PAVEMENT 4% SEED, FERTILIZE, AND MULCH AS SPECIFIED ON PLANS

TYPICAL SLOPE AND DITCH PROTECTION

MULCH BLANKET ON GUARDRAIL FILL SLOPE

MULCH BLANKET SPILLWAY DITCH

* NOTE:
MULCH BLANKET SHALL BE USED ON BOTH SIDES OF NORMAL SECTIONS. HIGH SIDES OF ALL SUPERELEVATED SECTIONS, AND LOW SIDES OF PAVEMENTS HAVING A SUPERELEVATION OF 5% OR LESS. HIGH VELOCITY MULCH BLANKET SHALL BE USED ON THE LOW SIDE OF PAVEMENTS HAVING A RATE OF SUPERELEVATION GREATER THAN 5%.
BRACING DETAIL

BRACE DECIDUOUS TREES 2" TO 4" IN CALIPER OR 8' OR MORE IN HEIGHT WITH TWO STAKES.

BRACE DECIDUOUS TREES LESS THAN 2" IN CALIPER OR 8' IN HEIGHT WITH ONE STAKE ON THE WESHERY SIDE OF THE PLANT.

GUYING - TRIPOD METHOD

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

TREE TRUNK

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

PREPARED SOIL

Loosen Subsoil

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

TRIPOD GUYING DETAIL

GUY EVERGREENS OVER 4" IN CALIPER OR 6' IN HEIGHT WITH THE TRIPODO METHOD AND UNDER 6' IN HEIGHT WITH TWO STAKES.

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

TOP OF ROOT BALL SHOULD BE SET AT OR SLIGHTLY HIGHER THAN SURROUNDING GRADE.

Loosen Subsoil

PREPARED SOIL

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

TREE TRUNK

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

PREPARED SOIL

Loosen Subsoil

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

TREE TRUNK

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

PREPARED SOIL

Loosen Subsoil

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

GUYING - TRIPOD METHOD

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

NOTCHED STAKE IN UNDISTURBED SOIL

PREPARED SOIL

Loosen Subsoil

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

TREE TRUNK

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

PREPARED SOIL

Loosen Subsoil

STEEL T-POSTS SPACED TO AVOID ROOT BALL.

5" - 6" MULCH TO COVER ENTIRE PLANTING HOLE. TAPER MULCH TO TRUNK.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR
SEEDING AND TREE PLANTING

9-30-2014 F.H.W.A. APPROVAL
9-26-2013 R-100-H SHEET
2 OF 4
PLANTING NOTES:
ALL EXCAVATED MATERIAL SHALL BE REMOVED 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 PREPARED SOIL TO 1/2 THE DEPTH OF THE ROOT BALL, PACK FIRMLY, AND PUDDLE WITH WATER.
BACKFILL WITH PREPARED SOIL WHICH, AFTER COMPACTION, IS FLUSH WITH SURROUNDING GROUND LEVEL.
COVER ENTIRE PLANT POCKET AREA WITH 5"-6" MULCH. PRUNE, WRAP, AND BRACE AND GUY.
WHEN PLANTS ARE FURNISHED IN CONTAINERS, CONTAINERS SHALL BE COMPLETELY REMOVED AT THE TIME OF PLANTING.
TREE HEIGHTS ARE SHOWN BEFORE PRUNING. TREE PLANTING DEPTHS ARE SHOWN AFTER SETTLING.
TREES AND SHRUBS SHALL NOT BE PLANTED WITHIN 50' AND 30' RESPECTIVELY OF THE NEAREST EDGE OF METAL - EXCEPT WHERE INACCESSIBLE TO VEHICLES.
**MICHIGAN DEPARTMENT OF TRANSPORTATION**

**PLAN DATE**: F.H.W.A. APPROVAL

**SHEET**: BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR R-96-SERIES.

**CONSTRUCTION AS AN EROSION CONTROL MEASURE.** SEE STANDARD PLAN ITEMS CALLED FOR ON THIS STANDARD MAY ALSO BE USED DURING CONTROL.

ALL DITCHES SHOULD HAVE HIGH VELOCITY MULCH BLANKET FOR EROSION ADHESIVE OR WITH A MULCH NET. MULCH BLANKET OR STANDARD MULCH ANCHORED IN PLACE WITH A MULCH NET FROM CURB IN THE TURN LANE FOR SHADE AND INTERMEDIATE TREES.

THE REMAINING AREAS WILL BE SEEDED, FERTILIZED, AND MULCHED WITH MULCH BLANKET. THE FIRST 6' BEHIND THE CURB OR SHOULDER IN URBAN MEDIAN AREAS MUST BE A MINIMUM OF 150' FROM CENTERLINE OF CROSSROADS.

MEDIAN PLANTING

**NOT TO SCALE**

**BARE ROOT PLANTS**

**PLANTING BARE ROOT PLANT MATERIAL**

REFER TO THE "SPECIAL PROVISIONS FOR BARE ROOT PLANTING" FOR SHIPPING, STORAGE AND HANDLING REQUIREMENTS.

MAINTAIN ROOT MOISTURE BY KEEPING ROOTS IMMERSED IN WATER PRIOR TO PLANTING.

ROOT PRUNE 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 ROOTS SPREAD OUT AT A DEPTH EQUAL TO THE DEPTH AT THE NURSERY.

HOLD PLANT FIRMLY AND PUDDLE (NOT TAM) THE BACKFILL AROUND THE ROOTS WITH WATER. SUFFICIENT WATER SHALL BE USED TO ENSURE SATURATION OF THE BACKFILL, BUT CARE SHOULD BE TAKEN NOT TO OVERWATER, CAUSING A FLOATING SOIL MASS THAT PREVENTS COMPACTION AND MAY RESULT IN AIR POCKETS ADJACENT TO THE ROOTS. BACKFILL SHOULD BE FLUSH WITH THE GROUND AFTER COMPACTION.

COVER ENTIRE PLANT POCKET AREA WITH 5" - 6" MULCH AS SHOWN.

**SEEDING NOTES:**

THIS STANDARD ILLUSTRATES THE TYPICAL USE OF SEEDED WITH MULCH, AS THESE ITEMS RELATE TO ROADWAY CONSTRUCTION. THE ACTUAL DESIGN AND MATERIALS USED TO CONSTRUCT THE COMPLETE SECTION, WHICH INCLUDES SEEDED WITH MULCHING, WILL BE ACCORDING TO THE PLANS AND CURRENT SPECIFICATIONS.

ITEMS CALLED FOR ON THIS STANDARD MAY ALSO BE USED DURING CONSTRUCTION AS AN EROSION CONTROL MEASURE. SEE STANDARD PLAN R-96-SERIES.

ALL DITCHES SHOULD HAVE HIGH VELOCITY MULCH BLANKET FOR EROSION CONTROL.

THE FIRST 6' BEHIND THE CURB OR SHOULDER IN URBAN MEDIAN AREAS WILL BE SEEDED, FERTILIZED, AND MULCHED WITH MULCH BLANKET. THE REMAINING AREAS WILL BE SEEDED, FERTILIZED, AND MULCHED WITH MULCH BLANKET OR STANDARD MULCH - ANCHORED IN PLACE WITH A MULCH ADHESIVE OR WITH A MULCH NET.

ALL AREAS WHERE MULCH BLANKET IS CALLED FOR SHALL BE SEEDED, FERTILIZED, AND TOPSOILED AS SPECIFIED ON PLANS. NO MULCH OR ANCHORING MULCH IS REQUIRED WHERE MULCH BLANKET IS INSTALLED.

BACKSLOPE RESTORATION TREATMENT SHALL BE THE SAME AS THE FRONT SLOPE.

**PERENNIAL PLANTS**

FIRST AND SECOND WATERING AND CULTIVATION SHALL INCLUDE PERENNIAL BEDS.

PERENNIALS ARE TO BE FULLY DEVELOPED TWO YEAR #2 CONTAINER PLANTS.

ENTIRE PERENNIAL BED SHALL BE EXCAVATED DOWN 12" AND REPLACED WITH 12" OF PREPARED SOIL.

PERENNIAL BEDS ARE TO BE PAID FOR BY THE PAY ITEM 'SITE PREPARATION'.

**SEEDING AND TREE PLANTING**

**MICHIGAN DEPARTMENT OF TRANSPORTATION**

**BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR**

**9-30-2014**

**9-26-2013**

**R-100-H**

**SHEET 4 OF 4**