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Prepared in the Office of:

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PROJECT REFERENCE NO.	SHEET NO.
U-5302	UC-3F

DESIGNED BY: KKPT
DRAWN BY: ZS
CHECKED BY:
APPROVED BY: SDS
REVISED: CRC

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UTILITIES ENGINEERING SEC.
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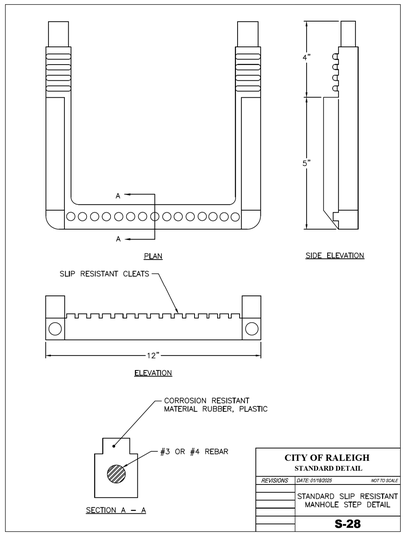
NORTH CAROLINA PROFESSIONAL SEAL 058684 ENGINEER CATHERINE R. CANDOW

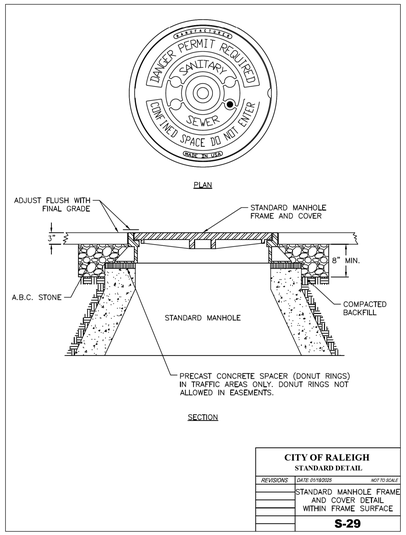
Signed by: Catherine R. Candow 1/19/2026
7B8D26EEEA6A415...

UTILITY CONSTRUCTION



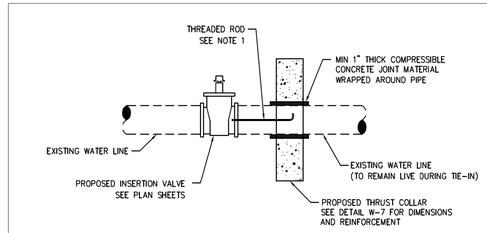
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE 01/18/2022	NOT TO SCALE
	STANDARD SLIP RESISTANT MANHOLE STEP DETAIL	
	S-28	



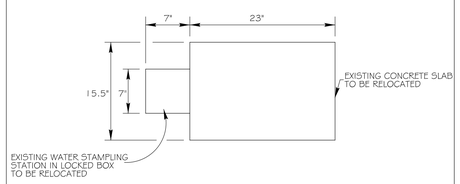
CITY OF RALEIGH
STANDARD DETAIL

REVISIONS	DATE 01/18/2022	NOT TO SCALE
	STANDARD MANHOLE FRAME AND COVER DETAIL WITHIN FRAME SURFACE	
	S-29	

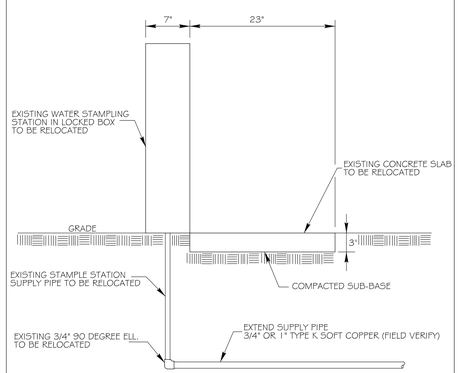


NOTES:
1. MECHANICALLY FASTEN THREADED ROD TO REBAR WITHIN THRUST COLLAR AND TO EXISTING/PROPOSED VALVE. SEE DETAIL W-15 FOR ROD SIZE, QUANTITY, AND MATERIAL.
2. THE THRUST COLLAR SHALL BE ALLOWED TO CURE A MINIMUM OF 3 DAYS BEFORE GATE VALVE IS CLOSED.
3. AFTER THRUST COLLAR HAS CURED, VALVE MAY BE CLOSED.
4. FOR LOCATIONS WHERE EXISTING WATER LINE IS TO BE REPLACED WITH PROPOSED WATER LINE, AFTER THRUST COLLAR HAS CURED, VALVE MAY BE CLOSED AND PIPE BE ABANDONED, CUT, AND REMOVED. SEE DETAIL 2/UC-3E.

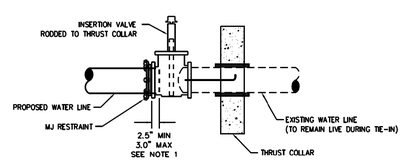
THRUST COLLAR ON EXISTING PIPE (1 / UC3E)
SCALE: NTS



EXISTING WATER SAMPLING STATION PLAN VIEW (3 / UC3E)
SCALE: NTS

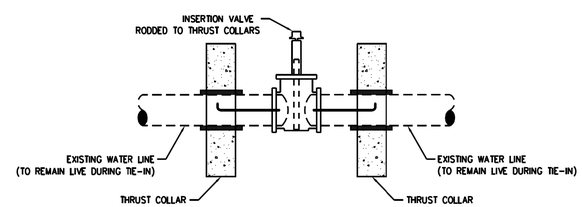


EXISTING WATER SAMPLING STATION PROFILE (4 / UC3E)
SCALE: NTS



NOTES:
1. CONNECT PROPOSED PIPING TO INSERTION VALVE BY INSERTING PROPOSED PIPE PLAIN END A MINIMUM OF 2.5" AND A MAXIMUM OF 3" BEYOND THE FACE OF THE VALVE'S MJ OPENING AND SECURING IN PLACE WITH A WEDGE RESTRAINING GLAND AND MJ SEAL. PROPOSED PIPE SHALL NOT INTERFERE WITH VALVE OPERATION.

PROPOSED PIPE TO INSERTION VALVE CONNECTION (2 / UC3E)
SCALE: NTS



NOTES:
1. EXISTING PIPE SHALL NOT INTERFERE WITH VALVE OPERATION.

EXISTING PIPE TO INSERTION VALVE CONNECTION (5 / UC3E)
SCALE: NTS

DATE: 10/14/2025
TIME: 2:45:53 PM
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