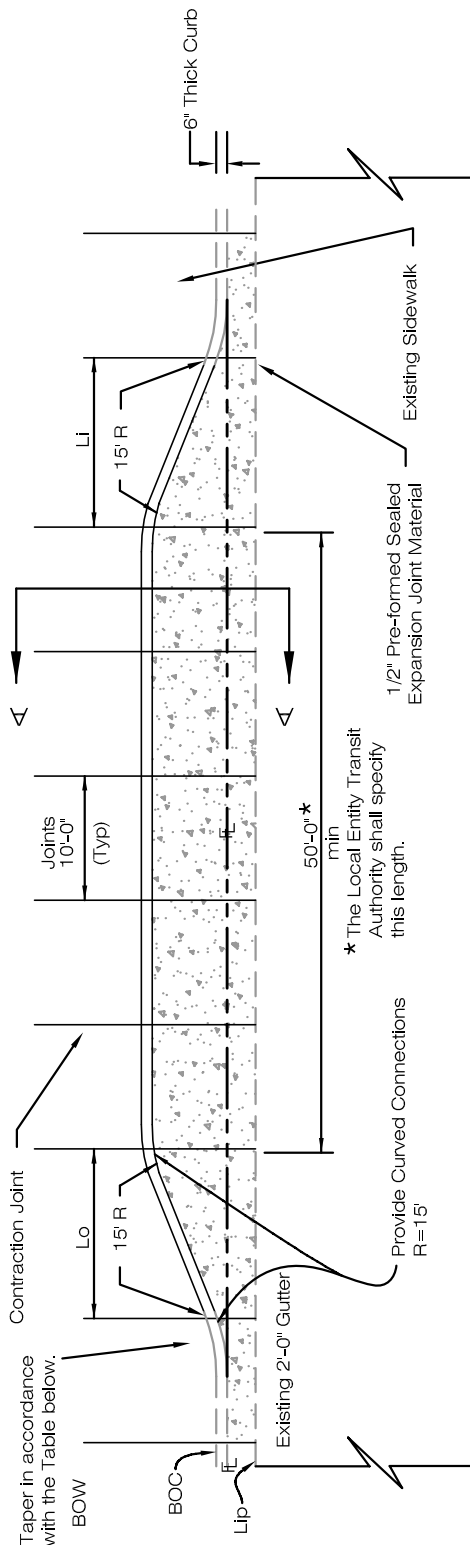
BUS BAY AND STOP STANDARD

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

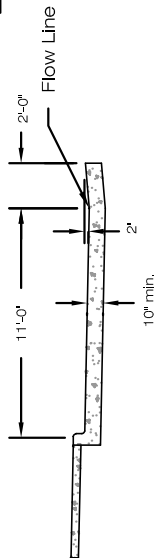
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 04/01/07

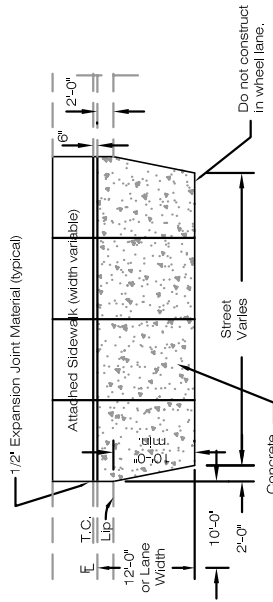
DRAWING
711



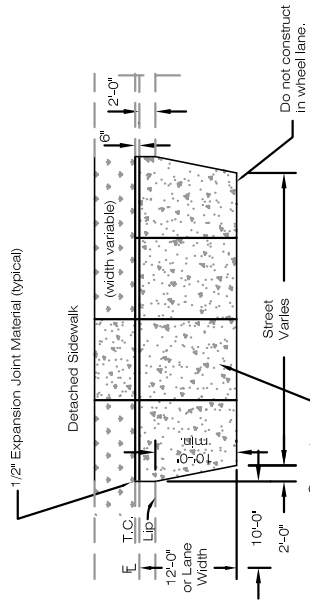
ASPHALT BUS BAY



SECTION A-A



CONCRETE BUS PAD - ATTACHED



CONCRETE BUS PAD - DETACHED

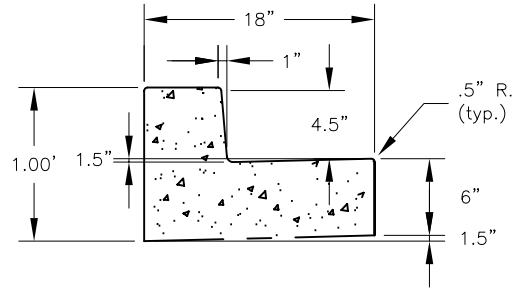
BUS STOP

BUS BAY TRANSITION LENGTHS		
SPEED LIMIT	LEAD IN LENGTH (LI) (FT.)	LEAD OUT LENGTH (Lo) (FT.)
<35	60	60
40	100	70
45	150	80
50	200	90
55	250	100

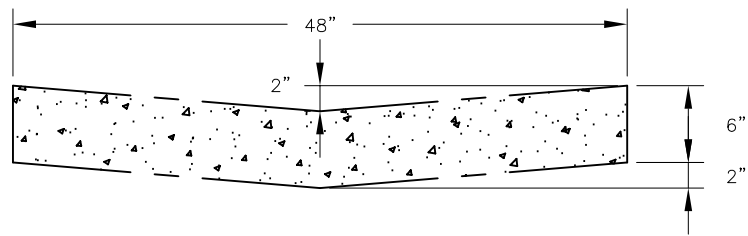
- NOTE:
1. Length of bus pad varies as directed by the Local Entity.
2. All pads shall be a minimum of 10" thick concrete.

LOVELAND (AFFORDABLE HOUSING ONLY)

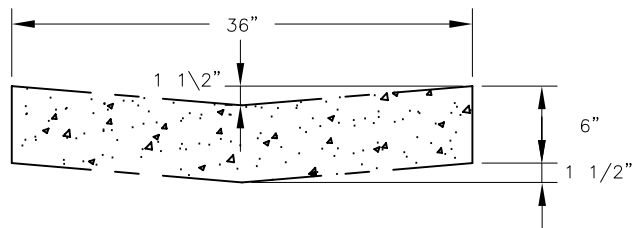
NARROW VERTICAL



VALLEY WALK
4' WIDE



VALLEY WALK
3' WIDE



CONCRETE DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

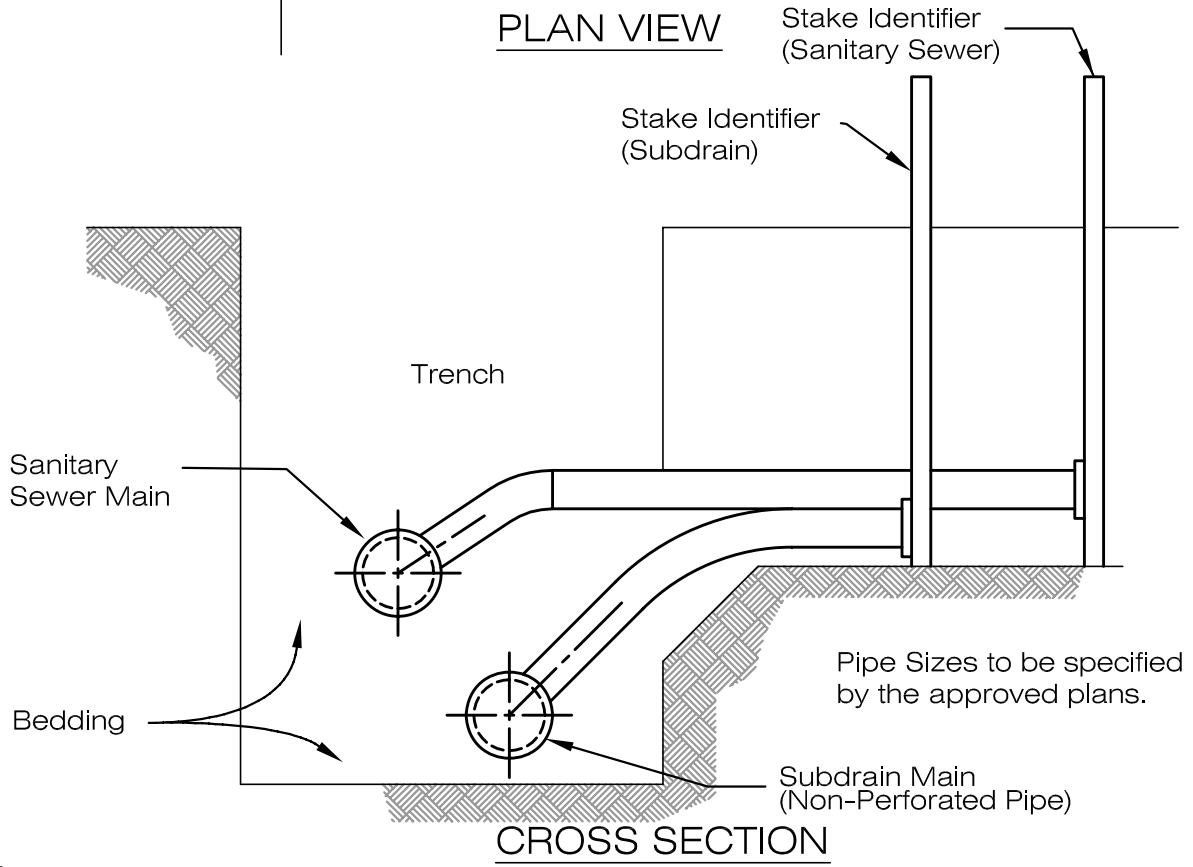
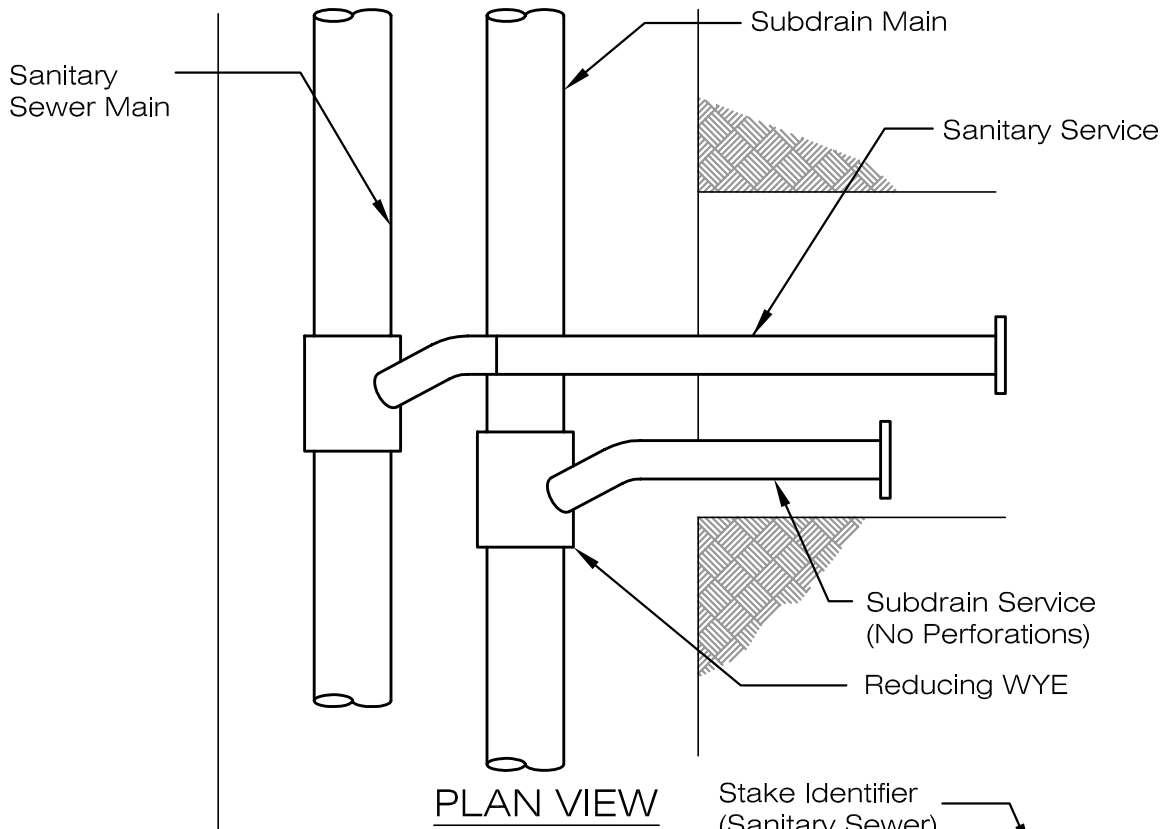
REVISION NO:

DATE: 08/04/99

DRAWING

712L

FORT COLLINS ONLY



SUBDRAIN SERVICE DETAIL

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

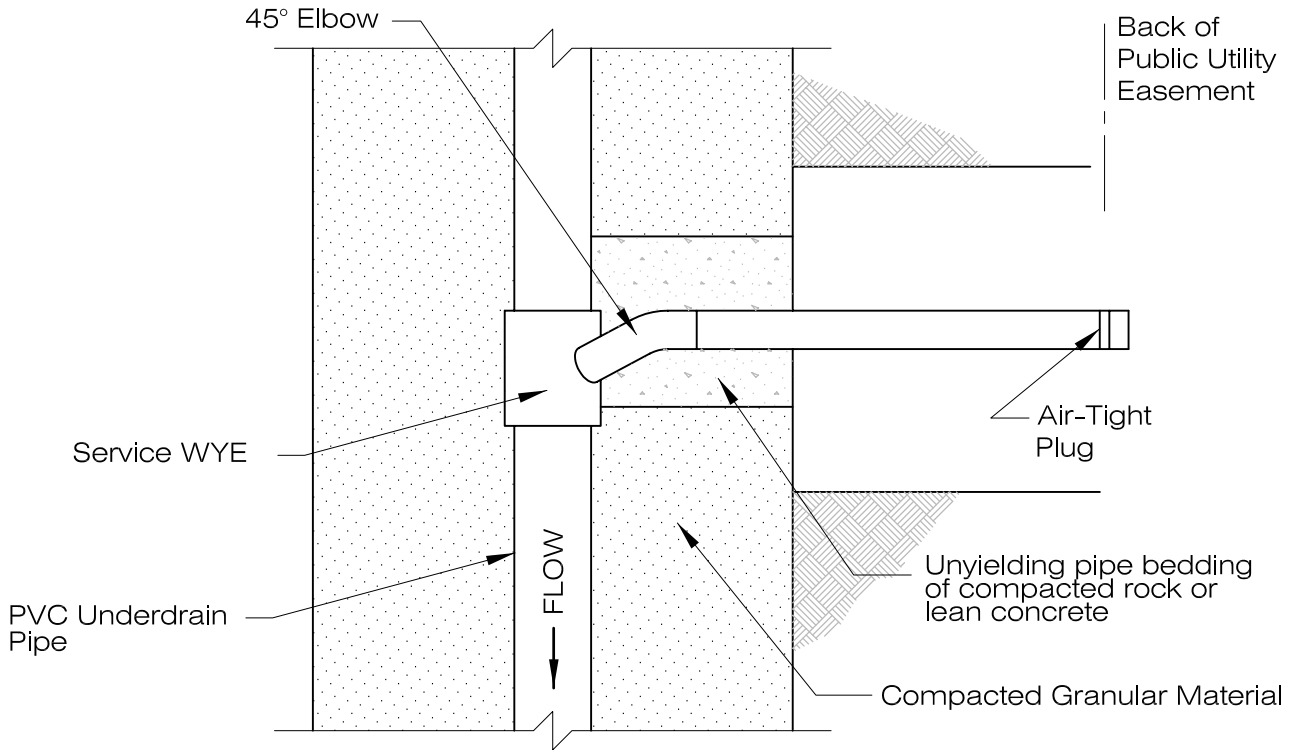
REVISION NO:

DATE: 04/01/07

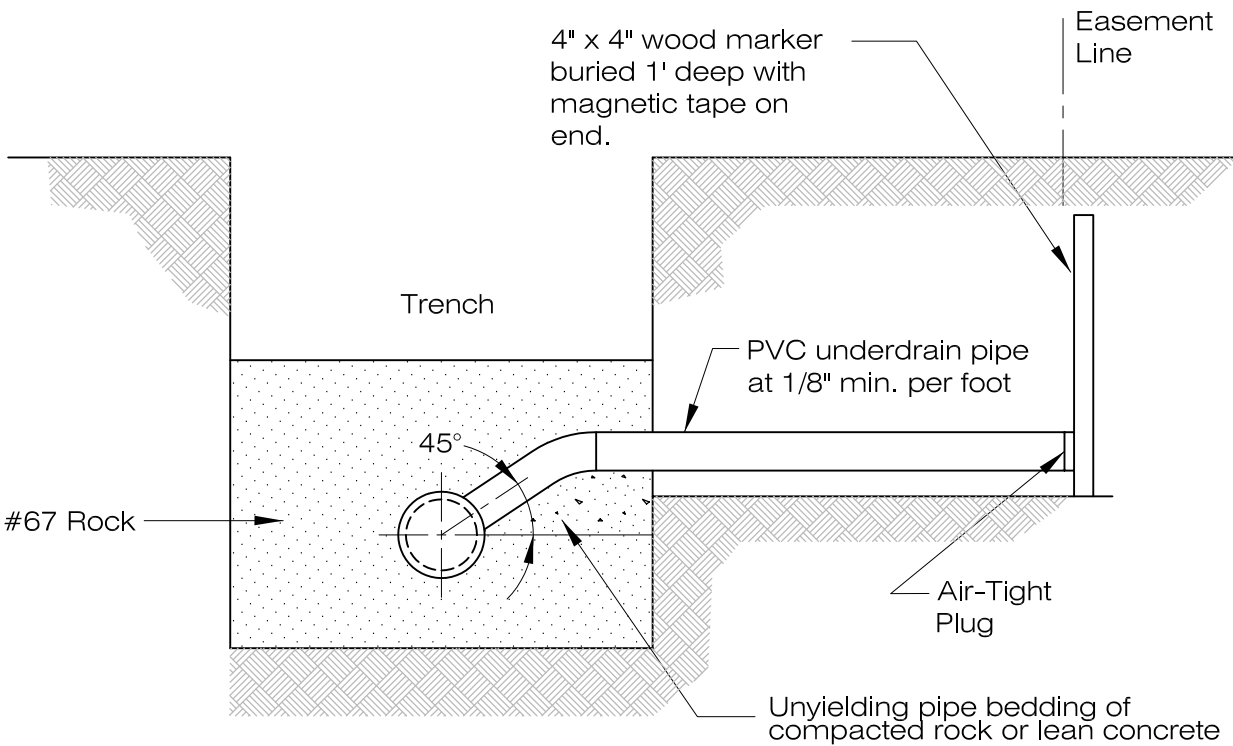
DRAWING

713.1F

LOVELAND ONLY



PLAN VIEW



CROSS SECTION

STANDARD UNDERDRAIN SERVICE CONNECTION

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

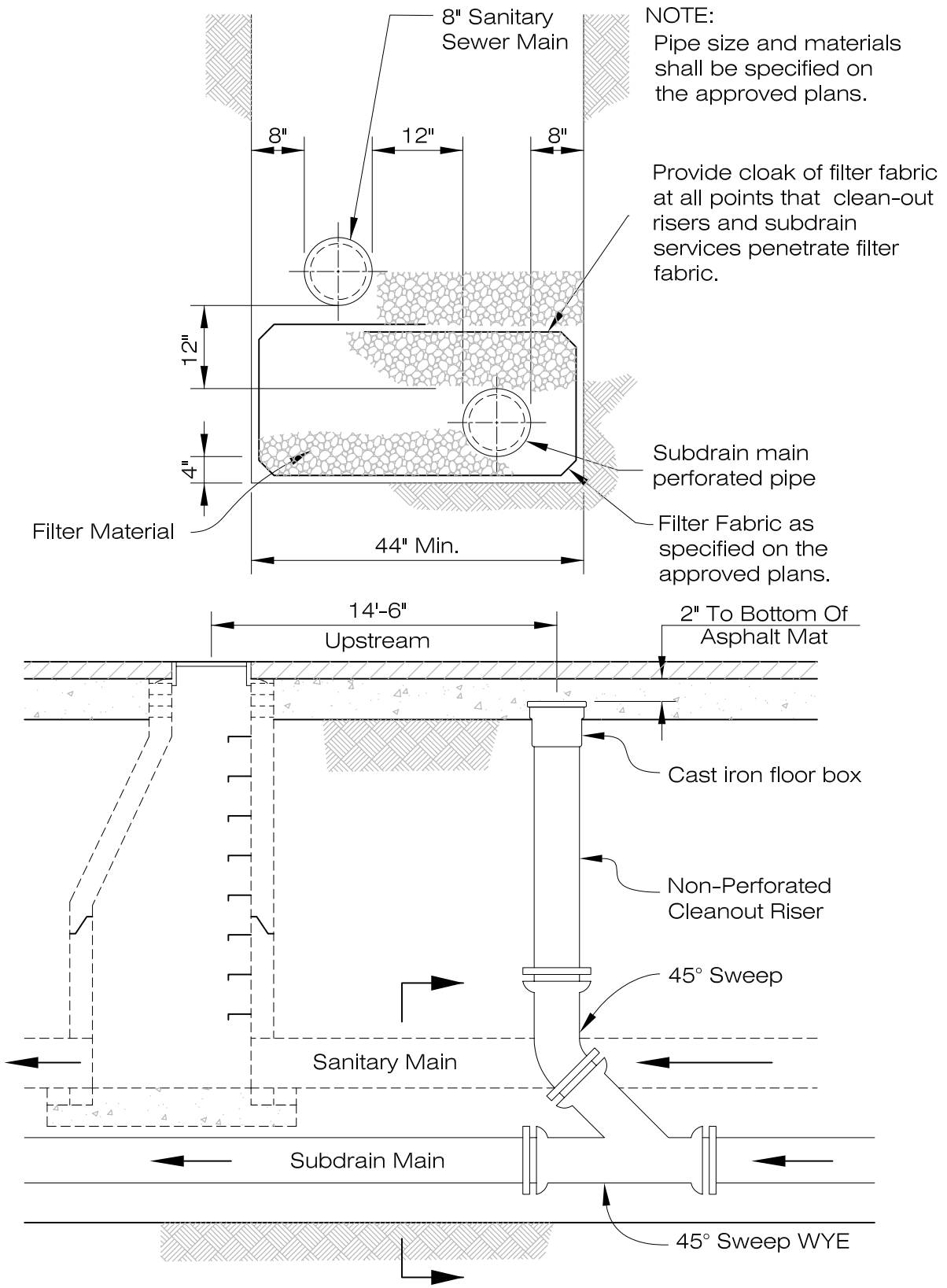
REVISION NO:

DATE: 10/25/01

DRAWING

713.1L

FORT COLLINS ONLY



SUBDRAIN MAIN - INSTALLATION DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

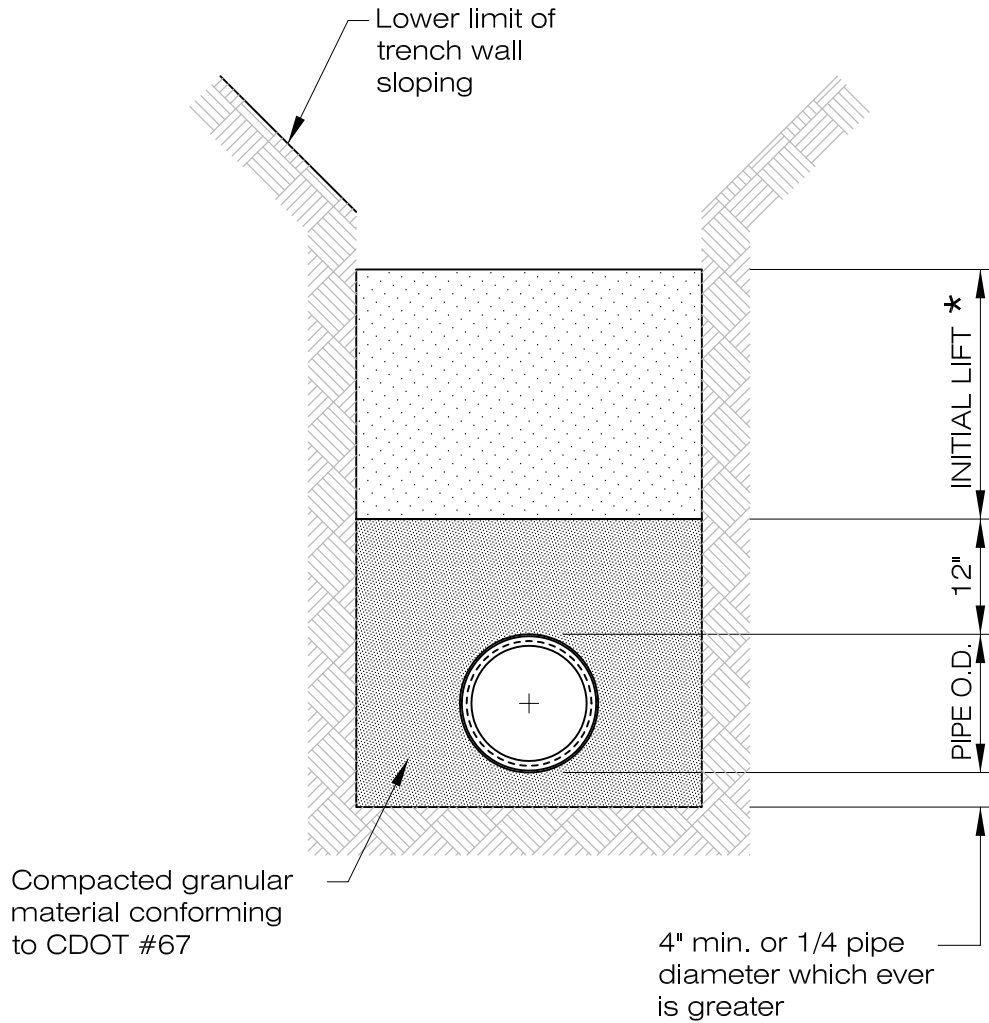
REVISION NO:

DATE: 10/25/01

DRAWING

713.2F

LOVELAND ONLY



* Initial lift shall not exceed 3 feet in depth.

NOTE: All underdrain mains will be pressure tested and video taped by contractor.

UNDERDRAIN MAIN – BEDDING REQUIREMENTS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWING

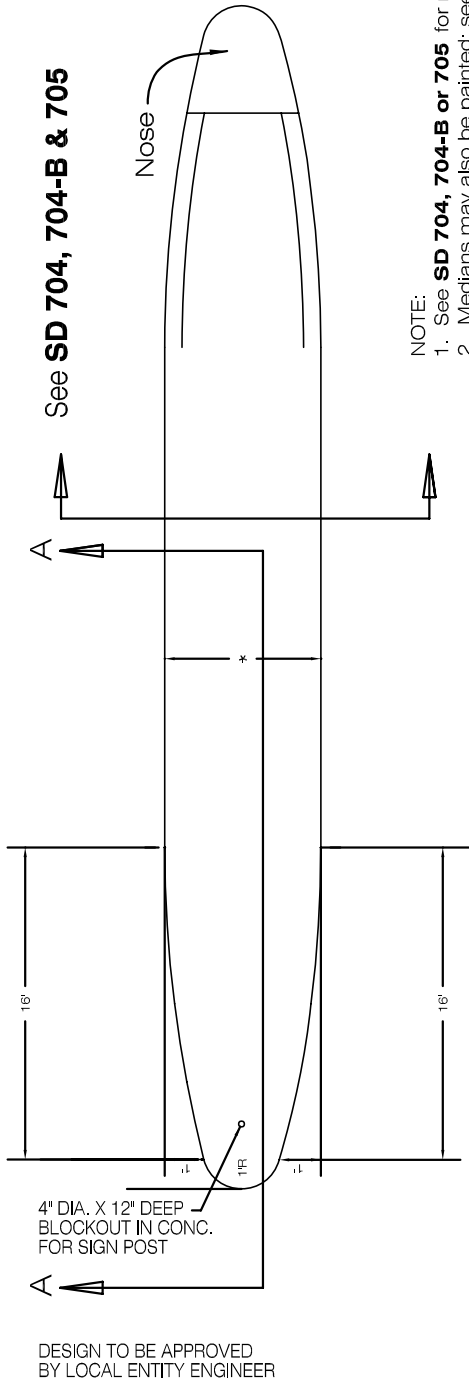
REVISION NO:

DATE: 10/25/01

DRAWING

713.2L

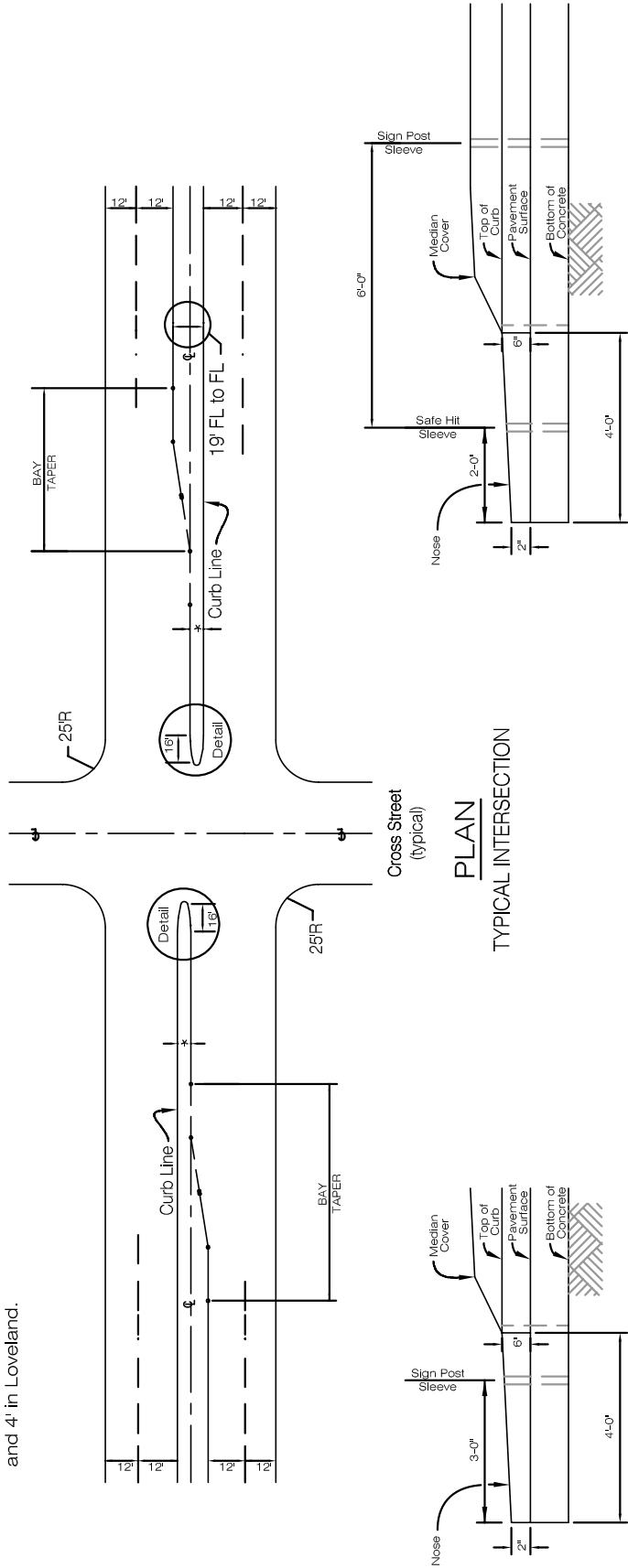
See SD 704, 704-B & 705



NOTE:

1. See SD 704, 704-B or 705 for more details.
2. Medians may also be painted; see Chapter 7.

* 7' (4' Retrofit) in Fort Collins and 4' in Loveland.



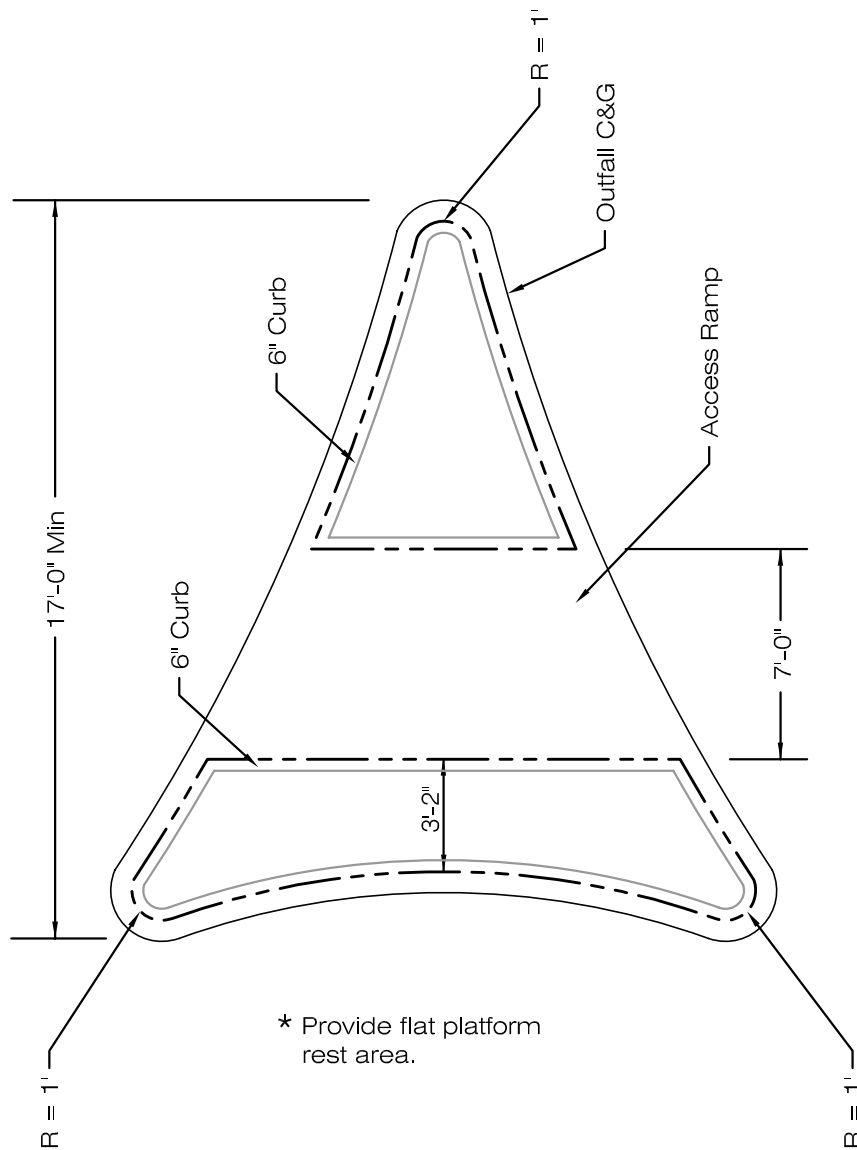
STANDARD DETAILS FOR RAISED MEDIAN GEOMETRY

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWING

REVISION NO: 1
DATE: 04/01/07

DRAWING
801



FORCED TURN BARRIER (SPLITTER ISLAND)

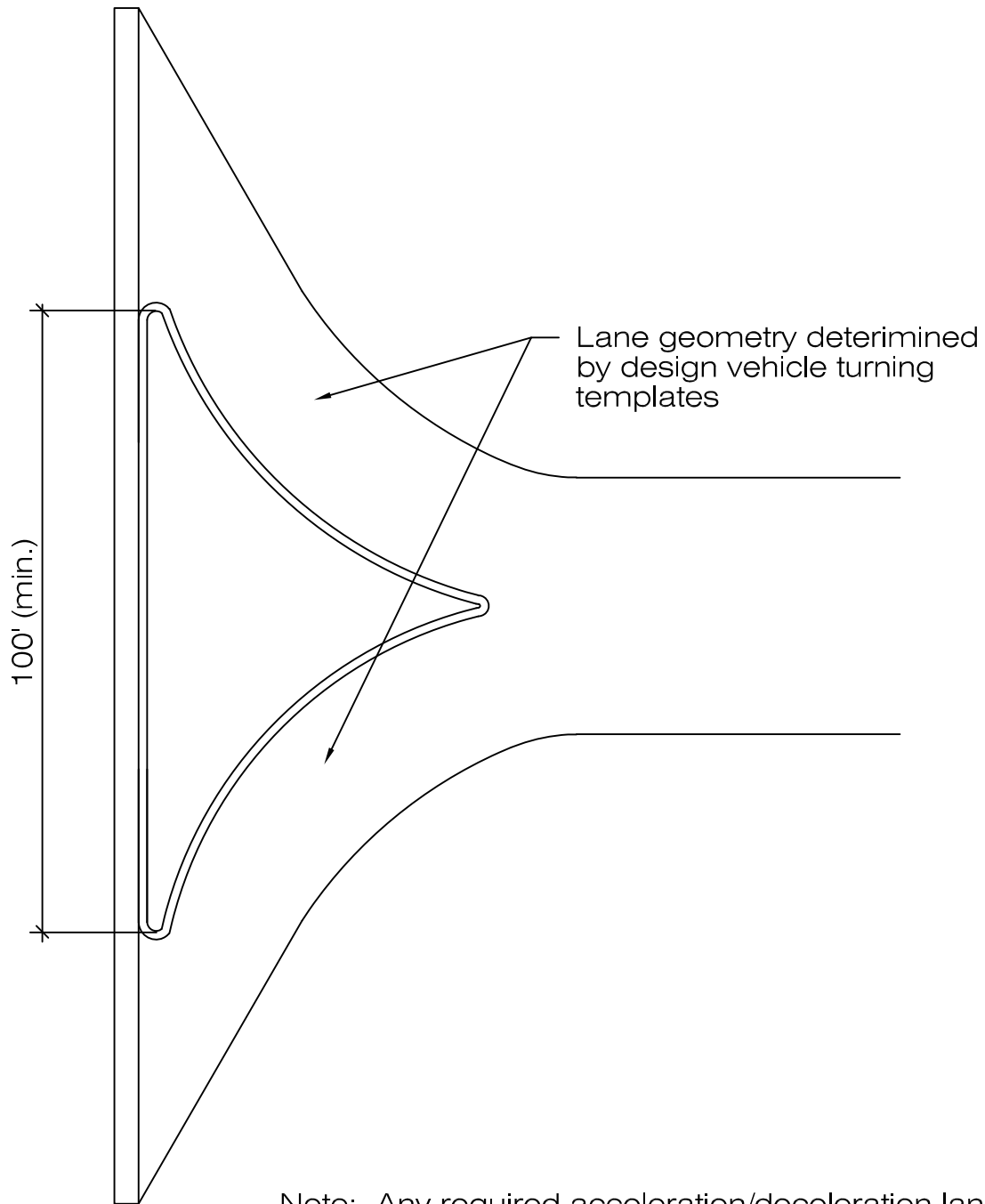
LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS

CONSTRUCTION
 DRAWINGS

REVISION NO: 2
 DATE: 04/01/07

DRAWING
 802

LOVELAND ONLY



Note: Any required acceleration/deceleration lanes at the access to accommodate the geometry.

Right-In Right-Out Access

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

DESIGN
FIGURE

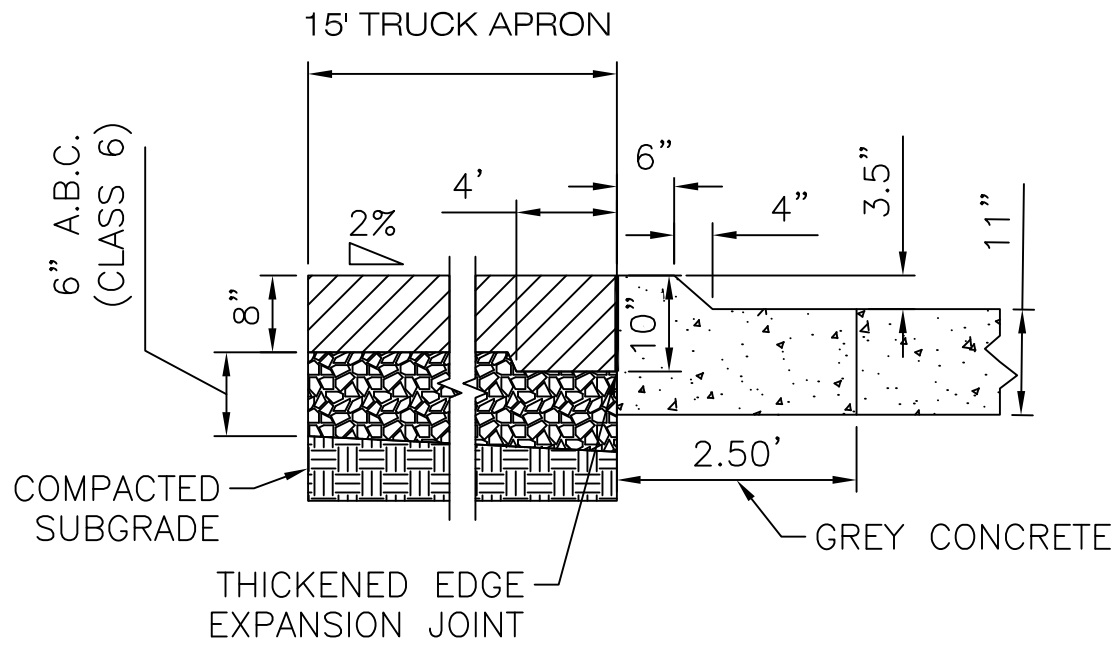
REVISION NO:

DATE: 08/01/21

DRAWING

802.1L

LOVELAND ONLY



Roundabout Truck Apron Curb

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

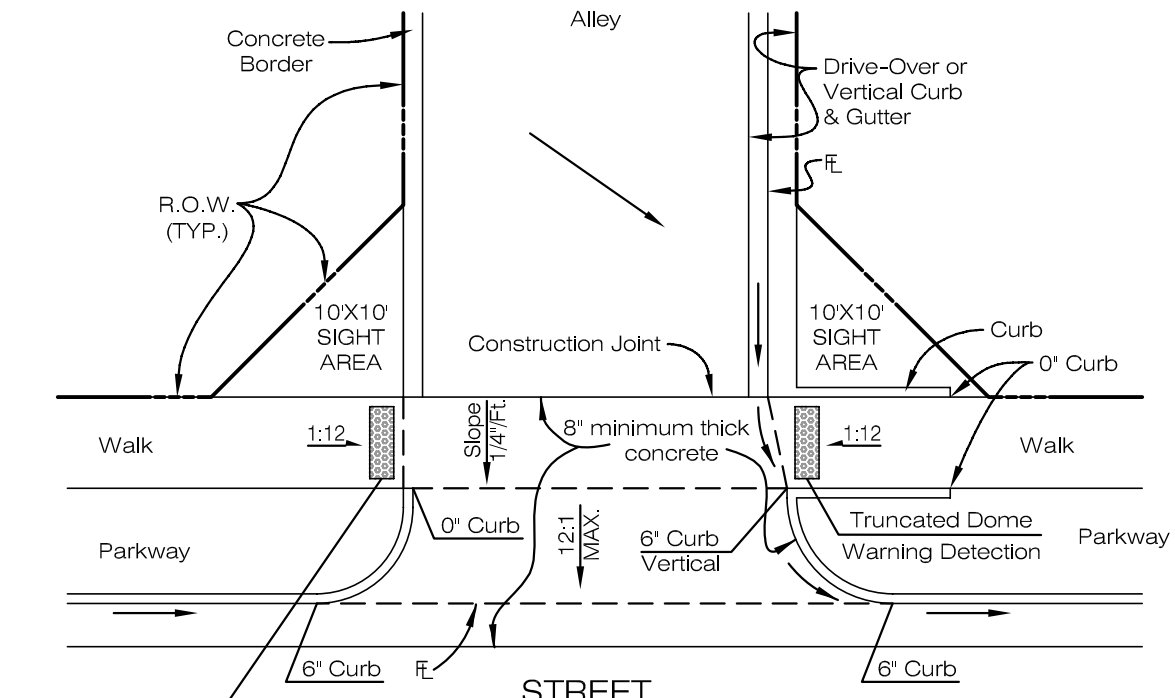
DESIGN
FIGURE

REVISION NO:

DATE: 08/01/21

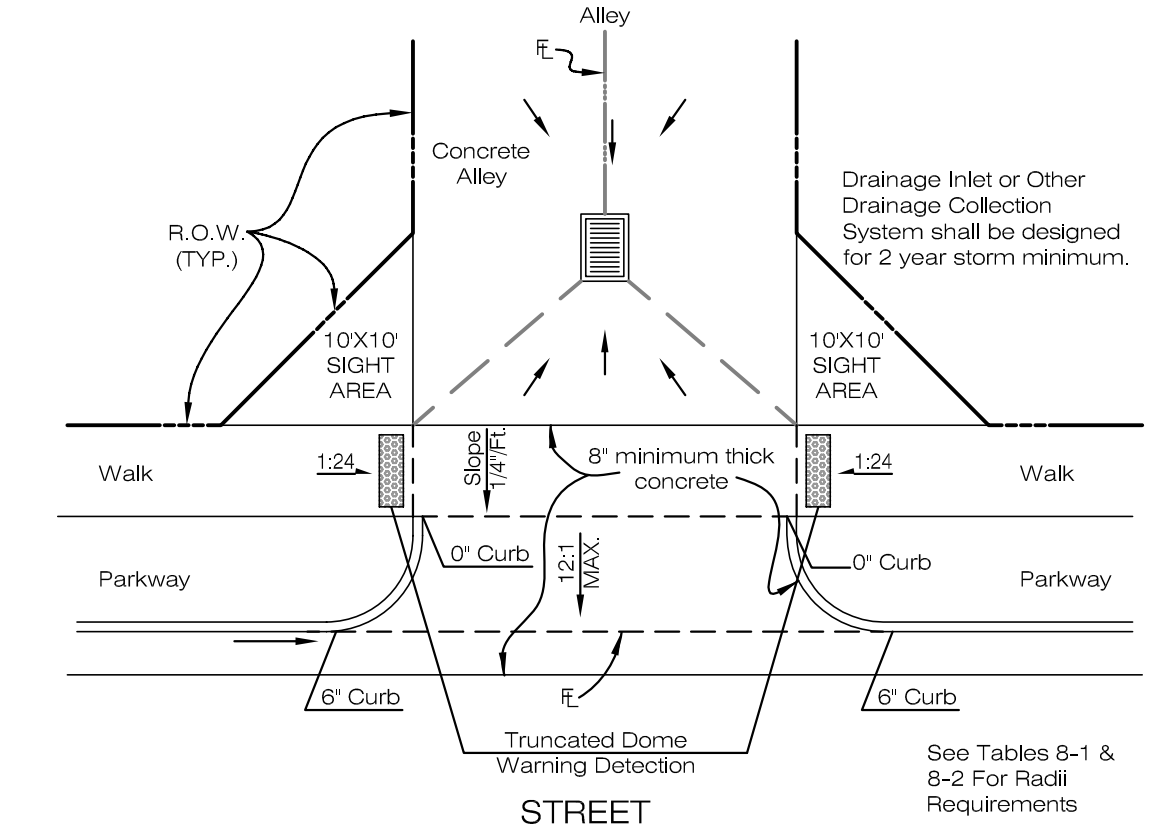
DRAWING

802.2L



ALLEY W/ SIDE DRAINAGE

Drainage May Cross the Walk Up to a Maximum of 0.5 cfs for the Design 2 Year Storm.



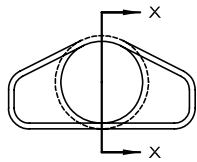
ALLEY W/ CENTER DRAINAGE

Drainage May Not Cross the Walk Unless The Water is Sheet Flow and does not interfere with pedestrian use of walk.

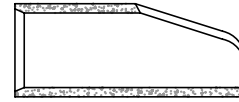
See Tables 8-1 & 8-2 For Radii Requirements

ALLEY INTERSECTIONS

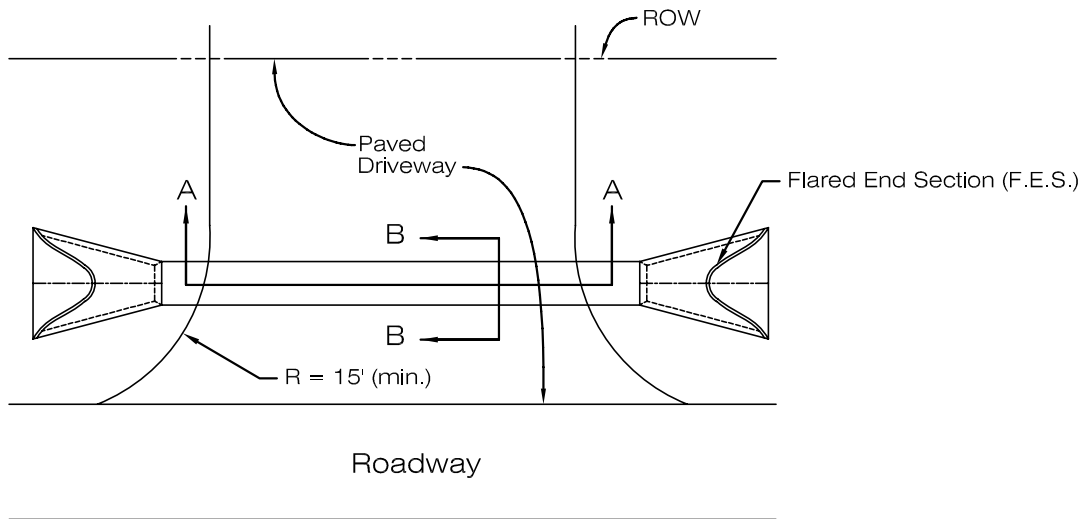
LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 2	DRAWING 803
		DATE: 04/01/07	



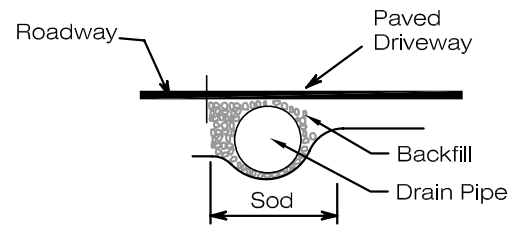
F.E.S. END VIEW



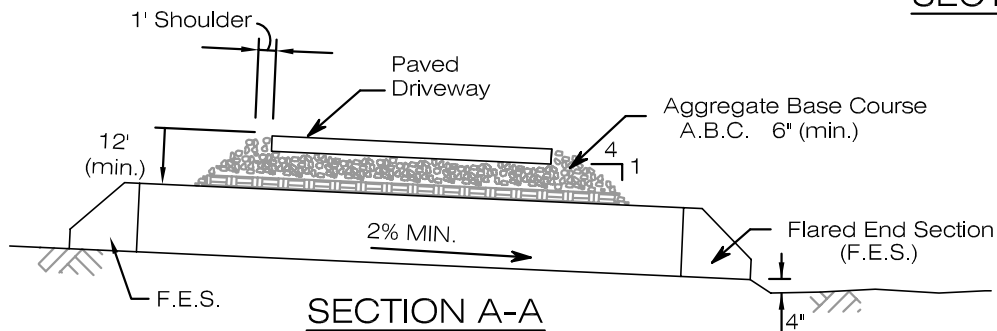
SECTION X-X



PLAN VIEW



SECTION B-B



SECTION A-A

NOTES:

1. Asphalt or concrete driveway.
2. F.E.S. required for each end of pipe. Reinforced concrete F.E.S. req'd. in Ft. Collins City Limits. Drain pipe to be 15" minimum diameter.
3. Ditch must be no more than 4:1 sideslope & sodded throughout.

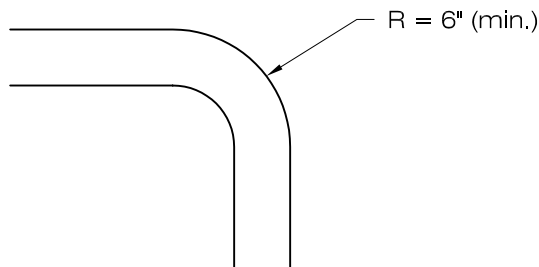
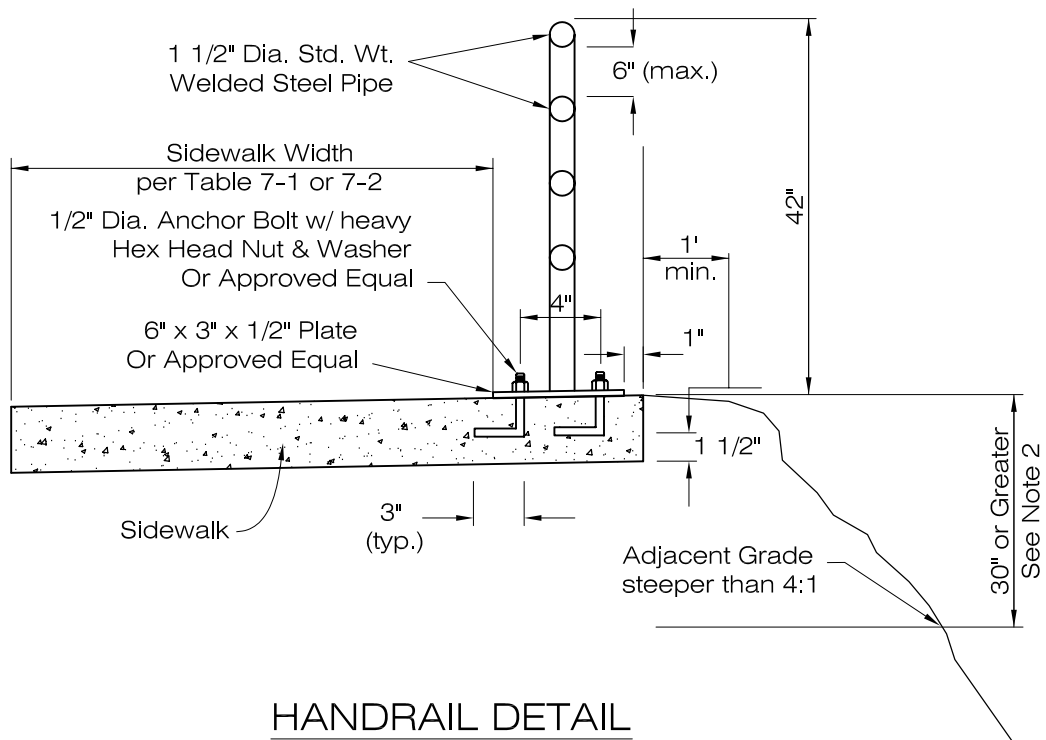
ACCESS ON RURAL ROADWAYS (W/O CURB AND GUTTER)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
901



NOTES:

1. The sidewalk width shall be increased by a minimum of 6" whenever handrail is used.
2. If a sidewalk is more than 30" above the adjacent grade, the handrail shall be used.
3. Open clearance between intermediate rails must be 4" or less.
4. Finish shall be either galvanized or semi-gloss enamel over a shop coat of metal primer.
5. When the slope behind the sidewalk is steeper than 4:1, the handrail must be used.
6. When slope behind sidewalk is less than or equal to 4:1 for a minimum distance of 10', a handrail is not required.

HANDRAIL DETAILS

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

**CONSTRUCTION
DRAWINGS**

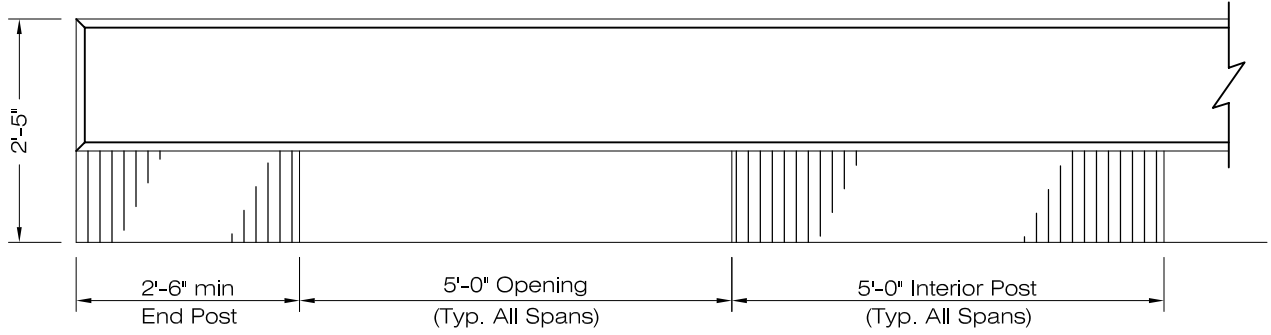
REVISION NO: 1

DATE: 03/01/02

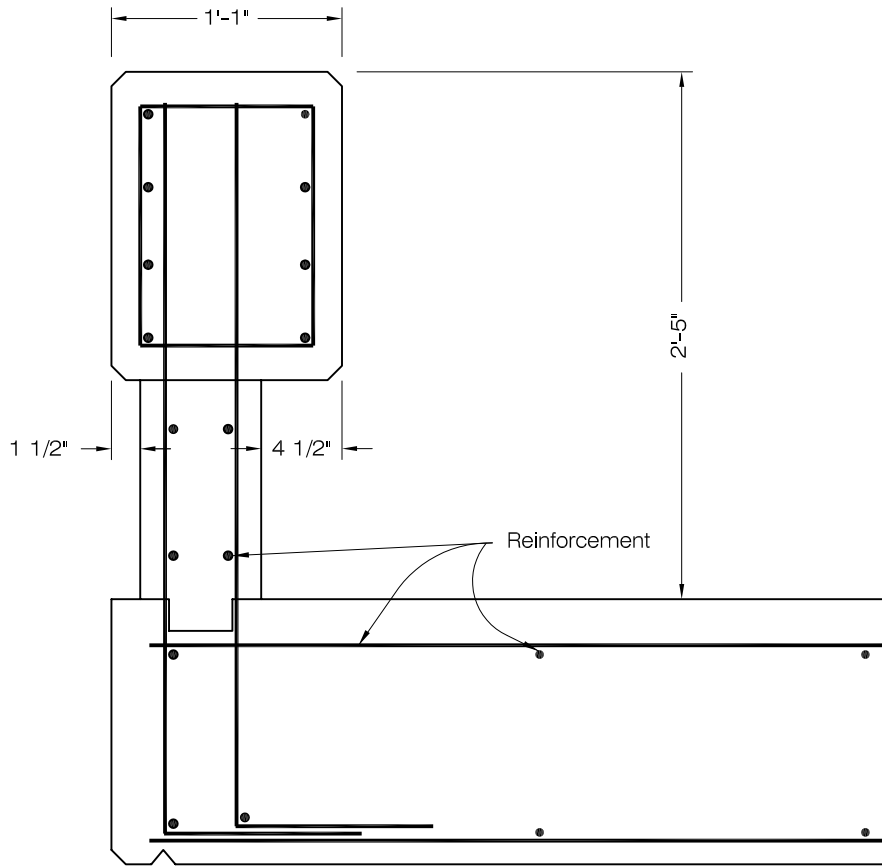
DRAWING

1101

LOVELAND ONLY



Elevation of Traffic Rail



Section

Rail Height (in.)	29	
Test Vehicle (lb.)	1980#- Car	4660#- Car
Impact Speed (mph)	59	59
Impact Angle (degrees)	18.9	25.4

FROM AASHTO ROADWAY GUIDELINE

NOTE: This drawing has been converted from metric to English units.

OKLAHOMA TR-1 BRIDGE RAILING

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

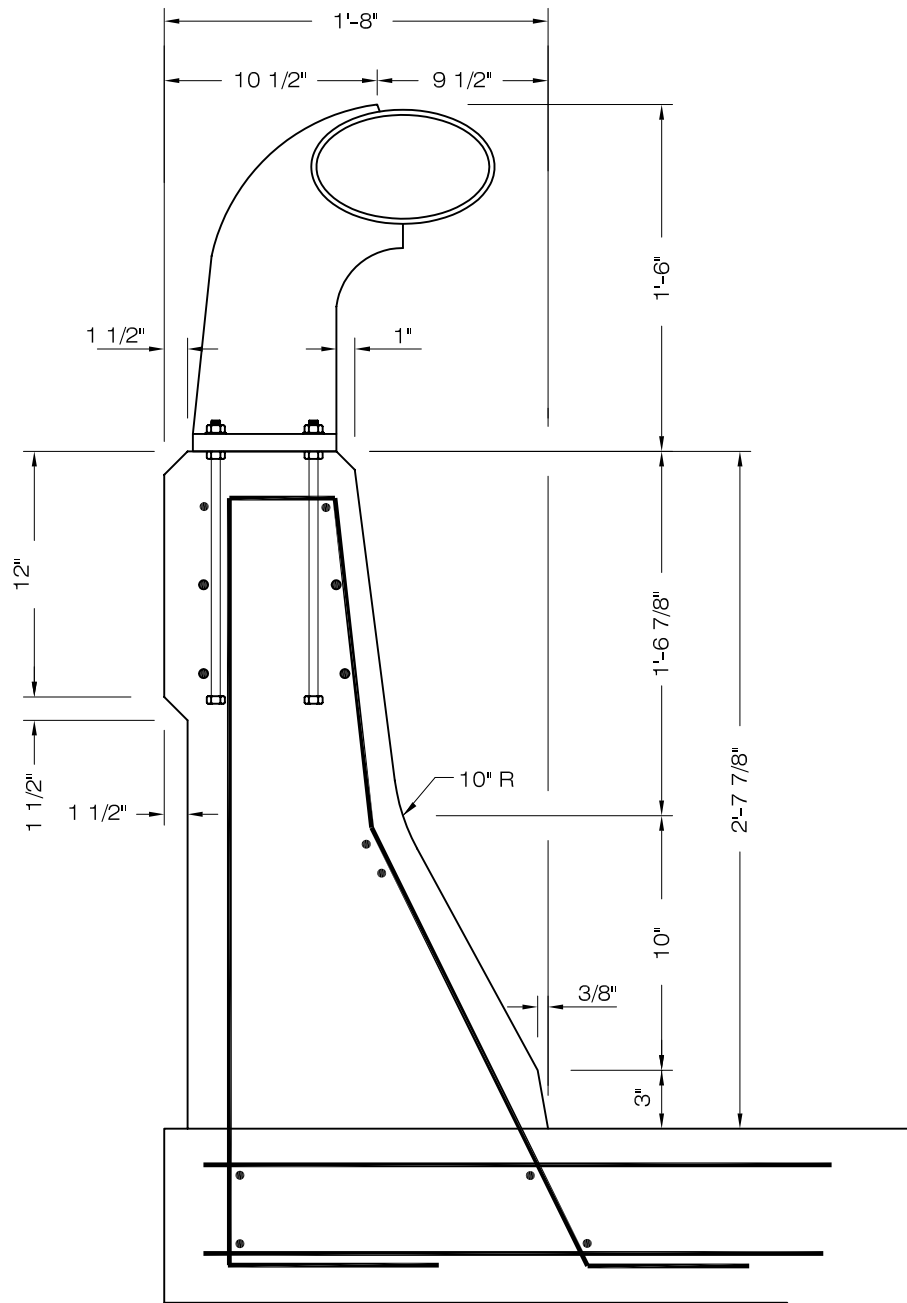
REVISION NO:

DATE: 08/07/00

DRAWING

1102L

LOVELAND ONLY



SECTION

Rail Height (in.)	50
Test Vehicle (lb.)	80,150- Truck
Impact Speed (mph)	48
Impact Angle (degrees)	14.5

FROM AASHTO ROADWAY GUIDELINE

NOTE: This drawing has been converted from metric to English units.

SAFETY-SHAPED CONCRETE BRIDGE RAILING

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

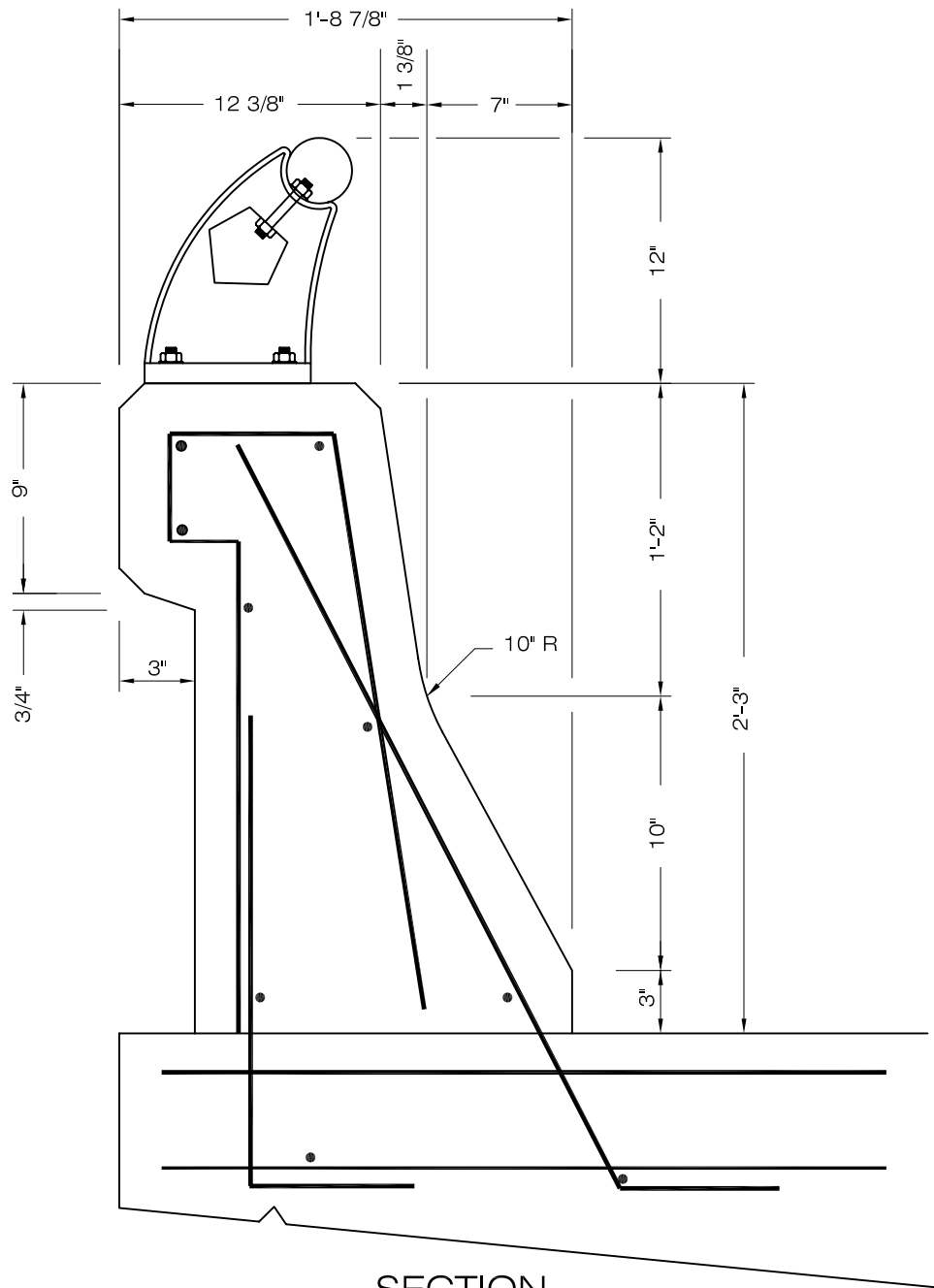
REVISION NO:

DATE: 08/07/00

DRAWING

1103L

LOVELAND ONLY



SECTION

Rail Height (in.)	39		
Test Vehicle (lb.)	1900- Car	4600- Car	40,000- Bus
Impact Speed (mph)	61	62	59
Impact Angle (degrees)	19.3	24.9	16.4

FROM AASHTO ROADWAY GUIDELINE

NOTE: This drawing has been converted from metric to English units.

NEVADA CONCRETE SAFETY SHAPE

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

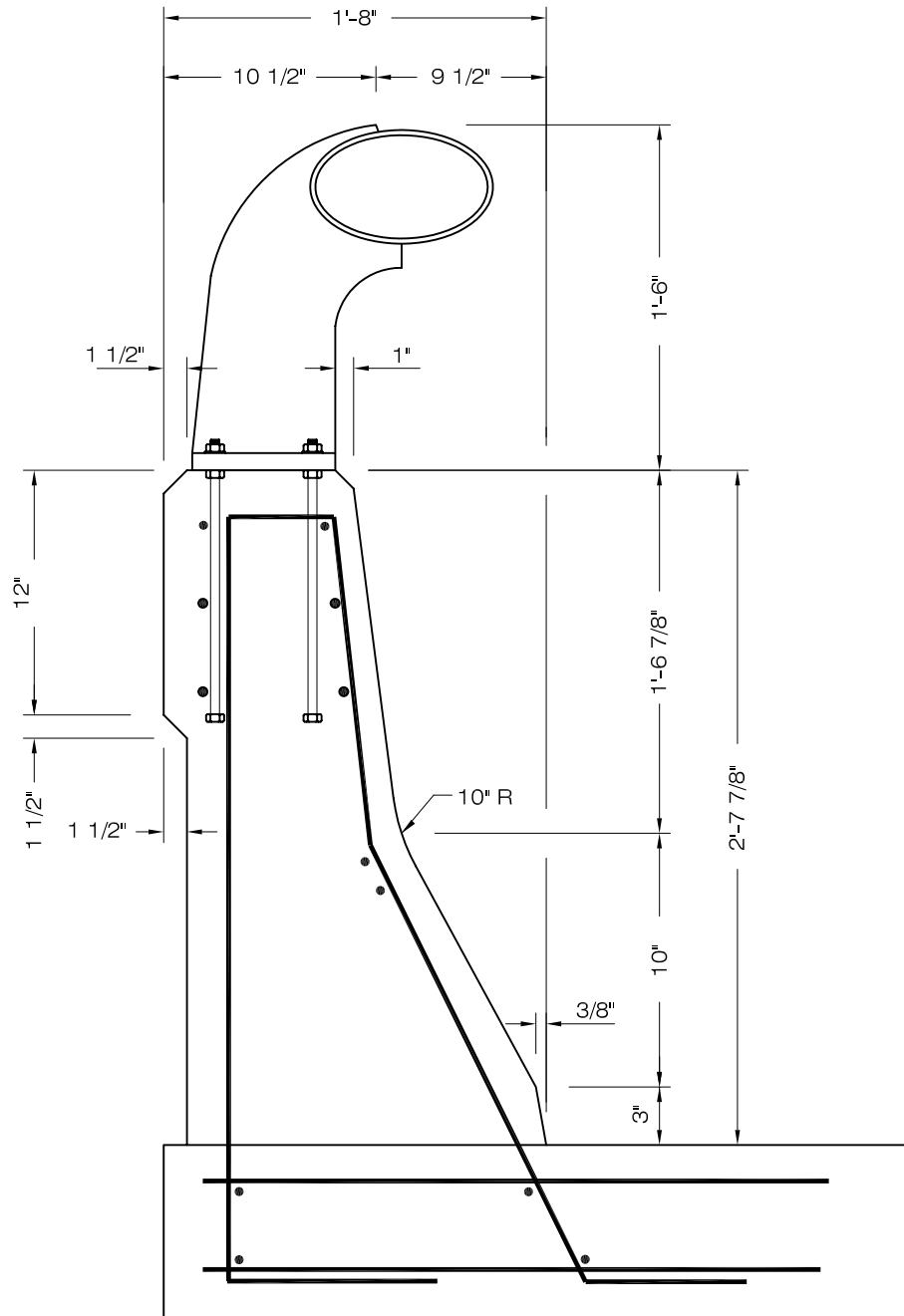
REVISION NO:

DATE: 08/07/00

DRAWING

1104L

LOVELAND ONLY



SECTION

Rail Height (in.)	50
Test Vehicle (lb.)	80,150- Truck
Impact Speed (mph)	48
Impact Angle (degrees)	14.5

FROM AASHTO ROADWAY GUIDELINE

NOTE: This drawing has been converted from metric to English units.

TEXAS TYPE HT

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

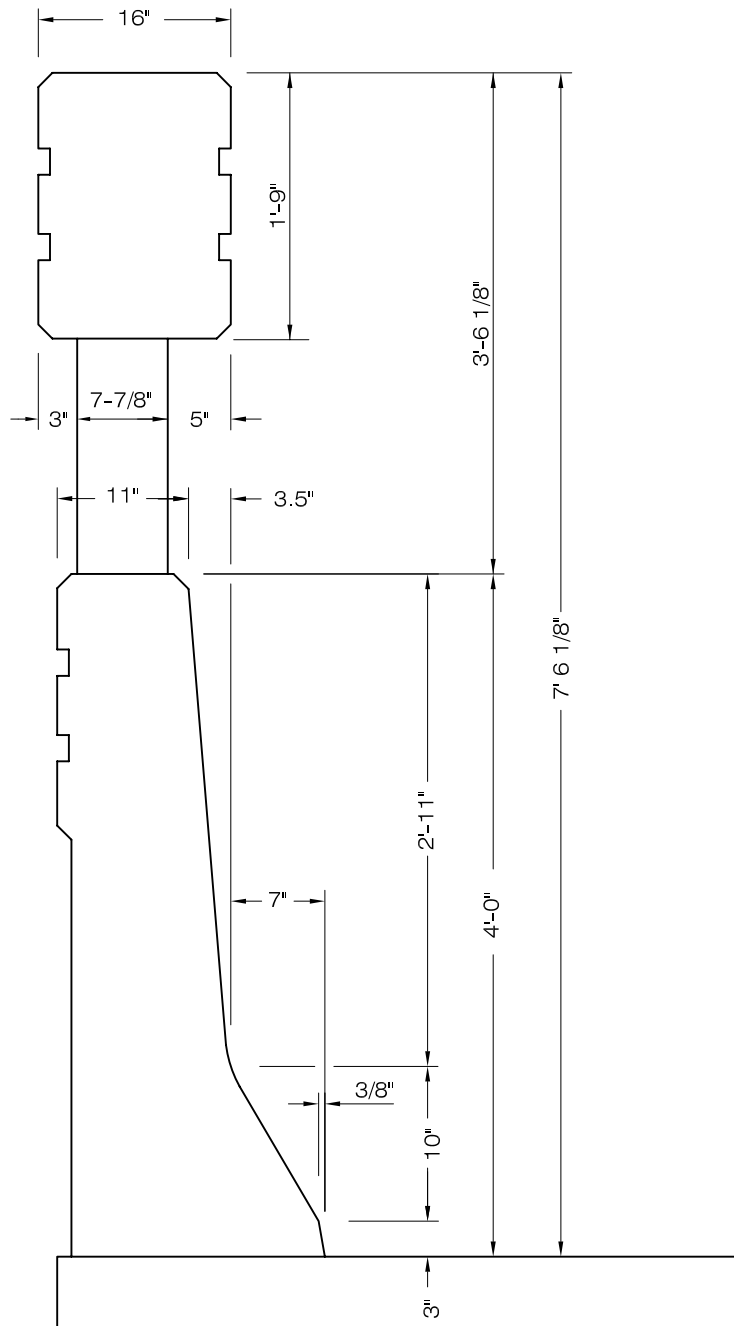
REVISION NO:

DATE: 08/07/00

DRAWING

1105L

LOVELAND ONLY



Rail Height (in.)	98
Test Vehicle (lb.)	80,190 -Tank Type Tractor-Trailer
Impact Speed (mph)	52
Impact Angle (degrees)	15.0

FROM AASHTO ROADWAY GUIDELINE

NOTE: This drawing has been converted from metric to English units.

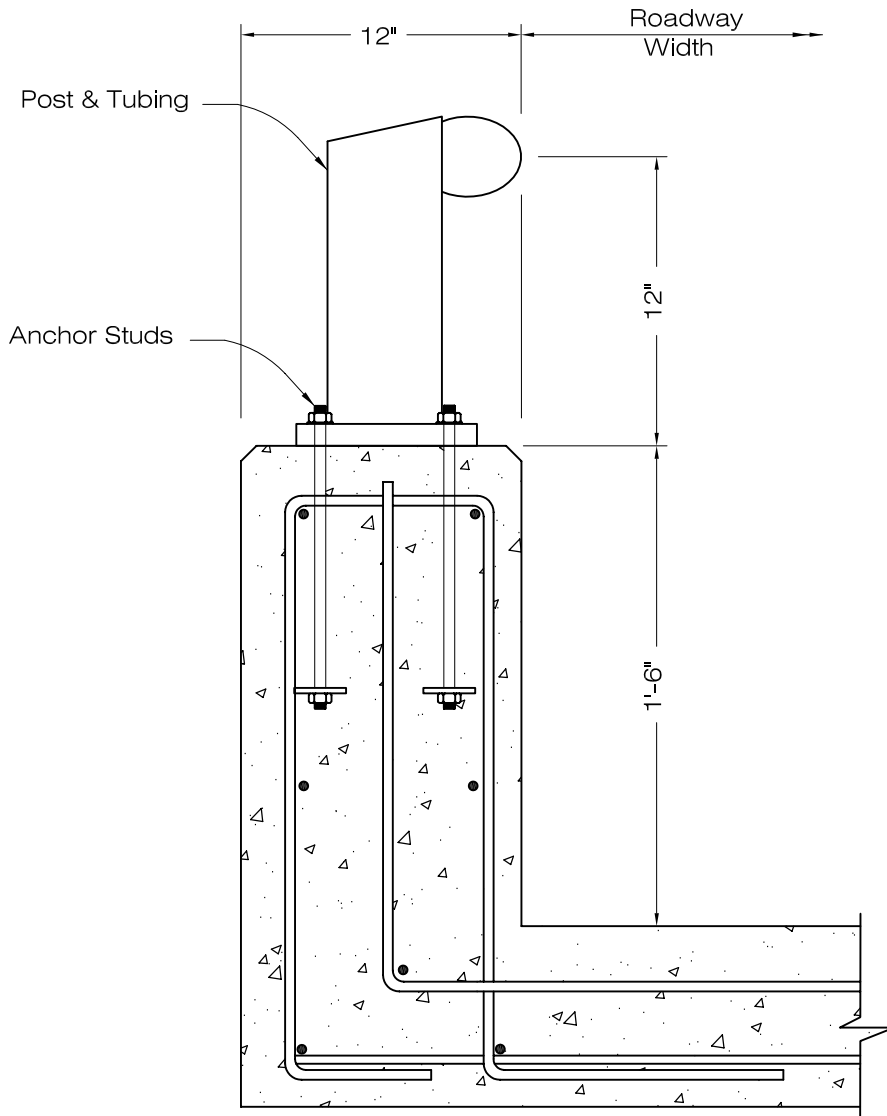
TEXAS TYPE TT

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/07/00

DRAWING
1106L



Section Through Parapet & Rail

Rail Height (in.)	32"		
Test Vehicle (lb.)	1990- Car	4660- Car	20,000- Bus
Impact Speed (mph)	60	60	57
Impact Angle (degrees)	18.8	25.0	14.8

FROM AASHTO ROADWAY GUIDELINE

TYPE C ALUMINUM BRIDGE RAILING

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

**CONSTRUCTION
DRAWINGS**

REVISION NO:
DATE: 08/07/00

**DRAWING
1107**

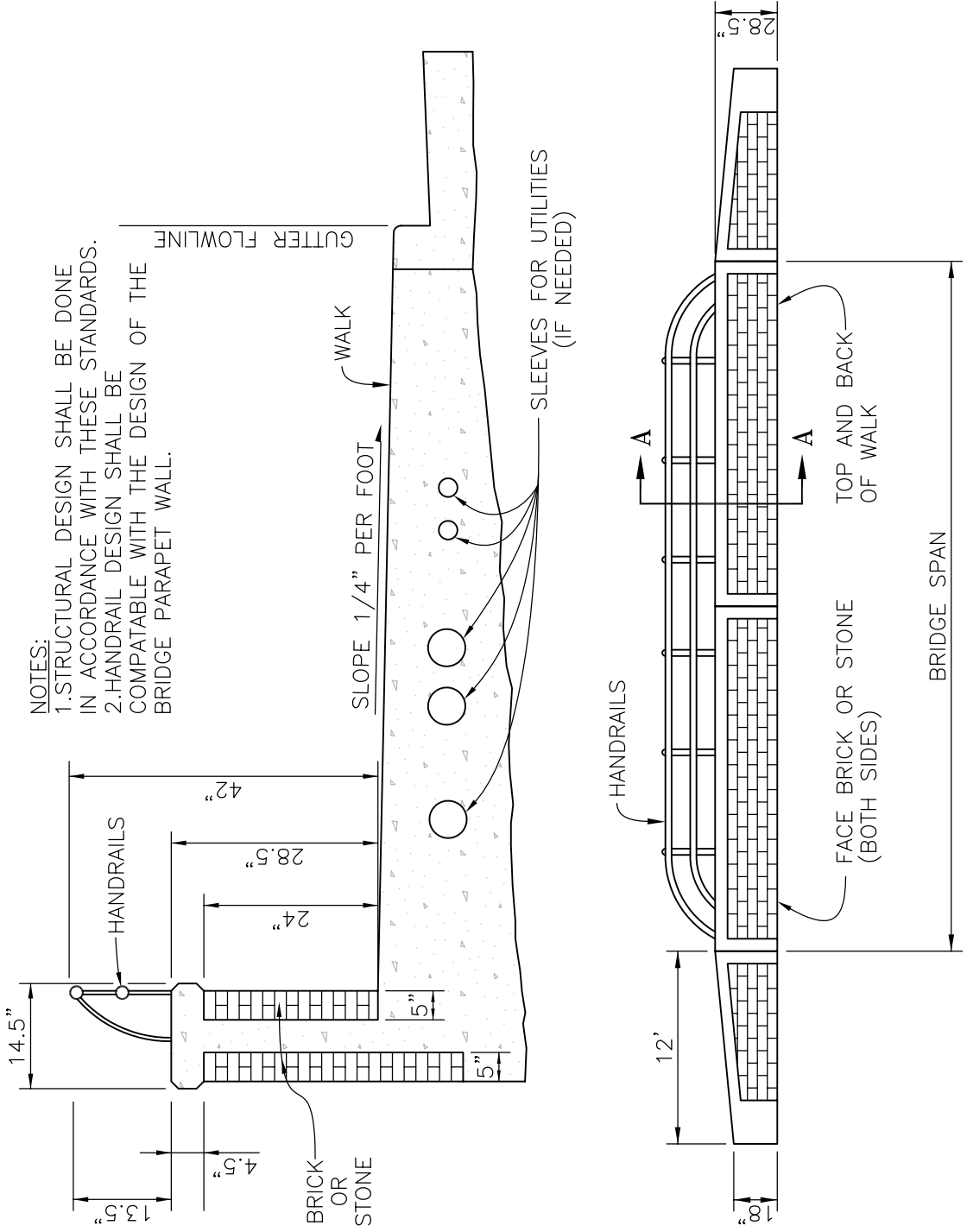
FORT COLLINS ONLY

THIS PLAN SPECIFIES APPEARANCE ONLY. THE STRUCTURE MUST BE DESIGNED TO FIT THE SPECIFIC CONDITIONS.

HEADWALL NOTES:

- 1. PROVIDE MASONRY TIES FOR EACH BRICK COURSE.
- 2. ALL EXPOSED CONCRETE SHALL HAVE A RUBBED FINISH.

- NOTES:**
- 1. STRUCTURAL DESIGN SHALL BE DONE IN ACCORDANCE WITH THESE STANDARDS.
 - 2. HANDRAIL DESIGN SHALL BE COMPATIBLE WITH THE DESIGN OF THE BRIDGE PARAPET WALL.



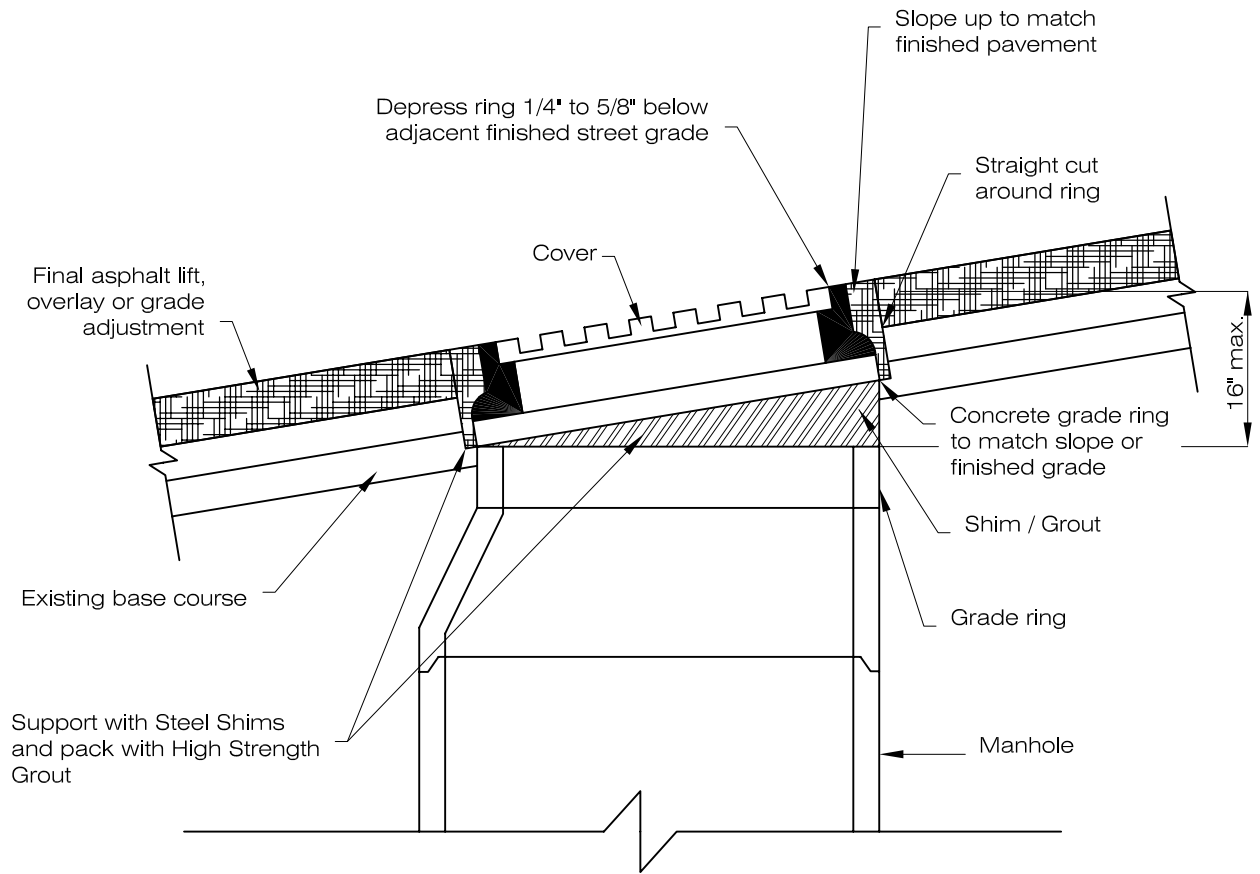
BRIDGE RAILING/PARAPET WALL CONFIGURATION DETAIL

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 11/16/00

FIGURE
1108



NOTE:

1. Grout shall be a mixture of 100 lbs Grout mix, 26 lbs water (3.12 Gal), and 100 lbs of sand conforming to ASTM C-35.
2. Manholes shall not be located in crosspans, gutters, or wheel path.
3. Shim and grout to make ring and cover flush with the finished pavement surface.

STANDARD MANHOLE COVER

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

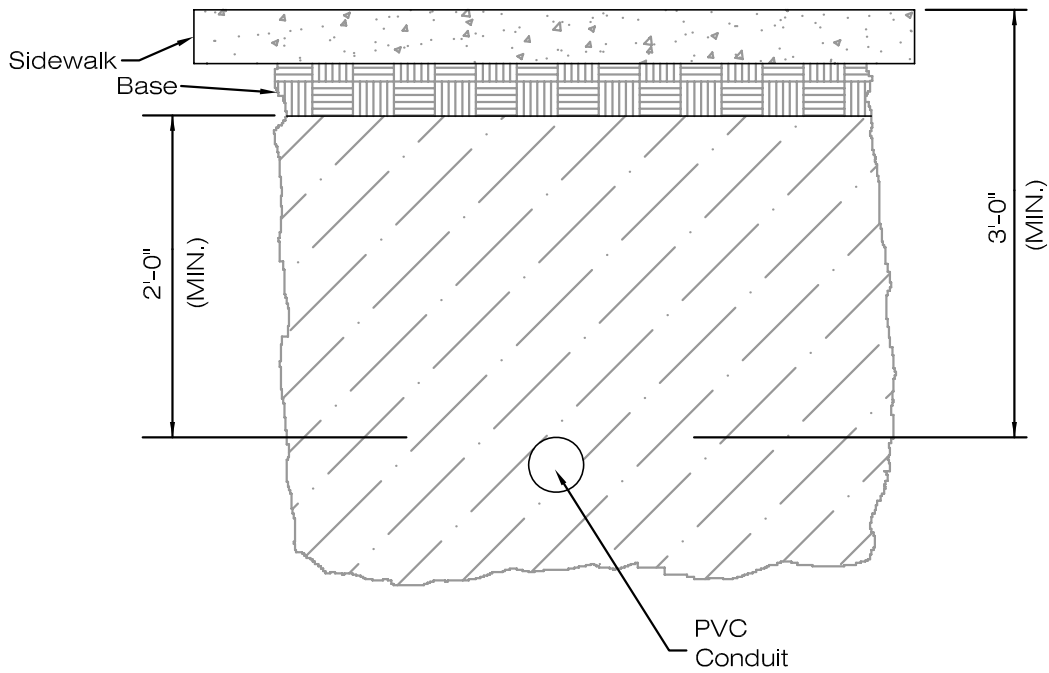
**CONSTRUCTION
DRAWINGS**

REVISION NO:

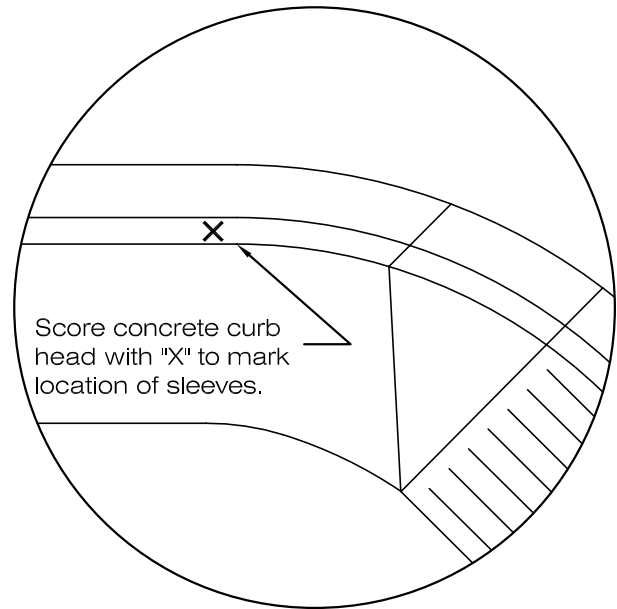
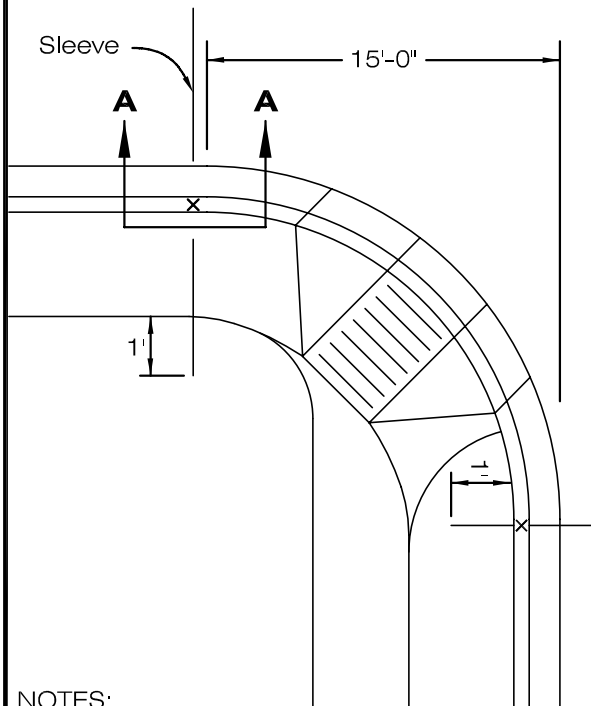
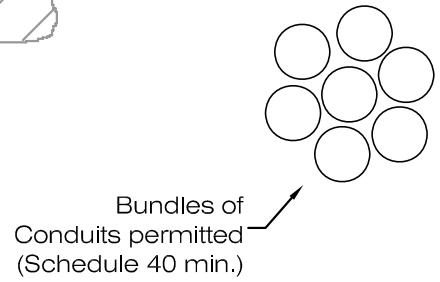
DATE: 08/07/00

DRAWING

1201



SECTION A-A



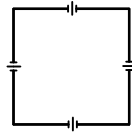
DETAIL

NOTES:

1. Match location of sleeves on curb head.
2. Depth of sleeve shall be no less than 3'-0" below street grade.
3. Bundles of sleeves are permitted.
4. Sleeves shall be installed with "Pull Wires".

SLEEVE LOCATIONS

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1	DRAWING 1202
		DATE: 04/01/07	



Cross section of post

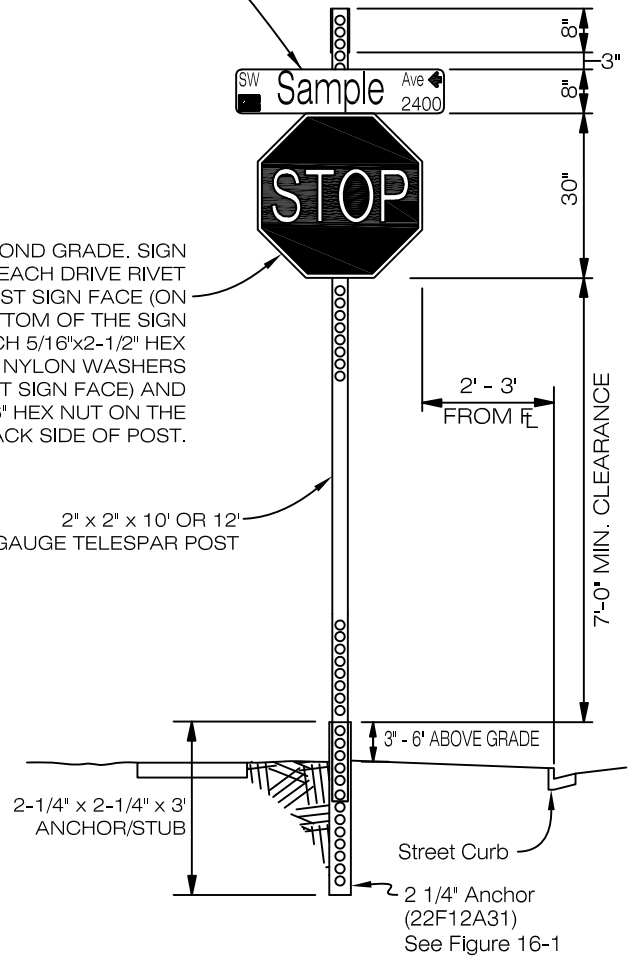
2 EACH 8" BLADES MOUNTED TO POST WITH 4 EACH DRIVE RIVETS WITH NYLON WASHERS

R1-1 "STOP" SIGN 30" DIAMOND GRADE. SIGN MOUNTED TO POST WITH 1 EACH DRIVE RIVET WITH NYLON WASHER AGAINST SIGN FACE (ON TOP OF THE SIGN). THE BOTTOM OF THE SIGN SHALL BE MOUNTED WITH 1 EACH 5/16"x2-1/2" HEX BOLT WITH METAL AND FROM NYLON WASHERS (NYLON WASHER AGAINST SIGN FACE) AND SECURED WITH 1 EACH 5/16" HEX NUT ON THE BACK SIDE OF POST.

2" x 2" x 10' OR 12' 12 GAUGE TELES PAR POST

CRITERIA FOR SINGLE POST		
Max. Sign Panel	Anchor/Stub *	Post Size *
36" x 36"	2.25' x 2.25' x 3'-0"	2" x 2" x 12'-0"

* 12 Gauge



NOTES:

1. Attach the sign panels tightly to the post and use 5/16" (ID) X 3/4" (OD) washers to keep the sign from breaking loose from the post when hit by a vehicle.
2. Sign panels should be mounted a minimum of 7 feet above the pavement or ground.
3. Signs larger than 36 inches in length or width require wind bracing and special post design.
4. Anchor Stub and post are square steel tube (perforated).
5. All "No Parking" signs shall be installed at 45° from Flow Line.
6. Stop sign to be installed at Point of Curvature (PC) for direction of travel.

SIGN POST

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 08/01/21

DRAWING
1401



R7-9a

MUTCD Designation

COLOR SCHEDULE	
LEGEND, CIRCLE DIAGONAL, BORDER, "ARROW", "BIKE LANE"	RED
BACKGROUND	WHITE
"P"	BLACK

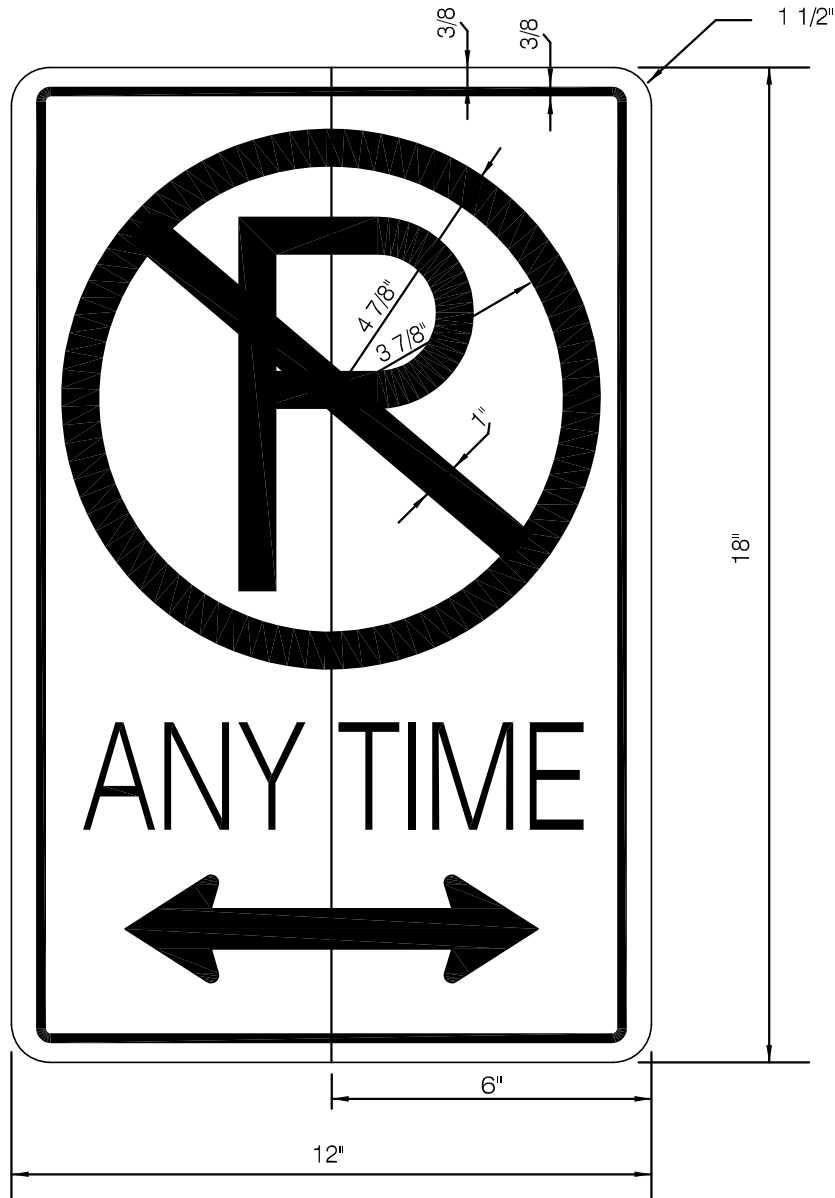
NO PARKING BIKE LANE SIGN DETAIL

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1402a



R7-9a

MUTCD Designation

COLOR SCHEDULE	
LEGEND, CIRCLE DIAGONAL, BORDER, "ARROW", "ANY TIME"	RED
BACKGROUND	WHITE
"P"	BLACK

NO PARKING ANY TIME SIGN DETAIL

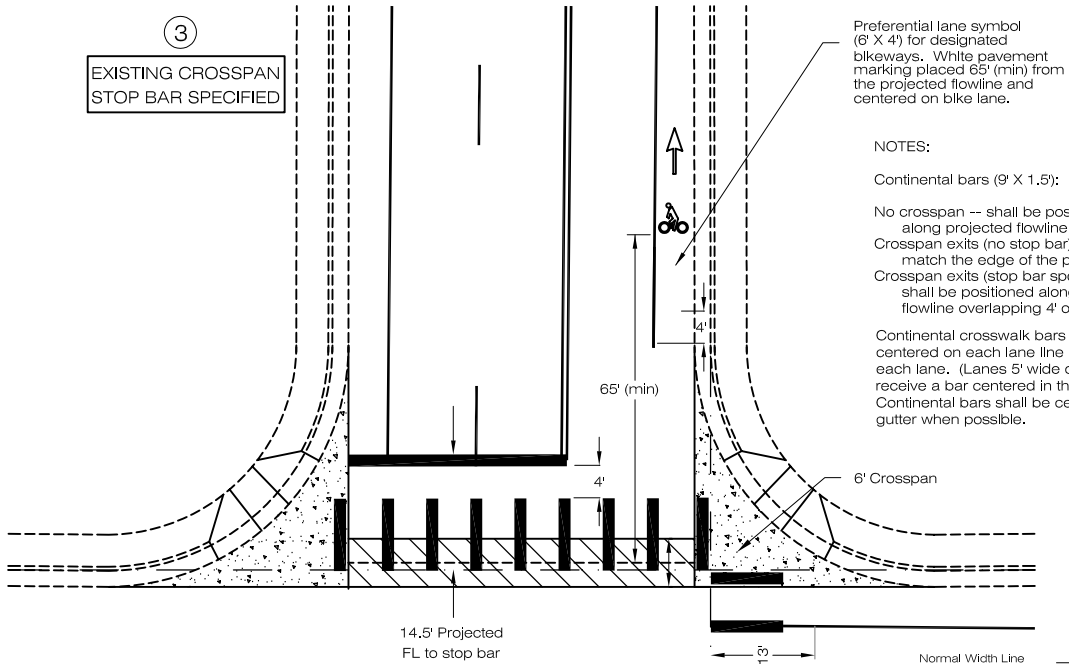
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1402b

③
EXISTING CROSSSPAN
STOP BAR SPECIFIED



Preferential lane symbol (6' X 4') for designated bikeways. White pavement marking placed 65' (min) from the projected flowline and centered on bike lane.

NOTES:

Continental bars (9' X 1.5');

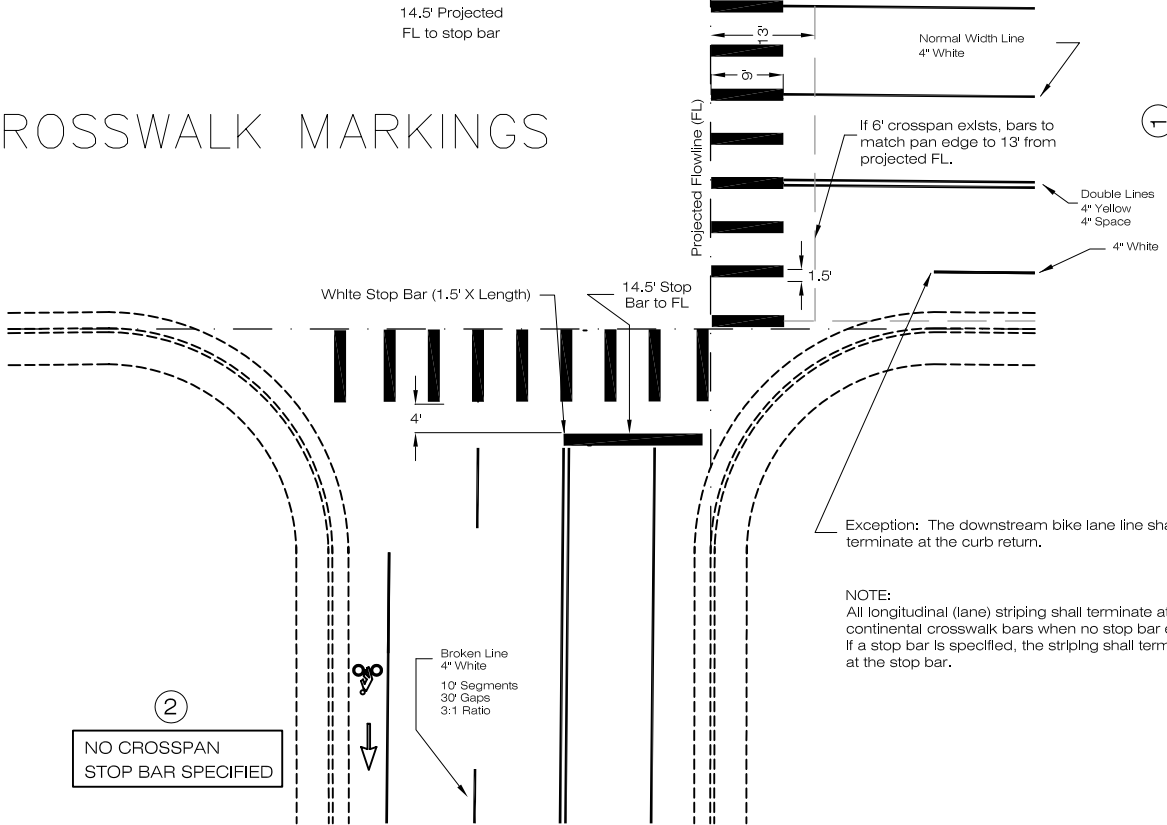
No crossspan -- shall be positioned along projected flowline.

Crossspan exits (no stop bar) -- shall match the edge of the pan.

Crossspan exits (stop bar specified) -- shall be positioned along projected flowline overlapping 4' of crossspan.

Continental crosswalk bars shall be placed centered on each lane line & in the center of each lane. (Lanes 5' wide or less shall not receive a bar centered in the lane.) Both outside Continental bars shall be centered on the curb & gutter when possible.

CROSSWALK MARKINGS



①
STANDARD
NO CROSSSPAN OR EXISTING CROSSSPAN
NO STOP BAR SPECIFIED

②
NO CROSSSPAN
STOP BAR SPECIFIED

Exception: The downstream bike lane line shall terminate at the curb return.

NOTE:
All longitudinal (lane) striping shall terminate at the continental crosswalk bars when no stop bar exists. If a stop bar is specified, the striping shall terminate at the stop bar.

STANDARD PAVEMENT MARKINGS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

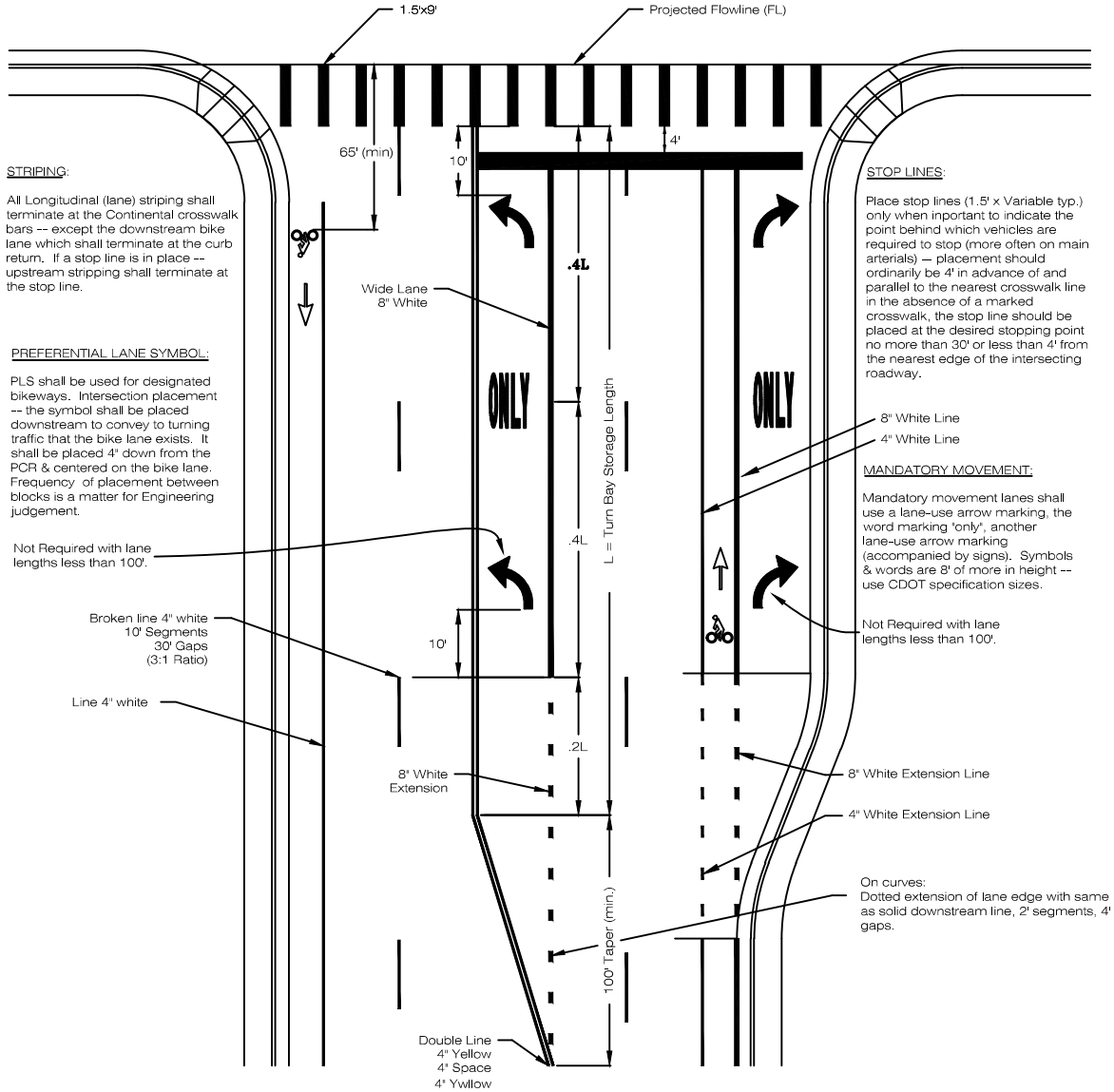
REVISION NO: 1
DATE: 03/01/02

DRAWING
1403

PAVEMENT MARKINGS

CROSSWALK MARKINGS:

An Engineering study should be required before crosswalk markings are installed in locations away from traffic signals or stop signs. Continental crosswalk bars (1.5' x 9' typ.) shall be placed adjacent to the projected flowline or abutting to existing crossspan. A bar shall be placed centered on each lane line and in the center of each lane. Lanes 5' wide or less shall not receive a bar centered in the lane. It is important that the markings are in alignment with the access ramps / sidewalks.



STRIPING:

All Longitudinal (lane) striping shall terminate at the Continental crosswalk bars -- except the downstream bike lane which shall terminate at the curb return. If a stop line is in place -- upstream striping shall terminate at the stop line.

PREFERENTIAL LANE SYMBOL:

PLS shall be used for designated bikeways. Intersection placement -- the symbol shall be placed downstream to convey to turning traffic that the bike lane exists. It shall be placed 4' down from the PCR & centered on the bike lane. Frequency of placement between blocks is a matter for Engineering judgement.

Not Required with lane lengths less than 100'.

Broken lines 4" white
10' Segments
30' Gaps
(3:1 Ratio)

Line 4" white

Double Line
4" Yellow
4" Space
4" Ywlow

STOP LINES:

Place stop lines (1.5' x Variable typ.) only when important to indicate the point behind which vehicles are required to stop (more often on main arterials) -- placement should ordinarily be 4' in advance of and parallel to the nearest crosswalk line in the absence of a marked crosswalk, the stop line should be placed at the desired stopping point no more than 30' or less than 4' from the nearest edge of the intersecting roadway.

MANDATORY MOVEMENT:

Mandatory movement lanes shall use a lane-use arrow marking, the word marking "only", another lane-use arrow marking (accompanied by signs). Symbols & words are 8' or more in height -- use CDOT specification sizes.

Not Required with lane lengths less than 100'.

On curves:
Dotted extension of lane edge with same as solid downstream line, 2' segments, 4' gaps.

Note: Two-Way Left-Turn Lane (TWLTL) Striping

TWLTL striping is 4" yellow skip (10' line, 30' gap), 4" space, 4" solid yellow

STANDARD PAVEMENT MARKINGS W/TURN LANE

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

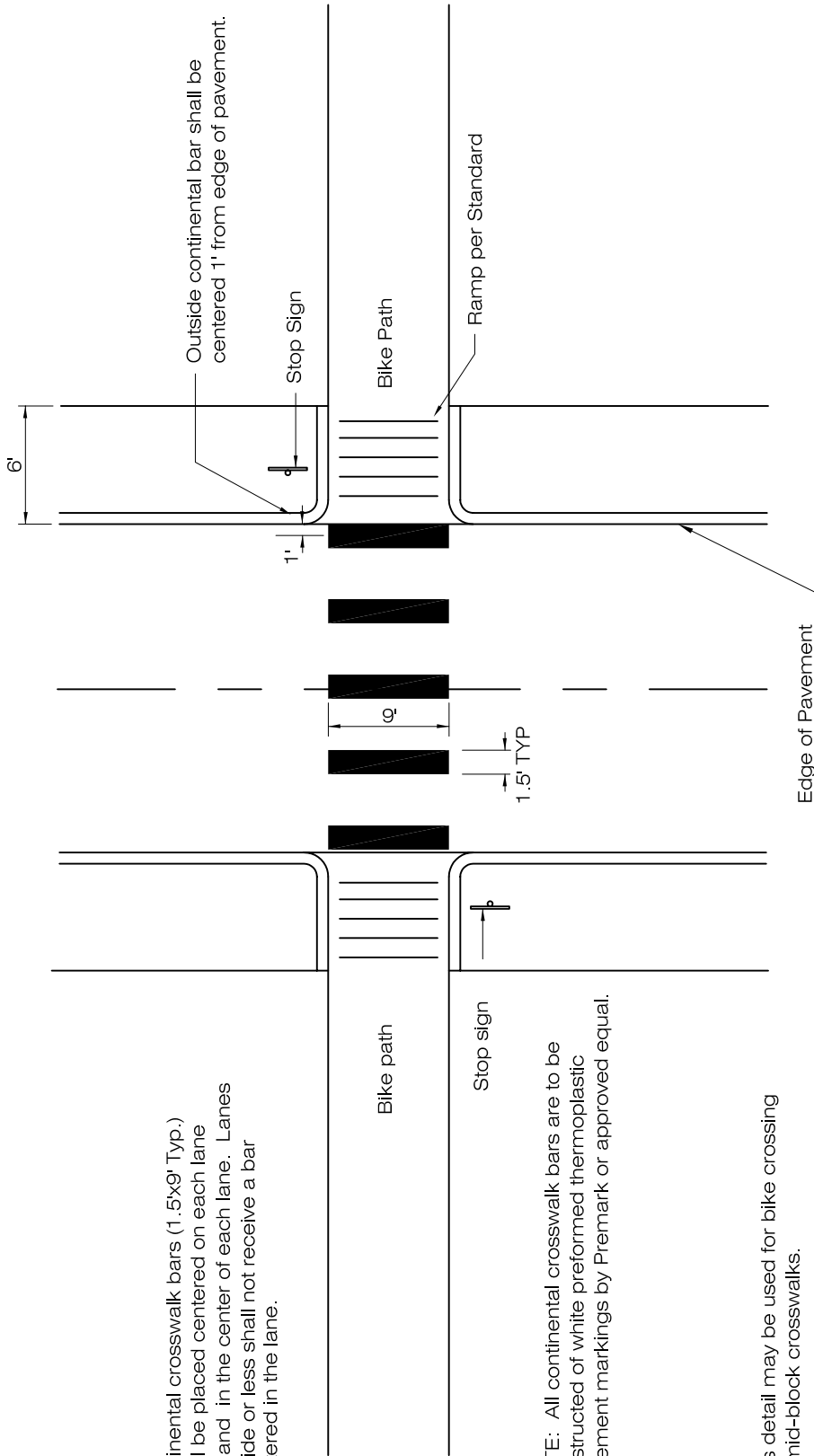
REVISION NO: 1

DATE: 07/01/21

DRAWING

1404

Continental crosswalk bars (1.5'x9' Typ.) shall be placed centered on each lane line and in the center of each lane. Lanes 5' wide or less shall not receive a bar centered in the lane.



NOTE: All continental crosswalk bars are to be constructed of white preformed thermoplastic pavement markings by Premark or approved equal.

This detail may be used for bike crossing or mid-block crosswalks.

Warning signs are required. Refer to CONST. DWG. 1417L.

"CONTINENTAL CROSSWALK BARS" BIKE CROSSING PAVEMENT MARKINGS

PAVEMENT MARKINGS FOR BIKE CROSSING

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

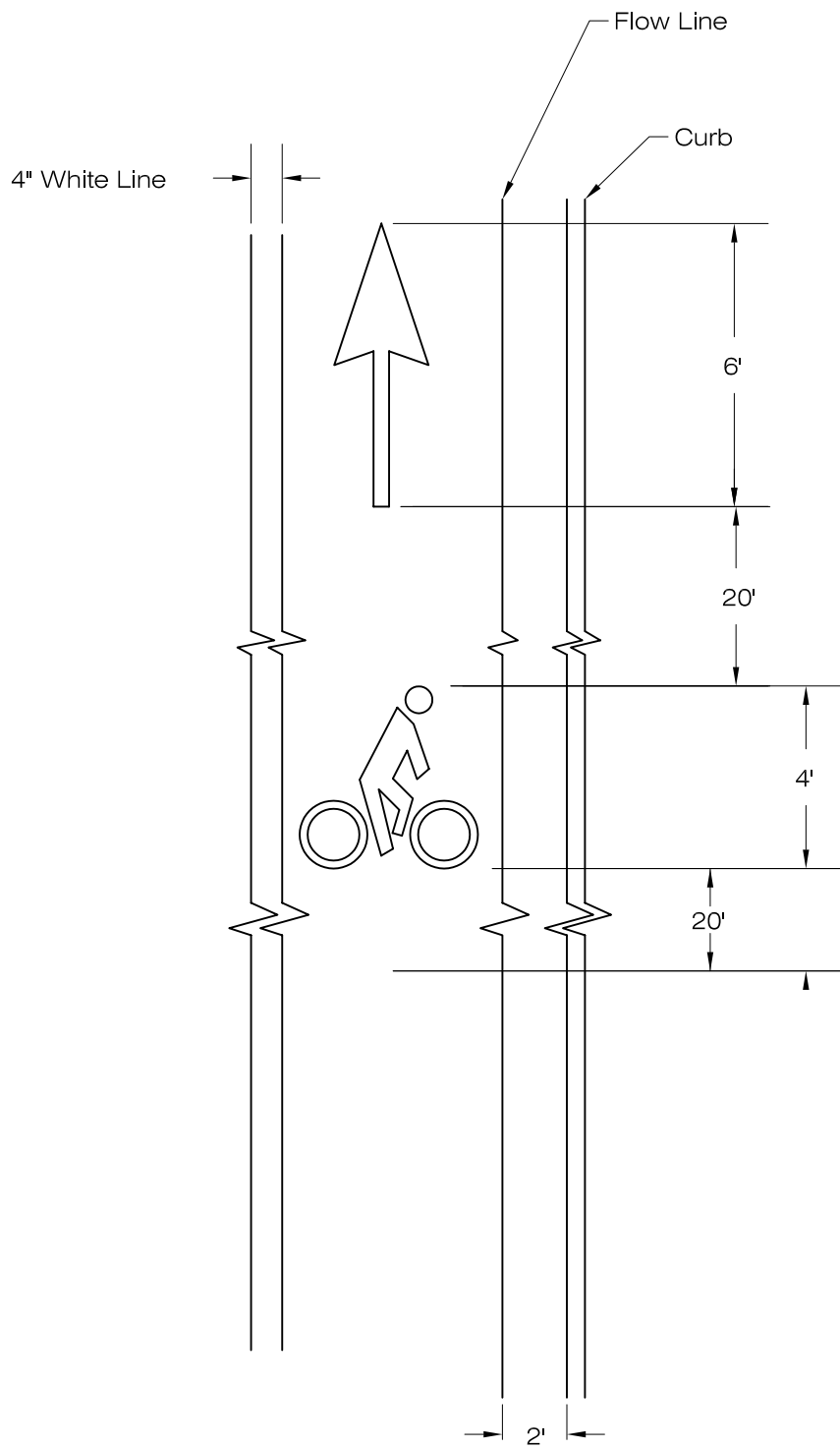
CONSTRUCTION
DRAWINGS

REVISION NO:

DATE: 08/07/00

DRAWING

1405



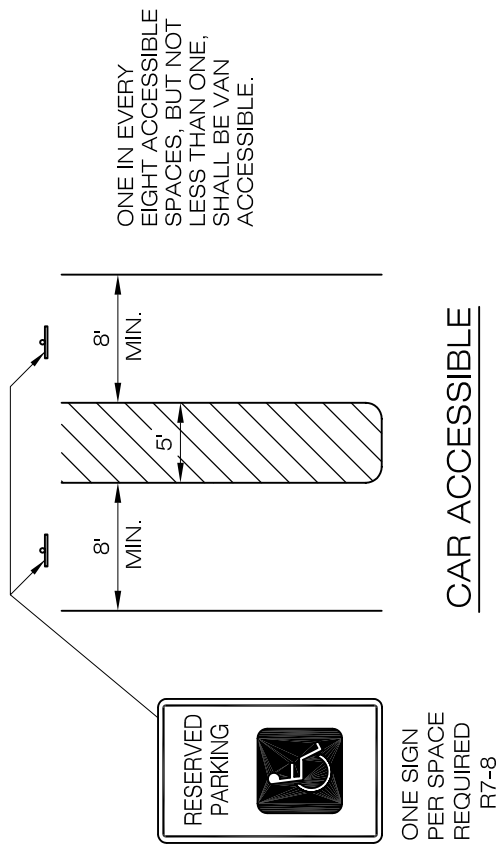
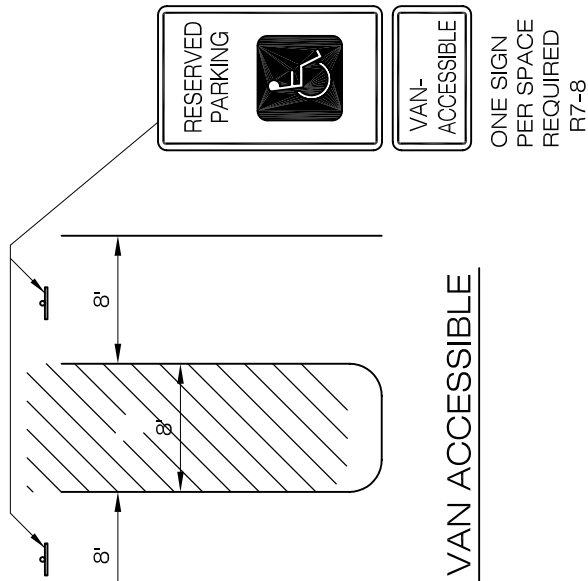
TYPICAL BICYCLE LANE PAVEMENT MARKINGS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 03/01/02

DRAWING
1406

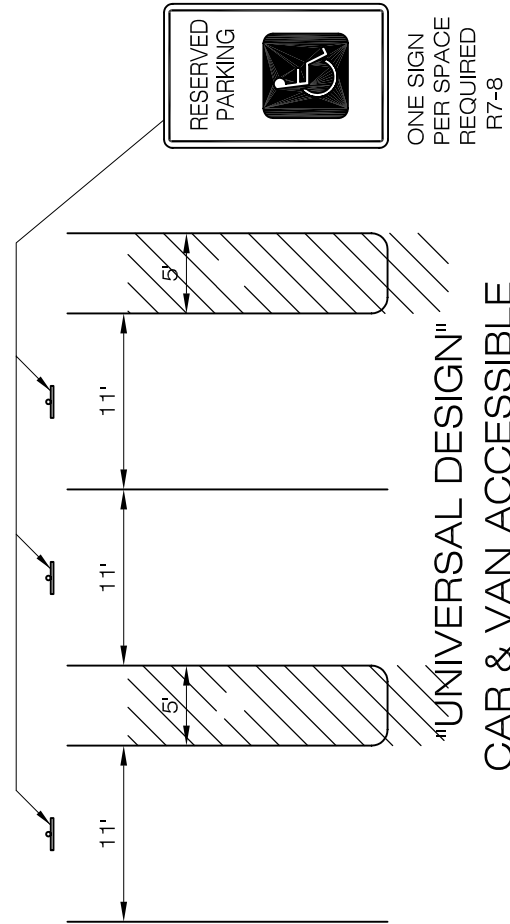


VAN ACCESSIBLE

CAR ACCESSIBLE

OR

A "UNIVERSAL" PARKING SPACE DESIGN MAY BE USED. THIS DESIGN IS USED TO ACCOMMODATE CAR & VAN ACCESSIBLE PARKING SPACES, WHICH ELIMINATES THE NEED FOR TWO SIGN TYPES.



"UNIVERSAL DESIGN"
CAR & VAN ACCESSIBLE

HANDICAP PARKING REQUIREMENTS (AS PER "ADA")

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 03/01/02

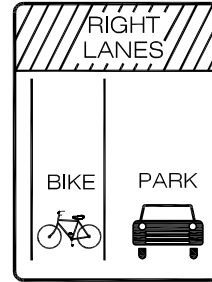
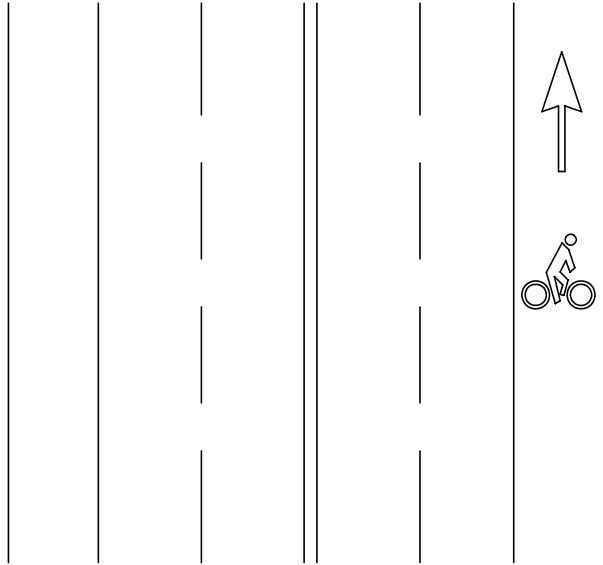
DRAWING
1407

LOVELAND ONLY

The bike and parking only sign may be used in two separate applications:

- *1. Where there is enough lane width for the painted line with a five foot wide bicycle lane and seven feet of undesignated parking lane.
- *2. Where the bicycle lane is designated by two painted lines and eight feet of parking lane.

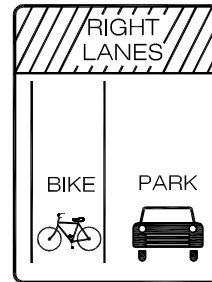
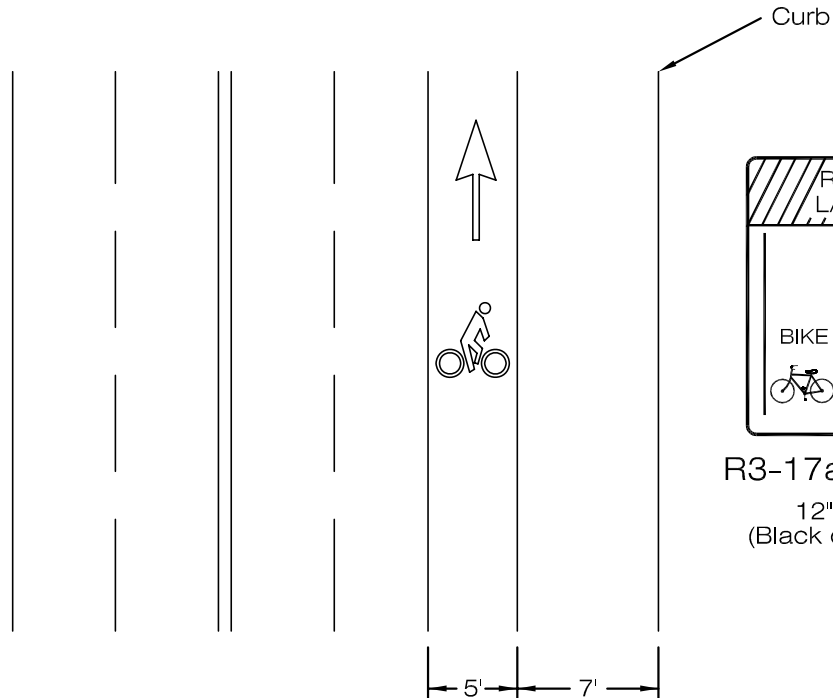
*1



R3-17a Modified
12" x 18"
(Black on White)

See **CONST. DWG. 1409L** for detail.

*2



R3-17a Modified
12" x 18"
(Black on White)

BICYCLE AND PARKING PAVEMENT MARKINGS

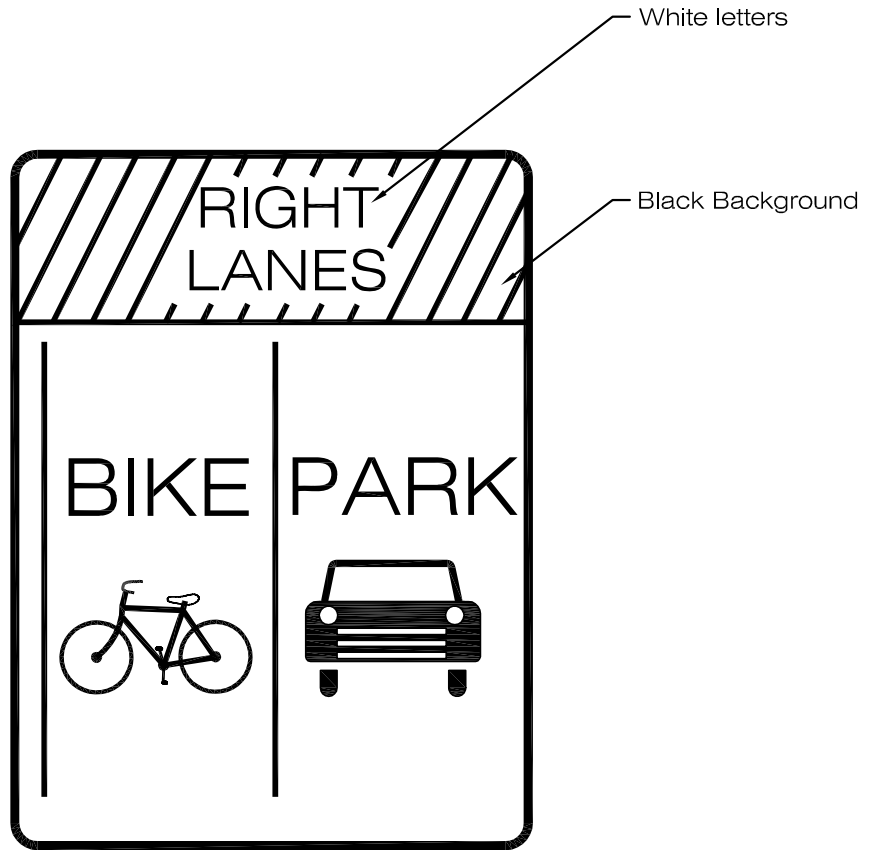
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1408L

LOVELAND ONLY



R 3-17a Modified
12" x 18"
(Black on White)

BICYCLE / PARKING SIGN

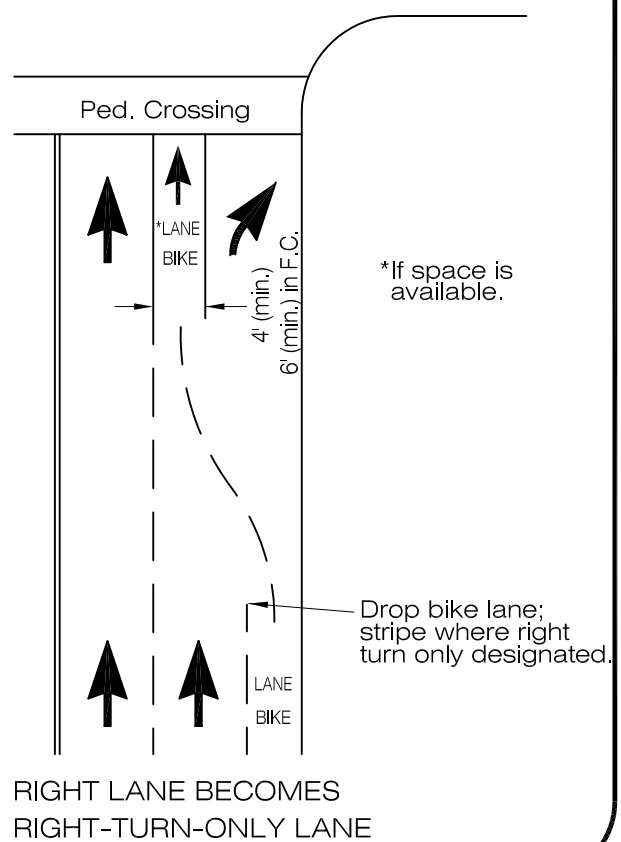
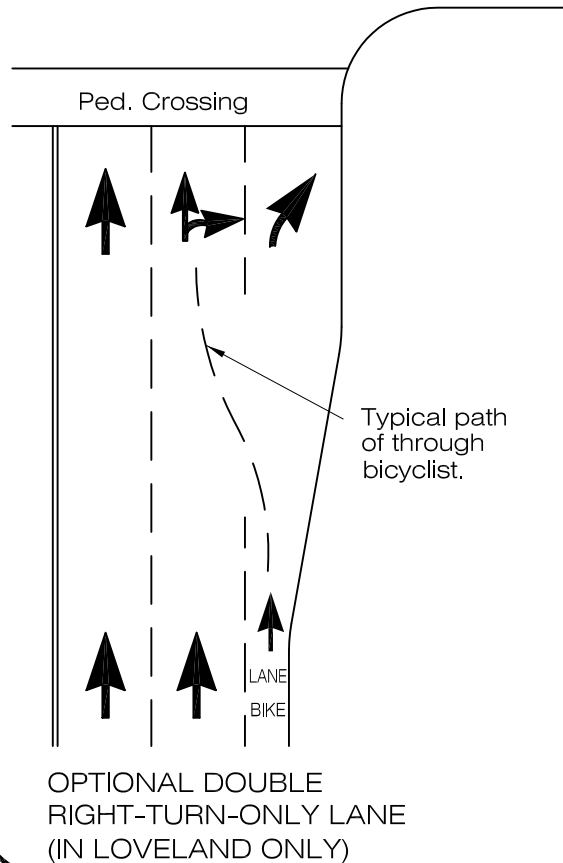
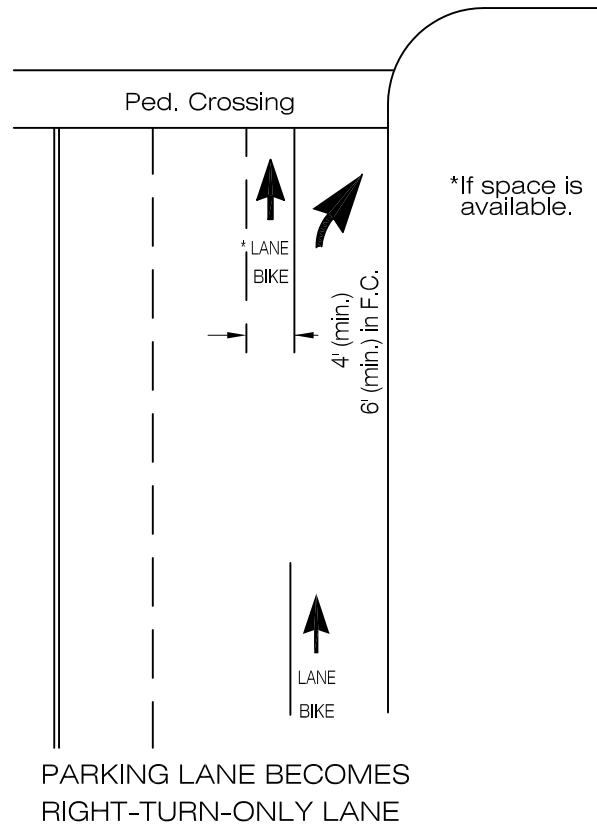
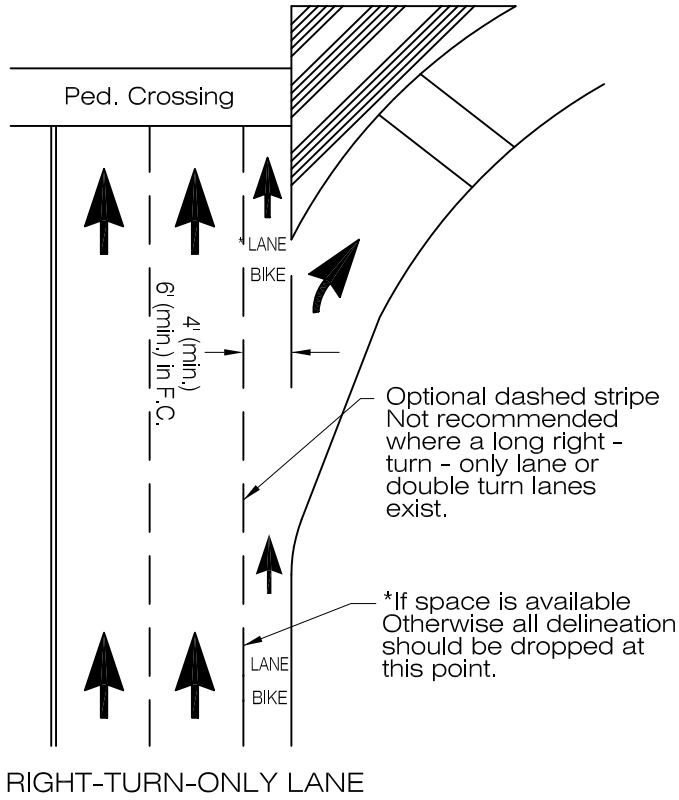
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 04/01/07

DRAWING
1409L

(Metric Conversion: 1 ft. = 0.3 m.)



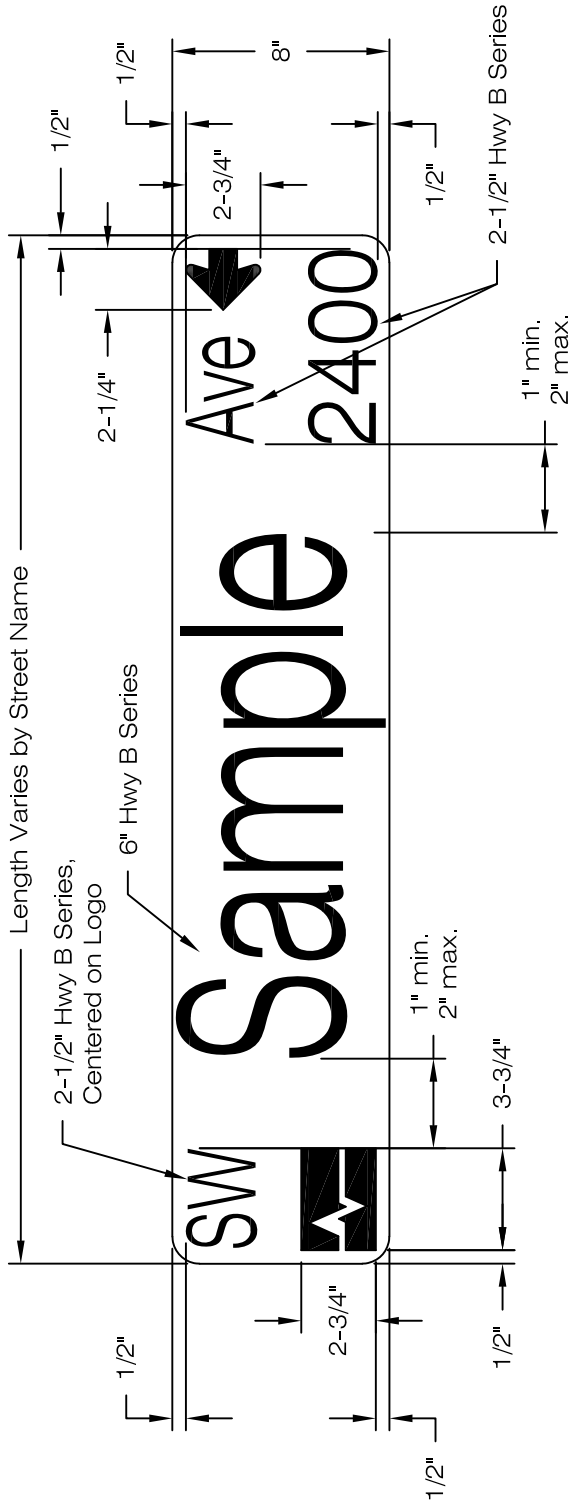
BICYCLE LANE APPROACHING VEHICLE RIGHT TURN LANE

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/07/00

DRAWING
1410



NOTES:

1. Street name must be 6" (min.) mixed case white letters, FHWA Series "B".
2. Prefix must be 2" letters, FHWA Series "B" and placed on the upper left.
3. Suffix must be 2" (min.) letters and block number must be 2" (min.) numbers, FHWA Series "B".
4. Overall sign length dimension varies according to length of street name.
5. All sign lettering and green background material must be at least Diamond Grade sheeting per FHWA; No silk screened signs will be permitted.
6. Street numbers shall always point to higher block number.
7. Aluminum sign blank shall be 0.10 thickness with 3/4" radius corners.
8. Loveland only, signalized intersection signs shall be 18" (min.) in height.
9. All street name signs shall be retroreflective.

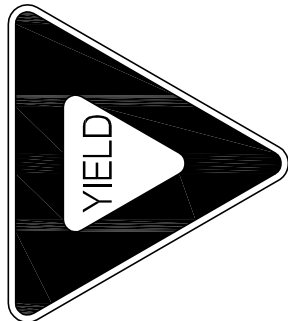
STREET NAME SIGN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

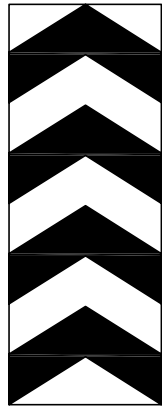
CONSTRUCTION
DRAWINGS

REVISION NO: 3
DATE: 08/01/21

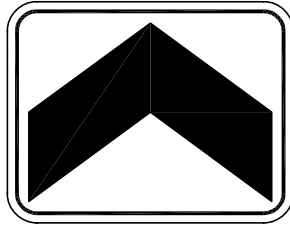
DRAWING
1411



RI-2
36" x 36" x 36"
(Red on White)



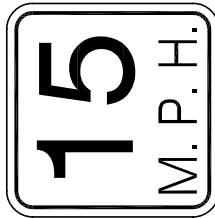
W1-8a
54" x 24" (min.)
(Black on White)



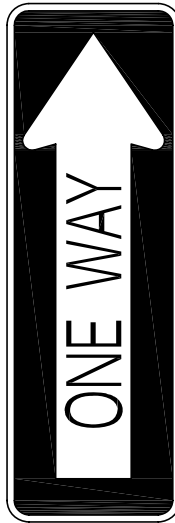
W1-8
18" x 24"



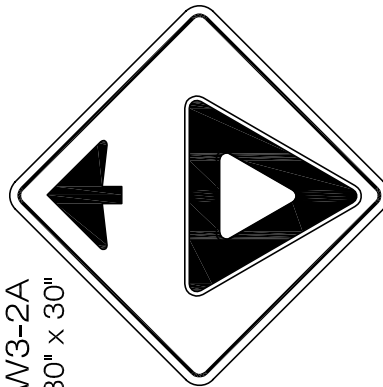
W11-2a
30" x 30"



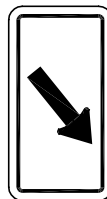
W13-1
18" x 18"



R6-1
54" x 18"
*This sign should only be used on major/larger roundabouts.



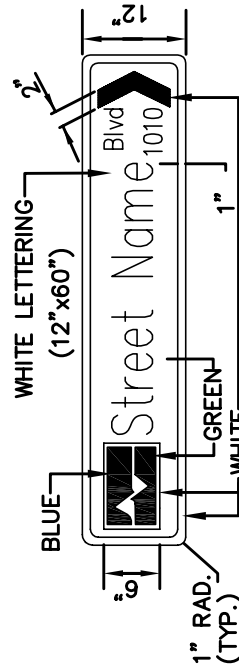
W3-2A
30" x 30"



W16-7P
24" x 18"



W2-6
30" x 30"
(Black on Yellow)



D1-1, Street Name Detail Sign
Loveland Only
12" x 60"

*This street name sign should only be used on Urban Roundabouts, mounted directly to sign post with rivets and nylon washers; 4 each per installation. (Use 8" blank for Mini-Roundabouts)

See the FHWA Roundabout Guidelines for additional signing details.

URBAN ROUNDABOUT SIGN DETAILS

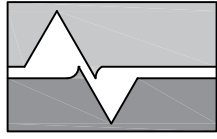
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1412

LOVELAND ONLY



NOTICE

THIS ROAD WILL BE
EXTENDED WITH
FUTURE DEVELOPMENT
FOR MORE INFO CONTACT
CITY OF LOVELAND
PUBLIC WORKS DEPARTMENT
970-962-2501

Notes:

1. Sign dimensions 30"x30"
2. White Lettering on Green Background
3. For Sign Mounting, see LCUASS Drawing 1401

FUTURE ROAD EXTENSION SIGN

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

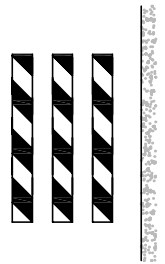
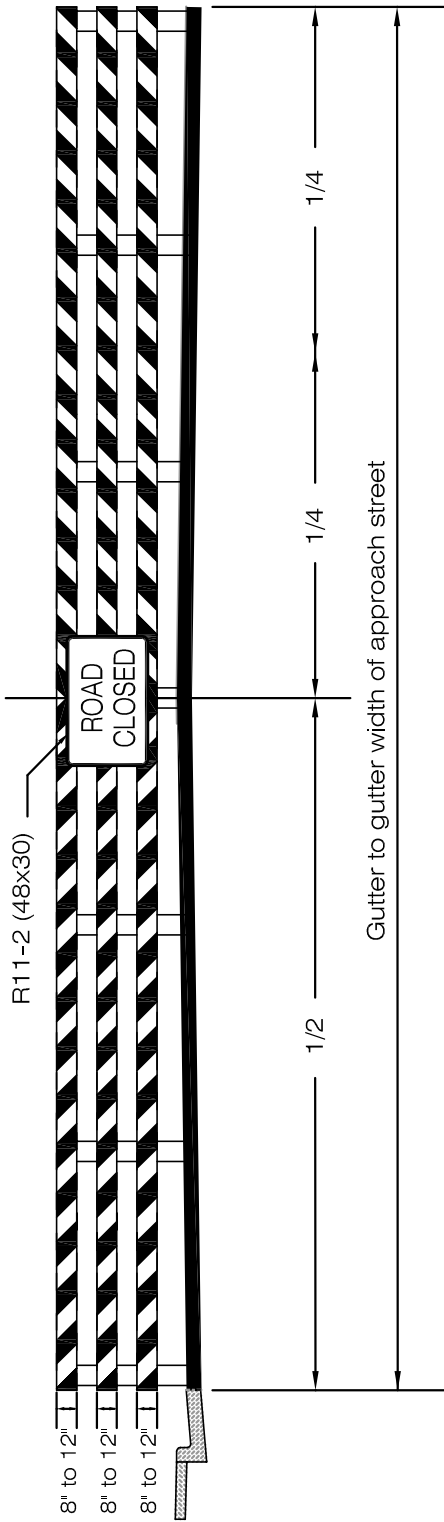
CONSTRUCTION
DRAWINGS

REVISION NO:

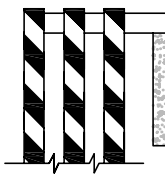
DATE: 08/01/21

DRAWING

1412L



DETACHED OR SIDEWALK
DOES NOT END AT BARRICADE



ATTACHED / SIDEWALK
ENDS AT BARRICADE

NOTES:

1. Rails shall be nominal lumber dimension.
2. Posts shall be 6" x 6" pressure treated, rot-resistant lumber.
3. Use 6" wide reflectorized orange stripes on reflectorized white background, front side only, paint back and edges white.
4. Other options may be used as approved by Local Entity Engineer.

These signs and barricades must be installed by the Developer at the end of all new streets that dead end on a temporary basis, and must be maintained by the Developer until the street is extended by future development.

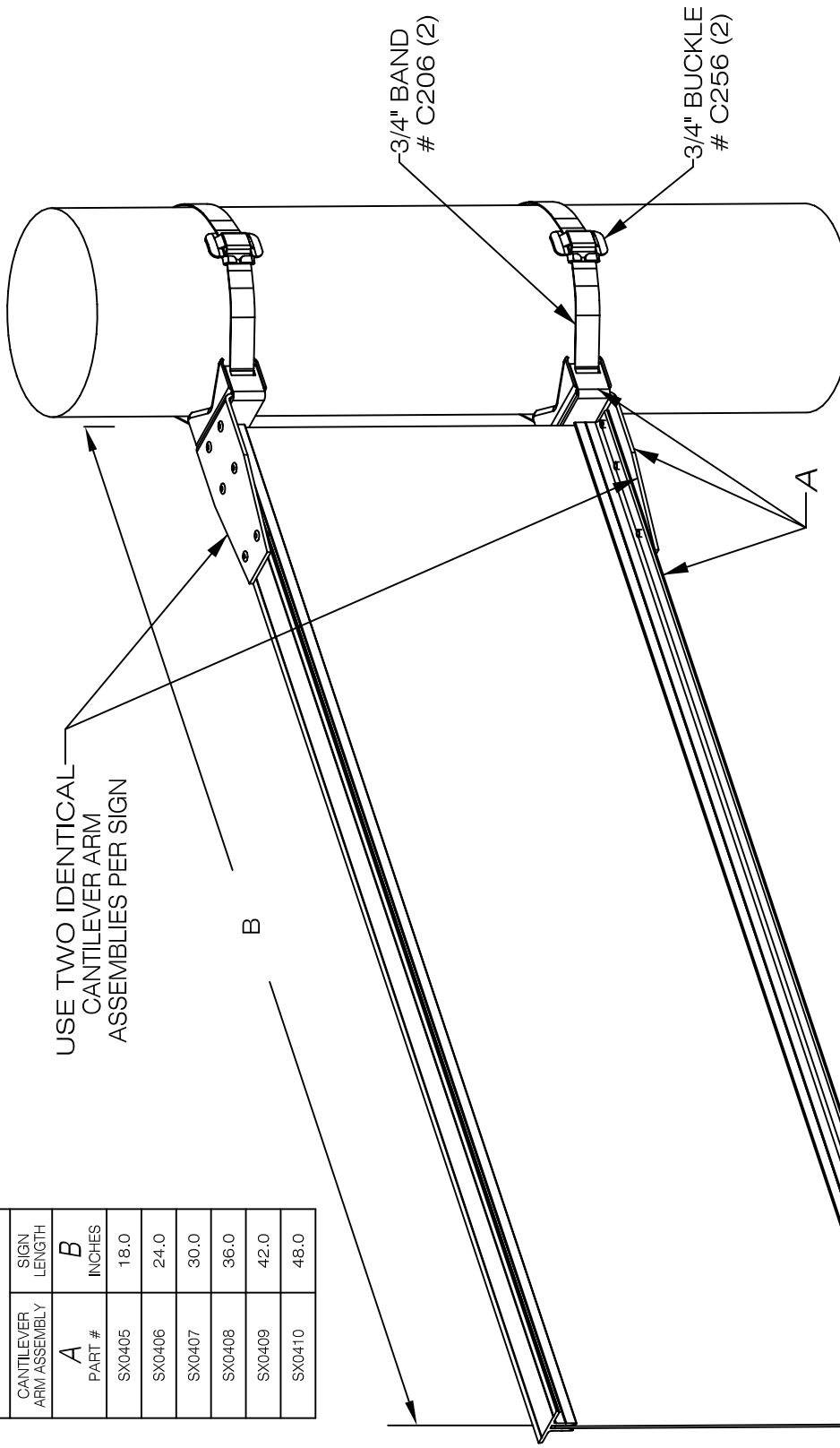
STANDARD TEMPORARY DEAD END BARRICADES

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1413



BAND-IT		SIGN LENGTH
CANTILEVER ARM ASSEMBLY	A	B
PART #		INCHES
SX0405		18.0
SX0406		24.0
SX0407		30.0
SX0408		36.0
SX0409		42.0
SX0410		48.0

NOTES:

1. Standard drilling (5/16" x 18" x 1/2" set screw).
2. Bolt Thru drilling (1/4" x 20" x 1/2" socket head bold).
3. BAND-IT is a unit of the IDEX Corporation.

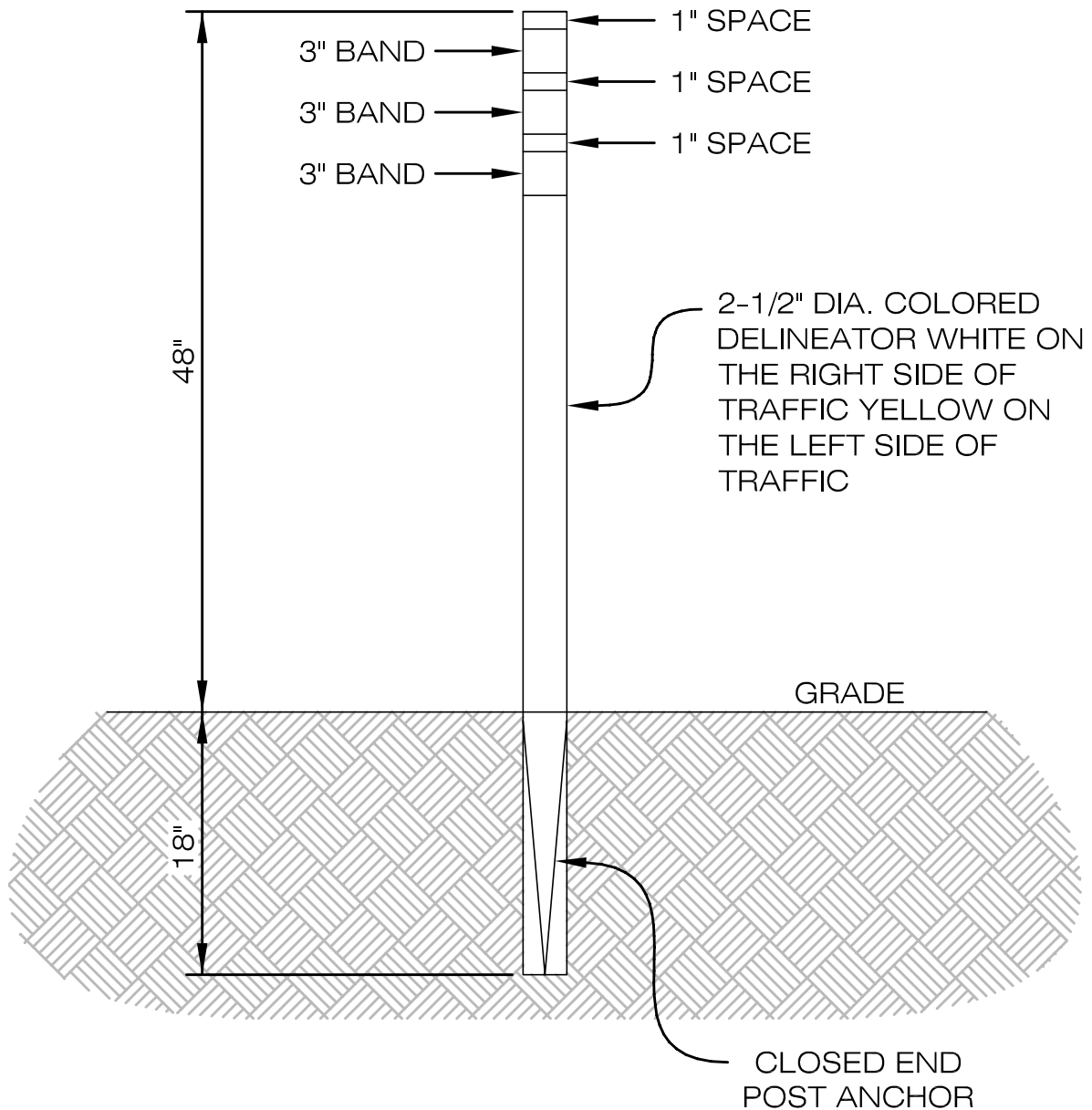
CANTILEVER ARM BRACKET FOR FLAT OR EXTRUDED BLADES

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/07/00

DRAWING
1414



NOTES:

DELINEATORS ARE ROUND W/ YELLOW OR WHITE REFLECTIVE MATERIAL WRAPPED AROUND WITH THE **SAME COLOR REFLECTIVE MATERIAL (BAND)** AS THE POST (YELLOW OR WHITE). THE REFLECTIVE MATERIAL IS WRAPPED ALL THE WAY AROUND THE DELINEATORS SO THAT THEY ARE VISIBLE FROM ALL DIRECTIONS.

THE NUMBER OF REFLECTIVE BANDS ON THE DELINEATOR SHALL BE THREE.

IF ANCHOR IS LOCATED IN AN ISLAND OR PAVED MEDIAN, A 4" DIA. PVC SLEEVE SHALL BE EXTENDED THROUGH THE PAVEMENT FOR POST ANCHOR (STUB).

DELINEATOR DETAIL (SAFE HIT)

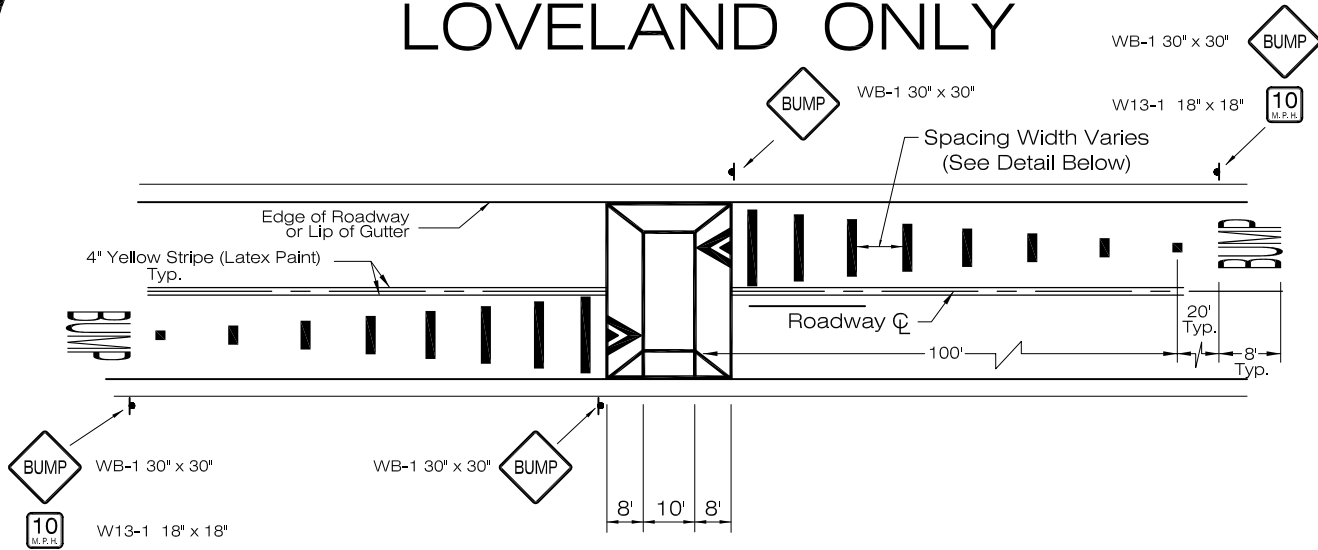
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

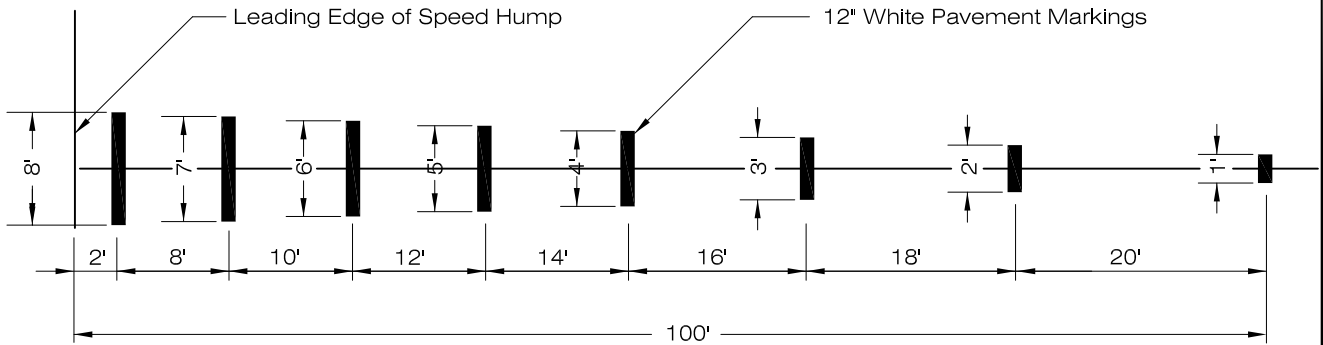
REVISION NO: 2
DATE: 04/01/07

DRAWING
1415

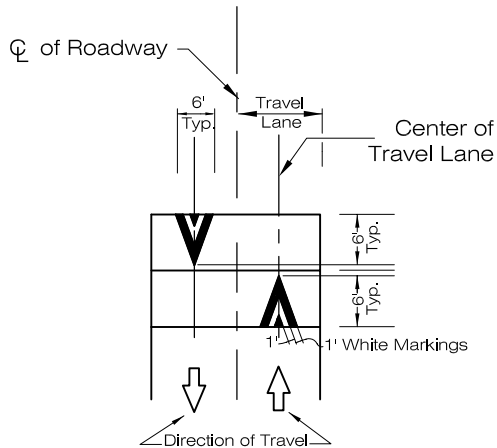
LOVELAND ONLY



PLAN VIEW



GRADUATED BAR DETAIL



CHEVRON DETAIL

NOTES:

1. Graduated bars, chevron and "Bump" markings are centered in the travel lanes.
2. All pavement markings (except the centerline striping) are to be pre-formed thermoplastic (PREMARK by Flint Trading, or equal)

SIGNS & PAVEMENT MARKINGS FOR SPEED TABLES

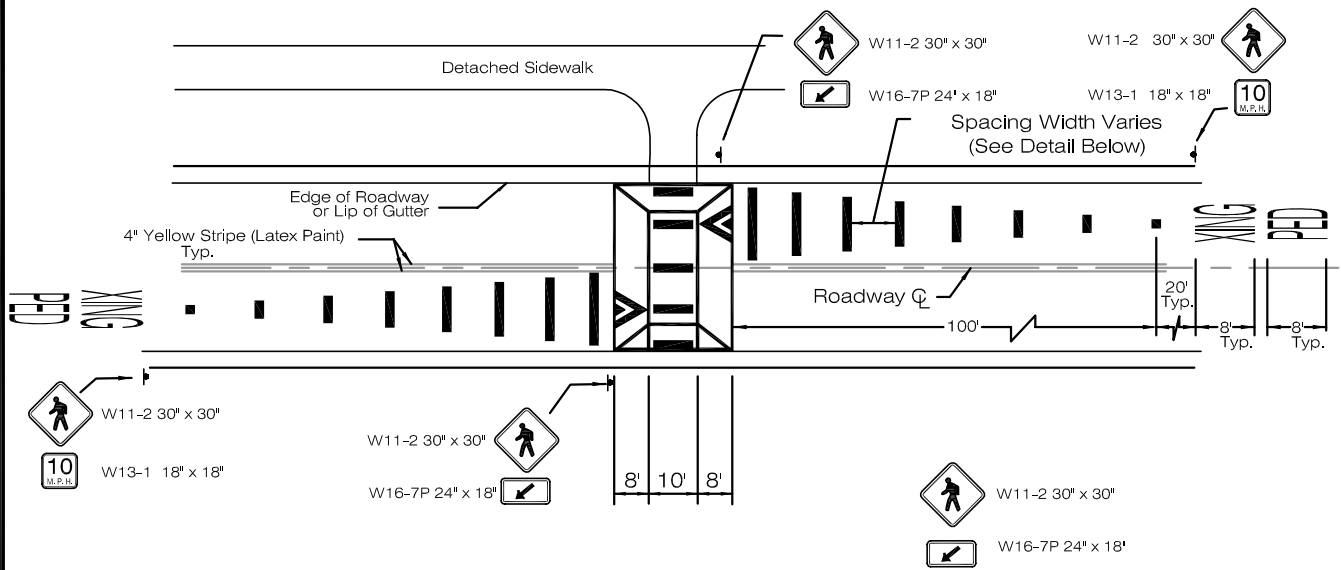
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

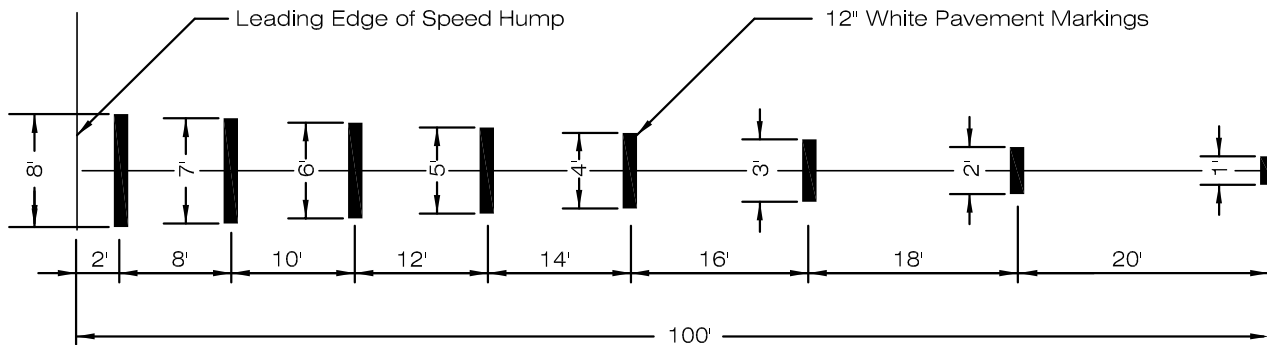
REVISION NO: 1
DATE: 03/01/02

DRAWING
1416L

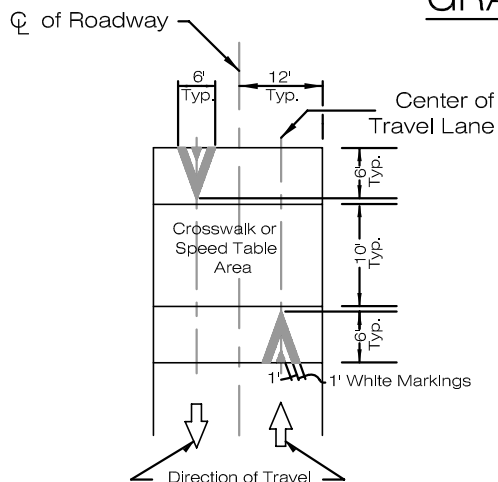
LOVELAND ONLY



PLAN VIEW



GRADUATED BAR DETAIL



CHEVRON DETAIL

NOTES:

1. Graduated bars, chevron and "PED XING" markings are centered in the travel lanes.
2. All pavement markings (except the centerline striping) are to be pre-formed thermoplastic (PREMARK by Flint Trading, or equal).

SIGNS & PAVEMENT MARKINGS FOR RAISED CROSSINGS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1417L



**STANDARD
FIRE LANE SIGN DETAIL
(FORT COLLINS ONLY)**

**UNIVERSAL
FIRE LANE SIGN DETAIL**

COLOR SCHEDULE	
LEGEND, CIRCLE DIAGONAL, BORDER, "ARROW", "FIRE LANE"	RED
BACKGROUND	WHITE
"P"	BLACK

NOTES:

1. THE SIGN PLATE SHALL BE A MINIMUM OF 12"X18" WITH A THICKNESS OF .080 ALUMINUM CONSTRUCTION.
2. THE SIGN FACE SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH A RED LEGEND. USE THE STANDARD 3M SCOTCHLITE SIGN FACE NUMBER R7-32 OR EQUIVALENT, WITH RED LETTERING AS SHOWN ABOVE.
3. ARROWS MAY BE NEEDED (LEFT, RIGHT OR DOUBLE), TO DESIGNATE BEGIN AND END OF NO PARKING AREA.

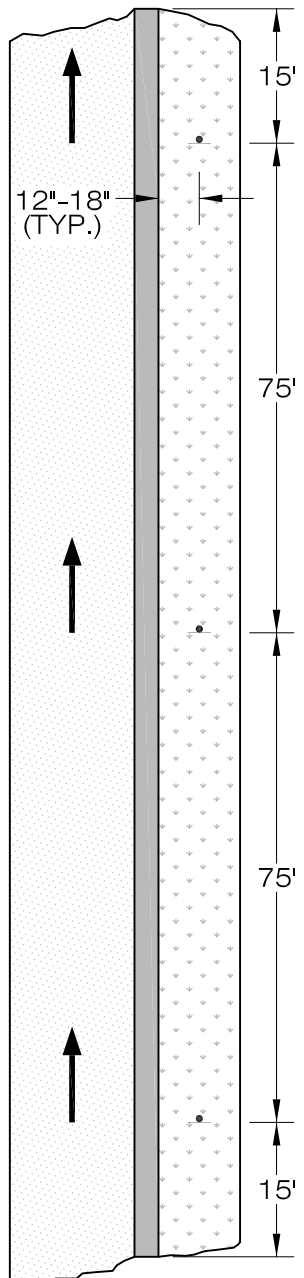
FIRE ACCESS ROAD SIGNS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

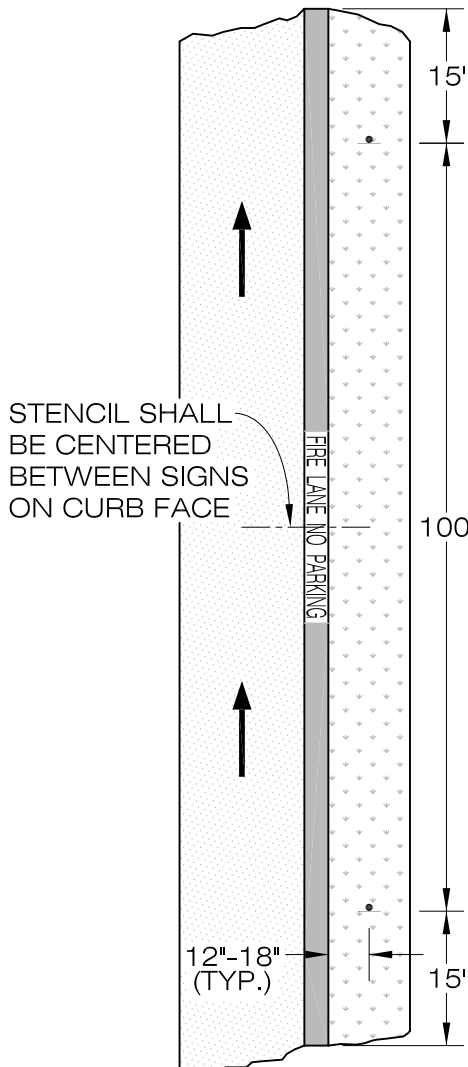
DRAWING
1418



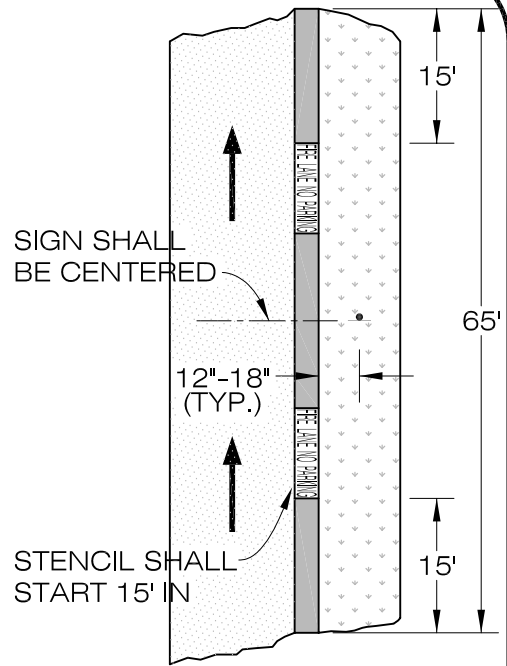
**STANDARD DETAIL 1
(WITHOUT STENCIL)**

NOTE:

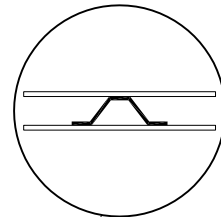
1. APPROVED FIRE LANE SIGNS SHALL BE INSTALLED 12" TO 18" FROM BACK OF CURB OR BACK OF SIDEWALK.
2. SIGN MUST FACE THE ONCOMING TRAFFIC.
3. STENCILS SHALL BE IN WHITE LETTERING (3" HT. 1/2" STROKE) ON RED PAINTED CURB.
4. STENCIL SHALL READ "FIRE LANE NO PARKING"



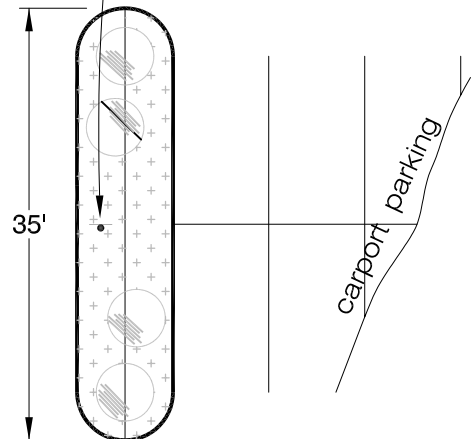
**STANDARD DETAIL 1
(WITH STENCIL)**
ACCESS OFFICER MUST
PRE-APPROVE THIS
APPLICATION



**DETAIL 3
(65' OR LESS)**
MUST BE PRE-APPROVED



2 APPROVED
FIRE LANE
SIGNS-BACK
TO BACK



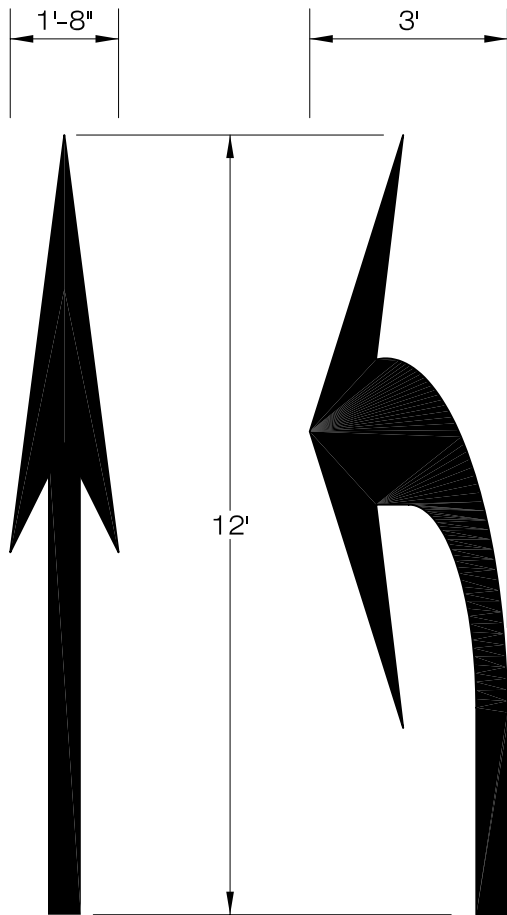
FIRE APPARATUS ACCESS ROAD STENCILING & FIRE LANE SIGN INSTALLATION

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

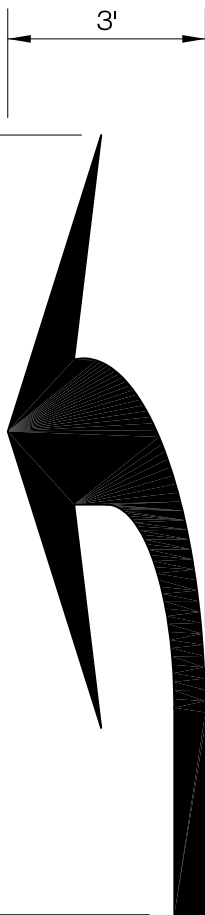
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 02/27/02

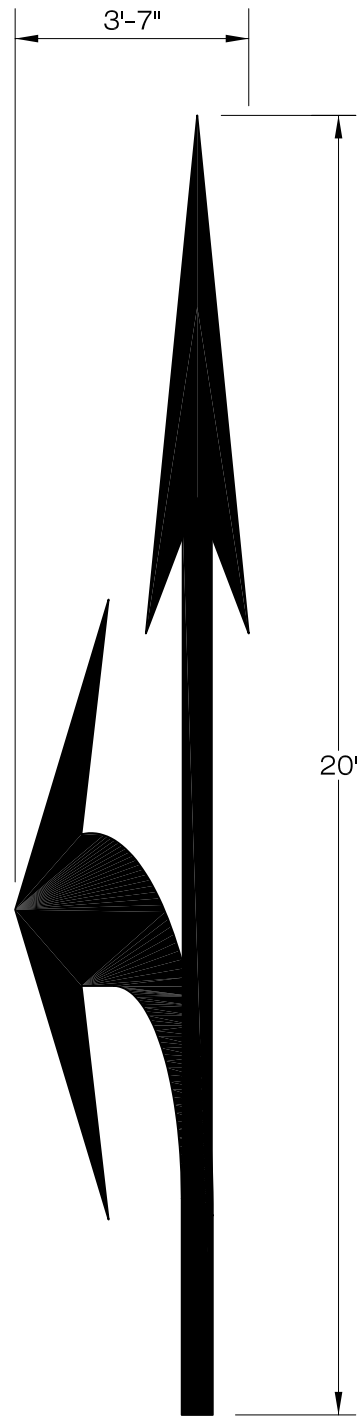
DRAWING
1419



#330248



#330247



#330149

NEW FHWA ARROWS (ELONGATED)

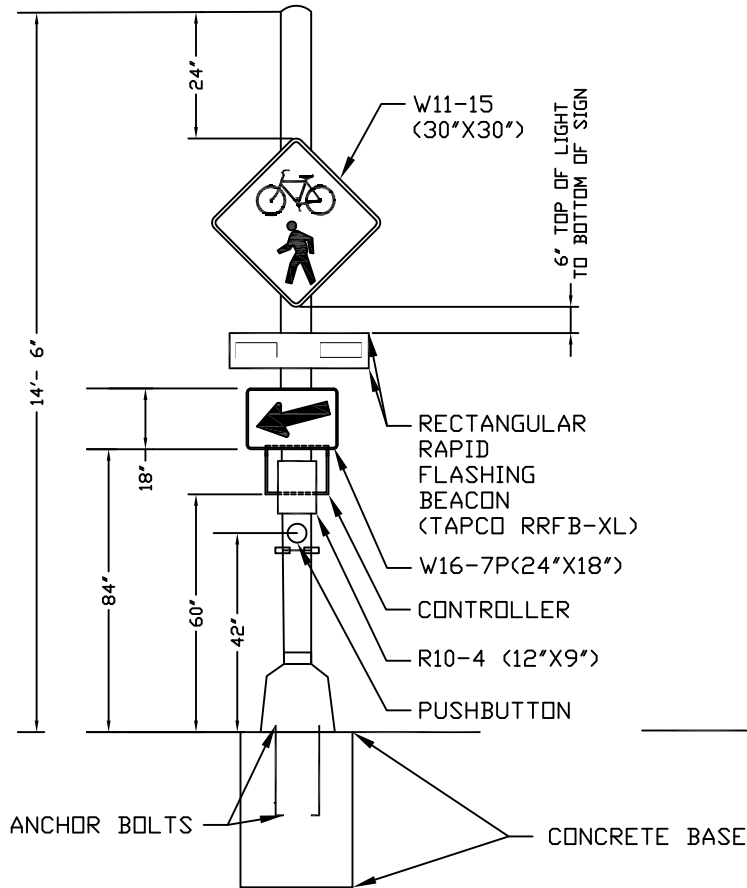
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

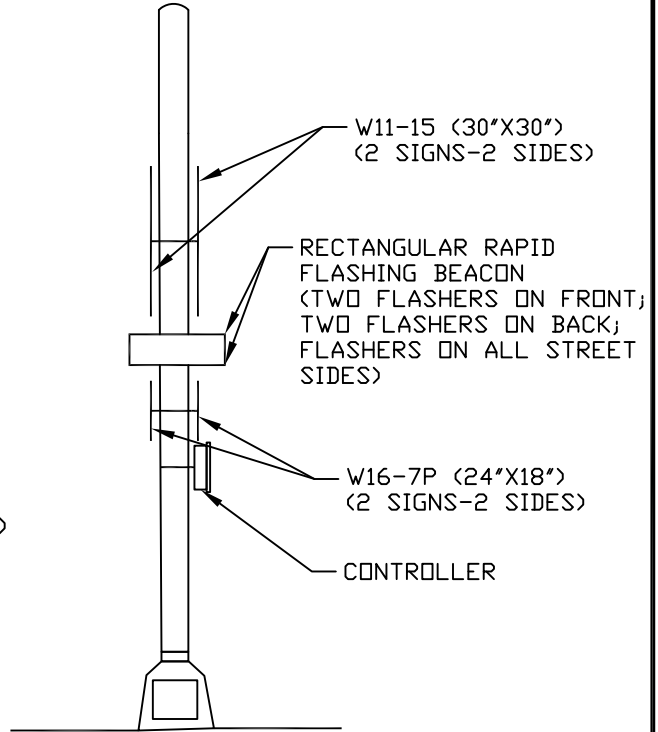
REVISION NO: 1
DATE: 02/28/02

DRAWING
1420

**RAPID FLASHING BEACON
(SECTION VIEW)**



**DUAL FLASHING DIRECTION
(SIDE VIEW)**



RECTANGULAR RAPID FLASHING BEACON SPECIFICATIONS (RRFB):

1. MANUFACTURER: TAPCO RRFB XL (AS APPROVED BY CITY OF LOVELAND)
2. POWER IS TO BE PROVIDED FROM THE CLOSEST CITY OF LOVELAND STREET LIGHT POLE. COORDINATE WITH LOVELAND POWER DEPARTMENT FOR INSTALLATION.

SIGNS:

1. ALL SIGNS MUST BE STANDARD BLACK LETTERING ON FLUORESCENT YELLOW GREEN BACKGROUND.
2. SIGN ORIENTATION IS REVERSED FOR PLACEMENT ON LEFT SIDE OF ROAD.

POLE SPECIFICATIONS:

1. PEDESTAL POLE W/DOME POLE CAP 14' X4.5" ROUND SCHEDULE 80 (.438 INCHES SPUN ALUMINUM)
2. PEDESTAL POLE ALUMINUM SQUARE BASE WITH ALUMINUM DOOR
3. PELCO BRAND PEDESTRIAN POLE COLLARS PART # PB5325
4. PELCO PEDESTRIAN POLE CAP, ALUMINUM PART # PB S402
5. PEDESTRIAN PUSH BUTTON - BLACK POLARA PART # PBF5X7-B
6. PEDESTRIAN PUSH BUTTON SIGN POLARA PART NUMBER PN5X7A REVERSIBLE OR EQUAL
7. PEDESTRIAN PEDESTAL POLE CONCRETE FOUNDATION PER CDOT STANDARDS (S-614-14)
8. PROVIDE 2 - 2INCH CONDUITS (1 FOR POWER AND 1 FOR COMMUNICATIONS)

NOT TO SCALE

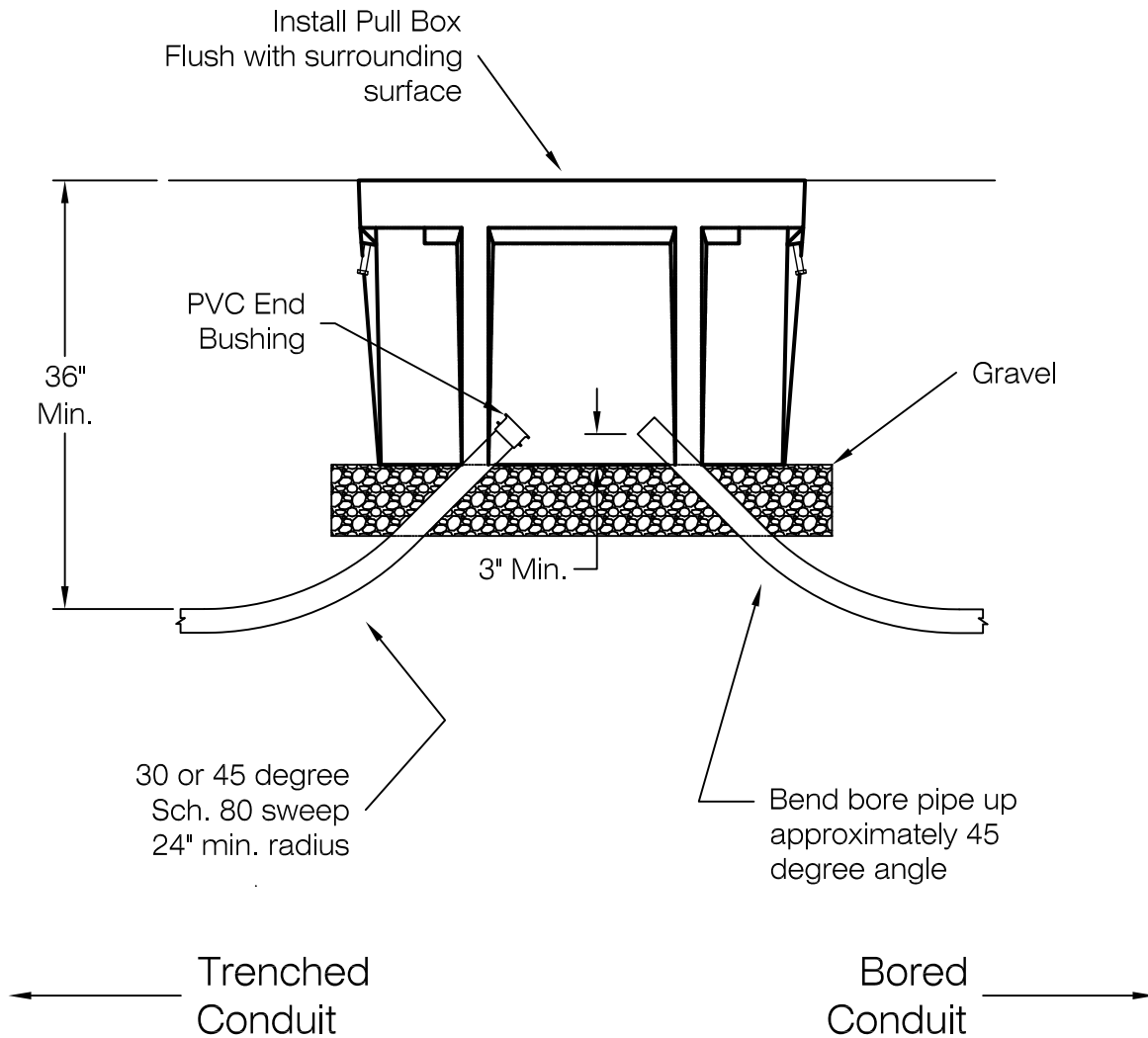
RECTANGULAR RAPID FLASHING BEACON (RRFB)

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

**CONSTRUCTION
DRAWINGS**

**REVISION NO: 4
DATE: 08/01/21**

**DRAWING
1421**



Notes:

1. Number, size, orientation, and installation method of conduits as per plans.
2. All pull boxes shall be Tier 22.
3. Pull boxes at designated fiber optic splice points shall be 30x48x24. All other fiber optic pull boxes shall be 24x36x24.
4. Bored conduit shall be continuous UL Listed HDPE smooth wall conduit designed for directional boring.
5. Trenched conduit shall be UL Listed Schedule 80 PVC with glued joints.
6. All fittings on PVC conduit shall be glued.
7. All conduit shall be provided with 1250 lbs polyester pull tape and #14 AWG THHN Stranded Copper locating wire (Green). Provide additional cabling as per plans.
8. Lids for polymer concrete pull boxes shall be 2 piece and have the word "TRAFFIC" cast into the surface.
9. Plastic pull boxes approved by Pulse are acceptable when fitted with "Traffic" labels.
10. Install ground rods in all pull boxes in accordance with current NEC.

NOT TO SCALE

CONDUIT AND PULL BOXES FOR FIBER OPTIC LINES

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

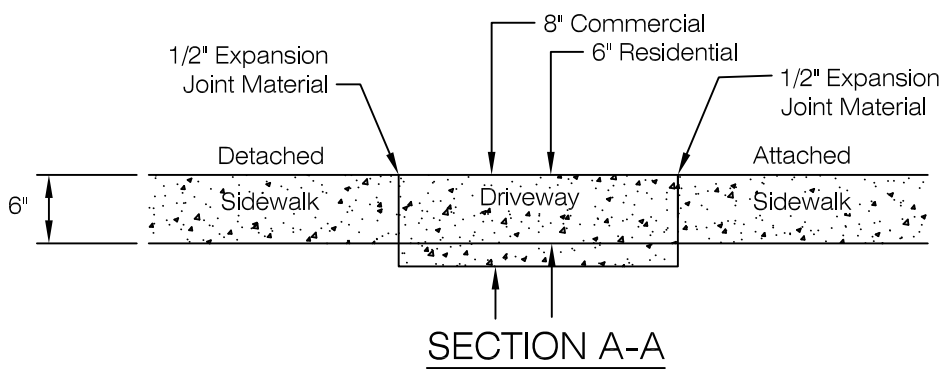
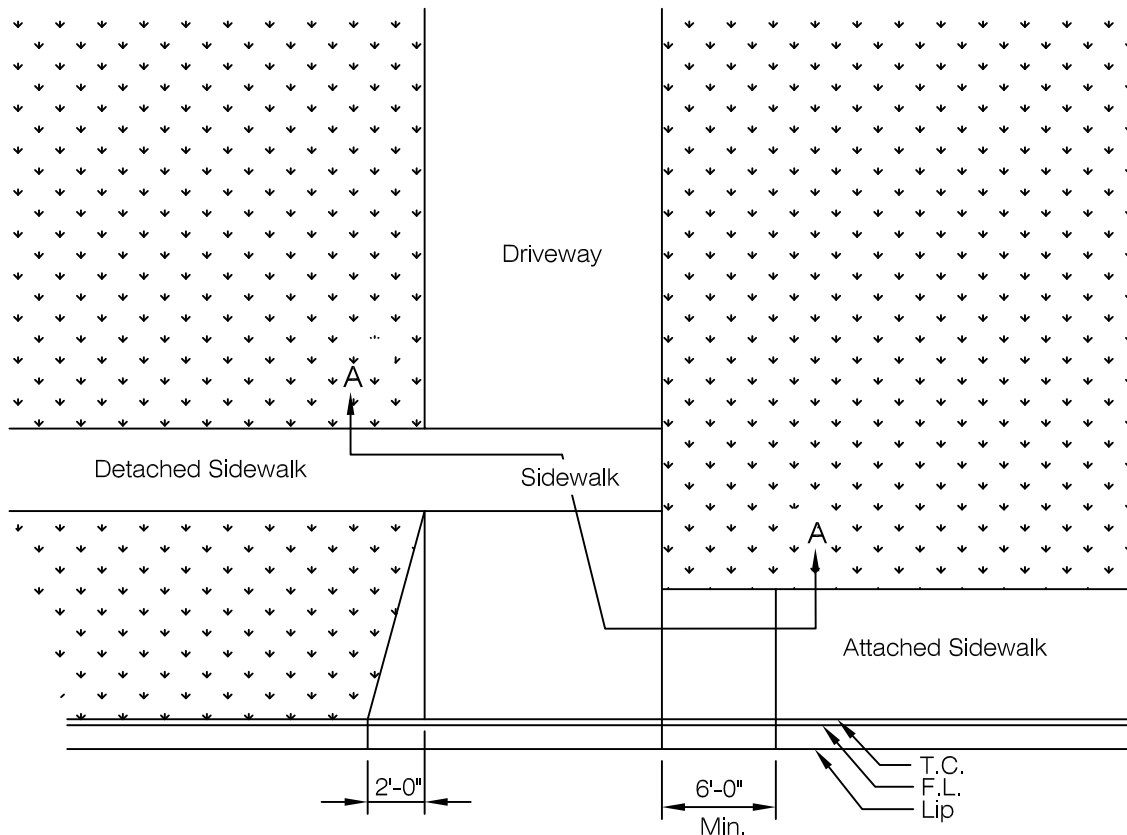
**CONSTRUCTION
DRAWINGS**

REVISION NO:

DATE: 08/01/21

DRAWING

1422



All Sidewalk Thickness Shall Be 6" minimum.

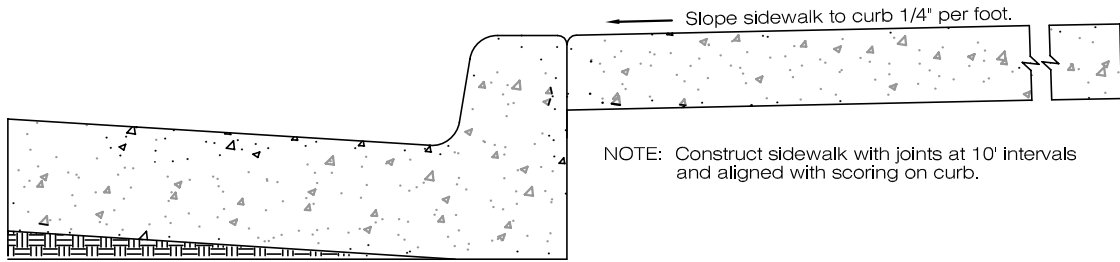
NOTE:

1. Sidewalk grade shall remain consistent across driveway
2. For driveway design requirements, see CONST. DWG. Series 706 & 707
3. This detail applies to Residential & Commercial driveways.

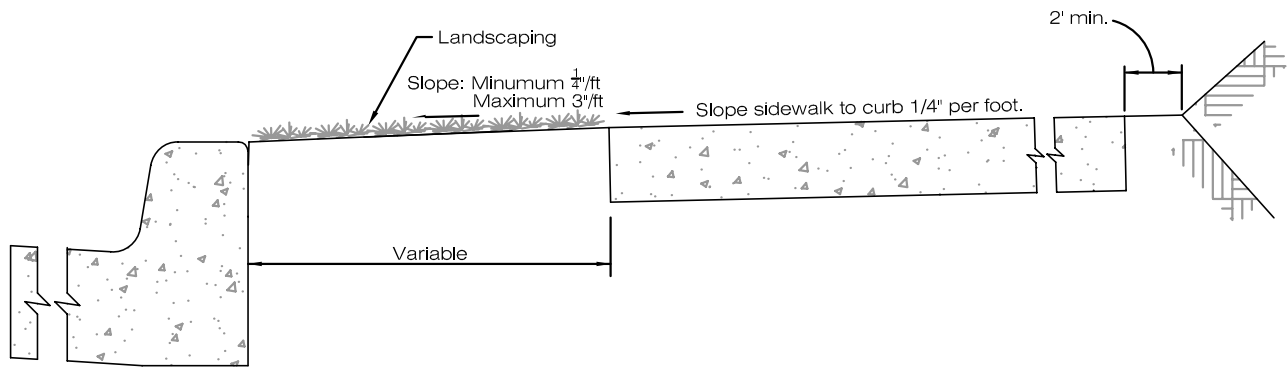
NOT TO SCALE

STANDARD SIDEWALK

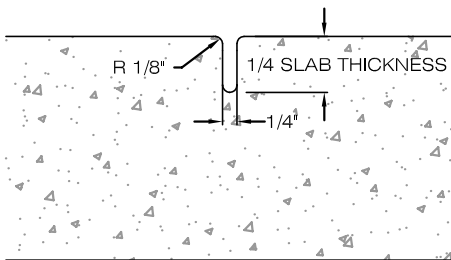
LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 4	DRAWING 1601
		DATE: 02/17/15	



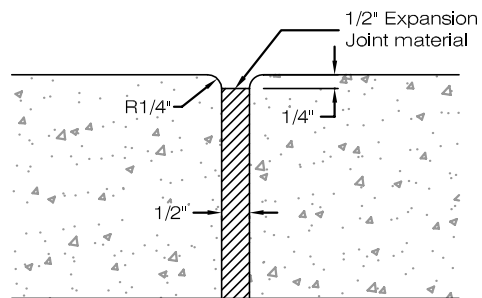
ATTACHED SIDEWALK DETAIL



DETACHED SIDEWALK DETAIL



WEAKENED PLANE JOINT



INSTALL IN LOCATIONS SPECIFIED
IN CHAPTER 22

EXPANSION JOINT

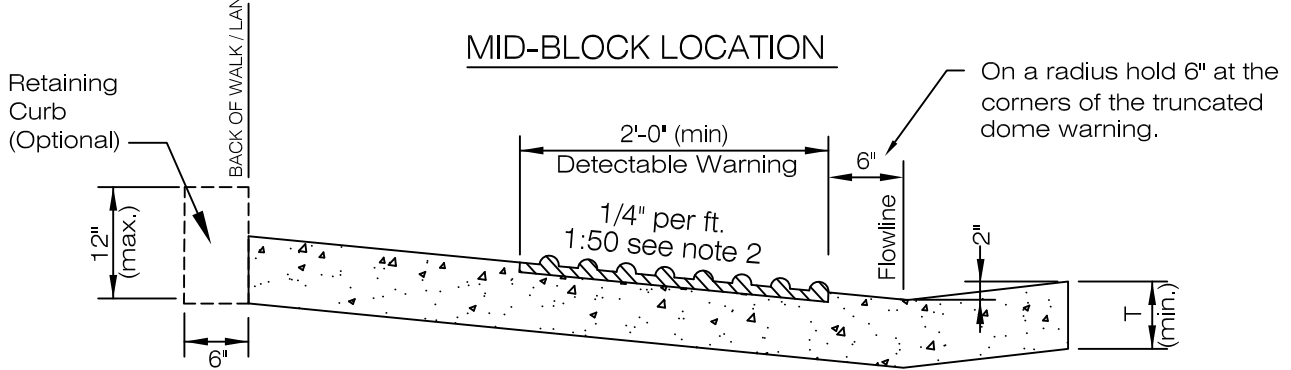
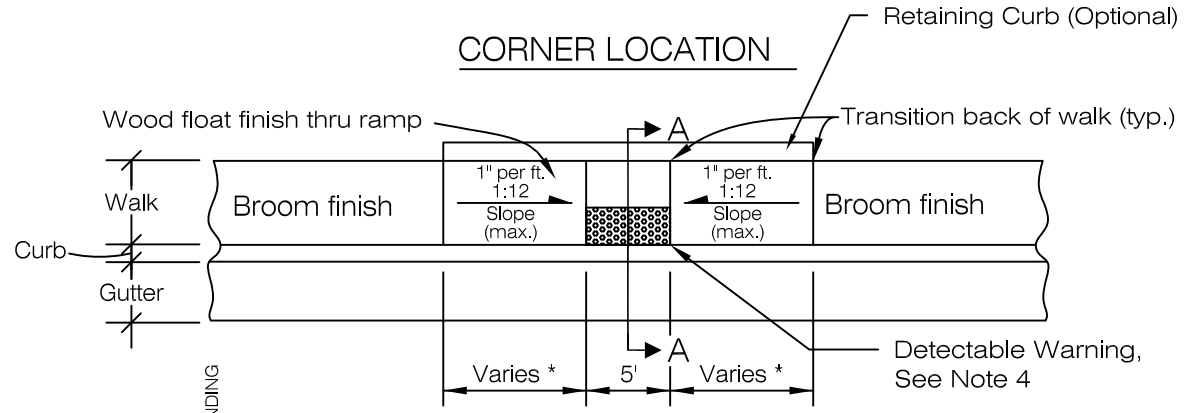
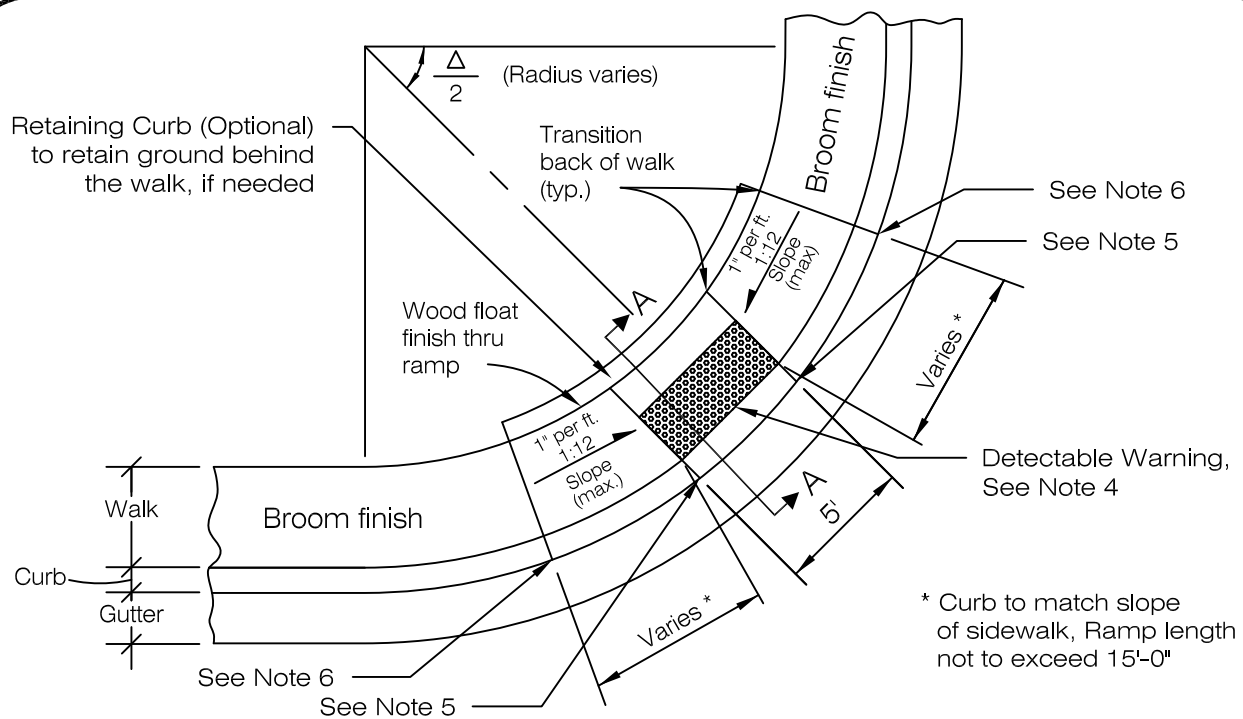
SIDEWALK DETAIL

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 04/01/07

DRAWING
1602



SECTION A-A

- NOTES:
1. T = Concrete thickness, 6" minimum for entire ramp area.
 2. 1:50 Max unless a landing behind ramp (then ramp can be 1:12 with 1:20 on the detectable warning).
 3. See **CONST. DWG. 1606(a) and 1607** for Fort Collins.
 4. Detectable Warning to extend the full width of the ramp. Material to be approved by Local Engineer.
 5. 0" Curb height, See Section A-A.
 6. Standard Curb and Gutter Section, See Standard Drawing 701.

NOT TO SCALE

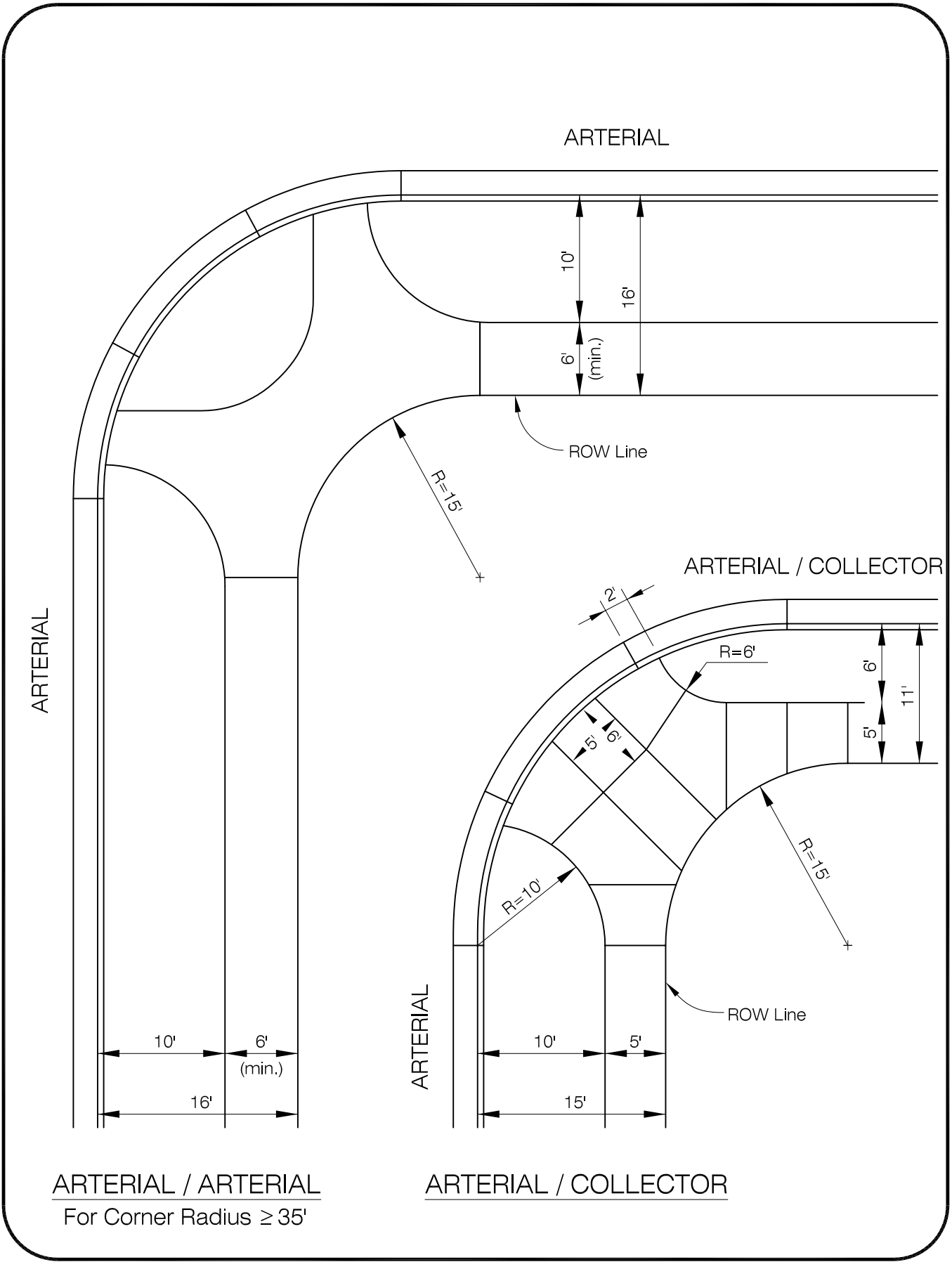
ACCESS RAMP DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 2
DATE: 02/17/15

DRAWING
1603

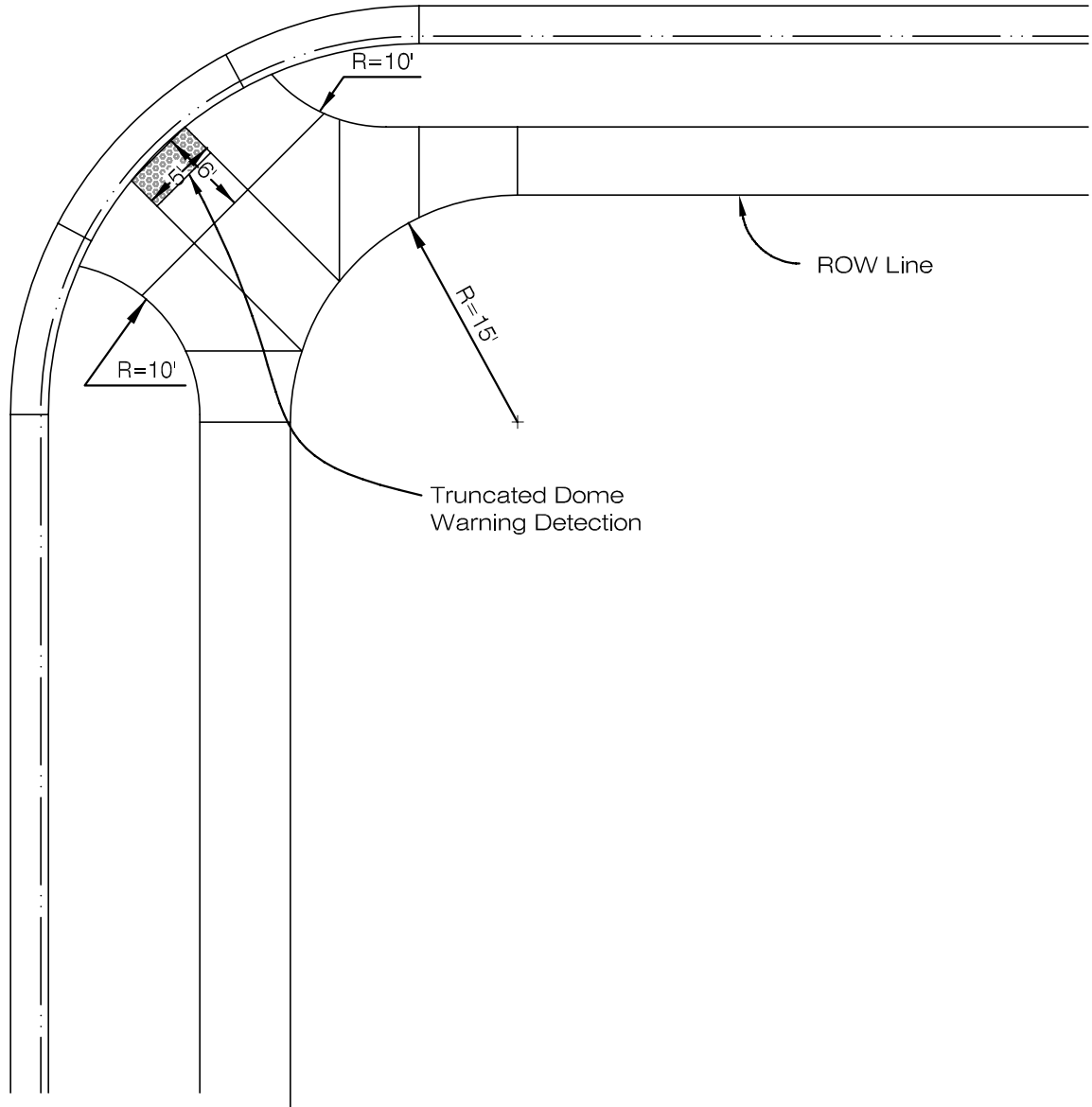


ARTERIAL / ARTERIAL
For Corner Radius $\geq 35'$

ARTERIAL / COLLECTOR

DETACHED WALK / INTERSECTION DETAIL

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO:	DRAWING 1604
		DATE: 08/07/00	



Note:
 Use of this detail requires special approval in
 Fort Collins by the Local Entity Engineer.

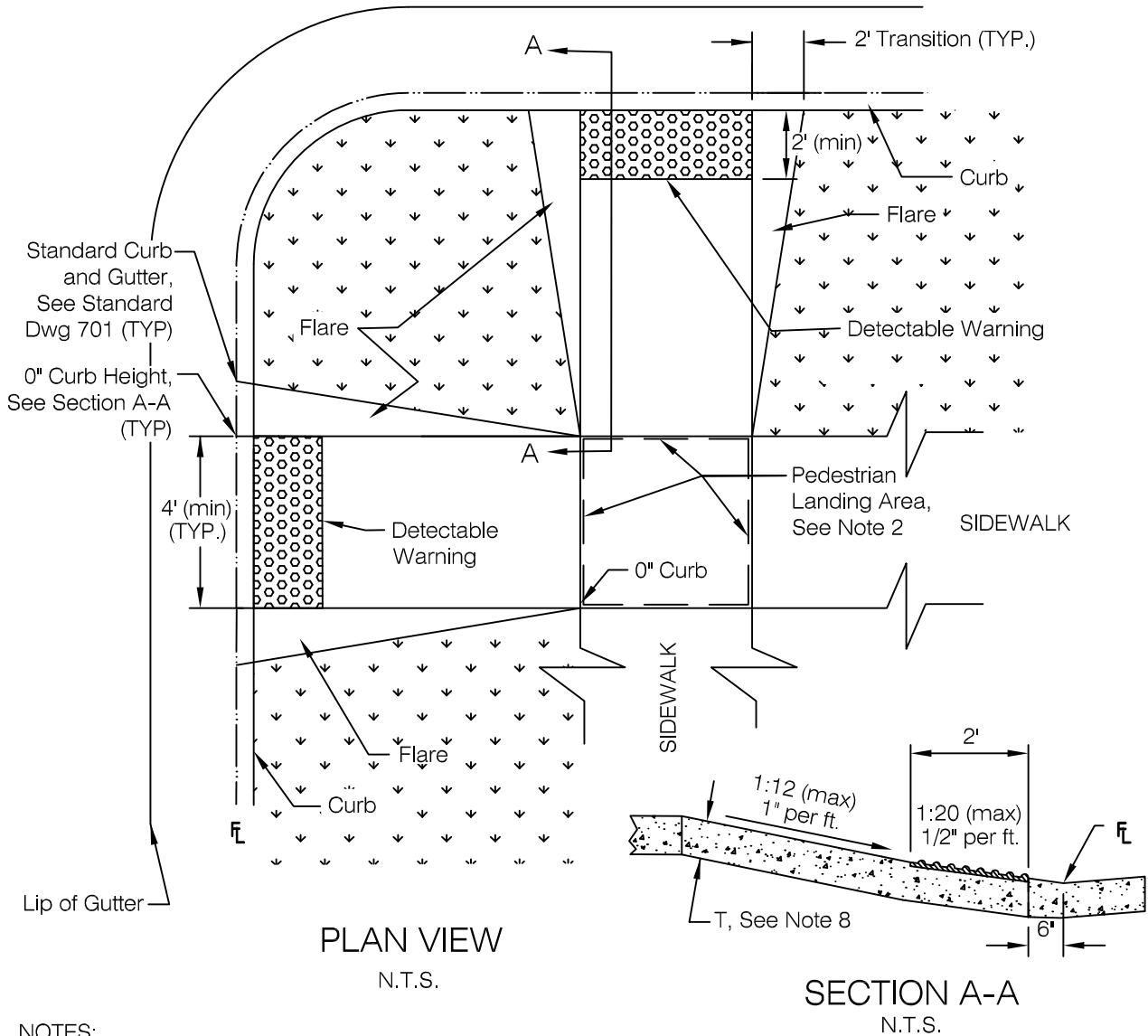
DETACHED WALK / INTERSECTION DETAIL

LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS

CONSTRUCTION
 DRAWINGS

REVISION NO: 2
 DATE: 04/01/07

DRAWING
 1605



NOTES:

1. No joints are allowed in the flowline. Six inch wide curb or "dummy joint" may be tooled no closer than 6 inches from flow line as shown.
2. Pedestrian landing area required 4 ft length x 4 ft width, max slope in any direction is 1:50 or 1/4" per foot.
3. Joint pattern to be according to intersection gutter detail' or as determined by the local entity.
4. Wood float finish is required over the sloped surface of ramp and flares.
5. Minimum ramp width shall be four feet, or the same as the widest adjacent sidewalk, whichever is greater, up to a maximum width of 8 feet.
6. Detectable warning is to extend full width of the ramp and be a minimum of 2.0' in the direction of travel. Material to be approved by local engineer
7. T = Concrete thickness, 6" minimum for entire ramp area.

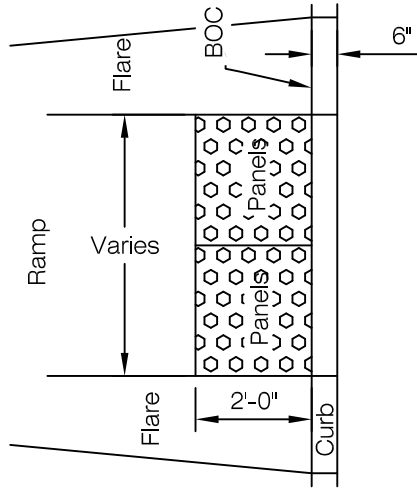
NOT TO SCALE

DIRECTIONAL ACCESS RAMP DETAIL & DETACHED SIDEWALK

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 2	DRAWING 1606
		DATE: 08/01/21	

FORT COLLINS ONLY

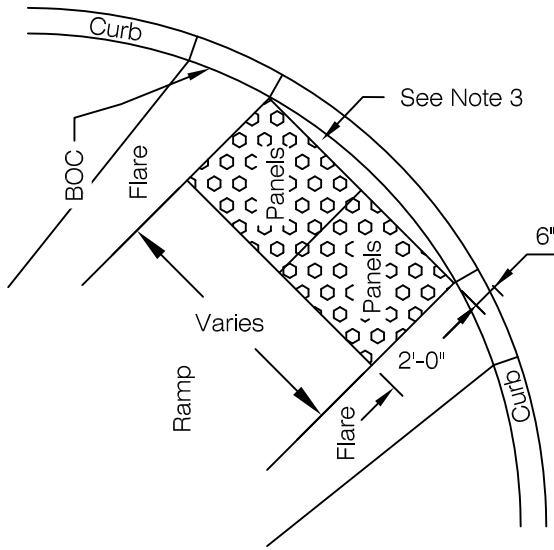
- ☒ Center line of ramp
- ☒ BOC - Back of Curb
- ☒ FOC - Face of Curb
- ☒ FL - Flow line



Case 3-Mid-Block Ramps

Ramp Width	Panel Width
4.5'	2'+2.5'
5.0'	2.5'+2.5'
6.0'	2'+2'+2'
7.0'	2.5'+2'+2.5'
8.0'	2'+2'+2'+2'

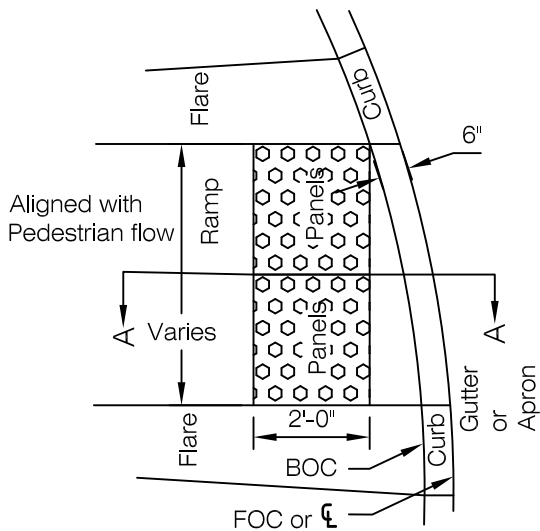
Note:
Truncated dome panels are available in 2'x2' squares and 2'x2.5' rectangles. Combine the widths to fit the ramp. Panels may be cut to no less than a 2'x1.5' size.



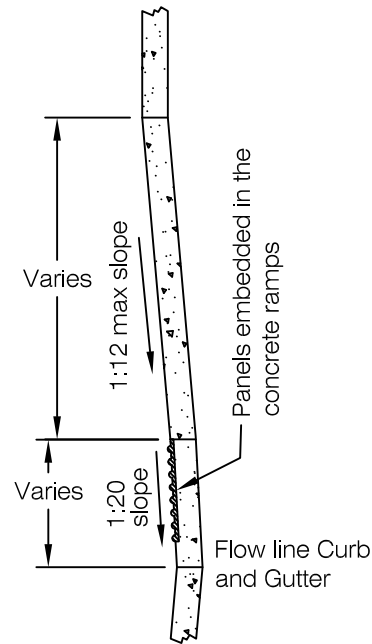
Case 2-Non-Directional Ramps

Notes:

1. Truncated dome warning panel: Install panels along with the concrete pour for the ramp. Specifications for the panel and installation instructions will be provided upon request.
2. This drawing shows vertical curb. For Drive Over Curb the warning detection location shall be placed in the same position 6" back from the back of curb.
3. If curb and gutter are poured monolithic with ramp, place dome edge at back of curb as shown. If not poured monolithic, place dome edge 6" from back of curb.



Case 1-Directional Ramps



Section A-A (Center line of ramp)

NTS

NOT TO SCALE

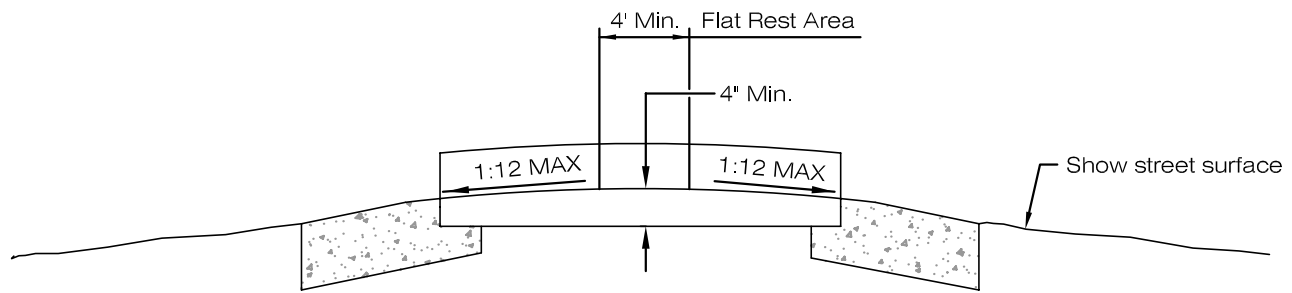
TRUNCATED DOME WARNING FOR ACCESS RAMPS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

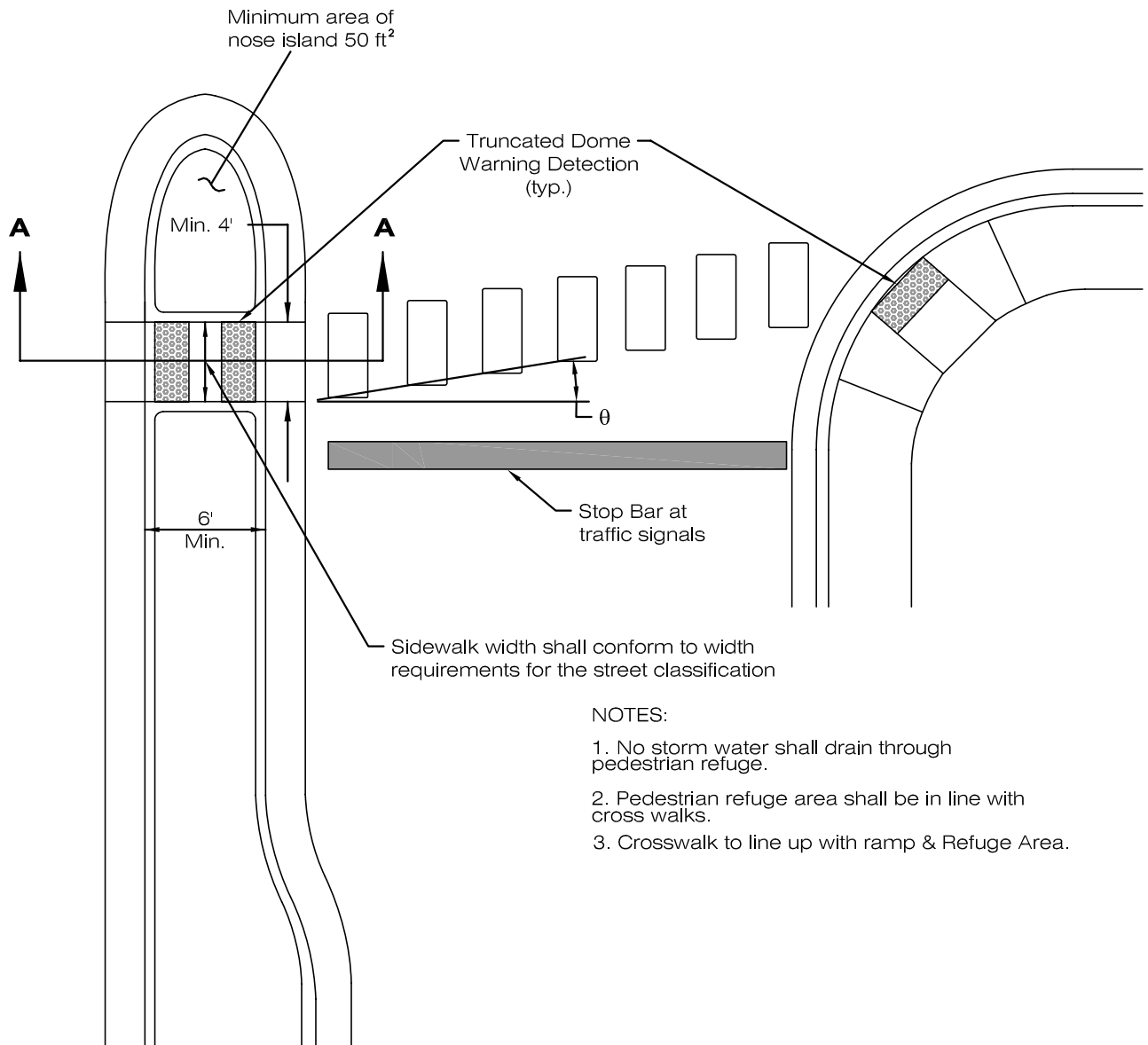
CONSTRUCTION
DRAWINGS

REVISION NO: 3
DATE: 02/17/15

DRAWING
1607



SECTION A-A



NOTES:

1. No storm water shall drain through pedestrian refuge.
2. Pedestrian refuge area shall be in line with cross walks.
3. Crosswalk to line up with ramp & Refuge Area.

MEDIAN ISLANDS & PEDESTRIAN REFUGE AREA

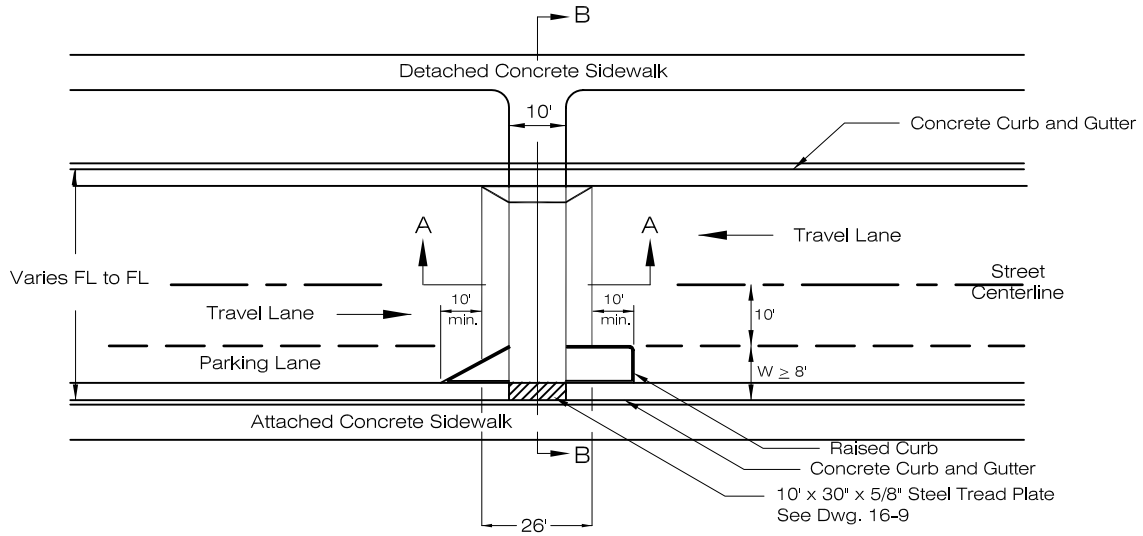
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

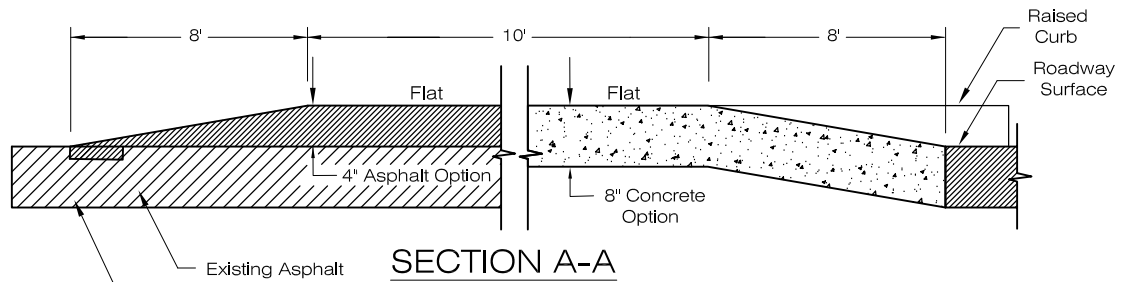
REVISION NO: 2
DATE: 04/01/07

DRAWING
1608

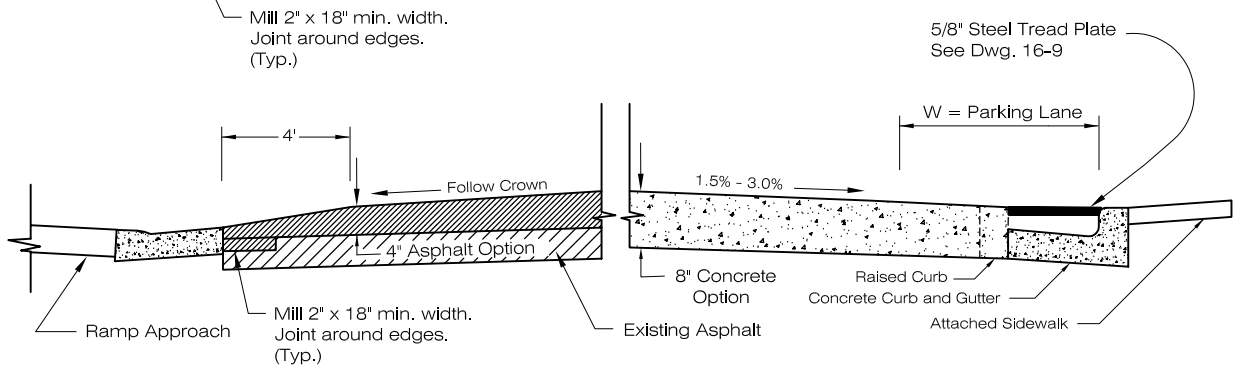
LOVELAND ONLY



PLAN VIEW



SECTION A-A



SECTION B-B
Curb Options

NOTES:

1. Contractor to use tack coat on all contact surfaces.
2. Speed Hump shall follow crown of road with constant thickness of 4".
3. Ramp or elevated approaches may be used.

4. Speed Humps are not allowed on major collector or arterial roadways.
5. See Dwgs 14-19 and 14-16 for signing and marking requirements.
6. Asphalt or concrete may be used for raised pedestrian crossings with ramp approach. Concrete only shall be used for elevated approach.

RAISED PEDESTRIAN CROSSING / SPEED TABLE

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

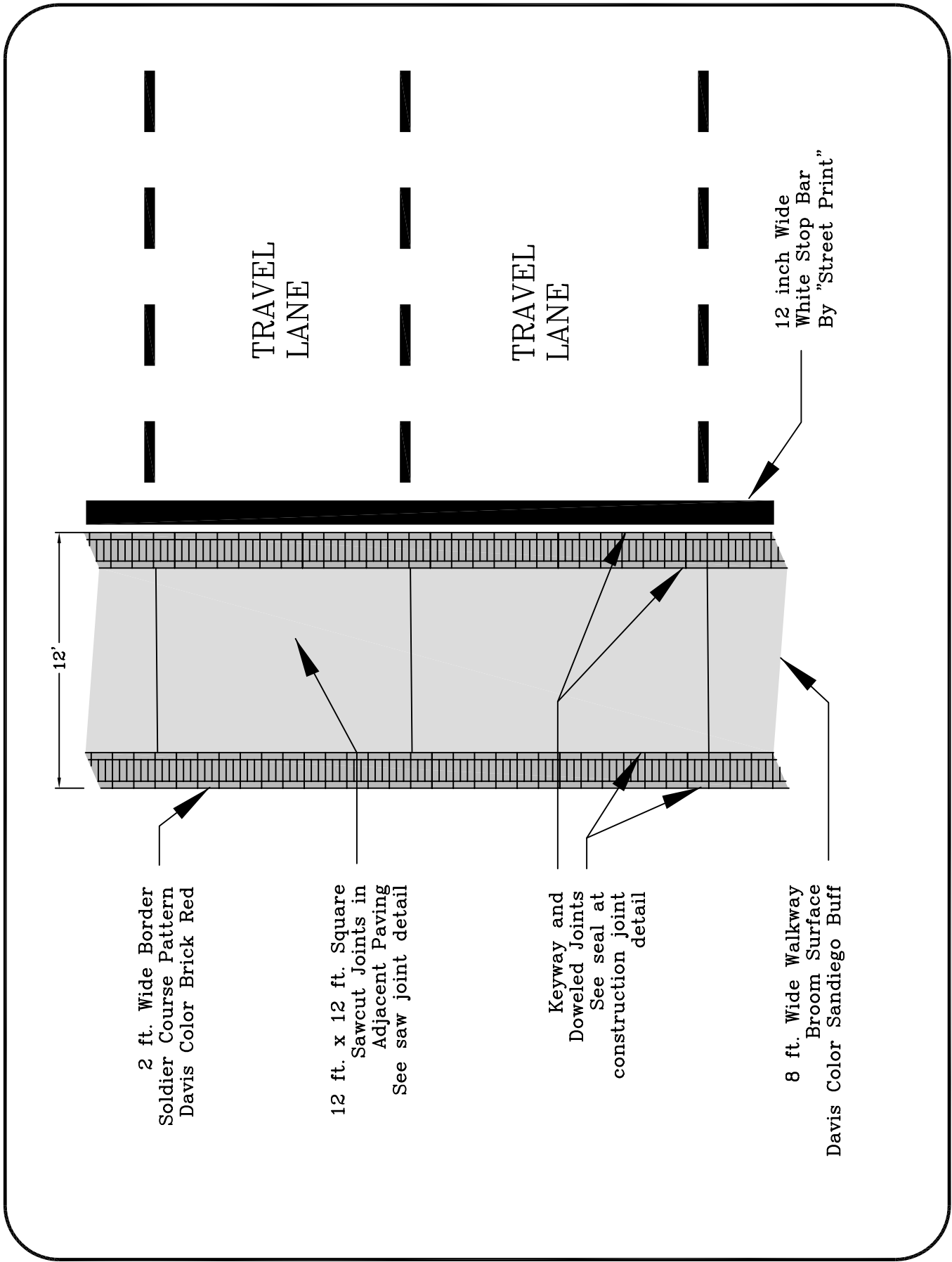
CONSTRUCTION
DRAWINGS

REVISION NO:

DATE: 01/26/01

DRAWING

1609L



2 ft. Wide Border
Soldier Course Pattern
Davis Color Brick Red

12 ft. x 12 ft. Square
Sawcut Joints in
Adjacent Paving
See saw joint detail

Keyway and
Doweled Joints
See seal at
construction joint
detail

8 ft. Wide Walkway
Broom Surface
Davis Color Sandiego Buff

TRAVEL
LANE

TRAVEL
LANE

12 inch Wide
White Stop Bar
By "Street Print"

12'

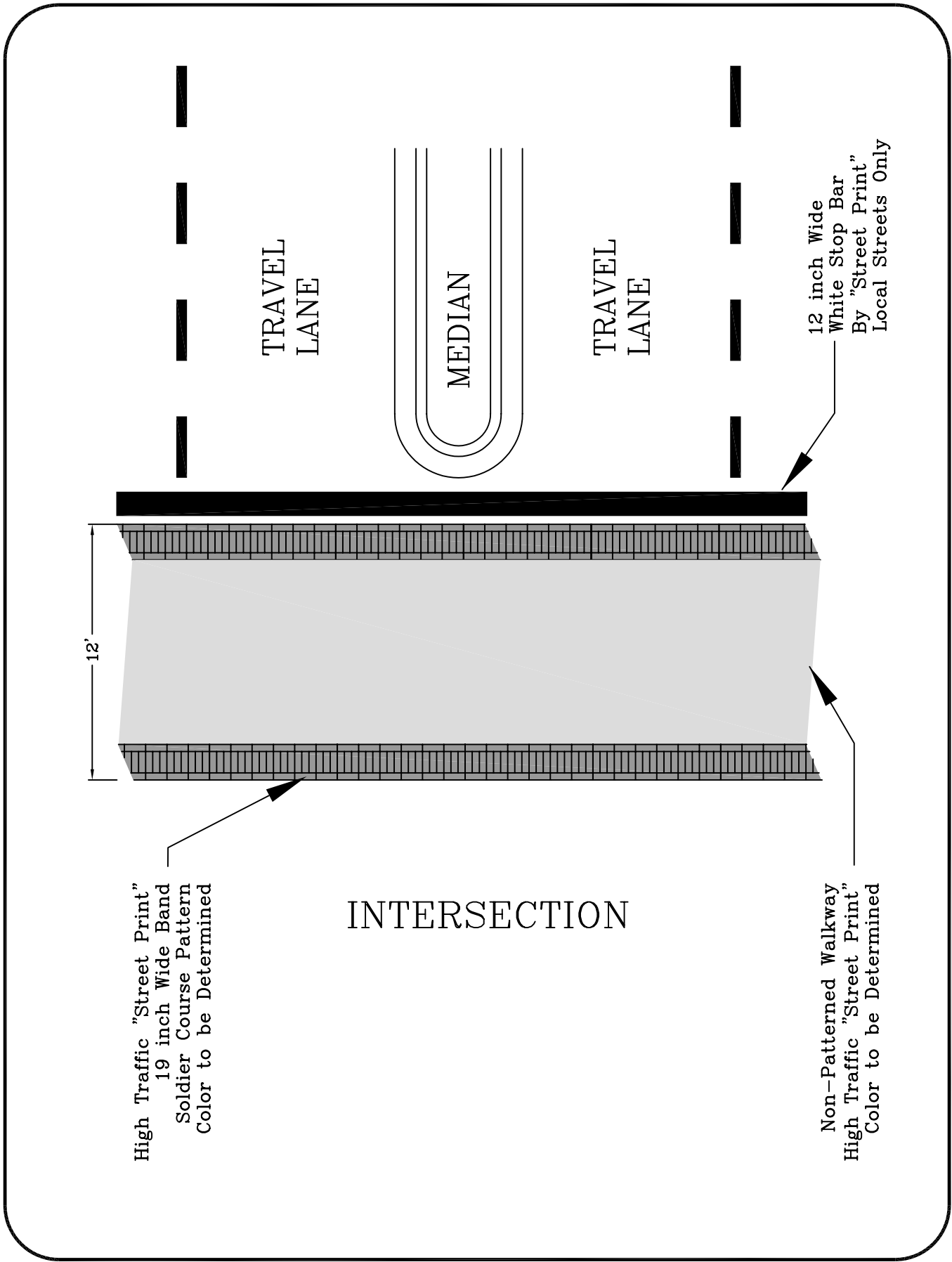
DECORATIVE CONC. CROSSWALK (PATTERNED/COLORED CONC.)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 11/08/00

DRAWING
1610



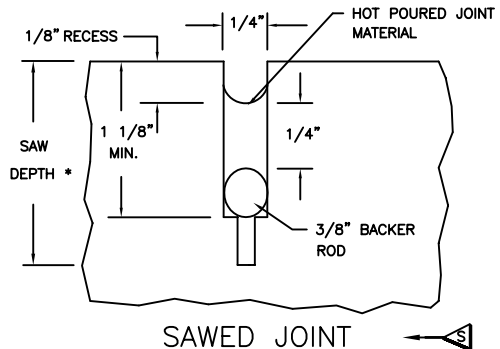
ENHANCED ASPH. CROSSWALK (PATTERNED/COLORED ASPH.)

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

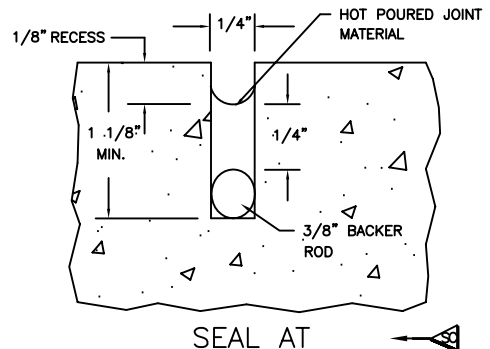
REVISION NO:
DATE: 11/07/00

DRAWING
1611

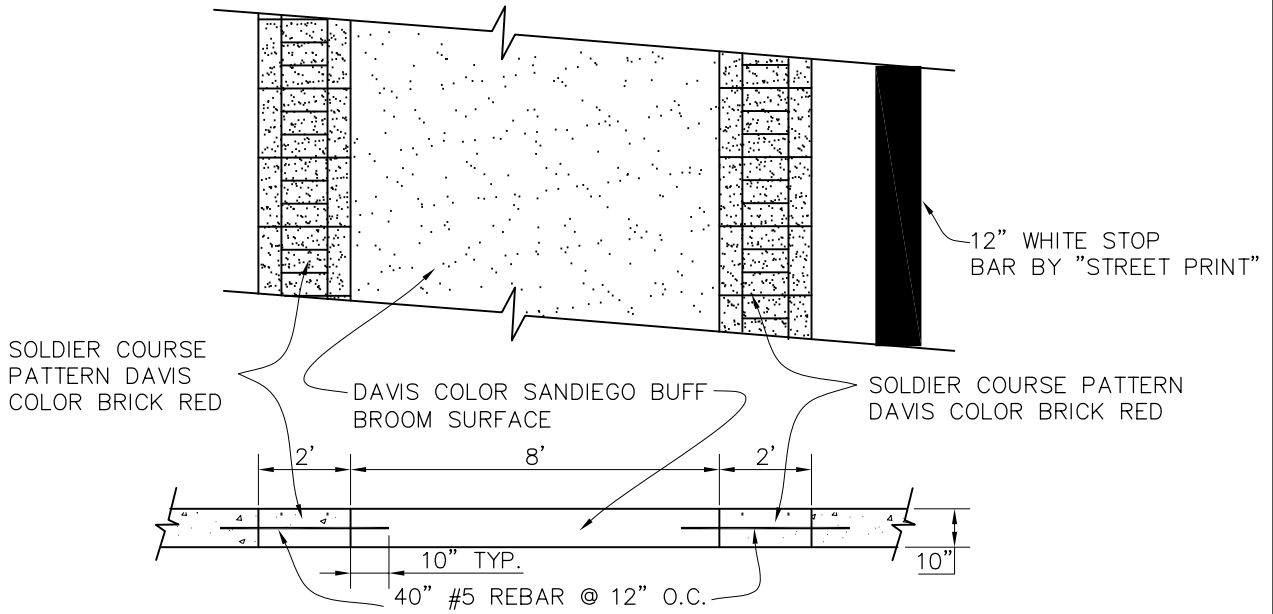


SAWED JOINT

* LONGITUDINAL JOINT, T/3
 TRANSVERSE JOINT, T/4



SEAL AT CONSTRUCTION JOINT



TYPICAL CROSSWALK DETAIL

N.T.S.

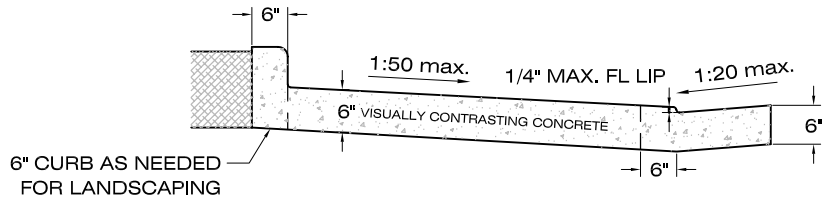
ENHANCED CONCRETE CROSSWALK (CONSTRUCTION DETAIL)

LARIMER COUNTY
 URBAN AREA
 STREET STANDARDS

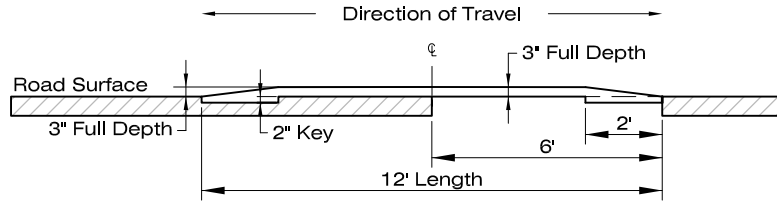
CONSTRUCTION
 DRAWINGS

REVISION NO:
 DATE: 11/08/00

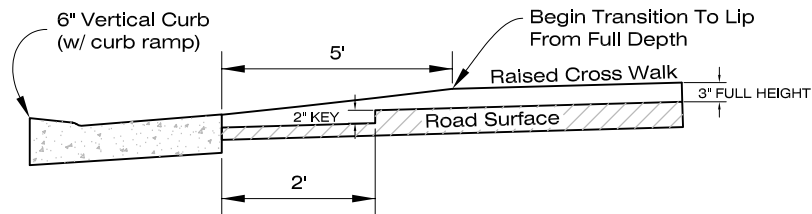
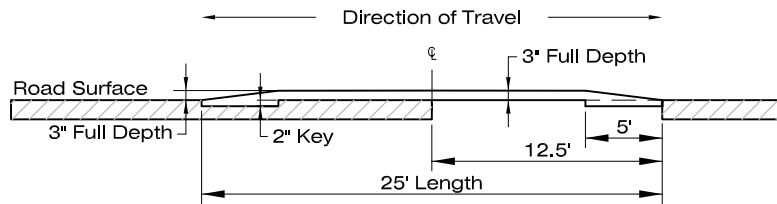
DRAWING
 1612



SPEED TABLE CROSS-SECTION
N.T.S.



RAISED CROSS WALK CROSS-SECTION
N.T.S.



EDGE TAPER CROSS-SECTION
N.T.S.

RAISED CROSS WALK

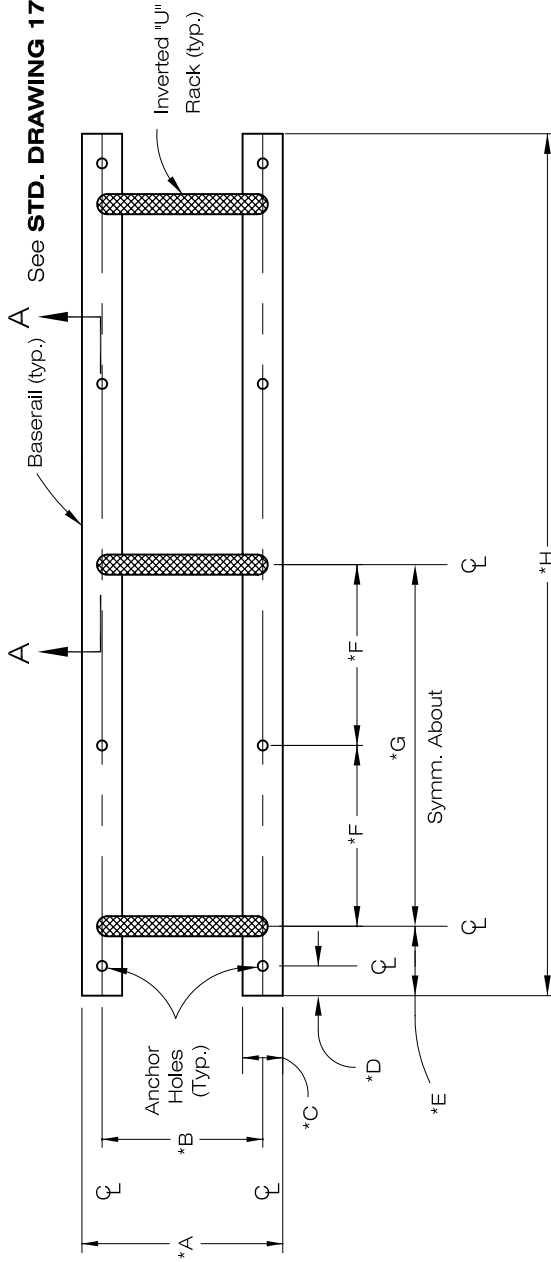
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 04/16/02

DRAWING
1613

See **STD. DRAWING 1702** for Section.



PLAN VIEW
BASE RAIL ARRAY

NOTES:

* REFER TO SCHEDULE BELOW

**3X INVERTED "U" ARRAY SHOWN

DESCRIPTION OF UNITS REQ'D	BASERRAIL							
	A	B	C	D	E	F	G	H
2X ARRAY INVERTED "U" RACKS	(19.1")	(16.1")	(3.0")	(1.50")	(4")	(15")	(30")	(38")
3X ARRAY INVERTED "U" RACKS **	(19.1")	(16.1")	(3.0")	(1.50")	(4")	(15")	(30")	(38")
4X ARRAY INVERTED "U" RACKS	(19.1")	(16.1")	(3.0")	(1.50")	(4")	(15")	(30")	(38")
5X ARRAY INVERTED "U" RACKS	(19.1")	(16.1")	(3.0")	(1.50")	(4")	(15")	(30")	(38")

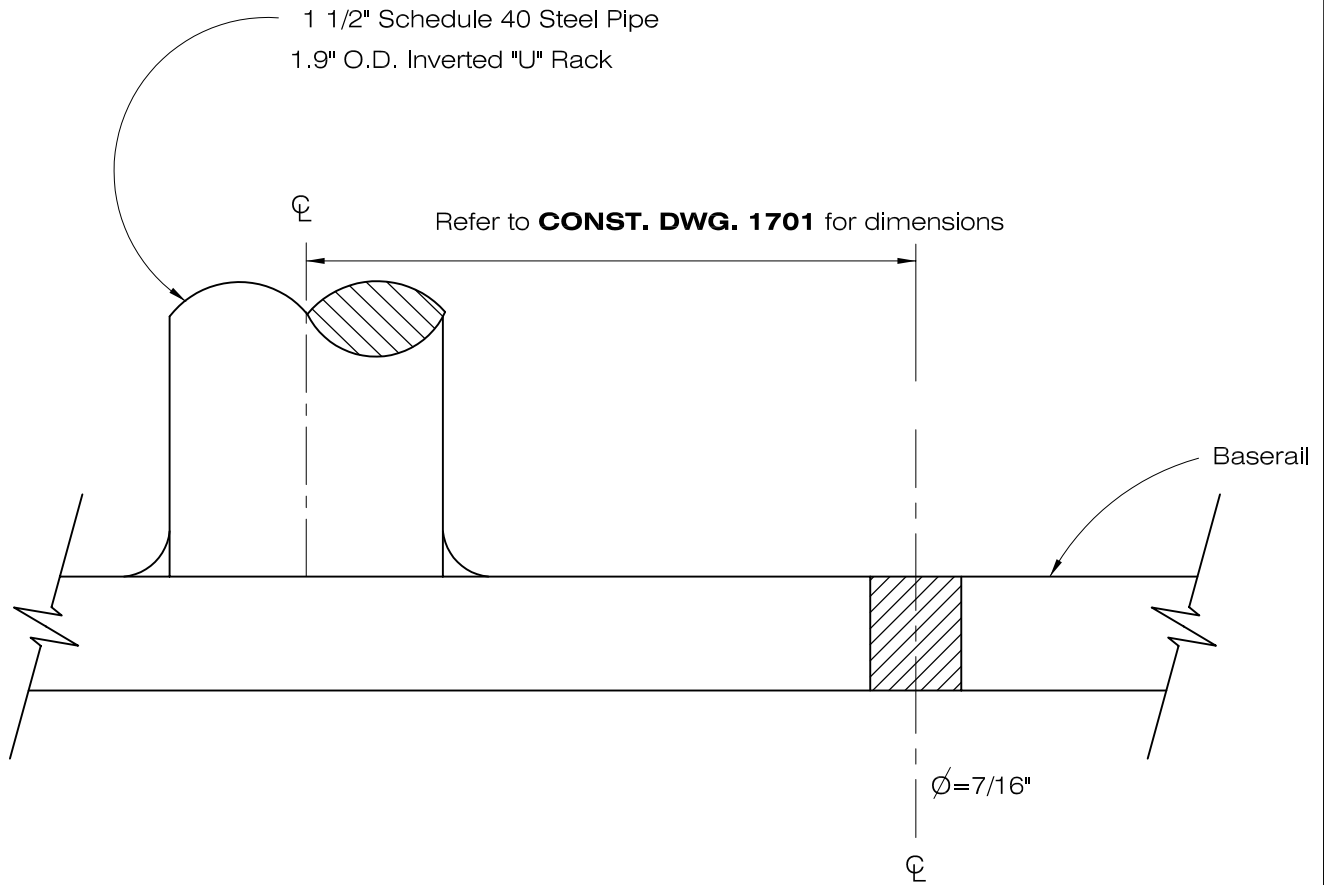
BICYCLE RACK DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/07/00

DRAWING
1701



SECTION A-A

Cross Section of Base Rail
(From **CONST. DWG. 1701**)

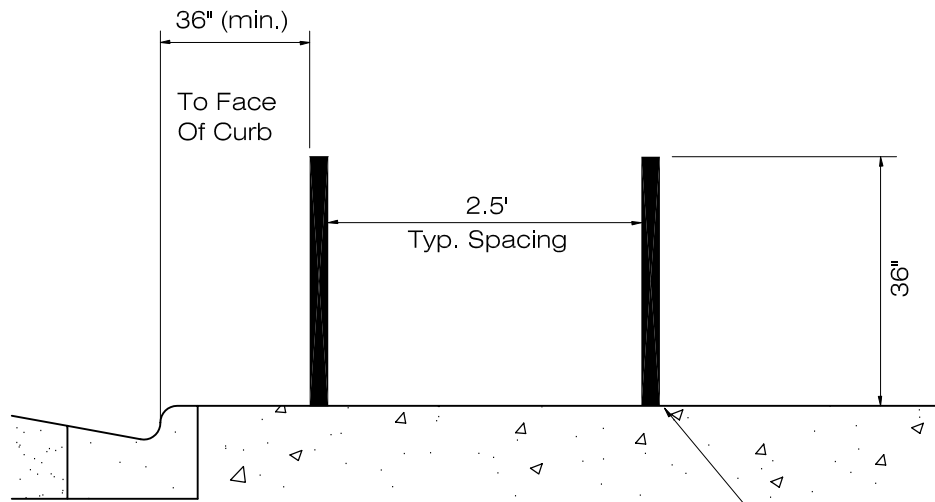
BICYCLE RACK DETAILS

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

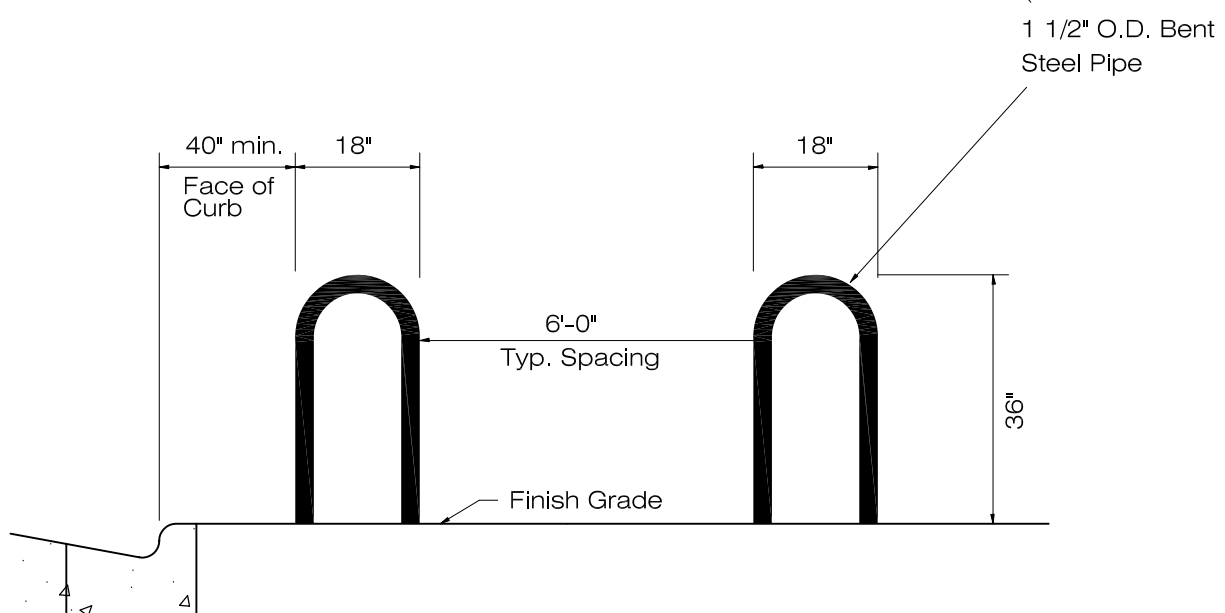
**CONSTRUCTION
DRAWINGS**

REVISION NO:
DATE: 08/07/00

**DRAWING
1702**



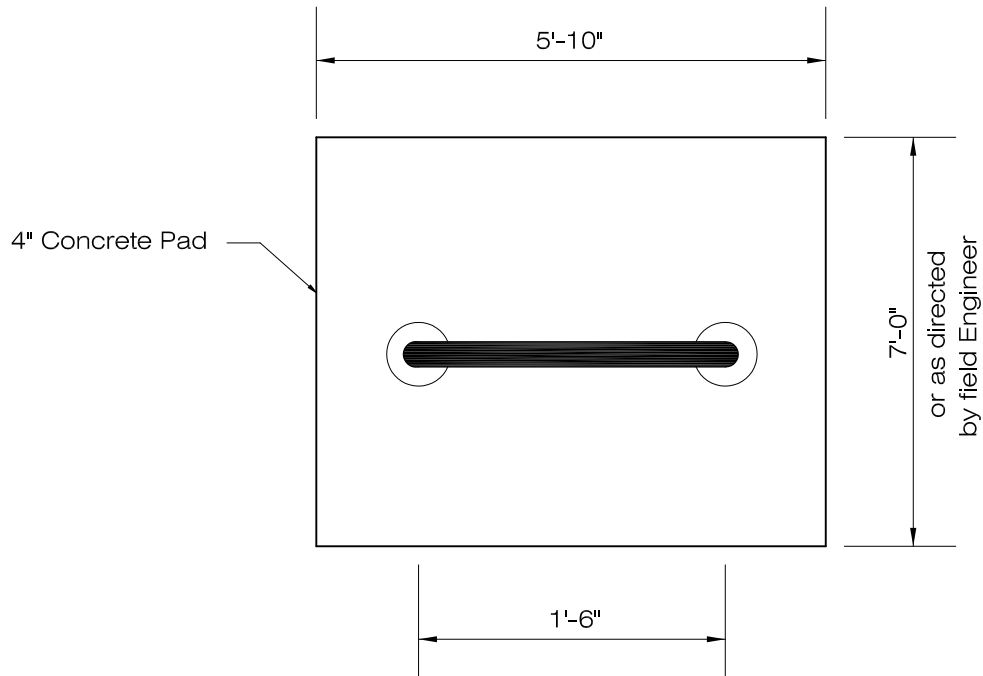
"INVERTED U" BICYCLE RACK



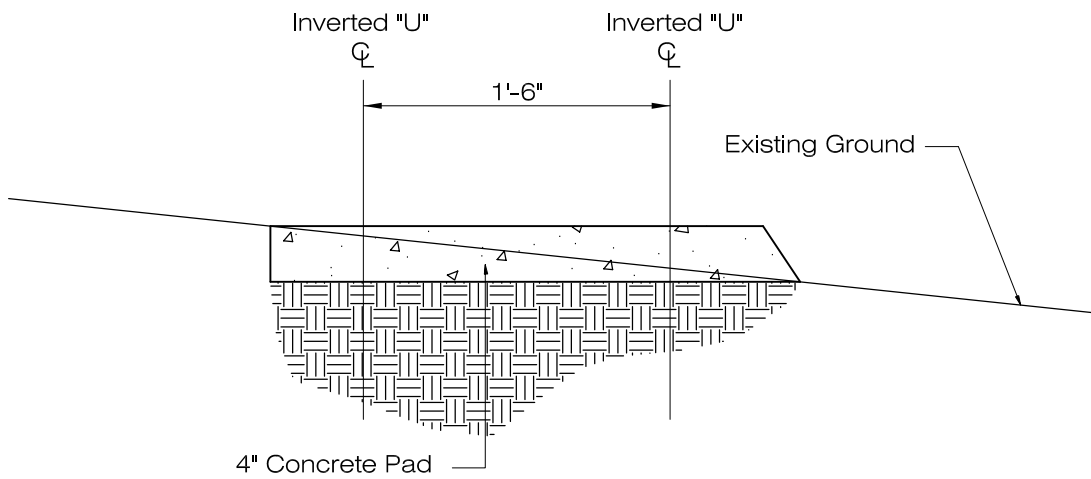
SPACE REQUIREMENTS

BICYCLE RACK DETAILS

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1	DRAWING 1703
		DATE: 03/01/02	



PLAN-CONCRETE PAD



ELEVATION

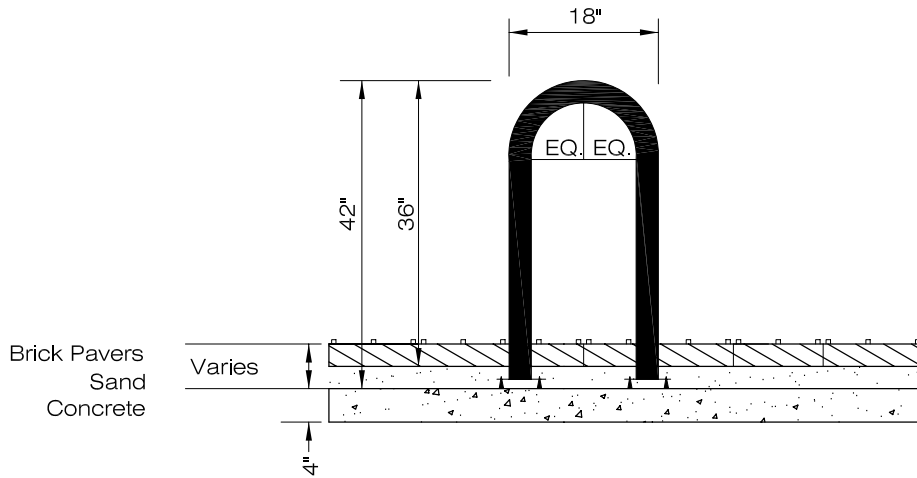
BICYCLE RACK FOUNDATION DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

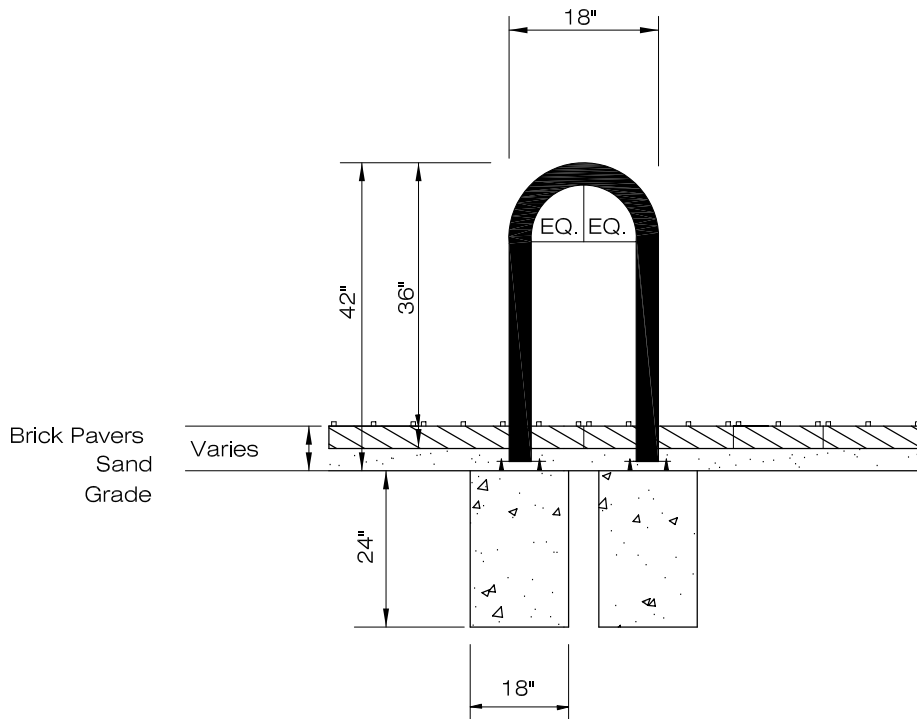
CONSTRUCTION
DRAWINGS

REVISION NO:
DATE: 08/07/00

DRAWING
1704



42" BICYCLE RACK IN EXISTING BRICK PAVERS
SET IN SAND ON CONCRETE



42" BICYCLE RACK IN EXISTING BRICK PAVERS
SET IN SAND ON GRADE

BICYCLE RACK DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

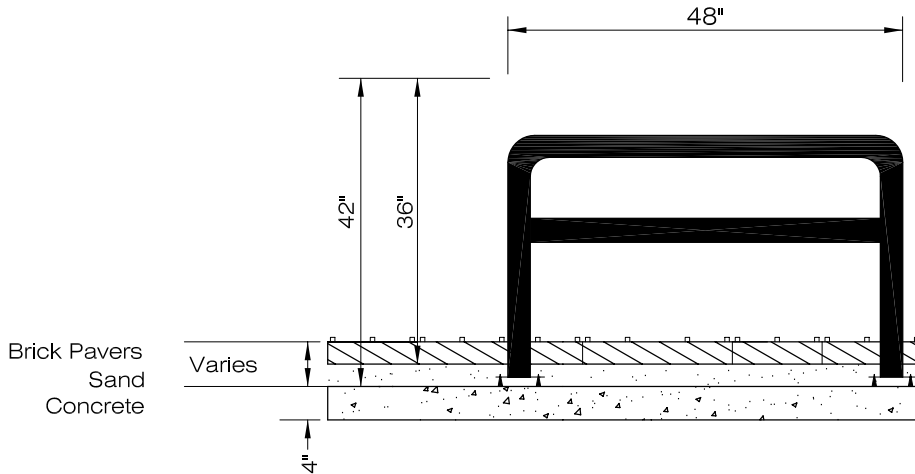
REVISION NO:

DATE: 08/07/00

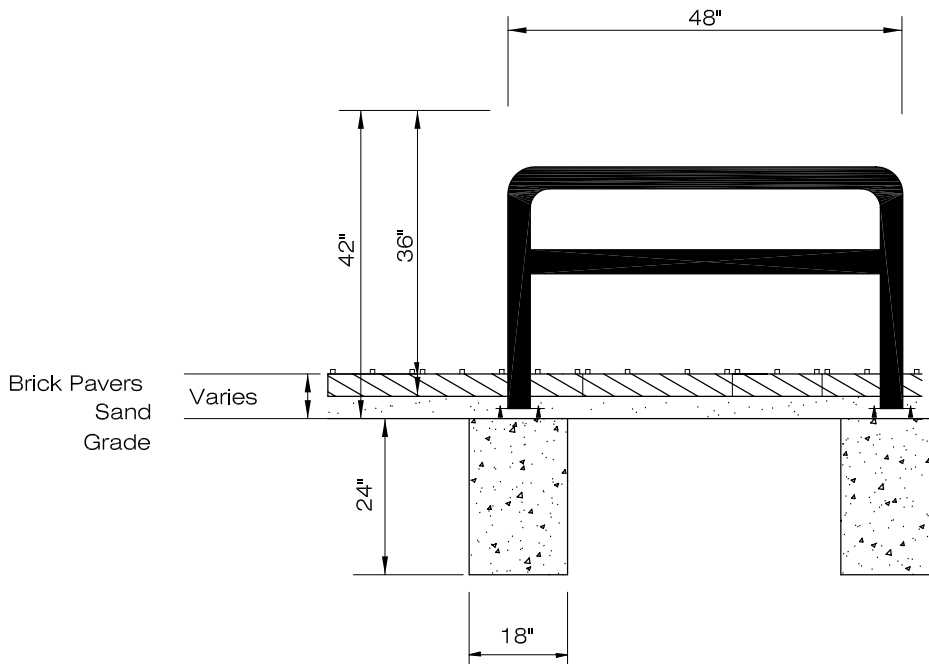
DRAWING

1705

FORT COLLINS ONLY



42" BICYCLE RACK IN EXISTING BRICK PAVERS
SET IN SAND ON CONCRETE



42" BICYCLE RACK IN EXISTING BRICK PAVERS
SET IN SAND ON GRADE

BICYCLE RACK DETAILS

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

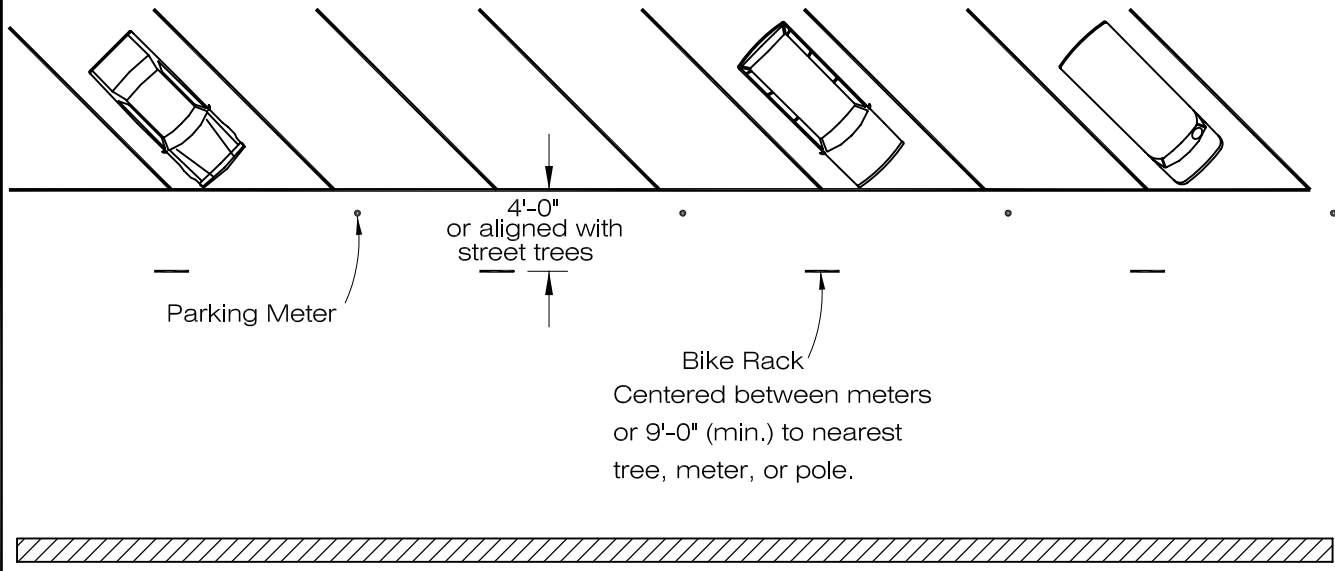
CONSTRUCTION
DRAWINGS

REVISION NO:

DATE: 08/07/00

DRAWING

1706F



Building Face

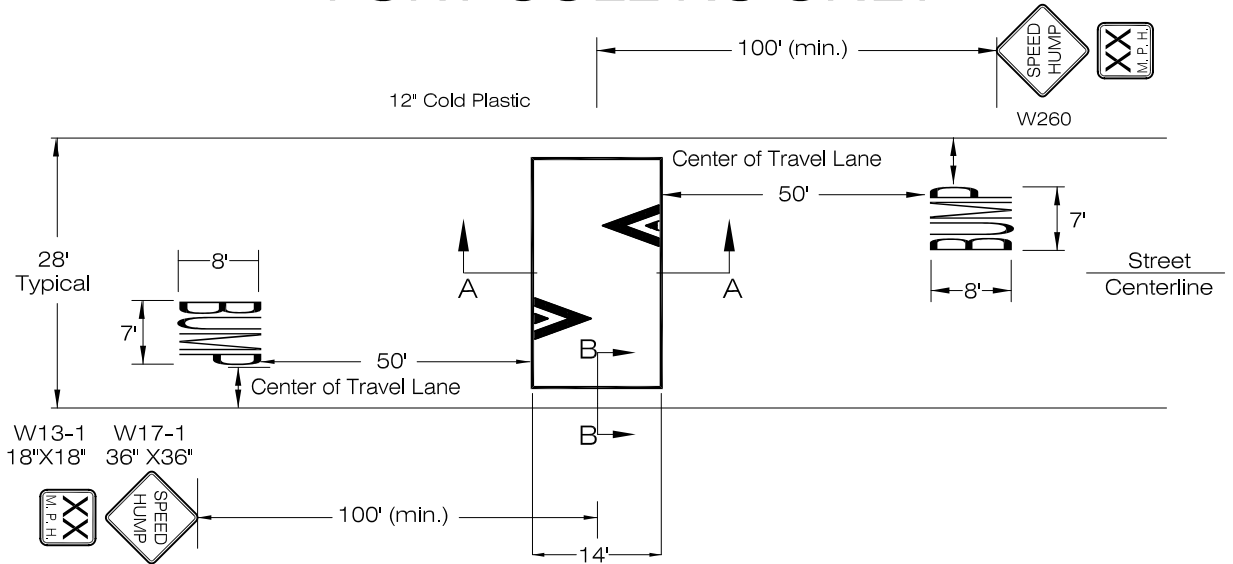
INVERTED U RACKS PLACEMENT
ALONG CURBLINE
WITH DIAGONAL PARKING

BICYCLE RACK DETAILS

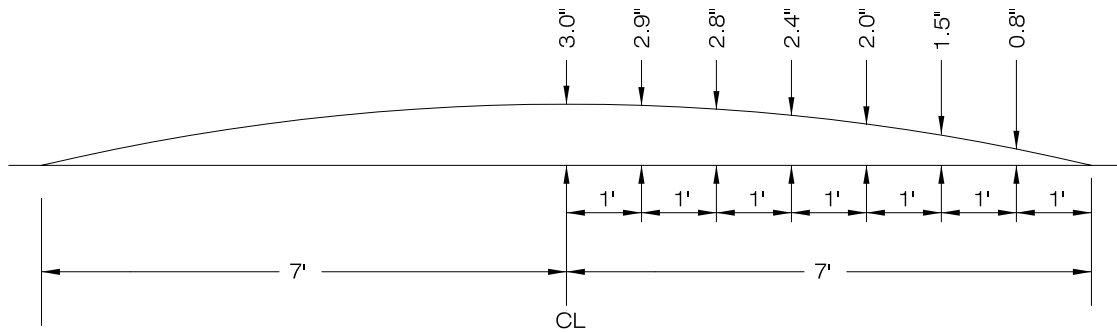
LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO:	DRAWING 1707
		DATE: 08/07/00	

FORT COLLINS ONLY

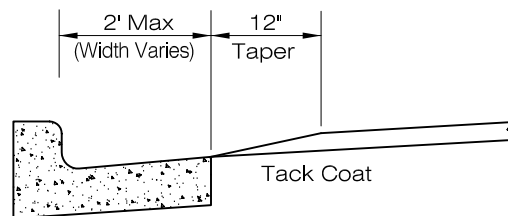
W17-1 36" X36" W13-1 18" X18"



SPEED HUMP (Typ.)



SECTION A-A
PARABOLIC CROWN



SECTION B-B
Curb Detail

14' LOCAL SPEED HUMP

LARIMER COUNTY
URBAN AREA
STREET STANDARDS

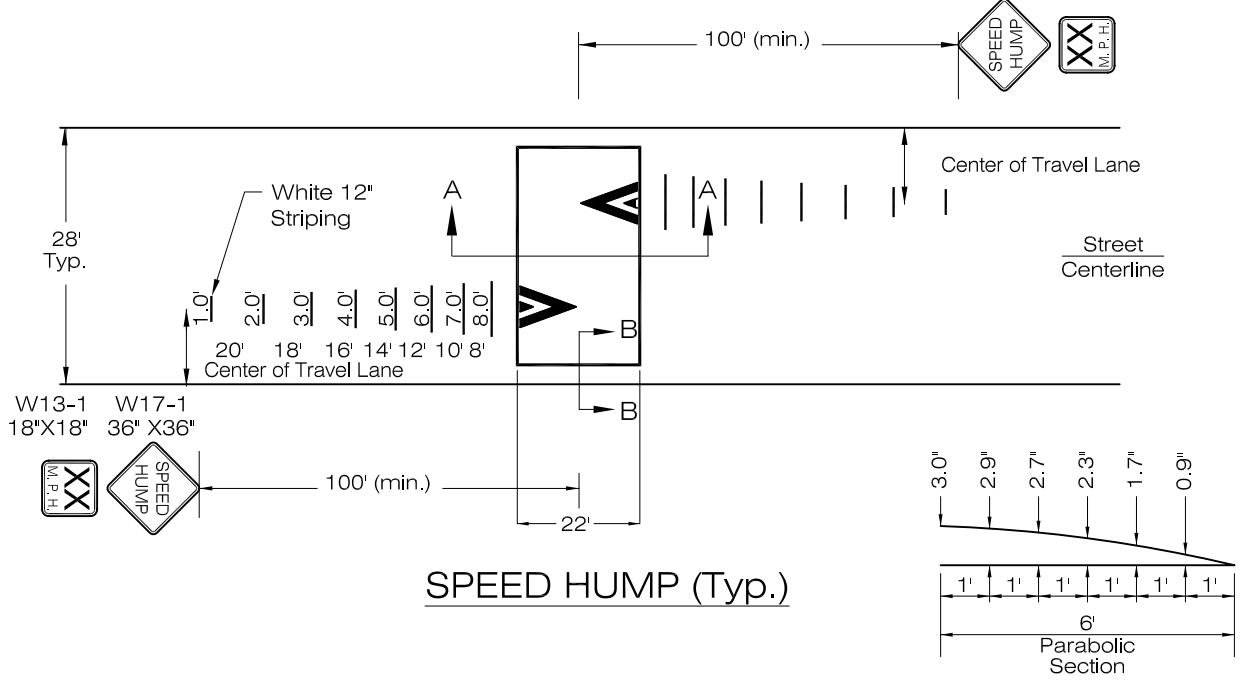
CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 03/01/02

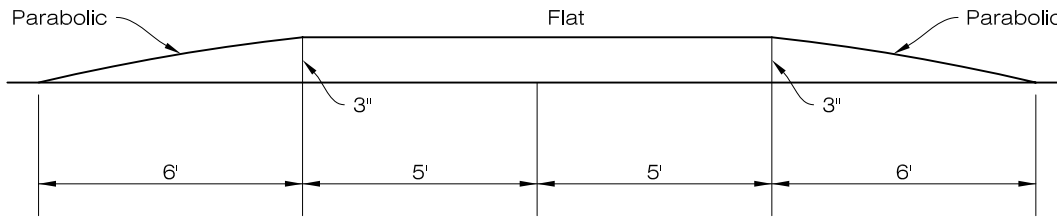
DRAWING
1801F

FORT COLLINS ONLY

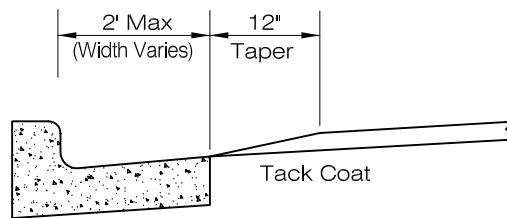
W17-1 36" X36" W13-1 18" X18"



SPEED HUMP (Typ.)



SECTION A-A



SECTION B-B

Curb Detail

22' SPEED HUMP

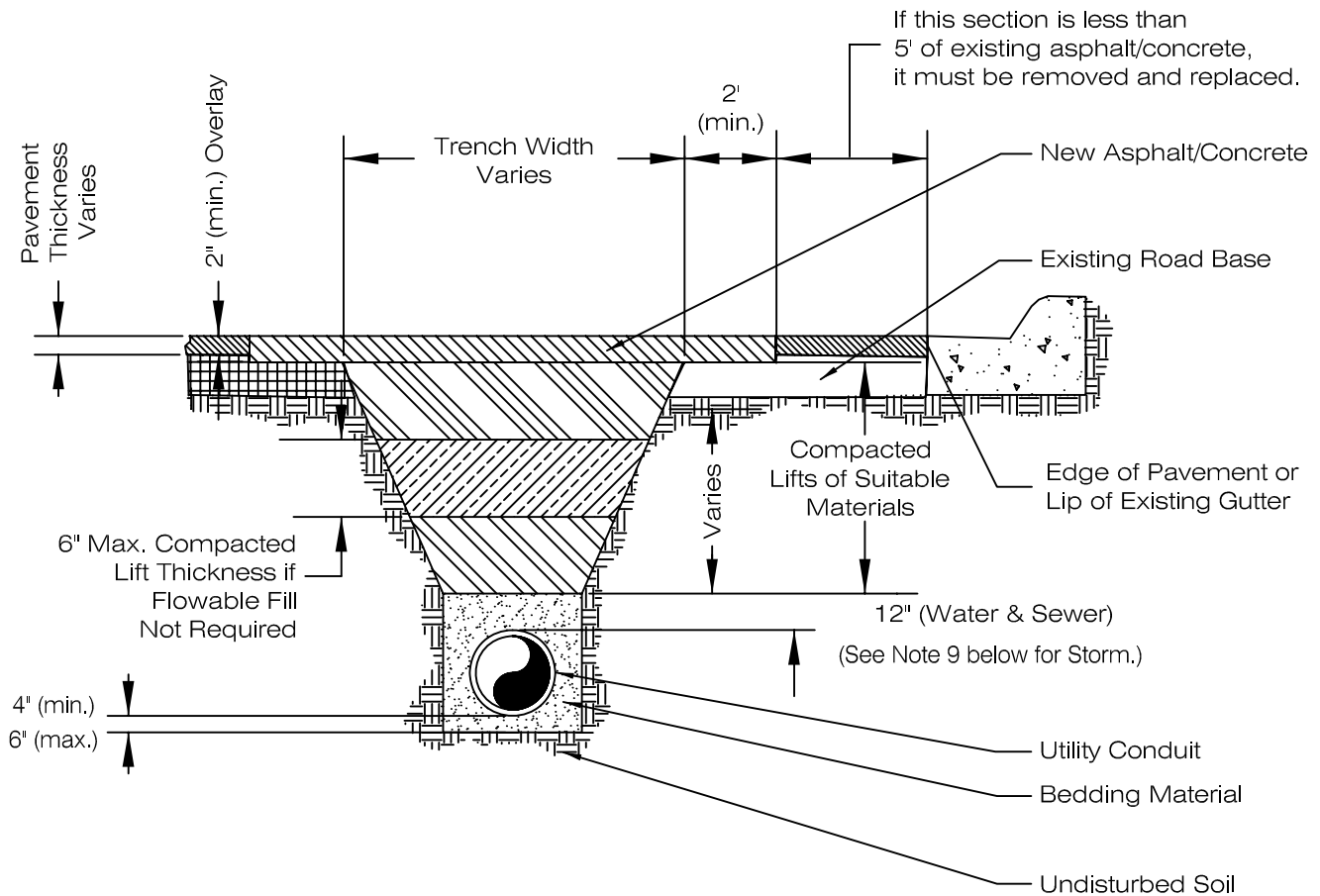
LARIMER COUNTY
URBAN AREA
STREET STANDARDS

CONSTRUCTION
DRAWINGS

REVISION NO: 1
DATE: 03/01/02

DRAWING
1802F

FULL DEPTH ASPHALT PATCH:
 THE THICKNESS OF THE ASPHALT PATCH SHALL BE ONE-INCH
 THICKER THAN THE EXISTING ASPHALT THICKNESS WITH A
 MINIMUM ASPHALT THICKNESS PER TABLE 25-1 OF CHAPTER 25.

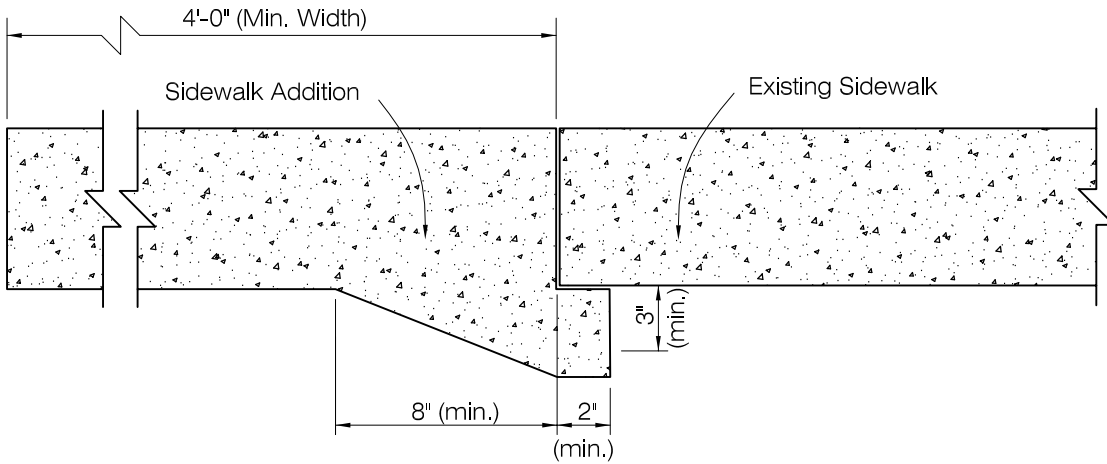


NOTES:

1. All trenches shall be backfilled in accordance with the above detail unless otherwise specified by the Local Entity Engineer.
2. Prior to placement of asphalt/concrete, pavement edge shall be saw cut to a clean, vertical, and straight edge & outside of the wheel path.
3. Where the surrounding soils are non-expansive, a flowable fill may be substituted for backfill material.
4. Trench width shall not be more than 16" nor less than 12" wider than the outside diameter of the pipe.
5. Use a 18" long #4 epoxy rebar at 18" on centers along the perimeter of concrete panel replacement sections.
6. Refer to **Chapter 22, Materials & Construction Specifications** for compaction and testing requirements.
7. In unimproved areas, all disturbed areas shall be regraded, seeded & mulched.
8. In concrete roadways, a minimum of one entire concrete panel must be replaced.
9. Bedding material depth when installing storm sewer shall be up to spring line, except in areas of unsuitable backfill; then, bedding material shall be placed to a level 12" above pipe.

TRENCH DETAIL

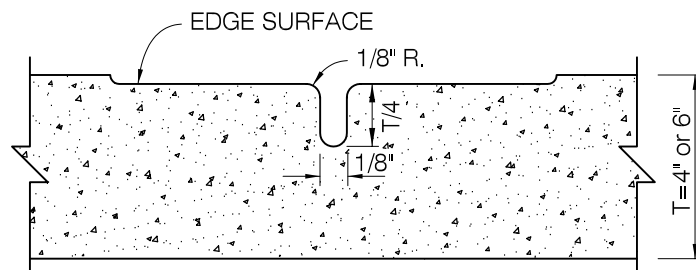
LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1	DRAWING 2201
		DATE: 04/01/07	



ADDITION TO EXISTING SIDEWALK

NOTES:

1. New walk additions shall be placed to the same line and grade as the existing walk.
2. Match transverse tooled joints to existing tooled joints.



TOOL JOINT FOR WALKS

NOTES:

1. Joint shall be cut 1/4 thickness of initial concrete; tool joint for walks.

SIDEWALK WIDENING DETAILS

**LARIMER COUNTY
URBAN AREA
STREET STANDARDS**

**CONSTRUCTION
DRAWINGS**

REVISION NO:
DATE: 08/07/00

**DRAWING
2501**