NOTES:
1. MATERIAL - WSDOT CONCRETE CLASS 4000psi.
2. FULL DEPTH EXPANSION JOINT SHALL BE INSTALLED ON CENTERLINE WHEN DRIVEWAY WIDTH IS 16' OR GREATER AND ON ALL COMMERCIAL/INDUSTRIAL DRIVEWAYS
3. CURB SHALL BE IN COMPLIANCE WITH STD DETAIL 312.
4. NO REBAR SHALL BE PLACED IN CURB, GUTTER, DRIVEWAY, OR SIDEWALK.
5. DRIVEWAY APRON SHALL MATCH AMENITY ZONE WIDTH. IF NO AMENITY ZONE IS PRESENT DRIVEWAY APRON SHALL BE 3'.
6. SIDEWALK SHOULD NOT BE NARROWED DOWN THROUGH DRIVEWAY APPROACH, AND SHALL BE ADA COMPLIANT.
7. CURB TRANSITION (DRIVEWAY WING) SHALL BE 2'-6" ON RESIDENTIAL STREETS, AND 5' ON ARTERIAL AND COLLECTOR STREETS.
8. THE USE OF REVERSE SLOPE MUST BE APPROVED BY THE ENGINEER.
9. CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 3/8" UNLESS A REVERSE SLOPE IS USED. WHEN A REVERSE SLOPE IS USED CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 2".

LEGEND
* 1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX)

SECTION A-A (TYPICAL)
SECTION A-A (REVERSE SLOPE)
NOTES:
1. MATERIAL - WSDOT CONCRETE CLASS 4000psi.
2. FULL DEPTH EXPANSION JOINT SHALL BE INSTALLED ON CENTERLINE WHEN DRIVEWAY WIDTH IS 16' OR GREATER AND ON ALL COMMERCIAL/INDUSTRIAL DRIVEWAYS.
3. CURB SHALL BE IN COMPLIANCE WITH STD DETAIL 312.
4. NO REBAR SHALL BE PLACED IN CURB, GUTTER, DRIVEWAY, OR SIDEWALK.
5. SIDEWALK SHOULD BE 8' WIDE AND MAINTAIN 8' WIDTH THROUGH DRIVEWAY. SIDEWALK SHALL BE ADA COMPLIANT.
6. SIDEWALK THROUGH DRIVEWAY APPROACH MAY REQUIRE A PERMANENT EASEMENT.
7. CURB TRANSITION (DRIVEWAY WING) SHALL BE 2'-6" ON RESIDENTIAL STREETS, AND 5' ON ARTERIAL AND COLLECTOR STREETS.
8. THE USE OF REVERSE SLOPE MUST BE APPROVED BY THE ENGINEER.
9. CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 3/8" UNLESS A REVERSE SLOPE IS USED. WHEN A REVERSE SLOPE IS USED CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 2".

LEGEND

- 1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX)
NOTES:
1. MATERIAL - WSDOT CONCRETE CLASS 4000psi.
2. FULL DEPTH EXPANSION JOINT SHALL BE INSTALLED ON CENTERLINE WHEN DRIVEWAY WIDTH IS 16' OR GREATER AND ON ALL COMMERCIAL/INDUSTRIAL DRIVEWAYS.
3. CURB SHALL BE IN COMPLIANCE WITH STND DETAIL 312.
4. NO REBAR SHALL BE PLACED IN CURB, GUTTER, DRIVEWAY, OR SIDEWALK.
5. SIDEWALK SHOULD BE 8' WIDE AND MAINTAIN 8' WIDTH THROUGH DRIVEWAY. SIDEWALK SHALL BE ADA COMPLIANT.
6. THE USE OF REVERSE SLOPE MUST BE APPROVED BY THE ENGINEER.
7. DRIVEWAY APRON WIDTH SHALL BE 4' MIN, 15' MAX AND SHALL BE DESIGNED TO BE ADA COMPLIANT.
8. DROP DOWN DRIVEWAYS SHOULD NOT BE USED UNLESS ALL OTHER DRIVEWAY TYPES ARE INFEASIBLE AND MUST BE APPROVED BY THE ENGINEER.
9. CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 3/8" UNLESS A REVERSE SLOPE IS USED. WHEN A REVERSE SLOPE IS USED CURB HEIGHT THROUGH THE DRIVEWAY SHALL BE 2".

LEGEND

• 1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX)

** 7.5% OR FLATTER RECOMMENDED FOR DESIGN / FORMWORK (8.33% MAX)
NOTES:

1. ALL COMMERCIAL/INDUSTRIAL DRIVEWAYS SHALL HAVE AN EXPANSION JOINT LOCATED MID-WIDTH.
2. EXPOSED PIPE ENDS SHALL BE BEVELED
3. PIPE COVER SHALL BE IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS.
4. PIPE SHALL BE INSTALLED IN A STRAIGHT UNIFORM ALIGNMENT AT A MIN. 0.5% SLOPE.
5. DRIVEWAYS SHALL BE PAVED FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE.
6. PIPES LARGER THAN 18” REQUIRE A TRASH TRACK RACK (SEE DETAIL 702).
SHARED DRIVEWAY

WITH CURB

PROPERTY LINES

AMENITY ZONE

FACE OF CURB

WITHOUT CURB

PROPERTY LINES

SHARED DRIVEWAY

EDGE OF SHOULDER

EDGE OF PAVEMENT
TREES SHALL BE ON THE APPROVED STREET TREE LIST.
INTERLOCKING PLASTIC TIES "DO NOT OVER TIGHTEN"
2" DIAM DOUG-FIR STAKE OR METAL ROD. STAKES & RODS TO BE LOCATED OUTSIDE OF ROOT BALL

LOW GROWING SHRUBS & GROUND COVER
Curb and gutter
IMPORTED SOIL
COMPACTED SUBGRADE (80% MIN)

2" DIAM DOUG-FIR STAKE OR METAL ROD. STAKES & RODS TO BE LOCATED OUTSIDE OF ROOT BALL

18" DEEP ROOT BARRIER REQUIRED ON BOTH SIDES AT 8' CENTER TO CENTER

NOTES:
1. TREE PIT SHALL NOT BE LESS THAN 2 TIMES ROOT BALL DIAM.
2. CUT ALL TIES & FOLD BACK BURLAP FROM UPPER ⅓ OF ROOT BALL.
3. WATER DAILY UNTIL ESTABLISHED, FERTILIZE & USE GROWTH HORMONE.
4. WHERE A CONTINUOUS PLANTING STRIP IS ALLOWED, WIDEN TREE PIT TO SIDEWALK.
5. STREET TREES SHOULD BE CENTERED WITHIN THE AMENITY ZONE.
6. STREET TREES SHOULD BE SPACED 25' OR GREATER ON CENTER. SPACING SHOULD BE DETERMINED BASED ON TREE SPECIES, THE LOCATION OF UTILITIES, AND THE LOCATION OF TRAFFIC CONTROL DEVICES.
7. REFER TO SECTION 15.2 OF THE EDM FOR ADDITIONAL LANDSCAPING REQUIREMENTS.
8. STREET TREE REPLACEMENT SHALL BE PER SMC CHAPTER 12.30.040.
1. SIDEWALK AND CURB & GUTTER SHALL NOT BE POURED MONOLITHICALLY.
2. AN EXPANSION JOINT WILL BE REQUIRED WHEN CONCRETE SIDEWALK IS SURROUNDED BY OTHER HARD SURFACES (CURB & GUTTER, CURB RAMPS, DRIVEWAYS, ETC.) OR AS DIRECTED BY THE CITY ENGINEER.
3. EXPANSION JOINTS SHALL BE INSTALLED AROUND FIRE HYDRANTS, POLES, POSTS, UTILITY CASTINGS, AND ALONG WALLS OR STRUCTURES IN PAVED AREAS.
4. CONTRACTION/CONTROL JOINT SHALL BE 1/4" SIDE BY 25% SLAB DEPTH; 1" DEEP FOR 4" SLAB, 1.5 DEEP FOR 6" SLAB, 2" DEEP FOR 8" SLAB, AT 5’ SPACING.
5. SIDEWALK SHALL BE ADA COMPLIANT.
6. LIDS FOR JUNCTION BOXES AND UTILITY VAULTS SHALL BE NON-SKID, FLUSH WITH THE SURFACE, AND MATCH THE GRADE OF THE SIDEWALK.
7. CONCRETE SHALL BE CLASS 4000 PER SECTION 6-02 OF WSDOT STANDARD SPECIFICATIONS.
8. REMOVAL/REPLACEMENT OF CEMENT CONCRETE SIDEWALK SHALL BE FROM EXPANSION JOINT TO EXPANSION JOINT UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
9. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 8-14 OF WSDOT STANDARD SPECIFICATIONS AND AS SHOWN ON THE STANDARD DETAILS.
COMPACTED SUBGRADE
CRUSHED SURFACING TOP COURSE
HOT MIX ASPHALT

SCALE: NOT TO SCALE

STANDARD DETAIL NUMBER: 309

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER

PUBLICATION DATE: 03/01/2020
REVISION DATE: 02/11/2020
Amenity Zone

Sidewalk

1' setback from slopes/ditches

5' min

Paved landing

15' max

Isometric View

Section A-A

Cement concrete sidewalk

15' max

Match existing or proposed surface

2" asphalt concrete

3' 1'

Ditch

2" crushed surfacing top course

Notes:
1. Ramp, curb taper, and landing all asphalt over 2" CSTC.
2. Locate catch basins at end of improvements to facilitate future extensions/connections.
3. For widths of pavement and shoulder see Stnd Dwg 201, 204 & 205.
4. For transitions adjacent to ditches, ditch sloping (3:1 typical), 1' setback & pipe bevel end design (see Stnd Dwg 701) may be required.
5. For curb and sidewalk joints see Stnd Dwg 309.
6. Detectable warning pattern (truncated domes) may be required if ramp crosses travel lane of public street or as specified by the City Traffic Engineer (see Stnd Dwg 318).
7. Curb radius required at intersections.
8. Existing shoulder may require restoration with CSTC.

Legend

1.5% or flatter recommended for design/formwork (2% max)

7.5% or flatter recommended for design/formwork (8.33% max)

Approval by: Tricia Juhnke
City Engineer

Publication Date: 03/01/2020 | Revision Date: 02/11/2020

Standard Detail Number: 311 Scale: Not to Scale

Asphalt Transition Ramp to Shoulder
**TYPE A CURB AND GUTTER**

- Top of Roadway: 1.5'
- 2'' Min Crushed Surfacing Top Course
- Compacted Subgrade
- 1.5''
- 3'' MIN

**DEPRESSED CURB AND GUTTER**

- Top of Roadway: 1.5'
- 2'' Min Crushed Surfacing Top Course
- Compacted Subgrade
- 1.5''
- 3'' MIN

**MEDIAN CURB AND GUTTER**

- Top of Roadway: 1.5'
- 2'' Min Crushed Surfacing Top Course
- Compacted Subgrade
- 1.5''
- 3'' MIN

**DRIVEWAY CURB AND GUTTER**

- Top of Roadway: 1.5'
- 2'' Min Crushed Surfacing Top Course
- Compacted Subgrade
- 1.5''
- 3'' MIN

**NOTES:**

*Reverse slope must be approved by the Engineer*
**2'' for reverse slope**
CRUSHED SURFACING

TOP COURSE

COMPACTED SUBGRADE

6"

CEMENT CONCRETE SIDEWALK,
CURB RAMP AND, LANDING

3/8" PREMOLDED JOINT FILLER

VARIES
(0" TO 6")

3/8"

CRUSHED SURFACING
TOP COURSE

COMPACTED SUBGRADE

1/2"R

1"R

6"
CROSSWALK STRIPING SHALL BE THERMOPLASTIC. SEE STND DWGS 315 & 316 FOR CROSSWALK DETAILS

STOP BAR (IF APPLICABLE) SHALL BE THERMOPLASTIC. SEE STND DWG 315 & DWG 316 FOR STOP BAR DETAILS

RADIUS TO BE DETERMINED BY STREET TYPE, AND DESIGN VEHICLE

NOTES:
1. INTERSECTION RADII SHALL ACCOMMODATE DESIGN VEHICLES APPLICABLE TO STREET.
2. LENGTH OF CURB EXTENSIONS MUST RECOGNIZE SITE CONDITIONS, E.G. DRIVEWAY LOCATIONS.
3. CATCH BASINS SHALL BE INSTALLED AT LOW POINTS ALONG CURB LINE TO PREVENT PONDING.
STOP LINE SHALL BE REQUIRED AT ALL STOP CONTROLLED INTERSECTIONS. SHALL BE 16" AT STOP SIGNS AND 24" AT SIGNALS.

EDGELINE OR CURBLINE EXTENDED SHALL HAVE A MINIMUM ZERO OFFSET.

RAMP AND LOWER LANDING SHALL BE CONTAINED IN CROSSWALK.

NOTE:
1. CURB RAMPS SHALL BE A MINIMUM OF 2' APART.
2. DRAINAGE STRUCTURES SHALL MANAGE SURFACE WATER AT MARKED CROSSWALKS.
3. STOP LINES AND CROSSWALKS SHALL BE THERMOPLASTIC.

LEGEND
• USE 5' TYPICAL SPACING IF LANES LINES ARE NOT MARKED
  ** STOP LINE SHALL BE LOCATED 4' BEHIND MARKED OR UNMARKED CROSSWALKS
  ← TRAFFIC DIRECTION

NOTES:
STOP LINE SHALL BE REQUIRED AT ALL STOP CONTROLLED INTERSECTIONS. SHALL BE 16" AT STOP SIGNS AND 24" AT SIGNALS.

EDGELINE OR CURBLINE EXTENDED

SHALL HAVE A MINIMUM ZERO OFFSET

RAMP AND LOWER LANDING SHALL BE CONTAINED IN CROSSWALK

2' MIN

STOP LINE SHALL BE LOCATED 4' MIN BEHIND MARKED OR UNMARKED CROSSWALKS. STOP LINE FOR LEFT TURN LANES MAY BE PUSHED BACK, AT THE DISCRETION OF THE ENGINEER, TO ACCOMMODATE OVERSIZED VEHICLES' TURNING MOVEMENTS.

TRAFFIC DIRECTION

NOTES:
1. CURB RAMPS SHALL BE A MINIMUM OF 2' APART 2.
2. IN ORDER TO PROVIDE SAFE STREETS FOR PEDESTRIANS, DRAINAGE STRUCTURES WILL BE REQUIRED TO MANAGE SURFACE WATER AT MARKED CROSSWALKS WHERE AFFECTED BY RUNOFF.
3. STOP LINES AND CROSSWALKS SHALL BE THERMOPLASTIC.
MATCH SIDEWALK WIDTH. SHALL BE 5’ MIN.

OPTIONAL. RAMP LAYOUT REFLECTS TYPICAL RESIDENTIAL/ARTERIAL INTERSECTION WHERE THE CROSSWALK ACROSS THE ARTERIAL HAS BEEN CLOSED. CLOSING CROSSWALKS OR MAINTAINING THE CLOSURE OF THE CROSSWALK REQUIRES APPROVAL BY THE CITY TRAFFIC ENGINEER AND PROPER SIGNAGE.

NOTES:
2. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACE PLANES SHALL BE FLUSH.
3. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES ON ANY PART OF THE CURB RAMP OR LANDING.
4. THE CURB RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET UNLESS SHOWN OTHERWISE IN THE CONTRACT PLANS. WHEN APPLYING THE 15-FOOT MAX LENGTH (MEASURED FROM BACK OF SIDEWALK) THE RUNNING SLOPE OF THE CURB RAMP IS ALLOWED TO EXCEED 8.3%. USE A SINGLE CONSTANT SLOPE FROM BOTTOM OF RAMP TO TOP OF RAMP TO MATCH INTO THE SIDEWALK OVER A HORIZONTAL DISTANCE OF 15 FEET.
5. CURB RAMP, LANDING, AND FLARES SHALL RECEIVE BROOM FINISH PER WSDOT STANDARD SPECIFICATIONS 8-14.
6. CURB RAMP SHALL BE ADA COMPLIANT.
NOTES:
1. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACES SHALL BE FLUSH.
2. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES ON ANY PART OF THE CURB RAMP OR LANDING, OR IN FRONT OF THE CURB RAMP WHERE IT CONNECTS TO THE ROADWAY.
3. BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. THE CURB RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET UNLESS SHOWN OTHERWISE ON THE CONTRACT PLANS. WHEN APPLYING THE 15-FOOT MAX LENGTH THE RUNNING SLOPE IS ALLOWED TO EXCEED 8.3%. USE A SINGLE CONSTANT SLOPE FROM BOTTOM OF RAMP TO TOP OF RAMP TO MATCH THE LANDING OVER A HORIZONTAL DISTANCE OF 15 FEET. DO NOT INCLUDE THE ABUTTING LANDING IN THE 15-FOOT MAX MEASUREMENT.
5. CURB RAMPS SHALL BE ADA COMPLIANT.
6. RAMP AND LANDING WIDTHS SHALL NOT INCLUDE EXPANSION JOINTS.
7. LANDING WIDTH SHALL MATCH CURB RAMP WIDTH.
9. SHARED DIAGONAL PERPENDICULAR RAMPS SHALL NOT BE INSTALLED UNLESS ALL OTHER DESIGN OPTIONS ARE UNABLE TO BE CONSTRUCTED DUE TO SITE CONSTRAINTS.
10. RAMP CENTERLINE SHALL BE RADIAL/PERPENDICULAR TO THE ALIGNMENT OF THE FACE OF CURB.
NOTES:
1. WHERE "GRADE BREAK" IS CALLED OUT, THE ENTIRE LENGTH OF THE GRADE BREAK BETWEEN THE TWO ADJACENT SURFACES SHALL BE FLUSH.
2. DO NOT PLACE GRATINGS, JUNCTION BOXES, ACCESS COVERS, OR OTHER APPURTENANCES ON ANY PART OF THE CURB RAMP OR LANDING, OR IN FRONT OF THE CURB RAMP WHERE IT CONNECTS TO THE ROADWAY.
3. BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
4. THE CURB RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET UNLESS SHOWN OTHERWISE ON THE CONTRACT PLANS. WHEN APPLYING THE 15-FOOT MAX LENGTH THE RUNNING SLOPE IS ALLOWED TO EXCEED 8.3%. USE A SINGLE CONSTANT SLOPE FROM BOTTOM OF RAMP TO TOP OF RAMP TO MATCH THE LANDING OVER A HORIZONTAL DISTANCE OF 15 FEET. DO NOT INCLUDE THE ABUTTING LANDING IN THE 15-FOOT MAX MEASUREMENT.
5. CURB RAMPS SHALL BE ADA COMPLIANT.
6. RAMP AND LANDING WIDTHS SHALL NOT INCLUDE EXPANSION JOINTS.
8. BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
RAMP LOCATIONS FOR NEW CONSTRUCTION OR STANDARD RECONSTRUCTION

NOTES:

1. CURB RAMP CONSTRUCTION MUST COMPLY WITH CURRENT ADA STANDARDS.
2. CONSTRUCT RAMP WITH A MINIMUM 1' CLEARANCE FROM FIXED OBJECTS SUCH AS HYDRANTS, POLES, INLETS, AND OTHER UTILITIES.
3. CONSTRUCT RAMP IN ACCORDANCE WITH STND DWGS 318 & 320.
4. CROSSWALKS ARE NOT ALWAYS MARKED.
5. WHEN RAMPS ARE CONSTRUCTED ON ONE SIDE OF STREET, COMPANION RAMPS SHALL BE CONSTRUCTED AT CORRESPONDING LOCATIONS ON OPPOSITE SIDE OF STREET.
NOTES:

1. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIALS BEING USED SHALL BE SPECIFIED IN THE SHOP DRAWINGS.

2. ALL ALUMINUM PARTS SHALL BE GIVEN A BLACK ANODIC COATING AT LEAST 0.0006 INCH THICK AND BE HOT WATER SEALED AND SHALL HAVE A UNIFORM FINISH.

3. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.

4. PIPE RAILING, PIPE BALUSTERS AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO ENSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.

5. WELDING OF ALUMINUM SHALL BE IN ACCORDANCE WITH THE LATEST AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

6. ALLOW FOR EXPANSION AT APPROXIMATELY EVERY FOURTH POST.

7. TOP OF RAIL:
   - 3 FEET 6 INCHES FOR PEDESTRIAN USES
   - 4 FEET 6 INCHES FOR COMBINED BICYCLE AND PEDESTRIAN USES

8. 50LB RAIL LOADING PER IBC, CURRENT EDITION.

9. ALL CONCEALED FASTENERS THROUGHOUT.
NOTES:
1. STEPS SHALL BE A MINIMUM OF 4'-0" WIDE, CURB TO CURB, PLUS 6" CURBS ON EACH SIDE.
2. CEMENT CONCRETE SHALL BE CLASS 4000psi TROWEL Finish.
3. NUMBER OF STEPS SHALL SUIT INDIVIDUAL CONDITIONS, WITH TREAD AND RISER DIMENSIONS TO SUIT THE GRADE.
4. RISERS SHALL BE 5" MINIMUM, 7" MAXIMUM: TREAD SHALL BE 11" MINIMUM, 12" MAXIMUM.
5. HANDRAIL REQUIRED ON BOTH SIDES PER IBC.
6. ALL STEPS SHALL BE UNIFORM HEIGHT & DEPTH.
THE RISER TREAD AND BOTTOM ELEMENT OF HANDRAIL SHALL BE LESS THAN 6" AT ITS LARGEST DIMENSION.

THE RISER TREAD AND BOTTOM ELEMENT OF HANDRAIL SHALL BE LESS THAN 6" AT ITS LARGEST DIMENSION.

34"(MIN), 38"(MAX) NOSING TO TOP OF RAILING

3½ EXPANSION JOINT MATERIAL
MATCH EXISTING PRIVATE WALK

MATCH SIDEWALK GRADE

1½ EXPANSION JOINT MATERIAL CONC. CL. 3000

#4 BARS 2' O.C. (TYP)

#4 BARS

8' MAX

SET POSTS ON TREAD

A

4" MAX

6"

11" MIN, 12" MAX

SLOPE TO DRAIN

16 GA. GALV. STEEL SLEEVE 3" DIA

6"

NON-SHRINK GROUT

POST DETAIL

SECTION A-A

NOTES:
1. CEMENT CONCRETE STEPS AND CURBS SHALL BE CONSTRUCTED AS SHOWN ON STND DWG 325.
2. HEIGHT OF RAILING SHALL BE 36" MINIMUM, 38" MAXIMUM TOP OF NOSING TO TOP OF RAILING.
3. PEDESTRIAN RAILING SHALL BE CONSTRUCTED AS SHOWN ON STND DWG 324.
4. CLEAR SPACE BETWEEN BALUSTERS SHALL BE A MAXIMUM OF 4".
5. ALL STEPS SHALL HAVE HANDRAIL ON BOTH SIDES 5.

STANDARD DETAIL NUMBER: 326 SCALE: NOT TO SCALE

CEMENT CONCRETE STAIRWAY

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER
PUBLICATION DATE: 03/01/2020 REVISION DATE: 02/11/2020
NOTE:
ALL COMPONENTS SHALL BE BLACK.

PIPE SCHEDULE
(ALL DIMENSION I.D.)

<table>
<thead>
<tr>
<th>TOP/BOTTOM RAIL</th>
<th>CORNER/ END POST</th>
<th>LINE POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25&quot;</td>
<td>2.5&quot;</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

NOTES:
1. RAILING SHALL BE ALUMINUM PIPE RAIL OR APPROVED EQUIVALENT. INSTALLATION PER MANUFACTURER’S RECOMMENDATIONS.
2. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIALS BEING USED SHALL BE SPECIFIED IN THE SHOP DRAWINGS.
3. ALL ALUMINUM PARTS SHALL BE GIVEN A BLACK ANODIC COATING AT LEAST 0.0006 INCH THICK AND BE HOT WATER SEALED AND SHALL HAVE A UNIFORM FINISH.
4. WIRE FABRIC SHALL BE GIVEN A BLACK FUSED BONDED VINYL COATING TO MATCH FINISHED POSTS.
5. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
6. ALL MATERIALS SHALL BE ADEQUATELY WRAPPED TO ENSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.
7. ANY WELDING OF ALUMINUM SHALL BE IN ACCORDANCE WITH THE LATEST AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.
9. TOP OF RAIL: 3 FEET 6 INCHES MIN FOR PEDESTRIAN USES/ 4 FEET 6 INCHES MIN FOR COMBINED BICYCLE AND PEDESTRIAN USES.
### TABLE 1

<table>
<thead>
<tr>
<th>USE</th>
<th>MINIMUM WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIKE PATH (ONE WAY)</td>
<td>5'</td>
</tr>
<tr>
<td>BIKE PATH (TWO WAY)</td>
<td>10'</td>
</tr>
</tbody>
</table>

**NOTES:**

1. ALL PLANS MUST BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION OF THE BIKE PATH. BIKE PATH CENTERLINE SHALL BE STAKED IN FIELD BY CONTRACTOR AND APPROVED BY THE CITY INSPECTOR.

2. MINIMUM BRANCH CLEARANCE ABOVE PATH SURFACE = 7'-0" (TYPICAL).

3. SEE BIKE LANE MARKINGS - STANDARD DETAIL NUMBER: 410
NOTES:
1. ALL PLANS MUST BE APPROVED BY THE CITY PRIOR TO CONSTRUCTION OF THE TRAIL. TRAIL CENTERLINE TO BE STAKED IN FIELD BY CONTRACTOR AND APPROVED BY THE CITY INSPECTOR.
2. ALL HAZARD TREES AND TREE LIMBS, AS DEFINED BY THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES HAZARD TREE BULLETIN, SHALL BE FELLED AND REMOVED FROM THE SITE.
3. SUBGRADE TO BE TREATED WITH AN APPROVED HERBICIDE PRIOR TO PLACING ASPHALT.
4. MINIMUM BRANCH CLEARANCE ABOVE TRAIL SURFACE = 7'-0" (TYPICAL).
5. ANY TRAILS USED FOR MAINTENANCE, 8' MIN. WIDTH.

### TABLE 1

<table>
<thead>
<tr>
<th>USE</th>
<th>WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOT PATH</td>
<td>5'</td>
</tr>
<tr>
<td>BIKE PATH (ONE WAY)</td>
<td>8'</td>
</tr>
<tr>
<td>BIKE PATH (TWO WAY)</td>
<td>12'</td>
</tr>
</tbody>
</table>

TYPICAL TRAIL SECTION

4" OF 3/8" MINUS CRUSHED ROCK, COMPACTED TO 95% DENSITY

1.5% (TYP), 2% (MAX) CROSS-SLOPE

4" HMA

3' MIN 6:1 (TYP), 3:1 (MAX)

7' TYP (SEE NOTE 4)

SUBGRADE COMPACTED TO 95% DENSITY

REFER TO TABLE 1
NOTE: ALL LUMBER SHALL BE PRESSURE-TREATED LP-22 OF AS APPROVED BY OWNER. FASTEN ALL MATERIALS W/ 12d GALVANIZED COMMON NAILS UNLESS OTHERWISE INDICATED.

9" O.C. (TYP)
8' (TYP)

ALTERNATE JOINTS W/ TOP 2X4 RAIL
(2) 2X4 HORIZONTAL RAILS SANDWICHED

FENCE FABRIC (CONT.) 2X4, 10GA/10GA WOVEN FABRIC, HOT DIP GALVANIZED FINISH

VERTICAL 2X4 @ POST (4X4 POST BEYOND)
(2) 2X4 HORIZONTAL RAILS SANDWICHED

NOTE: ALL LUMBER SHALL BE PRESSURE-TREATED LP-22 OF AS APPROVED BY OWNER. FASTEN ALL MATERIALS W/ 12d GALVANIZED COMMON NAILS UNLESS OTHERWISE INDICATED.

ELEVATION

2X6 CAP, EASE ALL EXPOSED EDGES 3/4"

(2) 2X4, INSTALL W/ 3/8" CARRIAGE BOLDS (TYP)

FENCE FABRIC FACING SIDE

VERTICAL 2X4 AT EACH POST

4X4 POST @ 4'6" O.C.

GRIND BOLTS FLUSH W/ HEX NUT (TYP)
(2) 2X4

CONCRETE BACK FILL

NOTE: DIAGONAL Brace RAILS (4x4) TO BE INSTALLED AT ALL END SECTIONS, TOP OF BRACE AT TOP OF END SECTION/CORNER.

SECTION

STANDARD DETAIL NUMBER: 335
SCALE: NOT TO SCALE

GREENBELT FENCE

APPROVED BY: TRICIA JUHNKE
CITY ENGINEER
PUBLICATION DATE: 03/01/2020
REVISION DATE: 02/11/2020