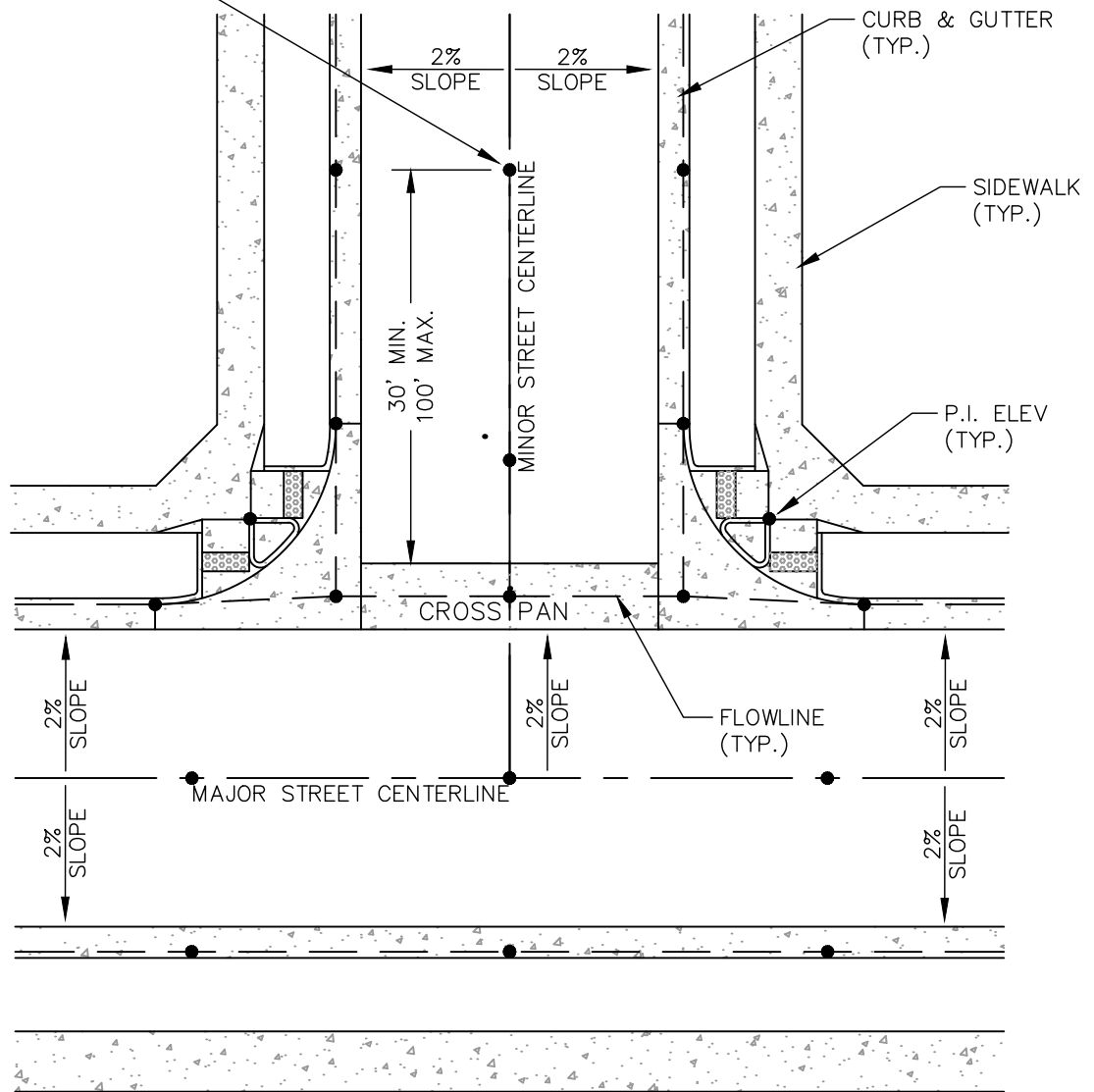


DESIGN ENGINEER—  
 LABEL STATION OF  
 BEGIN TRANSITION TO  
 REMOVE CROWN FROM  
 LOCAL STREET



NOTES:

1. DESIGN ENGINEER SHALL PROVIDE ELEVATIONS AT THESE POINTS (●) ON THE CONSTRUCTION DRAWINGS.
2. ALL ELEVATION POINTS SHALL BE STAKED FOR CONSTRUCTION.
3. ALL FLOWLINE GRADES THAT ARE NOT PARALLEL TO CENTERLINE SHALL BE LABELED ON INTERSECTION DETAILS OR A PROFILE DRAWING SHALL BE PROVIDED.



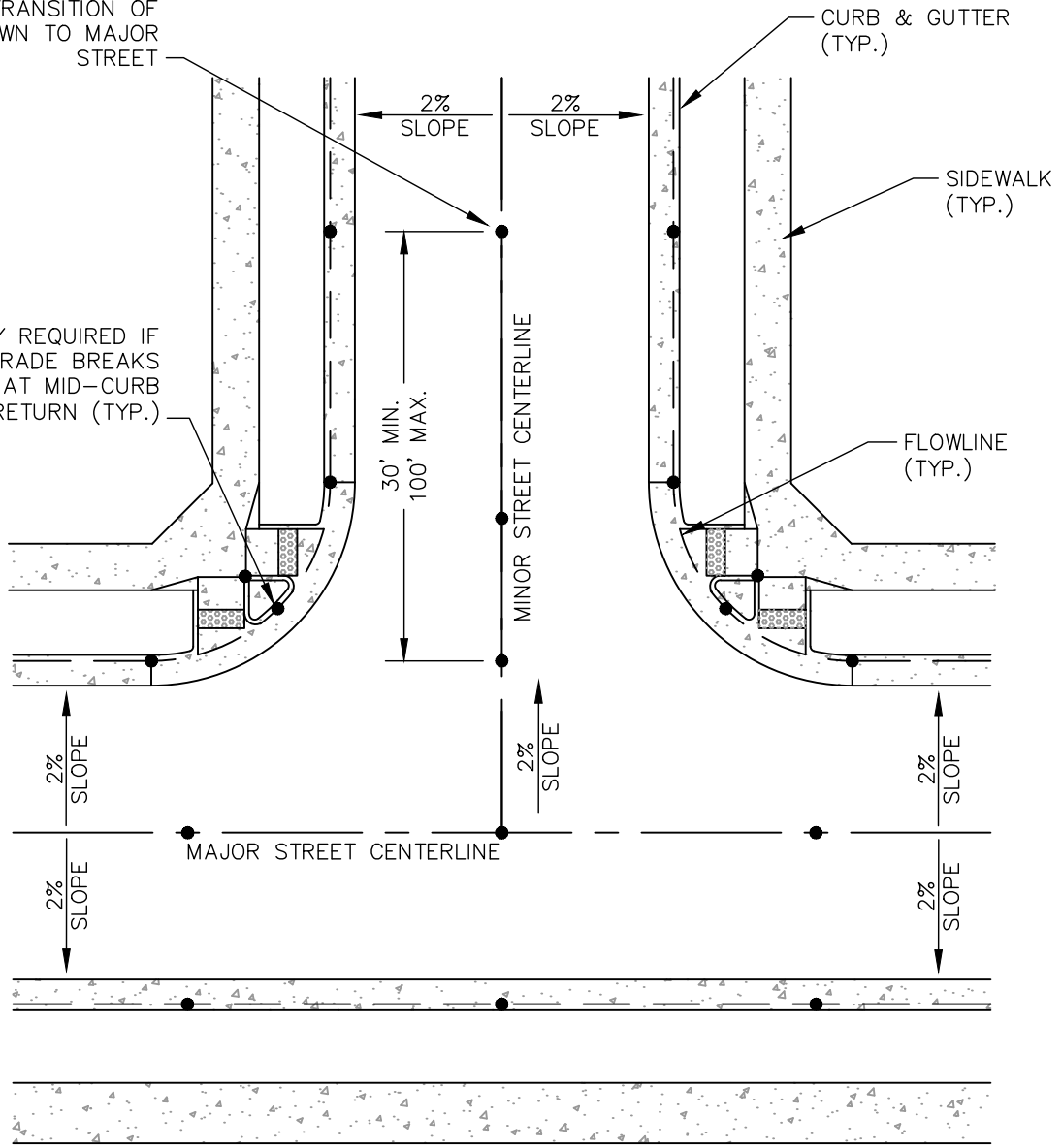
STREET INTERSECTION  
 CROSS PAN APPROACH DETAIL  
 DETAIL NO. S-7

DATE: JULY, 2015

SCALE: N.T.S.

DESIGN ENGINEER—  
 LABEL STATION OF  
 BEGIN TRANSITION OF  
 CROWN TO MAJOR  
 STREET

ONLY REQUIRED IF  
 GRADE BREAKS  
 AT MID-CURB  
 RETURN (TYP.)



NOTES:

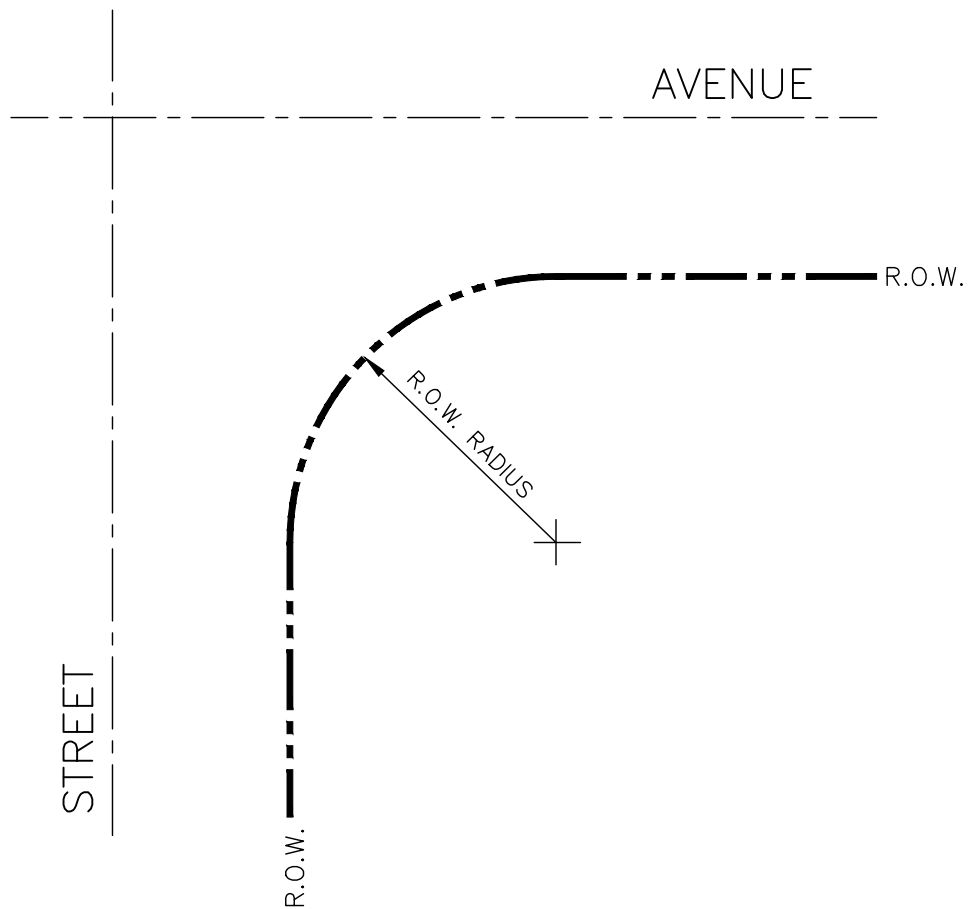
1. DESIGN ENGINEER SHALL PROVIDE ELEVATIONS AT THESE POINTS (●) ON THE CONSTRUCTION DRAWINGS.
2. ALL ELEVATION POINTS SHALL BE STAKED FOR CONSTRUCTION.
3. ALL FLOWLINE GRADES THAT ARE NOT PARALLEL TO CENTERLINE SHALL BE LABELED ON INTERSECTION DETAILS OR A PROFILE DRAWING SHALL BE PROVIDED.



STREET INTERSECTION  
 APPROACH DETAIL  
 DETAIL NO. S-8

DATE: JULY, 2015

SCALE: N.T.S.



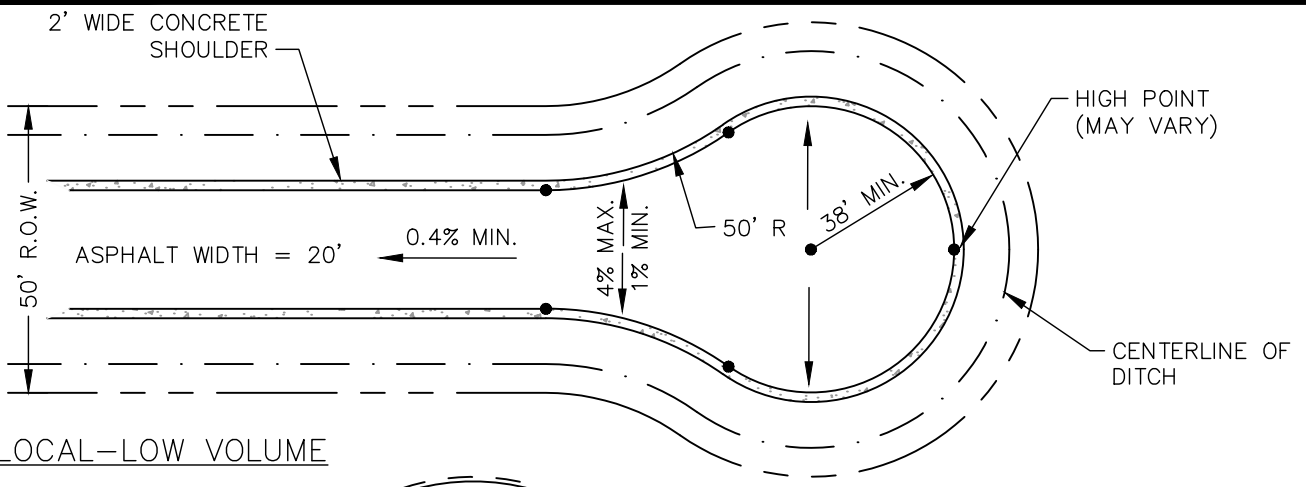
<u>ROADWAY CLASSIFICATION</u>	<u>RIGHT-OF-WAY MINIMUM WIDTH AT INTERSECTION</u>	<u>R.O.W. RADIUS</u>
LOCAL-COM/IND	60'	20'
LOCAL-RESID.	60'	20'
COLLECTOR WITHOUT PARKING	80'	20'
COLLECTOR WITH PARKING	90'	30'
MINOR ARTERIAL (2-LANE)	100'	30'
MINOR ARTERIAL (4-LANE)	120'	30'
MAJOR/PARKWAY ARTERIAL	150'	30'



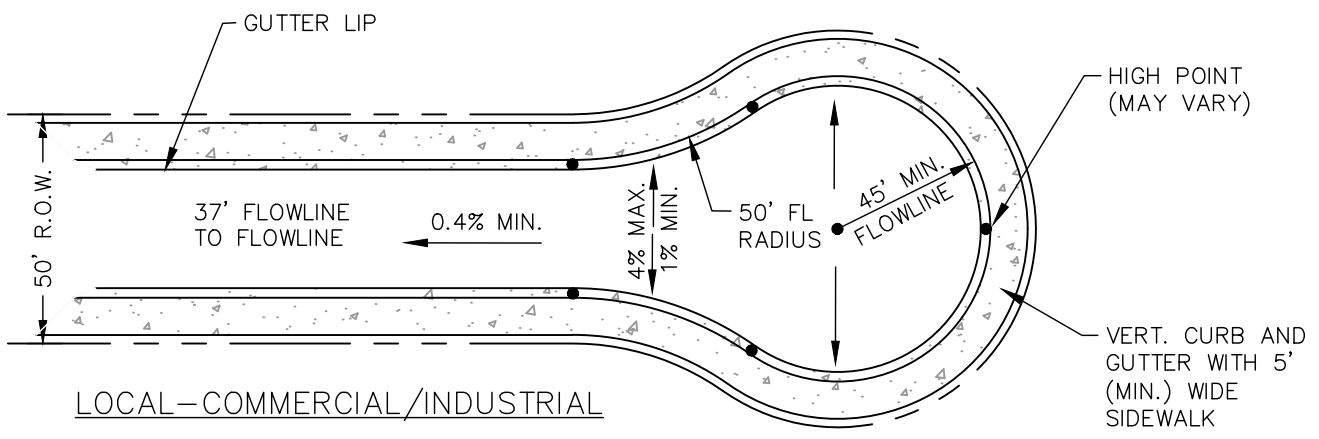
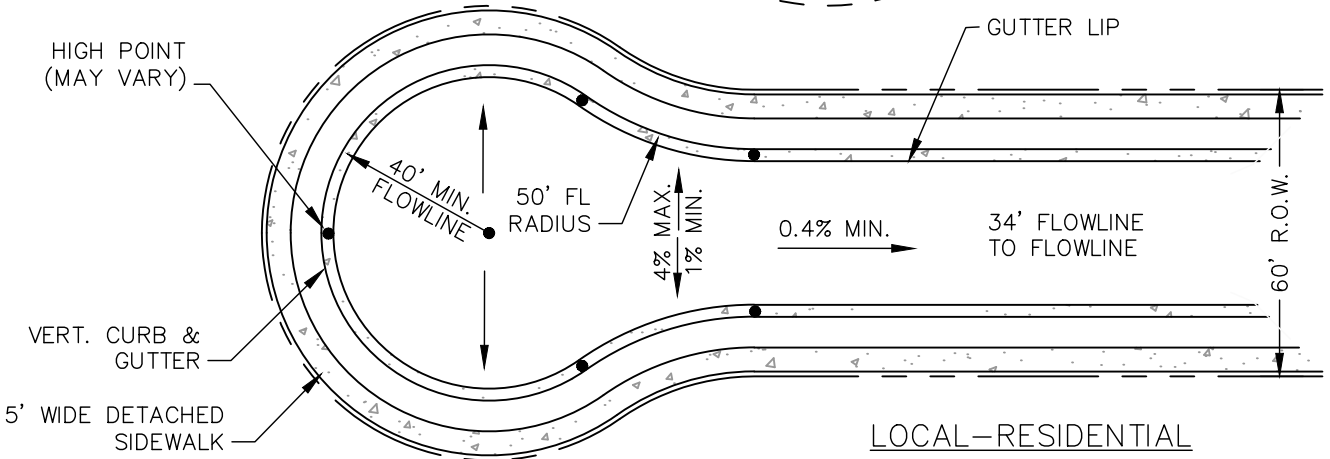
INTERSECTION RIGHT-OF-WAY  
DETAIL NO. S-9

DATE: APRIL, 2016

SCALE: N.T.S.



LOCAL-LOW VOLUME



NOTES:

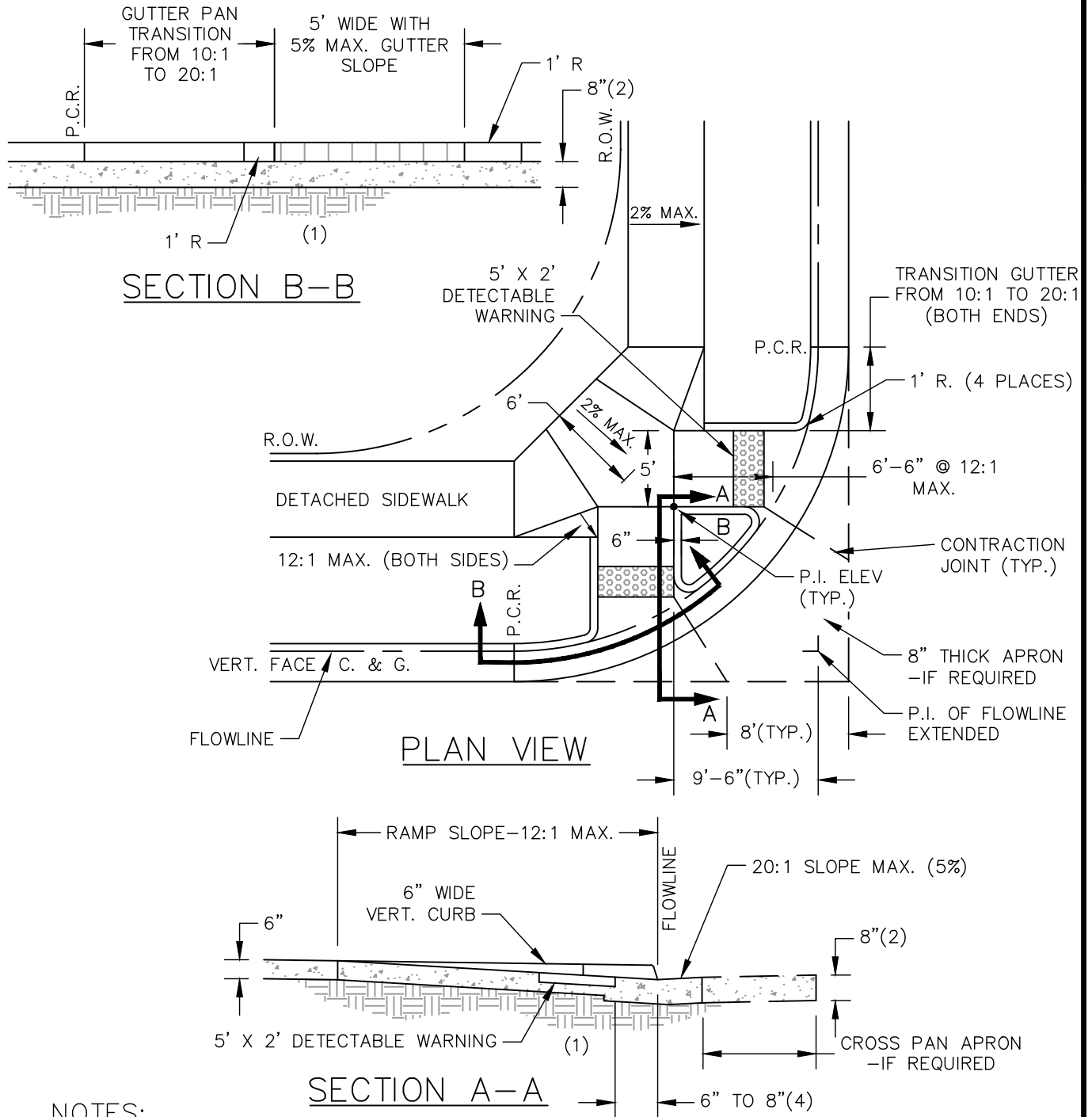
1. DESIGN ENGINEER SHALL PROVIDE ELEVATIONS AT THESE POINTS (●) ON THE CONSTRUCTION DRAWINGS.
2. ALL ELEVATION POINTS SHALL BE STAKED FOR CONSTRUCTION.
3. MINIMUM FLOWLINE SLOPE WITHIN CUL-DE-SAC SHALL BE 0.60%.
4. CUL-DE-SAC SHALL HAVE A MAXIMUM LENGTH OF 500' MEASURED FROM THE INTERSECTION CENTERLINE TO RADIUS POINT.



CUL-DE-SAC  
DETAILS  
DETAIL NO. S-10

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. 8" CONCRETE THICKNESS APPLIES TO CURB RETURN CURB AND GUTTER AND CROSS PAN APRON.
3. CONSTRUCT CURB RAMPS AT ALL INTERSECTIONS.
4. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM THE CLOSEST POINT OF THE FLOWLINE. SEE ADA DETECTABLE WARNING DETAIL.
5. EXTEND 20:1 GUTTER PAN SLOPE THROUGH THE CURB AND GUTTER BETWEEN RAMPS.
6. DIMENSIONS ARE BASED UPON THE USE OF DETACHED SIDEWALK AND A 90° CURB RETURN DELTA. USE OF A DIFFERENT RADIUS OR A SIGNIFICANT DELTA DIFFERENCE WILL ALTER SOME DIMENSIONS.

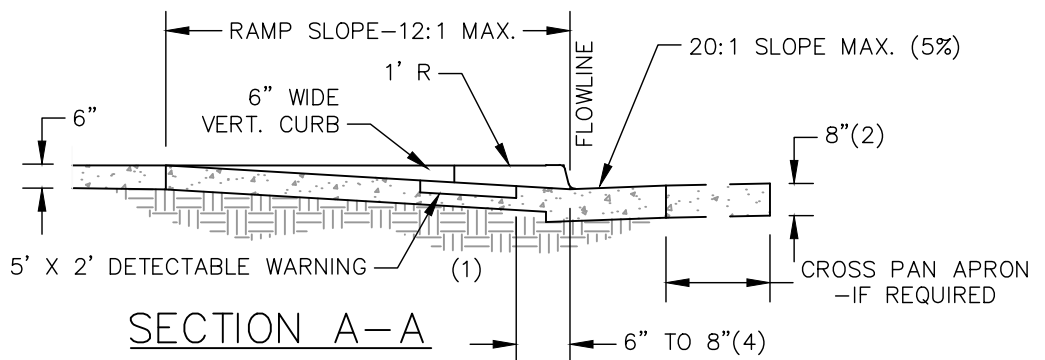
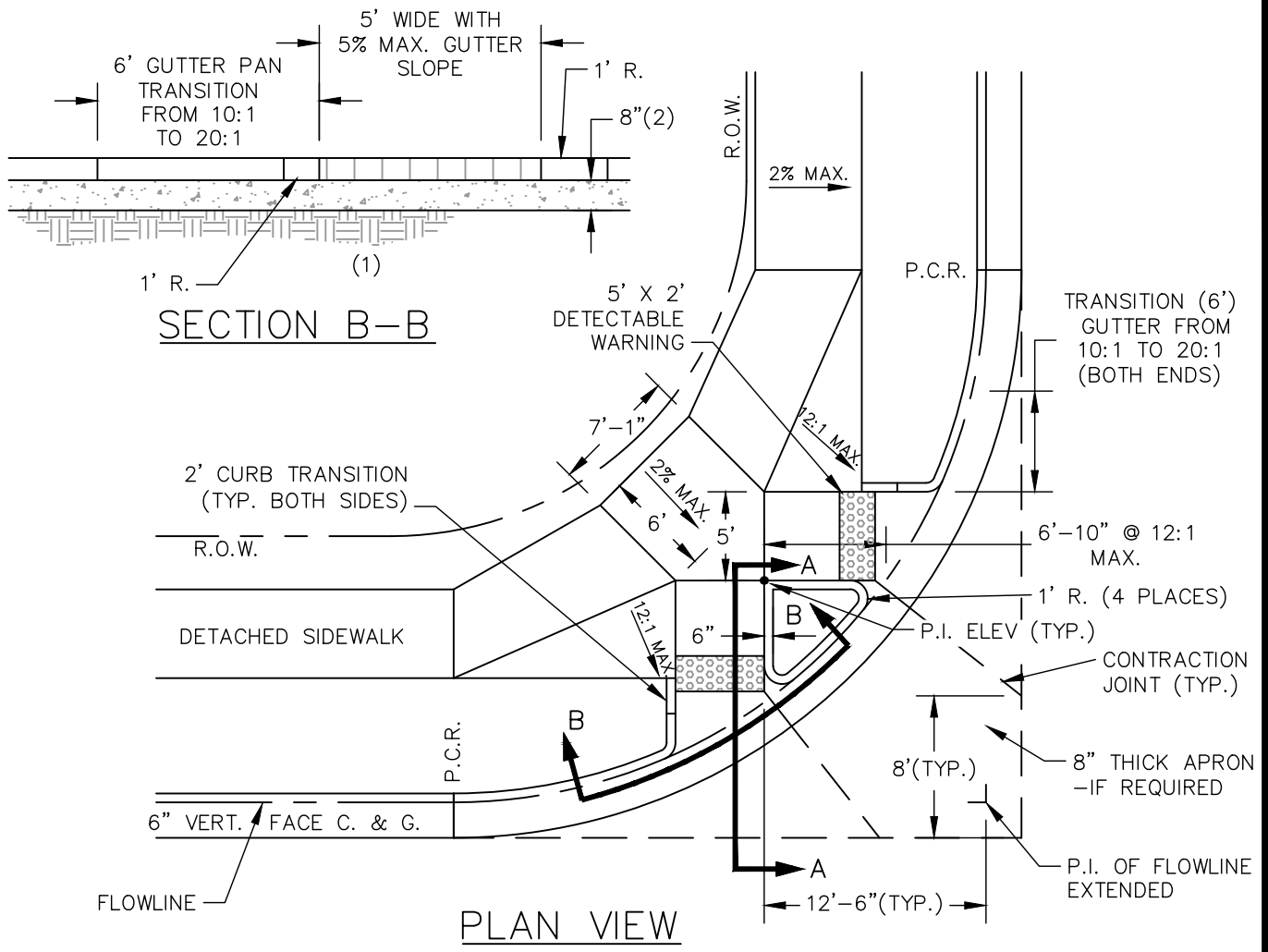


CORNER CURB RAMP DETAIL – 20' RADIUS

DETAIL NO. S-11

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. 8" CONCRETE THICKNESS APPLIES TO CURB RETURN CURB AND GUTTER AND CROSS PAN APRON.
3. CONSTRUCT CURB RAMPS AT ALL INTERSECTIONS.
4. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM THE CLOSEST POINT OF THE FLOWLINE. SEE ADA DETECTABLE WARNING DETAIL.
5. EXTEND 20:1 GUTTER PAN SLOPE THROUGH THE CURB AND GUTTER BETWEEN RAMPS.
6. DIMENSIONS ARE BASED UPON THE USE OF DETACHED SIDEWALKS AND A 90° CURB RETURN DELTA. USE OF A DIFFERENT RADIUS OR A SIGNIFICANT DELTA DIFFERENCE WILL ALTER SOME DIMENSIONS.

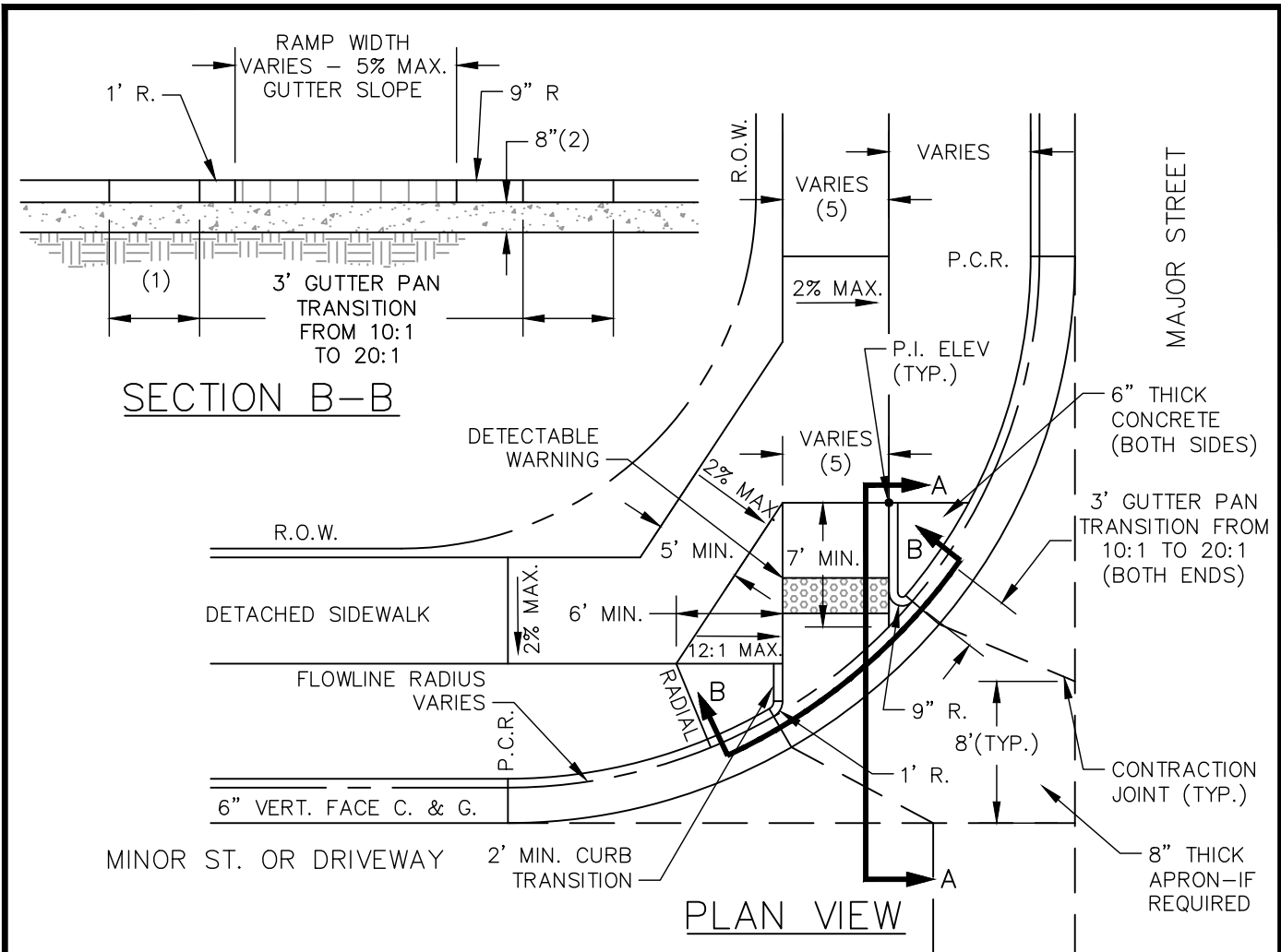


CORNER CURB RAMP DETAIL - 30' RADIUS

DETAIL NO. S-12

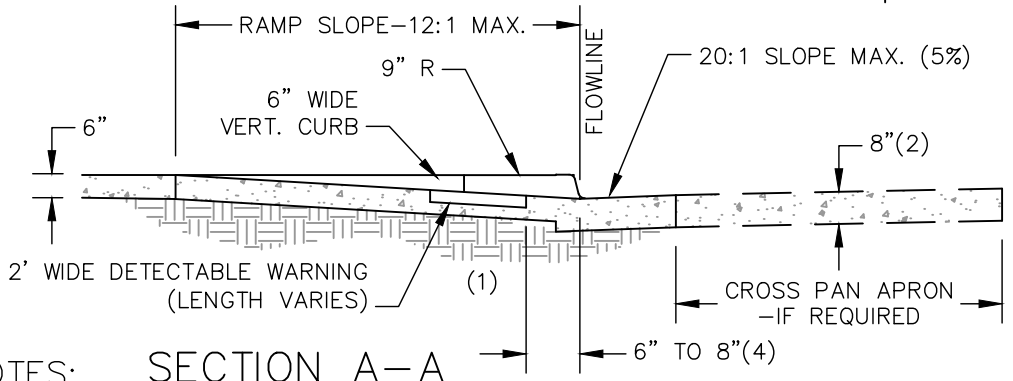
DATE: JULY, 2015

SCALE: N.T.S.



SECTION B-B

PLAN VIEW



NOTES: SECTION A-A

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. 8" CONCRETE THICKNESS APPLIES TO CURB RETURN CURB AND GUTTER AND CROSS PAN APRON.
3. CONSTRUCT CURB RAMPS AT ALL INTERSECTIONS.
4. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM THE CLOSEST POINT OF THE FLOWLINE. SEE ADA DETECTABLE WARNING DETAIL.
5. THIS DETAIL IS INTENDED FOR USE ALONG STREETS WHEN AT "T" INTERSECTIONS OR DRIVEWAYS WITH CURB RETURNS. THE RAMP SHOULD ONLY BE USED WHERE THE MAJOR STREET PEDESTRIAN CROSSING IS NOT RECOMMENDED. THE RAMP OPENING SHALL BE LOCATED AT THE EXTENSION OF THE SIDEWALK AND BE AS WIDE AS THE SIDEWALK ALONG THE MAJOR STREET.

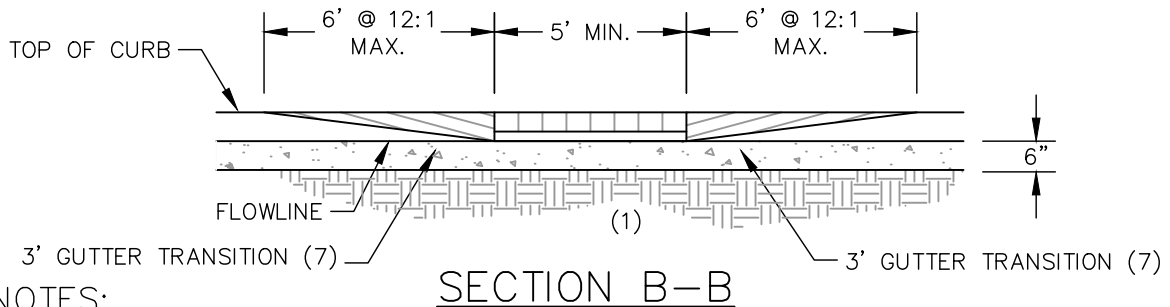
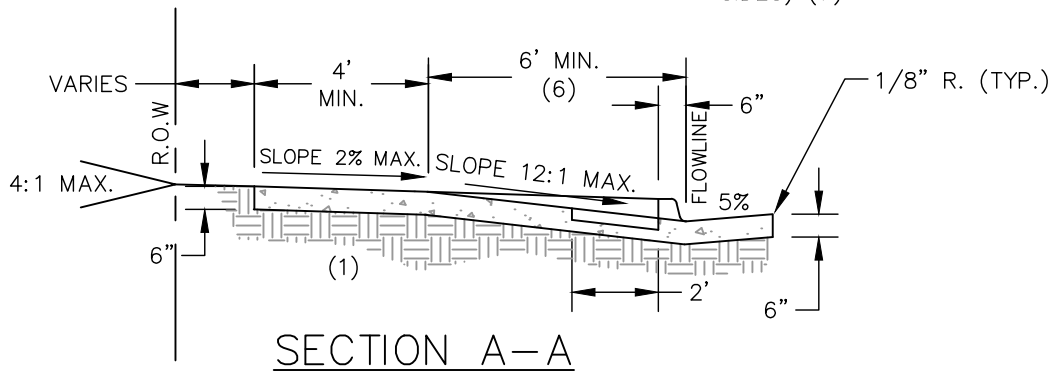
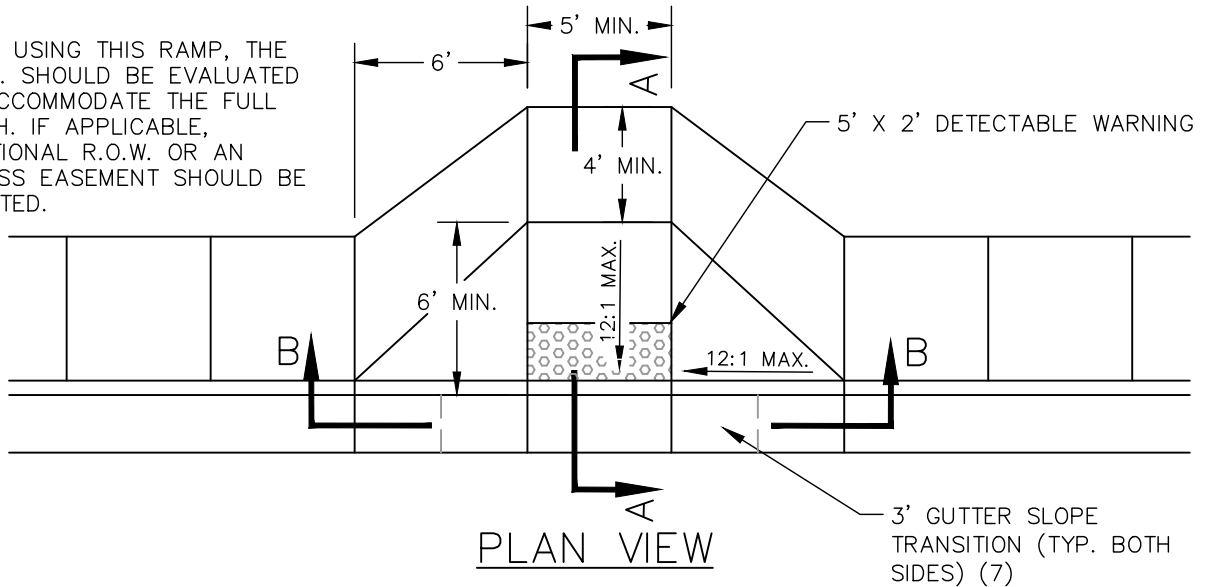


DIRECTIONAL CORNER CURB RAMP DETAIL  
 DETAIL NO. S-12-4

DATE: JULY, 2015

SCALE: N.T.S.

NOTE:  
WHEN USING THIS RAMP, THE R.O.W. SHOULD BE EVALUATED TO ACCOMMODATE THE FULL DEPTH. IF APPLICABLE, ADDITIONAL R.O.W. OR AN ACCESS EASEMENT SHOULD BE GRANTED.



NOTES:

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. SIX INCH (6") CONCRETE THICKNESS APPLIES TO RAMP, SIDE SLOPES AND WALK AREA.
3. CONSTRUCT A MIN. OF ONE MID-BLOCK CURB RAMP AT "T" INTERSECTIONS, WHERE PEDESTRIAN CROSSING IS DESIRED.
4. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM FLOWLINE. SEE ADA DETECTABLE WARNING DETAIL.
5. CONCRETE SHOWN (EXCEPT FOR RAMPS AND WALKS) SHALL BE POURED MONOLITHICALLY.
6. THIS DETAIL SHALL ONLY BE USED WHEN IN ASSOCIATION WITH ATTACHED SIDEWALKS OR IN RETROFIT SITUATIONS.
7. PROVIDE A 3' GUTTER SLOPE TRANSITION ON EACH SIDE OF THE BOTTOM OF THE RAMP OPENING. REDUCE SLOPE FROM 12:1 (10:1 ON DRIVE OVER) TO 20:1 AT RAMP OPENING.



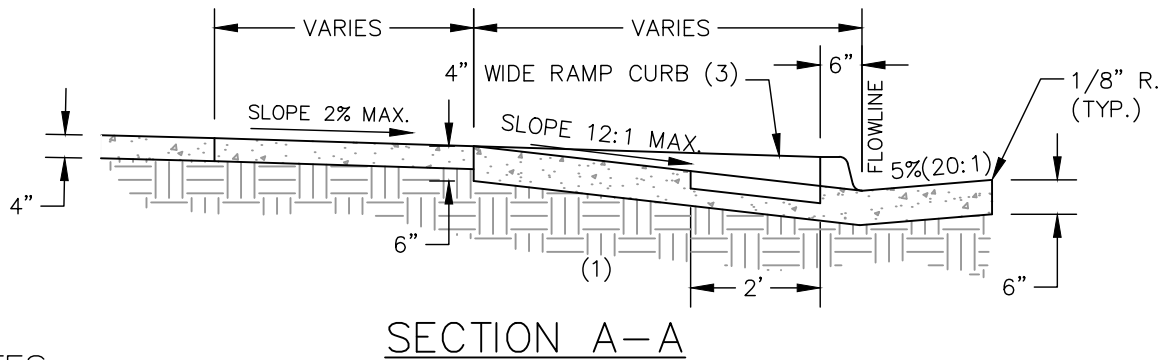
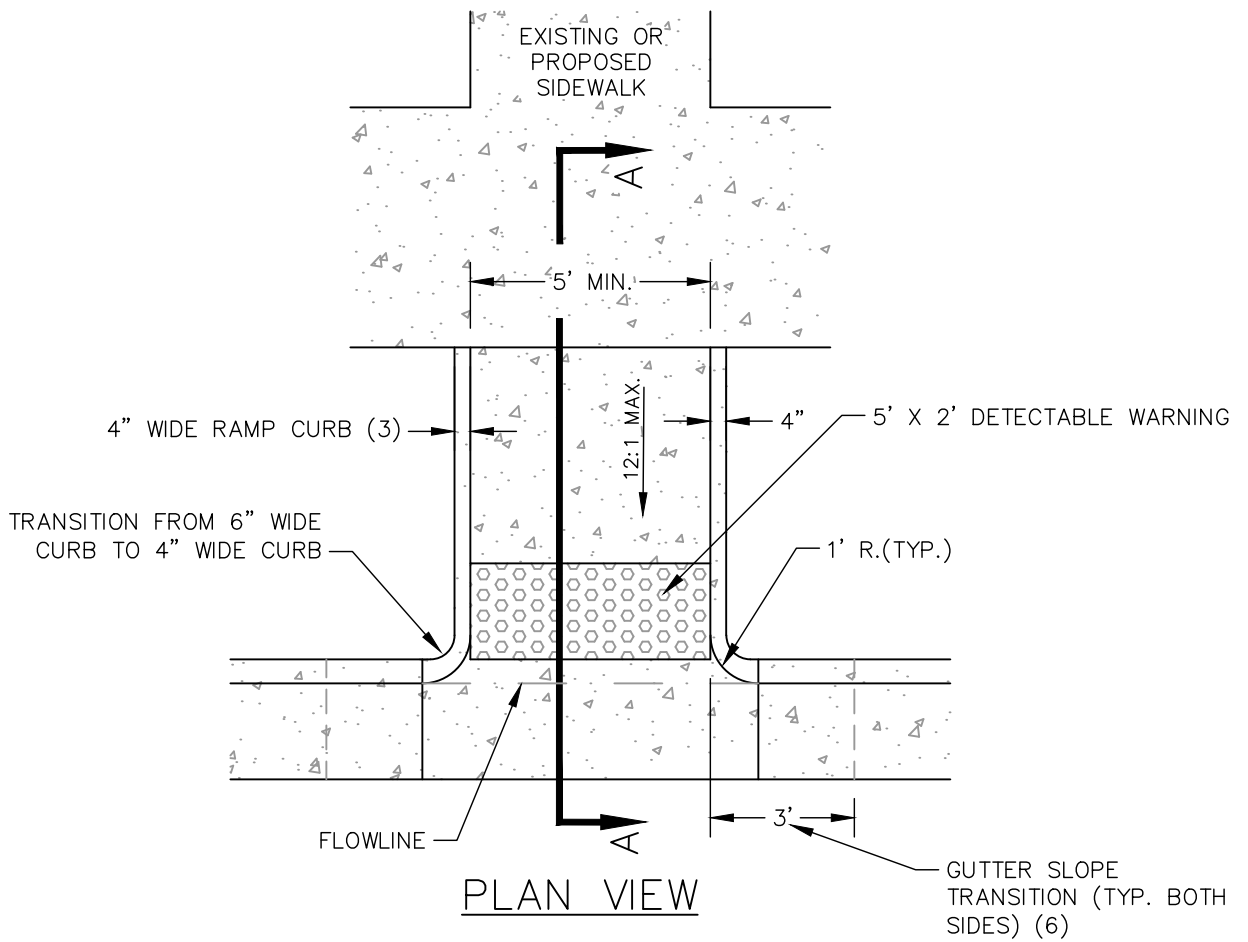
## MIDBLOCK CURB RAMP DETAIL

DETAIL NO. S-13

DATE: JULY, 2015

SCALE: N.T.S.





NOTES:

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. SIX INCH (6") CONCRETE THICKNESS APPLIES TO RAMP AREA.
3. RAMP CURB MAY BE OMITTED AT THE DIRECTION OF THE CITY.
4. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM FLOWLINE. SEE ADA DETECTABLE WARNING DETAIL.
5. CONCRETE SHOWN (EXCEPT FOR RAMPS AND WALKS) SHALL BE POURED MONOLITHICALLY.
6. PROVIDE A 3' GUTTER SLOPE TRANSITION ON EACH SIDE OF THE BOTTOM OF THE RAMP OPENING. REDUCE SLOPE FROM 12:1 TO 20:1 AT RAMP OPENING.
7. CONSTRUCT A MIN. OF ONE MID-BLOCK CURB RAMP AT "T" INTERSECTIONS, WHERE PEDESTRIAN CROSSING IS DESIRED.

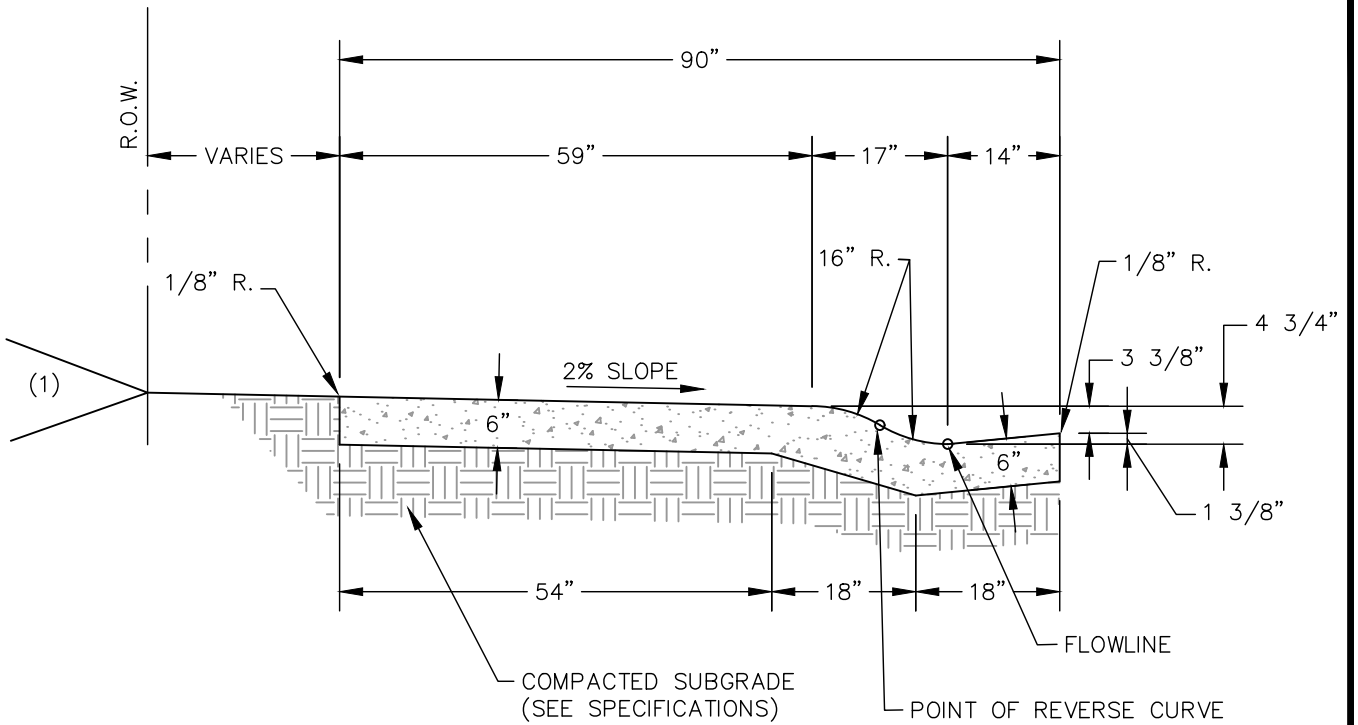


CURB RAMP DETAIL FOR DETACHED SIDEWALK

DETAIL NO. S-14

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. CUT AND FILL SLOPES SHALL BE A MAXIMUM OF 4:1.
2. THIS DETAIL SHALL BE USED ONLY IN THOSE SITUATIONS APPROVED BY THE CITY OR IN RETROFIT LOCATIONS. DETACHED SIDEWALKS AND VERTICAL FACE CURB AND GUTTER IS REQUIRED ON ALL NEW STREETS IN NEW RESIDENTIAL SUBDIVISIONS.
3. MAXIMUM SPACING OF CONTRACTION JOINTS – TEN (10) FEET.
4. EXPANSION JOINTS ARE REQUIRED, SEE JOINT DETAILS.
5. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

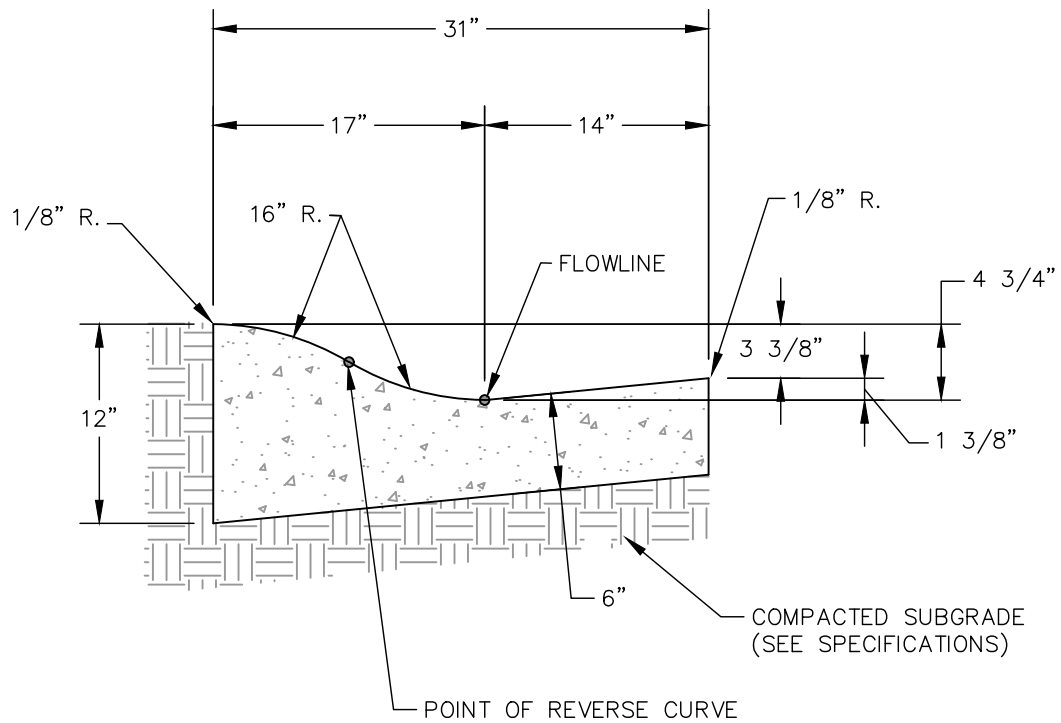


DRIVE OVER CURB, GUTTER & SIDEWALK

DETAIL NO. S-15

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. DRIVE OVER CURB SHALL NOT BE USED ADJACENT TO TRAVEL LANE.
2. DETACHED SIDEWALK WHEN USED WITH THIS SECTION SHALL BE 6" MINIMUM THICKNESS.
3. MAXIMUM SPACING OF CONTRACTION JOINTS – TEN (10) FEET.
4. EXPANSION JOINTS ARE REQUIRED, SEE JOINT DETAILS.
5. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.
6. THIS DETAIL SHALL BE USED ONLY IN THOSE SITUATIONS APPROVED BY THE CITY OR IN RETROFIT SITUATIONS. DETACHED SIDEWALKS AND VERTICAL FACE CURB AND GUTTER IS REQUIRED ON ALL NEW STREETS IN NEW RESIDENTIAL SUBDIVISIONS.

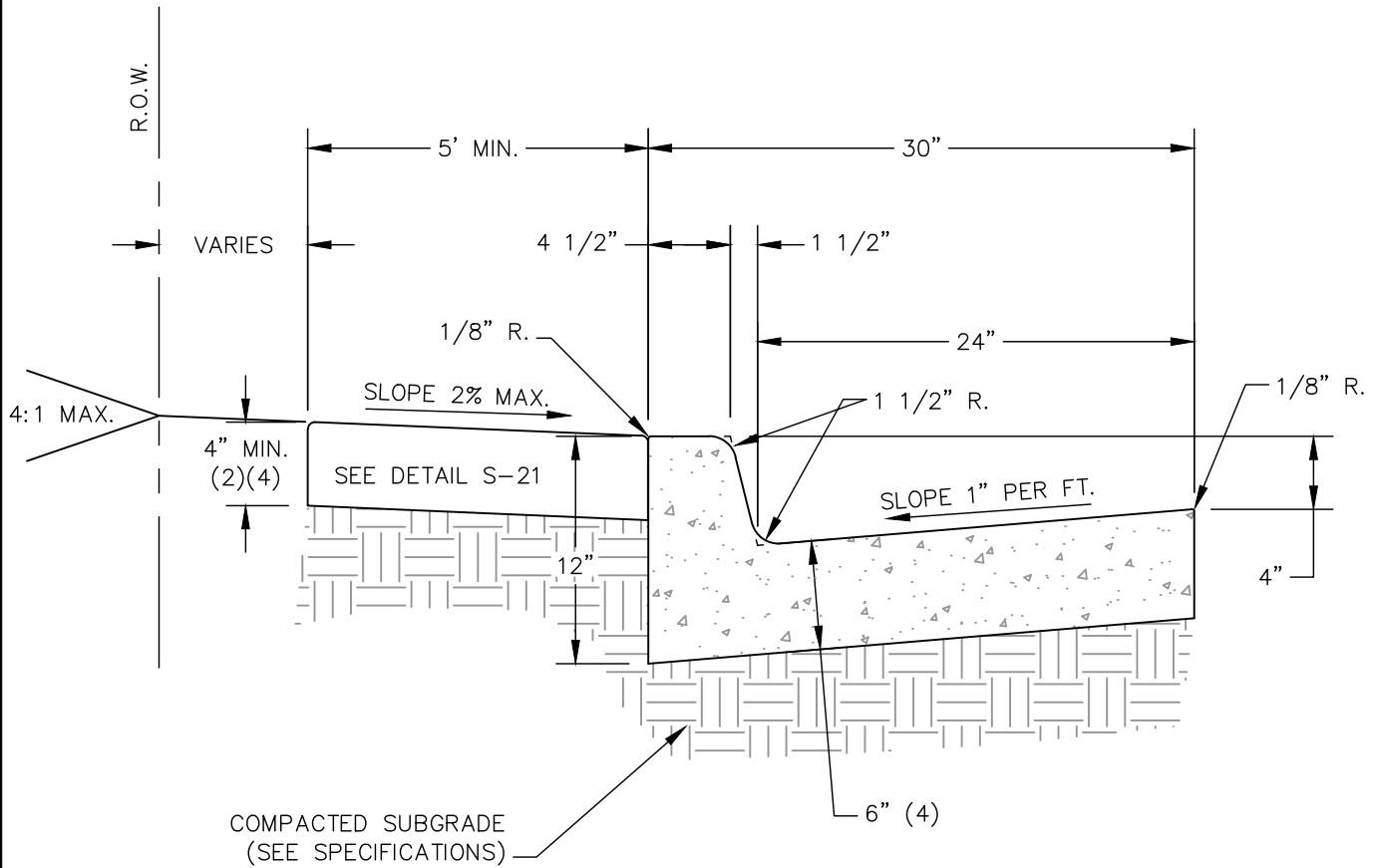


DRIVE OVER CURB AND GUTTER

DETAIL NO. S-15A

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. WHEN CONSTRUCTING ATTACHED SIDEWALK, CONTRACTION JOINTS FOR SIDEWALKS SHALL MATCH CURB AND GUTTER, MAXIMUM SPACING OF TEN (10) FEET.
2. AT RESIDENTIAL DRIVEWAYS, THE SIDEWALK THICKNESS SHALL BE INCREASED TO SIX (6) INCHES.
3. EXPANSION JOINTS REQUIRED AT 400 FOOT MAXIMUM SPACING. ADDITIONAL JOINTS MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER. SEE JOINT DETAILS.
4. AT ALLEYS AND COMMERCIAL DRIVEWAYS, THE CURB AND SIDEWALK THICKNESS SHALL BE INCREASED TO EIGHT (8) INCHES.
5. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

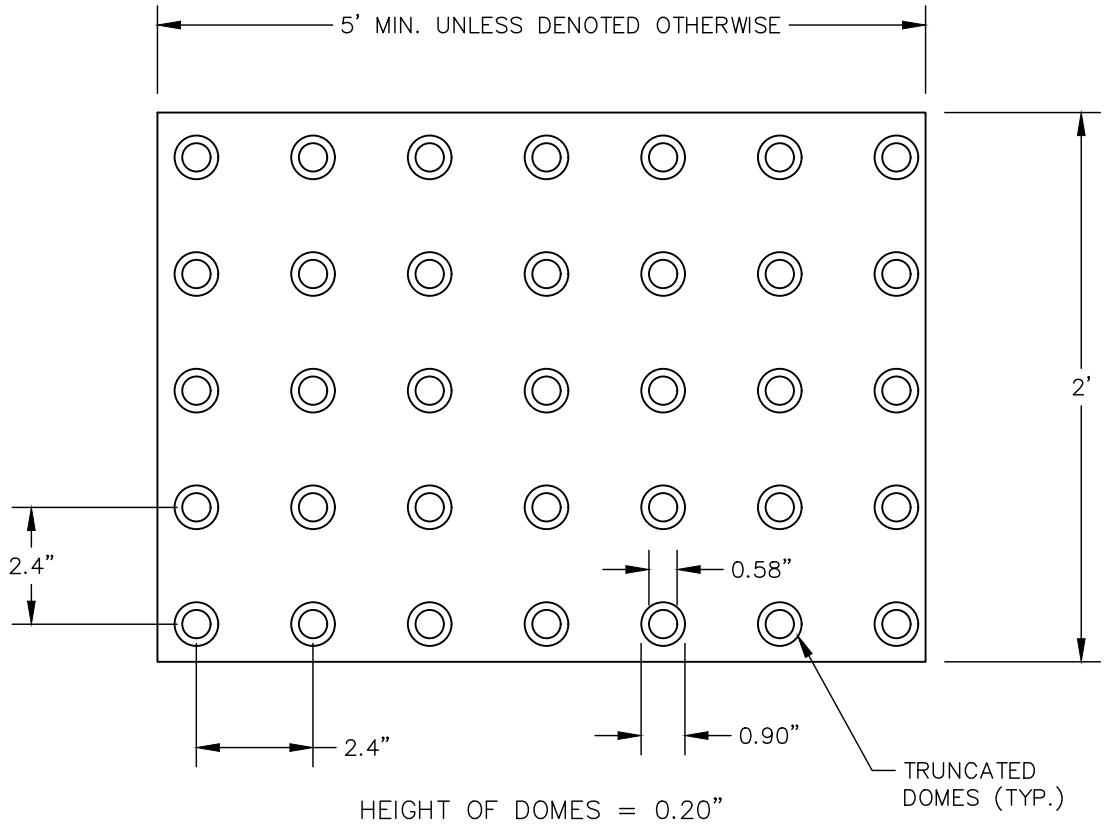


VERTICAL FACE CURB AND GUTTER

DETAIL NO. S-16

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. COLOR SHALL BE APPROVED BY THE CITY BUT IN ALL CASES THE COLOR SHALL CONTRAST WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
2. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" TO 8" FROM FLOWLINE USING APPROVED MATERIAL.

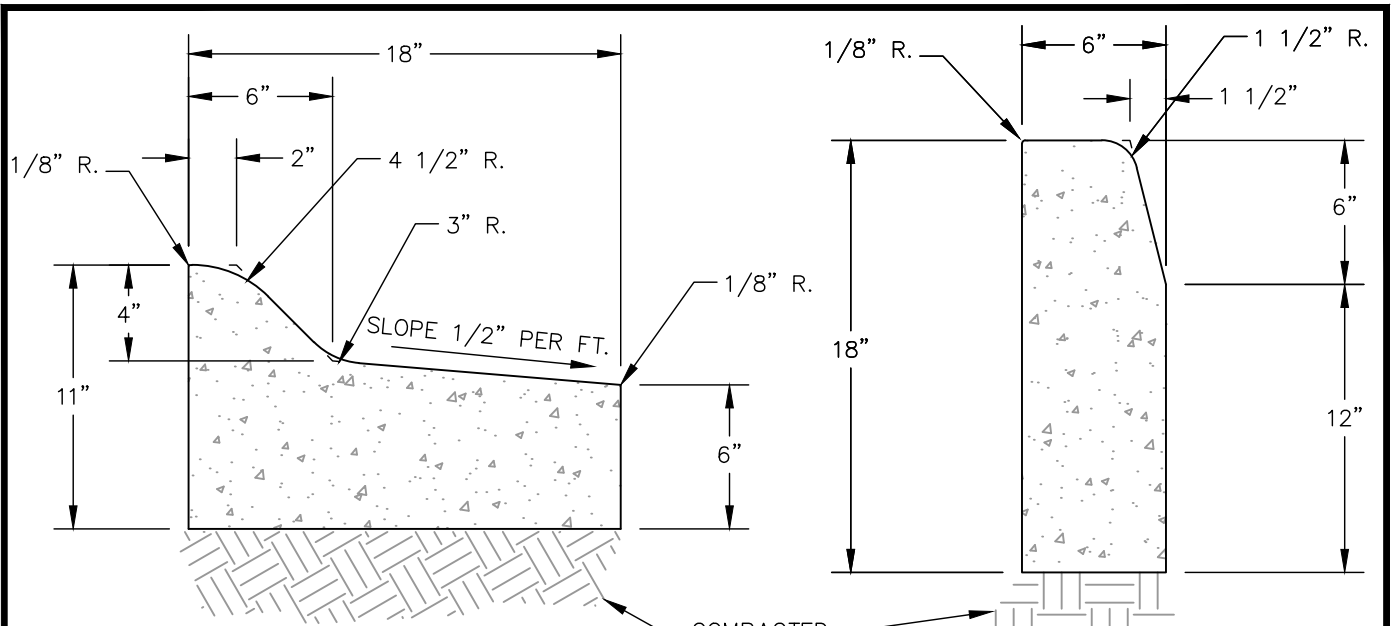


ADA DETECTABLE WARNING DETAIL

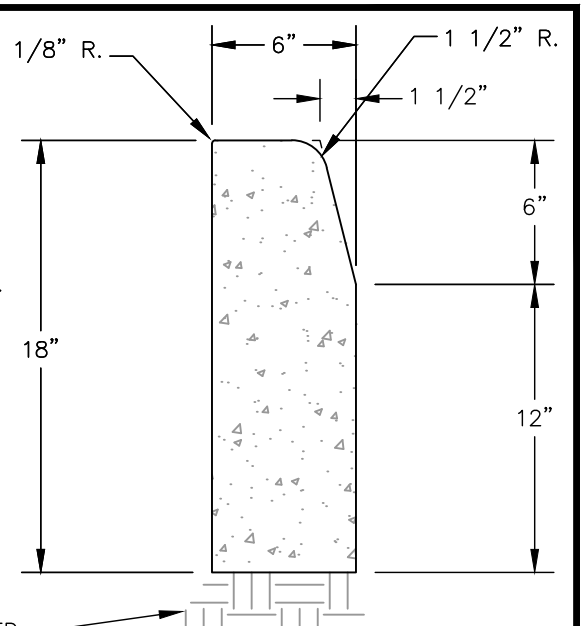
DETAIL NO. S-17

DATE: JULY, 2015

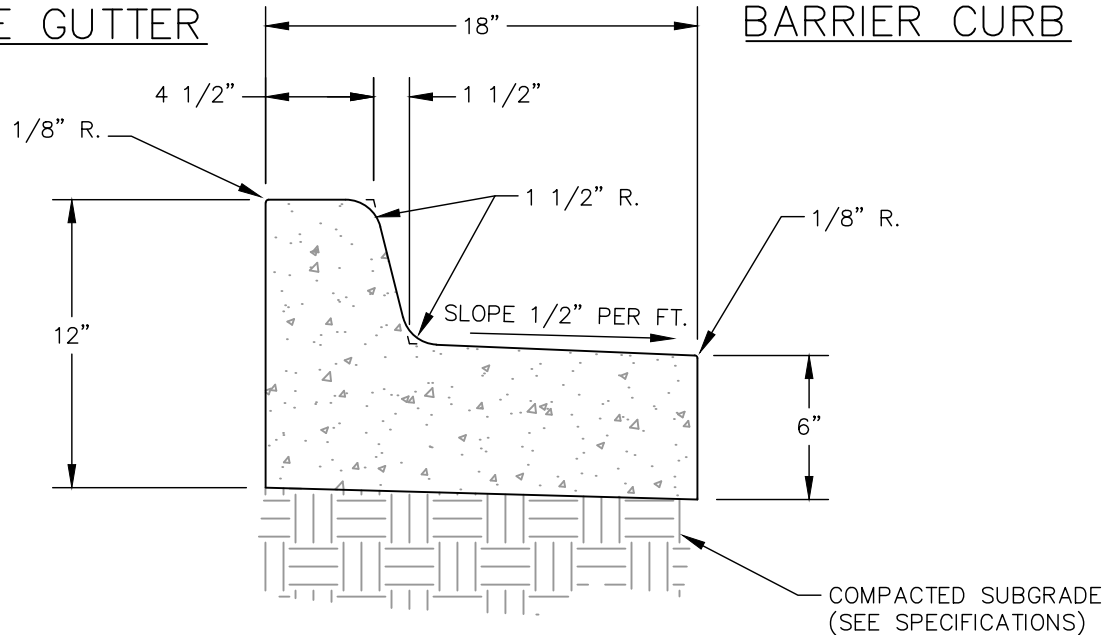
SCALE: N.T.S.



DRIVE OVER CURB  
WITH REVERSE  
SLOPE GUTTER



6" VERTICAL FACE  
BARRIER CURB



6" VERTICAL FACE CURB WITH REVERSE SLOPE GUTTER

NOTES:

1. CONTRACTION JOINTS FOR CONCRETE MEDIAN COVER SHALL MATCH CURB AND GUTTER, MAXIMUM SPACING OF TEN (10) FEET.
2. EXPANSION JOINTS REQUIRED AT 400 FOOT MAXIMUM SPACING. ADDITIONAL JOINTS MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER. SEE JOINT DETAILS.
3. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

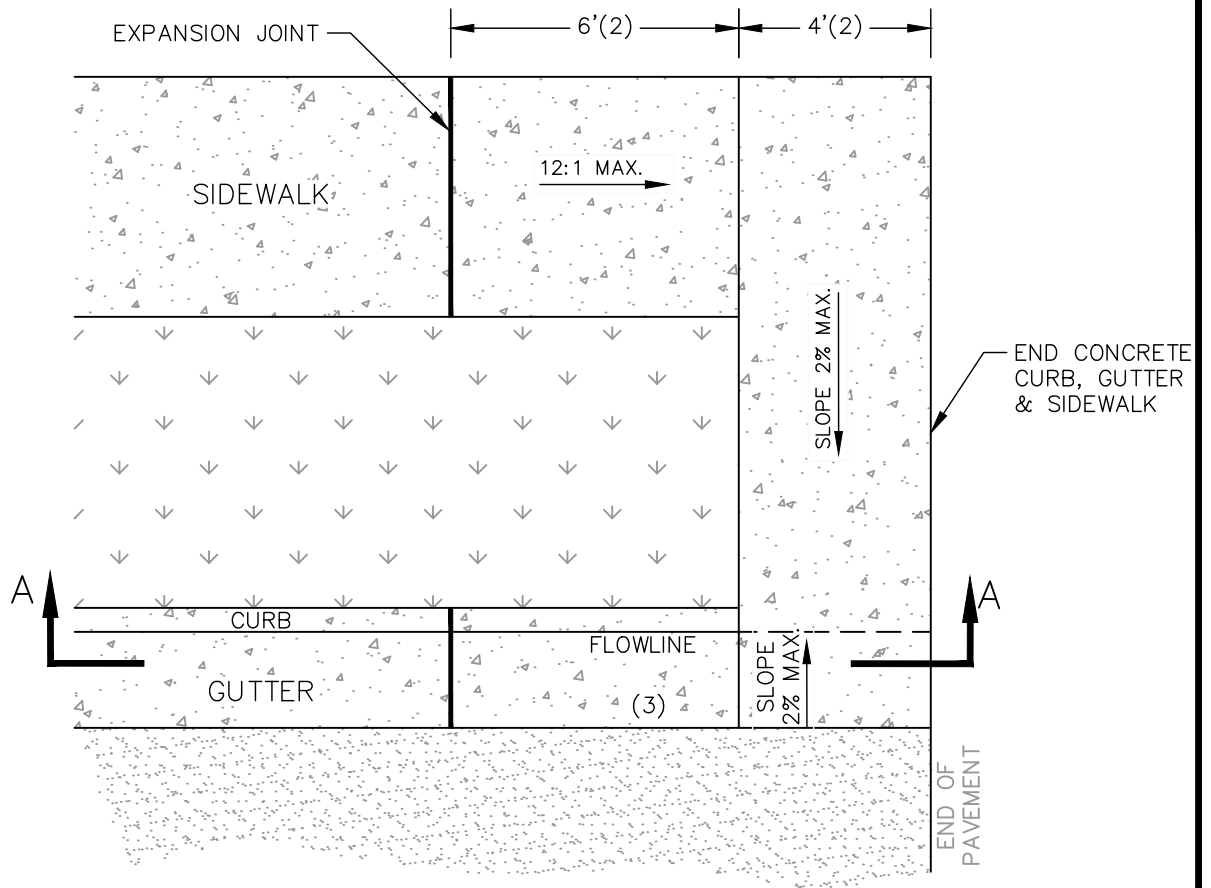


MEDIAN CURBS

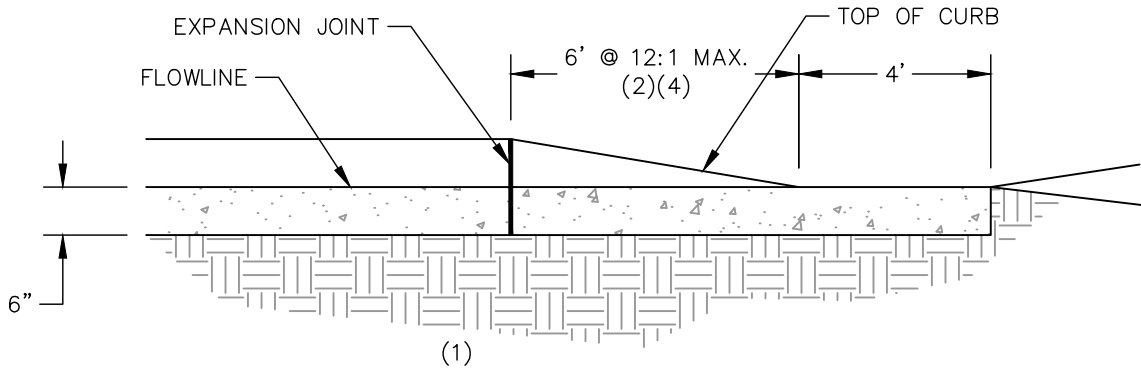
DETAIL NO. S-18

DATE: JULY, 2015

SCALE: N.T.S.



PLAN VIEW



NOTES:

SECTION A-A

1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. TEN FOOT (10') TEMPORARY END SECTION TO BE REMOVED TO CONTINUE CURB, GUTTER AND SIDEWALK.
3. PROVIDE A 6' GUTTER SLOPE TRANSITION AT THE TEMPORARY END SECTION. REDUCE SLOPE FROM 12:1 AT EXPANSION JOINT TO 50:1 AT FINAL 4'.
4. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

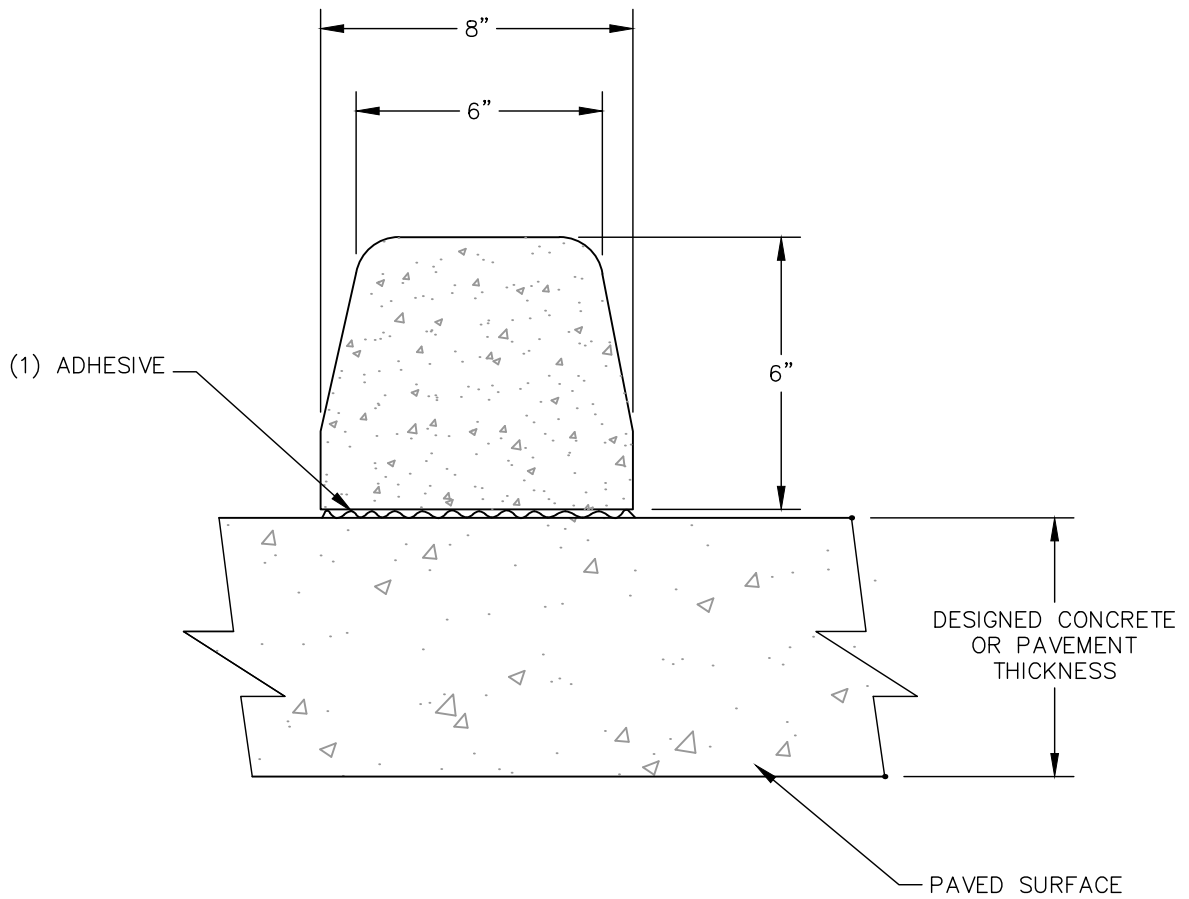


CURB, GUTTER & SIDEWALK  
TEMPORARY END SECTION

DETAIL NO. S-19

DATE: JULY, 2015

SCALE: N.T.S.



## EXTRUDED CURB

### NOTES:

1. ADHESIVE USED IN BONDING CURBHEAD TO SURFACE SHALL BE SPREAD ON A CLEAN SURFACE.
2. ADHESIVE SHALL BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
3. CONSTRUCT CURBS OF CONCRETE OR ASPHALT AS APPROVED BY THE CITY.
4. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.



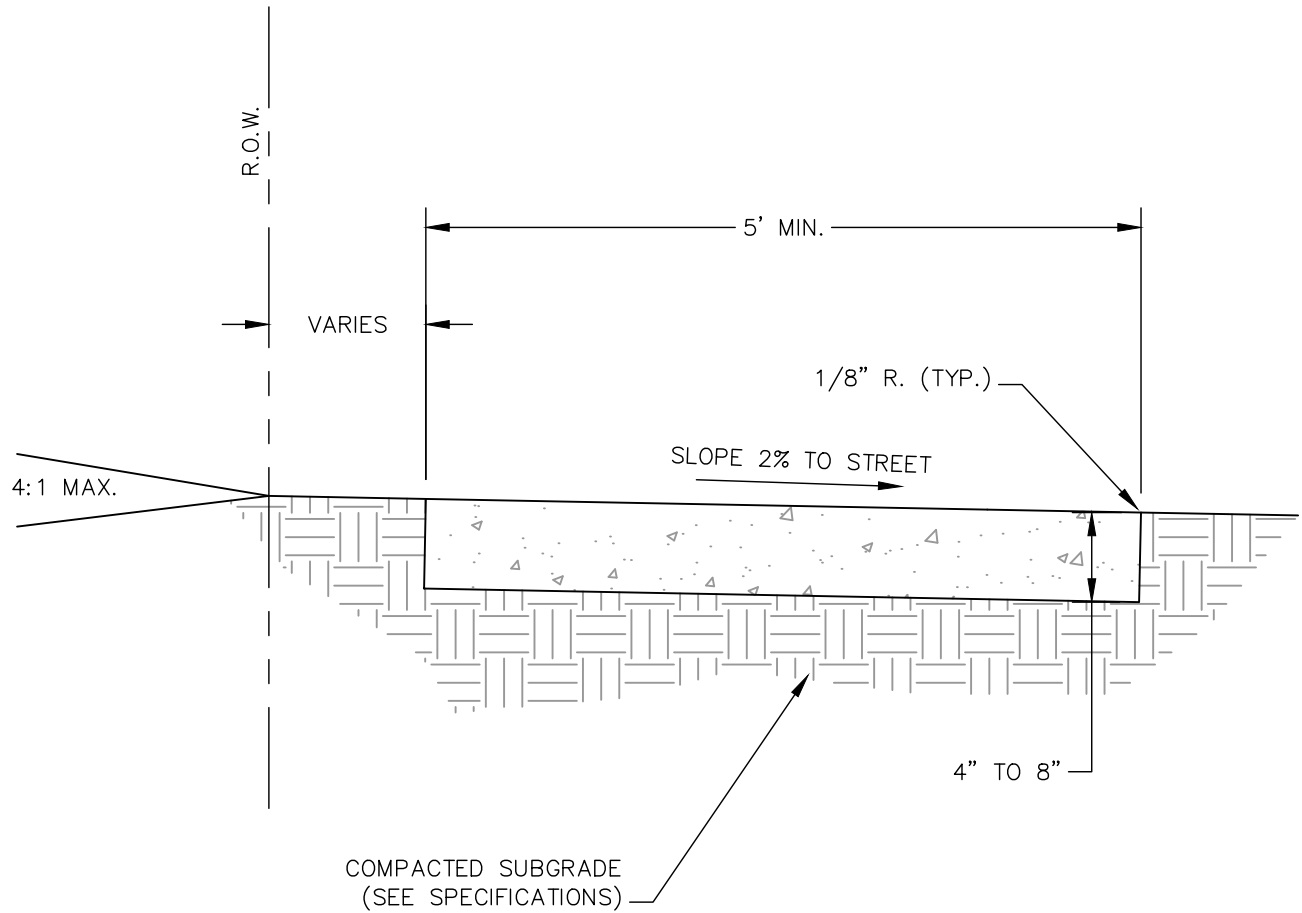
CURBHEAD DETAIL

DETAIL NO. S-20

DATE: JULY, 2015

SCALE: N.T.S.





NOTES:

1. MAXIMUM SPACING OF CONTRACTION JOINTS IS TEN (10) FEET.
2. AT RESIDENTIAL DRIVEWAYS, THE SIDEWALK THICKNESS SHALL BE INCREASED TO SIX (6) INCHES.
3. EXPANSION JOINTS REQUIRED AT 400 FOOT MAXIMUM SPACING. ADDITIONAL JOINTS MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER. SEE JOINT DETAILS.
4. AT ALLEYS AND COMMERCIAL DRIVEWAYS, THE SIDEWALK THICKNESS SHALL BE INCREASED TO EIGHT (8) INCHES.
5. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

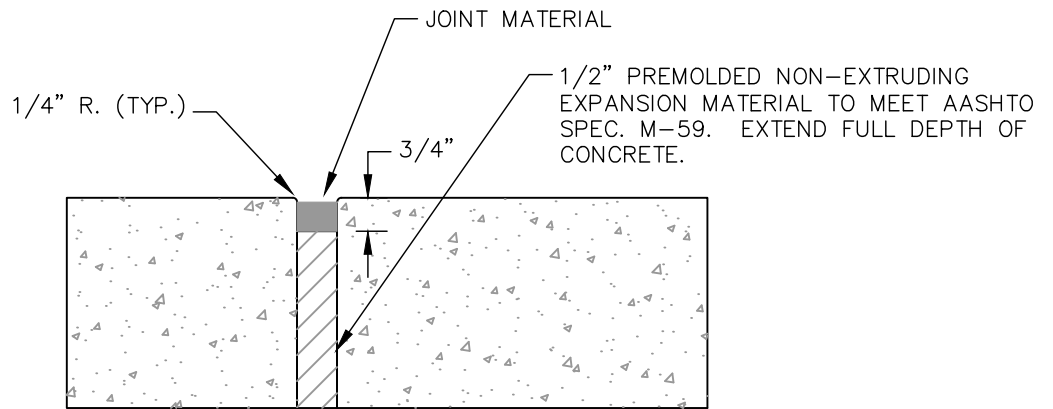


DETACHED SIDEWALK DETAIL

DETAIL NO. S-21

DATE: JULY, 2015

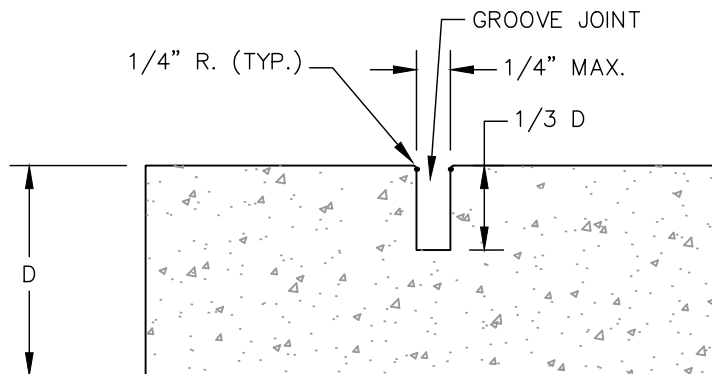
SCALE: N.T.S.



## EXPANSION JOINT

### NOTE FOR EXPANSION JOINTS:

EXPANSION JOINTS REQUIRED AT 400 FOOT MAXIMUM SPACING. ADDITIONAL JOINTS MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.



## CONTRACTION JOINT

### NOTES FOR CONTRACTION JOINTS:

1. FORM WITH TOOL TEMPLATE OR SAWCUT JOINTS.
2. SAWCUT JOINTS, IF USED, SHALL BEGIN AS SOON AS CONCRETE IS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELING AND BEFORE UNCONTROLLED CRACKING OCCURS.
3. MAXIMUM DISTANCE BETWEEN JOINTS IS TEN (10) FEET AND MINIMUM DISTANCE IS FIVE (5) FEET.

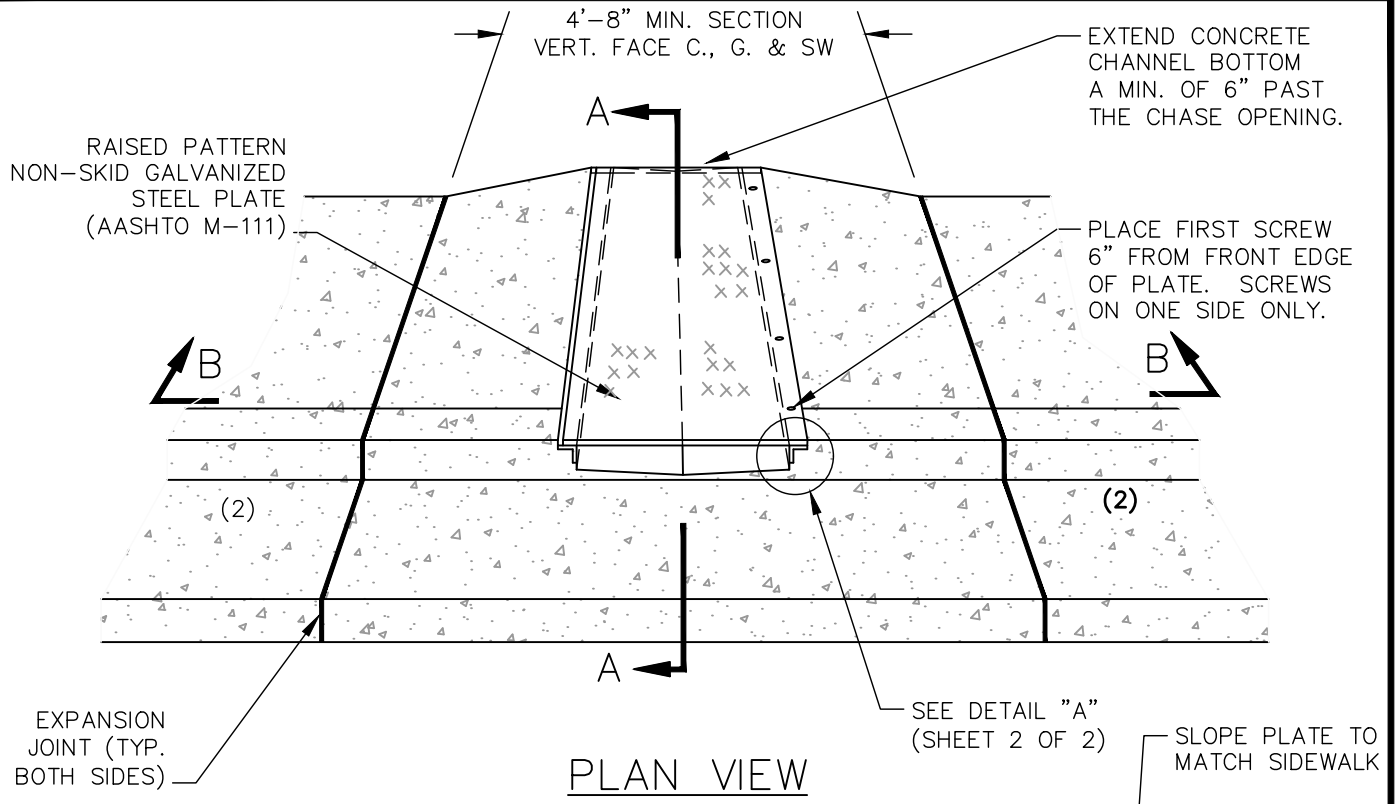


## CONCRETE JOINT DETAILS FOR SIDEWALKS, CURBS, GUTTERS AND CROSS PANS

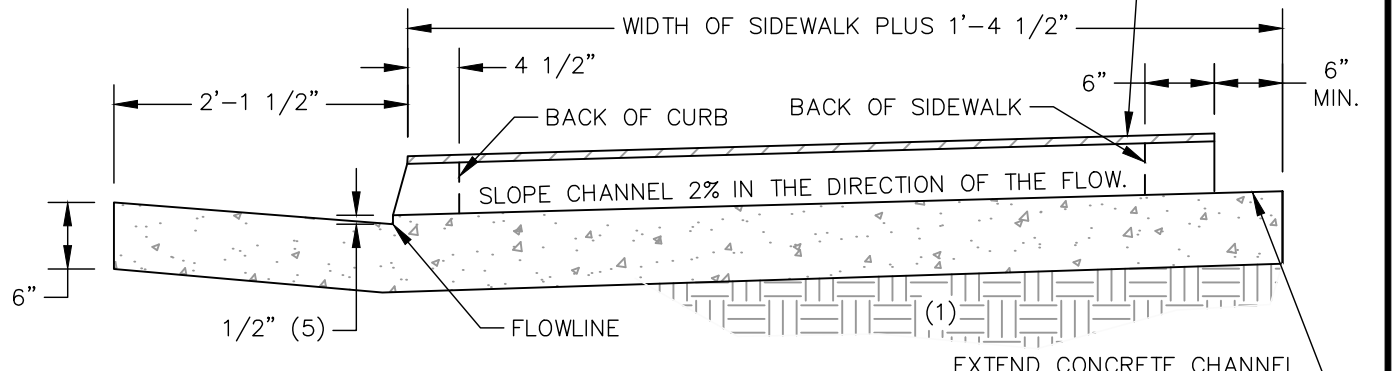
DETAIL NO. S-22

DATE: JULY, 2015

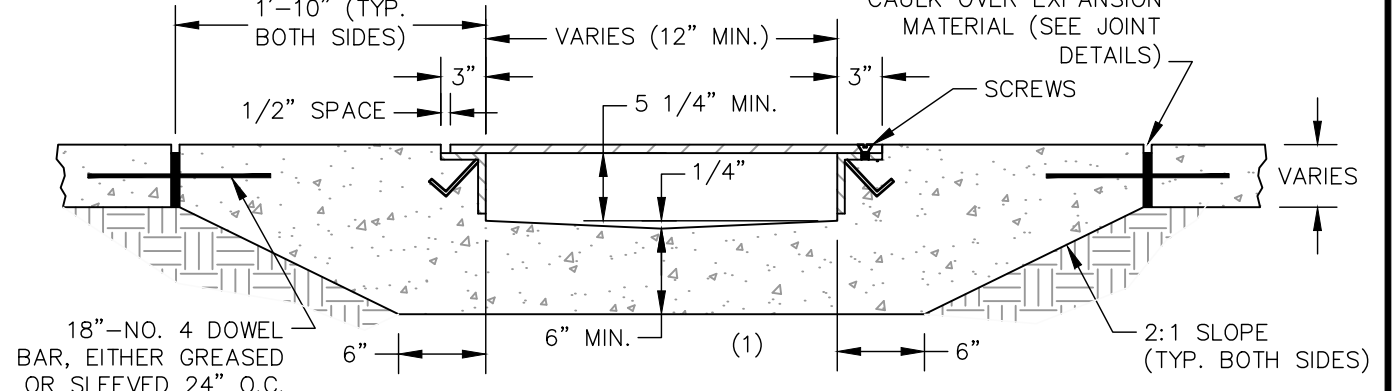
SCALE: N.T.S.



**PLAN VIEW**



**SECTION A-A**



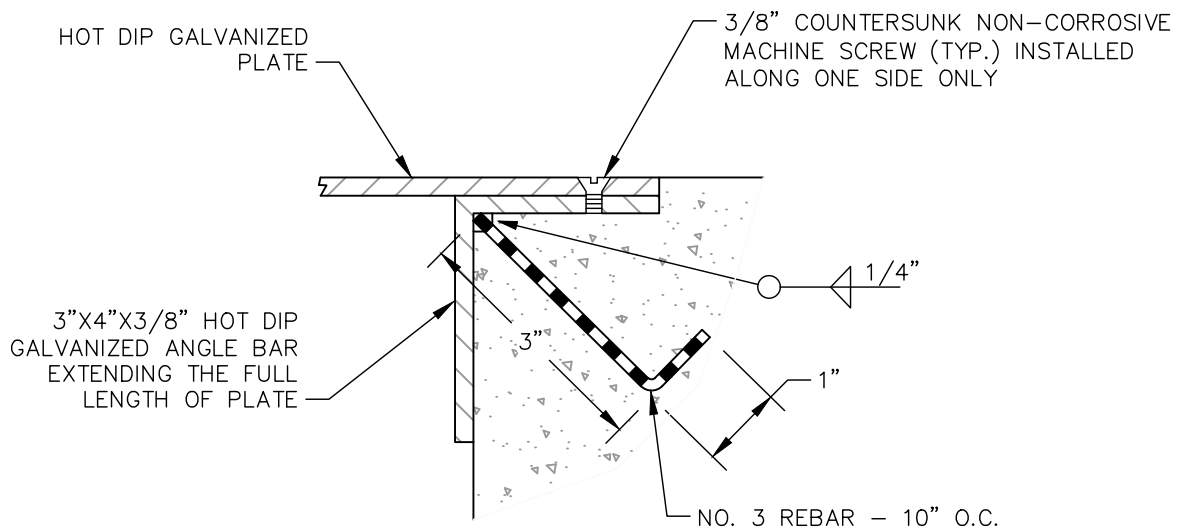
**SECTION B-B**



SIDEWALK CHASE FOR ATTACHED SIDEWALK  
 SHEET 1 OF 2  
 DETAIL NO. S-23-A

DATE: JULY, 2015

SCALE: N.T.S.



DETAIL "A"

WIDTH OF OPENING	THREADPLATE THICKNESS
12"–18"	9/16"
>18"–24"	5/8"
>24"	SPECIAL DESIGN

NOTES:

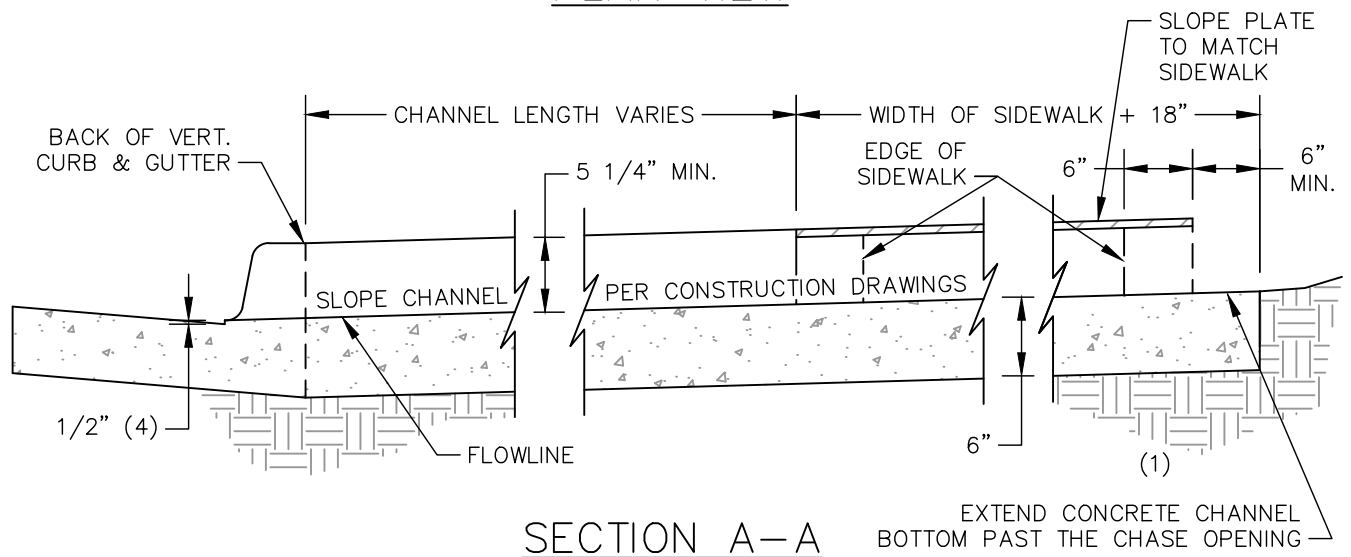
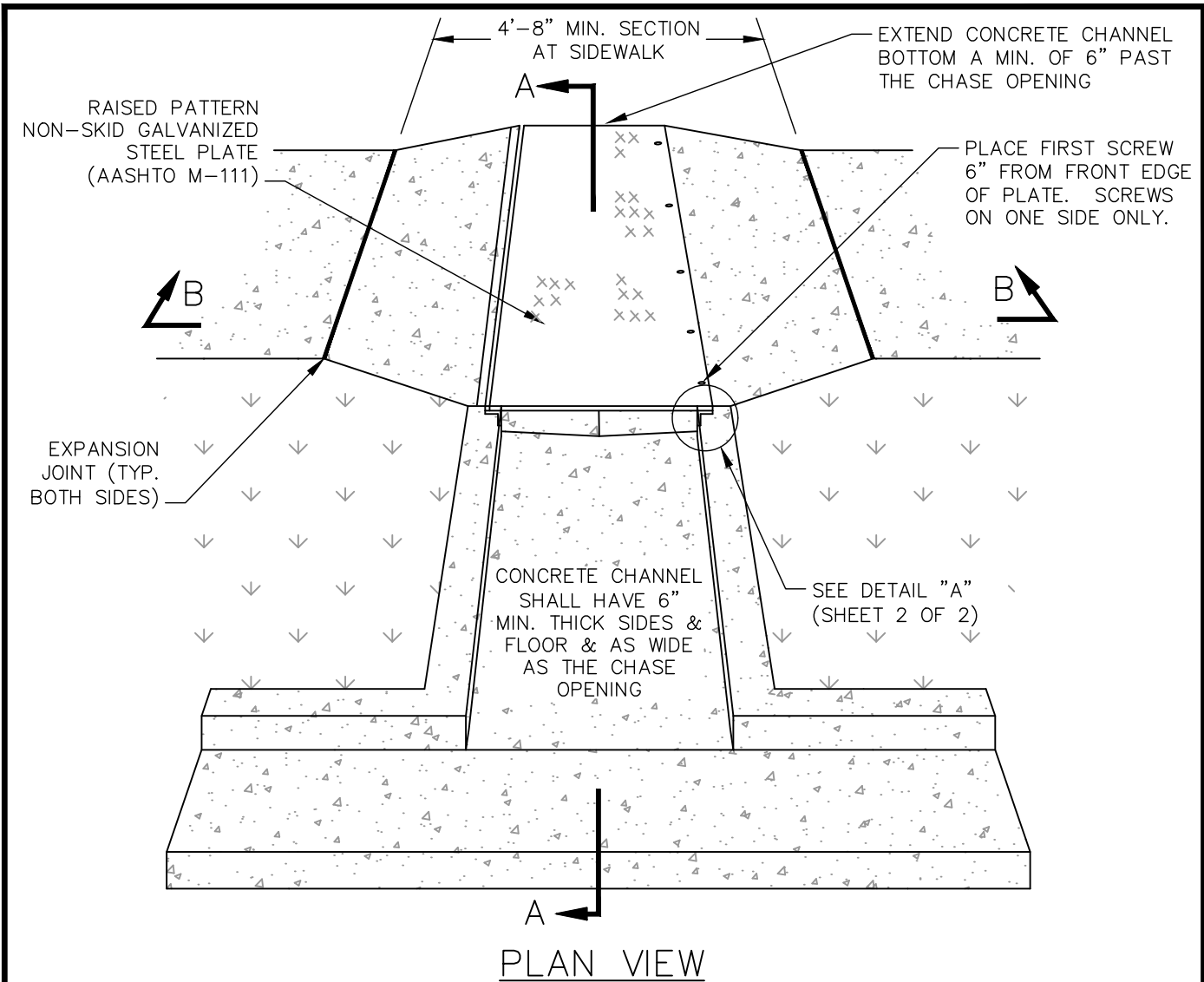
1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. FOR DRIVE OVER CURB, GUTTER AND SIDEWALK, TRANSITION (3' MIN.) TO A VERTICAL FACE CURB AND GUTTER FOR CHASE CONSTRUCTION. KEEP GUTTER WIDTH FOR DRIVE OVER.
3. NEENAH R-4999 SERIES BOLTED TRANSVERSE DRAINAGE STRUCTURE, SOLID CHECKERED TYPE D GRATE MAY BE SUBSTITUTED.
4. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.
5. ELIMINATE 1/2" FLOWLINE LIP WHEN STORMWATER DRAINS AWAY FROM THE GUTTER.



SIDEWALK CHASE FOR ATTACHED SIDEWALK  
SHEET 2 OF 2  
DETAIL NO. 2-23-A

DATE: JULY, 2015

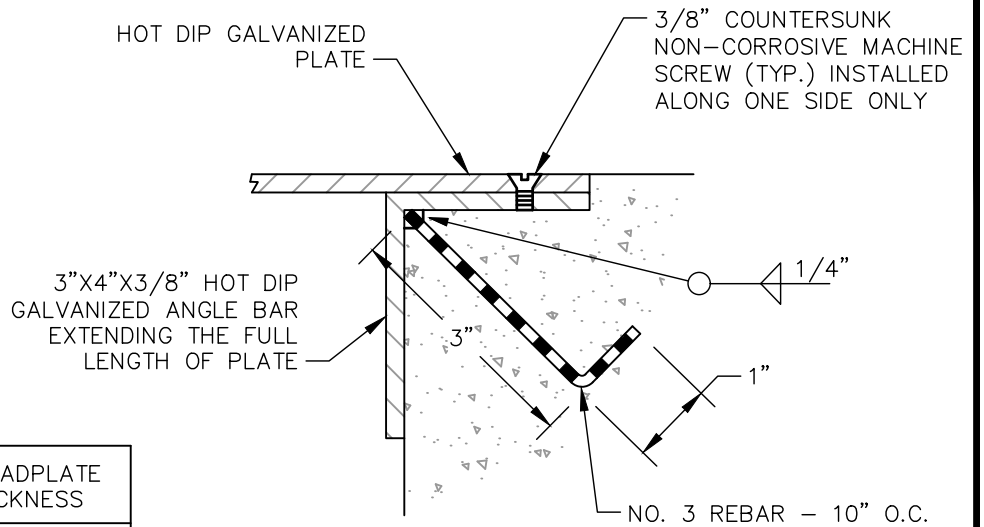
SCALE: N.T.S.



SIDEWALK CHASE FOR DETACHED SIDEWALK  
 SHEET 1 OF 2  
 DETAIL NO. S-23-D

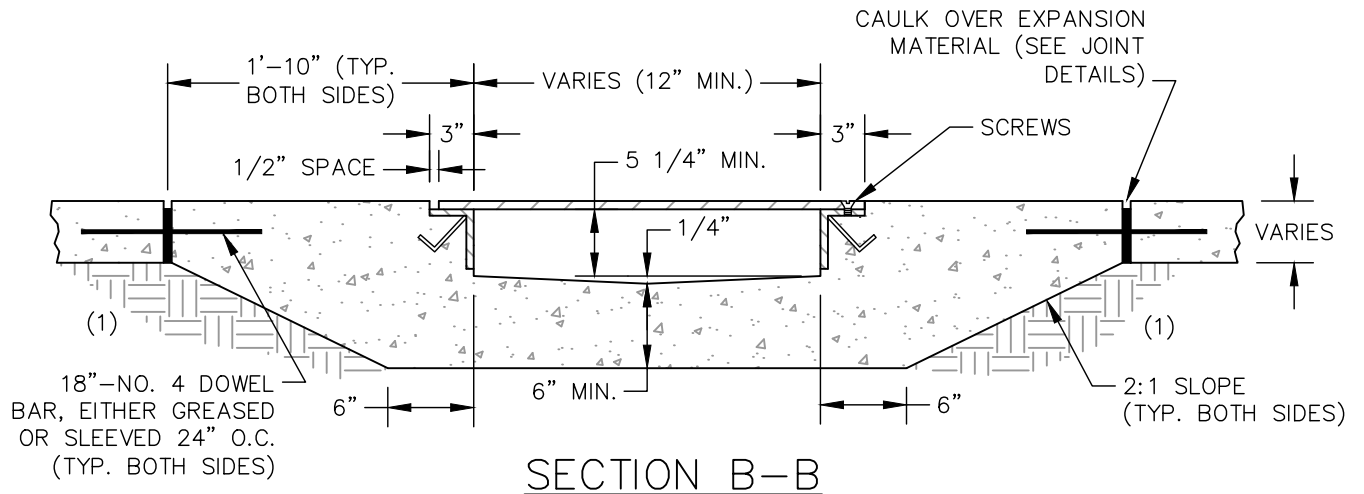
DATE: JULY, 2015

SCALE: N.T.S.



WIDTH OF OPENING	THREADPLATE THICKNESS
12"–18"	9/16"
>18"–24"	5/8"
>24"	SPECIAL DESIGN

DETAIL "A"



SECTION B-B

NOTES:

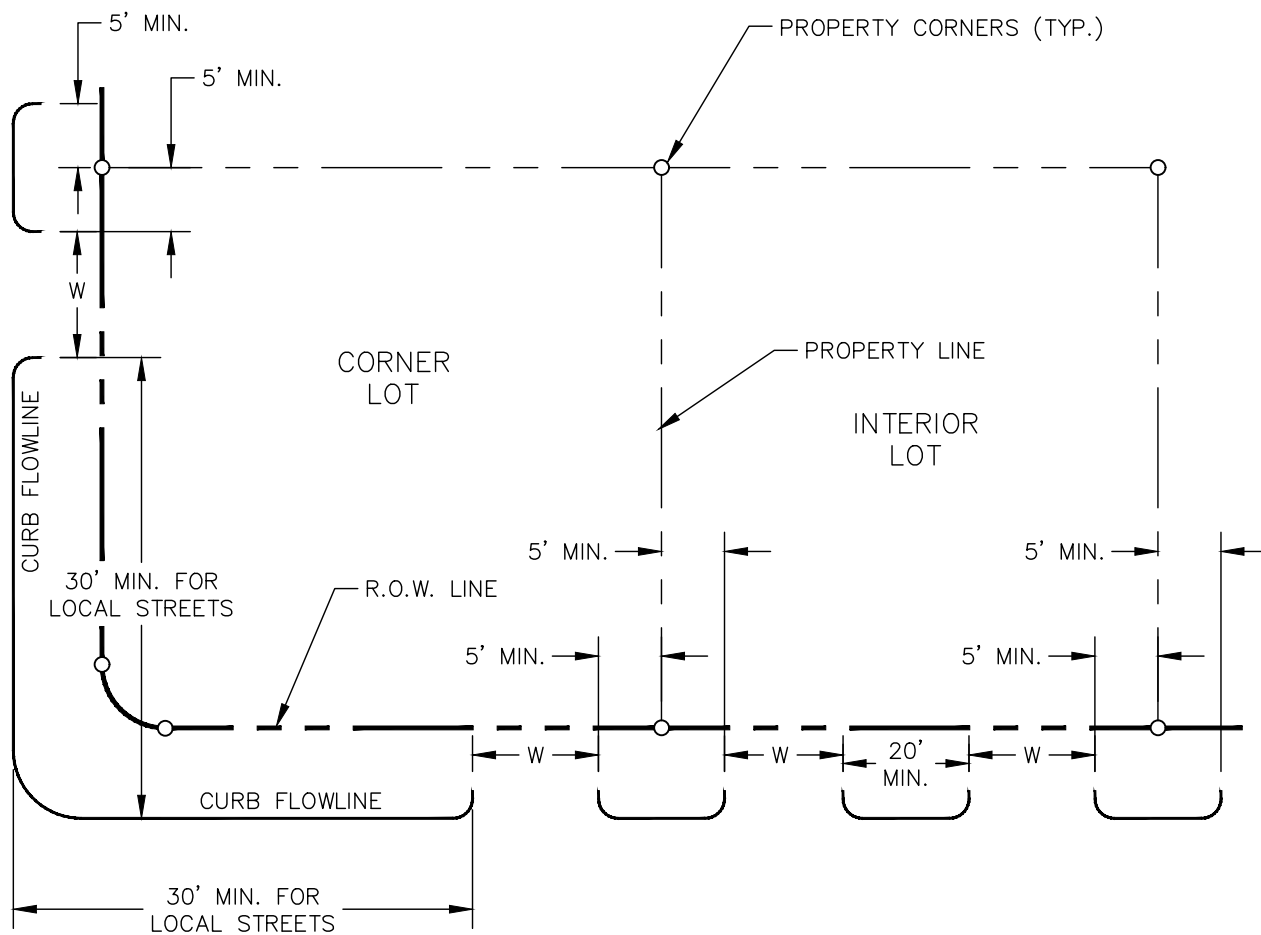
1. COMPACTED SUBGRADE (SEE SPECIFICATIONS).
2. NEENAH R-4999 SERIES BOLTED TRANSVERSE DRAINAGE STRUCTURE, SOLID CHECKERED TYPE D GRATE MAY BE SUBSTITUTED.
3. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.
4. ELIMINATE 1/2" FLOWLINE LIP WHEN STORMWATER DRAINS AWAY FROM THE GUTTER.



SIDEWALK CHASE FOR DETACHED SIDEWALK  
SHEET 2 OF 2  
DETAIL NO. S-23-D

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. FRONTAGES ON CUL-DE-SACS AND ODD SHAPED LOTS NEED SPECIAL REVIEW.
2. LOCATION OF CURB CUTS ADJACENT TO MINOR ARTERIALS AND MAJOR COLLECTORS WILL BE EVALUATED ON AN INDIVIDUAL BASIS BY THE ENGINEER.
3. DRIVEWAY WIDTHS (W) SHALL BE:  
 12' MINIMUM  
 36' MAXIMUM
4. THERE SHALL BE A MINIMUM OF TWENTY (20) FEET CLEAR SEPARATION BETWEEN DRIVEWAYS ON A SINGLE LOT.

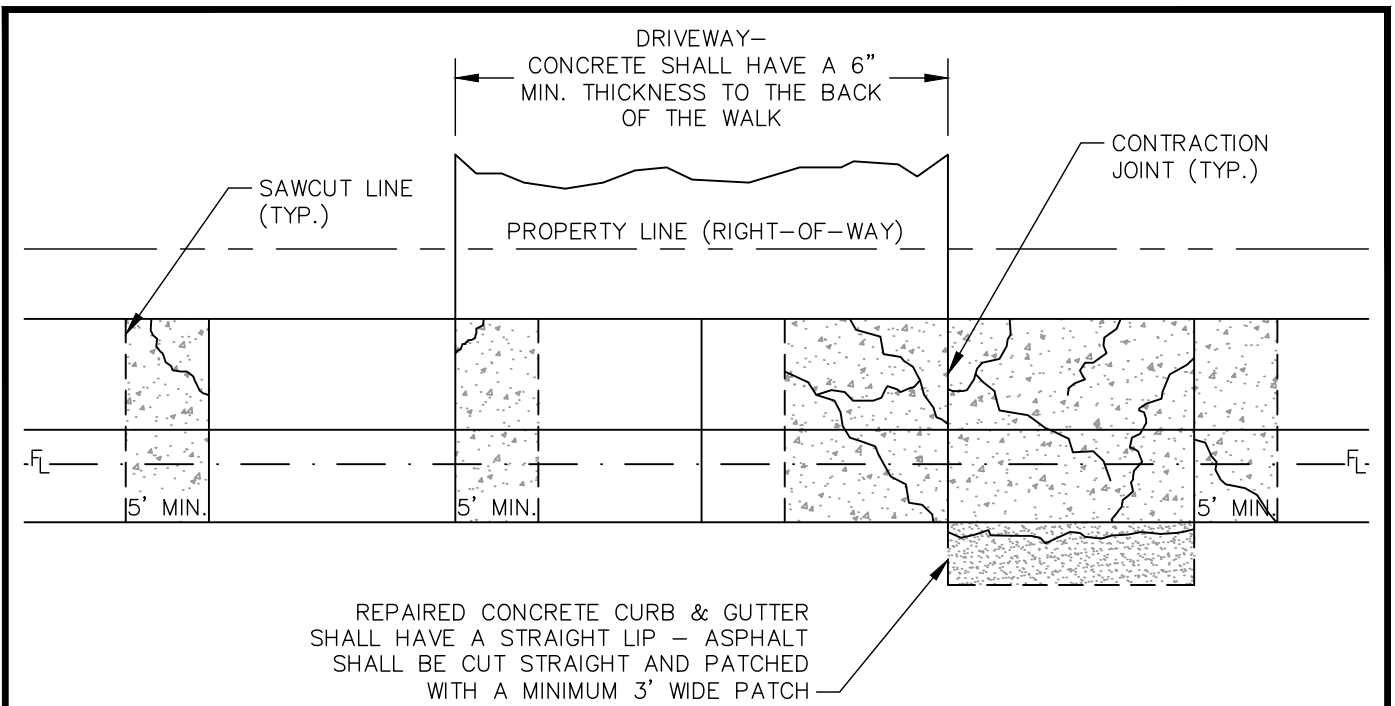


RESIDENTIAL CURB CUT LOCATION STANDARDS

DETAIL NO. S-24

DATE: JULY, 2015

SCALE: N.T.S.



#### NOTES:

1. THE FOLLOWING AREAS IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSIDERED FOR REPAIR:
  - SIDEWALK, CURB, AND/OR GUTTER ADJACENT TO ANY PUBLIC STREET.
  - DETACHED SIDEWALK ALONG ANY PUBLIC STREET.
  - SIDEWALK (CARRIAGE WALKS) BETWEEN THE DETACHED SIDEWALK AND ANY PUBLIC STREET.
  - DRIVEWAY APPROACHES BETWEEN THE DETACHED SIDEWALK AND ANY PUBLIC STREET.
2. FOR DRIVE OVER CURB, GUTTER & SIDEWALK, REPAIRS SHALL BE SAWCUT FROM THE BACK OF THE WALK TO THE LIP OF THE GUTTER AND NO LESS THAN 5' WIDE, AS SHOWN.
3. IN DRIVEWAYS, ALL BROKEN SECTIONS (WHICH MEET THE FOLLOWING CRITERIA FOR REPAIR) SHALL BE REPAIRED AS SHOWN WITH A MINIMUM 6" CONCRETE DEPTH.

#### CRITERIA FOR REPAIR OF CURB, GUTTER, SIDEWALK & DRIVE- WAY APPROACHES IN THE PUBLIC RIGHT-OF-WAY:

- A. TWO SECTIONS HAVING AN ELEVATION DIFFERENCE OF  $\frac{3}{4}$ ", OR GREATER, AT ANY LOCATION ALONG THE TOOLED JOINT OR CRACK.
- B. ANY SECTION WITH CRACKS  $\frac{1}{2}$ " IN WIDTH, OR GREATER.
- C. SPALLING (CRUMBLING OF CONCRETE SURFACE) OF DEPTHS GREATER THAN  $\frac{3}{4}$ ", OR ENCOMPASSING MORE THAN 50% OF THE CONCRETE SECTION.
- D. ANY PORTION OF A CONCRETE SECTION MISSING.
- E. SECTIONS DISPLACED FROM ORIGINAL GRADE AT MORE THAN A 12:1 SLOPE.



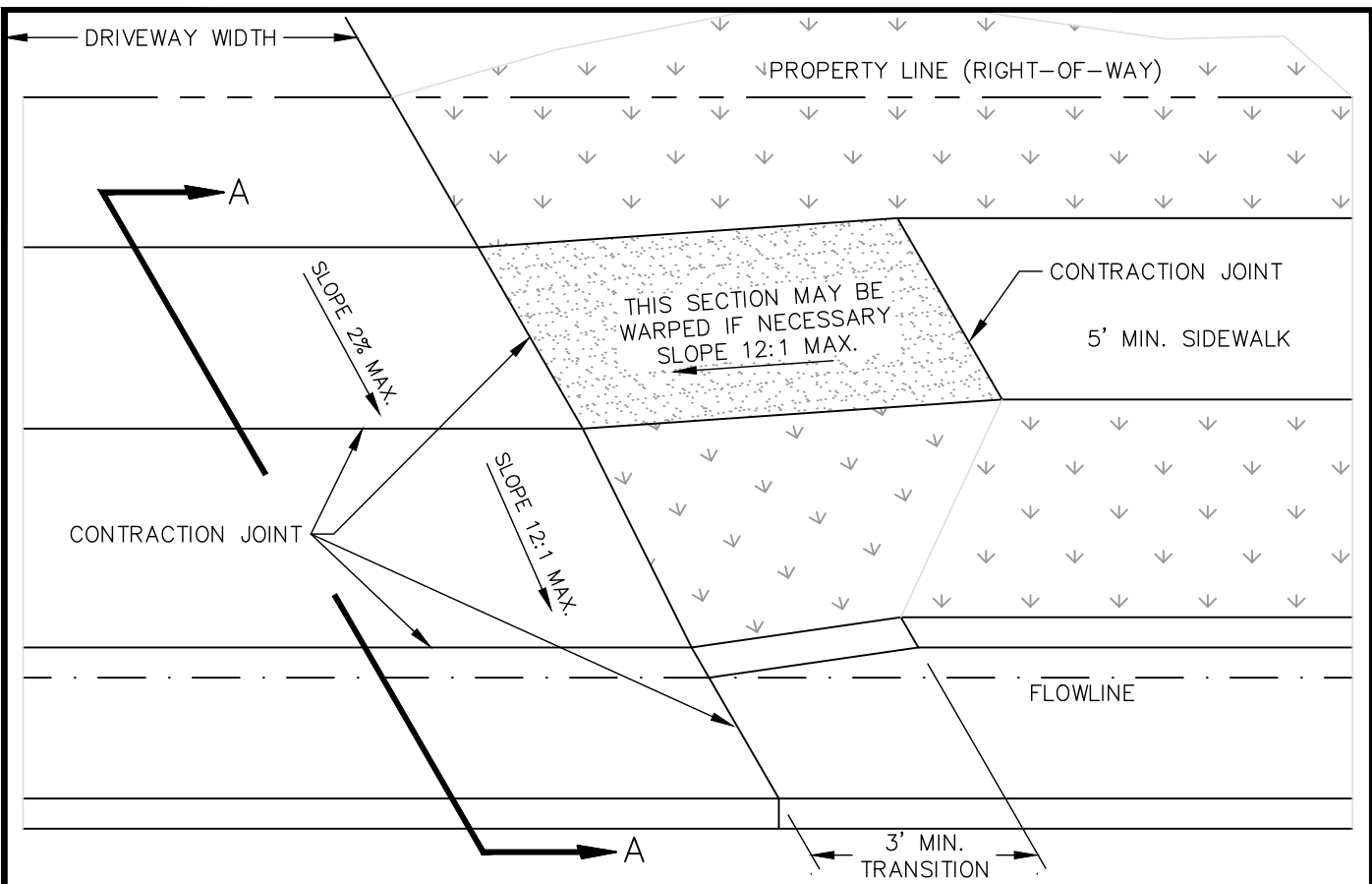
## CURB, GUTTER & SIDEWALK REPAIR DETAIL

DETAIL NO. S-25

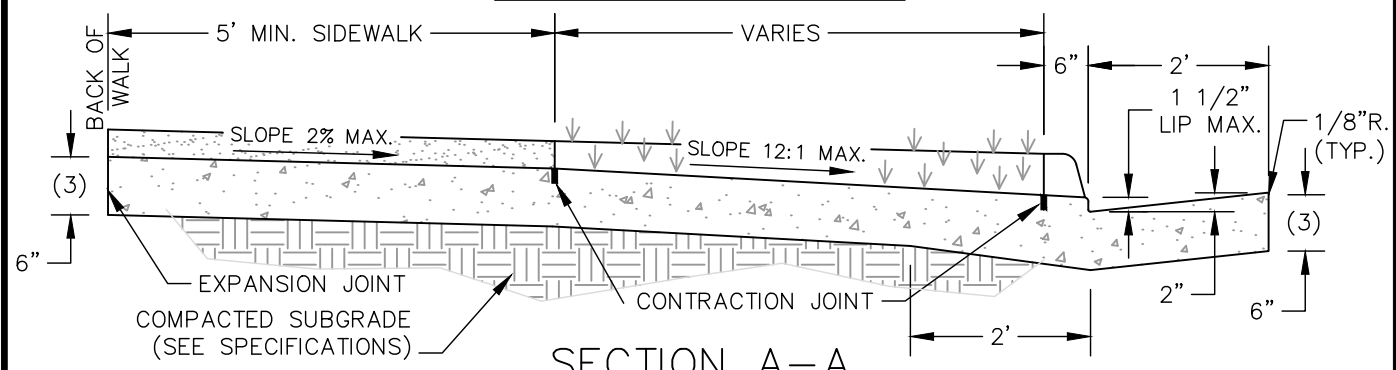
DATE: JULY, 2015

SCALE: N.T.S.





PERSPECTIVE VIEW



SECTION A-A

NOTES:

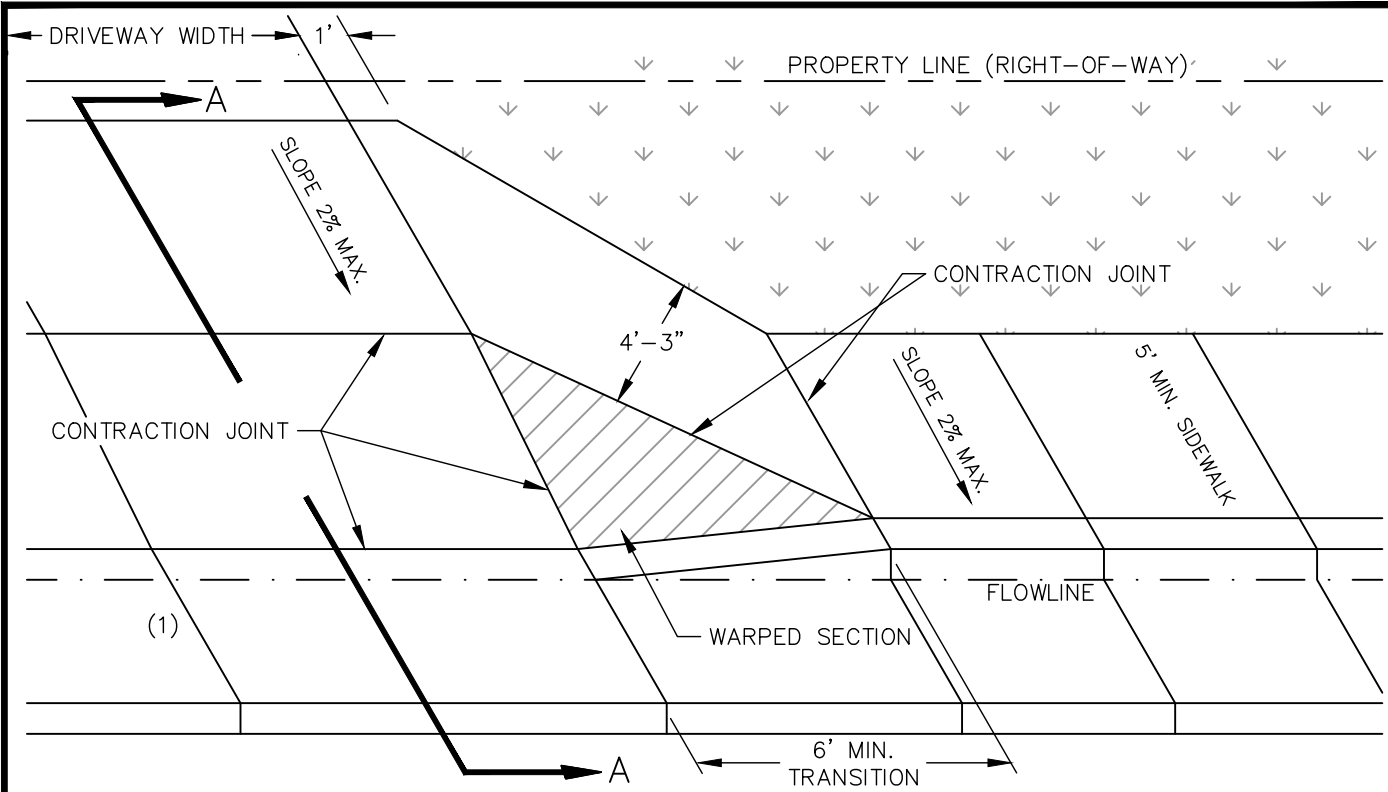
1. CONTRACTION JOINTS ARE REQUIRED AT EACH END OF WARPED SECTION AND SHOULD BE EVENLY SPACED A MAXIMUM OF 10' IN EITHER DIRECTION ALONG THE DRIVEWAY.
2. APPLY LIGHT BROOM FINISH TO SURFACES.
3. DRIVEWAY SECTION SHALL BE 6" THICK ON ALL RESIDENTIAL, MULTIFAMILY RESIDENTIAL, AND 8" THICK ON ALL COMMERCIAL, INDUSTRIAL AND ALLEY DRIVEWAYS.
4. DRIVEWAY WIDTHS: 12' MIN TO 36' MAX.
5. DRIVEWAY WIDTHS FOR COMMERCIAL/INDUSTRIAL AREAS SHALL BE APPROVED BY THE CITY.
6. SHOW DIMENSIONS AND LOCATIONS OF DRIVEWAY ON CONSTRUCTION PLANS.
7. CONSTRUCTION SHALL CONFORM TO ALL ADA STANDARDS FOR SIDEWALKS.
8. RETROFIT DRIVE APPROACHES SHALL MATCH EXISTING CONDITIONS EXCEPT CONCRETE THICKNESSES SHALL CONFORM TO THIS DETAIL. EXPANSION JOINT LOCATIONS SHALL BE APPROVED BY THE CITY.



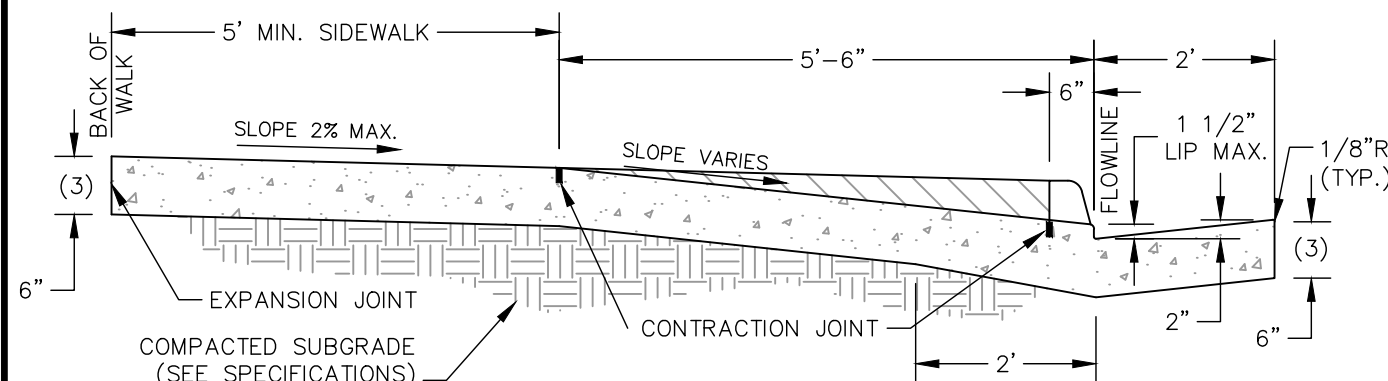
CONCRETE DRIVEWAY APPROACH FOR VERTICAL FACE CURB & GUTTER W/DETACHED SIDEWALK  
 DETAIL NO. S-26

DATE: JULY, 2015

SCALE: N.T.S.



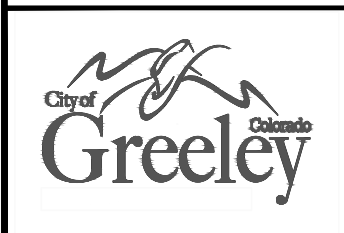
PERSPECTIVE VIEW



SECTION A-A

NOTES:

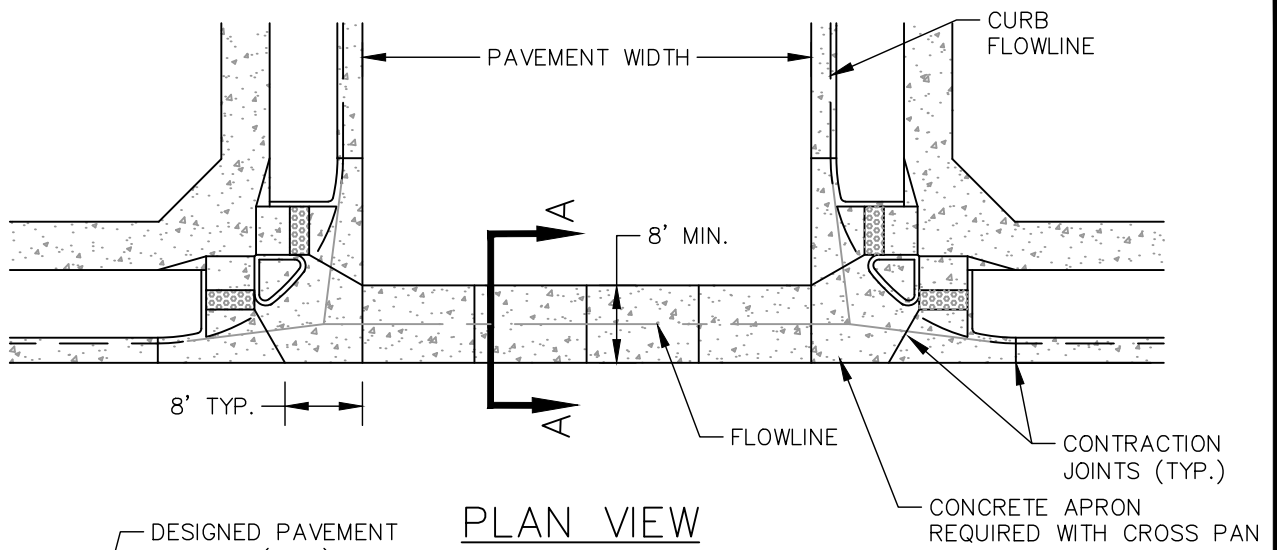
1. CONTRACTION JOINTS ARE REQUIRED AT EACH END OF WARPED SECTION AND SHOULD BE EVENLY SPACED A MAXIMUM OF 10' IN EITHER DIRECTION ALONG THE DRIVEWAY.
2. APPLY LIGHT BROOM FINISH TO SURFACES.
3. DRIVEWAY SECTION SHALL BE 6" THICK ON ALL RESIDENTIAL, MULTIFAMILY RESIDENTIAL, AND 8" THICK ON ALL COMMERCIAL, INDUSTRIAL AND ALLEY DRIVEWAYS.
4. DRIVEWAY WIDTHS: 12' MIN TO 36' MAX.
5. DRIVEWAY WIDTHS FOR COMMERCIAL/INDUSTRIAL AREAS SHALL BE APPROVED BY THE CITY.
6. SHOW DIMENSIONS AND LOCATIONS OF DRIVEWAY ON CONSTRUCTION PLANS.
7. CONSTRUCTION SHALL CONFORM TO ALL ADA STANDARDS FOR SIDEWALKS.
8. RETROFIT DRIVE APPROACHES SHALL MATCH EXISTING CONDITIONS EXCEPT CONCRETE THICKNESSES SHALL CONFORM TO THIS DETAIL. EXPANSION JOINT LOCATIONS SHALL BE APPROVED BY THE CITY.



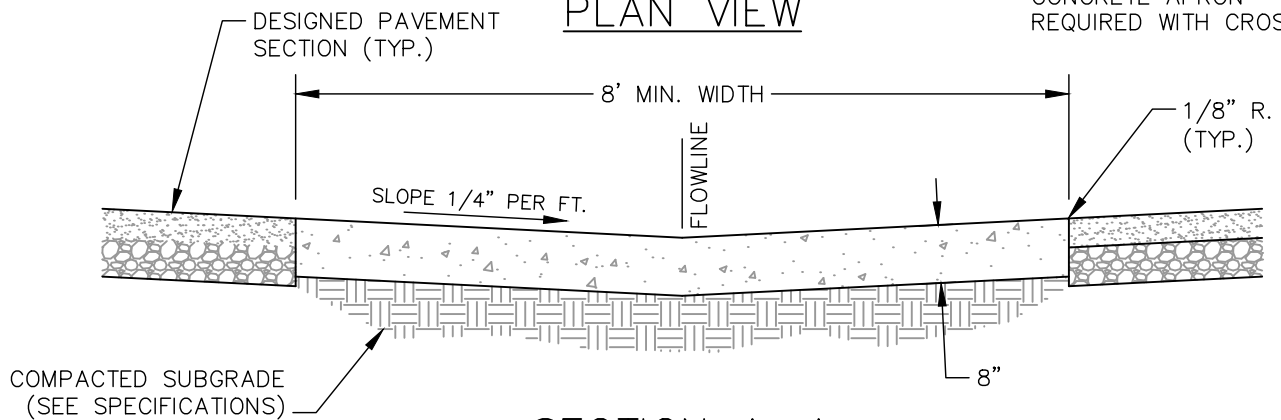
CONCRETE DRIVEWAY APPROACH FOR VERTICAL FACE CURB & GUTTER W/ATTACHED SIDEWALK  
 DETAIL NO. S-27

DATE: JULY, 2015

SCALE: N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

1. MINIMUM OF 0.6% LONGITUDINAL SLOPE FOR CROSS PANS.
2. MAXIMUM SPACING OF CONTRACTION JOINTS – TEN (10) FEET.
3. CONCRETE APRON SHALL BE Poured MONOLITHICALLY WITH CURB AND SHALL BE 8" THICK (SEE CURB RAMP DETAILS).
4. CROSS PAN AND APRON MAY BE Poured MONOLITHICALLY OR IF Poured SEPARATELY SHALL BE DOWELLED TOGETHER.
5. SEE STREET DESIGN STANDARDS FOR PERMISSIBLE LOCATIONS OF CROSS PANS.
6. MID-BLOCK CROSS PANS SHALL BE A MINIMUM OF TEN (10) FEET WIDE.
7. LARGER WIDTHS MAY BE REQUIRED BY THE CITY.
8. DOWELING MAY BE REQUIRED AT CERTAIN COLD JOINTS AT THE CITY'S DIRECTION, BASED ON SPECIAL SUBGRADE CIRCUMSTANCES.
9. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

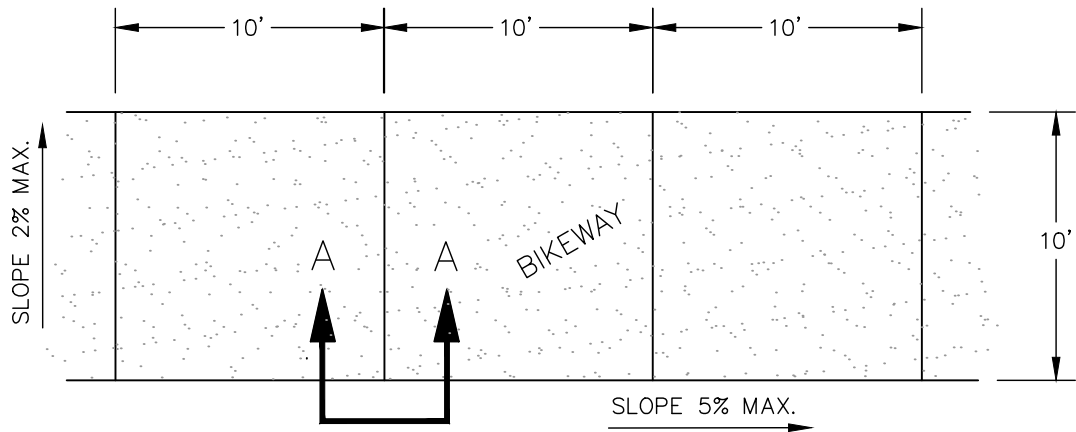


CONCRETE CROSS PAN DETAIL

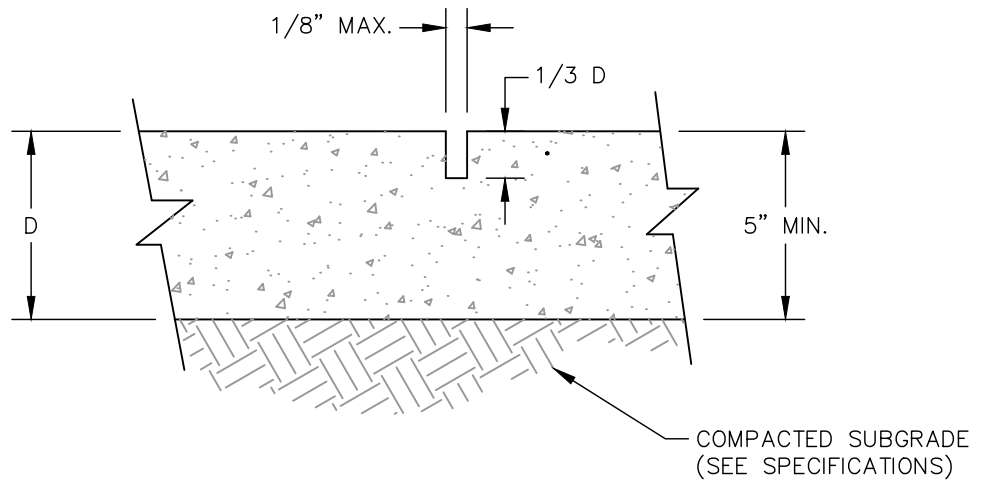
DETAIL NO. S-28

DATE: JULY, 2015

SCALE: N.T.S.



PLAN VIEW



SECTION A-A

NOTES:

1. SAWCUT, REMOVABLE PLASTIC DUMMY JOINT STRIPS OR OTHER APPROVED JOINTS AT 10' O.C.
2. EXPANSION JOINTS REQUIRED AT 200 FOOT SPACING AND ADDITIONAL JOINTS MAY BE REQUIRED AT THE DISCRETION OF THE CITY. SEE JOINT DETAILS.
3. CONCRETE SHALL BE FIBER REINFORCED AS APPROVED BY THE CITY.
4. BIKE PATHS WITH GREATER THAN 5% SLOPE SHALL REQUIRE A SPECIAL DESIGN AND MUST COMPLY WITH ALL ADA REQUIREMENTS.
5. CONCRETE SURFACES TO RECEIVE A LIGHT BROOM FINISH.

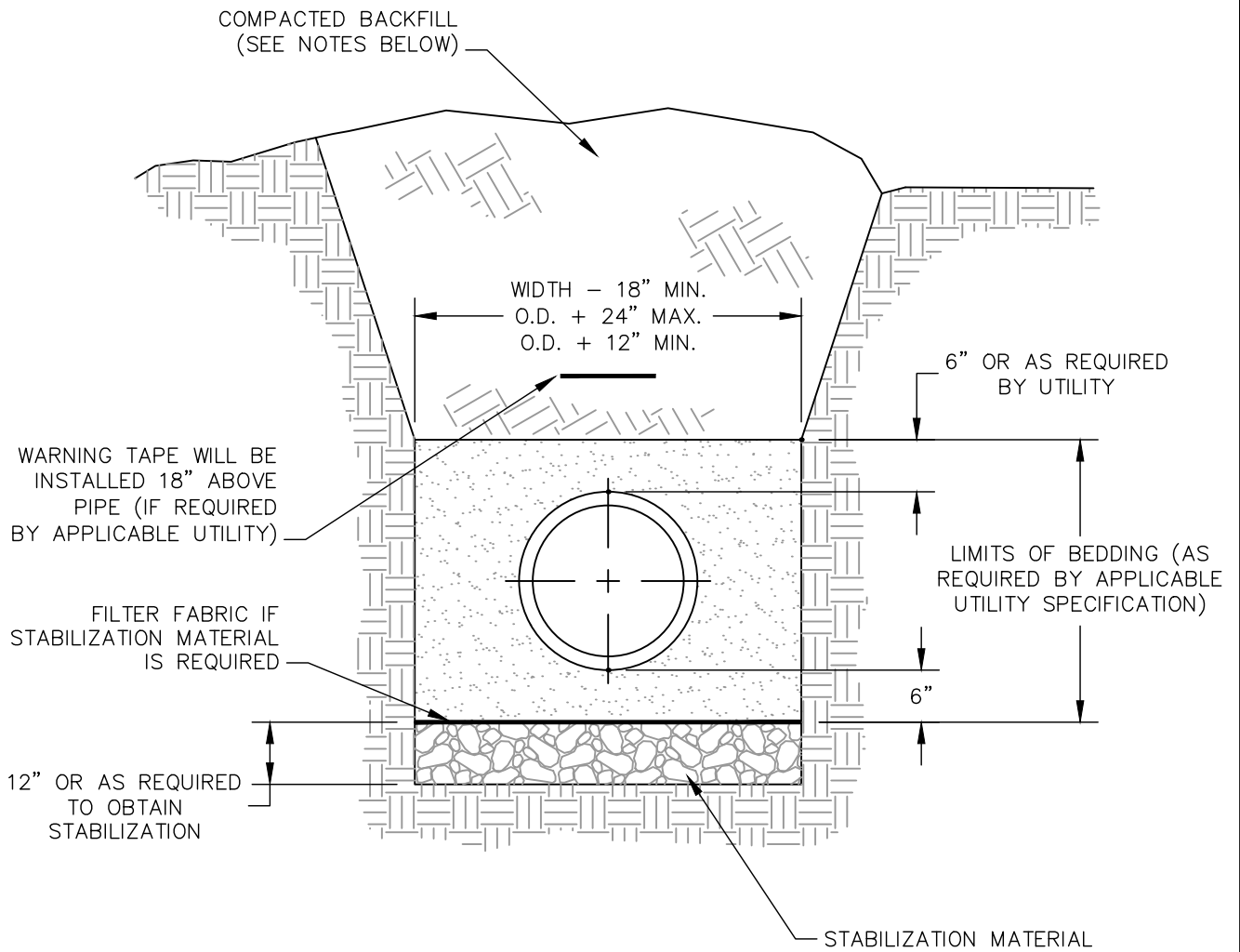


BIKEWAY DETAIL

DETAIL NO. S-29

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. RIGHT-OF-WAY AND EASEMENT AREAS SHALL BE GRADED (CUT AND FILL) TO SUBGRADE (+/-0.5') PRIOR TO AND AFTER UTILITY INSTALLATION.
2. BACKFILL WITHIN PUBLIC RIGHT-OF-WAY AND IN EASEMENTS WITHIN 20 FEET OF RIGHT-OF-WAY SHALL BE COMPACTED TO 95% WITHIN +/- 2% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY AASHTO T99 DENSITY. TRENCHES IN EASEMENTS BEYOND 20 FEET OF RIGHT-OF-WAY SHALL BE COMPACTED TO 90%. ALL TRENCHES SHALL BE COMPACTED BY A METHOD APPROVED BY THE CITY.
3. TRENCH EXCAVATION SHALL COMPLY TO ALL OSHA STANDARDS.
4. FILTER FABRIC IS REQUIRED IF STABILIZATION MATERIAL IS USED. THE FABRIC SHALL BE INSTALLED AS SHOWN IN THE DETAIL.
5. IF NOT SPECIFIED BY APPLICABLE UTILITY, AN APPROVED GRADE OF SAND BEDDING SHALL BE INSTALLED TO SPRINGLINE.



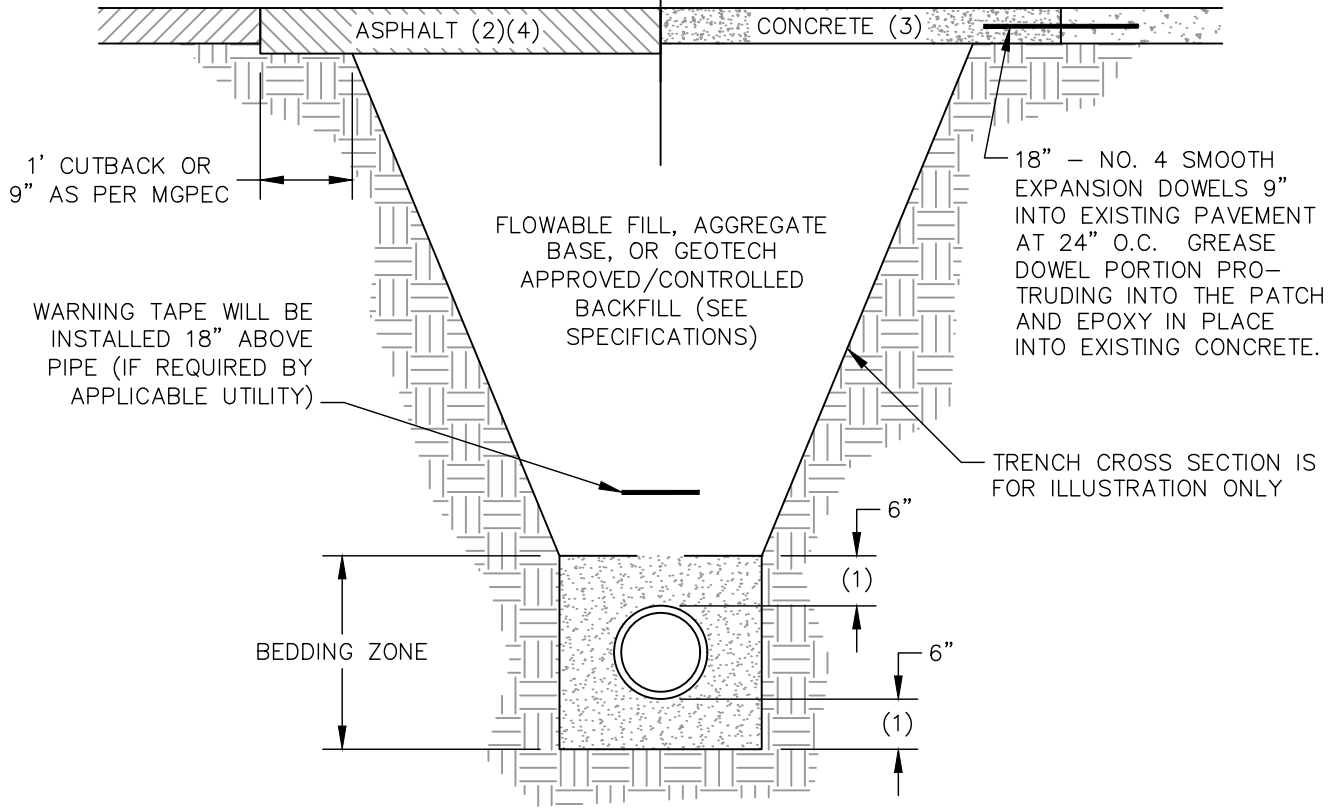
NEW DEVELOPMENT TRENCH EXCAVATION  
& BACKFILL DETAIL  
DETAIL NO. S-30

DATE: JULY, 2015

SCALE: N.T.S.

# TRENCH PATCH FOR ASPHALT PAVEMENT

# TRENCH PATCH FOR CONCRETE PAVEMENT



	LOCAL STANDARD & LOCAL LOW VOLUME			MAJOR LOCAL, COMMERCIAL & INDUSTRIAL	COLLECTOR	ARTERIAL
	ALLEY	EMER. ACCESS	RESIDENTIAL			
FULL DEPTH ASPHALT (4)	5 1/2"	5 1/2"	5 1/2"	7"	7"	7"

### NOTES:

1. USE THE LIMITS OF BEDDING SHOWN IF NOT SPECIFIED BY THE APPLICABLE UTILITY.
2. HOT MIX ASPHALT SHALL BE USED TO PATCH ASPHALT AND SHALL BE GRADE S OR SX. TACK COAT REQUIRED.
3. CONCRETE SHALL BE USED TO PATCH CONCRETE. MATCH EXISTING THICKNESS.
4. FULL DEPTH ASPHALT SHALL BE THICKNESSES AS SHOWN ABOVE OR ONE (1) INCH GREATER THAN THE EXISTING PAVEMENT THICKNESS, WHICHEVER IS GREATER.
5. PATCH MAY NOT END WITHIN THE WHEEL TRACK OF TRAVEL LANES. UP TO THREE (3) FEET OF ADDITIONAL ASPHALT PATCH WILL BE REQUIRED TO KEEP THE JOINT OUT OF THE WHEEL TRACK.
6. MINIMUM SIZE OF PATCH SHALL BE 3' X 3'.

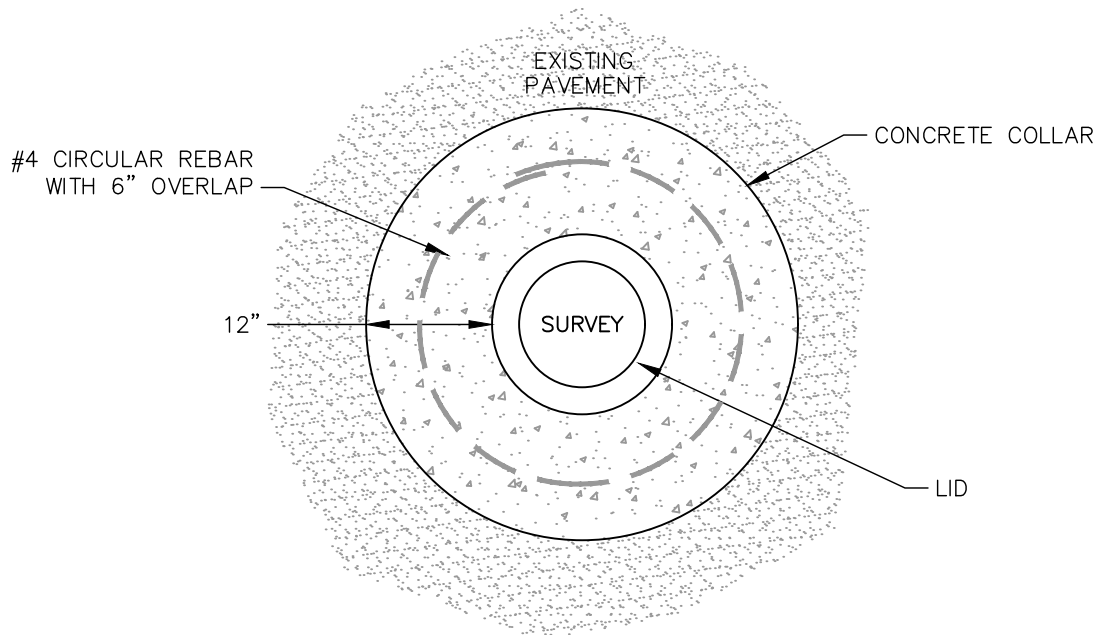


## EXISTING STREET PAVEMENT PATCH DETAIL FOR ASPHALT & CONCRETE

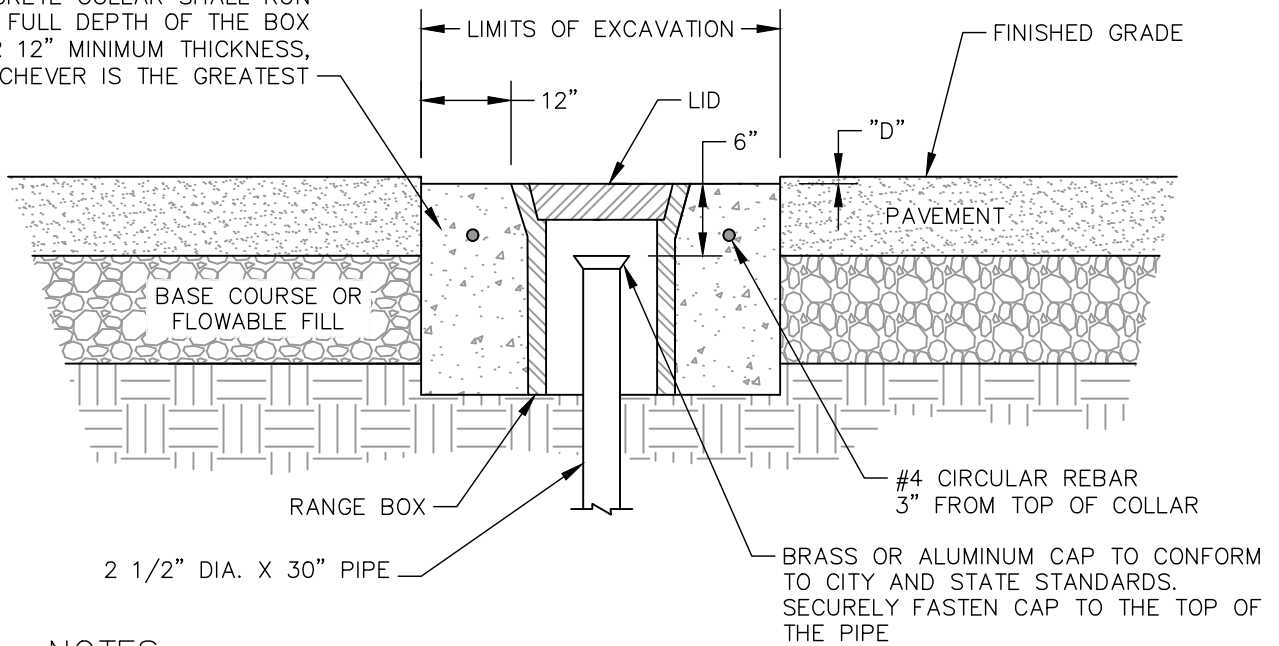
DETAIL NO. S-31

DATE: JULY, 2015

SCALE: N.T.S.



CONCRETE COLLAR SHALL RUN THE FULL DEPTH OF THE BOX OR 12" MINIMUM THICKNESS, WHICHEVER IS THE GREATEST



NOTES:

1. "D" = 1/2" FOR HOT MIX ASPHALT PAVEMENT OVERLAYS, SURFACE TREATMENTS, PAVEMENT RECONSTRUCTION OR NEW CONSTRUCTION.
2. "D" = 1/4" FOR CONCRETE STREETS.
3. THIS MONUMENT TO BE INSTALLED AT ALL ALIQUOT CORNERS.
4. SURVEY MONUMENTS SHALL CONFORM TO ALL LAND SURVEYING REQUIREMENTS AS DETERMINED BY CITY AND STATE STANDARDS.
5. RANGE BOX, CAP AND MONUMENT PIPE TO BE PURCHASED FROM THE CITY OF GREELEY.

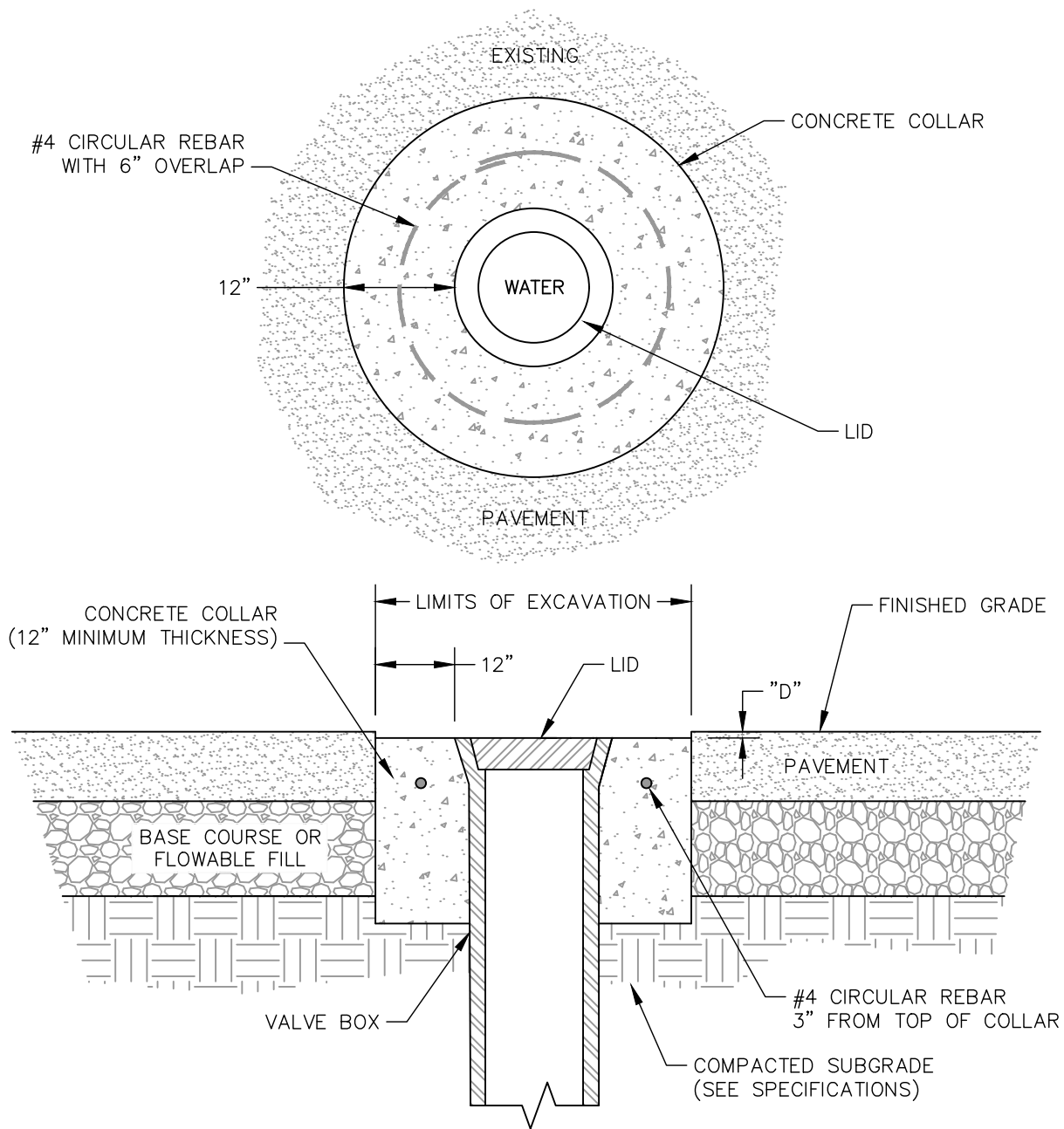


SURVEY MONUMENT IN PAVEMENT

DETAIL NO. S-32

DATE: JULY, 2015

SCALE: N.T.S.



NOTES:

1. "D" = 1/4" FOR HOT MIX ASPHALT PAVEMENT OVERLAYS, SURFACE TREATMENTS, PAVEMENT RECONSTRUCTION OR NEW CONSTRUCTION.
2. "D" = 1/4" FOR CONCRETE STREETS.
3. VALVE BOX MUST BE PLUMB AND CENTERED OVER THE VALVE NUT.
4. THIS DETAIL APPLIES TO BOTH ASPHALT AND CONCRETE STREETS.

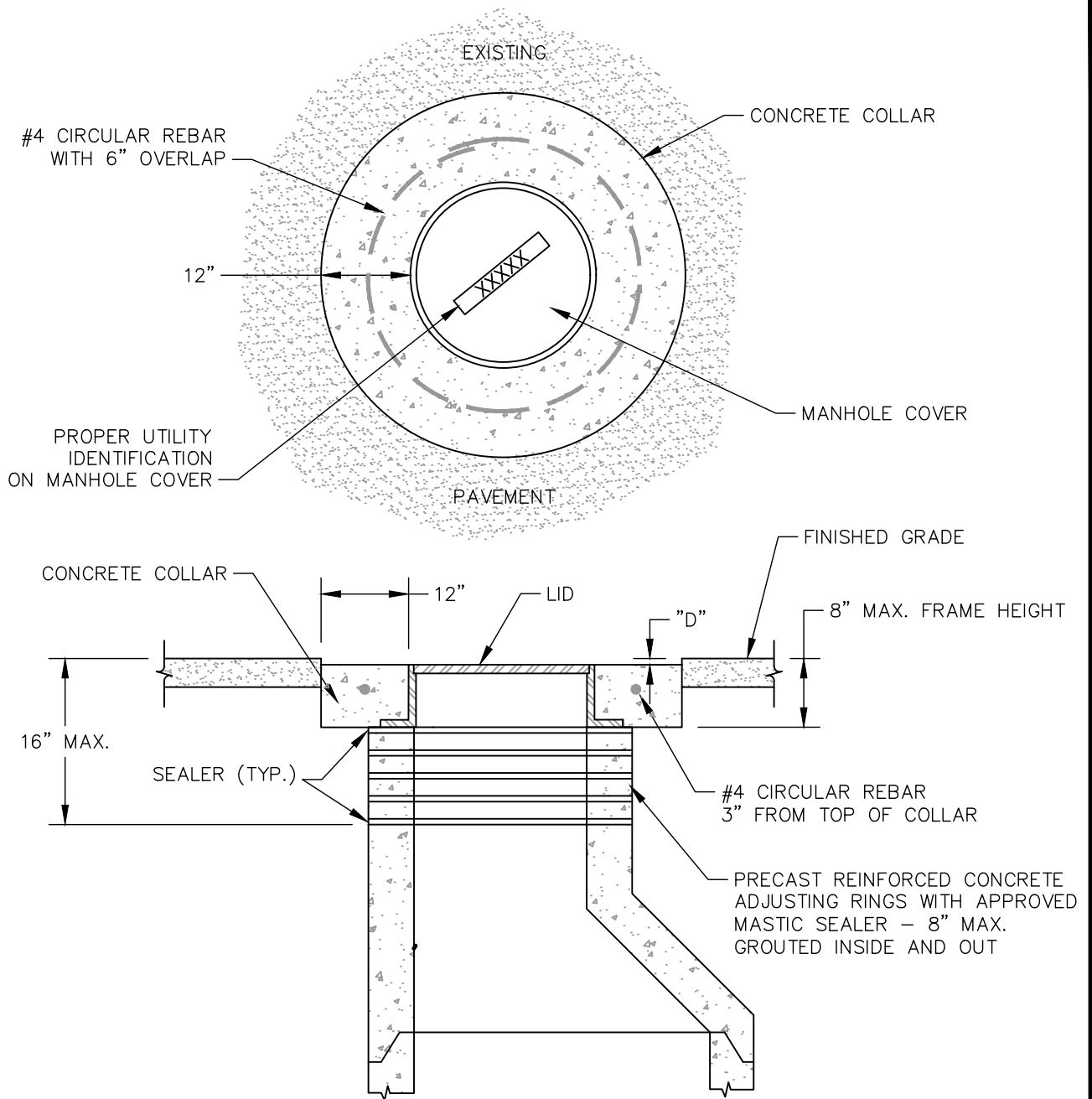


WATER VALVE DETAIL  
FOR RAISING TO FINISHED GRADE  
DETAIL NO. S-33

DATE: JULY, 2015

SCALE: N.T.S.





NOTES:

1. "D" = 1/4" FOR HOT MIX ASPHALT PAVEMENT OVERLAYS, SURFACE TREATMENTS, PAVEMENT RECONSTRUCTION OR NEW CONSTRUCTION.
2. "D" = 1/4" FOR CONCRETE STREETS.
3. A SEALER SHALL BE USED BETWEEN ALL ADJUSTING RINGS AS REQUIRED.
4. DROP-IN RISER RINGS NOT ALLOWED.
5. SET AND TILT RING AND COVER TO MATCH SLOPE OF FINISHED STREET.



MANHOLE RAISING DETAIL

DETAIL NO. S-34

DATE: JULY, 2015

SCALE: N.T.S.