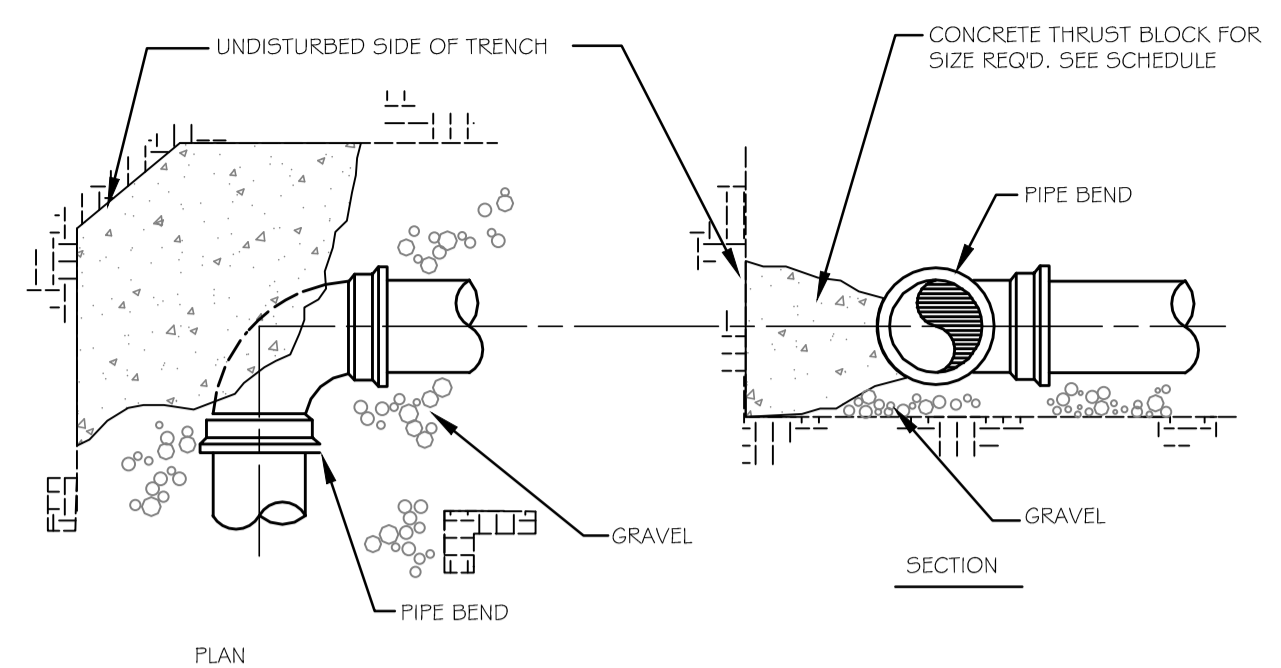


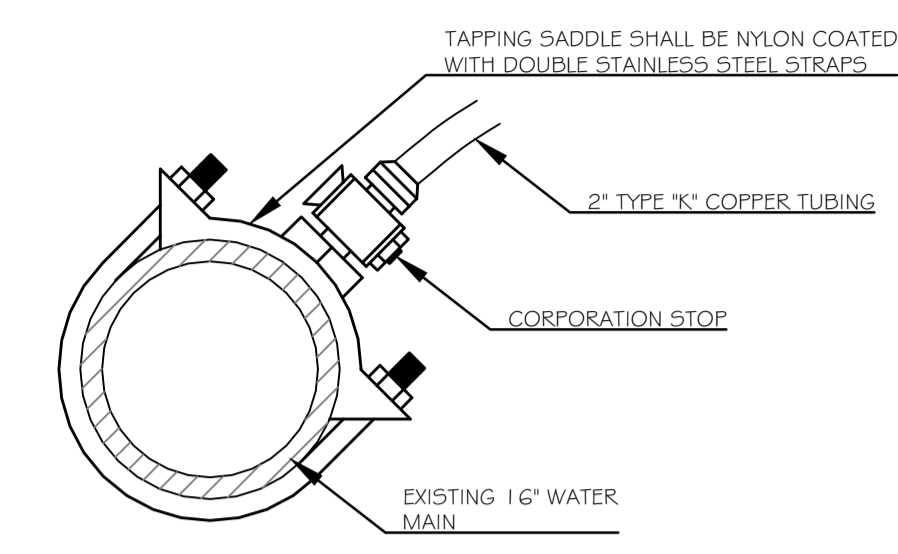
THRUST BLOCK PLACEMENT AT TEE(S)



THRUST BLOCK PLACEMENT AT BEND(S)

SIZE REQUIREMENTS FOR CONCRETE THRUST BLOCKS					
BEARING ON UNDISTURBED SOIL (SQUARE FT.)					
FITTINGS	90° BENDS	45° BENDS	TEES & PLUGS	HYDRANTS	
4"	2.0	1.0	1.0	N/A	
6"	3.0	2.0	2.0	6.0	
8"	5.0	3.0	4.0	N/A	

THRUST BLOCK SCHEDULE



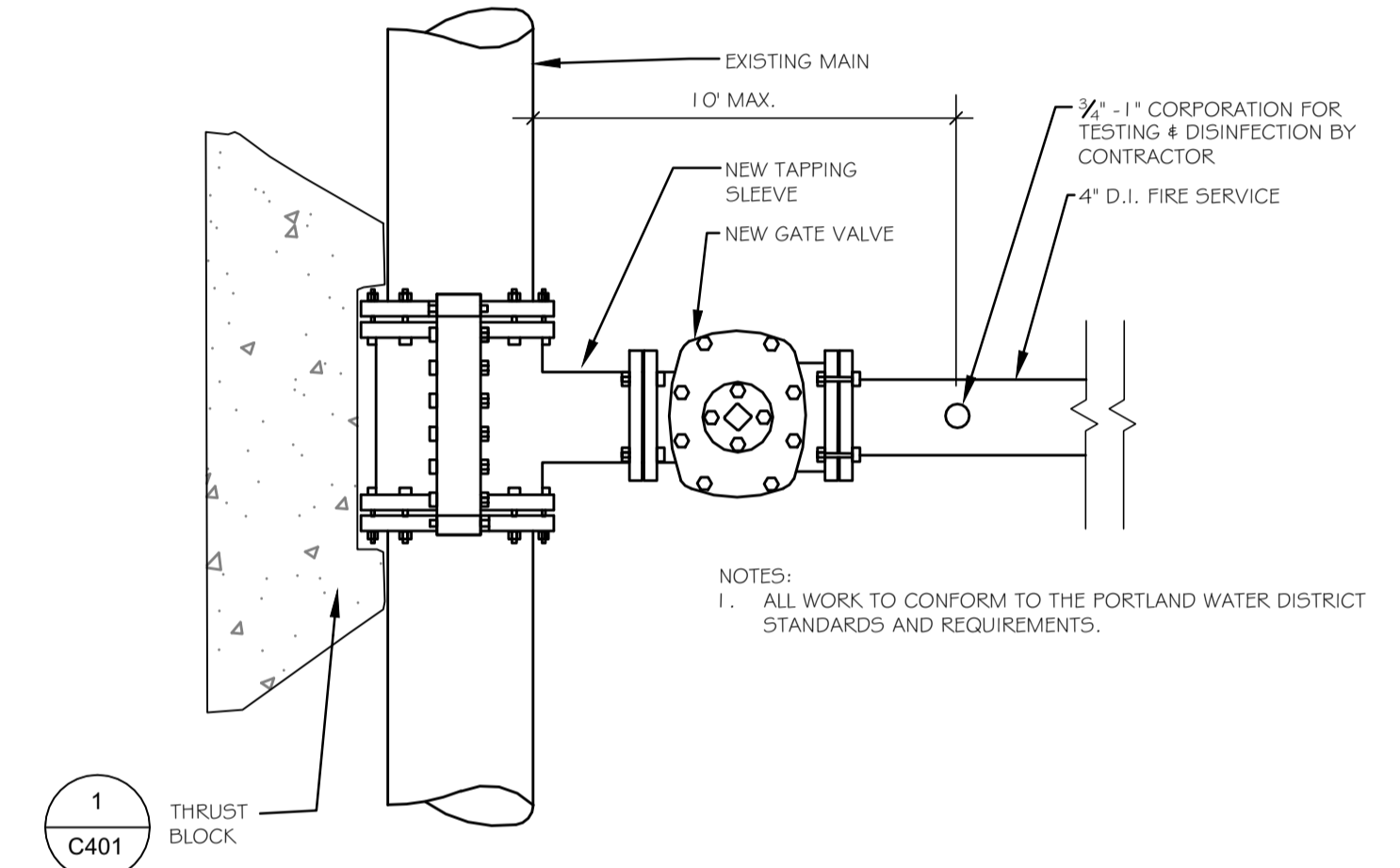
NOTES:
ALL WORK TO CONFORM TO THE PORTLAND WATER DISTRICT STANDARDS AND REQUIREMENTS.

2 STANDARD CORPORATION STOP DETAIL

1 THRUST BLOCK DETAILS

C401 NOT TO SCALE

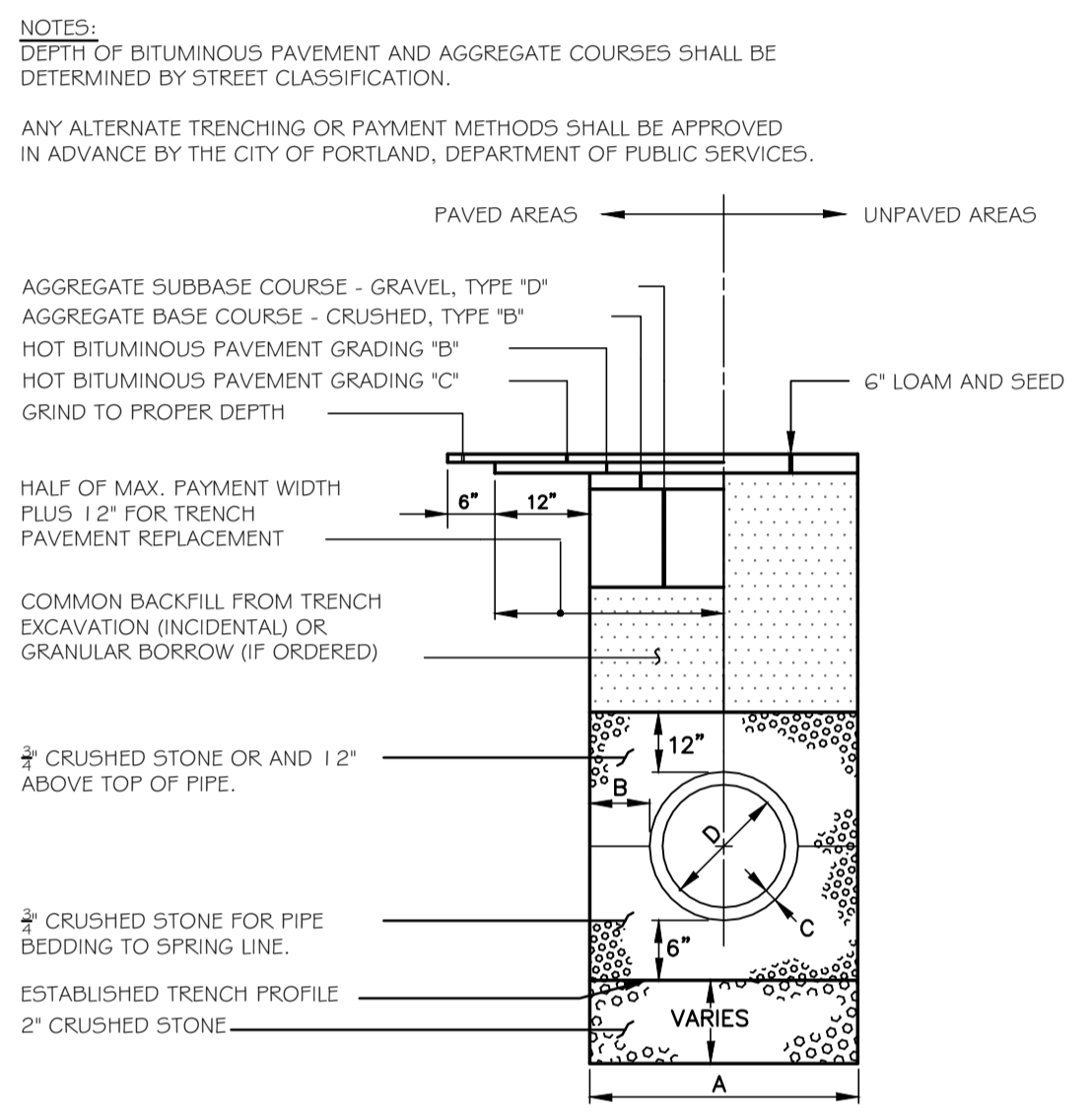
C401 NOT TO SCALE



NOTES:
1. ALL WORK TO CONFORM TO THE PORTLAND WATER DISTRICT STANDARDS AND REQUIREMENTS.

3 STANDARD TAPPING SLEEVE DETAIL (ALTERNATE #1)

C401



NOTES:
DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.

TYPICAL PIPE INSTALLATION NOTES

- ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
- 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.
- DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE, BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 9".
- DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

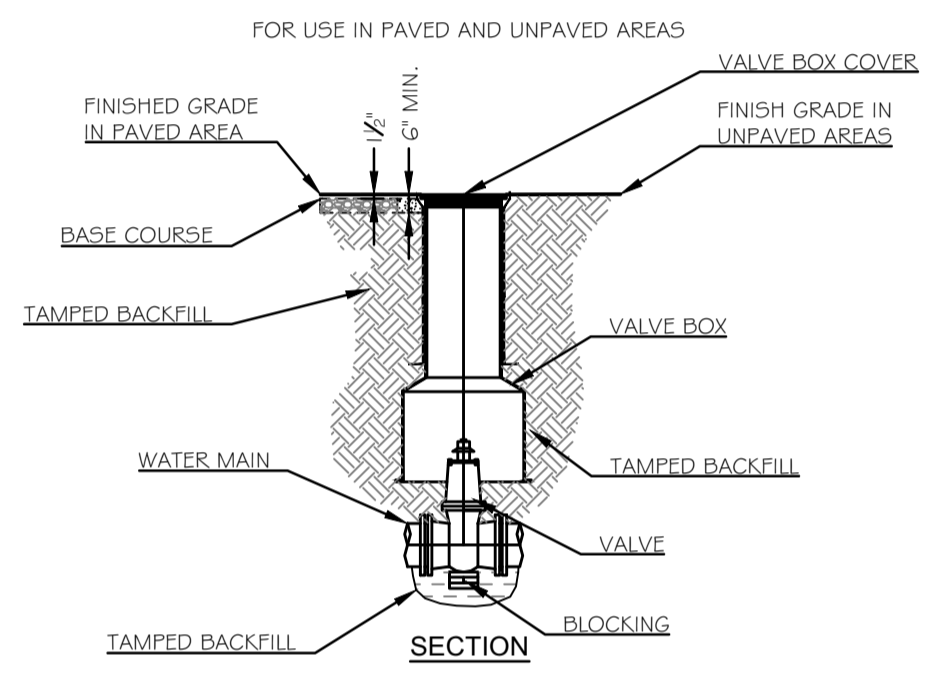
PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36	6.0
42	7.0
48	7.0

4 TYPICAL PIPE TRENCH & ROAD REPAIR DETAIL

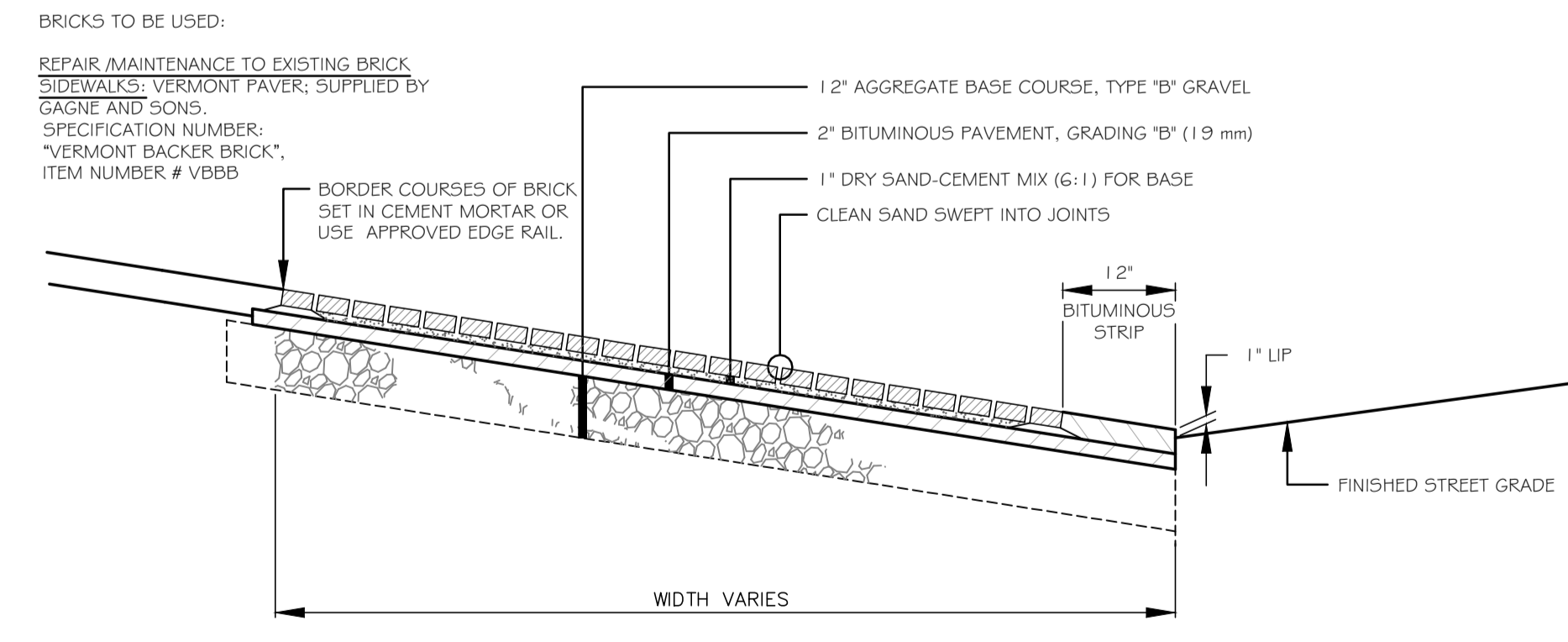
C401 NOT TO SCALE

5 VALVE AND VALVE BOX INSTALLATION DETAIL

C401 NOT TO SCALE

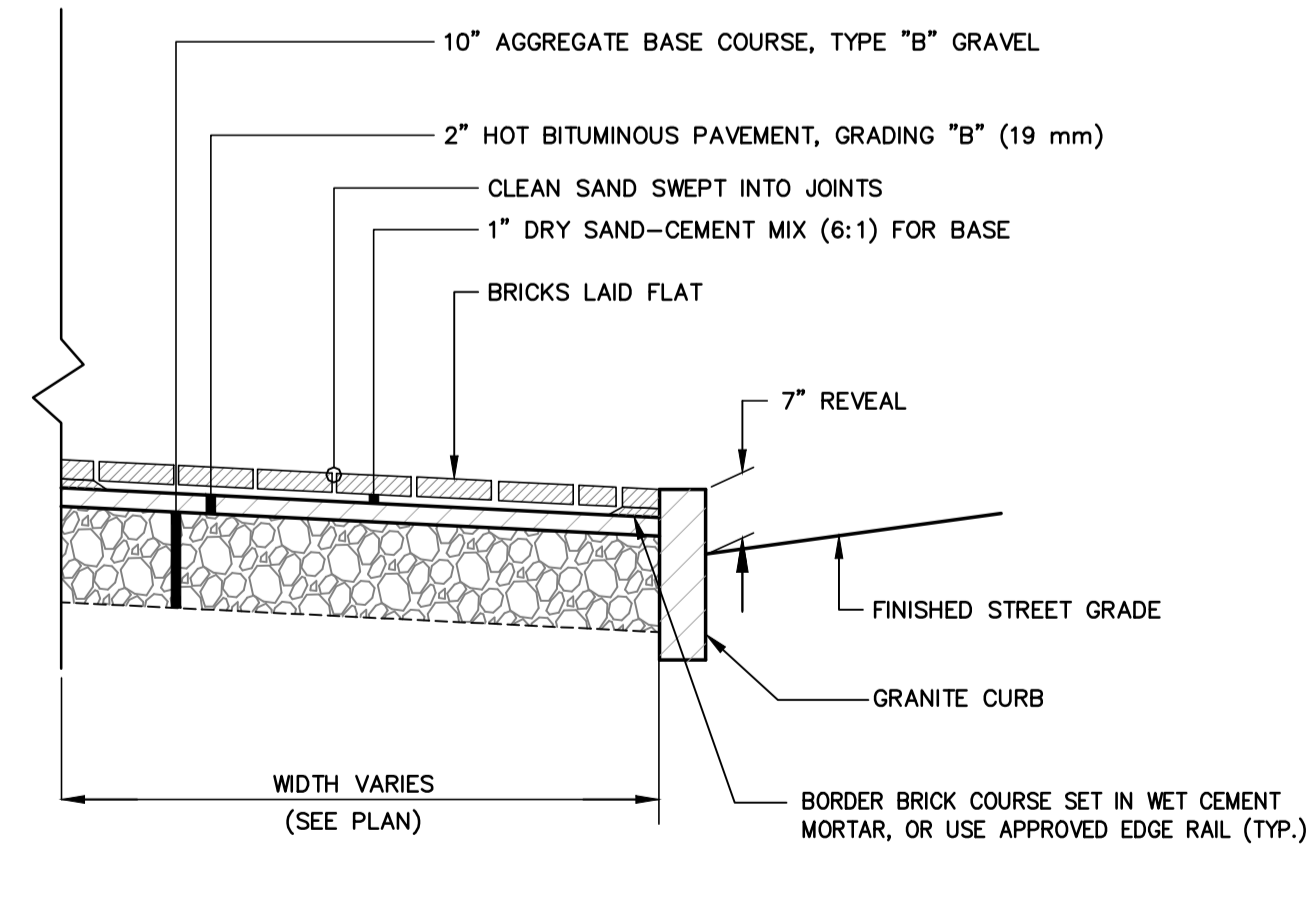


NOTES:
1. ALL WORK TO CONFORM TO THE MAINE WATER COMPANY STANDARDS AND REQUIREMENTS.
2. D.I.P. MAY BE USED FOR VALVE BOX EXTENSIONS.
3. VALVE BOX SHOULD NOT CONTACT WATER MAIN OR VALVE.
4. CONCRETE PROTECTOR RING SHALL BE USED IN ALL UNPAVED AREAS.



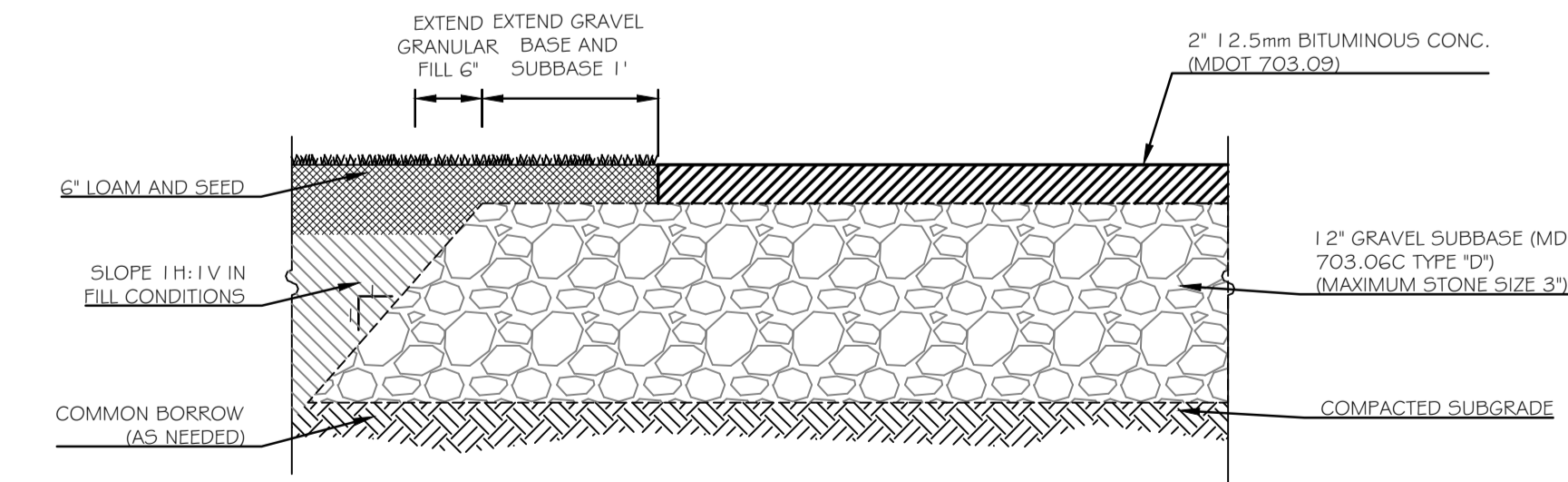
6 BRICK DRIVEWAY APRON WITH BITUMINOUS BASE

C401 NOT TO SCALE



7 BRICK SIDEWALK WITH BITUMINOUS BASE

C401 NOT TO SCALE



8 PAVED SIDEWALK SECTION

C401 NOT TO SCALE

BRICKS TO BE USED:
REPAIR / MAINTENANCE TO EXISTING BRICK SIDEWALKS: (PREBLE) VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: "VERMONT BACKER BRICK", ITEM NUMBER # VB88

BRICKS TO BE USED:
REPAIR / MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: "VERMONT BACKER BRICK", ITEM NUMBER # VB88