

WSACC STANDARD DETAILS

| | |
|--|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| B-5808 | UC-3E |
| DESIGNED BY: NKA | |
| DRAWN BY: NKA | |
| CHECKED BY: ASV | |
| APPROVED BY: | |
| REVISED: | |
| NORTH CAROLINA DEPARTMENT OF TRANSPORTATION | |
| UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 | |
| 1/11/2023 UTILITY CONSTRUCTION PLANS ONLY | |

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-0991

STANDARD DROP MANHOLE DETAIL

1. PIPE FOR INSIDE DROP SHALL BE 35 PVC CONFORMING TO ASTM SPECIFICATION D3034.
2. BOTTOM BEND TO BE 90° SHORT BEND, BELL-SPIGOT, OF SDR 35 PVC. SPOUT OF BEND TO REST DIRECTLY ON EXISTING SLEEF. CONTRUCT MASONRY TROUGH FROM DROP EFFLUENT TO MAIN CHANNEL.
3. NOTCH BELL OF PVC DROP TO ACCEPT DIP SPOUT AS SHOWN.
4. LOCATE STRAPS AT PIPE BELL AND ABOVE BELL OF 90° BEND AS SHOWN. ADD EXTRA STRAPS AS NECESSARY TO MAINTAIN MAXIMUM SPACING OF TEN FEET.
5. HOLE IN MANHOLE WALL TO BE MADE WITH A CORING MACHINE. INSTALL FLEXIBLE RUBBER COUPLING.
6. CORE HOLE SHALL NOT ENTER CONE SECTION.
7. STEPS SHALL BE RELOCATED IF THEY CONFLICT WITH INSIDE DROP.
8. A DROP MANHOLE SHALL BE REQUIRED WHEN DIA. "A" EXCEEDS 24" EXCEPT WHEN THE INLET PIPE INVERT LIES WITHIN THE LOWER HALF OF THE OUTLET PIPE. SEE FIGURE S2.0 FOR STANDARD MANHOLE.

WSACC
WATER AND SEWER AUTHORITY OF CABARRUS COUNTY

STANDARD DROP MANHOLE DETAIL
FILE NAME: S4.0 DATE: 8/08

CARRIER PIPE

| NOMINAL DIA. | O. D. | A | B | C |
|--------------|--------|---------|--------|--------|
| 6" | 6.90" | 11" | 1 1/4" | 5/8" |
| 8" | 9.05" | 16 1/2" | 2 1/4" | 1" |
| 12" | 13.20" | 22 1/2" | 3" | 1 1/4" |
| 16" | 17.40" | 28 1/2" | 3 1/2" | 1 1/2" |
| 24" | 25.80" | 34 1/4" | 4" | 2" |

SPIDER DIMENSIONS

| NOMINAL DIA. | 1 | 2 | 3 | 4 |
|--------------|-------------------|-----------------------|--------------|-----------------|
| 6" | 8" x 2" x 1/4" PL | 8" x 1 1/2" x 1/4" PL | 8" x 1/4" PL | 3/8" NUT & BOLT |
| 8" | 8" x 3" x 1/4" PL | 8" x 3 1/4" x 1/4" PL | 8" x 1/4" PL | 1/2" NUT & BOLT |
| 12" | 8" x 4" x 1/4" PL | 8" x 3 5/8" x 3/8" PL | 8" x 3/8" PL | 1/2" NUT & BOLT |
| 16" | 8" x 4" x 3/8" PL | 8" x 4 3/4" x 3/8" PL | 8" x 3/8" PL | 1/2" NUT & BOLT |
| 24" | 8" x 4" x 3/8" PL | 8" x 5 1/2" x 3/8" PL | 8" x 3/8" PL | 1/2" NUT & BOLT |

WSACC
WATER AND SEWER AUTHORITY OF CABARRUS COUNTY

CARRIER PIPE AND SPIDER DIMENSIONS
FILE NAME: M2.0 DATE: 09/08

TYPICAL PIPE CROSSING UNDER HIGHWAYS

TYPICAL PIPE CROSSING UNDER RAILROADS

WSACC
WATER AND SEWER AUTHORITY OF CABARRUS COUNTY

ENCASEMENT PIPE UNDER HIGHWAYS AND RAILROADS
FILE NAME: M1.0 DATE: 8/08

TABLE OF EMBEDMENT DEPTHS BELOW PIPE

| D | MIN SOIL | MIN ROCK |
|---------------|----------|----------|
| 27" & SMALLER | 6" | 6" |
| 30" TO 60" | 6" | 9" |
| 66" & LARGER | 6" | 12" |

CLASS A ARCH ENCASEMENT

CLASS B

CLASS C

CLASS D

WSACC
WATER AND SEWER AUTHORITY OF CABARRUS COUNTY

EMBEDMENTS FOR MAINS
FILE NAME: WS 1.0 DATE: 8/08