

NOTES:

1. CASING SHALL EXTEND TO THE GREATER OF THE FOLLOWING DISTANCES:
 - A. 2' BEYOND TOE OF SLOPE
 - B. 5' BEYOND CENTERLINE OF DITCH
 - C. MIN. OF 25' WHEN CASING IS SEALED AT BOTH ENDS
2. BORED CROSSINGS SHALL BE PERMITTED AND INSTALLED TO MEET THE REQUIREMENTS OF TENNESSEE DEPARTMENT OF TRANSPORTATION AND/OR LOCAL AUTHORITY.
3. CARRIER PIPE SHALL BE AS REQUIRED BY THE DRAWINGS. CARRIER PIPE SHALL BE CENTERED IN THE CASING PIPE. CARRIER PIPE SHALL BE INSTALLED USING CASING SPACERS. SPACERS SHALL BE PLACED AT PIPE JOINT MIDPOINT AND 1' FROM EACH END OF PIPE JOINT. SEE DETAIL M-02 FOR CASING SPACER AND END SEAL DETAILS.
4. ENDS OF CASING PIPE SHALL BE SEALED UTILIZING SYNTHETIC RUBBER SEALS WITH STAINLESS STEEL BINDING STRAPS.
5. REFER TO SPECIFICATION FOR CASING PIPE THICKNESS AND DIAMETER.
6. CARRIER PIPE SHALL BE RESTRAINED JOINT.

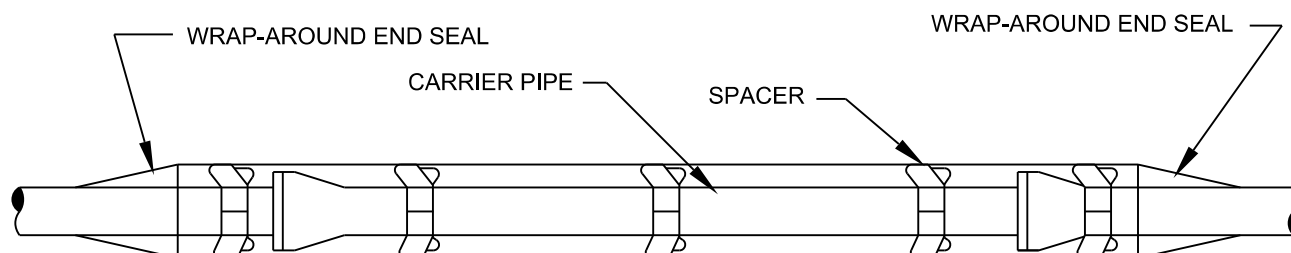


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

TYPICAL BORE AND JACK
FOR HIGHWAYS

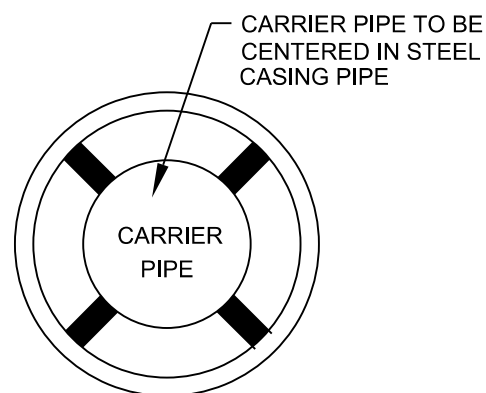
MARCH 2023

DRAWING NO. M-01



STEEL CASING PIPE

SPACERS FOR CARRIER PIPES UP THROUGH 36-INCHES IN DIAMETER SHALL BE INSTALLED WITHIN 1-FOOT ON EACH SIDE OF THE BELL AND IN THE CENTER OF THE JOINTS. IF SPACER IS MORE THAN 1-FOOT FROM END OF CASING PIPE, AN ADDITIONAL SPACER SHALL BE PLACED WITHIN 1-FOOT OF THE END OF THE CASING PIPE. SPACERS TO BE PIPELINE SEAL AND INSULATOR, INC. POLYPROPYLENE CASING SPACER MODEL RANGER II. END SEALS TO BE PIPELINE SEAL AND INSULATOR, INC. WRAP-AROUND (MODEL W)



CASING SPACER INSTALLATION DETAIL

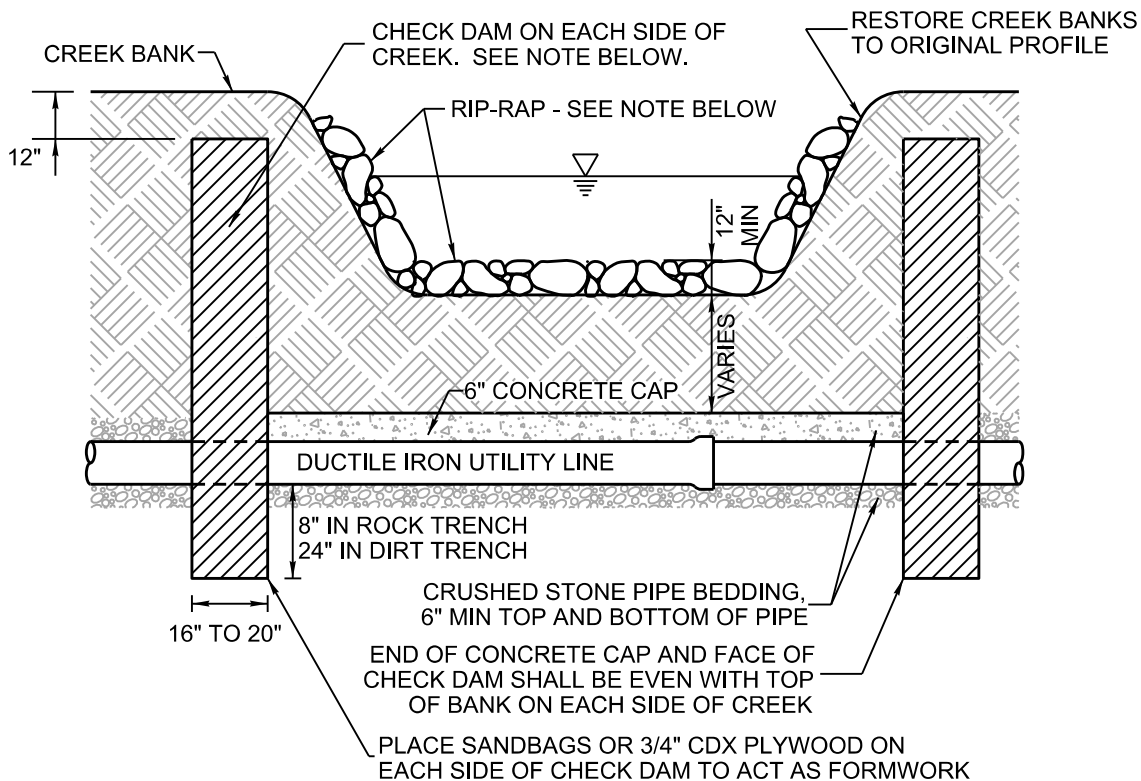


**CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL**

**CASING SPACER AND
END SEAL**

MARCH 2023

DRAWING NO. M-02



NOTES:

1. RIP RAP TO BE MACHINED RIP-RAP, CLASS A-2, VARYING IN SIZE FROM 2 INCHES TO 12 INCHES WITH NO MORE THAN 20% BY WEIGHT BEING LESS THAN 4 INCHES. THE THICKNESS OF THE STONE LAYER SHALL BE 1' MINIMUM.
2. CHECK DAM SHALL BE CONSTRUCTED FROM GENERAL USE FLOWABLE FILL $F'_c > 150$ PSI MIN. OR COMPACTED CLAY / BENTONITE. CHECK DAM WIDTH TO EXTEND 24" EACH SIDE OF PIPE.
3. NO BLASTING IS PERMITTED IN CREEK. ROCK SHALL BE REMOVED BY MEANS OF HYDRAULIC HOE RAM OR ROCK SAW.
4. INSTALL PLASTIC OR ALUMINUM SIGN, 12" SQUARE MINIMUM SIZE, ON GALVANIZED OR POWDER COATED U-CHANNEL SIGN POST WITH CONCRETE BASE ON EACH SIDE OF CREEK BANK. SIGN SHALL READ "UNDERGROUND WATER LINE BELOW. IN CASE OF EMERGENCY CONTACT CITY OF BRENTWOOD, TN AT (615) 371-0080
5. TDEC APPROVAL REQUIRED FOR OPEN - CUT CREEK CROSSINGS.

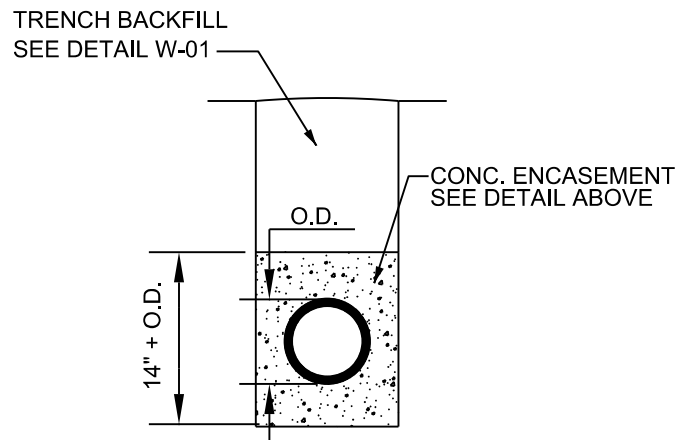
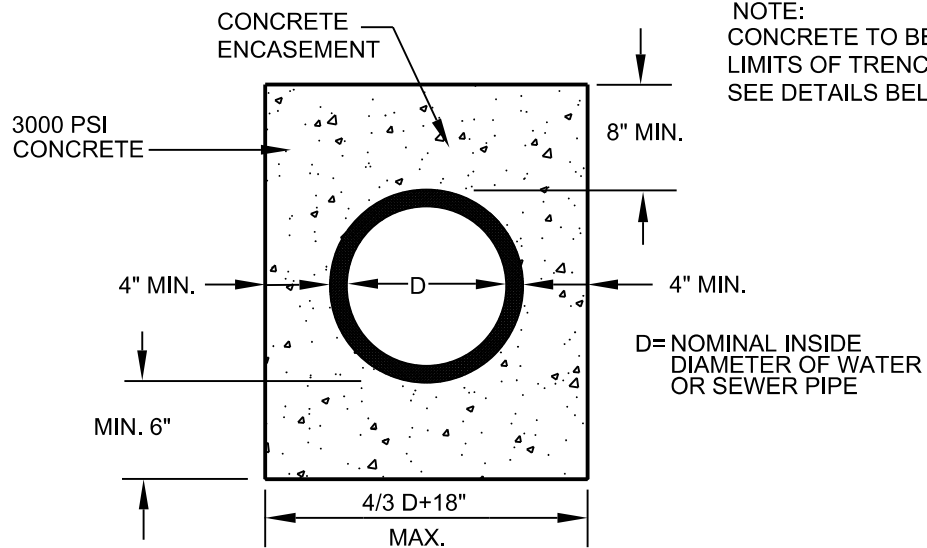


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

TYPICAL OPEN-CUT
CREEK CROSSING

MARCH 2023

DRAWING NO. M-03



STANDARD CONCRETE ENCASEMENT

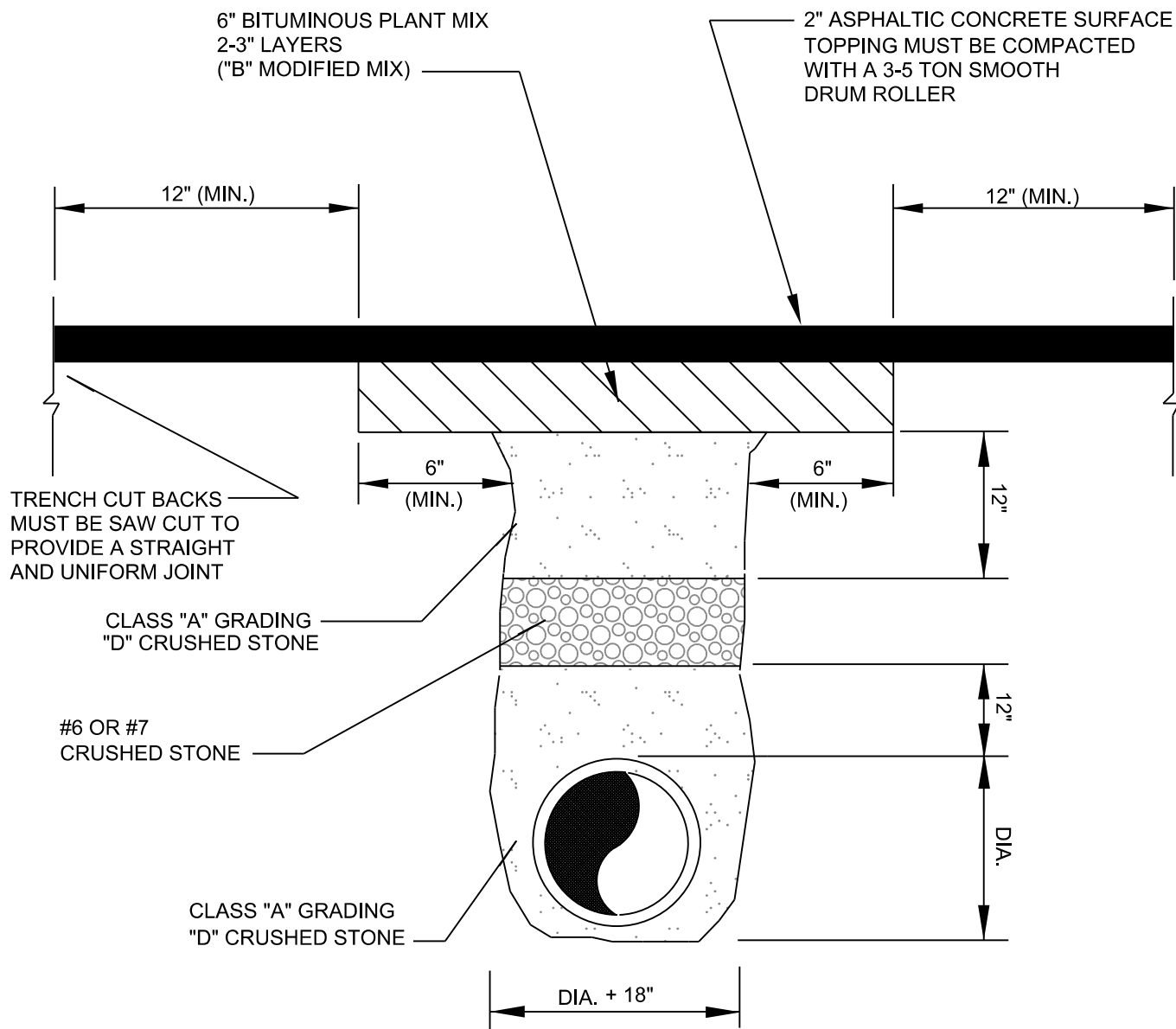


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

CONCRETE PROTECTION
FOR UTILITY LINES

MARCH 2023

DRAWING NO. M-04

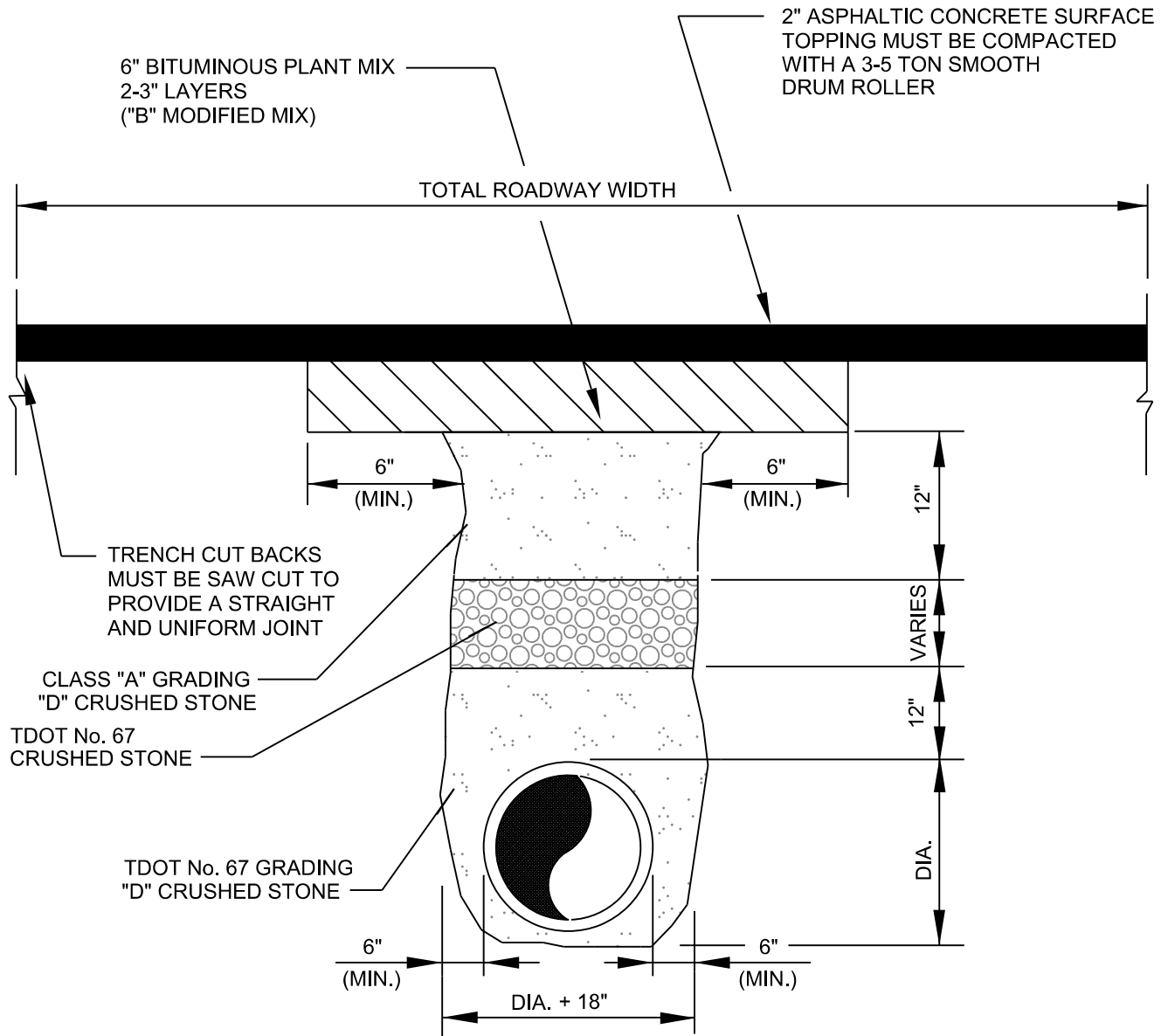


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

STREET REPLACEMENT
TRENCH WIDTH

MARCH 2023

DRAWING NO. M-05

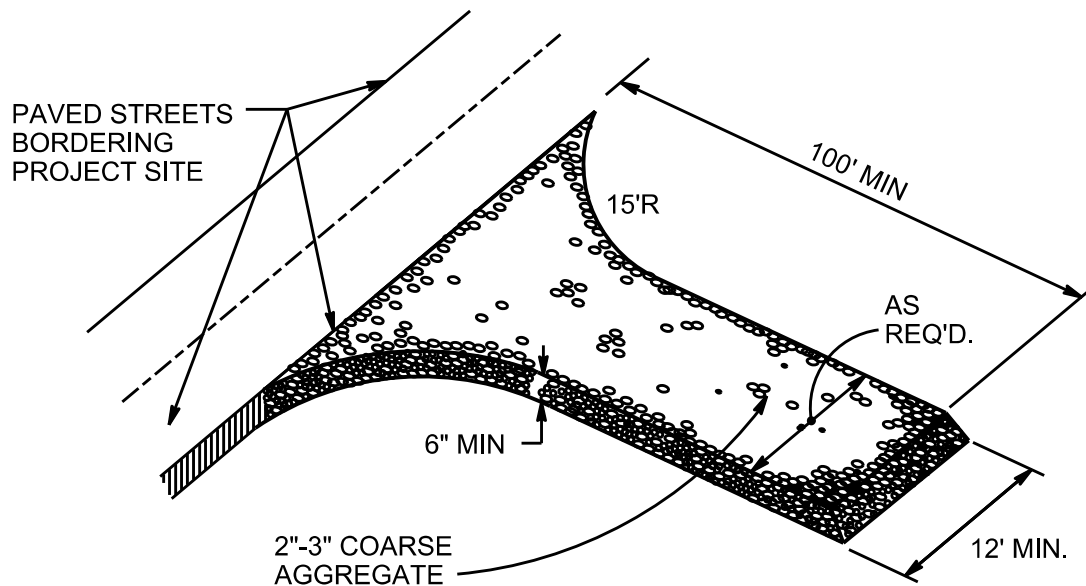


**CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL**

**STREET REPLACEMENT
FULL WIDTH OVERLAY**

MARCH 2023

DRAWING NO. M-06



NOTES:

1. GRAVEL PAD IS REQUIRED TO PROVIDE BUFFER AREA WHERE VEHICLES CAN DROP THEIR MUD AND SEDIMENT TO AVOID TRANSPORTING IT ONTO PAVED STREETS, TO CONTROL EROSION FROM SURFACE RUNOFF, AND TO HELP CONTROL DUST.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

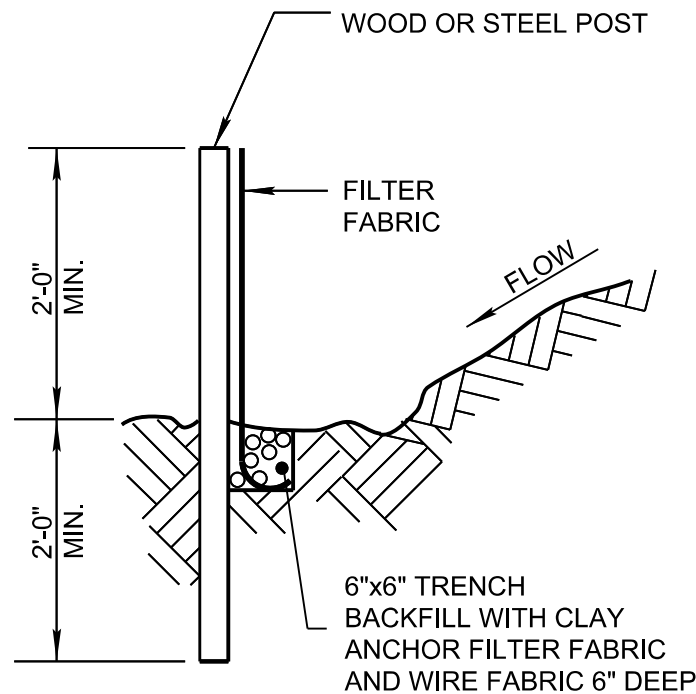


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

TEMPORARY
CONSTRUCTION ENTRANCE

MARCH 2023

DRAWING NO. M-08



NOTES:

1. FILTER FABRIC FENCE TO BE PLACED PRIOR TO START OF ROUGH GRADING.
2. STEEL POSTS SHALL BE APPROVED BY OWNER PRIOR TO USE.
3. WOOD POSTS SHALL BE 2"x 2" MIN., OAK OR SIMILAR HARDWOOD.
4. POSTS SHALL BE SPACED AT 6' INTERVALS.
5. FILTER FABRIC SHALL BE SECURELY BOUND TO POSTS WITH EITHER STAPLES OR WIRE TIES.
6. FILTER FABRIC SHALL BE POLYPROPYLENE FABRIC WITH EQUIVALENT OPENING SIZE (EOS) OF NO.100 SIEVE MIN., NO.40 SIEVE MAX., AS DETERMINED BY CORPS OF ENGINEERS GUIDE SPEC. CW 02215.
7. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.

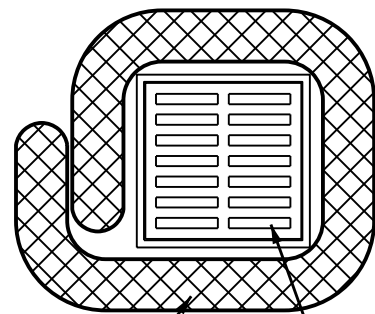


CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

TEMPORARY
SILT FENCE

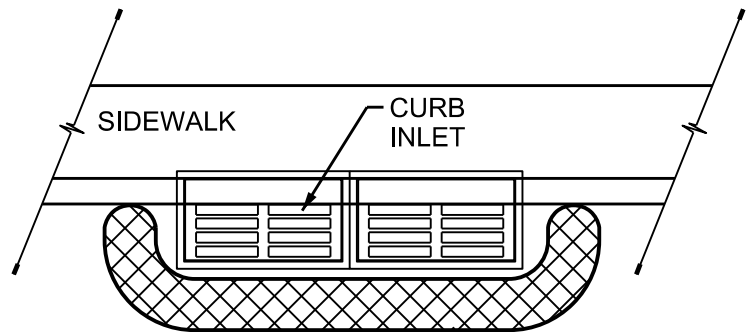
MARCH 2023

DRAWING NO. M-09



STRAW
WATTLE

STORMWATER
INLET



SIDEWALK

CURB
INLET

STRAW
WATTLE

NOTES:

1. STRAW WATTLES SHALL BE MANUFACTURED FROM RICE STRAW AND BE WRAPPED IN A TUBULAR PLASTIC NETTING. THE NETTING SHALL HAVE A STRAND THICKNESS OF 0.03 INCH, AND A KNOT THICKNESS OF 0.055 AND A WEIGHT OF 0.35 OUNCE PER FOOT AND SHALL BE MADE FROM 85% HIGH DENSITY POLYETHYLENE, 14% ETHYL VINYL ACETATE AND 1% COLOR FOR UV INHIBITION. STRAW WATTLES SHALL BE NINE INCHES IN DIAMETER, TWENTY-FIVE FEET LONG AND WEIGH APPROXIMATELY 35 POUNDS.
2. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.



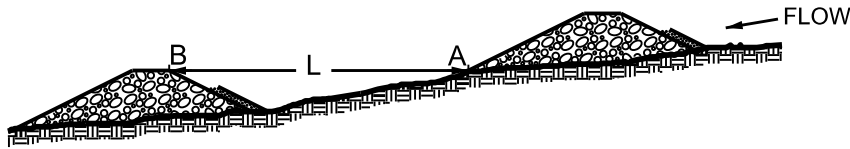
CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL

STRAW WATTLES

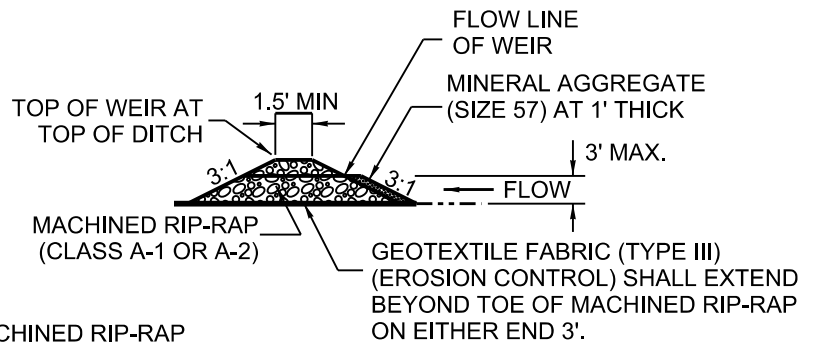
MARCH 2023

DRAWING NO. M-10

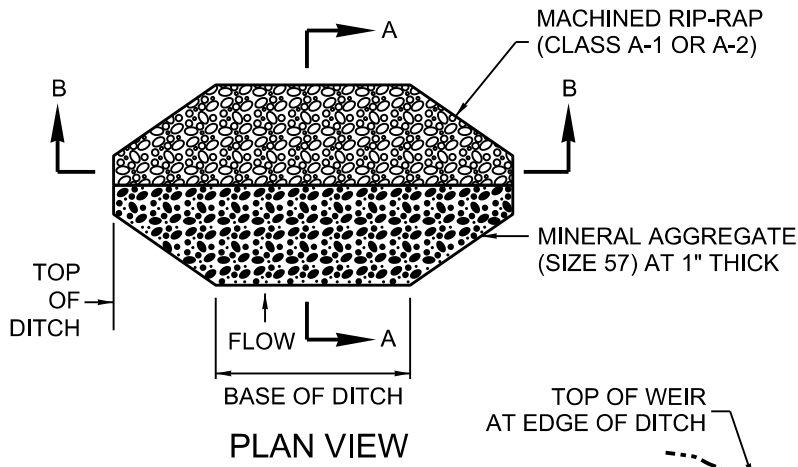
L = The distance necessary to make points A and B equal elevation.



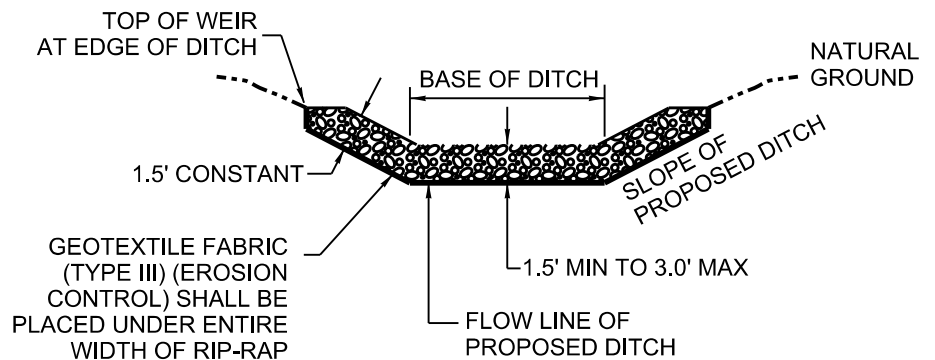
SPACING



SECTION A - A



PLAN VIEW



SECTION B - B

NOTE:

1. SHOULD TDEC EROSION AND SEDIMENT CONTROL REQUIREMENTS DIFFER FROM THIS DETAIL, THE STRICTER REQUIREMENTS SHALL GOVERN.



**CITY OF BRENTWOOD
WATER SERVICES
STANDARD DETAIL**

ROCK CHECK DAMS

MARCH 2023

DRAWING NO. M-11