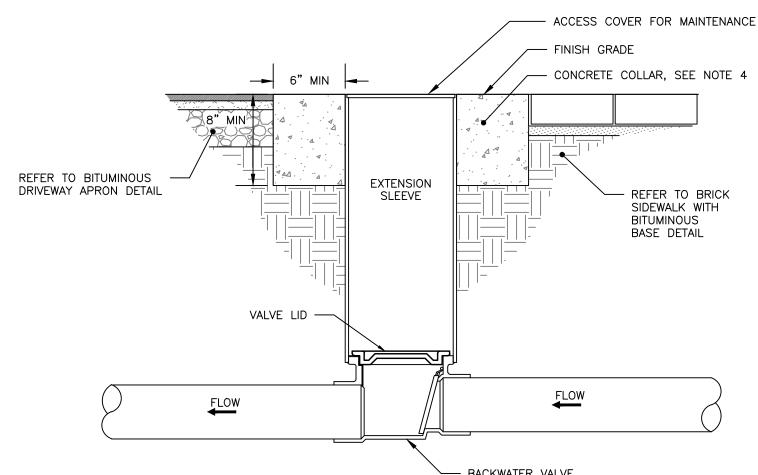
3. ENGINEER SHALL BE CONTACTED DURING CONNECTION TO BRICK SEWER. IF SEWER IS FOUND TO BE IN VERY GOOD CONDITION BY ENGINEER, THEN ONLY CONCRETE CASING AROUND PROPOSED LATERAL AND STUB SHALL BE REQUIRED. 6" THICK CONCRETE 4000 -BACKFILL PER CITY OF PORTLAND PSI @28 DAYS TYPICAL PIPE TRENCH DETAIL EXISTING BRICK SEWER -6"X6" W2.9 X W2.9 WELDED WIRE FABRIC MIN. 2" CONCRETE COVER ALL - PROPOSED LATERAL, BRACED WITH CONCRETE AS NECESSARY FOR STABILITY. - EXISTING SEWER BEDDING SPRING LINE

1. CONCRETE CASING AROUND PIPE SHALL CONTINUE LENGTHWISE FOR AT LEAST 4' OF PIPE,

OR LENGTH OF PIPE DAMAGED DURING CONSTRUCTION, WHICHEVER IS GREATER.

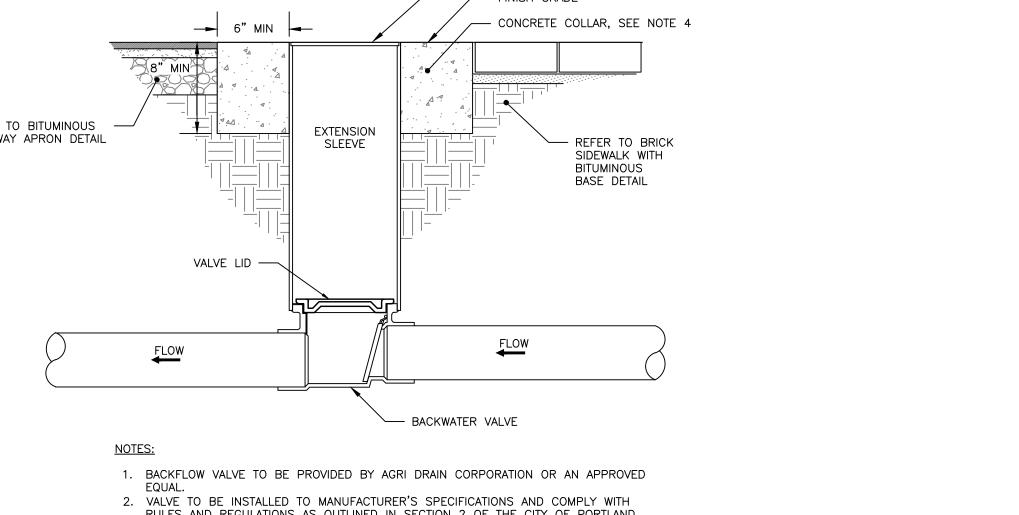
2. INSTALL ALL ITEMS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

CONNECTION TO BRICK SEWER NOT TO SCALE



- RULES AND REGULATIONS AS OUTLINED IN SECTION 2 OF THE CITY OF PORTLAND
- TECHNICAL MANUAL. 3. VALVE SHALL BE INSTALLED WITH A VALVE BOX AND COVER TO PROVIDE EASY ACCESS AND MAINTENANCE; VALVE COVER SHALL STATE 'SEWER' ON LID FLUSH TO
- SURFACE. REFER TO VALVE & BOX COVER DETAIL FOR ADDITIONAL INFORMATION. 4. CONCRETE COLLAR AT A MINIMUM 24-HOUR COMPRESSIVE STRENGTH OF 3,000 PSI.

BACKFLOW VALVE ASSEMBLY NOT TO SCALE



7621, OR APPROVED EQUAL FINISH FLOOR ELEVATION -CLEAN-OUT PLUG 1. REFER TO GRADING AND DRAINAGE PLANS FOR CLEANOUT LOCATIONS. 2. CONTRACTOR TO CONFIRM NO CONFLICT WITH OTHER FLOOR DRAINS OR PIPING SYSTEMS. 3. EACH CLEANOUT SHALL BE FLUSH WITH THE WATERTIGHT JOINT (TYP.) FINISH FLOOR ELEVATION. — 1/8 BEND REFER TO GRADING AND -DRAINAGE PLAN FOR FURTHER INFORMATION - PVC SDR 35 OR EQUIVALENT WITH SOLID COUPLINGS (TYP) DIRECTION OF FLOW - PROVIDE WYE AS NECESSARY OTHERWISE,

CLEANOUT DETAIL NOT TO SCALE

ECCENTRIC CONE

SECTION

SECTION

4'-0" DIAMETER PRECAST OIL AND WATER SEPARATOR

ADJUST TO GRADE WITH BRICK WITH A MIN.

VENT IN ACCORDANCE WITH THE PLUMBING CODE.

OIL, SAND AND WATER SEPARATOR TO CONFORM

TO CATCH BASIN DETAIL, EXCEPT AS EXPLICITLY

INLET AND OUTLET PIPE SHALL BE CONSTRUCTED

PORTLAND'S APPROVED SEWER PIPE MATERIALS. INLET AND OUTLET PIPE INVERT SHALL BE 3" SEPARATED UNLESS NOTED ON THE PLANS.

DESIGN LOAD FOR H-20 WHEEL LOAD.

PIPE OPENINGS CAST IN AS REQUIRED.

OF MATERIALS SPECIFIED WITHIN CITY OF

6. FOR CLARITY, SUMP DEPTH IS 6' BELOW OUTLET

7. AN APPROVED EQUAL MAY BE SUBSTITUTED BY

— 12" THICK 3/4" CRUSHED STONE BASE

US FOUNDRY COVER USF NO.

OF 3 COURSES AND A MAX. OF 8

IDENTIFIED IN THIS DETAIL

THE DESIGN ENGINEER.

— COMPACTED SUBGRADE

C-32-63, GRADE MA AND SA).

— OUTLET, SEE NOTE 5

COURSES (ASTM SPEC. DESIGNATE ON

SEE MANHOLE DETAIL FOR COVER -

3" GAS VENT, OR VENTED MANHOLE -

ALL PIPES TO HAVE A WATERTIGHT SEAL -

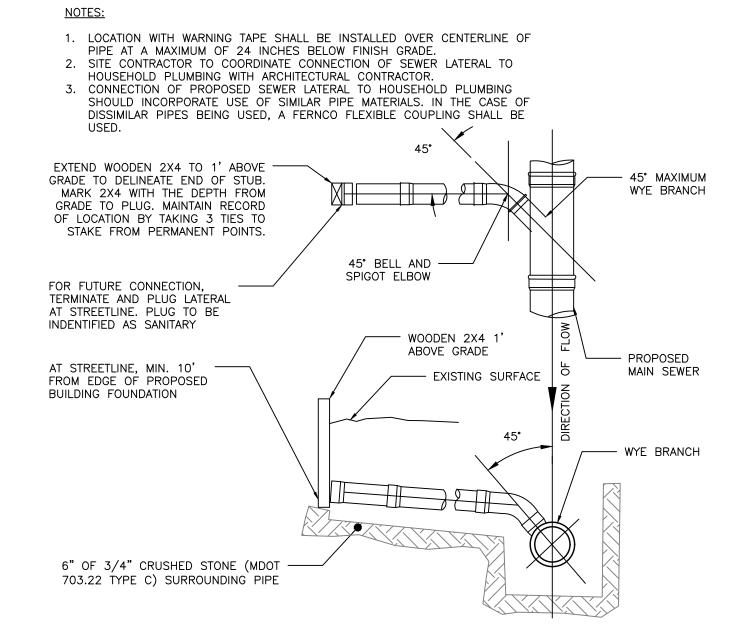
PORTLAND CEMENT MORTAR -

INLET, SEE NOTE 5 -

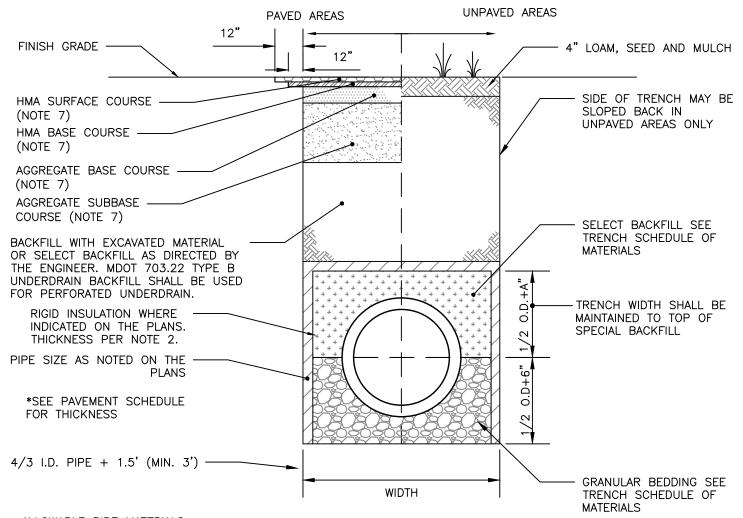
(TYPE 2 CEMENT)

OIL CONTAINMENT

SAND CONTAINMENT



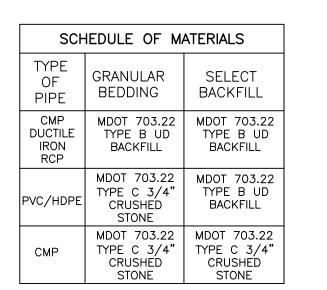
SEWER TEE/WYE CONNECTION DETAIL NOT TO SCALE



- ALLOWABLE PIPE MATERIALS: - REINFORCED CONCRETE PIPE (RCP) MIN. STRENGTH OF CLASS III - PVC RING TYPE SEWER (SDR 35) OR EQUIVALENT, MIN PS-46 RATING
- DUCTILE IRON PIPE (DIP)

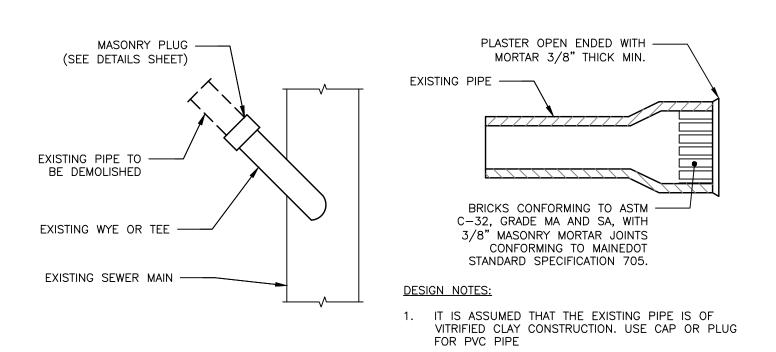
ADS SANITITE HP MIN. PS-46

- PVC RING TYPE SEWER PIPE MEÉTING ASTM F 789 - ADS N-12 HP TRIPLE-WALL MIN PS-46 RATING



- 1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR. 2. 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. 3. INSTALL WARNING TAPE DIRECTLY ABOVE UTILITIES AT THE
- TOP OF SUBGRADE. 4. MINIMUM COVER
- 4.1. 2'-0" STORM DRAIN 4.2. 5'-0" SEWER
- 5. NO TREES SHALL BE PLANTED WITHIN 5' OF A SEWER PIPE OR SERVICE
- 6. THIS DETAIL SHALL BE APPLIED ONLY TO DRAINAGE PIPE TRENCHES OUTSIDE OF THE CITY OF PORTLAND ROW.
- 7. THICKNESS AS NOTED BY SURFACE DETAILS 8. ALL PROPOSED TREES PLANTED WITHIN 10' OF A STORM OR SEWER PIPE SHALL BE PLANTED AT A DEPTH NO GREATER THAN 3' DEEP. PERMEABLE LANDSCAPE FABRIC SHALL CREATE A ROOT BARRIER AROUND THE PIPES. CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE





PROVIDE A 1/8 BEND

MASONRY PLUG DETAIL NOT TO SCALE

PERMIT LEVEL NOT ISSUED FOR CONSTRUCTION

CITY APP. REDEVELOPMENT **DETAILS** STREET LAWRENCE 1088_CIV DESIGNED BY: DRAWN BY: CHECKED BY:

DRAWING NO.