



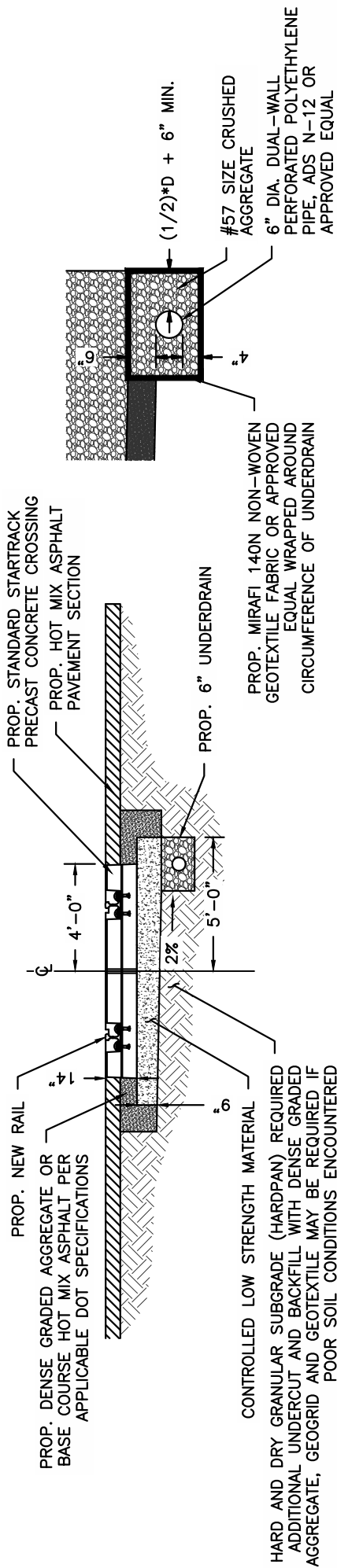
## MIDWEST REGION

### SPECIFICATIONS FOR CONCRETE TUB CROSSINGS

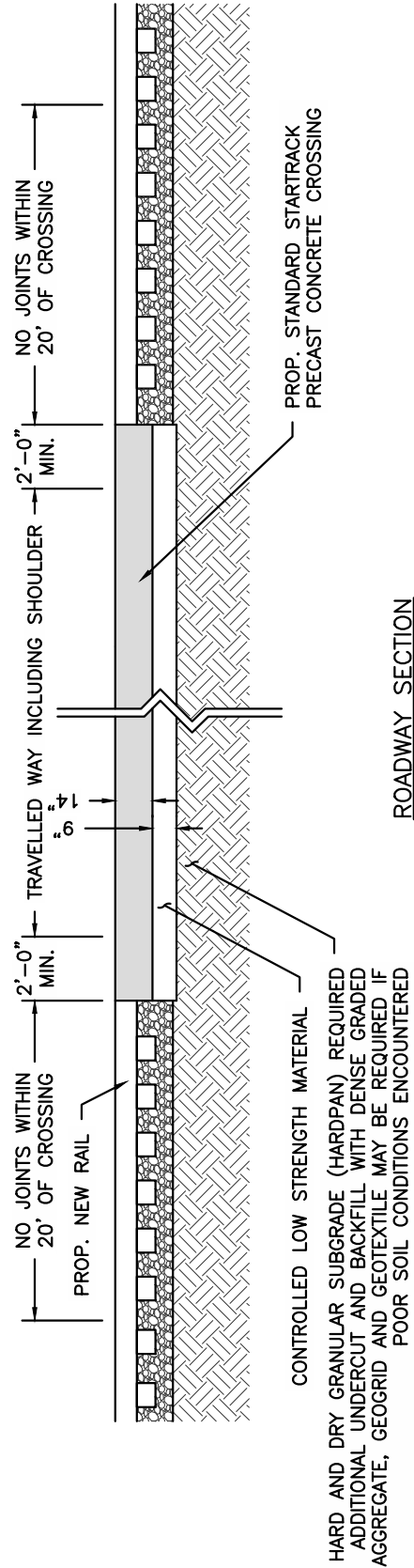
DATE: JANUARY 12, 2017

- CROSSING SURFACE SHALL BE STARTRACK STANDARD CROSSING OR APPROVED EQUAL.
- 9" CONTROLLED LOW STRENGTH MATERIAL (CLSM), MEETING AMERICAN CONCRETE INSTITUTE 229r-13 REPORT ON CLSM WITH MINIMUM  $F_c=500$  PSI, SHALL BE INSTALLED ON TOP OF THE PREPARED SUBGRADE. FORMWORK SHALL BE INSTALLED TO ALLOW THE CONTROLLED LOW STRENGTH MATERIAL TO BE SCREEDED OFF, PROVIDING A SMOOTH AND LEVEL FINISHED SURFACE TO SET THE CONCRETE PANELS ON AND ELIMINATE THE REQUIREMENT FOR A SAND LEVELING COURSE.
- ALL NEW MATERIALS TO AREMA SPECIFICATIONS AS APPLICABLE. EXCEPTION: TIE PLATES MAY BE GOOD QUALITY RELAY MEETING THE SPECIFICATIONS.
- NEW RAIL SHALL BE FULLY WELDED AND EXTEND A MINIMUM OF 20' BEYOND EDGE OF CROSSING WHERE PRACTICAL. NEW RAIL SHALL BE WELDED TO EXISTING RAIL (INCLUDING COMPROMISE WELDS IF APPLICABLE) SO AS TO ELIMINATE ANY SHORT RAIL LENGTHS. ALL WELDS SHALL BE ULTRASONICALLY TESTED.
- TIE PLATES PER AREMA PLAN NO. 8 OR 12 AS APPLICABLE WITH 8 HOLE PUNCH.
- TRACK SPIKES SHALL BE 5/8" x 6". SPIKING PATTERN AS SHOWN IN STANDARD DRAWING ES8050.1.
- 10' OAK AND MIXED HARDWOOD (MIN. 7# CREOSOTE RETENTION) OR APPROVED COMPOSITE CROSSTIES SHALL BE INSTALLED AT EACH END OF CROSSING, SPACED 20' CENTER-TO-CENTER, 5 TIES EACH SIDE.
- APPROVED TIE PLUGGING COMPOUND SHALL BE USED IN LIEU OF TREATED WOOD TIE PLUGS.

- 6" UNDERDRAIN SHALL BE INSTALLED ON ONE SIDE OF CROSSING TO DRAIN AS SHOWN PER THE TYPICAL SECTION.
- BALLAST SHALL BE #4-SIZE GRANITE OR TRAPROCK, OR LIMESTONE OR DOLOMITE FROM AN APPROVED STATE DEPARTMENT OF TRANSPORTATION SOURCE.
- BALLAST PROFILE PER G&W PLAN ES8048.1 LATEST REVISION.
- TRACK MUST BE FULLY BOX-ANCHORED WITH NEW UNIT V DRIVE-ON ANCHORS TO MATCH RAIL FOR 200' FROM EDGE OF CROSSING IN EACH DIRECTION.
- IF THE CROSSING ELEVATION IS LOWER THAN THE ADJACENT ROADWAY, THE TRACK SHALL BE RAISED TO MATCH THE ROADWAY UNLESS IT CANNOT BE REASONABLY ACCOMPLISHED DUE TO OTHER PHYSICAL CONSTRAINTS. THE TRACK SURFACE SHALL BE RUN OFF CONSISTENT WITH MINIMUM FEDERAL RAILROAD ADMINISTRATION (FRA) TRACK SAFETY STANDARDS FOR ONE CLASS OF TRACK HIGHER THAN THE EXISTING TRACK CLASS.
- EXISTING ASPHALT PAVEMENT SHALL BE REMOVED AND REPLACED A MINIMUM OF 4' FROM EDGE OF CROSSING PANEL OR WIDER IF NECESSARY TO ACCOMMODATE THE VIBRATORY SMOOTH DRUM ROLLER.
- ASPHALT PAVEMENT CONSISTING OF A WEARING COURSE, INTERMEDIATE COURSE AND BASE COURSE SHALL BE INSTALLED CONSISTENT WITH STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR THE STATE IN WHICH THE CROSSING IS LOCATED.
- ALL WORK SHALL BE IN ACCORDANCE WITH G&W PROCEDURES FOR THE INSTALLATION, ADJUSTMENT, MAINTENANCE, AND INSPECTION OF CWR, LATEST REVISION.
- ALL WORK SHALL BE IN ACCORDANCE WITH G&W SPECIFICATIONS 390-RAIL WELDING, 500-2 SURFACING, AND 500-3 RAIL, LATEST REVISIONS.
- WHERE THERE IS A CONFLICT BETWEEN SPECIFICATIONS, THE MOST RESTRICTIVE SPECIFICATION SHALL GOVERN.



TRACK TYPICAL SECTION  
NTS



ROADWAY SECTION  
NTS

UNDERDRAIN DETAIL  
NTS