PROJECT TYPICAL DETAILS

PROJECT REFERENCE NO. Stantec Stantec Consulting Services Inc. | DRAWN BY: 521 E. Morehead Street

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BP10-R013 DESIGNED BY: XMD ΤK CHECKED BY: XMD APPROVED BY: REVISED: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC. PHONE: (919)707-6690 UTILITY CONSTRUCTION FAX: (919)250-4151 PLANS ONLY

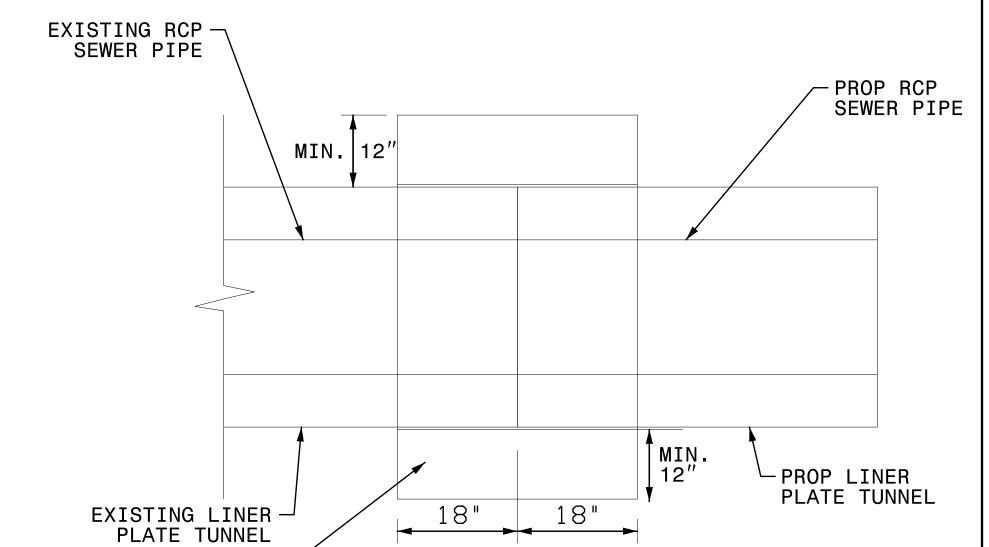
UTILITY CONSTRUCTION

SHEET NO.

UC-3A

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



CONCRETE COLLAR FOR PROPOSED SEWER & TUNNEL CONNECTIONS

NOTES:

- 1. BASE FLOW OF STREAM WILL BE DIVERTED AROUND WORK AREA AND RELEASED BACK INTO EXISTING STREAM BELOW THE WORK AREA.
- 2. SANDBAG MATERIAL: SANDBAG SHALL BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC, MINIMUM UNIT WEIGHT FOUR OUNCES PER SQUARE YARD, MULLEN BURST STRENGTH EXCEEDING 300 PSI IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355. USE OF BURLAP IS NOT ACCEPTABLE.
- 3. SAND FOR SANDBAGS SHALL BE A MINIMUM 110LB/CU.FT MATERIAL.
- 4. THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS NECESSARY TO PROTECT THE EXISTING WATERLINE FROM LEAKS OR DAMAGE DURING THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED WATERLINE.
- 5. IT IS THE CONTRACTORS RESPONSIBILITY TO FOLLOW ALL OSHA AND STATE SAFETY REQUIREMENTS PERTAINING TO THIS EXCAVATION.
- 6. ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.
- 7. PERFORM CROSSING DURING ANTICIPATED DRY WEATHER ONLY. INSTALL PROPOSED UTILITY IN A DRY TRENCH.
- 8. IMPERVIOUS DIKE TO BE APPROX 60% OF STREAM WIDTH.
- 9. ONCE PIPE IS INSTALLED, INSTALL IMPERVIOUS DIKE ON OPPOSITE SIDE OF CREEK AND INSTALL REMAINDER OF PIPE CROSSING.

IMPERVIOUS DIKE SECTION

DIKE (TYP.)

60% W

(MIN.)

─PROP U/G WATER LINE──

PUMP

DEWATERING

Z X H Z Z E

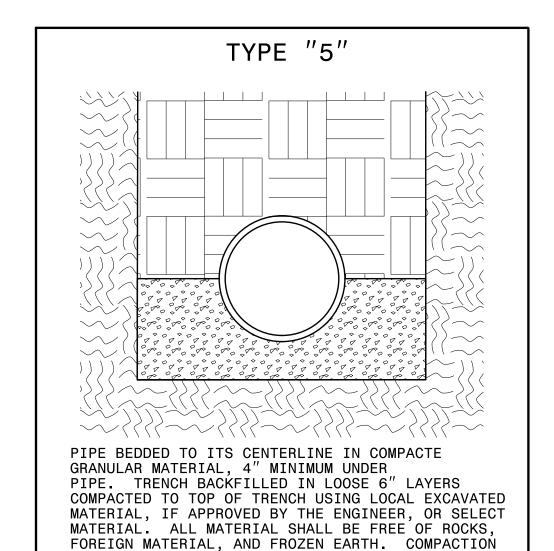
OPEN CUT CONSTRUCTION

NOT TO SCALE

-PROP U/G WATER ∠INĖ-

PROP. TRENCH BOX

STREAM WIDTH (W)

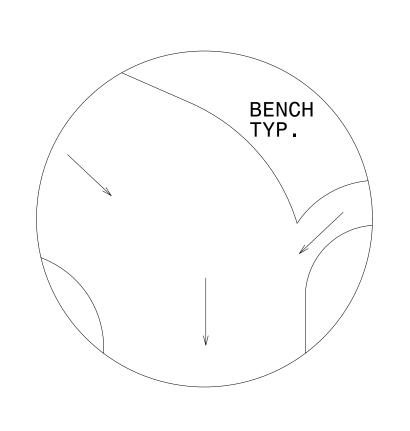


SHALL BE TO APPROX. 95% DENSITY IN ACCORDANCE

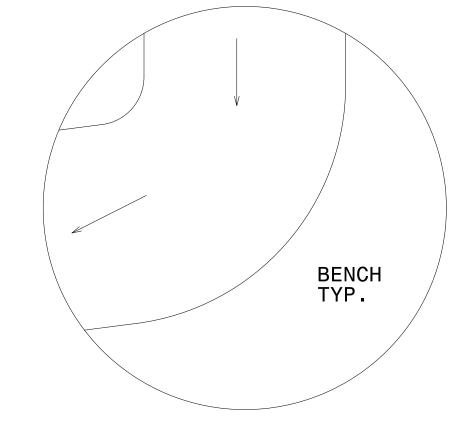
WITH AASHTO T-99 AS MODIFIED BY THE

DEPARTMENT OF TRANSPORTATION.

MAXIMUM TRENCH WIDTH AT TOP OF PIPE			
NOMINAL PIPE SIZE (INCHES) 4 6 8 10 12 14 16 18	TRENCH WIDTH (INCHES) 28 30 32 34 36 38 40 42	NOMINAL PIPE SIZE (INCHES) 20 24 30 36 42 48 54	TRENCH WIDTH (INCHES) 44 48 54 60 66 72 78







SSMH2 INVERT DETAIL

NOTE: FORM BENCH AND INVERTS TO CREATE SMOOTH TRANSITIONS

CLASS B CONCRETE WALL

AROUND CONNECTION