

**STANDARD ROADWAY SECTION**

- (A) RIGHT OF WAY REQUIREMENTS - 60'
- (B) PAVEMENT WIDTH - 20'
- (C) CONCRETE CURB AND GUTTER TYPE 1  
SEE STD DETAIL R-180
- (D) CEMENT CONCRETE SIDEWALK  
SEE STD DETAIL R-170
- (E) CONSTRUCTION EASEMENT REQUIRED

**NOTES:**

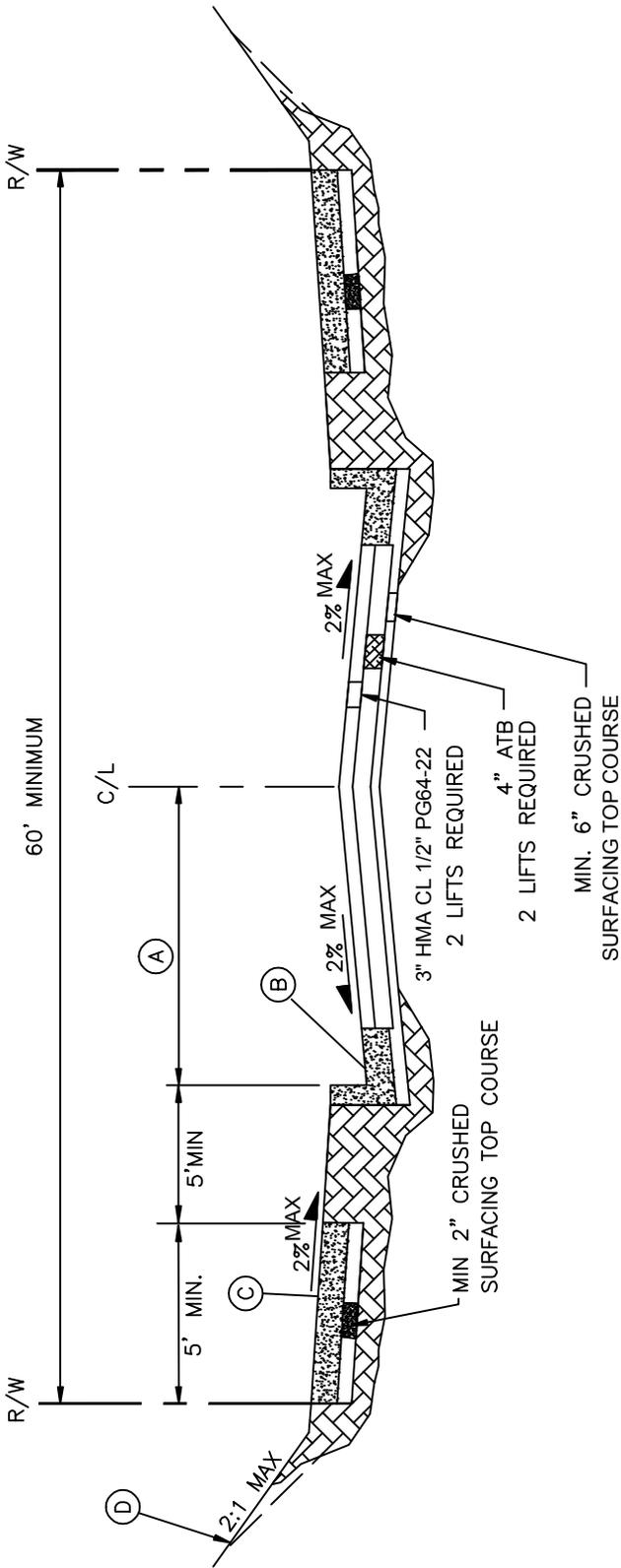
1. IN WIDENING AREAS, THE EXISTING PAVEMENT EDGE SHALL BE SAW-CUT TO LEAVE A JOIN POINT. ANY TRAFFIC STRIPING REMOVED OR DAMAGED DURING WIDENING WORK SHALL BE REPLACED IN KIND OR AS DIRECTED BY THE CITY ENGINEER.
2. COMPACTION TESTS ON SUBGRADE AND SURFACING ARE REQUIRED. THE NUMBER OF TESTS SHALL BE AT THE DISCRETION OF THE CITY INSPECTOR. ALL TESTING SHALL BE THROUGH A LICENSED TESTING LABORATORY. THE MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ON BOTH SUBGRADE AND SURFACING.
3. ADJUSTMENT OF CATCH BASIN LIDS OR GRATES, MONUMENTS CASES, VALVE BOXES, MANHOLE COVERS, ETC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER AS REQUIRED. ROADWAY SECTION MAY BE ADJUSTED WITH THE APPROVAL OF THE CITY ENGINEER UPON SUBMISSION OF SUBSTANTIATING ENGINEERING DATA (CBR, ETC) TO SUPPORT THE ADJUSTMENT. FOR DESIGN PURPOSES, THE MINIMUM THICKNESS OF CLASS B ASPHALT SHALL BE 3" COMPACTED DEPTH. COMPACTION SHALL BE AN AVERAGE OF 92% OF DRY, DENSITY PER WSDOT TEST METHOD 729.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL ROADWAY SECTION  
 LOCAL ACCESS STREET

STANDARD DETAIL  
 NUMBER  
**R-010**



**STANDARD ROADWAY SECTION:**

- (A) PAVEMENT WIDTH  
24' MINIMUM (VARIES)
- (B) CEMENT CONCRETE SIDEWALK  
SEE STD DETAIL R-170
- (C) CONCRETE CURB AND GUTTER TYPE 1  
SEE STD DETAIL R-180
- (D) CONSTRUCTION EASEMENT REQUIRED

**NOTES:**

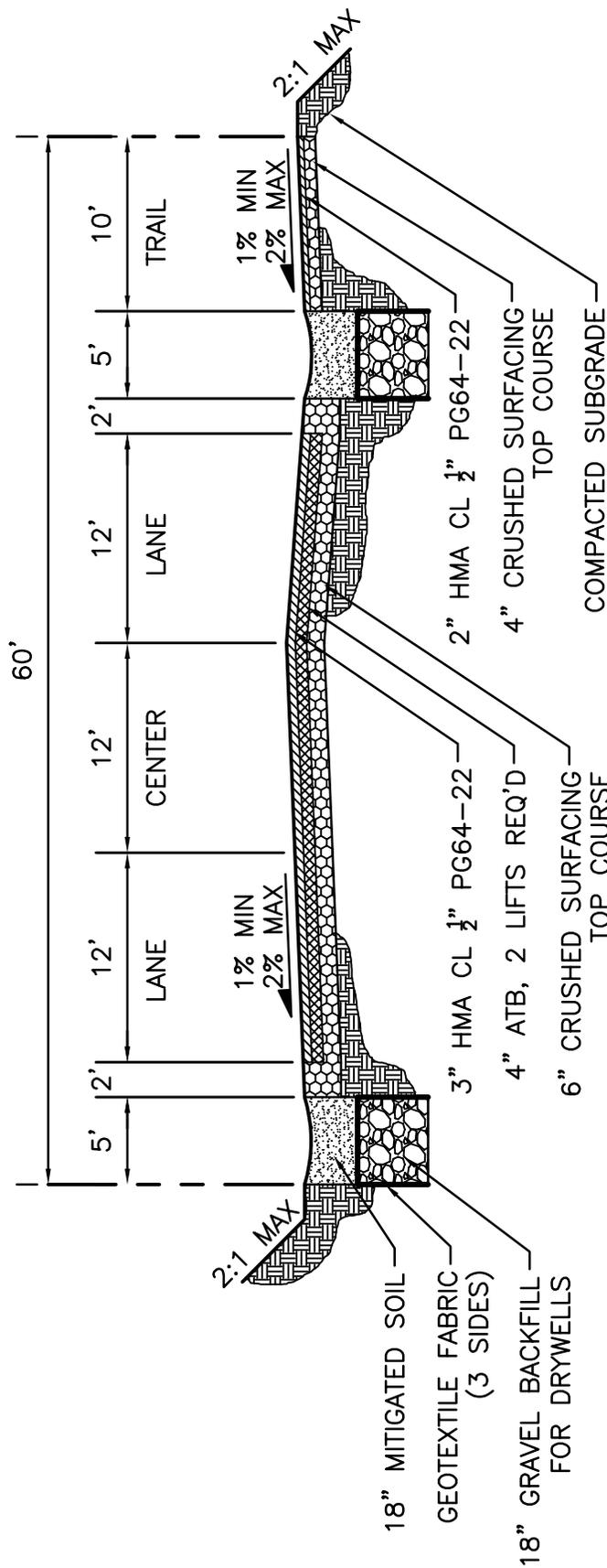
1. IN WIDENING AREAS, THE EXISTING PAVEMENT EDGE SHALL BE SAW-CUT TO LEAVE A JOINT POINT. ANY TRAFFIC STRIPING REMOVED OR DAMAGED DURING WIDENING WORK SHALL BE REPLACED IN KIND OR AS DIRECTED BY THE CITY ENGINEER.
2. COMPACTION TESTS ON SUBGRADE AND SURFACING SHALL BE REQUIRED. THE NUMBER OF TESTS SHALL BE AT THE DISCRETION OF THE CITY INSPECTOR. ALL TESTING SHALL BE THROUGH A LICENSED TESTING LABORATORY. THE MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ON BOTH SUBGRADE AND SURFACING.
3. ADJUSTMENT OF CATCH BASIN LIDS OR GRATES, MONUMENTS CASES, VALVE BOXES, MANHOLE COVERS, ETC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER AS REQUIRED.
4. ROADWAY SECTION MAY BE ADJUSTED WITH THE APPROVAL OF THE CITY ENGINEER UPON SUBMISSION OF SUBSTANTIATING ENGINEERING DATA (CBR, ETC) TO SUPPORT THE ADJUSTMENT. FOR DESIGN PURPOSES, THE MINIMUM THICKNESS OF CLASS B ASPHALT SHALL BE 3" COMPACTED DEPTH. COMPACTION SHALL BE AN AVERAGE OF 91% OF DRY DENSITY, WSDOT TEST METHOD 705.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |

DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL ROADWAY SECTION  
 ARTERIAL & INDUSTRIAL ACCESS

STANDARD DETAIL NUMBER  
**R-020**



**NOTES:**

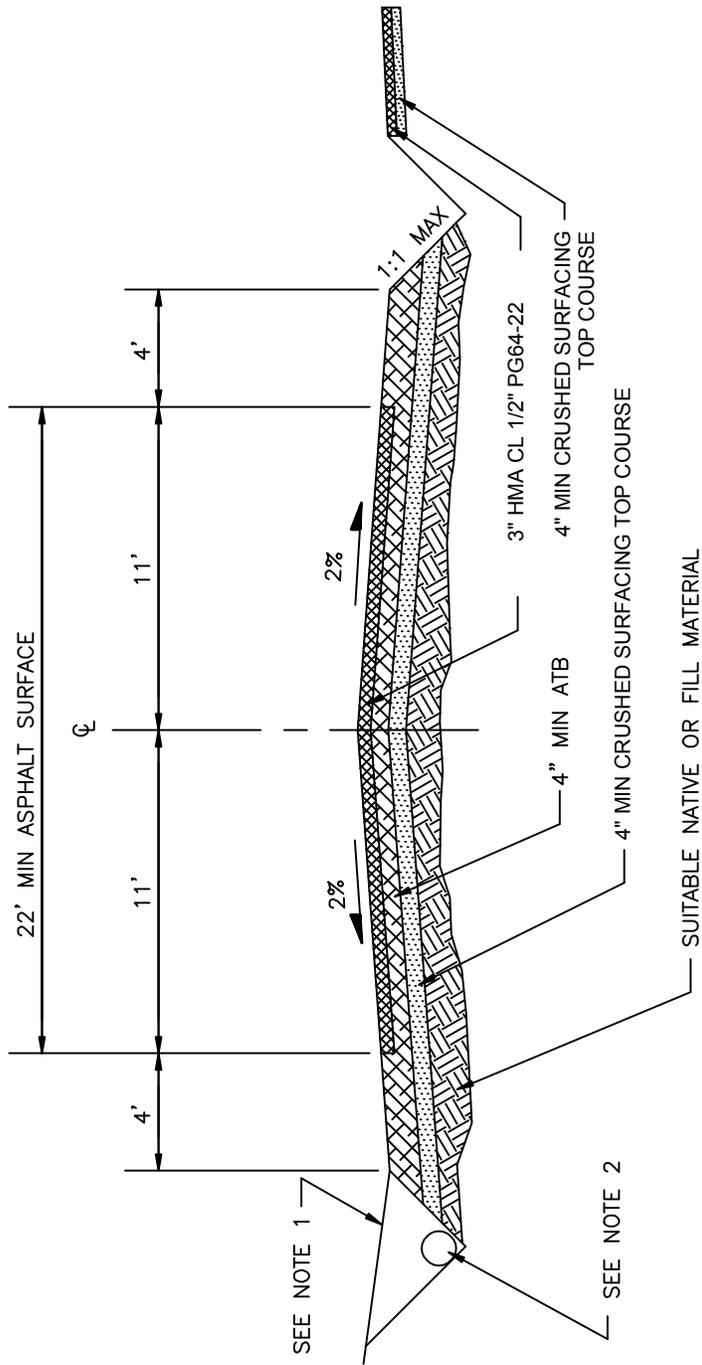
1. IN WIDENING AREAS, EXISTING PAVEMENT SECTION SHALL BE IMPROVED TO MATCH FLEXURAL STRENGTH OF NEW ASPHALT SECTION, UNLESS DEVIATION IS APPROVED BY CITY ENGINEER. THE EXISTING PAVEMENT EDGE SHALL BE SAW-CUT PRIOR TO PAVING, AND JOINTS SHALL BE SEALED. ANY TRAFFIC STRIPING REMOVED OR DAMAGED DURING WIDENING WORK SHALL BE REPLACED IN KIND OR AS DIRECTED BY THE CITY ENGINEER.
2. COMPACTION TESTS ON SUBGRADE AND SURFACING SHALL BE REQUIRED. THE NUMBER OF TESTS SHALL BE AT THE DISCRETION OF THE CITY INSPECTOR. ALL TESTING SHALL BE THROUGH A LICENSED TESTING LABORATORY. THE MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY ON BOTH SUBGRADE AND SURFACING.
3. ADJUSTMENT OF CATCH BASIN LIDS OR GRATES, MONUMENTS CASES, VALVE BOXES, MANHOLE COVERS, ETC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER AS REQUIRED.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL ROADWAY SECTION  
 INDUSTRIAL ACCESS

STANDARD DETAIL  
 NUMBER  
**R-025**



**NOTES:**

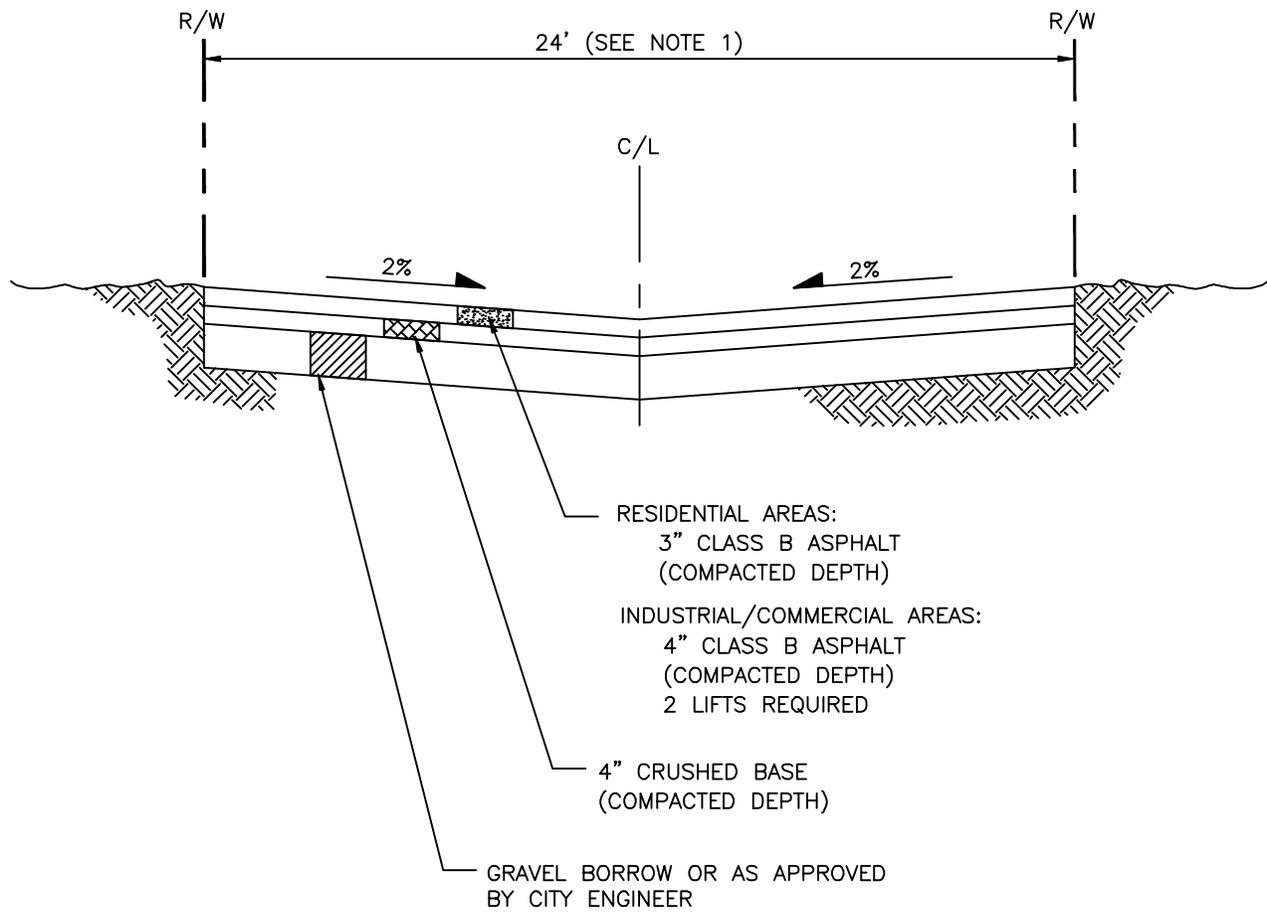
1. DRIVEWAY GRADE AT RIGHT-OF-WAY LINE SHALL CONFORM TO CHAPTER 2 OF THE CITY STANDARDS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
2. A 12-INCH MINIMUM CONCRETE OR CORRUGATED POLYETHYLENE SMOOTH INTERIOR PIPE IS REQUIRED UNDER ALL DRIVEWAYS.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL ROADWAY SECTION  
 MODIFIED STREET

STANDARD DETAIL  
 NUMBER  
**R-030**

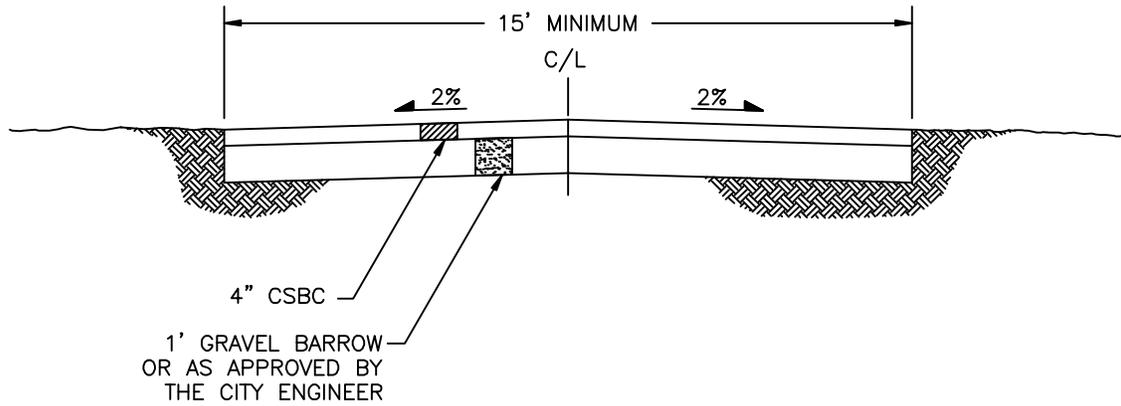


**NOTES:**

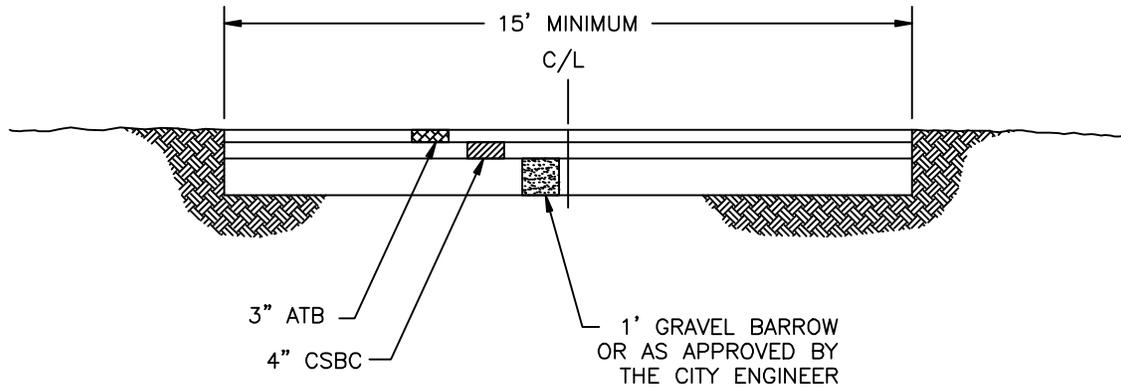
1. ALL NEW ALLEYS SHALL HAVE A MINIMUM WIDTH OF 24'. EXISTING ALLEY RIGHT-OF-WAYS MAY VARY FROM 12' TO 24'.
2. DRAINAGE TO BE COLLECTED AT LOW END OF IMPROVED SECTION WITH CATCH BASIN CONNECTED TO STORM DRAINAGE SYSTEM.
3. COMPACTION TESTS ON SUBGRADE AND AT THE TOP OF SUBGRADE WILL BE REQUIRED. THE NUMBER OF TESTS SHALL BE AT THE DISCRETION OF THE CITY INSPECTOR. ALL TESTING SHALL BE THROUGH A LICENSED TESTING LABORATORY. THE MINIMUM COMPACTION SHALL BE 95% OF MAXIMUM DENSITY OF BOTH SUBGRADE AND SURFACING.
4. ADJUSTMENT OF CATCH BASIN LIDS OR GRATES, MONUMENT CASES, VALVE BOXES, MANHOLE COVERS, ETC SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR DEVELOPER AS REQUIRED.

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|  | APPROVED BY  | L. OLIVE   | DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> | STANDARD DETAIL<br>NUMBER<br><br><b>R-040</b> |
|   | DATE         | 07/31/2008 |   |   |
|   | REF STD SPEC |            | TYPICAL ROADWAY SECTION<br>ALLEY                      |   |
|   |              |            |   |   |

### GRADES LESS THAN 8%



### GRADES 8% AND OVER



**NOTES:**

1. COMPACTION TESTS ARE REQUIRED. THE NUMBER OF TESTS TO BE FIELD DETERMINED BY THE CITY INSPECTOR. ALL TESTING SHALL BE PERFORMED BY A LICENSED TESTING LABORATORY. MINIMUM COMPACTION SHALL BE 95% MAXIMUM DENSITY OF BOTH SUBGRADE AND CSBC.
2. GRADES 8% AND OVER REQUIRE 3" ATB. COMPACTION SHALL BE AN AVERAGE OF 92% OF DRY DENSITY.



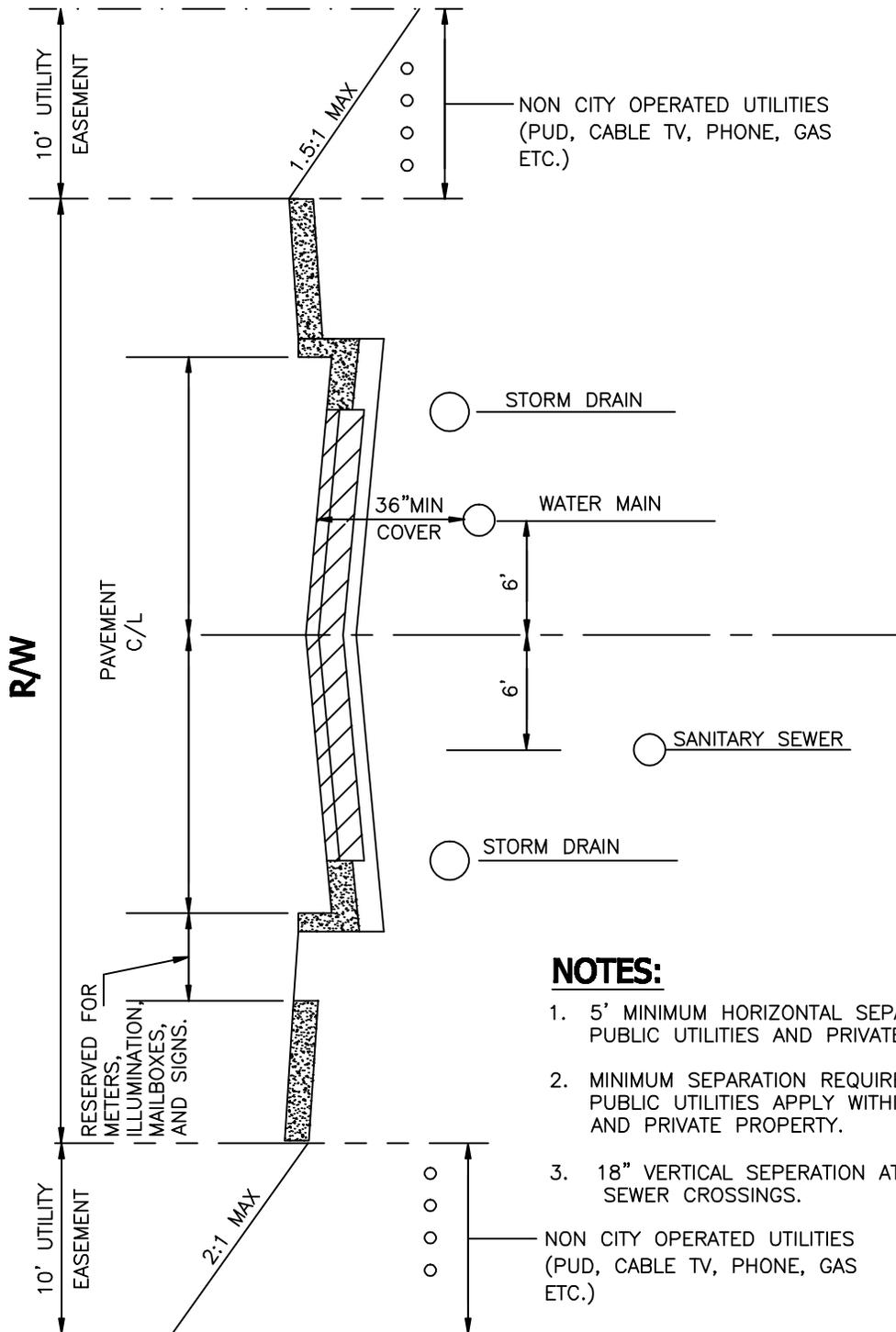
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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**DEPARTMENT OF PUBLIC WORKS**  
**STANDARD DETAILS**  
**ALL WEATHER SURFACES FOR**  
**UTILITY ACCESS**

|                        |
|------------------------|
| STANDARD DETAIL NUMBER |
| R-050                  |

NORTH OR EAST  
SIDE OF STREET

SOUTH OR WEST  
SIDE OF STREET



**NOTES:**

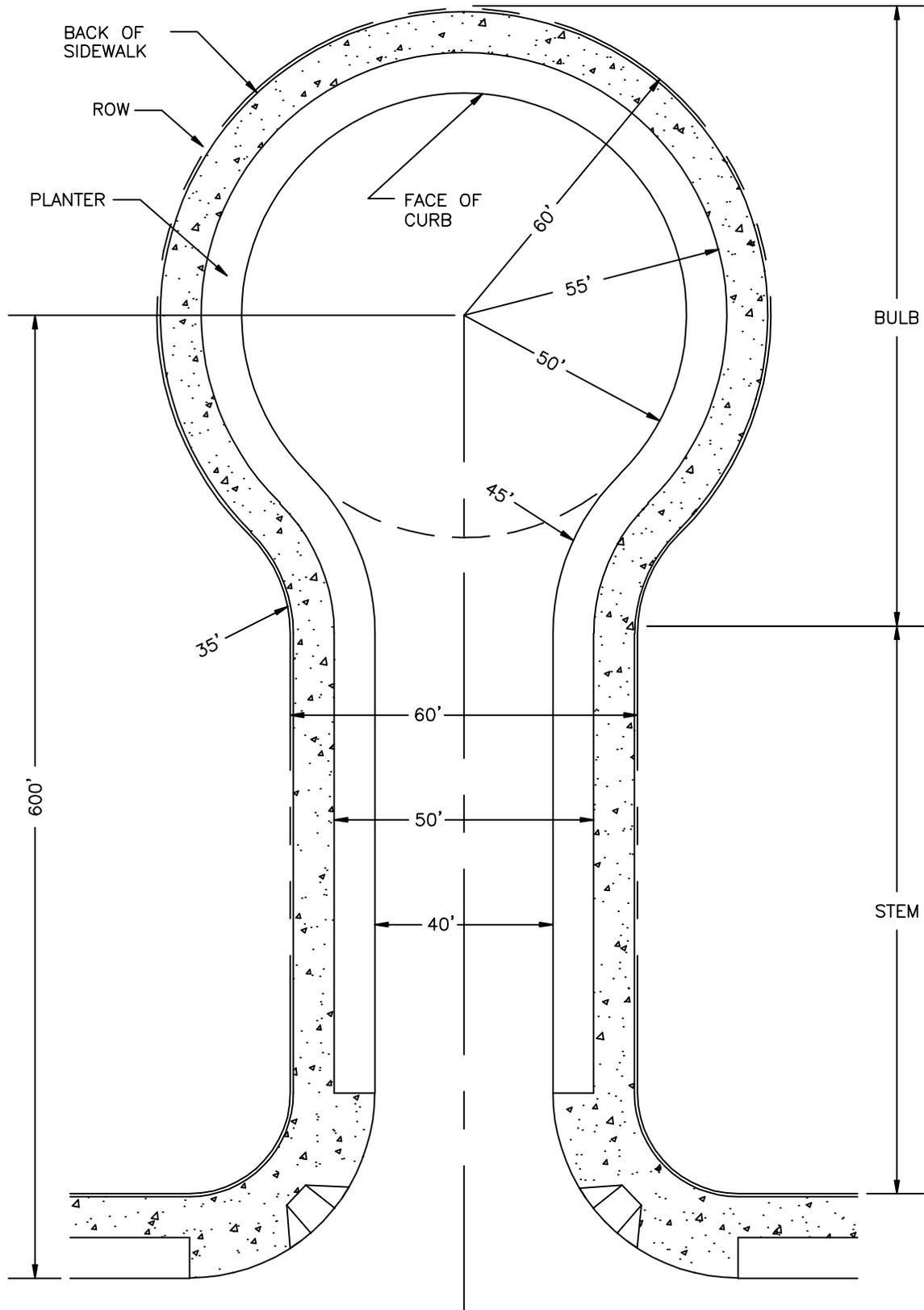
1. 5' MINIMUM HORIZONTAL SEPARATION BETWEEN PUBLIC UTILITIES AND PRIVATE UTILITIES.
2. MINIMUM SEPARATION REQUIREMENTS FROM PUBLIC UTILITIES APPLY WITHIN EASEMENTS AND PRIVATE PROPERTY.
3. 18" VERTICAL SEPERATION AT WATER AND SEWER CROSSINGS.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
  
TYPICAL UTILITY LOCATIONS

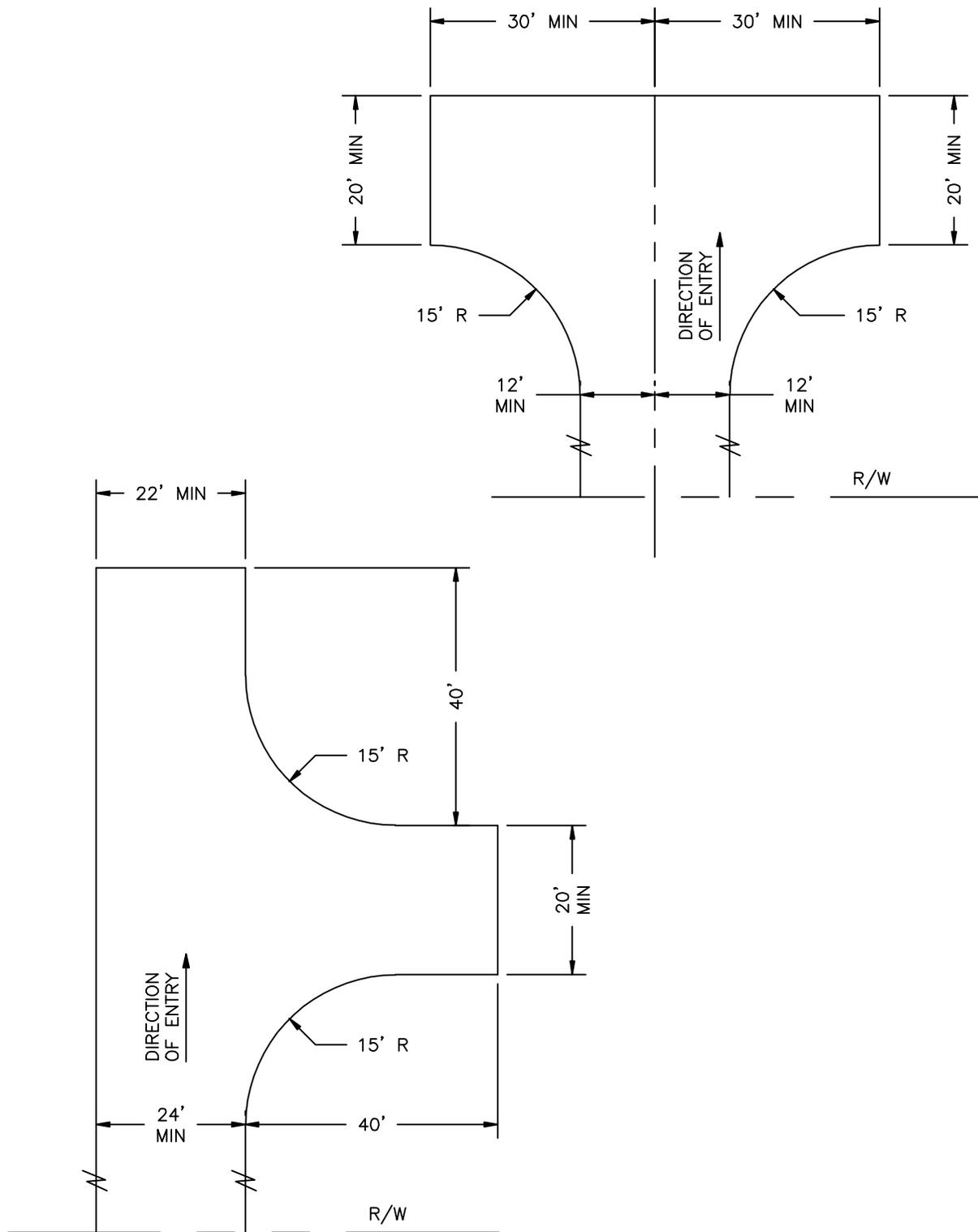
STANDARD DETAIL  
NUMBER  
  
**R-060**



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL CUL-DE-SAC

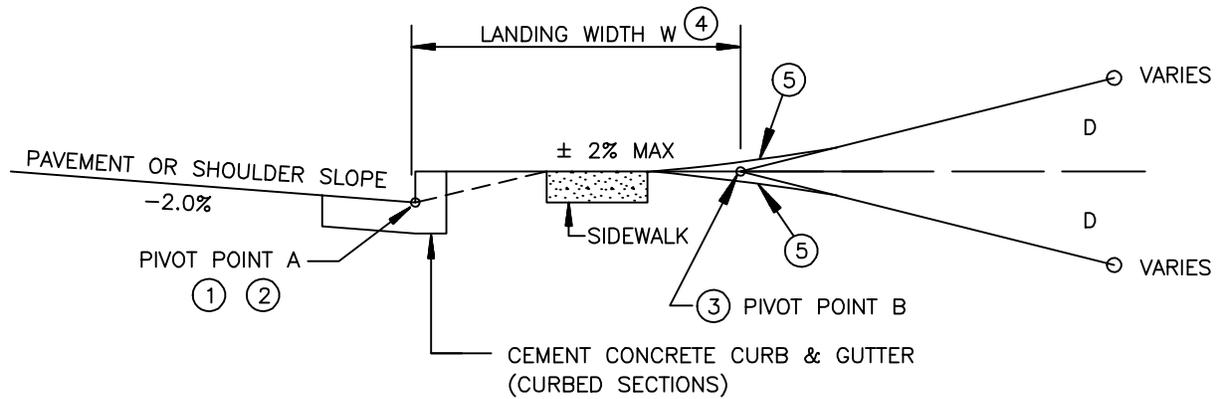
STANDARD DETAIL  
 NUMBER  
**R-070**



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TEMPORARY TURNAROUNDS

STANDARD DETAIL  
 NUMBER  
**R-080**



| TYPE OF ACCESS        | ACCESSING    | LANDING WIDTH W ④ | ACCESS GRADE D |
|-----------------------|--------------|-------------------|----------------|
| RESIDENTIAL (URBAN)   | NON-ARTERIAL | 15'               | ± 15% MAX.     |
| RESIDENTIAL (URBAN)   | ARTERIAL     | 15'               | ± 7% MAX.      |
| COMMERCIAL/INDUSTRIAL | NON-ARTERIAL | 30'               | ± 8% MAX.      |
| COMMERCIAL/INDUSTRIAL | ARTERIAL     | 30'               | ± 5% MAX.      |

NOTES:

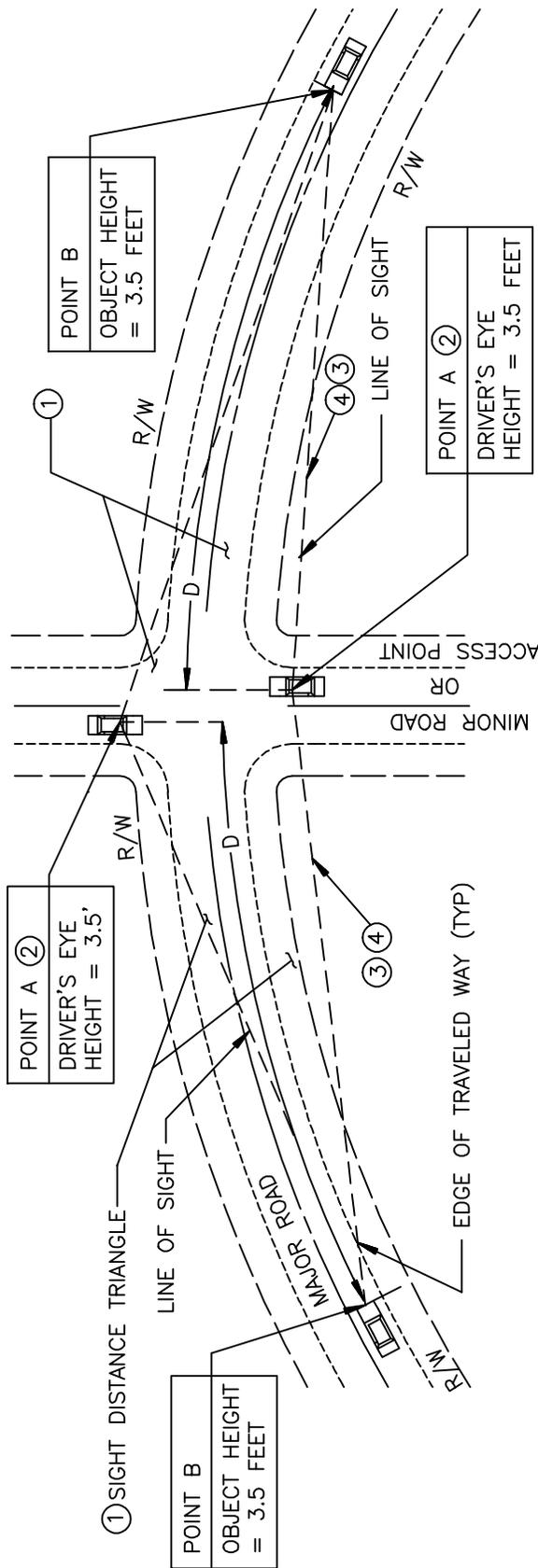
- ① SEE STD DETAIL R-180 FOR CURB DETAILS.
- ② WHEN ACCESSING SHOULDERED ROADWAYS, MAINTAIN SHOULDER SLOPE TO PIVOT POINT A.
- ③ ACCESS POINT GRADE SHALL BE MEASURED FROM PIVOT POINT B.
- ④ LANDING WIDTH W MAY BE REDUCED SUBJECT TO APPROVAL OF THE CITY ENGINEER.
- ⑤ A VERTICAL CURVE SHALL BE CONSTRUCTED TO TRANSITION THE LANDING TO THE ACCESS APPROACH. THE VERTICAL SEPARATION BETWEEN THE CURVE AND A 10-FOOT CHORD OF THE CURVE SHALL NOT EXCEED 3.25 INCHES (WHERE D IS POSITIVE) OR 2.00 INCHES (WHERE D IS NEGATIVE).



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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**DEPARTMENT OF PUBLIC WORKS**  
**STANDARD DETAILS**  
  
**ACCESS POINT GRADES**

STANDARD DETAIL  
NUMBER  
  
**R-090**



D = STOPPING SIGHT DISTANCE OR INTERSECTION SIGHT DISTANCE

**NOTES:**

1. AT ANY INTERSECTION OR ACCESS POINT CONNECTION, THERE MUST EXIST CLEAR SIGHT TRIANGLES, FREE OF SIGHT OBSCURING OBJECTS. UNOBSTRUCTED LINES OF SIGHT MUST BE PROVIDED FROM A POINT ON THE MINOR ROAD 15 FEET BEHIND THE EDGE OF TRAVELED WAY (POINT A) TO ALL POINTS IN THE TRAVELED WAY INCLUDED IN THE CLEAR SIGHT TRIANGLES. THE BASE OF EACH CLEAR SIGHT TRIANGLE SHALL BE AT LEAST EQUAL TO THE STOPPING SIGHT DISTANCE D.
2. THE DRIVER'S EYE TO DETERMINE LINE OF SIGHT AT INTERSECTIONS IS 3.5 FEET ABOVE THE MINOR ROAD PAVEMENT, WITH AN OBJECT HEIGHT OF 3.5 FEET ABOVE THE MAJOR ROAD PAVEMENT.
3. THE AREA WITHIN THE CLEAR SIGHT TRIANGLE MUST BE FREE FROM ANY SIGHT OBSCURING OBJECTS. GROUND SHALL BE REGRADED AND VEGETATION TRIMMED OR REMOVED SO THAT NO OBJECT PROTRUDES CLOSER THAN 18 INCHES TO THE LINE OF SIGHT BETWEEN THE MINOR ROAD/ACCESS POINT AND THE MAJOR ROAD.
4. AREA WITHIN THE CLEAR SIGHT TRIANGLE BUT OUTSIDE OF EXISTING PUBLIC RIGHT-OF-WAY SHALL EITHER BE ACQUIRED AS NEW PUBLIC RIGHT-OF-WAY OR A SIGHT DISTANCE EASEMENT RECORDED FOR FUTURE CITY MAINTENANCE.



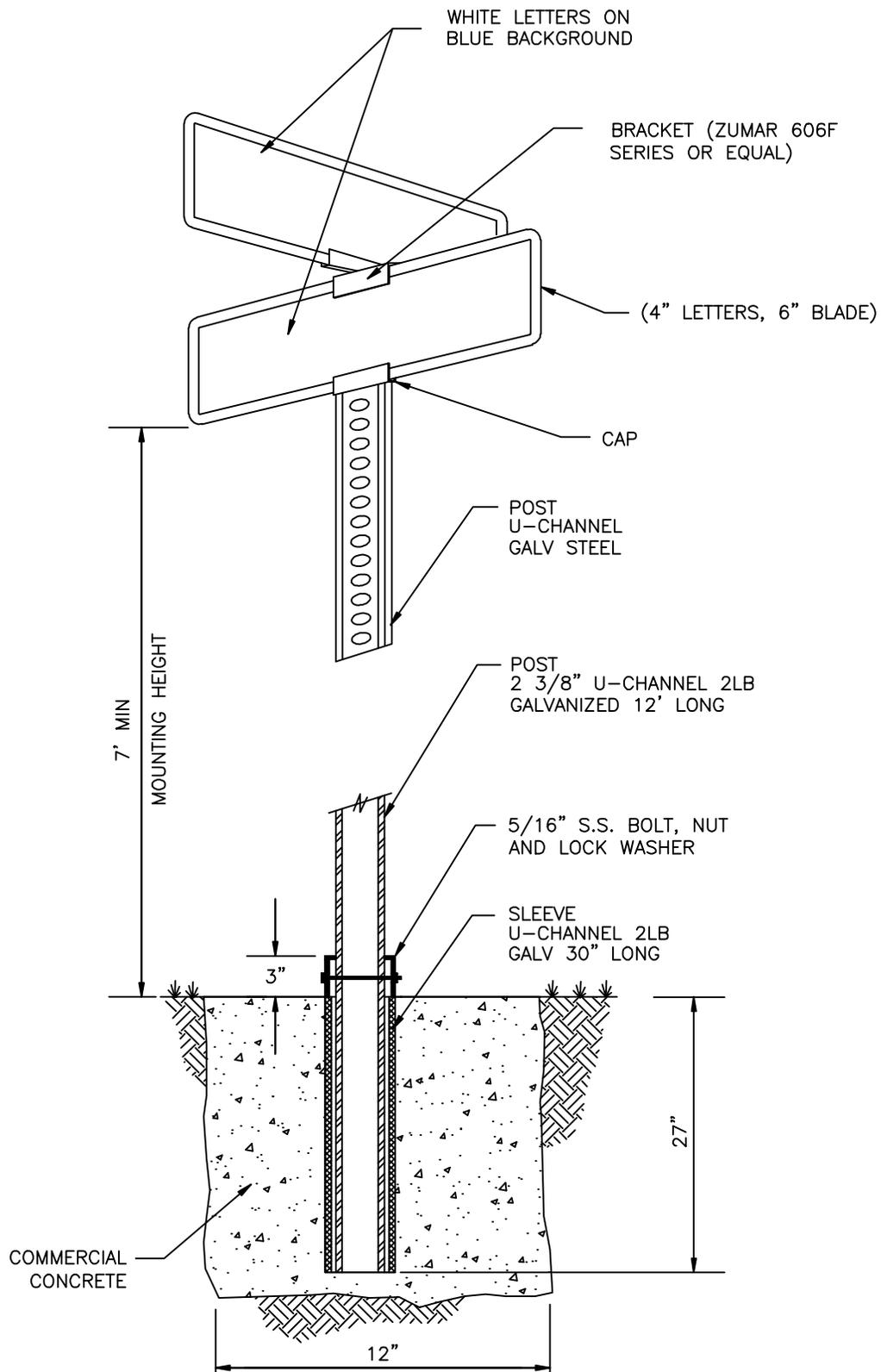
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
STANDARD DETAILS

CLEAR SIGHT TRIANGLES

STANDARD DETAIL NUMBER

R-100



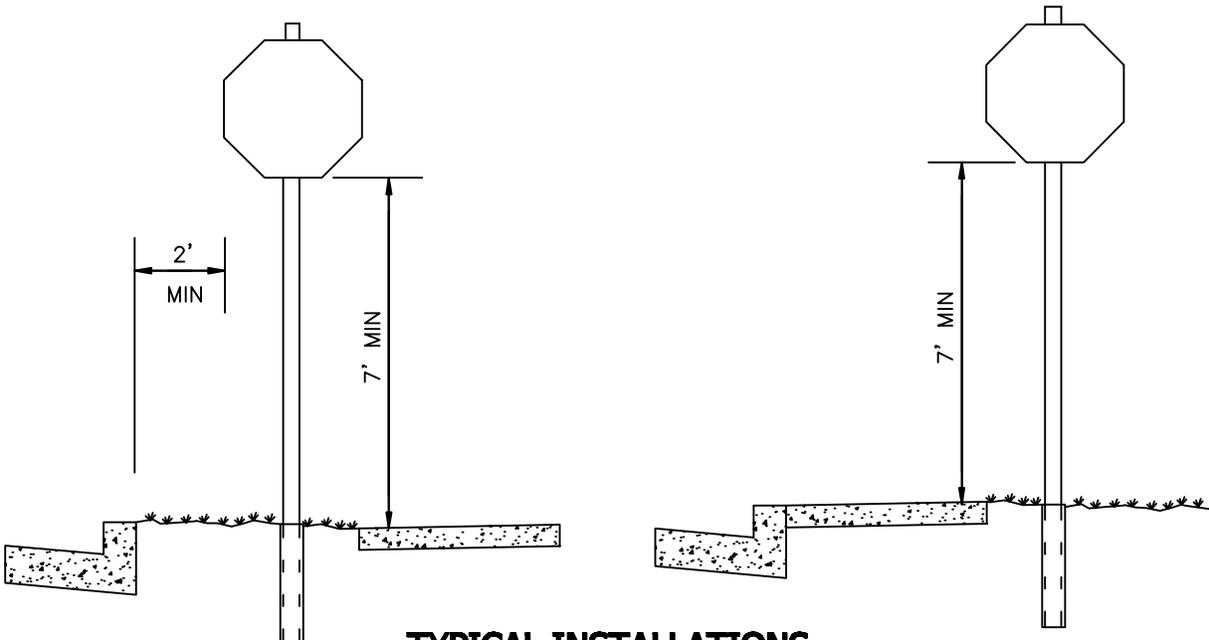
**TYPICAL SECTION**



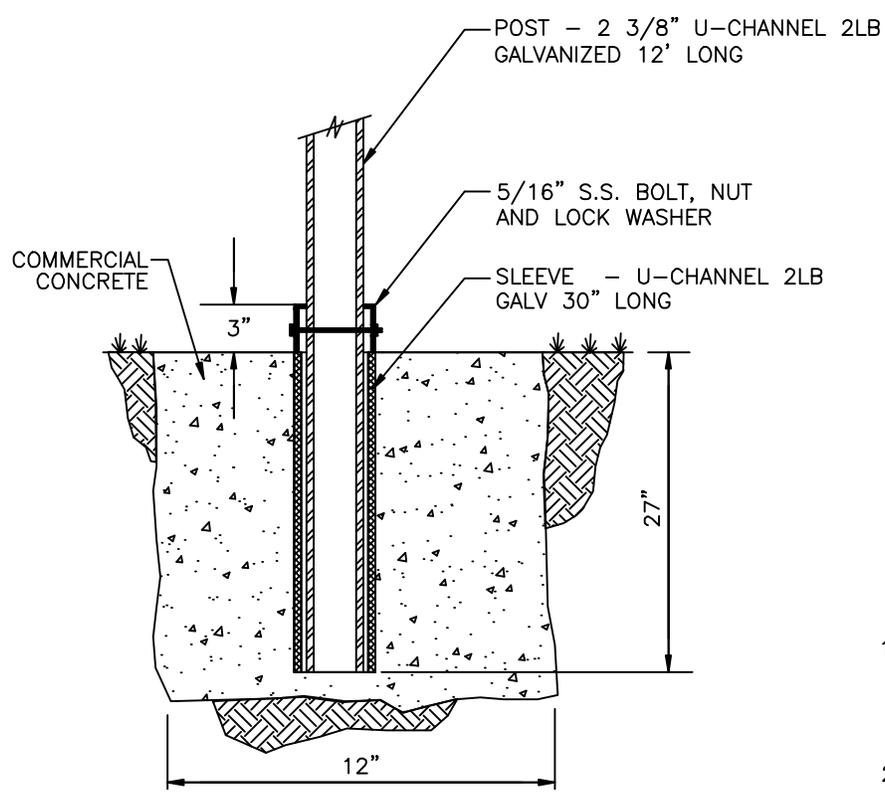
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> |
| <b>POST MOUNTED STREET NAME SIGNS</b>                 |

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| STANDARD DETAIL NUMBER |
| R-110                  |



**TYPICAL INSTALLATIONS**



**TYPICAL SECTION**

**NOTES:**

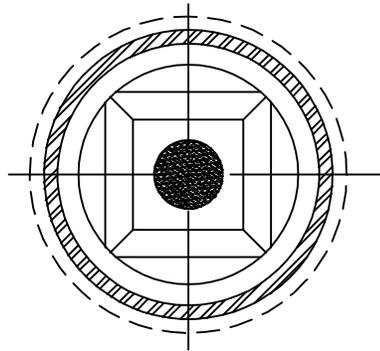
1. STANDARD STOP SIGNS SHALL BE 30"x30" PRISMATIC SPECIFICATION UNLESS OTHERWISE APPROVED OR DIRECTED BY THE CITY ENGINEER.
2. STREET NAME SIGNS MAY BE INSTALLED AT TOP OF POST.



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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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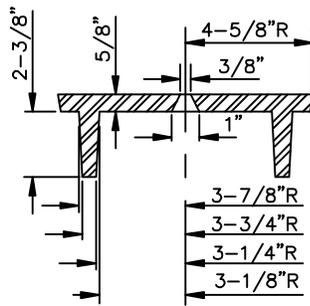
DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TRAFFIC REGULATORY  
 SIGN INSTALLATION

STANDARD DETAIL  
 NUMBER  
**R-120**

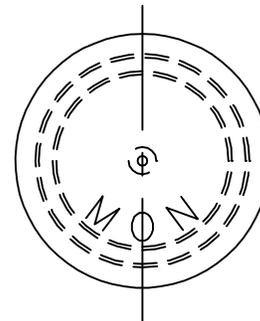


**PLAN**

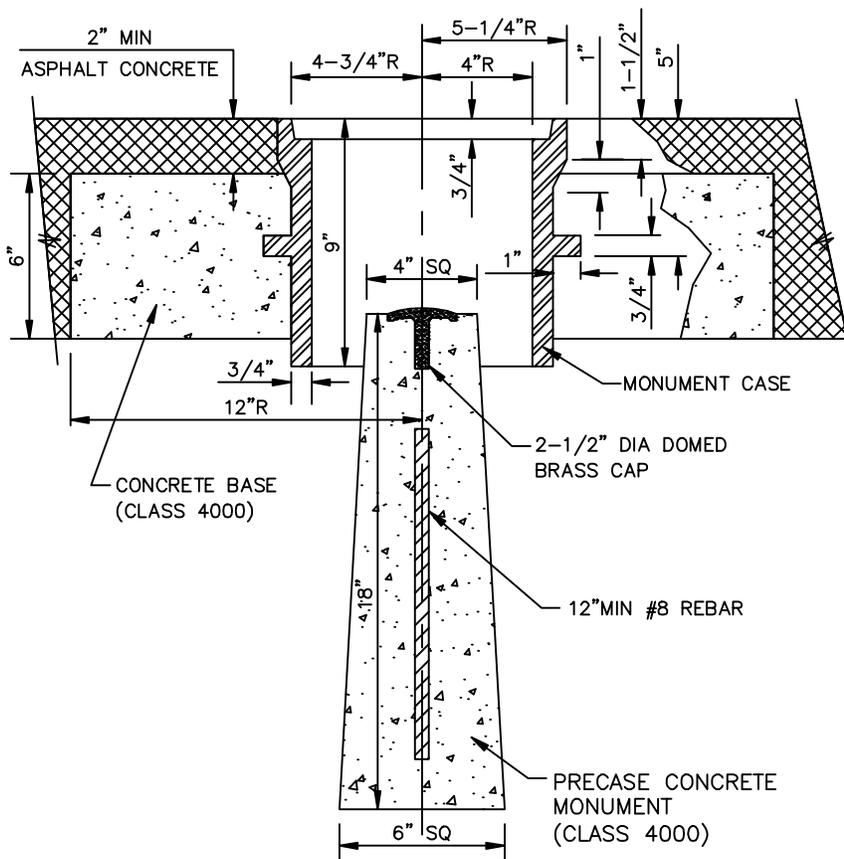
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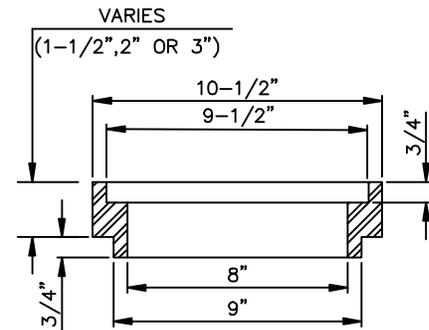
**COVER SECTION**



**COVER PLAN**



**SECTION**



**EXTENSION SECTION**

**NOTES**

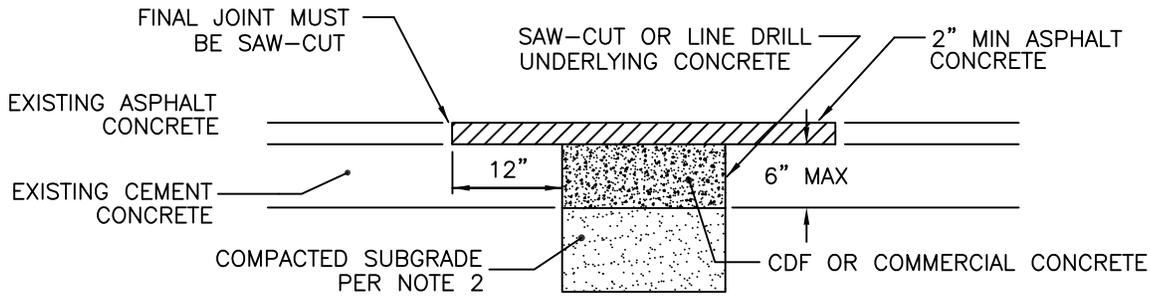
1. MONUMENTS IN NON-PAVED AREAS SHALL BE 3" ABOVE GRADE.
2. ALL MONUMENTS SHALL BE PRECAST CONC. WITH REBAR AND 2-1/2" DIA BRASS CAP.
3. MONUMENT CASE AND RISER SECTION SHALL BE CAST IRON PER ASTM-A48, CLASS 30, WITH BITUMINOUS COATING.
4. COVER SHALL BE DUCTILE IRON PER ASTM-A536, GRADE 80-55-06, WITH BITUMINOUS COATING.
5. LEGEND ON COVER SHALL BE 1/8" RAISED INTERGRALLY CAST LETTERS 1" HIGH WITH A MIN FACE WIDTH OF 3/16".



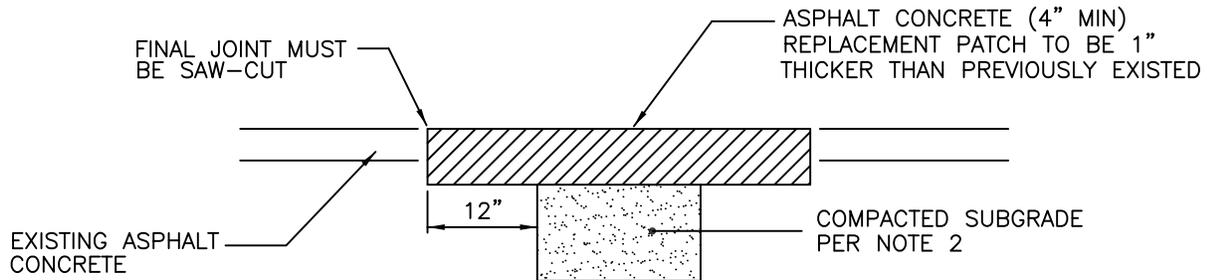
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> |
| SURVEY MONUMENT                                       |

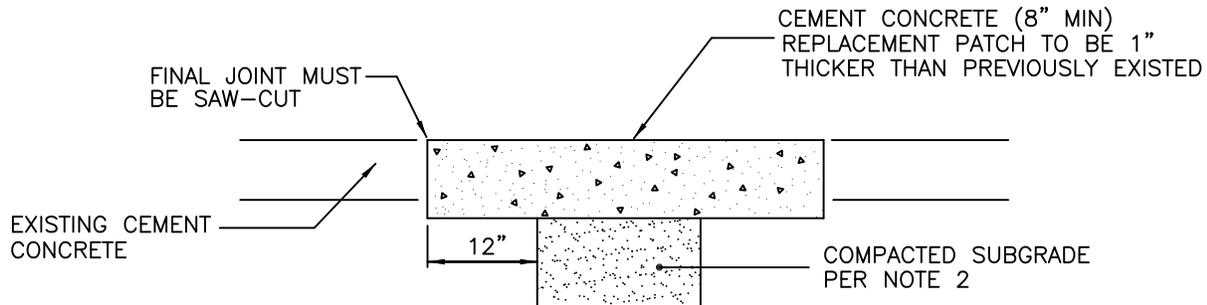
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| STANDARD DETAIL NUMBER |
| R-130                  |



### EXISTING ASPHALT CONCRETE OVER CEMENT CONCRETE



### EXISTING ASPHALT CONCRETE OVER PREPARED GRADE



### EXISTING CEMENT CONCRETE OVER PREPARED GRADE

#### NOTES:

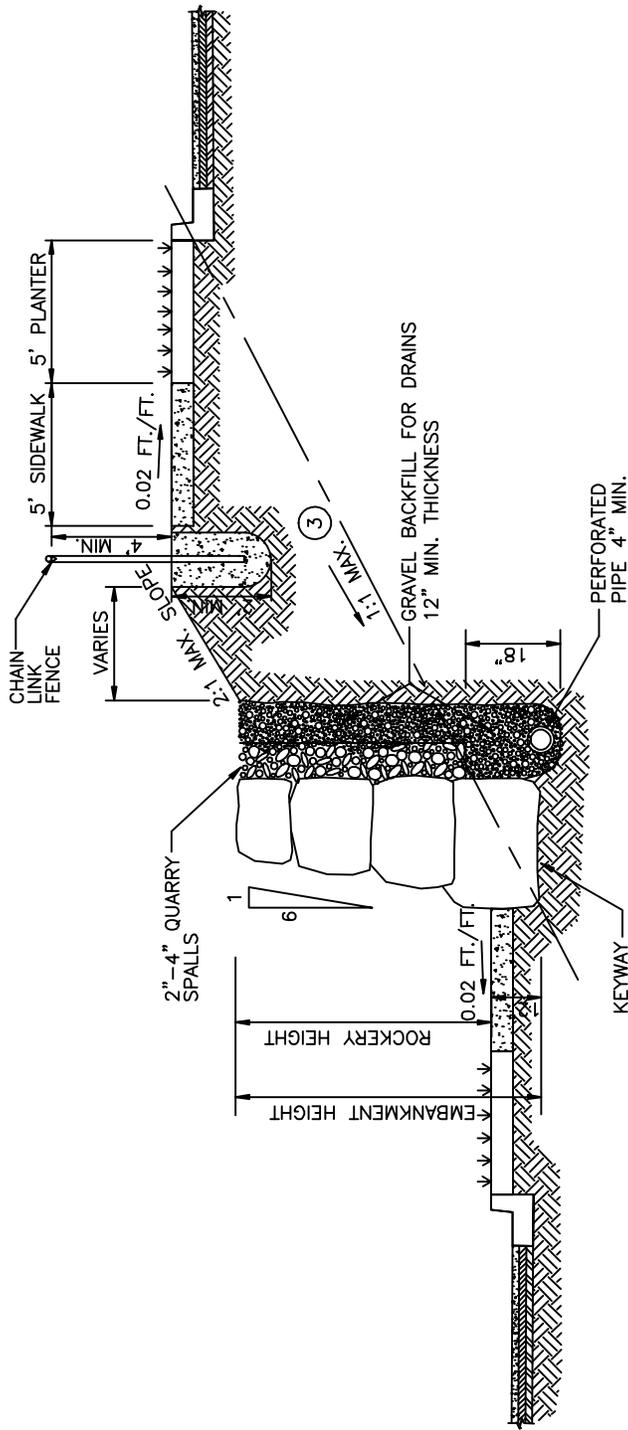
1. ALL TRENCHES IN ROADWAY AREAS SHALL BE BACKFILLED AND PATCHED WITH TEMPORARY ASPHALT AT THE END OF EACH WORK DAY, UNLESS PERMISSION IS GRANTED TO DO OTHERWISE BY THE CITY ENGINEER.
2. COMPACTED SUBGRADE MATERIAL SHALL BE PER WSDOT 9-03.9(3), 5/8" MINUS CRUSHED SURFACING OR APPROVED NATIVE MATERIAL. SUBGRADE SHALL BE COMPACTED TO 95% MAXIMUM DENSITY.
3. ALL TEMPORARY PATCHES ON TRENCHES SHALL BE PERMANENTLY PATCHED WITHIN 2 WEEKS OF COMPLETION OF WORK WITHIN THE ROADWAY AREA.



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| APPROVED BY  | R. MORRISON |
| DATE         | 6/2021      |
| REF STD SPEC |             |
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> |
| <b>ROADWAY PAVEMENT PATCH</b>                         |

|                        |
|------------------------|
| STANDARD DETAIL NUMBER |
| R-140                  |



**NOTES:**

1. SEE TEXT CHAPTER 2. ROCKERIES SHALL BE DESIGNED BY A GEOTECHNICAL ENGINEER IF EMBANKMENT HEIGHT EXCEEDS 6 FT. IN A CUT SECTION OR 4 FT. IN A FILL SECTION.
2. GRAVEL BACKFILL SHALL MEET WSDOT/APWA STANDARD SPECIFICATION 9-03.12[4]
3. FLATTER SLOPE MAY BE REQUIRED IN LESS STABLE SOIL.
4. CHAIN LINK FENCE, TYPE NO. 4 OR 6 (WSDOT/APWA STANDARD), REQUIRED WHEN ROCKERY HEIGHT IS 30 INCHES OR GREATER. VINYL-COATED FENCING IN A DARK, NATURAL COLOR MAY BE USED TO IMPROVE VISUAL APPEARANCE.
5. TRAFFIC BARRIERS MAY BE REQUIRED ON ROADS WITH SPEED LIMITS OF 40 MPH OR GREATER, WHERE ROCKERY HEIGHTS EXCEED 6'. SEE CHAPTER 7 OF THE WSDOT DESIGN MANUAL.
6. IF ROCKERY IS BEHIND A ROLLED CURB OR A RURAL SHOULDER SECTION, THE ROCKERY FACE SHALL BE A MINIMUM OF 10 FT FROM EDGE OF TRAVELED WAY.

NOT TO SCALE



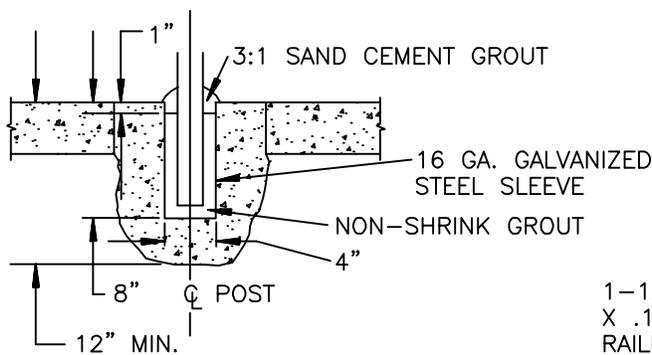
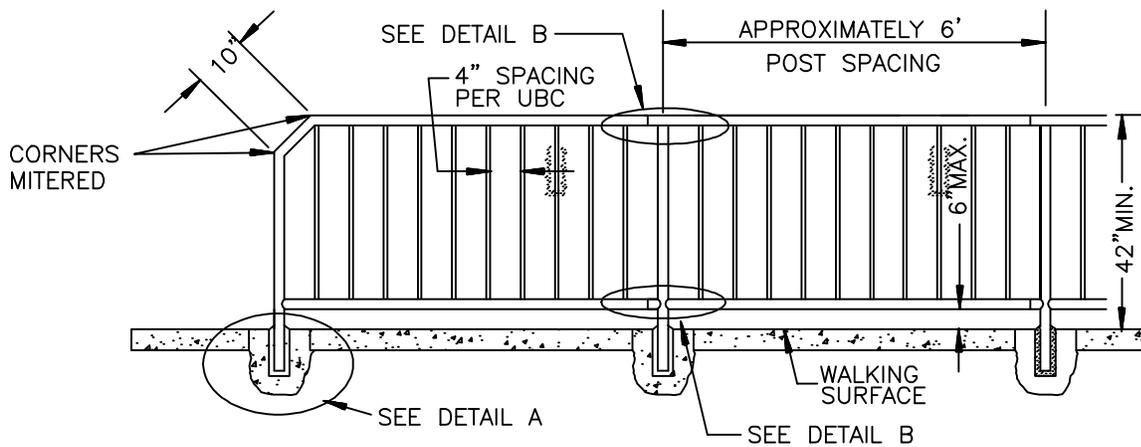
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
STANDARD DETAILS

ROCKERY

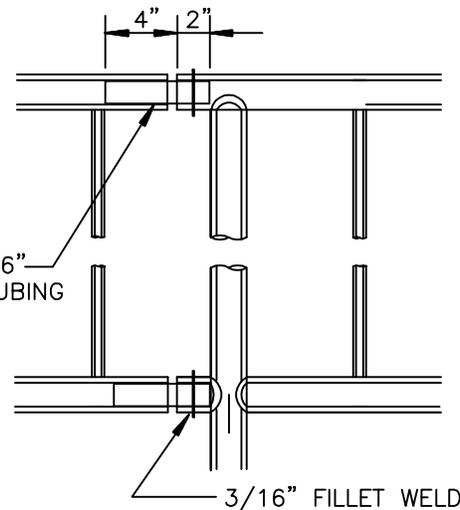
STANDARD DETAIL NUMBER

R-150

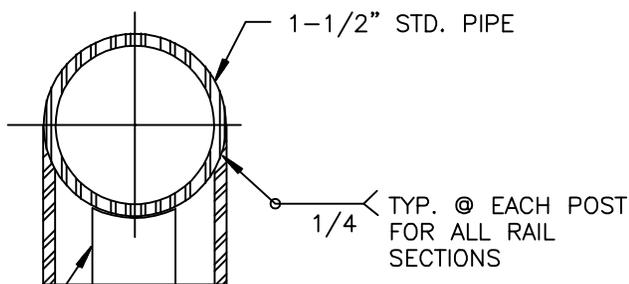


**DETAIL A**

1-1/2" O.D. X 6" X .188" WALL TUBING RAILING SPLICE



**DETAIL B**



3/4" SCH 40 (STD. PIPE)

PICKETS INSERTED IN HOLE AND TACK WELDED OPPOSITE TRAFFIC.

**NOTES:**

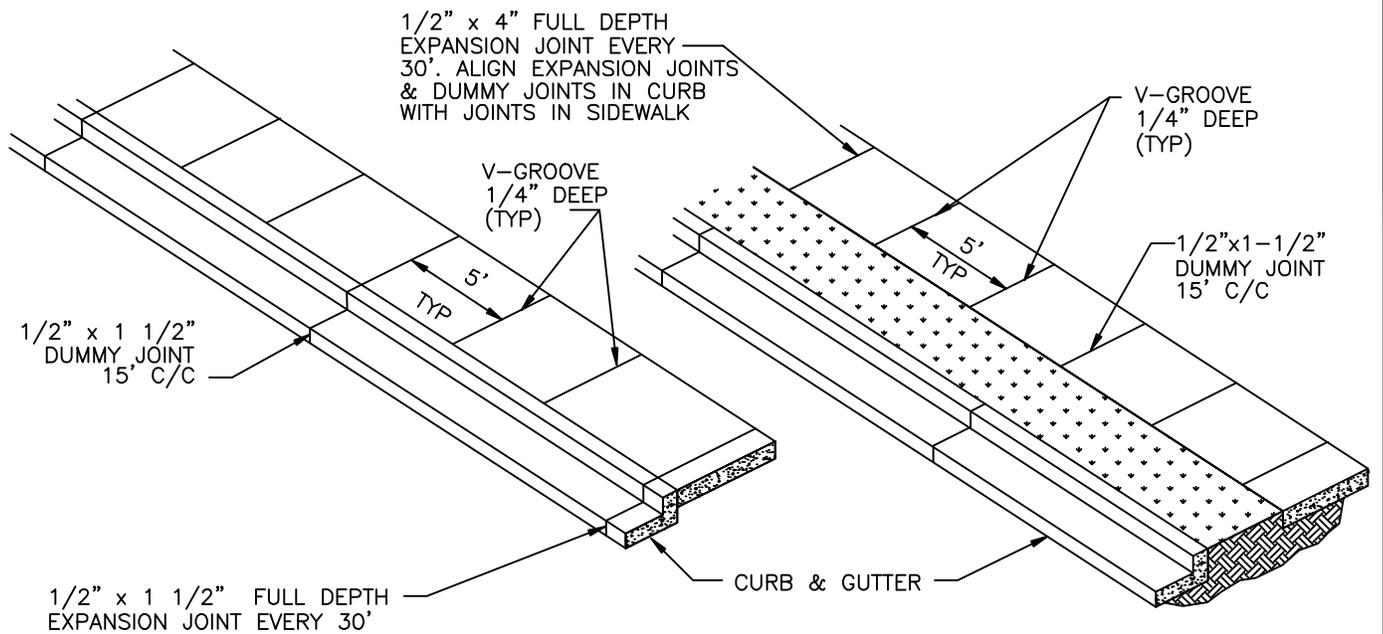
MATERIAL FOR PEDESTRIAN HANDRAIL SHALL BE STEEL (ASTM A120) OR ALUMINUM (ASTM B241 OR B429 ALLOY 6061-T6).



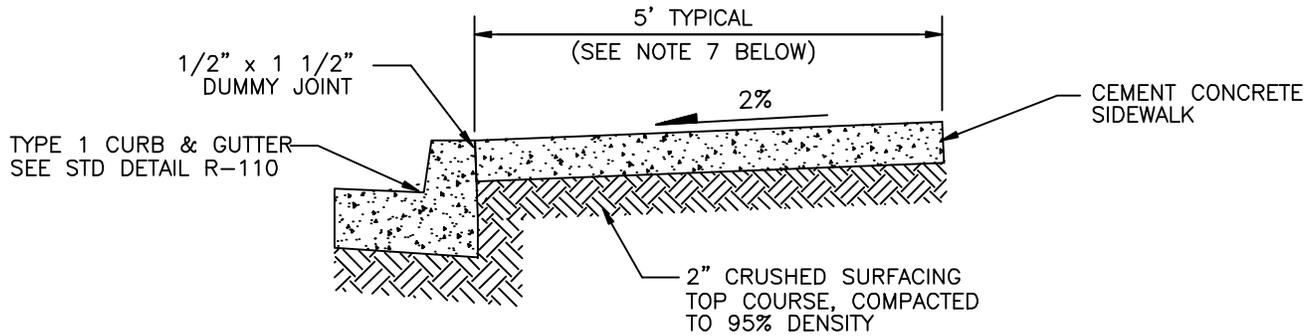
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> |
| <b>PEDESTRIAN HANDRAIL DETAILS</b>                    |

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|------------------------|
| STANDARD DETAIL NUMBER |
| R-160                  |



**PLAN VIEWS**



**TYPICAL SECTION**

**NOTES:**

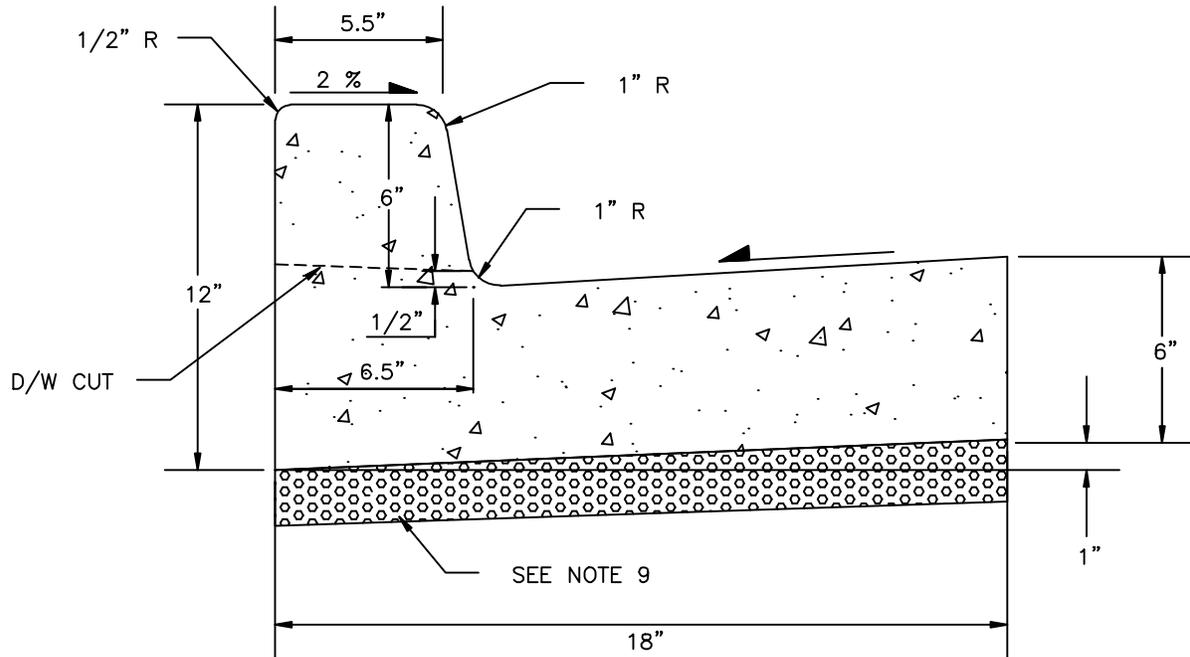
1. SIDEWALKS SHALL BE A MINIMUM OF 4" THICK, AND SHALL BE CLASS 3000 CEMENT CONCRETE, WITH AIR ENTRAINMENT (MIN 4.5% - MAX 6.5%).
2. FULL EXPANSION JOINTS SHALL GENERALLY BE PLACED TO MATCH THOSE PLACED IN ADJACENT CURB & GUTTER, WITH MAXIMUM SPACING OF 30 FEET, FINAL SPACING DETERMINATION SHALL BE DECIDED BY THE INSPECTOR IN THE FIELD.
3. SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95% OF MAXIMUM DENSITY.
4. SIDEWALK SHALL BE AT LEAST 6" THICK IN DRIVEWAYS.
5. THE FINISHED SIDEWALK SHALL BE SPRAYED WITH A TRANSPARENT CURING COMPOUND COVERED BY WATERPROOF PAPER OR PLASTIC SHEETING IN THE EVENT OF RAIN OR OTHER INCLEMENT WEATHER. CURING TIME SHALL BE FOR A MINIMUM OF 72 HOURS.
6. ALL JOINTS SHALL BE CLEANED AND EDGED WITH AN EDGER HAVING A 1/4" RADIUS.
7. SIDEWALKS ARE TYPICALLY 5' WIDE, WIDER SIDEWALK MAY BE REQUIRED BY THE CITY.



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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b> |
| <b>CEMENT CONCRETE SIDEWALK</b>                       |

|                        |
|------------------------|
| STANDARD DETAIL NUMBER |
| R-170                  |



**TYPICAL SECTION**

**NOTES:**

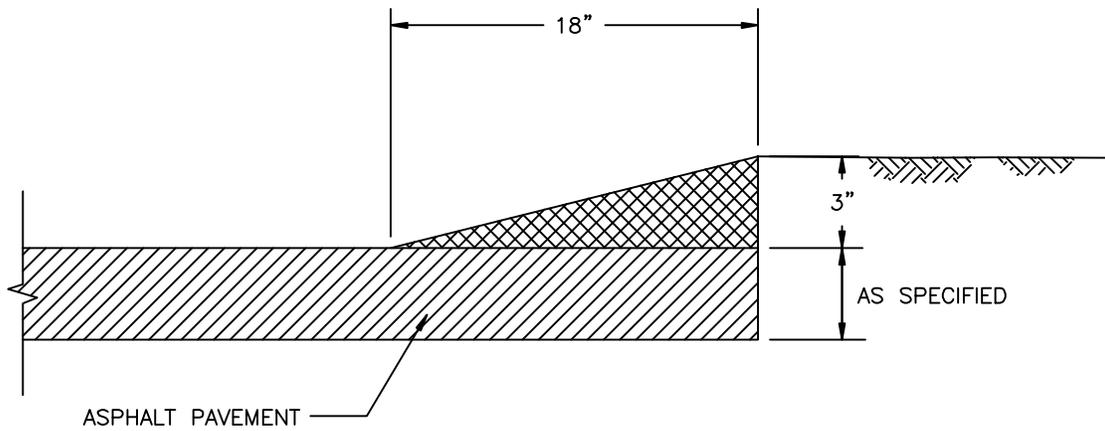
1. FORMS SHALL BE TRUE TO LINE AND GRADE AND SECURELY STAKED.
2. DUMMY JOINTS SHALL BE PLACED 15 FEET ON CENTERS. DUMMY JOINTS SHALL BE 1/2" x 1-1/2".
3. THRU JOINTS SHALL BE PLACED ADJACENT TO CATCH BASINS, INLETS AND AT POINTS OF TANGENCY ON STREETS, ALLEY AND DRIVEWAY RETURNS. MAXIMUM SPACING SHALL BE 30 FT. PRE-MOLDED JOINT FILLER SHALL BE 1/2" WIDE AND CONFORM TO AASHTO DESIGN M213.
4. ALL JOINTS SHALL BE CLEAN AND EDGED.
5. CONCRETE SHALL BE CEMENT CONCRETE, CLASS 3000.
6. STEEL FORMS ONLY SHALL BE USED ON TANGENT SECTIONS. WOOD FORMS MAY BE USED ON CURVED SECTIONS.
7. FINISH SHALL BE LIGHT BROOM FINISH.
8. THE FINISHED CURB SHALL BE SPRAYED WITH A TRANSPARENT CURING COMPOUND AND COVERED BY WATERPROOF PAPER OR PLASTIC MEMBRANE IN THE EVENT OF RAIN OR OTHER INCLEMENT WEATHER. CURING TIME SHALL BE A MINIMUM OF 72 HOURS.
9. ALL CURB AND GUTTER SHALL BE PLACED ON A MIN OF 2" OF CRUSHED SURFACING TOP COURSE.
10. DUMMY JOINT 1/2" x 1 1/2" BETWEEN TYPE 1 CURB AND GUTTER AND THE SIDEWALK.



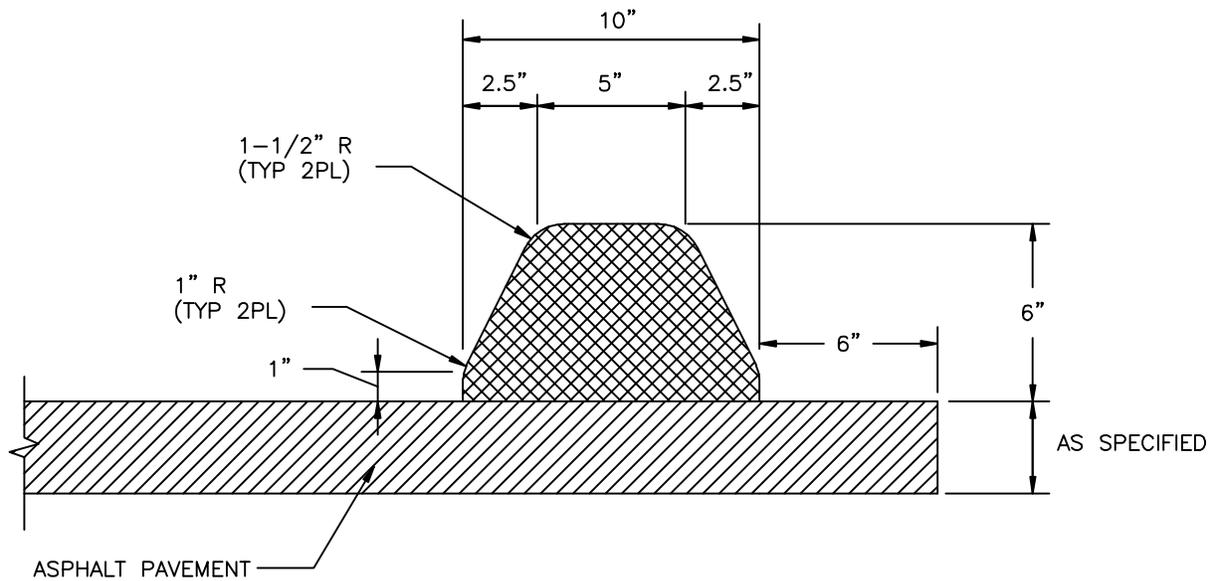
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| APPROVED BY  | L. OLIVE   |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 CEMENT CONCRETE CURB AND  
 GUTTER TYPE 1

STANDARD DETAIL  
 NUMBER  
**R-180**



**ASPHALT THICKENED EDGE**



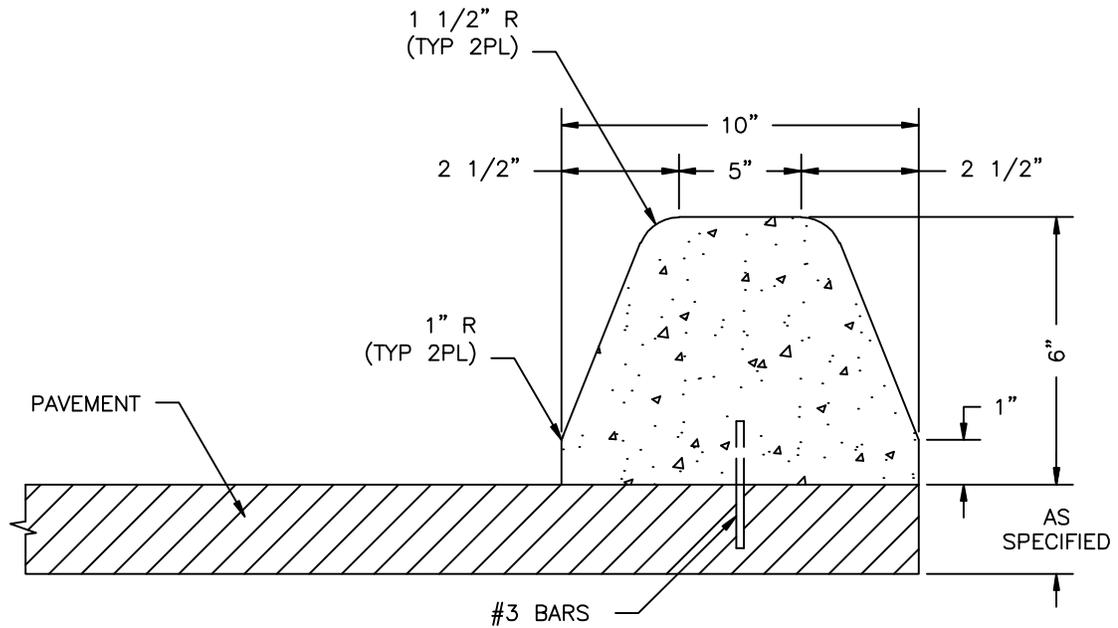
**EXTRUDED ASPHALT CONCRETE CURB**



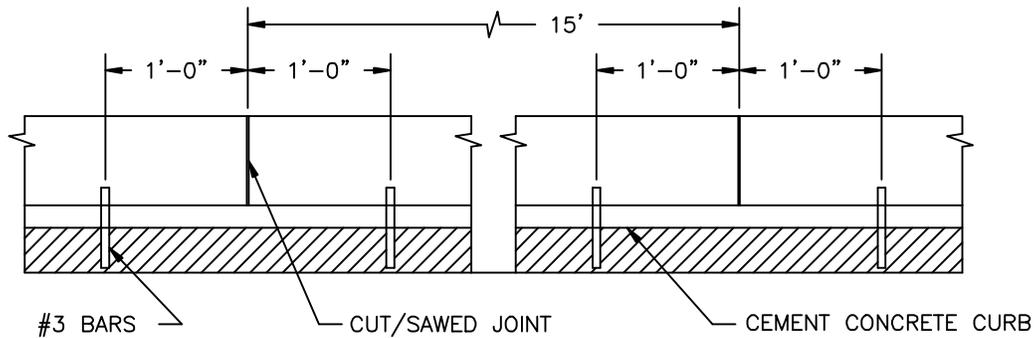
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| APPROVED BY  | L. OLIVE   |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 ASPHALT THICKENED EDGE AND  
 EXTRUDED ASPHALT CURB

STANDARD DETAIL  
 NUMBER  
**R-190**



**EXTRUDED CEMENT CONCRETE CURB**



**SPACING OF ANCHOR BARS**

**NOTES:**

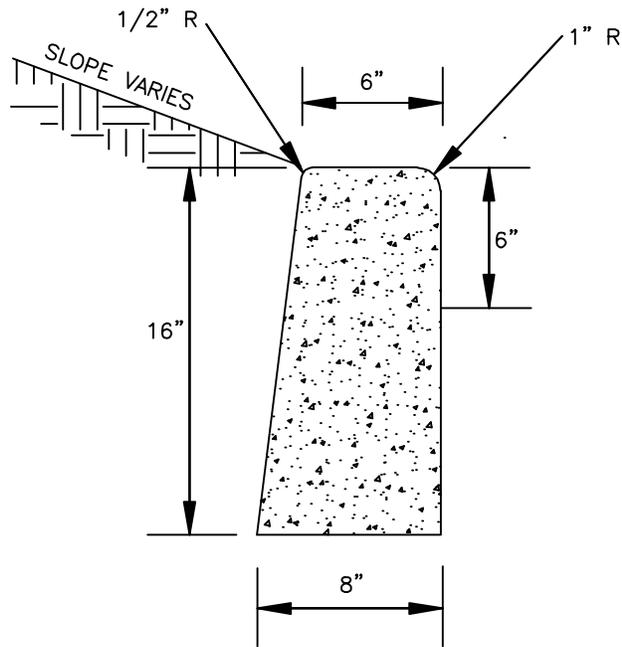
1. DUMMY JOINTS SHALL BE PLACED NOT TO EXCEED 15' ON CENTER. THRU JOINTS SHALL BE PLACED ONLY AT POINTS OF TANGENCY ON STREET ALLEY AND DRIVEWAY RETURNS AND WHERE THRU JOINTS OCCUR IN THE PAVEMENT SLAB.
2. CONCRETE SHALL BE CLASS 3000 OR COMMERCIAL WITH AIR-ENTRAINMENT.
3. AT THE CONTRACTOR'S OPTION CONCRETE CURBS MAY BE ANCHORED TO THE SIDE OF EVERY JOINT, OR BY USING AN ADHESIVE. THE ADHESIVE SHALL MEET THE REQUIREMENTS OF SECTION 9-20 OF THE WSDOT/APWA STANDARD SPECIFICATIONS FOR TYPE II EPOXY RESIN.



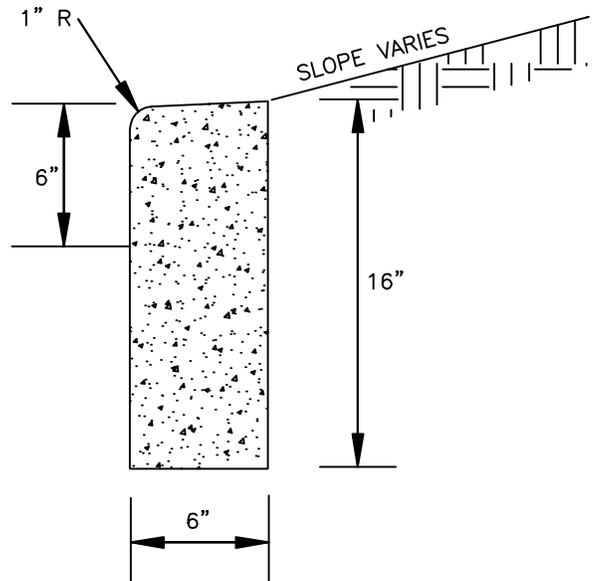
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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| DEPARTMENT OF PUBLIC WORKS |
| STANDARD DETAILS           |
| EXTRUDED CONCRETE CURB     |

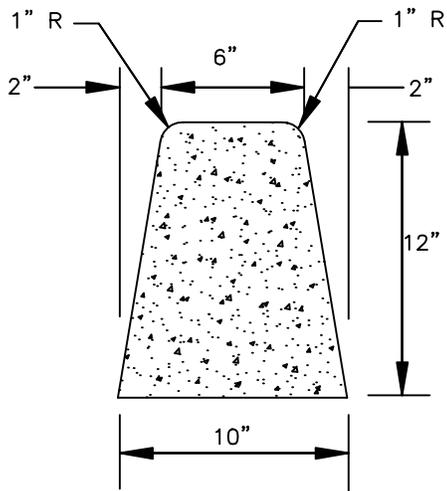
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| STANDARD DETAIL NUMBER |
| R-200                  |



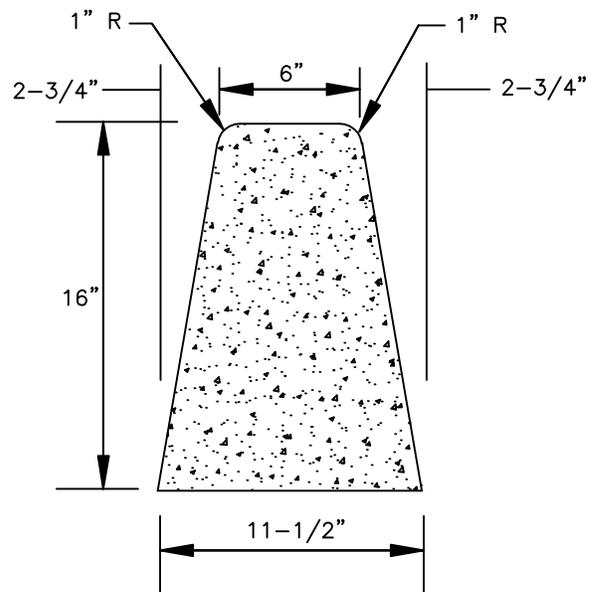
**TYPE E-1 CURB**



**TYPE E-2 CURB**



**TYPE E-3 CURB**



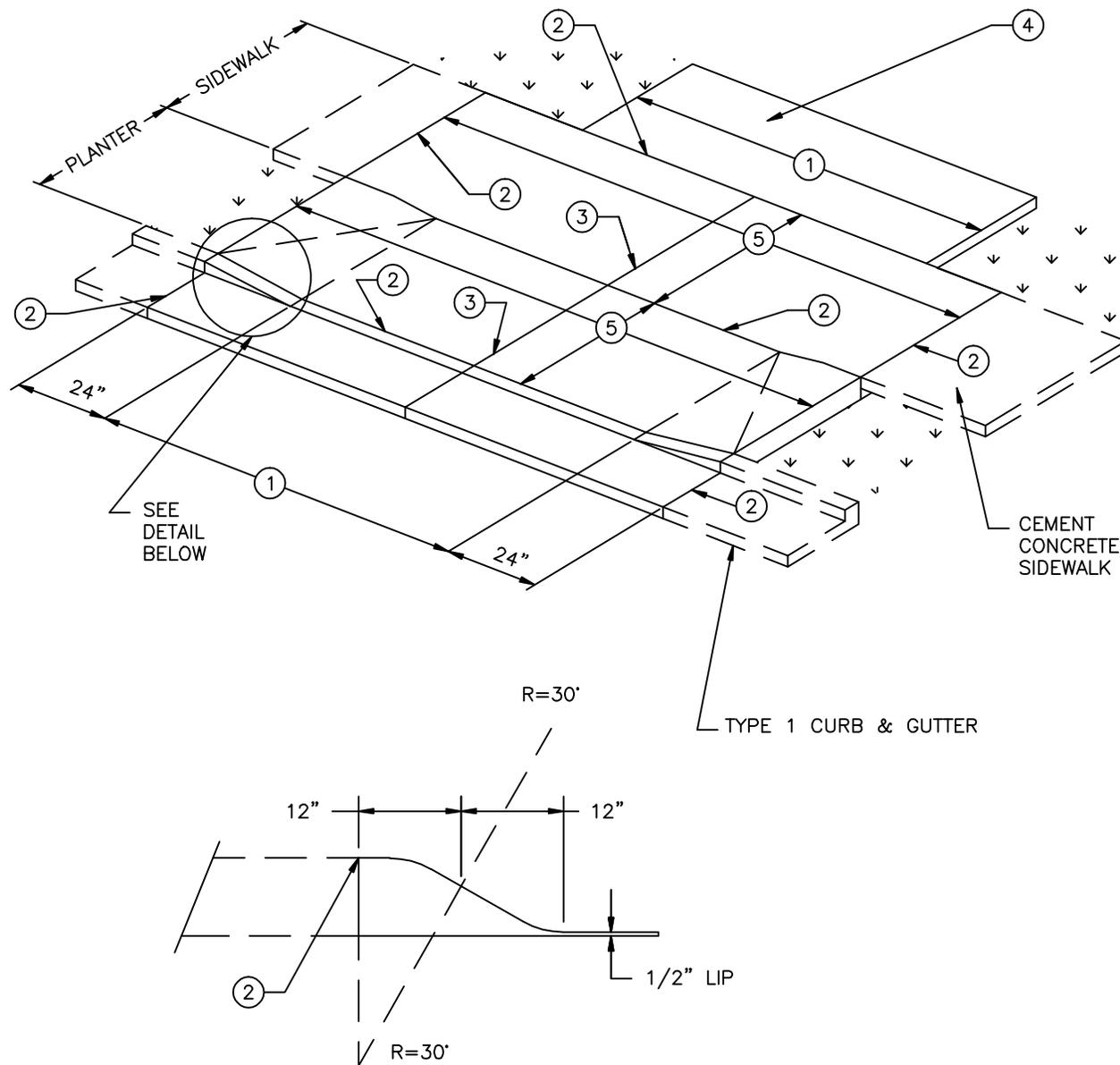
**TYPE E-4 CURB**



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| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 CEMENT CONCRETE CURB  
 TYPE E-1, E-2, E-3 & E-4

STANDARD DETAIL NUMBER  
**R-210**



**CURB TRANSITION DETAIL**

**NOTES:**

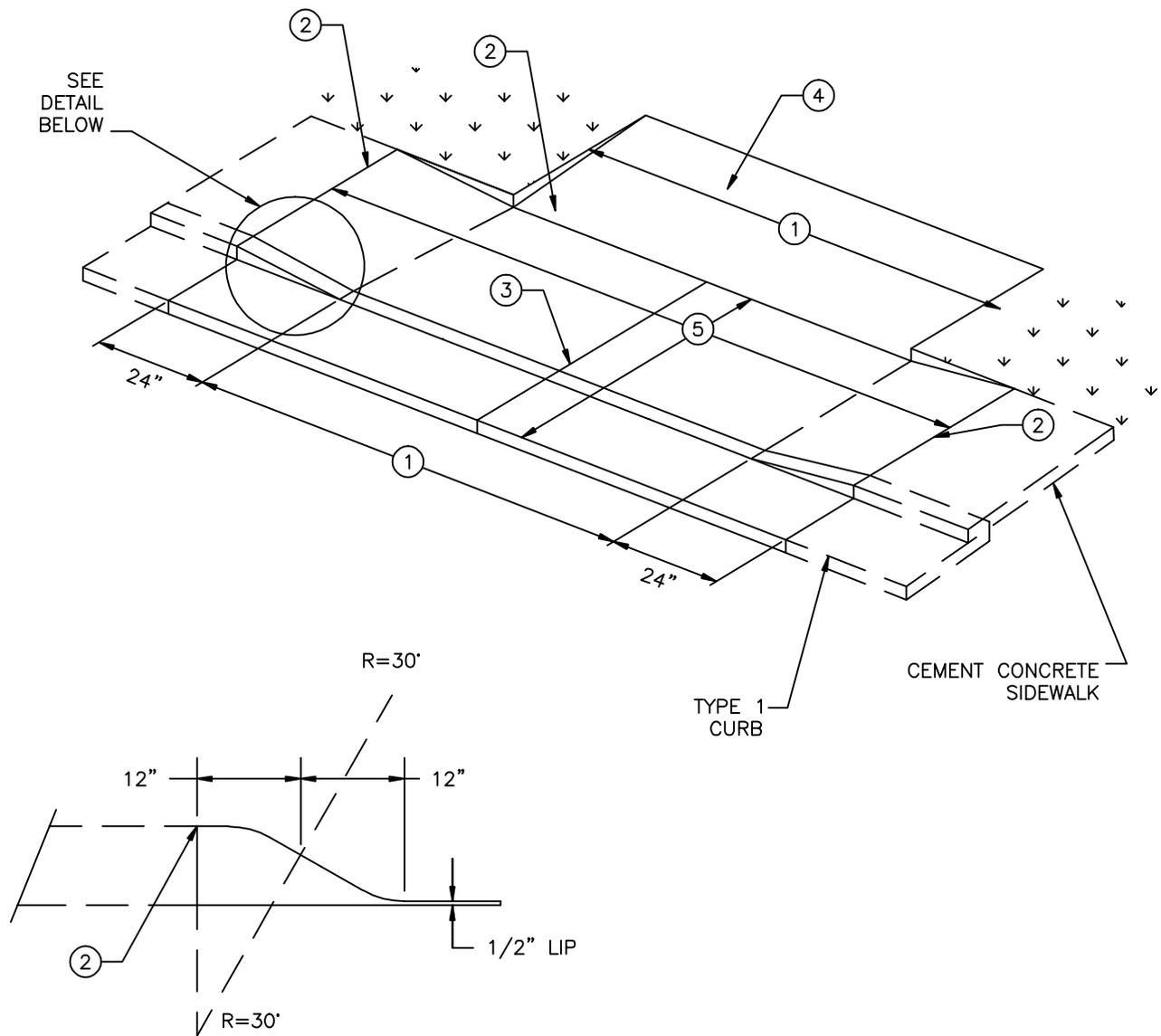
- ① WIDTH OF DRIVEWAY AT PROPERTY LINE.
- ② 1/2" WIDE FULL DEPTH EXPANSION JOINT.
- ③ FULL DEPTH EXPANSION JOINT IF ① IS 15' OR GREATER
- ④ DRIVEWAY TO BE SURFACED WITH ASPHALT OR CONCRETE.
- ⑤ DRIVEWAY CEMENT CONCRETE SHALL BE A MIN OF 6" THICK IN RESIDENTIAL AREAS, 8" THICK IN COMMERCIAL AREAS, AND IS TO BE PLACED ON A MINIMUM OF 2" CRUSHED SURFACING TOP COURSE COMPACTED TO 95% MAXIMUM DENSITY.



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| REF STD SPEC |            |
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b>        |
| <b>CEMENT CONCRETE DRIVEWAY APPROACH<br/>         TYPE 1</b> |

|                        |
|------------------------|
| STANDARD DETAIL NUMBER |
| <b>R-220</b>           |



**CURB TRANSITION DETAIL**

**NOTES:**

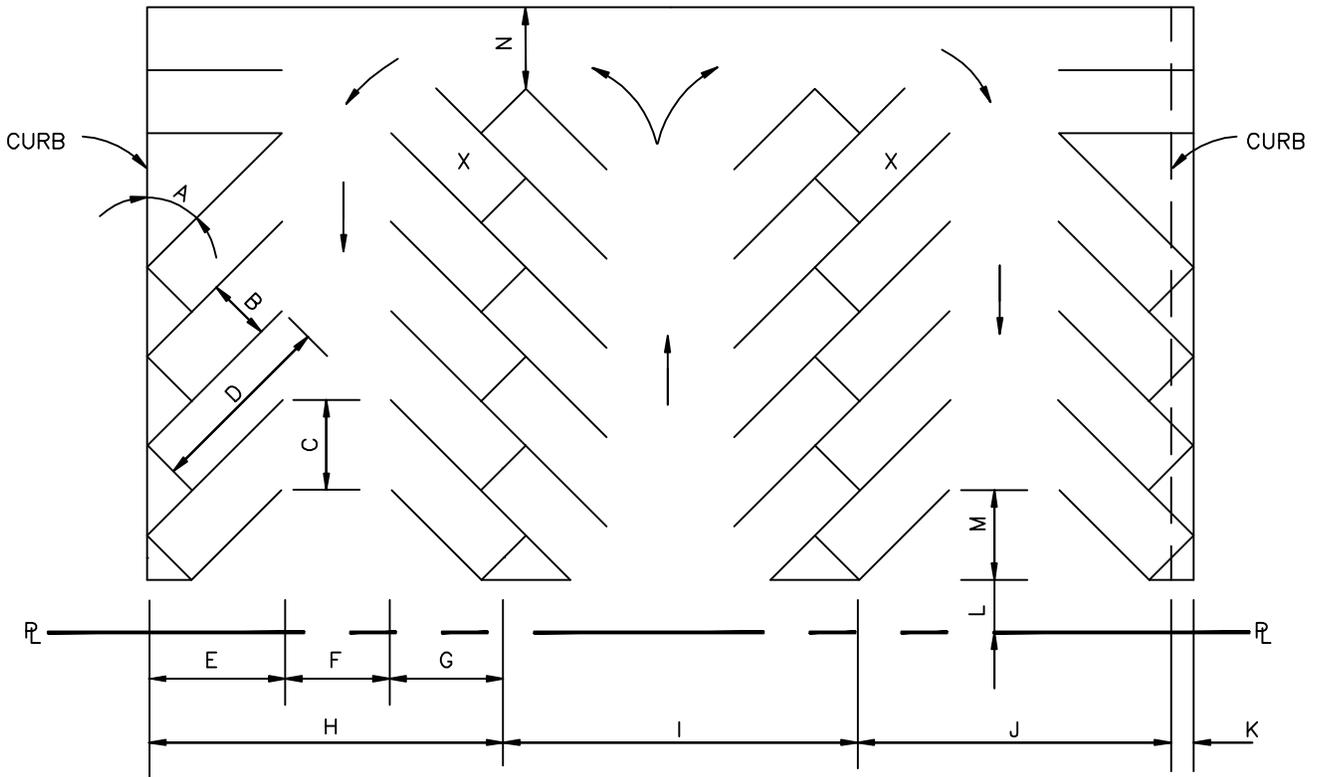
- ① WIDTH OF DRIVEWAY AT PROPERTY LINE.
- ② 1/2" WIDE FULL DEPTH EXPANSION JOINT.
- ③ FULL DEPTH EXPANSION JOINT IF ① IS 15' OR GREATER.
- ④ DRIVEWAY TO BE SURFACED WITH ASPHALT OR CONCRETE.
- ⑤ DRIVEWAY CEMENT CONCRETE SHALL BE A MIN OF 6" THICK IN RESIDENTIAL AREAS, 8" THICK IN COMMERCIAL AREAS, AND IS TO BE PLACED ON A MINIMUM OF 2" CRUSHED SURFACING TOP COURSE COMPACTED TO 95% MAXIMUM DENSITY.



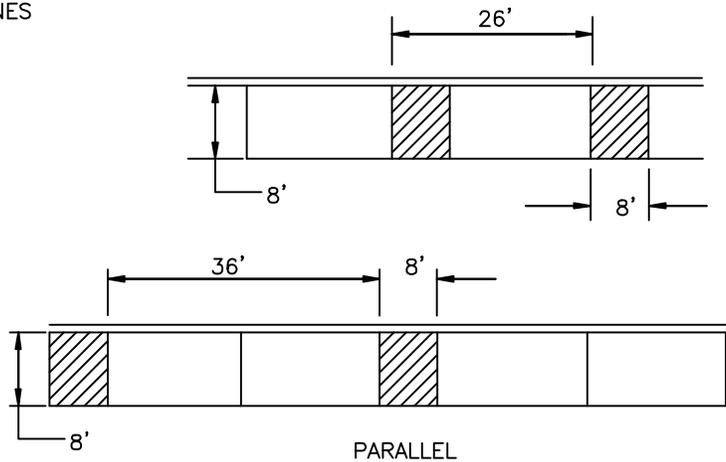
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| DEPARTMENT OF PUBLIC WORKS<br><b>STANDARD DETAILS</b>        |
| <b>CEMENT CONCRETE DRIVEWAY APPROACH<br/>         TYPE 2</b> |

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| STANDARD DETAIL NUMBER |
| <b>R-230</b>           |



- A = PARKING ANGLE
- B = STALL WIDTH, PERPENDICULAR TO STALL LINES
- C = STALL WIDTH, PARALLEL TO AISLE
- D = LENGTH OF STALL LINE
- E = STALL DEPTH, PERPENDICULAR TO AISLE
- F = AISLE WIDTH, BETWEEN STALL LINES
- G = STALL DEPTH, INTERLOCKING
- H = MODULE, WALL TO INTERLOCK
- I = MODULE, INTERLOCK TO INTERLOCK
- J = MODULE, INTERLOCK TO CURB
- K = BUMPER OVERHANG
- L = OFFSET
- M = SETBACK
- N = CROSS AISLE, ONE WAY
- N = CROSS AISLE, TWO WAY
- X = STALL NOT ACCESSIBLE IN CERTAIN LAYOUTS.



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DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TYPICAL PARKING LAYOUT

STANDARD DETAIL  
 NUMBER  
**R-240**

## PARKING STALL GEOMETRY DETAIL

SEE STD PLAN NO. R-210 FOR TYPICAL PARKING LAYOUT.

| PARKING ANGLE<br>(DEGREES) | STALL WIDTH<br>PERPENDICULAR<br>TO STALL LINES | STALL WIDTH<br>PARALLEL<br>TO AISLE | LENGTH OF<br>STALL LINE | STALL DEPTH<br>PERPENDICULAR<br>TO AISLE | AISLE WIDTH BETWEEN<br>STALL LINES<br>(SEE NOTE 1) | STALL DEPTH<br>INTERLOCKING | MODULE, WALL TO<br>INTERLOCK | MODULE, INTERLOCK<br>TO INTERLOCK | MODULE, INTERLOCK<br>TO CURB | BUMPER, OVERHANG<br>(TYPICAL) | OFFSET | SETBACK | CROSS AISLE<br>(ONE WAY) | CROSS AISLE<br>(TWO WAY) |
|----------------------------|--|-------------------------------------|-------------------------|--|--|-----------------------------|------------------------------|-----------------------------------|------------------------------|-------------------------------|--------|---------|--------------------------|--------------------------|
| A                          | B  | C                                   | D                       | E  | F  | G                           | H                            | I                                 | J                            | K                             | L      | M       | N                        | N                        |
| 45°                        | 9.0  | 12.7                                | 27.5                    | 19.5                                     | 12   | 16.5                        | 48.0                         | 45                                | 46.0                         | 2.0                           | 6.4    | 13.1    | 14                       | 24                       |
|                            | 9.5  | 13.4                                | 27.5                    | 19.5                                     | 11   | 16.5                        | 47.0                         | 44                                | 45.0                         | 2.0                           | 6.4    | 13.1    | 14                       | 24                       |
|                            | C  | 8.0                                 | 11.3                    | 22.5                                     | 16.0   | 11                          |                              |                                   |                              | 2.0                           |        |         | 14                       | 24                       |
|                            | H  | 13.0                                | 18.3                    | 27.5                                     | 19.5   | 11                          |                              |                                   |                              | 2.0                           |        |         | 14                       | 24                       |
|                            | V  | 16.0                                | 22.5                    | 32.0                                     | 22.6   | 12                          |                              |                                   |                              | 2.0                           |        |         | 14                       | 24                       |
| 60°                        | 9.0  | 10.4                                | 23.7                    | 20.5                                     | 16   | 18.5                        | 55.0                         | 53                                | 53.7                         | 2.3                           | 2.6    | 9.3     | 14                       | 24                       |
|                            | 9.5  | 11.0                                | 23.7                    | 20.5                                     | 15   | 18.5                        | 54.0                         | 52                                | 51.7                         | 2.3                           | 2.6    | 9.3     | 14                       | 24                       |
|                            | C  | 8.0                                 | 9.3                     | 19.5                                     | 16.7   | 14                          |                              |                                   |                              | 2.3                           |        |         | 14                       | 24                       |
|                            | H  | 13.0                                | 15.0                    | 23.7                                     | 20.5   | 15                          |                              |                                   |                              | 2.3                           |        |         | 14                       | 24                       |
|                            | V  | 16.0                                | 18.5                    | 26.9                                     | 23.3   | 16                          |                              |                                   |                              | 2.3                           |        |         | 14                       | 24                       |
| 75°                        | 9.0  | 9.3                                 | 20.9                    | 20.0                                     | 23   | 19.0                        | 62.0                         | 61                                | 59.5                         | 2.5                           | .6     | 4.8     | 14                       | 24                       |
|                            | 9.5  | 9.8                                 | 20.9                    | 20.0                                     | 22   | 19.0                        | 61.0                         | 60                                | 58.5                         | 2.5                           | .6     | 4.8     | 14                       | 24                       |
|                            | C  | 8.0                                 | 8.3                     | 17.0                                     | 16.3   | 18                          |                              |                                   |                              | 2.5                           |        |         | 14                       | 24                       |
|                            | H  | 13.0                                | 13.5                    | 20.9                                     | 20.0   | 22                          |                              |                                   |                              | 2.5                           |        |         | 14                       | 24                       |
|                            | V  | 16.0                                | 16.6                    | 23.2                                     | 22.4   | 24                          |                              |                                   |                              | 2.5                           |        |         | 14                       | 24                       |
| 90°                        | 9.0  | 9.0                                 | 19.0                    | 19.0                                     | 26   | 19.0                        | 66                           | 66                                | 66                           | 2.5                           | 0      | 0       | 14                       | 24                       |
|                            | 9.5  | 9.5                                 | 19.0                    | 19.0                                     | 25   | 19.0                        | 63                           | 63                                | 63                           | 2.5                           | 0      | 0       | 14                       | 24                       |
|                            | C  | 8.0                                 | 8.0                     | 15.0                                     | 15.0   | 22                          |                              |                                   |                              | 2.5                           |        | 0       | 14                       | 24                       |
|                            | H  | 13.0                                | 13.0                    | 18.5                                     | 18.5   | 25                          |                              |                                   |                              | 2.5                           |        | 11      | 14                       | 24                       |
|                            | V  | 16.0                                | 16.0                    | 20.0                                     | 20.0   | 24                          |                              |                                   |                              | 2.5                           |        |         | 14                       | 24                       |

### NOTES:

1. AISLE WIDTH MAY BE REQUIRED TO BE WIDER IF MULTIPLE UTILITY LINES ARE LOCATED WITHIN THE AISLE CORRIDOR.
2. C = COMPACT SPACE. EACH SPACE SHALL BE IDENTIFIED BY PAINTING "COMPACT" ON PAVEMENT.
3. H = HANDICAP SPACE, SEE WASHINGTON STATE REGULATIONS FOR BARRIER FREE FACILITIES.
4. V = HANDICAP VAN ACCESSIBLE SPACE, SEE WASHINGTON STATE REGULATIONS FOR BARRIER FREE FACILITIES.



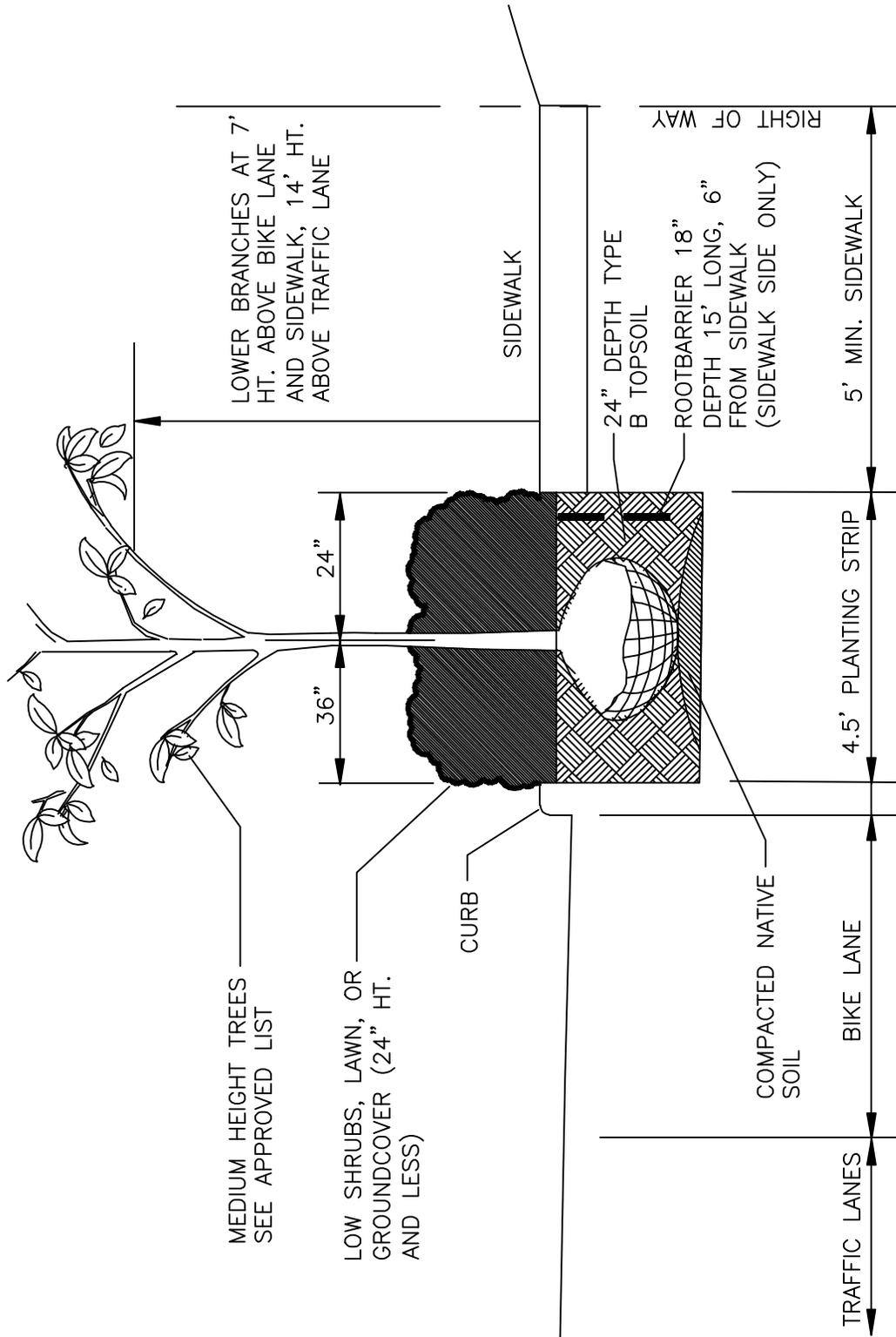
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| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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**DEPARTMENT OF PUBLIC WORKS  
STANDARD DETAILS**

**PARKING LOT DETAIL**

STANDARD DETAIL  
NUMBER

**R-250**



|              |            |
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| APPROVED BY  | L. OLIVE   |
| DATE         | 07/31/2008 |
| REF STD SPEC |            |
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DEPARTMENT OF PUBLIC WORKS  
 STANDARD DETAILS

PLANTING STRIP

STANDARD DETAIL NUMBER

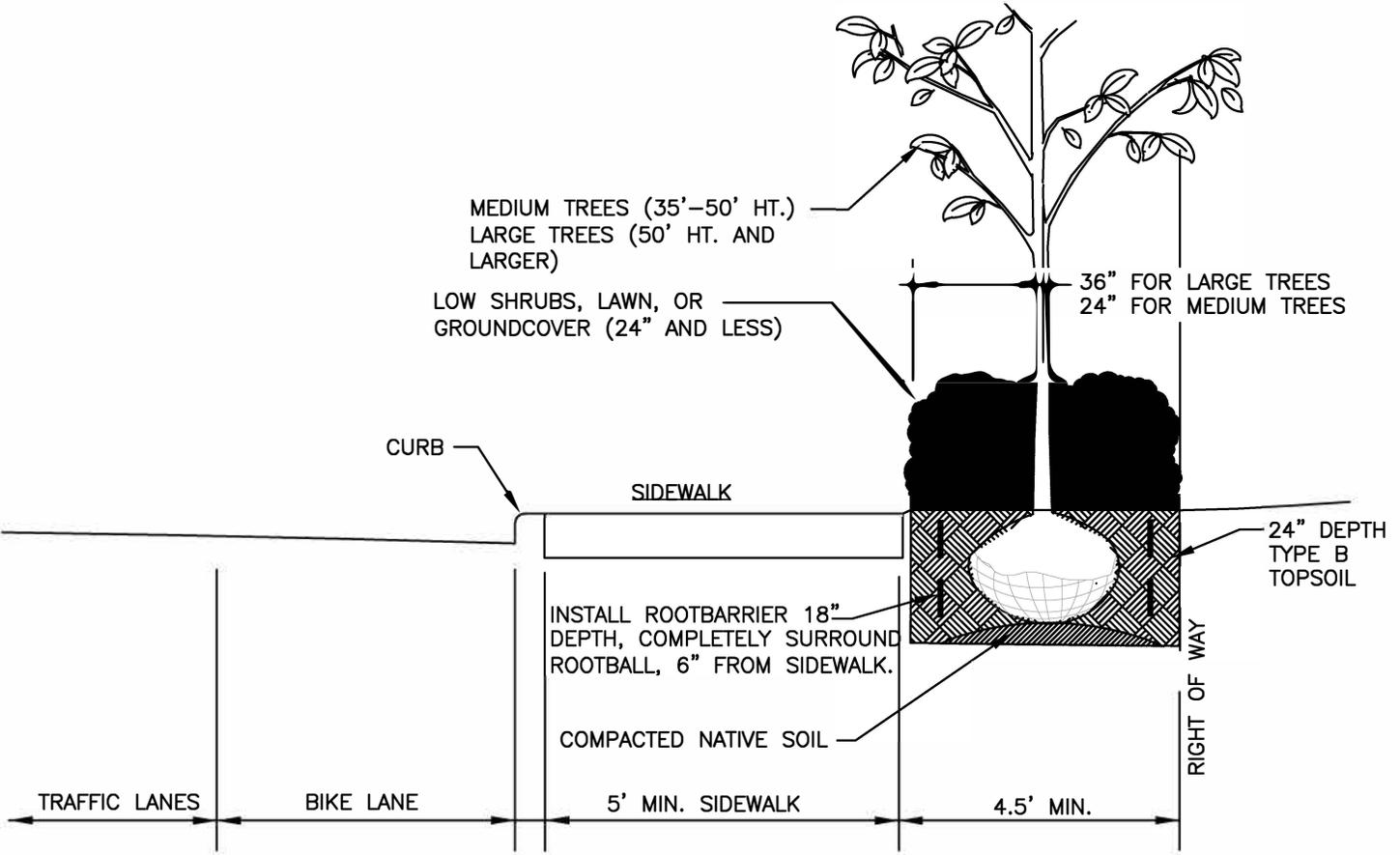
R-260



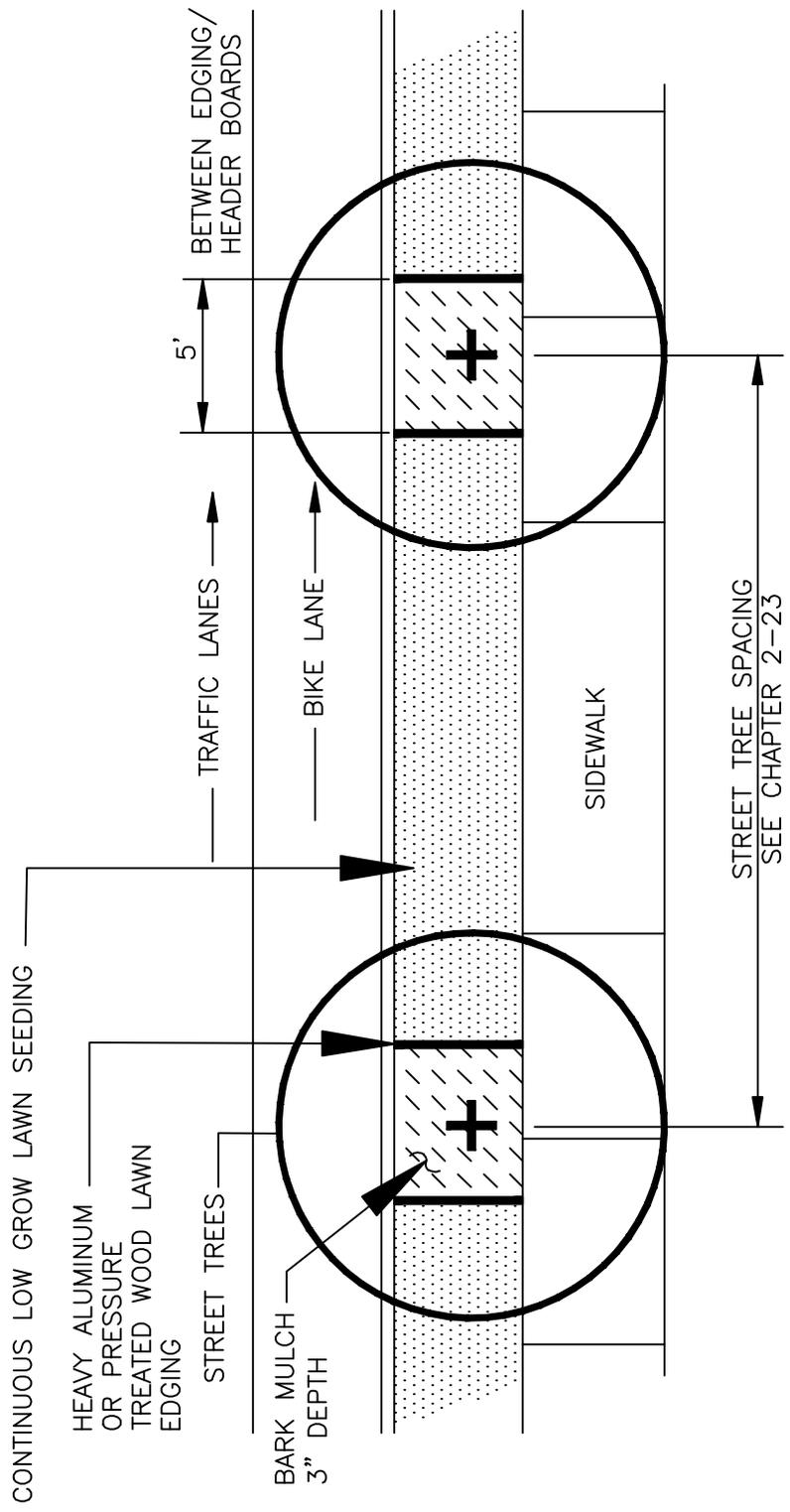
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| DATE          | 07/31/2008 |
| REF STD. SPEC |            |

DEPARTMENT OF PUBLIC WORKS  
 STANDARD DETAILS  
 PLANTING STRIP BEHIND  
 SIDEWALK

STANDARD DETAIL  
 NUMBER  
 R-270



MEDIUM AND LARGE TREES BEHIND SIDEWALK



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|              |            |

DEPARTMENT OF PUBLIC WORKS  
**STANDARD DETAILS**  
 TREE AND LAWN PLANTING  
 STRIP

STANDARD DETAIL  
 NUMBER  
**R-280**