



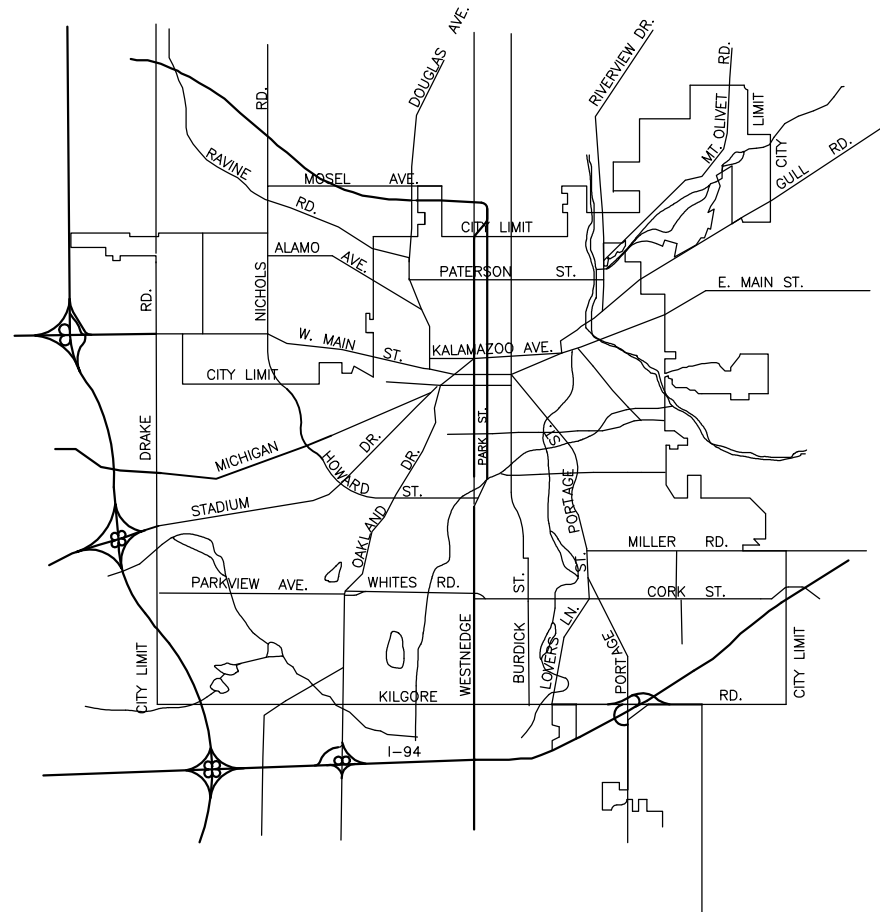
CITY OF KALAMAZOO  
DEPARTMENT OF PUBLIC SERVICES  
ENGINEERING

# CITY OF KALAMAZOO STANDARD STREETS DETAILS

*City of Kalamazoo*

### INDEX OF SHEETS

- 1 STANDARD DETAILS FOR SIDEWALK AND STREETS
- 2 TYPICAL CUTS FOR UTILITIES AND STREETS
- 3-4 FULL/PARTIAL WIDTH MILL AND FILL GUIDELINES
- 5 ADJUSTING DRAINAGE STRUCTURE – MDOT\_20SP-430A-02  
18" CORE / HYDROVAC FOR EXPOSING UTILITY  
BRICK STREET STANDARD DETAIL  
LOCAL STREETS – WINTER CUT DETAIL  
TYPICAL 24" STORM INLET
- 6 KALAMAZOO DOUBLE STORM INLET, MODIFIED
- 7 KALAMAZOO DOUBLE STORM INLET, INFILTRATION
- 8-9 SEEDING & PLANTING



ROW PERMIT  
EXTERNAL  
CONTRACTORS



ROW PERMIT  
COK INTERNAL

No ROW permit shall be issued for the total closure of any major arterial roadway or intersection without prior site plan approval, communications plan, maintenance of traffic plan and temporary traffic control plan all approved by the Public Services Director and City Engineer.

All ROW permit applications for work within major arterial roadways and intersections shall include a maintenance of traffic plan and temporary traffic control plan that will maintain all directions of traffic during all phases of work. Directional and/or total closures shall not be authorized nor will they be permitted.

All maintenance of traffic and temporary traffic control plans shall be in accordance with Part 6 of the 2011 Michigan MUTCD and the 2009 Federal MUTCD.



Know what's below.  
Call before you dig.  
www.missdig.net



MDOT STANDARD BRIDGE PLANS

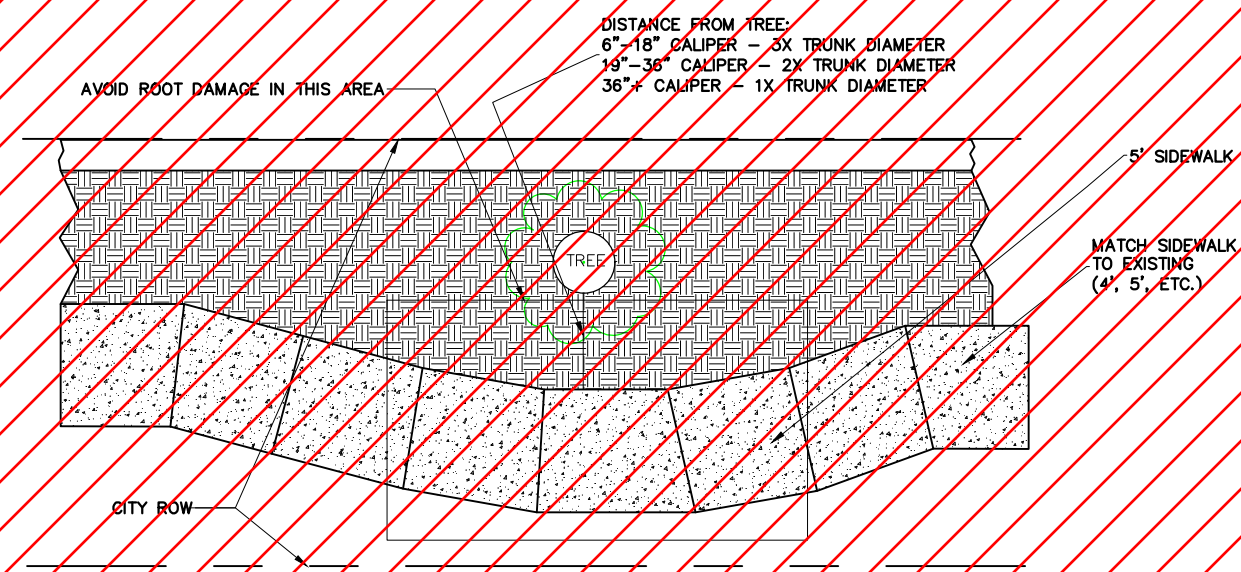


MDOT STANDARD ROAD PLANS

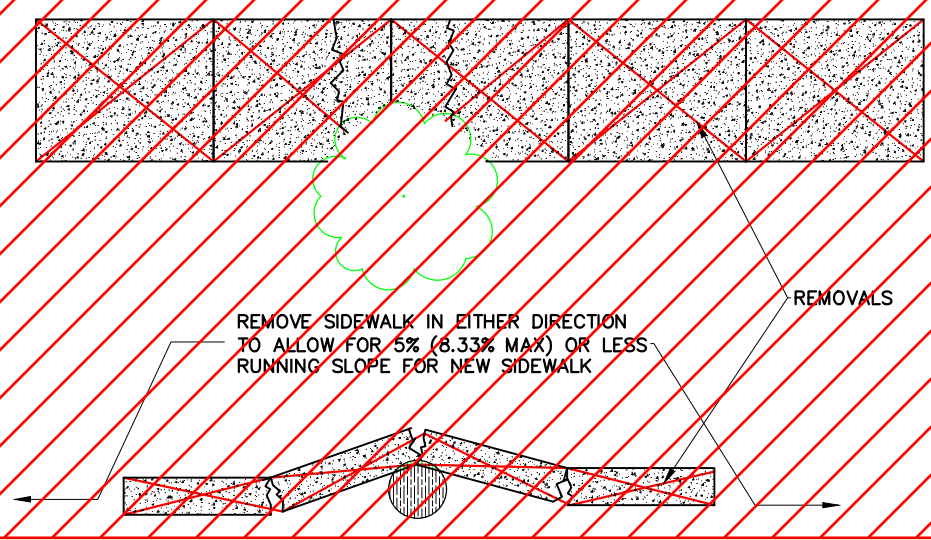
APPROVAL	
<b>CITY OF KALAMAZOO, MICHIGAN</b>	
<b>WILLIAM (JJ) ANTISDALE (STUDENT)</b> THE MONTESSORI SCHOOL	<b>05/23/2025</b> DATE
<b>JAMES J. BAKER, PE</b> PUBLIC SERVICES DIRECTOR & CITY ENGINEER	<b>05/23/2025</b> DATE

- GENERAL NOTES:**
- MDOT STANDARD PLANS R-28-K, R-29-J, R-30-G, AND R-44-F SHALL BE FOLLOWED IN CONJUNCTION WITH THESE STANDARD PLANS
  - ALL SAW CUTTING SHALL BE DONE PERPENDICULAR AND PARALLEL TO THE DIRECTION OF TRAVEL
  - SAW CUTTING SHALL PROVIDE A STRAIGHT, CLEAN, EDGE TO ENHANCE BONDING
  - ALL CUTS SHALL BE RECTANGULAR AND NEATLY CUT TO AVOID SPALLING OF PAVEMENT
  - IN GENERAL ALL ROAD/UTILITY CUTS OF AN AREA GREATER THAN 9SFT (3FTX3FT TYPICAL) SHALL EXTEND THE FULL WIDTH OF THE TRAVEL LANE FOR PAVEMENT WITH LOAD TRANSFER DOWEL RODS OR REINFORCEMENT: NEW LOAD TRANSFER DOWELS/REINFORCEMENT SHALL BE PLACED TO MAINTAIN BEARING CAPACITY OF ROADWAY
  - CUTS LESS THAN 12" SHALL BE PATCHED WITH PCC. IF GREATER THAN 12", ENSURE CUT IS IN ACCORDANCE WITH STANDARD DETAILS AND MATCHING EXISTING ROADWAY
  - BUMPS/CUTS/MILLED AREAS WITH EDGE GREATER THAN 2" DEEP/HIGH MUST BE WEDGED WITH HMA BEFORE OPEN TO TRAFFIC. SEE STANDARD DETAIL.
  - MEANDERING SIDEWALK SHALL ONLY BE PLACED IN THE CITY'S ROW OR WHERE AN EASEMENT IS ESTABLISHED
  - NEW SIDEWALK CONSTRUCTION SHALL MEET OR EXCEED CURRENT ADA AND ACCESSIBILITY STANDARDS
  - REPLACED SIDEWALK SHALL, TO THE EXTENT PRACTICABLE, MEET OR EXCEED ADA AND ACCESSIBILITY STANDARDS
  - SIDEWALK, DRIVEWAY OPENINGS & APPROACHES SHALL CONFORM TO MDOT STANDARD PLAN DETAILS R-28-K AND R-29-J
  - MARSHALL MIX 36/13A (TOP/LEVELING) MAY BE SUBSTITUTED FOR HMA MIX DESIGNS WITH CITY OF KALAMAZOO APPROVAL IF DEEMED APPROPRIATE BY THE ENGINEER
  - ASPHALT BINDER SHALL BE INCLUDED IN THE PAY ITEM FOR HMA
  - MDOT PCC 3500 MIX DESIGN SHALL BE USED FOR ALL CONCRETE UNLESS OTHERWISE STATED OR DIRECTED BY THE ENGINEER
  - OPENING TO TRAFFIC STRENGTHS (2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION, TABLE 603-1):
    - <72 HOURS, GRADE P-NC, 300 psi
    - 72 HOURS +, GRADE 3500/HP, 550 psi

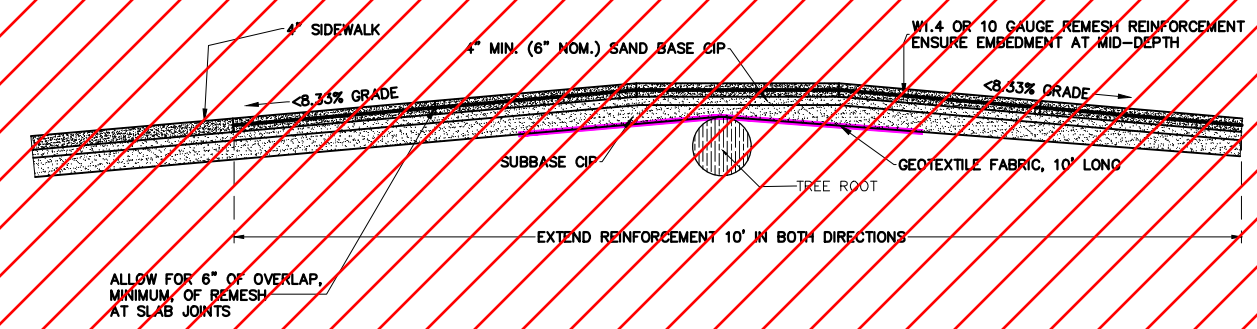
**STANDARD DETAIL - SIDEWALK  
 ROOT AVOIDANCE - MEANDERING SIDEWALK**



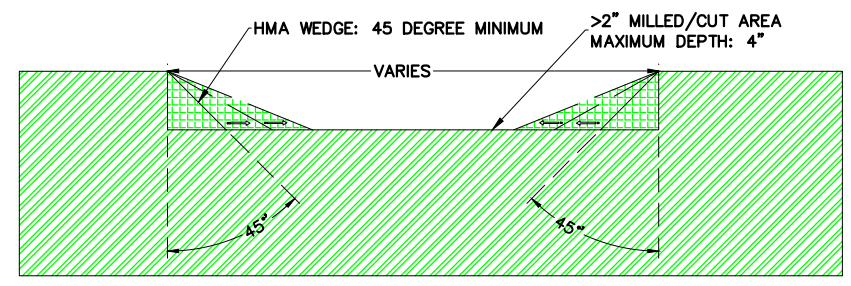
**ROOT CRACKING OF SIDEWALK**



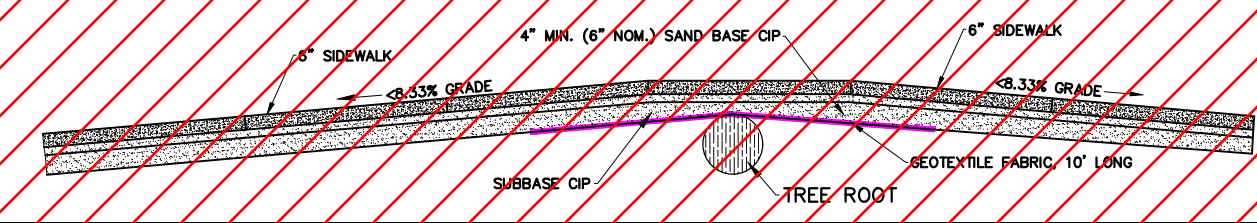
**STANDARD DETAIL -  
 SIDEWALK ROOT AVOIDANCE**



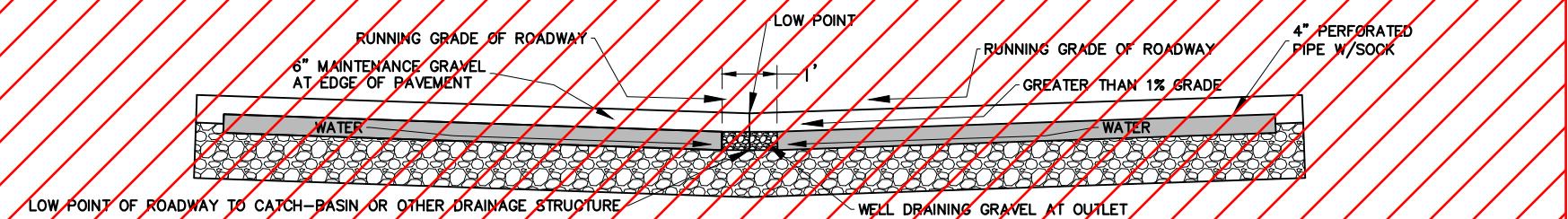
**STANDARD DETAIL - WEDGING  
 CUT / MILLED SECTION**



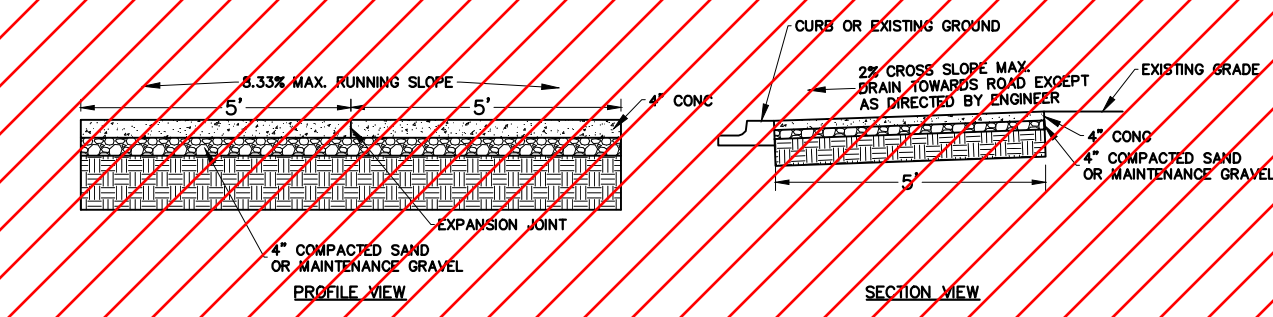
**STANDARD DETAIL - SIDEWALK ROOT AVOIDANCE  
 WITHOUT REINFORCEMENT  
 (USE ONLY AS DIRECTED BY ENGINEER)**



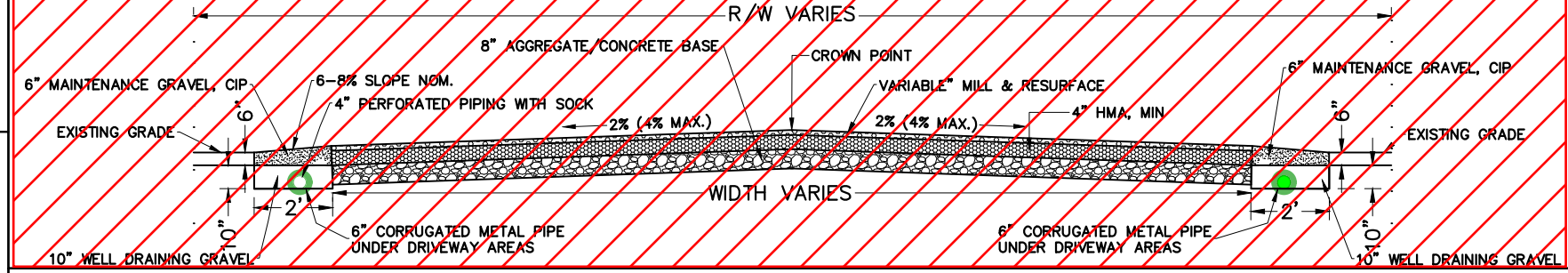
**STANDARD DETAIL - LOW VOLUME / RESIDENTIAL ROADS PERFORATED PIPE DETAIL**



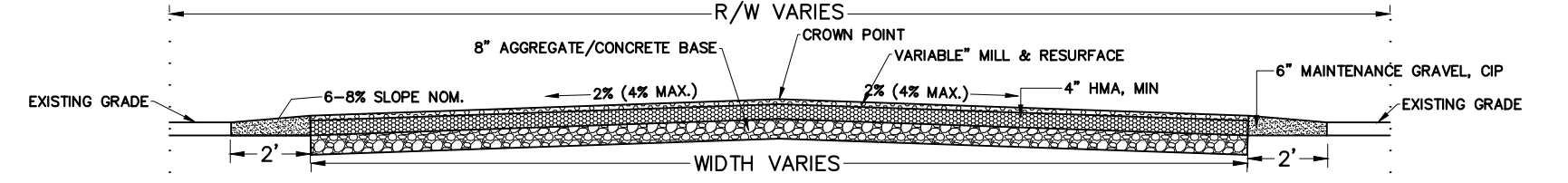
**TYPICAL 4" SIDEWALK DETAIL**



**STANDARD DETAIL - LOW VOLUME / RESIDENTIAL ROADS - POORLY DRAINED AREAS**



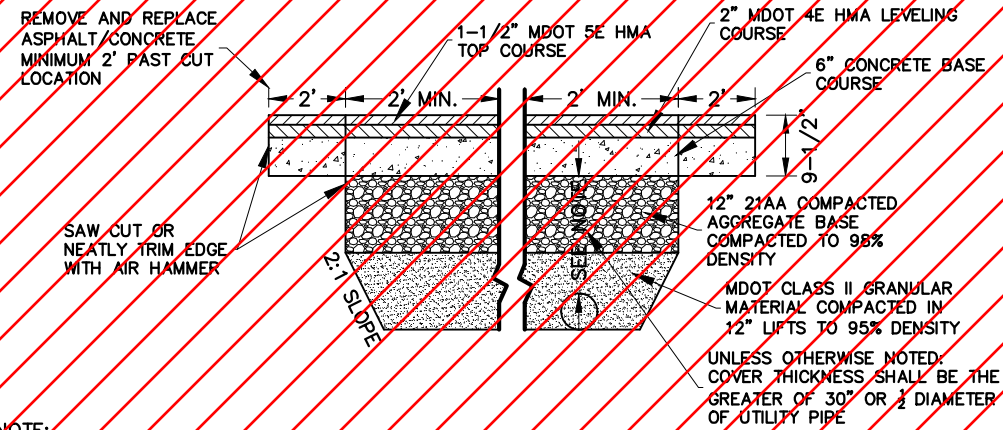
**STANDARD DETAIL - LOW VOLUME / RESIDENTIAL ROADS - EASILY DRAINED AREAS**



DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	01/01/2025

### ASPHALT WITH CONCRETE BASE TRENCH DETAIL

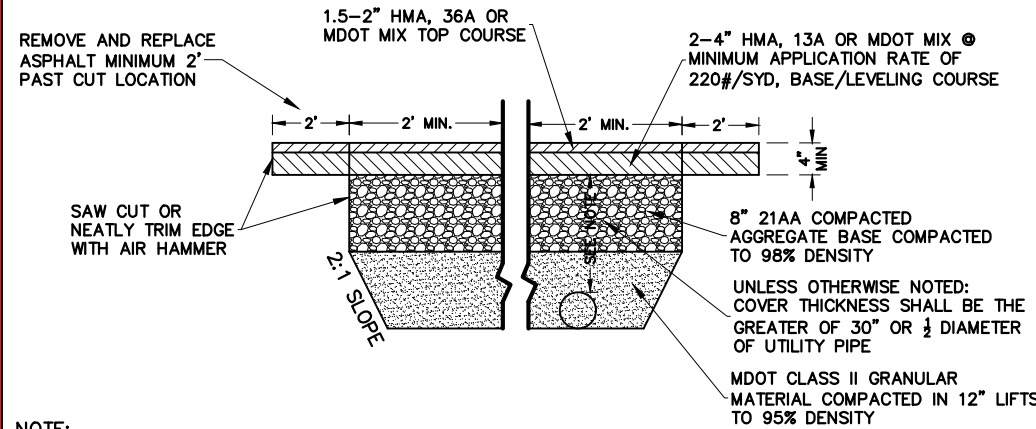
APPLIES TO:  
 CITY MAJOR ROADS  
 COMMERCIAL ROADS  
 HIGH VOLUME ROADS



- NOTE:
- CUT SHALL BE PARALLEL OR PERPENDICULAR TO EDGE OF ROADWAY/GUTTER
  - FOR POTHoles 12" DIAMETER AND SMALLER - ALL CONCRETE
  - FOR RESTORATION TOO SMALL TO FIT A PLATE COMPACTOR, HAND COMPACT LAYERS AS SHOWN AND FINISH WITH CONCRETE

### RESIDENTIAL / LOW TRAFFIC VOLUME ROAD ASPHALT UTILITY TRENCH DETAIL

APPLIES TO:  
 RESIDENTIAL ROADS  
 CITY LOCAL ROADS  
 LOW-VOLUME ROADS

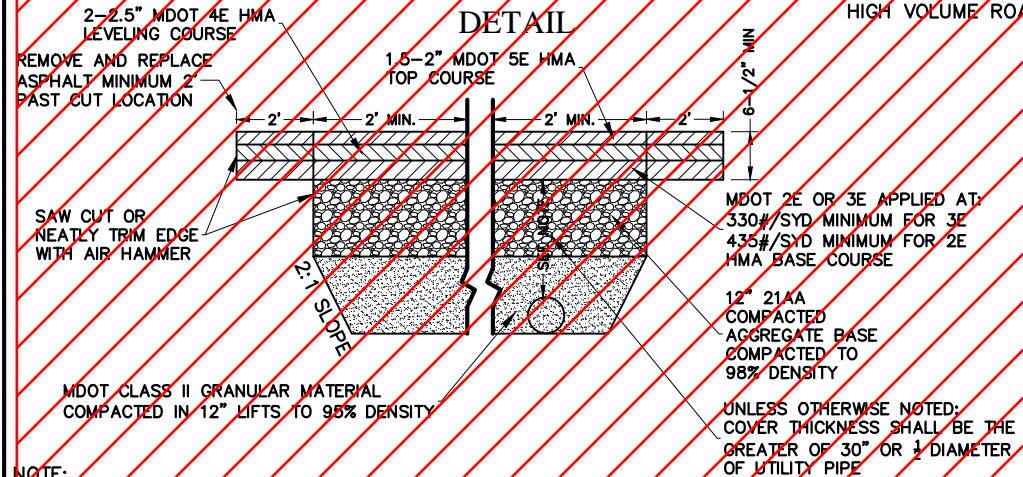


- NOTE:
- CUT SHALL BE PARALLEL OR PERPENDICULAR TO EDGE OF ROADWAY/GUTTER
  - \*SS-1H @ 0.10/GAL/SYD BETWEEN LIFTS
  - PERFORMANCE GRADE BINDER TO BE USED: PG 64-28

- GENERAL NOTES:
- MDOT STANDARD PLANS R-28-K, R-29-J, R-30-G, AND R-44-F SHALL BE FOLLOWED IN CONJUNCTION WITH THESE STANDARD PLANS
  - ALL SAW CUTTING SHALL BE DONE PERPENDICULAR AND PARALLEL TO THE DIRECTION OF TRAVEL
  - SAW CUTTING SHALL PROVIDE A STRAIGHT, CLEAN, EDGE TO ENHANCE BONDING
  - ALL CUTS SHALL BE RECTANGULAR AND NEATLY CUT TO AVOID SPALLING OF PAVEMENT
  - IN GENERAL ALL ROAD/UTILITY CUTS OF AN AREA GREATER THAN 9SFT (3FTX3FT TYPICAL) SHALL EXTEND THE FULL WIDTH OF THE TRAVEL LANE FOR PAVEMENT WITH LOAD TRANSFER DOWEL RODS OR REINFORCEMENT: NEW LOAD TRANSFER DOWELS/REINFORCEMENT SHALL BE PLACED TO MAINTAIN BEARING CAPACITY OF ROADWAY
  - CUTS LESS THAN 12" SHALL BE PATCHED WITH PCC. IF GREATER THAN 12", ENSURE CUT IS IN ACCORDANCE WITH STANDARD DETAILS AND MATCHING EXISTING ROADWAY
  - BUMPS/CUTS/MILLED AREAS WITH EDGE GREATER THAN 2" DEEP/HIGH MUST BE WEDGED WITH HMA BEFORE OPEN TO TRAFFIC. SEE STANDARD DETAIL.
  - MEANDERING SIDEWALK SHALL ONLY BE PLACED IN THE CITY'S ROW OR WHERE AN EASEMENT IS ESTABLISHED
  - NEW SIDEWALK CONSTRUCTION SHALL MEET OR EXCEED CURRENT ADA AND ACCESSIBILITY STANDARDS
  - REPLACED SIDEWALK SHALL, TO THE EXTENT PRACTICABLE, MEET OR EXCEED ADA AND ACCESSIBILITY STANDARDS
  - SIDEWALK, DRIVEWAY OPENINGS & APPROACHES SHALL CONFORM TO MDOT STANDARD PLAN DETAILS R-28-K AND R-29-J
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  - ASPHALT BINDER SHALL BE INCLUDED IN THE PAY ITEM FOR HMA
  - MDOT PCC 3500 MIX DESIGN SHALL BE USED FOR ALL CONCRETE UNLESS OTHERWISE STATED OR DIRECTED BY THE ENGINEER
  - OPENING TO TRAFFIC STRENGTHS (2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION, TABLE 603-1):
    - <72 HOURS, GRADE P-NC, 300 psi
    - 72 HOURS +, GRADE 3500/HP, 550 psi

### COMMERCIAL ROAD ASPHALT UTILITY TRENCH DETAIL

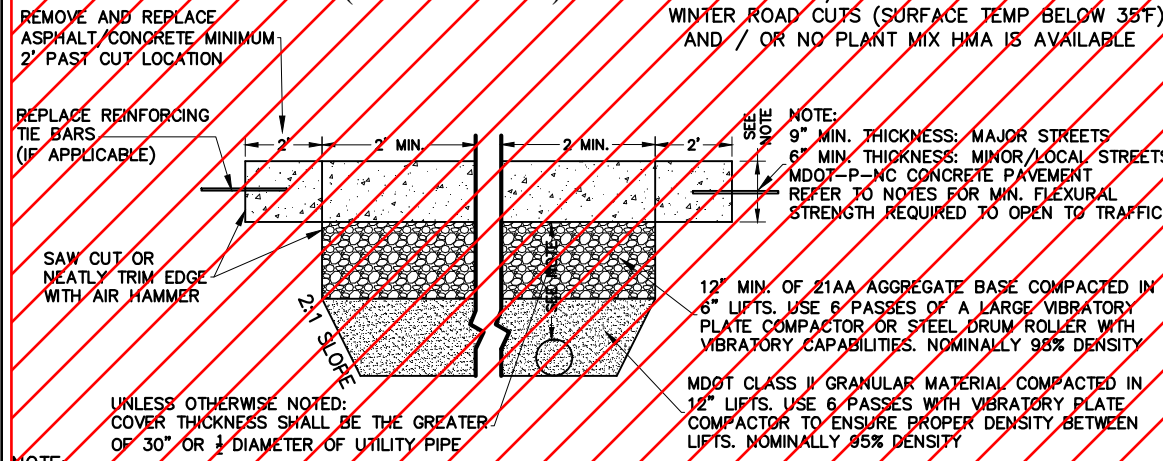
APPLIES TO:  
 CITY MAJOR ROADS  
 COMMERCIAL ROADS  
 HIGH VOLUME ROADS



- NOTE:
- CUT SHALL BE PARALLEL OR PERPENDICULAR TO EDGE OF ROADWAY/GUTTER
  - \*SS-1H @ 0.10/GAL/SYD BETWEEN LIFTS
  - PERFORMANCE GRADE BINDER TO BE USED: PG 64-28
  - HEAVY COMMERCIAL ADT COULD WARRANT CHANGE TO DESIGN.

### TYPICAL CUT USING PCC TO FILL (WINTER CUT)

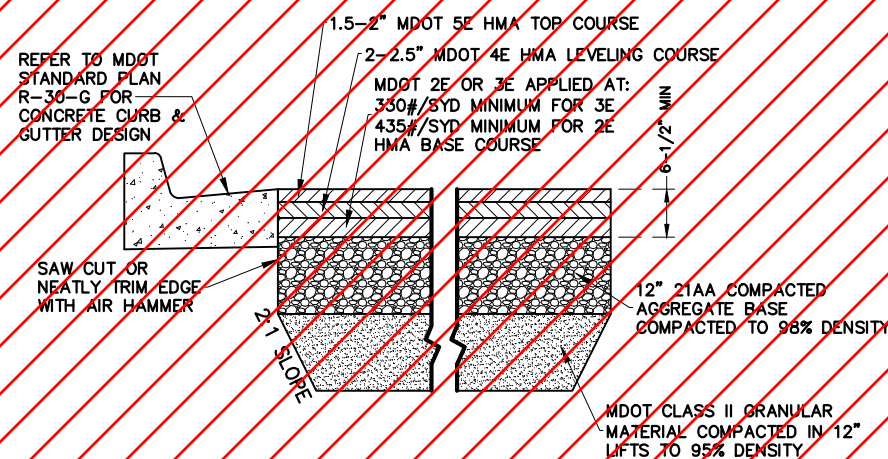
APPLIES TO:  
 CITY MAJOR / LOCAL ROADS  
 COMMERCIAL ROADS  
 HIGH / LOW VOLUME ROADS



- NOTE:
- CUT SHALL BE PARALLEL OR PERPENDICULAR TO EDGE OF ROADWAY/GUTTER
  - FOR POTHoles 12" DIAMETER AND SMALLER - ALL CONCRETE
  - FOR RESTORATION TOO SMALL TO FIT A PLATE COMPACTOR, HAND COMPACT LAYERS AS SHOWN AND FINISH WITH CONCRETE

### COMMERCIAL ROAD ASPHALT PAVEMENT DETAIL

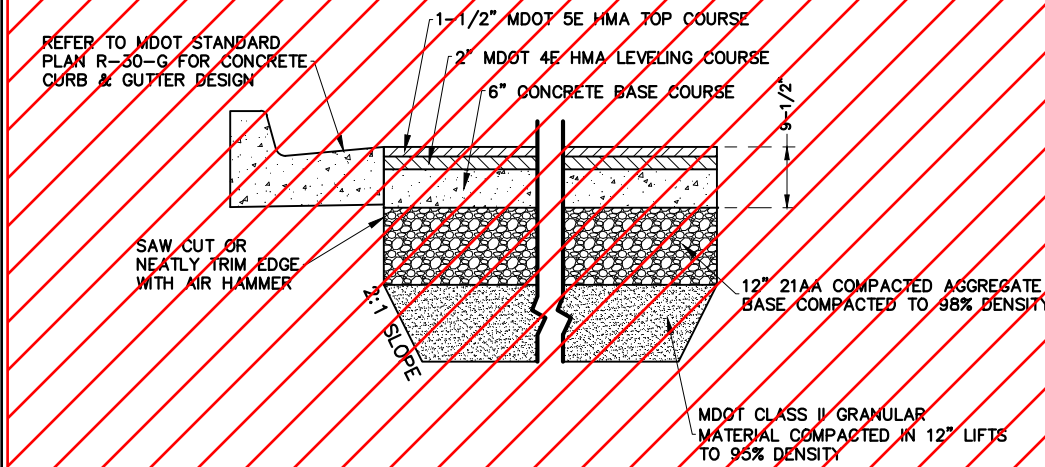
APPLIES TO:  
 CITY MAJOR ROADS  
 COMMERCIAL ROADS  
 HIGH VOLUME ROADS



- NOTE:
- \*SS-1H @ 0.10/GAL/SYD BETWEEN LIFTS
  - PERFORMANCE GRADE BINDER TO BE USED: PG 64-28

### ASPHALT PAVEMENT WITH CONCRETE BASE DETAIL

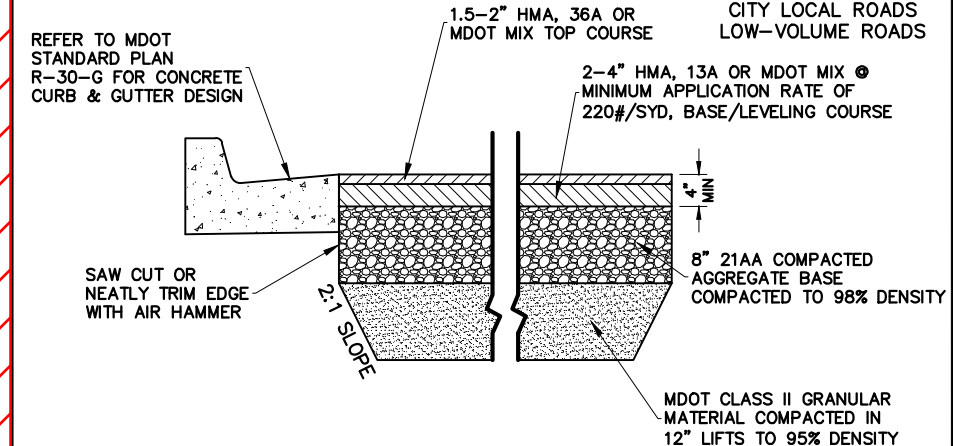
APPLIES TO:  
 CITY MAJOR ROADS  
 COMMERCIAL ROADS  
 HIGH VOLUME ROADS



- NOTE:
- \*SS-1H @ 0.10/GAL/SYD BETWEEN LIFTS
  - PERFORMANCE GRADE BINDER TO BE USED: PG 64-28

### RESIDENTIAL / LOW TRAFFIC VOLUME ROAD ASPHALT PAVEMENT DETAIL

APPLIES TO:  
 RESIDENTIAL ROADS  
 CITY LOCAL ROADS  
 LOW-VOLUME ROADS



- NOTE:
- \*SS-1H @ 0.10/GAL/SYD BETWEEN LIFTS
  - PERFORMANCE GRADE BINDER TO BE USED: PG 64-28

PAVEMENT CUT / PATCHING DETAILS

DEPARTMENT OF PUBLIC SERVICES - Engineering  
**CITY OF KALAMAZOO**  
 STANDARD DETAILS - SHEET 3  
 CITY OF KALAMAZOO

DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	01/01/2025

CUT OR PATCH DETAILS

IF PAVEMENT CUT EXTENDS INTO LANE MORE THAN 25% (3FT FOR A TYPICAL LANE WIDTH) THEN...  
 · MILL & REPAVE FULL LANE WIDTH  
 · MILLING SHOULD EXTEND THE FILL WIDTH OF THE LANE AND 2FT PAST THE CUT AREA TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA  
 · EXAMPLES 1-4

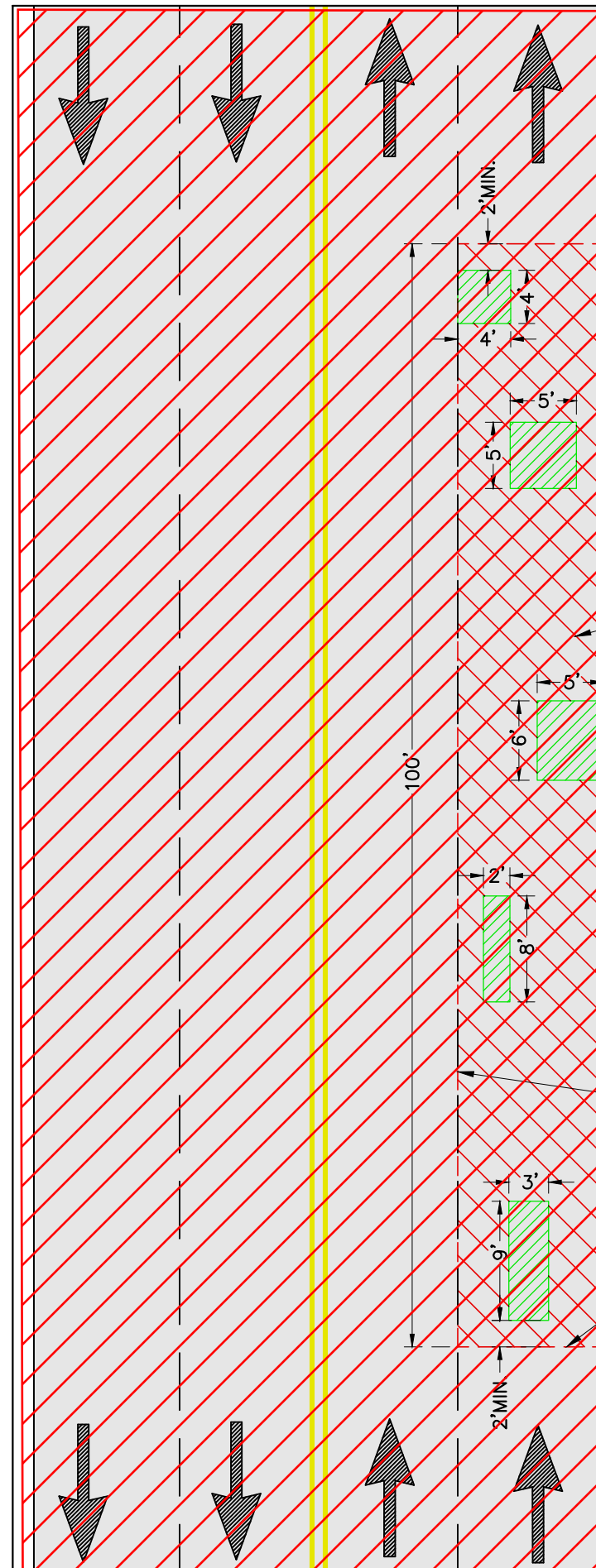
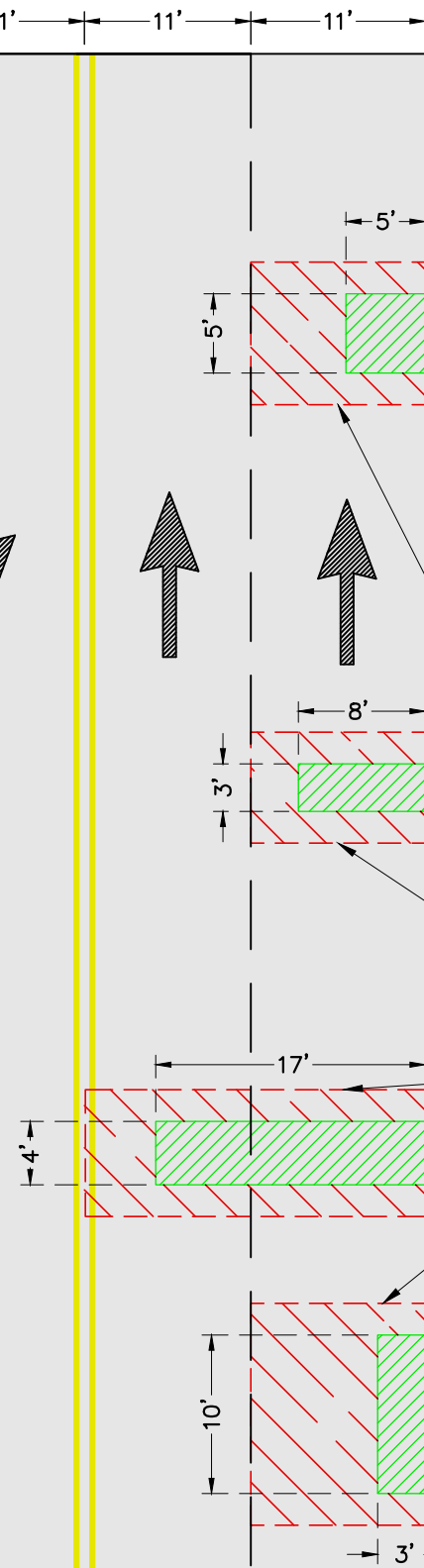
IF PAVEMENT CUT IS GREATER THAN OR EQUAL TO 9SFT IN AREA (3FTX3FT TYPICAL) THEN...  
 · MILL & REPAVE FULL LANE WIDTH  
 · MILLING SHOULD EXTEND THE FILL WIDTH OF THE LANE AND 2FT PAST THE CUT AREA TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA  
 · EXAMPLES 1, 3, & 4

IF PAVEMENT CUT EXTENDS ACROSS MULTIPLE LANES THEN...  
 · MILL & REPAVE THE FULL WIDTH OF EACH LANE THE CUT COMES INTO - EVEN IF IT ONLY PARTIALLY GOES INTO AN ADJOINING TRAVEL LANE  
 · MILLING SHOULD EXTEND THE FILL WIDTH OF THE LANE(S) AND 2FT PAST THE CUT AREA TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA  
 · EXAMPLE 3

IN AREAS WITH MULTIPLE CUTS, CONTACT THE CITY OF KALAMAZOO RIGHT OF WAY COORDINATOR PRIOR TO RESTORATION. RIGHT OF WAY COORDINATOR WILL DETERMINE THE BEST APPLICATION FOR THE AREA.

EDGES SHOULD BE SAW CUT IN A CLEAN LINE SO THEY ARE PARALLEL OR PERPENDICULAR TO TRAFFIC

1.5" MILL & RESURFACE FULL LANE WIDTH & 2' BEYOND THE OUTSIDE OF THE PATCH AREA



CUT OR PATCH DETAILS

IF PAVEMENT CUTS EQUAL 5 OR MORE IN A 100 FT LINEAR LENGTH OF PAVEMENT OR THE TOTAL CUT AREAS EQUAL 100SFT OR MORE THEN...  
 · MILLING SHOULD EXTEND THE FILL WIDTH OF THE LANE AND 2FT PAST THE FURTHEST CUT AREAS TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA

IF PAVEMENT CUTS EXTEND ACROSS MULTIPLE LANES THEN...  
 · FOLLOW THE MILLING & RESURFACING GUIDANCE ABOVE ACROSS ALL AFFECTED LANES

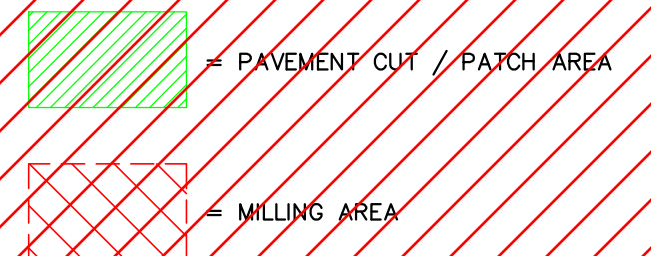
MILL & RESURFACE FULL LANE WIDTH

IN AREAS WITH MULTIPLE CUTS, CONTACT THE CITY OF KALAMAZOO RIGHT OF WAY COORDINATOR PRIOR TO RESTORATION. RIGHT OF WAY COORDINATOR WILL DETERMINE THE BEST APPLICATION FOR THE AREA.

114 SQ FT

EDGES SHOULD BE SAW CUT IN A CLEAN LINE SO THEY ARE PARALLEL OR PERPENDICULAR TO TRAFFIC

1.5" MILL & RESURFACE FULL LANE WIDTH & 2' BEYOND THE OUTSIDE OF THE PATCH AREA



PAVEMENT CUT / PATCHING DETAILS

DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	01/01/2025

CUT OR PATCH DETAILS

IF PAVEMENT CUTS EQUAL 4 OR MORE IN A 100 FT LINEAR LENGTH OF PAVEMENT AND THE TOTAL CUT AREAS EQUAL 150SFT OR MORE THEN...  
 MILLING SHOULD EXTEND THE FULL WIDTH OF THE LANE AND 2FT PAST THE FURTHEST CUT AREAS TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA

IF PAVEMENT CUTS EXTEND ACROSS MULTIPLE LANES THEN...  
 FOLLOW THE MILLING & RESURFACING GUIDANCE ABOVE ACROSS ALL AFFECTED LANES

IN AREAS WITH MULTIPLE CUTS, CONTACT THE CITY OF KALAMAZOO RIGHT OF WAY COORDINATOR PRIOR TO RESTORATION. RIGHT OF WAY COORDINATOR WILL DETERMINE THE BEST APPLICATION FOR THE AREA.

187 SQ FT

MILL & RESURFACE FULL LANE WIDTH

 = PAVEMENT CUT / PATCH AREA

 = MILLING AREA

EDGES SHOULD BE SAW CUT IN A CLEAN LINE SO THEY ARE PARALLEL OR PERPENDICULAR TO TRAFFIC

CUT OR PATCH DETAILS

IF PAVEMENT CUTS EQUAL 2 OR MORE IN A 100 FT LINEAR LENGTH OF PAVEMENT AND THE TOTAL CUT AREAS EQUAL 200SFT OR MORE THEN...  
 MILLING SHOULD EXTEND THE FULL WIDTH OF THE LANE AND 2FT PAST THE FURTHEST CUT AREAS TO A MINIMUM DEPTH OF 1.5" AND REPAVED USING MDOT 5E\_ HMA


IF PAVEMENT CUTS EXTEND ACROSS MULTIPLE LANES THEN...  
 FOLLOW THE MILLING & RESURFACING GUIDANCE ABOVE ACROSS ALL AFFECTED LANES

IN AREAS WITH MULTIPLE CUTS, CONTACT THE CITY OF KALAMAZOO RIGHT OF WAY COORDINATOR PRIOR TO RESTORATION. RIGHT OF WAY COORDINATOR WILL DETERMINE THE BEST APPLICATION FOR THE AREA.

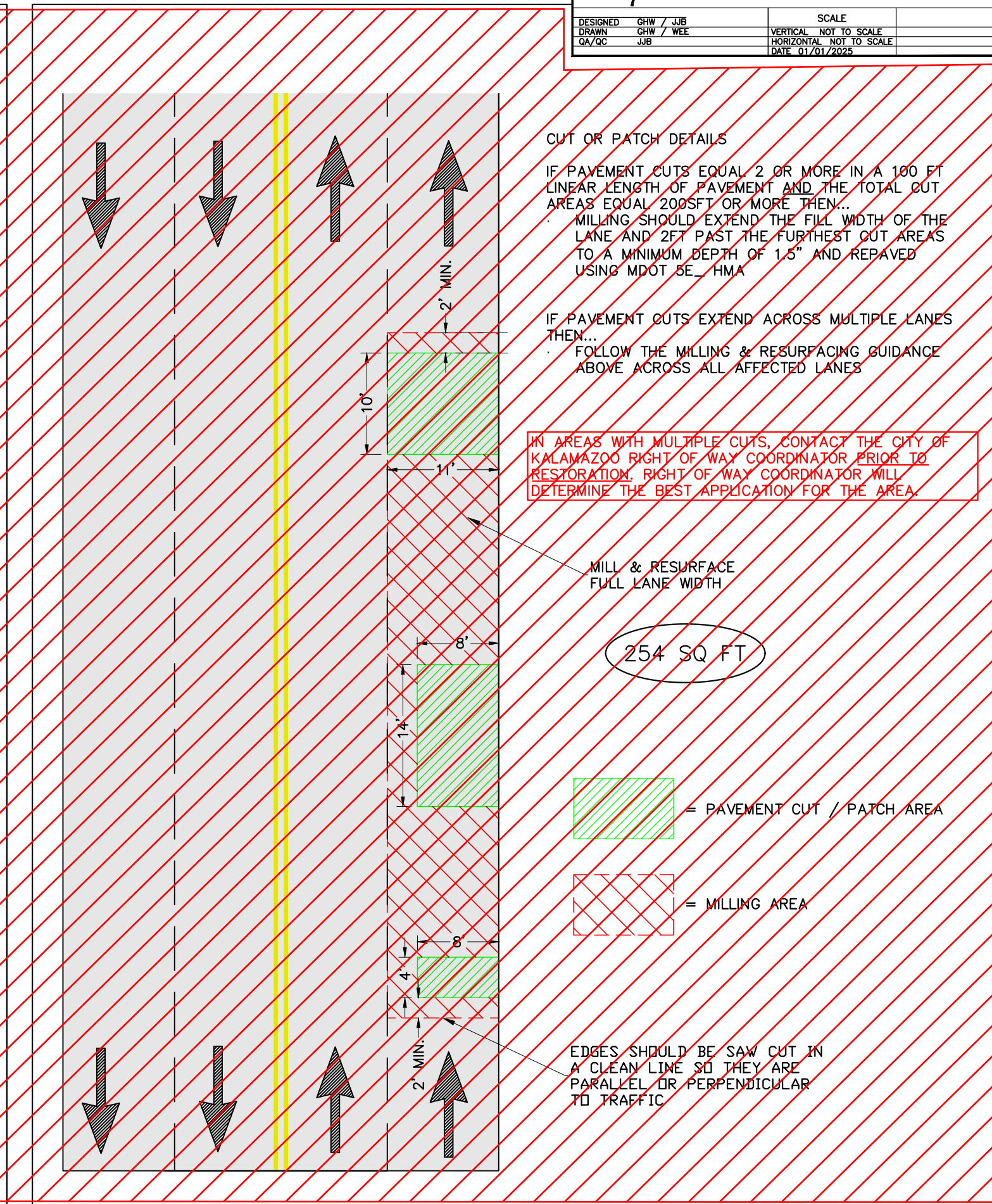
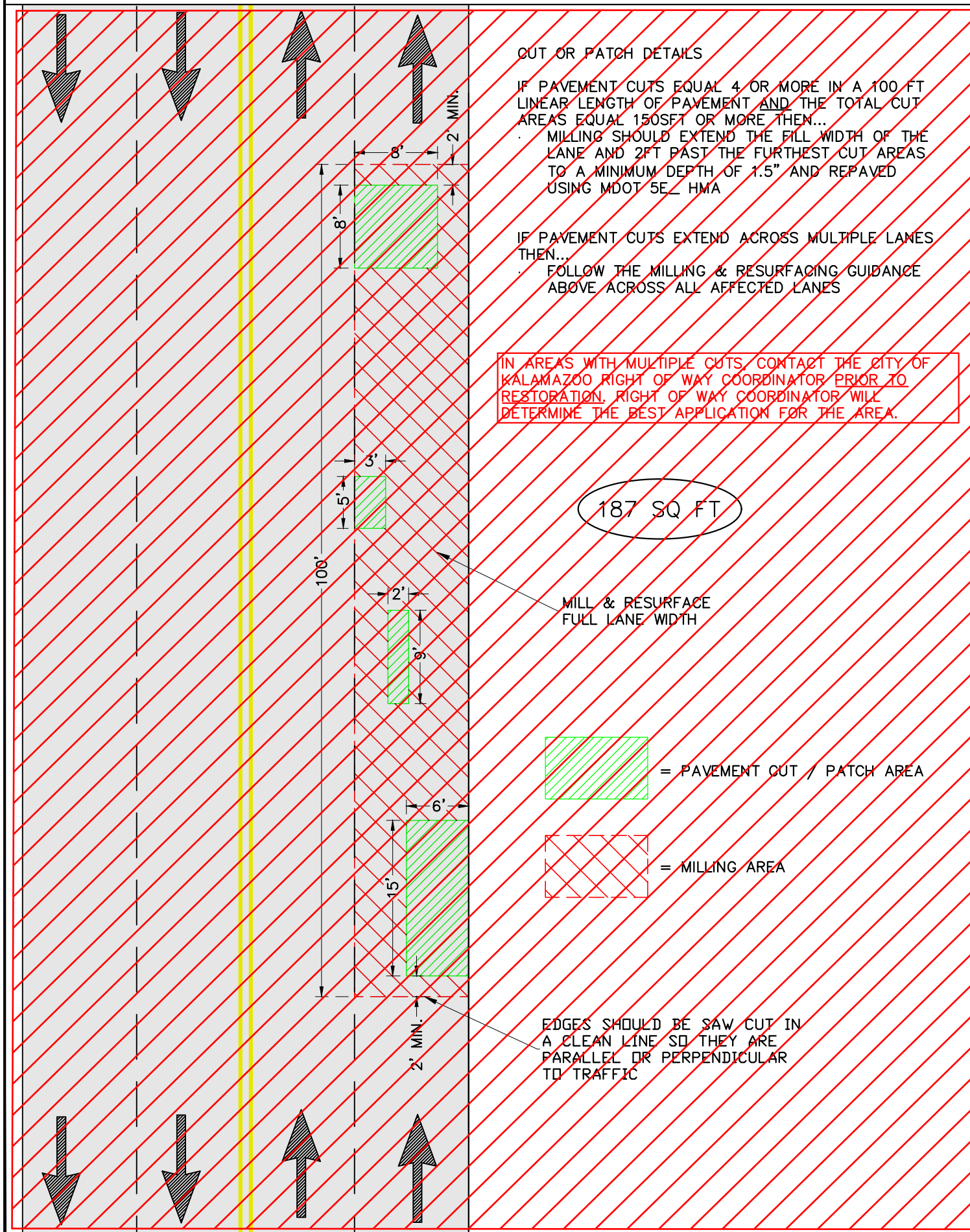
254 SQ FT

MILL & RESURFACE FULL LANE WIDTH

 = PAVEMENT CUT / PATCH AREA

 = MILLING AREA

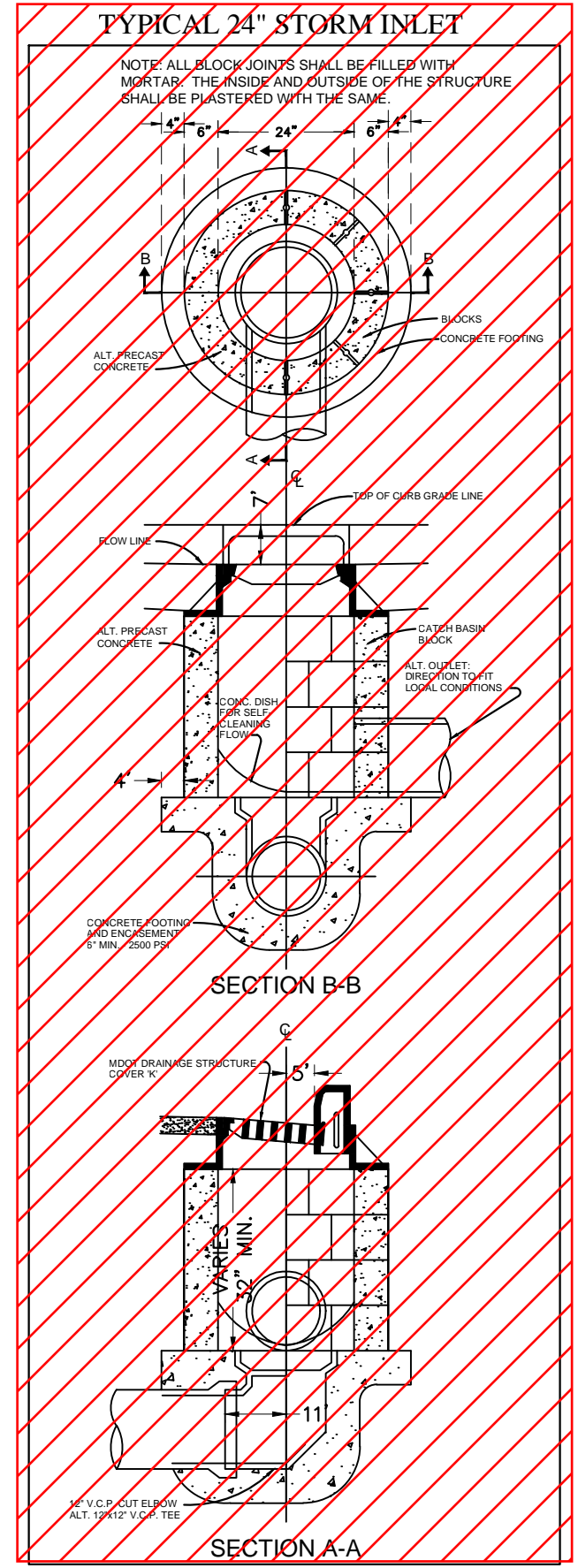
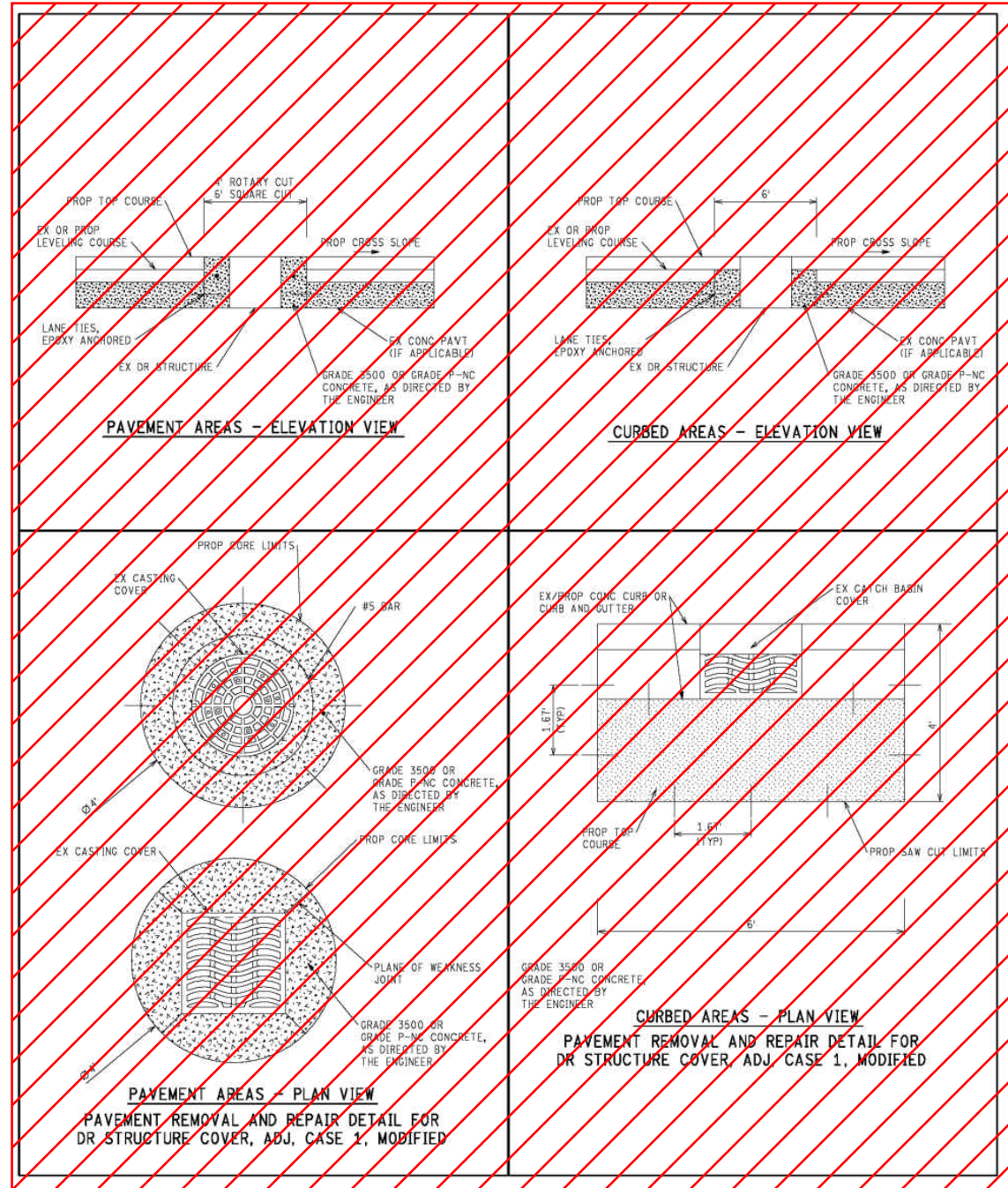
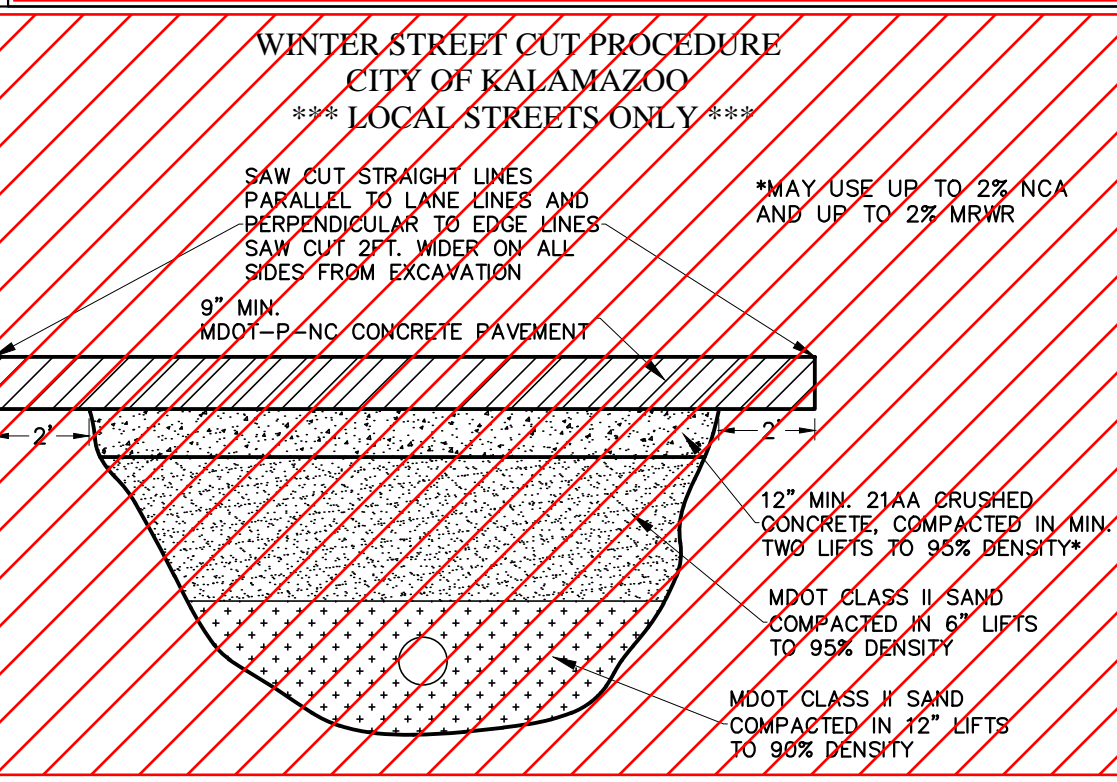
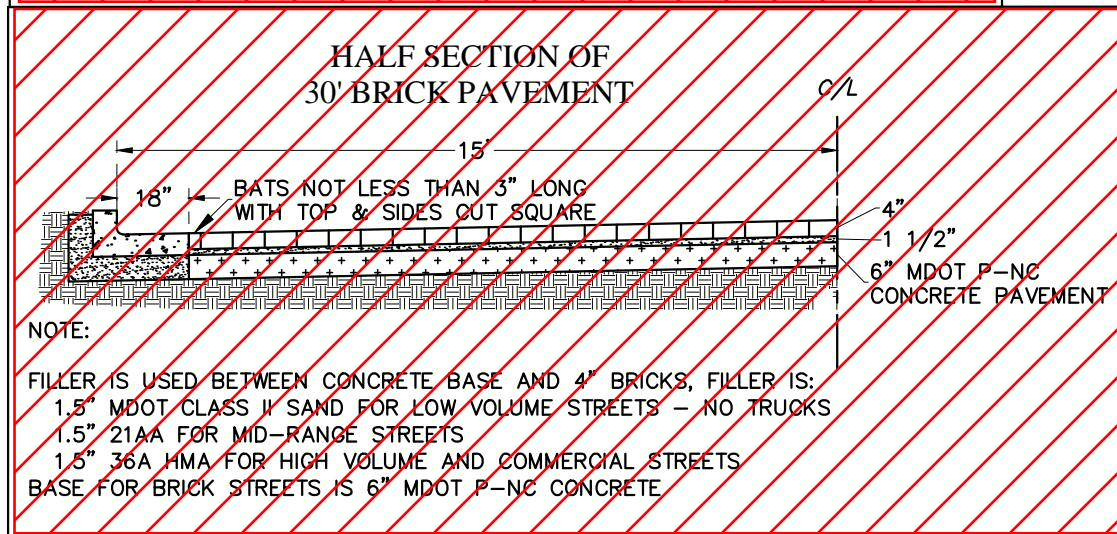
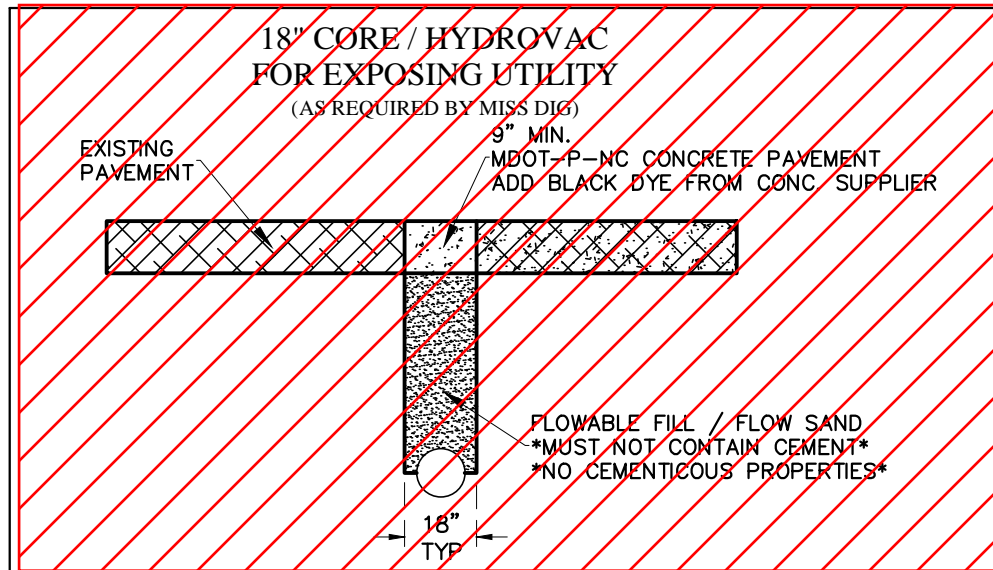
EDGES SHOULD BE SAW CUT IN A CLEAN LINE SO THEY ARE PARALLEL OR PERPENDICULAR TO TRAFFIC




CFS:DMG

3 of 3

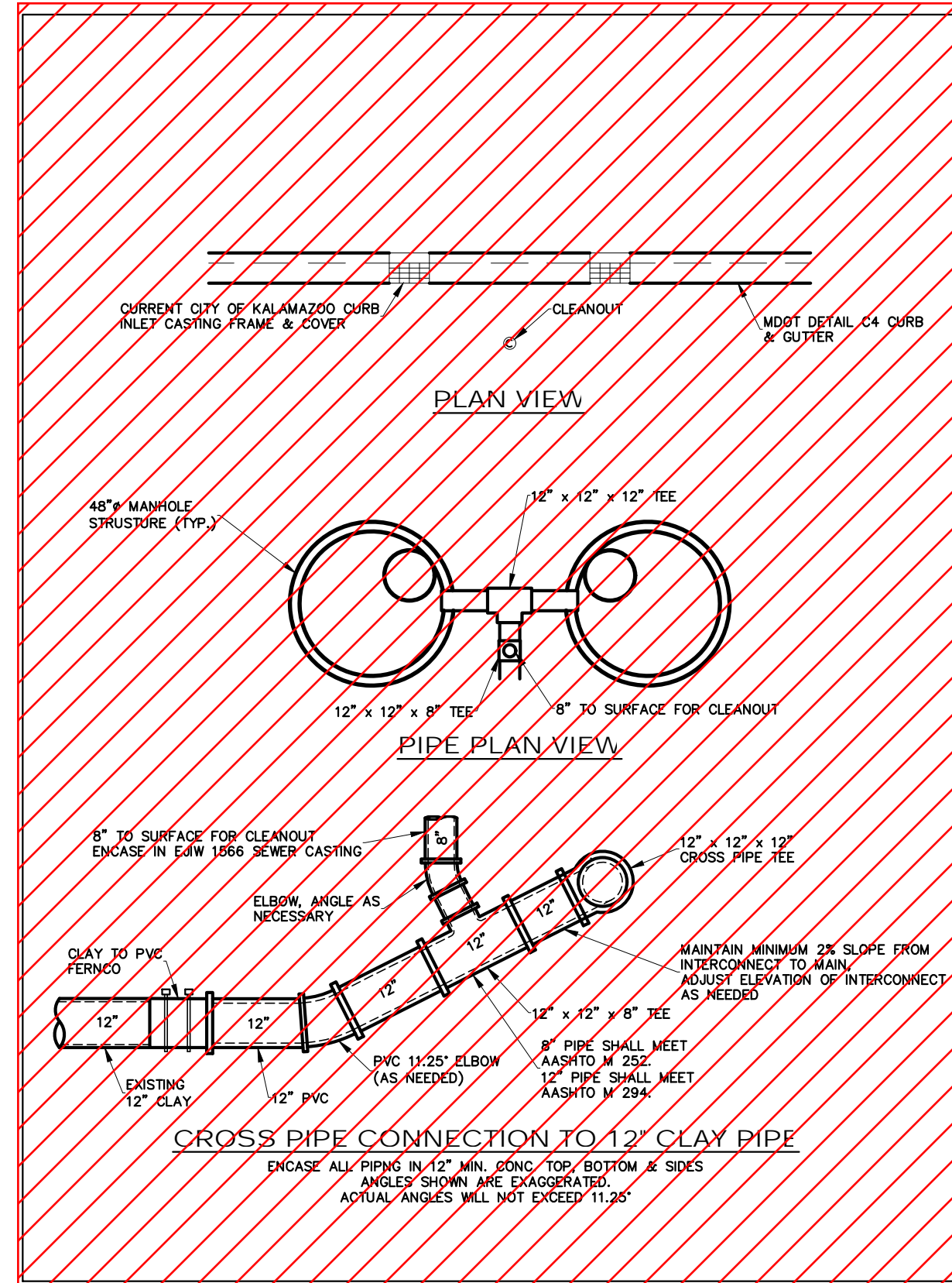
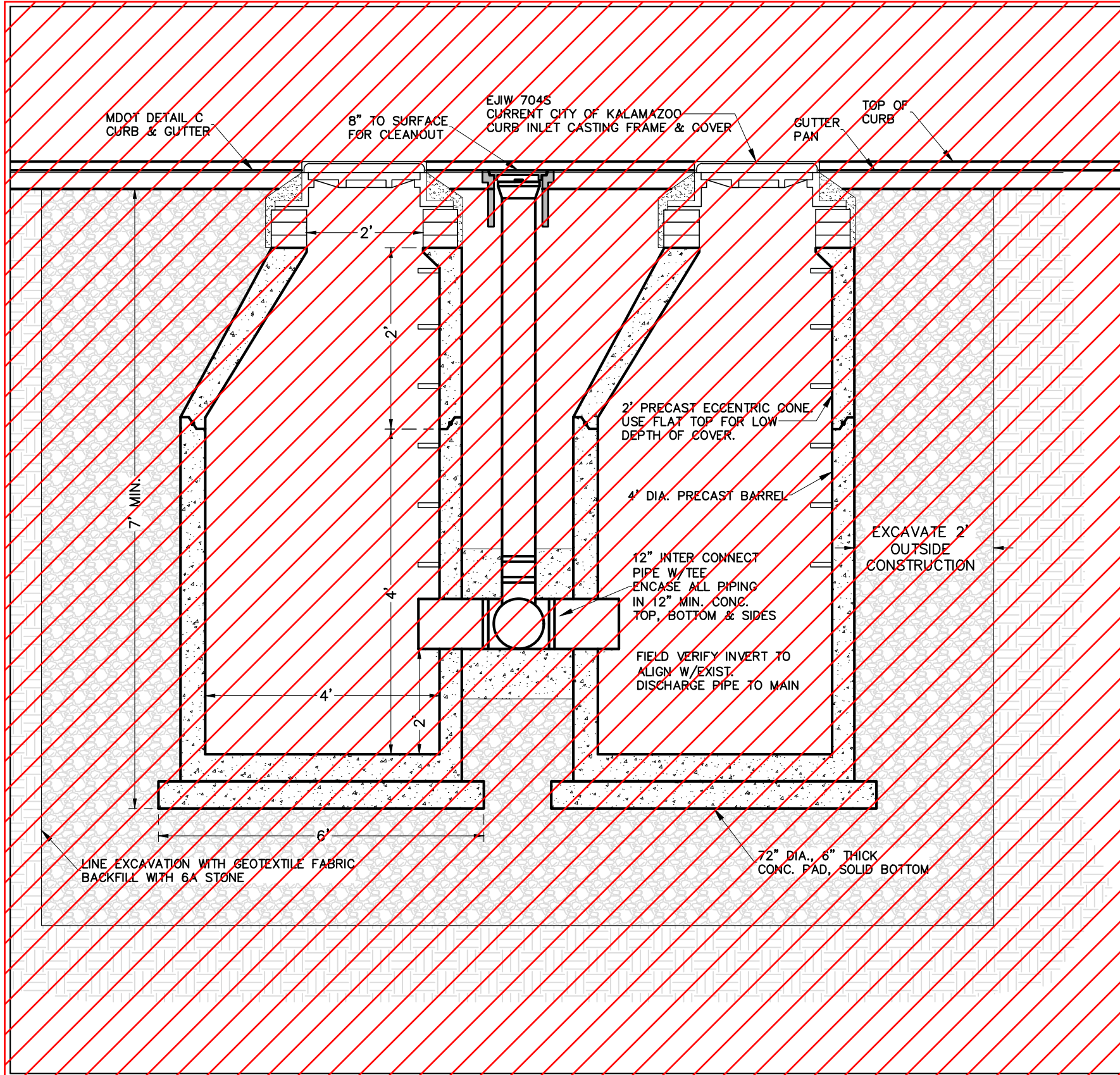
20SP-403A-02  
 03-08-22



STANDARD DETAIL - ST-3-A - KALAMAZOO DOUBLE STORM INLET, MODIFIED


 DEPARTMENT OF PUBLIC SERVICES - Engineering  
**STANDARD DETAILS - SHEET 6**  
 CITY OF KALAMAZOO

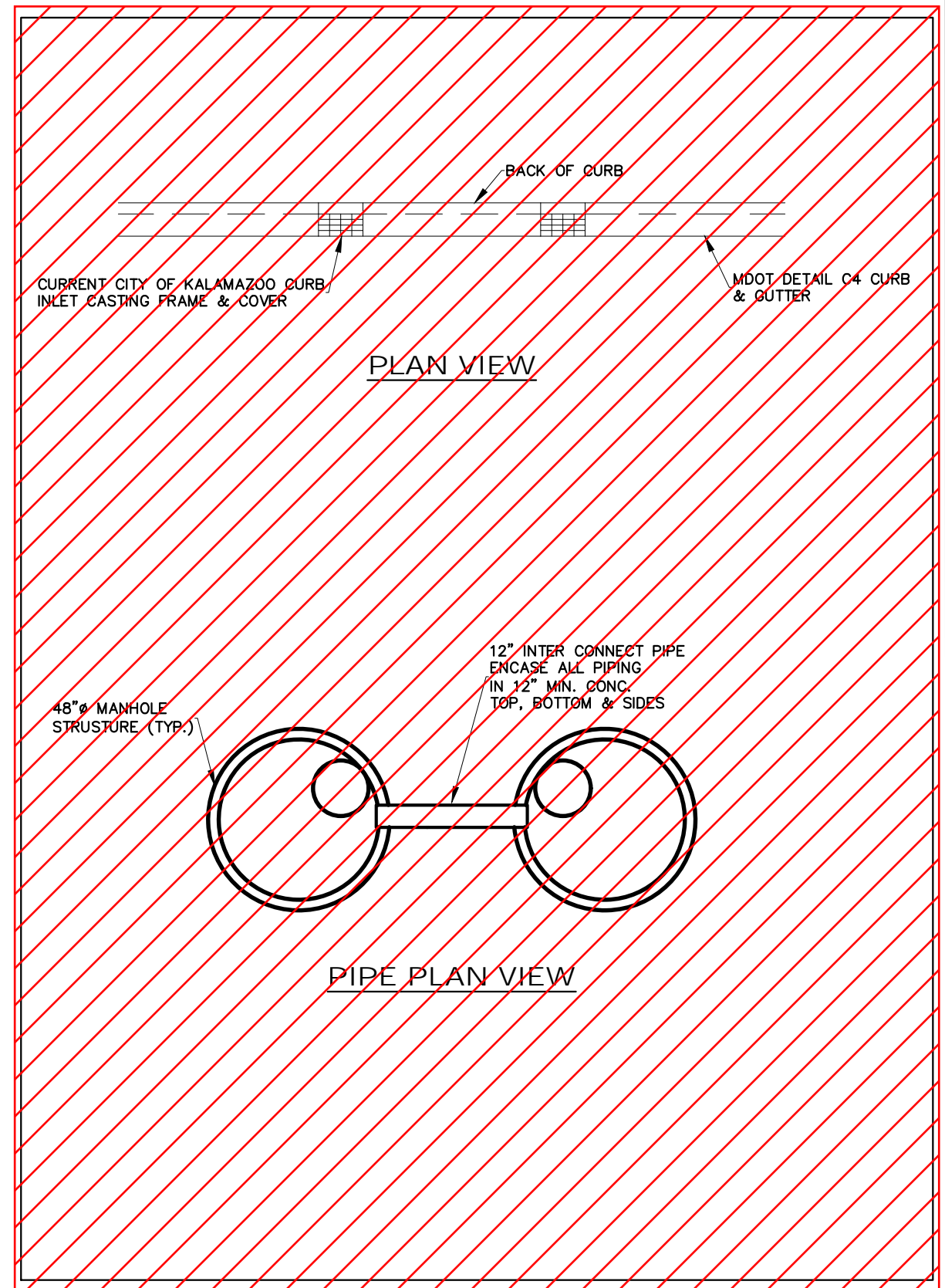
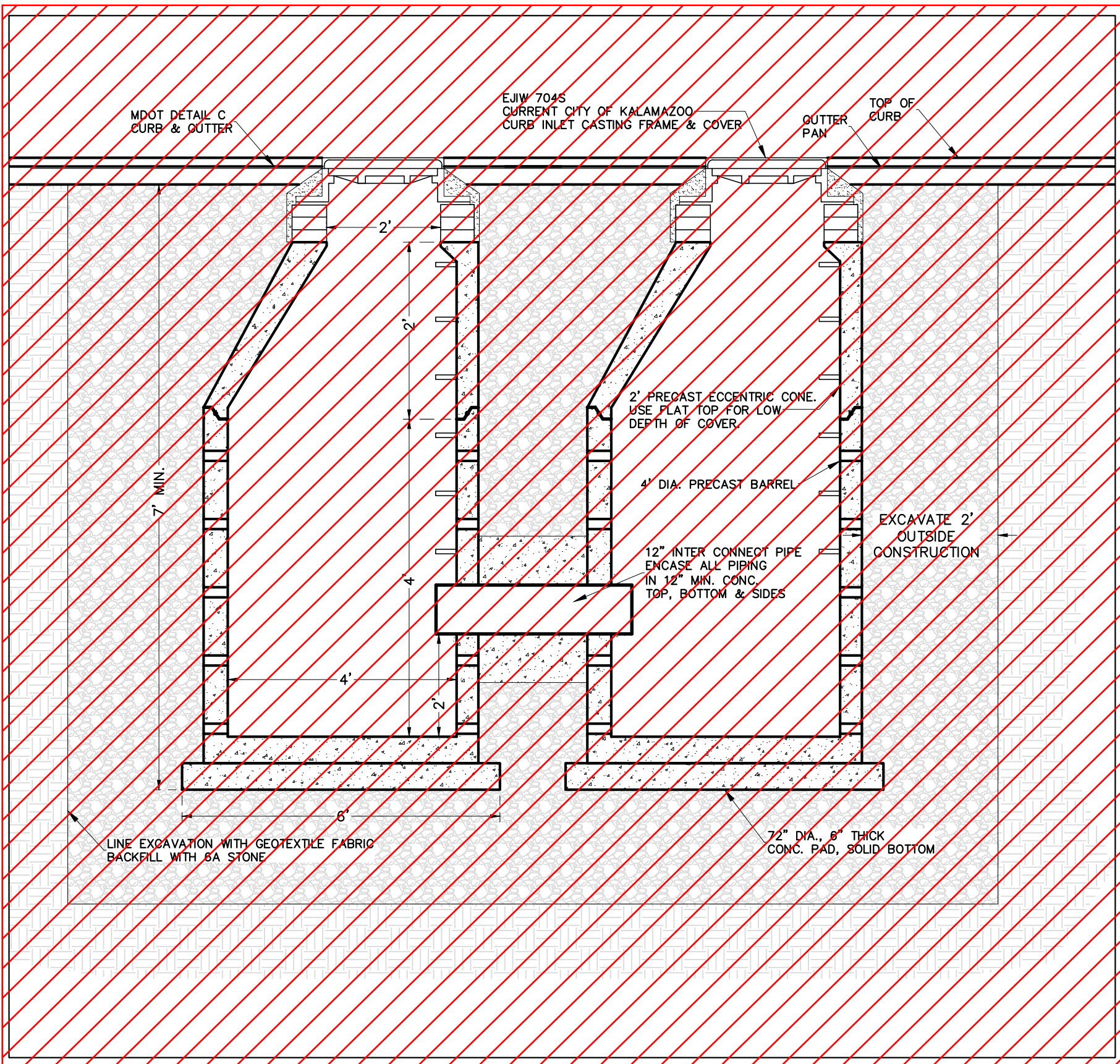
DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	04/30/2025



STANDARD DETAIL - ST-4-A - KALAMAZOO DOUBLE STORM INLET, INFILTRATION

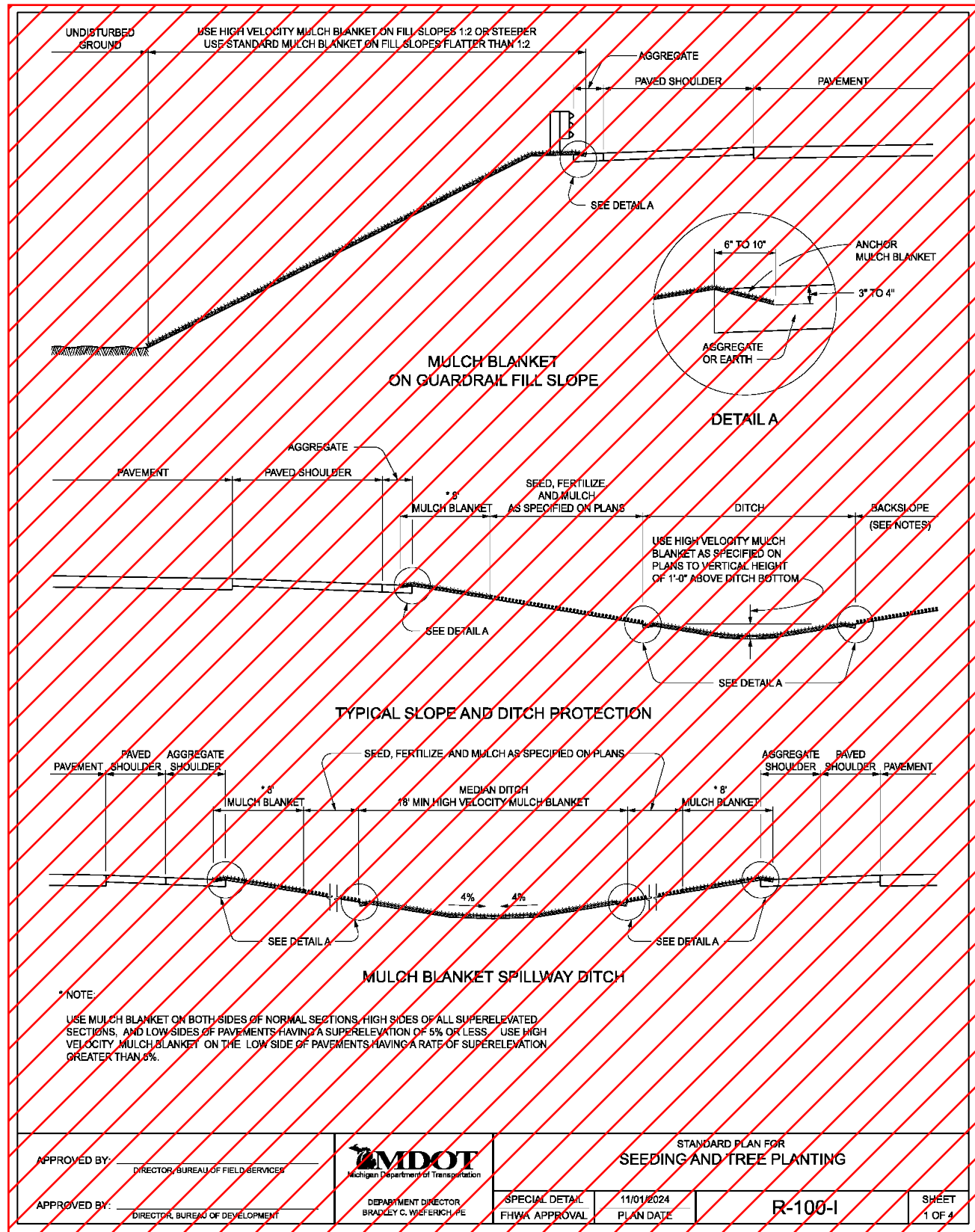
DEPARTMENT OF PUBLIC SERVICES - Engineering  
**Kalamazoo** STANDARD DETAILS - SHEET 7  
 CITY OF KALAMAZOO

DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	04/30/2025

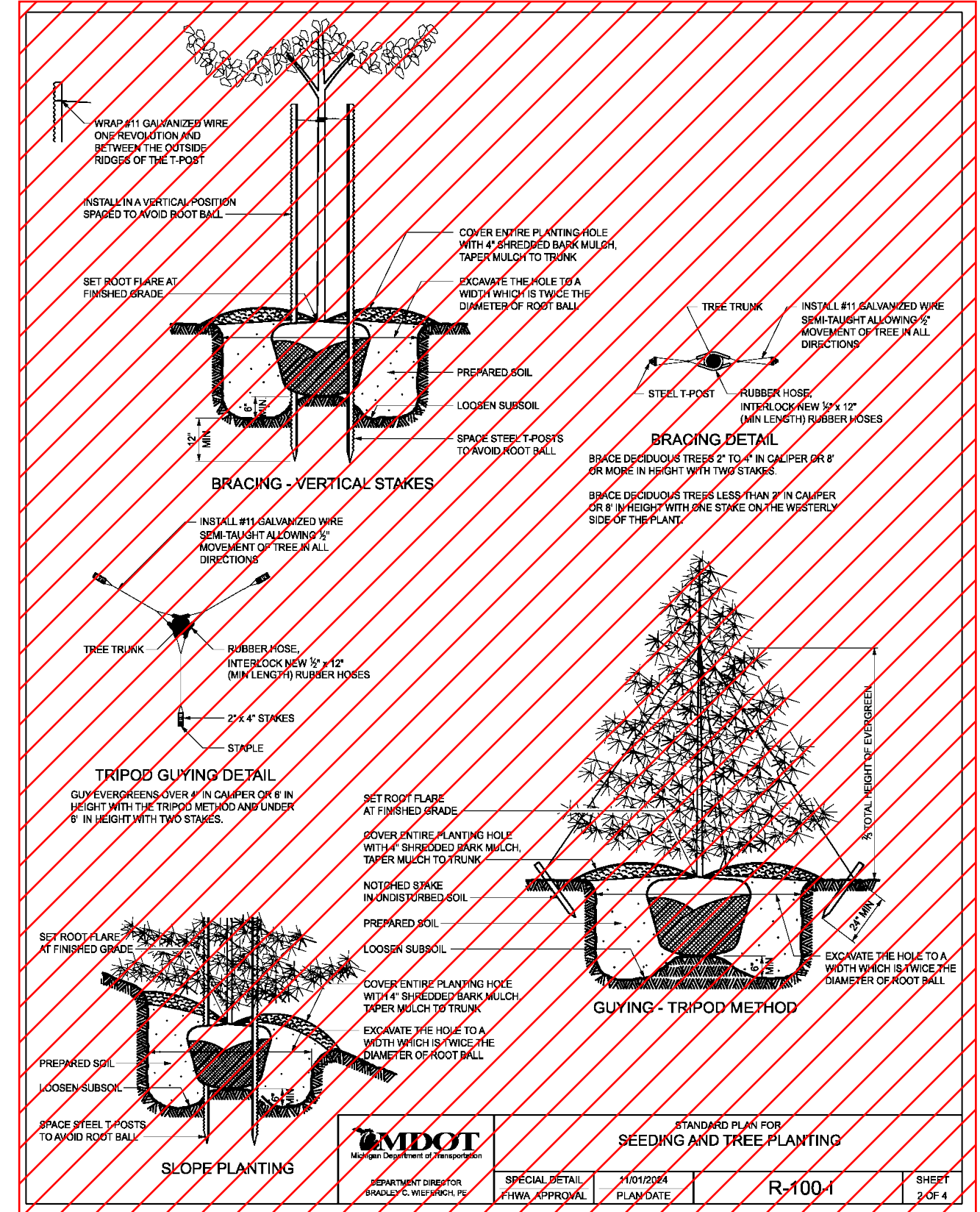


# SEEDING & TREE PLANTING

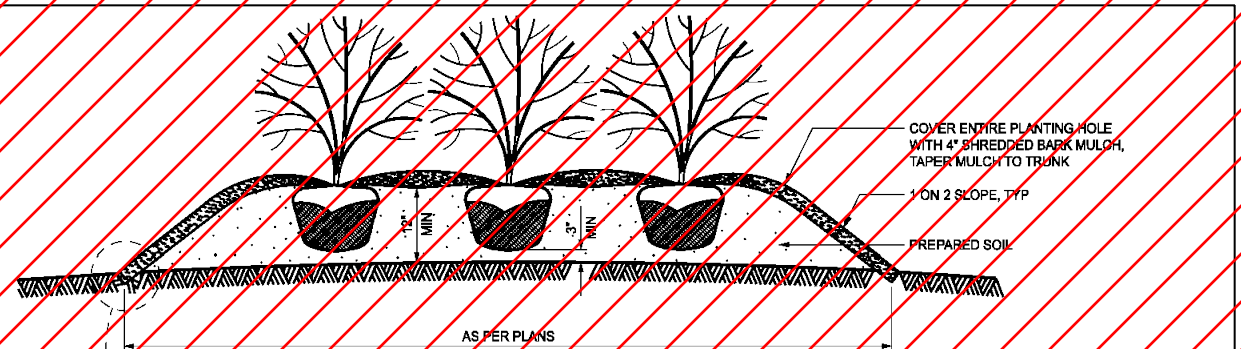
DESIGNED	GHW / JJB	SCALE	
DRAWN	GHW / WEE	VERTICAL	NOT TO SCALE
QA/QC	JJB	HORIZONTAL	NOT TO SCALE
		DATE	04/30/2025



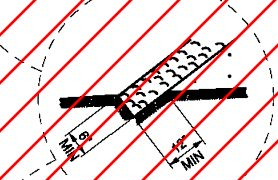
APPROVED BY:	DIRECTOR, BUREAU OF FIELD SERVICES	 Michigan Department of Transportation	STANDARD PLAN FOR SEEDING AND TREE PLANTING	
APPROVED BY:	DIRECTOR, BUREAU OF DEVELOPMENT		DEPARTMENT DIRECTOR BRADLEY C. WIEFERICH, PE	SPECIAL DETAIL FHWA APPROVAL
			R-100-1	SHEET 1 OF 4



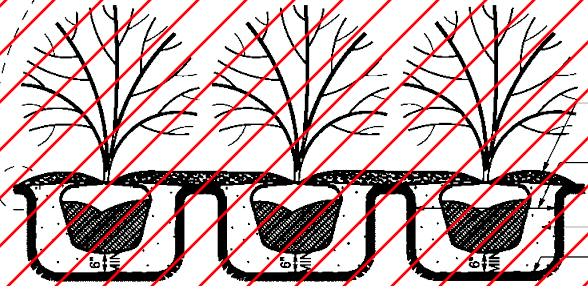
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			R-100-1	SHEET 2 OF 4



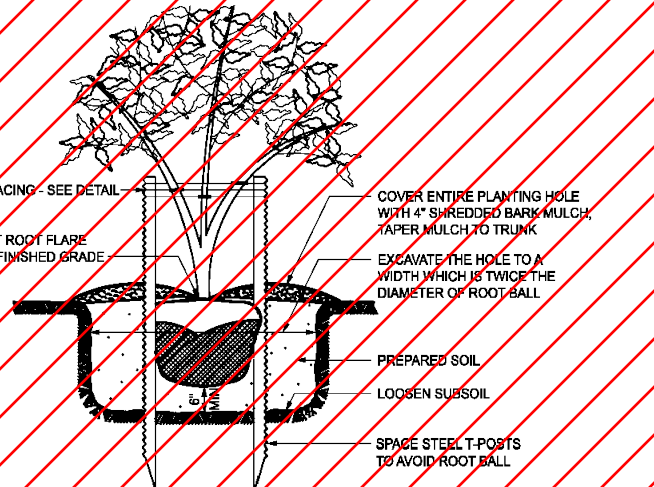
RAISED SHRUB BED DETAIL



SHRUB BED EDGING DETAIL



SHRUB BED DETAIL

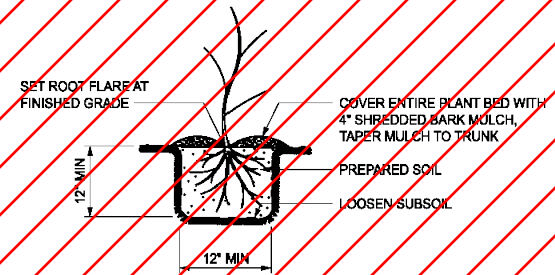


MULTIPLE STEM TREES

INCLUDE SHRUB BEDS IN THE FIRST AND SECOND WATERING AND CULTIVATION.  
 CUT 6" x 12" (MIN) EDGING AROUND THE PERIMETER OF ALL SHRUB BEDS SHOWN ON THE PLANS. SPRAY A NON-PERSISTANT GLYPHOSATE HERBICIDE TO ENTIRE SHRUB BEDS PRIOR TO PLANTING AND BARK PLACEMENT.  
 USE THE PAY ITEM SITE PREPARATION, MAX TO PAY FOR SHRUB BEDS.  
 SET ALL PLANTS PLUMB AND FACE THE BEST SIDE OF THE PLANT IN THE MAIN DIRECTION OF VIEWING.

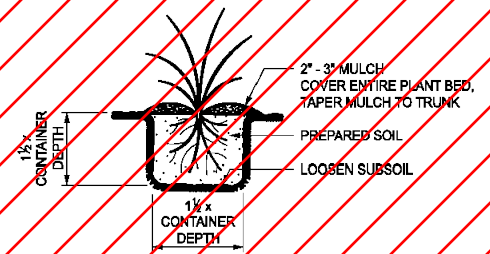
**PLANTING NOTES:**  
 REMOVE ALL EXCAVATED MATERIAL FROM THE SITE IMMEDIATELY.  
 LOOSEN SUBSOIL TO A DEPTH OF 4". LOOSEN EARTH ON SIDES OF PLANT POCKET TO BREAK ANY GLAZING CAUSED BY DIGGING.  
 FILL WITH PREPARED SOIL TO 1/2 THE DEPTH OF THE ROOT BALL AND PACK FIRMLY, THEN PUDDLE WITH WATER.  
 BACKFILL WITH PREPARED SOIL SO THAT AFTER COMPACTION THE AREA IS FLUSH WITH THE SURROUNDING GROUND LEVEL.  
 COVER ENTIRE PLANT POCKET AREA WITH 4" MULCH. PRUNE, BRACE AND GUY.  
 COMPLETELY REMOVE ANY CONTAINERS PLANTS ARE FURNISHED IN BEFORE PLANTING.  
 TREE HEIGHTS ARE SHOWN BEFORE PRUNING. TREE PLANTING DEPTHS ARE SHOWN AFTER SETTLING.

		STANDARD PLAN FOR <b>SEEDING AND TREE PLANTING</b>		
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BARE ROOT PLANTS

**PLANTING BARE ROOT PLANT MATERIAL**  
 REFER TO THE "SPECIAL PROVISIONS FOR BARE ROOT PLANTING" FOR SHIPPING, STORAGE AND HANDLING REQUIREMENTS.  
 KEEP ROOTS IMMERSUED IN WATER PRIOR TO PLANTING TO MAINTAIN ROOT MOISTURE.  
 PRUNE ROOTS AS NECESSARY (TO REMOVE ALL DAMAGED OR BROKEN ROOTS) AND AS REQUIRED BY THE DISTRICT FORESTER OR RESOURCE SPECIALIST.  
 DIG PLANTING HOLES AT LEAST 12" WIDE AND 12" DEEP TO ACCOMMODATE ROOT MASS.  
 SET PLANTS PLUMB WITH THE ROOT SPREAD PUT IN A NATURAL POSITION AT A DEPTH EQUAL TO THE DEPTH AT THE NURSERY.  
 HOLD PLANT FIRMLY AND PUDDLE (NOT TAMP) THE BACKFILL AROUND THE ROOTS WITH WATER. USE SUFFICIENT WATER TO ENSURE SATURATION OF THE BACKFILL, BUT DO NOT OVERWATER, CAUSING A FLOATING SOIL MASS WHICH PREVENTS COMPACTION AND MAY RESULT IN AIR POCKETS ADJACENT TO THE ROOTS. ENSURE BACKFILL IS FLUSH WITH THE GROUND AFTER COMPACTION.  
 COVER ENTIRE PLANT POCKET AREA WITH 4" MULCH AS SHOWN.



PERENNIAL PLANTS

INCLUDE PERENNIAL BEDS IN THE FIRST AND SECOND WATERING AND CULTIVATION.  
 USE FULLY DEVELOPED CONTAINER PLANTS FOR PERENNIALS.  
 EXCAVATE ENTIRE PERENNIAL BED DOWN 12" AND REPLACE WITH 12" OF PREPARED SOIL.  
 USE THE PAY ITEM SITE PREPARATION, MAX TO PAY FOR PERENNIAL BEDS.

**SEEDING NOTES:**  
 THIS STANDARD ILLUSTRATES THE TYPICAL USE OF SEEDING WITH MULCH (AS THESE ITEMS RELATE TO ROADWAY CONSTRUCTION). USE THE PLANS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION TO DETERMINE THE ACTUAL DESIGN AND MATERIALS USED TO CONSTRUCT THE COMPLETE SECTION WHICH INCLUDES SEEDING WITH MULCHING.  
 ITEMS CALLED FOR ON THIS STANDARD ARE OPTIONAL FOR EROSION CONTROL MEASURES. SEE STANDARD PLAN R-96 SERIES.  
 USE HIGH VELOCITY MULCH BLANKET ON ALL DITCHES FOR EROSION CONTROL.  
 SEED, FERTILIZE, AND MULCH WITH MULCH BLANKET THE FIRST 8' BEHIND THE CURB OR SHOULDER IN URBAN MEDIAN AREAS. FOR THE REMAINING AREAS, SEED, FERTILIZE, AND MULCH WITH MULCH BLANKET (OR STANDARD MULCH ANCHORED IN PLACE WITH A MULCH ADHESIVE OR A MULCH NET).  
 SEED, FERTILIZE, AND TOPSOIL (AS SPECIFIED ON PLANS) ALL AREAS WHERE MULCH BLANKET IS CALLED FOR. NO MULCH OR ANCHORING MULCH IS REQUIRED WHERE MULCH BLANKET IS INSTALLED.  
 APPLY THE FRONT SLOPE RESTORATION TREATMENT TO THE BACKSLOPE.

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