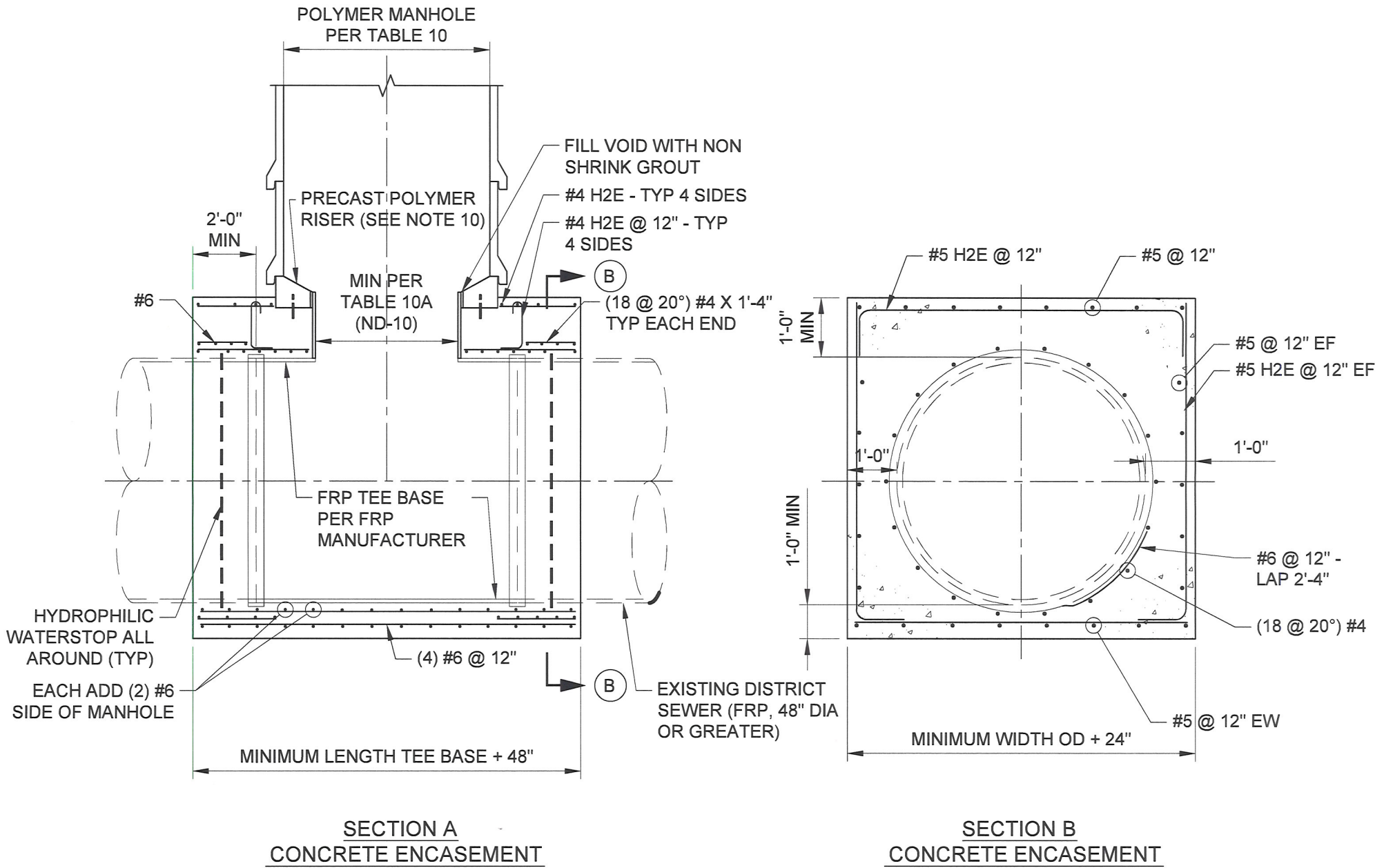


NORTH DAVIS SEWER DISTRICT

## ND-10 Standard FRP Tee Base Manhole Detail 48" DIA FRP Sewer or Larger 1 of 4

Adopted 6/13/2024



NORTH DAVIS SEWER DISTRICT

# ND-10 Standard FRP Tee Base Manhole Detail 48" DIA FRP Sewer or Larger 2 of 4

Adopted 6/13/2024

**NOTES:**

1. CONTRACTOR MUST NOTIFY THE DISTRICT 48 HOURS BEFORE WORK BEGINS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING SEWER AND OTHER UTILITIES, PROPER BACKFILLING, COMPACTING, AND SURFACE RESTORATION.
3. EXISTING DISTRICT SEWERS SHALL BE FULLY SUPPORTED AT ALL TIMES. CUT EXISTING SEWER TO NEAT STRAIGHT LINES WITH CUTTING TOOLS SUITABLE FOR THE PIPE MATERIAL AND IN STRICT ACCORDANCE WITH THE FRP MANUFACTURER'S REQUIREMENTS. DAMAGED PIPE SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE DISTRICT.
4. WHERE DEPTH OF COVER OVER THE TOP OF PIPE EXCEEDS 10 FEET, REINFORCEMENT REQUIREMENTS SHALL BE REVIEWED AND APPROVED BY A UTAH LICENSED CIVIL OR STRUCTURAL ENGINEER.
5. CONCRETE SHALL BE TYPE I/II PORTLAND CEMENT PER ASTM C150 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI PER ASTM C39. NO ADDITIVES SHALL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE DISTRICT. ENCASEMENT SHALL BE CAST IN A SINGLE MONOLITHIC POUR. ALL EXPOSED CEMENTITIOUS CONCRETE MUST BE PROVIDED WITH CORROSION PROTECTION.
6. HYDROPHILIC WATERSTOPS MUST BE PROVIDED BETWEEN THE PIPE AND CAST CONCRETE, BOTH SIDES, ALL AROUND (GREENSTREAK HYDROTITE OR APPROVED EQUAL). CLEAN PIPE USING WIRE BRUSH, POWER WASH, OR SAND BLAST TO PROVIDE A CLEAN, DURABLE SURFACE. SECURE WATERSTOP TO PIPE USING MANUFACTURER'S RECOMMENDED METHODS. APPLY LAYER OF GREENSTREAK LEAKMASTER OR APPROVED EQUAL BETWEEN WATERSTOP AND PIPE.
7. FRP COUPLINGS TO BE STAINLESS STEEL BANDS, TEEKAY, OR APPROVED EQUAL, OR FRP MANUFACTURER'S COUPLINGS CAST INTO CONCRETE ENCASEMENT.
8. INVERT OF CONNECTING PIPE SHALL MATCH THE CROWN OF EXISTING DISTRICT PIPE OR PROVIDED PER ND-19.
9. MINIMUM MANHOLE DIAMETER SHALL BE AS SHOWN IN TABLE 10A (ND-10). PRECAST MANHOLE COMPONENTS SHALL BE PROVIDED IN ACCORDANCE WITH ND-12.
10. PRECAST POLYMER RISER TO BE SET AND TIED TO BASE. PROVIDE (8) #4 BARS EQUALLY SPACED DOWELS CAST INTO POLYMER RISER AT TIME OF FABRICATION. MIN 6" EMBEDMENT INTO CAST CONCRETE TIED TO ENCASEMENT REBAR. WET SET RISER SECTIONS SHALL NOT BE ALLOWED.
11. SEE ND-06 FOR ACCEPTANCE TESTING, FINAL COMPLETION, AND WARRANTY REQUIREMENTS.



TABLE 10A. ND-10			
DISTRICT FRP SEWER NOMINAL DIA (IN)	TEE OUTLET DIA (IN)	MANHOLE NOMINAL DIA (IN)	MANHOLE DETAIL**
<48	N/A	PER ND-03	ND-12 OR ND-11*
48 TO 54	48	60	ND-12
>54 TO 60	54	72	ND-12
>60 TO 66	60	72	ND-12
>66 TO 78	66	72	ND-12
>78	72	84	ND-14

\* Provide Manholes per ND-03, Polymer Concrete or FRP manhole with precast base unless otherwise directed by the District.  
 \*\*Doghouse manholes may only be provided where directed by the District



NORTH DAVIS SEWER DISTRICT

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