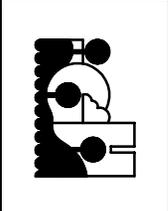
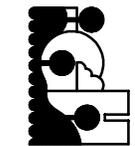
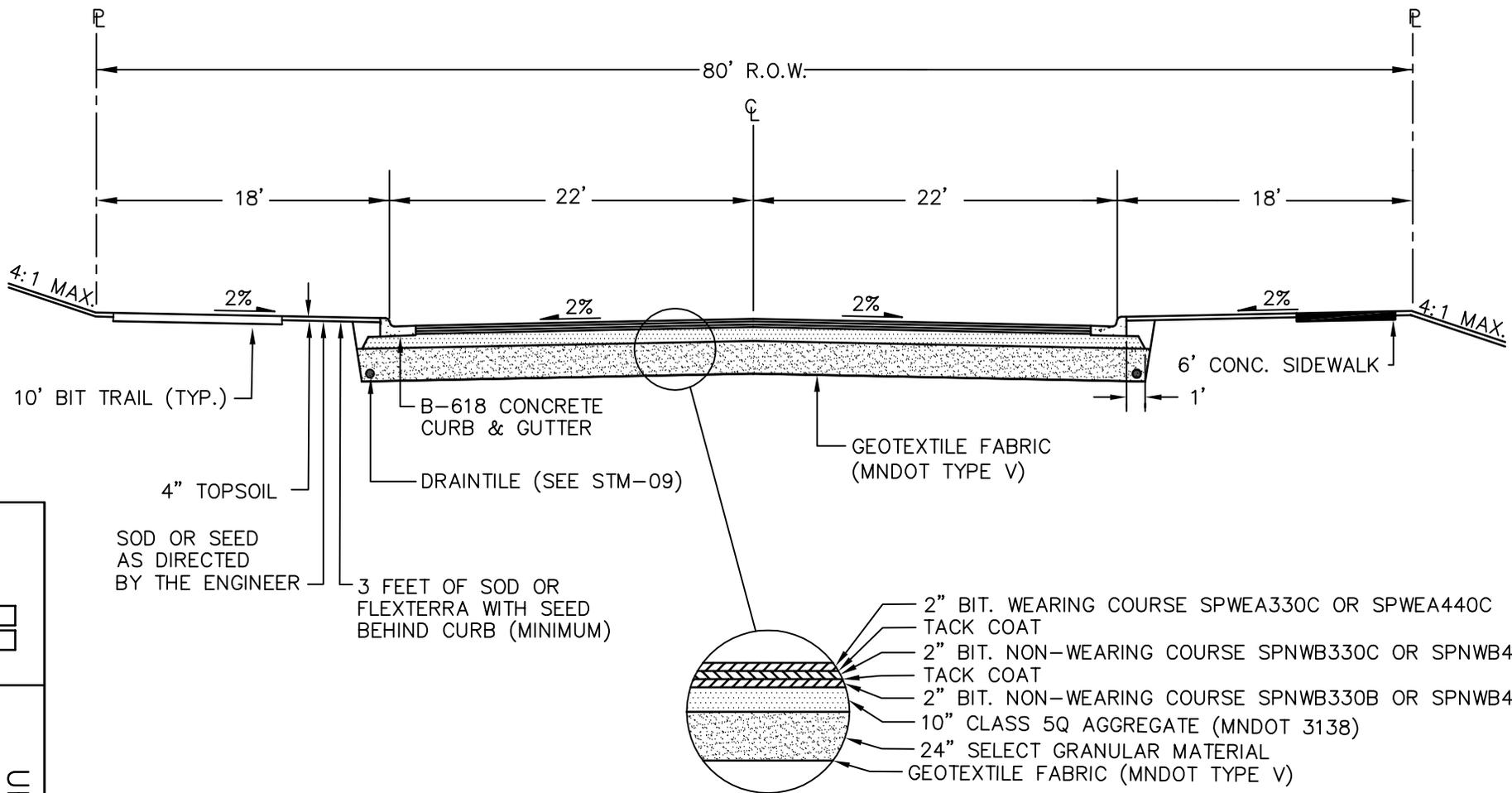


1. ALL RADII SHALL BE B6 CURB AND GUTTER WITH 10' TRANSITIONS FROM EACH SIDE OF RADIUS.
2. FOR CATCHBASIN TRANSITIONS SEE STR-07
3. DRAINTILE SHALL BE INSTALLED AT ALL CATCHBASINS AND AS DIRECTED BY THE ENGINEER.
4. BOTH CONCRETE SIDEWALK AND BITUMINOUS TRAIL TO BE INSTALLED ON URBAN COLLECTOR STREETS.
5. TRAIL SHALL BE INSTALLED ON THE NORTH AND EAST SIDE OF STREET.
6. SIDEWALK TO BE INSTALLED ON THE SOUTH AND WEST SIDE OF STREET.
7. SEE STR-15 FOR TRAIL AND SIDEWALK SECTIONS
8. SIDEWALK AND TRAIL TYPICALLY PLACED 1' FROM PROPERTY LINE.
9. MUST MAINTAIN A MINIMUM OF 6' BOULEVARD FOR SNOW STORAGE.
10. GEOTEXTILE FABRIC SHALL BE PLACED AT THE DIRECTION OF THE ENGINEER.

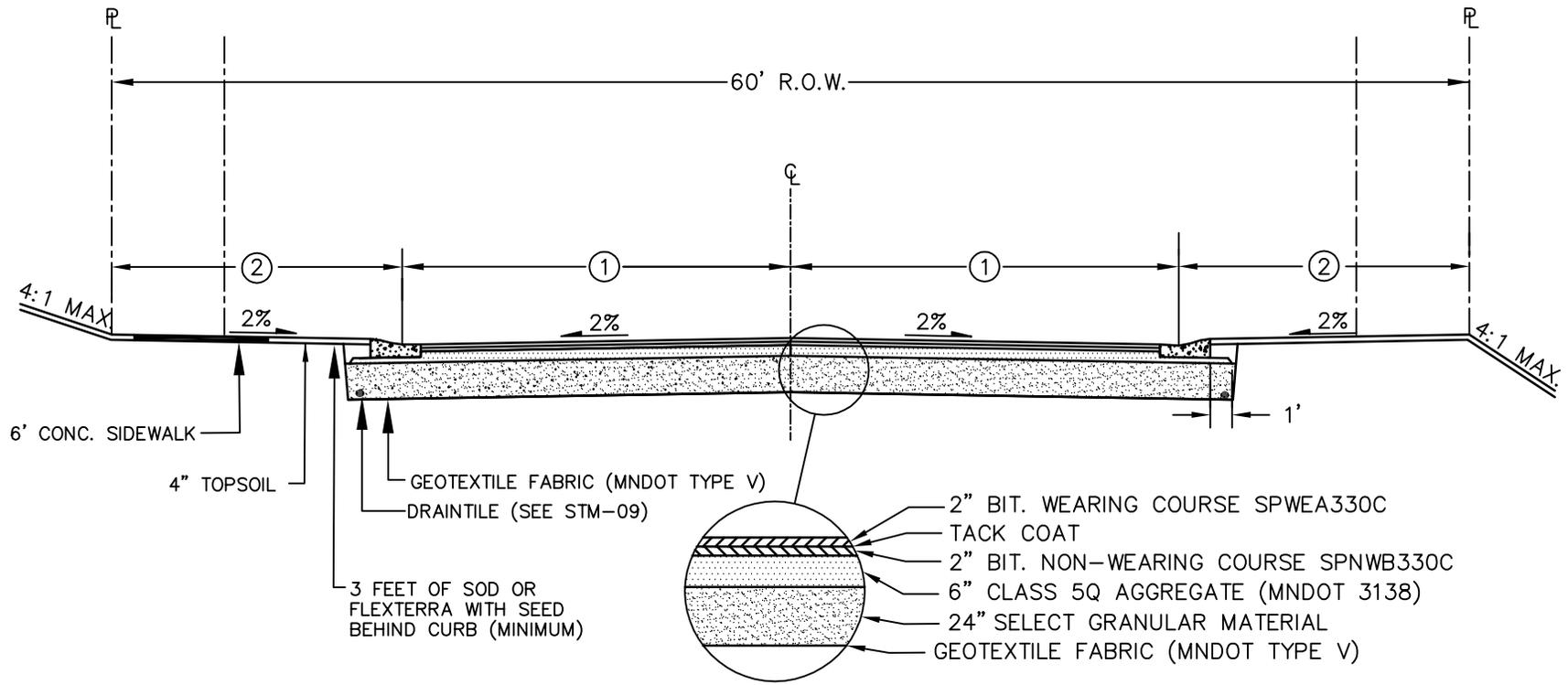


URBAN STREET DESIGN
 COLLECTOR STREET W/ SIDEWALK
 CITY OF INVER GROVE HEIGHTS
 ENGINEERING DEPARTMENT
 3/15
 PLATE NO.
 STR-01



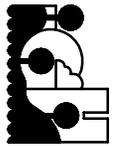
URBAN STREET DESIGN
 COLLECTOR STREET W/ SIDEWALK
 CITY OF INVER GROVE HEIGHTS
 ENGINEERING DEPARTMENT
 9/15
 PLATE NO.
 STR-01

1. ALL RADII SHALL BE B6 CURB AND GUTTER WITH 10' TRANSITIONS FROM EACH SIDE OF RADIUS.
2. FOR CATCHBASIN TRANSITIONS SEE STR-07
3. DRAINTILE SHALL BE INSTALLED AT ALL CATCHBASINS AND AS DIRECTED BY THE ENGINEER.
4. BOTH CONCRETE SIDEWALK AND BITUMINOUS TRAIL TO BE INSTALLED ON URBAN COLLECTOR STREETS.
5. TRAIL SHALL BE INSTALLED ON THE NORTH AND EAST SIDE OF STREET.
6. SIDEWALK TO BE INSTALLED ON THE SOUTH AND WEST SIDE OF STREET.
7. SEE STR-15 FOR TRAIL AND SIDEWALK SECTIONS
8. SIDEWALK AND TRAIL TYPICALLY PLACED 1' FROM PROPERTY LINE.
9. MUST MAINTAIN A MINIMUM OF 6' BOULEVARD FOR SNOW STORAGE.



- ① 18' FOR PARKING ON BOTH SIDES OF STREET
14' FOR PARKING ON ONE SIDE OF STREET
- ② 12' FOR PARKING ON BOTH SIDES OF STREET
16' FOR PARKING ON ONE SIDE OF STREET

1. ALL RADII SHALL BE B6 CURB AND GUTTER WITH 10' TRANSITIONS FROM EACH SIDE OF RADIUS.
2. FOR CATCHBASIN TRANSITIONS SEE STR-07
3. DRAINTILE SHALL BE INSTALLED AT ALL CATCHBASINS AND AS DIRECTED BY THE ENGINEER.
4. BOTH CONCRETE SIDEWALK AND BITUMINOUS TRAIL TO BE INSTALLED ON URBAN COLLECTOR STREETS.
5. TRAIL SHALL BE INSTALLED ON THE NORTH AND EAST SIDE OF STREET.
6. SIDEWALK TO BE INSTALLED ON THE SOUTH AND WEST SIDE OF STREET.
7. SEE STR-15 FOR TRAIL AND SIDEWALK SECTIONS
8. SIDEWALK AND TRAIL TYPICALLY PLACED 1' FROM PROPERTY LINE.
9. MUST MAINTAIN A MINIMUM OF 6' BOULEVARD FOR SNOW STORAGE.
10. IF STREET IS PLACED ON A 50' RIGHT OF WAY A SIDEWALK EASEMENT WILL BE REQUIRED TO MAINTAIN THE 6' BOULEVARD FOR SNOW STORAGE.

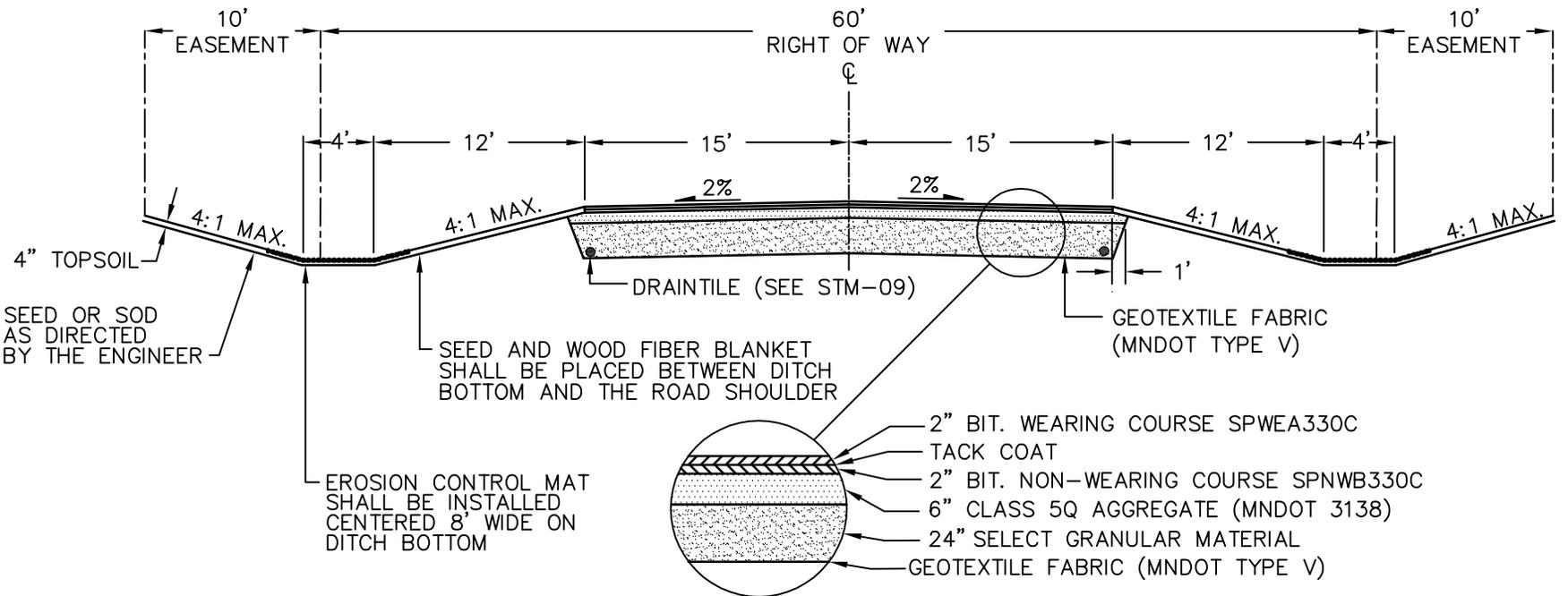


CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

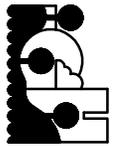
9/15

PLATE NO.
STR-02

URBAN STREET DESIGN
LOCAL STREET



1. FOR 50' EACH SIDE OF LOW POINTS, THE SELECT GRANULAR MATERIAL SHALL BE DAYLIGHTED INTO ADJOINING DITCH TO PERMIT DRAINAGE OF ROAD SUBGRADE.
2. THIS PAVEMENT SECTION HAS A 12' STRIPED DRIVING LANE WITH A 3' FULL DEPTH BITUMINOUS SHOULDER.
3. NEW SOD SHALL BE PLACED LEVEL WITH THE EXISTING ADJACENT SOD AND THE THATCH OR BASE SOIL SHALL BE APPROXIMATELY ONE INCH BELOW THE TOP OF ADJACENT BITUMINOUS OR GRAVEL SHOULDER
4. BIO ROLLS MAY BE REQUIRED IN DITCH BOTTOM
5. BALE CHECKS ARE NOT ALLOWED IN DITCH SECTIONS

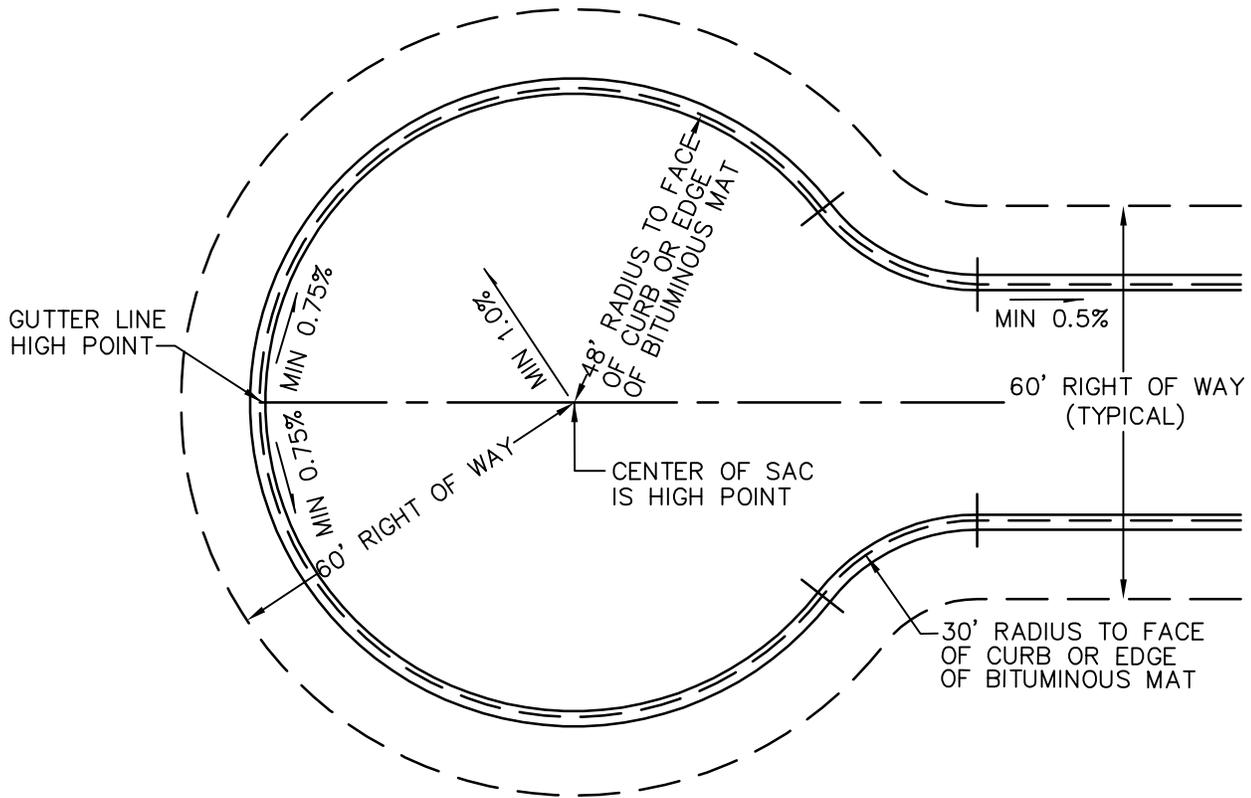


CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

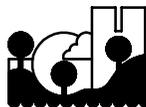
9/15

PLATE NO.
STR-03

RURAL STREET DESIGN
LOCAL STREET



- NOTES: 1. FOR CONCRETE CURB & GUTTER SEE PLATE NO. STR-06.
 2. FOR RURAL STREET WITH A DITCH SECTION SEE PLATE NO. STR-03.

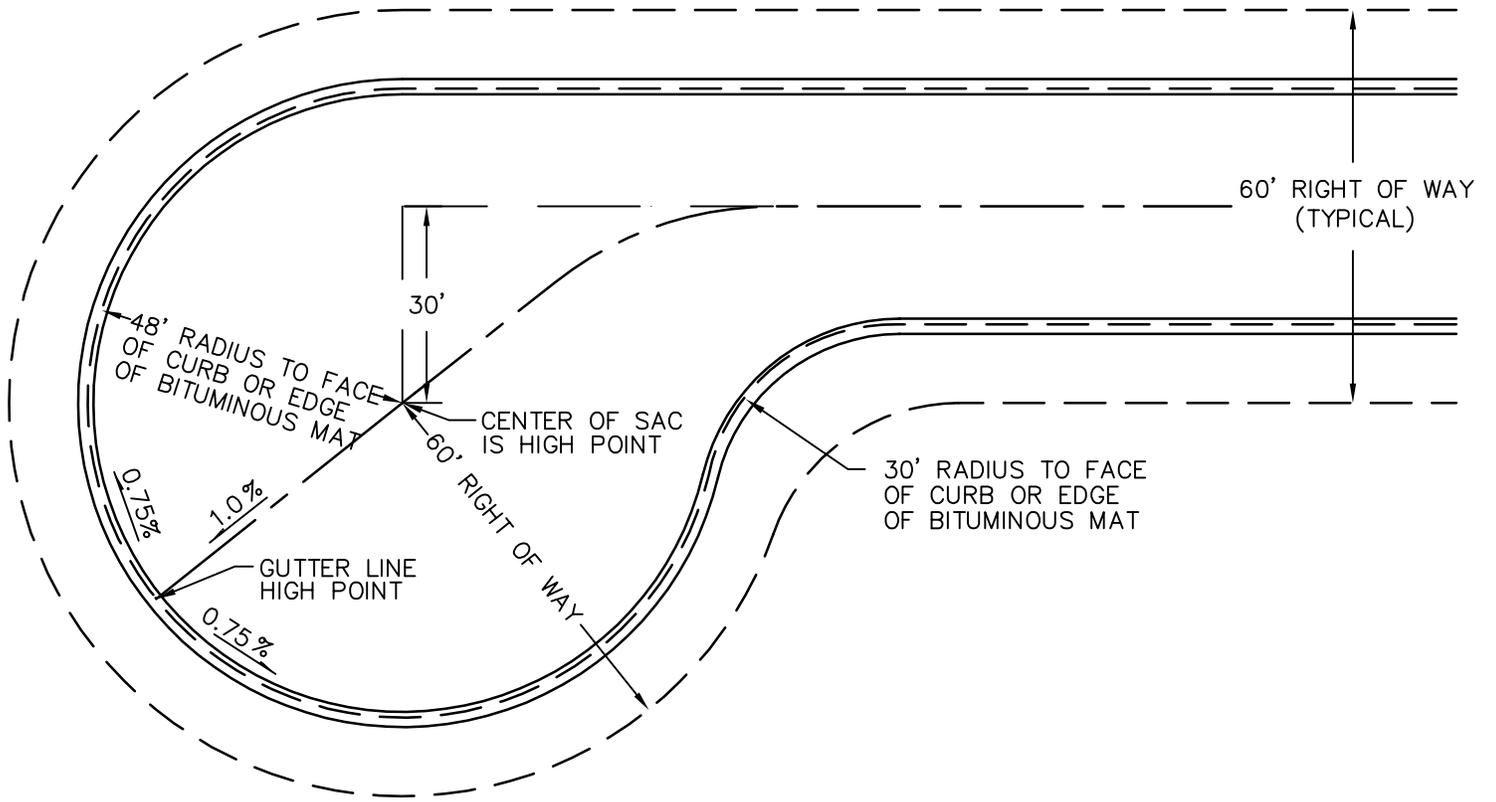


STANDARD CUL-DE-SAC

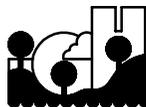
CITY OF INVER GROVE HEIGHTS
 ENGINEERING DEPARTMENT

4/11

PLATE NO.
 STR-04



- NOTES: 1. FOR CONCRETE CURB & GUTTER SEE PLATE NO. STR-06.
 2. FOR RURAL STREET WITH A DITCH SECTION SEE PLATE NO. STR-03.

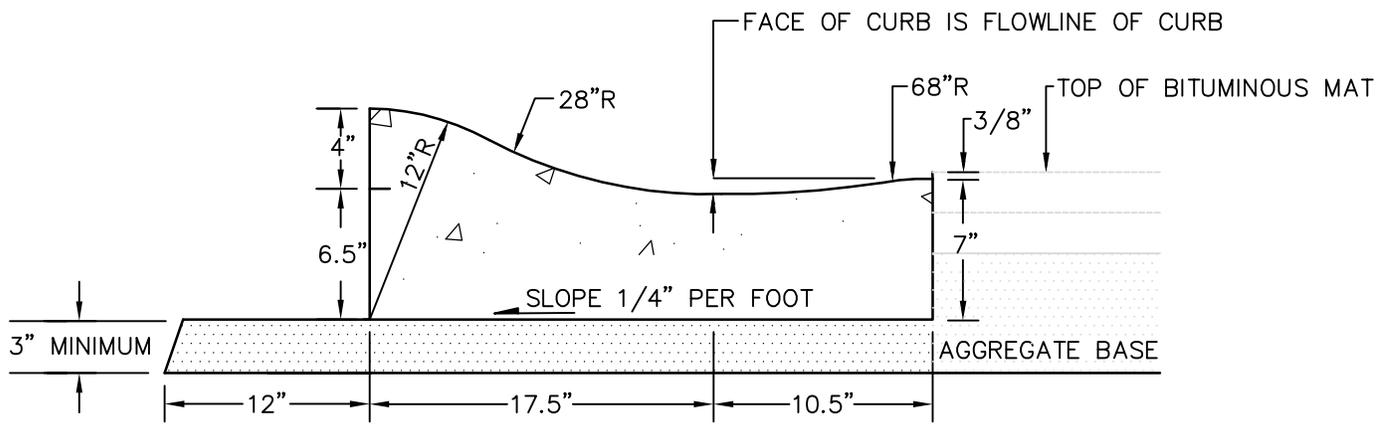


OFFSET CUL-DE-SAC

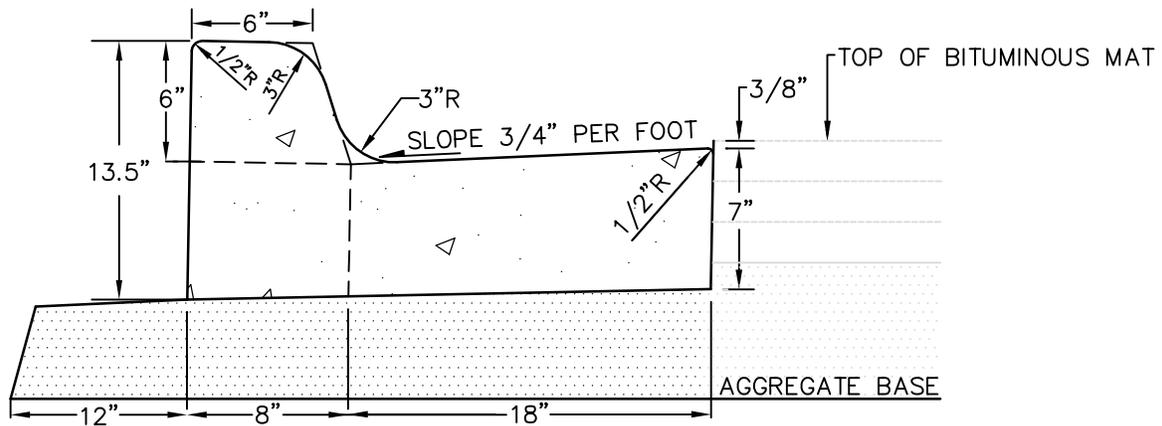
CITY OF INVER GROVE HEIGHTS
 ENGINEERING DEPARTMENT

3/15

PLATE NO.
 STR-05

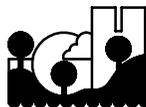


SURMOUNTABLE CURB



B618 CURB

- NOTES: 1. FOR CATCH BASIN TRANSITIONS SEE PLATE NO. STR-07.
2. EXPANSION SHALL BE PLACED AT ALL CATCH BASIN TRANSITIONS AND AT ALL BEGINNING AND END RADII.
3. CONTRACTION JOINTS SHALL BE PLACED EVERY 10 FEET.
4. FOUR #4 REINFORCING RODS, TWO PER SIDE, AT ALL CATCH BASINS, MINIMUM 10 FEET.
5. ONE #4 REINFORCING ROD IN FRONT OF CASTING, MINIMUM 5 FEET FOR SURMOUNTABLE CURB.

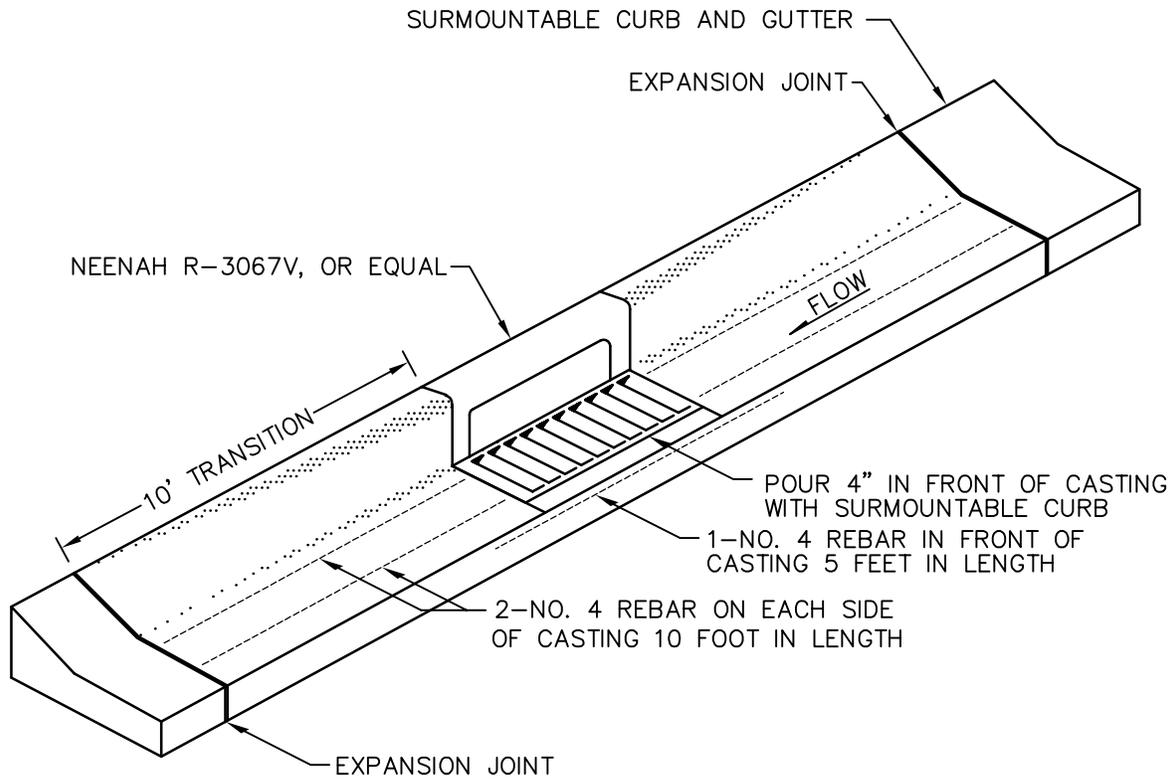


CURB & GUTTER

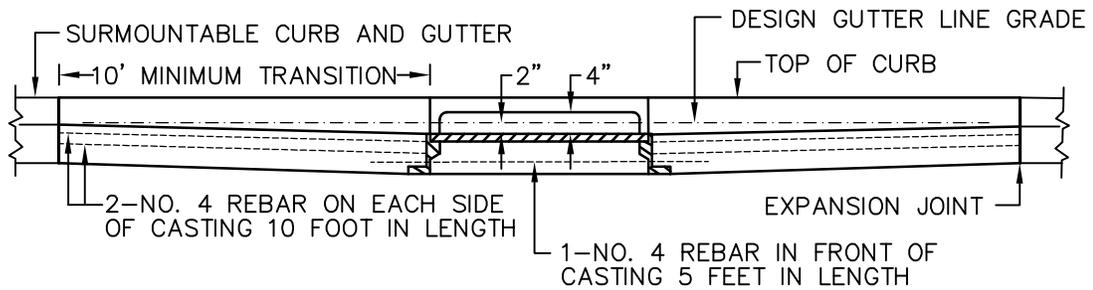
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

4/11

PLATE NO.
STR-06

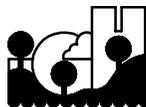


ISOMETRIC



SECTION

- NOTES:
1. SURMOUNTABLE CURB AND GUTTER TO BE FORMED INTO B618 CURB AT CATCH BASINS.
 2. ALL CATCH BASINS SHALL HAVE 4" OF CONCRETE IN FRONT OF CASTING.
 3. VANES SHALL BE PLACED TO INTERCEPT STORM WATER.
 4. IF CATCH BASIN FALLS IN DRIVEWAY USE NEENAH 3501-T OR EQUAL (SURMOUNTABLE CURB).
 5. CATCH BASIN GRATE SHALL BE DEPRESSED 2" BELOW DESIGN GUTTER LINE GRADE. (MAINTAIN GRADE AT TOE OF CURB).
 6. IF CURB IS B618, TRANSITION FROM 26" TO 24" IN THE ADJOINING 10'.

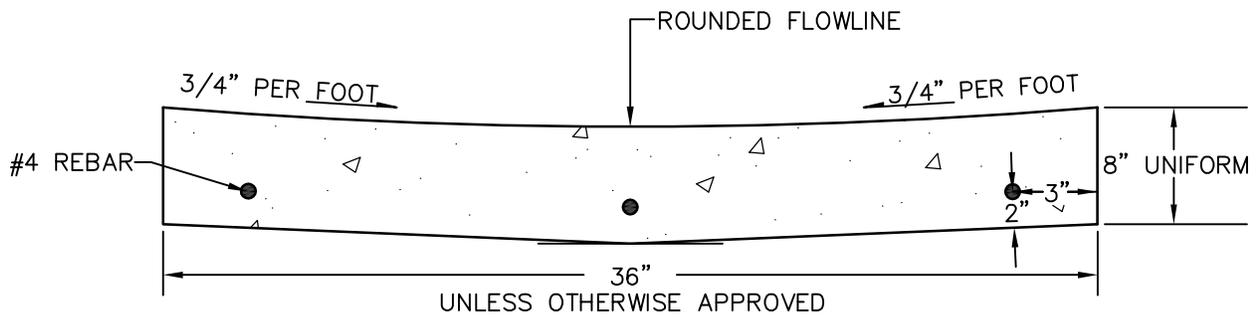


CATCH BASIN TRANSITION

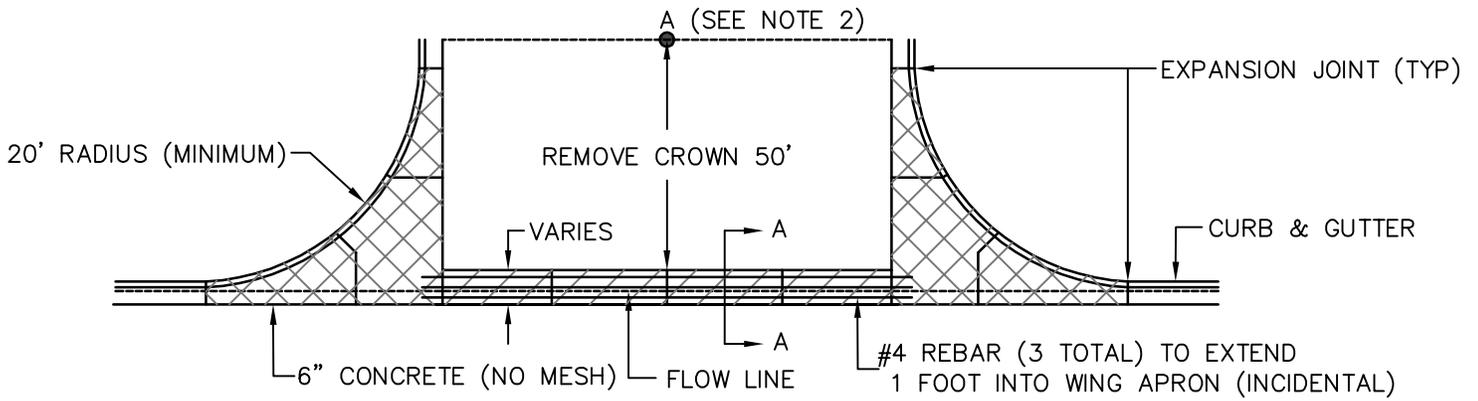
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/11

PLATE NO.
STR-07



CONCRETE SWALE - SECTION A-A



PLAN

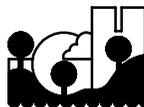
1. CONCRETE PANELS SHALL NOT EXCEED 10' IN ANY DIRECTION
2. POINT 'A' SHALL BE A MINIMUM OF 4 INCHES ABOVE THE FLOWLINE.



PAID AS 6" WING APRON



PAID AS CONCRETE VALLEY GUTTER

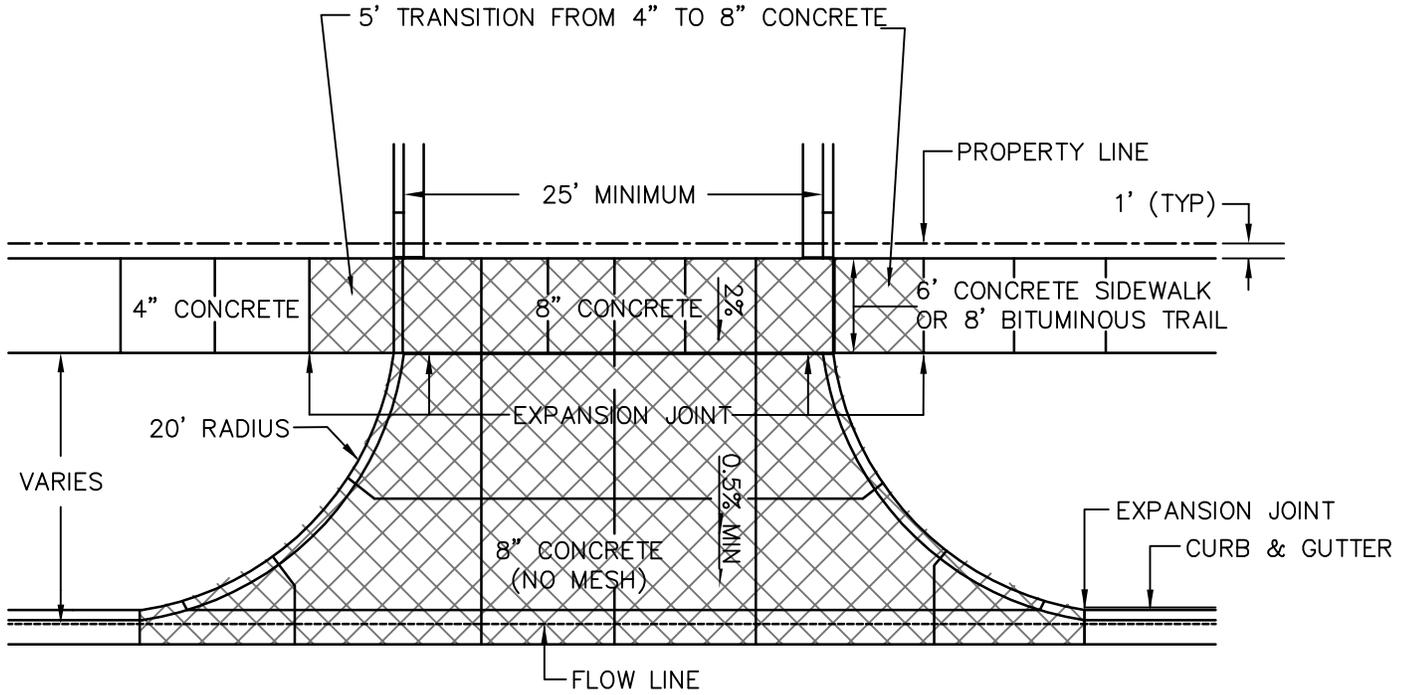


TYPICAL VALLEY GUTTER

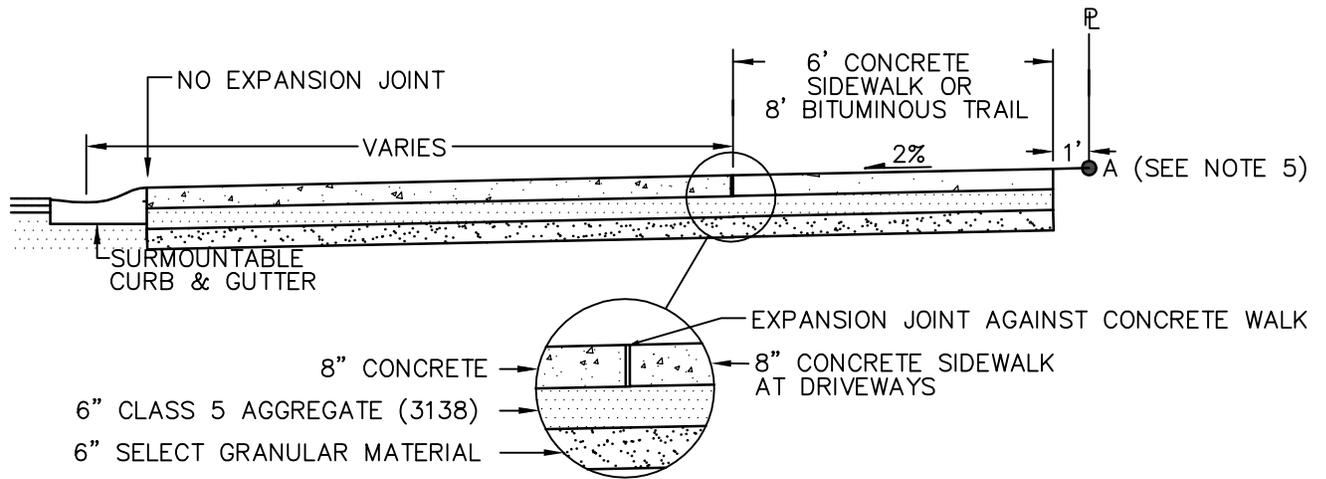
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/15

PLATE NO.
STR-08



PLAN

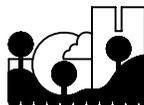


SECTION

1. CONCRETE PANELS SHALL NOT EXCEED 10' IN ANY DIRECTION.
2. TRANSITION CURB FROM FULL HEIGHT AT STREET TO MATCH AT SIDEWALK.
3. SIDEWALK PANELS SHALL BE FORMED 1 FOOT FROM PROPERTY LINE.
4. CURB, DRIVEWAY, AND SIDEWALK WILL BE Poured SEPARATELY.
5. POINT 'A' SHALL BE A MINIMUM OF 4 INCHES ABOVE THE FLOWLINE.



PAID AS 8" CONCRETE PAVEMENT

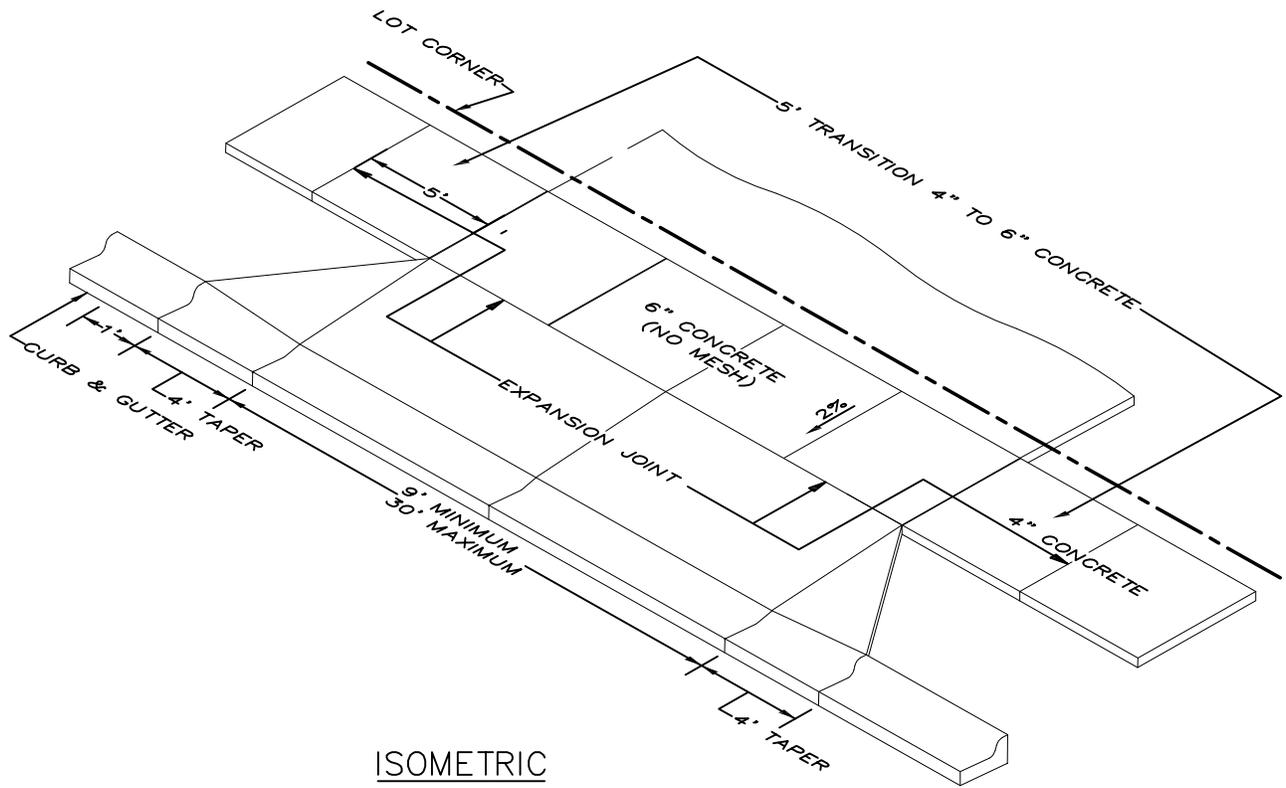


NON RESIDENTIAL DRIVEWAY WITH SIDEWALK

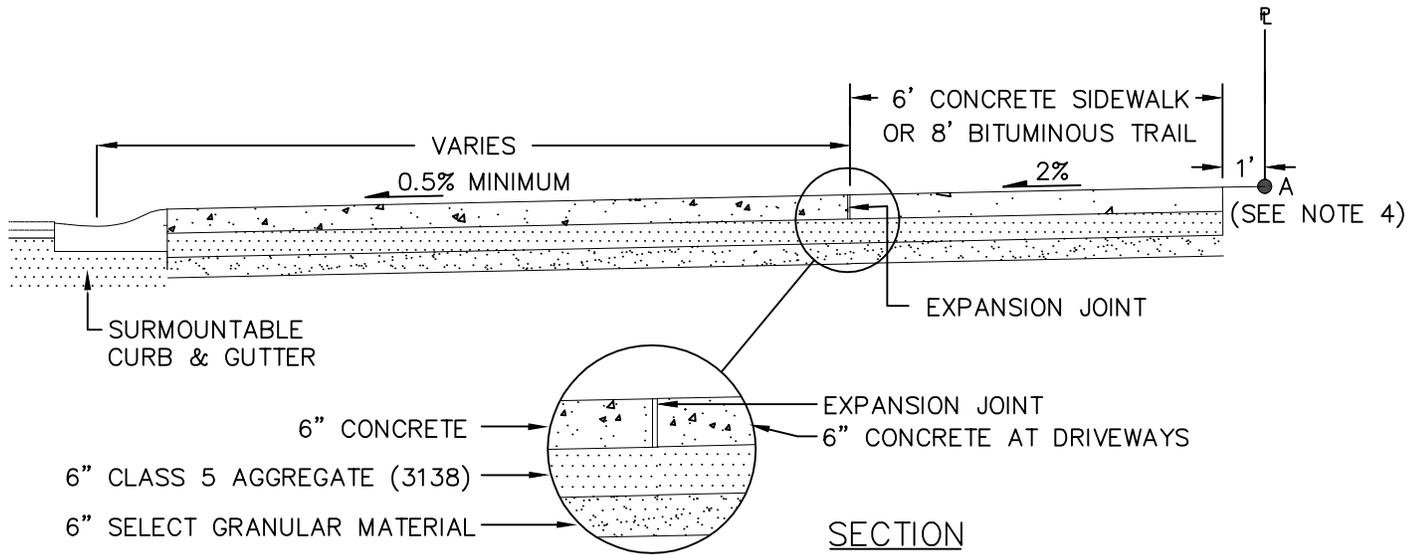
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/15

PLATE NO.
STR-09

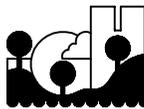


ISOMETRIC



SECTION

- NOTES:
1. CONCRETE PANELS SHALL NOT EXCEED 9' IN ANY DIRECTION
 2. SIDEWALK PANELS SHALL BE FORMED 1 FOOT FROM PROPERTY LINE.
 3. CURB, SIDEWALK AND DRIVEWAY SHALL BE POURED SEPERATELY.
 4. POINT 'A' SHALL BE A MINIMUM OF 4 INCHES ABOVE THE FLOWLINE.

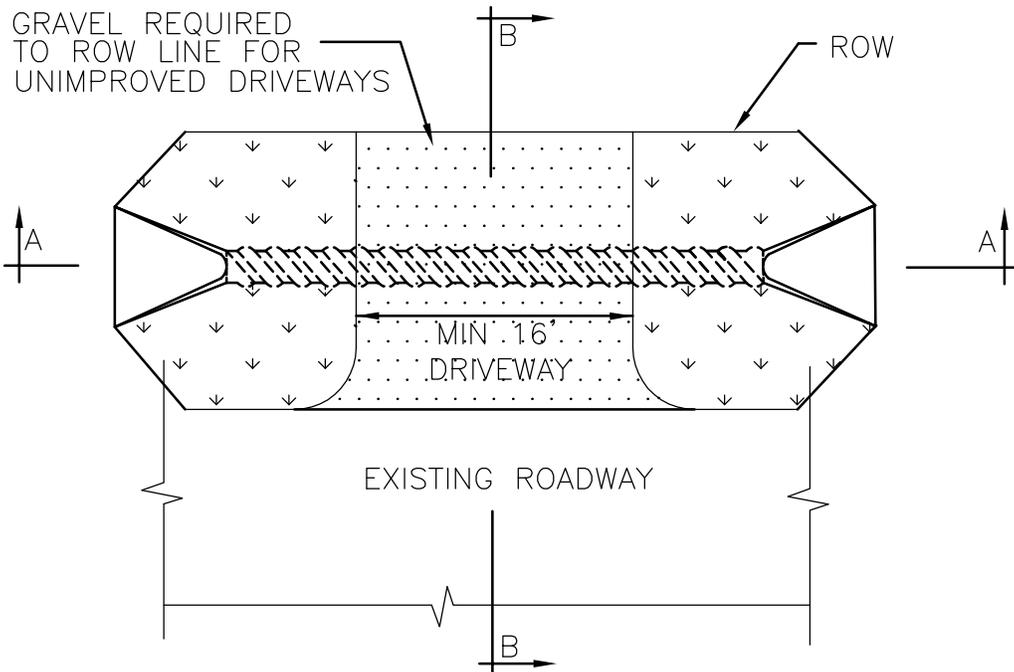


RESIDENTIAL DRIVEWAY
WITH SIDEWALK

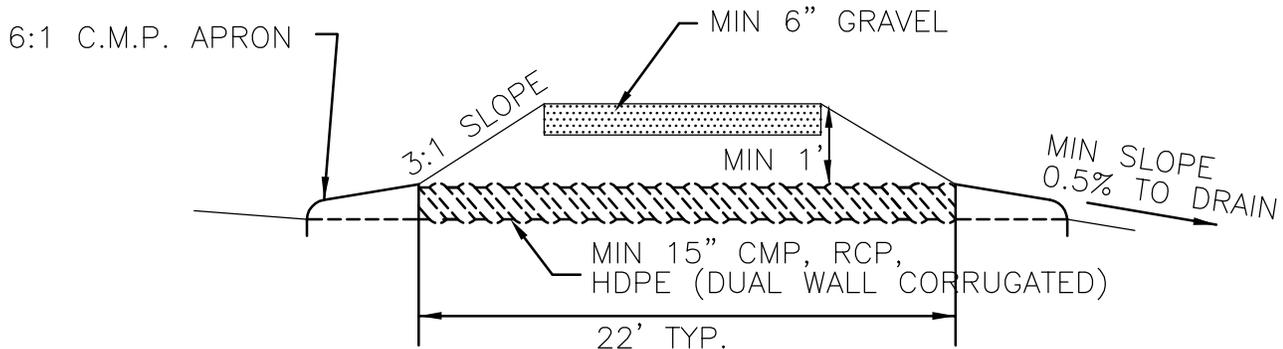
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/15

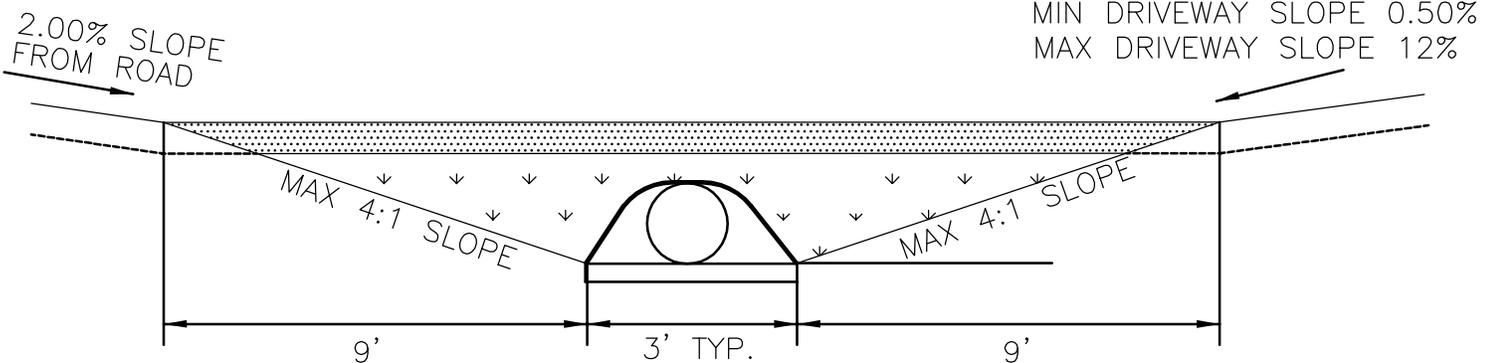
PLATE NO.
STR-10



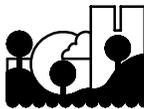
PLAN



SECTION A-A



SECTION B-B

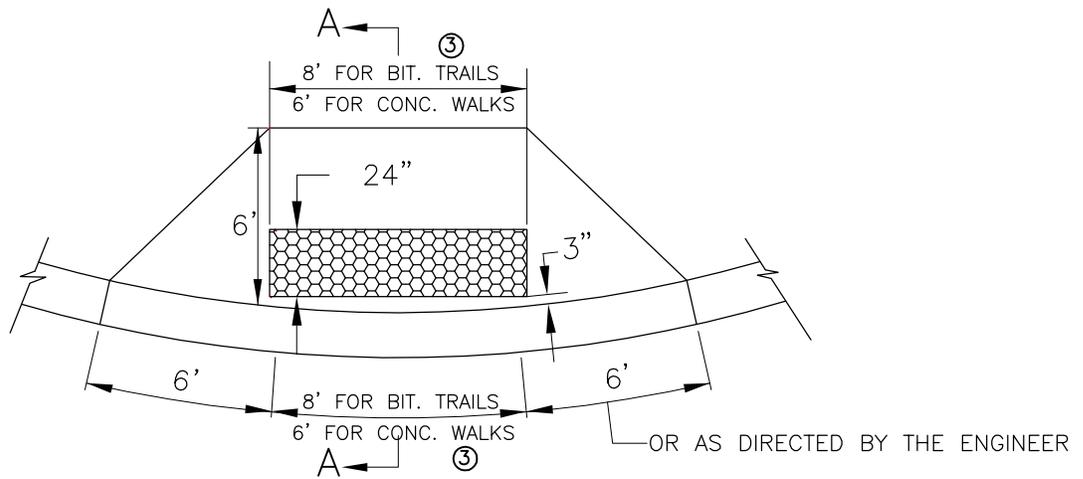


RURAL RESIDENTIAL DRIVEWAY

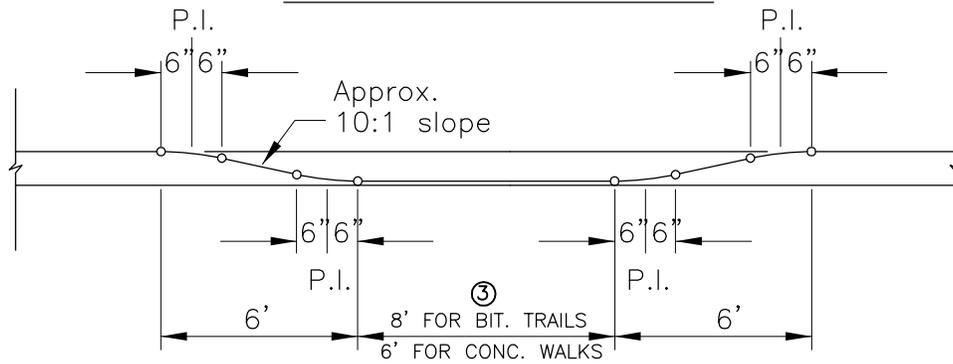
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

4/11

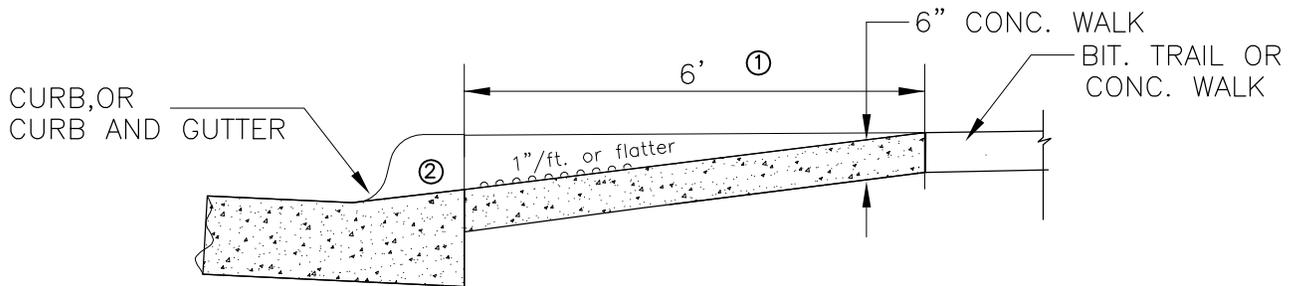
PLATE NO.
STR-11



PLAN VIEW OF RAMP



ELEVATION OF RAMP

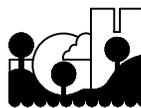


SECTION A-A

NOTES:

PEDESTRIAN CURB RAMPS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH. THE RAMP AND TRUNCATED DOME AREA WILL BE INCLUDED IN THE PER EACH COST. THE AREA INCLUDED FOR PAYMENT OF THE PEDESTRIAN CURB RAMP IS THE ENTIRE AREA OF THE RAMP (6' BACK FROM THE CURB) AND INCLUDES BOTH THE TRUNCATED DOME PORTION AND REGULAR CONCRETE FLATWORK IN THE PAY AREA. ANY LANDING AREA BEHIND THE PEDESTRIAN RAMP WILL BE PAID FOR AS CONCRETE WALK. TRUNCATED DOME SHALL BE NON-PAINTED, CAST GRAY IRON, NEENAH R-4984 (DETECTABLE WARNING PLATE) OR EQUAL

- ① 6' DIMENSION MAY BE INCREASED TO PROVIDE A 1"/FT. OR FLATTER SLOPE.
- ② THE 1"/FT. SLOPE SHALL EXTEND THROUGH THE CURB TO THE GUTTER WITH NO LIP AT THE GUTTER SECTION.
- ③ THE 6' OR 8' DIMENSION MAY BE MODIFIED AT THE DIRECTION OF THE CITY ENGINEER FOR RETROFIT PROJECTS.

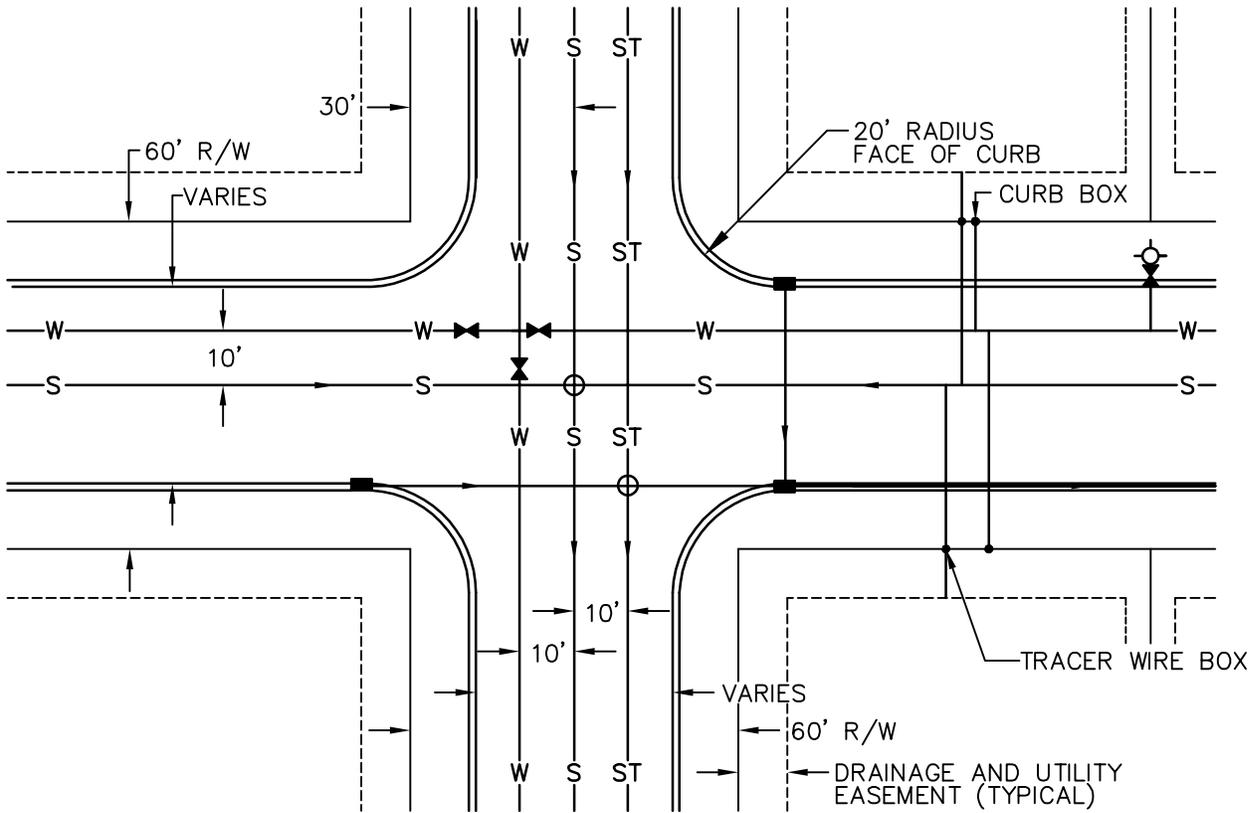


PEDESTRIAN CURB RAMP

CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

4/11

PLATE NO.
STR-12



NOTES:

1. A PERMIT IS REQUIRED TO WORK IN THE PUBLIC ROW. THIS INCLUDES INSTALLATION OF SMALL UTILITIES. CONTACT THE CITY OF IGH'S ENGINEERING DEPARTMENT TO OBTAIN THE PERMIT OR FOR FURTHER INFORMATION 651-450-2500.
2. ALL UTILITIES INCLUDING ABOVE GROUND TRANSFORMERS AND PEDESTALS TO BE IN EASEMENT, BUT LOCATED A MINIMUM OF 10' FROM CITY FACILITIES OR STRUCTURES.

SANITARY SEWER

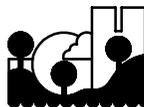
1. SANITARY SEWER SHALL BE PLACED ON CENTERLINE.
2. SANITARY MANHOLES SHALL BE SPACED A MAXIMUM OF 400 FEET.
3. SANITARY SERVICES TO BE LOCATED DOWNSTREAM OF WATERMAIN SERVICES.
4. SANITARY SERVICES SHALL BE INSTALLED WITH TRACER WIRE BOXES

WATERMAIN

1. WATERMAIN OFFSET 10' NORTH OR WEST OF CENTERLINE.
2. HYDRANTS SHALL BE LOCATED 4' BACK OF CURB.
3. CURB BOX TO BE INSTALLED AT THE PROPERTY LINE.
4. WATERMAIN SERVICES TO BE LOCATED UPSTREAM FROM SANITARY SERVICES.

STORM SEWER

1. STORM SEWER SHALL BE PLACED 10' SOUTH OR EAST OF CENTERLINE OR UNDER CURB ON OPPOSITE SIDE OF WATERMAIN.
2. CATCH BASINS TO BE AT END OF RADIUS.

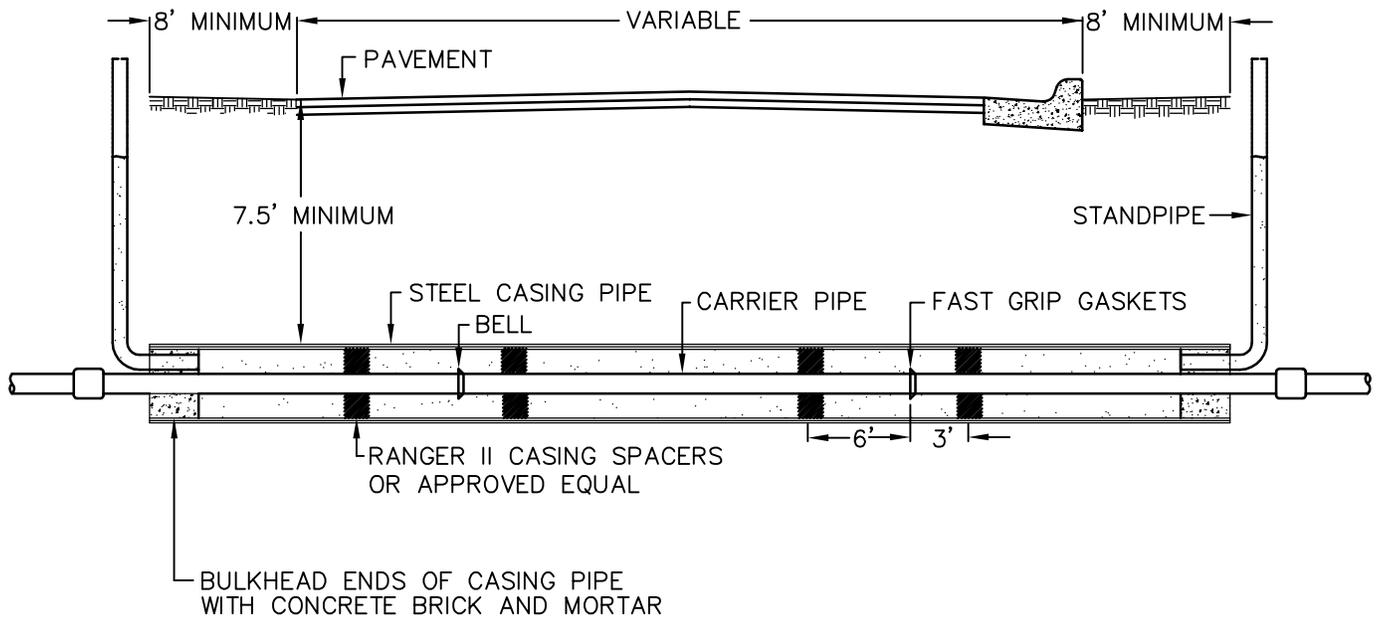


INTERSECTION DETAIL

**CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT**

3/15

**PLATE NO.
STR-13**



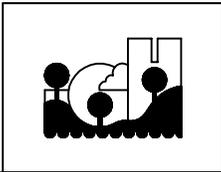
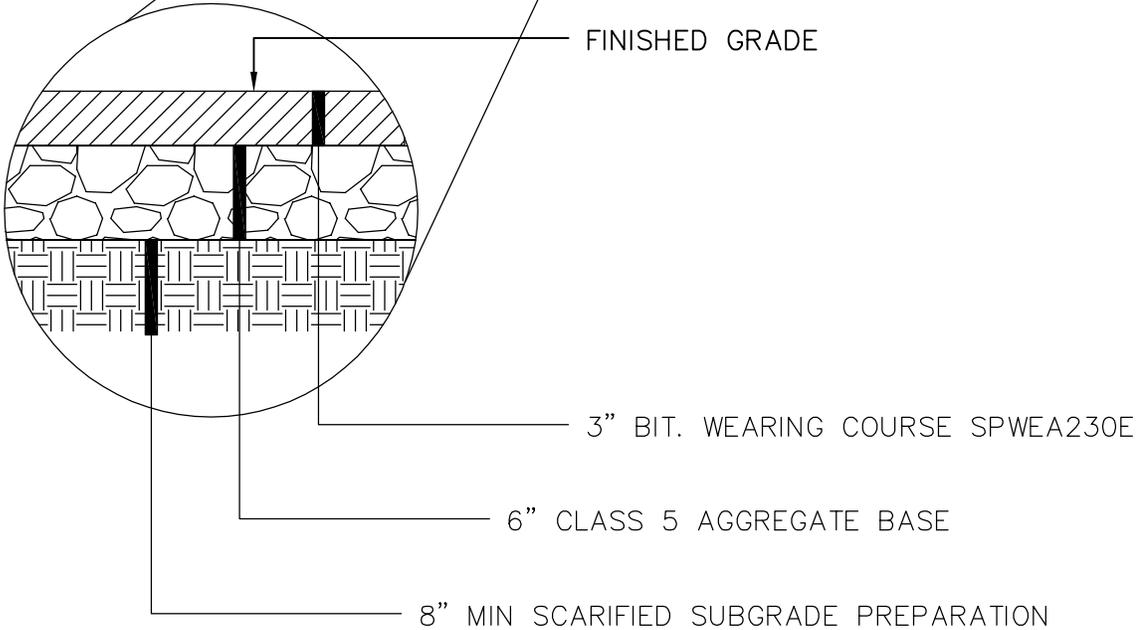
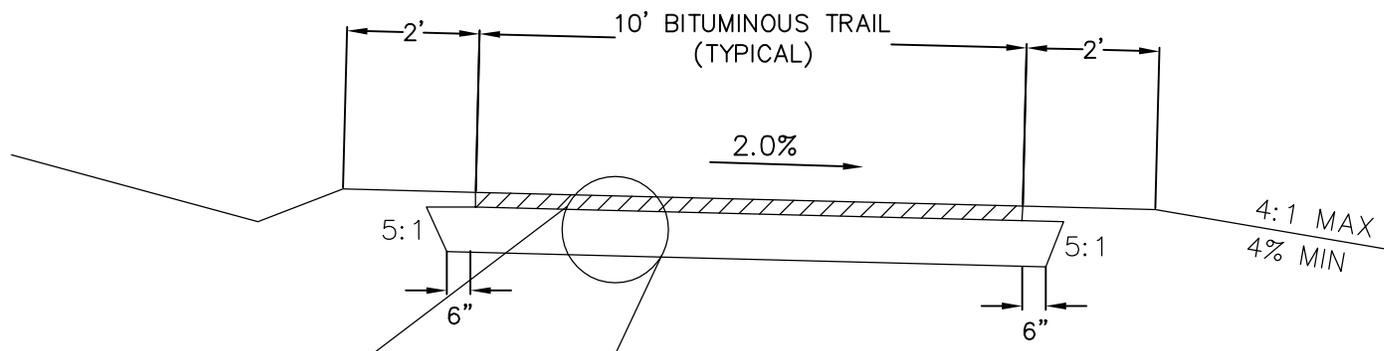
- NOTES:
1. CASING PIPE TO BE WELDED STEEL WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI. STEEL CASING PIPE COATING PER ASTM A139, GRADE B RED MILL ON THE INSIDE AND OUTSIDE OF THE PIPE SHALL BE COAL TAR ENAMEL COATED PER AWWA C203.
 2. STANDPIPE SHALL BE CUT OFF AND CAPPED 2' BELOW FINISHED GRADE .
 3. WATER MAIN CONDUCTIVITY SHALL MEET CITY SPEC 1034.2.7.A

PIPE SIZE CHART

CARRIER PIPE	CASING DIAMETER	CASING THICKNESS
6"	24	0.250
8"	24"	0.250
10"	24"	0.312
12"	24"	0.375
18"	30"	0.438
24"	40"	0.500



JACKING DETAIL

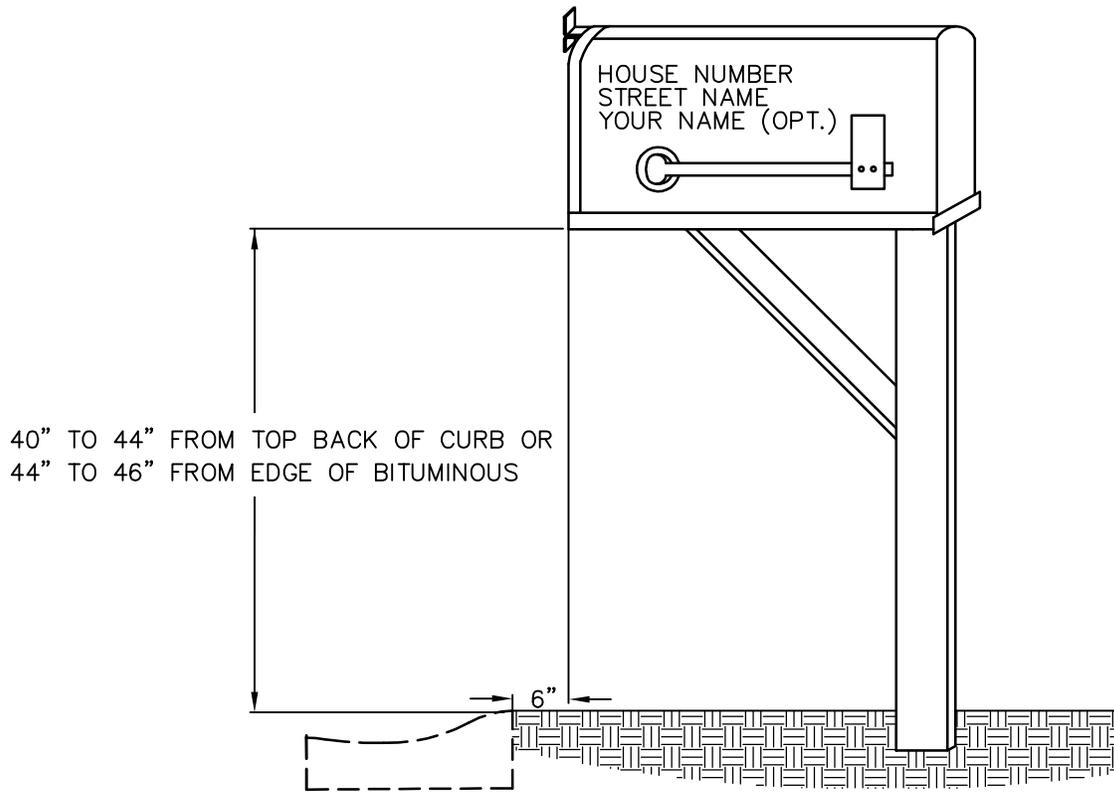


BITUMINOUS TRAIL

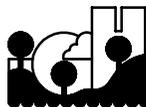
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/15

PLATE NO.
STR-15



- NOTES:
1. BOX SHALL EXTEND AS FAR IN FRONT OF SUPPORT POST AS POSSIBLE. (THIS PREVENTS POSSIBLE SNOW PLOW DAMAGE)
 2. LIST NAME AND ADDRESS ON SIDE OF BOX FROM WHICH CARRIER APPROACHES. LETTERS SHALL BE ABOUT ONE INCH HIGH.
 3. BOX MUST BE LOCATED SO CARRIER CAN SERVE WITHOUT LEAVING VEHICLE.



MAIL BOX INSTALLATION

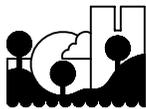
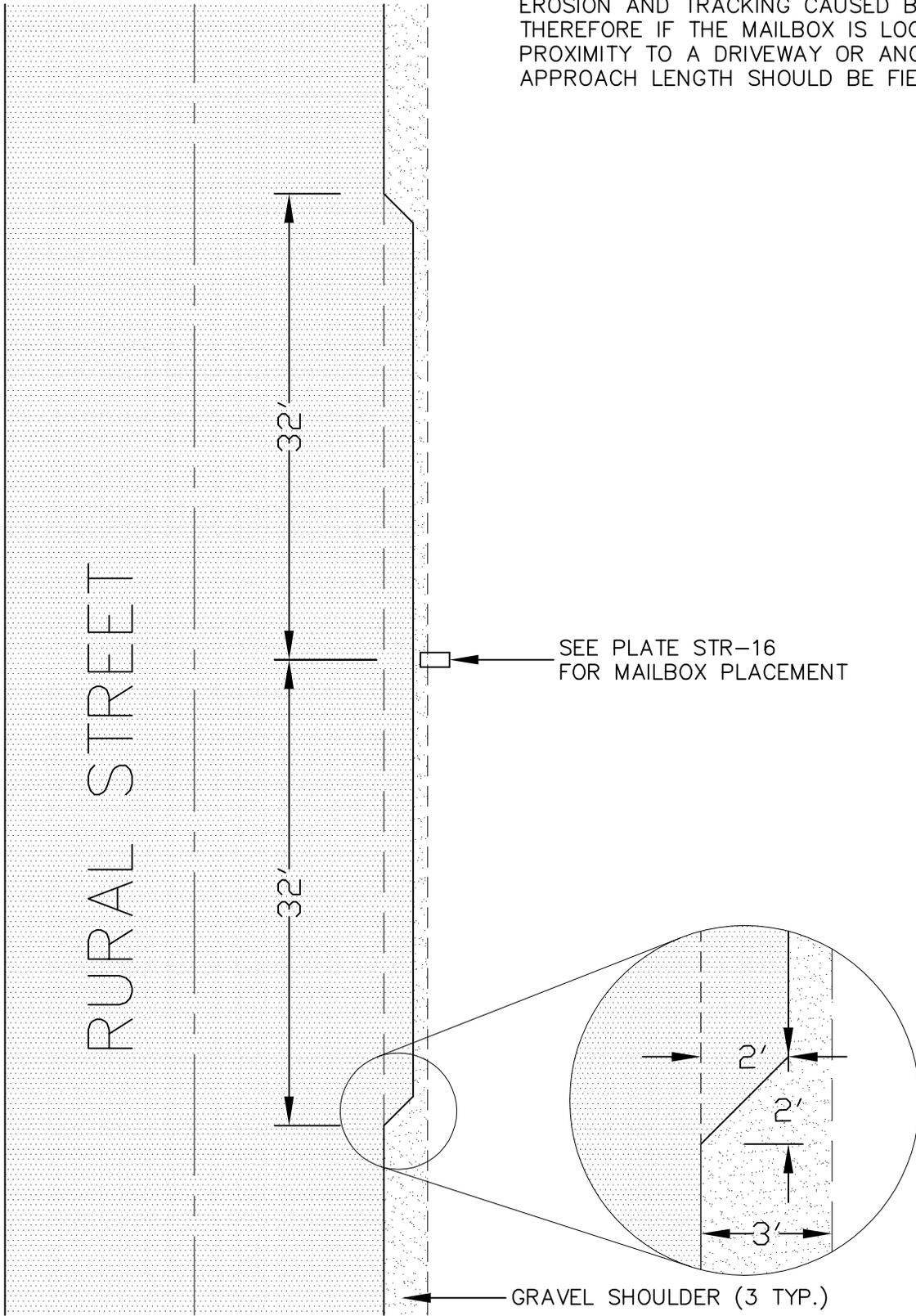
**CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT**

4/11

**PLATE NO.
STR-16**

NOTE:

THE PURPOSE OF THIS APPROACH IS TO LIMIT SHOULDER EROSION AND TRACKING CAUSED BY MAIL DELIVERY THEREFORE IF THE MAILBOX IS LOCATED IN CLOSE PROXIMITY TO A DRIVEWAY OR ANOTHER MAILBOX THE APPROACH LENGTH SHOULD BE FIELD MODIFIED AS NEEDED



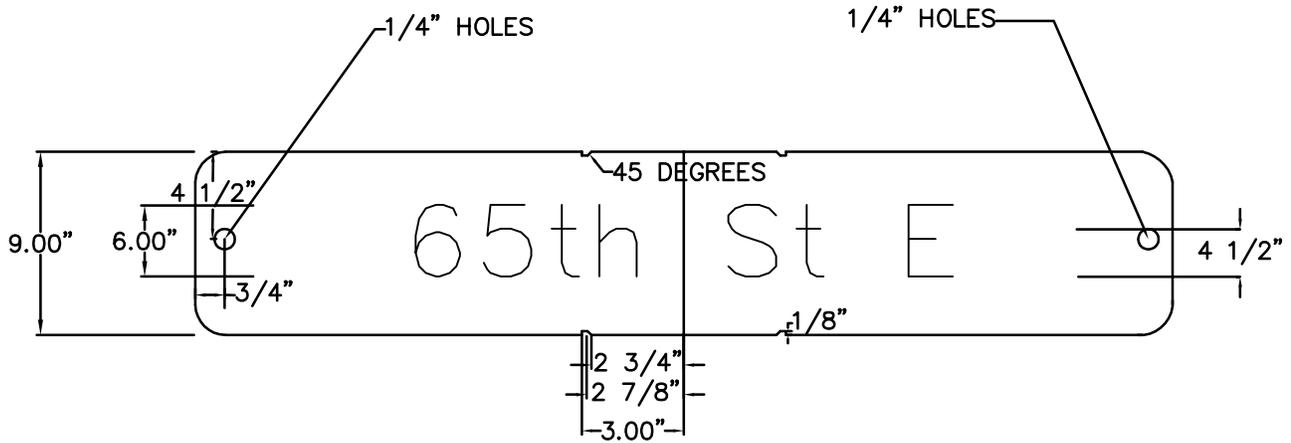
RURAL MAILBOX APPROACH

**CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT**

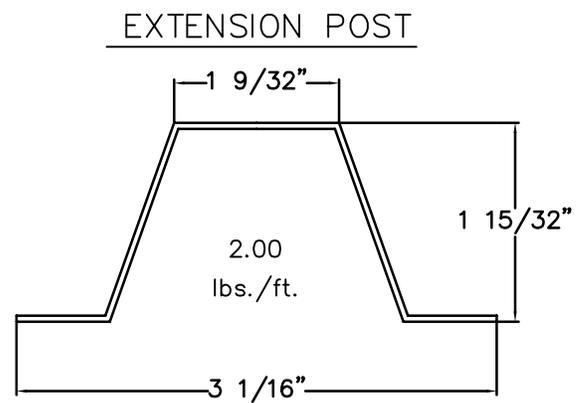
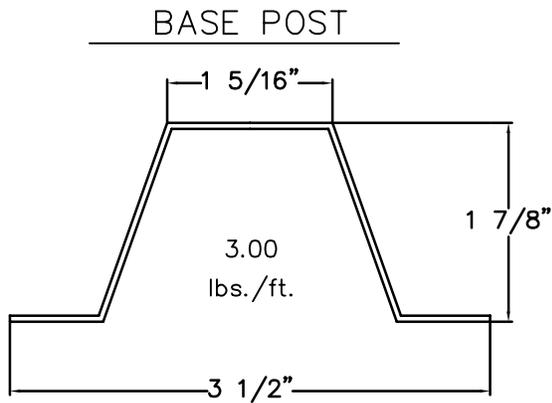
3/11

**PLATE NO.
STR-17**

SIGN DETAIL



POST DETAIL



STANDARD CONSTRUCTION NOTES FOR STREET NAME SIGNS AND POSTS

1. ALL STREET SIGNS SHALL BE DUAL BLADE, DIAMOND GRADE DG3 REFLECTIVE.
2. ALL STREET SIGNS SHALL BE 0.080 THICK AND HAVE 1" ROUNDED CORNERS.
3. ALL STREET SIGNS WILL BE PUNCHED AND NOTCHED BLADES.
4. ALL PUBLIC STREET NAME BLADES SHALL BE DIAMOND GRADE DG3 GREEN TRANSPARENT .
LETTERING ON ALL STREET NAME BLADES SHALL BE DIAMOND GRADE DG3 "WHITE" IN COLOR.
FONT SHALL BE E-MODIFIED.
5. ALL POSTS SHALL BE GALVANIZED, NOT PAINTED.
6. BASE POSTS SHALL BE 7 FEET LONG, 3 FEET DRIVEN INTO THE GROUND.
7. EXTENSION POSTS SHALL BE 8 FEET LONG.
8. PROVIDE E-450 KIT FOR 9" BLADE (GREEN) FOR CHANNEL POST.

<u>PLATE</u>	<u>MAX CHARACTERS</u>
24"	8
30"	10
36"	13
42"	15
48"	17

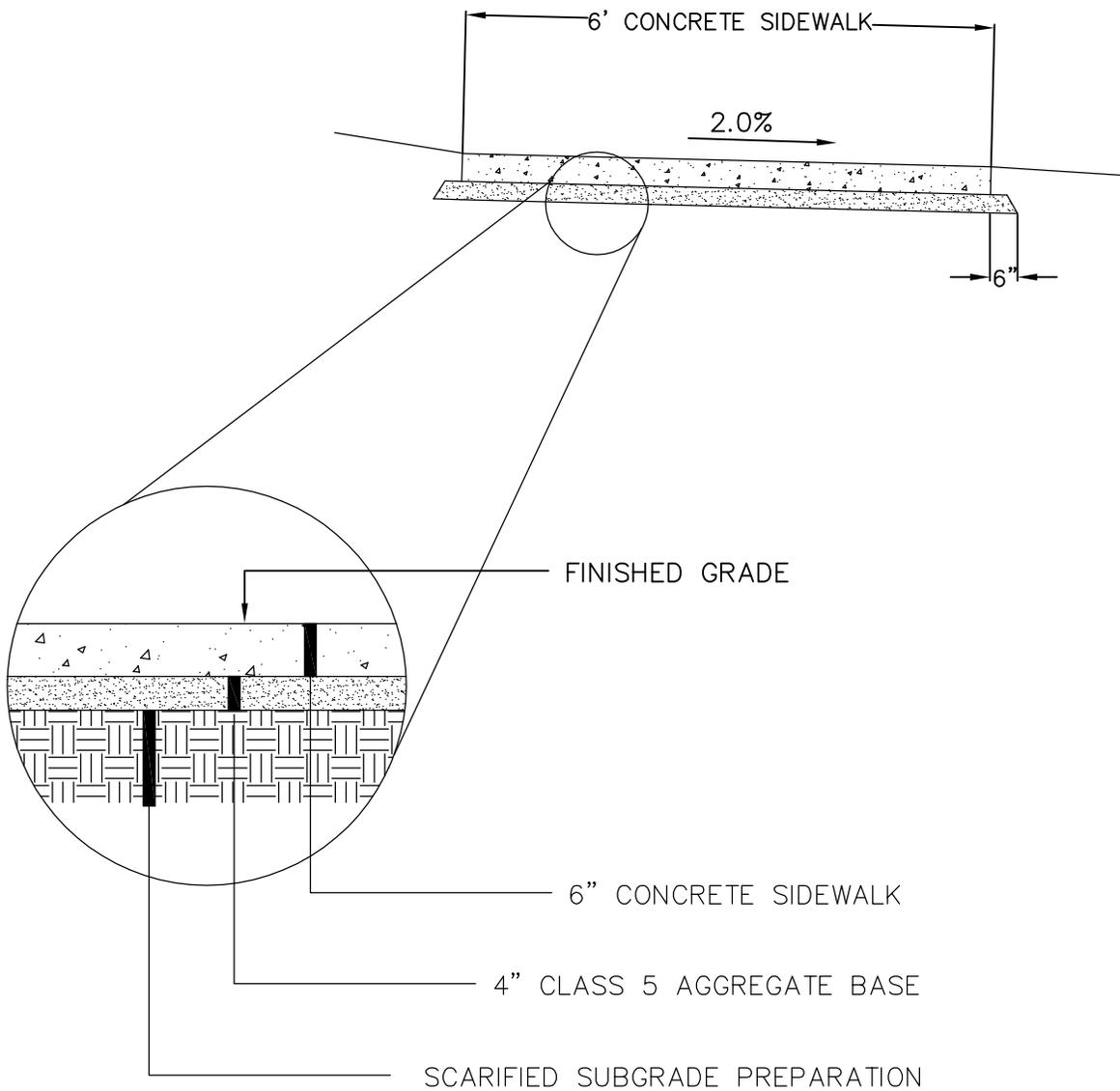


STREET SIGN DETAILS

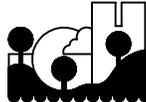
**CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT**

4/13

**PLATE NO.
STR-18**



CONCRETE PANELS SHALL NOT EXCEED 6' IN ANY DIRECTION

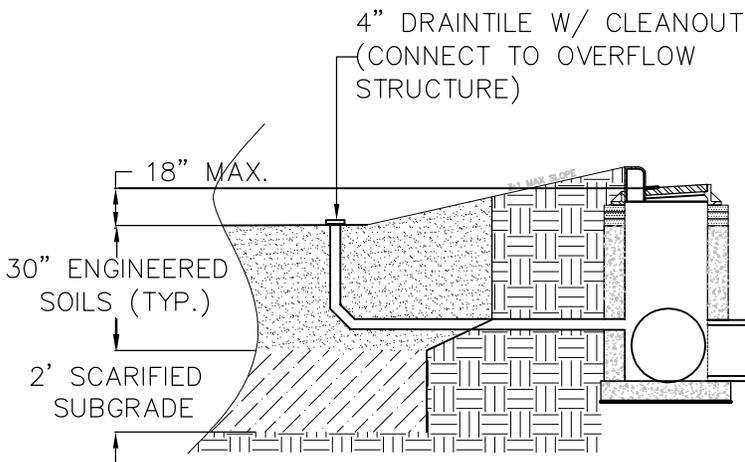
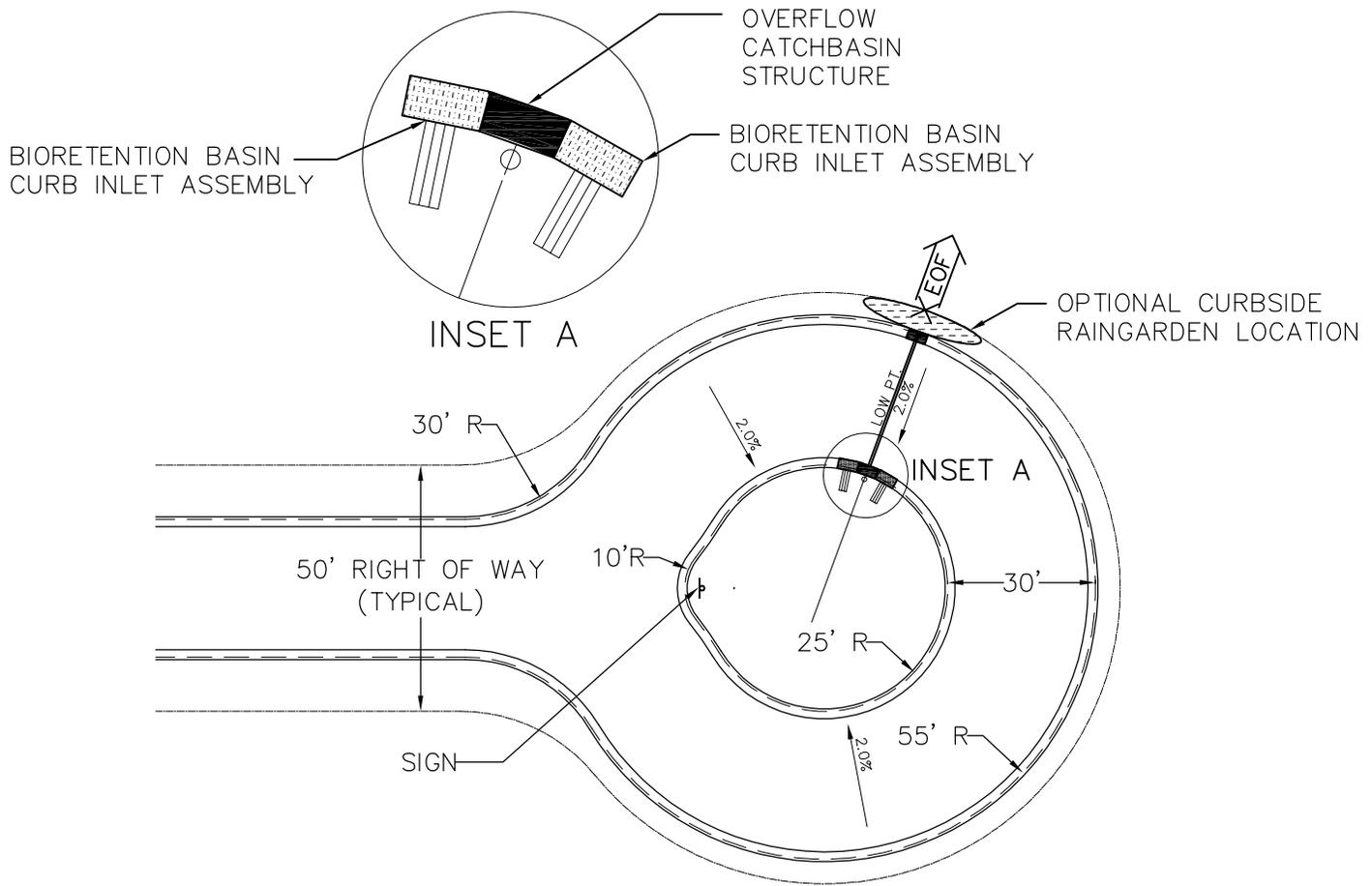


CONCRETE SIDEWALK

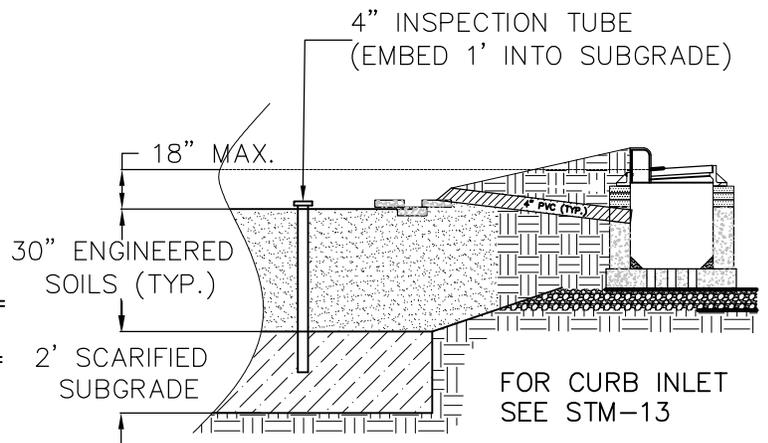
CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

3/15

PLATE NO.
STR-19

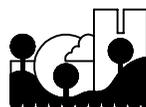


OVERFLOW CATCHBASIN



CURB INLET (2 TYP.)

1. ALL DIMENSIONS ARE CURB FACE TO CURB FACE
2. PROVIDE DELINEATION SIGN (OM1-2 9 BUTTON Y/B)
3. BASIN IS SHOWN FOR GENERAL CONSTRUCTION PURPOSES.
4. SEE STM-19 FOR BASIN CONSTRUCTION, TESTING AND INSPECTION REQUIREMENTS.
5. ALL CLEANOUTS INSPECTION TUBES AND VALVE BOXES SHALL HAVE A SCREW TYPE CAP.
6. THE CATCHBASIN FLOW LINE IS THE EMERGENCY OVERFLOW ELEVATION



CUL-DE-SAC WITH
BIORETENTION BASIN

CITY OF INVER GROVE HEIGHTS
ENGINEERING DEPARTMENT

9/15

PLATE NO.
STR-20