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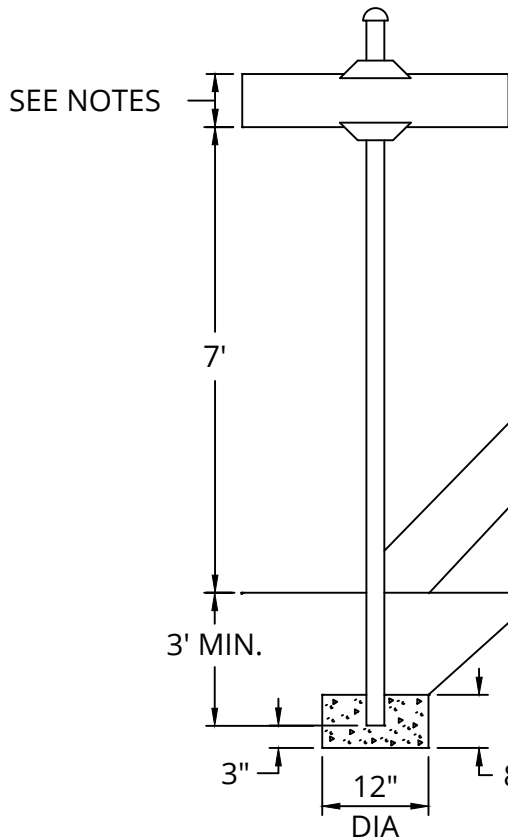


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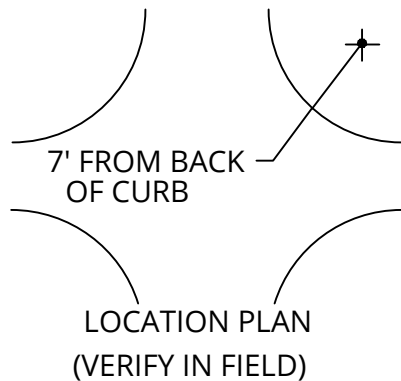
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ABBREVIATIONS	
•	Street-St
•	Avenue-Ave
•	Lane-Ln
•	Circle-Cir
•	Court-Ct
•	Boulevard-Blvd
•	Drive-Dr
•	Road-Rd
•	Parkway-Pkwy
•	Place-Pl
•	Service Road-Svc



NOTES:

1. SIGN SIZE-DESIGN A: 9" (40 MPH AND LESS) AND SIGN SIZE-DESIGN B: 12" (45 MPH AND GREATER).
2. BLADE LENGTH SHALL BE AS NECESSARY.
3. LETTER SIZE - DESIGN A: 6"UPPER CASE 4" LOWER CASE - DESIGN B: 8"UPPER CASE 6" LOWER CASE
4. DIAMOND GRADE, WHITE ON MNDOT GREEN BACKGROUND FOR PUBLIC STREETS WHITE ON MNDOT BROWN BACKGROUND FOR PRIVATE STREETS, SEE CITY SPECIFICATIONS FOR MATERIALS.
5. STREET NAMES SHALL BE SPELLED COMPLETELY EXCEPT FOR SUFFIXES WHICH MAY BE ABBREVIATED ON LONGER STREET NAMES.
6. SIGNS SHALL NOT HAVE BORDERS.
7. SIGN BRACKETS SHALL BE "LYLE SIGNS" NO. E-450 OR APPROVED EQUAL.
8. A SIGN PLAN SHOWING SIGN COLORS, SIZES AND LETTERING MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO SIGN INSTALLATION.
9. FIRST LETTER OF EACH WORD TO BE "CAPITAL" LETTERS; REMAINING LETTERS OF EACH WORD TO BE LOWER CASE

STREET SIGN INSTALLATION

Plate No. ST-1

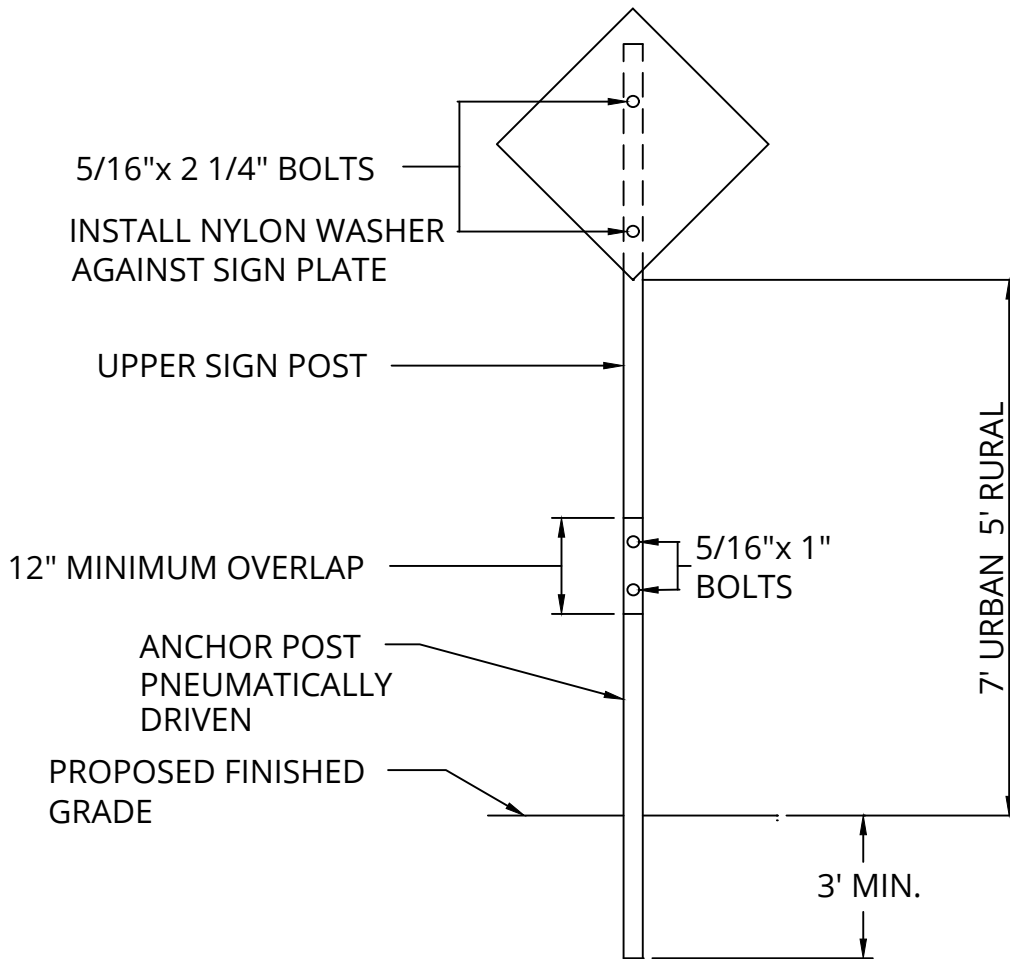


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NOTES:

1. MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY SPECIFICATIONS FOR MNDOT 2564 TYPE C TRAFFIC SIGNS.
2. SIGN PANELS-REFLECTIVE SHEETING, VIP DIAMOND GRADE.
3. BOLTS SHALL BE STAINLESS STEEL.
4. FLANGED CHANNEL SIGN POSTS SHALL BE GALVANIZED STEEL, 7' LONG 3LB/LF BOTTOM POST, AND 7'LONG 2LB/LF TOP POST.
5. SIGNS INSTALLED IN CONCRETE SHALL HAVE AN APPROVED BREAK-AWAY DEVICE. SEE DETAIL ST-18.
6. EDGE OF SIGN SHALL BE 2' FROM FACE OF CURB AND/OR 5' FROM EDGE OF SHOULDER.

TRAFFIC SIGN INSTALLATION

Plate No. ST-2



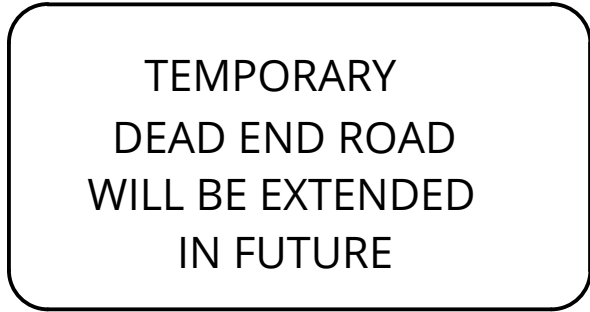
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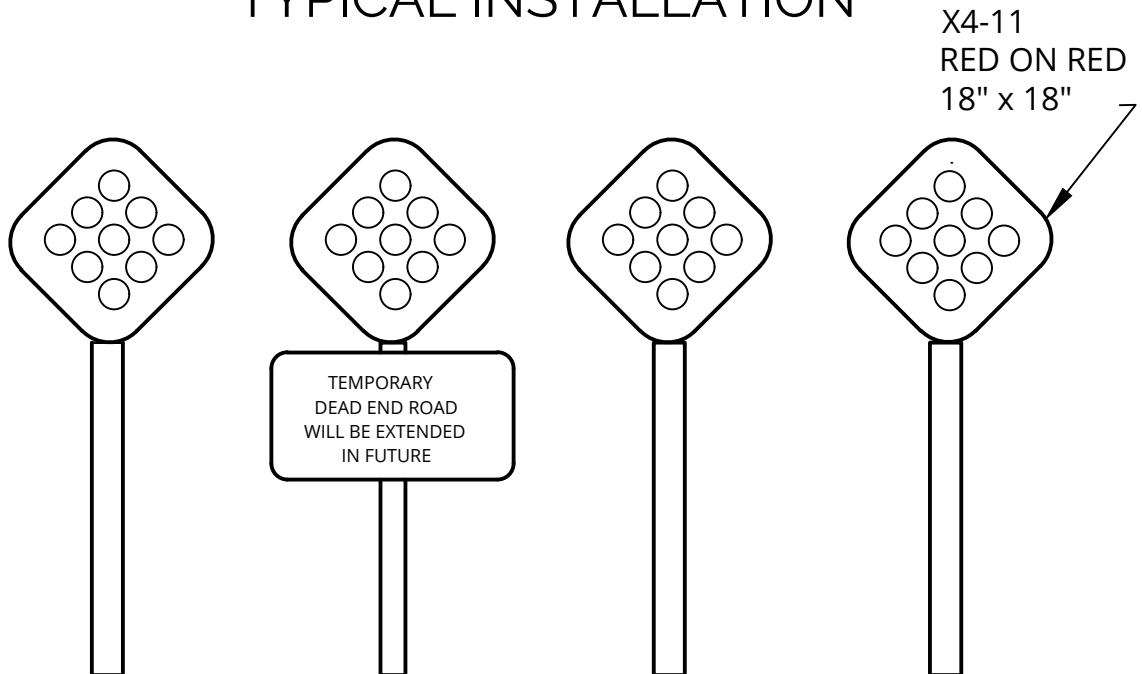
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SIGN DETAIL



12" HIGH X 18" WIDE
WHITE LETTERING ON BLUE BACKGROUND

TYPICAL INSTALLATION



FUTURE ROAD SIGNAGE DETAIL

Plate No. ST-3

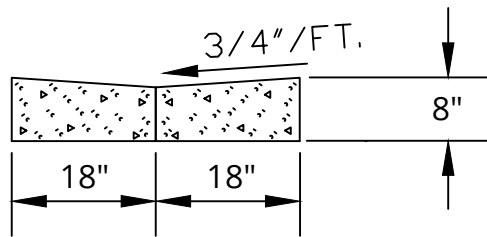


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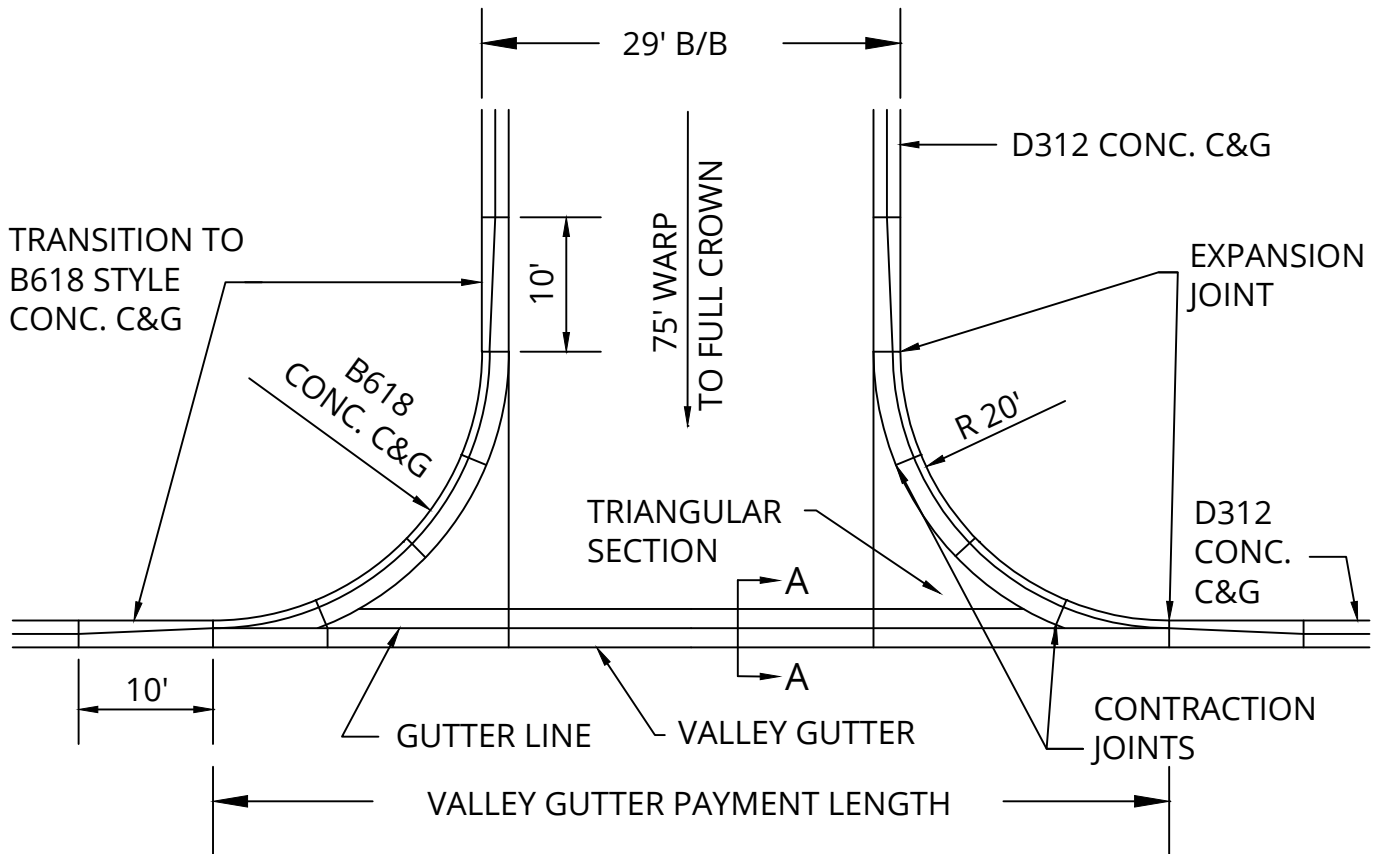
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SECTION A-A



NOTE:

PAYMENT FOR TRANSITION C&G SECTIONS AND B618 CONC. C & G, SHALL BE PER L.F. OF B618 CONC. C & G. PAYMENT FOR VALLEY GUTTER SHALL BE PER L.F. OF VALLEY GUTTER MEASURED AS SHOWN. TRIANGULAR SECTIONS SHALL BE INCIDENTAL TO THE VALLEY GUTTER PAY ITEM.

CONCRETE VALLEY GUTTER

Plate No. ST-4

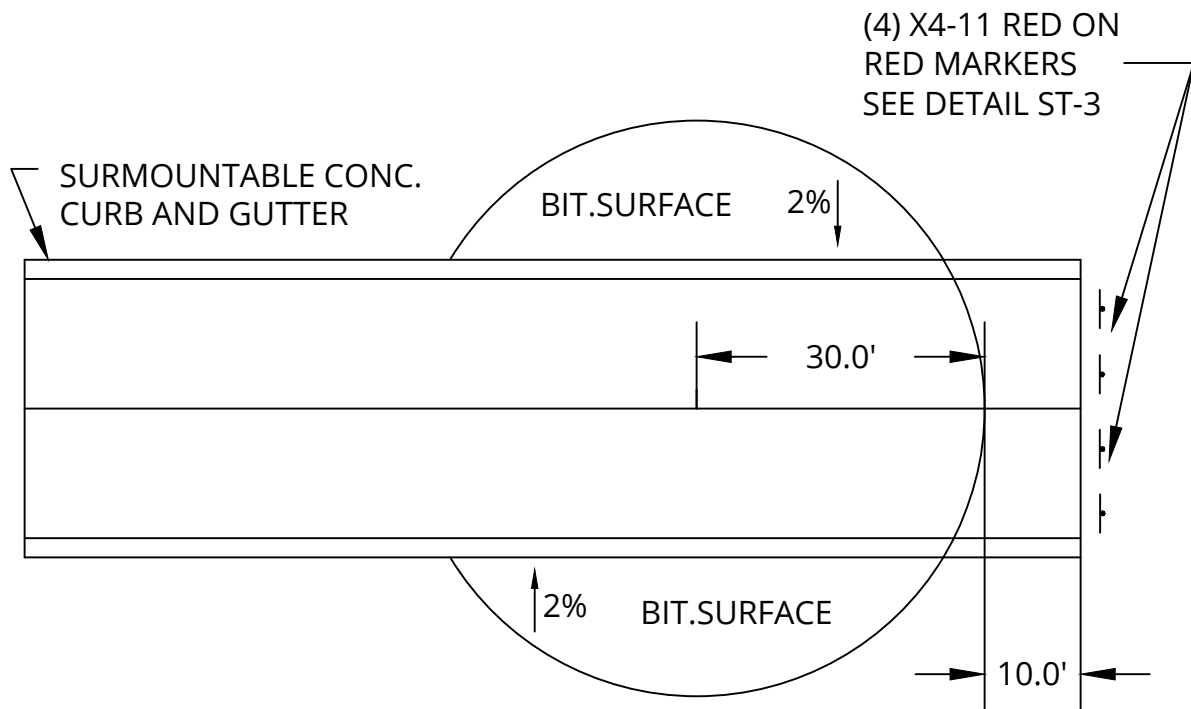


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NOTE: BITUMINOUS TURNAROUND SHALL BE 4" AGGREGATE BASE, 2" BITUMINOUS SURFACE OF TYPE SPECIFIED FOR STREET CONSTRUCTION.

PAYMENT SHALL BE PER UNIT PRICE FOR CLASS 5 AND BITUMINOUS.

TEMPORARY TURNAROUND

Plate No. ST-5

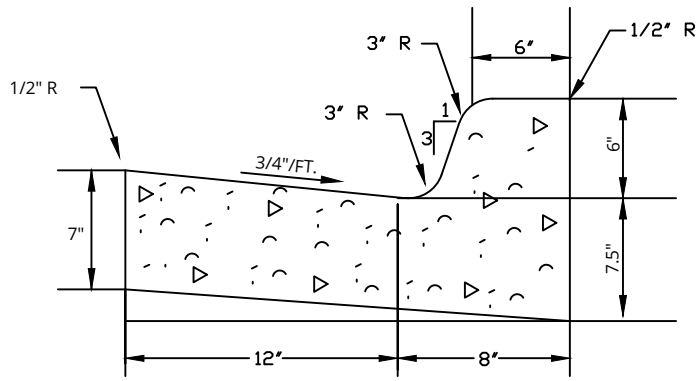


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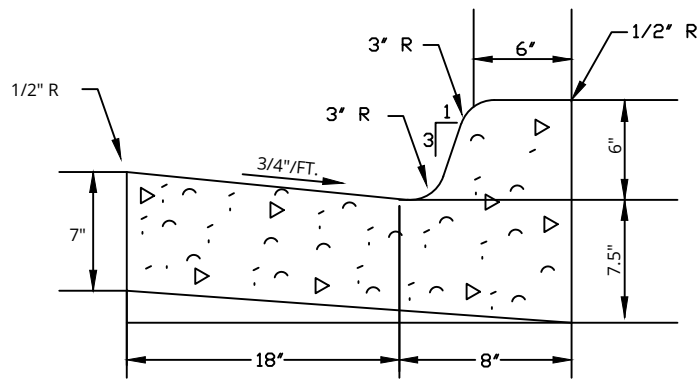
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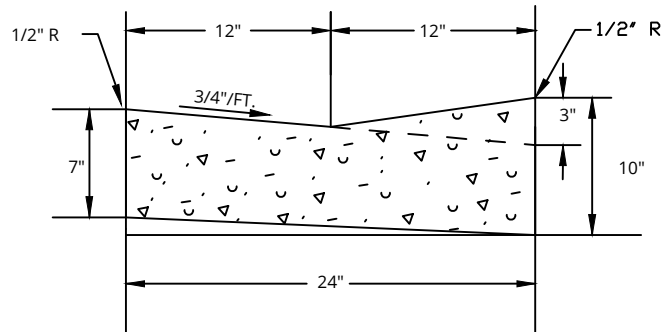
B-612 CONCRETE CURB & GUTTER

MNDOT Standard Plate 7100H



B-618 CONCRETE CURB & GUTTER

MNDOT Standard Plate 7100H



D-312 CONCRETE CURB & GUTTER

CONCRETE CURB & GUTTER

Plate No. ST-6

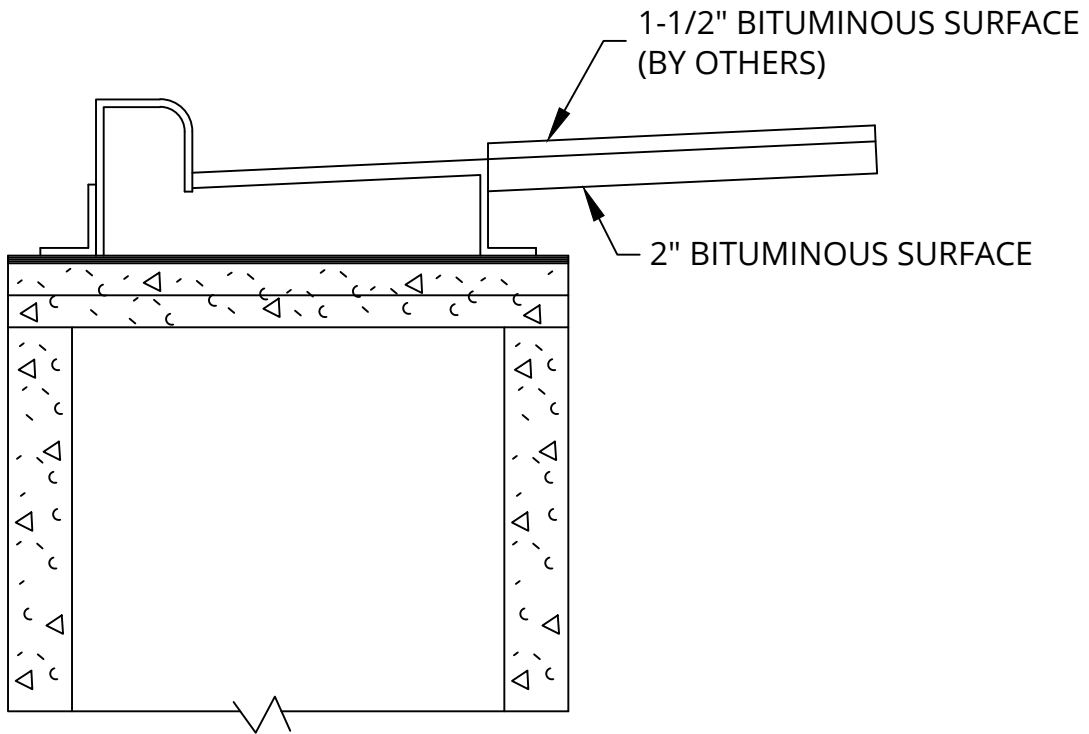


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NOTE: ADJUST CATCH BASIN TO MATCH 2"
INTERIM BITUMINOUS SURFACE

CATCH BASIN ADJUSTMENT

Plate No. ST-7

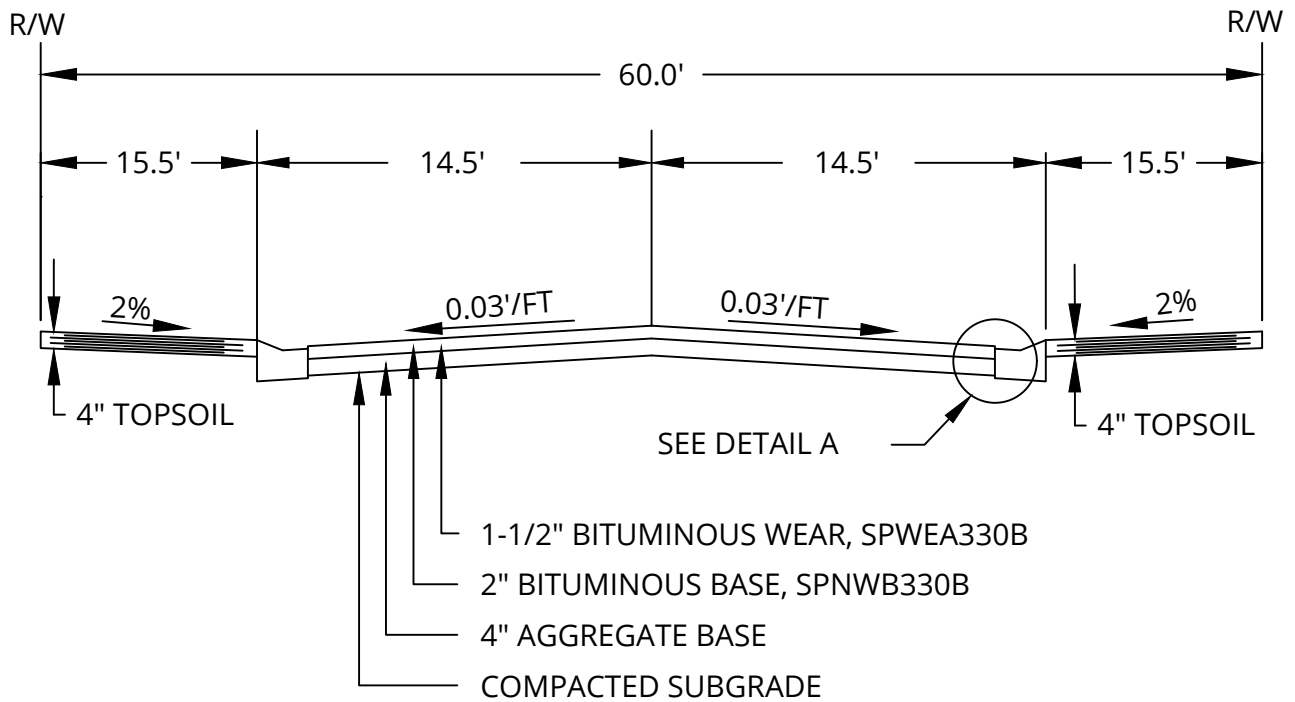
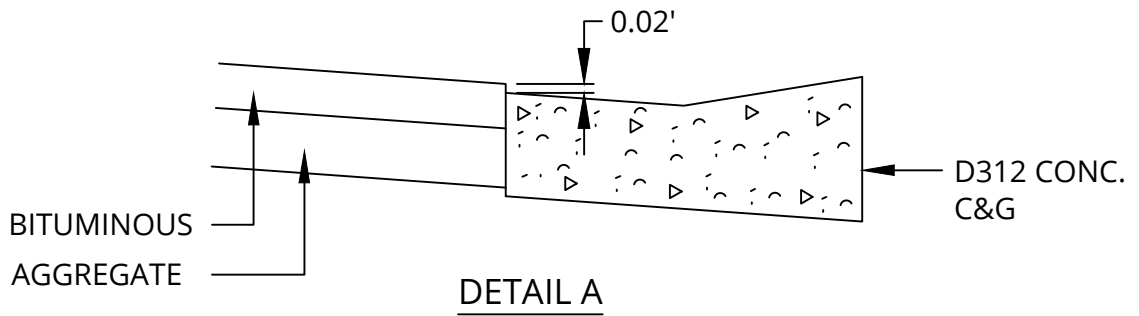


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NOTES:

1. 1-1/2" WEAR COURSE TO BE INSTALLED BY OTHERS.
2. SOD 4' BEHIND CURB (OR BLANKET AS APPROVED BY ENGINEERING DEPARTMENT). SEED AND MULCH REMAINING R/W.
3. WHEN CONSTRUCTING ADJACENT TO EXISTING LAWNS, SOD AREAS AS DIRECTED BY ENGINEER.

URBAN SECTION STREET

Plate No. ST-8

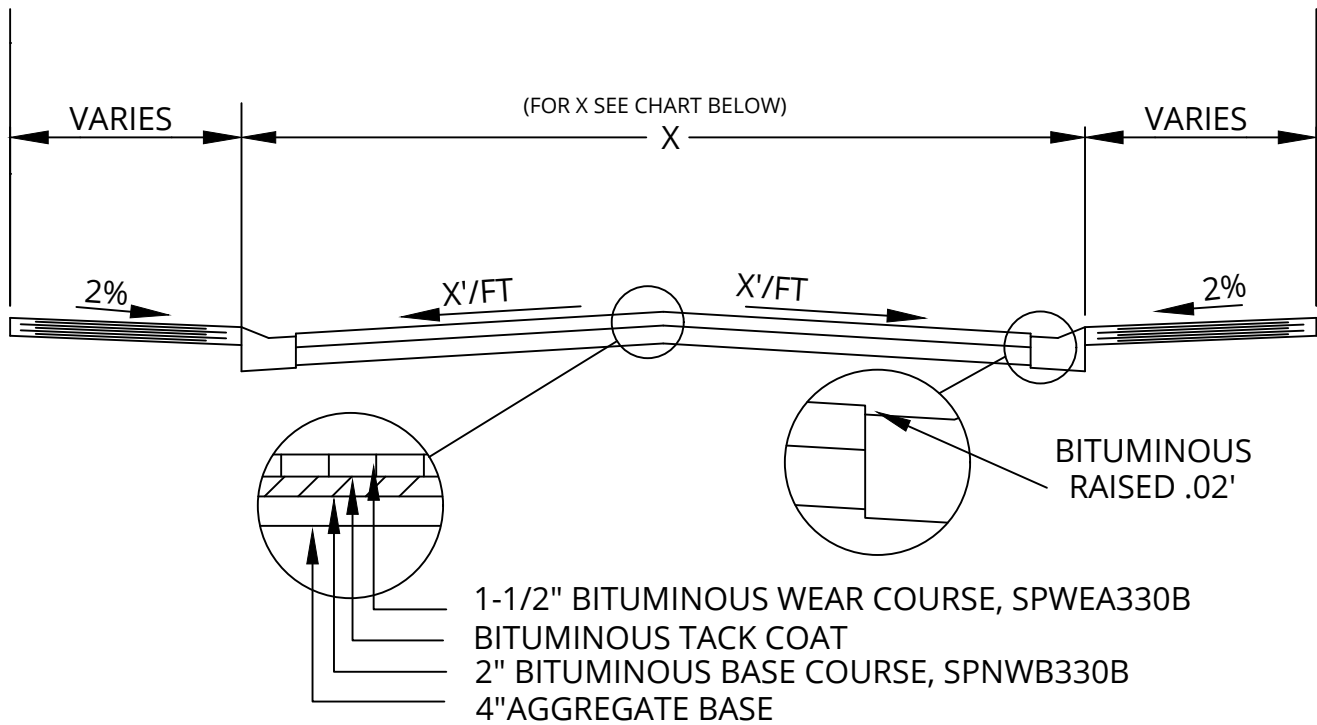


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ROAD WIDTH AT 2% SLOPE	31'	29'	24'	22'
WEAR CL=TC	+.17'	+.15'	+.10'	+.08'
BASE CL=TC	+.05'	+.03'	-.03'	-.05'
CL-5 CL=TC	-.12'	-.14'	-.20'	-.22'
SUBGRADE CL=TC	-.45'	-.47'	-.53'	-.55'

ROAD WIDTH AT 3% SLOPE	31'	29'	24'	22'
WEAR CL=TC	+.31'	+.28'	+.20'	+.17'
BASE CL=TC	+.19'	+.16'	+.08'	+.05'
CL-5 CL=TC	+.02'	-.01'	-.09'	-.12'
SUBGRADE CL=TC	-.31'	-.34'	-.42'	-.45'

TYPICAL STREET SECTION WITH D312 CURBING

Plate No. ST-9

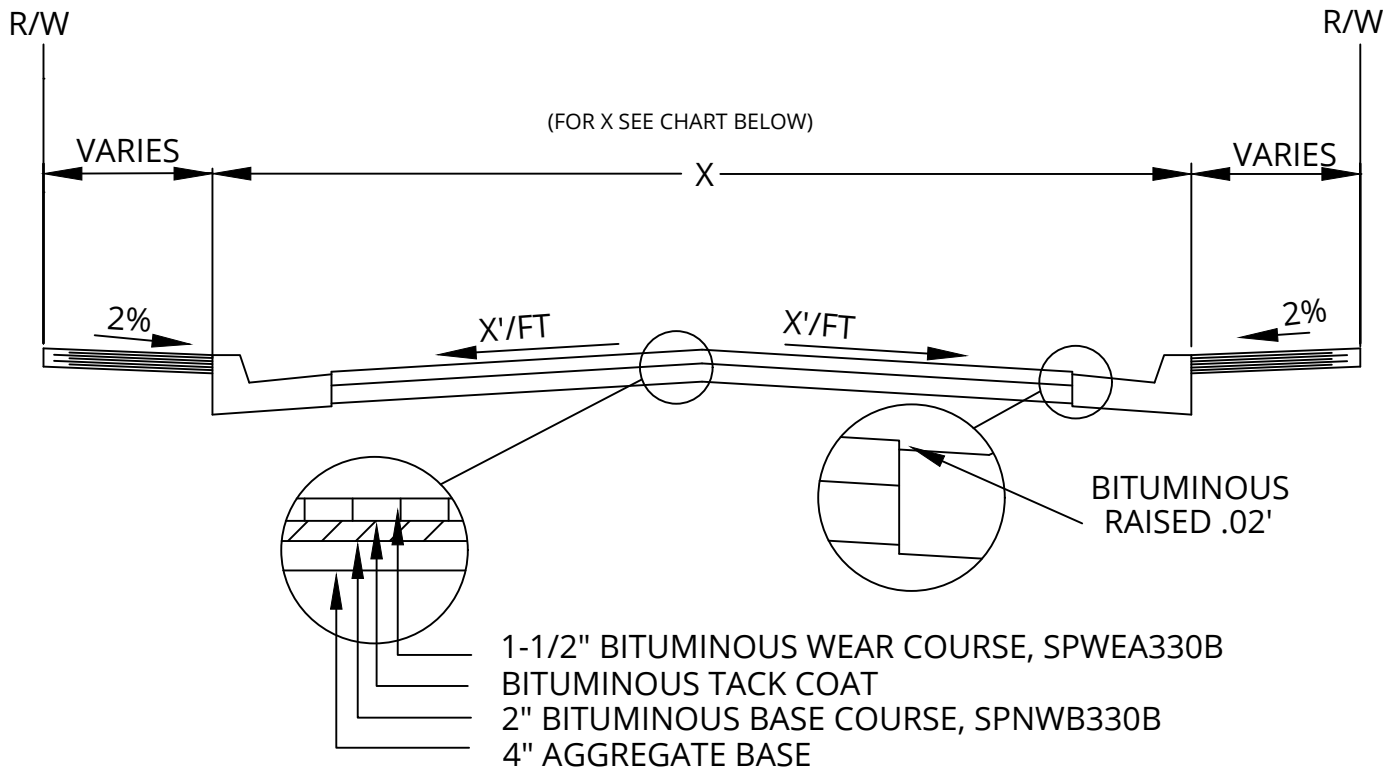


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ROAD WIDTH AT 2% SLOPE	31'	29'	24'	22'
WEAR CL=TC	-.14'	-.16'	-.21'	-.23'
BASE CL=TC	-.27'	-.29'	-.34'	-.36'
CL-5 CL=TC	-.44'	-.46'	-.51'	-.53'
SUBGRADE CL=TC	-.77'	-.79'	-.84'	-.86'

ROAD WIDTH AT 3% SLOPE	31'	29'	24'	22'
WEAR CL=TC	-.01'	-.04'	-.11'	-.14'
BASE CL=TC	-.14'	-.17'	-.24'	-.27'
CL-5 CL=TC	-.31'	-.34'	-.41'	-.44'
SUBGRADE CL=TC	-.64'	-.67'	-.74'	-.75'

TYPICAL STREET SECTION WITH B612 CURBING

Plate No. ST-10

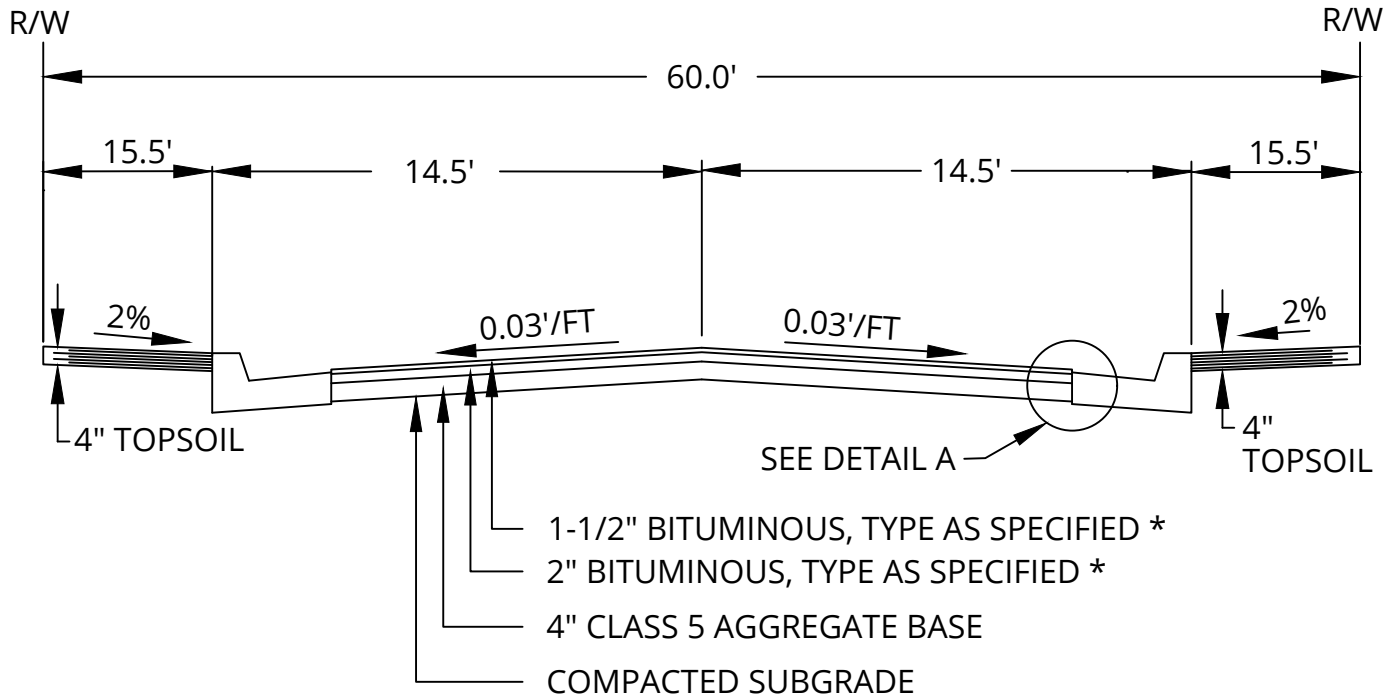
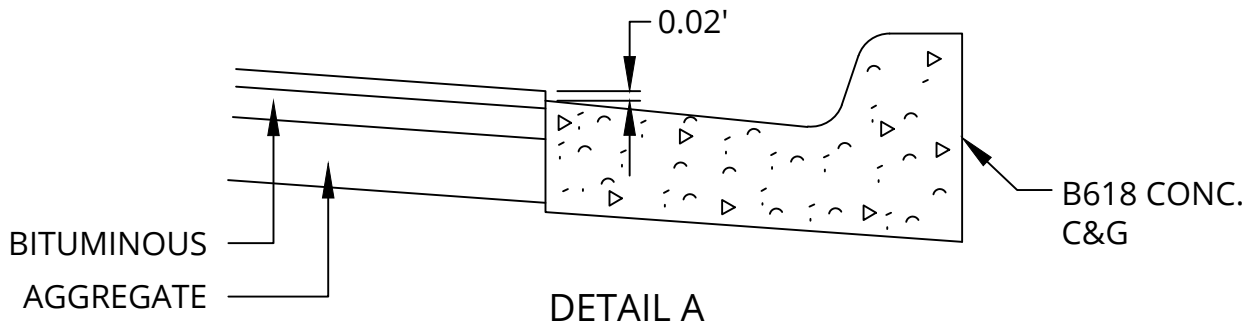


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* ON NEW DEVELOPMENT OR AS SPECIFIED ON THE PLANS, THIS REPRESENTS TOTAL THICKNESS OF BITUMINOUS SURFACE. COMPRISES OF A 2" SPNWB330B BASE LIFT TO BE PLACED WITH THIS PROJECT. THE REMAINING 1-1/2" LIFT WILL BE PLACED AT A LATER DATE BY OTHERS.

SOD 4' BEHIND CURB, SEED AND MULCH REMAINING R/W.

URBAN STREET SECTION W/ B618 CURBING

Plate No. ST-11

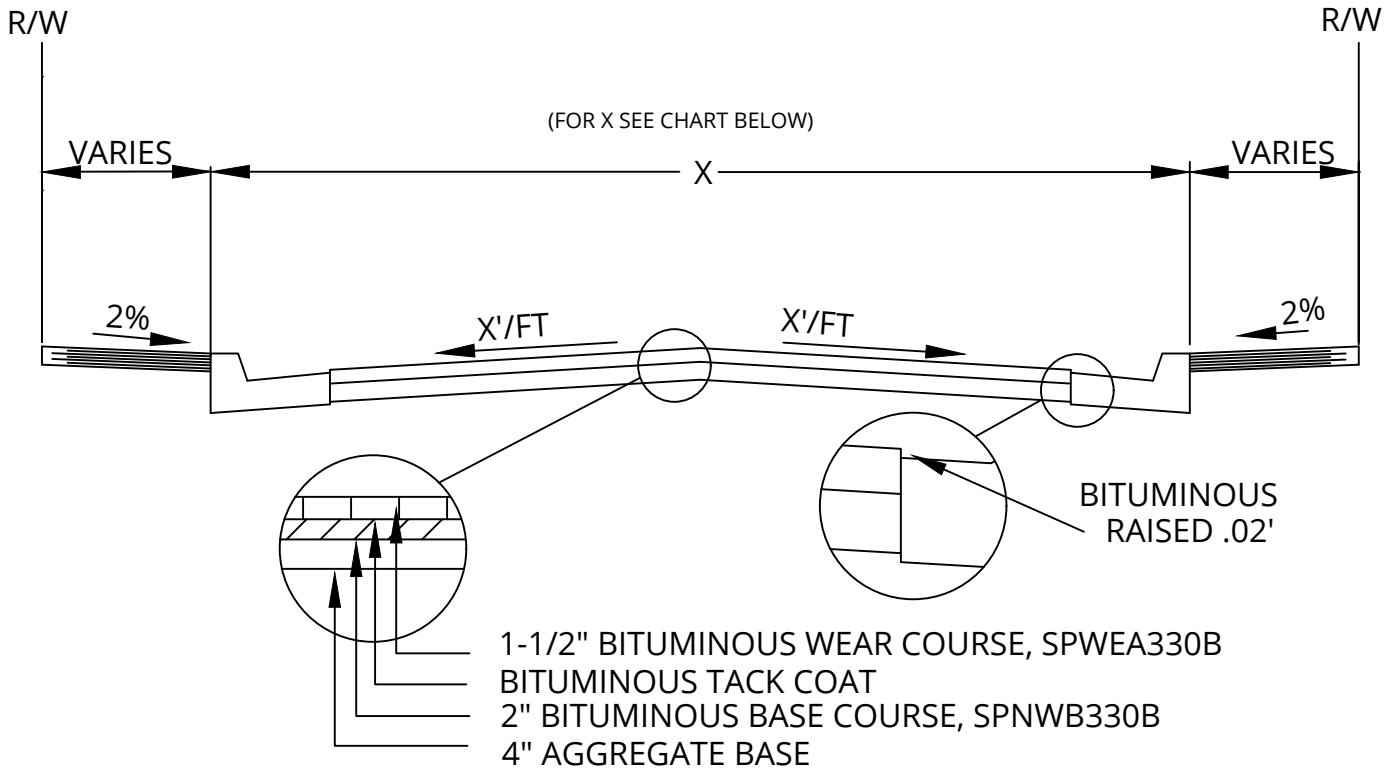


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ROAD WIDTH AT 2% SLOPE	31'	29'	24'	22'
WEAR CL=TC	-.12'	-.14'	-.19'	-.21'
BASE CL=TC	-.24'	-.26'	-.31'	-.33'
CL-5 CL=TC	-.41'	-.43'	-.48'	-.50'
SUBGRADE CL=TC	-.74'	-.76'	-.81'	-.83'

ROAD WIDTH AT 3% SLOPE	31'	29'	24'	22'
WEAR CL=TC	+.01'	-.02'	-.10'	-.13'
BASE CL=TC	-.11'	-.14'	-.22'	-.25'
CL-5 CL=TC	-.28'	-.31'	-.39'	-.42'
SUBGRADE CL=TC	-.61'	-.64'	-.72'	-.75'

TYPICAL STREET SECTION WITH B618 CURBING

Plate No. ST-12

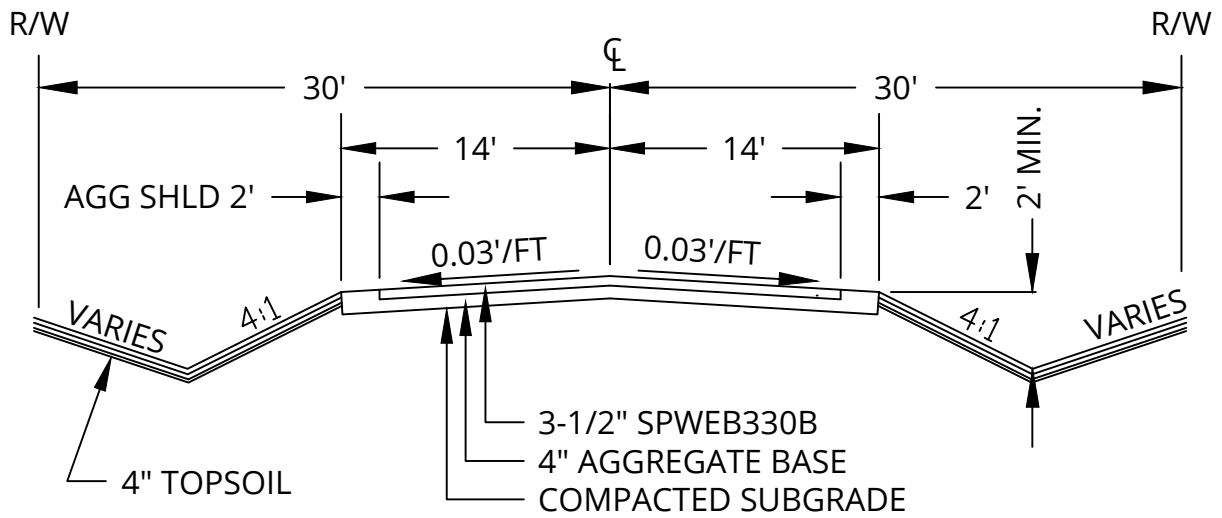


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NOTE: SOD 4' BEYOND AGGREGATE BASE,
SEED AND MULCH REMAINING R/W

RURAL SECTION ROAD

Plate No. ST-13

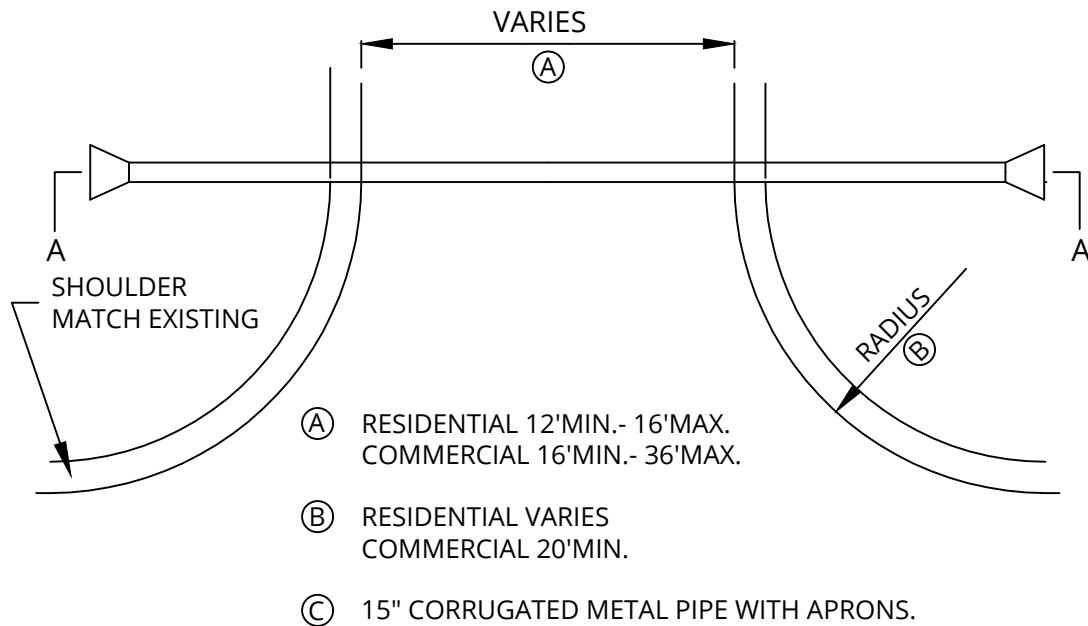


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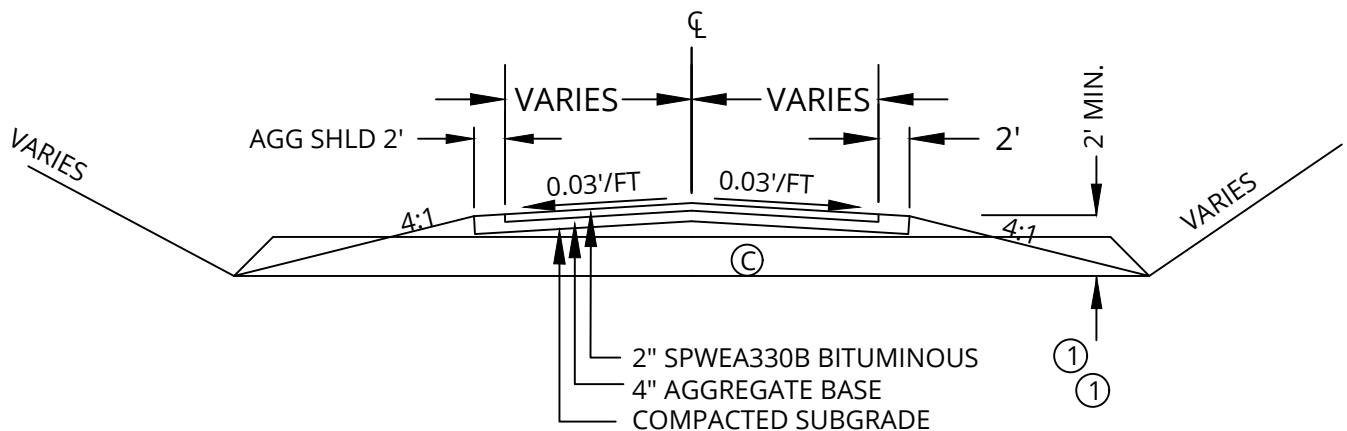
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NOTES: ELEVATE CULVERT FOR POSITIVE DRAINAGE
CORRUGATED METAL PIPE
SHALL CONFORM TO MNDOT SPECIFICATION.



SECTION A-A

- NOTE: ① WHEN APPROVED IN FARM RESIDENTIAL ZONING, 8" AGGREGATE BASE MAY BE SUBSTITUTED IN LIEU OF 2" BITUMINOUS/4" AGGREGATE BASE.
- ② A MINIMUM OF 35' DIRECTLY ADJACENT TO A PAVED PUBLIC STREET MUST HAVE A BITUMINOUS SURFACE.

RURAL SECTION DRIVEWAY
& CULVERT INSTALLATION

Plate No. ST-14

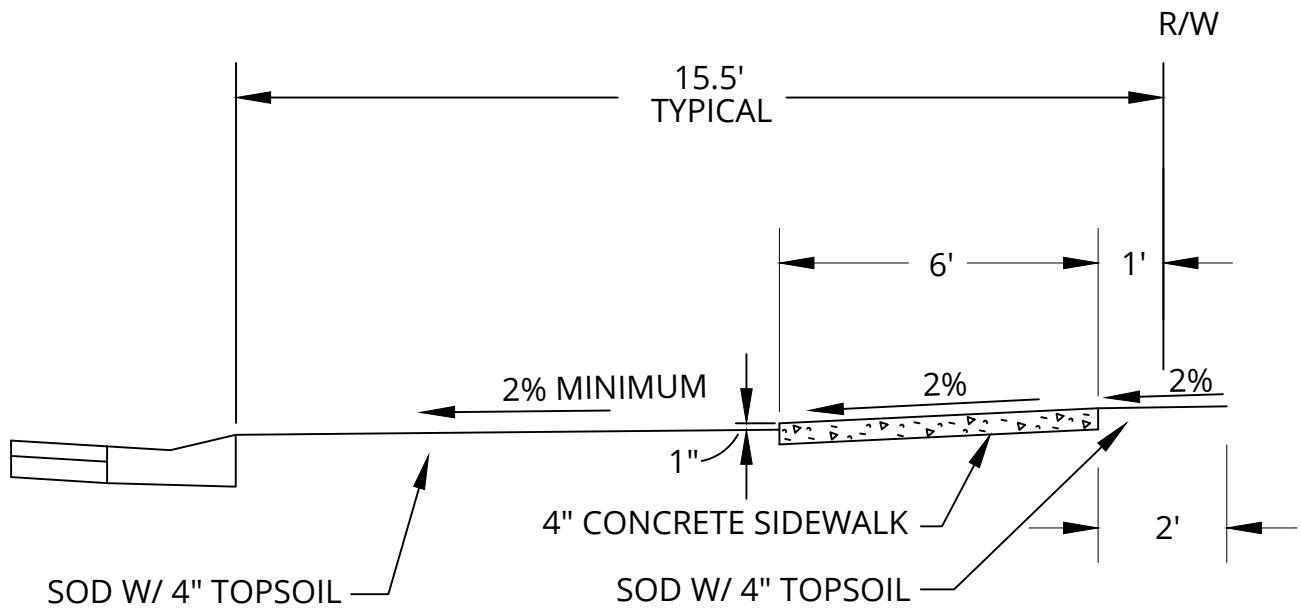


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NOTES:

1. INCREASE SIDEWALK THICKNESS THROUGH EXISTING DRIVEWAYS TO 6" MINIMUM.
2. SEE MNDOT STANDARD PLATE 7035 FOR JOINT INFORMATION.
3. SEE DETAIL ST-17 FOR PED RAMP

TYPICAL SIDEWALK

Plate No. ST-15

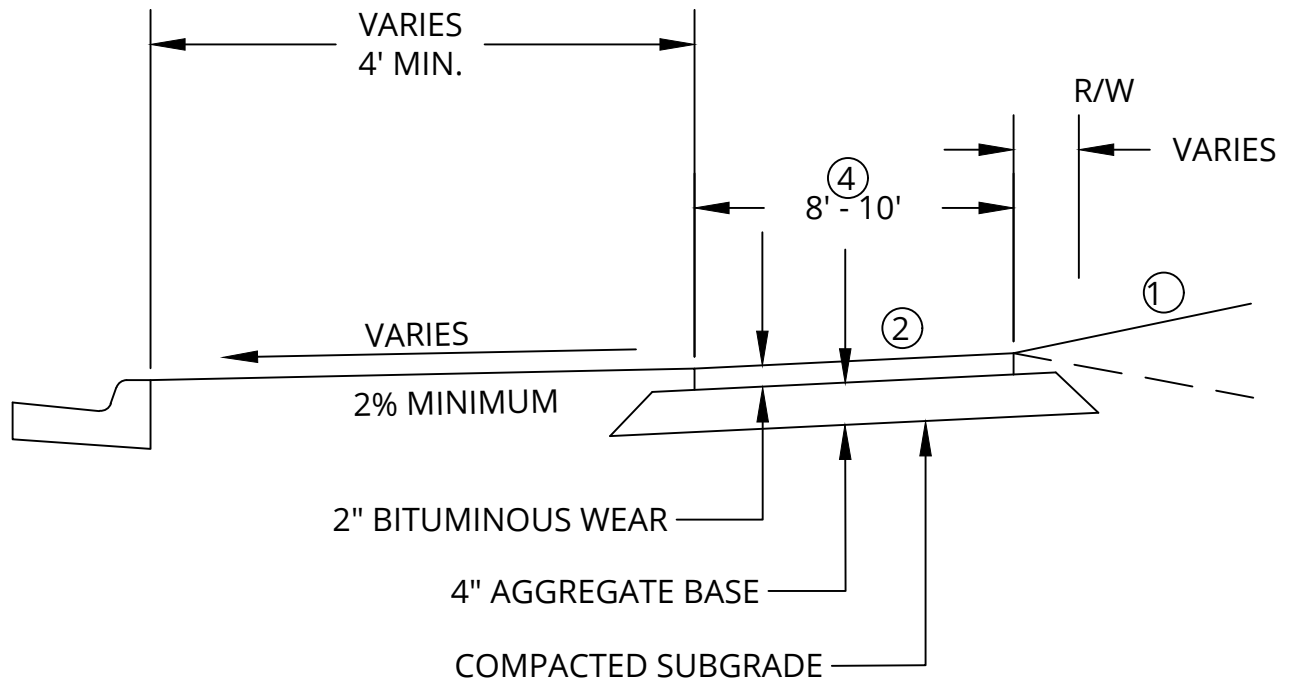


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NOTES:

- ① - SLOPE VARIES 1:2 TO 1:4
- ② - CROSS SLOPE 2%
- ③ - RESTORE ALL DISTURBED AREAS WITH 4" TOPSOIL AND SOD.
- ④ - CHECK WITH CITY ENGINEERING DEPARTMENT FOR REQUIRED WIDTH.

OFF ROAD TRAIL TYPICAL SECTION

Plate No. ST-16



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THE CITY OF BLAINE WILL USE MNDOT STANDARD PLAN SHEETS 5-297.250 (1-6) FOR THE CONSTRUCTION OF RAMPS, EXCEPT AS MODIFIED BELOW:

1. TRUNCATED DOME PANELS SHALL BE UNCOATED CAST IRON PER CURRENT MNDOT APPROVED PRODUCTS LIST.
2. THE PANELS SHALL BE INSTALLED IN WET MORTAR BASE OVER A 6" CONCRETE SLAB.

PEDESTRIAN RAMP REQUIREMENTS

Plate No. ST-17

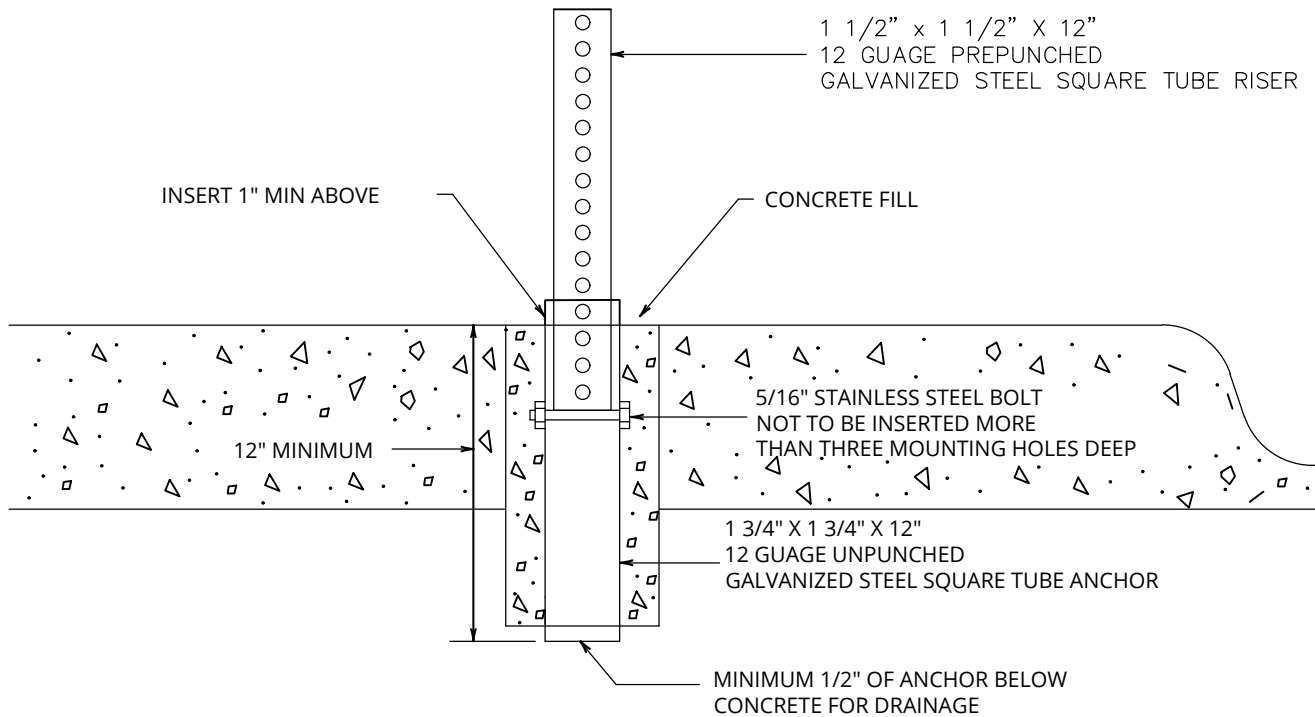


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NOTES:

1. DRILL AN 8" DIAMETER HOLE THE FULL DEPTH OF THE ANCHOR.
2. DRILL $\frac{3}{8}$ " HOLES ON OPPOSITE SIDES OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR NOT MORE THAN THREE MOUNTING HOLES DEEP. INSERT A $\frac{5}{16}$ " STAINLESS STEEL BOLT THROUGH THE HOLES AND SECURE WITH A STAINLESS STEEL LOCK NUT WITH NYLON INSERT. THE PREPUNCHED GALVANIZED STEEL SQUARE TUBE RISER (TO BE INSERTED INSIDE THE UNPUNCHED GALVANIZED SQUARE TUBE ANCHOR) WILL REST ON BOLT.
3. INSERT THE ANCHOR IN THE HOLE.
4. AFTER INSTALLATION OF THE UNPUNCHED GALVANIZED STEEL SQUARE TUBE ANCHOR, FILL THE HOLE WITH A CONCRETE MIX APPROVED BY THE ENGINEER AND LEVEL OFF THE TOP OF CONCRETE.

TRAFFIC SIGN INSTALLATION IN CONCRETE

Plate No. ST-18



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