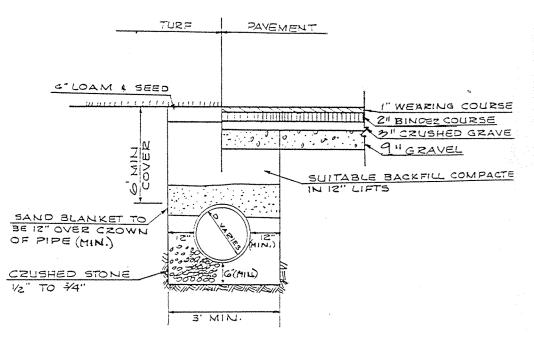
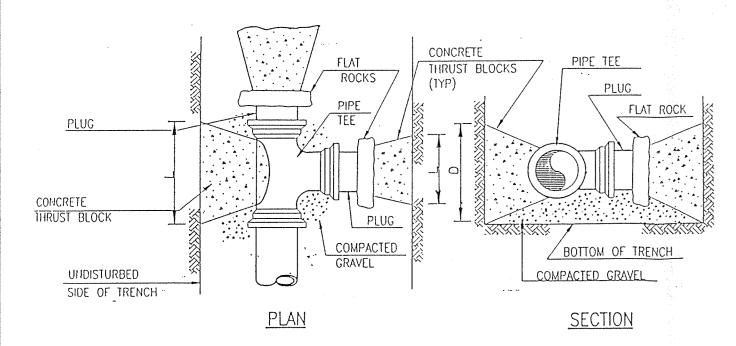


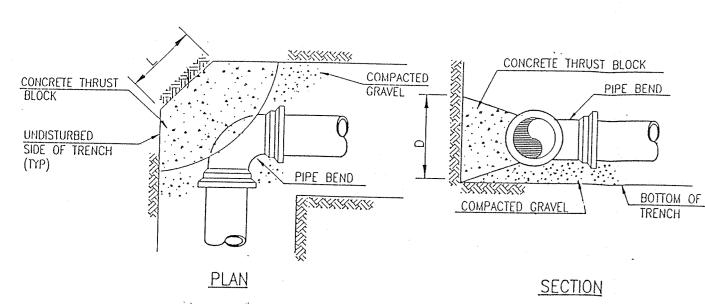
PVC SEWER AND HOUSE SEWER DETAIL



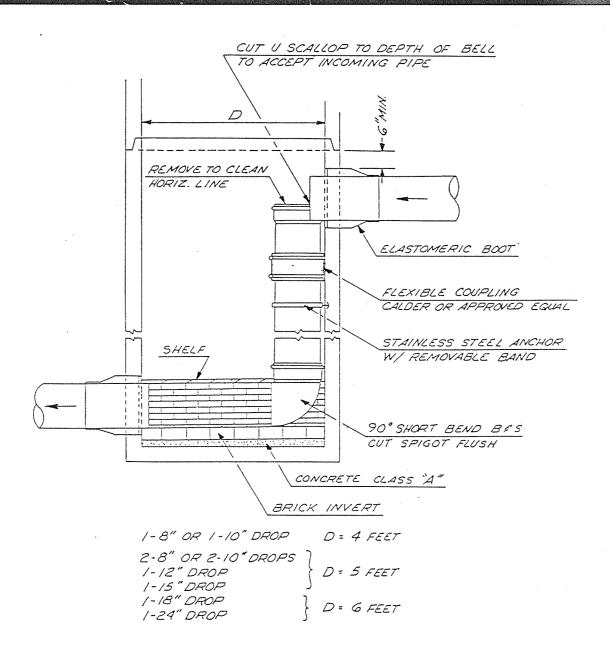
TYPICAL SEWER TRENCH DETAIL



TYPICAL TEES & PLUGS INSTALLATION NOT TO SCALE

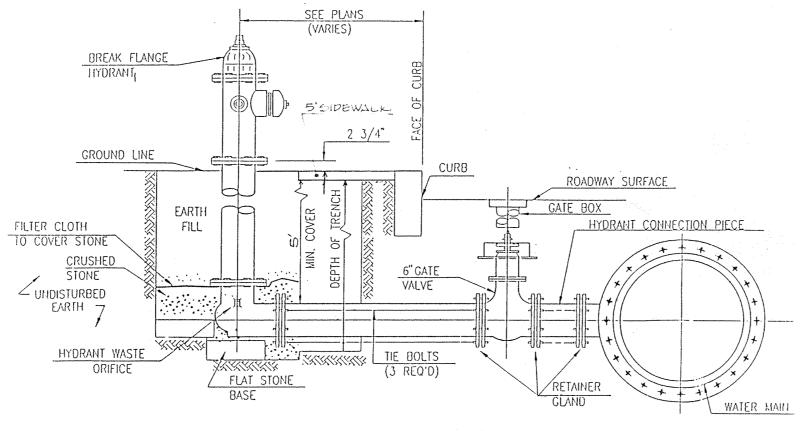


BENDS INSTALLATION NOT TO SCALE

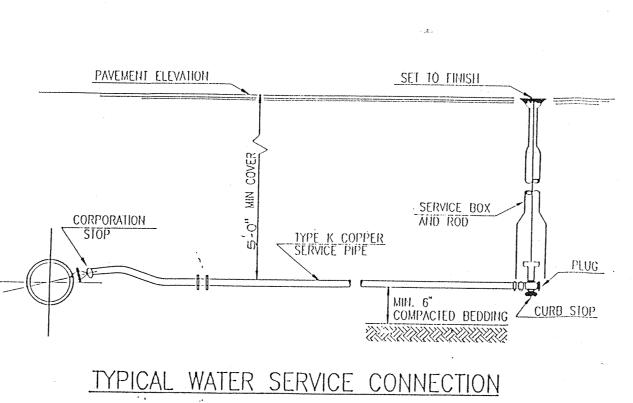


INSIDE DROP CONNECTION FOR P.V.C. PIPE

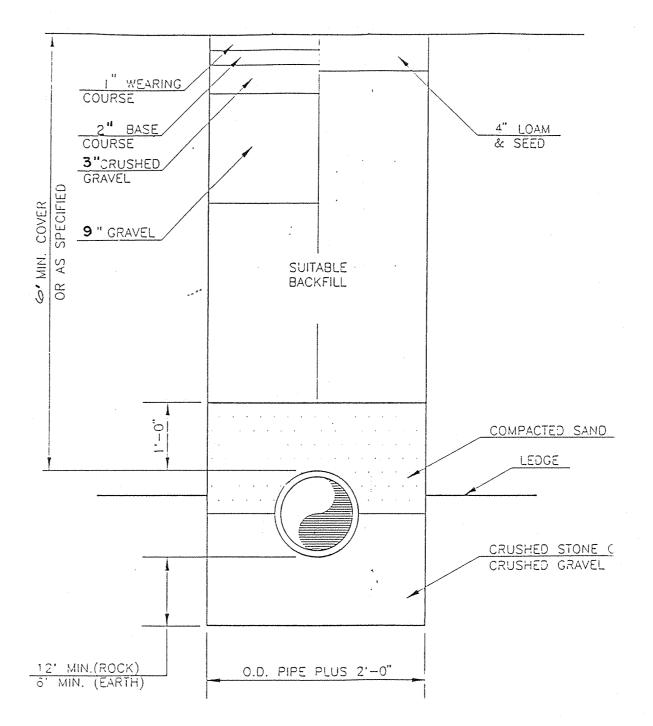
NOT TO SCALE



TYPICAL HYDRANT INSTALLATION NOT TO, SCALE



NOT TO SCALE

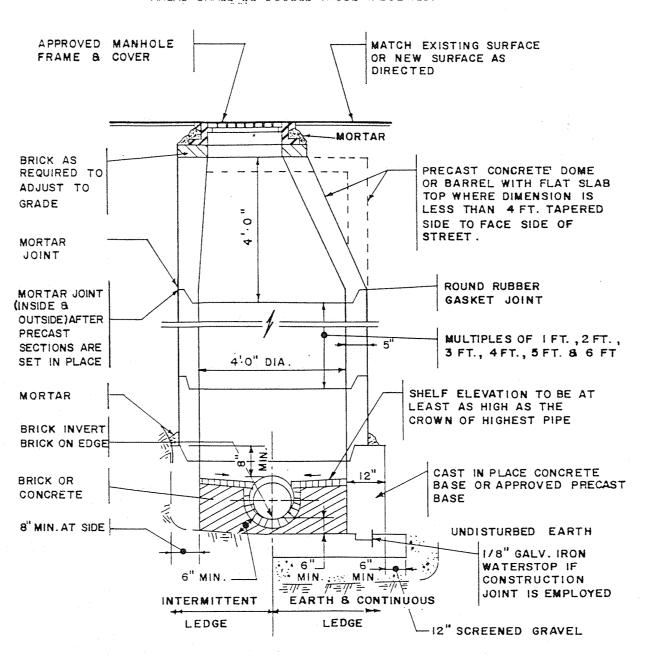


TYPICAL PIPE TRENCH NOT TO SCALE

REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS

PIPE	TEE (SEE NOTE 1)		90° BEND		45° BEHD	
SIZE	AREA SQ. FT.	DIMENSIONS D & L	SQ. FT.	DIMENSIONS D & L	AREA SQ. FT.	DIMENSIONS D & L
6	3.2	1.5' X 2.5'	4.5	2.0' X 2.5'	2.4	1.5' X 2.5'
8	5.7	2.0' X 3.0'	8.0	'2.0' X 4.0'	4.3	2.0' X 2.5'
10	8.3	· 2.5' X 3.5'	12.5	3.0° X 4.5°	6.8	2.0' X 3.5'
12	12.7	`3.5' X 3.5'	18.0	4.0' X 4.5'	9.7	2.5' X 4.0'
16	22.6	4.5' X 5.0'	32.0	5.0' X 6.5'	17.3	3.5' X 4.5'

- 1. VALUES FOR TEE ALSO APPLY TO END PLUGS, CAPS, AND TAPPPING SLEEVES.
- REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 2000 POUNDS PER SQUARE FOOT FOR SAND OR GRAVEL IF BEARING AREA IS AGAINST SILT OR CLAY, THE REQUIRED BEARING AREAS SHALL BE DOUBLE THOSE TABULATED.



PRECAST SEWER MANHOLE

NOT TO SCALE

1/6/93	ADDED CONSTRUCTION NOTES	Α
DATE	DESCRIPTION	REV.

CONSTRUCTION NOTES

- 1. ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE STATE OF MASSACHUSETTS DEPT. OF PUBLIC WORKS STANDARD SPECIFICATIONS AND WITH THE TOWN REGULATIONS.
- 2. ANY SUBSTITUTIONS OF MATERIALS SHALL BE APPROVED BY THE ENGINEER IN WRITING.
- 3. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-800-322-4844 AND VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING EXCAVATION OR CONSTRUCTION.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LOCAL AND STATE CONSTRUCTION PERMITS PRIOR TO BEGINNING WORK.
- 5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- 6. SHOULD GROUND WATER OR UNSUITABLE MATERIALS BE ENCOUNTERED DURING CONSTRUCTION, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY FOR DETERMINATION OF POSSIBLE CONSTRUCTION DESIGN CHANGES SUCH AS (BUT NOT LIMITED TO) UNDERDRAINS OR ALIGNMENT AND GRADE CHANGES.
- 7. CLEARING THE SITE SHALL INCLUDE THE REMOVAL AND DISPOSAL OF DOWN TIMBER, RUBBISH AND DEBRIS FOUND EXISTING WITHIN THE AREAS TO BE CLEARED. CLEARING SHALL NOT TAKE PLACE UNTIL THE CONTRACTOR HAS DETERMINED FROM THE OWNER WHICH TREES ARE TO BE SAVED WITHIN THE CLEARING LIMITS.
- 8. PAVEMENT OF PUBLIC ROADWAYS SHALL CONSIST OF 2 1/2 INCHES BITUMINOUS LAYER, 9 INCHES CRUSHED GRAVEL, 12 INCHES BANK RUN GRAVEL.
- 9. WOOD SHEETING OR A SUITABLE TRENCH BOX SHALL BE USED TO SUPPORT THE TRENCH AS NECESSARY. IF WOOD SHEETING IS USED, IT SHALL BE DRIVEN AT A DISTANCE OF ONE FOOT FROM THE OUTSIDE DIAMETER OF THE PIPE TO A DEPTH SIX INCHES BELOW THE INVERT OF THE PIPE. WOOD SHEETING SHALL BE CUT OF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE, BUT NOT GREATER THAN THREE FEET BELOW THE FINISHED GRADE.
- 10. BEDDING SHALL CONFORM WITH THE STATE OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
- 11. BACKFILL MATERIAL WILL CONFORM WITH STATE OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS, IN ADDITION, SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. BACKFILL SHALL NOT BE PLACED ON FROZEN MATERIAL.
- 12. COMPACTION OF TRENCH BACKFILL AND PIPE BEDDING SHALL BE SIX INCH LIFTS FOR BEDDING AND BACKFILL TO A PLANE ONE FOOT ABOVE THE PIPE AND IN 12 INCH LIFTS THEREAFTER BY AN APPROVED MECHANICAL COMPACTOR.
- 13. SHOULD FROZEN MATERIAL BE ENCOUNTERED, IT SHALL NOT BE PLACED IN THE BACKFILL NOR SHALL BACKFILL BE PLACED UPON FROZEN MATERIAL.
- 14. ALL DRAINAGE UNDER ROADWAYS SHALL BE CLASS IV PIPE. USE CLASS III ELSEWHERE.
- 15. ALL WORK SHALL CONFORM TO THE TOWN DEPT. OF HIGHWAYS STANDARD SPECIFICATIONS.
- 16. WATER MAIN SHALL BE C-900 PVC, HYDRANTS SHALL BE A.P. SMITH OPENING TO THE LEFT WITH TOWN APPROVED GATE VALVES, BRASS FITTINGS AND SADDLES.
- 17. SEWER COVERS SHALL BE WATER TIGHT, CAST-IN RUBBER BOOTS AND STAINLESS STEEL STRAPS TO PRECAST BASE.
- 18. WATER MAINS, SEWER MAINS AND MANHOLES ARE TO BE TESTED IN THE PRESENCE OF THE TOWN.

BEFORE YOU DIG CALL DIG SAFE CALL CENTER TOLL FREE IN MASS. 1-800-322-4844

IN ME, NH, VT, & RI 1-800-225-4977

SK PROPERTIES NEW IPSWICH, N.H.

HOBERT .

BASKERVILLE

CIAIT

WATER - SEWER DETAILS

6CALE: NOTED		DATE: DEC. 18, 1992	SHE	SHEET D-1		
DESIGN	DEAWN	CHECKED	FB	PG		A 1"
GAC		RJB			92 · 004 · 1	

Bedford Design Consultants

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