GENERAL CONCRETE NOTES

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE UNLESS OTHERWISE SPECIFIED.
2. CLASS 2 CONCRETE SHALL CONTAIN NOT LESS THAN 590 POUNDS OF PORTLAND CEMENT PER CUBIC YARD WITH 1 INCH AGGREGATE. 5 INCH MAXIMUM SLUMP. 3000 P.S.I. AT 28 DAYS.
3. CLASS 3 CONCRETE SHALL CONTAIN NOT LESS THAN 505 POUNDS OF PORTLAND CEMENT PER CUBIC YARD WITH 1 INCH AGGREGATE. 5 INCH MAXIMUM SLUMP. 2500 P.S.I. AT 28 DAYS.
4. CLASS 4 CONCRETE SHALL CONTAIN NOT LESS THAN 420 POUNDS OF PORTLAND CEMENT PER CUBIC YARD WITH 1 INCH AGGREGATE. 5 INCH MAXIMUM SLUMP. 2500 P.S.I. AT 28 DAYS.
5. WHEN MAXIMUM DAYTIME TEMPERATURE EXCEEDS 50° F. ALL NEWLY PLACED CONCRETE SHALL BE SPRAYED UNIFORMLY WITH A CURING COMPOUND. CURING COMPOUND SHALL BE APPLIED AT A NOMINAL RATE OF ONE GALLON PER 150 SQUARE FEET, UNLESS OTHERWISE SPECIFIED.
6. ALL WORK CONSTRUCTED BY THESE STANDARDS SHALL BE IN COMPLIANCE WITH ALL CURRENT ADA AND PROWAG REGULATIONS.
7. WHERE REBAR IS USED, CONTRACTOR SHALL INSTALL WIRE TIES SECURELY AT ALL REBAR CROSSINGS. CONCRETE BLOCK OR CHAIRS AS APPROVED BY THE CITY ENGINEER SHALL BE INSTALLED PRIOR TO CONCRETE INSTALLATION TO KEEP REBAR IN THE PROPER LOCATION.
8. CONCRETE JOINTS IN THE PATH OF TRAVEL SHALL BE FINISHED WITH A 1/4" RADIUS TOOL AND SHALL MEET ADA GAP TOOL TESTING REQUIREMENTS.
9. WHERE CURBS ARE ADJACENT TO CONCRETE FLATWORK, THE JOINTS IN THE FLATWORK AND CURBING SHALL BE ALIGNED WHERE POSSIBLE.
10. NO CONCRETE FLATWORK SLOPES SHALL BE LESS THAN 1.0%. THIS IS FOR DRAINAGE PURPOSES.
11. ALL CONCRETE SURFACES SHALL BE TESTED FOR WATER FLOW.
12. ABBREVIATIONS: TYP. OR TYP = TYPICAL, MIN = MINIMUM, MAX. OR MAX = MAXIMUM, PROWAG = PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES

APPROVED BY: _____ 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

CONCRETE SPECIFICATIONS

REVISIONS
01/29/25
BK 2016

C-1

CURBS AND GUTTERS

1. ALL CURB AND GUTTER, VEE GUTTER, MEDIAN CURB AND LANDSCAPE CURB SHALL BE CLASS 2 OR CLASS 3 CONCRETE.

2. BARRIER TYPE CURB AND GUTTER SHALL HAVE A MINIMUM GRADIENT OF 0.20 FEET PER 100 FEET OR AS APPROVED BY THE CITY ENGINEER.

3. BARRIER TYPE CURB AND GUTTER ON THE CURVE OF CUL–DE–SACS AND STREET BULBS SHALL HAVE A MINIMUM GRADIENT OF 0.35 FEET PER 100 FEET OR AS APPROVED BY THE CITY ENGINEER.

4. ROLL TYPE CURB AND GUTTER SHALL HAVE A MINIMUM GRADIENT OF 0.35 FEET PER 100 FEET OR AS APPROVED BY THE CITY ENGINEER.

5. VEE GUTTER SHALL HAVE A MINIMUM GRADIENT OF 0.25 FEET PER 100 FEET OR AS APPROVED BY THE CITY ENGINEER.

6. ALL CURB AND GUTTER, VEE GUTTER, MEDIAN CURB AND LANDSCAPE CURB SHALL BE PLACED ON 6 INCH MOIST AND COMPACTED BASE MATERIALS. 95 PERCENT MINIMUM RELATIVE COMPACTION.

7. ALL CURB AND GUTTER, VEE GUTTER, MEDIAN CURB AND LANDSCAPE CURB SHALL HAVE A LIGHT BROOM FINISH.

8. ALL CURB AND GUTTER AND VEE GUTTER SHALL HAVE WEAKENED PLANE JOINTS CONSTRUCTED AT 15 FOOT CENTERS. MEDIAN CURB AND LANDSCAPE CURB SHALL HAVE WEAKENED PLANE JOINTS CONSTRUCTED AT 8 FOOT CENTERS. WEAKENED PLANE JOINTS SHALL BE A MINIMUM OF 1–1/2 INCHES IN DEPTH AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.

9. ALL EXPOSED SURFACES OF CURB AND GUTTER, VEE GUTTER, MEDIAN CURB AND LANDSCAPE CURB SHALL NOT VARY IN EXCESS OF 0.02 FEET WHEN A 10 FOOT STRAIGHT EDGE IS PLACED ON THE SURFACE, EXCEPT AT GRADE CHANGES OR CURVES.

10. ALL CURB AND GUTTER AND VEE GUTTER SHALL BE WATER TESTED FOR FLOW.

11. ALL CURB AND GUTTER, VEE GUTTER, MEDIAN CURB AND LANDSCAPE CURB SHALL BE CURED IN ACCORDANCE WITH THE PROVISIONS IN THE GENERAL CONCRETE NOTES IN THESE IMPROVEMENT STANDARDS.

APPROVED BY: _____ CITY ENGINEER R.C.E. 71192 — 01/29/25 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS	
CONCRETE SPECIFICATIONS	REVISIONS 01/29/25 BK 2016	C–2

SIDEWALKS AND RAMPS

1. ALL SIDEWALKS AND RAMPS SHALL BE CLASS 2 OR CLASS 3 CONCRETE.
2. SIDEWALKS AND RAMPS SHALL BE PLACED ON 6 INCH MOIST AND COMPACTED BASE MATERIALS. 90 PERCENT RELATIVE COMPACTION UNDER SIDEWALKS. 95 PERCENT RELATIVE COMPACTION UNDER RAMPS AND SIDEWALKS AT CURB RETURNS.
3. SIDEWALKS AND RAMPS SHALL BE STEEL TROWELED AND HAVE A LIGHT BROOM FINISH UNLESS OTHERWISE NOTED. RAMPS SHALL HAVE A HEAVY BROOM FINISH ACROSS THE SLOPE OF THE RAMP.
4. SIDEWALKS AND RAMPS SHALL HAVE WEAKENED PLANE JOINTS CONSTRUCTED AT 15 FOOT CENTERS AND WHERE SHOWN IN THESE IMPROVEMENT STANDARDS. WEAKENED PLANE JOINTS SHALL BE A MINIMUM OF 1 INCH IN DEPTH AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
5. ESTABLISHED SIDEWALK PATTERN IN BLOCK SHALL BE MATCHED.
6. SPECIAL SIDEWALK DESIGNS AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
7. SIDEWALK INSTALLED IN INFILL OR EXISTING AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.
8. ALL SIDEWALKS AND RAMPS SHALL BE CURED IN ACCORDANCE WITH THE PROVISIONS IN THE GENERAL CONCRETE NOTES OF THESE IMPROVEMENT STANDARDS.
9. DETECTABLE WARNING SURFACES SHALL BE INSTALLED PER THESE IMPROVEMENT STANDARDS AND AS REQUIRED BY THE CITY ENGINEER.

DRIVE APPROACHES

1. ALL DRIVE APPROACHES SHALL BE CLASS 2 OR CLASS 3 CONCRETE UNLESS OTHERWISE NOTED.
2. SINGLE FAMILY RESIDENTIAL DRIVE APPROACHES SHALL BE PLACED ON 6 INCH MOIST AND COMPACTED BASE MATERIALS. 95 PERCENT RELATIVE COMPACTION.
3. MULTI–FAMILY RESIDENTIAL, OFFICE AND COMMERCIAL DRIVE APPROACHES SHALL BE PLACED ON 6 INCH MOIST AND COMPACTED BASE MATERIALS. 95 PERCENT RELATIVE COMPACTION.
4. MAJOR COMMERCIAL DRIVE APPROACHES SHALL BE PLACED ON 6 INCH MOIST AND COMPACTED CLASS 2 AGGREGATE BASE OVER 6 INCH MOIST AND COMPACTED BASE MATERIALS. 95 PERCENT RELATIVE COMPACTION.
5. DRIVE APPROACHES SHALL BE STEEL TROWELED AND HAVE A LIGHT BROOM FINISH.
6. DRIVE APPROACHES SHALL HAVE A WEAKENED PLANE JOINT CONSTRUCTED AT EACH EDGE AND AT THE CENTERLINE. WEAKENED PLANE JOINTS SHALL BE A MINIMUM OF 1–1/2 INCH IN DEPTH AND SHALL BE FINISHED WITH A SCORING TOOL LEAVING THE EDGES ROUNDED.
7. NOT MORE THAN 50 PERCENT OF PROPERTY FRONTAGE SHALL BE USED AS DRIVE APPROACH.
8. DRIVE APPROACHES ON STATE ROUTES ARE SUBJECT TO APPROVAL BY CALTRANS.
9. ALL EXPOSED SURFACES OF DRIVE APPROACHES AND FLOW LINES SHALL NOT VARY IN EXCESS OF 0.02 FEET WHEN A 10 FOOT STRAIGHT EDGE IS PLACED ON THE SURFACE, EXCEPT AT GRADE CHANGES OR CURVES.
10. ALL DRIVE APPROACHES SHALL BE CURED IN ACCORDANCE WITH THE PROVISIONS IN THE GENERAL CONCRETE NOTES OF THESE IMPROVEMENT STANDARDS.

APPROVED BY: Chris Young 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

CONCRETE SPECIFICATIONS

REVISIONS
01/29/25
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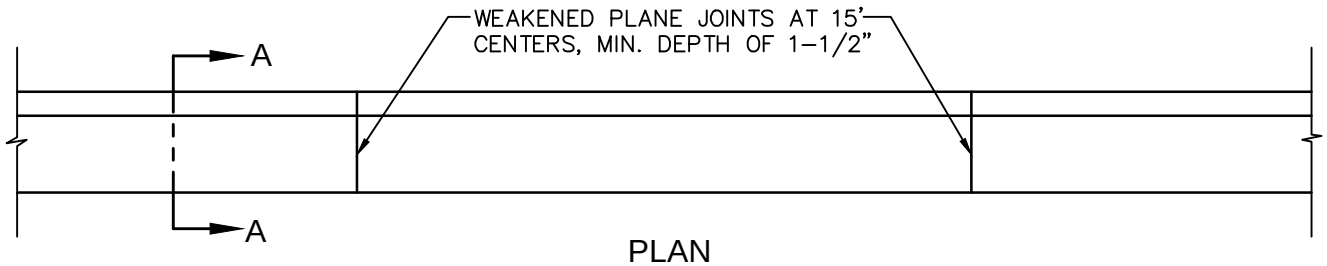
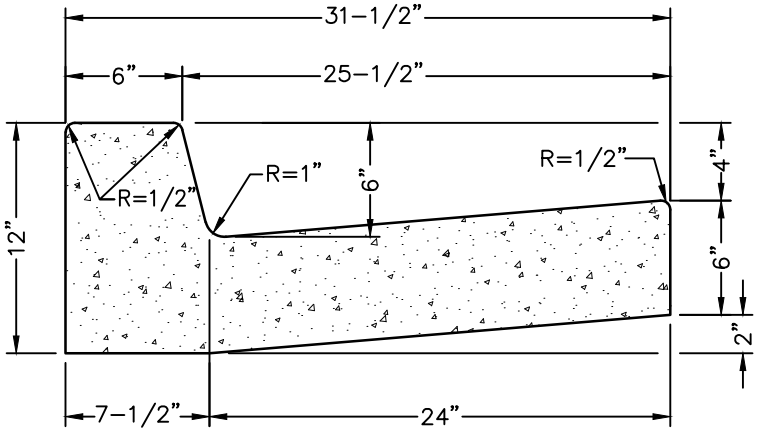


PLAN



SECTION A-A

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. A WEAKENED PLANE JOINT OR COLD JOINT SHALL BE INSTALLED AT THE END OF CURB RETURNS AND AT THE CENTERLINE OF PROPOSED DRIVE APPROACHES.
3. CALTRANS FACILITIES REQUIRE STATE STANDARD CURB AND GUTTER.
4. WHERE ADA ACCESSIBLE PATH CROSSES GUTTER PAN, SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 4% MININMUM AND 5% MAXIMUM.

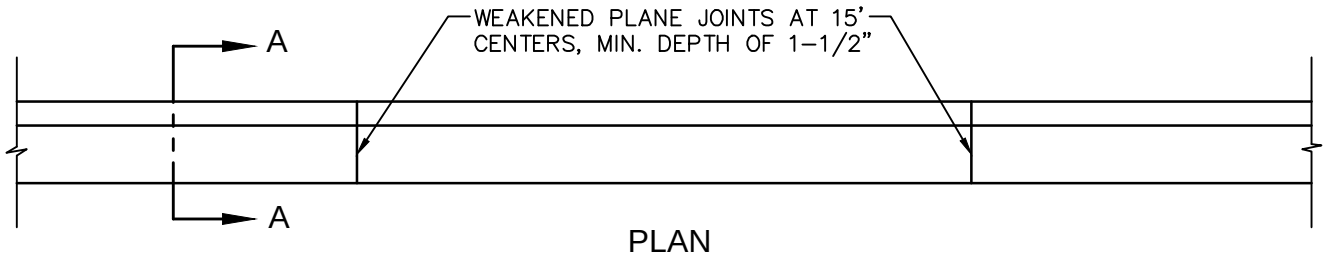
APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

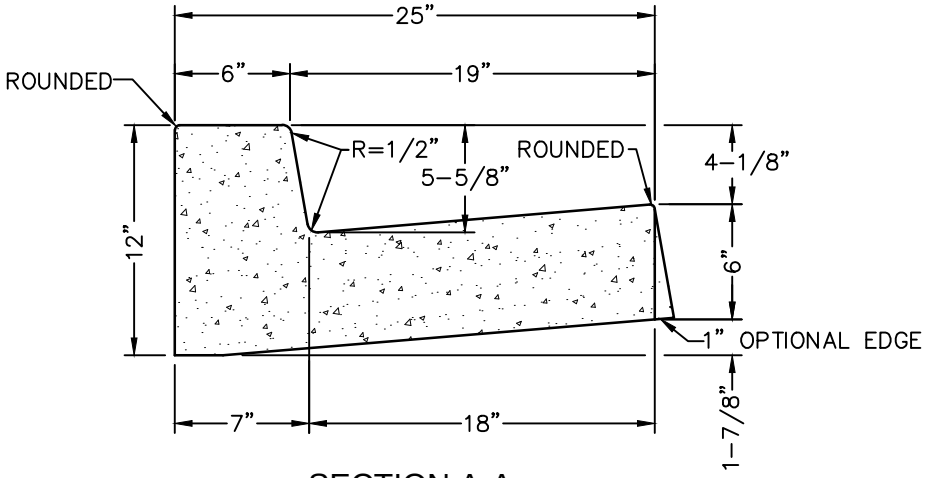
BARRIER CURB AND GUTTER TYPE A2–6

REVISIONS
06/30/16
BK 2016

C–4



PLAN

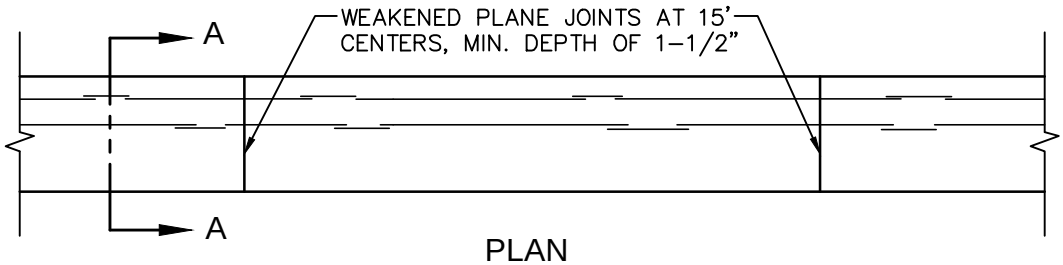


SECTION A-A

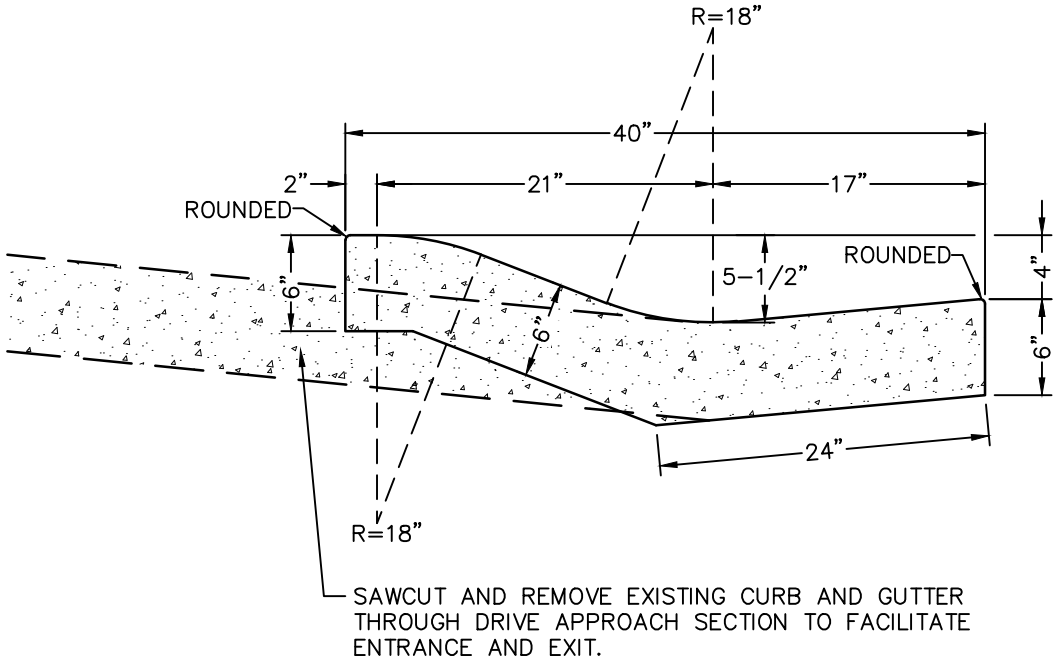
NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. A WEAKENED PLANE JOINT OR COLD JOINT SHALL BE INSTALLED AT THE END OF CURB RETURNS AND AT THE CENTERLINE OF PROPOSED DRIVE APPROACHES.
3. ABOVE TYPE CURB AND GUTTER SHALL NOT BE CONSTRUCTED EXCEPT TO COMPLETE A BLOCK WITH EXISTING ABOVE TYPE CURB AND GUTTER OR TO REPLACE EXISTING DAMAGED ABOVE TYPE CURB.
4. WHERE ADA ACCESSIBLE PATH CROSSES GUTTER PAN, SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 4% MINIMUM AND 5% MAXIMUM.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
BARRIER TYPE CURB AND GUTTER (INFILL & REPLACEMENT ONLY)	REVISIONS 06/30/16 BK 2016 — C–5



PLAN

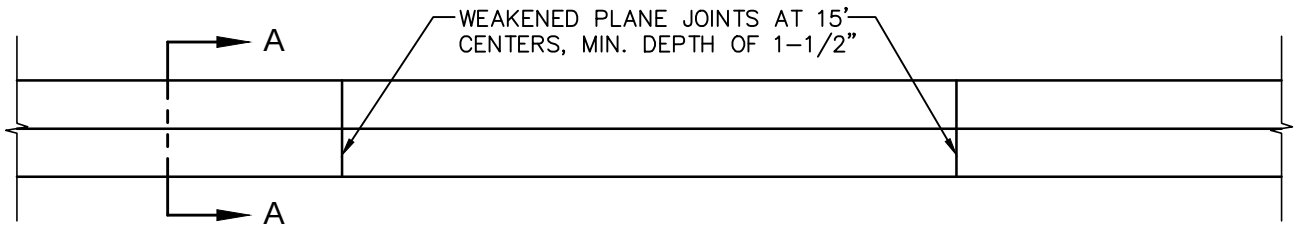


SECTION A-A

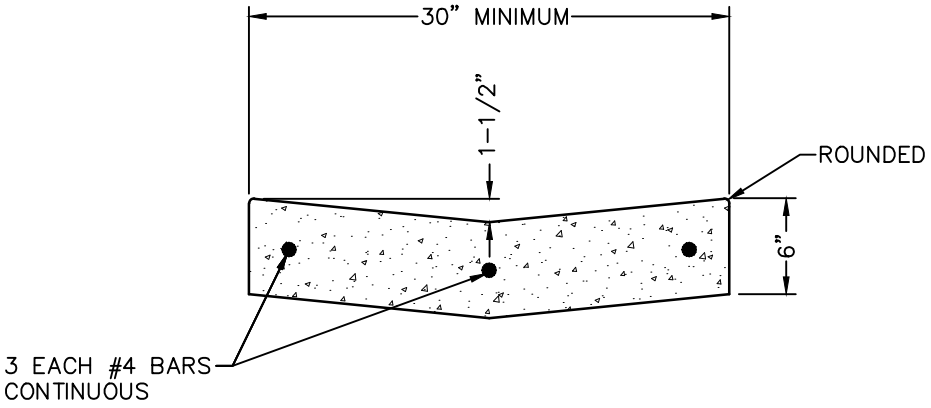
NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. A WEAKENED PLANE JOINT OR COLD JOINT SHALL BE INSTALLED AT THE END OF CURB RETURNS AND AT THE CENTERLINE OF PROPOSED DRIVE APPROACHES.
3. ROLL TYPE CURB AND GUTTER SHALL NOT BE CONSTRUCTED EXCEPT TO COMPLETE A BLOCK WITH EXISTING ROLL TYPE CURB AND GUTTER OR TO REPLACE EXISTING DAMAGED ROLL CURB.
4. WHERE ADA ACCESSIBLE PATH CROSSES GUTTER PAN, SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 4% MINIMUM AND 5% MAXIMUM.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 — 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
ROLL TYPE CURB AND GUTTER (INFILL & REPLACEMENT ONLY)	REVISIONS 06/14/13 BK 2016 — C-6



PLAN

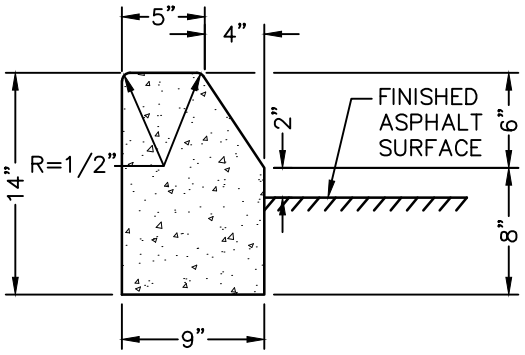


SECTION A-A

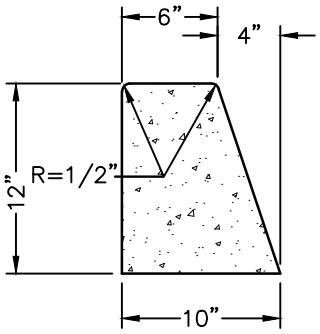
NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
3. REBAR SHALL HAVE A MINIMUM OF 2" OF CLEAR COVERAGE.
4. WHERE ADA ACCESSIBLE PATH CROSSES GUTTER PAN, SLOPE IN THE DIRECTION OF TRAVEL SHALL BE 4% MINIMUM AND 5% MAXIMUM.

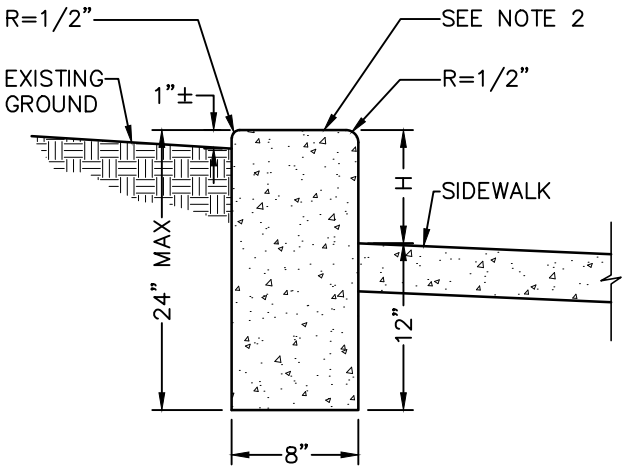
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
VEE GUTTER	REVISIONS 09/14/16 BK 2016 — C–7



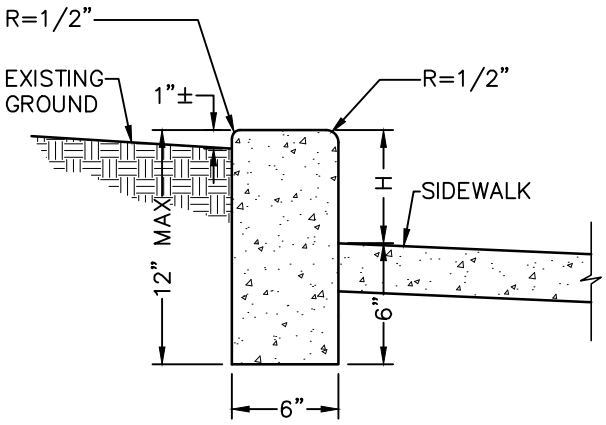
MEDIAN CURB TYPE B1-6
STREET APPLICATIONS



LANDSCAPE CURB
NON-STREET APPLICATIONS



RETAINING CURB
NON-STREET APPLICATIONS
USE WHEN H>6"



RETAINING CURB
NON-STREET APPLICATIONS
USE WHEN H ≤6"

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. REBAR SHALL BE USED AT THE DISCRETION OF THE CITY ENGINEER.

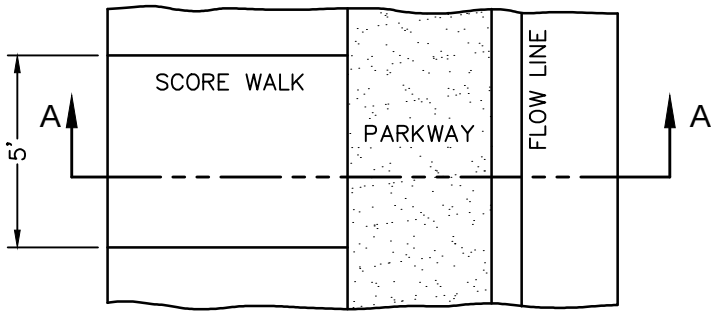
APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

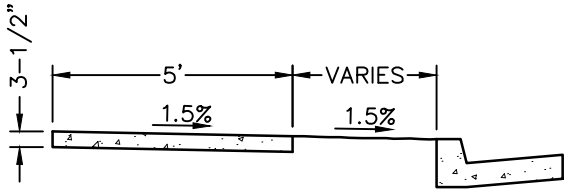
MEDIAN CURB TYPE B1–6, RETAINING CURB AND LANDSCAPE CURB

REVISIONS
06/14/13
BK 2016

C–8



PLAN

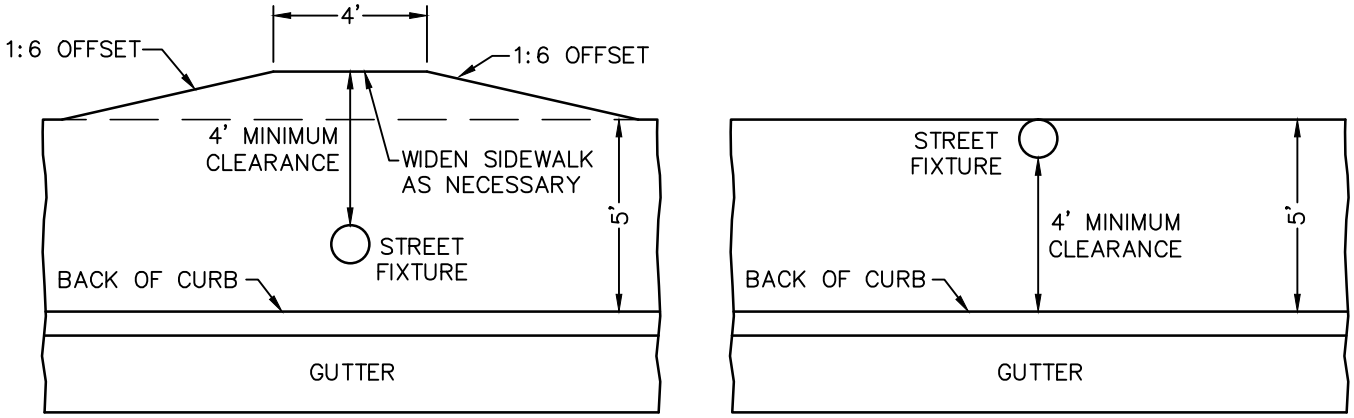


SECTION A-A

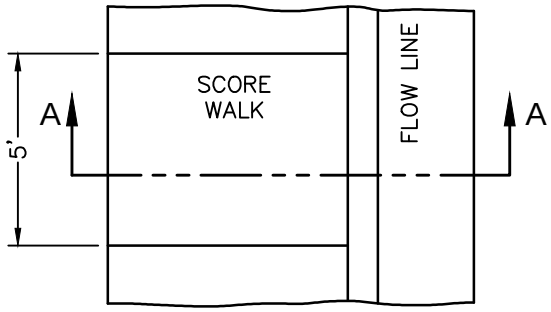
NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.

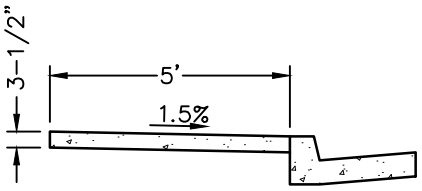
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
SIDEWALK – RESIDENTIAL WITH PARKWAY	REVISIONS 06/30/16 BK 2016
	C–9



PLAN WITH STREET FIXTURE



PLAN

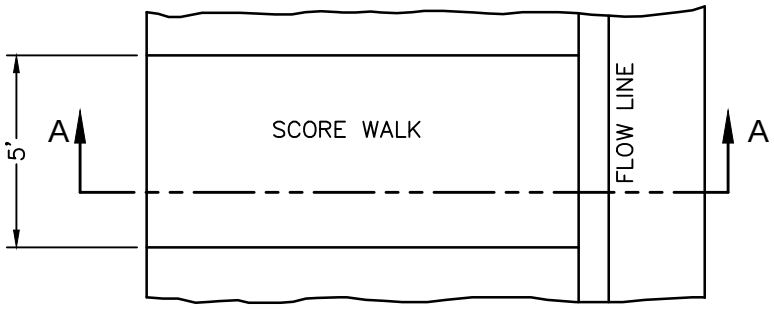


SECTION A-A

NOTES:

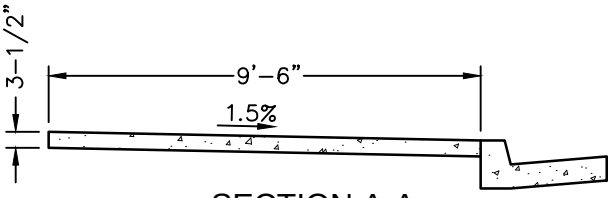
1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. SIDEWALK SHALL BE WIDENED AT STREET FIXTURE LOCATIONS PROVIDING A MINIMUM CLEARANCE OF 4' TO BACK OF SIDEWALK, OR AS APPROVED BY CITY ENGINEER.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 — 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
SIDEWALK – RESIDENTIAL ADJACENT TO CURB	REVISIONS 06/30/16 BK 2016 — C–10

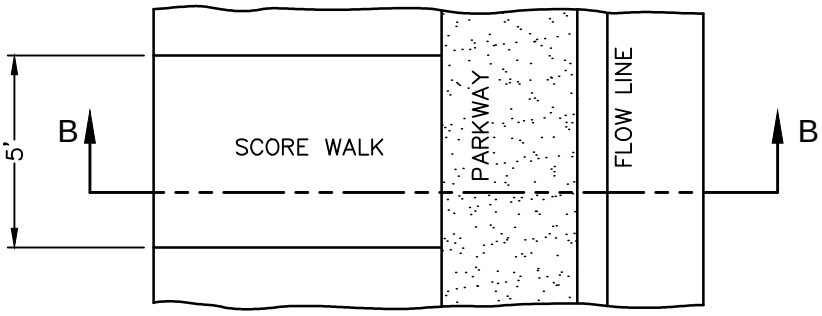


PLAN

DOWNTOWN COMMERCIAL

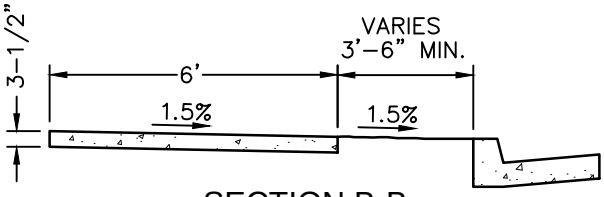


SECTION A-A



PLAN

WITH PARKWAY

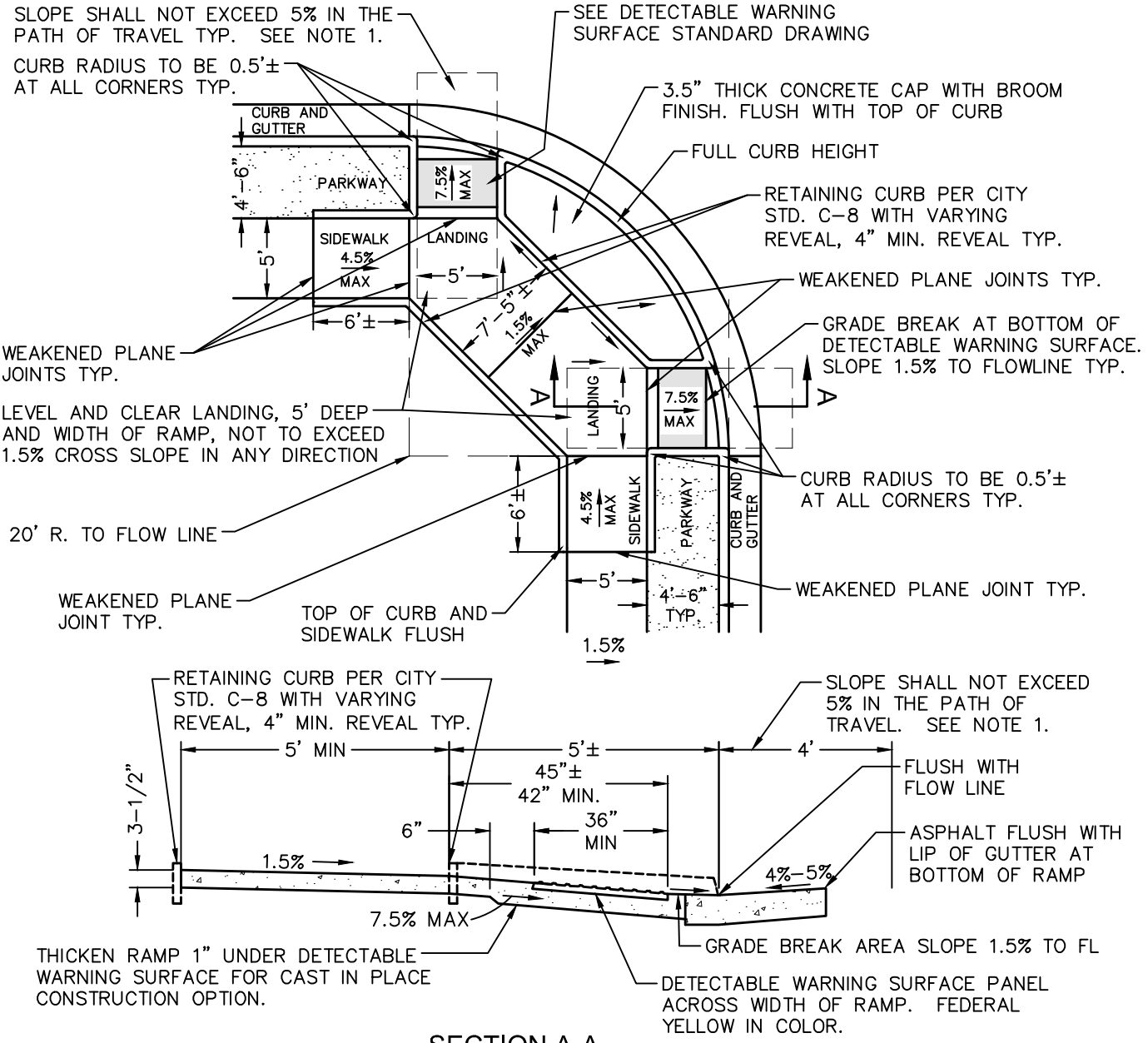


SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
SIDEWALKS – OFFICE/COMMERCIAL	REVISIONS 06/30/16 BK 2016 / C–11



SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE CURB AND GUTTER FLOWLINE
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION BACK TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. APPLICABLE TO LOCAL STREET INTERSECTIONS IN RESIDENTIAL AND OFFICE ZONES
5. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
6. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C-1 AND C-3 FOR ADDITIONAL SPECIFICATIONS

APPROVED BY: _____ 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

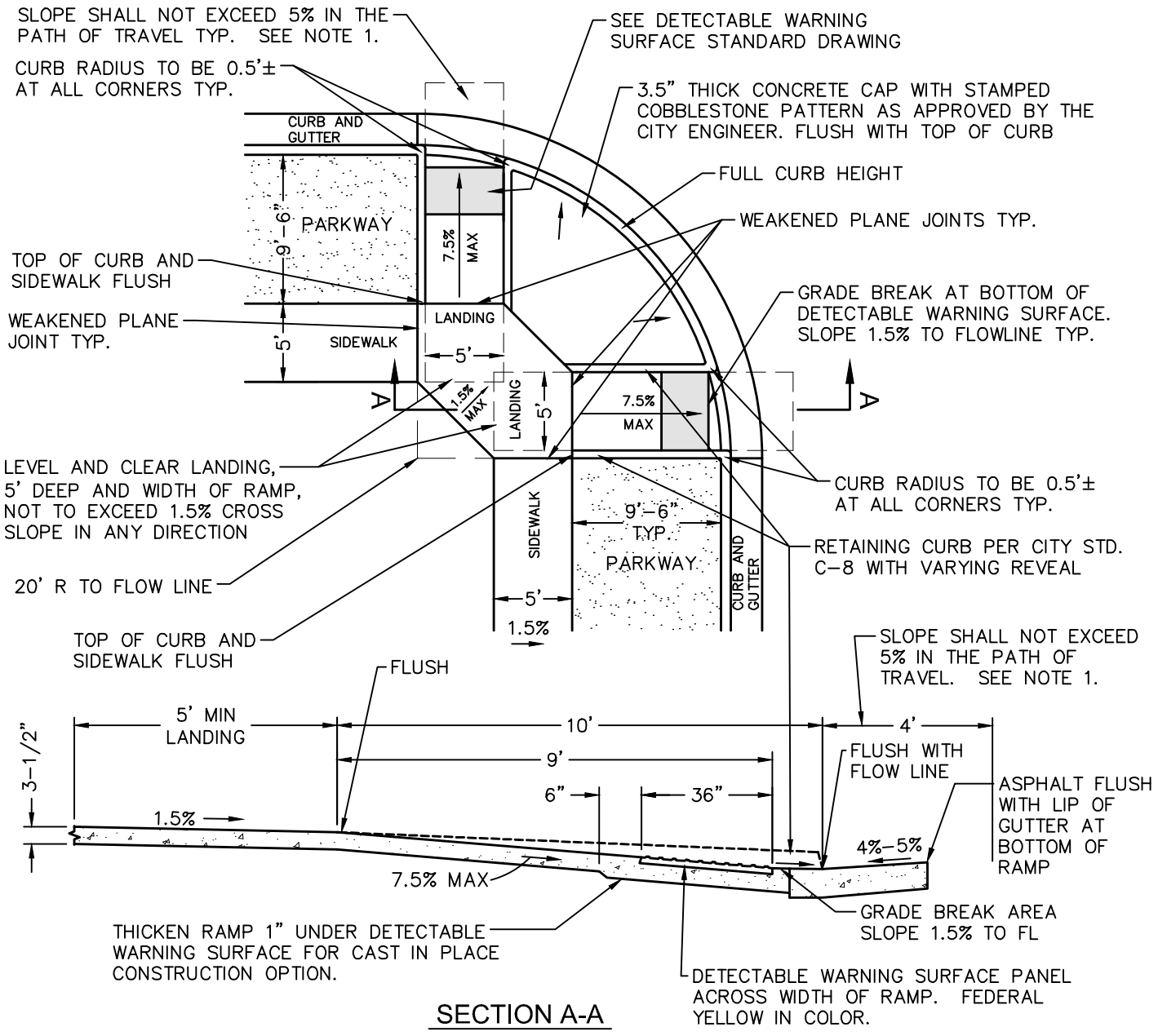
20' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS – DETAIL 1

REVISIONS
01/29/25
BK 2016

C-12

RESERVED FOR FUTURE DETAIL

APPROVED BY: _____ CITY ENGINEER R.C.E. 71192 _____ DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C–13



SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE CURB AND GUTTER FLOWLINE
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. APPLICABLE TO LOCAL STREET INTERSECTIONS IN RESIDENTIAL AND OFFICE ZONES
5. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
6. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C-1 AND C-3 FOR ADDITIONAL SPECIFICATIONS

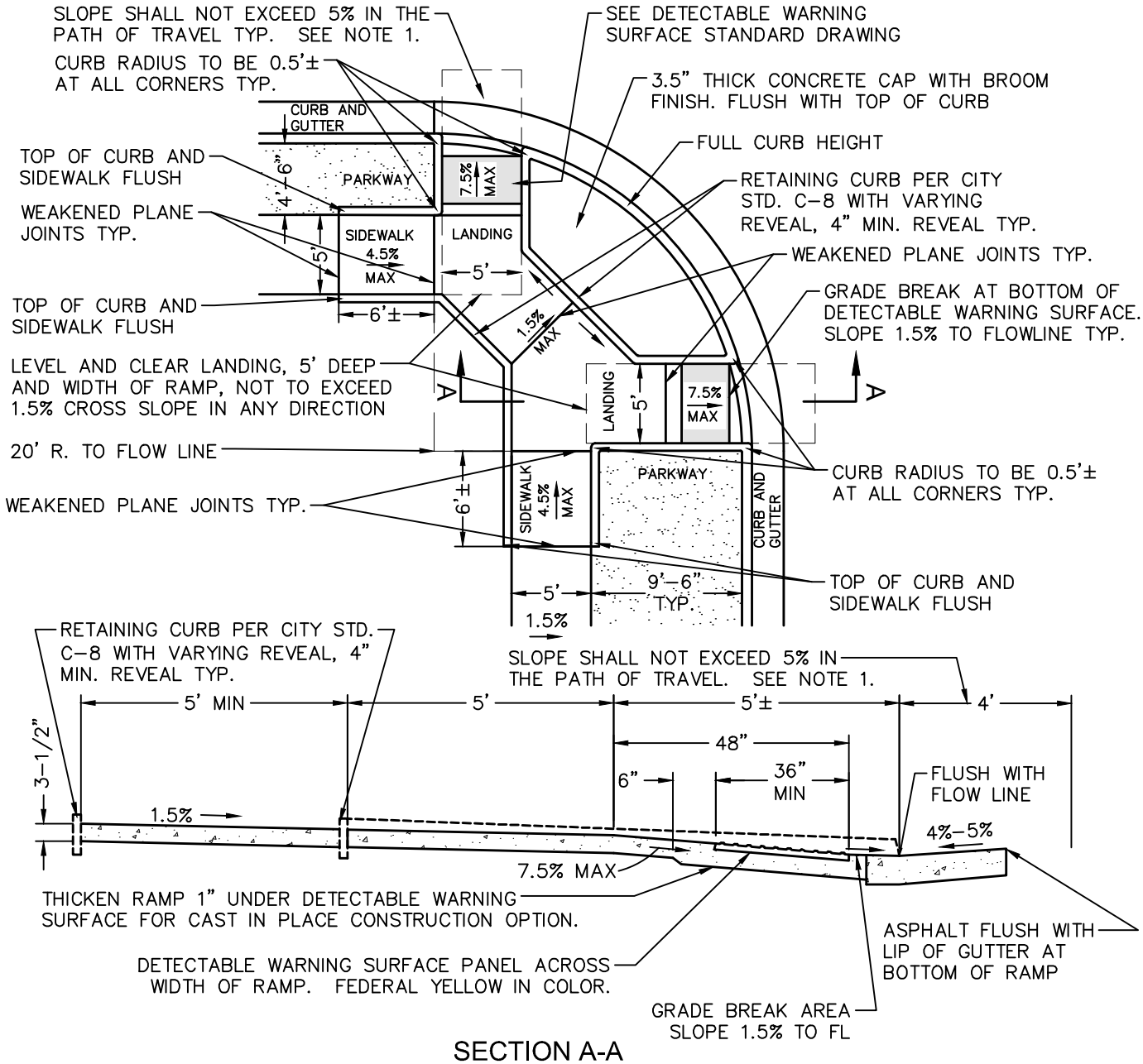
APPROVED BY: _____ 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

20' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS – DETAIL 2

REVISIONS
01/29/25
BK 2016

C-14



SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE CURB AND GUTTER FLOWLINE
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION BACK TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. APPLICABLE TO LOCAL STREET INTERSECTIONS IN RESIDENTIAL AND OFFICE ZONES
5. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
6. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C-1 AND C-3 FOR ADDITIONAL SPECIFICATIONS

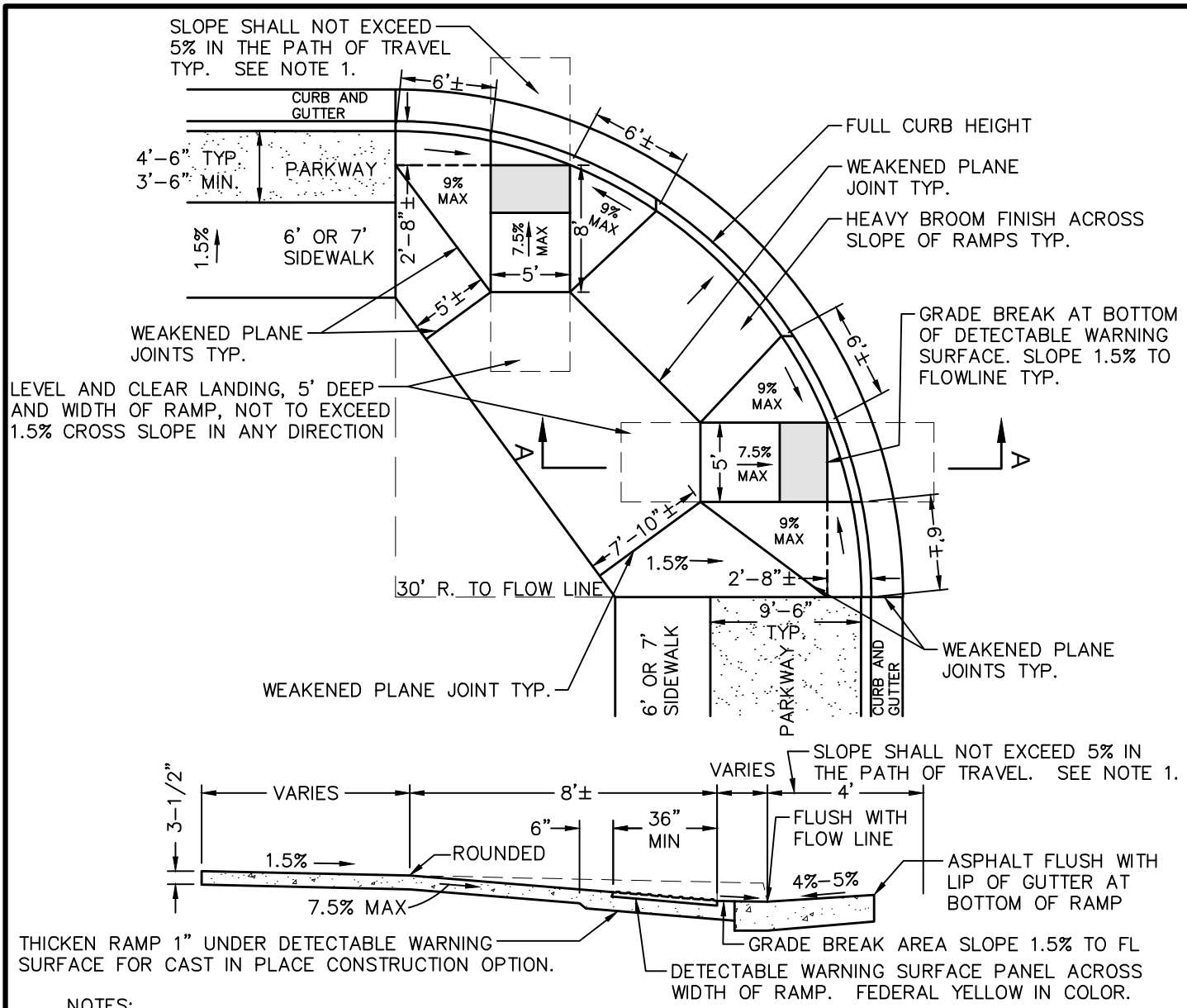
APPROVED BY: _____ 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

20' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS – DETAIL 3

REVISIONS
01/29/25
BK 2016

C-15



SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE CURB AND GUTTER FLOWLINE
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION BACK TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. APPLICABLE TO LOCAL STREET INTERSECTIONS WITH COLLECTORS OR ARTERIALS.
5. APPLICABLE TO LOCAL STREET INTERSECTIONS IN INDUSTRIAL AND COMMERCIAL ZONES.
6. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
7. CURB AND GUTTER AND CURB RETURN FLATWORK SHALL BE POURED MONOLITHICALLY UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER
8. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C-1 AND C-3 FOR ADDITIONAL SPECIFICATIONS

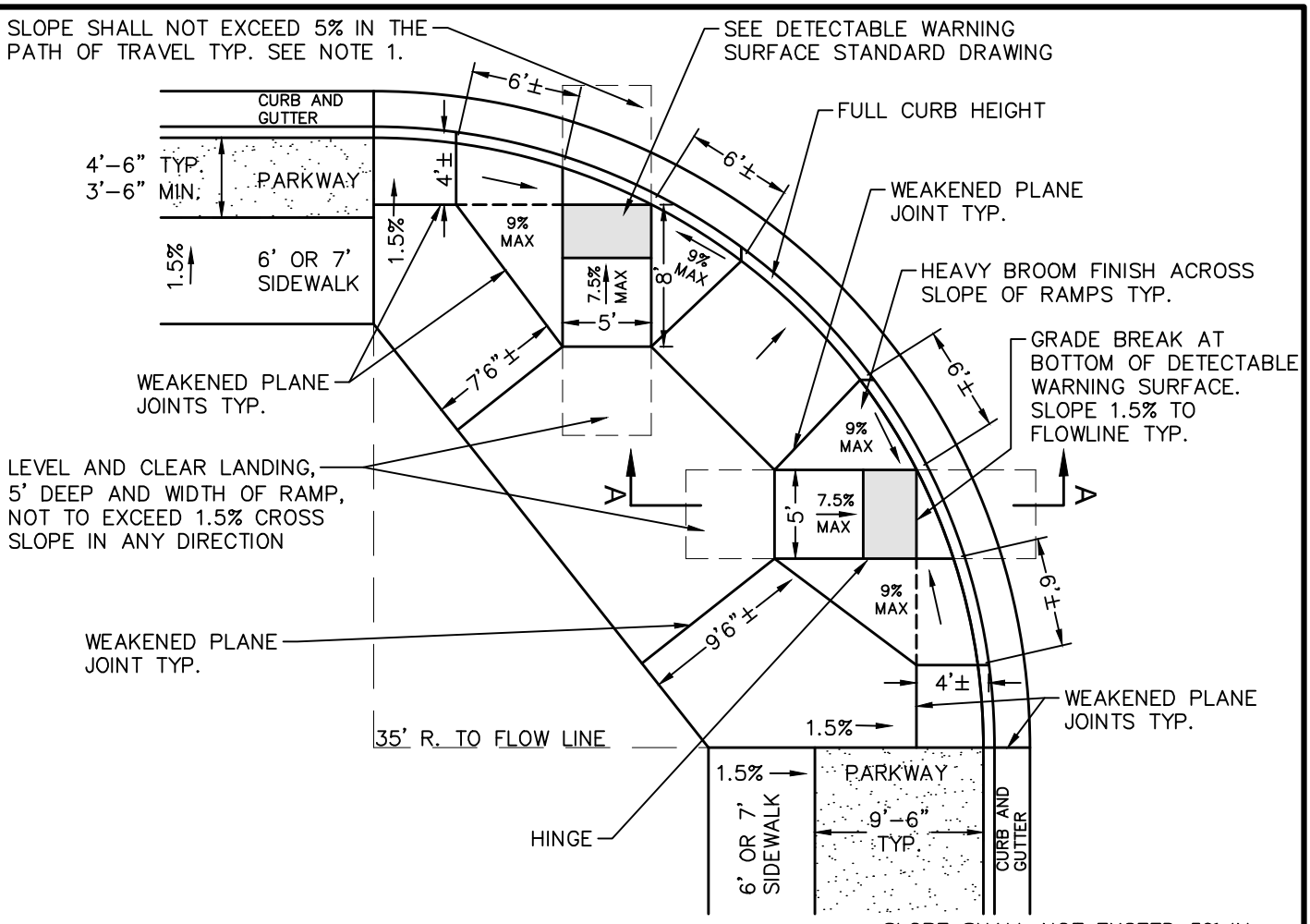
APPROVED BY: _____ 02/05/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

30' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS

REVISIONS
02/05/25
BK 2016

C-16



SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE CURB AND GUTTER FLOWLINE
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION BACK TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
5. CURB AND GUTTER AND CURB RETURN FLATWORK SHALL BE POURED MONOLITHICALLY UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER
6. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C–1 AND C–3 FOR ADDITIONAL SPECIFICATIONS

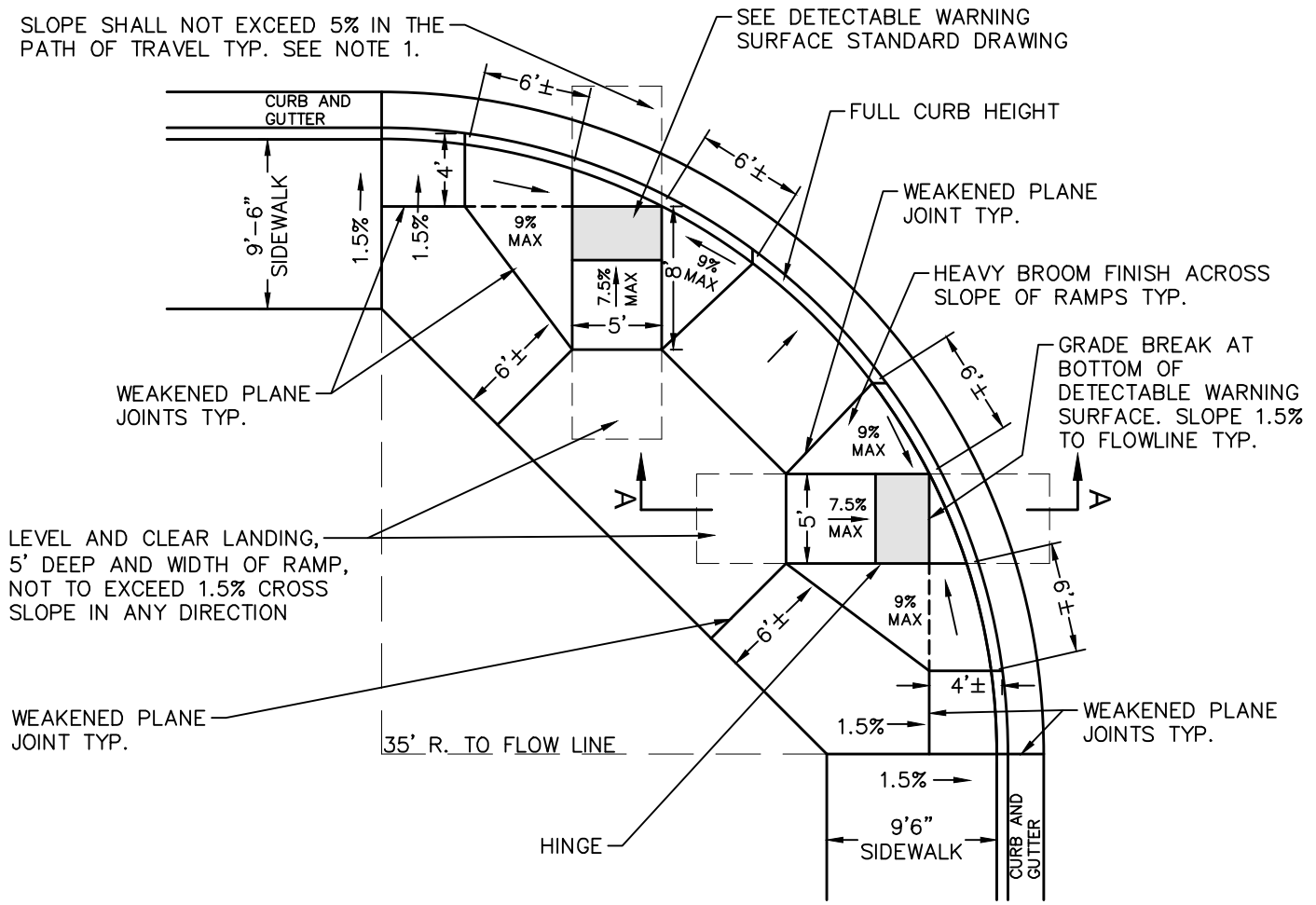
APPROVED BY: _____ CITY ENGINEER R.C.E. 71192 01/29/25 DATE

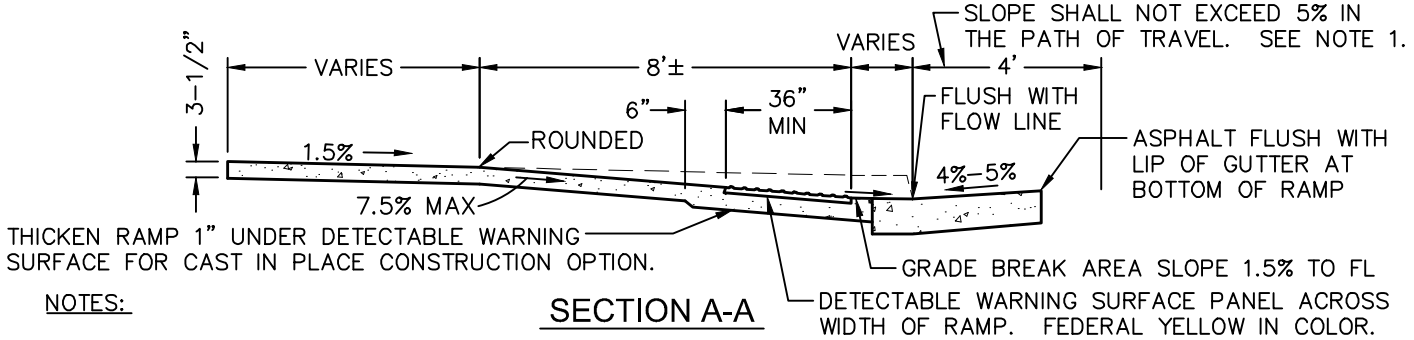
CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

35' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS – DETAIL 1

REVISIONS
01/29/25
BK 2016

C–17





SECTION A-A

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS, THE ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE BOTTOM OF THE CURB RAMP.
2. NO CROSS SLOPE IN THE PATH OF TRAVEL TO EXCEED 1.5% OR BE LESS THAN 1.0%
3. DEPRESSED CURB AND GUTTER LIPS AT RAMPS SHALL TRANSITION BACK TO NORMAL CURB AND GUTTER LIP SLOPES OVER A DISTANCE OF AROUND 5'
4. THE DESIGN ENGINEER IS RESPONSIBLE FOR DESIGNING EACH RAMP AND ALL GRADES TO BE COMPLIANT WITH ADA AND PROWAG REQUIREMENTS
5. CURB AND GUTTER AND CURB RETURN FLATWORK SHALL BE POURED MONOLITHICALLY UNLESS APPROVED OTHERWISE BY THE CITY ENGINEER
6. CONTRACTOR SHALL REFER TO CITY STANDARD DETAILS C-1 AND C-3 FOR ADDITIONAL SPECIFICATIONS

APPROVED BY: _____ 01/29/25
CITY ENGINEER R.C.E. 71192 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

35' RADIUS CURB RETURN WITH DIRECTIONAL RAMPS – DETAIL 2

REVISIONS
01/29/25
BK 2016

C-18

RESERVED FOR FUTURE DETAIL

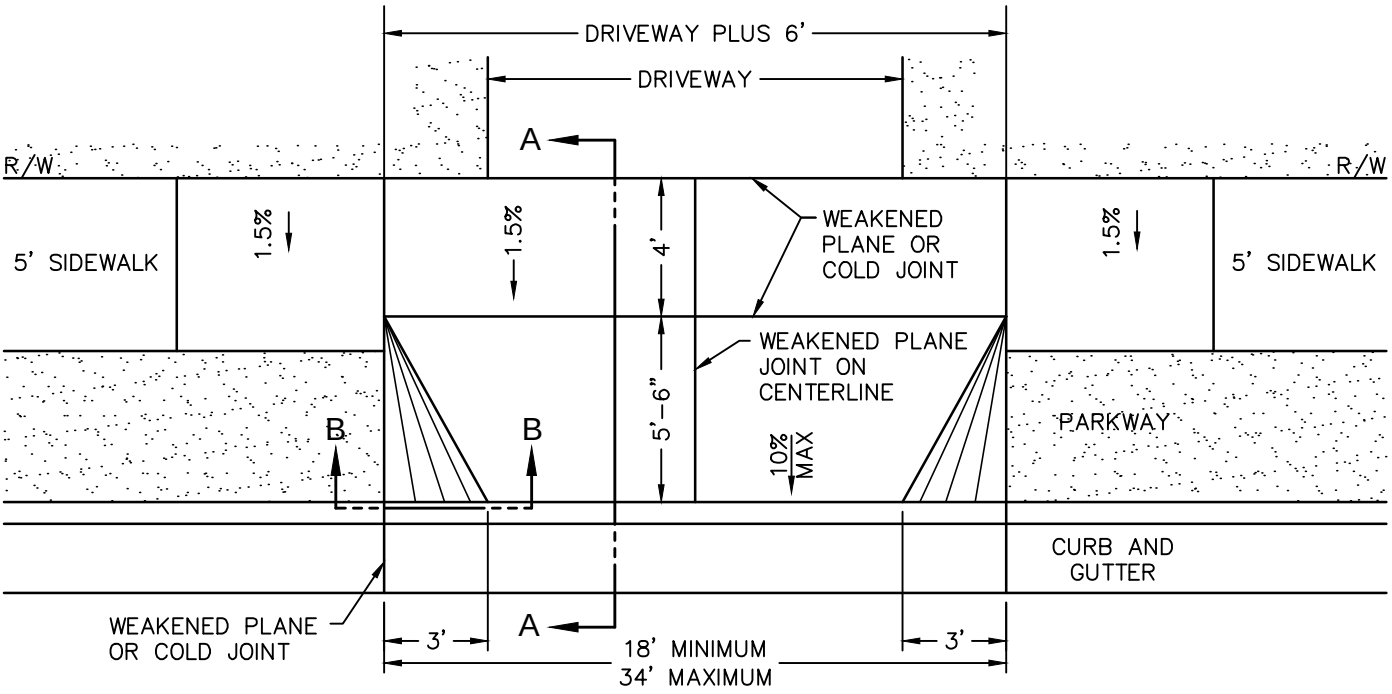
APPROVED BY:_____ _____	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C–19

RESERVED FOR FUTURE DETAIL

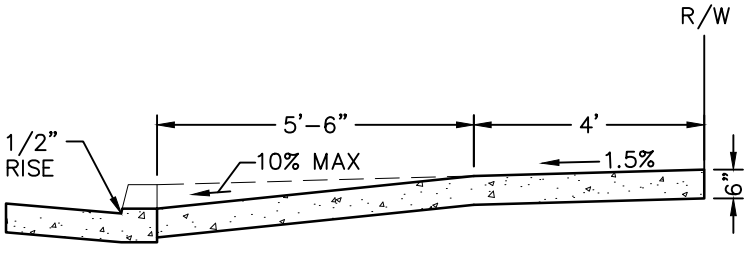
APPROVED BY: _____ _____	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C-20

RESERVED FOR FUTURE DETAIL

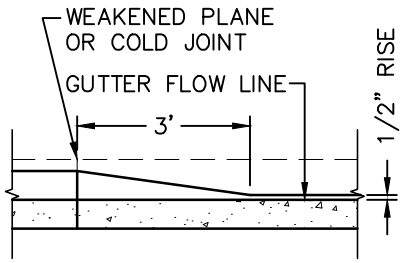
APPROVED BY: _____ _____	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C-21



PLAN



SECTION A-A

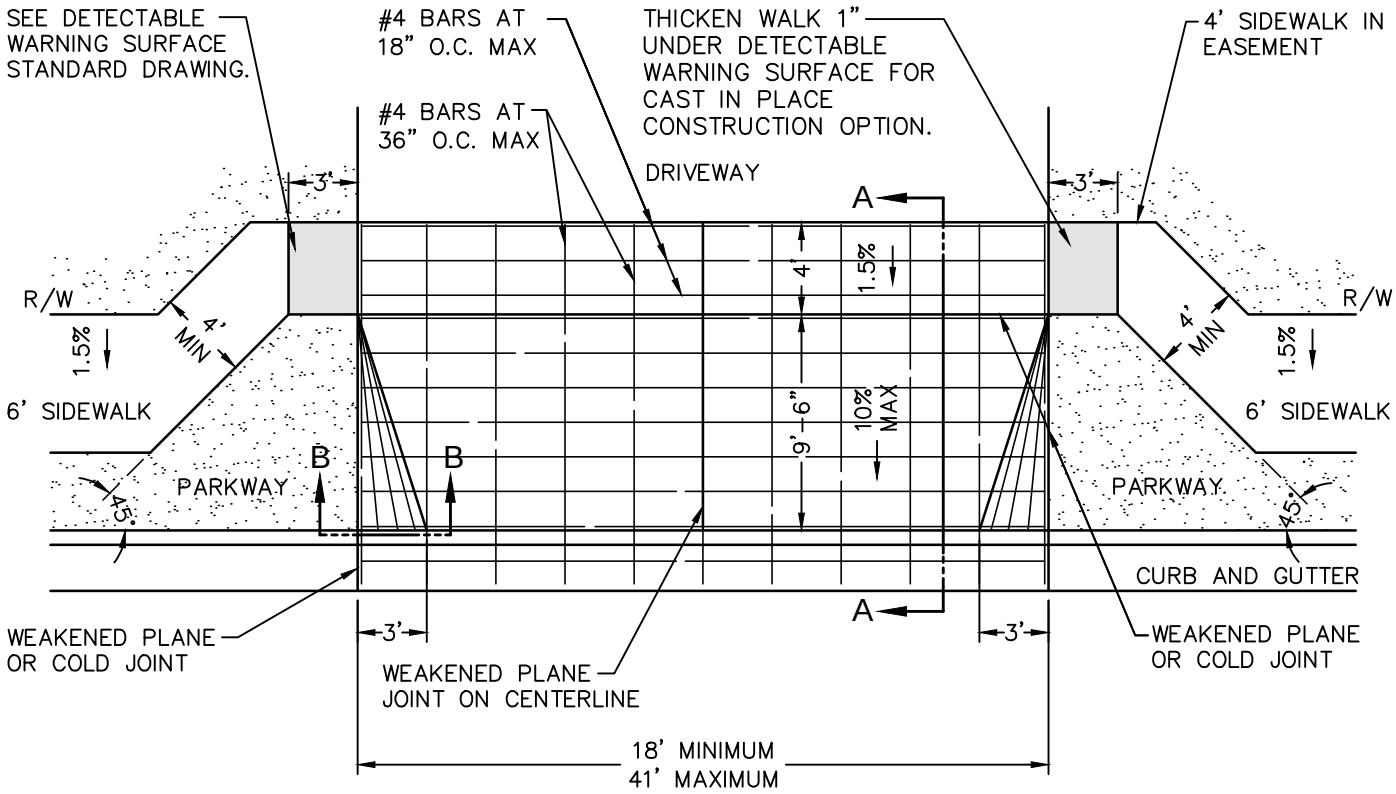


SECTION B-B

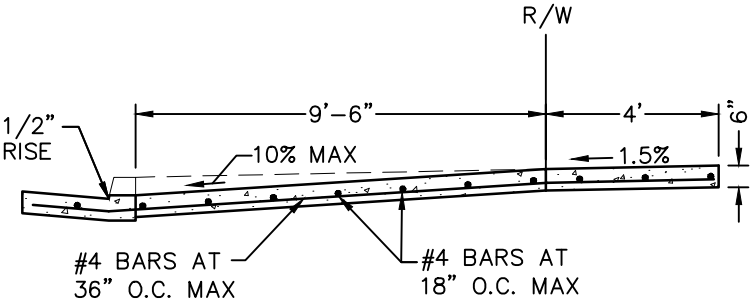
NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. DRIVE APPROACHES SHALL BE NO GREATER THAN 6' WIDER THAN THE DRIVEWAY.

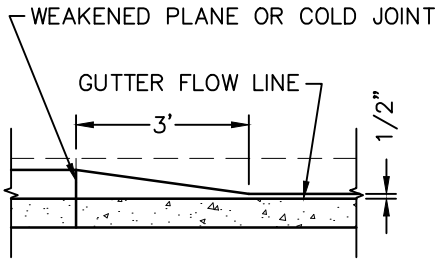
APPROVED BY: CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESIDENTIAL DRIVE APPROACH	REVISIONS 07/11/16 BK 2016 / C-22



PLAN



SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. ON COLLECTOR AND ARTERIAL STREETS, THE MINIMUM DRIVE APPROACH WIDTH SHALL BE 21' FOR ONE-WAY DRIVE APPROACHES AND 36' FOR TWO-WAY DRIVE APPROACHES, OR AS APPROVED BY CITY ENGINEER.
3. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
4. REBAR SHALL HAVE A MINIMUM OF 2" OF CLEAR COVERAGE.
5. NOT MORE THAN 50% OF PROPERTY FRONTAGE SHALL BE USED AS DRIVE APPROACH.
6. WIDTH AND LOCATION OF DRIVE APPROACHES ON STATE ROUTES IS SUBJECT TO APPROVAL BY CALTRANS.

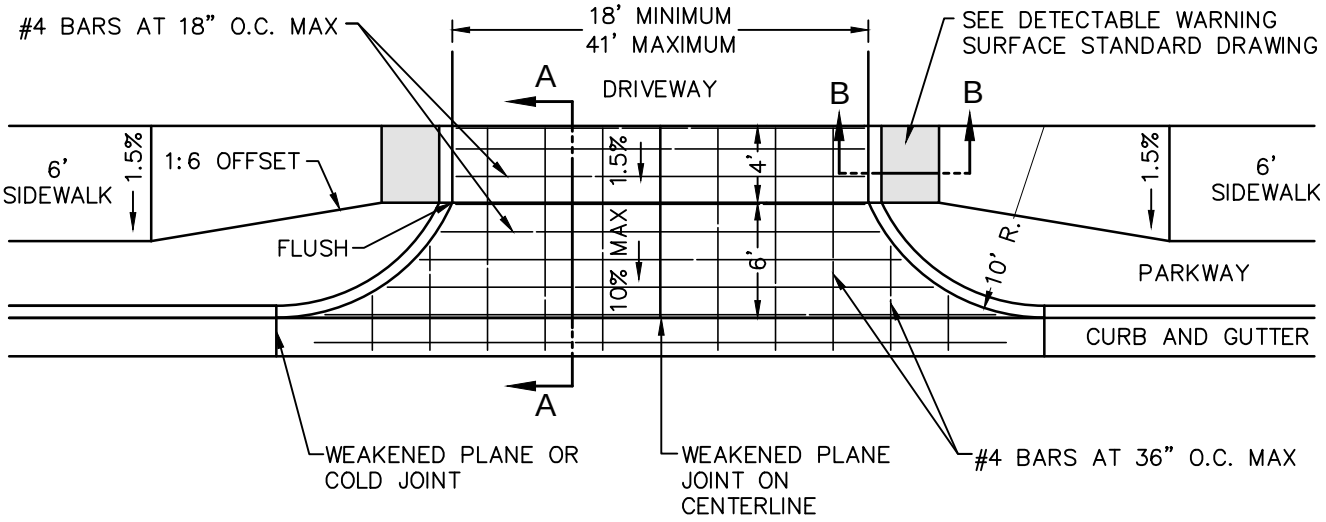
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 — 09/16/16 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

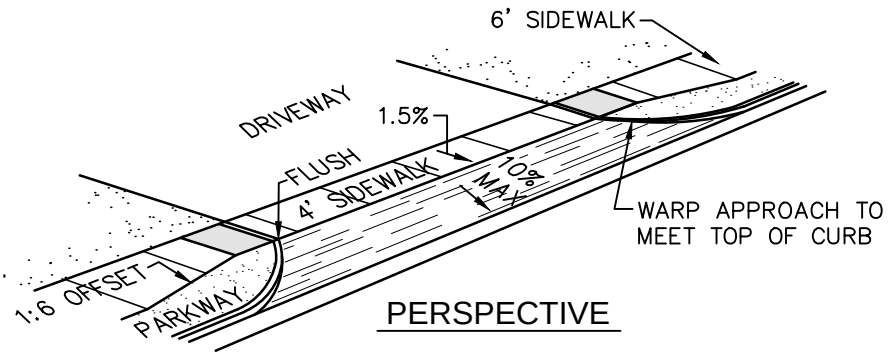
MULTI-FAMILY RESIDENTIAL/OFFICE /COMMERCIAL DRIVE APPROACH

REVISIONS
09/15/16
BK 2016

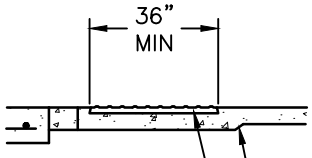
C-23



PLAN

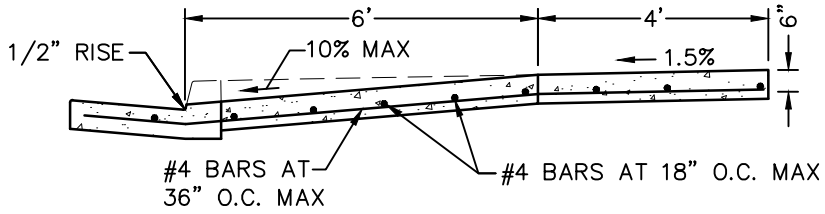


PERSPECTIVE



DETECTABLE WARNING SURFACE PANEL ACROSS WIDTH OF WALK. FEDERAL YELLOW IN COLOR.

THICKEN WALK 1" UNDER DETECTABLE WARNING SURFACE FOR CAST IN PLACE CONSTRUCTION OPTION.



SECTION A-A

SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. ON COLLECTOR AND ARTERIAL STREETS, THE MINIMUM DRIVE APPROACH WIDTH SHALL BE 21' FOR ONE-WAY DRIVE APPROACHES AND 36' FOR TWO-WAY DRIVE APPROACHES, OR AS APPROVED BY CITY ENGINEER.
3. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
4. REBAR SHALL HAVE A MINIMUM OF 2" OF CLEAR COVERAGE.
5. NOT MORE THAN 50% OF PROPERTY FRONTAGE SHALL BE USED AS DRIVE APPROACH.
6. WIDTH AND LOCATION OF DRIVE APPROACHES ON STATE ROUTES IS SUBJECT TO APPROVAL BY CALTRANS.

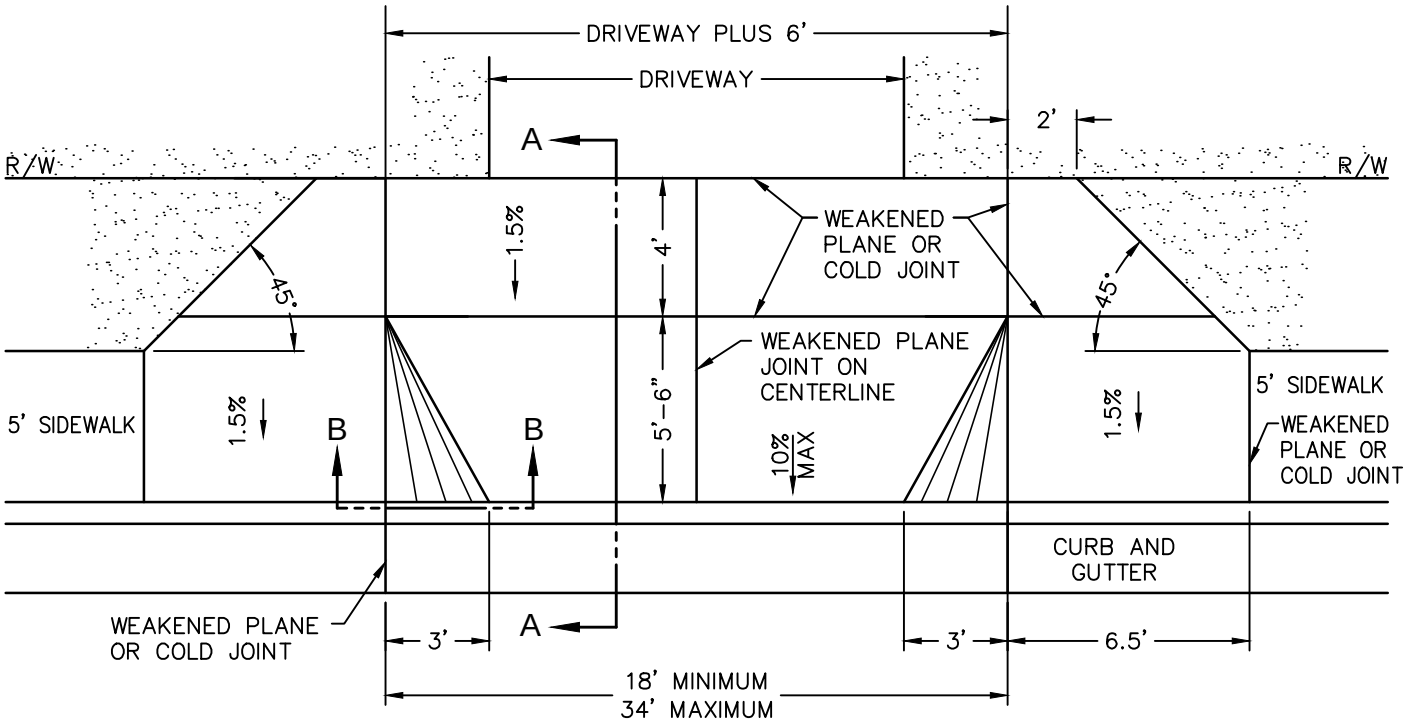
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

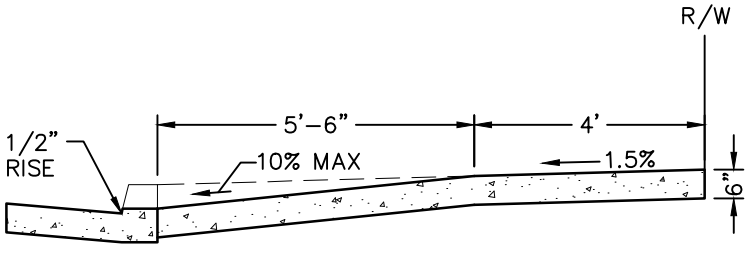
OFFICE/COMMERCIAL DRIVE APPROACH (ALTERNATIVE – WITH CURB RETURNS)

REVISIONS
09/15/16
BK 2016

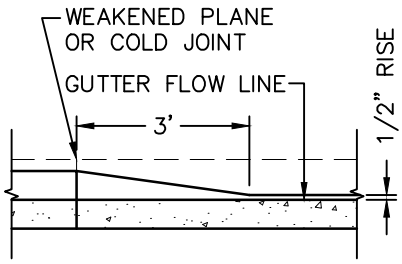
C-24



PLAN



SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. DRIVE APPROACHES SHALL BE NO GREATER THAN 6' WIDER THAN THE DRIVEWAY.

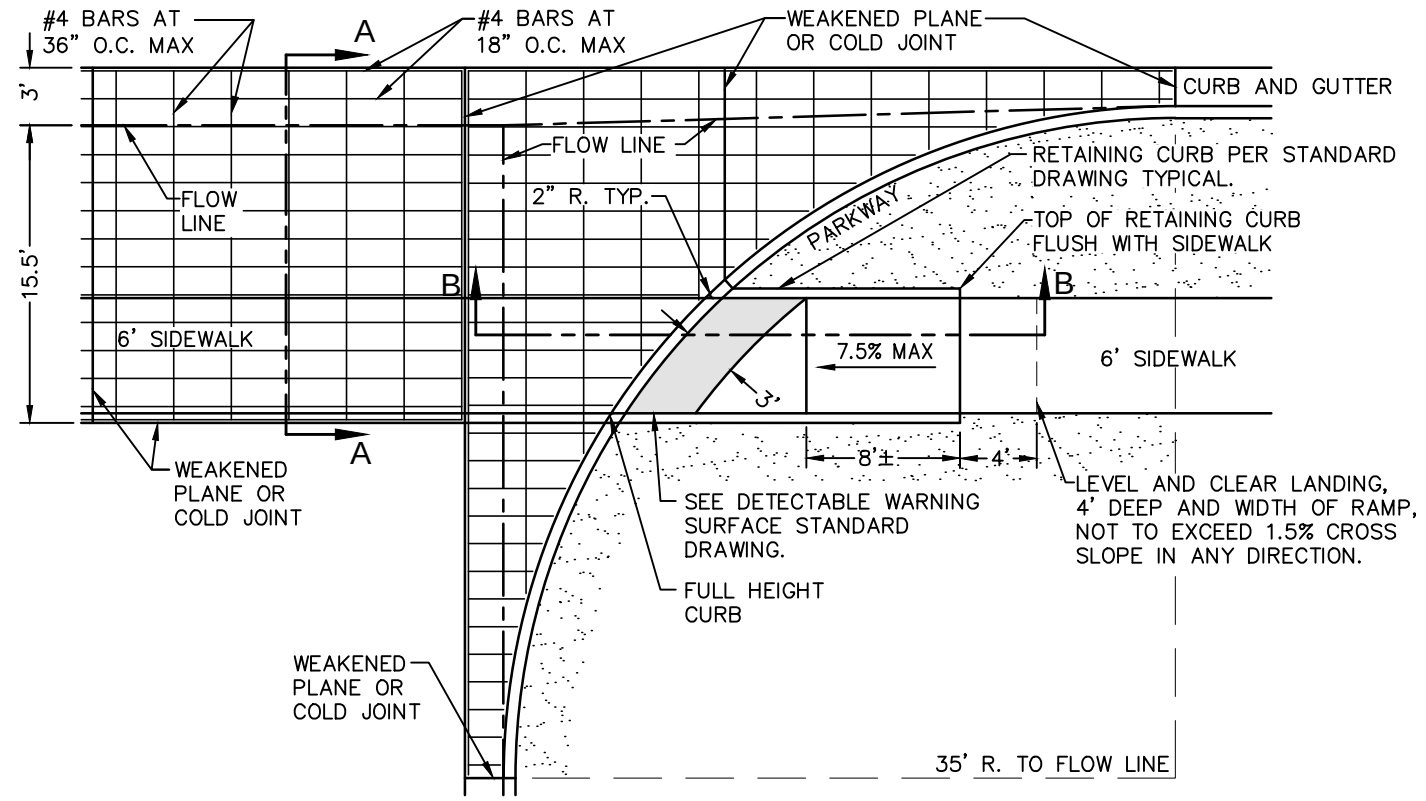
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE

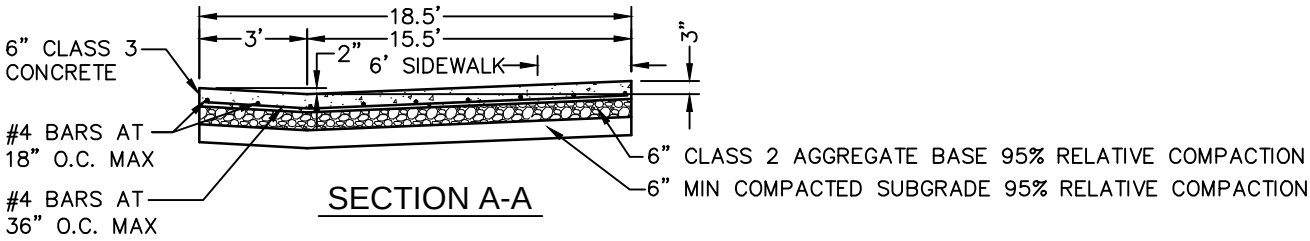
CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

RESIDENTIAL DRIVE APPROACH WITH ADJACENT SIDEWALK (INFILL ONLY)

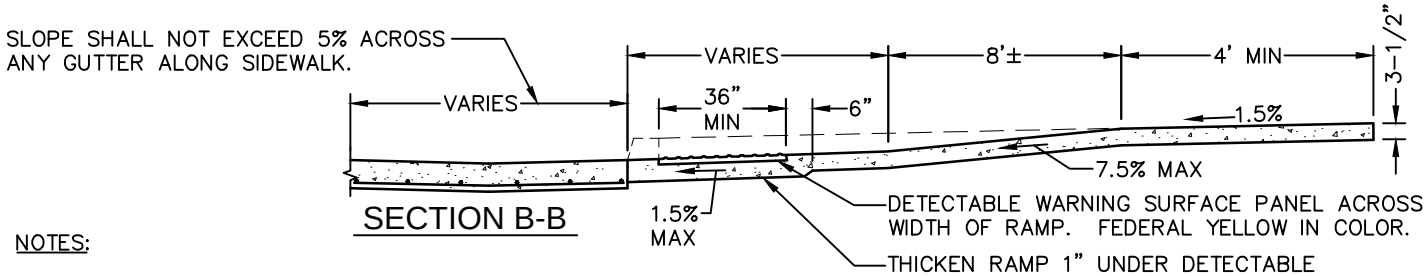
REVISIONS
07/11/16
BK 2016

C-25





SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. COMMERCIAL DRIVE APPROACH SHALL HAVE A MINIMUM GRADIENT OF 0.40%. MINIMUM GRADIENT ON INFILL PROJECTS MAY BE LESS AS APPROVED BY THE CITY ENGINEER.
3. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
4. REBAR SHALL HAVE A MINIMUM 2" OF CLEAR COVERAGE.
5. GUTTER FLOW LINE SHALL BE WATER TESTED FOR FLOW.
6. PROVIDE A MINIMUM 6' SIDEWALK ACROSS DRIVE. MAXIMUM 1.5% CROSS SLOPE AND MAXIMUM 1.5% SLOPE IN THE DIRECTION OF SIDEWALK.
7. NO CROSS SLOPE IN THE PEDESTRIAN ACCESS ROUTE TO EXCEED 1.5%.

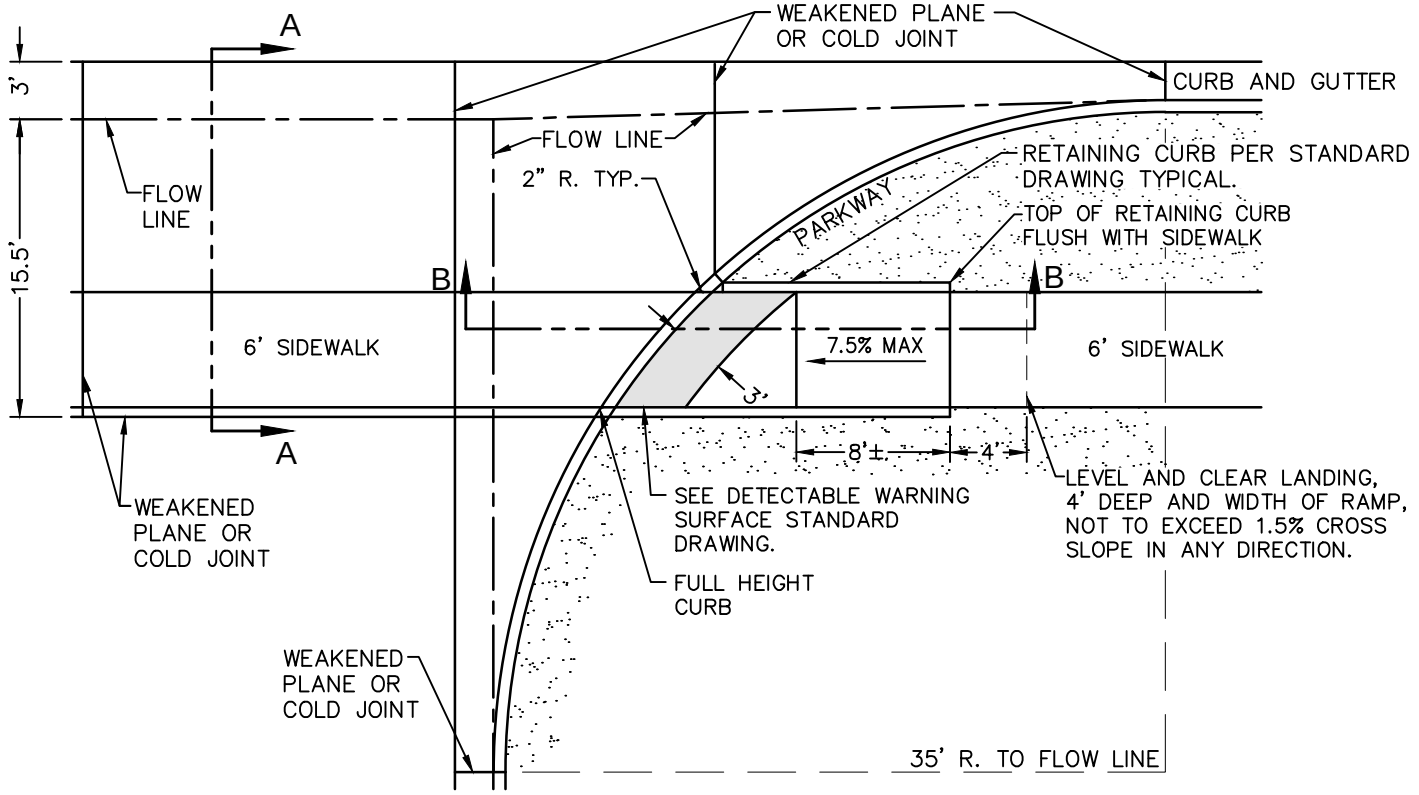
APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

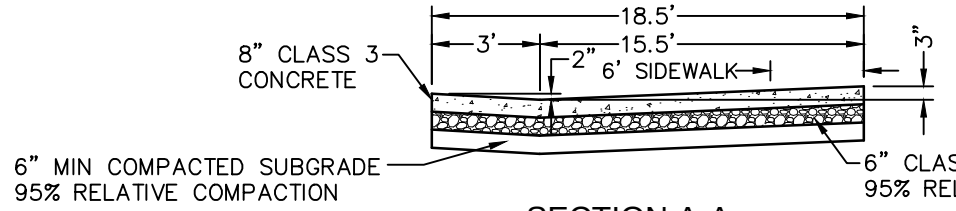
CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

MAJOR COMMERCIAL DRIVE APPROACH 35' RADIUS CURB RETURN

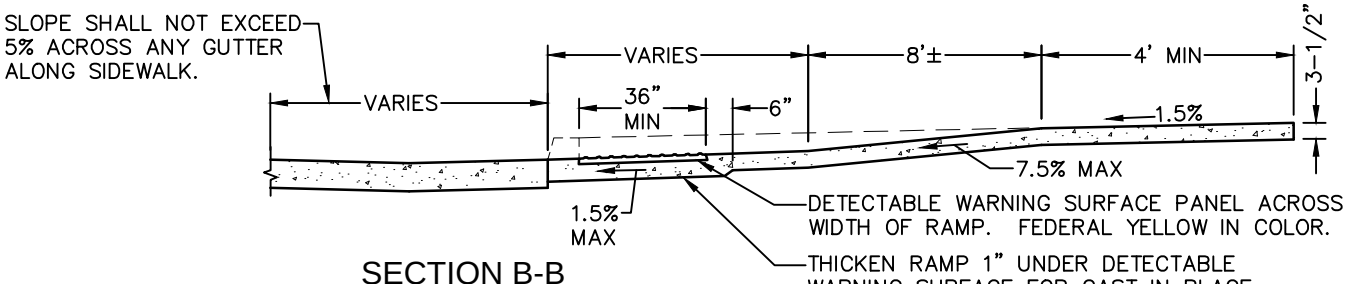
REVISIONS
09/15/16
BK 2016

C–26





SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. COMMERCIAL DRIVE APPROACH GUTTER SHALL HAVE A MINIMUM GRADIENT OF 0.40%. MINIMUM GRADIENT ON INFILL PROJECTS MAY BE LESS AS APPROVED BY THE CITY ENGINEER.
3. GUTTER FLOW LINE SHALL BE WATER TESTED FOR FLOW.
4. NO CROSS SLOPE IN THE PEDESTRIAN ACCESS ROUTE TO EXCEED 1.5%.
5. PROVIDE A MINIMUM 6' SIDEWALK ACROSS DRIVE. MAXIMUM 1.5% CROSS SLOPE AND MAXIMUM 1.5% SLOPE IN THE DIRECTION OF SIDEWALK.

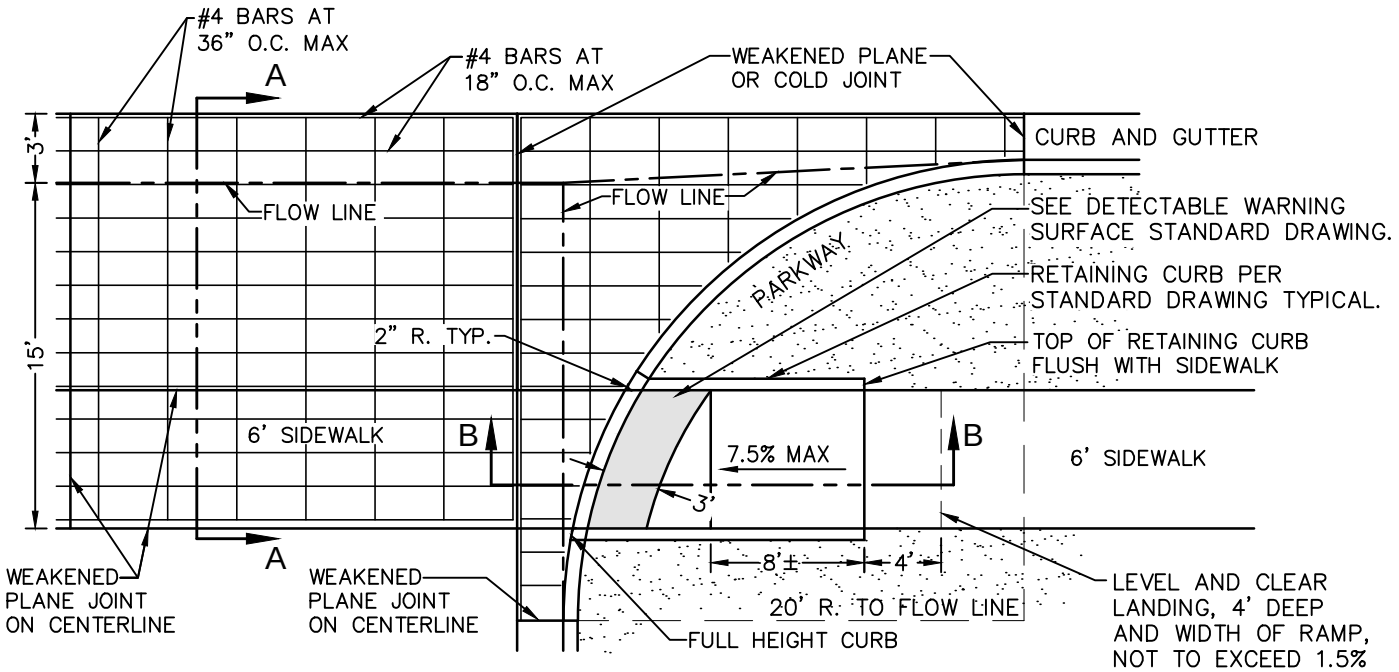
APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE

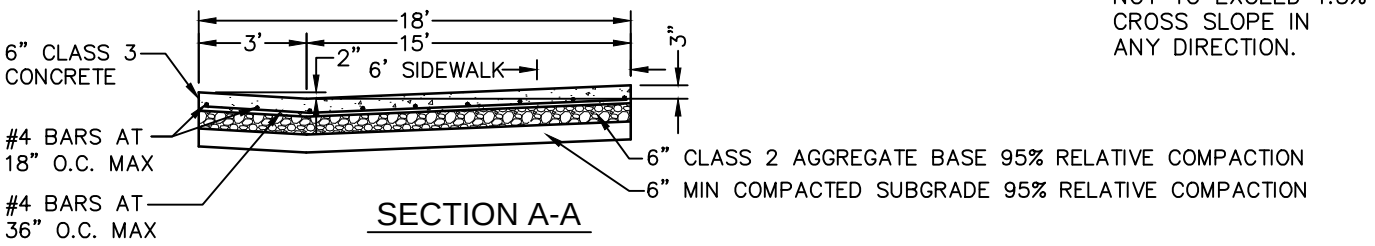
CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

MAJOR COMMERCIAL DRIVE APPROACH 35' RADIUS CURB RETURN–ALTERNATE

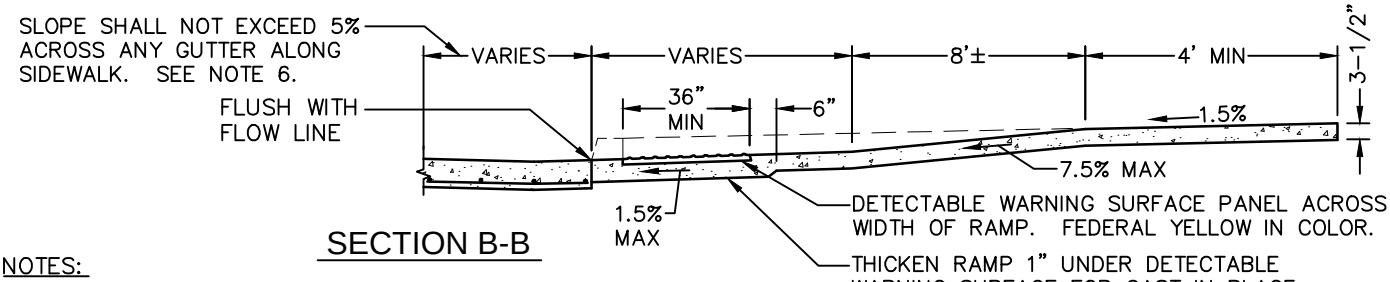
REVISIONS
09/15/16
BK 2016

C–27





SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. COMMERCIAL DRIVE APPROACH SHALL HAVE A MINIMUM GRADIENT OF 0.40%. MINIMUM GRADIENT ON INFILL PROJECTS MAY BE LESS AS APPROVED BY THE CITY ENGINEER.
3. REBAR SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REBAR SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
4. REBAR SHALL HAVE A MINIMUM OF 2" OF CLEAR COVERAGE.
5. GUTTER FLOW LINE SHALL BE WATER TESTED FOR FLOW.
6. MAXIMUM SLOPES OF ADJOINING GUTTERS IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE BOTTOM OF THE CURB RAMP.
7. NO CROSS SLOPE IN THE PEDESTRIAN ACCESS ROUTE TO EXCEED 1.5%.
8. PROVIDE A MINIMUM 6' SIDEWALK ACROSS DRIVE. MAXIMUM 1.5% CROSS SLOPE AND MAXIMUM 1.5% SLOPE IN THE DIRECTION OF SIDEWALK.

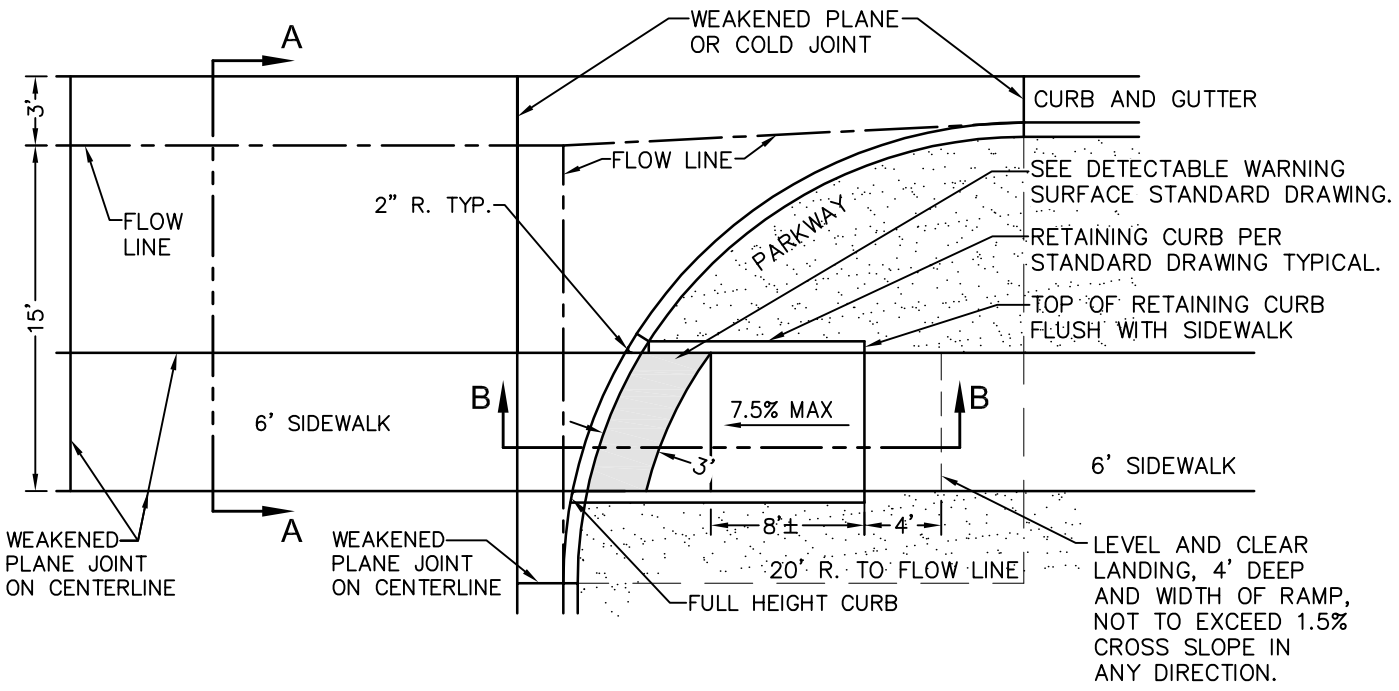
APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

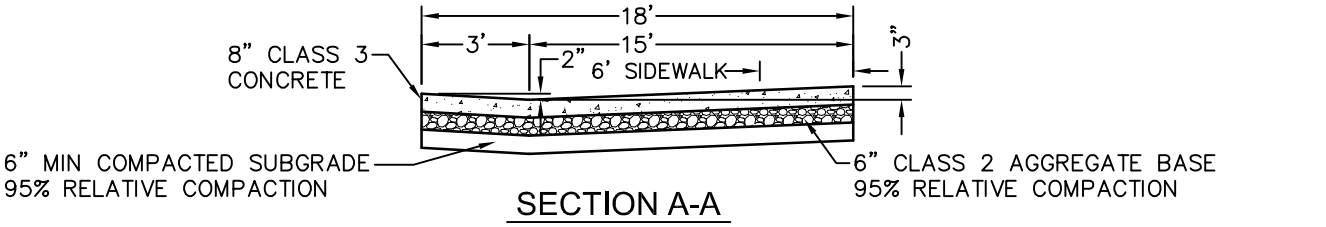
CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

MAJOR COMMERCIAL DRIVE APPROACH 20' RADIUS CURB RETURN

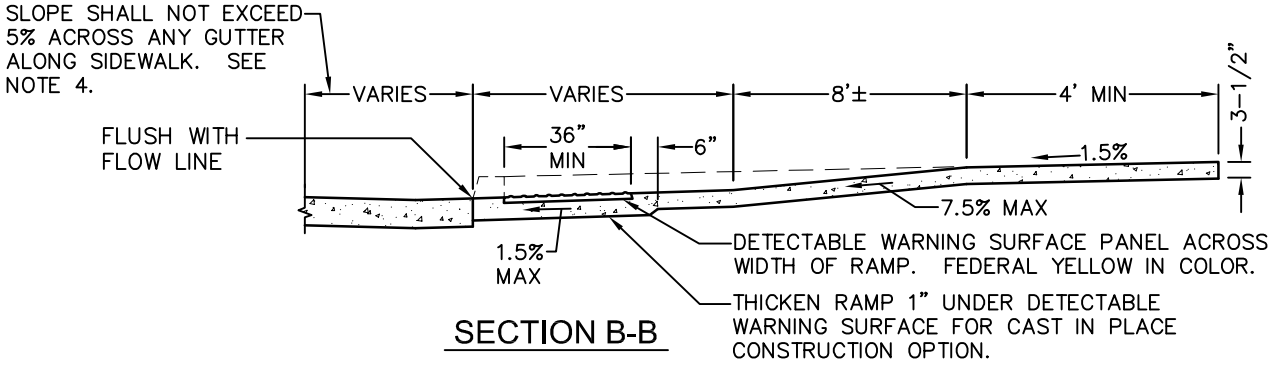
REVISIONS
09/15/16
BK 2016

C-28





SECTION A-A



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. COMMERCIAL DRIVE APPROACH GUTTER SHALL HAVE A MINIMUM GRADIENT OF 0.40%. MINIMUM GRADIENT ON INFILL PROJECTS MAY BE LESS AS APPROVED BY THE CITY ENGINEER.
3. GUTTER FLOW LINE SHALL BE WATER TESTED FOR FLOW.
4. MAXIMUM SLOPES OF ADJOINING GUTTERS IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 5% WITHIN 4' OF THE BOTTOM OF THE CURB RAMP.
5. NO CROSS SLOPE IN THE PEDESTRIAN ACCESS ROUTE TO EXCEED 1.5%.
6. PROVIDE A MINIMUM 6' SIDEWALK ACROSS DRIVE. MAXIMUM 1.5% CROSS SLOPE AND MAXIMUM 1.5% SLOPE IN THE DIRECTION OF SIDEWALK.

APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

MAJOR COMMERCIAL DRIVE APPROACH 20' RADIUS CURB RETURN–ALTERNATE

REVISIONS
10/28/16
BK 2016

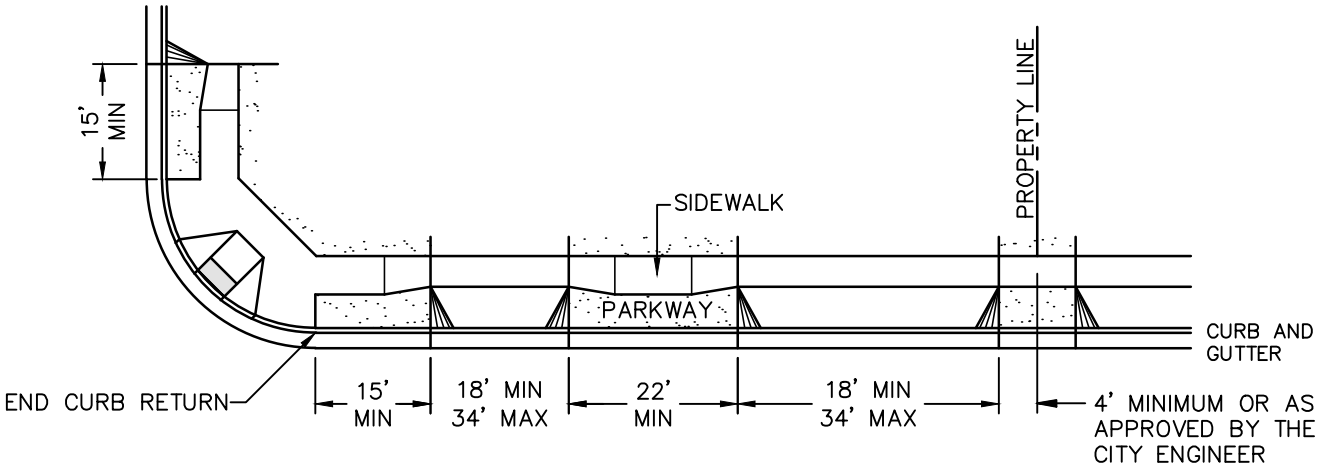
C–29

RESERVED FOR FUTURE DETAIL

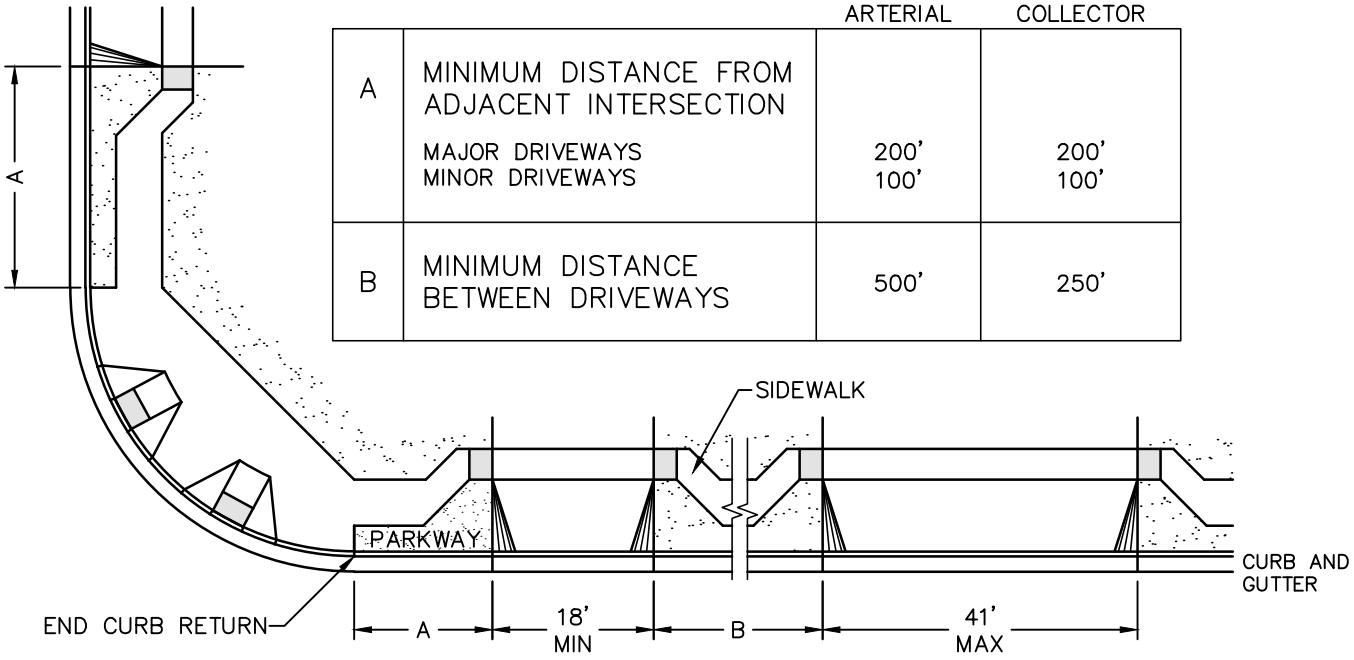
APPROVED BY: _____ _____	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C-30

RESERVED FOR FUTURE DETAIL

APPROVED BY:_____ _____	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
RESERVED	REVISIONS BK 2016
	C-31



DRIVE APPROACH LOCATIONS
RESIDENTIAL ZONES WITH 4 UNITS OR LESS PER LOT



		ARTERIAL	COLLECTOR
A	MINIMUM DISTANCE FROM ADJACENT INTERSECTION		
	MAJOR DRIVEWAYS	200'	200'
	MINOR DRIVEWAYS	100'	100'
B	MINIMUM DISTANCE BETWEEN DRIVEWAYS	500'	250'

DRIVE APPROACH LOCATIONS
OFFICE / COMMERCIAL / MULTI FAMILY ZONES

NOTES:

1. ON COLLECTOR AND ARTERIAL STREETS, THE MINIMUM DRIVE APPROACH WIDTH SHALL BE 21' FOR ONE-WAY DRIVE APPROACHES AND 36' FOR TWO-WAY DRIVE APPROACHES, OR AS APPROVED BY CITY ENGINEER.
2. NOT MORE THAN 50% OF PROPERTY FRONTAGE SHALL BE USED AS DRIVE APPROACH.
3. DRIVEWAYS SHOULD BE CONSOLIDATED WHENEVER POSSIBLE TO PROVIDE THE MINIMUM DISTANCE BETWEEN DRIVEWAYS AS SHOWN IN 'B' ABOVE.
4. DRIVEWAYS FROM RESIDENTIAL PROPERTIES TO ARTERIAL STREETS ARE DISCOURAGED. RESIDENTIAL PROPERTIES SHOULD RECEIVE ACCESS TO ARTERIALS FROM COLLECTOR STREETS AND LOCAL STREETS.
5. WIDTH AND LOCATION OF DRIVE APPROACHES ON STATE ROUTES IS SUBJECT TO CALTRANS APPROVAL.
6. NO VEHICULAR TRAFFIC SHALL CROSS CURB, GUTTER, OR SIDEWALK WITHOUT AN APPROVED DRIVE APPROACH.

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CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

DRIVE APPROACH LOCATIONS

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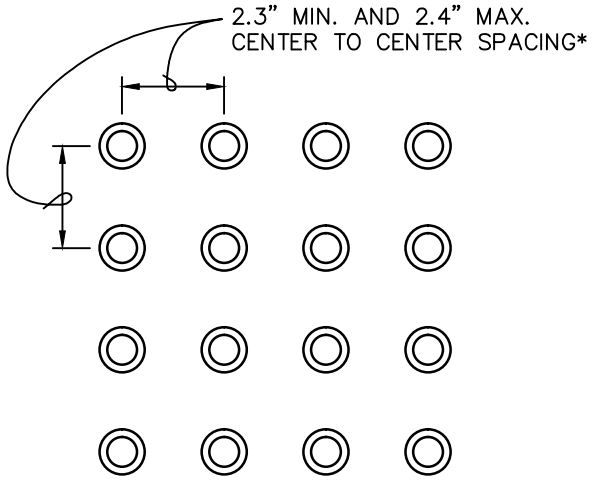
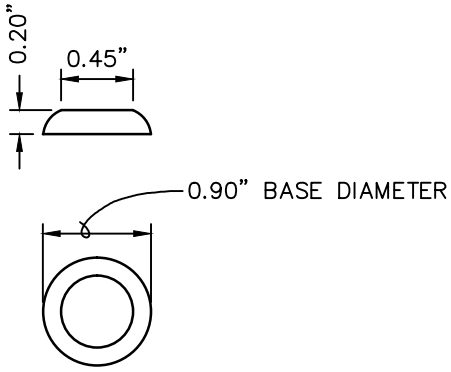
NOTE:

* WHERE INSTALLED IN A RADIAL PATTERN, TRUNCATED DOMES SHALL HAVE A CENTER TO CENTER SPACING OF 1.6" MINIMUM TO 2.4" MAXIMUM OR AS INDICATED PER CURRENT CBC.



RAISED TRUNCATED DOME PATTERN



RAISED TRUNCATED DOME

NOTES:

1. DETECTABLE WARNING SURFACE SHALL BE INSTALLED AT THE BOTTOM OF ALL CURB RAMPS.
2. DETECTABLE WARNING SHALL BE INSTALLED SO THAT IT BUTTS UP FLUSH AGAINST THE BACK OF ADJACENT CURB. WHERE CURBS ARE ON A CURVE, THE BACK OF CURB SHALL BE STRAIGHTENED AT THE DETECTABLE WARNING LOCATION SO THE WARNING BUTTS UP FLUSH AGAINST THE BACK OF CURB.
3. DETECTABLE WARNING SURFACE SHALL BE THE FULL WIDTH OF RAMP AND SHALL BE A MINIMUM OF 36" IN DEPTH.
4. DETECTABLE WARNING SURFACE SHALL BE PREMIXED FEDERAL YELLOW COLORED AND SHALL BE AN AUTHORIZED MATERIAL FROM THE CITY OF VISALIA DETECTABLE WARNING SURFACE AUTHORIZED MATERIAL LIST.
5. IN RETROFIT TYPE SITUATIONS ON EXISTING SURFACES THE CITY WILL ALLOW RETROFIT TYPE WARNING PANELS. RETROFIT PANEL MATERIALS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR ACCEPTANCE PRIOR TO CONSTRUCTION. PANELS SHALL BE GLUED AND BOLTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. BOTTOM OF PANELS SHALL BE FLUSH AGAINST THE ADJACENT CONCRETE SURFACE.

APPROVED BY: _____ 09/16/16
CITY ENGINEER R.P.E. 81734 DATE

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DETECTABLE WARNING SURFACE DETAIL

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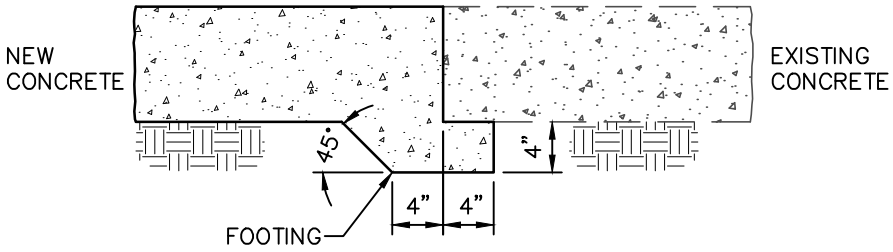
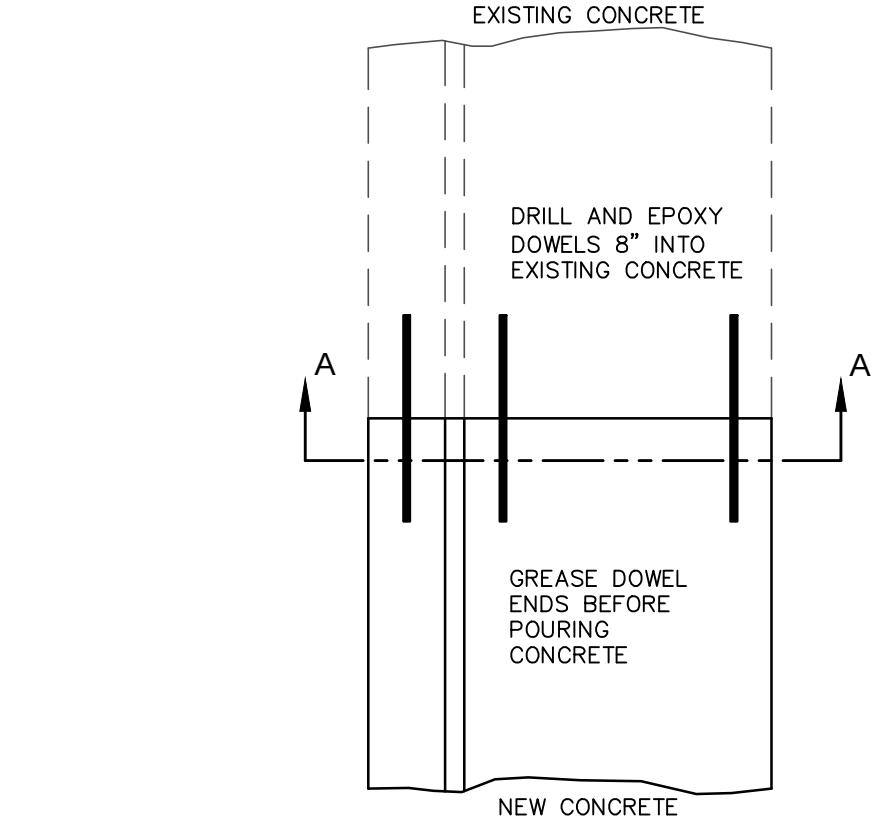
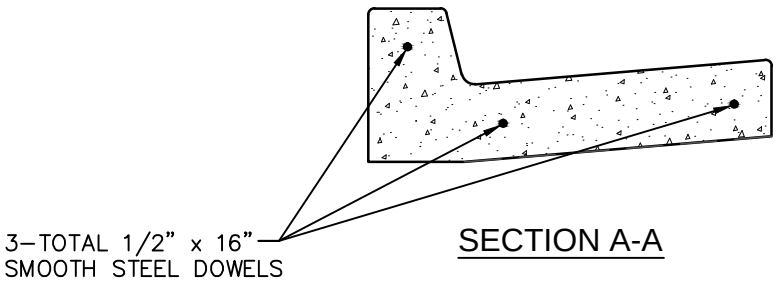


SECTION

CONCRETE FLATWORK



PLAN



SECTION A-A

CONCRETE CURBING

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
CONCRETE COLD JOINTS	REVISIONS 10/23/12 BK 2016
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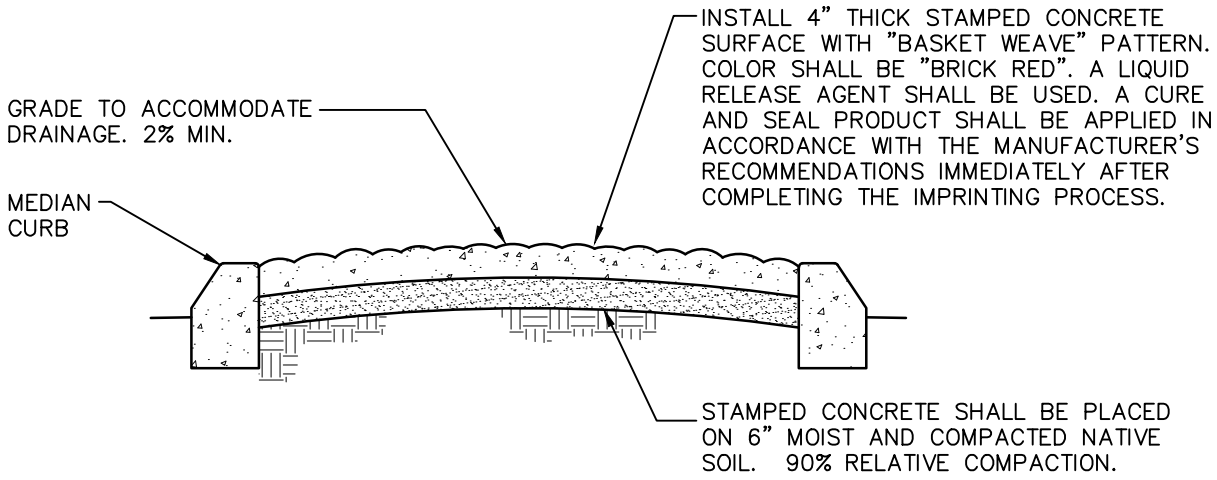
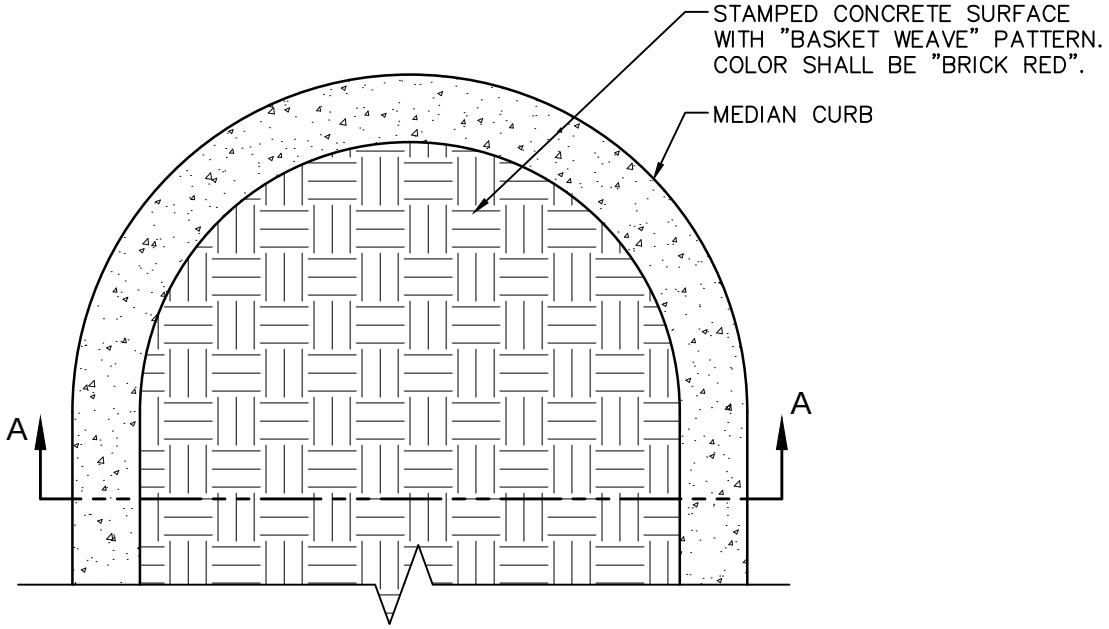


SECTION A-A

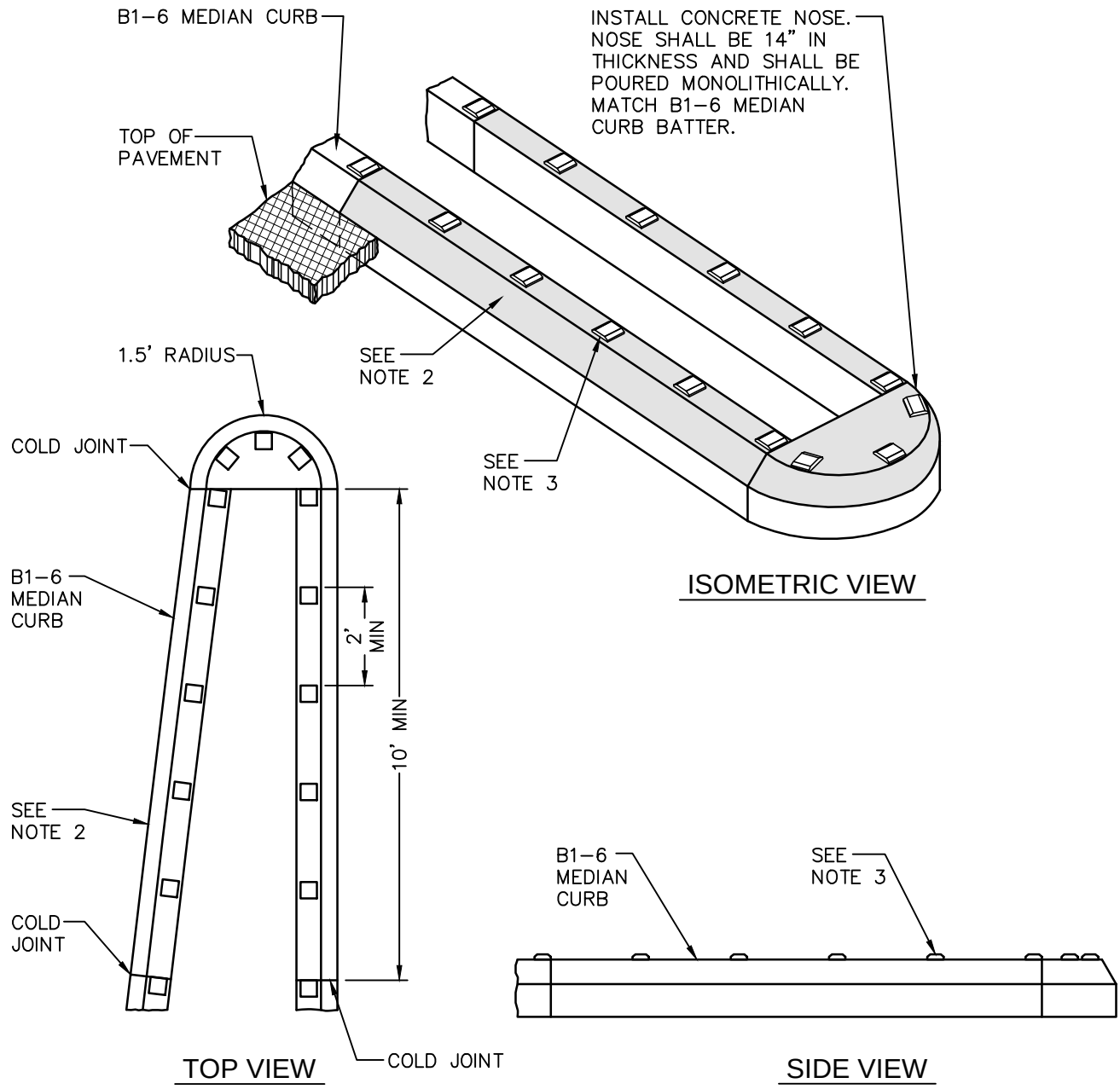


PLAN

NOTES:

1. WHEN MATCHING AN EXISTING COBBLESTONE MEDIAN, "RIVER ROCK" PATTERN WITH "COBBLESTONE GRAY" COLOR AND A LIQUID RELEASE AGENT SHALL BE USED.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 — 09/16/16 DATE	CITY OF VISALIA DESIGN & IMPROVEMENT STANDARDS
STAMPED CONCRETE MEDIAN	REVISIONS 07/19/16 BK 2016 — C–35



NOTES:

1. ALL CONCRETE SHALL BE CLASS 3 CONCRETE.
2. THE TOP AND FACE OF THE CURB SHALL BE PAINTED WITH WHITE OR YELLOW WATERBORNE PAINT AND APPLY GLASS BEADS FOR RETROREFLECTIVITY IN ACCORDANCE TO CITY OF VISALIA STANDARD SPECIFICATIONS.
3. INSTALL TYPE G OR TYPE D RAISED PAVEMENT MARKERS PER CALTRANS STANDARD SPECIFICATIONS SECTION 81–3.02C. THE RAISED PAVEMENT MARKERS SHALL BE ATTACHED TO THE TOP OF THE CURB USING ADHESIVES PER CALTRANS STANDARD SPECIFICATIONS SECTIONS 81–3.02D AND 81–3.02E.

APPROVED BY: _____ CITY ENGINEER R.P.E. 81734 09/16/16 DATE

CITY OF VISALIA
DESIGN & IMPROVEMENT STANDARDS

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