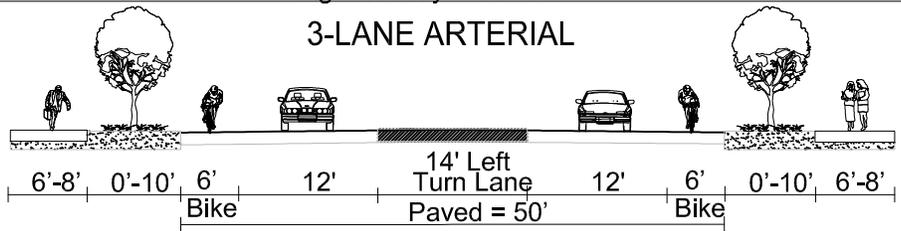
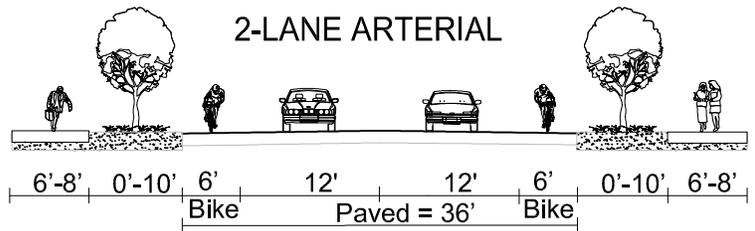


STRUCTURAL DESIGN STANDARDS IN COMPLIANCE WITH CITY OF SISTERS PUBLIC WORKS CONSTRUCTION STANDARDS AND CURRENT OREGON DEPARTMENT OF TRANSPORTATION STANDARDS
Right of Way = 98'-110'

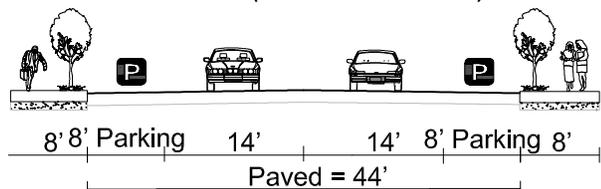


STRUCTURAL DESIGN STANDARDS IN COMPLIANCE WITH CITY OF SISTERS PUBLIC WORKS CONSTRUCTION STANDARDS AND CURRENT OREGON DEPARTMENT OF TRANSPORTATION STANDARDS
Right of Way = 62'-86'



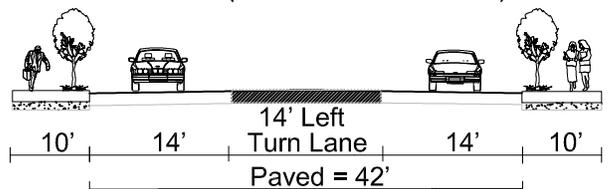
STRUCTURAL DESIGN STANDARDS IN COMPLIANCE WITH CITY OF SISTERS PUBLIC WORKS CONSTRUCTION STANDARDS AND CURRENT OREGON DEPARTMENT OF TRANSPORTATION STANDARDS
Right of Way = 48'-72'

CASCADE AVE (STA - TYPICAL)



STRUCTURAL DESIGN STANDARDS IN COMPLIANCE WITH CITY OF SISTERS PUBLIC WORKS CONSTRUCTION STANDARDS AND CURRENT OREGON DEPARTMENT OF TRANSPORTATION STANDARDS
Right of Way = 60'

CASCADE AVE (STA - TURN LANE)



STRUCTURAL DESIGN STANDARDS IN COMPLIANCE WITH CITY OF SISTERS PUBLIC WORKS CONSTRUCTION STANDARDS AND CURRENT OREGON DEPARTMENT OF TRANSPORTATION STANDARDS
Right of Way = 60'

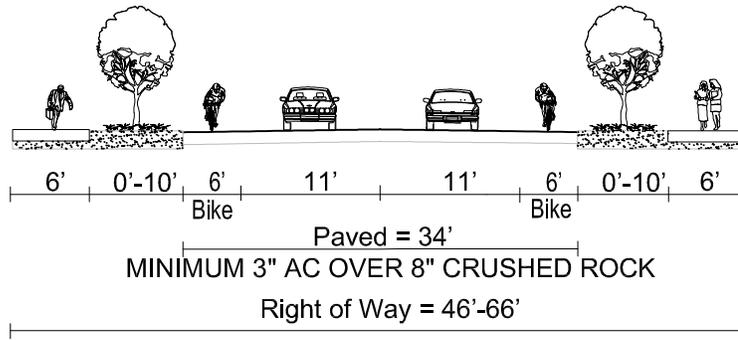
NOTES:

- TURN LANE WARRANTS SHOULD BE REVIEWED USING HIGHWAY RESEARCH RECORD NO. 211, NCHRP REPORT NO. 279 OR OTHER UPDATED/SUPERSEDING REFERENCE.
- ODOT "HIGHWAY DESIGN MANUAL" REQUIREMENTS SUPERCEDE CITY STANDARDS.
- BIKE LANES MAY NOT BE REQUIRED IF A PARALLEL ALTERNATIVE ROUTE IS APPROVED BY THE CITY ENGINEER.
- WHEN MULTI-USE PATHS ARE USED INSTEAD OF SIDEWALKS AND BIKE LANE, PATHS SHALL BE A MINIMUM OF 10 FEET (12 FEET IS DESIRED) WITH A MINIMUM 6-FOOT SEPARATION FROM THE ROADWAY.
- CASCADE SECTIONS AS DEPICTED REQUIRE AN ODOT DESIGN EXCEPTION PRIOR TO CONSTRUCTING IMPROVEMENTS. WHERE ON-STREET PARKING IS ALLOWED, CURB-EXTENSIONS MAY BE CONSTRUCTED IN PLACE OF PARKING SPACES.

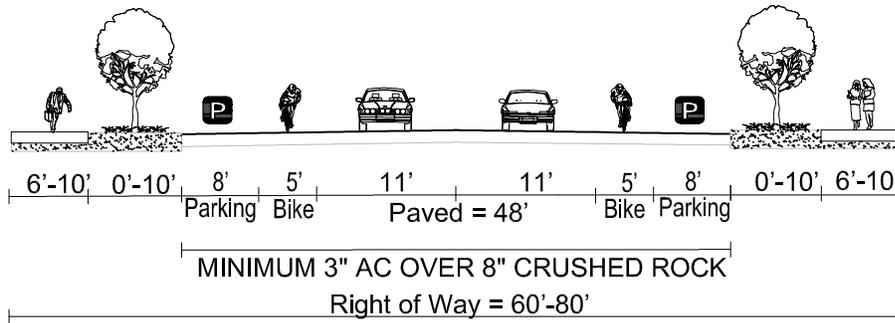
On-street Parking Lane (except at intersections)

	<h2>City of Sisters • Standard Detail</h2>	SCALE: NONE	DRAWING NO. <h1>2-1</h1>
		DRAWN BY: EH	
		APPROVED BY: PB	
		REVISION DATE: 12/03/2013	
TYPICAL STREET SECTIONS			

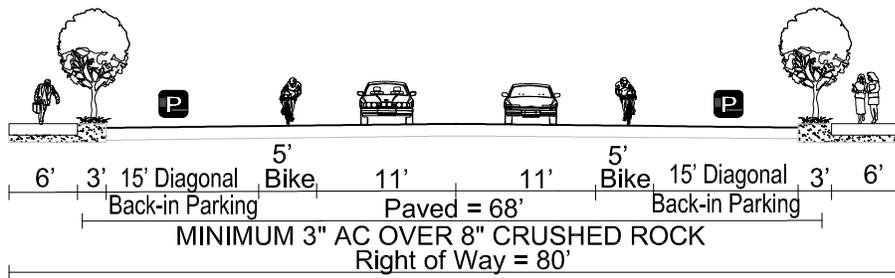
STANDARD COLLECTOR



COLLECTOR (COMMERCIAL DISTRICT - PARALLEL PARKING)



COLLECTOR (COMMERCIAL DISTRICT - DIAGONAL PARKING)



Note: 3' between parking and sidewalk would provide for landscaping/swale and parking overhang

NOTES:

1. WHEN MULTI-USE PATHS ARE USED INSTEAD OF SIDEWALKS/PEDESTRIAN PATHS AND BIKE LANE, PATHS SHALL BE A MINIMUM OF 8 FEET WIDE (10 FEET IS DESIRED) WITH A MINIMUM 6-FOOT SEPARATION FROM THE ROADWAY.
2. BIKE LANES MAY NOT BE REQUIRED IF A PARALLEL ALTERNATIVE ROUTE IS APPROVED BY THE CITY ENGINEER.

P On-street Parking Lane (except at intersections)



City of Sisters • Standard Detail

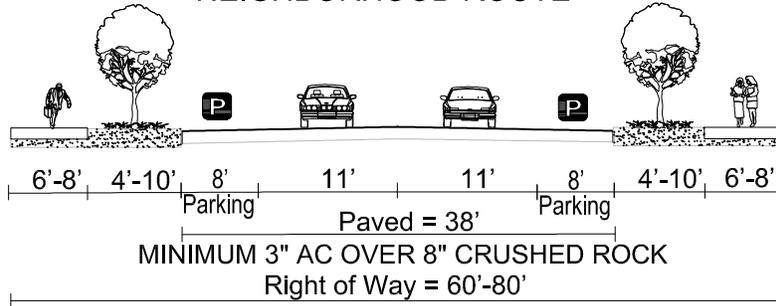
TYPICAL STREET
SECTIONS

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

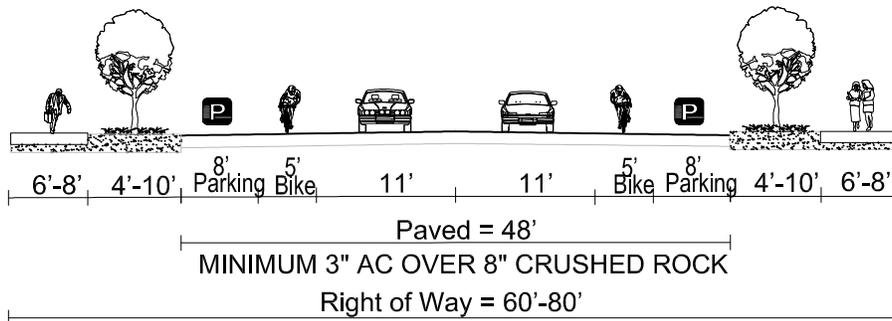
DRAWING
NO.

2-2

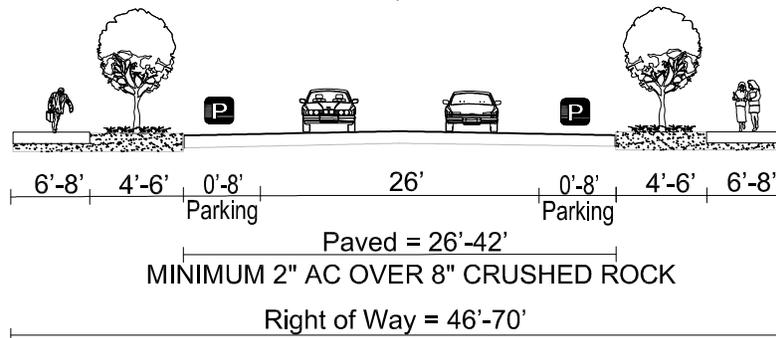
NEIGHBORHOOD ROUTE



NEIGHBORHOOD ROUTE WITH BIKE LANES



STANDARD LOCAL STREET (COMMERCIAL/INDUSTRIAL)



City of Sisters • Standard Detail

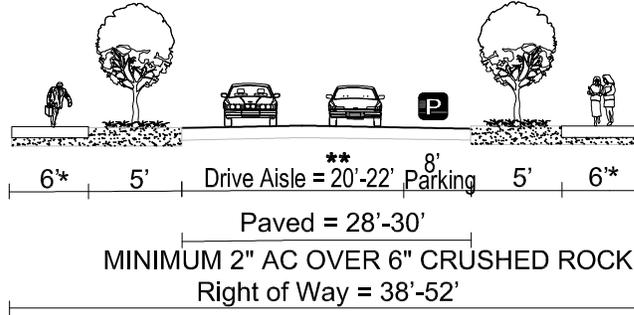
TYPICAL STREET
SECTIONS

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

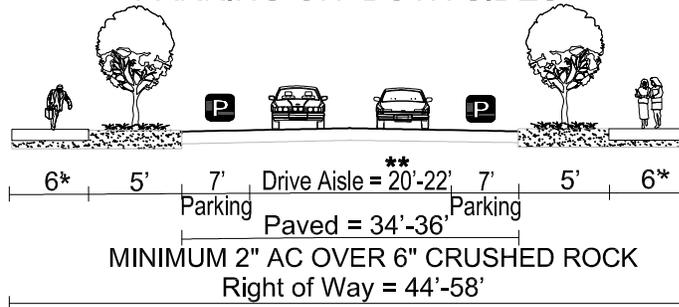
DRAWING
NO.

2-3

RESIDENTIAL LOCAL STREET WITH PARKING ON ONE SIDE



RESIDENTIAL LOCAL STREET WITH PARKING ON BOTH SIDES



NOTES FOR RESIDENTIAL LOCAL STREET WITH PARKING ON ONE SIDE:

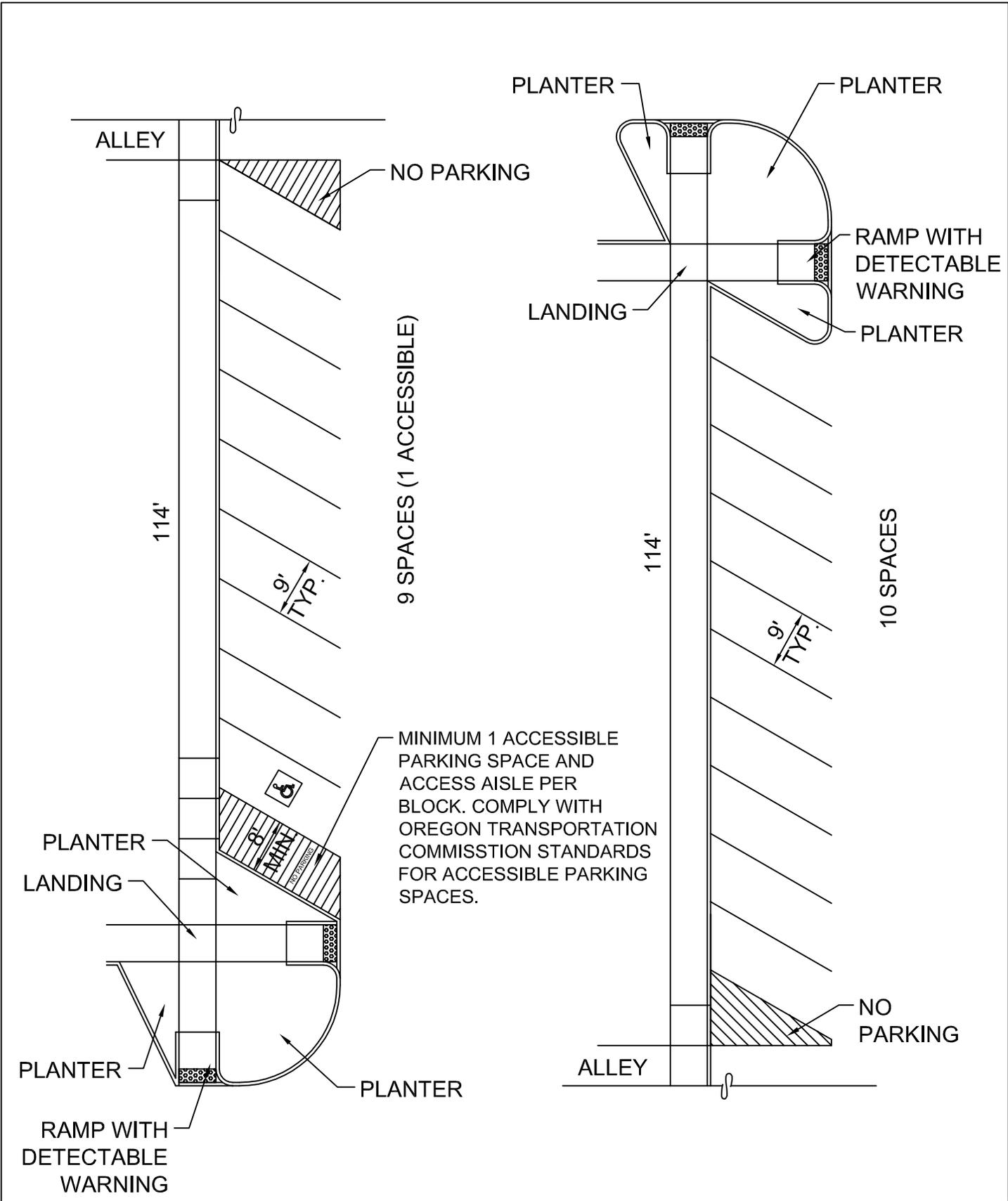
1. STREETS THAT ALLOW PARKING ON ONE SIDE MAY ONLY BE USED IN LIMITED SITUATIONS, SUCH AS (1) ADJACENT TO A SCHOOL OR OTHER PUBLIC USE WHERE PARKING ON ONE SIDE IS INFEASIBLE OR UNDESIRABLE, OR (2) FOR LIMITED-LENGTH SPANS OF ONE BLOCK OR LESS ALONG ZONE BOUNDARIES (RESIDENTIAL/COMMERCIAL, RESIDENTIAL/INDUSTRIAL, RESIDENTIAL/PUBLIC FACILITY ZONES) IN SITUATIONS WHERE PARKING ON BOTH SIDES IS INFEASIBLE OR UNDESIRABLE.
2. IN ANY EVENT, STREETS THAT INCORPORATE PARKING LIMITED TO ONE SIDE OF THE STREET SHALL NOT HOWEVER BE USED IN PLACE OF STREETS THAT PROVIDE PARKING ON BOTH SIDES EXCEPT WHERE SUBSTANTIAL OFF-STREET PARKING IS AVAILABLE, AND AT THE DISCRETION OF THE PLANNING COMMISSION.

GENERAL NOTES:

1. WHEN MULTI-USE PATHS ARE USED INSTEAD OF SIDEWALKS/PEDESTRIAN PATHS AND BIKE LANE, PATHS SHALL BE A MINIMUM OF 8 FEET WIDE (10 FEET IS DESIRED) WITH A MINIMUM 4-FOOT SEPARATION FROM THE ROADWAY.
 2. BIKE LANES MAY BE REQUIRED ON NEIGHBORHOOD ROUTES, AS INDICATED BY THE BICYCLE MASTER PLAN.
- * SIDEWALKS/PEDESTRIAN PATHS ON RESIDENTIAL LOCAL STREETS MAY BE LOCATED ON PRIVATE PROPERTY IN A "SIDEWALK PEDESTRIAN ACCESS EASEMENT."
 - ** ROADS LESS-THAN 1,000 FEET

P - On-street Parking Lane (except at intersections)

	City of Sisters ◦ Standard Detail	SCALE: NONE	DRAWING NO. 2-4
		DRAWN BY: EH	
	TYPICAL STREET SECTIONS	APPROVED BY: PB	
		REVISION DATE: 12/03/2013	

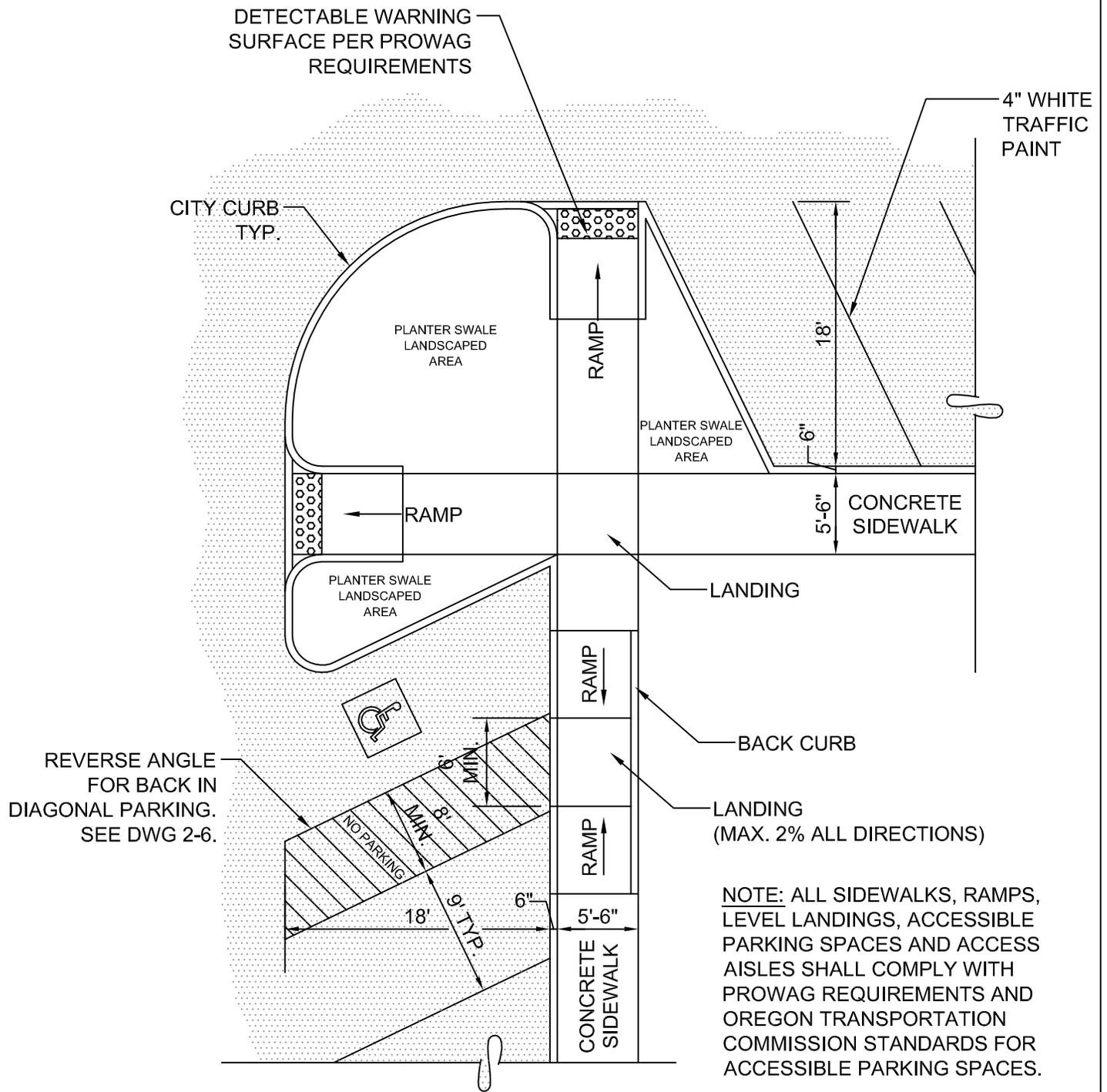


City of Sisters • Standard Detail

BACK IN DIAGONAL PARKING
BLOCK LAYOUT

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING NO.
2-6



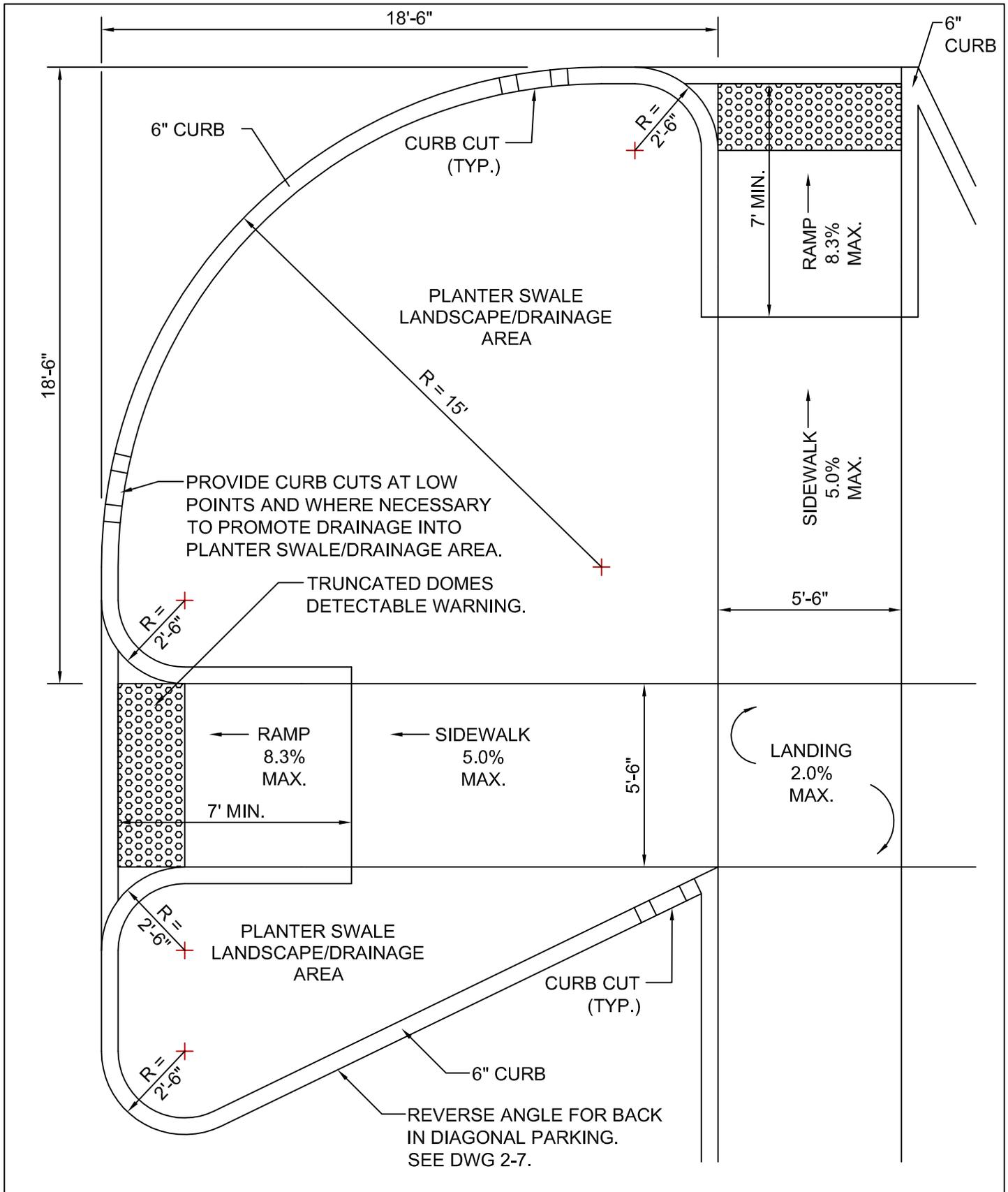
City of Sisters • Standard Detail

DIAGONAL PARKING
CORNER LAYOUT

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

2-7



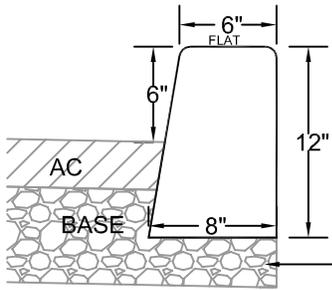
City of Sisters • Standard Detail

DIAGONAL PARKING
CORNER DETAIL

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

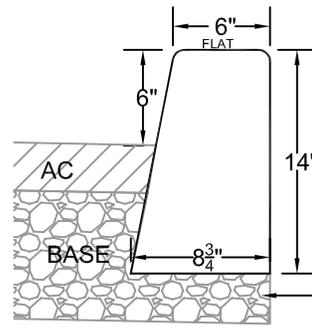
DRAWING NO.

2-8



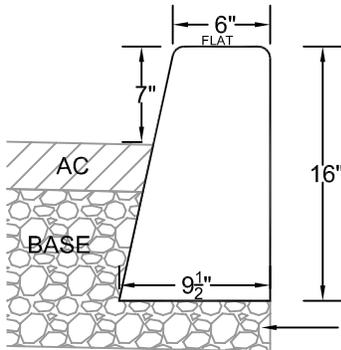
12" - TYPE I
LOCAL STREETS

MINIMUM 2" OF
BASE UNDER
CURB



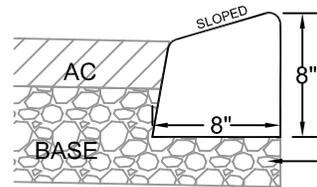
14" - TYPE II
NEIGHBORHOOD ROUTE AND COLLECTOR STREETS

MINIMUM 2" OF
BASE UNDER
CURB



16" - TYPE III
ARTERIAL STREETS

MINIMUM 2" OF
BASE UNDER
CURB



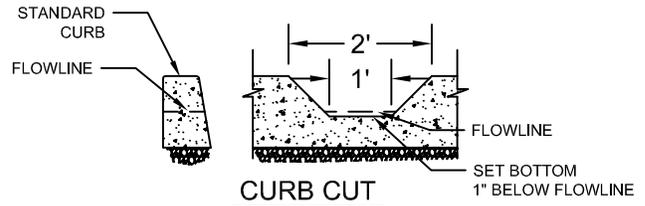
ROLLED CURB
USED ONLY WITH CITY ENGINEER APPROVAL

MINIMUM 2" OF
BASE UNDER
CURB

CITY STANDARD CURBS

NOTES:

1. CONCRETE SHALL BE CLASS 4000.
2. ROLLED CURBS USED ONLY AT CITY ENGINEERS DISCRETION.
3. EXPANSION JOINTS ARE REQUIRED AT:
 - A. A MAXIMUM SPACING OF 30 FEET.
 - B. AT EACH POINT OF TANGENCY.
 - C. AT THE TOP OF ALL ADA AND DRIVEWAY APRON FLARES.
 - D. AROUND ALL POLES, POSTS, BOXES AND OTHER FIXTURES THAT PROTRUDE THROUGH OR AGAINST THE CURB.
4. CONTROL JOINTS ARE TO BE CUT INTO THE WET CONCRETE A MINIMUM 1/3 OF THE DEPTH AND PLACED AT A MAXIMUM OF 10' APART.
5. BASE ROCK UNDER CURB SHALL BE A MINIMUM OF TWO INCHES DEEP OR DEEPER AS REQUIRED TO MATCH STREET SECTION.
6. DRIVEWAY APRON LIPS SHALL BE MINIMUM OF 1" TO A MAXIMUM OF 1 1/2" HEIGHT ABOVE ASPHALT AT GUTTER.
7. ADA LIPS SHALL BE FLUSH WITH ASPHALT PAVEMENT AT GUTTER.
8. ALL VISIBLE EDGES OF CURB SHALL HAVE A MAXIMUM 3/4" RADIUS FINISHED EDGE.
9. ALL VISIBLE SURFACES SHALL HAVE A LIGHT BROOM FINISH, PARALLEL WITH CURB.
10. WHERE CURB AND GUTTER IS CALLED OUT ON THE PLANS, BUT NO DETAIL IS PROVIDED, USE ODOT STANDARD DRAWING RD-700 WITH 18" GUTTER PAN SLOPED AT 4° AND 6" CURB EXPOSURE. FOR REPLACEMENT, MATCH EXISTING CURB AND GUTTER DIMENSION AND SLOPE.
11. ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE MARKED ON THE SURFACE OF CURB USING A STAMPED IMPRESSION OF "W" OR "S".
12. CURB HEIGHTS SHALL BE AS FOLLOWS:
 - A. LOCAL STREETS - 12" - TYPE I
 - B. NEIGHBORHOOD ROUTE, COLLECTOR STREETS AND INDUSTRIAL ZONE - 14" - TYPE II
 - C. ARTERIAL STREETS - 16" - TYPE III



CURB CUT

SET BOTTOM
1" BELOW FLOWLINE



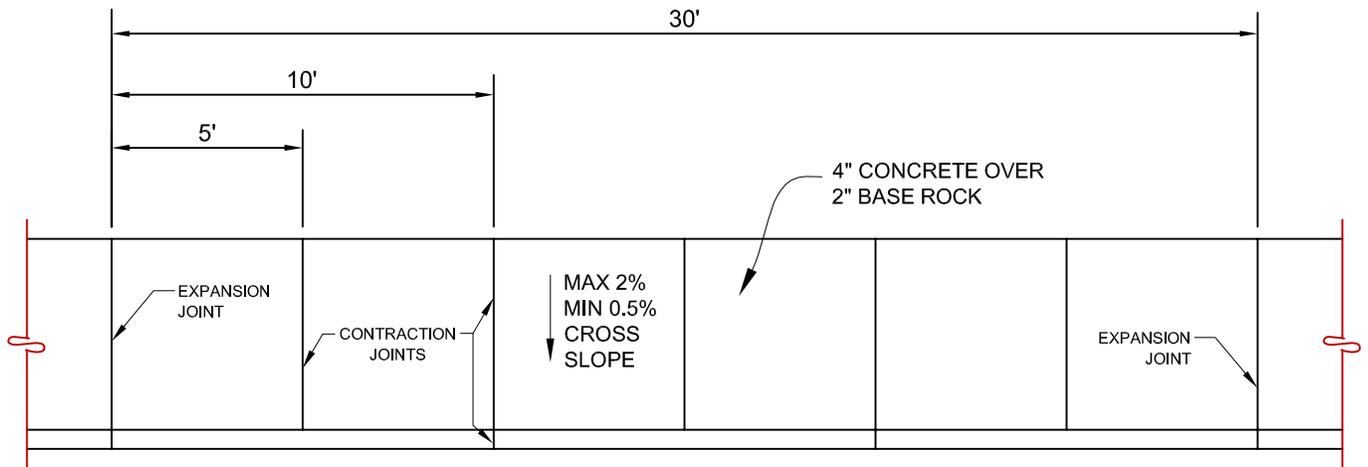
City of Sisters • Standard Detail

STANDARD PCC CURB AND
GUTTER SECTION

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

2-9



SIDEWALK: EXPANSION JOINTS AT 30'
CONTRACTION JOINTS AT 5'

CURB: EXPANSION JOINTS AT 30'
CONTRACTION JOINTS AT 5'

CURB & SIDEWALK NOTES

1. CONCRETE FOR CURB AND SIDEWALK SHALL BE CLASS 4000 PSI.
2. SIDEWALK EXPANSION JOINTS ARE REQUIRED AT:
 - A. A MAXIMUM SPACING OF 30 FEET.
 - B. AROUND ALL POLES, POSTS, BOXES AND OTHER FIXTURES THAT PROTRUDE THROUGH OR AGAINST THE SIDEWALK.
3. CURB EXPANSION JOINTS ARE REQUIRED AT:
 - A. A MAXIMUM SPACING OF 30 FEET.
 - B. AT EACH POINT OF TANGENCY.
 - C. AT THE TOP OF ALL ADA AND DRIVEWAY APRON FLARES.
 - D. AROUND ALL POLES, POSTS, BOXES AND OTHER FIXTURES THAT PROTRUDE THROUGH OR AGAINST THE CURB.
4. CONCRETE SIDEWALK SHALL BE A MINIMUM OF FOUR INCHES DEEP.
5. BASE ROCK BENEATH SIDEWALK SHALL BE A MINIMUM OF TWO INCHES DEEP.
6. SIDEWALK CROSS SLOPE SHALL BE MAXIMUM OF 2% AND A MINIMUM OF 0.5%
7. BASE ROCK UNDER THE SIDEWALK SHALL BE COMPACTED TO 95% OF AASHTO T-99.
8. BASE ROCK UNDER THE CURB SHALL BE COMPACTED TO 95% OF AASHTO T-99.
9. ALL VISIBLE EDGES SHALL HAVE A MAXIMUM 3/4" RADIUS FINISHED EDGE.
10. THE SIDEWALK SURFACE SHALL HAVE A LIGHT BROOM FINISH PERPENDICULAR TO CURB.



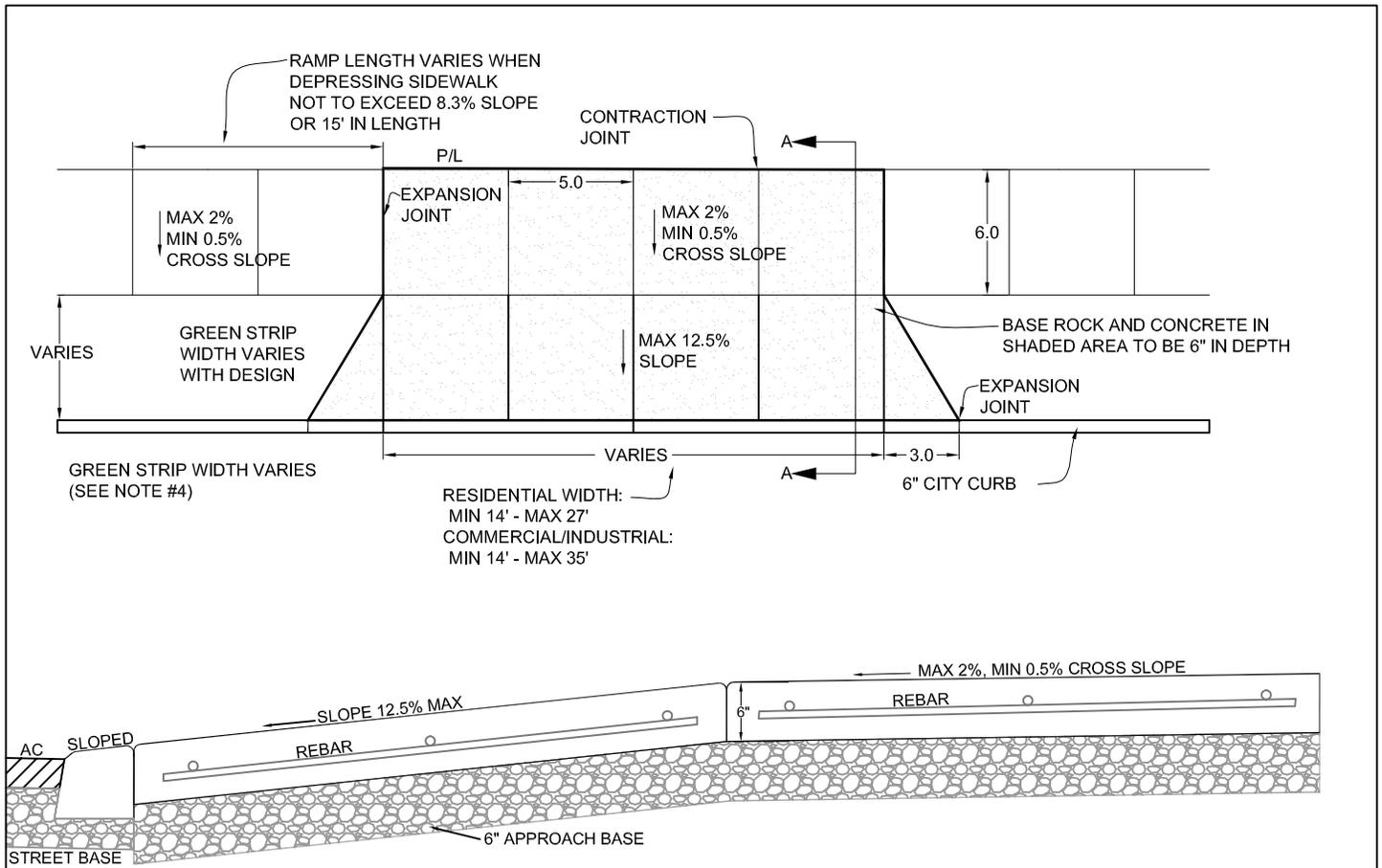
City of Sisters • Standard Detail

EXPANSION AND CONTRACTION
JOINT DETAIL

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

2-10



CROSS SECTION A-A

STANDARD DRIVEWAY APPROACH

NOTES:

1. CONCRETE SHALL BE CLASS 4000 PSI.
2. CONCRETE SHALL BE A MINIMUM OF SIX INCHES DEEP IN THE APPROACH AND THAT PORTION OF THE SIDEWALK ADJACENT TO THE APPROACH.
3. EXPANSION JOINTS ARE REQUIRED ON BOTH SIDES OF DRIVEWAY APPROACH WHERE THE TOP OF THE FLARE/WING MEETS THE SIDEWALK.
4. WHEN THE GREEN STRIP IS 2 FEET OR LESS IN WIDTH, DEPRESS THE SIDEWALK TO MAINTAIN APPROACH AT 12.5% SLOPE OR LESS. PROVIDE SIDEWALK RAMPS AT A SLOPE NOT TO EXCEED 8.3%.
5. THE FLARE/WINGS ARE A MINIMUM LENGTH OF 3' AT CURB.
6. THE BASE ROCK UNDER A DRIVEWAY APPROACH SHALL BE A MINIMUM OF SIX INCHES DEEP.
7. BASE ROCK SHALL BE COMPACTED TO 95% OF AASHTO T-99.
8. #4 REBAR SHALL BE USED IN ALL COMMERCIAL, INDUSTRIAL, ALLEY, AND MULTI-FAMILY DRIVEWAY APPROACHES. LONGITUDINAL AND TRANSVERSE BARS SHALL BE PLACED TWO FEET ON CENTER, TWO INCHES FROM BOTTOM AND THREE INCHES IN FROM EDGES.
9. DRIVEWAY APRON LIPS SHALL BE A MINIMUM OF ONE INCH TO A MAXIMUM ONE AND ONE HALF INCH IN HEIGHT ABOVE ASPHALT AT GUTTER.
10. ALL VISIBLE EDGES SHALL HAVE A MAXIMUM $\frac{3}{4}$ " RADIUS FINISHED EDGE.
11. APPROACH SURFACES SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE CURB.
12. CONTRACTION JOINTS SHALL BE PLACED AT A MAXIMUM OF FIVE FEET APART.



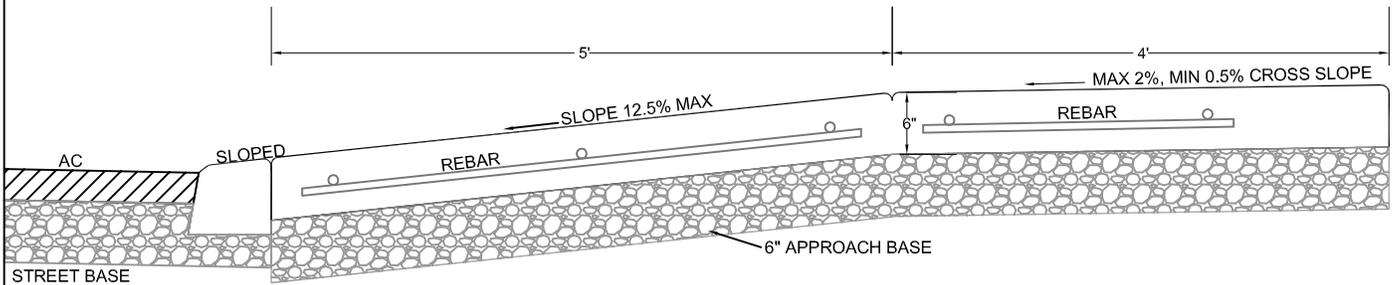
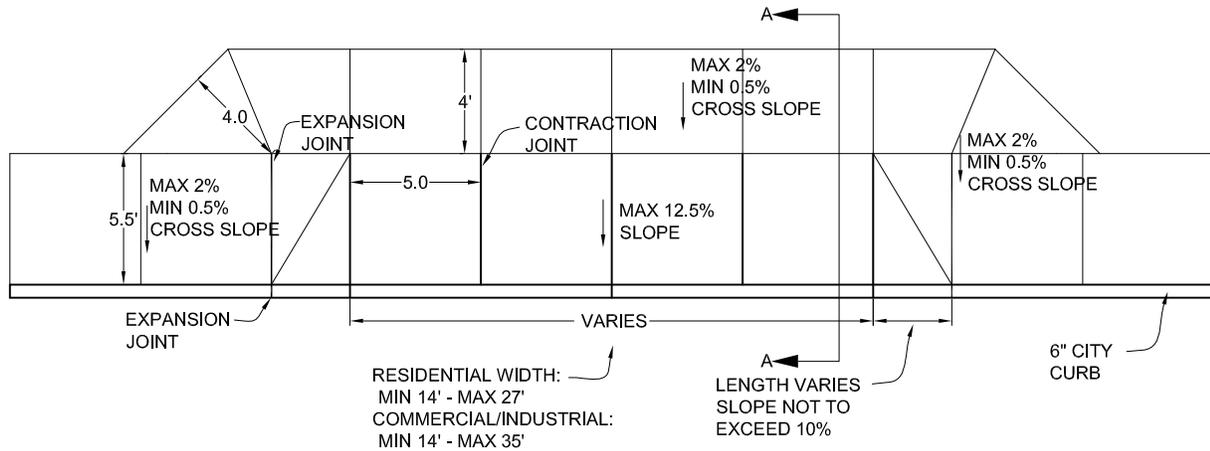
City of Sisters • Standard Detail

TYPICAL CONCRETE
DRIVEWAY APPROACH

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

2-11



CROSS SECTION A-A

DRIVEWAY APPROACH OPTION A

NOTES:

1. CONCRETE SHALL BE CLASS 4000 PSI.
2. CONCRETE SHALL BE A MINIMUM OF SIX INCHES DEEP.
3. EXPANSION JOINTS ARE REQUIRED ON BOTH SIDES OF DRIVEWAY APPROACH WHERE THE TOP OF THE FLARE/WING MEETS THE SIDEWALK.
4. THE FLARE/WINGS SHALL NOT EXCEED 10% SLOPE.
5. THE ADA ACCESSIBILITY PATH PLACED BEHIND APPROACH RAMP SHALL BE 4 FEET IN WIDTH AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS ADA ACCESSIBILITY PATH SHALL EXTEND BEYOND EITHER SIDE OF THE APPROACH TO INSURE THAT THE 2% CROSS SLOPE IS MAINTAINED THROUGHOUT.
6. THE BASE ROCK UNDER A DRIVEWAY APPROACH SHALL BE A MINIMUM OF SIX INCHES DEEP.
7. BASE ROCK SHALL BE COMPACTED TO 95% OF AASHTO T-99.
8. #4 REBAR SHALL BE USED IN ALL COMMERCIAL, INDUSTRIAL, ALLEY, AND MULTI-FAMILY DRIVEWAY APPROACHES. LONGITUDINAL AND TRANSVERSE BARS SHALL BE PLACED TWO FEET ON CENTER, TWO INCHES FROM BOTTOM AND THREE INCHES IN FROM EDGES.
9. DRIVEWAY APRON LIPS SHALL BE A MINIMUM OF ONE INCH TO A MAXIMUM ONE AND ONE HALF INCH IN HEIGHT ABOVE ASPHALT AT GUTTER.
10. ALL VISIBLE EDGES SHALL HAVE A MAXIMUM $\frac{3}{4}$ " RADIUS FINISHED EDGE.
11. APPROACH SURFACES SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE CURB.
12. CONTRACTION JOINTS SHALL BE PLACED AT A MAXIMUM OF FIVE FEET APART.



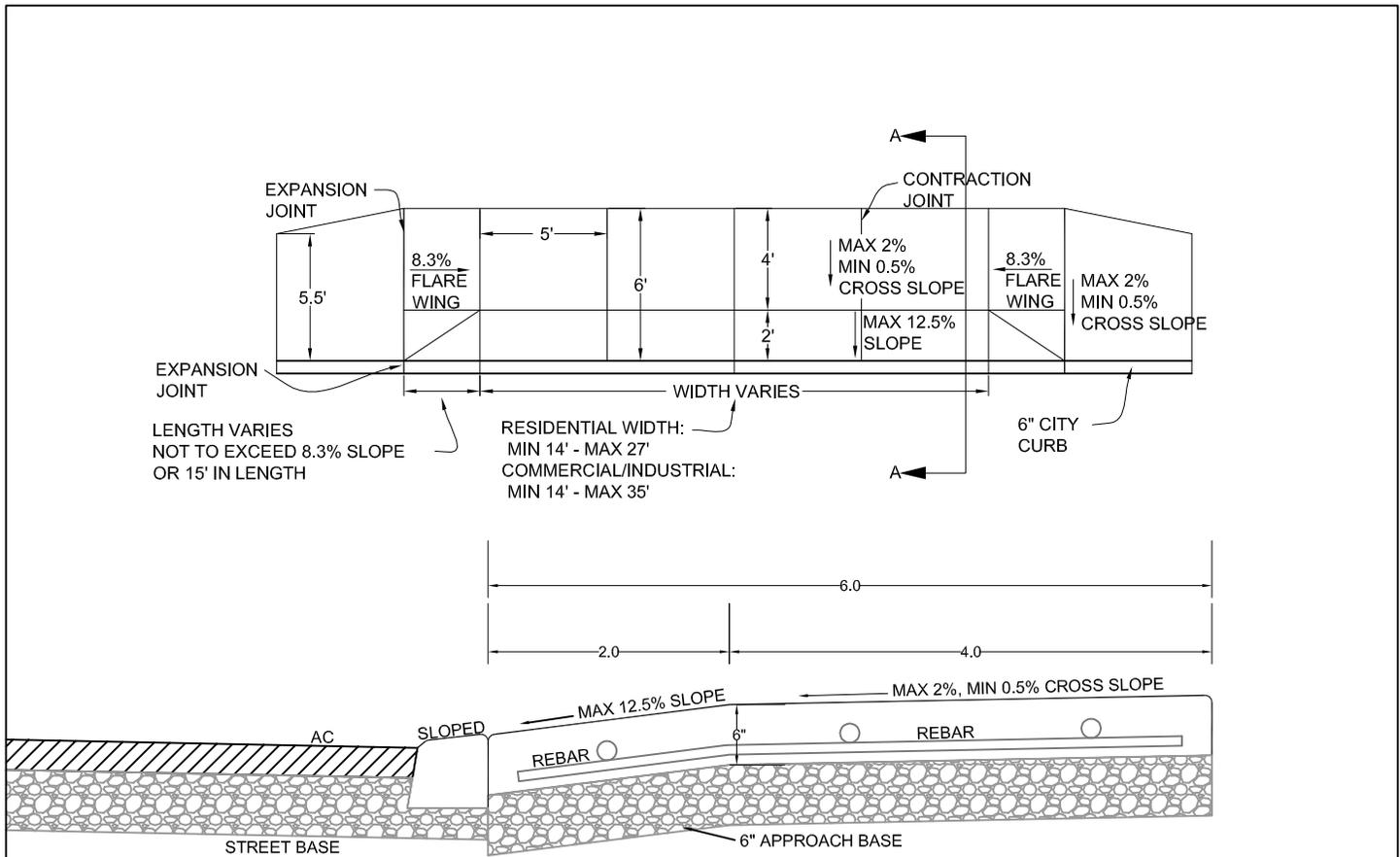
City of Sisters • Standard Detail

TYPICAL CONCRETE
DRIVEWAY APPROACH OPTION A

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING NO.

2-12



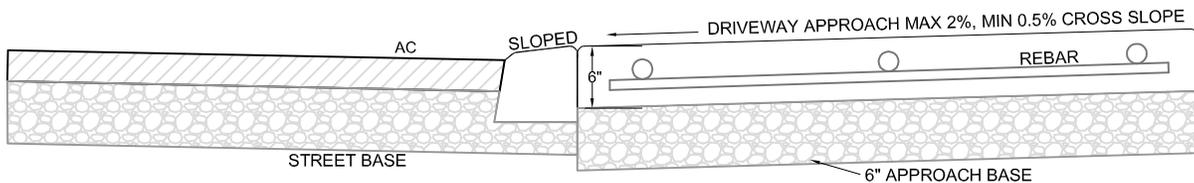
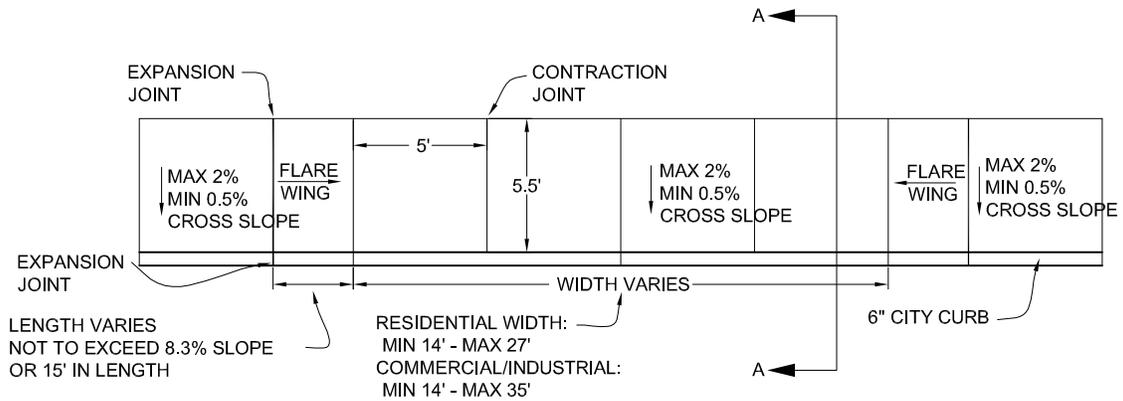
CROSS SECTION A-A

DRIVEWAY APPROACH OPTION B

NOTES:

1. CONCRETE SHALL BE CLASS 4000 PSI .
2. CONCRETE SHALL BE A MINIMUM OF SIX INCHES DEEP.
3. EXPANSION JOINTS ARE REQUIRED ON BOTH SIDES OF DRIVEWAY APPROACH WHERE THE TOP OF THE FLARE/WING MEETS THE SIDEWALK.
4. A MAXIMUM OF 12.5% SLOPE ON THE FIRST 2 FEET OF THE APPROACH.
5. A MAXIMUM OF 2% CROSS SLOPE ON THE BACK 4 FEET OF THE APPROACH.
6. THE FLARE/WINGS SHALL NOT EXCEED 8.3% IN RUNNING SLOPE. WHERE 8.3% SLOPE CAN NOT BE ACHIEVED BECAUSE OF STREET GRADE THEN THE RUNNING SLOPE WILL NOT EXCEED 15' IN LENGTH.
7. THE BASE ROCK UNDER A DRIVEWAY APPROACH SHALL BE A MINIMUM OF SIX INCHES DEEP.
8. BASE ROCK SHALL BE COMPACTED TO 95% OF AASHTO T-99.
9. #4 REBAR SHALL BE USED IN ALL COMMERCIAL, INDUSTRIAL, ALLEY, AND MULTI-FAMILY DRIVEWAY APPROACHES. LONGITUDINAL AND TRANSVERSE BARS SHALL BE PLACED TWO FEET ON CENTER, TWO INCHES FROM BOTTOM AND THREE INCHES IN FROM EDGES.
10. DRIVEWAY APRON LIPS SHALL BE A MINIMUM OF ONE INCH TO A MAXIMUM ONE AND ONE HALF INCH IN HEIGHT ABOVE ASPHALT AT GUTTER.
11. ALL VISIBLE EDGES SHALL HAVE A MAXIMUM $\frac{3}{4}$ " RADIUS FINISHED EDGE.
12. APPROACH SURFACES SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE CURB.
13. CONTROL JOINTS SHALL BE PLACED AT A MAXIMUM OF FIVE FEET APART.

	<p>City of Sisters • Standard Detail</p>	SCALE: NONE	<p>DRAWING NO. 2-13</p>
		DRAWN BY: EH	
	TYPICAL CONCRETE	APPROVED BY: PB	
	DRIVEWAY APPROACH OPTION B	REVISION DATE: 12/03/2013	



CROSS SECTION A-A

DRIVEWAY APPROACH OPTION C

NOTES:

1. CONCRETE SHALL BE CLASS 4000 PSI.
2. CONCRETE SHALL BE A MINIMUM OF SIX INCHES DEEP.
3. EXPANSION JOINTS ARE REQUIRED ON BOTH SIDES OF DRIVEWAY APPROACH WHERE THE TOP OF THE FLARE/WING MEETS THE SIDEWALK.
4. THE FLARE/WINGS SHALL NOT EXCEED 8.3% IN RUNNING SLOPE. WHERE 8.3% SLOPE CAN NOT BE ACHIEVED BECAUSE OF STREET GRADE THEN THE RUNNING SLOPE WILL NOT EXCEED 15' IN LENGTH.
5. THE BASE ROCK UNDER A DRIVEWAY APPROACH SHALL BE A MINIMUM OF SIX INCHES DEEP.
6. BASE ROCK SHALL BE COMPACTED TO 95% OF AASHTO T-99.
7. #4 REBAR SHALL BE USED IN ALL COMMERCIAL, INDUSTRIAL, ALLEY, AND MULTI-FAMILY DRIVEWAY APPROACHES. LONGITUDINAL AND TRANSVERSE BARS SHALL BE PLACED TWO FEET ON CENTER, TWO INCHES FROM BOTTOM AND THREE INCHES IN FROM EDGES.
8. DRIVEWAY APRON LIPS SHALL BE A MINIMUM OF ONE INCH TO A MAXIMUM ONE AND ONE HALF INCH IN HEIGHT ABOVE ASPHALT AT GUTTER.
9. ALL VISIBLE EDGES SHALL HAVE A MAXIMUM $\frac{3}{4}$ " RADIUS FINISHED EDGE.
10. APPROACH SURFACES SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE CURB.
11. CONTROL JOINTS SHALL BE PLACED AT A MAXIMUM OF FIVE FEET APART.



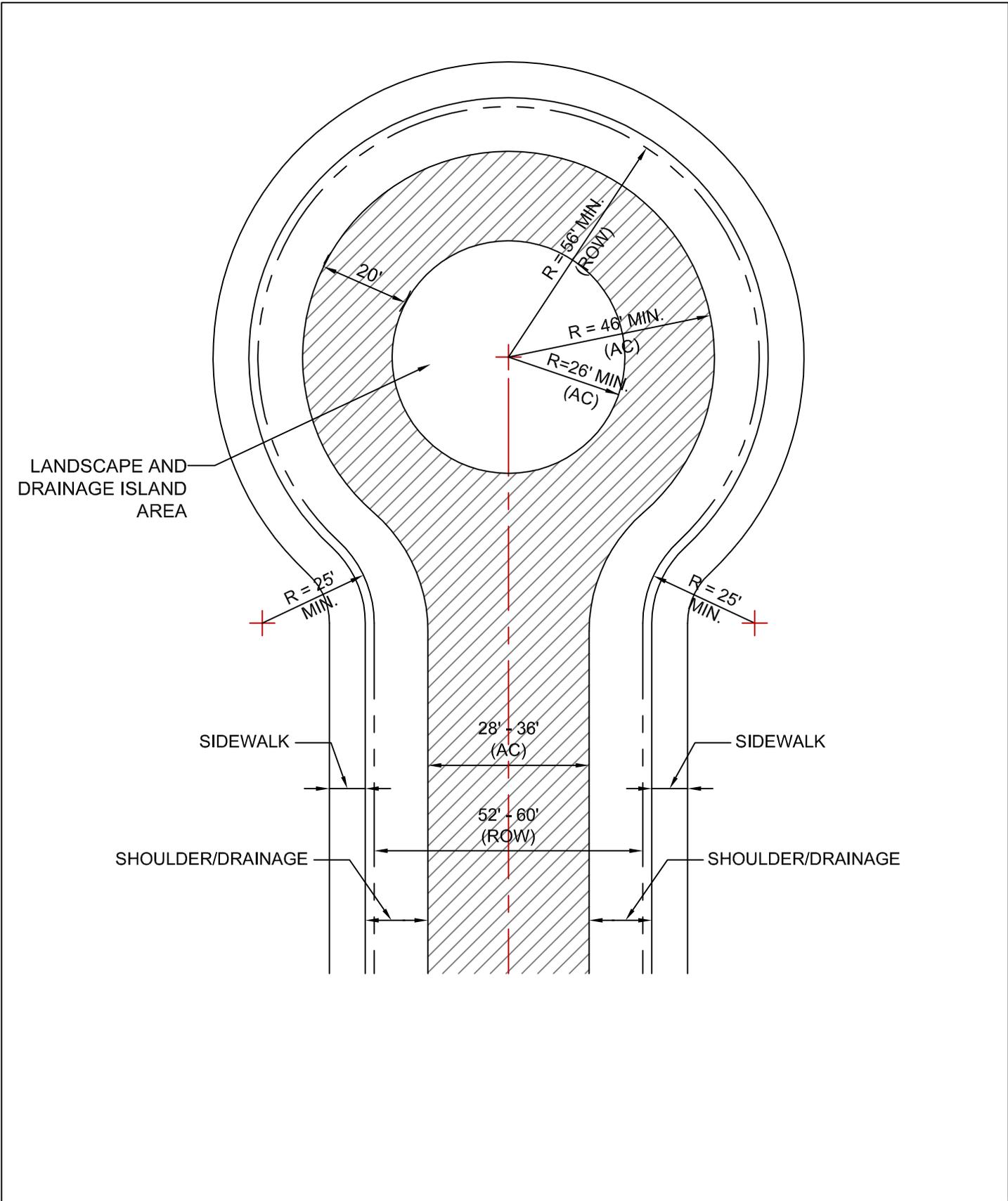
City of Sisters • Standard Detail

TYPICAL CONCRETE
DRIVEWAY APPROACH OPTION C

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING NO.

2-14



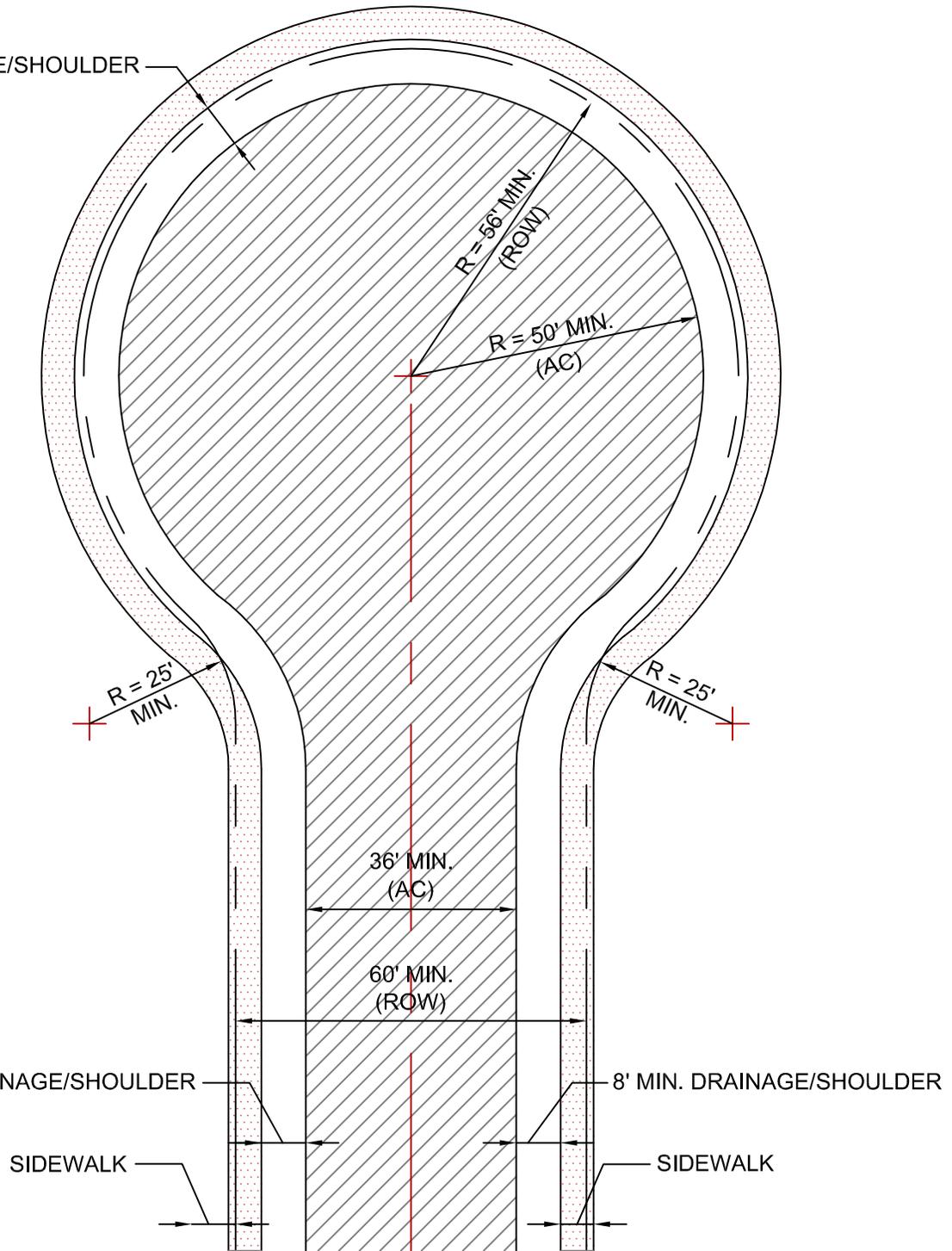
City of Sisters • Standard Detail

RESIDENTIAL
CUL-DE-SAC

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING NO.
2-15

8' MIN. DRAINAGE/SHOULDER



8' MIN. DRAINAGE/SHOULDER

SIDEWALK

8' MIN. DRAINAGE/SHOULDER

SIDEWALK



City of Sisters • Standard Detail

COMMERCIAL/INDUSTRIAL
CUL-DE-SAC

SCALE:

NONE

DRAWN BY:

EH

APPROVED BY:

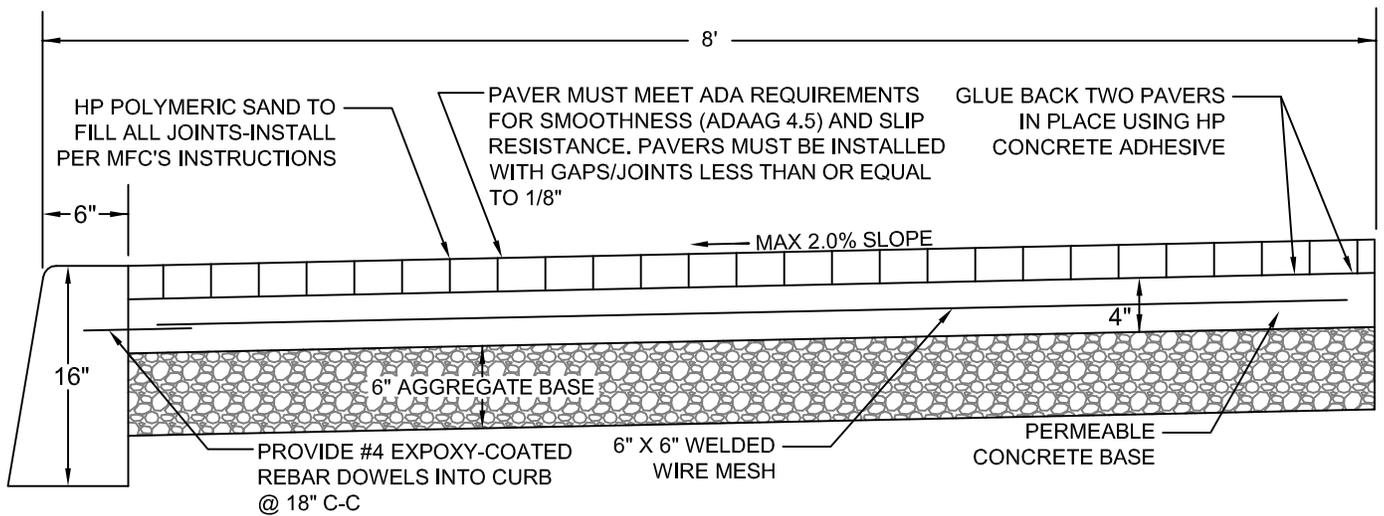
PB

REVISION DATE:

12/03/2013

DRAWING
NO.

2-16



City of Sisters • Standard Detail

INTERLOCKING PAVER
SIDEWALKS

SCALE:	NONE
DRAWN BY:	EH
APPROVED BY:	PB
REVISION DATE:	12/03/2013

DRAWING
NO.

2-17