DRIVEWAY APPROACH
WITH CONCRETE APRON
(B618)
DRIVEWAY APPROACH WITH CONCRETE APRON (D412)

EXPANSION JOINT IF APRON ABUTS CONCRETE.

DROP CURB AT DRIVEWAYS.

NOTE: REBAR NOT ALLOWED IN CITY ROW.

DROP CURB AT DRIVEWAY OPENINGS. (TRANSITION TO BE MADE IN 3 FT.)
CONTRACTION JOINTS
SPACED EQUALLY WITH
NO CURB LENGTH
OVER 10 FT.

EXPANSION JOINT

WIDTH
VARIABLE

CONTRACTION
JOINTS

A
A

NO. 4 REBAR TIED &
SUPPORTED ON BASKETS

SECTION AA
THRU GUTTER

NO. 4 REBARS
12” O.C.

6% SLOPE
7”

18”
3’

18”

BACK OF CURB RADIUS
VARIES.
CONTRACTION JOINTS SPACED EQUALLY WITH NO CURB LENGTH OVER 10 FT.

EXPANSION JOINT (TYP.)

3 NO. 4 EPOXY COATED REINFORCING RODS CONTINUOUS IN CROSS GUTTER FROM EXPANSION JOINT TO EXPANSION JOINT.

WIDTH VARIABLE

CONTRACTION JOINTS (TYP.)

A A

BACK OF CURB RADIUS VARIES.

SECTION AA THRU GUTTER

NO. 4 REBARS 12" O.C.

6% SLOPE

7" 18" 18" 3'
PLAN VIEW

SECTION

CATCH BASIN INSTALLATION FOR B618 CURB & GUTTER
Excavations shall be compacted in no greater than 6" lifts.

An inspection by the city is required when the excavation has been filled to the top of the Class 5 and before placement of asphalt.

The contractor shall provide a soil density test on the compacted soils from a testing company approved by the city. Test must be in compliance with the current MnDOT standard specifications for construction.

Two soil density tests must be performed; one in the upper 3' and one below.

* If less than 3", the asphalt shall be replaced to the curb.

Note: The thickness of the asphalt patch shall match the thickness of the existing pavement but in no case less than 3". The thickness of the Class 5 base shall match the thickness of the existing CL 5 but not less than 6". The city engineer shall specify larger thicknesses if it is deemed necessary.

The existing asphalt shall be saw cut to form a neat, rectangular patch a minimum of 18" larger on all sides than the excavation.
COMPACTED EXISTING SOIL
IF THE EXISTING SOILS ARE
NOT SUITABLE, THE CONTRACTOR
SHALL NOTIFY THE CITY
ENGINEER AND HE SHALL
SPECIFY THE TYPE OF
BACKFILL TO USE.

* IF LESS THAN 3', THE ASPHALT SHALL BE REPLACED
  TO THE CURB.

NOTE: THE THICKNESS OF THE ASPHALT PATCH SHALL MATCH
THE THICKNESS OF THE EXISTING PAVEMENT BUT IN NO
CASE LESS THAN 3". THE THICKNESS OF THE CLASS 5
BASE SHALL MATCH THE THICKNESS OF THE EXISTING
CL 5 BUT NOT LESS THAN 6".
THE CITY ENGINEER SHALL SPECIFY LARGER THICKNESSES
IF IT IS DEEMED NECESSARY.

THE EXISTING ASPHALT SHALL BE
SAW CUT TO FORM A NEAT,
RECTANGULAR PATCH A
MINIMUM OF 18" LARGER
ON ALL SIDES THAN THE
EXCAVATION.

EXCAVATIONS SHALL BE COMPACTED IN NO GREATER THAN 6" LIFTS.

AN INSPECTION BY THE CITY IS REQUIRED WHEN THE EXCAVATION HAS BEEN
FILLED TO THE TOP OF THE CLASS 5 AND BEFORE PLACEMENT OF ASPHALT.

THE CONTRACTOR SHALL PROVIDE A SOIL DENSITY TEST ON THE COMPACTED SOILS
FROM A TESTING COMPANY APPROVED BY THE CITY. TEST MUST BE IN COMPLIANCE WITH
THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

TWO SOIL DENSITY TESTS MUST BE PERFORMED; ONE IN THE UPPER 3’ AND ONE BELOW
THE UPPER 3’.
OVERLAP THE EXISTING GEOTEXTILE FABRIC A MINIMUM OF 2' WITH TYPE V GEOTEXTILE ON EACH SIDE OF THE EXCAVATION.

* IF LESS THAN 3', THE ASPHALT SHALL BE REPLACED TO THE CURB.

NOTE: THE THICKNESS OF THE ASPHALT PATCH SHALL MATCH THE THICKNESS OF THE EXISTING PAVEMENT BUT IN NO CASE LESS THAN 3". THE THICKNESS OF THE CLASS 5 BASE SHALL MATCH THE THICKNESS OF THE EXISTING CL 5 BUT NOT LESS THAN 6". THE CITY ENGINEER SHALL SPECIFY LARGER THICKNESSES IF IT IS DEEMED NECESSARY.

THE EXISTING ASPHALT SHALL BE SAW CUT TO FORM A NEAT, RECTANGULAR PATCH.

EXTREME CARE MUST BE TAKEN TO EXPOSE THE PORTION OF GEOTEXTILE FABRIC WHICH IS TO BE OVERLAPPED TO PREVENT DAMAGE TO THE EXISTING FABRIC. IF THE FABRIC IS DAMAGED, THE EXCAVATION MUST BE ENLARGED TO PROVIDE A MINIMUM OF 2' OF OVERLAP ON TO UNDAMAGED FABRIC.

EXCAVATIONS SHALL BE COMPACTED IN NO GREATER THAN 6" LIFTS.

AN INSPECTION BY THE CITY IS REQUIRED WHEN THE EXCAVATION HAS BEEN FILLED TO THE EXISTING GEOTEXTILE FABRIC AND BEFORE PLACEMENT OF SAND AND ALSO WHEN IT IS FILLED TO THE TOP OF THE CLASS 5, BEFORE

THE CONTRACTOR SHALL PROVIDE A SOIL DENSITY TEST ON THE COMPACTED SOILS FROM A TESTING COMPANY APPROVED BY THE CITY. TEST MUST BE IN COMPLIANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

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EXCAVATIONS SHALL BE COMPACTED IN NO GREATER THAN 6" LIFTS.

AN INSPECTION BY THE CITY IS REQUIRED WHEN THE EXCAVATION HAS BEEN FILLED TO THE TOP OF THE CLASS 5 AND BEFORE PLACEMENT OF ASPHALT. ALSO WHEN THE EXISTING ASPHALT HAS BEEN MILLED AND READY FOR THE PLACEMENT OF THE ASPHALT WEAR COURSE.

THE CONTRACTOR SHALL PROVIDE A SOIL DENSITY TEST ON THE COMPACTED SOILS FROM A TESTING COMPANY APPROVED BY THE CITY. TEST MUST BE IN COMPLIANCE WITH THE CURRENT MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.
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IF IT IS DEEMED NECESSARY.

THE EXISTING ASPHALT SHALL BE
SAW CUT TO FORM A NEAT,
RECTANGULAR PATCH A
MINIMUM OF 18” LARGER
ON ALL SIDES THAN THE
EXCAVATION.

THE CITY ENGINEER SHALL
DETERMINE THE LIMITS OF
THE OVERLAY.

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THE CONTRACTOR SHALL PROVIDE A SOIL DENSITY TEST ON THE COMPACTED SOILS FROM A TESTING COMPANY APPROVED BY THE CITY. TEST MUST BE IN COMPLIANCE WITH THE CURRENT MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

TWO SOIL DENSITY TESTS MUST BE PERFORMED; ONE IN THE UPPER 3’ AND ONE BELOW THE UPPER 3’.
NO PRIVATE FACILITIES ARE ALLOWED TO RUN PARALLEL TO PUBLIC FACILITIES IN THE CLEAR ZONE SHOWN ABOVE.

NOTE:
MINIMUM SEPARATION
1:1 RISE: RUN
FOR USE WITH TYPE V GEOTEXTILE FABRIC

THIS SEAM TYPE REQUIRES THE MATING OF TWO PARALLEL SECTIONS OF GEOTEXTILE WHICH ARE THEN TURNED TWICE IN THE SAME DIRECTION (HENCE "DOUBLE J") TO CREATE A THICKNESS OF 6 PLIES WHICH IS THEN SEWN WITH 2 ROWS OF STITCHES. THIS SEAM ALSO ENCAPSULATES THE SELVAGE SO THAT IT CANNOT BE USED AS A STITCHING SURFACE.
TWO ROWS OF STICHES REQUIRED

SEWN "J" SEAM

FOR USE WITH TYPE VI GEOTEXTILE FABRIC.
NOTE:
BOTTOM OF MAILBOX SHOULD BE 41–45 INCHES ABOVE GRADE. FACE OF MAILBOX SHOULD BE BETWEEN 6 AND 8 INCHES FROM FACE OF CURB.

MAILBOX AND POST SHOULD MEET CURRENT UNITED STATES POST OFFICE GUIDELINES.
ALL POSTS 8”x8”x6’ "BROWN TONE” OR APPROVED EQUAL, C.C.A. TREATED WOOD. ASSEMBLY AND HARDWARE SHALL BE AS DETAILED ON MNDOT STANDARD PLATE 8330G EXCEPT THAT THE POSTS USED SHALL CONFORM TO THE ABOVE DRAWING AND THE END POST PLATE WASHER SHALL BE FLAT (NO 3” CURVATURE) OF THE SAME DIMENSIONS SHOWN.
SIGN LENGTH VARIES
36" MINIMUM LENGTH
48" MAXIMUM LENGTH

2" PYRAMID CAP

SIGN LENGTH VARIES
36" MINIMUM LENGTH
48" MAXIMUM LENGTH

SIGNS

SIGNS SHALL BE MADE OF FLAT ALUMINUM THAT IS .080 THICK AND 9" HIGH WITH 1.5" RADIUS CORNERS AND TELESPAR PUNCHING.

SIGNS SHALL BE SINGLE FACE DG3 DIAMOND GRADE SHEETING.

PUBLIC STREET SIGNS SHALL HAVE A GREEN BACKGROUND WITH WHITE LETTERING, .5" E 450 SERIES BORDER, AND 6" CITY LOGO ON LEFT.

SIGNS SHALL HAVE .75" OF GREEN BACKGROUND ON ALL SIDES OF THE SIGN LEGEND.

STREET NAMES SHALL BE 6" UPPER CASE AND 4.5" LOWER CASE USING CLEARVIEW ONE FONT WITH .375" MARGINS.

STREET SUFFIXES AND BLOCK NUMBERS SHALL BE 3" UPPER CASE AND 2.25" LOWER CASE USING CLEARVIEW ONE FONT WITH .375" MARGINS.

A 6" ARROW SHALL BE ON THE RIGHT IF APPLICABLE.

ALL SIGNS SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MN MUTCD).
QUICK PUNCH SQUARE TUBE STREET NAME SIGN POST DETAIL

2\" #34 RIVET AND 1\frac{3}{4}\" PLASTIC SPACER (SIGN TO SIGN)

2\" PYRAMID CAP

3/8\" DRIVE RIVET W/ (1) NYLON WASHERS (SIGN TO POST)

QUICK PUNCH (NOT PRE-PUNCHED) SQUARE TUBE POST ASSEMBLY
2\" x 2\" X 12' - 14ga.

5/16\" @ 90\(^\circ\) CORNER BOLT (SIGN POST TO ANCHOR POST)

GROUND LINE

1\" TO 2\"

2-1/2\" X 2-1/2\" X 18\" - 12ga. OMNI SLEEVE FOR SOIL STABILIZATION

PRE PUNCHED SQUARE TUBE ANCHOR ASSEMBLY
2-1/4\" x 2-1/4\" x 4' - 12ga

4'-0\"
LEVEL OF BACKFILL

COMPACTED DRAINABLE FILL (SELECT GRANULAR OR COARSE FILTER AGGREGATE)

5' STRIPS MIRAGRIDGE 5T @ 1/3 POINTS OF EXPOSED WALL

4" PVC DRAINTILE

APPROVED GRATE

VARIES 6.5' MAX.

33"

6"

COMPACTED GRAVEL FOOTING BATTER WALL 1/2" PER COURSE

NOTE: EXTEND DRAINTILE OUT THROUGH FACE OF WALL EVERY 100' TO 150'. CAP EXPOSED END WITH APPROVED GRATE.

NOTE: INSTALL A MINIMUM OF ONE COURSE BELOW GRADE

FIBERGLASS PINS

FACE TEXTURE, COLOR, AND STYLE TO BE DETERMINED BY ENGINEER

MODULAR BLOCK RETAINING WALL

CITY ENGINEER REG 23110

APPROVED JANUARY 1, 2018

GV-STRT-240
NOTE: THE ENGINEER SHALL MAKE FIELD DETERMINATIONS OF SUBGRADE SUITABILITY AND, IF NECESSARY, SHALL DIRECT THE CONTRACTOR TO VARY THE DEPTH OF COMMON EXCAVATION AND SELECT GRANULAR BORROW.

1.5" PLANT MIXED BITUMINOUS WEARING COURSE, MIXTURE DESIGNATION SPWEA240C

3" PLANT MIXED BITUMINOUS BASE COURSE, MIXTURE DESIGNATION SPNWB230B

6" AGGREGATE BASE, CLASS 5 -100% CRUSHED LIMESTONE - SPEC. 2211

0 to 36" SELECT GRANULAR BORROW - SPEC. 2149.232 (AS DIRECTED BY THE ENGINEER)

GEOTEXTILE FABRIC TYPE IV - SPEC. 2105 AS DEEMED NECESSARY BY THE ENGINEER