

# STREET WORK DRAWINGS

## TABLE OF CONTENTS PAGE 1 OF 2

500.	LOCAL STREET SECTION	<u>DELETED</u>
501.	COLLECTOR STREET SECTION	516
502.	ARTERIAL STREET SECTION	
503.	STANDARD CUL-DE-SAC	
504.	STANDARD RESIDENTIAL DRIVEWAY	
504A.	STANDARD DRIVEWAY NOTES	
505.	STANDARD COMMERCIAL DRIVEWAY	
506.	COMMERCIAL DRIVEWAY WITH CURBS	
507.	CURB CUT FOR DRIVEWAYS	
508.	SIDEWALK DETAIL	
509.	SIDEWALK RAMP DETAILS AND PLACEMENT OPTIONS	
510.	STANDARD CURB	
511.	MONOLITHIC CURB AND GUTTER	
512.	STREET BARRICADE	
513.	TYPICAL UTILITY PLACEMENT DETAIL	
514.	MANHOLE ADJUSTMENT DETAIL	
515.	PEDESTRIAN PATH OR BIKEWAY	
517.	OFFSET CROWN	
518.	EYEBROW-CORNER	
519.	MAILBOX LOCATION	
520.	CENTERLINE SURVEY MONUMENTS	
521.	STREET NAME SIGN 4-INCH LETTERING	
522.	STREET NAME SIGN 6-INCH LETTERING	
523.	TYPICAL SIGN ASSEMBLY AND MOUNTING HARDWARE	
524.	STREET SIGN GENERAL NOTES	
525.	END-OF-ROADWAY/SIDEWALK MARKER	
526.	ALLEY SECTION	
527.	REMOVABLE VEHICLE BARRIER POST	
528.	LOCAL RESIDENTIAL SPEED HUMP	
529.	PAVEMENT MARKINGS PLACEMENT	
529A.	BIKE LANE AND CROSSWALK NOTES	
530.	STREET TREE PLANTING IN PLANTER STRIP	
531.	PROJECT NOTIFICATION SIGN	

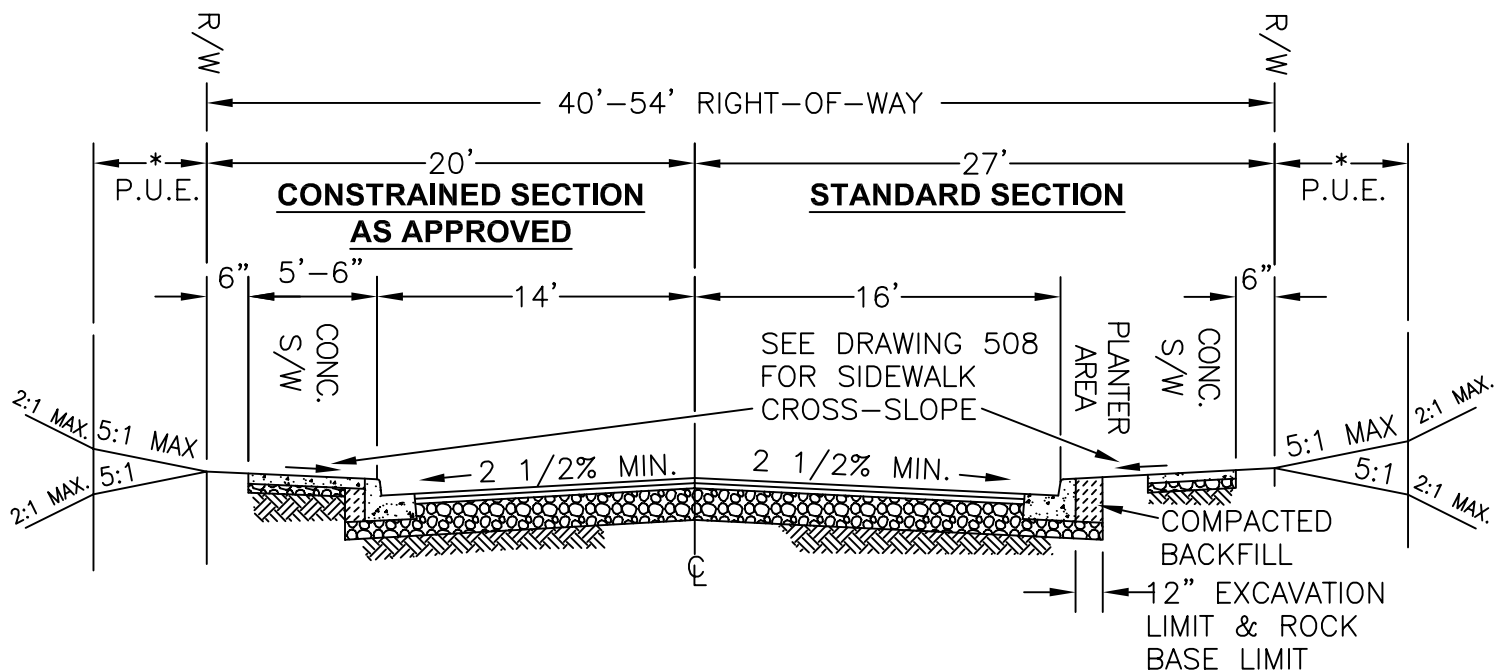


# STREET WORK DRAWINGS

## TABLE OF CONTENTS PAGE 2 OF 2

532.	PAVEMENT CUT STANDARD, TYPICAL LAYOUT
533.	PAVEMENT CUT STANDARD, INTERSECTIONS
534.	PAVEMENT CUT STANDARDS, CUL-DE-SAC (LOCAL STREETS)
535.	MEDIAN STRIPING AND SIGN DETAIL
536.	TYPICAL ACORN STYLE DECORATIVE STREET LIGHT POLE DETAIL
536A.	TYPICAL LIGHT POLE WIRING TO JUNCTION BOX
536B.	24" CAST-IN-PLACE DECORATIVE LUMINAIRE POLE FOUNDATION
536C.	STREET LIGHT LOCATIONS AND FIXTURE DETAILS
537.	BIKE RACK DETAIL
538.	POTHOLE RESTORATION
539.	DECORATIVE CORRIDOR, TYPICAL TREE GRATE INSTALLATION
540.	DECORATIVE CORRIDOR, TYPICAL SIDEWALK SCORING DETAIL
541.	FUTURE ROAD SIGN





#### NOTES:

1. ASPHALT CONCRETE PAVEMENT (ACP) FOR ALL LOCAL STREET SECTIONS SHALL BE LEVEL 2 1/2" DENSE, PG 64-22, ESAL 3 TO 30 MIX DESIGN.
2. AASHTO SOIL TYPES:
  - 2.1. FOR SOIL TYPES A-1 TO A-6, PLACE ASPHALT CONCRETE IN TWO LIFTS. EACH LIFT THICKNESS SHALL BE 2 INCHES FOR A TOTAL ASPHALT THICKNESS OF 4 INCHES. SECOND FINAL LIFT SHALL BE PLACED WITH A CONTINUOUS PAVING OPERATION FOLLOWING THE PLACEMENT OF THE FIRST BASE LIFT, UNLESS OTHERWISE APPROVED BY CITY. COMPACT PER OREGON CITY STREET SYSTEM NOTES.
  - 2.2. FOR SOIL TYPE A-7 (CLAY SOILS), A PAVEMENT DESIGN REPORT SHALL BE REQUIRED TO ACCOMMODATE ANTICIPATED TRAFFIC LOADINGS AND EXISTING SOIL CONDITIONS. THE REPORT SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
3. DEFAULT AGGREGATE BASE ROCK THICKNESS SHALL BE 10 INCHES, PER THE STREET DESIGN STANDARDS.
4. SUBGRADE AND BASE ROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY, PER AASHTO T-180.
5. STANDARD AND CONSTRAINED SECTIONS SHALL BE SYMMETRICAL ABOUT THE CENTER LINE.
6. USE MONOLITHIC CURB AND GUTTER, UNLESS OTHERWISE NOTED (SEE DRAWING 511)
7. DESIGN SPEED EQUALS 25 MILES PER HOUR.
- \* 10' P.U.E. FOR R-10, R-8, R-6, R3.5, R-2, G1, C1. ALL OTHER ZONES 5' P.U.E.



Public Works Standard Drawings

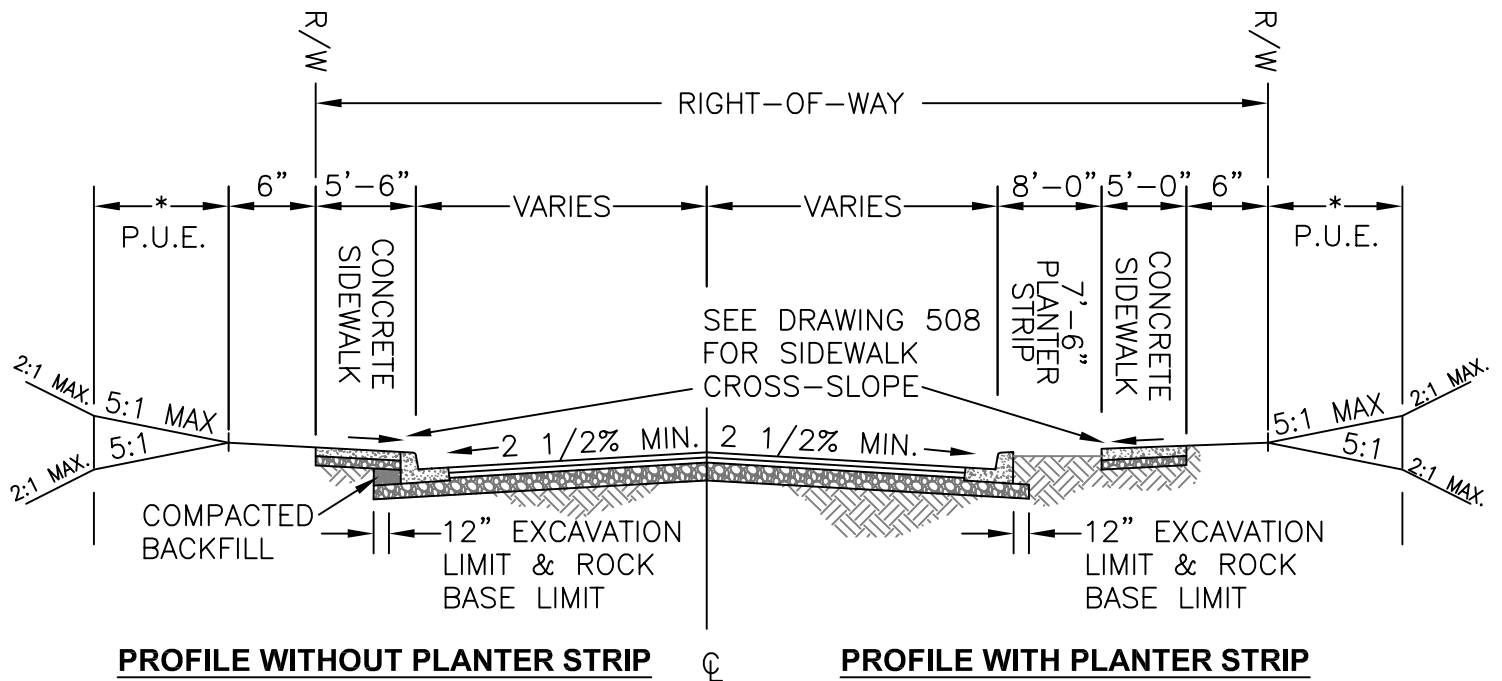
LOCAL STREET SECTION

SCALE NTS

DATE JAN '24 REV. 1

ENGR. DW DRAWN KAE

DRAWING NO. 500



**NOTES:**

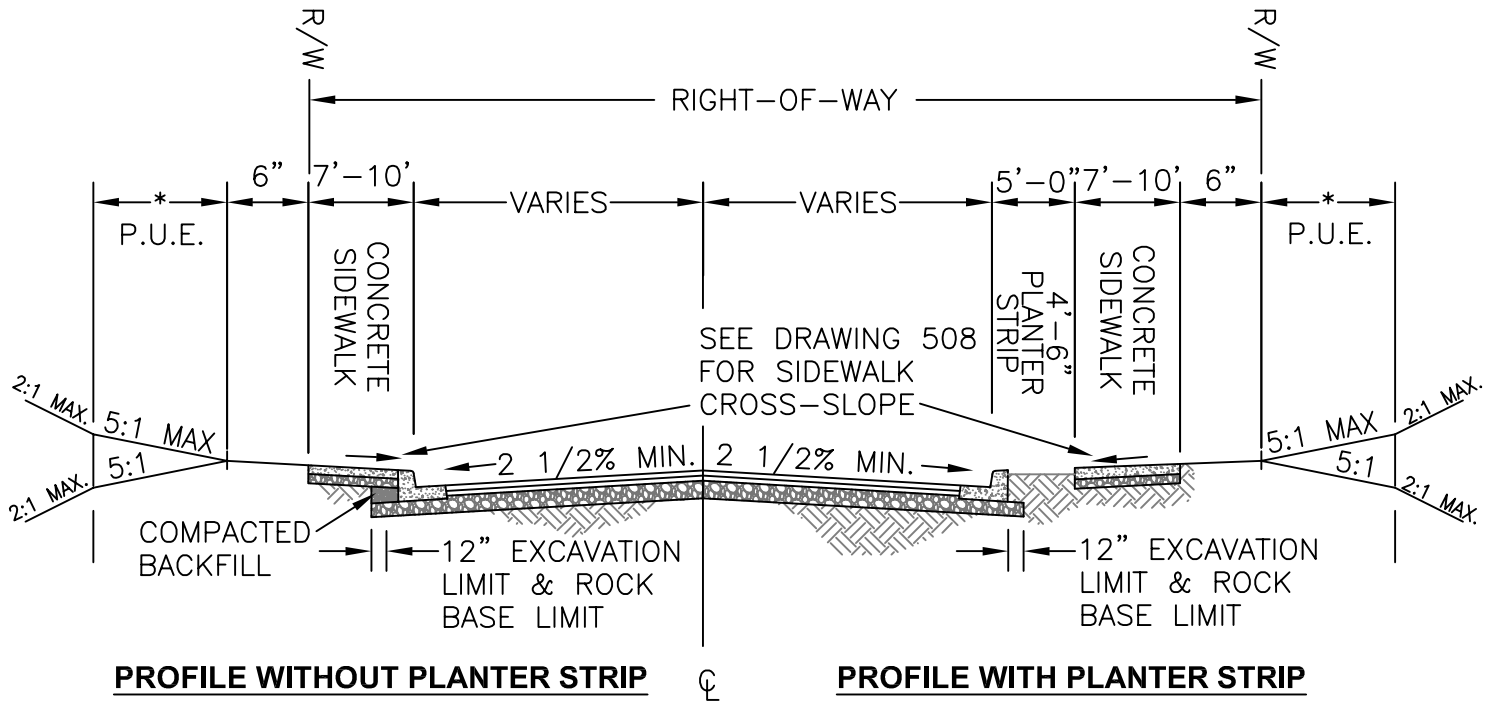
1. A PAVEMENT DESIGN, PER OREGON CITY STREET DESIGN STANDARDS, TO ACCOMMODATE ANTICIPATED TRAFFIC LOADINGS AND EXISTING SOIL CONDITIONS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL. PAVEMENT SHALL BE LEVEL-2, HALF-INCH DENSE ACP COMPACTED TO 92% MAX DENSITY (RICE DENSITY) PER AASHTO T-209.
  2. SUBGRADE AND BASE ROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER AASHTO T-180.
  3. ALL COLLECTORS SHALL INCLUDE TWO SIX-FOOT BIKE LANES, UNLESS PROVIDED OTHERWISE. MAY BE FIVE-FOOT BIKE LANES IF PARKING LANE PROVIDED.
  4. WHEN REQUIRED, CENTER TURN LANES SHALL BE 12 FEET WIDE.
  5. TRAVEL LANES SHALL BE 11 FEET WIDE, OR AS APPROVED BY CITY ENGINEER.
  6. THE NUMBER OF LANES SHALL BE DETERMINED BY THE CITY'S TRANSPORTATION SYSTEM PLAN OR PROJECT TRAFFIC ANALYSIS.
  7. BIKE SYMBOLS SHALL BE THERMOPLASTIC.
- \* 10' P.U.E. FOR R-10, R-8, R-6, R3.5, R-2, G1, C1. ALL OTHER ZONES 5' P.U.E.



Public Works Standard Drawings

COLLECTOR STREET SECTION

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	501



#### NOTES:

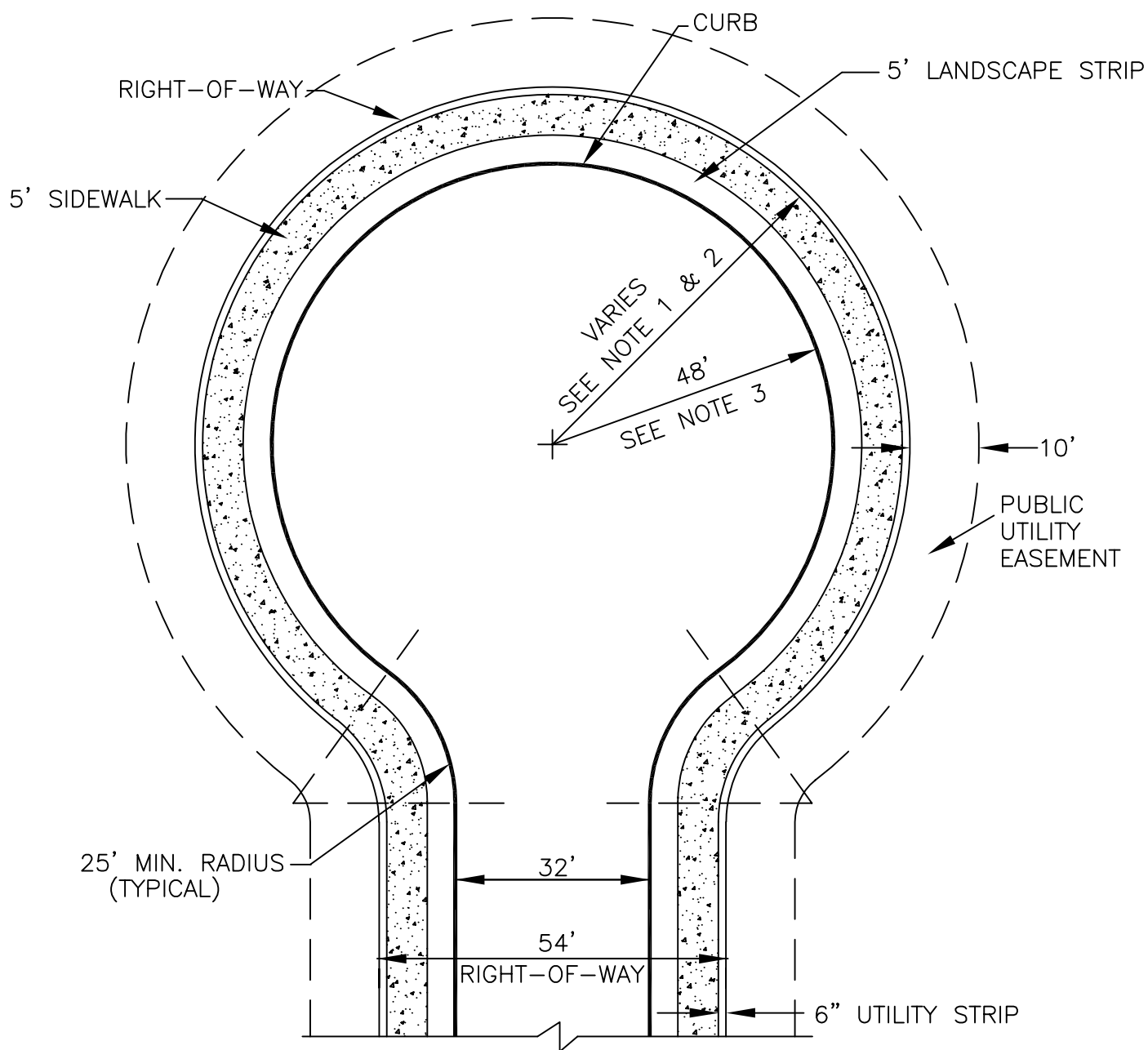
1. A PAVEMENT DESIGN, PER OREGON CITY STREET DESIGN STANDARDS, TO ACCOMMODATE ANTICIPATED TRAFFIC LOADINGS AND EXISTING SOIL CONDITIONS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL. PAVEMENT SHALL BE LEVEL-3 1/2" DENSE ACP COMPACTED TO 92% MAX DENSITY (RICE DENSITY) PER AASHTO T-209.
  2. SUBGRADE AND BASE ROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER AASHTO T-180.
  3. ALL ARTERIALS SHALL INCLUDE TWO SIX-FOOT BIKE LANES, UNLESS PROVIDED OTHERWISE.
  4. WHEN REQUIRED CENTER TURN LANES SHALL BE 12 FEET WIDE.
  5. TRAVEL LANES SHALL BE 12 FEET WIDE, OR AS APPROVED BY CITY ENGINEER.
  6. THE NUMBER OF LANES SHALL BE DETERMINED BY THE CITY'S TRANSPORTATION SYSTEM PLAN OR PROJECT TRAFFIC ANALYSIS.
  7. BIKE SYMBOLS SHALL BE THERMOPLASTIC.
- \* 10' P.U.E. FOR R-10, R-8, R-6, R3.5, R-2, G1, C1. ALL OTHER ZONES 5' P.U.E.



Public Works Standard Drawings

ARTERIAL STREET SECTION

SCALE NTS	
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO. 502	



#### NOTES:

1. PAVEMENT WIDTH EXCEPTION. A 28' WIDTH WITH A 41' RADIUS TURNAROUND MAY BE ALLOWED WHEN A CONSTRAINED SECTION IS APPROVED.
2. RIGHT OF WAY WIDTH EXCEPTION. A 50' WIDTH WITH A 51.5' RADIUS TURNAROUND MAY BE ALLOWED WHEN A CONSTRAINED SECTION IS APPROVED.
3. DEAD END CUL-DE-SAC ROADS IN EXCESS OF 150' IN LENGTH SHALL HAVE A RADIUS OF 48' AND PARKING WITHIN THE CUL-DE-SAC SHALL BE PROHIBITED.



Public Works Standard Drawings

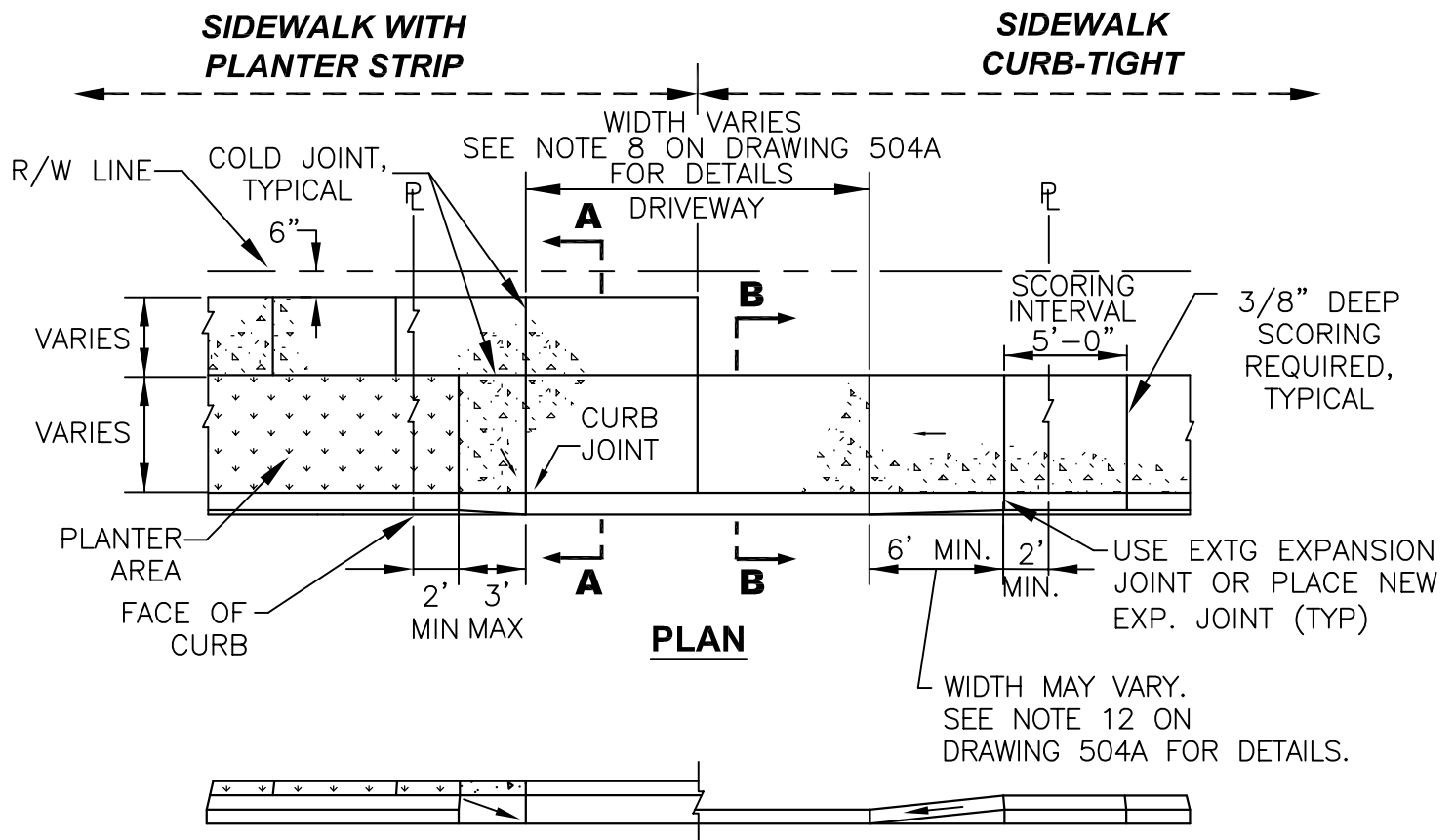
STANDARD CUL-DE-SAC

SCALE NTS

DATE JAN '23 REV.

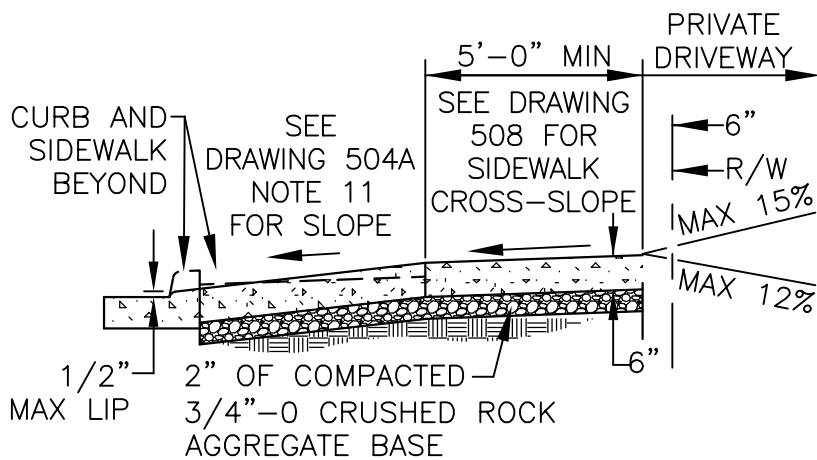
ENGR. DW DRAWN KAE

DRAWING NO. 503

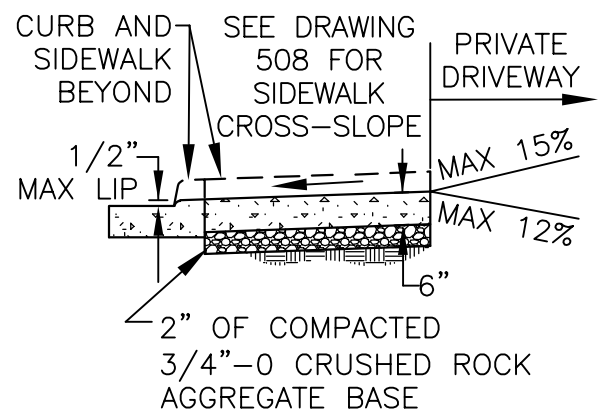


SEE STANDARD DRAWING 504A FOR STANDARD RESIDENTIAL DRIVEWAY NOTES

### ELEVATION



### SECTION A-A



### SECTION B-B



Public Works Standard Drawings

STANDARD RESIDENTIAL DRIVEWAY

SCALE	NTS
DATE MAY '24	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO.	504

NOTES FOR STANDARD DETAIL DRAWINGS 504 & 505 (STANDARD DRIVEWAYS):

1. SECTION A-A MAY BE USED FOR CURB-TIGHT SIDEWALK DRIVEWAY APRONS IF SIDEWALK WIDTH IS 10' OR MORE.
2. CONCRETE SHALL BE AIR-ENTRAINED 4.0% MINIMUM AND HAVE A MINIMUM BREAKING STRENGTH OF 4,000 PSI AFTER 28 DAYS.
3. FINISH WITH BROOM AND EDGE ALL JOINTS WITH 3" SHINE.
4. IF CURBING IS BEING REMOVED TO INSTALL A DRIVEWAY AND THE GUTTER SHOULD BECOME SEPARATED FROM THE DRIVING SURFACE IN EXCESS OF 1/16 INCH, THEN THE GUTTER SHALL ALSO BE REMOVED AND REPLACED.
5. CURB JOINT SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2 INCH RADIUS ALONG BACK OF CURB.
6. WEEPHOLES SHALL NOT BE PLACED IN WING.
7. SLOPE OF THE DRIVEWAY MAY BE AWAY FROM THE CURB WHEN PREAPPROVED BY CITY ENGINEER.
8. DRIVEWAY THROAT SCORING PATTERN SHALL MATCH SIDEWALK SCORING PATTERN.
9. EXPANSION JOINT MATERIAL SHALL BE "REFLEX RUBBER JOINT EXPANSION" MANUFACTURED BY THE JD RUSSELL COMPANY, OR CITY APPROVED EQUAL, WITH A THICKNESS OF 1/2-INCH.
10. MAX 7.5% DESIGN SLOPE DRIVEWAY RAMP (MAX 8.33% FINISH SLOPE).
11. SEE DRAWING 508 FOR SIDEWALK SLOPE.
12. WINGS OF A DRIVEWAY WHICH ARE A PORTION OF THE CURB-TIGHT SIDEWALK SHALL HAVE MAXIMUM 7.5% DESIGN SLOPE (MAXIMUM 8.33% FINISHED SLOPE).

DRIVEWAY THROAT MEASURED AT THE R.O.W. SHALL CONFORM TO:

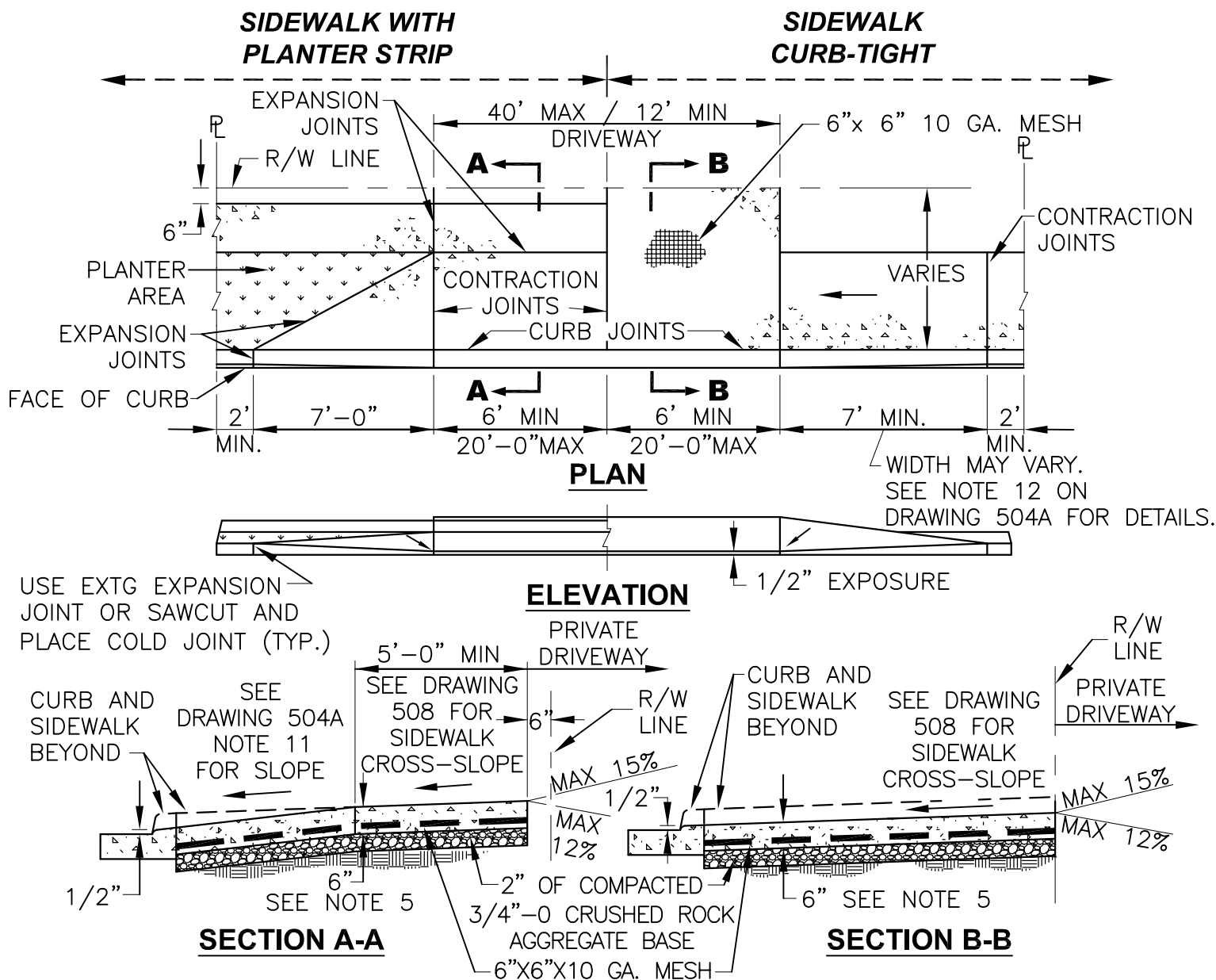
- |                      |                    |
|----------------------|--------------------|
| • SINGLE FAMILY      | 10' MIN., 24' MAX. |
| • DUPLEXES           | 12' MIN., 24' MAX. |
| • 3-4 PLEXES         | 12' MIN., 36' MAX. |
| • MULTI-FAMILY       | 18' MIN., 30' MAX. |
| • COMMERCIAL ONE-WAY | 12' MIN.           |
| • COMMERCIAL TWO-WAY | 20' MIN., 40' MAX. |



Public Works Standard Drawings

STANDARD DRIVEWAY NOTES

SCALE	NTS
DATE JUL '25	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO.	504A



#### NOTES:

1. SECTION A-A MAY BE USED FOR CURB-TIGHT SIDEWALK DRIVEWAY APRONS IF SIDEWALK'S WIDTH IS 10' OR MORE.
2. CONCRETE SHALL BE AIR ENTRAINED 4.5% MINIMUM AND HAVE A MINIMUM BREAKING STRENGTH OF 4,000 PSI AFTER 28 DAYS.
3. CURB JOINT SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2 INCH RADIUS ALONG BACK OF CURB.
4. EXPANSION JOINTS SHALL BE 1/2 INCH "REFLEX RUBBER JOINT EXPANSION," OR APPROVED EQUAL, EXTENDING FROM TOP OF BASE TO FINISHED GRADE.
5. FOR DRIVEWAYS 24 FEET WIDE OR GREATER, CONCRETE TO BE INCREASED TO A 7-INCH DEPTH.
6. FINISH WITH BROOM AND EDGE ALL JOINTS WITH 3" SHINE.
7. WEEPHOLES SHALL NOT BE PLACED IN WING.
8. IF CURBING IS BEING REMOVED TO INSTALL A DRIVEWAY AND THE GUTTER SHOULD BECOME SEPARATED FROM THE DRIVING SURFACE IN EXCESS OF 1/16 INCH, THEN THE GUTTER SHALL ALSO BE REMOVED AND REPLACED.
9. WINGS OF THE COMMERCIAL DRIVEWAY WHICH ARE A PORTION OF THE CURB-TIGHT SIDEWALK SHALL NOT EXCEED 8.33% (1:12) FINISHED SLOPE.
10. SLOPE OF THE DRIVEWAY MAY BE AWAY FROM THE CURB WHEN PREAPPROVED BY CITY ENGINEER.



Public Works Standard Drawings

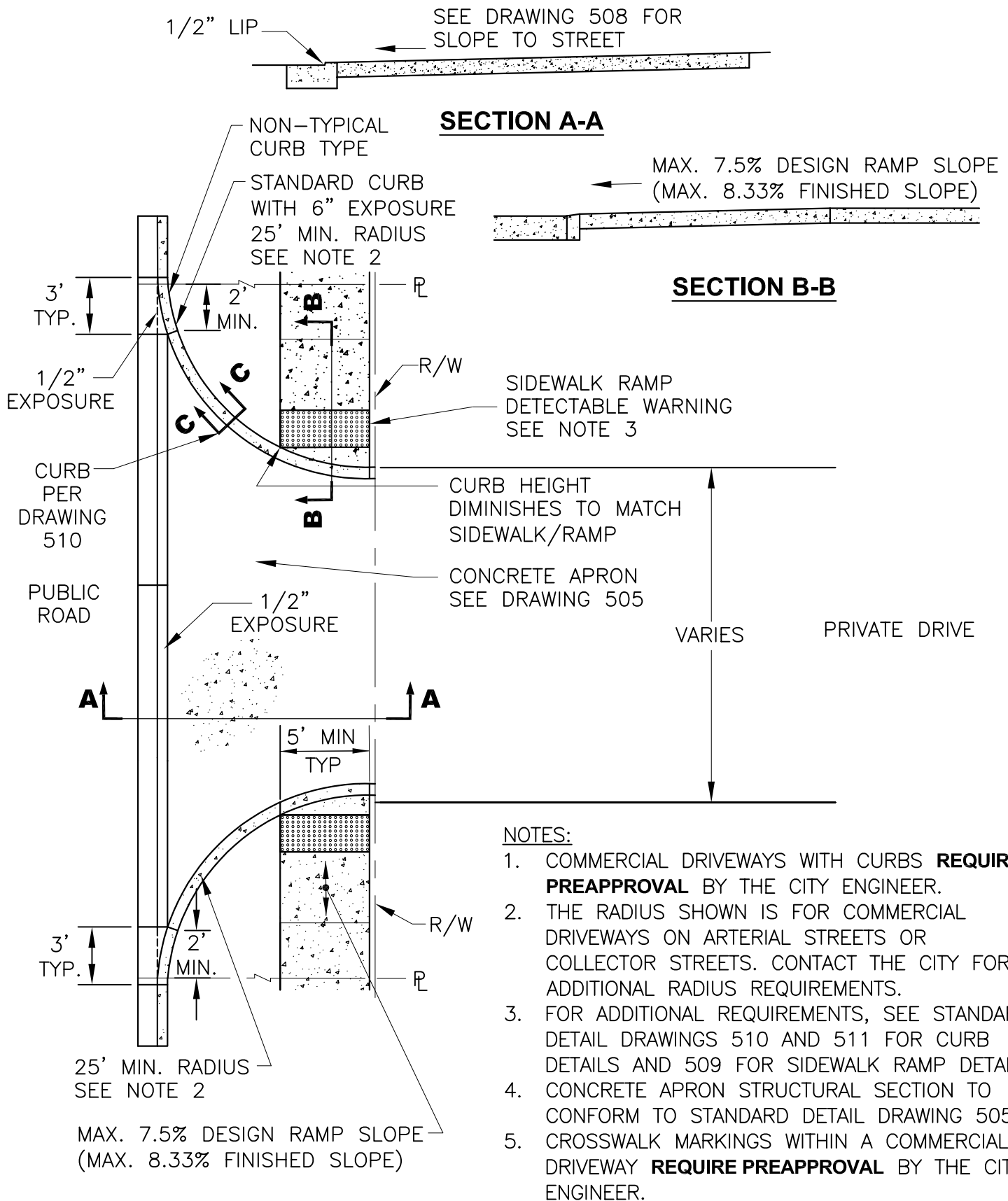
STANDARD COMMERCIAL DRIVEWAY

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

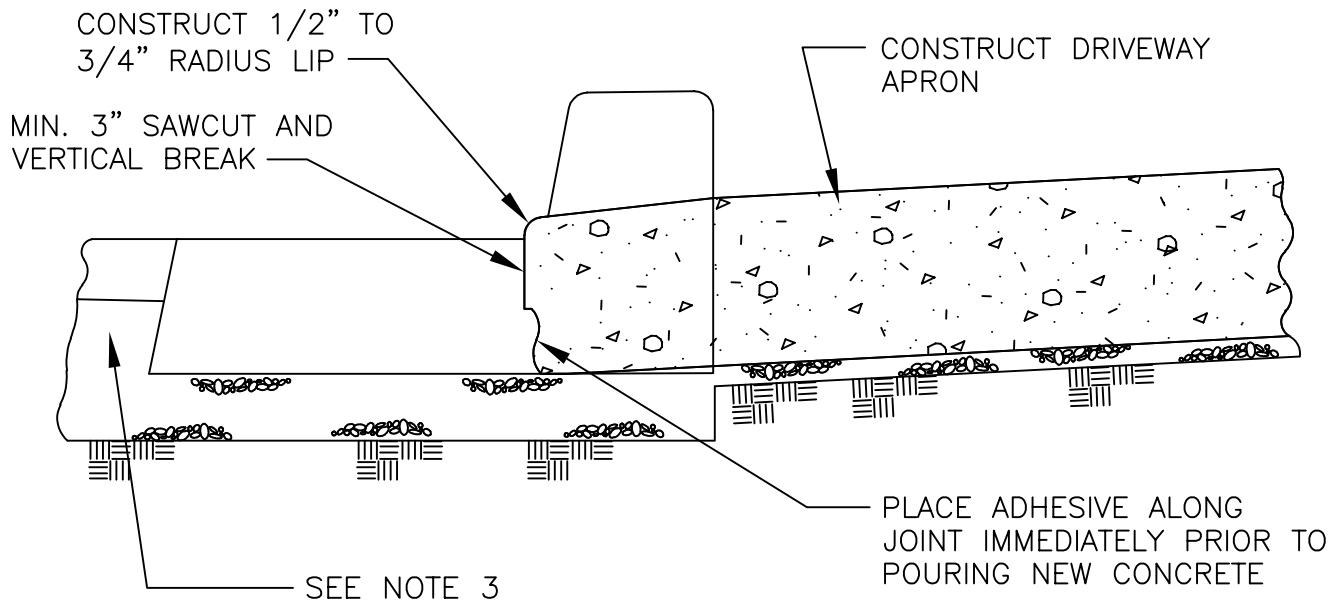
DRAWING NO. 505



Public Works Standard Drawings

COMMERCIAL DRIVEWAY WITH CURBS

SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	506



#### NOTES:

1. SAWCUT THROUGH GUTTER PLATE SHALL BE MADE AS CLOSE TO CURB FACE AS POSSIBLE.
  - 1.A. WITH CITY ENGINEER APPROVAL, THE CURB MAY BE GROUND DOWN TO ACHIEVE A REMAINING LIP EXPOSURE OF  $1/2 - 3/4$ " ABOVE THE GUTTER FLOWLINE. THIS OPTION IS ONLY ALLOWED IF CURB REMOVAL IS LESS THAN 50% OF TOTAL HEIGHT. GRINDING SHALL BE FINISHED USING A DIAMOND CUP GRINDING WHEEL TO PROVIDE A NON-SLIP SURFACE, UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
2. COMPLETE CURB AND GUTTER SHALL NOT BE REMOVED UNLESS DIRECTED BY THE ENGINEER.
3. WHEN ENTIRE GUTTER PLATE IS REMOVED THE EXISTING PAVEMENT SHALL BE CUT BACK AND A 6" MONOLITHIC CONCRETE BENCH SHALL BE CONSTRUCTED WITH THE NEW GUTTER TO PROVIDE SUPPORT UNDER PAVEMENT.
4. WHEN STANDARD CURBS ARE REMOVED, A MINIMUM OF 2 FEET OF PAVEMENT FROM THE FACE OF CURB SHALL BE REMOVED AND REPLACED WITH LEVEL 2  $1/2$ " DENSE HMA OF AN EQUIVALENT DEPTH AND COMPACTED.



Public Works Standard Drawings

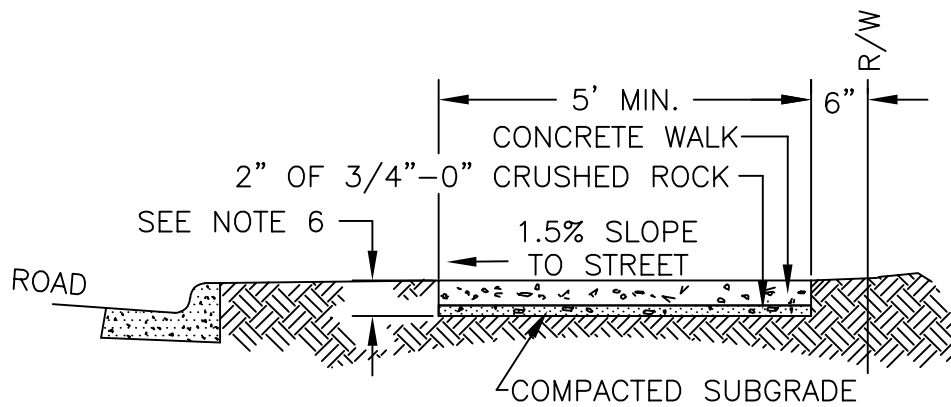
CURB CUT FOR DRIVEWAYS

SCALE NTS

DATE JAN '26 REV. 1

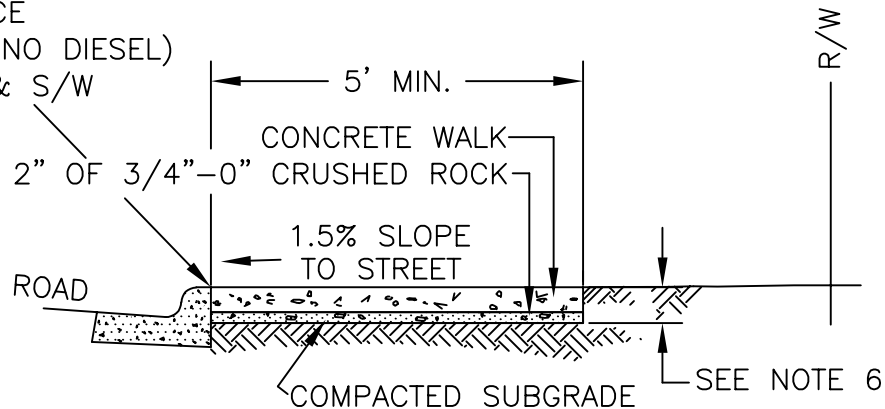
ENGR. DW DRAWN KAE

DRAWING NO. 507



### **SIDEWALK AWAY FROM CURB**

CURB JOINT PLACE  
BOND BREAKER (NO DIESEL)  
BETWEEN CURB & S/W



### **SIDEWALK ADJACENT TO CURB**

#### **NOTES:**

1. CONCRETE SHALL BE AIR ENTRAINED MINIMUM 4.0% AND HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AT 28 DAYS.
2. PANELS TO BE 5 FEET LONG, ALL SURFACES SHALL BE TROWELED AND BROOMED IN A WORKMAN LIKE MANNER. WORKMANSHIP DESCRIBED AS: LIGHT BROOM FINISH WITH NO RIDGES AT TROWELED BORDERS. ALL EDGES SHALL BE TOOL ROUNDED AND SHINED 3" AFTER BROOMING. NO HUMPS OR SAGS, AND FINISH TO BE PROTECTED FROM WEATHER DAMAGE AND GRAFFITI.
3. EXPANSION JOINTS SHALL BE PLACED AT SIDES OF DRIVEWAY APPROACHES, UTILITY VAULTS, RAMPS, & AT SPACING NOT TO EXCEED 45 FT. EXPANSION MATERIAL SHALL BE 1/2" REFLEX RUBBER JOINT EXPANSION.
4. CONTRACTION JOINTS SHALL BE PLACED AT ALL CHANGES IN DIRECTION, POINTS OF CURVATURE AND AT 15' MAXIMUM INTERVALS WITH A MAXIMUM 1/2-INCH RADIUS TROWEL JOINT.
5. SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4 INCHES, SEE DRAWINGS 504 & 505 FOR DRIVEWAY CROSSINGS.
6. DRAIN WEEPHOLES IN CURBS SHALL BE EXTENDED TO BACK OF SIDEWALK WITH 3-INCH DIAMETER PVC SCHEDULE 40 ASTM 1785 PIPE AT 2% SLOPE. CONTRACTION JOINT TO BE PLACED OVER PIPE.
7. LOCATION & WIDTH OF SIDEWALK WILL VARY DEPENDING OF STREET CLASSIFICATION. SEE STREET SECTIONS.
8. MAX. 1.5% DESIGN SLOPE (MAX. 2.0% FINISHED SLOPE)

Public Works Standard Drawings

**SIDEWALK DETAIL**

SCALE NTS

DATE JUL '25 REV. 1

ENGR. DW DRAWN KAE

DRAWING NO. 508



NOTES:

1. FOR SIDEWALK RAMP DETAILS USE OREGON DEPARTMENT OF TRANSPORTATION'S (ODOT) STANDARD RD900 SERIES DRAWINGS. SEE INDEX BELOW:

CURB RAMP INDEX	
STD. DWG. NO.	STD. DWG. TITLE
RD900	Curb Ramp Components And Legend
RD901	Curb Ramp Legend And Corner Identification
RD902	Detectable Warning Surface Details
RD904	Detectable Warning Surface Placement For Curb Ramps
RD905	Detectable Warning Surface Placement For Directional Curbs
RD906	Detectable Warning Surface Placement For Accessible Route Island
RD908	Detectable Warning Surface Placement
RD910, RD912	Perpendicular Curb Ramp
RD913	Perpendicular Curb Ramp With Closure
RD916	Perpendicular Curb Ramp Single Ramp
RD920	Parallel Curb Ramp
RD922	Parallel Curb Ramp Single Ramp
RD930, RD932	Combination Curb Ramp
RD938	Combination Curb Ramp Single Ramp
RD940	Blended Transition Curb Ramp Single Ramp
RD950 & RD952	End Of Walk Curb Ramp
RD960	Unique Curb Ramp

2. THESE DRAWINGS CAN BE BE FOUND ON ODOT'S WEBSITE:  
<https://www.oregon.gov/ODOT/Engineering/Pages/Drawings-Roadway.aspx>
3. CONCRETE FOR SIDEWALK RAMPS SHALL BE AIR ENTRAINED (4.5% MINIMUM) AND HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AT 28 DAYS.
4. TRUNCATED DOME DETECTABLE WARNING SURFACE PANELS SHALL BE:  
CITY APPROVED CONCRETE OR CAST IRON PANEL IN COATED BLACK OR CHARCOAL COLOR. PLASTIC OR FIBERGLASS PANELS OR SURFACE APPLIED SYSTEMS WILL NOT BE ACCEPTED.

QUALIFYING PRODUCT LIST:

ADA SOLUTIONS— CAST IRON TACTILE SYSTEM OR CITY APPROVED EQUAL  
<https://adatile.com/cast-iron-tactile-systems/>

TUFTILE — CAST IRON WET SET TILES  
<https://www.tuftile.com>

OR APPROVED EQUAL CAST IRON TRUNCATED DOME FROM THE ODOT QPL.

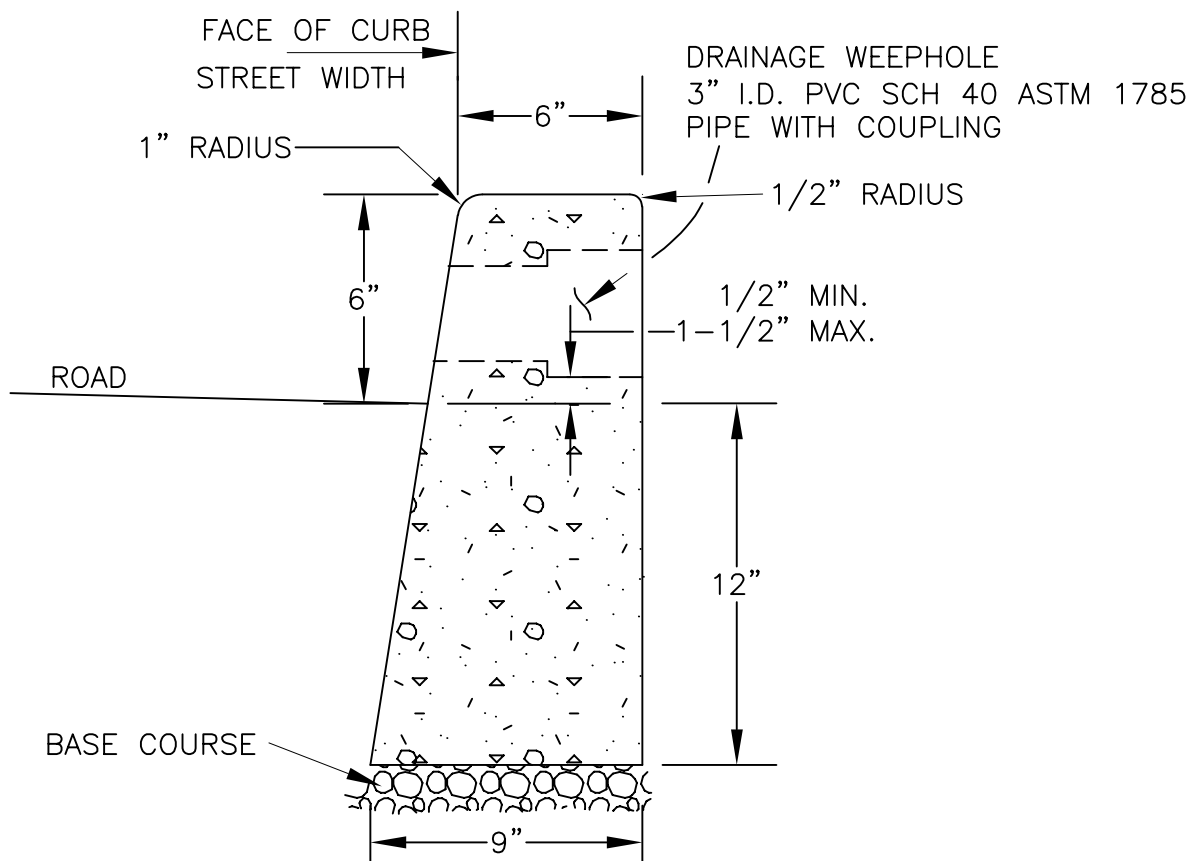
5. MAX. 1.5% DESIGN LANDING SLOPE (MAX. 2.0% FINISHED SLOPE).
6. MAX. 7.5% DESIGN RAMP SLOPE (MAX. 8.33% FINISHED SLOPE).
7. TRUNCATED DOME PANELS SHALL BE NO SMALLER THAN 2'x1'



Public Works Standard Drawings

**SIDEWALK RAMP DETAILS  
AND PLACEMENT OPTIONS**

SCALE	NTS
DATE JAN '24	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO.	509



**NOTES:**

1. CONCRETE SHALL BE AIR-ENTRAINED MINIMUM 4.0% AND HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AFTER 28 DAYS.
2. EXPANSION JOINTS
  - A. TO BE PROVIDED:
    - 1) AT EACH COLD JOINT.
    - 2) AT EACH END OF DRIVEWAYS.
    - 3) AT EACH SIDE OF INLET STRUCTURES.
    - 4) AT EACH POINT OF TANGENCY OF THE CURB.
    - 5) AT LOCATIONS NECESSARY TO LIMIT SPACING TO 45 FEET.
  - B. MATERIAL TO BE USED IS "REFLEX RUBBER JOINT EXPANSION" JOINT MATERIAL, OR CITY APPROVED EQUAL, WITH A THICKNESS OF 1/2-INCH.
3. CONTRACTION JOINTS
  - A. SPACING TO BE NOT MORE THAN 15 FEET.
  - B. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2 INCHES WITH 1/2-INCH MAXIMUM RADIUS TROWEL JOINT.
4. BASE ROCK TO BE 1"-0" OR 3/4"-0", 95% COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4-INCH IN DEPTH, WHICHEVER IS GREATER.
5. DRAINAGE WEEPHOLE
  - A. 3-INCH I.D. PVC SCH 40 ASTM 1785 PIPE WITH COUPLING.
  - B. DRAINAGE ACCESS THRU EXISTING CURBS SHALL BE CORE DRILLED OR CURB SAW CUT VERTICALLY AT NEAREST JOINT EACH SIDE OF DRAIN AND REPOURED TO FULL DEPTH OF CURB.
6. CURB EXPOSURE SHALL BE 7-1/2 INCHES AT CATCH INLETS/BASINS.

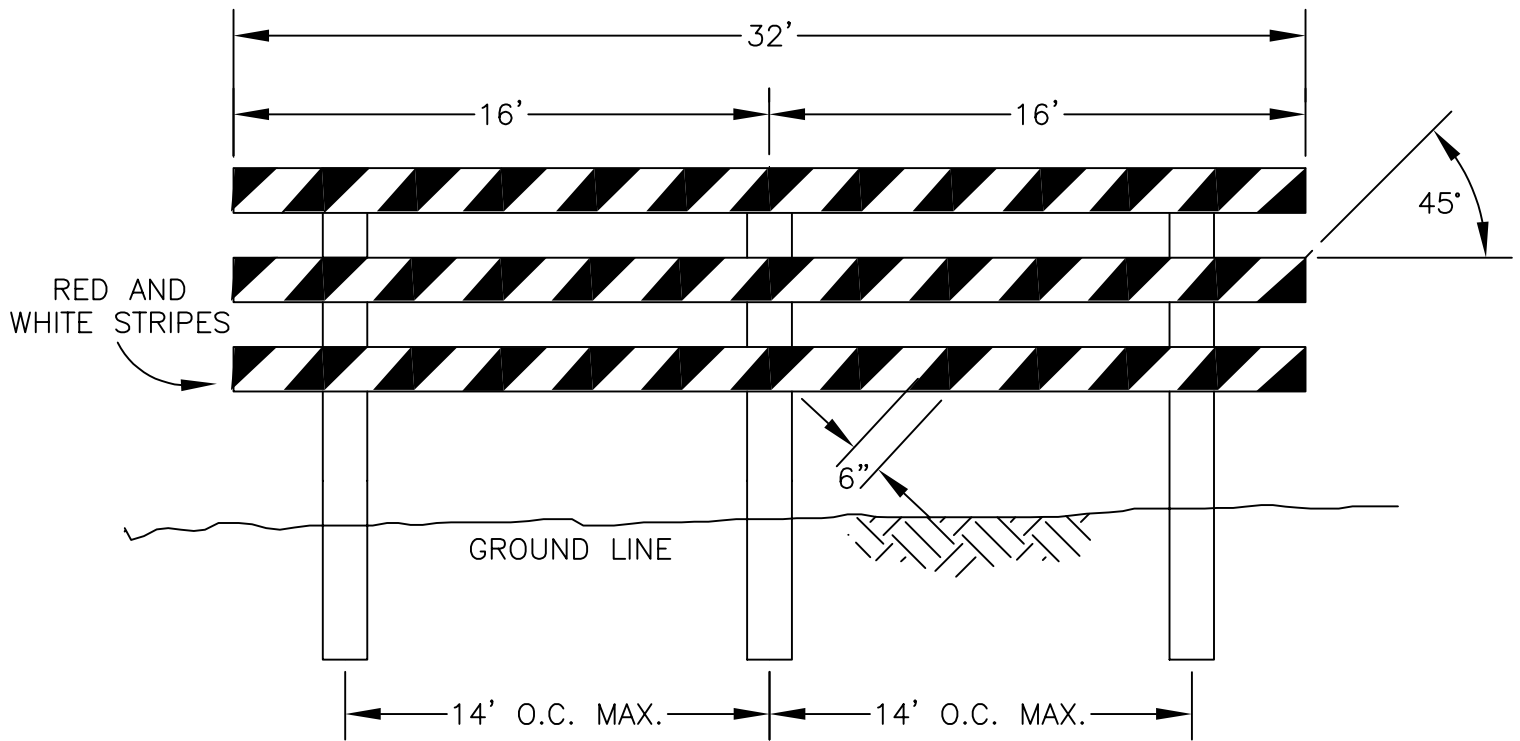


Public Works Standard Drawings

STANDARD CURB

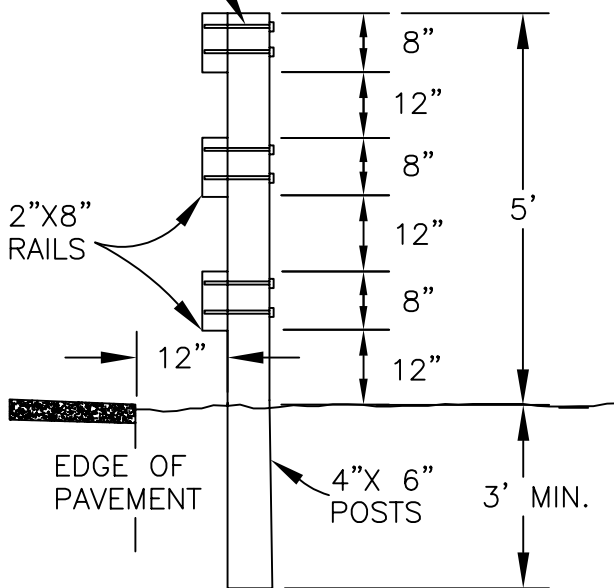
SCALE	NTS
DATE JUL '25	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO.	510





**ELEVATION**

5/8" GALV. SQ. HD.  
MACHINE BOLTS W/  
WASHERS



**END VIEW**

**NOTES:**

1. BARRICADES ARE ONLY TO BE USED WITH CITY'S APPROVAL. SEE DRAWING 525 FOR END-OF-ROADWAY/SIDEWALK MARKER.
2. BARRICADES SHALL MEET THE DESIGN CRITERIAL OF SECTION 6F.63 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, EXCEPT THE COLORS OF THE STRIPES SHALL BE RETROREFLECTIVE WHITE AND RETROREFLECTIVE RED.
3. FOR WIDER APPLICATIONS, MULTIPLE SECTIONS AS SHOWN SHALL BE USED.
4. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OREGON STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

Public Works Standard Drawings

**STREET BARRICADE**

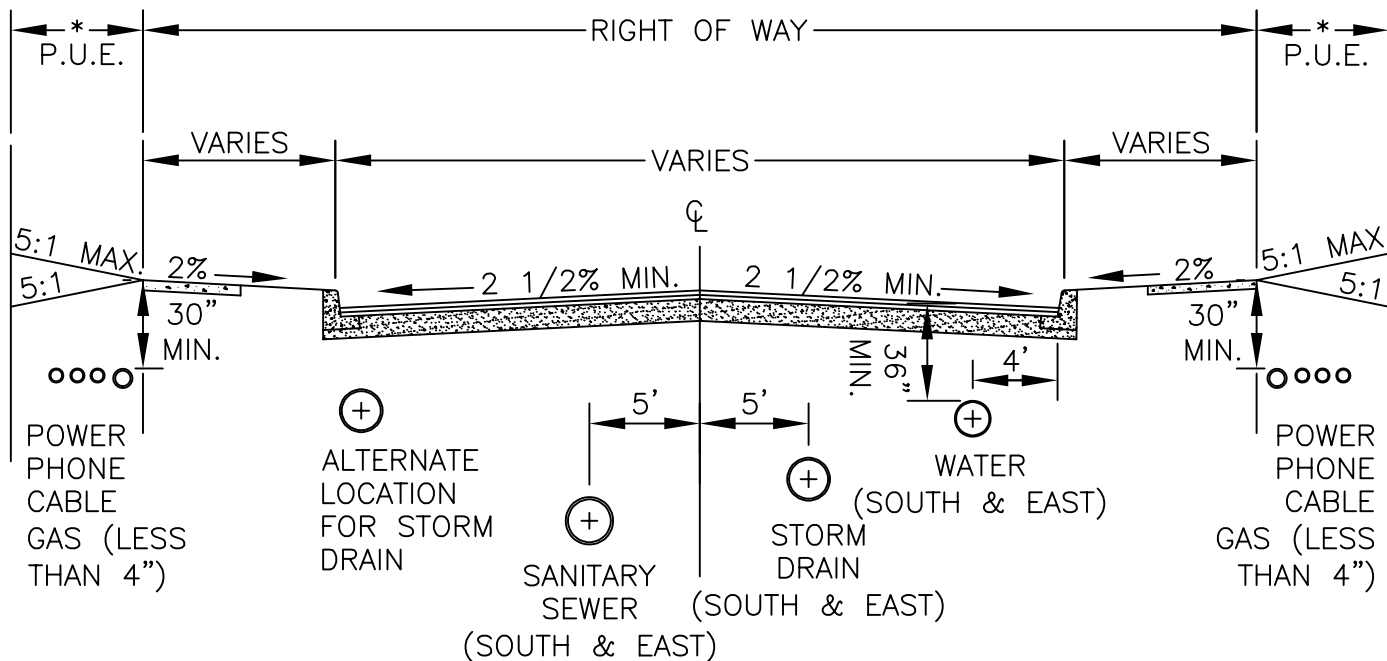
SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 512





#### NOTES:

1. STREET TREES, LIGHT POLES, AND FIRE HYDRANTS SHALL BE LOCATED IN THE PLANTER STRIP WHERE AVAILABLE, OTHERWISE AS APPROVED BY THE CITY ENGINEER.

\* 10' P.U.E. FOR R-10, R-8, R-6, R3.5, R-2, G1, C1. ALL OTHER ZONES 5' P.U.E.



Public Works Standard Drawings

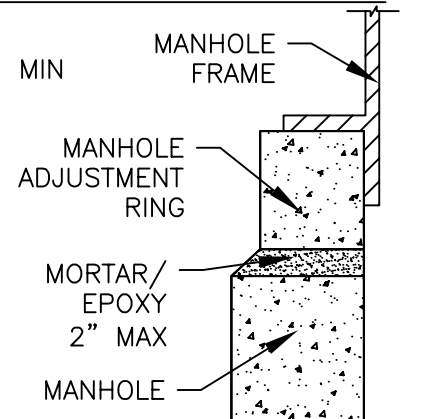
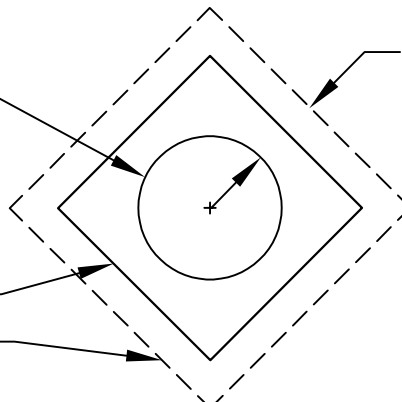
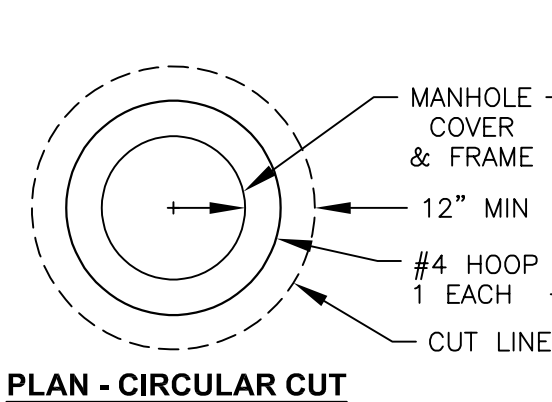
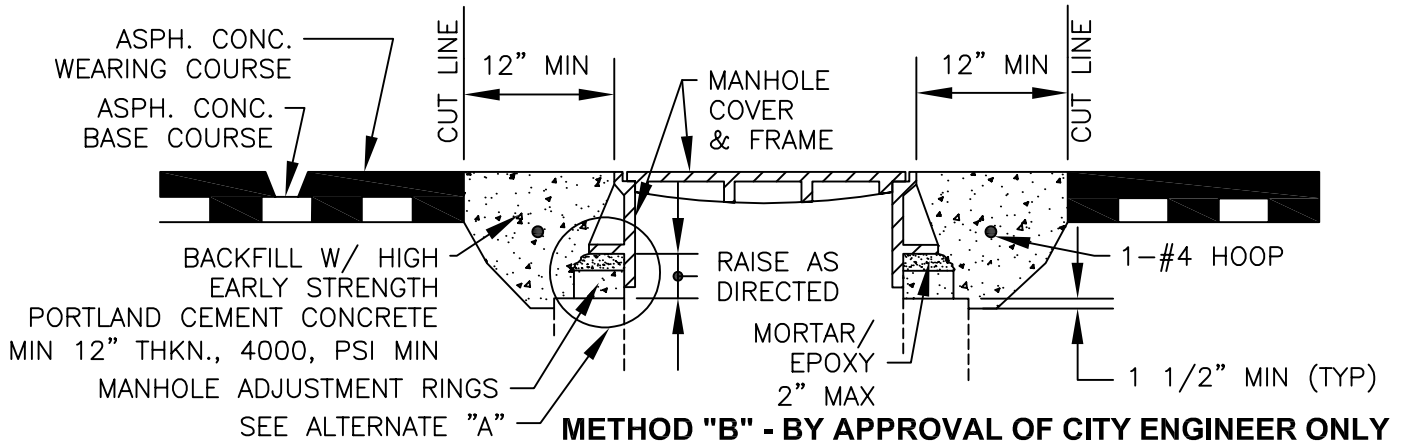
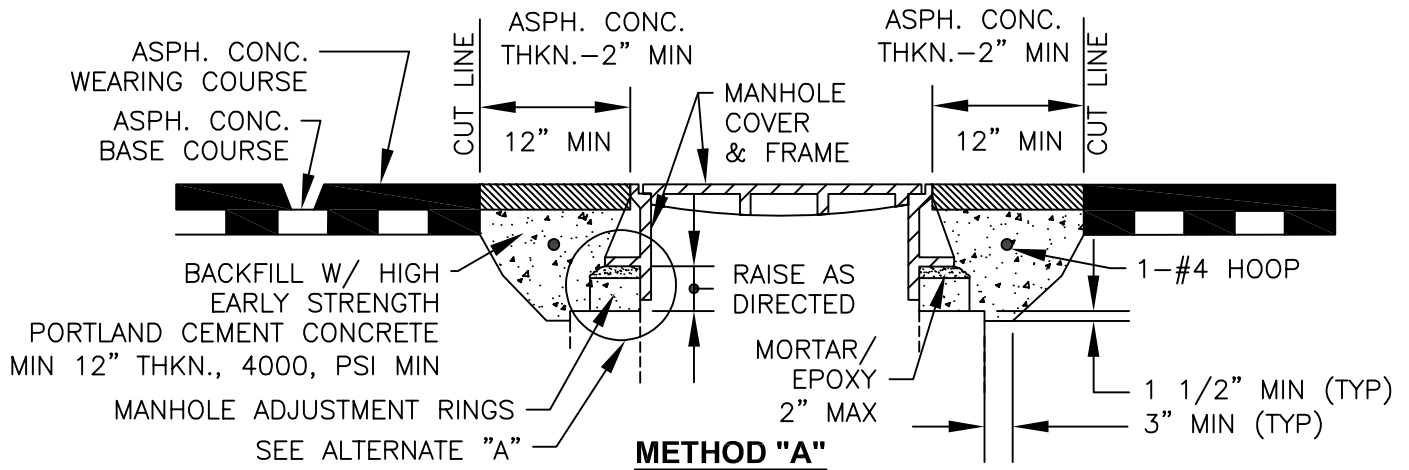
TYPICAL UTILITY PLACEMENT DETAIL

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 513



#### NOTES:

1. COVER MANHOLE WITH BUILDING PAPER AND CONSTRUCT ASPHALT CONCRETE BASE COURSE AND WEARING COURSES.
2. ARTERIAL STREETS - SAW CUT CIRCULAR EXCAVATION AROUND STRUCTURE 12" MIN. FROM STRUCTURE FRAME.
3. COLLECTOR & LOCAL STREETS - SAW CUT DIAMOND EXCAVATION AT 90° ANGLES AROUND STRUCTURE 12" MIN. FROM STRUCTURE FRAME.
4. RAISE MANHOLE COVER AND FRAME AND ADJUST TO MATCH FINISH GRADE BY INSTALLING CONCRETE MANHOLE ADJUSTMENT RINGS AND LEVELING MORTAR, AS SHOWN.
5. BACKFILL HIGH EARLY 4000 PSI MINIMUM PORTLAND CEMENT CONCRETE.
6. PROTECT FROM TRAFFIC LOADING UNTIL CONCRETE REACHES 2500 PSI MINIMUM.
7. APPLY TACK COAT TO EDGES OF EXISTING PAVEMENT BEFORE INSTALLING PATCH.
8. FINISH JOINT WITH CRACK SEAL.
9. METAL ADJUSTING RINGS SHALL NEVER BE USED.

Public Works Standard Drawings

MANHOLE ADJUSTMENT DETAIL

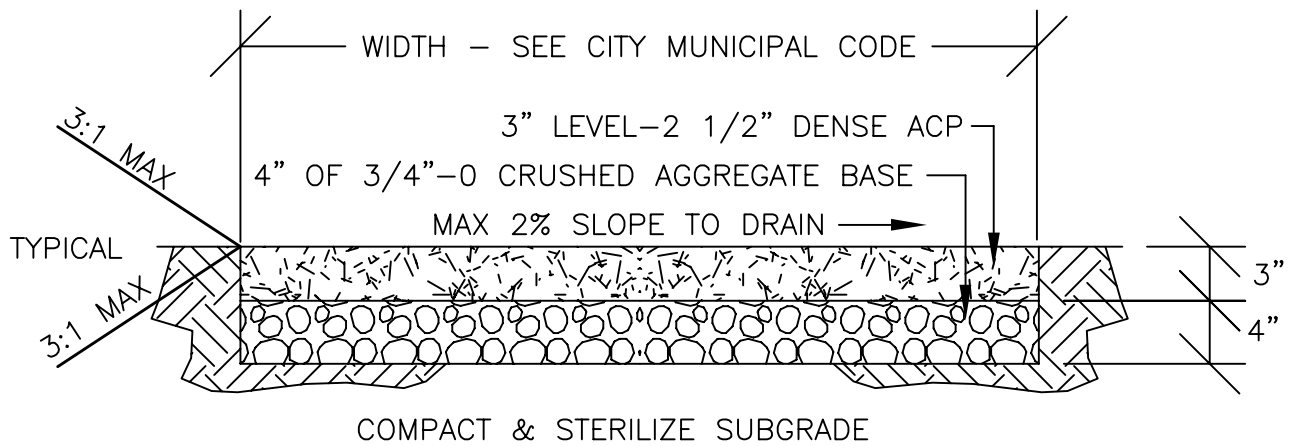
SCALE NTS

DATE JAN '26 REV. 1

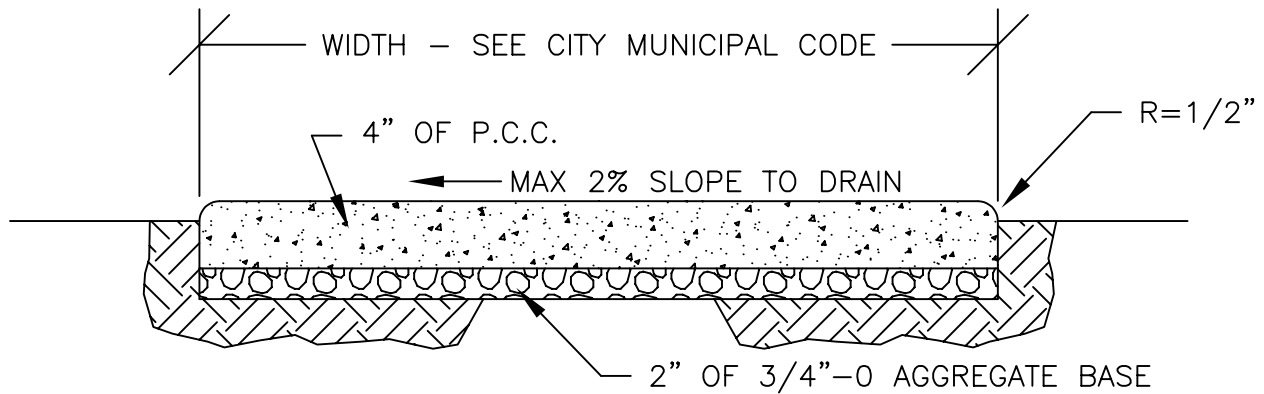
ENGR. DW DRAWN KAE

DRAWING NO. 514





### ASPHALTIC CONCRETE



### PORTLAND CEMENT CONCRETE

#### NOTES:

1. CONCRETE SHALL BE AIR ENTRAINED MINIMUM 4.0% AND HAVE A MINIMUM BREAKING STRENGTH OF 4000 PSI AT 28 DAYS.
2. SEE SIDEWALK DETAIL FOR ADDITIONAL NOTES ON CONCRETE CONSTRUCTION.
3. PROVIDE DRAINAGE AT LOW POINTS, AS DIRECTED.
4. PROVIDE ONE FOOT 3/4"–0 GRAVEL SHOULDER ON CUT/FILL SLOPE EDGES.
5. MAXIMUM SLOPE OF CUT AND FILL EDGES, 3:1.
6. SUBGRADE AND BASE ROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER AASHTO T–99 FOR CONCRETE AND 95% COMPACTION FOR ACP.
7. SEE CITY MUNICIPAL CODE FOR CROSS SECTION AND ADDITIONAL INFORMATION.



Public Works Standard Drawings

PEDESTRIAN PATH OR BIKEWAY

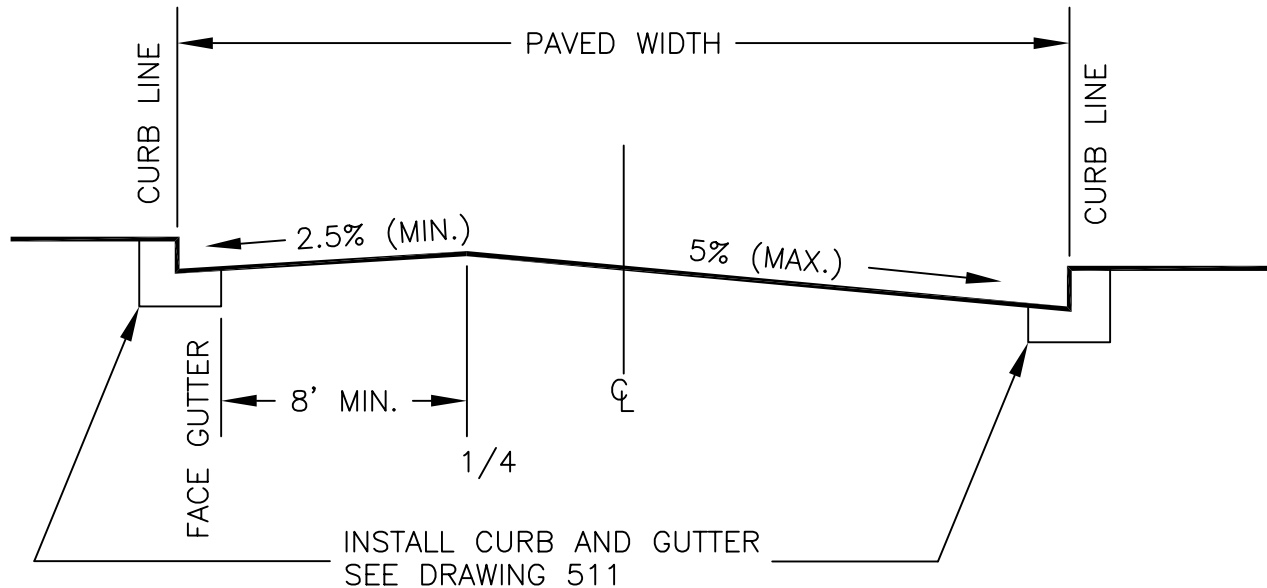
SCALE NTS

DATE JUL '25 REV. 1

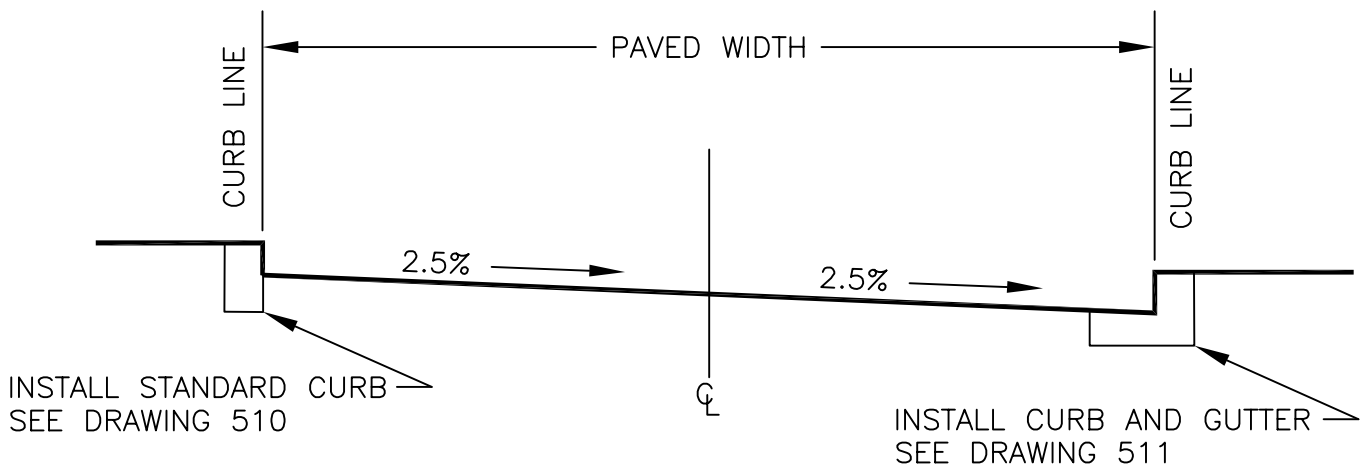
ENGR. DW DRAWN KAE

DRAWING NO. 515

## OFFSET CROWN



## SHED STREET



### NOTES:

1. OFFSET CROWN CROSS-SECTIONS MAY BE USED IN AREAS OF SUBSTANTIAL CROSS SLOPE, AT THE DISCRETION OF THE ENGINEER.
2. OFFSET CROWN CROSS-SECTIONS SHALL NOT BE USED TO INCREASE DESIGN SPEED IN HORIZONTAL CURVES. SUPERELEVATION SECTIONS SHALL BE USED FOR THAT PURPOSE.
3. MAXIMUM ELEVATION DIFFERENCE OF CURBS (OR EDGE OF PAVEMENT) IS DETERMINED BY CROSS-SLOPES AND WIDTH OF STREET.



Public Works Standard Drawings

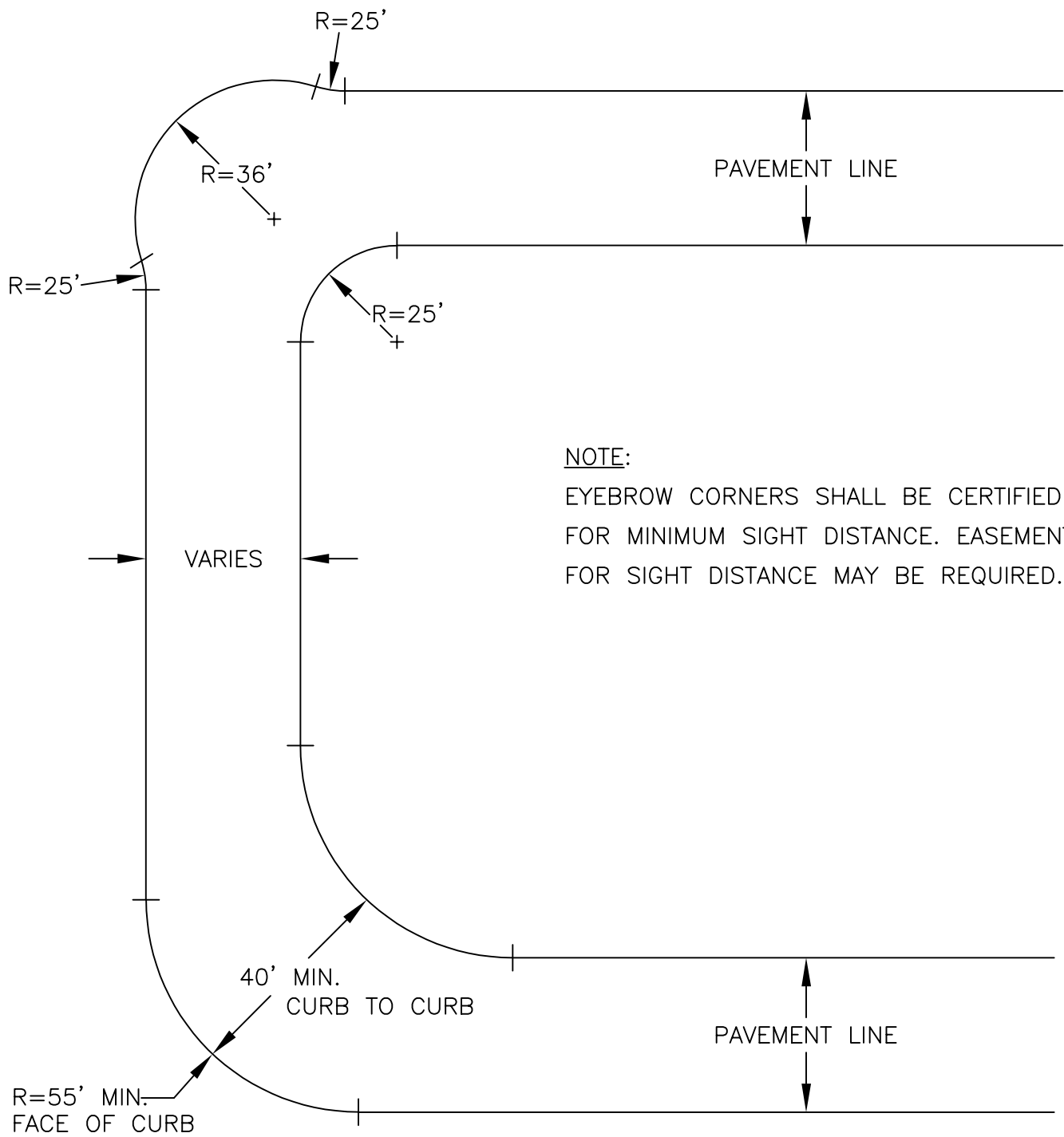
OFFSET CROWN AND SHED STREET

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 517



Public Works Standard Drawings

EYEBROW-CORNER

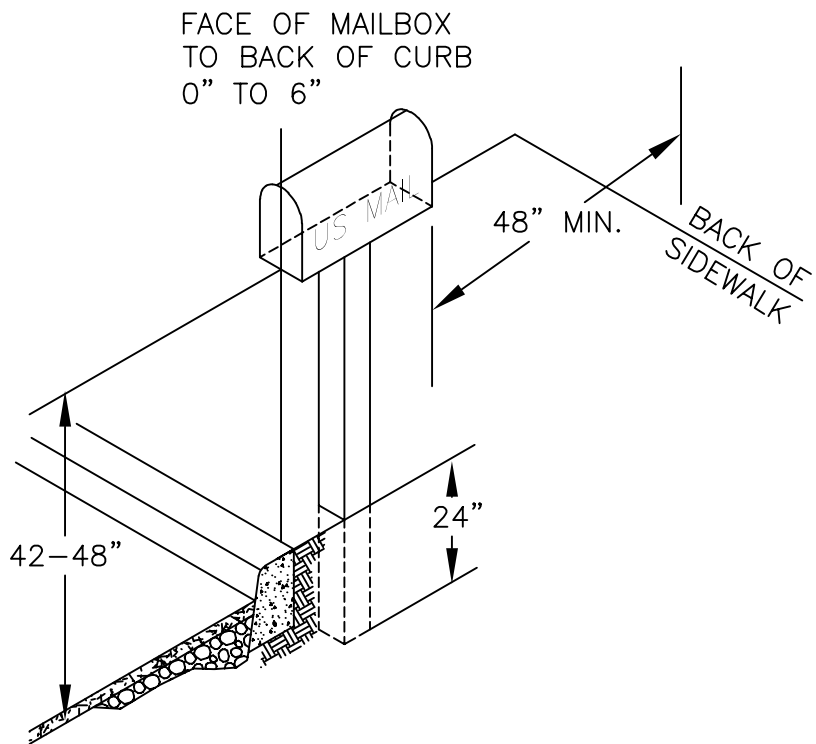
SCALE NTS

DATE JAN '23 REV.

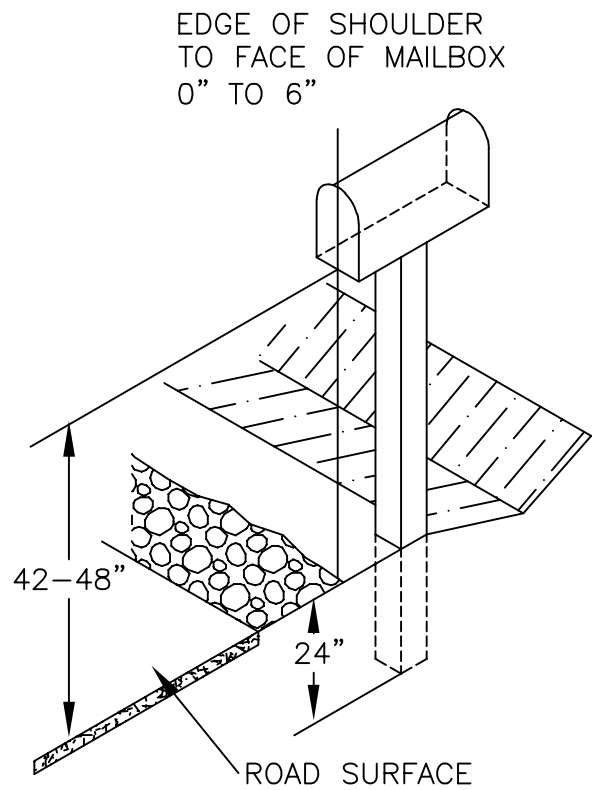
ENGR. DW DRAWN KAE

DRAWING NO. 518

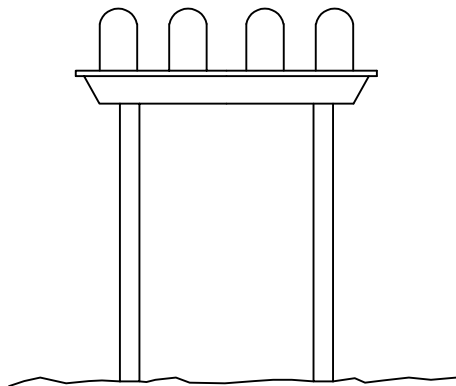




**STREETS WITH CURBS**



**STREETS WITHOUT CURBS**



**GROUP BOXES**

**NOTES:**

1. BOX NUMBER AND NAMES SHALL BE NOT LESS THAN ONE INCH HIGH.
2. POSTS MUST BE NEAT AND OF ADEQUATE STRENGTH AND SIZE.
3. ALL MAILBOX LOCATIONS AND CLUSTERS MUST CONFORM TO REQUIREMENTS OF THE UNITED STATES POSTAL SERVICE AND THE AMERICANS WITH DISABILITIES ACT (ADA)



Public Works Standard Drawings

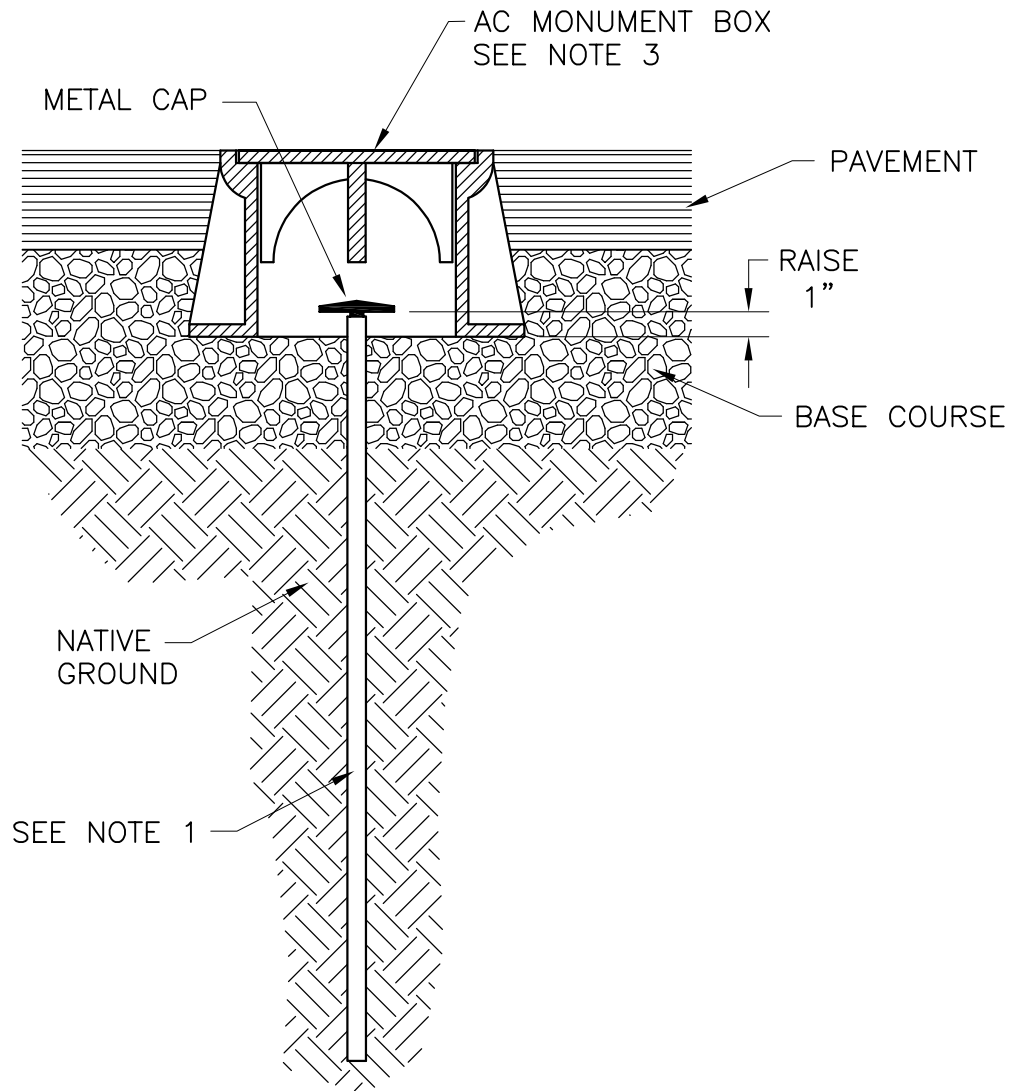
MAILBOX LOCATION

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 519



NOTES:

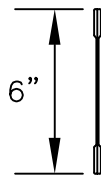
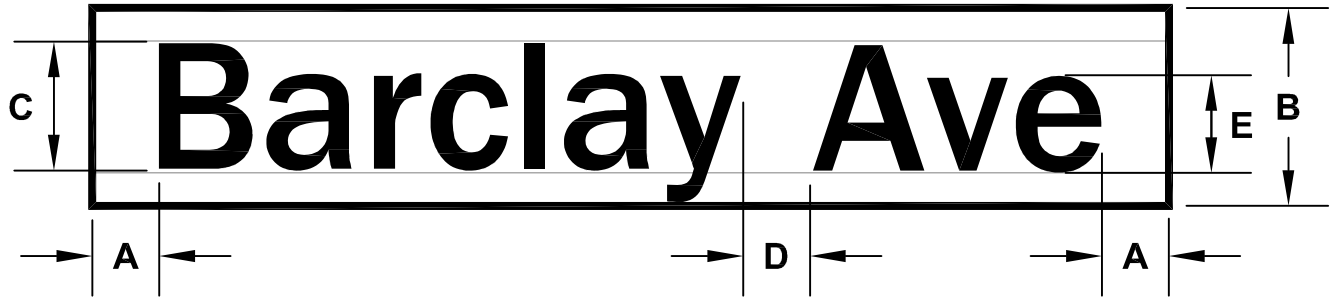
1. ALL MONUMENTS SHALL USE EITHER  $\frac{5}{8}$ -INCH OR  $\frac{3}{4}$ -INCH DIAMETER IRON PIPE, 30 INCHES LONG AND COMPLY WITH CLACKAMAS COUNTY STANDARDS.
2. ALL SURVEY MONUMENTS SHALL BE IN ACCORDANCE WITH THE OREGON REVISED STATUTES CHAPTERS 92 AND 209 AND THE CLACKAMAS COUNTY CODE, TITLE 11.
3. APPROVED MONUMENT BOXES AND COVERS PER CLACKAMAS COUNTY STANDARDS.
4. IF MONUMENTS INSTALLED AFTER PAVING COMPLETED OR IN EXISTING ROADWAYS SURFACE RESTORATION PER DRAWING 514.



Public Works Standard Drawings

CENTERLINE SURVEY MONUMENTS

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	520



**SIGN PROFILE**

MINIMUM DIMENSIONS				
A	B	C	D	E
2"	6"	4"	2"	3"

**NOTES:**

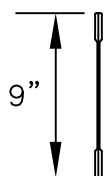
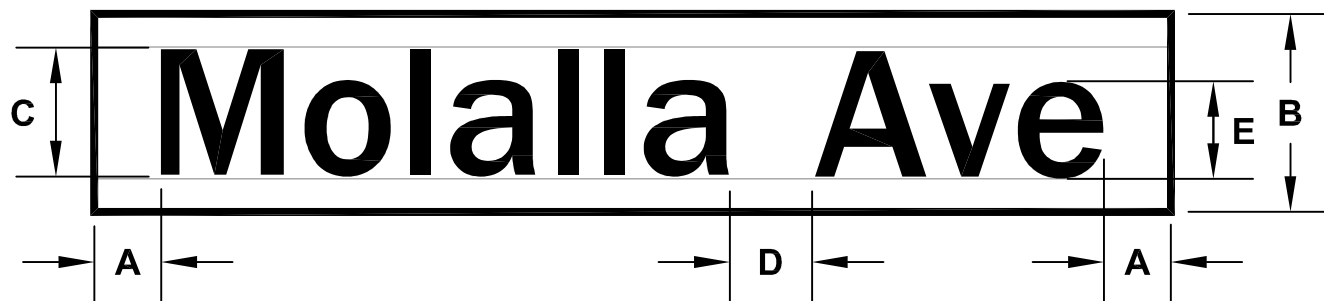
1. ON ALL STREETS WITH DESIGNATED OR POSTED SPEEDS OF 25 MPH OR LESS, INITIAL UPPER-CASE LETTERS SHALL BE 4 INCHES IN HEIGHT AND LOWER-CASE LETTERS 3 INCHES IN HEIGHT.
2. LETTER STYLES FOR STREET NAME AND SUFFIX SHALL BE 4-INCH SERIES 'B' FROM THE *STANDARD ALPHABETS FOR HIGHWAY SIGNS MANUAL*.
3. BLANKS FOR 6-INCH EXTRUDED SHALL BE A MINIMUM 0.125 INCH GAUGE WITH 6063 T5 OR 6063 T6 ALODINE COATED ALUMINUM SUBSTRATE.
4. THE MINIMUM LENGTH SHALL BE 24 INCHES.
5. BOTH SIDES OF STREET NAME SIGNS SHALL BE GREEN (PUBLIC) OR BLUE (PRIVATE) *3M HIGH INTENSITY PRISMATIC (HIP)* REFLECTIVE SHEETING.
6. ALL LETTERS AND NUMBERS SHALL BE WHITE *3M HIGH INTENSITY PRISMATIC (HIP)* REFLECTIVE SHEETING.
7. MOUNTING HARDWARE: SEE DRAWING 523.



Public Works Standard Drawings

**STREET NAME SIGN WITH 4-INCH LETTERING  
FOR 25 MPH OR LESS SPEED LIMITS**

SCALE	NTS		
DATE	JUL '25	REV.	1
ENGR.	DW	DRAWN	KAE
DRAWING NO.		521	



**SIGN PROFILE**

MINIMUM DIMENSIONS				
A	B	C	D	E
2"	9"	6"	2"	4½"

**NOTES:**

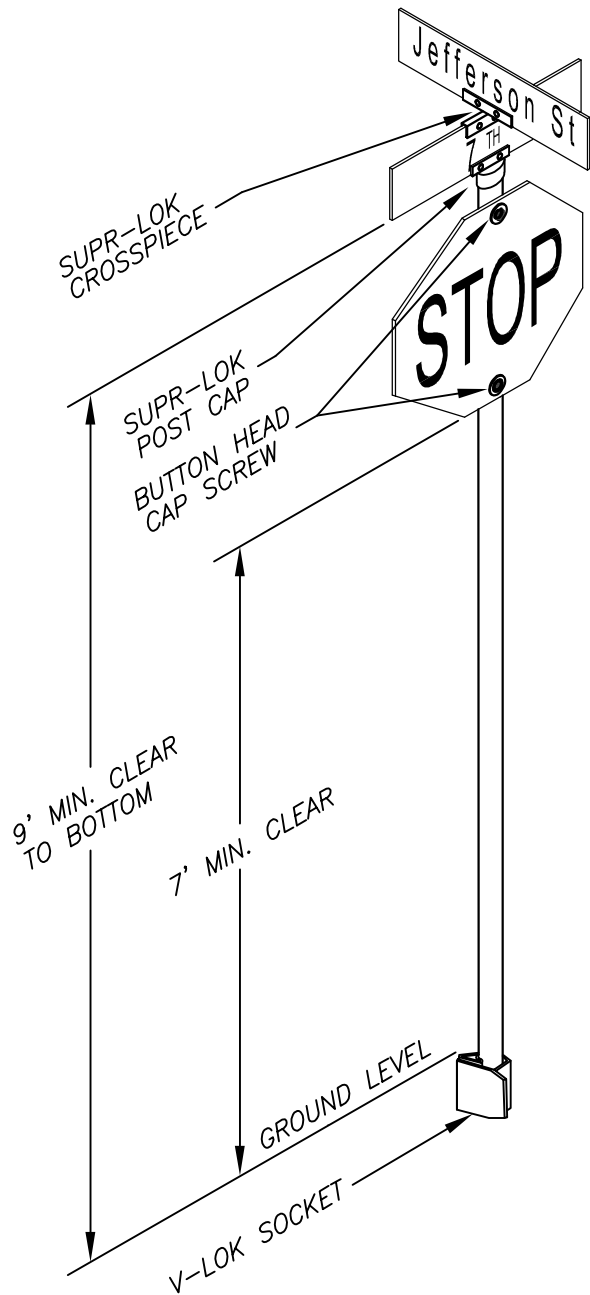
1. ON ALL STREETS WITH DESIGNATED OR POSTED SPEEDS OF 30 MPH OR GREATER, INITIAL UPPER-CASE LETTERS SHALL BE 6 INCHES IN HEIGHT AND LOWER-CASE LETTERS 4½ INCHES IN HEIGHT.
2. LETTER STYLES FOR STREET NAME AND SUFFIX SHALL BE 6-INCH SERIES 'B' FROM THE *STANDARD ALPHABETS FOR HIGHWAY SIGNS MANUAL*.
3. 9-INCH EXTRUDED BLANKS SHALL BE A MINIMUM 0.125 INCH GAUGE WITH 6063 T5 OR 6063 T6 ALODINE COATED ALUMINUM SUBSTRATE.
4. THE MINIMUM LENGTH SHALL BE 24 INCHES.
5. BOTH SIDES OF STREET NAME SIGNS SHALL BE GREEN (PUBLIC) OR BLUE (PRIVATE) *3M HIGH INTENSITY PRISMATIC (HIP)* REFLECTIVE SHEETING.
6. ALL LETTERS AND NUMBERS SHALL BE WHITE *3M HIGH INTENSITY PRISMATIC (HIP)* REFLECTIVE SHEETING.
7. MOUNTING HARDWARE: SEE DRAWING 523.



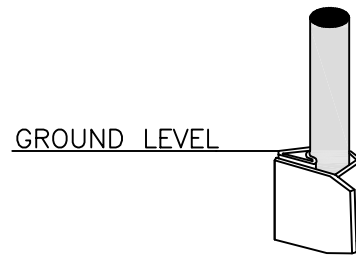
Public Works Standard Drawings

**STREET NAME SIGN WITH 6-INCH LETTERING  
FOR 30 MPH TO 40 MPH SPEED LIMITS**

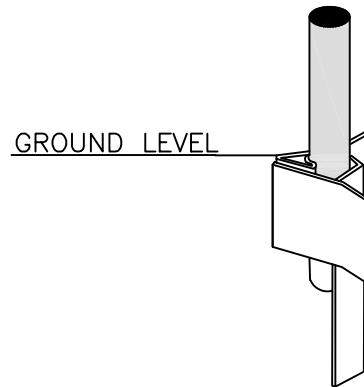
SCALE NTS	
DATE JUL '25	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO. 522	



**NOTE:**  
V-LOK WEDGE SHALL FACE DIRECTION OF TRAVEL.

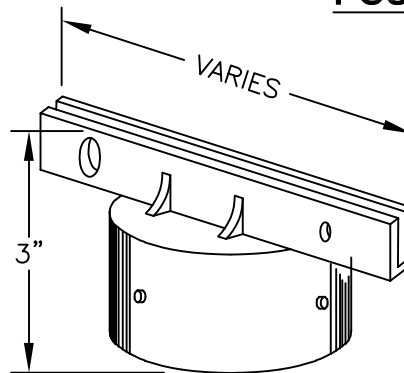


FOR CONCRETE INSTALLATION  
USE V-LOK VR-1 (MODEL 23 ROUND)  
OR APPROVED EQUAL



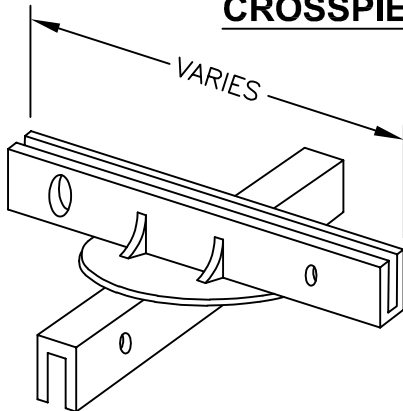
FOR EARTH OR  
ASPHALT INSTALLATION  
USE V-LOK VR-2  
(MODEL 23 ROUND)  
OR APPROVED EQUAL

### **POST CAP**

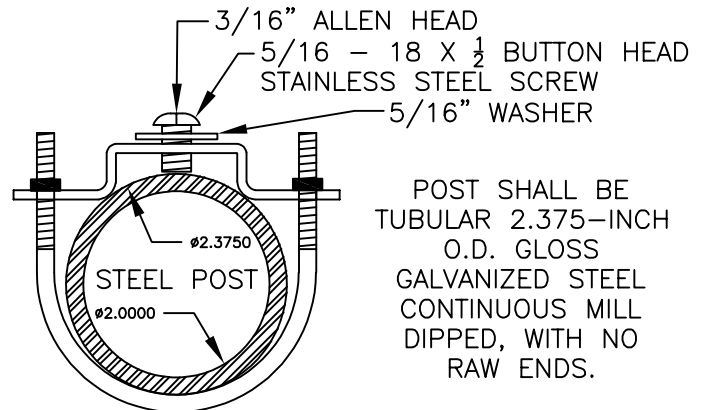


FOR STREET NAME  
SIGNS WITH 4-INCH  
LETTERING, USE  
SUPR-LOK 922-X  
OR APPROVED  
EQUAL. FOR 6 INCH  
LETTERING, USE  
ULTRA SUPR-LOK  
1238X OR  
APPROVED EQUAL.

### **CROSSPIECE**



FOR STREET NAME  
SIGNS WITH 4-INCH  
LETTERING, USE  
SUPR-LOK 990-X  
OR APPROVED  
EQUAL. FOR 6 INCH  
LETTERING, USE  
ULTRA SUPR-LOK  
12CRX OR  
APPROVED EQUAL.



POST SHALL BE  
TUBULAR 2.375-INCH  
O.D. GLOSS  
GALVANIZED STEEL  
CONTINUOUS MILL  
DIPPED, WITH NO  
RAW ENDS.



Public Works Standard Drawings

**TYPICAL SIGN ASSEMBLY  
AND MOUNTING HARDWARE**

SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	523

GENERAL SIGNING NOTES:

- 1) STREET NAMES SHALL BE APPROVED BY BUILDING DIVISION PER APPROVED PLAT AS APPROPRIATE
- 2) CONTRACTOR SHALL SUPPLY ALL STREET NAME SIGNS, SIGN MATERIALS, BRACKETS, HARDWARE, POSTS, AND ANCHORS IN ACCORDANCE WITH THE CITY OF OREGON CITY STANDARDS (SEE OREGON CITY STANDARD DETAILS 521, 522, 523, AND 524)
- 3) ALL SIGNING SHALL CONFORM TO CURRENT OREGON DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
- 4) CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING SIGN LOCATIONS AND OBTAINING UTILITY LOCATES FOR STAKED SIGN LOCATIONS. SIGNS SHALL BE LOCATED PER THE TYPICAL SIGN LOCATION AND AS SHOWN ON THE PLANS
- 5) SIGNS SHALL BE INSTALLED PER THE TYPICAL SIGN INSTALLATION DETAIL UTILIZING THE SPECIFIED BRACKETS AND HARDWARE (SEE STANDARD INSTALLATION DETAIL #523)

COMMON ABBREVIATIONS

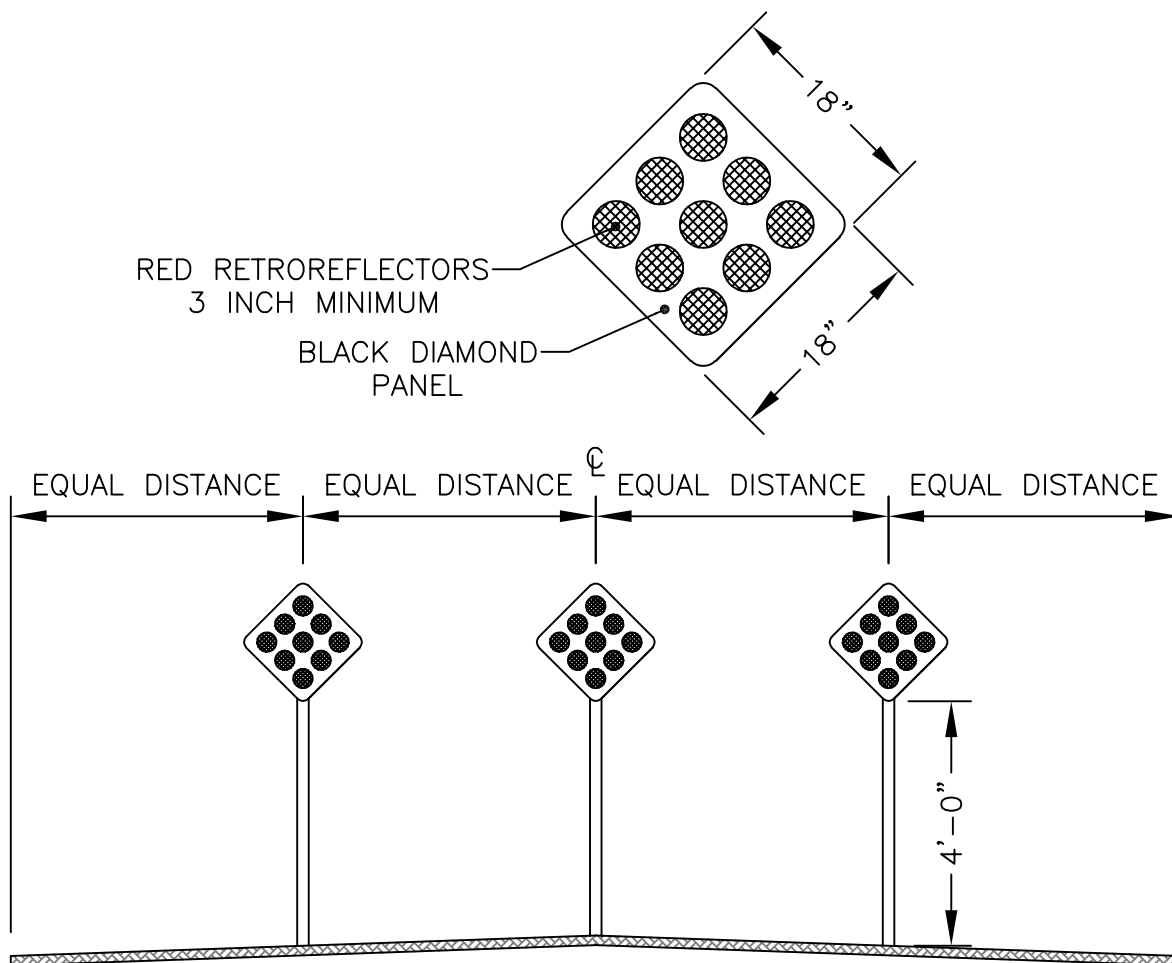
AVE= AVENUE	PKWY = PARKWAY
PL = PLACE	BLVD = BOULEVARD
CT = COURT	ST = STREET
DR = DRIVE	TER = TERRACE
LN = LANE	WAY = WAY
LP = LOOP	CIR = CIRCLE
RD = ROAD	



Public Works Standard Drawings

**STREET SIGN GENERAL NOTES**

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	524



**NOTES:**

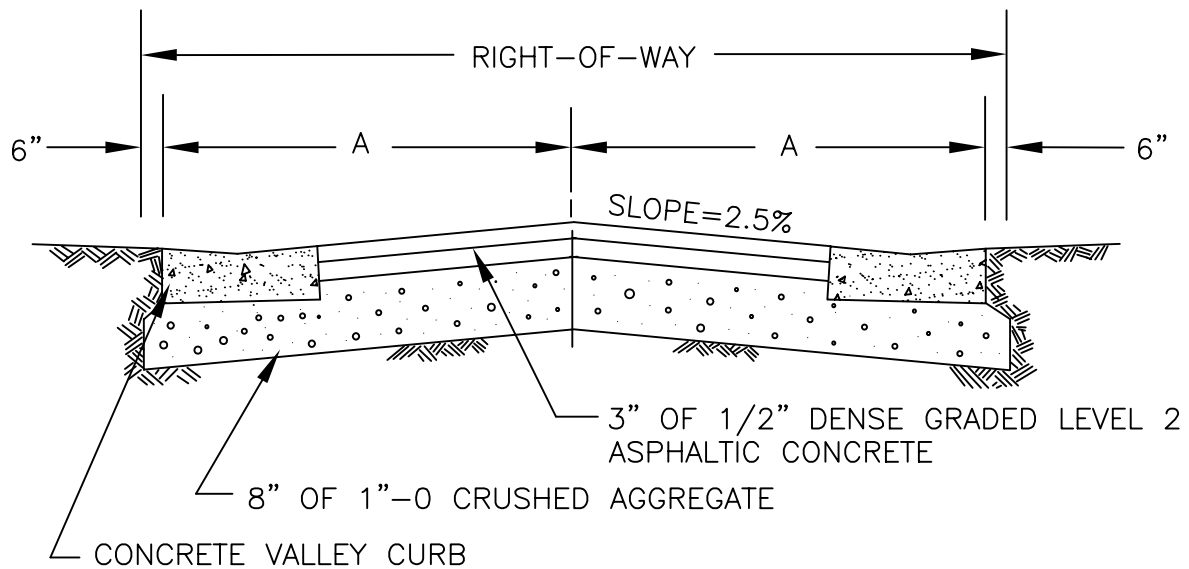
1. END-OF-ROADWAY MARKER PLACEMENT SHALL BE AS FOLLOWS:
  - A. END OF SIDEWALK SHALL HAVE ONE MARKER PLACED ON THE CENTERLINE JUST BEYOND THE EDGE OF SIDEWALK.
  - B. END OF ROADWAY SHALL HAVE ONE MARKER PER 10 FEET OF ROAD WIDTH WITH A MINIMUM OF 3 MARKERS (I.E. 20 TO 29 FOOT ROADWAY HAS 3 MARKERS; 30 TO 39 FOOT ROADWAY HAS 3 MARKERS; 40 TO 49 FOOT ROADWAY HAS 4 MARKERS). ALL MARKERS SHALL BE EQUALLY SPACED BETWEEN WIDTH OF ROADWAY.
2. THE MARKER SHALL CONSIST OF NINE RED RETROREFLECTORS, EACH WITH A MINIMUM DIAMETER OF THREE INCHES, MOUNTED SYMMETRICALLY ON A BLACK DIAMOND PANEL MEASURING 18 INCHES PER SIDE.
3. CONTRACTOR SHALL SUPPLY ALL MARKERS, POSTS, AND MOUNTING HARDWARE.
4. MARKERS SHALL BE MOUNTED ON 2.375 INCH OUTSIDE DIAMETER STEEL POSTS. SEE OREGON CITY STANDARD DETAIL 523 FOR INSTALLATION HARDWARE AND DETAILS.
5. MOUNTING HEIGHT OF A MARKER SHALL BE 4 FEET.
6. ADDITIONAL BARRICADING MAY BE REQUIRED BY THE CITY.



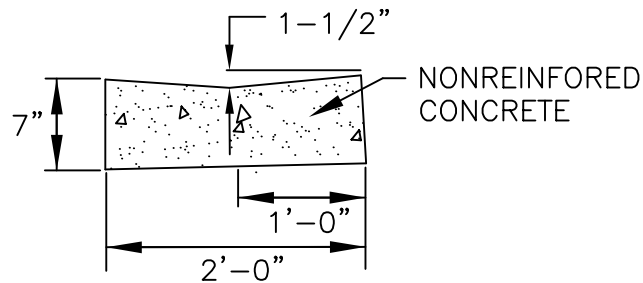
Public Works Standard Drawings

END-OF-ROADWAY/SIDEWALK MARKER

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	525



### **TYPICAL ALLEY SECTION**



### **VALLEY CURB DETAIL (WHEN REQUIRED)**

#### **NOTES:**

1. ASPHALTIC CONCRETE SHALL BE COMPACTED TO 92% OF RICE DENSITY.
2. AGGREGATE BASE CRUSHED ROCK. 8" DEPTH PER STREET DESIGN STANDARDS.
3. SUBGRADE AND BASEROCK SHALL BE COMPACTED TO 95% RELATIVE DENSITY PER AASHTO T-180.
4. PCC CURB SHALL BE 4000 PSI AT 28 DAYS.
5. "NO PARKING" SHALL BE POSTED THE ENTIRE LENGTH OF ALLEY DISTRICTS.
6. FIRE HYDRANTS WHEN REQUIRED ARE TO BE LOCATED OUTSIDE THE R-O-W IN A 5' BY 5' EASEMENT.

#### **ALLEY AND RIGHT-OF-WAY WIDTHS**

FUNCTIONAL CLASSIFICATION	RIGHT-OF-WAY	"A" PAVEMENT WIDTH	SIDEWALK WIDTH	PLANTER STRIP WIDTH
ALLEY REDISENTIAL DISTRICT	15'	7'	N/A	N/A
ALLEY-COMM. INDUSTRIAL DISTRICT	21'	10'	N/A	N/A

Public Works Standard Drawings

ALLEY SECTION

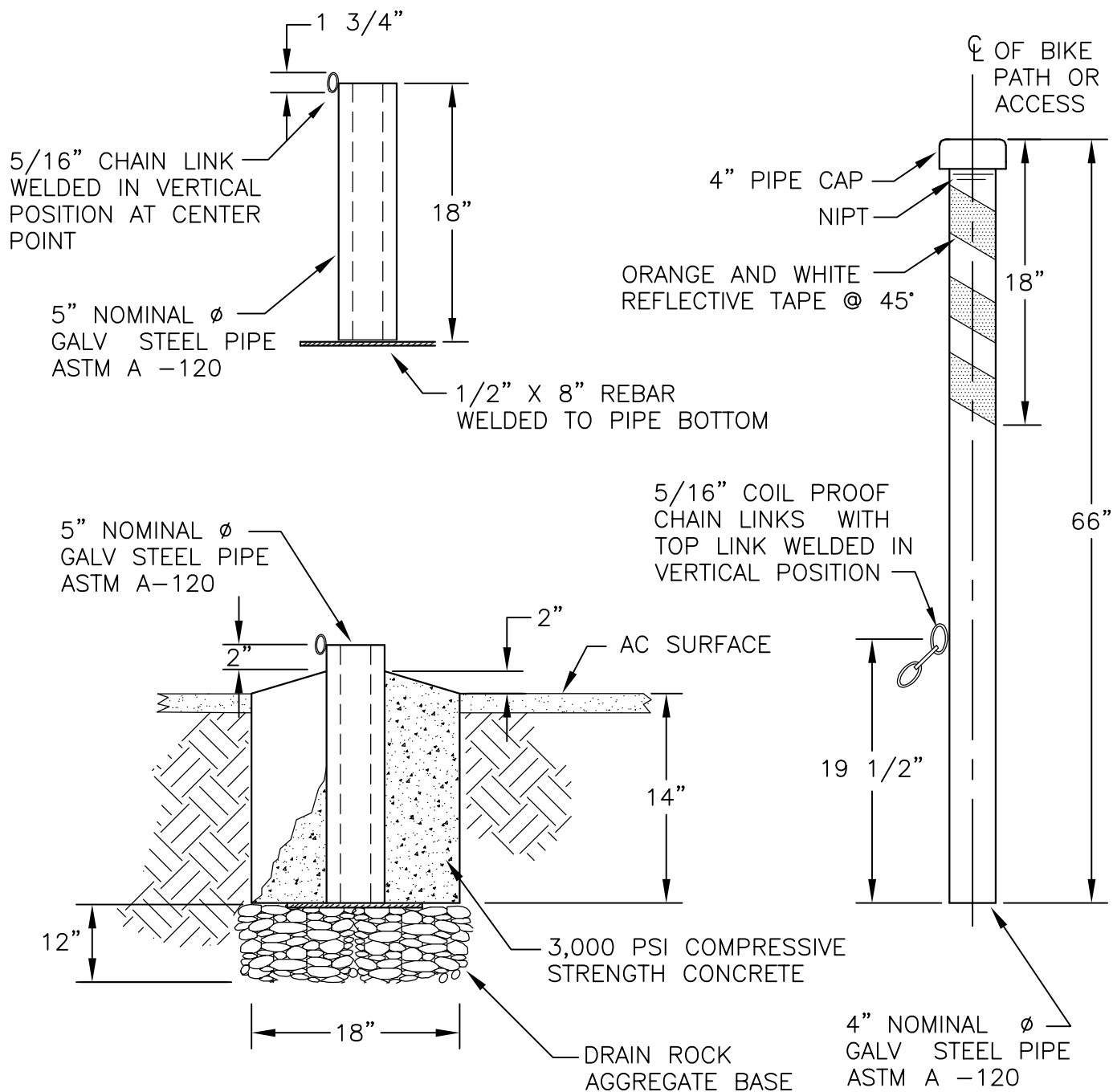
SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 526





**NOTES:**

1. BARRIER IS TO BE USED ONLY WHEN SPECIFICALLY APPROVED BY CITY ENGINEER.
2. BARRIER IS NOT TO BE USED ON FIRE ACCESSSES.
3. PADLOCK TO BE PROVIDED BY THE CITY.



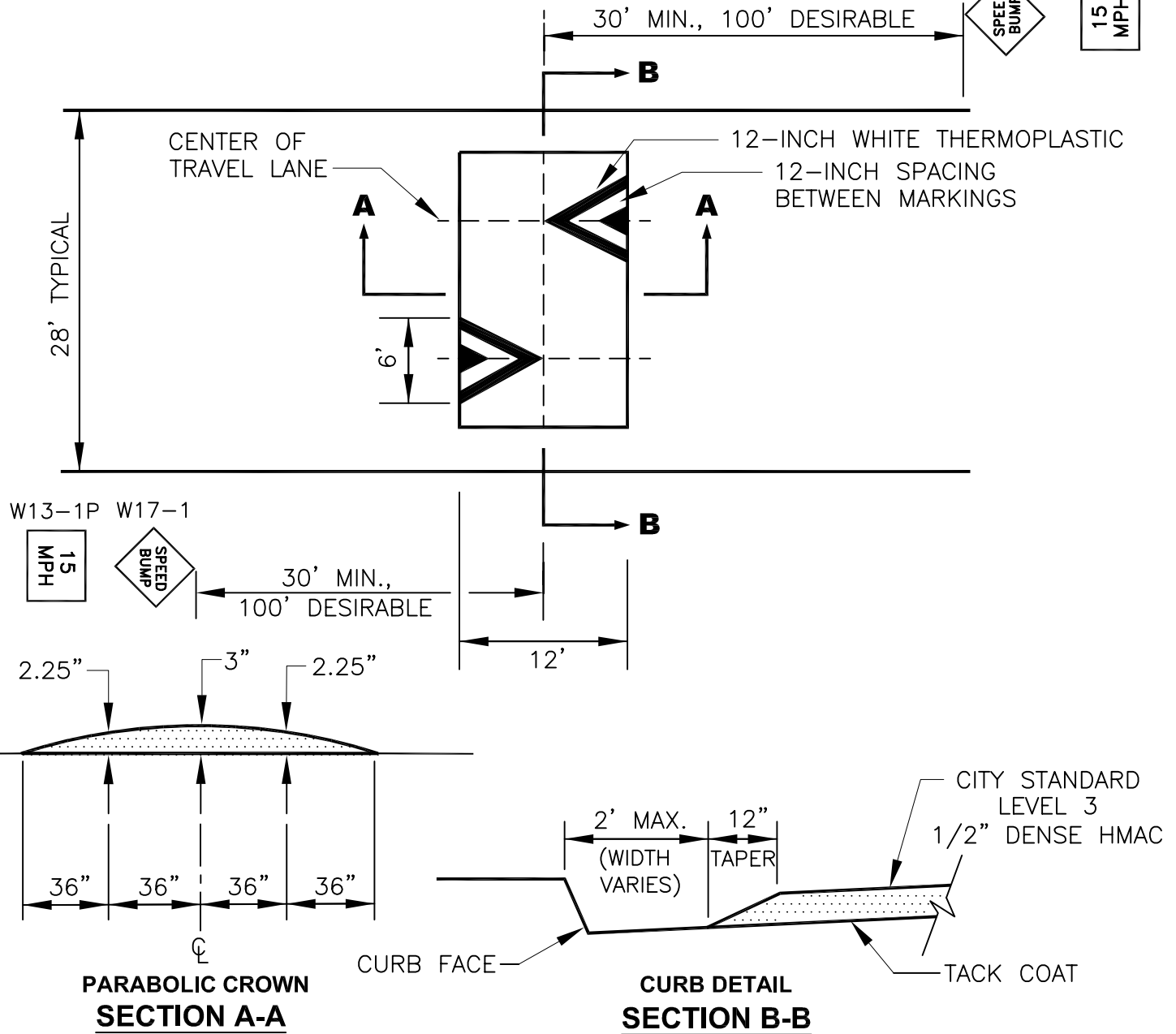
Public Works Standard Drawings

REMOVABLE VEHICLE BARRIER POST

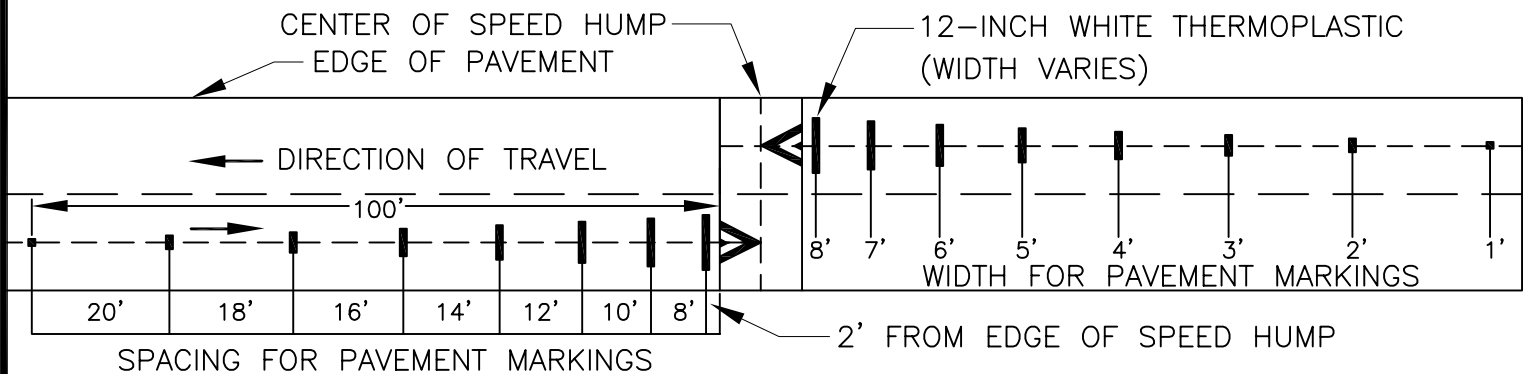
SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	527

# SPEED HUMP (TYPICAL)

W13-1P W17-1



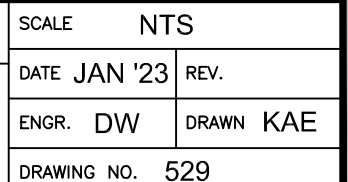
## SPEED HUMP ADVANCE WARNING PAVEMENT MARKINGS



Public Works Standard Drawings

LOCAL RESIDENTIAL SPEED HUMP

SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	528



**GENERAL NOTES:**

1. INSTALL CROSSWALK BARS SUCH THAT THE THROAT OF THE ADA RAMP IS ENTIRELY WITHIN CROSSWALK MARKINGS, OR 5 FEET BACK OF EXTENDED FOG LINE, EDGE OF PAVEMENT, OR CURB FACE.

**PREFORMED THERMOPLASTIC INSTALLATION NOTES**

1. THE AREA OF APPLICATION SHALL BE DRY AND FREE OF DIRT, DUST, CHEMICALS, OR SIGNIFICANT OILY SUBSTANCES. THE PAVEMENT MARKINGS SHALL NOT BE APPLIED ON TOP OF EXISTING PAINT OR THERMOPLASTIC.
2. THE PREFORMED MARKINGS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS IN A MANNER WHICH PROVIDES A UNIFORM SURFACE FREE OF DEFECTS. SPLICES SHALL BE INSTALLED WITHOUT OVERLAP OR GAPS.
3. ALL STANDARD CONTINENTAL CROSSWALK KEYS SHALL BE INSTALLED PARALLEL TO THE LONG LINE STRIPING AND ROADWAY. ALL THERMOPLASTIC LAYOUTS SHALL BE INSPECTED BY A CITY OF OREGON CITY REPRESENTATIVE PRIOR TO ANY PLACEMENT OF THERMOPLASTIC. UNDER NO CIRCUMSTANCE WILL INDIVIDUAL CROSSWALK KEYS BE ALLOWED TO CROSS A ROADWAY ON A SKEWED ANGLE OR BE PLACED IN A WHEEL PATH.
4. APPLICATION GENERALLY CONSISTS OF CLEANING AND PREHEATING THE INSTALLATION AREA; PLACEMENT OF THE PREFORMED MARKING; AND HEATING OF THE MARKING TO THE MELTING POINT.

**STRIPE AND MARKER REMOVAL**

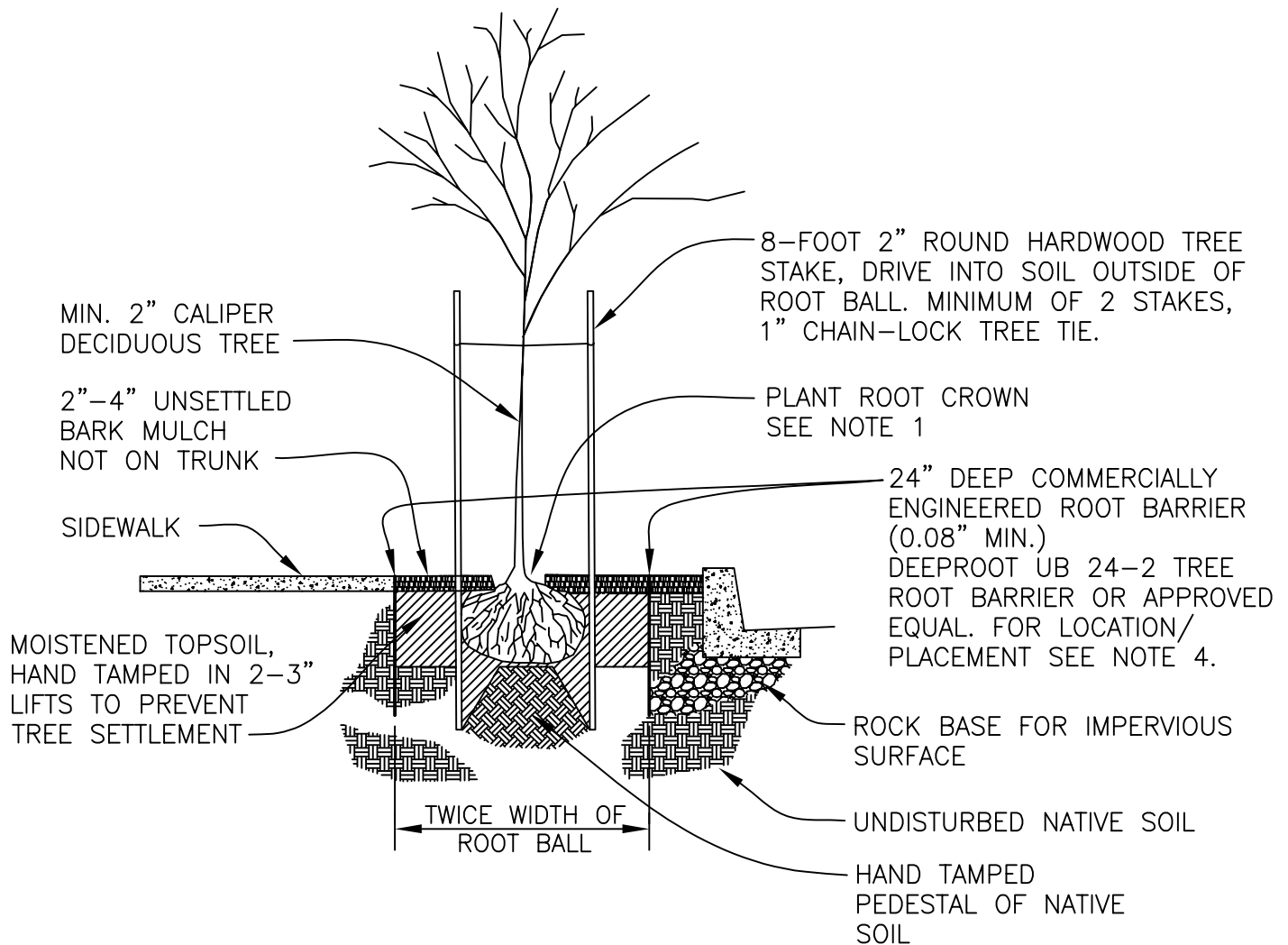
1. REMOVE PAINTED AND THERMOPLASTIC STRIPE, AND MARKER EPOXY OR BUTYL RUBBER ADHESIVE, BY ABRASION, SANDBLASTING, HYDROBLASTING, OR SURFACE GRINDING, SO THAT THE PAVEMENT SURFACE IS NOT DAMAGED AND HAS A SURFACE TEXTURE SIMILAR TO THE SURROUNDING AREA. OBLITERATION WITH PAINT OR OTHER SUBSTANCE SHALL NOT BE PERMITTED.
2. ALL DEBRIS COLLECTED BY STRIPE AND MARKER REMOVAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.



Public Works Standard Drawings

**BIKE LANE AND CROSSWALK NOTES**

SCALE      NTS	
DATE    JAN '23	REV.
ENGR.   DW	DRAWN   KAE
DRAWING NO.    529A	



#### NOTES:

1. SET ROOT TRUNK COLLAR FLUSH TO 1" ABOVE FINISHED GRADE FOR LANDSCAPE AREAS AND PLANTER AREAS. FINISHED GRADE SHALL BE FLUSH WITH TOP OF CURB, FINISHED SIDEWALK, OR AT GRADE IN LANDSCAPE AREAS.
2. CUT AND REMOVE WIRE BASKETS FROM SIDES OF ROOT BALL WITHOUT DEFORMING BALL. CUT OFF AND REMOVE BURLAP AND ROPE FROM TOP HALF OF ROOT BALL. COMPLETELY REMOVE SYNTHETIC ROPE AND NON-BIODEGRADABLE BURLAP.
3. TREES SHALL BE INSTALLED:
  - A. 15' FROM STREET LIGHTS
  - B. 5' FROM FIRE HYDRANTS
  - C. 20' FROM INTERSECTIONS
  - D. 5' FROM ALL PUBLIC UTILITIES (i.e. STORM, SEWER, AND WATERLINES, UTILITY METERS, ETC.)
4. ROOT BARRIER SHALL BE PLACED ABUTTING ALL SIDEWALK EDGES, 12" FROM BACK OF CURB, OR 12" FROM IMPERVIOUS SURFACE AND SHALL EXTEND 20 FEET CENTERED WITH THE TREE BASE.



#### Public Works Standard Drawings

#### STREET TREE PLANTING IN PLANTER STRIP

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	530



# OREGON CITY

**LINE 1 (SEE BELOW)  
PROJECT:**

**LINE 2 (SEE BELOW)**

*LINE 3 (SEE BELOW)*

*LINE 4 (SEE BELOW)*

9 1/4"  
3 1/4" SPACE  
2 3/4" LETTERING  
2" SPACE  
2 3/4" LETTERING  
5 1/4" SPACE  
2 1/2" LETTERING  
5 3/4" SPACE  
2" LETTERING  
2" LETTERING

LINE 1	LINE 2	LINE 3	LINE 4
SEWER SYSTEM	PIPELINE EXTENSION PIPELINE REPLACEMENT PIPELINE REHABILITATION PUMP STATION	YOUR SEWER FEES AT WORK	PROJECT CONTACT INFORMATION
STORM SYSTEM	PIPELINE EXTENSION PIPELINE REPLACEMENT	YOUR STORMWATER RATES AT WORK	PROJECT CONTACT INFORMATION
STREET SYSTEM	IMPROVEMENT WIDENING RESURFACING RECONSTRUCTION	YOUR GAS TAXES AT WORK YOUR PAVEMENT MAINTENANCE UTILITY FEES (PMUF) AT WORK	PROJECT CONTACT INFORMATION
WATER SYSTEM	PIPELINE EXTENSION PIPELINE REPLACEMENT PUMP STATION RESERVOIR	YOUR WATER RATES AT WORK	PROJECT CONTACT INFORMATION
OTHER	OTHER	OTHER	OTHER

**NOTES:**

- SIGN TO BE 48" x 48", 0.100", ALUMINUM WITH 2.25" ROUNDED CORNERS. LEGEND TO BE BLACK ON WHITE. USE TYPE C FONT.
- MOUNT SIGN ON 4" x 6" WOOD POST DRILLED WITH 2-2" HOLES AT GROUND LEVEL AT 90° ANGLES FOR BREAKAWAY PROTECTION (MINIMUM 14' LONG), 7' TO BOTTOM OF SIGN.
- CONTRACTOR TO BE RESPONSIBLE FOR PURCHASING, MOUNTING AND MAINTAIN SIGN DURING CONSTRUCTION, REMOVE SIGN AND POST AFTER CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR REPAIR OR REPLACEMENT OF DAMAGED SIGN DURING WORK.
- ENGINEER TO SPECIFY CONTENTS OF LINES 1, 2, 3 & 4.
- SIGN LOCATION TO BE APPROVED BY ENGINEER.
- SIGN INSTALLATION REQUIRED MINIMUM 2 BUSINESS DAYS PRIOR TO START.

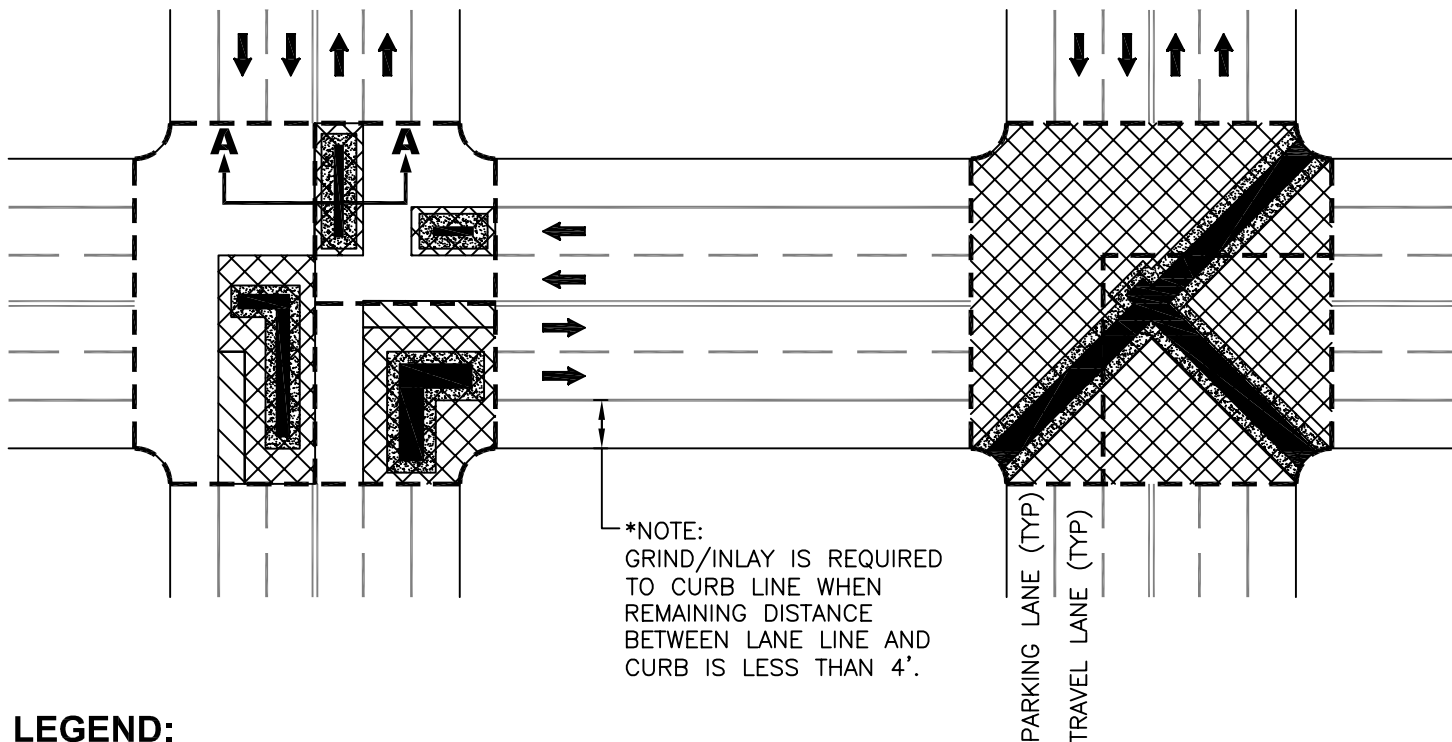


Public Works Standard Drawings

**PROJECT NOTIFICATION SIGN**

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	531





## LEGEND:

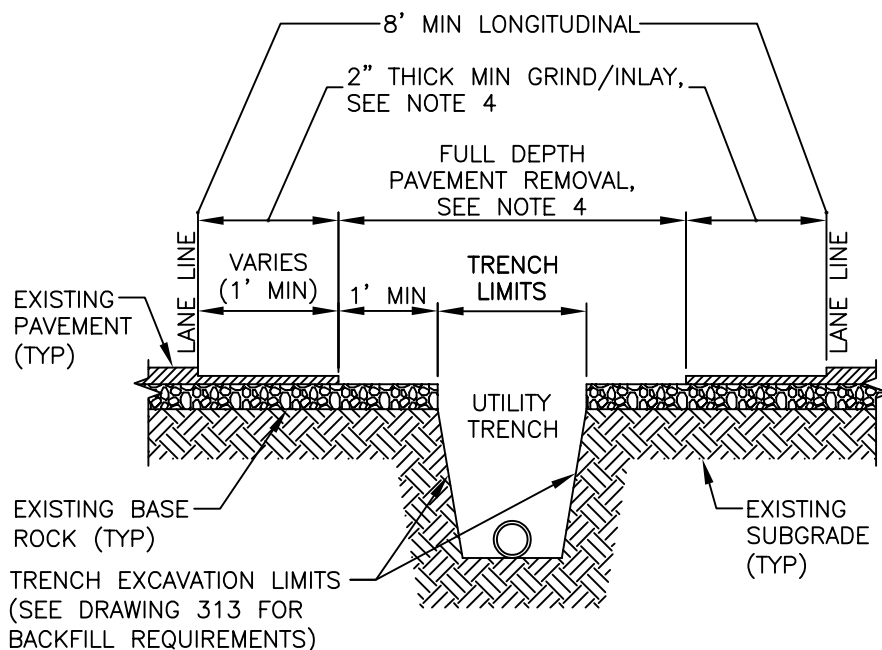
MORATORIUM STANDARD:  
PAVEMENT PATCH IS REQUIRED  
TO THESE LIMITS (MINIMUM ONE  
QUARTER OF INTERSECTION)

FULL STANDARD:  
PAVEMENT PATCH IS REQUIRED  
TO THE NEAREST LANE LINE

MODIFIED STANDARD:  
PAVEMENT PATCH IS REQUIRED  
TO THE NEAREST CENTER OF  
LANE OR LANE LINE

T-CUT STANDARD:  
PAVEMENT PATCH IS REQUIRED  
1' BEYOND TRENCH LIMITS

TRENCH LIMITS AT TOP OF  
PAVEMENT



## SECTION A-A

### NOTES:

1. ALL CUTS TO BE PERPENDICULAR/PARALLEL TO DIRECTION OF TRAVEL.
2. ALL PAVEMENT PATCH JOINTS AND ALL CUT EDGES SHALL BE SAND SEALED PER ODOT SPECS AND OREGON CITY SPECIAL PROVISIONS SEC-00744.51.
3. PAVEMENT REPLACEMENT IS REQUIRED TO THE NEXT ADJACENT CURB, PARKING, OR LANE LINE WHENEVER A TRENCH OR DISTURBANCE OF ASPHALT OR SUPPORT MATERIAL EXTENDS BEYOND SUCH LINE.
4. FOR STREETS WITH EXISTING AC THICKNESS OF LESS THAN 4 INCHES, COMPLETE FULL DEPTH AC REMOVAL TO PAVING LIMITS AND REPLACE WITH MINIMUM 4 INCHES OF AC.
5. RESURFACING TO BE A MINIMUM 4 INCHES, LEVEL 2, 1/2-INCH PG 64-22 ACP (IF ARTERIAL, LEVEL 3) OR MATCHING EXISTING, WHICHEVER IS GREATER.

Public Works Standard Drawings

PAVEMENT CUT STANDARD,  
INTERSECTIONS

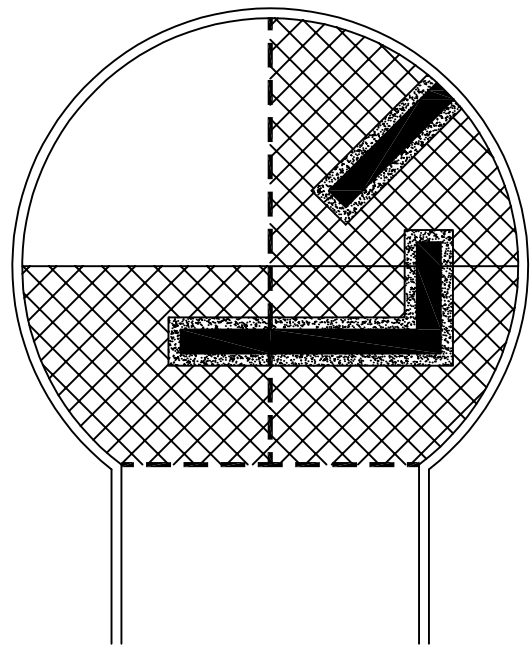
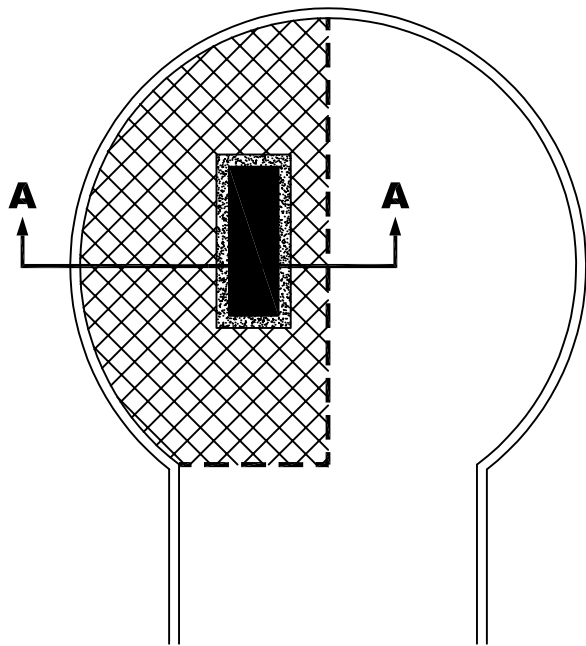
SCALE NTS

DATE JAN '23 REV.

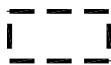
ENGR. DW DRAWN KAE

DRAWING NO. 533





## LEGEND:



**MORATORIUM STANDARD:**  
PAVEMENT PATCH IS REQUIRED  
TO THESE LIMITS (MINIMUM ONE  
HALF OF CUL-DE-SAC).



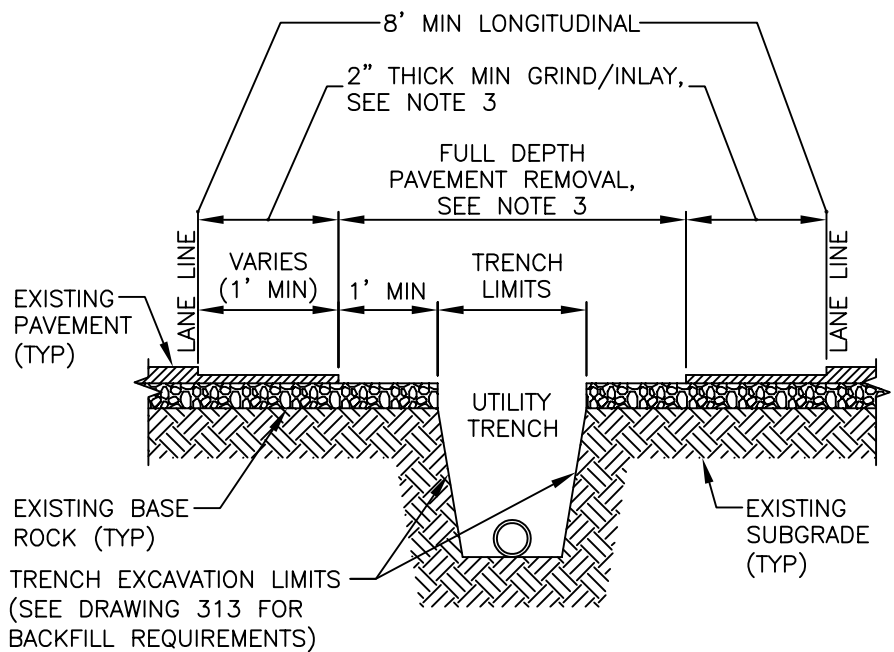
**FULL & MODIFIED STANDARDS:**  
PAVEMENT PATCH IS REQUIRED  
TO THESE LIMITS (MINIMUM ONE  
QUARTER OF CUL-DE-SAC).



**T-CUT STANDARD:**  
PAVEMENT PATCH IS REQUIRED  
1' BEYOND TRENCH LIMITS.



**TRENCH LIMITS AT TOP OF  
PAVEMENT.**



## SECTION A-A

### NOTES:

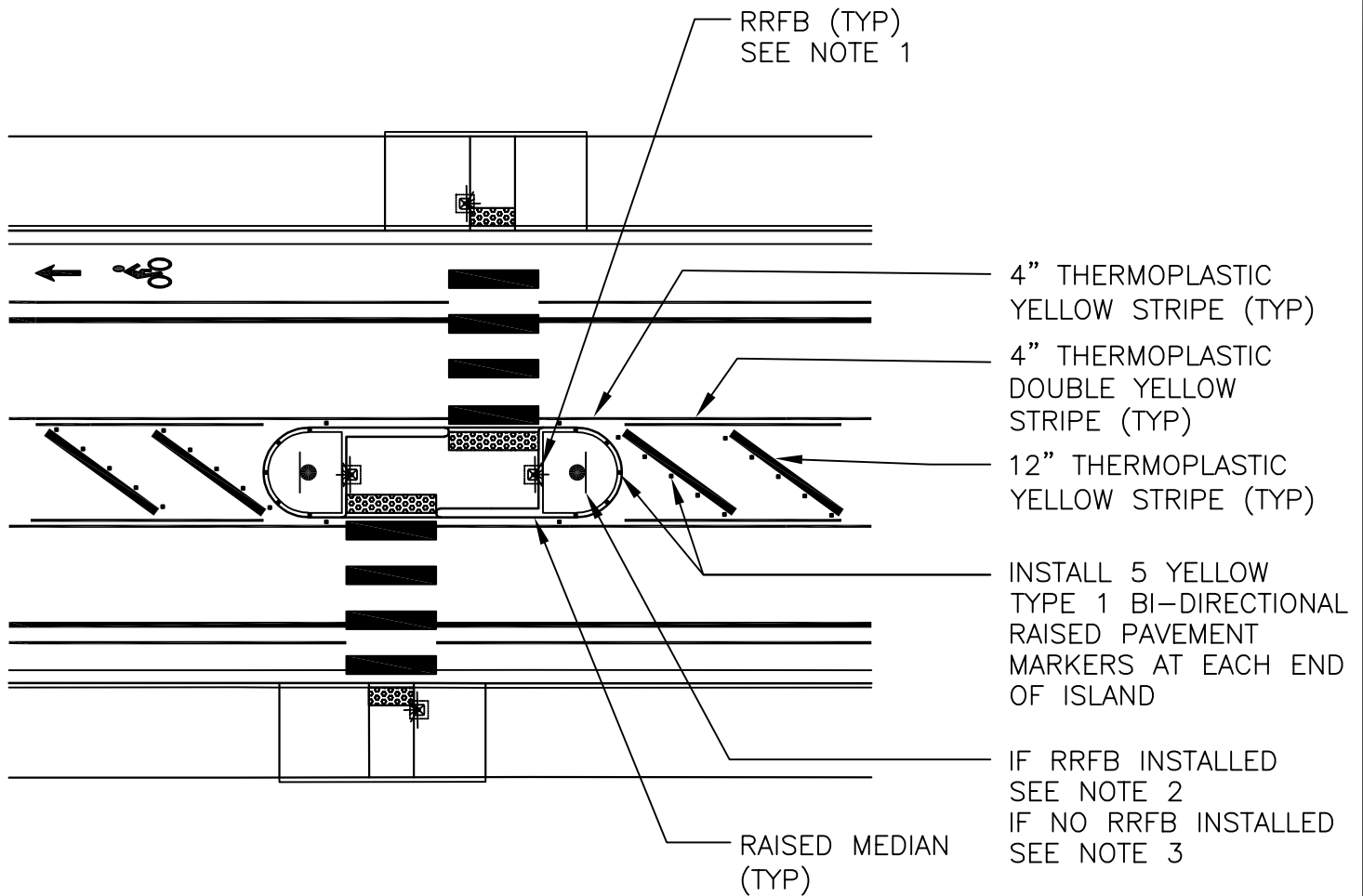
1. ALL CUTS TO BE PERPENDICULAR/PARALLEL TO DIRECTION OF TRAVEL.
2. ALL PAVEMENT PATCH JOINTS AND ALL CUT EDGES SHALL BE SAND SEALED PER ODOT SPECS AND OREGON CITY SPECIAL PROVISIONS SEC-00744.51.
3. FOR STREETS WITH EXISTING AC THICKNESS OF LESS THAN 4 INCHES, COMPLETE FULL DEPTH AC REMOVAL TO PAVING LIMITS AND REPLACE WITH MINIMUM 4 INCHES OF AC.
4. RESURFACING TO BE A MINIMUM 4 INCHES, LEVEL 2, 1/2-INCH PG 64-22 ACP (IF ARTERIAL, LEVEL 3) OR MATCHING EXISTING, WHICHEVER IS GREATER.



## Public Works Standard Drawings

### PAVEMENT CUT STANDARD, CUL-DE-SACS (LOCAL STREETS)

SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	534



NOTES:

1. IF RRFB (RECTANGULAR RAPID FLASHING BEACON) SYSTEM IS TO BE INSTALLED, INSTALL TO CLACKAMAS COUNTY STANDARDS.
2. IF RRFB IS INSTALLED, OBJECT MARKER SIGN OM3-L YELLOW TO BE INSTALLED ON SEPARATE POST IN FRONT OF AND BELOW W16-7pR SUPPLEMENTAL STD YELLOW ARROW PLAQUE ON RRFB POLE.
3. IF NO RRFB IS INSTALLED, R4-7 KEEP RIGHT SIGN SHALL BE INSTALLED.



Public Works Standard Drawings

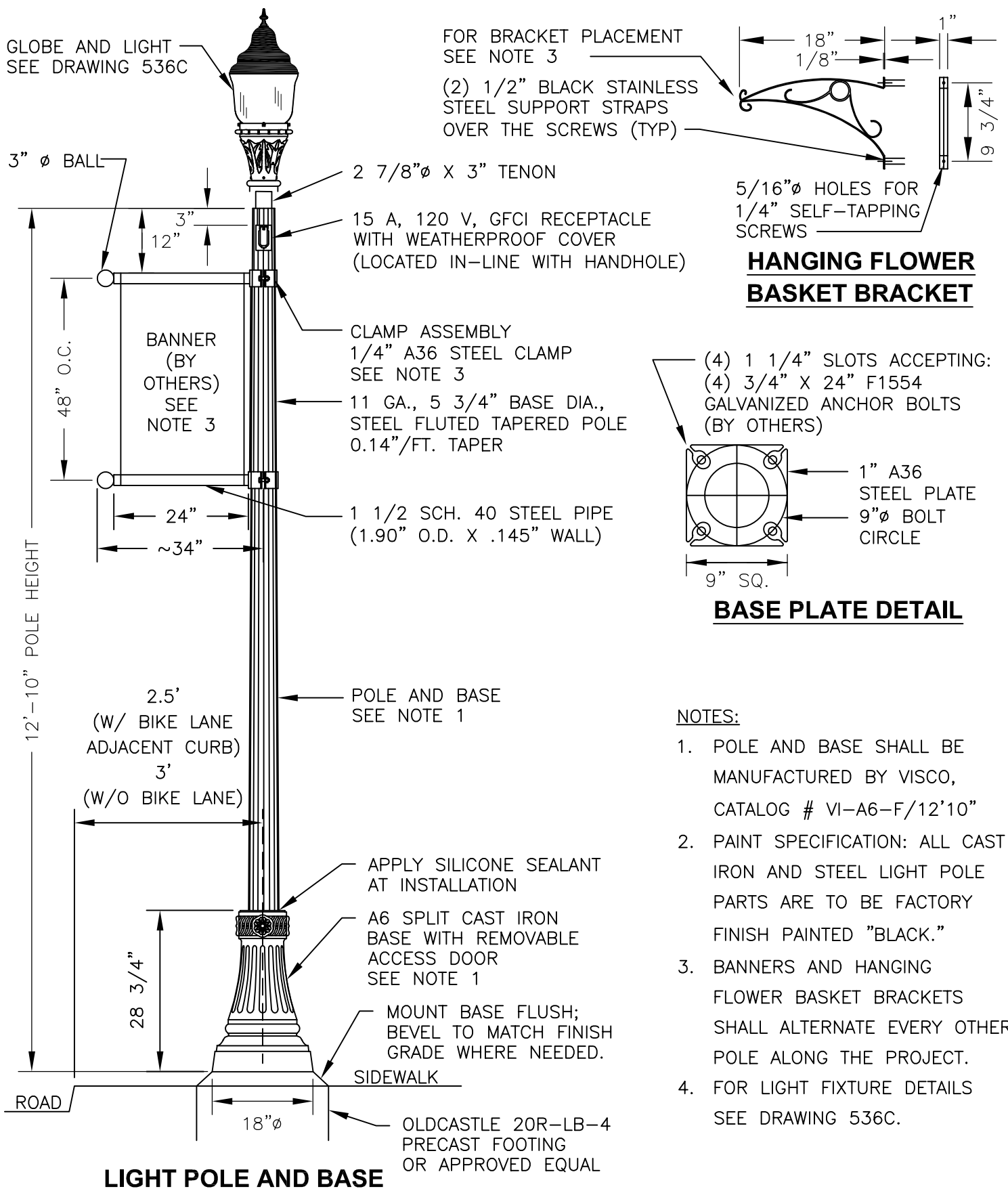
MEDIAN STRIPING AND SIGN DETAIL

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

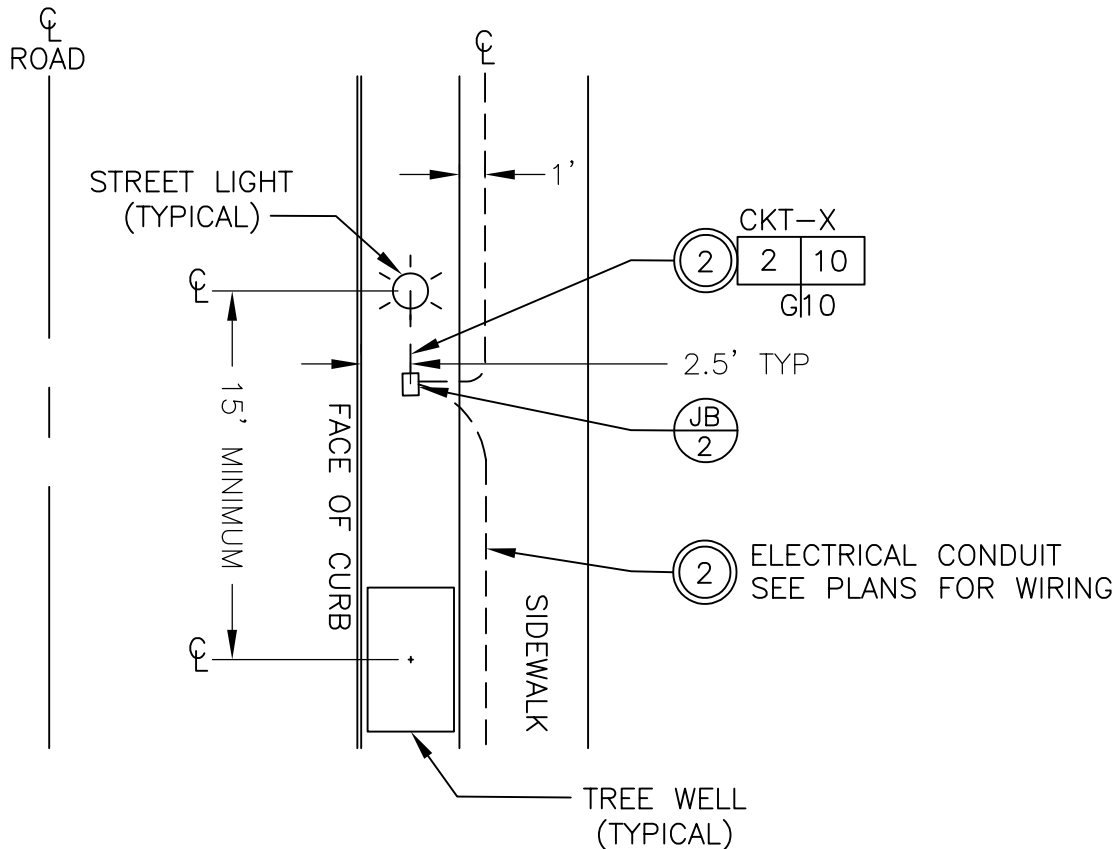
DRAWING NO. 535



Public Works Standard Drawings

TYPICAL ACORN STYLE DECORATIVE  
STREET LIGHT POLE DETAIL

SCALE	NTS
DATE JAN '26	REV. 1
ENGR. DW	DRAWN KAE
DRAWING NO. 536	



#### NOTES:

1. CONTRACTOR TO INSTALL 2-1/C #10 CONDUCTORS FROM LUMINAIRE TO JUNCTION BOX IN TREE WELL/STREET LIGHT STRIP.
2. A WATER PROOF FUSEHOLDER IS REQUIRED AT EACH LUMINAIRE.
3. JUNCTION BOXES SHALL BE PGE APPROVED SPLICE BOXES. PGE APPROVED BOXES ARE:

MANUFACTURER	CATALOG NUMBER
NEW BASIS	FCA173018T-90026
QUAZITE (HUBBELL)	A42173018A017
OLDCASTLE	17301620
ARMORCAST	A6001640TAX18-PGE
HIGHLINE	CHA173018HE1

"ELECTRIC" OR "POWER" SHALL BE IN THE LID MARKING AREA FOR PGE JUNCTION BOXES.

4. THE PHOTOELECTRIC CONTROL SHALL BE PGE APPROVED TWISTLOCK, FAIL-ON, ELECTRONIC, 105-300 VAC, 60 HZ, PER ANSI136.10, BRONZE HOUSING, 1.5 LUMEN TURN-ON, RATED 1000 W TUNGSTON (1800 VA BALLAST), 1.5:1 TURN-OFF / TURN-ON RATION, SOLID BRASS PLUG BLADES, CONFORMALLY COATED CDS CELL, 160 JOULE MOV, 2-4 SEC. TURN-OFF DELAY. LOCATION TO BE APPROVED BY CITY.

#### Public Works Standard Drawings

#### TYPICAL LIGHT POLE WIRING TO JUNCTION BOX

SCALE NTS

DATE JAN '23 REV.

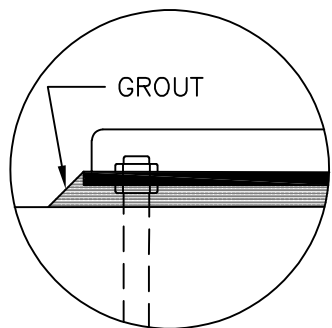
ENGR. DW DRAWN KAE

DRAWING NO. 536A



### ANCHOR BOLTS:

- A1.- ANCHOR BOLTS SHALL BE 4 - DIAMETER AS GIVEN BY POLE MANUFACTURER.
- A2.- BOLT CIRCLE DIAMETER TO MATCH POLE BASE PLATE.
- A3.- ANCHOR BOLTS SHALL HAVE HEADS, OR NUTS WITH THE THREADS STAKED AT TWO PLACES BELOW THE NUT, EMBEDDED IN FOUNDATION.
- A4.- ANCHOR BOLTS SHALL BE EMBEDDED 33" MINIMUM, IN CONCRETE. (SEE NOTE R2).
- A5.- BOLT PROJECTION SHALL BE 5" ABOVE SIDEWALK FINISH GRADE OR LANDSCAPED AREAS WHERE THERE IS NO SIDEWALK PRESENT.
- A6.- ANCHOR BOLT TOTAL LENGTH SHALL EQUAL A4 PLUS DISTANCE FROM TOP OF FOUNDATION TO TOP OF SIDEWALK PLUS A5.



DOUBLE NUT EACH ANCHOR BOLT (LEVEL PLATE AND FILL SPACE WITH GROUT. PROVIDE 1/2-INCH DIAMETER DRAIN HOLE.)

### GROUND ROD:

- G1.- MINIMUM 5" EXPOSURE AT TOP OF FOUNDATION, WITHIN BOLT CIRCLE.
- G2.- GROUND ROD SHALL BE MINIMUM 5/8" DIA. X 8 FT LONG, COPPER CLAD.

### CONDUIT:

- C1.- CONDUIT SHALL BE RIGID STEEL, GALVANIZED, INSIDE THE FOUNDATION, WITH 6" MINIMUM STUB-OUT.
- C2.- SERVICE AND FEED CONDUITS SHALL BE RSGC OR PVC, AS REQUIRED.
- C3.- STUB UP TO WITHIN 4" FROM HAND HOLE.

36" MINIMUM BURIAL  
42" MAXIMUM BURIAL

CONNECTOR

### REINFORCEMENT:

- R1.- VERTICAL REBAR SHALL BE 7-#6 EQUALLY SPACED INSIDE OF HOOPS.
- R2.- VERTICAL REBAR MAY BE 6-#6 IF ANCHOR BOLTS ARE EMBEDDED TO 45" MINIMUM.
- R3.- HOOPS SHALL BE #4 X 18" I.D., SPACED 4" O/C FROM TOP OF FOUNDATION TO END OF ANCHOR BOLTS.
- R4.- HOOPS SHALL BE #4 X 18" I.D., SPACED 12" MINIMUM FROM THE ANCHOR BOLTS TO BOTTOM OF FOUNDATION.
- R5.- REBAR SHALL BE 3 INCHES BELOW FINISH GRADE OF SIDEWALK.

POUR FOOTING AGAINST UNDISTURBED MATERIAL

### FOUNDATION:

- F1.- WHEN CASTING THE LUMINAIRE POLE BASE, STOP THE FOUNDATION POUR 5.5 INCHES TO 6 INCHES BELOW SIDEWALK FINISH GRADE WHILE MAINTAINING THE CORRECT ANCHOR BOLT LOCATIONS AND ELEVATIONS.
- F2.- THE FOUNDATION SHALL CURE A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO POLE INSTALLATION OR TORQUING OF THE ANCHOR BOLTS.
- F3.- FOUNDATION DEPTH: 50 INCHES (MINIMUM)
- F4.- THERE SHALL BE A MINIMUM OF 17" FOUNDATION BELOW THE ANCHOR BOLT HEADS.



Public Works Standard Drawings

## 24" CAST-IN-PLACE DECORATIVE LUMINAIRE POLE FOUNDATION

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 536B

## STREET LIGHT STYLE LOCATIONS

LOCATION	TEAR DROP STYLE	KING ACORN STYLE	LUMECON ACORN STYLE	TOWN & COUNTRY STYLE
99E: CLACKAMETTE PARK TO TUNNEL	<b>X</b> SEE NOTE 4			
MAIN: 99E TO 15TH PLUS SIDE STREETS			<b>X</b>	
WASHINGTON: 7TH TO HOME DEPOT			<b>X</b>	
WASHINGTON: HOME DEPOT TO PRAIRIE SCHOONER	<b>X</b> SEE NOTE 4			
MOLALLA: 213 TO HOLMES		<b>X</b>		
MOLALLA: HOLMES TO DIVISION			<b>X</b>	
7TH: DIVISION TO HIGH	<b>X</b> SEE NOTE 3			
HOLCOMB: FRONT TO WINSTON				<b>X</b>

### NOTES:

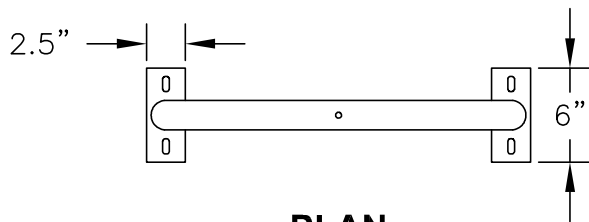
- KING ACORN STYLE LIGHT: CATALOG # K137R-P4AR-III-60(SSL)-1036-120:  
277V-K14-PR7-4K-TB-DALI-#1-LPS-RAL9017 C/W (2)
- LUMECON ACORN STYLE LIGHT: CATALOG # LDS-ROF-2-B-1-CW-C-B-8-S-H
- TEAR DROP STYLE LIGHT/POLE MANUFACTURED BY HOLOPHANE, MEMPHIS STYLE,  
CATALOG #'S:  
POLE: AORTS 25 70 3T12 GV/RAL44-80066 RFD328354  
CLAMSHELL BASE: NY20CSB CA RCXX PP RAL44-80066 RFD328354  
ROADWAY ARM: GAC 72IN 1A TN PP RAL44-80066 RFD328354  
LIGHT: MSPL2 P30 40K MVOLT NPT BK TG4 PR7 PCLL L03 NL1X1
- TEAR DROP STYLE LIGHT/POLE MANUFACTURED BY HOLOPHANE, ESPLANADE STYLE,  
CATALOG #'S:  
POLE AND CLAMSHELL BASE: SAME AS ABOVE  
LIGHT: E SPL3 P30S 40K MVOLT NPT BK TG4 PR7 PCLL L03 NL1X1
- TOWN AND COUNTRY STYLE: SEE PGE FOR MORE INFORMATION
- ALL FUTURE LIGHTS TO BE LED.



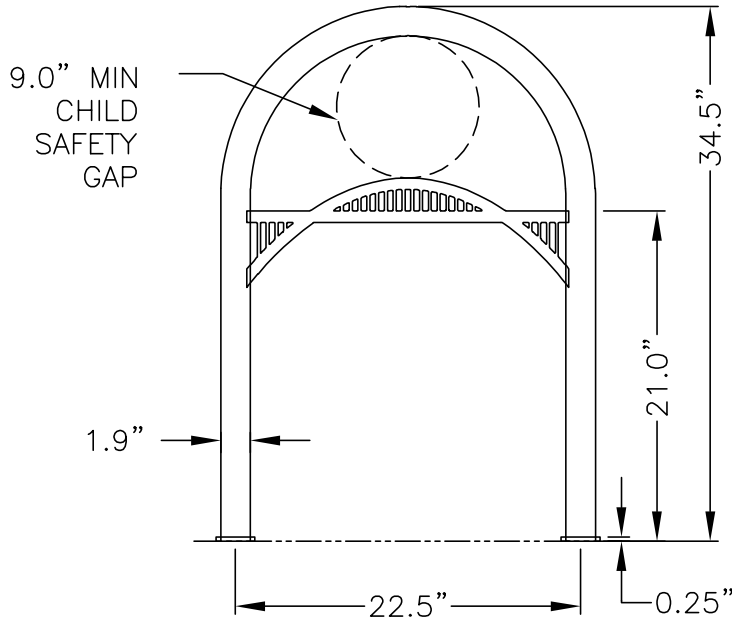
Public Works Standard Drawings

**STREET LIGHT LOCATIONS  
AND FIXTURE DETAILS**

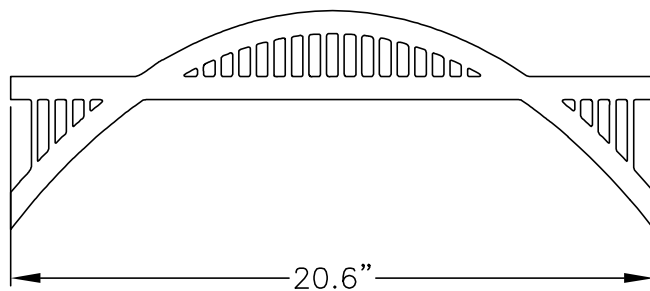
SCALE	NTS
DATE JAN '26	REV. 3
ENGR. DW	DRAWN KAE
DRAWING NO.	536C



**PLAN**



**PROFILE**



.25" LASER-CUT PLATE  
TOTAL CUT LENGTH = 121.62"

**ENLARGED DETAIL**

**NOTES:**

- DERO HOOP BIKE RACK WITH CUSTOM LASER-CUT PLATE OR APPROVED EQUAL.

**MATERIALS:**

- 1.5" SCHEDULE 40 PIPE (1.9" O.D.)

**FINISH:**

- POWDER COAT FINISH
- COLOR: DERO RAL 9005

**INSTALLATION:**

- SURFACE MOUNT PER MANUFACTURE SPECIFICATIONS OR AS SHOWN ON THE PLANS.
- FOR CONCRETE PAVEMENT THAT IS NOT LEVEL, USE HOT DIPPED GALVANIZED STEEL OR STAINLESS STEEL WASHERS TO LEVEL THE RACK AND SUPPORT PLATES BEFORE DRIVING ANCHOR BOLTS.

**SETBACKS:**

- SETBACK SHALL BE 24" MINIMUM BETWEEN THE STREET AND THE RACK, OR AS SHOWN ON THE PLANS.



Public Works Standard Drawings

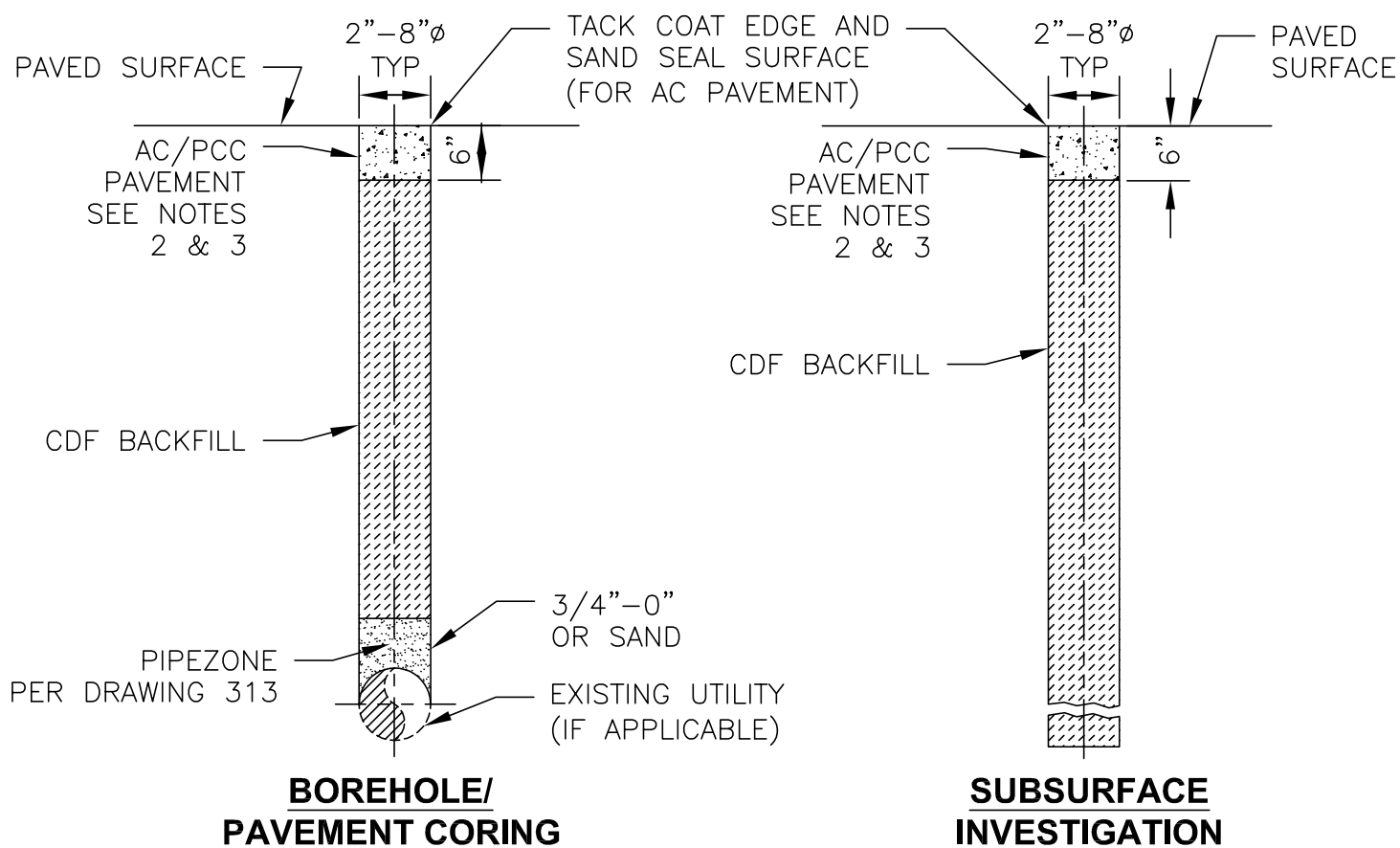
BIKE RACK DETAIL

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 537



**NOTES:**

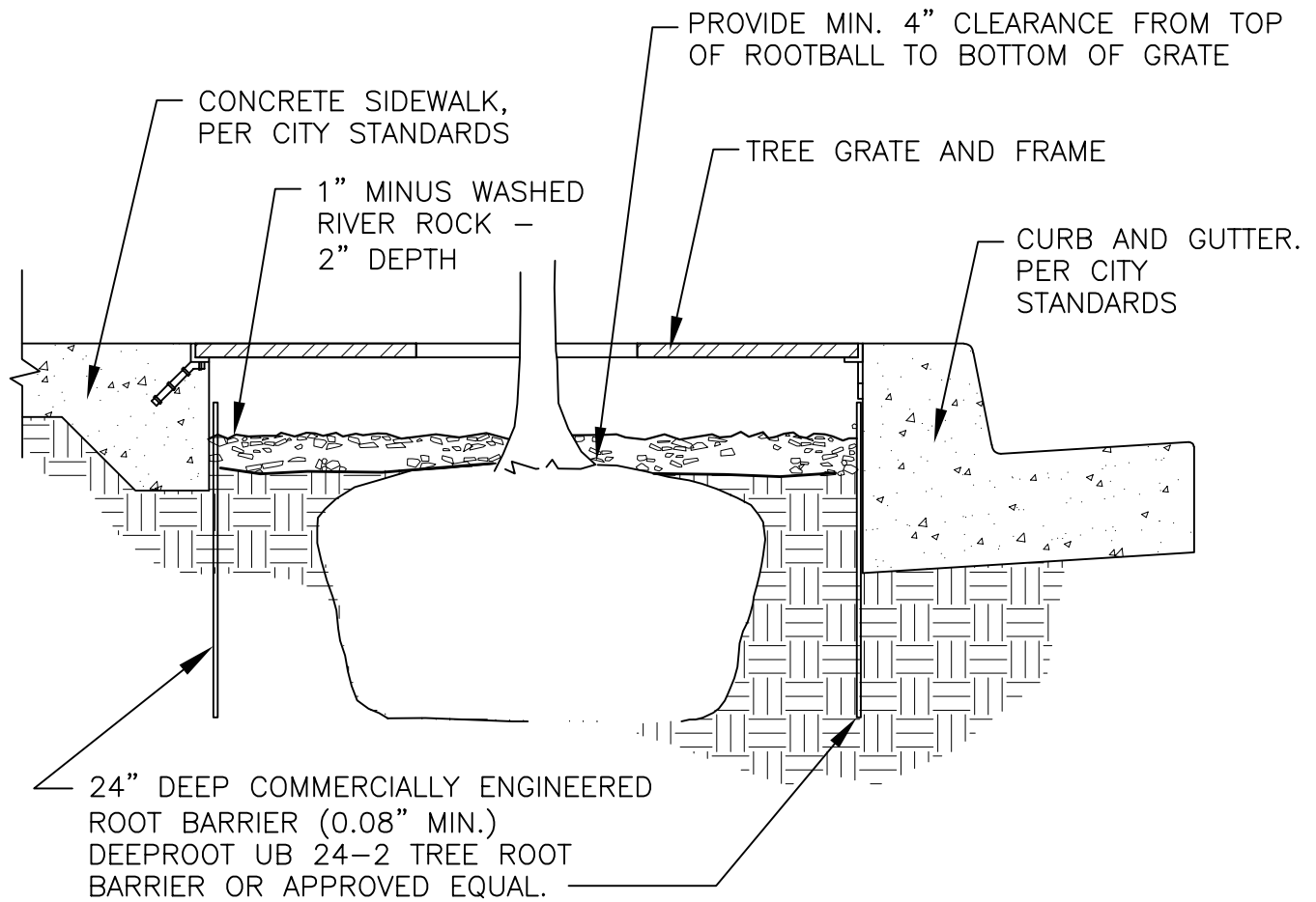
1. IF PAVEMENT IS UNDERMINED OR DAMAGED DURING CONSTRUCTION THEN RESTORATION SHALL BE AS DIRECTED.
2. ASPHALT STREETS: RESTORE WITH HOT MIX OR APPROVED COLD MIX PLACED IN TWO EQUAL LIFTS USING PNEUMATIC TAMPER (OR APPROVED EQUAL). TACK COAT ALL SIDE SURFACES AND SAND SEAL THE TOP SURFACE.
3. CONCRETE STREETS: RESTORE WITH 4000 PSI MIN PREMIX OR BATCH PLANT CONCRETE 2" BELOW CONCRETE PANEL, STRIKE LEVEL WITH EXISTING PAVEMENT.
4. FOLLOW ALL APPLICABLE REGULATORY REQUIREMENTS.
5. BOREHOLE/SUBSURFACE INVESTIGATIONS SHALL ONLY OCCUR OUTSIDE OF ANY CROSSWALK, MARKED OR NON-MARKED.
6. IF BOREHOLE/SUBSURFACE INVESTIGATION IS WITHIN ANY BIKE LANE PAVEMENT RESTORATION SHALL BE ENTIRE BIKE LANE WIDTH AND 3 FEET LONG (MIN).
7. MULTIPLE BOREHOLES OR SUBSURFACE INVESTIGATIONS WITH LESS THAN 3 FT SEPARATION SHALL BE RESTORED AS A SINGLE AREA PATCH PER OREGON CITY PAVEMENT CUT STANDARD.
8. IF A POTHOLE IS DONE WITHIN A SIDEWALK PANEL, FULL PANEL REPLACEMENT REQUIRED.
9. IF POTHOLE METHOD IS OTHER THAN 2"-8" DIAMETER VAC-EX, SUBMIT PROPOSED METHOD. SURFACE RESTORATION MAY BE MORE EXTENSIVE.



Public Works Standard Drawings

POTHOLE RESTORATION

SCALE	NTS
DATE	JAN '23
ENGR.	DW
DRAWN	KAE
DRAWING NO.	538



NOTES:

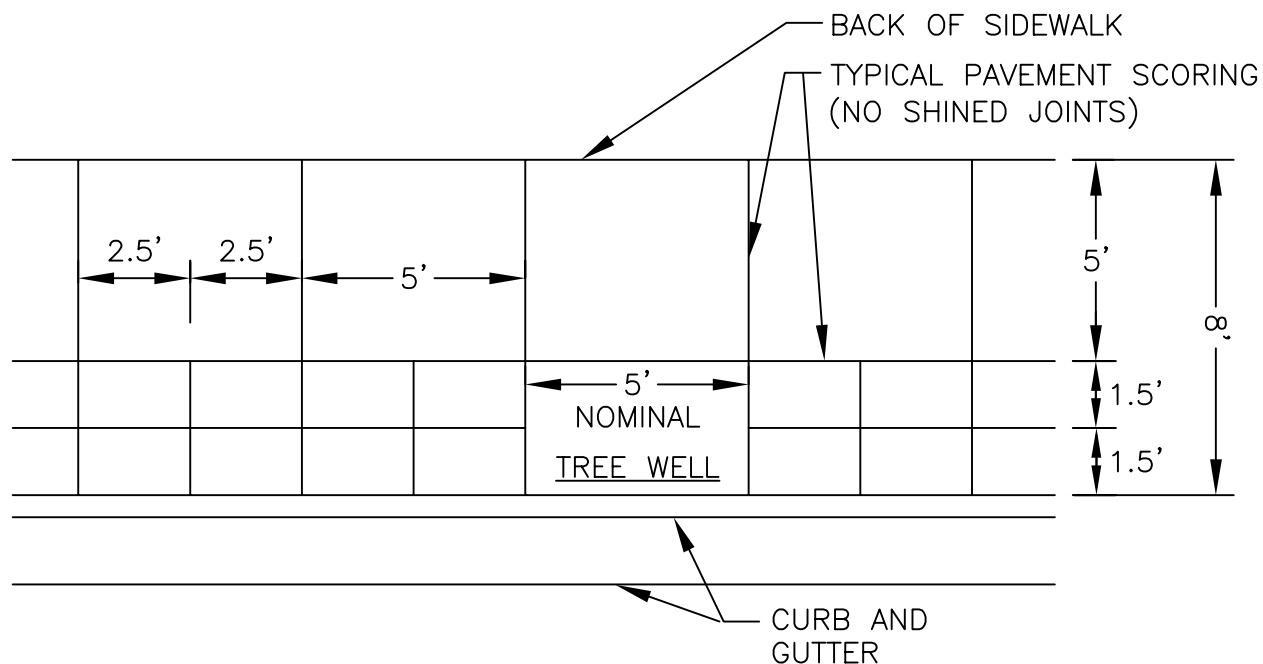
1. TREE GRATES AND FRAMES SHALL MEET THE FOLLOWING REQUIREMENTS:
  - TWO-PIECE CAST IRON GRATE WITH NATURAL FINISH WITH FITTED FRAME MANUFACTURED BY FAIRWEATHER SF OR CITY APPROVED EQUAL. FRAME SHALL INCLUDE REBAR STUDS ON THREE SIDES FOR SIDEWALK MOUNTING AND ONE SIDE SHALL INCLUDE STEEL TABS TO ACCEPT EXPANSION BOLTS FOR CURB MOUNTING.
  - WHERE 10 FEET WIDE SIDEWALKS ARE BEING CONSTRUCTED, TREE GRATE WITH FRAME SHALL BE THE FAIRWEATHER SF STYLE CNK 4872, SIZE 48"X72" (OVERALL DIMENSIONS 4 FEET X 6 FEET). WHERE 8 FEET SIDEWALKS ARE BEING CONSTRUCTED, TREE GRATE WITH FRAME SHALL BE FAIRWEATHER SF STYLE IVY 3660, SIZE 36"X60" (OVERALL DIMENSIONS 3 FEET X 5 FEET).
  - PROVIDE SUBMITTAL TO CITY FOR APPROVAL.
2. TREE STAKES AND TIES SHALL MEET THE FOLLOWING REQUIREMENTS:
  - WHERE TREES ARE TO BE LOCATED IN TREE GRATES, TREES SHALL BE ANCHORED WITH PLATI-MAT TREE ANCHORING SYSTEMS AS MANUFACTURED BY PLATIPUS ANCHORING SYSTEMS (SEE [www.platipus-anchors.com](http://www.platipus-anchors.com)) OR CITY APPROVED EQUAL.
  - WITH EACH STREET TREE INSTALL ROOT BARRIER TO COMPLETELY ENCLOSE TREE WELL. ROOT BARRIER MATERIAL SHALL BE INSTALLED PARALLEL TO CURB OR SIDEWALK EDGE.
3. SEE DRAWING 540 FOR ADDITIONAL SIDEWALK REQUIREMENTS.



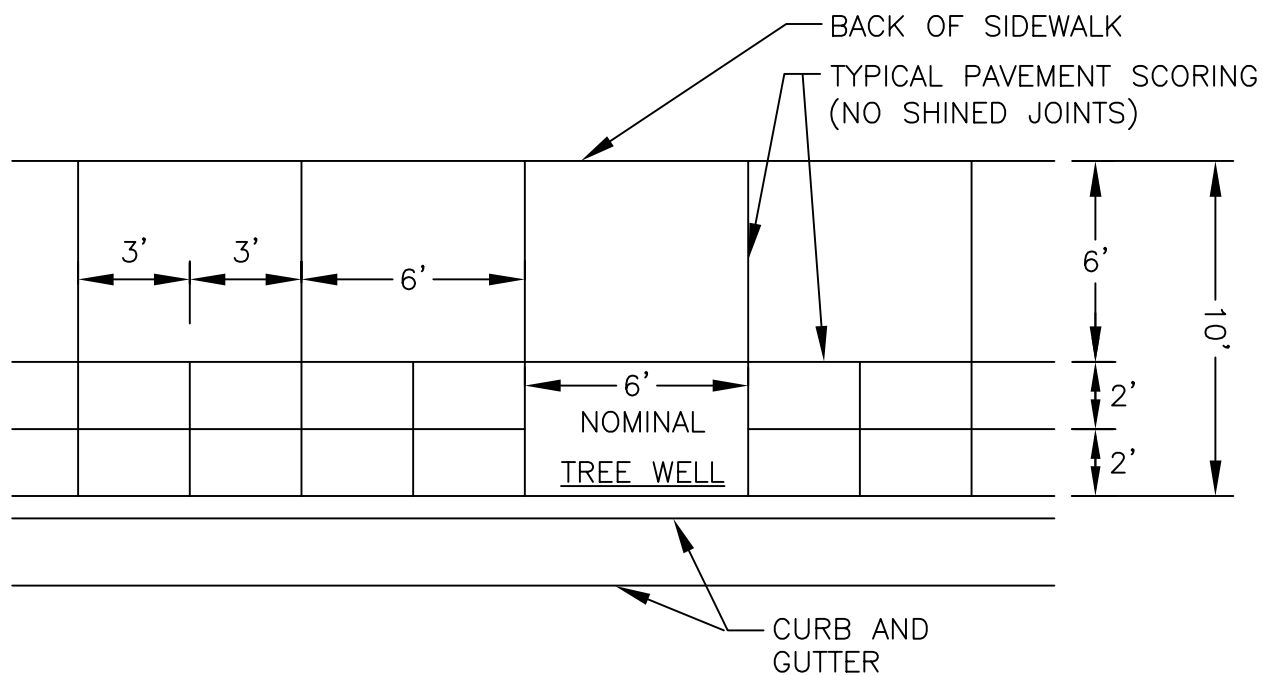
Public Works Standard Drawings

DECORATIVE CORRIDOR,  
TYPICAL TREE GRATE INSTALLATION

SCALE	NTS
DATE JAN '23	REV.
ENGR. DW	DRAWN KAE
DRAWING NO.	539



**TYPICAL SIDEWALK SCORING DETAIL FOR 8 FOOT SIDEWALK**



**TYPICAL SIDEWALK SCORING DETAIL FOR 10 FOOT SIDEWALK**

NOTES:

1. METAL TREE GRATE AND FRAME MUST BE ASSEMBLED PRIOR TO PLACING CONCRETE SIDEWALK.
2. ALL SCORING DIMENSIONS ARE NOMINAL. SCORING SHALL BE ADJUSTED TO MATCH OUTSIDE OF TREETWELL FRAME.



Public Works Standard Drawings

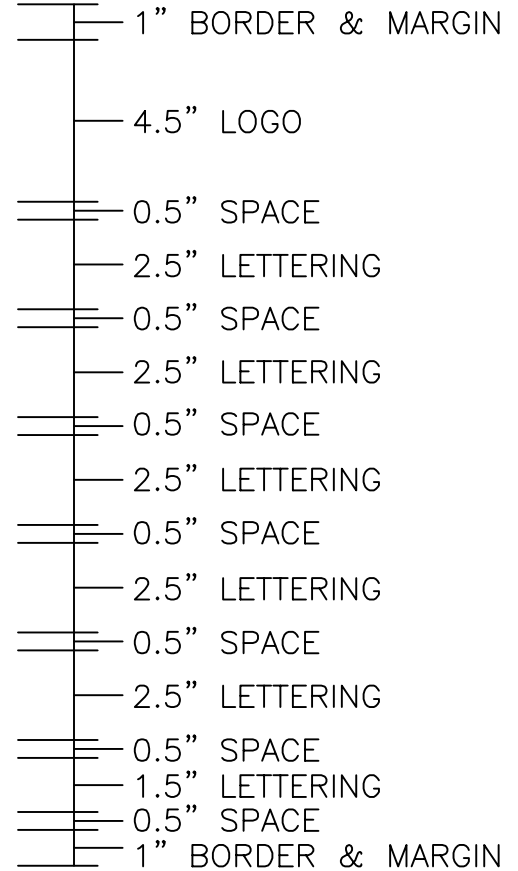
DECORATIVE CORRIDOR,  
TYPICAL SIDEWALK SCORING DETAIL

SCALE NTS

DATE JAN '23 REV.

ENGR. DW DRAWN KAE

DRAWING NO. 540



NOTES:

1. SIGN TO BE 24" x 24", 0.100", ALUMINUM WITH 2.25" ROUNDED CORNERS. LEGEND TO BE BLACK ON WHITE. USE TYPE C FONT.
2. MOUNT SIGN ON CENTER OF END OF ROAD MARKER.
3. SIGN LOCATION TO BE APPROVED BY ENGINEER.
4. ALL SIGN HARDWARE SHALL CONFORM TO OREGON CITY STANDARD DRAWING 523.

Public Works Standard Drawings

FUTURE ROAD SIGN

SCALE NTS

DATE AUG '25 REV. 1

ENGR. DW DRAWN KAE

DRAWING NO. 541

