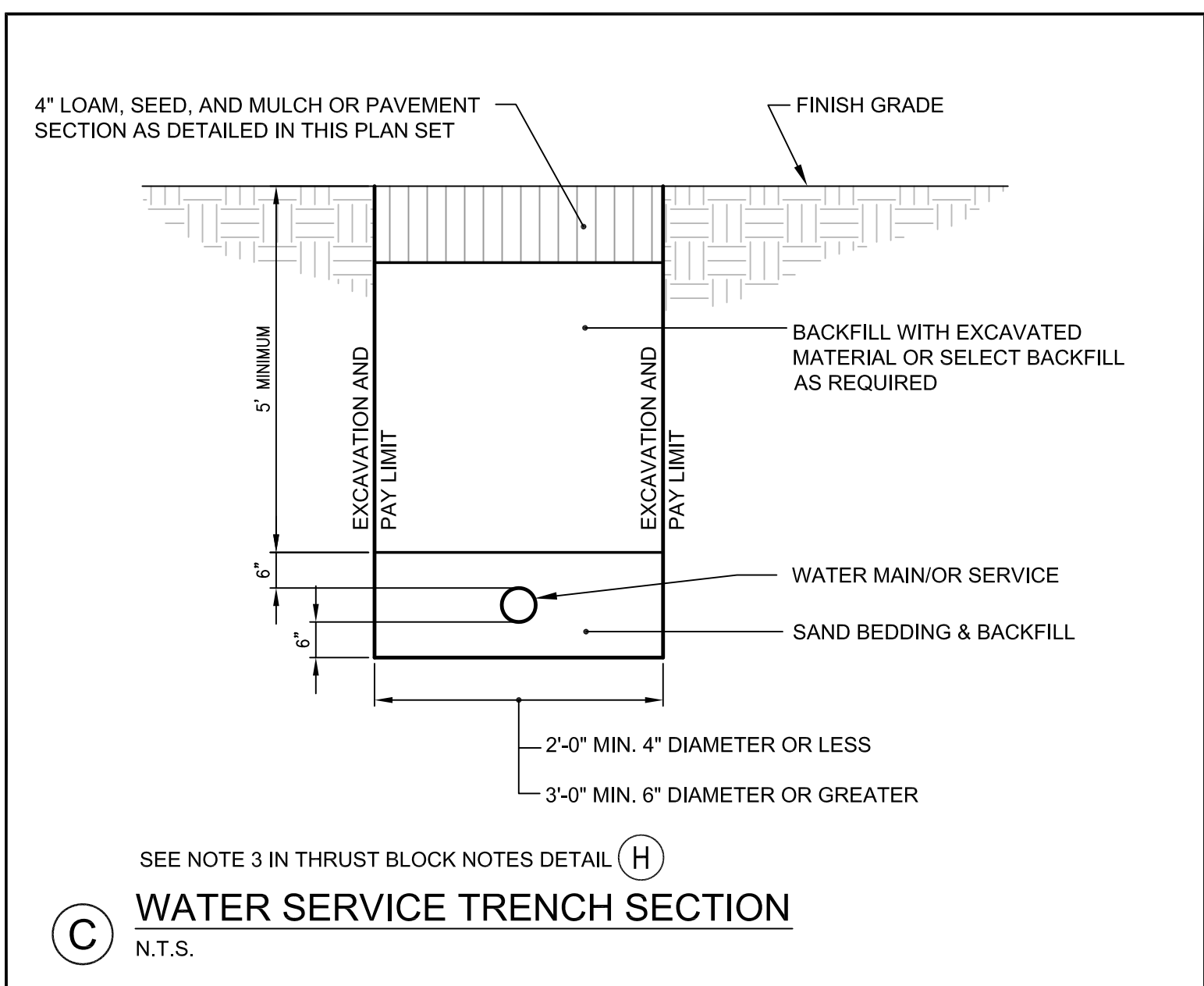
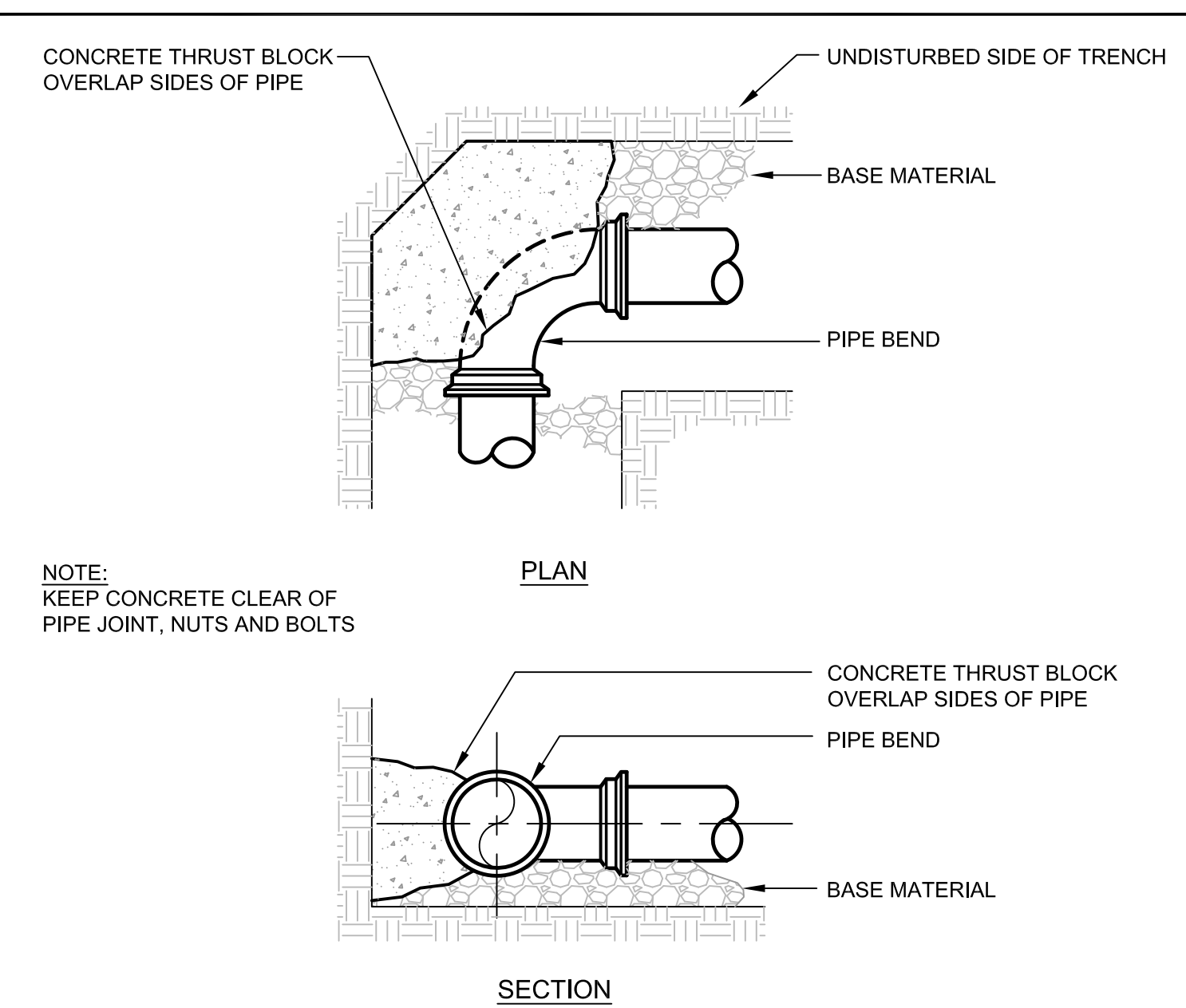


(A) SECONDARY ELECTRICAL TRENCH DETAIL
N.T.S.



(C) WATER SERVICE TRENCH SECTION
N.T.S.

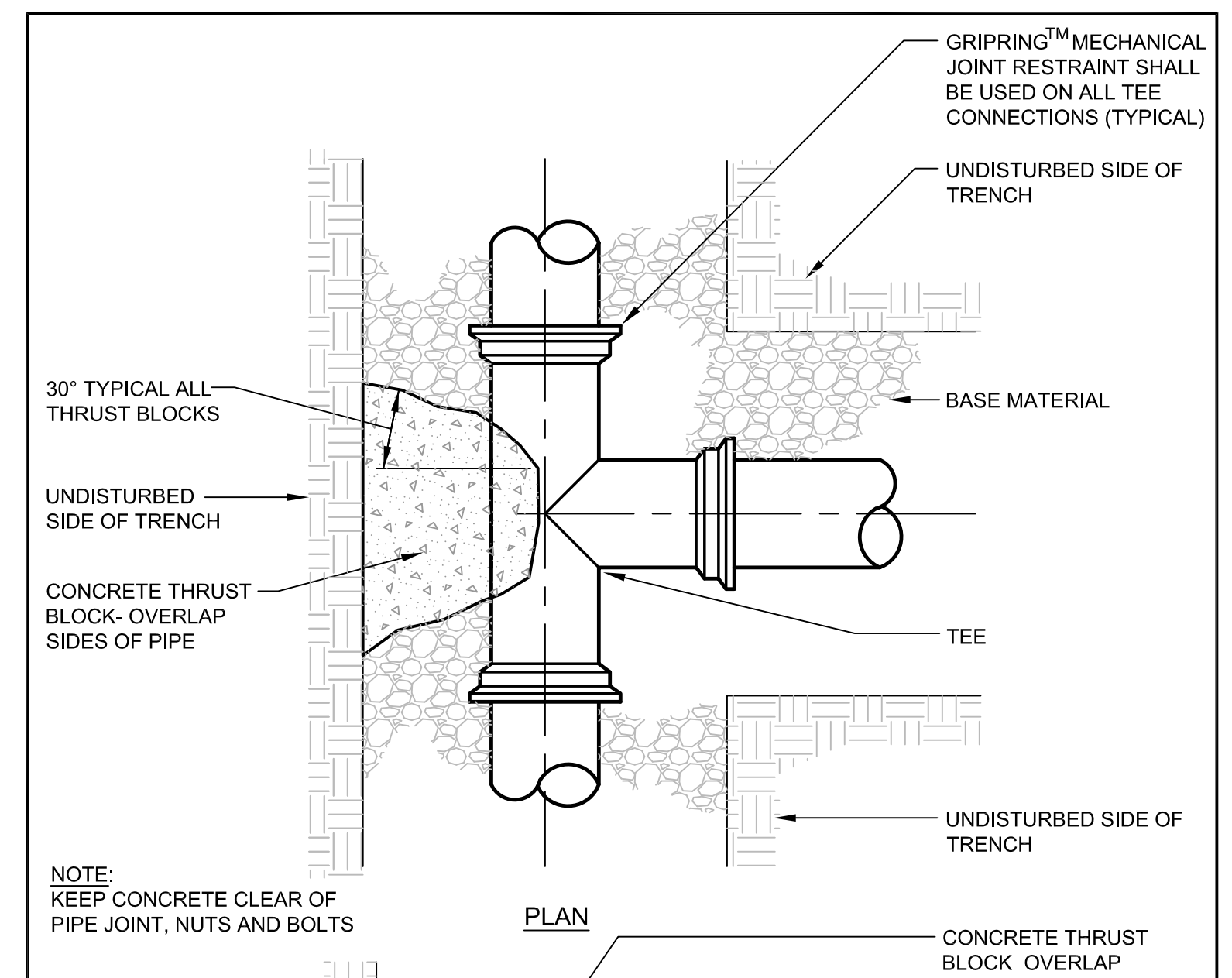


THRUST/RETAINER GLAND SCHEDULE		
1/2 BEND	(90°)	USE POURED-IN-PLACE THRUST BLOCK WITH GRIPRING™ MECHANICAL JOINT RESTRAINT
1/4 BEND	(45°)	THRUST BLOCK W/ GRIPRING™
1/8 BEND	(22 1/2°)	THRUST BLOCK W/ GRIPRING™
1/2 BEND	(11 1/4°)	THRUST BLOCK W/ GRIPRING™

THE ABOVE SCHEDULE IS SUBJECT TO THE APPROVAL OF THE ON-SITE INSPECTOR DUE TO SOILS AND WORKING PRESSURES IN THE AREA.

- NOTES:**
- THE _____ WATER DISTRICT MAY HAVE INSPECTION FEES AND REQUIRE OBSERVATION OF ALL PIPING INSTALLATION BEFORE BURIAL. REFER TO SPECIFICATIONS.
 - FOR WATER MAIN LAYOUT SEE DRAWINGS ____ AND ____
 - FOR WATER MAIN PROFILE SEE DRAWING ____
 - FOR WATER MAIN TRENCH DETAILS SEE DRAWING ____
 - REFER TO SPECIFICATIONS FOR TESTING AND CHLORINATION REQUIREMENTS.
 - ALL HYDRANTS AND VALVES TO BE EPOXY COATED, NUTS & BOLTS TO BE STAINLESS STEEL.
 - SERVICE RODS FOR DOMESTIC SERVICE OR AIR VALVES TO BE STAINLESS STEEL.

(F) TYPICAL THRUST BLOCK PLACEMENT ON BENDS DETAIL
N.T.S.



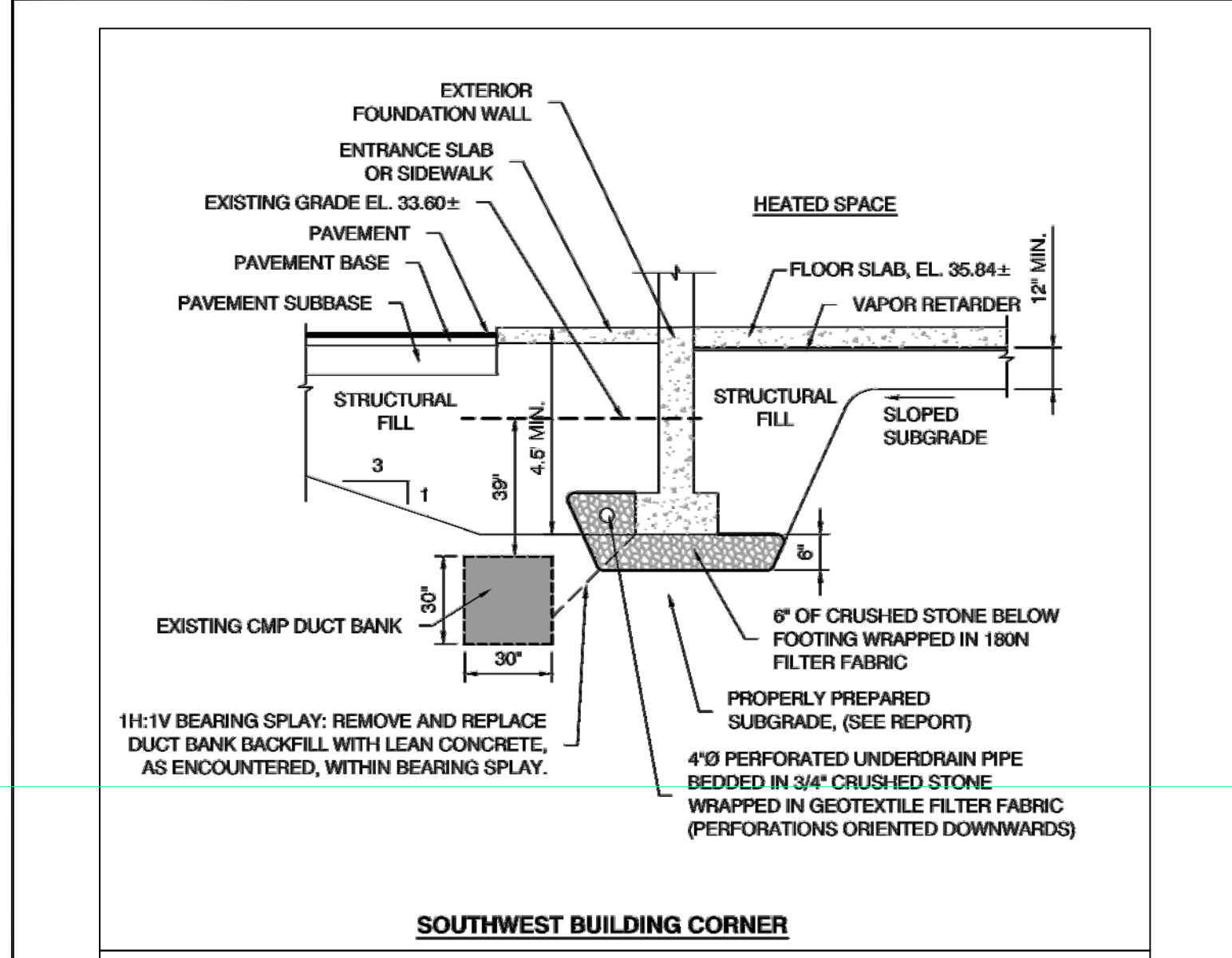
THRUST BLOCK NOTES

- INSTALL POLY BARRIER BETWEEN PIPE AND ALL THRUST BLOCKS.
- ANY MODIFICATION TO THRUST BLOCK SIZING OR PIPE RESTRAINT REVISIONS SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO IMPLEMENTATION IN THE FIELD.
- ANY WORK RELATING TO WATER PIPING OR DETAILS SHALL BE IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT SPECIFICATIONS.
- ALL RESTRAINED JOINTS MUST HAVE GRIPRING™.

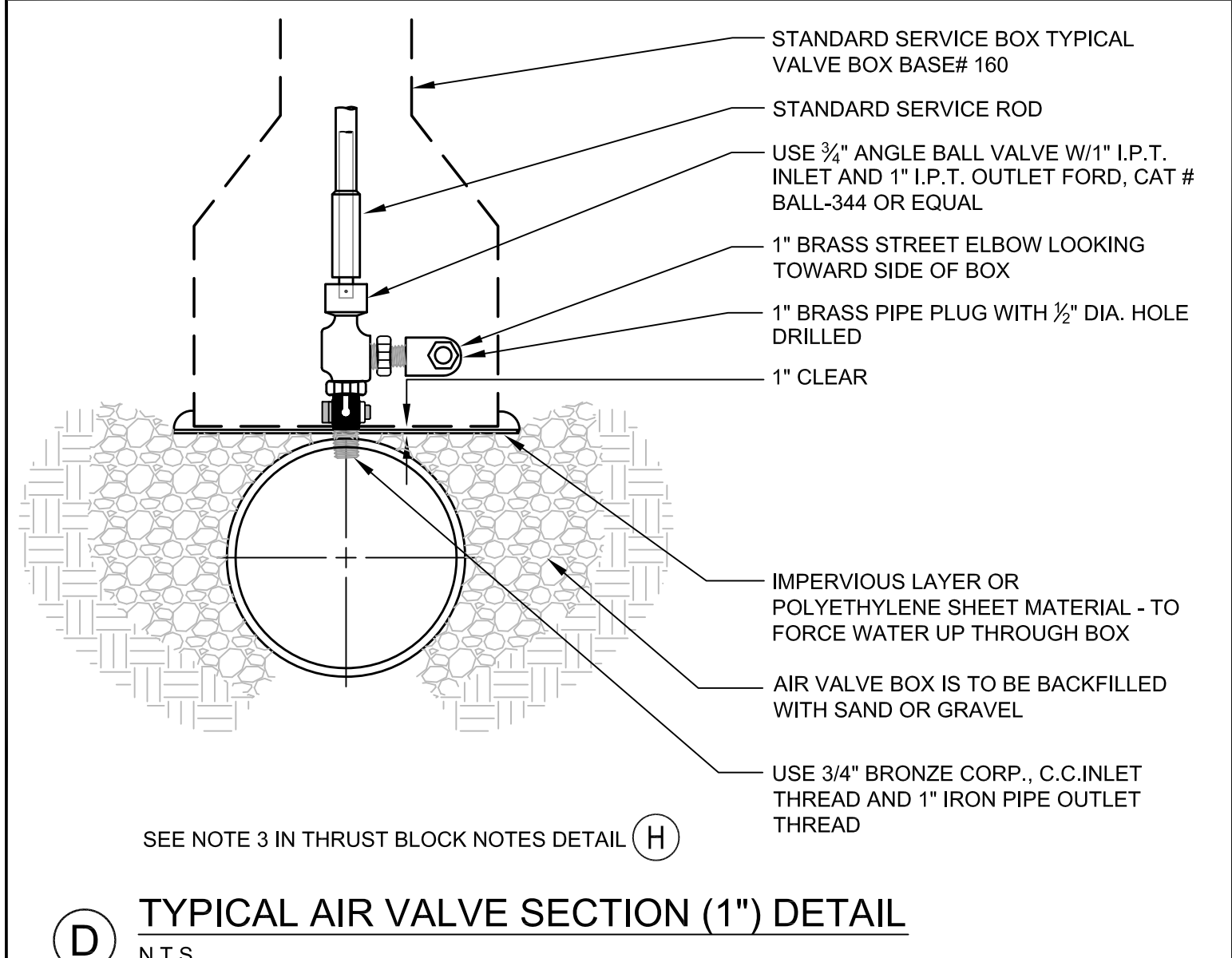
BEARING SURFACE REQUIRED IN SQUARE FEET

PIPE SIZE	1/2 BEND	1/4 BEND	1/8 BEND	1/2 BEND	TEES/CAPS
6" 8"	5.0	5.0	5.0	6.5	5.0
12"	11.5	11.5	11.5	20.0	22.0

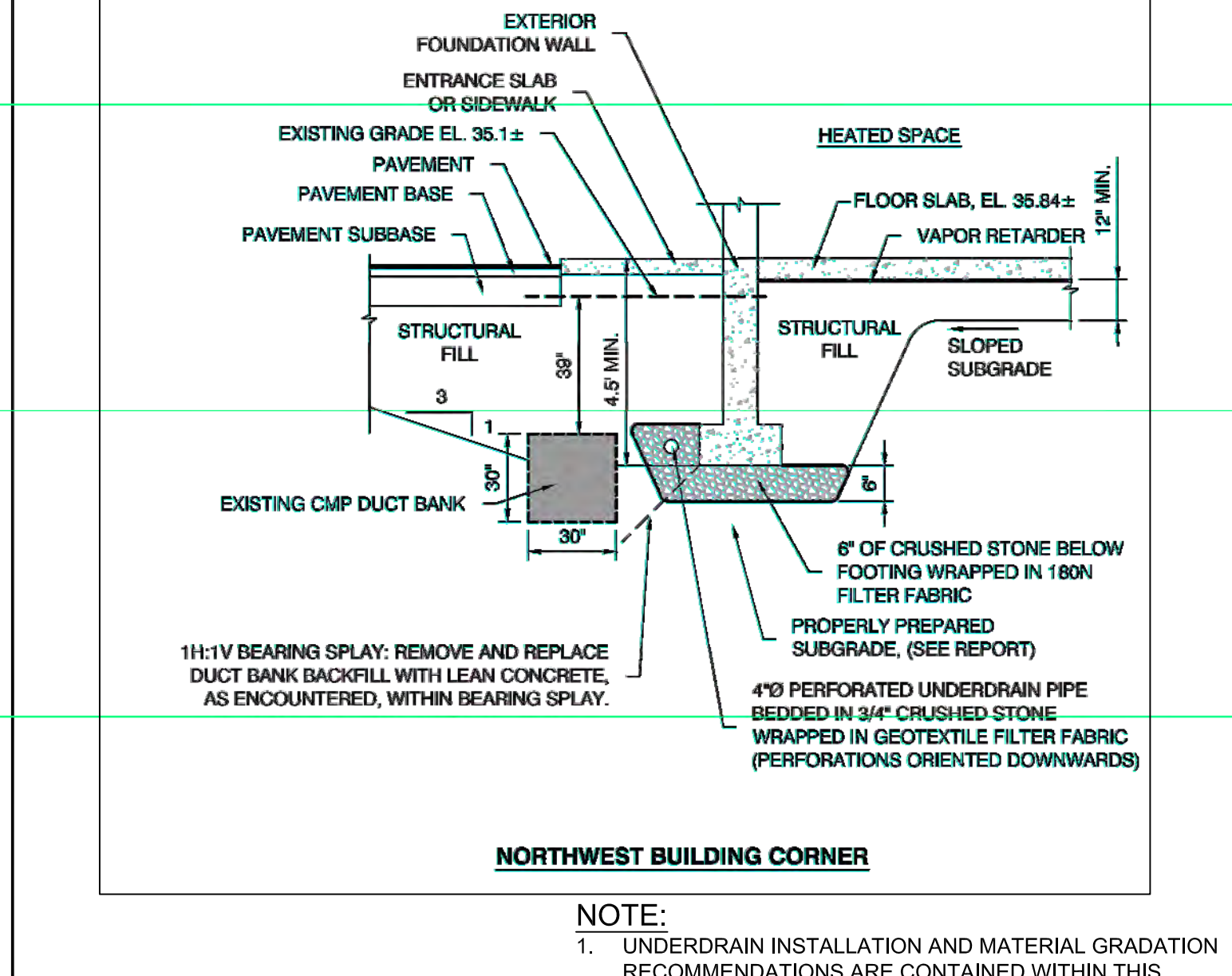
- THRUST BLOCK NOTES AND TYPICAL THRUST BLOCK PLACEMENT ON TEES DETAIL**
- (H) N.T.S.**



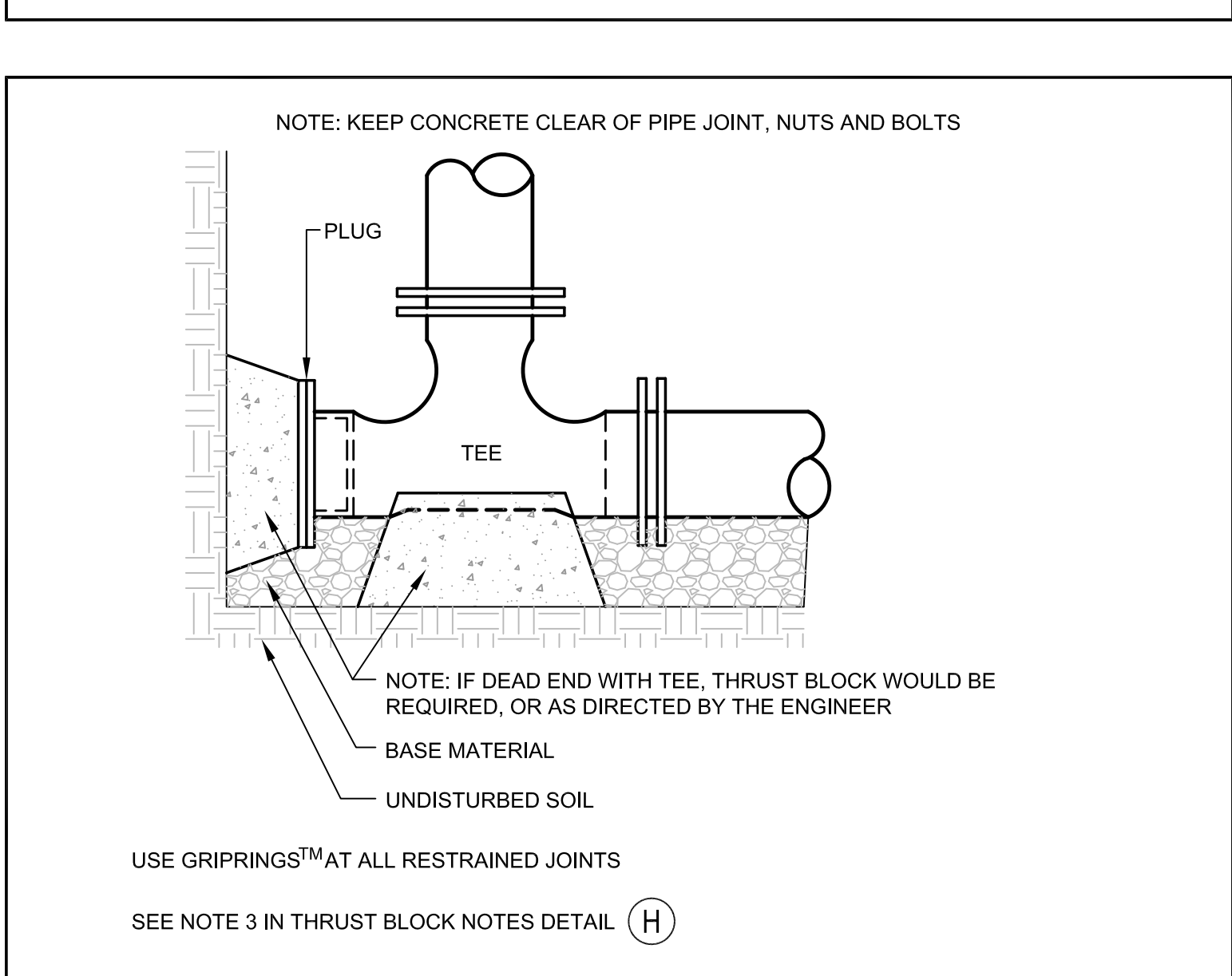
(B) UNDERDRAIN DETAIL
N.T.S.



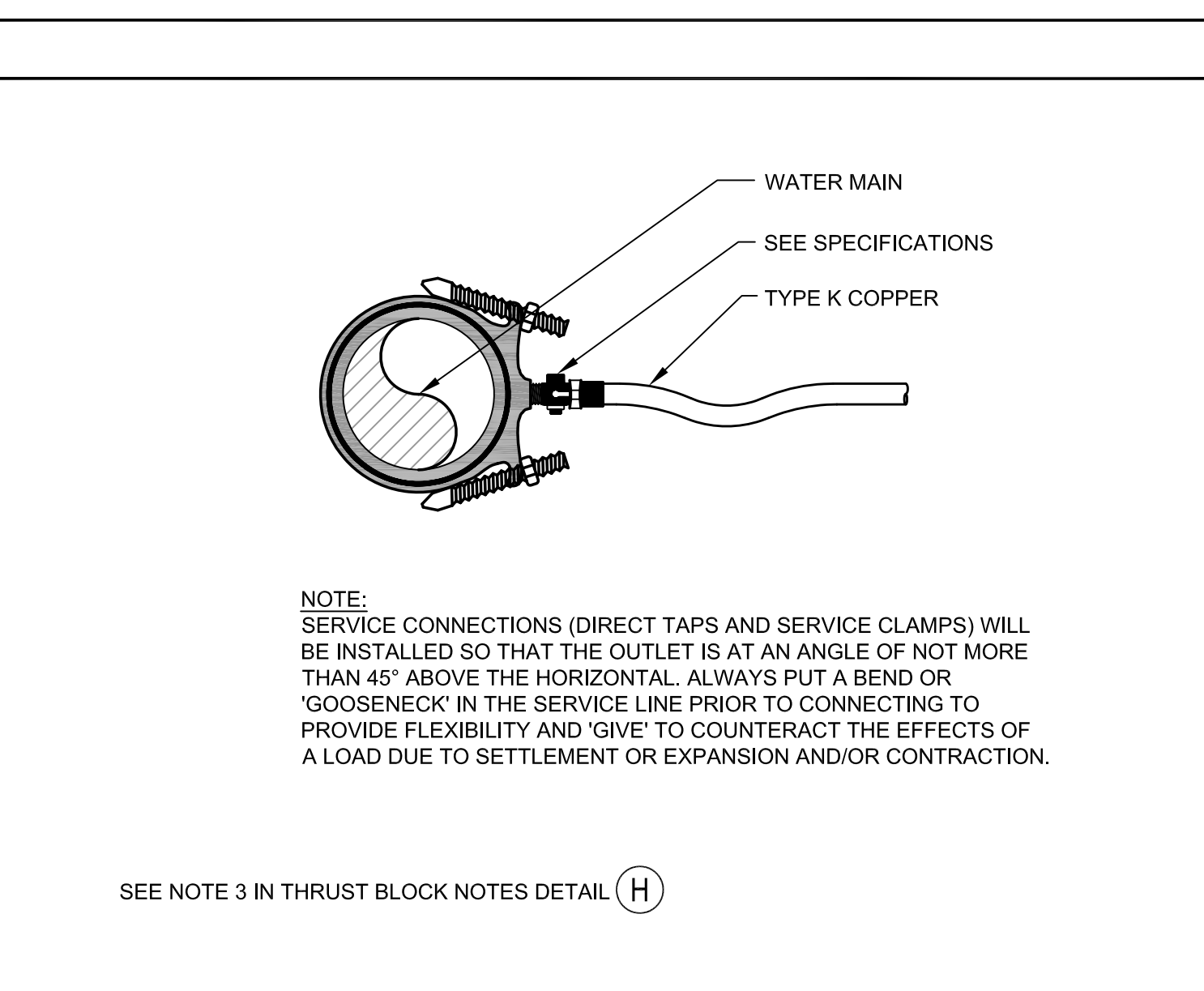
(D) TYPICAL AIR VALVE SECTION (1") DETAIL
N.T.S.



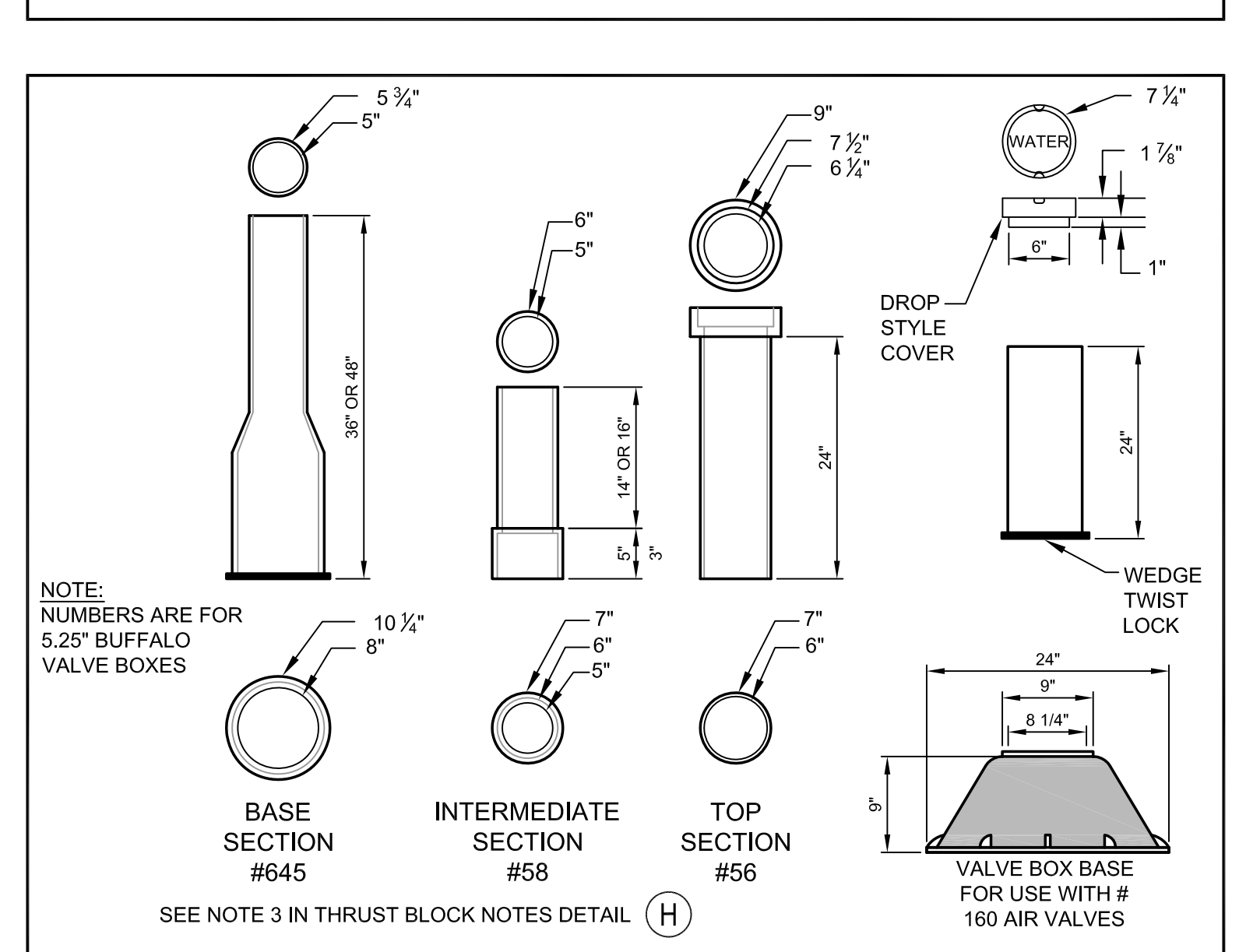
(B) UNDERDRAIN DETAIL
N.T.S.



(E) STANDARD TEE BLOCKING DETAIL
N.T.S.



(G) WATER SERVICE DETAIL
N.T.S.



(I) TYPICAL VALVE BOXES DETAIL
N.T.S.

			PROJECT EYECARE MEDICAL GROUP PHASE 2 - ADDITION & RENOVATION	DeLUCA-HOFFMAN ASSOCIATES, INC. 778 MAIN STREET, SUITE 8 SOUTH PORTLAND, ME 04106 WWW.DELUCAHOFFMAN.COM
SHEET TITLE DETAILS			CLIENT PDT ARCHITECTS	
3 06.13.13 RELEASED FOR BID 2 06.03.13 LEVEL II SITE PLAN SUBMISSION 1 05.22.13 DESIGN DEVELOPMENT	REVISIONS	P.E. STEPHEN BUSHEY LIC. #7429	DRAWN: CMW DATE: MAY 2013 DESIGNED: RJW SCALE: AS NOTED CHECKED: SRB JOB NO. 3165 FILE NAME: 3165-DET	SHEET C-6.1