

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-1	STREET SIGN	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463



MINIMUM LETTER
HEIGHT 2"

3'

NAME OF PROJECT

PER PLANNING BOARD APPROVAL
SITE & UTILITY WORKING HOURS ARE:

MONDAY – FRIDAY _____
SATURDAY _____
NO SUNDAY OR HOLIDAY HOURS

NAME OF DEVELOPER/SITE CONTRACTOR
24HR REACHABLE PHONE NUMBER

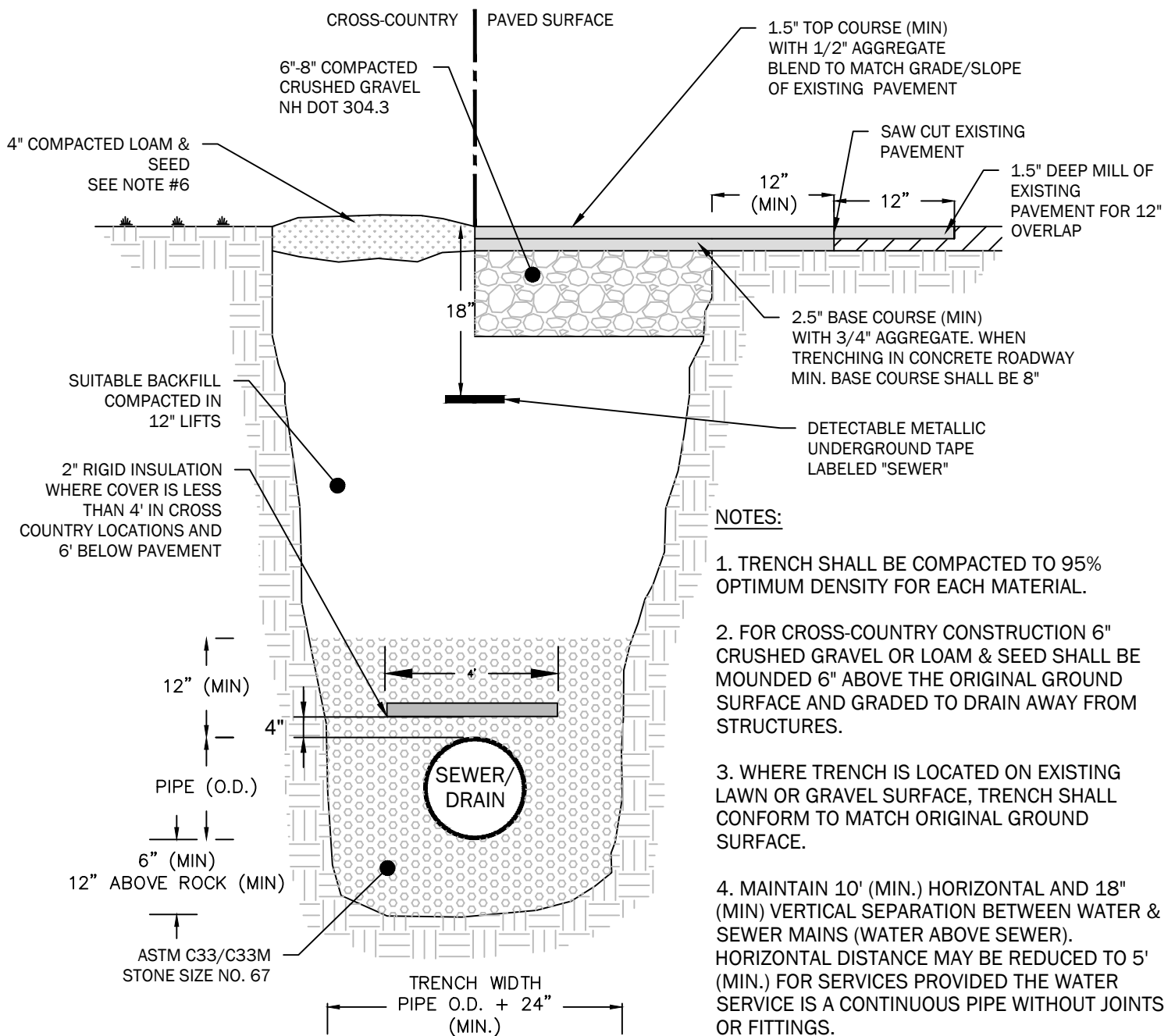
2'

NOTES:

1. SIGN SHALL HAVE BLACK LETTERS ON A WHITE BACKGROUND
2. SIGN SHALL BE WEATHER RESISTANT AND SECURED TO THE GROUND
3. HOURS ON THE SIGN SHALL COMPLY WITH ALL PLANNING BOARD CONDITIONS OF APPROVAL.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-2	CONSTRUCTION SIGN	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463





NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE AND GRADED TO DRAIN AWAY FROM STRUCTURES.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION
6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

SHEET NO.

STANDARD DETAILS
NOT TO SCALE

CITY OF DOVER, NH

D-3

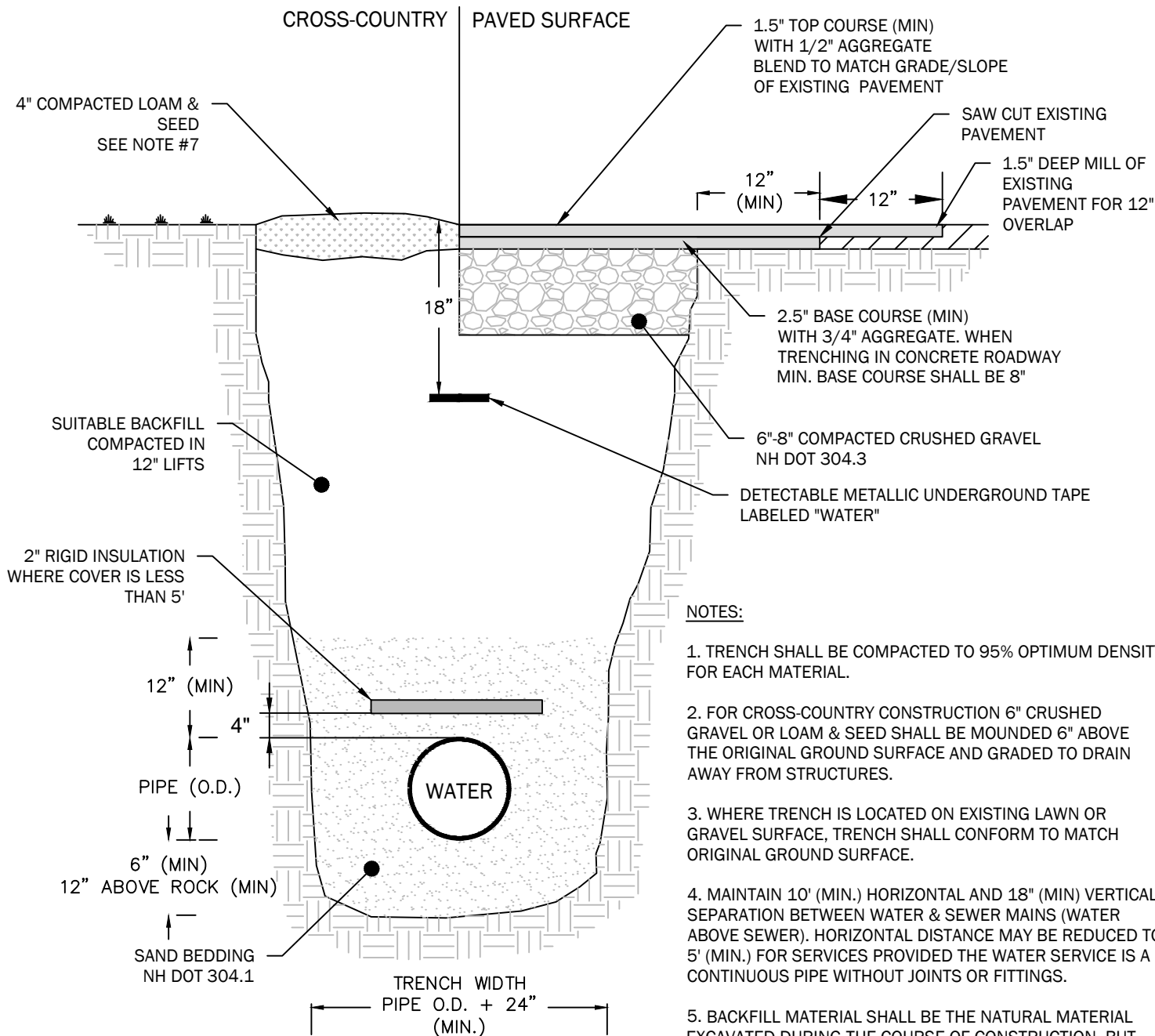
SEWER/DRAIN
TRENCH

COMMUNITY SERVICES
ENGINEERING DIVISION

288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE: (603) 516-6450
FAX: (603) 516-6463



REVISED:
April 2025



NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE AND GRADED TO DRAIN AWAY FROM STRUCTURES.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE; DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT, AND ROCKS OVER 6" IN LARGEST DIMENSION
6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.
7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

SHEET NO.

STANDARD DETAILS
NOT TO SCALE

CITY OF DOVER, NH

D-4

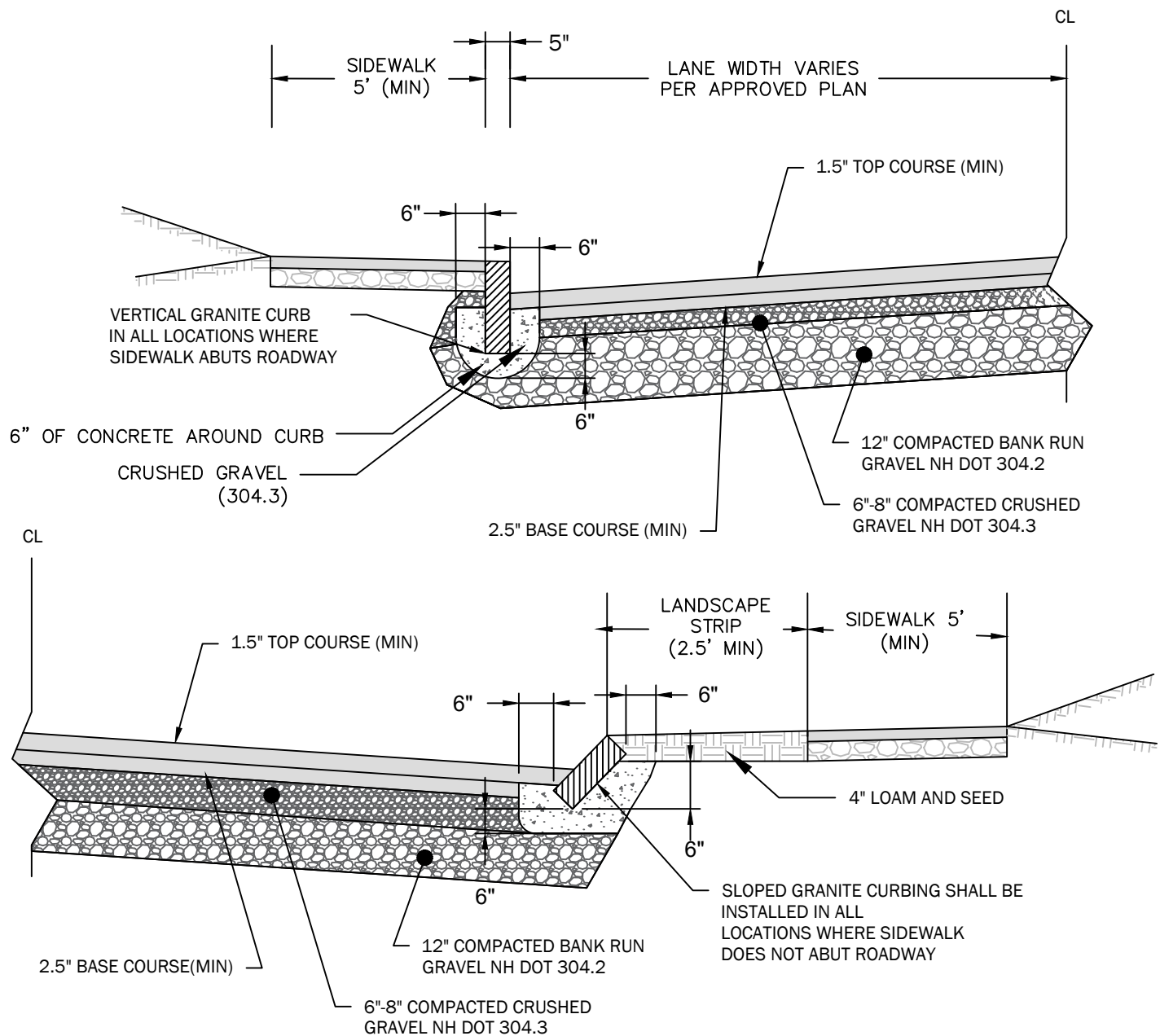
WATER TRENCH

REVISED:
April 2025

COMMUNITY SERVICES
ENGINEERING DIVISION

288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE: (603) 516-6450
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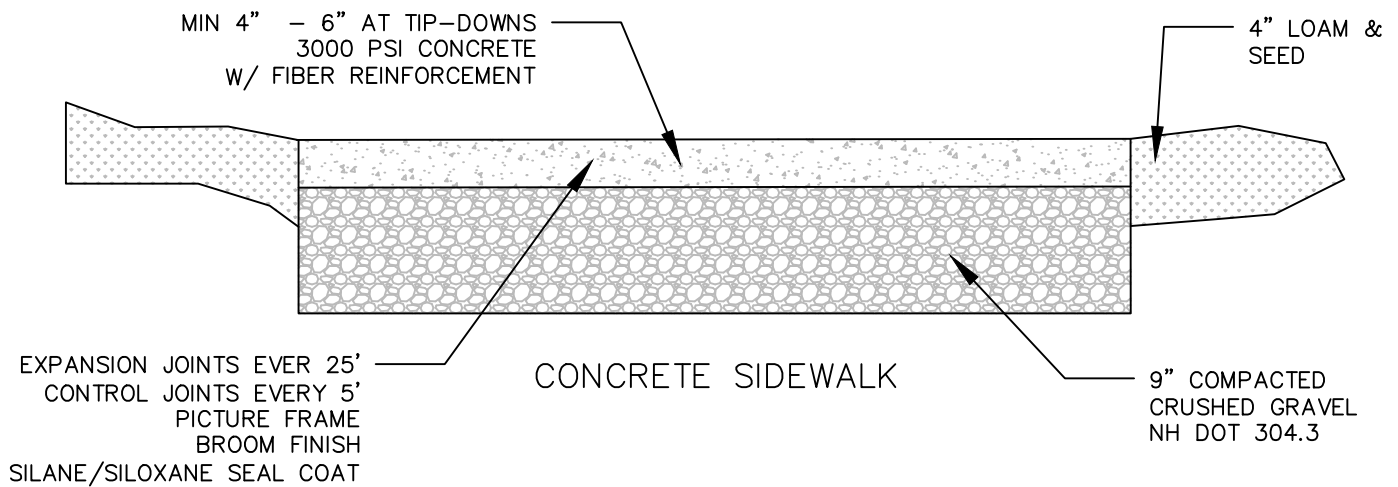
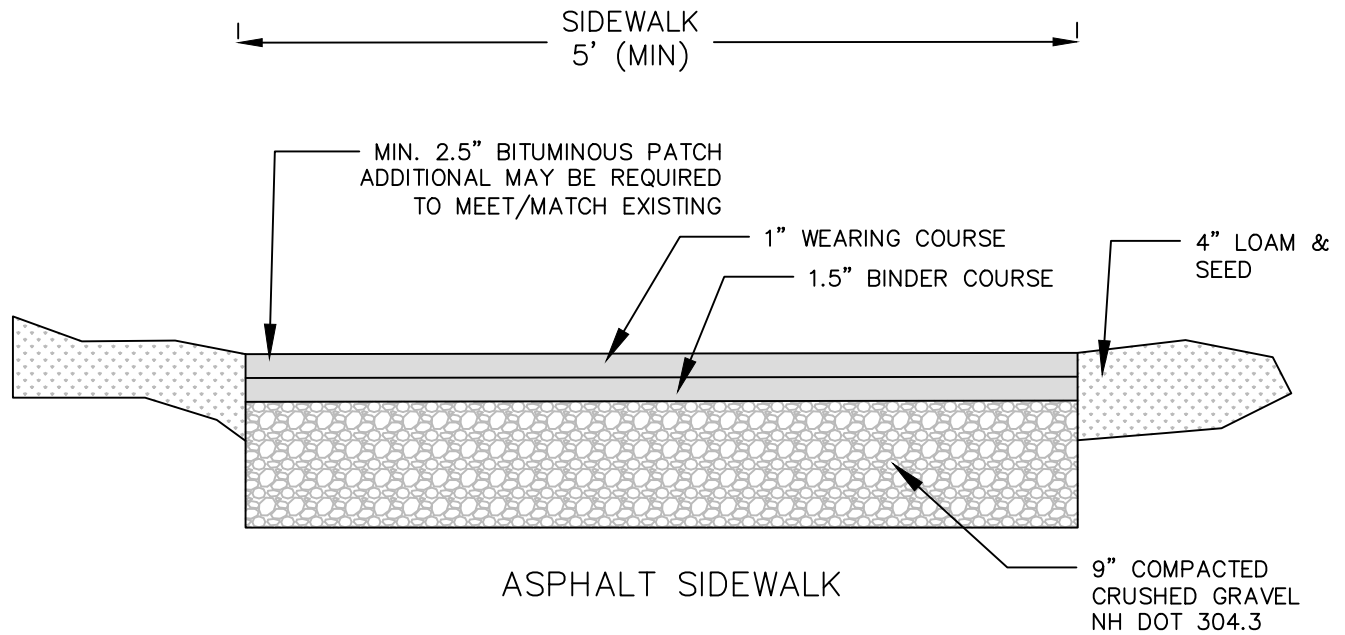


NOTES:

1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS AND APPROVED PLANS.
2. SIDEWALK LOCATION AND MATERIAL SHALL BE AS APPROVED BY THE CITY OF DOVER.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-5	PUBLIC ROAD CROSS SECTION	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463



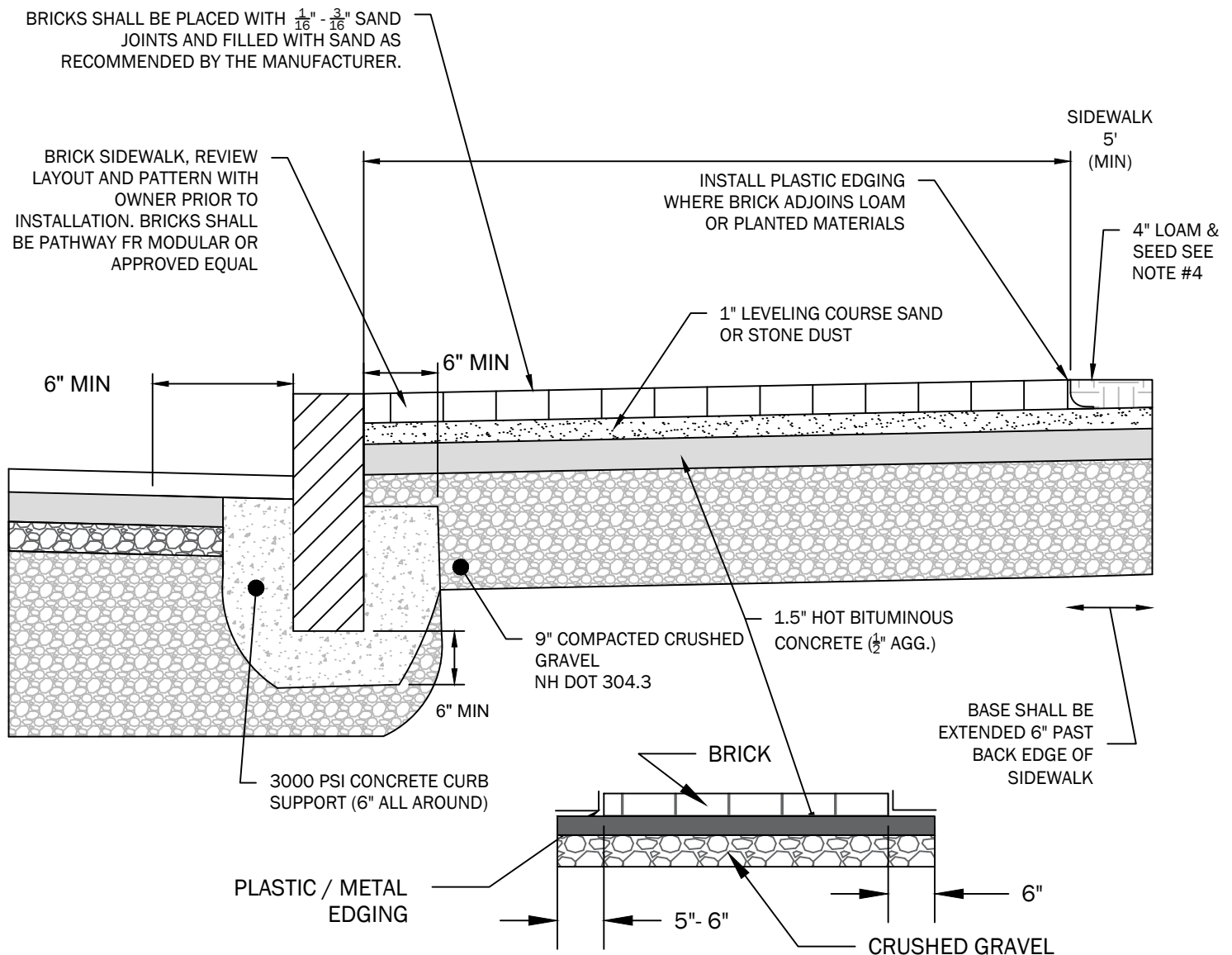


NOTES:

1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.
2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.
3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-6	ASPHALT & CONCRETE SIDEWALK	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463





NOTES:

1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.
2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.
3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.
4. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-7	BRICK SIDEWALK	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463

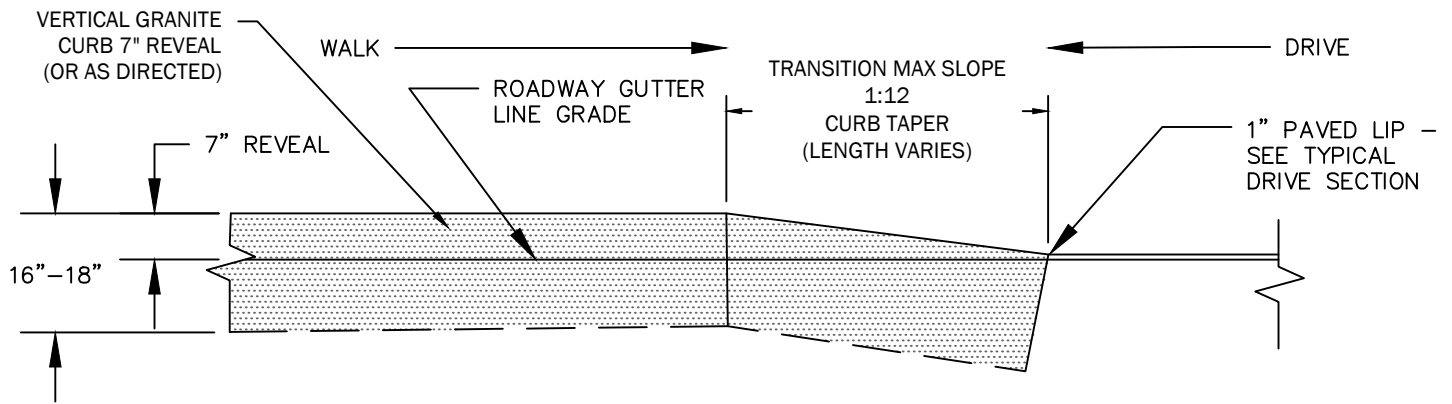




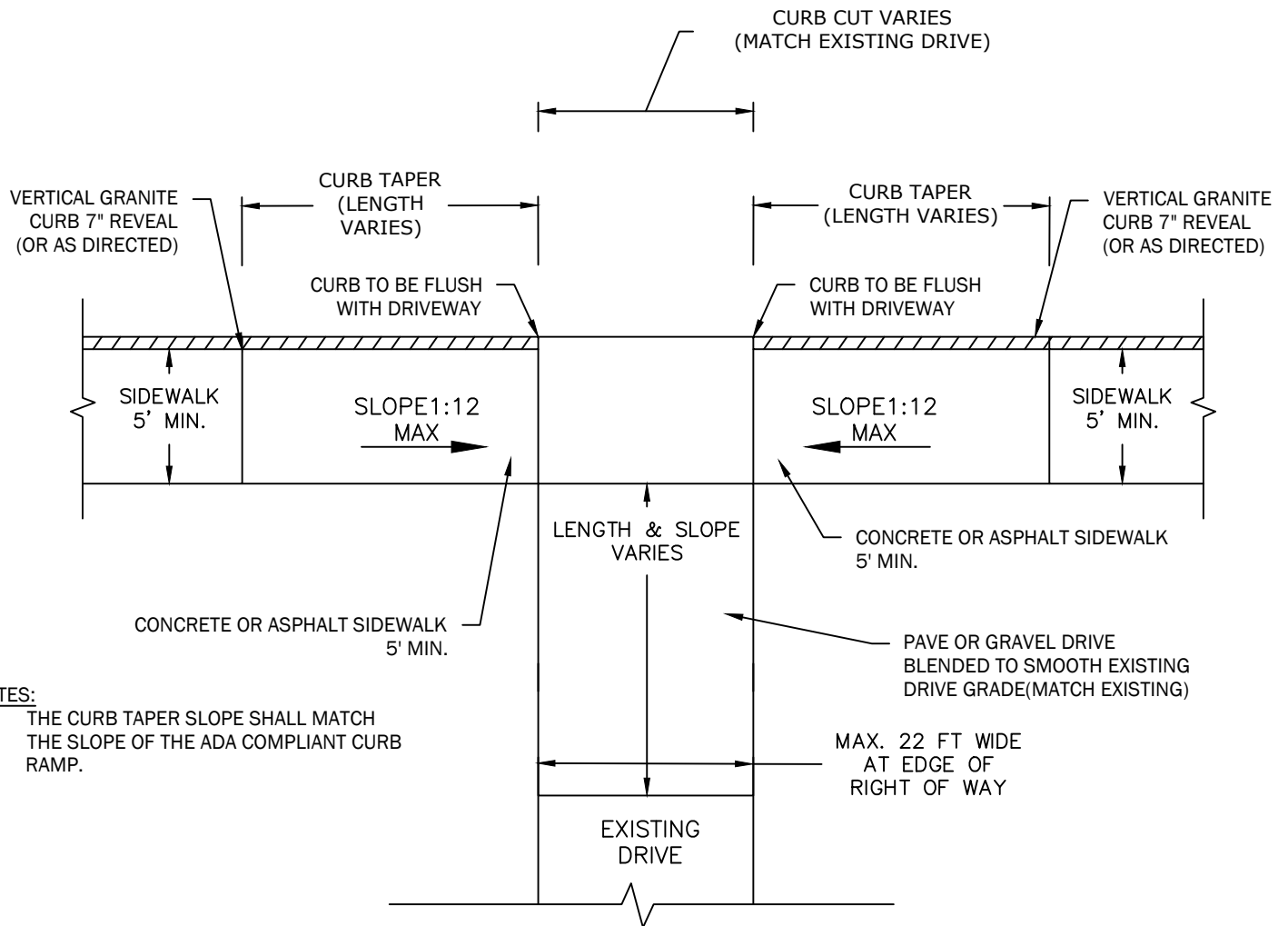
NOTES:

- 3000 PSI CONCRETE
CURB SUPPORT





GRANITE CURB TRANSITION AT TIP DOWN



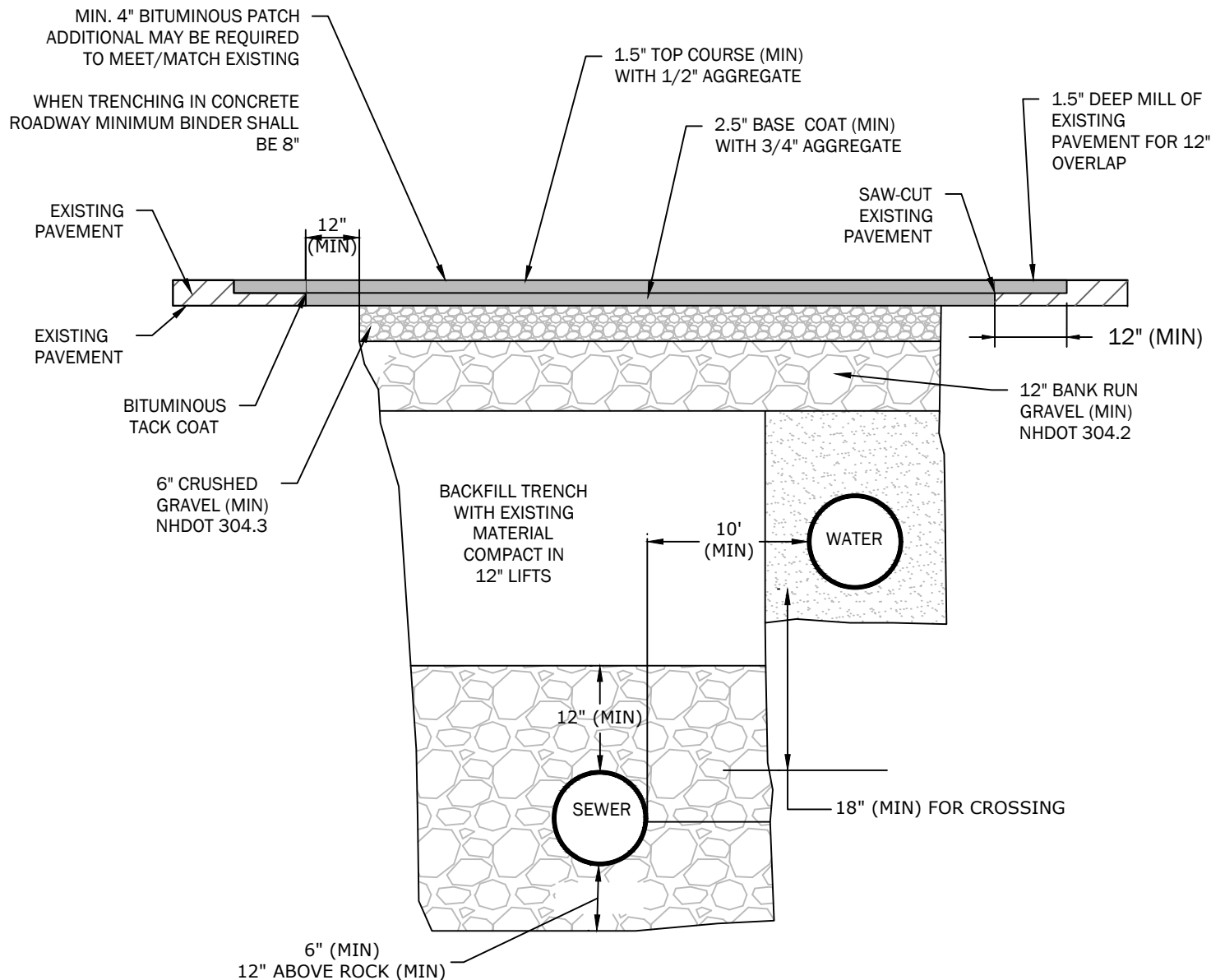
NOTES:

1. THE CURB TAPER SLOPE SHALL MATCH THE SLOPE OF THE ADA COMPLIANT CURB RAMP.

DRIVEWAY PLAN WITH SIDEWALK TIP DOWNS

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-9	SIDEWALK TIP DOWN AT DRIVEWAY	COMMUNITY SERVICES ENGINEERING DIVISION 288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463
REVISED: April 2025		



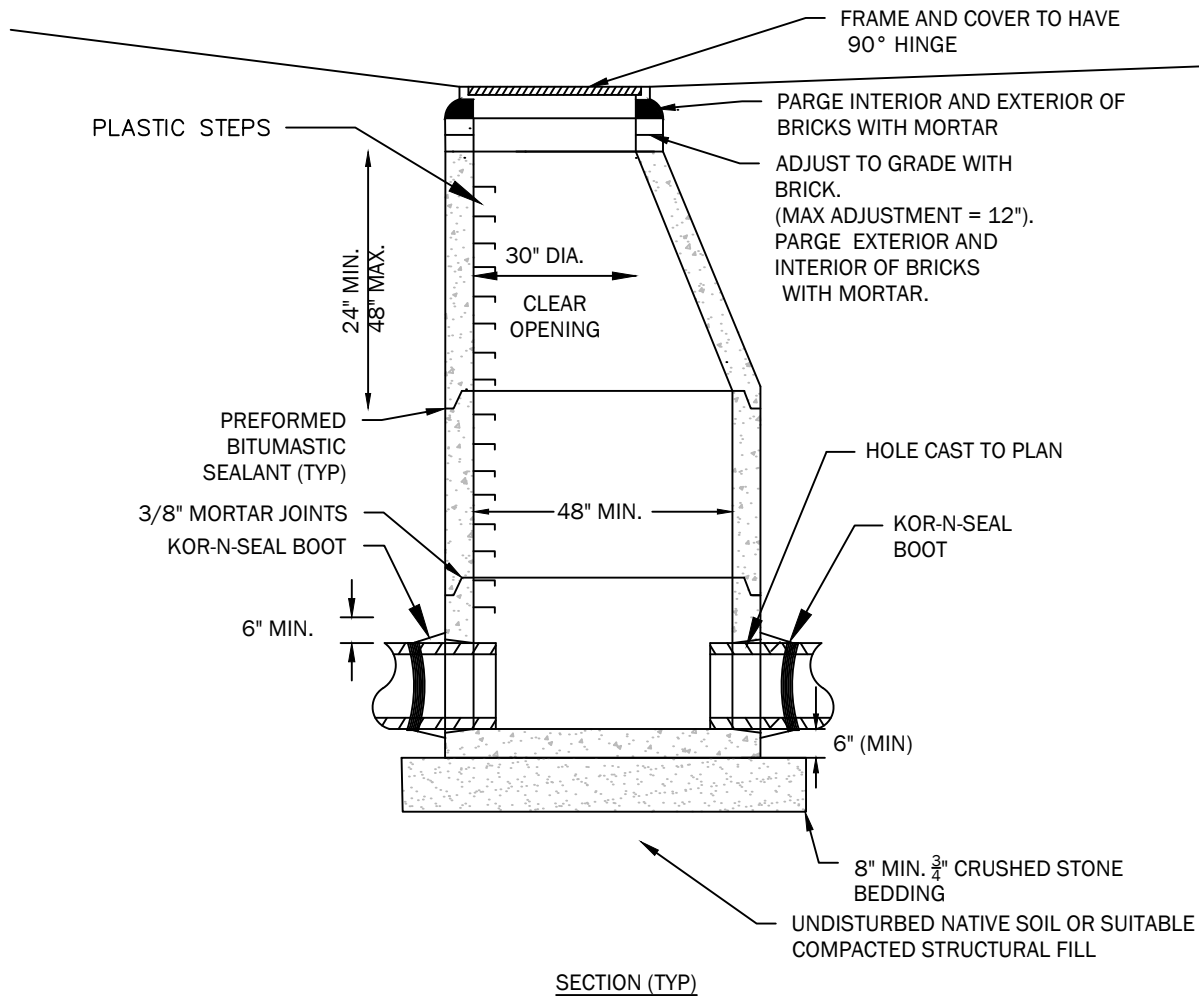


NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-10	TYPICAL TRENCH	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463



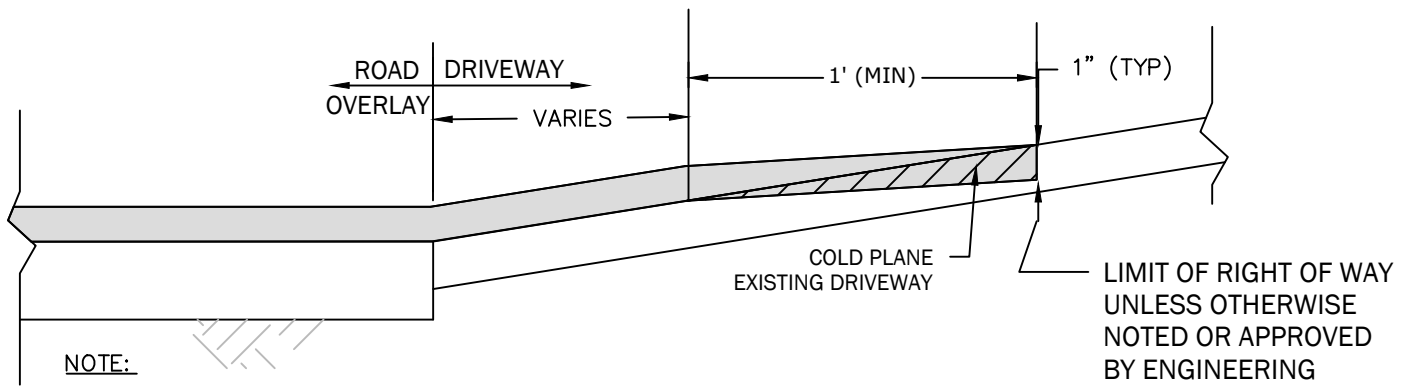


NOTES:

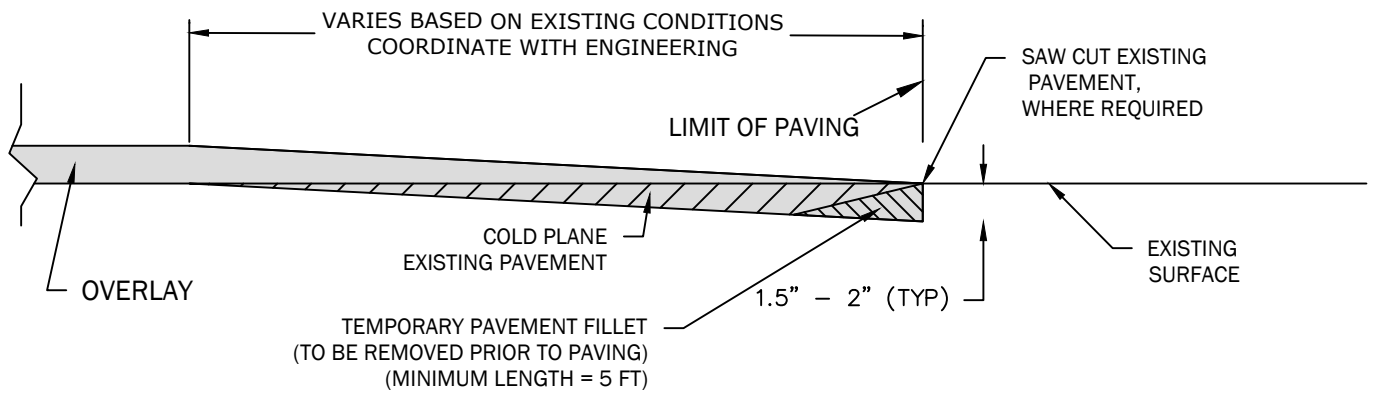
1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-20	DRAIN MANHOLE	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463

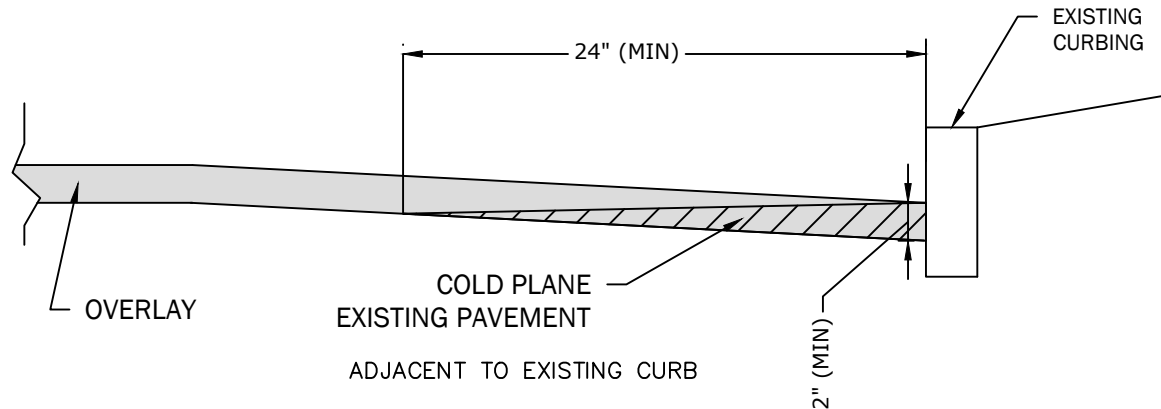




ADJACENT TO EXISTING DRIVEWAY



ADJACENT TO EXISTING PAVEMENT

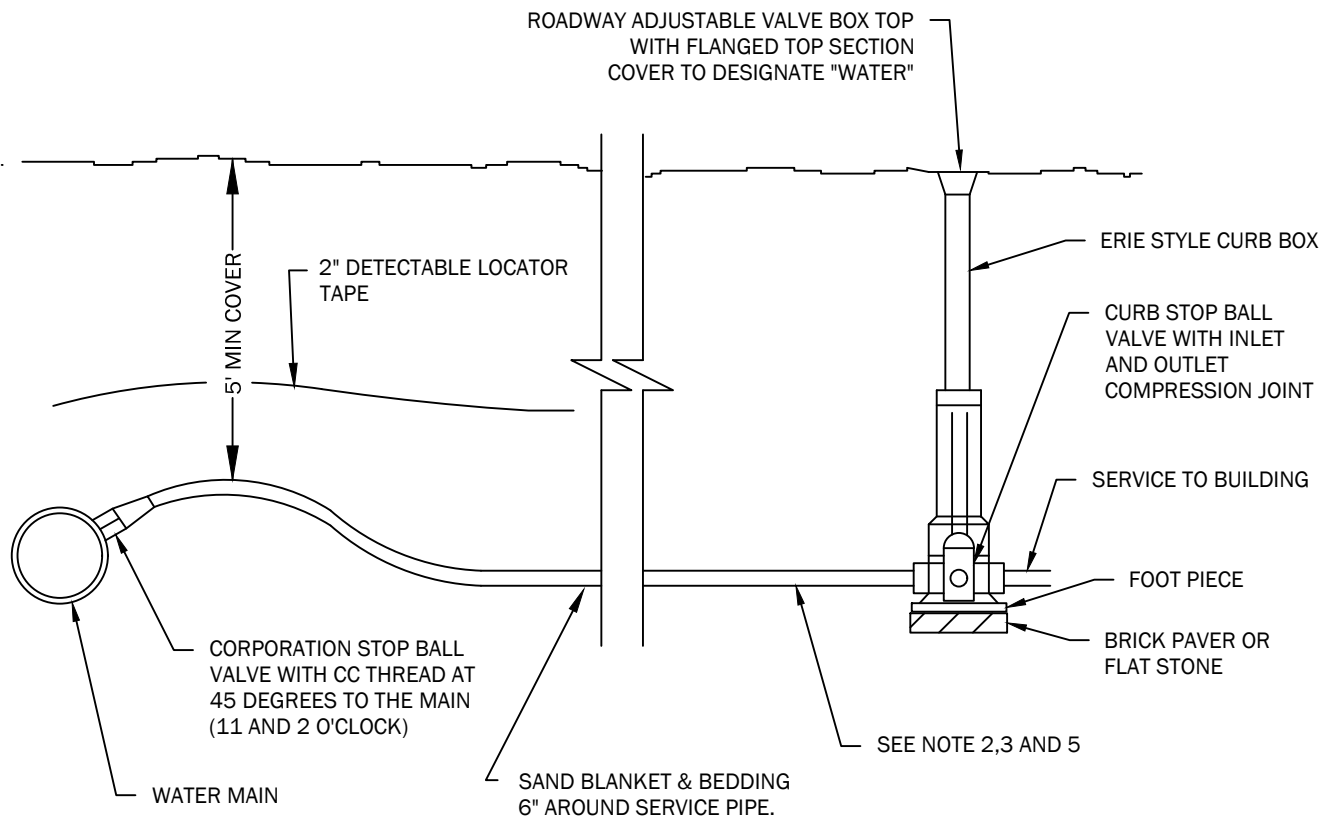


NOTES:

1. THE LENGTH OF THE TAPER MAY BE ADJUSTED AS ORDERED TO PROVIDE FOR VARYING FIELD CONDITIONS OR CHANGES IN SINGLE COURSE DEPTH.


SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-12	PAVEMENT OVERLAY	COMMUNITY SERVICES ENGINEERING DIVISION
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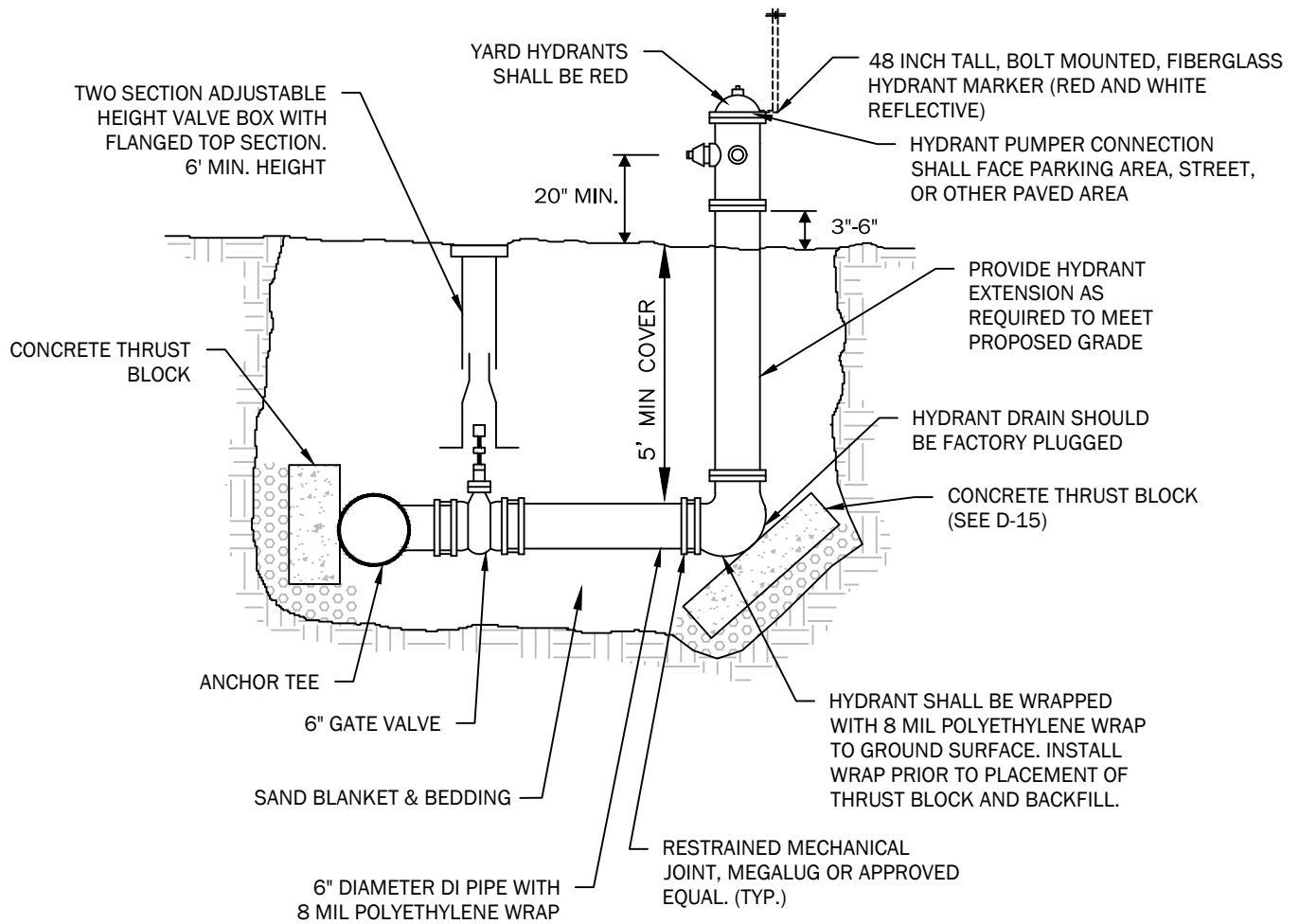




NOTES:

1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH A ZINC COATED 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.
4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE
5. ALL SERVICES SHALL BE 1". PROVIDE 1" TO 3/4" REDUCER COUPLING WHERE EXISTING SERVICES ARE 3/4", SUBSIDIARY.
6. APPROVED WATER SERVICE MATERIALS INCLUDE:
 1"- COPPER, CTS
 2"- CTS, HDPE, IPS
7. ALL SADDLES USED AS SPECIFIED SHALL HAVE DOUBLE STAINLESS STEEL STRAPS.
8. TAPS TO BE MADE AT APPROX. 2:00 AND 10:00.

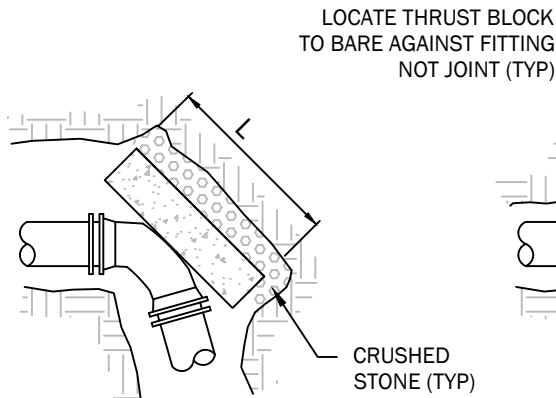
SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-13	WATER SERVICE	COMMUNITY SERVICES ENGINEERING DIVISION
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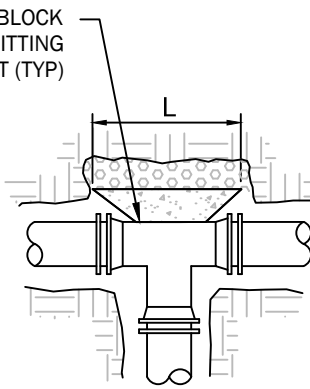
NOTES:

1. FIRE HYDRANTS SHALL BE FACTORY SEALED EDDY STYLE 2641.
2. HYDRANT SHALL BE PAINTED RED WITH EPOXY PAINT AS RECOMMENDED BY THE HYDRANT MANUFACTURER.
3. HYDRANT SHALL OPEN LEFT.
4. HYDRANT MARKER TO BE 3/8" FIBERGLASS RODS BY E-ZGUIDE PRODUCTS OR APPROVED EQUAL.
5. PIPE BEDDING AND BLANKET SHALL MEET THE STANDARD WATER TRENCH DETAIL D-4.

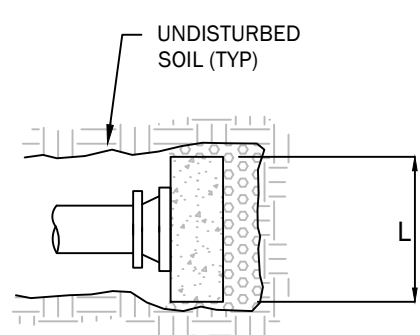
SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-14	FIRE HYDRANT	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		<p>288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820</p> <p>TELEPHONE: (603) 516-6450 FAX: (603) 516-6463</p> 



PLAN - ELBOW

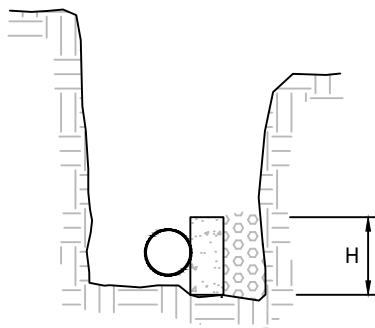


PLAN - TEE



PLAN - CAP

THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)



SECTION (TYP)

Nominal Dia. (in)	PIPE SIZE					
	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2 SYSTEM PRESSURE: 125 PSI SAFETY FACTOR: 1.5 SOIL BEARING CAPACITY: 2,000 PSF						

NOTES:

1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

SHEET NO.

STANDARD DETAILS
NOT TO SCALE

CITY OF DOVER, NH

D-15

CONCRETE

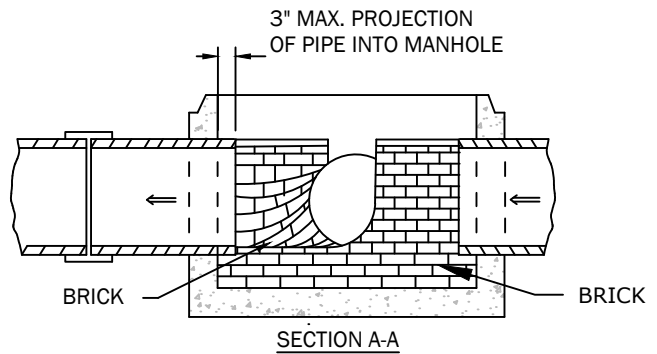
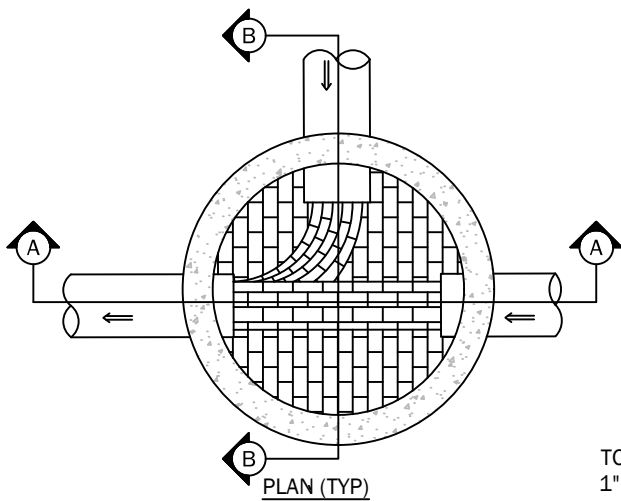
COMMUNITY SERVICES
ENGINEERING DIVISION

REVISED:
April 2025

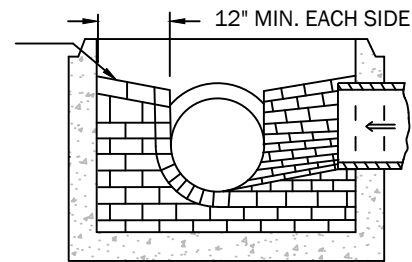
THRUST BLOCK

288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE: (603) 516-6450
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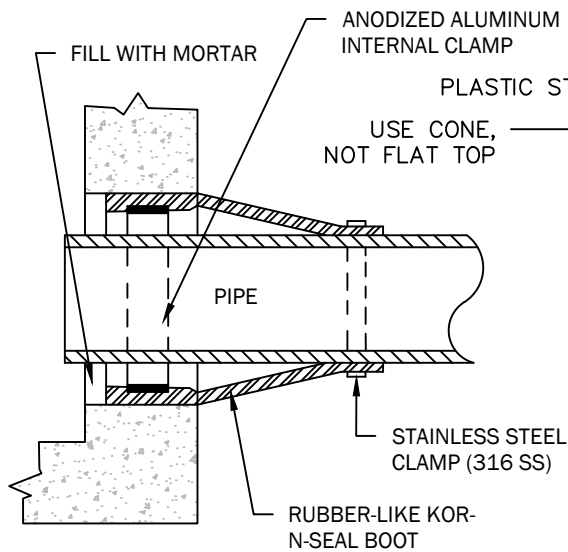


TOP OF SHELF SHALL BE
1" ABOVE CROWN
OF HIGHEST PIPE



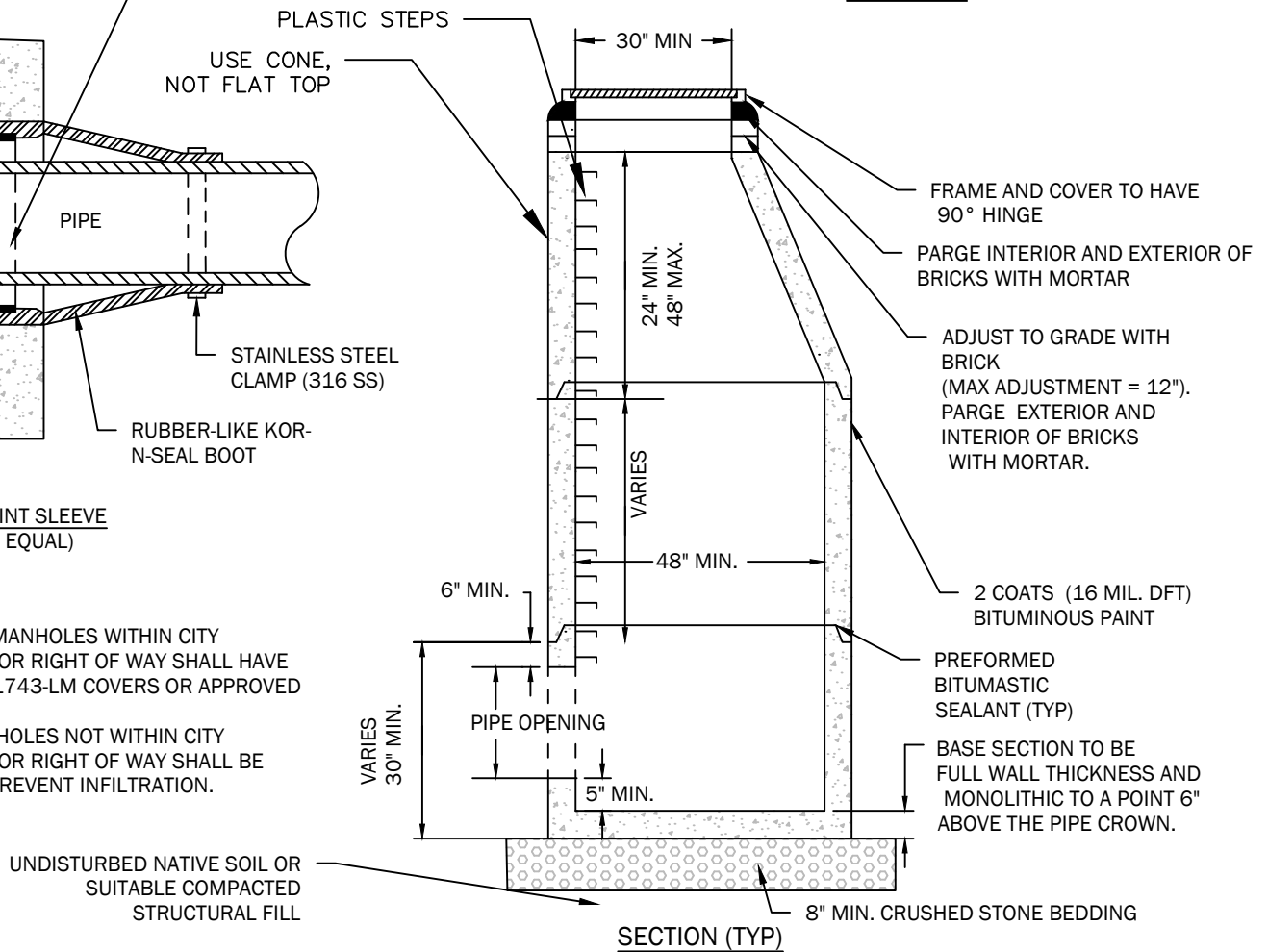
NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION



NOTES:

1. ALL SEWER MANHOLES WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MANHOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.



SHEET NO.

STANDARD DETAILS
NOT TO SCALE

CITY OF DOVER, NH

D-16

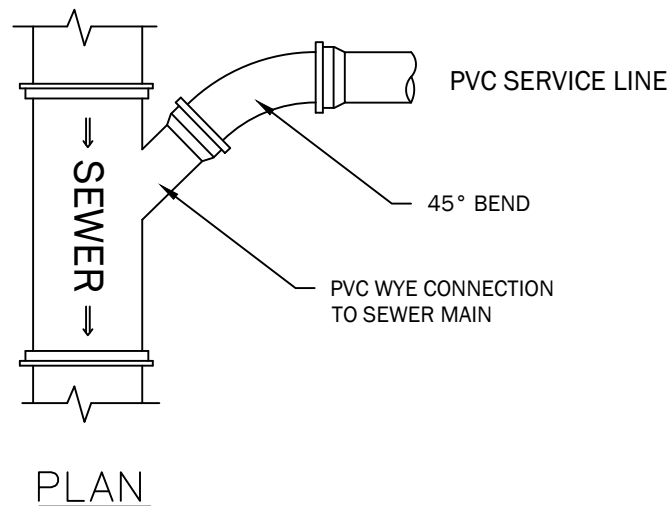
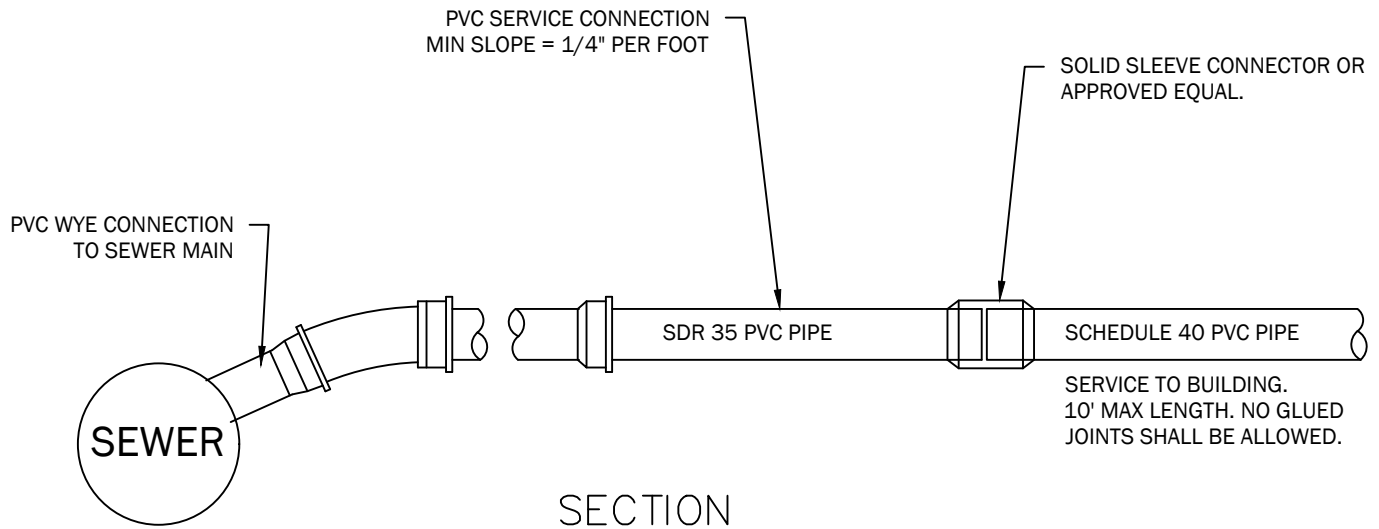
SEWER
MANHOLE

COMMUNITY SERVICES
ENGINEERING DIVISION

288 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE: (603) 516-6450
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REVISED:
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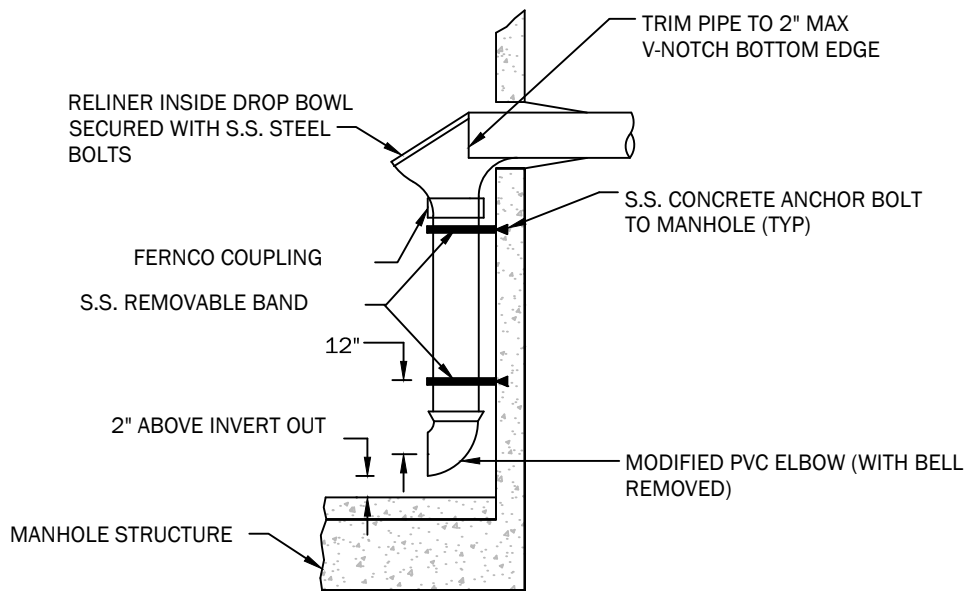


NOTES:

1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-17	SEWER SERVICE	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463



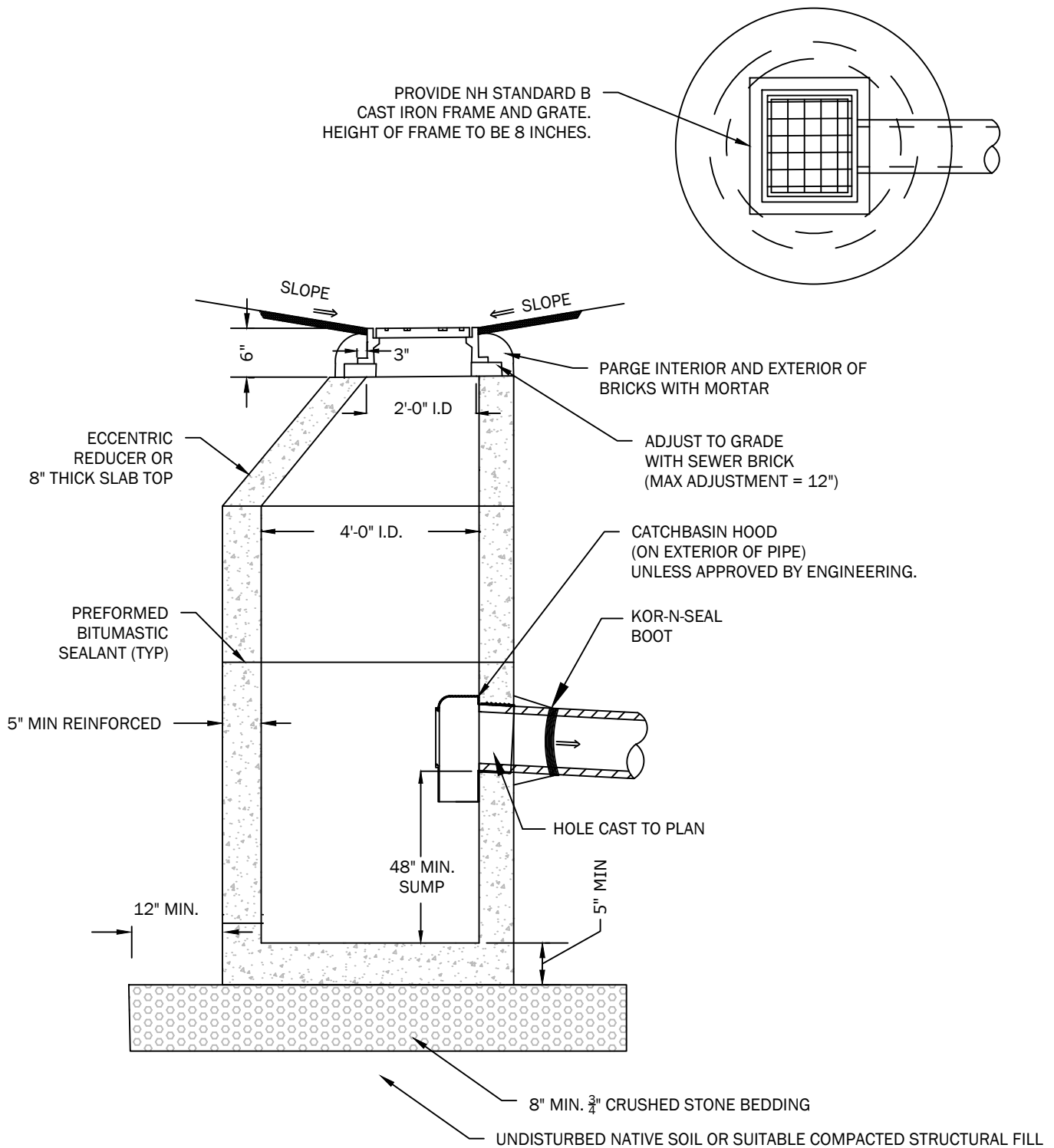


INTERNAL DROP

NOTES:

1. INTERNAL DROPS ARE PROHIBITED UNLESS APPROVED BY THE CITY ENGINEER.
2. A MINIMUM 5 FT DIAMETER MANHOLE IS REQUIRED FOR AN INTERNAL DROP.
3. IF A DROP IS PROPOSED FOR AN EXISTING MANHOLE, THE BRICK SHELF SHALL BE REWORKED TO FORM A NEW CHANNEL FOR NEW DROP CONNECTIONS. IF STRUCTURE IS LESS THAN 5 FT IN DIAMETER, A NEW PRECAST MANHOLE SHALL BE INSTALLED.
3. BRICK INVERT NOT SHOWN ON DETAIL.
4. EXTERNAL DROPS ARE NOT PERMITTED UNLESS AUTHORIZED IN WRITING BY COMMUNITY SERVICES.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-18	MANHOLE DROP INLET	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463 

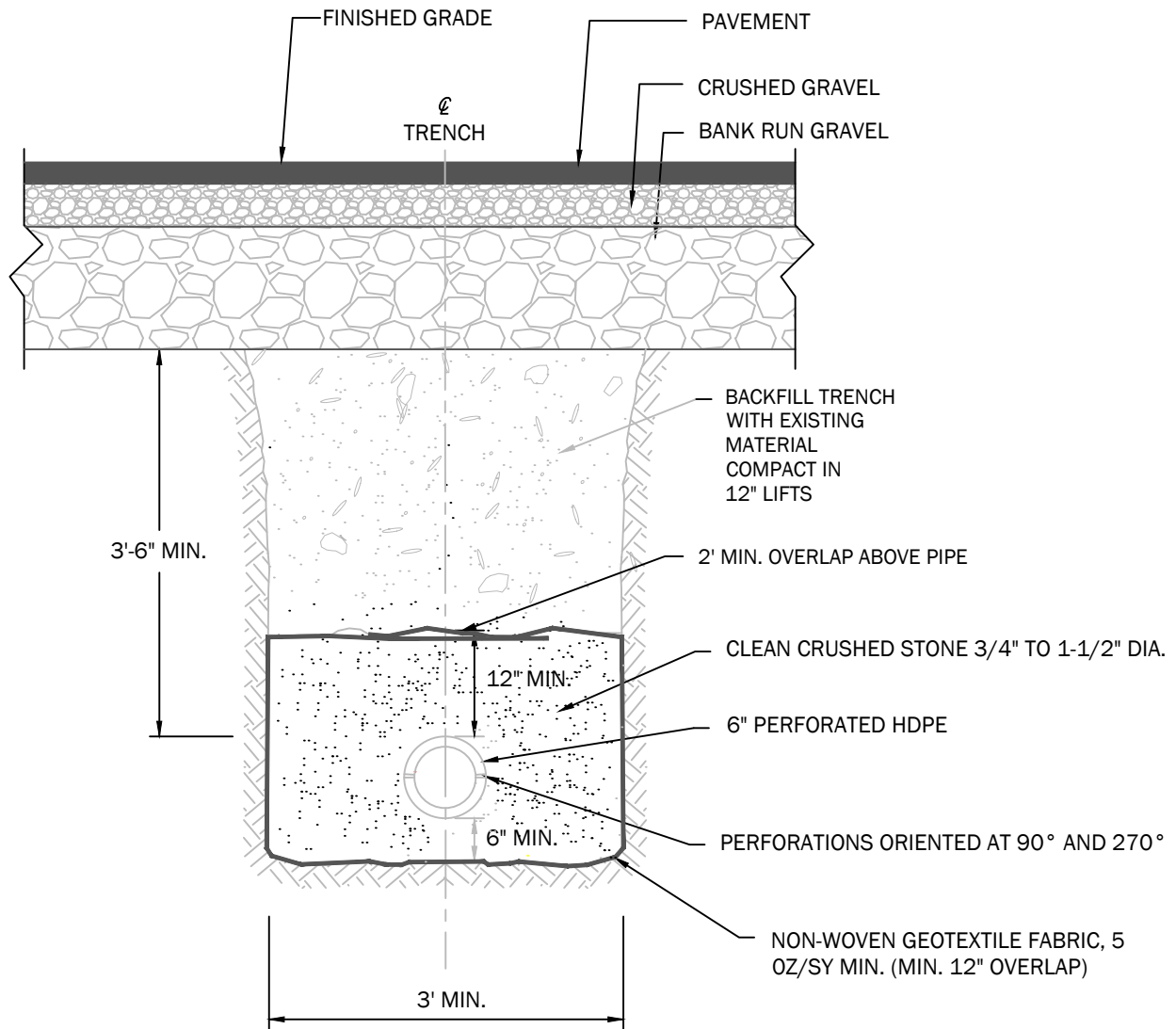


NOTES:

1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.
2. CONTRACTOR SHALL HAVE OPTION TO USE 6" OR 8" PRECAST GRADE RINGS TO ADJUST GRADE.

SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-19	CATCHBASIN	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463





SHEET NO.	STANDARD DETAILS NOT TO SCALE	CITY OF DOVER, NH
D-20	UNDERDRAIN	COMMUNITY SERVICES ENGINEERING DIVISION
REVISED: April 2025		288 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE: (603) 516-6450 FAX: (603) 516-6463

