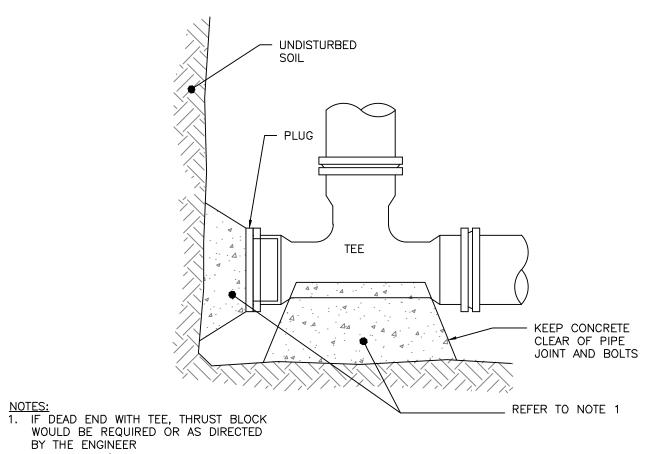
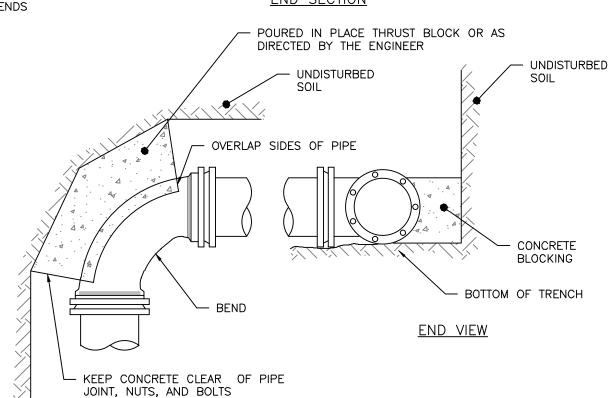


VALVE BOX & COVER NOT TO SCALE



2. SEE THRUST/RETAINER GLAND SCHEDULE FOR TYPE OF BLOCKING TO BE USED ON

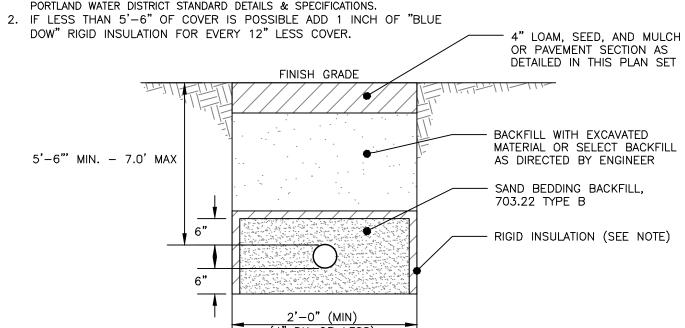


TOP VIEW

THRUST BLOCKING: REGULAR BEND

NOT TO SCALE

1. THE WATER TRENCH SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT STANDARD DETAILS & SPECIFICATIONS.

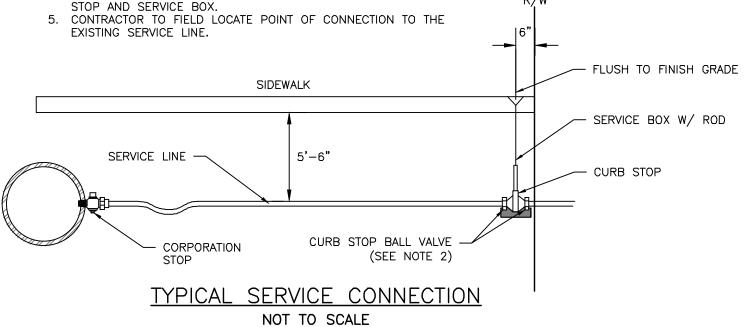


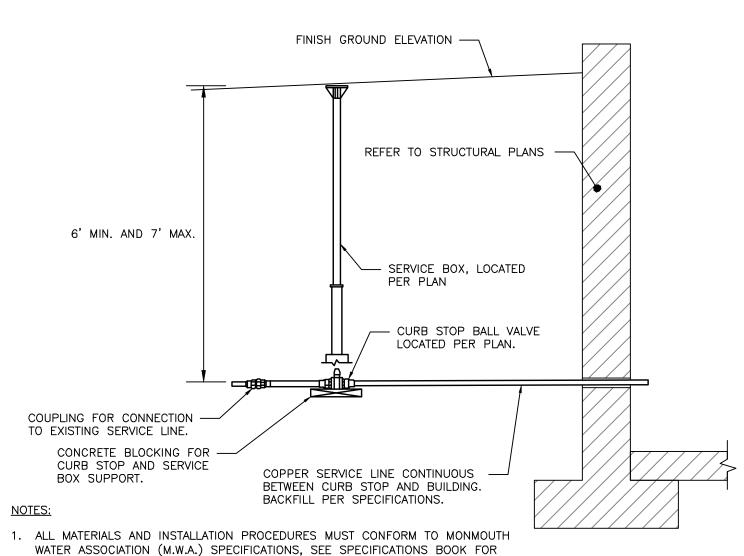
WATER SERVICE TRENCH SECTION DETAIL NOT TO SCALE

NOTES:

- 1. ALL MATERIALS AND INSTALLATION PROCEDURES MUST COMPLY WITH THE CITY OF PORTLAND WATER DISTRICT (PWD)
- SPECIFICATIONS.

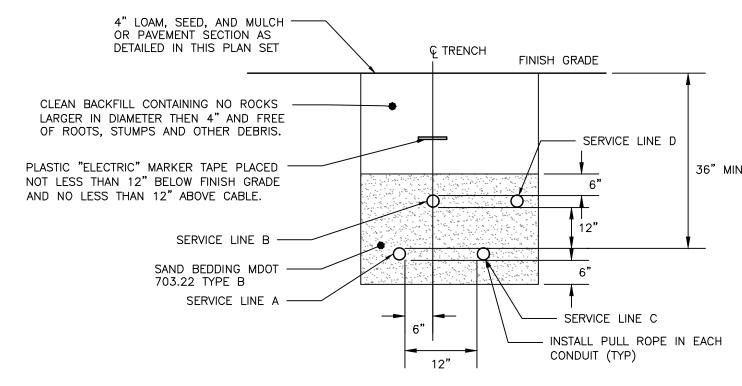
 2. CURB STOP BALL VALVE TO BE MADE OF COPPER OR BRASS
- UNLESS OTHERWISE NOTED BY THE PORTLAND WATER DISTRICT. 3. SERVICE LINE TO BE MADE OF TYPE K COPPER.
- 4. CONCRETE BLOCKING SHALL BE ADDED TO THE BASE OF THE CURB STOP TO PROVIDE STRUCTURAL SUPPORT FOR THE CURB
- STOP AND SERVICE BOX. 5. CONTRACTOR TO FIELD LOCATE POINT OF CONNECTION TO THE





- M.W.A. REQUIRES THE USE OF COPPER FOR THE CUSTOMERS SIDE OF SERVICE.
 CUSTOMERS PORTION OF SERVICE LINE IS THAT PORTION FROM THE PROPERTY LINE INTO THE BUILDING, IN THIS INSTANCE THE CUSTOMER IS ALSO RESPONSIBLE
- FOR THE INSTALLATION OF THE CURB STOP BALL VALVE. 4. FOR THE INTERIOR BUILDING PLUMBING REFER TO THE PLUMPING PLAN BY
- MECHANICAL SYSTEMS ENGINEERS. 5. CONTRACTOR TO FIELD LOCATE POINT OF CONNECTION TO THE EXISTING SERVICE

SERVICE INSTALLATION DETAIL NOT TO SCALE



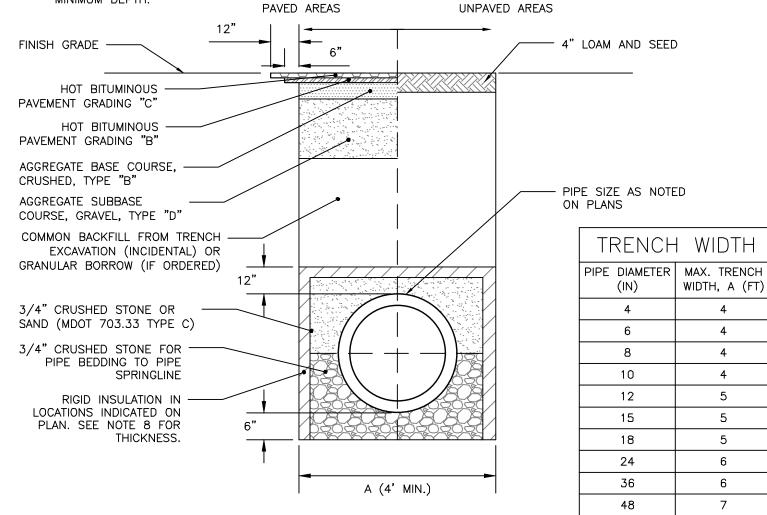
CONDUIT TYPE				
SERVICE	CONDUIT SIZE	GRASS AND PAVED AREAS	UTILITY	<u>REMARKS</u>
А	2-5"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
В	2-4"	SCHEDULE 40 PVC	COMMUNICATION	_
С	2-4"	SCHEDULE 40 PVC ELECTRICAL GRADE	SPARE	IF REQUIRED
D	2-4"	SCHEDULE 40 PVC	CABLE	_

NOTES:

- 1. ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10" ABOVE GRADE AT POLE WITH
- 2. MINIMUM SEPARATION OF 24 INCHES BETWEEN PRIMARY CABLE/CONDUIT AND GAS LINES SHALL BE MAINTAINED.

UTILITY TRENCH: PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE NOT TO SCALE

- 1. ANY ALTERNATE TRENCHING METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY. 2. ALL CONSTRUCTION METHODS SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARDS FIGURE
- 3. BRACING & SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. WHERE APPLICABLE, PERFORATIONS IN STORM DRAIN (PERF.SD) SHALL BE ORIENTED UP.
 5. ALL STORM DRAINS SHALL BE PVC SDR 35 MIN PS-46 RATING OR OR IN ACCORDANCE WITH CITY OF PORTLAND TECHNICAL MANUAL, SECTION 2 SANITARY SEWER AND STORM DRAIN PART 2.5.2
- 6. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
- 7. THIS DETAIL SHALL BE APPLIED ONLY TO PIPE TRENCHES WITHIN OF THE CITY OF PORTLAND ROW.STORM DRAIN COVER BETWEEN 2' AND 3' SHALL INCLUDE 4" OF RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2' RIGID INSULATION. OTHER UTILITIES: ADD 2" OF RIGID INSULATION FOR EACH FOOT ABOVE MINIMUM DEPTH.



CITY OF PORTLAND TYPICAL PIPE TRENCH DETAIL NOT TO SCALE

PERMIT LEVEL NOT ISSUED FOR CONSTRUCTION

BUILDING PERMIT WASHINGTON **DETAILS** 93 BOX 面 1073_CIV DESIGNED BY: DRAWN BY: CHECKED BY: WILLIAM H. O.

FINAL APPLICATION

DRAWING NO.